



DEPARTMENT OF THE AIR FORCE
377TH AIR BASE WING (AFGSC)

24 March 2021

Colonel David S. Miller, USAF
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Mr. Kevin M. Pierard
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Dear Mr. Pierard

Attached, please find the *Periodic Monitoring Report for October-December 2020 and Annual Report for 2020 for the Bulk Fuels Facility, Solid Waste Management Units ST-106/SS-111, Kirtland Air Force Base, New Mexico*, dated March 2021. This report summarizes groundwater monitoring and interim measure activities associated with the distal plume capture and treatment system at Solid Waste Management Units ST-106/SS-111.

If you have any questions or concerns, please contact Mr. Sheen Kottkamp at commercial (505) 846-7674 or by email sheen.kottkamp.1@us.af.mil.

Sincerely

DAVID S. MILLER, Colonel, USAF
Commander

Attachment:

Periodic Monitoring Report for October-December 2020 and Annual Report for 2020, Bulk Fuels Facility, Solid Waste Management Units ST-106/SS-111, Kirtland Air Force Base, New Mexico, date March 2021

cc:

NMED Resource Protection Division (Stringer), letter and CD
NMED HWB (Pierard, Address), letter and CD
NMED GWQB (Hunter), letter and CD
EPA Region 6 (King, Ellinger), letter and CD
COA (Ziegler), electronic only
ABCWUA (Agnew), electronic only
SAF-IEE (Lynnes), electronic only
AFCEC/CZ (Clark, Kottkamp, Segura, Wortman), electronic only
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**KIRTLAND AIR FORCE BASE
ALBUQUERQUE, NEW MEXICO**

**PERIODIC MONITORING REPORT –
OCTOBER–DECEMBER 2020
AND ANNUAL REPORT FOR 2020
BULK FUELS FACILITY
SOLID WASTE MANAGEMENT UNITS ST-106/SS-111
KIRTLAND AIR FORCE BASE, NEW MEXICO**

MARCH 2021



**377 MSG/CEI
2050 Wyoming Boulevard SE
Kirtland Air Force Base, New Mexico 87117-5270**

**KIRTLAND AIR FORCE BASE
ALBUQUERQUE, NEW MEXICO**

**Periodic Monitoring Report –
October–December 2020
and Annual Report for 2020
Bulk Fuels Facility
Solid Waste Management Units ST-106/SS-111
Kirtland Air Force Base, New Mexico**

March 2021

Prepared for

Kirtland Air Force Base
2050 Wyoming Boulevard SE
Kirtland Air Force Base, New Mexico 87117-5270

Prepared by

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U.S. Army Corps of Engineers Contract No. W912PP20C0020

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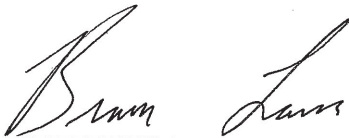


DAVID S. MILLER, Colonel, U.S. Air Force
Commander, 377th Air Base Wing

24 March 2021

Date

This document has been approved for public release.



KIRTLAND AIR FORCE BASE
377th Air Base Wing Public Affairs

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Date

PREFACE

This Periodic Monitoring Report – October–December 2020, and Annual Report for 2020 has been prepared by EA Engineering, Science, and Technology, Inc., PBC (EA) for Kirtland Air Force Base (AFB) under the U.S. Army Corps of Engineers Contract Number W912PP-20-C-0020, and pertains to Kirtland AFB Bulk Fuels Facility, Solid Waste Management Units ST-106/SS-111, located in Albuquerque, New Mexico.

This report contains data collected by EA itself as well as from other entities/sources that are not under EA’s direct control (collectively “non-EA Data”). All non-EA data reported herein are displayed in the form in which they were received from their source entity, and EA assumes no liability for the accuracy of any non-EA data in this report.

This report was prepared in accordance with applicable federal, state, and local laws and regulations, including the New Mexico Hazardous Waste Act, New Mexico Statutes Annotated 1978, New Mexico Hazardous Waste Management Regulations, Resource Conservation and Recovery Act, and regulatory correspondence between the New Mexico Environment Department Hazardous Waste Bureau and the U.S. Air Force, dated March 25 and May 20, 2016. The work presented in this report was conducted in accordance with Kirtland AFB’s Hazardous Waste Treatment Facility Operating Permit Number NM9570024423 and the Class V Underground Injection Well Discharge Permit Number 1839, both issued by the New Mexico Environment Department.

Monitoring of groundwater and drinking water and operation of the groundwater treatment system were conducted from October 1 through December 31, 2020.

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LIST OF ACRONYMS AND ABBREVIATIONS

$\mu\text{g}/\text{m}^3$	microgram(s) per cubic meter
$\mu\text{g}/\text{L}$	microgram(s) per liter
%	percent
2D	two-dimensional
3D	three-dimensional
AFB	Air Force Base
AOI	area of interest
BFF	Bulk Fuels Facility
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and total xylenes
CFR	Code of Federal Regulations
CO_2	carbon dioxide
DL	detection limit
DO	dissolved oxygen
DoD	Department of Defense
DP	Discharge Permit
EDB	1,2-dibromoethane (ethylene dibromide)
EPA	U.S. Environmental Protection Agency
ft	foot (feet)
GAC	granular activated carbon
GCMP	Golf Course main pond
gpm	gallon(s) per minute
GWM	groundwater monitoring
GWTS	groundwater treatment system
HC	hydrocarbon
Horiba	Horiba MEXA-584L auto emissions analyzer
IDW	investigation-derived waste
IMOA	Interim Measure Operational Area
KAFB	Kirtland Air Force Base
LNAPL	light non-aqueous phase liquid
LOD	limit of detection
LOQ	limit of quantitation
MCL	maximum contaminant level
MDL	method detection limit
mg/L	milligram(s) per liter

NMED	New Mexico Environment Department
NMWQCC No.	New Mexico Water Quality Control Commission number
O&M	operation and maintenance
O ₂	oxygen
ORP	oxidation reduction potential
ppmv	part(s) per million by volume
PQL	practical quantitation limit
psi	pound(s) per square inch
Q1	first quarter of the year, January 1 through March 31
Q2	second quarter of the year, April 1 through June 30
Q4	fourth quarter of the year, October 1 through December 31
QAPjP	Quality Assurance Project Plan
QSM	Quality Systems Manual
RCRA	Resource Conservation and Recovery Act
REI	reference elevation interval
RL	reporting limit
SE	Southeast
SVE	soil vapor extraction
SVM	soil vapor monitoring
SVMP	soil vapor monitoring point
SWMU	Solid Waste Management Unit
TCZ	Target Capture Zone
UIC	underground injection control
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey
VA	Veterans Affairs
VISL	vapor intrusion screening level

EXECUTIVE SUMMARY

The investigation and interim measure of the Kirtland Air Force Base (AFB) Bulk Fuels Facility (BFF) release (Solid Waste Management Units [SWMUs] ST-106/SS-111) are being implemented pursuant to the Resource Conservation and Recovery Act (RCRA) corrective action provisions in Part 6 of Kirtland AFB's Hazardous Waste Treatment Facility Operating Permit (Permit Number [No.] NM9570024423 [RCRA Permit]) (New Mexico Environment Department [NMED], 2010). This Periodic Monitoring Report was prepared in accordance with Parts 6.2.4.1 and 6.2.4.4 of the RCRA Permit, Class V Underground Injection Well Discharge Permit No. 1839 (NMED, 2017c), and NMED General Reporting Guidelines (NMED, 2020b). This report summarizes the activities performed for the fourth quarter (Q4) of calendar year 2020 from October 1 through December 31, 2020. It provides an annual summary for 2020. These activities include quarterly vapor and groundwater monitoring and evaluation of the dissolved-phase 1,2-dibromoethane (ethylene dibromide [EDB]) groundwater pump and treat interim measure.

In Q4 2020, 271 soil vapor monitoring wells were sampled. Consistent with previous quarters, the highest EDB, benzene, and hydrocarbon concentrations were detected on Kirtland AFB within the source area at depths 50 feet (ft) below ground surface and greater. Samples collected at soil vapor monitoring points within the 25-ft horizon were screened against the NMED residential soil gas vapor intrusion screening levels (VISL). Benzene and EDB concentrations were below the respective residential soil gas VISL at all soil vapor monitoring points in the 25-ft horizon both on-Base and off-Base.

In Q4 2020, 161 groundwater monitoring wells were sampled. Consistent with previous quarters, the highest EDB and benzene, toluene, ethylbenzene, and total xylenes (BTEX) concentrations were detected on Kirtland AFB within the source area. Within the source area plume south of Ridgecrest Drive Southeast (SE), the footprints of the EDB and BTEX plumes have remained stable over time. The plume boundaries are well defined in three dimensions with monitoring wells screened at varying depth across the groundwater monitoring well network.

Depths to groundwater were gauged in 165 groundwater monitoring wells during the synoptic gauging event. Light non-aqueous phase liquid (LNAPL) was detected and measured in four of these wells. The location and thickness of LNAPL was consistent with previous monitoring events. LNAPL was detected on-Base within the source area plume at wells KAFB-106005, KAFB-106059, KAFB-106150-484, and KAFB-106154-484, ranging in thickness from 0.01 ft in KAFB-106005 and KAFB-106059 to 0.10 ft in KAFB-106150-484. There were 14 wells with unsubmerged screens surrounding these wells that did not indicate the presence of LNAPL, which shows that the extent of LNAPL was bounded during Q4 2020.

As part of the groundwater treatment interim measure, groundwater pumped from four extraction wells within the dissolved-phase EDB plume was treated at the groundwater treatment system (GWTS) located on Kirtland AFB. Groundwater pumped from the extraction wells was conveyed into the GWTS and filtered through two treatment trains containing granular activated carbon. The water flowing into the GWTS during Q4 2020 had concentrations of EDB below the U.S. Environmental Protection Agency Maximum Contaminant Level of 0.05 micrograms per liter and had no detections of BTEX. While flowing through the granular activated carbon vessels, the EDB was filtered out of the groundwater, and no EDB or BTEX was detected in the water flowing out of the GWTS.

During Q4 2020, the GWTS ran for 95.1 percent of the time, treated 72,390,700 gallons of groundwater, and removed an estimated 2.1 grams of EDB. During Q4 2020, the discharged treated water had no detections of EDB or BTEX. Once the groundwater was treated at the GWTS, it was then pumped to the lined main pond at the Kirtland AFB Tijeras Arroyo Golf Course (23,029,900 gallons) and/or gravity-fed

into injection wells KAFB-7 (49,220,100 gallons) and KAFB-IN2 (140,700 gallons).

Throughout 2020, the GWTS was operational 97.6 percent of the time, treated a total of 248,046,600 gallons of groundwater, and removed approximately 9.6 grams of EDB. No EDB was detected in the treated water during 2020. Of the treated water, 147,776,200 gallons was discharged to the lined main pond at the Kirtland AFB Tijeras Arroyo Golf Course, 100,129,700 gallons was discharged to gravity-fed injection well KAFB-7, and 140,700 gallons was discharged to gravity-fed injection well KAFB-IN2.

Sentinel wells are located between the contaminated groundwater and nearby production wells owned and operated by Kirtland AFB, the Albuquerque Bernalillo County Water Utility Authority, and Raymond G. Murphy Veterans Affairs (VA) Medical Center. These wells serve as an early warning system to assess any potential contaminant migration toward production wells and were sampled every quarter during 2020. During 2020, sentinel well samples had no detections of EDB or BTEX. Additionally, three Kirtland AFB drinking water supply wells (KAFB-003, KAFB-015, and KAFB-016) and the VA drinking water supply well (ST106-VA-2) were sampled monthly during Q4 2020. There were no detectable concentrations of EDB or BTEX in any of the samples analyzed.

Analysis of the collected data indicates that the mass of EDB has decreased significantly since the interim measure began in Q4 2016. As of October 2020, only 5.2 grams of EDB remains to be remediated within the target capture zone. This represents a 95 percent decrease in plume mass since the interim measure began operations approximately 4 years ago. In general, the analysis shows that the interim measure has collapsed the EDB plume, with the remaining mass of EDB north of Ridgecrest Drive SE either being centered around interim measure extraction well KAFB-106228, or just north of Ridgecrest Drive SE as an extension of the source area plume. Overall, the plume analysis suggests that the GWTS is successfully capturing and removing the dissolved-phase EDB mass.

1. INTRODUCTION

The investigation and interim measure of the Kirtland Air Force Base (AFB) Bulk Fuels Facility (BFF) release (Solid Waste Management Units [SWMUs] ST-106/SS-111) are being implemented pursuant to the Resource Conservation and Recovery Act (RCRA) corrective action provisions in Part 6 of Kirtland AFB's Hazardous Waste Treatment Facility Operating Permit (Permit Number [No.] NM9570024423 [RCRA Permit]) (New Mexico Environment Department [NMED], 2010). This Periodic Monitoring Report for the fourth quarter (Q4) of calendar year 2020 was prepared in accordance with Parts 6.2.4.1 (Quarterly Reporting) and 6.2.4.4 (Periodic Monitoring Reports) of the RCRA Permit. It presents data for Q4 2020 and a summary of data collected over the four quarters of 2020. The reporting schedule is provided in the Work Plan for BFF Expansion of the Dissolved-Phase Plume Groundwater Treatment System (GWTS) Design (Kirtland AFB, 2017a). Regulatory correspondence and response to regulator comments are provided in Appendix A.

The BFF site is located within the northwestern portion of Kirtland AFB, on the southern end of the city of Albuquerque, as shown on the site location map (Figure 1-1). The Phase I RCRA Facility Investigation (Kirtland AFB, 2018a) provides a detailed site description and history. Ongoing groundwater monitoring (GWM), soil vapor monitoring (SVM), and the groundwater interim measure are discussed in this report. Data from ongoing pilot tests, which are reported under separate cover as required by NMED, are discussed if they impact the data from the GWM, SVM, and the groundwater interim measure.

1.1 Scope of Activities

The following activities were performed during Q4 2020:

- Soil vapor sampling
- Groundwater sampling
- Water level and light non-aqueous phase liquid (LNAPL) gauging
- Drinking water supply well sampling
- GWTS operation and maintenance (O&M)
- GWTS performance monitoring
- Chemical analytical testing
- Investigation-derived waste (IDW) management disposal, and reporting.

The Q4 2020 monitoring program was performed in accordance with multiple work plans: (1) SVM (NMED, 2017a, 2018a; Kirtland AFB, 2017b), (2) GWM (NMED, 2017b, 2018a; Kirtland AFB, 2017a, 2017b, 2017c), and (3) drinking water supply well sampling (NMED, 2018a; Kirtland AFB, 2017b). GWTS operations, sampling, and treated effluent discharge were performed in accordance with the O&M Plan (NMED, 2016, 2017c; Kirtland AFB, 2016a, 2017d, 2018b). Field methods are provided in Appendix B-1, and a list of former well designations for cross-reference with historical documentation is provided in Appendix B-2.

In accordance with the approved work plans (NMED, 2017a, 2017b, 2018a; Kirtland AFB, 2017a, 2017b, 2017c), SVM occurs semiannually in the second quarter (Q2) and Q4 and GWM includes additional wells and analytes for semiannual sampling in Q2 and annual sampling in Q4.

2. REGULATORY CRITERIA

The investigation and interim measure of Kirtland AFB BFF release are being implemented pursuant to the corrective action provisions in Kirtland AFB's RCRA Permit (NMED, 2010). This permit is enforced by NMED's Hazardous Waste Bureau, which is authorized to administer RCRA by the U.S. Environmental Protection Agency (EPA). NMED is the regulating agency for the investigation and interim measure being conducted at Kirtland AFB BFF SWMUs ST-106/SS-111. Site-specific investigation and interim measure are conducted in accordance with approved work plans (Section 1.1) and additional written requirements from NMED. Regulatory correspondence for Q4 2020 is provided in Appendix A-1.

The following screening levels and regulatory requirements are used for the investigation and interim measure being conducted at SWMUs ST-106/SS-111:

- For groundwater analytical samples and semi-annual inorganic samples collected from drinking water supply wells, the analytical results were screened against the cleanup levels for contaminants in groundwater as provided in Part 6.2.3.1 of the RCRA Permit (NMED, 2010):
 - New Mexico Water Quality Control Commission (NMWQCC) standards per the New Mexico Administrative Code, Title 20.6.2.3103, Standards for Groundwater of 10,000 milligrams per liter Total Dissolved Solids Concentration or Less (New Mexico Administrative Code, 2018). For metals, the NMWQCC standard applies to dissolved metals and total mercury
 - EPA National Primary Drinking Water Regulations, maximum contaminant levels (MCLs) and secondary MCLs, and Title 40 Code of Federal Regulations (CFR) Parts 141 and 143
 - If no MCL or NMWQCC standard existed for an analyte, the project screening level used was the EPA Residential Tap Water Regional Screening Level (EPA, 2020).
- For monthly organic drinking water supply well monitoring, analytical data were compared to drinking water MCLs and Secondary MCLs. The MCLs for drinking water supply wells were established in the EPA National Primary Drinking Water Regulations, MCLs and Secondary MCLs, Title 40 CFR Parts 141 and 143.
- Operation of the GWTS and performance monitoring are subject to the terms of Class V Underground Injection Well Discharge Permit (DP) No. 1839 (DP-1839) (NMED, 2017c) for injecting treated groundwater to KAFB-7 and KAFB-IN2. Kirtland AFB is also permitted to discharge to Tijeras Arroyo under National Pollutant Discharge Elimination System Permit NM0031216 (EPA, 2019).
- As stated in NMED Comment #4 in Quarterly Monitoring Report for April-June 2019, dated July 2020 (NMED, 2020a), the Permittee must provide a comparison of detected concentrations to a regulatory standard for the purpose of assessing the presence and location of contaminants of concern. NMED's Risk Assessment Guidance for Site Investigations and Remediation (2019 and as updated) vapor intrusion screening levels (VISLs) must be used as a first-tier screening assessment. NMED VISLs were calculated utilizing EPA default attenuation factors which are based on conservative assumptions and empirical data. VISLs are intended to be screened against soil vapor samples collected from below building foundations (sub slab samples). However, the shallowest soil vapor monitoring points (SVMPs) at SWMUs ST-106/SS-111 are screened from

15 to 25 feet (ft) below ground surface (bgs). Therefore, using NMED VISLs as a first-tier screening level for soil vapor concentrations at the 25 ft horizon provides a conservative estimate. NMED VISLs are not appropriate screening levels for deeper SVMPs. Kirtland AFB is currently in coordination with U.S. Army Corps of Engineers (USACE)–Albuquerque District to determine the most appropriate screening criteria for evaluating soil vapor at depth at the Kirtland BFF. Pending resolution, data will be screened in the manner indicated above in future reports.

Key regulatory correspondence for Q4 2020 is provided in Appendix A-1, a response to regulator comments is provided as Appendix A-2 in accordance with NMED requirements in the letters dated July 11, 2020 (NMED, 2020a) (Appendix A-1) and September 2, 2020 (NMED, 2020b) (Appendix A-1). A cross-walk table between the RCRA Permit reporting requirements and this Periodic Monitoring Report is provided as Appendix A-3.

3. VADOSE ZONE MONITORING

This section describes the monitoring activities, results, and interpretations for semiannual soil vapor sampling. Q4 2020 monitoring was performed at 271 SVMPs located in 51 nested SVM wells at Kirtland AFB (Figure 3-1). Semiannual soil vapor sampling is conducted to monitor fuel-related contaminant concentrations in the vadose zone and are representative of current conditions. Section 3.1 through Section 3.3 discuss field sampling and laboratory testing procedures, data usability, and results of soil vapor data collected during Q4 2020. Section 3.4 provides an annual soil vapor data summary.

Appendices pertinent to SVM are listed below:

- Appendix C-1 Soil Vapor Purge Logs
- Appendix C-2 Soil Vapor Field Activity Logs
- Appendix C-3 Soil Vapor Sample Chain-of-Custody Forms
- Appendix D-1 Data Quality Evaluation Report – Soil Vapor Samples
- Appendix D-2 Data Packages – Soil Vapor Samples
- Appendix D-3 Soil Vapor Analytical Data
- Appendix D-4 Mann-Kendall Trend Analysis of 2020 Soil Vapor Data
- Appendix D-5 Soil Vapor Time-Series Graphs.

3.1 Vadose Zone Soil Vapor Data Collection

Each SVM location is comprised of up to six SVMPs, each screened at discrete intervals ranging from approximately 25 to 450 ft bgs. Each SVMP has a unique database identification, which includes the SVM location followed by a number identifying the approximate depth of the screened interval associated with an individual SVMP (e.g., KAFB-106135-025 and KAFB-106135-050 are two of six SVMPs located at KAFB-106135, with the bottom of the screened intervals at 25 and 50 ft, respectively). Although screen depths vary across the vapor network, nominal depths of 25, 50, 100, 150, 250, 350, and 450 ft are used to group various screen intervals for evaluation.

Table 3-1 lists each SVM sample location, its associated SVMPs (location identification), the screen intervals, and the pre-calculated purge volumes. SVM locations are shown on Figure 3-1. Field methods for SVM are presented in Appendix B-1.

To the extent possible, soil vapor samples collected in Q4 2020 represent the vadose zone conditions without the influence of induced air flow. All SVMP sample ports were sealed to atmospheric air, which minimized exchanges with atmospheric “inhalation” and “exhalation” cycles that were driven by barometric pressure fluctuations.

Soil vapor samples were collected from 271 of 284 SVMPs (within 51 of 56 SVM locations) and were submitted for laboratory analysis. The remaining 13 SVMPs were in use for the bioventing pilot test (Kirtland AFB, 2017e) and sampled as part of pilot test activities, but not sampled as part of the semiannual monitoring event. The bioventing pilot test was designed to evaluate whether the addition of oxygen and water in the vadose zone would enhance biodegradation of fuel constituents. The bioventing test ended in November 2020, and results will be presented in a standalone report.

Soil vapor monitoring was performed in accordance with Part 6.5.16 of the RCRA Permit. In accordance with the letter outlining NMED reporting guidance for all document submittals (NMED, 2020b) and NMED comments on the Q2 2019 report (NMED, 2020a), analytical results for the current and three previous sampling events are provided in a searchable, sortable format in Appendix D-3. The condition of

the SVM location vault and the pneumatic quick-connect fittings at each SVMP were documented on a purge log to ensure sample representativeness (Appendix C-1).

Field parameters including total hydrocarbon (HC) concentration, oxygen (O₂), and carbon dioxide (CO₂) were measured and recorded at each SVMP using a Horiba MEXA-584L auto emissions analyzer (Horiba). SVMPs were purged of their respective casing volume before field measurements were recorded and before samples were collected. Static air pressure readings (measured in inches of water) were measured using an electric manometer and recorded on purge logs for pre-purging and post-purging conditions of each well to ensure the stability of each well before sampling. Purge data were recorded on purge logs (Appendix C-1); field data are listed in Table 3-2. Horiba calibration and sample system leak tests were performed and documented on calibration logs (Appendix C-2); daily quality control reports are provided in Appendix C-2.

In Q4 2020, soil vapor samples were collected between October 5 and October 20. Two hundred and seventy-one SVMP field samples and 29 field duplicates were collected using certified pre-evacuated Summa canisters fitted with a specialized pneumatic connector to allow only the vapor from the SVMP to enter the canister. Sample information was recorded on sample collection logs (Appendix C-1). Chain-of-custody records are provided in Appendix C-3. After collecting each SVMP sample, the canister was placed in protective packaging and shipped to ALS Environmental in Simi Valley, California, for volatile organic compound analysis by EPA Method TO-15.

The Data Quality Evaluation Report is provided in Appendix D-1. Analytical results are reported in the ALS Environmental laboratory report (Appendix D-2). Soil vapor analytical data were validated by Environmental Data Services, Inc., Palm Gardens, Florida (Section 3.2). Soil vapor analytical results are provided in Tables 3-3, 3-4, 3-5, and 3-6. Analytical data for the current and three previous sampling events are provided in Appendix D-3. Subsequent to performing data validation, the data qualifiers were uploaded to the EQUIS[®] project database. Data presented and discussed in this report are final validated data. The Environmental Resources Program Information Management System data deliverable was submitted in December 2020.

3.1.1 Soil Vapor Sampling Deviations

No soil vapor sampling deviations occurred during the Q4 2020 sampling event.

3.2 Data Review and Usability

Environmental Data Services, Inc. performed EPA Stage 3 data validation on 23 percent (%) of Q4 2020 soil vapor analytical data and all data underwent data verification in accordance with the approved work plan (Kirtland AFB, 2017b). Analytical results were qualified as estimated detects “J” and estimated non-detect data “UJ” based on exceedance of data quality indicator criteria for (1) laboratory control sample recovery, (2) continuing calibration verification, and (3) field duplicate relative percent difference. Data were also qualified non-detect “U” based on trip blank contamination.

During the Q4 2020 soil vapor sampling event, two SVMPs (SVEW-11-410 and SVMW-04-300) showed unstable static pressure after purging. Unstable static pressure is defined as a difference larger than 0.1 inch of water in static pressure before and after purging. Field parameters taken from these SVMPs were compared to historical values and were found to be consistent, indicating that the change in static pressure had no effect on sample quality.

Initial sample results for KAFB-106131-245 and KAFB-106131-450 were observed to have anomalous laboratory concentrations. An investigation by the laboratory indicated that these two samples had been mislabeled at the laboratory and switched. Revised analytical reports were received and Table 3-4 has been corrected to illustrate the correct results for each of these SVMPS.

3.2.1 Department of Defense Quality Systems Manual Reporting Limits

Soil vapor and groundwater sample analysis was performed in accordance with Department of Defense (DoD) Quality Systems Manual (QSM) Version 5.3 (DoD 2019) per contract requirements and as applicable to the analytical method. DoD QSM is not applicable to drinking water methods. DoD QSM reporting limit requirements include (1) detection limit (DL), (2) limit of detection (LOD) and (3) limit of quantitation (LOQ) where the DL is less than LOD which is less than LOQ. The DoD DL is most commonly associated with the EPA method detection limit (MDL), the lowest concentration that an analyte can be detected per the analytical method. The DoD LOD is commonly associated with the EPA sample-specific reporting limit (RL), the limit at which the detected analyte is reported with 99% confidence. The DoD LOQ is associated with the EPA practical quantitation limit (PQL), the limit an analyte can be reported at 100% confidence and within method precision and accuracy. Per DoD QSM reporting requirements, sample results below the LOQ and above the DL are reported with a “J” qualifier, signifying estimated data. Non-detect sample results are reported with a “U” qualifier at the LOD.

For example, the DL/MDL, LOD/RL and LOQ/PQL for benzene in soil vapor are 0.4, 0.8, and 2.5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), respectively.

- If benzene is not detected in the sample, the result is reported as “U” at the LOD (0.8U $\mu\text{g}/\text{m}^3$).
- If benzene is reported at a concentration below the LOQ but above the DL such as 1.0 $\mu\text{g}/\text{m}^3$, the result is reported as 1.0J $\mu\text{g}/\text{m}^3$ (estimated detection).
- If benzene is detected at a concentration above the LOQ at 3.0 $\mu\text{g}/\text{m}^3$, the result is reported at that concentration.

3.2.2 Soil Vapor Dilution and Data Usability

In accordance with Part 6.5.18 of the RCRA Permit (Kirtland AFB, 2010), no Q4 soil vapor samples were diluted prior to analysis. However, during analysis, sample dilution is performed as deemed necessary by the laboratory in order to bring elevated concentrations of analytes into the instrument calibration range for quantitation. Q4 samples requiring dilution due to elevated analytes in the sample (target or non-target) resulted in elevated reporting limits for all analytes in the sample per standard analytical method protocol.

DoD DLs and LODs for EDB and benzene (site contaminants of concern) achieve the NMED Risk Assessment Guidance for Site Investigations and Remediation, Residential VISL for soil gas (NMED 2019) of 1.56 and 120 $\mu\text{g}/\text{m}^3$, respectively. However, when samples require dilution during analysis due to elevated concentrations of analytes in the sample, depending on the concentration and dilution required, DLs and LODs may no longer achieve the VISL. This is not considered an analytical deficiency and data are still considered usable to achieve project objectives (i.e., results are valid per analytical and validation requirements). As discussed in Section 2, the comparison of DLs and LODs to VISLs is only applicable at the 25 ft horizon.

During Q4 soil vapor sample analysis, no data were reported at elevated reporting limits unless associated with other elevated analytes in the sample matrix. Data qualified “J,” “UJ,” and “U,” and data with elevated reporting limits are usable to achieve data quality objectives. Q4 samples were analyzed in accordance with DoD QSM and EPA analytical methodology and 100% technical data completeness was achieved for the Q4 soil vapor data.

3.3 Q4 2020 Soil Vapor Monitoring and Chemical Analytical Data Results

The Q4 2020 analytical results and field data from the 271 SVMs were used to generate two-dimensional (2D) plan-view maps (Figures 3-2 through 3-8) that depict benzene, EDB, and HC concentrations at nominal depths of 25, 50, 100, 150, 250, 350, and 450 ft bgs, respectively. Field parameters collected during the SVM event are listed in Table 3-2. Soil vapor analytical results are provided in Tables 3-3, 3-4, 3-5, and 3-6.

The SVM locations have been categorized into three areas of interest (AOIs), which are all located south of Ridgcrest Drive Southeast (SE): (1) off-Base SVM locations, (2) on-Base SVM locations outside the source area, and (3) on-Base SVM locations inside the source area. Soil vapor analytical data are discussed in relation to each AOI. The soil vapor source area (Figures 3-2 through 3-8), established in the Phase I RCRA Facility Investigation Report (Kirtland AFB, 2018a), is defined as a 100-ft buffer zone around the original underground jet fuel pipelines that were the source of the BFF releases. These pipelines were removed in 2010.

As stated in NMED Comment No. 4 in Quarterly Monitoring Report for April-June 2019, dated July 2020 (NMED, 2020a), the Permittee must provide a comparison of detected concentrations to a regulatory standard for the purpose of assessing the presence and location of contaminants of concern. NMED’s Risk Assessment Guidance for Site Investigations and Remediation (2019 and as updated) VISLs must be used as a first tier screening assessment. Site specific VISLs at depth or by horizon have not been established as of the date of this report. As explained in the Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air (EPA, 2015), VISLs are a function of attenuation factors which are site specific and can vary depending on several variables (e.g., soil type, depth of contamination, etc.). NMED VISLs were calculated utilizing EPA default attenuation factors, which are based on conservative assumptions and empirical data. Therefore, this document uses the generic NMED Residential soil gas VISL as a default screening value for the 25-ft horizon. Kirtland AFB is currently in coordination with USACE–Albuquerque District to determine the most appropriate screening criteria for evaluating soil vapor at depth at the Kirtland AFB BFF. Pending resolution, data will be screened in the manner indicated above in future reports. Table 3-6 includes the results of screening the 25-ft horizon against residential soil gas VISLs. This screening is for comparison purposes only, and should not be considered an evaluation of exposure or risk.

Sections 3.3.1 through 3.3.3 discuss the soil vapor concentrations of EDB, benzene, HC, O₂, and CO₂ in relation to each AOI. Refer to Figures 3-2 through 3-8 for the EDB, benzene, and HC data. EDB and benzene data are laboratory analytical results, while HC, O₂, and CO₂ are field monitoring results.

3.3.1 Off-Base Soil Vapor Monitoring Points

There are five off-Base SVM locations consisting of 28 SVMs, with screened intervals from nominal depths of approximately 25-450 ft bgs. Each of these SVM locations is in non-residential areas: in Bullhead Park, city of Albuquerque open space, or the Raymond G. Murphy Veterans Affairs (VA) Medical Center parking lot. Well KAFB-106028 is screened at intervals from 150 to 450 ft bgs. Off-Base soil vapor concentrations were reported to be very low in comparison to the on-Base AOIs. The

maximum off-Base HC concentration was 10 parts per million by volume (ppmv), observed at 450 ft bgs in KAFB-106028-450.

- TO-15 results in the 25-ft horizon were compared to the NMED residential soil gas VISLs (Table 3-6). No detected concentrations of any analyte off-Base exceeded the residential VISLs. The LOD for all samples at SVMPs in the 25-ft horizon off-Base were below the residential VISLs.
- EDB was reported in one of the 28 off-Base SVMPs (KAFB-106028-450) at a concentration of $3.6 \mu\text{g}/\text{m}^3$, which is consistent with previous quarters. EDB was not detected in 27 of the 28 SVMPs.
- Benzene was reported in 18 of the 28 off-Base SVMPs. Sixteen of the 18 benzene detections were estimated concentrations (J-flagged values) of $1.9 \mu\text{g}/\text{m}^3$ or less. The two non-estimated detections were reported to have concentrations of $50 \mu\text{g}/\text{m}^3$ at KAFB-106142-450 and $19 \mu\text{g}/\text{m}^3$ at KAFB-106138-050. Benzene was not detected in 10 of the off-Base SVMPs.
- HC concentrations in the 28 off-Base SVMPs ranged between 0 and 10 ppmv. The highest HC concentration of 10 ppmv was observed at KAFB-106028-450.
- O_2 concentrations at off-Base SVMPs averaged 19.67%, near atmospheric levels (approximately 21%) (Berner et al., 2007). CO_2 levels ranged from 0.02 to 3.56%. The maximum CO_2 level (3.56%) was detected at KAFB-106138-025; however, 23 of the 28 SVMPs had CO_2 levels below 1.00%.

3.3.2 On-Base Soil Vapor Monitoring Points Outside of Source Area

There are 40 on-Base SVM locations outside of the source area, consisting of 224 SVMPs that are screened at nominal depth intervals from approximately 25 to 450 ft bgs. The highest soil vapor concentrations in this AOI were reported to be located adjacent to the source area and above the source area groundwater plume.

- TO-15 results in the 25-ft horizon were compared to the NMED residential soil gas VISLs (Table 3-6). The LOD for all samples in the 25-ft horizon on-Base outside of the source area were below the residential VISLs. Neither benzene nor EDB exceeded residential VISLs at any location in the 25-ft horizon on Base outside of the source area. Trichloroethene exceeded the residential VISL at two SVMPs (KAFB-106132-025 and KAFB-106135-025) with concentrations of $4,100 \mu\text{g}/\text{m}^3$ and $82 \mu\text{g}/\text{m}^3$, respectfully. These locations are near Air National Guard buildings. An unrelated suspected source of solvent release may be present in the vicinity of the New Mexico Air National guard east of the site. Kirtland AFB is preparing a contract for the investigation of this potential release (NMED, 2020c).
- Two compounds had detections exceeding the residential soil gas VISL in the vicinity of the former fuel tanks. Bromodichloromethane exceeded the residential soil gas VISL at five locations in the vicinity of the former fuel tanks in the BFF with a maximum detected concentration of $120 \mu\text{g}/\text{m}^3$ at KAFB-106123-025. Chloroform also exceed the residential soil gas VISL at eight locations around the former fuel tanks with a maximum detection of $640 \mu\text{g}/\text{m}^3$ at KAFB-106121-025.
- EDB was reported in 16 of the 224 on-Base SVMPs outside the source area. EDB was not detected in 208 SVMPs on-Base, outside the source area. EDB concentrations in this AOI ranged

from 0.43 to 6,900 $\mu\text{g}/\text{m}^3$. The highest EDB concentration of 6,900 $\mu\text{g}/\text{m}^3$ was reported at SVMW-02-100, located approximately 50 ft north of the source area.

- Benzene was reported in 194 of the 224 on-Base SVMPs outside the source area. Benzene concentrations in 106 of these 194 SVMPs were estimated concentrations (J-flagged values). Benzene was not detected in 30 SVMPs on-Base outside the source area. Benzene concentrations in this AOI ranged from 0.36 to 610,000 $\mu\text{g}/\text{m}^3$. The highest benzene concentration of 610,000 $\mu\text{g}/\text{m}^3$ was reported at SVMW-02-150, located approximately 50 ft north of the source area.
- HC was measured in the 224 on-Base SVMPs outside the source area. The highest HC concentration (19,260 ppmv) was observed at SVMW-02-100, located approximately 50 ft north of the source area. In the remaining 223 SVMPs, HC was measured at concentrations ranging from 0 to 15,070 ppmv.
- SVM locations KAFB-106139, KAFB-106137, KAFB-106135, KAFB-106132, KAFB-106126, KAFB-106140, KAFB-106131, SVEW-12/SVMW-14, KAFB-106109, and SVEW-10/SVMW-12 are on-Base perimeter wells. These locations represent the perimeter of the on-Base soil vapor investigation area.
 - All but two of the perimeter wells (SVEW-12/SVMW-14, and SVEW-10/SVMW-12) have SVMPs at the 25-ft horizon and were compared to the residential soil gas VISLs (1.56 $\mu\text{g}/\text{m}^3$ for EDB and 120 $\mu\text{g}/\text{m}^3$ for benzene). EDB and benzene concentrations did not exceed VISLs at the 25-ft horizon at any of these locations. No TO-15 analytes exceeded residential soil gas VISLs in the 25-ft horizon at any of these locations with the exception of KAFB-106132-25 and KAFB-106135-25, which have trichloroethene detections as discussed above in the vicinity of unrelated sources east of the site.
 - The shallowest SVMPs at SVEW-12/SVMW-14 and SVEW-10/SVMW-12 are at 150 ft bgs. As discussed in Section 3.3 above, SVMPs below the 25-ft horizon were not compared to the residential soil gas VISLs. In SVMW-14-150, benzene was detected at a concentration of 1.8 $\mu\text{g}/\text{m}^3$ with a LOD of 0.72 $\mu\text{g}/\text{m}^3$, and EDB was not detected, with a LOD of 0.72 $\mu\text{g}/\text{m}^3$. In SVMW-12-150, benzene was detected at a concentration of 1.6 $\mu\text{g}/\text{m}^3$ with a LOD of 0.78 $\mu\text{g}/\text{m}^3$, and EDB was not detected, with a LOD of 0.78 $\mu\text{g}/\text{m}^3$.
- O_2 and CO_2 were measured in the 224 on-Base SVMPs outside the source area. Forty-six SVMPs had relatively low O_2 levels (<15%) with corresponding CO_2 levels ranging between 0.14 and 14.64%. KAFB-106119-150 and SVMW-02-050 had high CO_2 levels of 14.12 and 14.64%, respectively, with corresponding low O_2 levels below 5%. This suggests that at these SVMPs, and others with similar O_2 and CO_2 comparisons, there are rate-limiting conditions for aerobic microbial activity and that aerobic biodegradation may be occurring at less-than-optimal conditions.

3.3.3 On-Base Soil Vapor Monitoring Points Inside the Source Area

There are 11 on-Base SVM locations inside the source area, consisting of 32 SVMPs that are screened at nominal depth intervals from approximately 25 to 450 ft bgs. These SVMPs are within 100 ft of the original location of the underground jet fuel pipeline. SVM locations SVEW-01, SVEW-02/03, SVEW-04/05, SVMW-10, and SVMW-11 (consisting of 13 SVMPs) were in use to perform a bioventing pilot test (Kirtland AFB, 2017e) and were not sampled for soil vapor during this quarter. Bioventing pilot test results will be provided in a separate document to be submitted in 2021. The remaining 19 SVMPs were

sampled in Q4 2020.

The highest benzene and HC concentrations obtained from soil vapor for Q4 2020 were encountered on-Base within the source area AOI. High concentrations observed included 970,000 $\mu\text{g}/\text{m}^3$ for benzene (SVMW-04-250), 12,000 $\mu\text{g}/\text{m}^3$ for EDB (SVMW-09-100), and 25,060 ppmv for HC (SVEW-07-160). This AOI had the highest percentage of benzene detections (Table 3-5), but only samples from six SVMPs on-Base inside the source area had detections of EDB.

- There are no SVMPs in the 25-ft horizon within the source area. Therefore, there was no comparison to VISLs performed in this AOI.
- EDB was reported in six sampled SVMPs inside the source area. Detections ranged from 900 to 12,000 $\mu\text{g}/\text{m}^3$. The highest EDB concentration of 12,000 $\mu\text{g}/\text{m}^3$ was detected at SVMW-09-100.
- Benzene was reported in 18 of the 19 sampled SVMPs inside the source area. Benzene concentrations ranged from 6.0 to 970,000 $\mu\text{g}/\text{m}^3$. The highest benzene concentration of 970,000 $\mu\text{g}/\text{m}^3$ was reported at SVMW-04-250.
- HC was detected at concentrations ranging from 0 to 25,060 ppmv. The highest concentration of HC was 25,060 ppmv, which was detected at SVEW-07-160.

The O_2 levels on-Base, inside the source area SVMPs, ranged from 1.00 to 20.26%. Three SVMPs had O_2 levels below 5% at depths ranging from approximately 50 to 100 ft bgs. CO_2 levels ranged from 0.24 to 16.34%. The maximum CO_2 level (16.34%) was detected at SVMW-03-050. In Q4 2019, only four SVMPs in the source area had O_2 levels higher than 5%. In Q2 and Q4 2020, all but three SVMPs reported O_2 levels higher than 5%. This increase in O_2 levels may be a result of bioventing activities.

3.3.4 Maintenance and Repairs

Maintenance was performed at 51 of 56 SVM locations following completion of the Q4 2020 sampling event. SVM locations SVEW-01, SVEW-02/03, SVEW-04/05, SVMW-10, and SVMW-11 were in use to perform a bioventing pilot test (Kirtland AFB, 2017e). Routine maintenance will be performed at these five SVM locations after bioventing activities are completed. Any maintenance needs, which included corroded quick-connects, worn or damaged gaskets, overgrown vegetation, worn/rusted bolts, and overall cleanliness of locations were noted during the sampling event and addressed during the subsequent weeks.

Rusty pneumatic quick-connects were observed at the following six SVMPs during the Q4 2020 sampling event and were repaired after the event:

- KAFB-106118-450
- KAFB-106133-450
- KAFB-134-050
- SVEW-10-410
- SVMW-12-250
- SVMW-12-350.

Pneumatic quick-connects were replaced on November 3 and November 5, 2020, as part of periodic maintenance of the SVM network. In addition to the pneumatic quick-connect maintenance at the six locations identified for repair, the 51 SVM locations were also swept and cleared of vegetation and

miscellaneous debris, as necessary.

Well identification numbers were re-marked for clarity. Damaged or missing parts (typically gaskets and pneumatic quick-connects) were repaired or replaced. These maintenance activities were performed after Q4 2020 samples were collected and had no effect on the results.

3.4 Soil Vapor Trends

This section evaluates soil vapor data collected in 2015, 2016, 2017, 2018, 2019, and 2020 to determine the presence of long-term trends after the soil vapor extraction (SVE) system shutdown in Q2 2015.

A catalytic oxidizer SVE system was operational at the site from the first quarter (Q1) 2013 through Q2 2015. The SVE system was shut down in Q2 2015 to perform rebound and respiration testing. Rebound and respiration testing was ongoing through Q4 2015 and is summarized in the Kirtland AFB BFF Pilot SVE Shutdown Test Report (Kirtland AFB, 2016b). Mann-Kendall analysis was performed using Q1 2016 through Q4 2020 data to evaluate trends following rebound and respiration testing. If an analyte was reported as non-detect, the method detection limit was used as that value. If an analyte at an SVMP was reported as non-detect six or more times between Q1 2016 and Q4 2020, the statistical analysis was not performed due to insufficient data. Trend analysis results and conclusions are discussed in the sections below. The Mann-Kendall analysis is described in detail in Appendix D-4.

The Mann-Kendall trend analysis was performed on SVMPs with HC concentrations greater than 20 ppmv at any time between 2016 and 2020 (HC concentrations less than 20 ppmv are considered background concentrations for the purposes of this report). Out of 284 total SVMPs, 187 had HC concentrations below 20 ppmv between Q1 2016 and Q4 2020 and were identified as background.

Of the 28 off-Base SVMPs, only one, at a depth of 450 ft bgs, was identified as having above background concentrations for this first time in Q2 2020 (149 ppmv). HC then decreased to 10 ppmv at this location in Q4 2020.

The 31 on-Base SVMPs at 25 ft bgs were identified as having background concentrations. The remaining 128 SVMPs identified as having background concentrations were located at various depths on-Base. Thirteen individual SVMPs were in use to perform a bioventing pilot test and were not sampled in 2020 and are not evaluated for long-term trends. A total of 84 individual SVMPs were evaluated for long-term trends.

The Mann-Kendall trend analysis was performed to determine whether there was a statistically significant increasing or decreasing trend at a 95% confidence interval in EDB, benzene, and HC. Twelve data points corresponding to the 12 separate sampling events that occurred between Q1 2016 and Q4 2020 were evaluated for each analyte.

Time series graphs were created for the same 84 SVMPs that had HC concentrations above 20 ppmv between Q1 2016 and Q4 2020. To illustrate concentration changes before and after the SVE system shutdown, soil vapor data from Q1 to Q4 2015 (prior to SVE system shutdown) are included on the time series graphs along with the Q1 2016 to Q4 2020 data (after SVE system shutdown). There are two time series graphs per SVMP: one illustrating EDB, benzene, and HC and one illustrating O₂ and CO₂ levels for the same time period. These time series graphs are presented in Appendix D-5.

3.4.1 Trend Analysis Results

Of the 84 SVMPs evaluated, 60 had either statistically significant increasing or decreasing trends in EDB, benzene, or HC between Q1 2016 and Q4 2020; 24 had no statistically significant trend. Table 3-7 lists the 84 SVMPs included in the analysis and identifies whether any statistically significant EDB, benzene, or HC trends were observed at each one. Conclusions drawn from the trend analysis are presented in Section 8.1.1. Depth intervals discussed represent nominal depths.

The 84 SVMPs evaluated had adequate detections to evaluate benzene and HC trends. Sixty of the 84 SVMPs evaluated for trends had an increasing or decreasing trend for one or more of the analytes evaluated. Thirty-four SVMPs did not have a statistically significant HC trend and 38 did not have a statistically significant benzene trend. Twenty-seven locations had adequate detections to evaluate EDB trends. Of the 27 locations, 16 did not have a statistically significant indication of a trend (Table 3-7).

3.4.1.1 Increasing Trends

From 50 to 350 ft bgs, 41 increasing trends were observed, the majority of which were within and adjacent to the source area. Of these, 25 were increases in HC and 16 were increases in benzene. It should be noted that the bioventing pilot test has the potential to impact trends at SVMPs adjacent to the pilot test area. Interpretations specific to the bioventing pilot test will be included in a separate report.

At 450 ft, 24 increasing trends were observed to the east of the source area, throughout and adjacent to the remainder of the BFF. Of these, 16 were increases in HC, six were increases in benzene, and two were increases in EDB.

3.4.1.2 Decreasing Trends

From 50 to 150 ft bgs, five decreasing trends were observed, primarily at the south edge of the source area, as well as to the east. Of these, four were decreases in benzene and one was in EDB. No decreasing trends were observed at 100 ft bgs.

From 250 to 350 ft bgs, 23 decreasing trends were observed, primarily within the BFF to the east of the source area. Of these, six were decreases in HC, 11 were decreases in benzene, and six were decreases in EDB.

At 450 ft bgs, 14 decreasing trends were observed, primarily in the center and southeast corner of the BFF, with decreasing trends also observed in one SVMP in the northern portion of the BFF (KAFB-106137-450). Of these, three were decreases in HC (both located in the southeast corner of the BFF), nine were decreases in benzene, and two were decreases in EDB.

3.4.1.3 Trend Summary

A review of the statistical analysis in conjunction with the time series graphs provides the following observations:

1. Concentrations measured in nearly all off-Base SVMPs and at shallow (25 ft) SVMPs both on-Base and off-Base were determined to be background concentrations and, therefore, trends were not evaluated. Only one off-Base SVMP was evaluated (KAFB-106028-450) because a high reading of HC was observed in Q2 2020 (149 ppmv). HC then decreased to 10 ppmv at this location in Q4 2020. After using ProUCL to run an outlier test on the dataset, the observation of 149 ppm was determined to be an outlier.

2. The additional data collected in 2020 had a similar number of statistically significant trends observed at the site in comparison to 2019, although there was an increase in total significant trends. In 2019, there were 69 SVMs with significant trends, increasing to 84 in 2020. This is most likely due to the higher number of data points evaluated in 2020. Despite this increase, the ratio of increasing to decreasing trends remained consistent between Q4 2019 and Q4 2020 for benzene (4.56 [2019] and 5.00 [2020]), EDB (0.22 [2019] and 0.29 [2020]), and HC (0.92 [2019] and 0.94 [2020]).
3. The ratio of increasing to decreasing HC trends has remained constant between Q4 2019 and Q4 2020.
4. The sample depth with the greatest number of increasing HC and benzene trends is 450 ft, south and east of the source area, and approximately above the benzene groundwater plume. Both locations with increasing EDB trends are at 450 ft bgs, within the BFF, east of the source area.

4. GROUNDWATER MONITORING

At the end of Q4 2020, the BFF GWM well network was comprised of 167 GWM wells (Figure 4-1, Table 4-1, and Table 4-2), including 161 wells that are sampled on a quarterly or semiannual basis, five wells that are gauged but not sampled (KAFB-106148-484, KAFB-106150-484, KAFB-106154-484, KAFB-106155-484, and KAFB-106156-484), and one well that is gauged and will be sampled once the water level rises sufficiently (KAFB-106211). A total of 161 of these wells were sampled in Q4 2020 in accordance with the approved work plans (NMED, 2017b, 2018a; Kirtland AFB, 2017a, 2017b, 2017c) (Table 4-3). Sampling and gauging were conducted in accordance with the applicable technical requirements in Part 6.5 of the RCRA Permit (NMED, 2010), and Appendix B-1 describes the field methods used for GWM in Q4 2020.

Appendices pertinent to GWM are listed below:

- Appendix E-1 Daily Quality Control Reports – Groundwater Sampling
- Appendix E-2 Groundwater and LNAPL Measurements
- Appendix E-3 Groundwater Purge Logs and Sample Collection Logs
- Appendix E-4 Groundwater Sample Chain-of-Custody Forms
- Appendix E-5 U.S. Geological Survey (USGS) Sentinel Well Data
- Appendix E-6 Descriptions from Previous Reports
- Appendix F-1 Data Quality Evaluation Report – Groundwater Samples
- Appendix F-2 Data Packages – Groundwater Samples
- Appendix F-3 EPA Data Verification and Validation Figures
- Appendix F-4 Groundwater Analytical Data.
- Appendix F-5 Groundwater and LNAPL Depths and Elevations Annual Data
- Appendix F-6 Water Level Hydrographs.

Throughout this report, GWM wells, and their associated groundwater data, are described based on reference elevation intervals (REIs). REIs are below ground surface elevations that divide the GWM network into datasets comprised of wells that are screened across their respective elevations, allowing for a vertical evaluation of groundwater parameters and contaminant locations. Three REIs were designated (4857, 4838, and 4814) (Figure 4-2), and each well was assigned to one or more REI based on the elevation of its screened interval. A detailed explanation of how the REIs are defined is provided in Appendix E-6.

Prior to Q4 2018, GWM wells were assigned designations based either on their location related to the groundwater gradient and their spatial relationship to the dissolved-phase 1,2-dibromoethane (ethylene dibromide [EDB]) plume or simply on their location (i.e., source area, etc.). In response to the changing regional groundwater gradient (Appendix E-6), well designations are no longer used in figures and

analytical results tables. The former well designations and current monitoring well objectives are provided in Table 4-1 along with the current sampling regime by quarter. Detailed descriptions of the former well designations and the frequency of samples collected by designation are provided in Appendix E-6.

In this report, sample results from GWM wells are discussed based on their location (north or south) in relation to Ridgecrest Drive SE. The Source Area Plume is located south of Ridgecrest Drive SE. The Interim Measure Operational Area (IMOA) for the groundwater interim measure is located north of Ridgecrest Drive SE (Figure 4-1). The Target Capture Zone (TCZ) is located within the IMOA and is defined in accordance with EPA guidance (EPA, 2008). The definition used by EPA defines the TCZ as the three-dimensional (3D) zone of groundwater that must be captured by the remedy extraction wells for the hydraulic containment portion of the remedy to be considered successful (Section 6.4.2, below). The 3D zone of groundwater that must be captured by the interim measure extraction wells (i.e., the TCZ) is defined as the MCL for dissolved EDB, 0.05 micrograms per liter ($\mu\text{g/L}$).

GWM activities included measuring the depths to groundwater and LNAPL (Tables 4-2 and 4-4, Figures 4-3 through 4-6) and measuring field parameters in wells sampled with low-flow sampling pumps (Table 4-5). Field parameter measurements are not part of the passive sampling methodology, as discussed in more detail in Appendix E-6. Groundwater samples were collected and submitted for laboratory analysis from 161 wells in Q4 2020 (Tables 4-6 and 4-7, and Figures 4-7 through 4-19). Field methods are provided in Appendix B-1.

4.1 New Groundwater Monitoring Activities

The installation of six new data gap wells began in Q4 2020 in accordance with the Work Plan for Data Gap Monitoring Well Installation KAFB-106248 to KAFB-106252 (Kirtland AFB, 2019). After these wells are completed, they will be incorporated into the GWM network.

4.2 Groundwater and Light Non-Aqueous Phase Liquid Gauging

Depth to water and LNAPL (if present) were measured in 165 of the 167 GWM wells between November 2 and 4, 2020 (Figures 4-3 through 4-6, and Tables 4-2 and 4-4), in accordance with the approved work plan (Kirtland AFB, 2017a). Gauging was conducted in accordance with Part 6.5.17.2 of the RCRA Permit (NMED, 2010), and Appendix B-1 describes the field methods used in Q4 2020. Gauging deviations are discussed in Section 4.2.2. Of the 88 GWM wells in REI 4857 gauged in Q4 2020, 35 wells had screens that intersected the current water table, while the remaining 53 wells had submerged well screens. Screen submergence in these 56 wells ranged from 0.34 to 22.70 ft (KAFB-106207 and KAFB-106025, respectively) (Table 4-2).

The interface probe was checked for proper operation and cable integrity prior to each use and was decontaminated after gauging each well. If LNAPL was detected using the interface probe, a plastic bailer was used to confirm the presence and thickness of the LNAPL. Additionally, during Bennett pump sampling, every well was checked for the presence of LNAPL prior to the installation of the pump. Depths to LNAPL and groundwater were recorded in the field on well gauging forms (Appendix E-2).

Depth to water in the GWM wells was gauged using five oil-water interface probes, each dedicated to groups of wells with similar historical analytical results. Measurement differences from a control probe were calculated in accordance with the methods described in Appendix B-1, and subsequent data corrections are presented in Appendix E-2, Table E-2-2.

4.2.1 Groundwater Gauging Monitoring Results

Groundwater elevations from the water table were used to create potentiometric surface maps at the water table, REI 4838, and REI 4857 (Figures 4-3, 4-4, and 4-5, respectively). Horizontal groundwater gradients within the monitoring network are dominated by a radial flow pattern toward depressions in the water table, which are primarily attributable to groundwater extraction wells.

LNAPL was measured in only four of the 165 wells (KAFB-106005, KAFB-106059, KAFB-106150-484, and KAFB-106154-484) in Q4 2020 at thicknesses of 0.01, 0.01, 0.10, and 0.04 ft, respectively (Table 4-2 and Figure 4-6). The wells with LNAPL are located south of Ridgecrest Drive SE, on-Base, and within the footprint of the Source Area Plume. The location of LNAPL is consistent with previous monitoring events (Table 4-8). There are 14 wells with unsubmerged screens surrounding these wells that did not indicate the presence of LNAPL. These data indicate that the extent of LNAPL was bounded during Q4 2020 (Figure 4-6).

4.2.2 Gauging Deviations

Water level measurements were not obtained from two wells during the Q4 2020 synoptic gauging event. Depth to water in wells KAFB-106063 and KAFB-106064 (Figure 4-1) was not measured during the synoptic gauging event in November due to the presence of dedicated downhole equipment related to the Environmental Security Technology Certification Program pilot test project for EDB *in situ* biodegradation (Kirtland AFB, 2016b). However, water levels were measured prior to sampling in October and are reported in Tables 4-2 and 4-4 for informational purposes only; these data were not used to contour groundwater elevations or in the performance assessment.

4.3 Groundwater Sampling

Annual groundwater samples were collected from 161 wells in the GWM network between October 1 and November 24, 2020, using low-flow pump systems or passive sampling methods (Table 4-3). Well locations are shown on Figure 4-1, and sentinel well locations are shown on Figure 4-20. Sentinel wells are wells located between contaminant plumes and extraction wells to provide early detection if contaminants migrate toward the extraction wells.

Groundwater samples collected for the Q4 2020 monitoring event were analyzed for EDB, VOCs, anions, alkalinity, and metals according to the Q4 sampling regime in Table 4-1 and the well-specific analytical suite listed in Table 4-3. Groundwater samples were analyzed by Eurofins Lancaster Laboratories Environmental, LLC located in Lancaster, Pennsylvania, which maintains current DoD Environmental Laboratory Accreditation Program certification. Sampling was conducted in accordance with the applicable technical requirements in Parts 6.5.5 and 6.5.17 of the RCRA Permit (NMED, 2010), and Appendix B-1 describes the field methods used for GWM in Q4 2020. The groundwater purge and sampling forms are provided in Appendix E-3 and the chain-of-custody forms are provided in Appendix E-4.

4.3.1 Sampling Deviations

There were no groundwater sampling deviations in Q4 2020.

4.4 Data Review and Usability Results

Laboratory deliverables and data review were prepared and conducted in accordance with Parts 6.5.18.2 and 6.5.18.3 of the RCRA Permit (NMED, 2010). The Q4 2020 groundwater analytical data underwent EPA 100% Stage 3 data validation by an independent third-party subcontractor, Validata Chemical Services, Inc., Duluth, Georgia, following data verification. Data verification is performed on a data set to ensure method, procedural, and contractual compliance with project-specific requirements and is typically performed by the contractor responsible for data collection.

Data validation is an analyte- and sample-specific process that extends the evaluation of analytical data beyond the data verification process to determine the analytical quality of a specific data set.

Data verification and data validation are sequential steps in a data review process that can be performed by either the contractor collecting the data or an independent third-party subcontractor. For this project, verification is performed by the contractor to ensure compliance with the project Quality Assurance Project Plan (QAPjP), Appendix D of the Work Plan for BFF Expansion of the Dissolved-Phase Plume GWTS and associated QAPjP (Kirtland AFB, 2017a), and is performed during or at the completion of field or laboratory data collection activities. EPA Stage 3 data validation is conducted by Validata Chemical Services, Inc. and incorporates the data verification process and further evaluates data quality based on analytical method-specific quality control criteria and DoD QSM requirements as documented in the project QAPjP. Further details regarding EPA data verification and validation processes are documented in Figures 2 and 4 of the Guidance on Environmental Data Verification and Data Validation (EPA, 2002) provided in Appendix F-3.

Subsequent to performing data validation, the data qualifiers were uploaded to the EQUIS[®] project database. Data were further assessed for accuracy, precision, representativeness, comparability, completeness, and sensitivity and determined to achieve the project data quality objectives in Q4 2020. All groundwater data presented and discussed in this report are final validated data. The Environmental Resources Program Information Management System data deliverable is scheduled for submittal in February 2021. The Data Quality Evaluation Report for groundwater samples collected in Q4 2020 is provided in Appendix F-1, and the EPA Level II laboratory data reports are provided in Appendix F-2. EPA Level III and IV data packages will be maintained by Kirtland AFB and made available to NMED upon request, in accordance with Part 6.5.18.2 of the RCRA Permit (NMED, 2010).

4.5 Groundwater Chemical Analytical Data Results

Groundwater samples collected in 161 GWM wells for the Q4 2020 monitoring event were analyzed for EDB, VOCs, anions, alkalinity, and metals (Table 4-3). Contaminant concentrations were compared to their respective MCLs or project screening levels (Tables 4-6 and 4-7) and are discussed in the following sections. The analytical results for field duplicate samples are presented in the tables and were used to assess field and laboratory analytical precision. However, field duplicate results are not discussed in this text for comparison purposes unless otherwise noted and duplicate data are not provided on figures. The results for the duplicate sample analyses are included in the Data Quality Evaluation Report (Appendix F-1). In accordance with NMED reporting guidance for all document submittals (NMED, 2020b), analytical results and screening levels are provided in a sortable, searchable format (Appendix F-4).

In this report, sample results from GWM wells are discussed based on their location (north or south) in relation to Ridgecrest Drive SE (Figure 4-1). The Source Area Plume is located south of Ridgecrest Drive SE. The IMOAs for the groundwater interim measure is located north of Ridgecrest Drive SE.

Analytical data for organic compounds for GWM wells are provided in Table 4-6 and inorganic compounds in Table 4-7. Historical EDB and benzene, toluene, ethylbenzene, and total xylenes (BTEX) results for the previous three samples from the 161 GWM wells sampled either quarterly or semiannually are provided in Tables 4-9 and 4-10, respectively. Groundwater analytical data for this quarter and the previous three quarters are provided in Appendix F-4. Q4 2020 chemical concentrations are depicted on the figures as listed below:

- EDB on Figures 4-7 to 4-9
- Benzene on Figures 4-10 to 4-12
- Toluene on Figure 4-13
- Ethylbenzene on Figure 4-14
- Total xylenes on Figure 4-15
- Total alkalinity on Figure 4-16
- Bromide on Figure 4-17
- Dissolved iron on Figure 4-18
- Dissolved manganese on Figure 4-19.

4.5.1 Organic Compounds Analytical Results

4.5.1.1 EDB Analytical Results

Groundwater samples from 161 wells were analyzed for EDB in Q4 2020 (Table 4-3). Analytical results of EDB are presented in Table 4-6, and on Figures 4-7 through 4-9. There were no detections of EDB in sentinel GWM wells in Q4 2020; sentinel well locations are shown on Figure 4-20.

4.5.1.1.1 EDB Analytical Results North of Ridgecrest Drive SE

Of the 161 wells analyzed for EDB in Q4 2020, 82 were located in the IMOA north of Ridgecrest Drive, SE. Concentrations of EDB exceeded the EPA MCL of 0.05 µg/L in six of these wells.

- The highest EDB concentration north of Ridgecrest Drive SE was detected in the groundwater sample collected from KAFB-106036 at a concentration of 0.12 µg/L. This well is in REI 4838 and is located near extraction well KAFB-106228.

4.5.1.1.2 EDB Analytical Results South of Ridgecrest Drive SE

Of the 161 wells analyzed for EDB in Q4 2020, 79 were located south of Ridgecrest Drive SE in the Source Area. Concentrations of EDB exceeded the EPA MCL of 0.05 µg/L in 17 of these wells.

- Eight EDB exceedances were observed in wells located on-Base in the immediate vicinity of, or within, the BFF.
- The highest EDB concentration south of Ridgecrest Drive SE was located on-Base and detected in the groundwater sample collected from well KAFB-106S2-451 (37 µg/L).

4.5.1.2 BTEX Analytical Results

Groundwater samples from 160 wells were analyzed for BTEX in Q4 2020 (Table 4-3). Analytical results of BTEX are presented in Table 4-6, and on Figures 4-10 through 4-15. There were no detections of

BTEX compounds in sentinel GWM wells in Q4 2020; sentinel well locations are shown on Figure 4-20.

4.5.1.2.1 BTEX Analytical Results North of Ridgecrest Drive SE

Of the 160 wells analyzed for BTEX in Q4 2020, 81 were located north of Ridgecrest Drive SE in the IMOA.

- Benzene did not exceed the EPA MCL of 5.0 µg/L north of Ridgecrest Drive SE (Figures 4-10 to 4-12). Benzene was detected below the MCL in one well north of Ridgecrest Drive SE, KAFB-106022 at an estimated concentration of 0.29 µg/L. This well is located in REI 4857/4838, and is located south of Gibson Boulevard SE near extraction well KAFB-106228.
- Toluene, ethylbenzene, and total xylenes were not detected north of Ridgecrest Drive SE.

4.5.1.2.2 BTEX Analytical Results South of Ridgecrest Drive SE

Of the 160 wells analyzed for BTEX in Q4 2020, 79 were located south of Ridgecrest Drive SE in the Source Area.

- Benzene exceeded the EPA MCL of 5.0 µg/L in 22 wells located south of Ridgecrest Drive SE (Figures 4-10 to 4-12). These wells were primarily in REI 4857 with two in REI 4838. The highest benzene concentration was detected in KAFB-106059 (15,000 µg/L) in REI 4857 in the Source Area Plume.
- Toluene exceeded the 1,000 µg/L project screening level in 11 wells located south of Ridgecrest Drive SE (Figure 4-13); these exceedances were primarily in REI 4857 with one in REI 4838. The highest toluene concentration was detected in KAFB-106059 (12,000 µg/L) in REI 4857 in the Source Area Plume.
- Ethylbenzene exceeded the 700 µg/L project screening level in seven wells located south of Ridgecrest Drive SE (Figure 4-14); six exceedances were in REI 4857 and one was in REI 4838. The highest ethylbenzene concentration was detected in KAFB-106064 and KAFB-106S5-446 (1,200 µg/L) in REI 4857 in the Source Area Plume.
- Total xylenes exceeded the 620 µg/L project screening level in 14 wells located south of Ridgecrest Drive SE (Figure 4-15); these exceedances were primarily in REI 4857 with one in REI 4838. The highest total xylenes concentration was detected in KAFB-106064 (4,100 µg/L) in REI 4837 in the EDB *in situ* bioremediation study area within the Source Area Plume.

4.5.2 Inorganic Compound Analytical Results

Inorganic compounds include total metals (arsenic, lead, calcium, magnesium, potassium, and sodium), dissolved metals (iron and manganese), and anions (bromide, chloride, sulfate, and nitrate/nitrite nitrogen). Total metals and anions are not site contaminants but are analyzed to evaluate the geochemical conditions of the aquifer.

A total of 160 wells were sampled for inorganic compounds in Q4 2020 (Table 4-3). Inorganic sampling is conducted to assess geochemical aquifer conditions. Inorganic analytical results are presented in Table 4-7, and on Figures 4-16 through 4-19.

4.5.2.1 *Inorganic Compound Analytical Results North of Ridgecrest Drive SE*

Of the 160 wells analyzed for BTEX in Q4 2020, 81 were located north of Ridgecrest Drive SE in the IMOA.

- Total alkalinity was measured in the groundwater samples collected from the 81 GWM wells located north of Ridgecrest Drive SE. Twenty-nine of the wells were in REI 4857 and four were in REI 4857/4838 (Figure 4-16). Concentrations in REI 4857 and 4857/4838 ranged from 68 to 140 milligrams per liter (mg/L); there is no established project screening level for alkalinity.
- Nitrate/nitrite nitrogen was detected in groundwater samples collected from 72 wells located north of Ridgecrest Drive SE. None of these sample results exceeded the 10 mg/L project screening level. Twenty-seven of the detections were in REI 4857 and two of the detections were in REI 4857/4838.
- Sulfate exceeded the 250 mg/L project screening level in one groundwater sample collected north of Ridgecrest Drive SE. KAFB-106049, in REI 4857, had a sulfate concentration of 370 mg/L.
- Bromide was detected in groundwater samples collected from 19 of the GWM wells located north of Ridgecrest Drive SE. Eight of the detections were in REI 4857 and one was in REI 4857/4838 (Figure 4-17). Concentrations in REI 4857 and REI 4857/4838 ranged from 1.3 J to 2.5 mg/L; there is no established project screening level for bromide.
- Dissolved iron was not detected in groundwater samples collected from wells located north of Ridgecrest Drive SE (Figure 4-18).
- Dissolved manganese was detected in groundwater samples collected from six wells located north of Ridgecrest Drive SE; these detections were below the 0.2 mg/L project screening level. Two of the detections were in REI 4857 and two of the detections were in REI 4857/4838 (Figure 4-19).
- Chloride was measured in groundwater samples collected from the 81 GWM wells located north of Ridgecrest Drive SE. None of these sample results exceeded the 250 mg/L project screening level. Twenty-nine of the detections were in REI 4857.

4.5.2.2 *Inorganic Compound Analytical Results South of Ridgecrest Drive SE*

Of the 160 wells sampled for inorganic compounds in Q4 2020, 79 were located south of Ridgecrest Drive SE.

- Total alkalinity was measured in the groundwater samples collected from the 79 wells located south of Ridgecrest Drive SE. Forty-five of the wells were in REI 4857 and four were in REI 4857/4838 (Figure 4-16). Concentrations in REI 4857 and 4857/4838 ranged from 88 to 570 mg/L; there is no established project screening level for alkalinity.
- Nitrate/nitrite nitrogen was detected in groundwater samples from 44 wells located south of Ridgecrest Drive SE. None of these sample results exceeded the 10 mg/L project screening level. Twenty-two of the detections were in REI 4857 and three of the detections were in REI 4857/4838.

- Sulfate exceeded the 250 mg/L project screening level in groundwater samples collected from six wells located south of Ridgecrest Drive SE; these wells were located in REI 4857. The highest sulfate concentration was detected in KAFB-106S9-447 at a concentration of 370 mg/L.
- Bromide was detected in groundwater samples collected from 24 GWM wells located south of Ridgecrest Drive SE. Eighteen of the detections were in REI 4857 and one was in REI 4857/4838 (Figure 4-17). Concentrations in REI 4857 and 4857/4838 ranged from 1.3 J to 3.3 mg/L; there is no established project screening level for bromide.
- Dissolved iron was detected in groundwater samples collected from 23 wells located south of Ridgecrest Drive SE; 14 exceeded the 1 mg/L project screening level. The highest iron concentration was detected in KAFB-106008, in REI 4857, at 8.3 mg/L. Twelve of the exceedances were in REI 4857 (Figure 4-18).
- Dissolved manganese was detected in groundwater samples collected from 36 wells located south of Ridgecrest Drive SE; 24 exceeded the 0.2 mg/L project screening level. The highest manganese concentration was detected in KAFB-106064, in REI 4857, at 8.0 mg/L. Nineteen exceedances were in REI 4857 and two exceedances were in REI 4857/4838 (Figure 4-19).
- Chloride was measured in groundwater samples collected from the 79 GWM wells located south of Ridgecrest Drive SE. One of these sample results exceeded the 250 mg/L project screening level. Chloride was detected in KAFB-106S4-446 at 290 mg/L. Forty-five of the detections were in REI 4857.

4.5.3 Sampling Results for U.S. Geological Survey Sentinel Wells

USGS monitors 14 sentinel wells between the Kirtland AFB BFF EDB plume and water supply wells, which are owned and operated by the Albuquerque Bernalillo County Water Utility Authority and Raymond G. Murphy VA Medical Center (Figure 4-20). This monitoring is conducted as a means of providing independent observation of water quality in the vicinity of these water supply wells. Samples are collected from these sentinel wells quarterly. For Q4 2020, these samples were collected using dual membrane samplers from October 19 to 22, 2020. The samples were analyzed for volatile organic compounds and EDB by the USGS National Water Quality Laboratory using Method O-4127-96 (Connor et al., 1998). No detections were found in the Q4 2020 samples. The USGS transmittal letter, including the Q4 2020 data results, is provided in Appendix E-5.

4.5.4 Field Parameter Monitoring Results

Field parameters were collected from 57 wells located south of Ridgecrest Drive SE that were sampled using the low-flow sampling method. Field parameter data are presented in Table 4-5. Historical field parameter data from the three previous quarters are presented in Appendix E-3, Table E-3-1.

- Groundwater temperatures ranged from 16.5 degrees Celsius in KAFB-106065 to 24.0 degrees Celsius in KAFB-106039.
- Sample pH ranged from 6.72 in KAFB-106064 and KAFB-106076 to 8.17 in KAFB-106044.
- Specific conductivity ranged from 322.2 microSiemens per centimeter in KAFB-106001 to 1,774 microSiemens per centimeter in KAFB-106009.

- Dissolved oxygen (DO) ranged from an anaerobic value of 0.00 mg/L in KAFB-106064 to an aerobic value of 8.52 mg/L in KAFB-106003.
- Oxidation reduction potential (ORP) ranged from -324.8 millivolts in KAFB-106005 to 441.9 millivolts in KAFB-106098.
- Turbidity ranged from 0.27 nephelometric turbidity units in KAFB-106002 to 123 nephelometric turbidity units in KAFB-106020.

4.5.5 Bioremediation Indicators

Alkalinity, dissolved iron, dissolved manganese, DO, ORP, nitrate/nitrite nitrogen, and sulfate concentrations provide direct and indirect evidence of subsurface conditions impacted by microbial activities.

The highest total alkalinity measurements were observed within the footprint of the Source Area Plume (Figure 4-16). Increased alkalinity and dissolved iron and manganese concentrations relative to “background” are often associated with biological activity, as CO₂ respiration is a common component of many microbiological systems. As the dissolved CO₂ reacts with the groundwater, carbonic acid forms and mineral dissolution occurs. This dissolution results in increased total alkalinity and dissolved metals concentrations.

In REI 4857, the project screening level exceedances for dissolved iron and manganese were clustered in the Source Area (Figures 4-18 and 4-19, respectively). The combination of elevated alkalinity and dissolved metals concentrations is often associated with increased microbial degradation of organics, resulting in the creation of anaerobic conditions. Aerobic microorganisms require the presence of DO to effectively break down organic compounds found in the environment. Decreased DO and ORP can be indicators of microbial degradation of HC in the subsurface. The lowest DO and ORP values are located in the Source Area.

Decreased concentrations of nitrate/nitrite nitrogen and sulfate are often associated with microbial activity. Nitrogen is incorporated into microbial biomass and sulfate/sulfite transitions can be used as an energy bank by some microorganisms. Generally, lower concentrations of nitrate/nitrite nitrogen and sulfate were observed near the Source Area Plume with the exception of wells located near the boundary between Kirtland AFB and Bullhead Park, on the western edge of the monitoring network. An investigation by Kirtland AFB found that nearby sewer lines are intact, while a junction manhole may have been a historical source of sanitary waste release to the subsurface (Kirtland AFB, 2017e). A replacement manhole was installed in Q4 2017. Nitrogen levels in the area have decreased since Q4 2017 and are now only detected below the project screening level, while sulfate levels in six REI 4857 wells in this area remain above the project screening level.

4.6 Groundwater Gauging and Monitoring Annual Summary

4.6.1 Annual Time-Series Analysis of Groundwater Elevations and Light Non-Aqueous Phase Liquid Thicknesses

Overall, groundwater levels fell throughout the GWM network during the latter half of 2020. The greatest declines were observed in the northeastern portion of the GWM network (Appendix F-6). The decline observed in 2020 was attributed to additional City of Albuquerque and Kirtland AFB production well pumping due to drought conditions. From Q4 2019 to Q4 2020, the average change in groundwater level

was a decrease of 0.54 ft. In 2019, the groundwater level rose by an average of 2.83 ft. The maximum observed decrease in groundwater level from Q4 2019 to Q4 2020 was 7.97 ft observed in KAFB-106230 and the maximum increase in groundwater level for the same time period was 1.04 ft observed in KAFB-106003.

The greatest decreases in groundwater level during 2020 were observed in the northeastern extent of the plume, in the vicinity of extraction well KAFB-003. Water level hydrographs for select wells are provided in Appendix F-6 and all groundwater and LNAPL elevations for 2020 are provided in Appendix F-5.

In 2020, floating fuel on the water table (i.e., LNAPL) was limited to five out of the 165 wells that were gauged in 2020. These wells were located on-Base and in the Source Area Plume. Each GWM well was gauged quarterly and evaluated for LNAPL as a precaution. Two wells had measurable LNAPL present consistently throughout 2020, KAFB-106059 at a thickness ranging from 0.01 to 0.16 ft, and KAFB-106150-484 at a thickness ranging from 0.10 to 0.38 ft. Two GWM wells had measurable LNAPL during two of the four quarters of gauging (KAFB-106076 and KAFB-106154-484). KAFB-106005 had measurable LNAPL only in Q4.

4.6.2 Annual Analysis of Analytes in Groundwater

This section discusses general changes in EDB and BTEX throughout the GWM network from Q4 2019 to Q4 2020. A detailed analysis and discussion of the mass and volume of the dissolved-phase EDB within the TCZ were conducted using modeling and are presented in the performance assessment in Sections 6.4 and 6.5.

A discussion of the notable changes observed in both organic and inorganic compounds is provided in the subsections below. Analytical data for all wells sampled in 2020 are provided in Appendix F-4 in a sortable, searchable format.

4.6.2.1 Annual Analysis of EDB in Groundwater

The following changes in concentrations were observed in wells located north of Ridgecrest Drive SE in the IMOA:

- In two wells, EDB decreased from above the MCL to below the MCL:
 - KAFB-106042 (REI 4857): EDB decreased from 0.057 J to 0.043 µg/L.
 - KAFB-106243-425 (REI 4857): EDB decreased from 0.054 J to 0.018 J µg/L.
- In one well, EDB decreased from below the MCL to non-detect:
 - KAFB-106085 (REI 4857): EDB decreased from 0.014 J µg/L to non-detect.
- There were no observed increases in EDB from below the MCL to above the MCL.

The following changes in concentrations were observed in wells located south of Ridgecrest Drive SE, in the Source Area Plume:

- In four wells, EDB decreased from above the MCL to below the MCL:

- KAFB-106019 (REI 4857/4838): EDB decreased from 0.052 to 0.026 J µg/L.
 - KAFB-106060 (REI 4838): EDB decreased from 0.14 µg/L to non-detect.
 - KAFB-106151-484 (REI 4857): EDB decreased from 1.4 to 0.03 µg/L.
 - KAFB-106S9-447 (REI 4857): EDB decreased from 58 to 0.018 J µg/L.
- In three wells, EDB decreased from below the MCL to non-detect:
 - KAFB-106076 (REI 4857): EDB decreased from 0.035 µg/L to non-detect.
 - KAFB-106079 (REI 4857): EDB decreased from 0.027 J µg/L to non-detect.
 - KAFB-106152-484 (REI 4857): EDB decreased from 0.043 µg/L to non-detect.
 - In two wells, EDB increased from below the MCL to above the MCL:
 - KAFB-106014 (REI 4857): EDB increased from non-detect to 2.6 µg/L.
 - KAFB-106094 (REI 4857): EDB increased from non-detect to 0.071 µg/L.

4.6.2.2 Annual Analysis of BTEX in Groundwater

BTEX analytical results for groundwater samples collected from GWM wells were similar to results from Q4 2019. At the plume edges, some wells showed a decrease from slightly above to slightly below the MCL; and, outside of the plume boundary, a few wells showed a decrease from low-level detections to non-detect. Within the plume boundary, intra-well concentrations fluctuated both up and down. Overall, the extent of the dissolved-phase BTEX constituents has not appreciatively varied over time (Figure 4-10). The maximum benzene concentration in Q4 2020 was 15,000 µg/L in the sample collected from KAFB-1060059, which is an increase from 13,000 µg/L in Q4 2019; KAFB-106059 is in the source area.

4.7 Groundwater Monitoring Well Network Maintenance

The GWM well network was inspected to ensure that the condition of all protective covers and wellheads met the intended requirements for performance and security. During the inspection period, cleaning and maintenance were performed and all GWM wells were determined to be fully serviceable. One dedicated Bennett pump was removed during Q4 2020, from well KAFB-106080. As of the end of Q4 2020, 95 dedicated Bennett pumps have been removed from the GWM well network. Of these, 77 were removed in Q2 2017 as part of a transition to passive sampling for the monitoring program (NMED, 2017b). In the remaining 18 wells, dedicated Bennett pumps were removed due to pump failure. Twelve of these 18 wells have been sampled using a portable Bennett pump since removal, and six wells will be sampled using a portable Bennett pump until official written approval is obtained for passive sampling.

5. DRINKING WATER SUPPLY WELL MONITORING

Three drinking water supply wells (KAFB-003, KAFB-015, and KAFB-016) provide drinking water to on-Base employees and tenants of Maxwell Housing, which is located off-Base. One drinking water supply well (ST106-VA-2) provides drinking water to VA Medical Center patients, employees, and visitors. These drinking water wells are community water systems that are regulated by the NMED Drinking Water Bureau in accordance with the Safe Drinking Water Act.

As part of the monitoring associated with the BFF site, these wells are sampled monthly and analyzed for EDB and BTEX to document that the EDB plume has not impacted these drinking water wells. Semi-annually, these wells are sampled for inorganic compounds as part of the GWM program.

5.1 Drinking Water Supply Well Sampling and Analysis Procedures

Drinking water supply wells KAFB-003, KAFB-015, KAFB-016, and ST106-VA-2 were sampled in October, November, and December 2020. Field measurements, sample collection, packaging, shipping, and analyses were performed in accordance with the Vadose Zone Coring, Vapor Monitoring, and Water Supply Sampling Work Plan and associated QAPjP (Kirtland AFB, 2017b). Sampling was conducted in accordance with the procedures discussed in Appendix B-1. Daily quality control reports are provided in Appendix G-1. Completed sample collection logs and chain-of-custody forms are provided in Appendix G-2. Drinking water supply samples were collected and submitted for the following analyses:

- EDB using EPA Method 504.1
- BTEX using EPA Method 524.2.

Samples were submitted to Eurofins TestAmerica Laboratories in Savannah, Georgia, for analytical testing. Analytical results were validated by Environmental Data Services, Inc. The Data Quality Evaluation Reports are provided in Appendix H-1. The Eurofins TestAmerica Laboratories Analytical Reports for October, November, and December 2020 are provided in Appendix H-2.

In addition, semi-annual water samples were collected in October 2020, and analyzed for the following inorganic parameters:

- Total metals (calcium, magnesium, potassium, and sodium) using EPA Method 6010C
- Dissolved metals (iron and manganese) using EPA Method 6010C
- Total metals (arsenic and lead) using EPA Method 6020A
- Anions (bromide, chloride, and sulfate) using EPA Method 300.0A
- Anions (nitrate/nitrite nitrogen) using EPA Method 353.2
- Ammonia nitrogen using Standard Method 4500NH3B/C
- Sulfide using Standard Method 4500S2CF
- Alkalinity-bicarbonate/carbonate using Standard Method 2320B.

Inorganic samples were submitted to Eurofins Lancaster Laboratories Environmental, LLC located in Lancaster, Pennsylvania. Analytical results were validated by Validata Chemical Services, Inc.

5.2 Data Review and Usability Results

The Q4 2020 drinking water analytical data underwent a 100% Stage 3 data validation performed by Environmental Data Services, Inc., Palm Gardens, Florida (EDB and BTEX), and Validata Chemical

Services Inc, Duluth, Georgia (inorganic compounds) following data verification. The data verification and validation steps are discussed in detail in Section 4.4.

All data were valid based on necessary criteria, and no data were qualified as rejected. The technical data completeness was 100%. The data met data quality objectives and were appropriate for use in project decision-making. The quality control parameter and data quality indicator (precision, bias [accuracy], representativeness, comparability, completeness, and sensitivity) evaluation results are provided in the Data Quality Evaluation Report and Data Validation Report provided in Appendix H-1. Final validated data are provided in Tables 5-1 and 5-2.

5.3 Drinking Water Supply Well Analytical Results for Q4 2020

Appendix H-3 includes analytical data from Q4 2020 and the three previous quarters. EDB and BTEX monthly results for Q4 2020 are presented in Table 5-1 and Figure 5-1. No detectable concentrations of EDB or BTEX were observed in the drinking water supply wells samples, consistent with historical results.

Semi-annual inorganic results for Q4 2020 are presented in Table 5-2. Inorganic compounds detected in the samples collected from drinking water supply wells KAFB-003 and ST106-VA-2 were below their respective EPA MCLs. The arsenic concentrations detected in the samples collected from KAFB-015 and KAFB-016 in October 2020 were 0.015 and 0.023 mg/L, respectively, which both exceeded the MCL of 0.01 mg/L. These arsenic concentrations are consistent with naturally occurring arsenic observed in the Albuquerque Basin (Bexfield and Plummer, 2003). Consequently, Kirtland AFB operates an arsenic compliance system as part of the water treatment system; and, as a result, arsenic concentrations in the Kirtland AFB drinking water supply do not exceed drinking water criteria (Kirtland AFB, 2003). The other inorganic compounds detected in KAFB-015 and KAFB-016 were below their respective MCLs.

5.4 Drinking Water Supply Well Analytical Results Annual Summary

The four drinking water supply wells (KAFB-003, KAFB-015, KAFB-016, and ST106-VA-2) were sampled monthly for EDB and BTEX from January through December 2020. KAFB-015 was shut down for repairs and, therefore, not sampled in April and May. All samples were non-detect for EDB and BTEX. Analytical results for 2020 are provided in a sortable, searchable format in Appendix H-3.

The four drinking water supply wells were sampled for inorganic compounds in April and October 2020. The inorganic compounds detected in drinking water supply wells KAFB-003 and ST106-VA-2 were below their respective MCLs for both sampling events. Arsenic was detected in samples collected from KAFB-015 and KAFB-016 exceeding the MCL of 0.01 mg/L in both April and October 2020; drinking water samples from KAFB-015 had arsenic concentrations of 0.017 and 0.015 mg/L in April and October, respectively; and KAFB-016 had concentrations of 0.024 and 0.023 mg/L in April and October, respectively. As noted in Section 5.3, these arsenic concentrations are consistent with naturally occurring arsenic observed in the Albuquerque Basin (Bexfield and Plummer, 2003) and Kirtland AFB operates an arsenic compliance system to ensure that the drinking water supply does not exceed drinking water criteria (Kirtland AFB, 2003).

6. INTERIM MEASURE

This section presents the Q4 2020 and Calendar Year 2020 annual GWTS operation, performance monitoring and EDB removal, system maintenance and expansion, and analysis of the lines of evidence for the GWTS. Appendices pertinent to GWTS operation and performance are:

- Appendix I-1 GWTS Plant O&M Documentation
- Appendix I-2 New Mexico 811 Line Locate Tickets
- Appendix I-3 GWTS Performance Sample Collection Logs
- Appendix I-4 Data Quality Evaluation Report – GWTS Samples
- Appendix I-5 Data Packages – GWTS Samples.
- Appendix I-6 GWTS Performance Analytical Data.

6.1 Groundwater Treatment System Operation

The GWTS is part of the interim measure performed pursuant to the corrective action provisions in Kirtland AFB's RCRA Permit (NMED, 2010). The purpose of the interim measure is to collapse and treat the dissolved-phase EDB plume within the IMOA, located north of Ridgecrest Drive SE. The GWTS includes:

- Four extraction wells (KAFB-106228, KAFB-106233, KAFB-106234, and KAFB-106239)
- Influent conveyance piping
- Two carbon treatment trains (designed for, but not operating at, 800-gallon per minute [gpm] maximum capacity) located within the GWTS building and associated influent conveyance lines
- Effluent conveyance lines discharging to either the Tijeras Arroyo Golf Course main pond (GCMP), gravity-fed injection well KAFB-7, or gravity-fed injection well KAFB-IN2 (Figure 6-1). Kirtland AFB is also permitted to discharge to Tijeras Arroyo under National Pollutant Discharge Elimination System Permit NM0031216 (EPA, 2019). This discharge point will only be used in emergency situations (i.e., GCMP, KAFB-7, or KAFB-IN2 are all inoperable).

The GWTS is subject to the terms of DP-1839 as discussed in Section 2. The requirements associated with the conditions of DP-1839 and the location of reporting requirements in this report are summarized in Table 6-1.

6.1.1 Groundwater Treatment System Treatment Volumes and Percentage Run Time

For the purpose of run time evaluation, GWTS operation is defined as the time when groundwater was being pumped from at least one extraction well and subsequently treated and discharged.

6.1.1.1 Quarterly Run Time

Table 6-2 provides a monthly and quarterly summary of the extraction well performance, including individual extraction well run times.

Table 6-3 provides a cumulative summary of groundwater quantities extracted, treated, and discharged.

During Q4 2020, the GWTS treated 72,390,700 gallons of groundwater; 23,029,900 gallons was discharged to the GCMP, 49,220,100 gallons was discharged to injection well KAFB-7, and 140,700 gallons was discharged to injection well KAFB-IN2. During Q4 2020, Trains 1 and 2 treated 44,234,900 and 28,155,800 gallons, respectively.

During Q4 2020, the GWTS was operational 95.1% of the time (Table 6-2). Planned and unplanned system shutdowns affecting GWTS overall run time during Q4 2020 are described in Sections 6.3.1 and 6.3.3.

6.1.1.2 Annual Run Time

Table 6-4 provides a quarterly and annual summary of the extraction well performance, including individual extraction well run times.

During 2020, the GWTS treated 248,046,600 gallons of groundwater; 147,776,200 gallons was discharged to the GCMP, 100,129,700 gallons was discharged to injection well KAFB-7, and 140,700 gallons was discharged to injection well KAFB-IN2. During 2020, Trains 1 and 2 treated 141,590,600 and 106,456,000 gallons, respectively. Table 6-3 provides a cumulative summary of groundwater quantities extracted, treated, and discharged.

Throughout 2020, the GWTS was operational 97.6% of the time (Table 6-4). Planned and unplanned system shutdowns affecting GWTS overall run time during 2020 are described in Sections 6.3.1 and 6.3.3.

6.1.2 Extraction Well Performance Metrics

The following subsection provides a summary of the performance metrics for the four extraction wells. Quarterly extraction well performance data required for DP-1839 reporting compliance are provided in Table 6-1. Average operational extraction flow rates do not include flow rates during downtime. Well performance figures are provided in Appendix I-1.

Extraction wells are prioritized for pumping based on their impact on the TCZ and protection of the municipal water supply wells. Well KAFB-106228 and KAFB-106239 are the highest priority as they have the greatest impact on the reduction of the TCZ based on GWTS performance monitoring and wellhead sampling results. Well KAFB-106234 is the next highest priority as it serves as a distal plume capture well between the TCZ and municipal water supply wells to the northeast. Well KAFB-106233 has minimal impact on TCZ reduction based on wellhead sampling results and is, therefore, the most likely to be deprioritized. Quarterly and annual extraction rates are presented in Table 6-2.

6.1.2.1 Quarterly Extraction Rates

Water was extracted from KAFB-106228 during Q4 2020 at an average operational flow rate of 139.6 gpm with a run time of 95.1% (Table 6-2).

Water was extracted from KAFB-106234 during Q4 2020 at an average operational flow rate of 173.8 gpm with a run time of 94.5% (Table 6-2).

Water was extracted from KAFB-106239 during Q4 2020 at an average operational flow rate of 73.4 gpm with a run time of 94.2% (Table 6-2).

Water was extracted from KAFB-106233 during Q4 2020 at an average operational flow rate of 160.1 gpm with a run time of 94.1% (Table 6-2).

6.1.2.2 Annual Extraction Rates

Water was extracted from KAFB-106228 during 2020 at an average operational flow rate of 142.3 gpm with a run time of 96.9% (Table 6-4).

Water was extracted from KAFB-106234 during 2020 at an average operational flow rate of 174.7 gpm with a run time of 97.1% (Table 6-4).

Water was extracted from KAFB-106239 during 2020 at an average operational flow rate of 73.9 gpm with a run time of 94.9% (Table 6-4).

Water was extracted from KAFB-106233 during 2020 at an average operational flow rate of 162.8 gpm with a run time of 54.4% (Table 6-4).

6.1.3 Injection Well Performance Metrics

Quarterly injection well performance data required for DP-1839 reporting compliance are provided in Table 6-5. Injection well performance figures are provided in Appendix I-1. Quarterly and annual injection rates are provided in Table 6-6.

6.1.3.1 Quarterly Injection Rates

Groundwater was injected into KAFB-7 during Q4 2020 at an average operational flow rate of 654.7 gpm with a run time of 67.4% (Table 6-5).

Groundwater was injected into KAFB-IN2 during Q4 2020 at an average operational flow rate of 539.1 gpm with a run time of 4.3% (Table 6-5). Installation of this well was completed in December and is currently undergoing testing and injection development.

6.1.3.2 Annual Injection Rates

Groundwater was injected into KAFB-7 in 2020 at an average operational flow rate of 562.6 gpm with a run time of 44.5% (Table 6-6).

Groundwater was injected into KAFB-IN2 in 2020 at an average operational flow rate of 539.1 gpm with a run time of 1.1% (Table 6-6).

6.2 Groundwater Treatment System Performance Monitoring and 1,2-Dibromoethane Removal

GWTS performance monitoring is performed in conformance with the most recently approved Work Plan (Kirtland AFB, 2017a) as well as the O&M Plan (NMED, 2016; Kirtland AFB, 2016a, 2017d, 2018b). DP-1839 provides additional sampling criteria. Table 2 of DP-1839 provides a list of the constituents of concern that are most frequently monitored at the GWTS (NMED, 2017c). Q4 2020 GWTS analytical performance metrics and EDB mass removal are discussed in the following sections.

6.2.1 Sampling and Analytical Results

Water samples from Train 1 (KAFB-106233 and KAFB-106234) and Train 2 (KAFB-106228 and KAFB-106239) were collected monthly from the untreated influent (sample identifications GWTS-BFF-INF1 and GWTS-BFF-INF2), from a port located after the initial granular activated carbon (GAC) vessel (sample identifications GWTS-BFF-GAC1 and GWTS-BFF-GAC2) but before the final GAC vessel, and from the treated effluent (sample identifications GWTS-BFF-EFF1 and GWTS-BFF-EFF2) in Q4 2020. These samples were analyzed for EDB, BTEX, and dissolved iron and manganese. EDB concentrations and mass removal for Q4 2020 are summarized in Table 6-7. Sample results and effluent discharge limits are provided in Table 6-8 for Train 1 and Table 6-9 for Train 2. GWTS performance sample collection logs are provided in Appendix I-3 and analytical data for this quarter and the previous three quarters are provided in Appendix I-6.

Concentrations of EDB in the influent samples of Train 1 were below the laboratory detection limit throughout Q4 2020 (Table 6-8); therefore, no mass of EDB was estimated to be captured and removed in the initial GAC vessel of Train 1. Quantities of mass were calculated by taking the sum of each monthly influent concentration multiplied by the respective total weekly treated volume (Table 6-7).

In Q4 2020, an estimated 2,051 milligrams of EDB was captured in the initial GAC vessel and removed by Train 2. Concentrations of EDB were detected in the influent samples of Train 2 below the 0.05 µg/L MCL at estimated concentrations of 0.024 J, 0.024 J, and 0.018 J µg/L in October, November, and December 2020, respectively (Table 6-9). The J-qualifier denotes that the analyte was identified, but at a low enough concentration that the associated numerical value is estimated. BTEX was not detected in influent samples collected from either train during Q4 2020.

Dissolved manganese was detected below the project screening level in monthly influent samples collected from Train 2 in Q4 2020 but was not detected in the influent samples collected from Train 1 during Q4 2020 (Tables 6-8 and 6-9). Dissolved iron was not detected in monthly influent samples collected from either Train 1 or Train 2 (Tables 6-8 and 6-9).

Concentrations of EDB, BTEX, dissolved iron, and manganese were non-detect in effluent monthly samples collected from both Trains 1 and 2 during Q4 2020 (Tables 6-8 and 6-9).

6.2.1.1 Annual Analytical Results

Analyte concentrations for effluent samples collected during 2020 were below their respective limits of detection. For 2020 operations (defined as December 30, 2019 through January 4, 2021, based on weekly data collection), an estimated 1,513 and 8,065 milligrams of EDB was adsorbed in the lead GAC vessel of Train 1 and Train 2, respectively (Table 6-10), for an annual total of 9,577 milligrams of EDB captured.

Wells KAFB-0505, ST105MW507, and KAFB-0508, associated with the Kirtland ST-105 abatement plan, were sampled on July 27, 2020 in the vicinity of KAFB-7. As a requirement of DP-1839, these wells are sampled annually; this was the third sampling event for these wells since the DP-1839 was issued on April 28, 2017. Analytical results are presented in Table 6-11. None of the analytes exceeded their MCL or project screening level from the groundwater samples collected from these wells. The analytical data from these wells, along with an analysis of groundwater flow in the vicinity of KAFB-7, will be included in the ST-105 Annual Report (Table 6-1).

6.2.2 Data Review and Usability Results

The GWTS analytical data from Q4 2020 underwent EPA Stage 3 data validation by Validata Chemical Services, Inc., Duluth, Georgia, or Environmental Data Services, Inc., Palm Gardens, Florida (disinfection well data and data from ST-105 wells in the vicinity of KAFB-7) following data verification. The data verification and validation steps are discussed in detail in Section 4.4.

Upon completion of the verification and validation process, the data were assessed for accuracy, precision, representativeness, comparability, completeness, and sensitivity to determine if the project data quality objectives were achieved and deemed usable for their intended purpose. The data validation results are included in the Data Quality Evaluation Report provided in Appendix I-4 and the final laboratory data reports provided in Appendix I-5.

6.3 Groundwater Treatment System Maintenance and Expansion Activities

Q4 2020 maintenance activities at the GWTS were performed in accordance with the O&M Plan (NMED, 2016; Kirtland AFB, 2016a, 2017d, 2018b) and are discussed in the following sections.

6.3.1 Routine Maintenance Activities

Routine maintenance is any activity described as such in the GWTS O&M Plan (NMED, 2016; Kirtland AFB, 2016a, 2017d, 2018b). A summary of routine maintenance activities is provided below.

6.3.1.1 Quarterly Routine Maintenance Activities

During Q4 2020, Train 1 influent bag filters were replaced on October 14, Train 2 influent bag filters were replaced on October 9 and December 9, and Train 2 effluent bag filters were replaced on December 9. Train 1 effluent bag filters were not replaced during Q4 2020 as they did not reach the differential pressure required for replacement (NMED, 2016; Kirtland AFB, 2016a, 2017d, 2018b). The differential pressure at the initial GAC vessel on Train 1 was 2.3 pounds per square inch (psi) on October 1, 2020; and, on December 31, 2020, the differential pressure was 3.0 psi (Appendix I-1). The differential pressure at the initial GAC vessel on Train 2 was 5.0 psi on October 1, 2020; and, on December 31, 2020, the differential pressure was 5.7 psi.

The influent basket strainers were cleaned 15 times for Train 1 and 17 times for Train 2 throughout Q4 2020. The effluent Wye strainers were cleaned two times for both Train 1 and Train 2 throughout Q4 2020. Wye strainers/basket strainers were cleaned to maintain equalization of the influent tanks and prevent cavitation at the influent pump intakes. The Wye strainers/basket strainers accumulate biologic materials coming in with the influent.

The GWTS routine maintenance schedule is provided in Table 6-12 and non-routine maintenance activities that were performed during Q4 2020 are discussed in Section 6.3.3 and in Table 6-13.

6.3.1.2 Annual Routine Maintenance Activities

During 2020, the GWTS was intentionally shut down on several occasions for routine maintenance including changing bag filters, cleaning Wye strainers and basket strainers, changing pump oil, and greasing pump bearings. Routine maintenance was performed as per the GWTS O&M Plan throughout 2020.

Table 6-12 contains a comprehensive list of all routine maintenance activities and their respective frequencies.

6.3.2 Conveyance Line Security and Administrative Controls

Kirtland AFB is registered as a line-owner with New Mexico 811 for the off-Base portion of the conveyance lines. U.S. Air Force permits are required for all on-Base excavation projects.

6.3.2.1 Quarterly Conveyance Line Security

During Q4 2020, Kirtland AFB responded to six off-Base tickets requested through New Mexico 811 (Appendix I-2). There were no conveyance line breaches and all off-Base conveyance lines remained intact.

6.3.2.2 Annual Conveyance Line Security

Over the course of 2020, Kirtland AFB responded to 24 off-Base tickets requested through New Mexico 811. Throughout 2020, there were no conveyance line breaches and all off-Base conveyance lines remained intact.

6.3.3 Non-Routine Maintenance Activities

Non-routine maintenance activities are defined as maintenance items that fall outside of the scope of the GWTS O&M Plan (NMED, 2016; Kirtland AFB, 2016a, 2017d, 2018b) but need to be addressed in order to maintain consistent GWTS operation. A summary of shutdowns associated with non-routine maintenance activities occurring during Q4 2020 is provided on Table 6-13. Major non-routine maintenance performed in Q4 2020 is listed below.

6.3.3.1 Quarterly Non-Routine Maintenance Activities

On October 5, 2020, due to a failure of the GWTS control room uninterruptable power supply during a power interruption on-Base, all instrumentation and controls of the GWTS were shut offline. Because the programmable logic controller did not have time to signal the controls at the well control house, extraction wells KAFB-106233 and KAFB-106234 (the wells associated with the well control house) continued to pump water at an approximate rate of 334 gpm into the influent tank of Train 1. The tank overflowed, and influent water from KAFB-106233 and KAFB-106234 spilled out through the upper air vent of the Train 1 influent tank and out into the floor of the GWTS building. Since all GWTS controls were offline due to the failed uninterruptable power supply and power interruption, no alarms were triggered, including the high-high level float switch alarm in the influent tank, the internal sump high-level alarm, or the external sump high-level alarm. Water escaped through small gaps in the doors of the GWTS building and overflowed the external sump without triggering the alarm.

Once discovered, water was pumped back through the system for treatment, where available. Soil samples were taken to assess if impacts to the soil occurred. A sample of standing water was also collected to assess if contaminants of concern were present in the released water. The results of both the soil and water laboratory analytical data indicated no detection of EDB or BTEX in the collected samples (Appendix I-3). A report on the release was submitted to NMED on October 21, 2020 following approval by NMED of a 15-day extension to submit the report on October 8, 2020. An addendum to the report that contained a second set of data analyzed by a DoD Environmental Laboratory Accreditation Program laboratory was submitted to the NMED on November 16, 2020.

Extraction well KAFB-106239 was disinfected on December 21, 2020 to mitigate bacterial growth and biofouling, and to increase well efficiency. Extraction well disinfection was performed in accordance with the Standard Operating Procedure provided as Appendix R to the O&M Plan (NMED, 2016; Kirtland AFB, 2016a, 2017d, 2018b). The Standard Operating Procedure was approved by NMED on August 6, 2018 (NMED, 2018b). The analytical sampling suites for pre-treatment and post-treatment groundwater samples were approved on November 16, 2018 (NMED, 2018c).

Pre- and post-treatment samples were analyzed for bromate and chlorite using EPA Method E300.1. Perchlorate was analyzed using EPA Method E331.0. Bromate and chlorite were not detected in either sample. Perchlorate was detected at concentrations ranging from 0.16 to 0.18 $\mu\text{g/L}$, below the project screening level of 14 $\mu\text{g/L}$, in both samples (Appendix I-1, Table I-1-5). Groundwater from the Middle Rio Grande Basin has naturally occurring perchlorate concentrations ranging from 0.12 to 1.8 $\mu\text{g/L}$ (Plummer et al., 2006).

6.3.3.2 Annual Non-Routine Maintenance Activities

In addition to the Q4 2020 non-routine maintenance activities discussed in Section 6.3.3.1, non-routine maintenance activities performed in 2020 are discussed below and provided in Table 6-14.

Extraction well KAFB-106239 was disinfected on February 26, and September 10, 2020 to mitigate bacterial growth and biofouling, and to increase well efficiency. Rehabilitation on extraction well KAFB-106239 was performed between June 22 and June 26, 2020. This included chlorine disinfection, mechanical swabbing, brushing, bailing, and a camera survey. Extraction well disinfection was performed in accordance with the Standard Operating Procedure provided as Appendix R to the O&M Plan (NMED, 2016; Kirtland AFB, 2016a, 2017d, 2018b). The Standard Operating Procedure was approved by NMED on August 6, 2018 (NMED, 2018b). The analytical sampling suites for pre-treatment and post-treatment groundwater samples were approved on November 16, 2018 (NMED, 2018c).

Pre- and post-treatment samples were analyzed for bromate and chlorite using EPA Method E300.1. Perchlorate was analyzed using EPA Method E331.0. Bromate and chlorite were not detected in either sample. Perchlorate was detected at concentrations ranging from 0.16 to 0.18 $\mu\text{g/L}$, below the project screening level of 14 $\mu\text{g/L}$, in both samples (Appendix I-1, Table I-1-5). Groundwater from the Middle Rio Grande Basin has naturally occurring perchlorate concentrations ranging from 0.12 to 1.8 $\mu\text{g/L}$ (Plummer et al., 2006).

On March 6, 2020, the Train 2 effluent pump skid motor was replaced due to extensive wear on the bearings caused by standard use and aging of the motor.

Between May 7 and May 13, 2020, the Train 1 effluent pump skid motor (P-118) and a Train 2 influent pump skid motor (P-212B) were replaced with rebuilt motors due to extensive wear on the bearings caused by standard use and aging of the motor. All pump skid motors were given grounding rings and laser alignments. On June 18, 2020, the Train 2 influent pump skid motor (P-212B) was replaced with a new motor after detections of bearing vibration anomalies.

On July 3, 2020, the Train 2 Influent tank level transmitter failed. It was replaced on July 15, 2020.

The GWTS was shut down several times due to GCMP maintenance activities, rain events, and electrical disruptions throughout 2020.

6.3.4 Effluent Conveyance Line Integrity

Pressure testing of the effluent conveyance line was performed pursuant to Condition A15 of DP-1839 that requires the demonstration of the structural integrity of the effluent conveyance system between the GWTS and the underground injection control (UIC) well (KAFB-7 and KAFB-IN2). Final retesting of the effluent conveyance line between the GWTS and KAFB-7 was performed on July 14, 2020. The initial pressure reading after the 30-minute makeup period was 50.02 psi. After 1 hour, the pressure reading was 42.76 psi, indicating a difference of 7.26 psi. Because the final pressure was within 30% of the initial pressure, the test was a success. No leaks were detected.

Pressure testing of the effluent conveyance line between the GWTS and KAFB-IN2 is pending full operation of this injection well.

6.3.5 Groundwater Treatment System Alarm Testing

To ensure system wide integrity within the GWTS and its peripheral operations, initial annual alarm testing was performed on 70 alarms in the programmable logic controller on November 17, 2020. All but one of the alarms that were tested passed on the initial test by responding in the correct manner. The one alarm that failed was resolved and retested on November 30, 2020 and passed. Table 6-15 details the results of the 2020 GWTS annual alarm testing.

6.3.6 Annual Expansion Activities

On February 22, 2020, 6-inch Val-Matic check valves were installed on the effluent lines of Train 1 and Train 2 (one check valve per train). In August 2020, two 8-inch butterfly valves and AQ25 electric actuators were installed to replace the manually operated effluent changeover valves between the GCMP and KAFB-7. In October 2020, the uninterruptable power supply in the GWTS control room was replaced after it failed.

A new injection well (KAFB-106IN2) was installed in 2020. The installation, development, and surveying of the new injection well took place between June and November 2020. A down-hole flow control valve was installed in the well in December 2020. Subsequent testing indicated that the well had a low injection specific capacity. Due to this, additional injection-specific well development is being performed to increase the injection specific capacity.

The injection well was drilled using the reverse circulation mud rotary method. The borehole was advanced to a depth of 920 ft bgs using a 12.75-inch diameter tricone bit. After reaching total depth, the well was over-drilled to 920 ft bgs using a 20-inch tricone bit. The well was constructed of 12.75-inch 0.060-slot louvered stainless screen, connected to a carbon steel blank casing with a dielectric coupling. Filter pack material consists of 8/12 silica sand placed from 567 ft bgs to a total depth of 920 ft bgs and 6/9 silica sand placed from 541 to 567 ft bgs. Approximately 40 ft of bentonite was placed above the sand pack. Cement/bentonite grout was placed above the bentonite from approximately 500 to 30 ft bgs. The remainder of the borehole annulus was backfilled with neat cement to surface.

KAFB-IN2 was completed with an aboveground reinforced concrete wellhead support cube measuring 3 ft × 3 ft × 3 ft. The concrete wellhead support cube was mated to a wellhead equipment pad that measures 5 ft wide × 15 ft long by 6 inches thick. The wellhead equipment pad supports the wellhead equipment, piping supports, and the electrical service rack. A 6-inch discharge line was installed from the existing GWTS effluent line and was connected to the downhole injection piping to allow for injection.

The electrical service rack includes the electric meter, breaker box, control panels, and the radio antenna mast. Wellhead equipment included a magnetic flow meter, an automated wellhead control valve, air release valves, and pressure transmitters. The 6-inch discharge pipe as well as all wellhead equipment are equipped with electric heat trace and is wrapped in insulation.

6.4 Pump and Treat Interim Measure Performance Assessment

This section details the evaluation of the volume and mass, of the dissolved phase EDB plume north of Ridgecrest Drive SE (TCZ) based on actual field sampling results and evaluates TCZ capture analyses based on current water level measurements, numerical groundwater flow modeling, 3D particle track analysis, and concentration trend analysis. The efficiency of the interim measure extraction network is quantified by first delineating the volume and mass of the current TCZ that is captured under the current hydrogeologic conditions by the interim measure extraction network, then the remaining uncaptured TCZ volume and mass is compared to the initial TCZ volume and mass as defined by the Q4 2016 TCZ delineation. Current conditions capture is presented as a percentage of the initial TCZ volume and mass, which was the design objective for the extraction network. The results from these multiple lines of evidence yield a range of from 97 to 100% capture of the volume and mass of the initial TCZ by the interim measure extraction system under Q4 2020 conditions.

The pump and treat interim measure to contain the dissolved-phase EDB groundwater plume is being implemented pursuant to the corrective action provisions in Part 6 of Kirtland AFB's RCRA Permit. As discussed above, this interim measure focuses on the collapse and treatment of the dissolved-phase EDB concentrations in groundwater that extends north of Ridgecrest Drive SE. It does not address dissolved-phase EDB or other fuel-related constituent concentrations present in the source area located south of Ridgecrest Drive SE. The fuel release-related contamination south of Ridgecrest Drive SE will be comprehensively addressed in the Corrective Measures Implementation phase once the final remedy for the source area has been selected by NMED.

The principal goals of the groundwater interim measure are to:

1. Collapse the dissolved-phase EDB plume north of Ridgecrest Drive SE, which includes reducing the volume and EDB mass over time.
2. Halt plume expansion in the dissolved-phase EDB plume north of Ridgecrest Drive SE and provide protection to water supply wells by hydraulic capture of the dissolved-phase EDB utilizing well pumping.

Measuring the attainment of these goals during implementation of both the interim measure and the final remedy is referred to as performance assessment.

Defining the effectiveness of the interim measure in achieving the first goal of collapsing the plume is performed by analyzing groundwater samples for the presence and concentration of EDB and interpolating the extent of the plume based on these analyses. Groundwater samples are collected and analyzed every second and fourth quarter and the plume volume and mass is interpolated for each sampling period. In this way, the effect of interim measure extraction on the extent of the plume can be observed and quantified. This analysis also provides a domain against which the interim measure's capture potential (goal 2) can be evaluated.

The second goal, referred to as plume capture by EPA (EPA, 2008) and in this report, provides mitigation of impact to receptors prior to implementation of the final remedy. Performance assessment of the EDB pump and treat interim measure is performed in Q2 and Q4 of each year using the EPA Systematic

Approach for Evaluation of Capture Zones at Pump and Treat Systems (EPA, 2008). Performance assessment, consisting of multiple lines of evidence including numerical modeling, was approved by NMED on April 23, 2018 (NMED, 2018d) in resolution of the modeling component of the Notice of Deficiency issued to Kirtland AFB on November 16, 2017 (NMED, 2017d).

The EPA document (EPA, 2008) highlights six key steps for systematically performing a capture zone evaluation (detailed in Section 6.4.2). Quoting from this document, *Specific techniques to interpret the extent of capture achieved by the ground-water extraction are applied in Steps 3 to 5. Each of these techniques is subject to limitations, and in most cases, no single line of evidence will conclusively differentiate between successful and failed capture. Therefore, developing “converging lines of evidence,” by applying multiple techniques to evaluate capture, increases confidence in the conclusions of the capture zone analysis.*

Specific lines of evidence used to assess the capture zone include:

- Interpretation of collected water level data
- Modeling to simulate water levels in conjunction with particle tracking
- Evaluation of concentration trends.

The groundwater modeling performed is an iterative process and is used to support the interpretation of the collected water level and concentration data.

This performance assessment is a snapshot of the system’s performance at the time of the synoptic gauging event and is designed to evaluate point-in-time capture produced by the interim measure extraction system. It does not provide an integrated assessment of capture throughout Q4 2020, and it is not intended to be a final remedy evaluation.

6.4.1 Plume Collapse Analysis

This section describes the analyses designed to quantify the distribution of dissolved-phase EDB mass and volume within the aquifer over the course of the interim measure. The interim measure goal is to reduce the mass and volume of contaminated media by containing, capturing, and treating contaminated groundwater in the plume north of Ridgecrest Drive SE.

As discussed in Section 4, the IMOA for the groundwater interim measure is the distal section of the EDB plume located north of Ridgecrest Drive SE. The TCZ within the IMOA is defined in accordance with EPA 2008 guidance. The definition used by EPA defines the TCZ as the 3D zone of groundwater that must be captured by the remedy extraction wells for the hydraulic containment portion of the remedy to be considered successful. The 3D zone of groundwater that must be captured by the interim measure extraction wells (i.e., the TCZ) is defined as the MCL for dissolved EDB, 0.05 µg/L. The iso-shell delineating the cleanup standard is defined as the 3D polygon with a periphery concentration of 0.05 µg/L. Collapse of the TCZ is the long-term goal; therefore, establishing a consistent method of measurement that allows comparison of plume mass and volume trends over the duration of cleanup activities is essential.

The effectiveness of the interim measure is evaluated by comparing the most recent dissolved-phase EDB delineation with past delineations. EDB concentration data are collected and analyzed from the full GWM network during Q2 and Q4 of each year. Therefore, dissolved-phase EDB delineations are updated on this schedule and plume comparisons are presented in the reports associated with these quarters. All delineation updates are performed using the same methodology with the only variations being the

insertion of the current EDB concentration data, addition of any new monitoring wells since the last assessment, and allowance of volume increase due by resetting the plume upper surface to the current water table surface. The EDB iso-shell represented in Section 6 figures was simulated in three dimensions and is only used for TCZ analysis purposes and discussion of Section 6. Figures 4-7 through 4-9 represent the EDB plume manually interpolated for each REI using the measured monitoring data collected in Q4 2020.

Figure 6-2 shows the interpolated TCZ delineations for the last four synoptic measuring periods, as well as the TCZ delineation for Q4 2016 for baseline comparison. The TCZ volume defined by the 0.05 $\mu\text{g/L}$ iso-shell changes between measuring periods as a result of the changing regional water table and interim measure extraction activity. The volume and mass of the TCZ is calculated for each assessment period shown in Figure 6-2 and the values are listed in Table 6-16.

As can be seen in both Figure 6-2 and Table 6-16, the volume and mass of the TCZ have reduced significantly over time. In Q4 2016, 15 months after the first interim measure extraction well KAFB-106228 became active, the TCZ volume and mass were estimated at 114,700,000 cubic ft and 104 grams, respectively. Both of these values have been on a decreasing trend over the last 4 years with the current plume volume and mass estimated at 12,264,000 cubic ft and 5.2 grams, respectively. This represents an 89% decrease in TCZ volume and a 95% decrease in TCZ mass from Q4 2016.

Figure 6-3 shows a cross-section comparison of the dissolved-phase EDB extent in Q2 2020 and Q4 2020. The plume has been cut along the T1A transect that, in general, runs along the longitudinal axis of the plume from southwest to northeast. The plume is shown transparent against the stratigraphic layers of the saturated portion of the aquifer along this transect developed by AECOM (2016) so that the shape and movement of the plume can be compared to the location and extent of coarse-grained (white) and fine-grained (gray) lithology as coarse-grained sediments are generally more permeable and conductive and may provide pathways for plume movement.

Beginning in Q2 2019, this analysis was modified to focus on dissolved-phase EDB mass and volume changes solely for the TCZ, the plume extent north of Ridgecrest Drive SE. East-west transect intervals were started at, and oriented parallel to, Ridgecrest Drive SE. The total number of analysis intervals was reduced from 11 to 6 (A through F) (Figure 6-3). Both Figure 6-3 and Table 6-16 list the volume and mass of each interval and summarize these for total TCZ plume characterization. In order to retain mass and volume change comparisons, the modified analysis was repeated on dissolved-phase EDB plumes derived for Q4 2016 through Q2 2018 performance assessments. Figure 6-3 shows a graphic comparison of the Q2 2020 and Q4 2020 analyses, while Table 6-16 summarizes the analysis comparisons from Q4 2016 to Q4 2020. The dissolved-phase EDB mass values (in grams) assume a uniform total porosity of 25% for the contaminated thickness of the aquifer.

In Q4 2020, the total mass in the TCZ increased by 2.8 grams from 2.4 to 5.2 grams. The increase in mass is likely due to seasonal water table fluctuations that have been exacerbated by drought response extractions occurring north of the TCZ. When comparing similar seasonal time periods (Q4 2019 to Q4 2020), the amount of dissolved phase EDB plume mass present within the IMO decreased by 1.9 grams (Table 6-16).

This analysis shows that the interim measure has collapsed the TCZ over the last 4 years and is currently containing the remaining mass with the bulk of the remaining volume and mass north of Ridgecrest Drive SE either being centered around interim measure well KAFB-106228, or present just north of Ridgecrest Drive SE as an extension of the Source Area Plume. Overall, the plume analysis reveals the general pattern of dissolved-phase EDB volume and mass response expected due to interim measure system extraction.

6.4.2 Plume Capture Evaluation

As described in Section 6.4, one of the goals of the interim measure is to halt the migration of the EDB plume. The degree to which the interim measure is achieving this goal is defined by performing a capture evaluation during each assessment period. The subsections below describe the methods and results of the capture evaluation being utilized to assess the effectiveness of the interim measure. The evaluation follows EPA capture evaluation guidelines defined as a six-step process (EPA, 2008):

- Step 1: Review site data, site conceptual model, and remedy objectives
- Step 2: Define site-specific TCZ
- Step 3: Interpret water levels
 - Potentiometric surface maps (horizontal capture)
 - Water level difference maps (vertical capture)
 - Water level pairs (gradient control points)
- Step 4: Perform calculations
 - Estimate flow rate calculation
 - Capture zone width calculation
 - Modeling (analytical or numerical) to simulate water levels, in conjunction with particle tracking and/or transport modeling
- Step 5: Evaluate concentration trends
- Step 6: Interpret actual capture based on Steps 3 through 5, compare to TCZ, and assess uncertainties and data gaps.

As defined by EPA, a “Capture Zone” refers to the 3D region in an aquifer system that contributes the groundwater extracted by one or more wells (EPA, 2008). The purpose of the performance assessment is to assess hydraulic containment produced by each interim measure extraction well at a single point in time (period of gauging) and compare it to the TCZ (dissolved EDB concentrations above the MCL). The percentage of the plume contained will be identified as captured, meaning that if conditions do not change, the contained portion of the plume will eventually flow to the extraction well and be removed from the aquifer. The terms “capture” and “contained” are used interchangeably representing the above definition.

Steps 3 through 5 represent techniques for systematically evaluating capture, and each has limitations, meaning that no single line of evidence will conclusively differentiate between successful and failed capture. Therefore, in order to increase the confidence in the conclusions of a capture zone analysis, multiple techniques are applied so that converging lines of evidence can be developed. This section describes the methods and results for each line of evidence used to evaluate dissolved-phase EDB capture at Kirtland AFB BFF. Descriptions of the methodologies utilized are provided in Appendix E-6.

6.4.2.1 Step 1: Review Site Data, Site Conceptual Model, and Remedy Objectives

EPA (2008) identifies four prerequisites for establishing meaningful TCZs. These prerequisites are cited below, followed by responses to the posed questions.

1. *Is the plume adequately delineated in three dimensions?*

Yes, plume delineation is accomplished through the GWM network gauging and sampling activities described in Section 4, along with the gauging of 35 wells that are not in the GWM network (Appendix E-2). In Q4 2020, the groundwater level and water chemistry monitoring network included 164 and 161 monitoring wells, respectively. A total of 128 wells are located in vertical profiles with two-, three-, or four-well nests/clusters designed to monitor vertical gradients and 3D water chemistry. Nested wells are wells that are located within the same borehole. Clustered wells are individual well screens that were installed at different depths and generally located within 50 ft of each other laterally and 80 ft of each other vertically. The 42 well nests/clusters consist of nine nested wells (13 well screens) and 33 clustered wells (115 well screen). The use of multiple well screens at different depths allows for assessment of the plume in three dimensions.

2. *Is there adequate hydrogeologic information for performing capture zone evaluations?*

Yes, quarterly analyses are used to identify data gaps and define locations for additional monitoring wells, continually improving the performance of the monitoring well network. A summary of hydrogeologic information used for the capture zone evaluations follows:

- Groundwater levels across the site are measured during 3- to 5-day synoptic periods every quarter. (Note that “groundwater level” and “head” are used interchangeably throughout Section 6.4.) Based on screen interval elevations, the monitoring well network has been grouped into three REIs that allow for a systematic way to analyze the horizontal flow and vertical gradients at depth in the aquifer.
- Water chemistry data are collected from the entire monitoring well network every Q2 and Q4 in order to define and monitor the extent and character of contaminant concentrations, including dissolved-phase EDB addressed in this section.
- Quarterly water level measurements have shown that the groundwater levels in the project area have been increasing at an average rate of approximately 3.3 ft per year since 2013. However, groundwater levels across the project area decreased in the latter half of 2020, presumably due to both on-Base and off-Base drought response extractions (Section 4.6.1, above and Appendix F-6). In Q4 2020, well screens of 40 monitoring wells within the GWM network were unsubmerged.

3. *Is there a site conceptual model (not a numerical model)?*

Yes, the plume exists in an unconfined aquifer characterized by coarse-grained, braided river deposits with a northeast-southwest-oriented channel axis (AECOM, 2016). Silt and clay units representing overbank, backwater, and/or floodplain deposits are interbedded with the coarser grained channel deposits.

Due to relatively high evapotranspiration rates, recharge from the ground surface is usually negative. The primary source of recharge to the aquifer is from mountain front runoff and from seepage from the Rio Grande and its tributary streams and arroyos (AECOM, 2016).

In a study of the hydrologic system of the Middle Rio Grande Basin (Bartolino and Cole, 2002), USGS states: “Though the aquifer is under confined conditions locally, it is considered to be an unconfined aquifer as a whole. (For groundwater flow modeling, the upper part of the aquifer system is treated as unconfined and the lower part as confined.)”

The network currently incorporates 42 nested and co-located groundwater level monitoring locations (Figures 6-4 and 6-5), which measure pressure at two or three vertically distinct horizons in the aquifer at relatively the same horizontal location (for this discussion, wells are considered nested if the wells being compared are located less than 180 ft apart). Well pairs are evaluated across the entire plume in conjunction with the Step 3 potentiometric surface analysis. Aquifer confinement would be indicated by differences in pressure between vertical nested wells. In Q4 2020, vertical head differences could not be determined well nest KAFB-106063 and KAFB-106064 due to the presence of downhole equipment associated with the *in situ* biodegradation pilot study (Kirtland AFB, 2016b) in these wells. Measurements could only be obtained for the REI 4814 well (KAFB-106062) and this is not expected to impact capture assessments in the TCZ.

A comparison of the head difference between the shallow (REI 4857) and intermediate (REI 4838) monitoring location for each of the 39 well pairs shows that 72% (28 well pairs) represent unconfined conditions, having vertical pressure differences of between -0.1 and 0.1 ft (head difference rounded to the nearest tenth of a foot). The remaining 11 well pairs are scattered throughout the monitored groundwater network for the BFF EDB plume representing localized aquifer separation due to discontinuous interbedded fine grain lenses between the nested well screens. A comparison of the head difference between the intermediate (REI 4838) and deep (REI 4814) monitoring location for each of the 39 well pairs shows that 67% (26 well pairs) represents unconfined conditions, having vertical pressure differences of between -0.1 and 0.1 ft. Similar to the upper comparison, the remaining 13 well pairs are scattered around the project area representing localized aquifer separation due to discontinuous interbedded fine grain lenses between the nested well screens.

The section of aquifer upon which the hydraulic containment analyses presented in this section are performed includes the upper part of the Santa Fe Group (Middle Rio Grande Basin), above the uppermost confining unit referred to as A2 (AECOM, 2015).

4. *Is the objective of the remedy clearly stated?*

Yes, the objective of the groundwater pump and treat system is hydraulic containment (capture) and collapse of the dissolved-phase EDB >0.05 µg/L north of Ridgecrest Drive SE (TCZ).

6.4.2.2 Step 2: Define Site-Specific Target Capture Zone

According to EPA (2008), the *TCZ is defined herein as the 3D zone of groundwater that must be captured by the remedy extraction wells for the hydraulic containment portion of the remedy to be considered successful. This will depend on the site-specific remedy objectives (Step 1).*

- Water chemistry samples collected from vertically nested wells have shown that EDB in concentrations above the detection limit do not extend throughout the entire thickness of the aquifer; therefore, a 3D delineation of the TCZ is required.
- EDB concentration data are collected and analyzed from the full GWM network during Q2 and Q4 of each year. Therefore, dissolved-phase EDB delineations are updated on this schedule and plume comparisons are presented in the reports associated with these quarters. All delineation updates are performed using the same methodology with the only variations being the insertion of the current EDB concentration data, addition of any new monitoring wells since the last assessment, and allowance of volume increase due by resetting the plume upper surface to the current water table surface.

EPA (2008) also states that *the TCZ should be defined in terms of specific criteria, such as a specific concentration contour or a geographical boundary along which an inward hydraulic gradient is to be established.*

- The 3D zone of groundwater that must be captured by the interim measure extraction wells (i.e., the TCZ) is defined as the MCL for dissolved EDB, 0.05 µg/L. The iso-shell delineating the cleanup standard is defined as the 3D polygon with a periphery concentration of 0.05 µg/L.

The plume delineation produced in Step 2 estimates the volume and mass of the TCZ (plume extent north of Ridgecrest Drive SE) against which the interim measure capture potential for each evaluation period is gauged. As shown in Section 6.4.1, the volume and mass of the TCZ has continued to decrease overtime. This means that the interim measure capture target has decreased. It is important to note that the decreasing plume extent effects how the effectiveness of interim measure capture is reported. For example, if the interim measure is found to capture all but 1 gram of EDB mass in the TCZ in Q4 2016, this would result in an estimated capture potential of 99%, while if the interim measure is found to capture all but 1 gram of EDB mass in the current TCZ, the estimated capture potential would be only 58%. While the two capture percentages are very different, they both represent the same amount of uncaptured mass. For this reason, the interim measure capture potential will be reported in volume and mass values, percent of current TCZ, and percent of initial TCZ which is represented by the Q4 2016 baseline TCZ delineation. The final determination of interim measure capture for the evaluation period will be based on the percent of initial TCZ captured.

6.4.2.3 Step 3: Interpret Water Levels

EPA (2008) states that *for most sites, it is appropriate to analyze groundwater flow patterns in three dimensions (i.e., both horizontal and vertical). The potential for vertical transport of contaminants to underlying or overlying aquifers should be considered. Three-dimensionality of groundwater flow patterns in the vicinity of pumping wells should also be considered.*

Hydraulic capture analyses, both in the horizontal and vertical directions, are based on defining the direction of groundwater flow through mapping pressure in the aquifer from discrete measuring points (monitoring wells). The purpose of the performance assessment is to delineate the zone of hydraulic containment produced by each interim measure extraction well at a single point in time (period of gauging) and compare the zone to the TCZ (dissolved-phase EDB north of Ridgecrest Drive SE).

The percentage of the plume within the containment zone will be identified as contained; meaning that, if conditions do not change, the contained portion of the dissolved-phase EDB will eventually flow to the extraction well and be removed from the aquifer. The current capture zone analyses were conducted using

groundwater head and EDB concentration data sets collected during this monitoring event (Section 4 above).

It should be noted that Steps 3a and 3b, which are discussed in Sections 6.4.2.3.1 and 6.4.2.3.2 below, are capture analyses that do not rely on the delineation or interpretation of drawdown. Drawdown is the change of water level due to groundwater extraction. It is calculated by subtracting the water level measured under pumping conditions from the water level measured without pumping. The “cone of depression” (i.e., drawdown) caused by extraction from one or more locations does not represent the capture zone associated with that extraction.

If a regional hydraulic gradient exists (which it does across the project area), there are locations outside the capture zone where drawdown due to pumping is observed. These analyses define capture by delineating the flow field under pumping conditions only.

6.4.2.3.1 Step 3a: Potentiometric Surface Maps (Horizontal Capture Analysis)

EPA (2008) states that *horizontal capture is defined by a bounding flow line, within which all other flow lines reach an extraction location. The delineation of the capture zone in this manner is a derived interpretation since water level contours must first be interpreted from water level values.*

Horizontal water level maps indicate contours of water levels within the aquifer from which the extent of horizontal capture can be interpreted. Flow lines are interpreted as perpendicular lines to water level contours. The method used in this analysis uses Esri Spatial Analyst to develop potentiometric surface grids (analogous to groundwater level contours) from measured groundwater levels, then converts the potentiometric surface grid into flow direction grids (analogues to flow lines). From the flow direction grids, still using Spatial Analyst, the hydraulic divide defining capture by each interim measure extraction well is defined.

Capture analyses are performed in Q2 and Q4 of each year when dissolved-phase EDB delineations are updated. The horizontal capture analysis for the TCZ north of Ridgecrest Drive SE for the baseline EDB delineation (Q4 2020) and the subsequent delineations are summarized in Table 6-17.

Figure 6-6 shows the horizontal capture of the portion of the dissolved-phase EDB within REI 4857 during this monitoring event. Plume capture is divided among the four extraction wells, which were active during the synoptic gauging period (KAFB-106228, KAFB-106233, KAFB-106234, and KAFB-106239). With respect to the current TCZ (EDB plume north of Ridgecrest Drive SE), the interim measure resulted in the horizontal capture of 100% of the dissolved-phase EDB volume and mass (Table 6-17). Within the REI 4857 TCZ, the interim measure was shown to capture 100% of the dissolved-phase EDB volume and mass. With respect to REI 4857, extraction well KAFB-106228 was the most effective with capturing 50% of the TCZ volume and 49% of the TCZ mass. Extraction well KAFB-106228 capture efficiency was followed by KAFB-106234, capturing 30% of the TCZ volume and 30% of the mass, and KAFB-106239, capturing 20% of the TCZ volume and 21% of the TCZ mass (Table 6-18). Even though KAFB-106233 was active, its capture zone did not intercept any of the EDB plume volume.

Figure 6-7 shows the horizontal capture of the TCZ within REI 4838 during Q4 2020. With respect to capture in the current TCZ, the interim measure resulted in the horizontal capture of 100% of the dissolved-phase EDB volume and mass (Table 6-17). Within REI 4838 north of Ridgecrest Drive SE, extraction well KAFB-106228 is the most effective, capturing 99% of the dissolved-phase EDB volume and 99% of the mass; followed by KAFB-106234, capturing 0.7% of the dissolved-phase EDB volume and 0.6% of the mass (Table 6-18). Again, even though KAFB-106233 and KAFB-106239 were active, their capture zones did not intercept any of the REI 4838 TCZ volume. There is no horizontal mass

capture assessment for the REI 4814 TCZ because there were no EDB detections in excess of the 0.05 µg/L in REI 4814 (Figure 6-8).

Combining dissolved-phase EDB volume and mass capture analyses for both REIs 4857 and 4838, the interim measure resulted in the horizontal capture of 12,248,000 cubic ft and 5.2 grams of the current TCZ volume and mass respectively (Table 6-19). This equates to a capture of 100% of the initial TCZ volume and mass under Q4 2020 groundwater conditions.

With the addition of the 15 water table wells in 2018 and nine in 2019 (both newly installed and existing), the flow directions and hydraulic containment along the saturated/unsaturated interface can start to be analyzed. Combining data from the added wells and from the existing unsubmerged and slightly submerged wells (less than 5.0 ft of submergence) in REI 4857, a water table surface can be interpolated.

Figure 6-9 shows the interpolated water table surface based on groundwater levels from unsubmerged wells for Q4 2020. Since this analysis merges with the REI 4857 at locations throughout the domain, a unique plume split cannot be developed; however, hydraulic containment can be represented graphically by placing delineated water table containment basins over the REI 4857 plume outline as defined by dissolved-phase EDB. The data presented in Figure 6-9 show that only a small portion of an isolated segment of the TCZ centered around monitoring well KAFB-106041 has the potential to migrate away from the interim extraction wells under Q4 2020 conditions. However, as the groundwater divides and the TCZ at this location are both based on measurements from a single well (KAFB-106041), there is reduced confidence in the interpolated extent of the TCZ and location of the divides in this area. While the potential cannot be ruled out, the likelihood of EDB migrating away from the interim measure extraction wells along the water table is very low.

Below is a list of parameters used for the interpretation of horizontal capture cited by EPA (EPA, 2008) to be considered and how this assessment addresses them:

- Are the number and distribution of measurement locations adequate?
 - Yes, while there is no rule regarding the “correct” amount of groundwater level data (EPA, 2008), each of the four interim extraction wells is surrounded by five to eight nested monitoring wells indicating the direction of flow radially around the extraction well and at depth. Groundwater level monitoring is also conducted within, at the perimeter, and downgradient of the TCZ to interpret groundwater flow patterns and the associated capture zone.
 - Contouring accuracy will increase as the number of data points increase. Measurement locations have improved with the installation of 15 new Data Gap wells in Q4 2018 and Q1 2019. Locations are shown on Figure 4-1.
- Are water levels included in the vicinity of extraction wells (and have well inefficiency and losses been considered at extraction well locations)?
 - Yes, for extraction wells KAFB-106228 and KAFB-106233, which have nested monitoring wells located less than 55 ft away.
 - No, for extraction wells KAFB-106234 and KAFB-106239 where the closest monitoring wells are 223 and 150 ft away and represent only the uppermost portion of the aquifer. However, a new monitoring well is being installed adjacent to KAFB-106234 this year.

- The water level measured in an extraction well is typically lower than the level in the adjacent aquifer due to well inefficiency and well losses (EPA, 2008). Therefore, groundwater levels at the extraction wells are estimated through linear interpolation using the measured head in the closest monitoring well to the extraction well and all other neighboring monitoring wells.
- Has the horizontal capture evaluation been performed individually for all pertinent horizontal units?
 - Yes, horizontal capture is performed in three REIs covering the extraction screen interval and is reported for each REI containing a portion of the TCZ.
- Is there bias based on contouring algorithm?
 - No, the potentiometric surface for each REI is interpolated using a natural neighbor algorithm that honors all measured values, places contours based on the distance between any one well and all of its neighboring wells, and eliminates over- and under-run estimates related to the gradient between neighboring wells.
 - Uncertainty still exists as the method assumes that all ridges and valleys (divides) in the potentiometric surface are represented by the monitoring well network.
- Is representation of transient influences adequate?
 - No, but the data required to perform a fully transient evaluation are not available. Groundwater level measurements are only available for second and fourth quarter except at four locations within the model domain. Water supply well extraction rate data (on- and off-Base) is only available as monthly total volumes. It is recognized that extraction within and surrounding the project area is transient and, therefore, the regional gradient across the site is transient requiring continual updating of the capture assessment currently scheduled at twice a year. As discussed in Section 6.4 above, this performance assessment is a snapshot of the systems performance. EPA guidance emphasizes that while the modeling used for this biannual performance assessment is a tool for evaluating and improving the site conceptual model, predicting capture zones, and evaluating alternative remediation scenarios, capture zone effectiveness is “ultimately determined by field monitoring.”
- Has the potential for vertical transport been neglected when evaluating horizontal capture?
 - No, vertical transport potential is assessed separately from, but in conjunction with, horizontal capture (see next section). Horizontal capture is assessed by REI volume and vertical transport is assessed between REIs.

6.4.2.3.2 Step 3b: Water Level Difference Maps (Vertical Capture Analysis)

EPA (2008) states that *water levels between adjacent hydrogeologic units are evaluated to indicate zones of upward versus downward flow. The analysis can be based on vertical head differences or vertical gradients (the head difference divided by the vertical distance between measurements).*

The vertical capture analysis for the interim measure TCZ north of Ridgecrest Drive SE for the current monitoring period is summarized in Table 6-20. A vertical capture analysis defines hydraulic containment

by evaluating groundwater levels between adjacent hydrologic units to determine zones of upward versus downward flow. Containment is defined by zones with upward flow that prevents dissolved contaminants from being transported by advection deeper into the aquifer. Vertical flow direction can be evaluated by subtracting the groundwater head measured in an adjacent lower hydrologic unit from the groundwater head measured in the overlying unit. A head difference of less than zero indicates that the head in the lower unit is greater than the head in the upper unit and, therefore, water will flow vertically upward. Vertical hydraulic gradient is the head difference divided by the vertical distance between measuring points. While vertical gradients can provide more information than head differences because they account for the distance between measurements, error exists in calculating vertical gradients from groundwater levels measured from long screen intervals. Also, vertical gradient values are typically very small reducing their ability to represent the magnitude of the vertical difference. Because of this and because interim measure monitoring well screen intervals range from 10 to 30 ft in length, this analysis uses vertical head differences to illustrate vertical capture as described in the EPA guidance above.

The well network was resurveyed in 2017 by USGS, and all measuring point elevations were officially updated in October 2017. As such, the measuring point elevations and, therefore, groundwater elevations for most of the GWM wells changed from historical values, as discussed in more detail in Section 6.4.2.1.

The method for delineating vertical containment was changed in the Q4 2018 analysis. Previously, the vertical head difference between REIs was calculated by subtracting the potentiometric surfaces developed for each REI. However, uncertainty was introduced using this method as the data resolution was different within each REI because the number of head measurements decreased with depth.

Starting in Q4 2018, vertical head differences were calculated only at each nested well location. Those difference values were then used to interpolate the vertical head differences across the plume area using a linear interpolation method assigning head differences between data points based on the distance from and magnitude of all neighboring data points. While the new method removed the data resolution issues going forward, the change limits the usefulness of comparison of vertical containment with past analyses.

The entire dissolved-phase EDB volume delineated for Q4 2020 was sliced along the elevation surface dividing REI 4857 and REI 4838 and along the elevation surface dividing REI 4838 and REI 4814. The upper dissolved-phase EDB volume has two opportunities to be contained vertically. Initially, this plume volume can be contained by upward flow between REI 4838 and REI 4857. Portions of the plume not contained in this interval have the potential to move downward into the lower unit. Once in the lower unit, these portions can be contained by vertical upward flow between REI 4814 and REI 4838. The lower plume volume can only be contained by vertical upward flow between REI 4814 and REI 4838. No non-pumping potentiometric surface grids are developed and no pumping versus non-pumping difference maps are calculated.

Figure 6-4 shows the results of the vertical containment analysis for the upper unit plume volume (above the 4838 REI midpoint) in Q4 2020. All “green” areas are vertically captured, and “tan” areas do not have vertical capture. With respect to the dissolved-phase EDB within the current interim measure TCZ, 100% of the dissolved-phase EDB volume and mass were vertically contained in this unit (Table 6-20).

Figure 6-5 shows the results of the vertical containment analysis for the lower plume volume (below the 4838 REI midpoint) in Q4 2020. Similar to Figure 6-4, the “green” areas are vertically captured, and “tan” areas do not have vertical capture. With respect to the current interim measure TCZ, 100% of the dissolved-phase EDB volume and 100% of the mass were vertically contained (Table 6-20).

In total (above and below the 4838 REI mid-point), the vertical capture evaluation estimated that the interim measure extraction system produced containment of 12,270,000 cubic ft and 5.2 grams of the current TCZ volume and mass, respectively (Table 6-21). This equates to a capture of 100% of the initial

TCZ volume and 100.0% of the initial TCZ mass under Q4 2020 groundwater conditions.

Vertical capture based on vertical head differences or vertical hydraulic gradients is subject to a similar set of uncertainties as described for horizontal capture. With respect to having an adequate vertical distribution of monitoring wells, 11 of the REI 4814 monitoring wells within the TCZ north of Ridgecrest Drive SE are screened above an elevation of 4,790 ft. Downward vertical flow at these well nests may be in response to the 3D capture zone of an extraction well and not the loss of capture.

This uncertainty in the vertical containment analysis has been addressed by comparing multiple lines of evidence (i.e., modeling). Section 6.5 describes the results of a numerical model designed for use in Step 4 of the EPA capture evaluation guidelines (EPA, 2008). The numerical model provides for a method to estimate in 3D the containment produced by the interim measure extraction.

6.4.2.3.3 Step 3c: Water Level Pairs (Gradient Control)

To support the previously presented horizontal and vertical containment analyses, a water level pairs analysis was performed. Water level pairs analysis defines gradient control points and demonstrates the direction of flow relative to the plume boundary, thus providing an initial assessment of interim measure effectiveness and a supporting line of evidence for assumptions made during horizontal and vertical containment analyses. Two types of water level pairs analysis were performed, as described below.

To support the horizontal containment analyses, a horizontal water level pairs analysis was performed for REI 4857 and REI 4838. Thiessen polygons, which define the area that is closest to each point relative to all other points within a spatial dataset, were developed for each of the interval group wells. Water levels were then compared among a well in the center of a polygon and all of the wells with neighboring polygons. The graphical representation of the Q4 2020 horizontal water levels pairs analysis is shown on Figure 6-10. The arrows on these figures show the potential directions of flow from each well based off of the head comparison. Polygon colors delineate the plume area as: captured (by one or more extraction wells), possibly captured (flow could go to an extraction well or to an unidentified sink), or not captured (flow cannot go to an extraction well). The horizontal water level pairs analyses show that the entirety of the TCZ in REI 4857 and REI 4838 has the potential to flow toward at least one of the interim measure extraction wells. However, there are regions of the TCZ, south of KAFB-106228 and around KAFB-106041, where the flow direction across the TCZ boundary is outward with respect to the TCZ footprint. Under Q4 2020 conditions, the well pairs analysis cannot conclusively define capture of the TCZ.

To support the vertical containment analysis, heads in vertically nested well sets were compared in order to verify the vertical flow direction. The locations of the centroid for each nested well pair are shown on Figures 6-4 and 6-5. The values associated with these wells represent the head difference when the lower unit's head is subtracted from the upper unit's head. A head difference of less than zero represents upward flow (wells shown as "green") and, therefore, vertical containment is achieved.

A head difference greater than zero presents downward flow (wells shown as orange) and, therefore, vertical containment is not achieved. Results from this well pair analysis are shown on the figures to identify the location and magnitude of gradient control points for the vertical containment analysis.

6.4.2.4 Step 4: Perform Calculations

Step 4 of the EPA Systematic Approach for Evaluation of Capture Zones (EPA, 2008) states that *specific calculations can be performed to add additional lines of evidence regarding the extent of capture, including the following:*

- *Simple horizontal analyses related to capture, such as estimated flow rate calculations and capture zone width calculations (EPA, 2008).*
- *Modeling (analytical or numerical) to simulate heads, in conjunction with particle tracking and/or contaminant transport modeling (EPA, 2008).*
- *Determining the appropriate types of calculations to perform should be based on site complexity. For instance, numerical simulation of heads for evaluating capture may not be necessary for sites with very simple hydrogeology and only minor heterogeneity of aquifer parameters (EPA, 2008).*

Calculations performed in Step 4 can range from simple 2D analyses estimating capture zone width based on extraction rates and aquifer properties to complex 3D analytical or numerical simulations of head, producing particle track delineations of capture. EPA encourages the use of groundwater modeling at more complex sites as a tool for evaluating and improving the site conceptual model and predicting capture zones. Complexity can be defined as aquifer heterogeneity and anisotropy, non-uniform aquifer thickness, non-uniform hydraulic gradient, transient conditions, offsite aquifer stresses, and/or the presence of many partially penetrating extraction and/or injection wells.

If one or more of these complexities is present, the assumptions associated with simple 2D methods are violated and a more complex form of additional lines of evidence should be examined. Heterogeneity and non-uniform hydraulic gradient have been identified as complexities that may need to be addressed with future use of the numerical model.

The BFF site is not adequately addressed using simple calculations or assumptions of uniform thickness, homogeneous, and isotropic aquifer conditions, or fully penetrating wells. The aquifer at the BFF site has a variable thickness due to a dipping confining unit along the bottom; is heterogeneous, being composed of fluvial, braided stream deposits; and has multiple partially penetrating wells included the interim measure extraction wells and several Kirtland AFB production wells. Therefore, the 3D numerical model was created to simulate heads resulting from interim measure extraction and define the 3D hydraulic containment produced by interim measure extraction at the point in time when groundwater heads are measured and compare these containment zones to the TCZ developed for the same time period.

6.4.2.4.1 Step 4a: Groundwater Flow Model Design

EPA guidelines do not dictate specific model types for use in Step 4 stating that different types of simulation models, ranging from analytical to numerical, can be applied to calculate hydraulic heads and produce particle tracks upon which capture can be evaluated (EPA, 2008). NMED deferred to Kirtland AFB for selection of an appropriate modeling approach and approved the proposed modeling approach on April 23, 2018 (NMED, 2018d).

The numerical model used for the purpose of adding a supporting line of evidence to this capture zone evaluation was developed using the finite element software FEFLOW 7.1 (Diersch, 2014). FEFLOW was chosen primarily because of the superior mesh design capabilities of the finite-element method. Figure 6-11 shows the domain, boundary groundwater elevations and extraction locations, and rates for the Q4 2020 version of the KAFB 2020 Groundwater Model. A discussion of the construction and calibration of the model and subsequent revisions can be found in Appendix I-7.

The model is intended to be used as a supporting line of evidence as part of performance assessment every Q2 and Q4. For each assessment period, the model will be updated, further refinements will be

incorporated, and extraction and injection rates for all interim measure and water supply wells and updated with the most recent regional flow field estimate. This biannual update is consistent with the iterative capture zone analysis process outlined in the EPA guidance.

6.4.2.4.2 Step 4b: Groundwater Flow Model Results

Step 4b (Bullet 3) of the EPA guidelines (EPA, 2008) suggests:

- *Modeling (analytical or numerical) to simulate heads, in conjunction with particle tracking and/or contaminant transport modeling.*

The objective of Step 4a is to quantify capture. EDB plume-specific capture delineation was focused to the TCZ plume volume. Plume-specific capture is delineated using forward run particle tracks from the centroids of each model cell in the quarter's plume model, over 3,000 seed points in Q4 2020, which completely represent the 3D volume of the dissolved-phase EDB in the TCZ.

With respect to capture in the TCZ, the interim measure resulted in the capture of 8,830,770 cubic ft of the dissolved-phase EDB volume and 3.7 grams of the mass (Table 6-22). North of Ridgecrest Drive SE, extraction well KAFB-106228 is the most effective with capturing 70% of the dissolved-phase EDB volume and 69% of the mass, followed by KAFB-106239 capturing 2% of the dissolved-phase EDB volume and 2% of the mass. Interim measure extraction wells KAFB-106233 and KAFB-106234, while active, do not capture any of the dissolved EDB plume in the TCZ in Q4 2020 (Table 6-23).

The uncaptured TCZ volume and mass is the portion of the volume and mass within the TCZ that is not being pulled into one of the interim measure extraction wells under Q4 2020 conditions. The uncaptured TCZ volume and mass equates to 3,435,230 cubic ft and 1.5 grams, respectively, in Q4 2020. As described in the above sections, the total volume and mass the interim measure was designed to capture was greater than 114,000,000 cubic ft and 103 grams, respectively. Over time, the interim measure has caused the migration of this initial plume volume and mass toward the interim measure extraction wells, reducing the overall size of the TCZ by mass removal and concentration of mass into a smaller volume. With respect to the initial TCZ volume and mass, Step 4 estimates that under Q4 2020 groundwater conditions, the interim measure is producing the potential capture of greater than 97% of the initial TCZ volume and greater than 98% of the initial TCZ mass. This is consistent with past Step 4 capture estimates dating back to the first Step 4 estimate in Q2 2018 (Table 6-22).

Capture zone effectiveness is ultimately determined by field monitoring that includes hydraulic head measurement and groundwater sampling and analysis, in conjunction with field confirmation of pumping rates. Modeling is only one line of evidence to support the field monitoring.

6.4.2.5 Step 5: Evaluate Concentration Trends

Step 5 of the EPA Systematic Approach for Evaluation of Capture Zones (EPA, 2008) states that *Contaminant concentrations can be monitored at two types of locations downgradient of the TCZ in an attempt to interpret capture...*:

- *Sentinel wells located downgradient of the TCZ and are not currently impacted above background concentrations*
- *Downgradient performance monitoring wells located downgradient of the TCZ and are currently impacted above background concentrations.*

Monitoring concentration trends downgradient of the dissolved-phase EDB plume provide supporting evidence to the primary capture analyses. Concentration trend monitoring is being conducted at two location types at Kirtland AFB: sentinel wells and downgradient performance monitoring wells. For sentinel wells, contaminant concentrations should remain at background levels over time if capture is successful. For downgradient performance monitoring wells, contaminant concentrations should decline to background levels (or below cleanup levels) over time if capture is successful. Figure 6-12 shows the location of the nine monitored sentinel wells and the location and concentration trends in the five distal performance monitoring wells. EDB concentrations in the sentinel wells have remained below laboratory detection limits since monitoring began.

Distal performance monitoring well concentration trends are shown (Figure 6-12) from the beginning of 2015 to the present. Within this time period, water chemistry samples from KAFB-106205, located northeast of the distal end of the dissolved-phase EDB plume have mostly been non-detect for EDB and have always been below the TCZ concentration of 0.05 µg/L. The increase of EDB in Q2 2017 was a result of a 30-day system shutdown. With the interim measure extraction returning to full capacity, the concentration in KAFB-106205 decreased and is below the detection limit in Q4 2020.

Groundwater samples collected from KAFB-106106, located on the western edge of the dissolved-phase EDB boundary, have historically had detectable EDB concentrations. Before interim measure extraction began in June 2015, EDB concentrations in this well were above the EDB MCL concentration (0.05 µg/L) and the well was within the dissolved-phase EDB boundary. Since interim measure wells KAFB-106233 and KAFB-106234 came on-line in 2016, the EDB concentrations in KAFB-106106 have declined to at or below the laboratory detection limit for the last seven assessment periods. EDB was reported at an estimated concentration of 0.027 µg/L (just above the detection limit of 0.019 µg/L) in the groundwater sample collected from KAFB-106106 in Q4 2020.

At the beginning of 2015, EDB was detected in groundwater samples collected from the three clustered wells (KAFB-106055, KAFB-106057, and KAFB-106058). EDB concentrations decreased with depth. Concentrations above the MCL were observed in well KAFB-106055 (REI 4857) and well KAFB-106057 (REI 4838). Since interim measure extraction began at KAFB-106234 in December 2015, the EDB concentrations in KAFB-106057 and KAFB-106058 have decreased and currently have estimated values at or below the laboratory detection limit. In Q4 2018, the data gap associated with submergence at this well nest was eliminated by the installation of monitoring well KAFB-106241-428 with a screen interval across the water table. The EDB concentration measured in this well has been constantly below 0.05 µg/L since sampling began in Q4 2018, with an estimated Q4 2020 concentration of 0.023 µg/L (below the standard detection limit).

6.4.2.6 Step 6: Interpret Actual Capture and Compare to Target Capture Zone

Step 6 of the EPA Systematic Approach for Evaluation of Capture Zones (EPA, 2008) states that *Once multiple lines of evidence regarding capture have been evaluated, actual capture achieved by the extraction wells should be interpreted... To avoid bias, the actual capture should be interpreted independent of the TCZ (i.e., they should be compared after the actual capture zone is interpreted).*

Based on evaluations of multiple lines of evidence discussed in Step 3 through Step 5 described above, the actual capture achieved by the interim measure extraction wells is interpreted in Step 6, and the following items are addressed:

- Compare the interpreted capture zone to the TCZ
- Assess uncertainties in the interpretation of the actual capture zone
- Assess the need for additional characterization and/or monitoring.

In Step 3, the potentiometric surface analysis resulted in 100% capture of the volume and mass of the initial TCZ. The vertical head difference analysis resulted in an estimated containment of 100% of the initial TCZ. In Step 4, the numerical flow model estimated that the interim measure produced capture conditions for greater than 97% of the initial TCZ volume and greater than 98% of the initial TCZ mass. In Step 5, the concentration trends in the designated performance monitoring wells show static or decreasing trends indicating decreasing dissolved-phase EDB volume and mass reduction. Table 6-24 summarizes the TCZ evaluation for this site, which concludes that at least 97% of the initial TCZ volume and mass the interim measure was designed to contain is being captured under Q4 2020 conditions.

6.4.2.6.1 Uncertainty and Data Gaps

There is uncertainty in the analysis of water levels due to a linear estimate of the water levels at the extraction wells. However, the results from the numerical model suggest that, based on extraction rates and aquifer conductivity, the extraction well water levels used in the water level analysis were underestimated and, therefore, do not overestimate the capture prediction.

There is uncertainty in the numerical modeling with respect to the assigned regional flow field. Uncertainty exists in that the method relies on interpolations from data measurements taken up to approximately 3.4 miles away from the model domain and on estimated groundwater levels associated with external extractions. An additional uncertainty component is the length of time the estimated regional flow field persists over the model domain. The flow field is sensitive to stresses exerted by both on-Base and nearby public supply extractions. These stresses change seasonally and with local domestic demand allowing for the possibility that the simulated capture zones may change between each analysis period.

There is uncertainty in the numerical modeling associated with the assignment of lithology-based hydraulic conductivity zones. The assigned lithology type is based on visual delineation of grain sizes, not laboratory sieve analysis and error is added with grain size mixing and loss due to drilling methods. There is also uncertainty in the extent of the assigned lithology zones, as the transitions between zones can only be estimated from the spatial distribution of wells.

Capture zone analysis is an iterative process, as shown on Figure 6-13, and includes the following:

- Evaluate capture based on existing data
- Identify any data gaps that create uncertainty in the conclusions of the capture zone analysis
- Fill any data gaps that are identified (e.g., add new monitoring wells), and re-evaluate capture
- Continue monitoring capture over time
- If capture is ever determined to not be sufficient, optimize the extraction system until capture is sufficient

- If capture is determined to be sufficient, continue routine monitoring and consider the potential to optimize extraction locations and/or rates to be reduce cost.

The installation of additional monitoring wells began in Q4 2020 under the Work Plan for Data Gap Monitoring Well Installation KAFB-106248 to KAFB-106252 (Kirtland AFB, 2019). In addition, analysis methods are continuously evaluated through comparison to observed data and are revised when more accurate results can be obtained. An example of this is the development and application of the new numerical groundwater flow model that includes an expanded domain and more accurately represents aquifer heterogeneity.

As discussed in Section 6.4 above, this performance assessment is a snapshot of the system's performance. EPA guidance emphasizes that capture zone effectiveness is "ultimately determined by field monitoring," and modeling is only one line of evidence used to support the field monitoring data.

6.5 Analysis of the Lines of Evidence

The following includes the various lines of evidence used in the plume capture assessment:

- The volume and mass of the plume has reduced significantly over time. In Q4 2016, 15 months after the first interim measure extraction well KAFB-106228 became active, the plume volume and mass were estimated at 114,700,000 cubic ft and 104 grams, respectively. Both of these values have been on a decreasing trend over the last 4 years with the current plume volume and mass estimated at approximately 12,270,000 cubic ft and 5.2 grams, respectively. With respect to the Q4 2016 TCZ, the Q4 2020 TCZ represents an 89% decrease in plume volume and a 95% decrease in plume mass.
- This analysis shows that the interim measure has collapsed the TCZ, with the bulk of the remaining volume and mass north of Ridgecrest Drive SE either being centered around interim measure well KAFB-106228, or present connecting from the source area to the KAFB-106228 cone of depression. Overall, the plume analysis reveals the general pattern of dissolved-phase EDB volume and mass response expected due to interim measure system extraction.
- Actual field sampling resulted in potentiometric surface analyses estimating that the interim measure extraction system produced horizontal containment of approximately 12,250,000 cubic ft and 5.2 grams of the current TCZ volume and mass, respectively. This equates to a horizontal capture component of 100% of the initial TCZ volume and 100% of the initial TCZ mass under Q4 2020 groundwater conditions.
- The vertical capture analysis estimated that the interim measure extraction system produced containment of approximately 12,270,000 cubic ft and 5.2 grams of the current TCZ volume and mass, respectively. This equates to a vertical capture component of 100% of the initial TCZ volume and 100% of the initial TCZ mass under Q4 2020 groundwater conditions.
- The horizontal water level pairs analyses within the IMOA show that all well pair gradients within or surrounding the plume boundary north of Ridgecrest Drive SE in REI 4857 and REI 4838 have the potential to flow toward one or more interim measure extraction wells.
- Concentration trends analysis in performance monitoring wells indicated static or decreasing trends of dissolved-phase EDB volume and mass reduction.
- Table 6-24 summarizes the TCZ evaluation for this site, which concludes that at least 97% of the

initial TCZ volume and mass the interim measure was designed to contain is being captured under Q4 2020 conditions.

- Capture zone effectiveness is ultimately determined by field monitoring that includes hydraulic head measurement and groundwater sampling and analysis, in conjunction with field confirmation of pumping rates.
- A total of 14 USGS sentinel wells installed outside the IMOA between the EDB plume and drinking water wells owned and operated by the Albuquerque Bernalillo County Water Utility Authority and Raymond G. Murphy VA Medical Center were tested and no contaminants associated with the BFF release were detected in Q4 2020 samples. These wells are tested quarterly to provide advance notice of any threat to drinking water wells. The USGS transmittal letter, including the Q4 2020 data results, is provided in Appendix E-5.
- Finally, three Kirtland AFB drinking water supply wells (KAFB-003, KAFB-015, and KAFB-016) and the VA drinking water supply well (ST106-VA-2) are sampled monthly to verify the safety of the drinking water. No contamination was detected in the October, November, or December 2020 samples from the drinking water supply wells.

These lines of evidence suggest that, under Q4 2020 conditions, at least 97% of the initial TCZ volume and mass for which the interim measure was designed to contain is being captured.

7. INVESTIGATION-DERIVED WASTE

During Q4 2020, both hazardous and non-hazardous IDW and drilling waste were generated. IDW, generated from routine monitoring well operations included non-hazardous and hazardous purge water. Drilling waste included non-hazardous and suspected hazardous solid (soil) waste as well as suspected hazardous liquid waste. This section discusses the details of waste generated, disposed of, and managed during the quarter.

7.1 Non-Hazardous Investigation-Derived Waste

Non-hazardous IDW liquid wastes were generated from quarterly GWM sampling activities. Appendices J-1 and J-2 provide specific information regarding the non-hazardous liquid and solid IDW generated and disposed of during Q4 2020.

7.1.1 Groundwater Monitoring Liquid Investigation-Derived Waste

Non-hazardous IDW purge water collected during sampling of the GWM wells was placed in 55-gallon plastic (poly) drums. The drums were sealed with matching plastic lids with steel, locking-ring collars, labeled with vinyl non-hazardous waste labels, and transferred to the designated non-hazardous IDW yard located on Kirtland AFB. Small volumes of IDW water, typically generated from passive sampling devices or sampling of drinking water wells, were placed in labeled, 5-gallon plastic buckets (pails) with sealing lids.

Eligibility for discharge of non-hazardous liquid IDW to the GWTS was determined by comparing historical, well-specific data from the previous two quarters to the acceptance criteria of the GWTS. Liquid IDW from monitoring wells that had historically met the GWTS acceptance criteria was discharged to the facility without further review. Liquid IDW sourced from wells with historical data from the previous two quarters that exceeded the GWTS acceptance criteria was held for further evaluation.

For Q4 2020, a total of 623.5 gallons of non-hazardous water was generated and disposed of. This total was 100% sourced from standard GWM activities and fluid obtained from equipment rinsate activities. In all cases, the water met the GWTS acceptance criteria and was processed through the GWTS. All IDW water processed through the GWTS was discharged to the GCMP (Table J-1-1 of Appendix J-1). There was no non-hazardous liquid IDW generated from other sources collected and disposed of during Q4 2020 (Appendix J-1, Table J-1-2).

Any liquid IDW that is collected, approved for GWTS disposal, but not yet processed through the GWTS is temporarily accumulated in the “Pending Disposal” area of the IDW yard. Typically, this category includes non-hazardous purge water generated during the quarter that meets GWTS acceptance criteria, but was held due to scheduling constraints, GWTS discharge limitations or O&M activities. By the end of Q4 2020, no GWM purge water was being held in the “Pending Disposal” category (Appendix J-1, Table J-1-3).

Any liquid IDW that is collected, but held pending receipt and evaluation of analytical data, is placed in the “Pending Analysis” area of the IDW yard. By the end of Q4 2020, 178.5 gallons of liquids was being held in the “Pending Analysis” area of the IDW yard (Appendix J-1, Table J-1-4).

7.1.2 Non-Hazardous Drilling Liquid Investigation-Derived Waste

No non-hazardous liquids were generated from drilling operations during the quarter (Appendix J-1, Table J-1-5).

7.1.3 Non-Hazardous Well Drilling Liquid Investigation-Derived Waste Pending Disposal

There was no non-hazardous well drilling liquid IDW held as “Pending Disposal” at the end of Q4 2020.

7.1.4 Non-Hazardous Solid Waste

No non-hazardous solid waste was generated from IDW or GWTS operations during Q4 2020 (Appendix J-2, Table J-2-1).

Routine, non-hazardous disposable solid wastes were generated during GWM activities. These included single-use dual membrane samplers, disposable in-line filters, nitrile gloves, and paper trash. These items were disposed of as municipal solid waste and volumes were not tracked.

7.1.5 Non-Hazardous Well Drilling Solid Investigation-Derived Waste

During Q4 2020, non-hazardous soil was generated during the drilling of GWM well KAFB-106S10 and the soil vapor well KAFB-106V3. Approximately 40 cubic yards of soil was collected and placed in the Zia Park IDW yard. The bins are categorized as “Pending Analysis” until soil characterization activities can confirm the proper disposal pathway (Appendix J-2, Table J-2-2a). There was no non-hazardous solid IDW (soil) disposed of during the quarter. There was no soil or mud waste generated from well drilling activities held as “Pending Disposal” at the end of Q4 2020.

7.1.6 Special Waste Well Drilling Solid Investigation-Derived Waste

Special waste is defined as petroleum-contaminated soil that has total petroleum hydrocarbon concentrations greater than 100 milligrams per kilogram (Subparagraph [i] of Paragraph [13] of Subsection S of 20.9.2.7 New Mexico Administrative Code [2011]). No confirmed special waste was generated or disposed of during Q4 2020 (Appendix J-2, Table J-2-2b). No confirmed special waste was held in “Pending Disposal” areas of the IDW yard at the end of Q4 2020.

7.2 Hazardous Investigation-Derived Waste

Hazardous or suspected hazardous IDW is accumulated in one of two RCRA less than 90-day accumulation areas associated with the Kirtland BFF Project. Hazardous waste generated from routine GWM sampling or well maintenance activities (purge or well rehabilitation water) is placed in the Kirtland AFB BFF RCRA less than 90-day accumulation area. Hazardous or suspected hazardous waste generated during drilling activities is held in the Kirtland AFB Zia Park temporary RCRA less than 90-day accumulation area.

The hazardous, or suspected hazardous waste, is held in the 90-day accumulation areas until final waste determination can be made, either from analytical confirmation data or generator knowledge. If the waste is verified to be hazardous, the IDW remains in the less than 90-day accumulation area. If the IDW is determined to not meet hazardous waste criteria, the waste is recategorized as non-hazardous and is transferred to the “Pending Disposal” area of the non-hazardous IDW yard.

All hazardous waste must be removed from Kirtland AFB and properly disposed of off-Base within the required 90-day accumulation time limit. Hazardous waste is transported off Kirtland AFB only after it is properly profiled, manifested, and approved for transport by the Kirtland AFB Environmental Restoration Group. Waste is transported by a licensed hazardous waste hauler to a permitted treatment, storage, and disposal facility.

7.2.1 Liquid Hazardous Investigation-Derived Waste

Prior to the start of each quarterly GWM sampling event, an evaluation is made to identify monitoring wells that are anticipated to generate characteristically hazardous liquid IDW. This evaluation flags wells that require purge water to be managed as “hazardous” from the point of generation and for initial waste segregation purposes. Based on historical analytical data available for each well, the water is suspected to be characteristically hazardous if the concentration of benzene exceeded 500 µg/L (per 40 CFR Part 261.24) in either of the previous two sampling events. The hazardous waste classification code for benzene is D018.

For monitoring wells located in the source area of the groundwater plume that show consistent data that indicate purge water is hazardous, “Generator Knowledge” is used for hazardous waste determination. Use of generator knowledge to determine if solid waste is hazardous is permitted under RCRA regulations 40 CFR 262.11(d)(1).

All liquid hazardous waste (purge or well development water) is placed in 55-gallon steel drums with steel tops and locking rings (UN designation 1A2/Y1.2/100/**). When small volumes (less than five gallons) of waste is generated at a well, a plastic container with threaded top (jerrican) is used to contain the liquid. The jerrican is then placed in a steel, 55-gallon drum for additional security. All waste containers are properly labeled, sealed, and placed on secondary containment pallets located within the appropriate less than 90-day accumulation area. The accumulation areas and waste containers are inspected on a weekly basis by trained personnel as required under 40 CFR 262.34.

When possible, liquid hazardous waste may be consolidated. This is typically done to combine small volumes of waste generated during passive sampling activities at multiple well sites. Consolidation is also performed to reduce the total number of drums that require offsite disposal. Appendix J-3 provides specific information regarding the hazardous liquid waste disposed of during Q4 2020.

For Q4 2020, there was no liquid hazardous waste disposed during the quarter (Appendix J-3, Table J-3-1). A total of 396.5 gallons of suspected liquid hazardous waste was generated (Appendix J-3, Table J-3-2). Of this total, 131.5 gallons was collected from GWM activities and held in the BFF less than 90-day accumulation area pending analytical confirmation and disposal. Drilling activities generated 265.0 gallons of suspected hazardous development water sourced from well KAFB-106S10. This liquid was placed in the Zia Park less than 90-day accumulation area pending analytical confirmation.

7.2.2 Solid Hazardous Investigation-Derived Waste

Solid (soil) hazardous waste on the BFF project is determined by analytical concentrations of benzene equal to, or greater than, the RCRA characteristic regulatory limit of 5.0 milligrams per kilogram. Based on an extensive history of analytical data on the BFF project, no other organic or inorganic characteristic hazardous waste compounds have been identified for this project.

Solid hazardous wastes are held in either 55-gallon steel drums with steel tops and locking rings or, if volume requires, 20-yard capacity roll-off bins. Bin doors are sealed with an expanding foam to minimize

the potential of leaks and the bins are double lined with 10-millimeter plastic liners. Bins have either integrated hard cover tops with ratcheting straps or have removable, heavy-duty vinyl covers that are secured to the bin using heavy-duty rubber straps to protect the contents from weather or access by local fauna. All drums are placed on secondary containment pallets. Roll-off bins are placed on secondary containment composed of plastic sheeting with berm or rolled edges.

For Q4 2020, a total of 26 cubic yards of suspected hazardous soil was generated during the drilling of KAFB-106S10 (Appendix J-3, Table J-3-2). The soil is held in “Pending Analysis” status until analytical confirmation can be made for disposal purposes. There was no solid hazardous waste formally disposed of in Q4 2020.

7.2.3 Hazardous Investigation-Derived Waste Volume Quarterly Totals

Table J-3-3 provides the quarterly and cumulative annual total of hazardous waste disposed of from the Kirtland AFB BFF project during the calendar year. The total volume for 2020 that has been manifested and properly disposed of is 256 gallons of liquid hazardous waste. There was no solid (soil) hazardous waste generated or disposed of in 2020.

8. SUMMARY

8.1 Discussion and Conclusions

The following section summarizes the data collected during Q4 2020 and annual trends for 2020.

8.1.1 Soil Vapor Monitoring

Semiannual soil vapor samples were collected from 271 of 284 SVMPs in the vadose zone from both on-Base and off-Base locations and are representative of current conditions. In Q4 2020, the highest EDB, benzene, and HC concentrations were observed within the source area on Kirtland AFB, at depths 50 ft bgs and greater. The lowest concentrations were observed at 25 ft bgs across the SVM network. Samples collected at SVMPs within the 25-ft horizon were screened against the NMED residential soil gas VISLs. Benzene and EDB concentrations were below the respective residential soil gas VISL at the SVMPs in the 25-ft horizon both on-Base and off-Base. At off-Base SVMPs at the 25-ft horizon, no detected concentrations of any TO-15 analyte exceeded the residential soil gas VISLs.

8.1.1.1 Trend Analysis

Of the 84 wells evaluated for trends, 60 had an increasing or decreasing trend for one or more of the analytes evaluated. Forty-one showed increasing HC trends, nine showed decreasing HC trends, and 34 showed no HC trend. Twenty-two wells showed increasing benzene trends, 24 showed decreasing benzene trends, and 38 showed no benzene trend. Two wells showed increasing EDB trends, nine showed decreasing EDB trends, 15 showed no EDB trend, and the remainder did not have enough EDB detections to evaluate a trend.

Locations with increasing HC trends are generally located adjacent to the source area and above the benzene plume, indicating that the increasing concentrations may be due to diffusion from the residual fuel constituents in the source area and in the groundwater benzene plume. The sample depth with the greatest number of increasing HC and benzene trends is 450 ft, south and east of the source area, and approximately above the source area groundwater plume. The historically rising water table has brought the dissolved-phase benzene plume closer to the 450 ft bgs SVMPs. The diffusion of constituents from the Source Area Plume may be causing the increase in benzene and HC concentrations.

Increasing trends also indicate that soil vapor HC concentrations are diffusing from areas of residual LNAPL at a higher rate than aerobic microbial degradation is lowering soil vapor hydrocarbon concentrations. This may be due to aerobic microbial degradation being rate-limited by low oxygen concentrations and/or limited moisture content in the vadose zone.

8.1.2 Groundwater Monitoring

8.1.2.1 Aquifer Conditions

The horizontal groundwater gradient within the monitoring network is dominated by radial flow patterns toward depressions in the water table created by groundwater extraction wells. Water levels across the site fell in the latter half of 2020, resulting in an average decline in water level of 0.54 ft since Q4 2019, and 3.14 ft since Q2 2020. Historically, water levels were rising across the site since 2008, when the San-Juan Chama Drinking Water Project became operational (Appendix F-6). The recent decline observed in 2020 is attributed to additional City of Albuquerque and Kirtland AFB production well pumping due to drought conditions.

8.1.2.2 Light Non-Aqueous Phase Liquid

During gauging, LNAPL was detected and measured in four wells located on-Base within the Source Area Plume (KAFB-106005, KAFB-106059, KAFB-106150-484, and KAFB-106154-484), consistent with previous quarters (Table 4-8). LNAPL thickness ranged from 0.01 ft in KAFB-106005 and KAFB-106059 to 0.1 ft in KAFB-106150-484 (Figure 4-6). There are 10 wells with unsubmerged screens surrounding these wells where LNAPL was not detected. These data indicate that the extent of LNAPL was bounded during Q4 2020 (Figure 4-6).

The historical extent of LNAPL has decreased since GWM began. Table 4-8 includes a complete history of LNAPL detections at SWMUs ST106/SS-111. Within the past 5 years, the extent of LNAPL detections has been at on-Base locations, with the majority of detections within the past year located within or immediately adjacent to the BFF (Figure 4-6).

Each of the wells with historical LNAPL detections is either screened across the water table or is located in close proximity to a well that is currently screened across the water table. In some of these locations, the well was installed within the past 2 years to fill a previous data gap as the water table rose and submerged wells across the monitoring network. The newer water table wells provide a current analysis of conditions at the water table and confirm the decrease in the historical extent of LNAPL. In addition, there are 14 water table wells surrounding the locations where LNAPL has been detected within the past 5 years. These 14 water table wells provide a perimeter around the historical LNAPL locations to bound the data (Figure 4-6).

8.1.2.3 Dissolved-Phase EDB and BTEX Plumes

The volume and mass of the EDB plume has reduced significantly over time in the IMO A (Figure 6-2). In Q4 2016, 15 months after the first interim measure extraction well KAFB-106228 became active, the plume volume and mass were estimated at 114,700,000 cubic ft and 104 grams, respectively. Both of these values have been on a decreasing trend over the last 4 years with the current plume volume and mass estimated at 12,264,000 cubic ft and 5.2 grams, respectively. This represents an 89% decrease in plume volume and a 95% decrease in plume mass. In the IMO A, the interim measure has collapsed the TCZ over the last 4 years, and is currently containing the remaining mass with the bulk of the remaining volume and mass north of Ridgecrest Drive SE either being centered around interim measure well KAFB-106228, or present just north of Ridgecrest Drive SE as an extension of the Source Area Plume. Overall, the plume analysis reveals the general pattern of dissolved-phase EDB volume and mass response expected due to interim measure system extraction. In Q4 2020, EDB was not detected in the deepest monitoring interval, REI 4814.

The footprint of the BTEX plume has not changed substantially since Q4 2019 (Figure 4-10). Individual wells have higher and lower concentrations of BTEX compounds detected since Q4 2019 (Section 4.6.2.2). In the Source Area Plume, alkalinity, dissolved iron, and dissolved manganese were high as compared to the concentrations in wells outside of the Source Area Plume. In addition, decreased DO, ORP, nitrate/nitrite nitrogen and sulfate were observed in the Source Area Plume. These bioremediation indicators suggest that microbial degradation may be occurring in the Source Area Plume, which could contribute to the stability of the BTEX plume. In Q4 2020, benzene was not detected in the deepest monitoring interval, REI 4814.

8.1.3 Drinking Water Supply Well Monitoring

Drinking water supply well analytical data are provided in Tables 5-1 and 5-2. Consistent with previous

monitoring events, no detectable concentrations of EDB or BTEX were observed in the drinking water supply well samples (Appendix H-3) in 2020.

8.1.4 Groundwater Treatment System Operation and Performance

During Q4 2020, an additional UIC well, KAFB-IN2, was brought online. During Q4 2020, the GWTS operated 95.1% of the time, and treated 75,390,700 gallons of groundwater, which was discharged to the GCMP and UIC wells KAFB-7 and KAFB-IN2 (Table 6-4). In Q4 2020, an estimated 2,870 milligrams of EDB were removed by the GWTS (Table 6-7).

Analytical results and effluent discharge limits for monthly water samples from the GWTS are provided in Tables 6-9 and 6-10. Effluent concentrations for both treatment trains were below the laboratory reporting limit during Q4 2020.

Analytical results for annual influent and effluent GWTS samples are provided in Table 5-8. Results for the annual samples indicated similar results to concentrations of the contaminants of concern measured in 2019 (Kirtland AFB, 2020).

During 2020, the GWTS was operation 97.6% of the time, and treated a total of 248,046,600 gallons of groundwater, removing approximately 9,577 mg of EDB. Of the treated water, 147,776,200 gallons was discharged to the GCMP, 100,129,700 gallons was discharged to UIC KAFB-7, and 140,700 gallons was discharged to UIC KAFB-IN2.

8.1.5 Pump and Treat Interim Measure Performance Assessment

Based on the analysis of the various lines of evidence used in the plume capture assessment (Section 6.5), at least 97% of the initial TCZ volume and mass the interim measure was designed to contain is being captured under Q4 2020 conditions.

8.2 Data Gaps

No data gaps were identified in Q4 2020. The installation of six nested water table wells began in Q4 2020 to address a previous data gap of submerged well screens due to water table rise. These wells will be incorporated into the GWM monitoring program in Q1 and Q2 2021.

8.3 Recommendations

It is recommended that monitoring and GWTS operation continue in accordance with the schedules provided in the approved work plans (Section 1.1).

Q1 2021 will comprise the period between January 1 and March 31, 2021. Planned Q1 2021 activities are summarized below.

Groundwater Monitoring

- Perform and report on quarterly GWM in Q1 2020.
- Report quarterly monitoring of USGS sentinel wells (by USGS).

Drinking Water Supply Well Monitoring

- Perform drinking water supply well monitoring monthly for organic compound analysis for the four wells sampled, and once for semi-annual inorganic compound analysis.

Groundwater Treatment System Operation

- Continue operating the GWTS and extraction wells KAFB-106228, KAFB-106233, KAFB-106234, and KAFB-106239
- Perform GWTS well disinfection as required.

Reporting

- Prepare a quarterly report to detail the activities conducted during the quarter.

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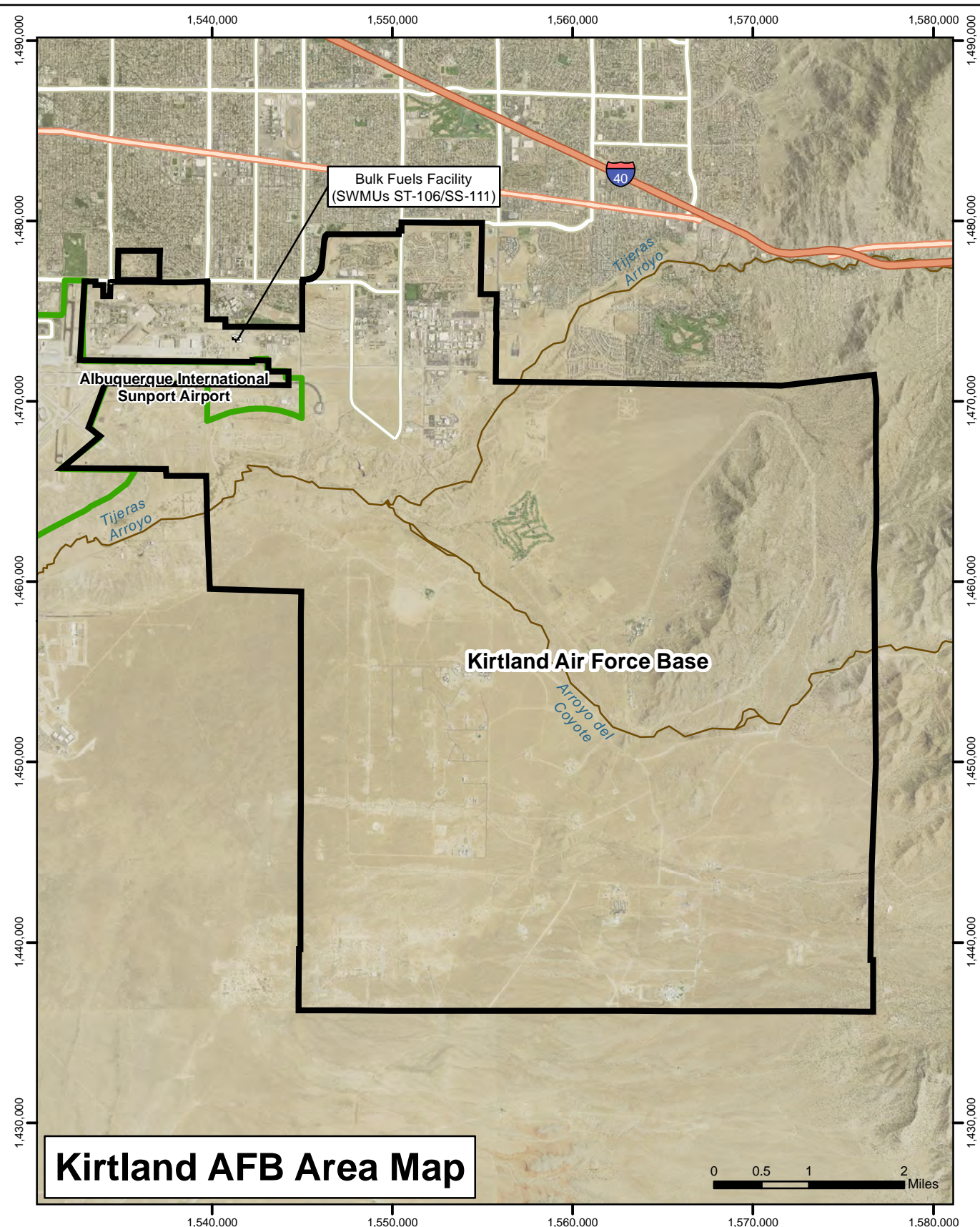
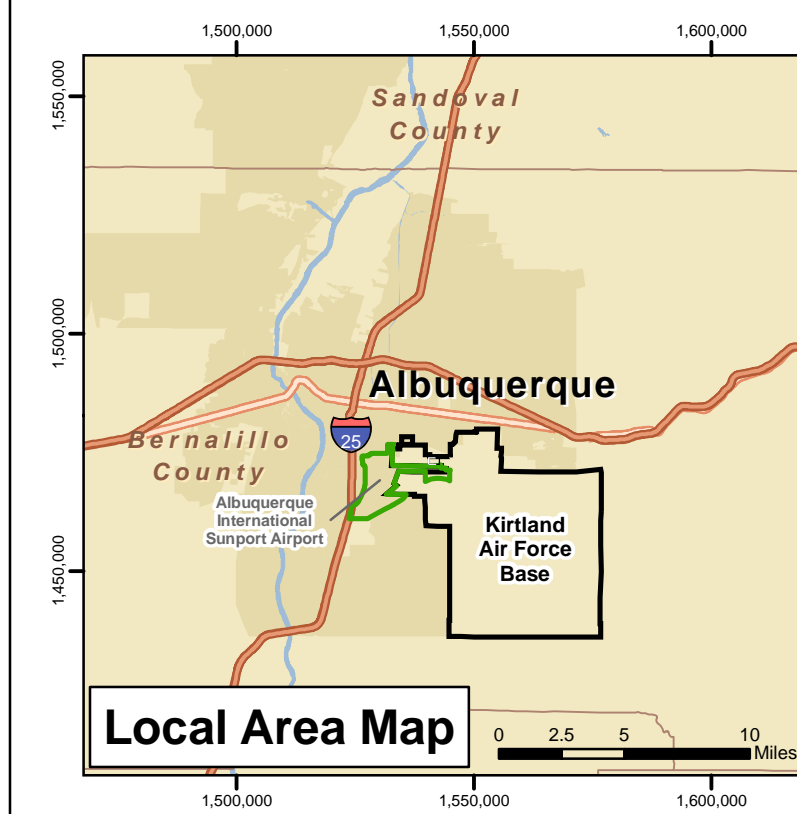
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- NMED. 2020b. Correspondence from Mr. Kevin Pierard, Chief, Hazardous Waste Bureau, to Colonel David S. Miller, Base Commander, 377 AB/CC, Kirtland AFB, NM and Lt. Colonel Wayne J. Acosta, Civil Engineer Office, 377 Civil Engineer Division, Kirtland AFB, NM, *re: Reporting Requirements for All Document Submittals, Kirtland Air Force Base, New Mexico.* EPA ID# NM6213820974, HWB-KAFB-19-017. September 2.
- NMED. 2020c. Correspondence from Mr. Kevin Pierard, Chief, Hazardous Waste Bureau, to Colonel David S. Miller, Base Commander, 377 AB/CC, Kirtland AFB, NM and Lt. Colonel Wayne J. Acosta, Civil Engineer Office, 377 Civil Engineer Division, Kirtland AFB, NM, *re: Approval Fifteen Day Notification of Newly Discovered SWMU or AOC Kirtland Air Force Base, New Mexico.* EPA ID# NM9570024423, HWB-KAFB-20-Misc. April 6.
- Plummer, L.N., J.K. Bohlke, and M.W. Doughten. 2006. *Perchlorate in Pleistocene and Holocene Groundwater in North-Central New Mexico.* Environmental Science and Technology Vol. 40, pp. 1757-1763. February.

FIGURES



- Legend**
- Kirtland Air Force Base Installation Boundary
 - Albuquerque International Sunport Airport
 - Major Highways
 - Highways
 - Major Roads
 - Arroyos
 - Rivers
 - Source Area

Note:
SWMU = Solid Waste Management Unit

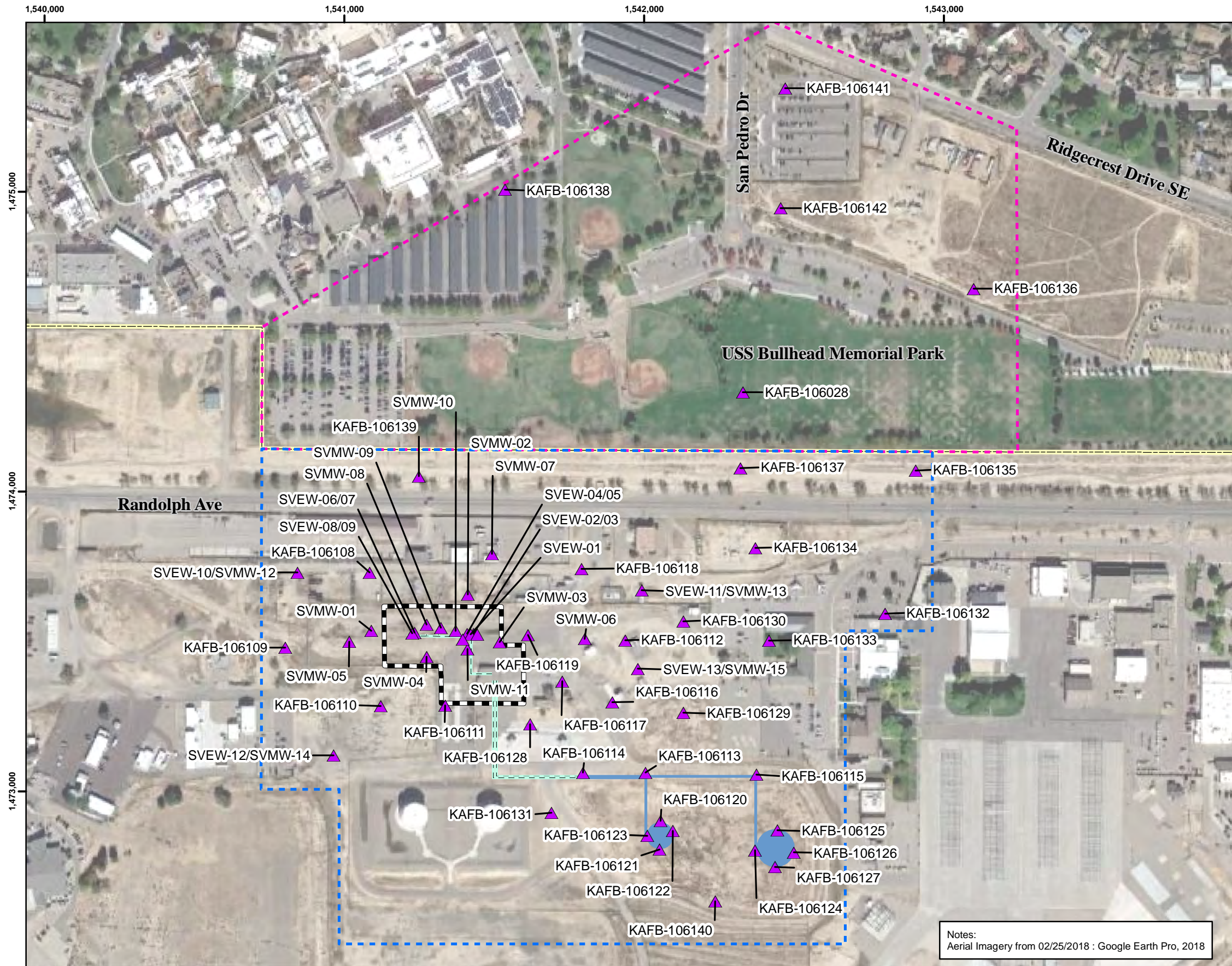


Projection: NAD83 State Plane New Mexico Central FIPS3002 Feet

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FIGURE 1-1

SITE LOCATION MAP

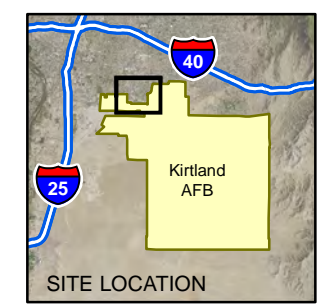


Legend

- Soil Vapor Monitoring Point
- Former Aboveground Storage Tank
- Former Buried Fuel Transfer Line
- Former Aboveground Fuel Transfer Line
- Installation Boundary

Area of Interest

- Off-Base
- On-Base Outside of Source Area
- Source Area



N

0 175 350 700

Feet

1 inch = 350 feet

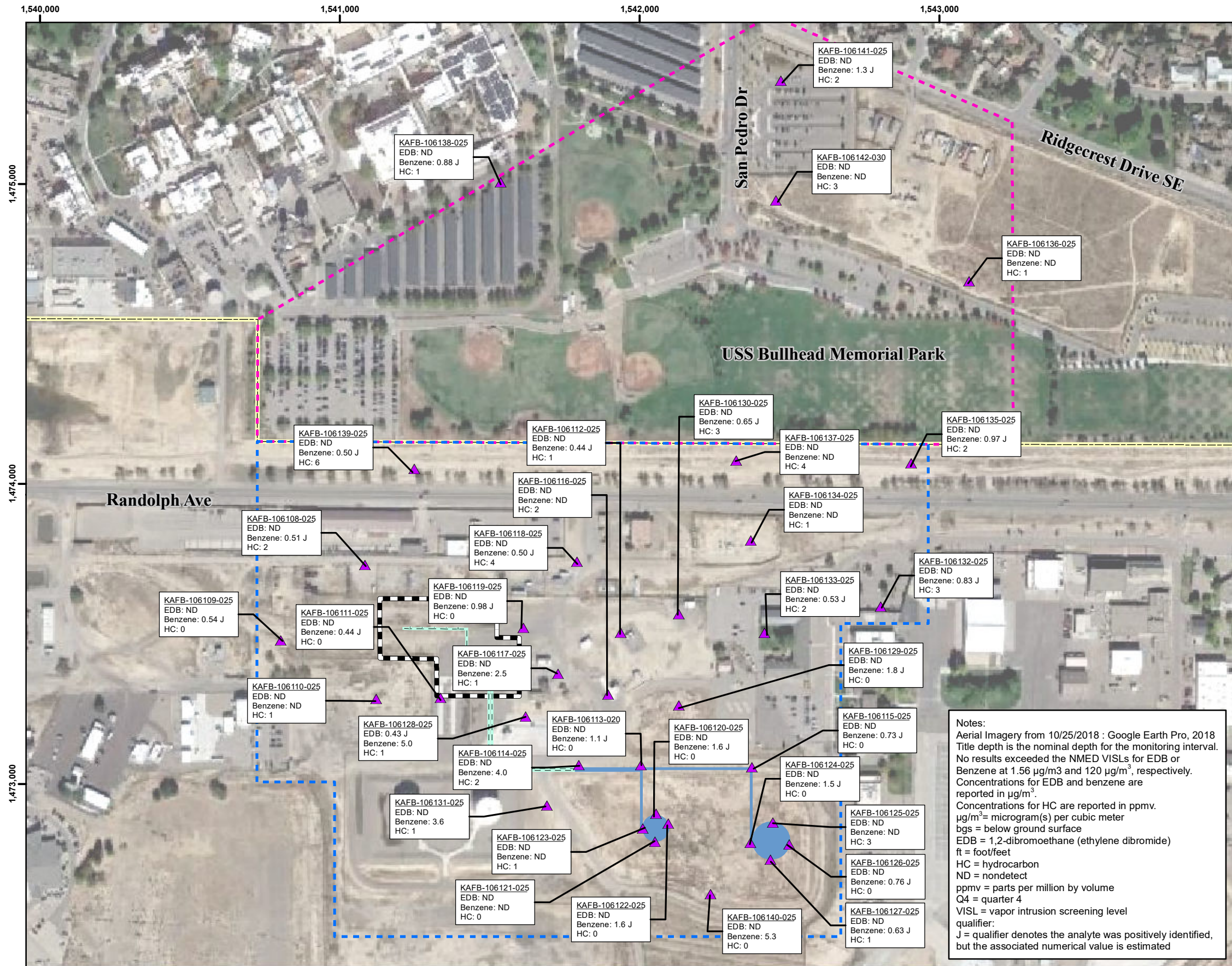
Projection: NAD83 State Plane New Mexico Central FIPS3002 Feet

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FIGURE 3-1

SOIL VAPOR MONITORING LOCATIONS
 IN THE SOURCE AREA PLUME

Notes:
 Aerial Imagery from 02/25/2018 : Google Earth Pro, 2018



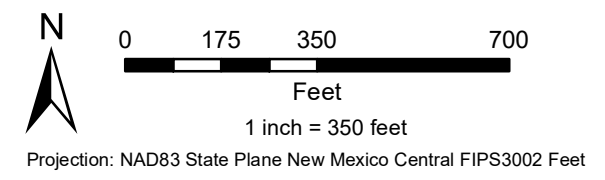
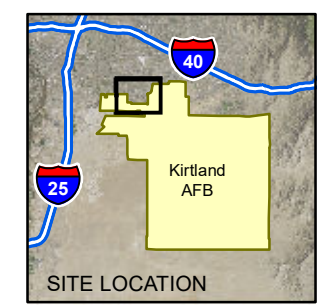
Notes:
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018
 Title depth is the nominal depth for the monitoring interval.
 No results exceeded the NMED VISLs for EDB or Benzene at 1.56 µg/m³ and 120 µg/m³, respectively.
 Concentrations for EDB and benzene are reported in µg/m³.
 Concentrations for HC are reported in ppmv.
 µg/m³ = microgram(s) per cubic meter
 bgs = below ground surface
 EDB = 1,2-dibromoethane (ethylene dibromide)
 ft = foot/feet
 HC = hydrocarbon
 ND = nondetect
 ppmv = parts per million by volume
 Q4 = quarter 4
 VISL = vapor intrusion screening level
 qualifier:
 J = qualifier denotes the analyte was positively identified, but the associated numerical value is estimated

Legend

- ▲ Soil Vapor Monitoring Point
- Former Aboveground Storage Tank
- Former Buried Fuel Transfer Line
- Former Aboveground Fuel Transfer Line
- Installation Boundary

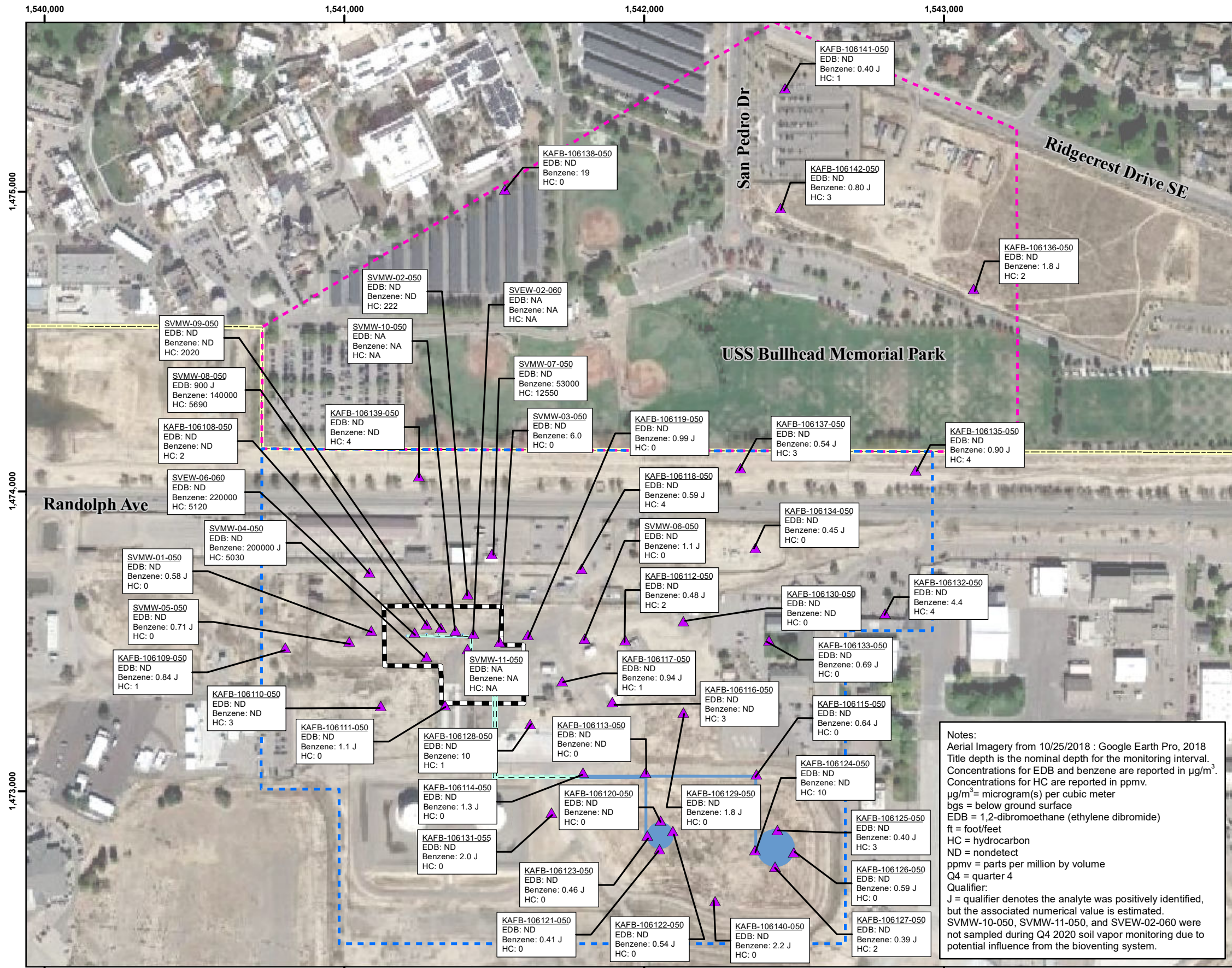
Area of Interest

- Off-Base
- On-Base Outside of Source Area
- Source Area



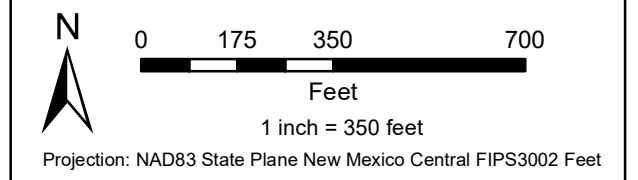
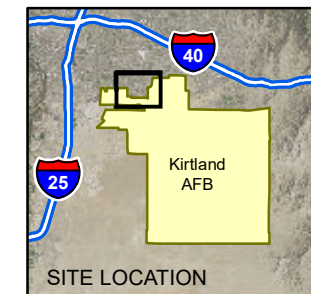
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FIGURE 3-2
 BENZENE, EDB, AND HC CONCENTRATIONS
 IN SOIL VAPOR IN THE SOURCE AREA
 PLUME AT 25 FT BGS, Q4 2020



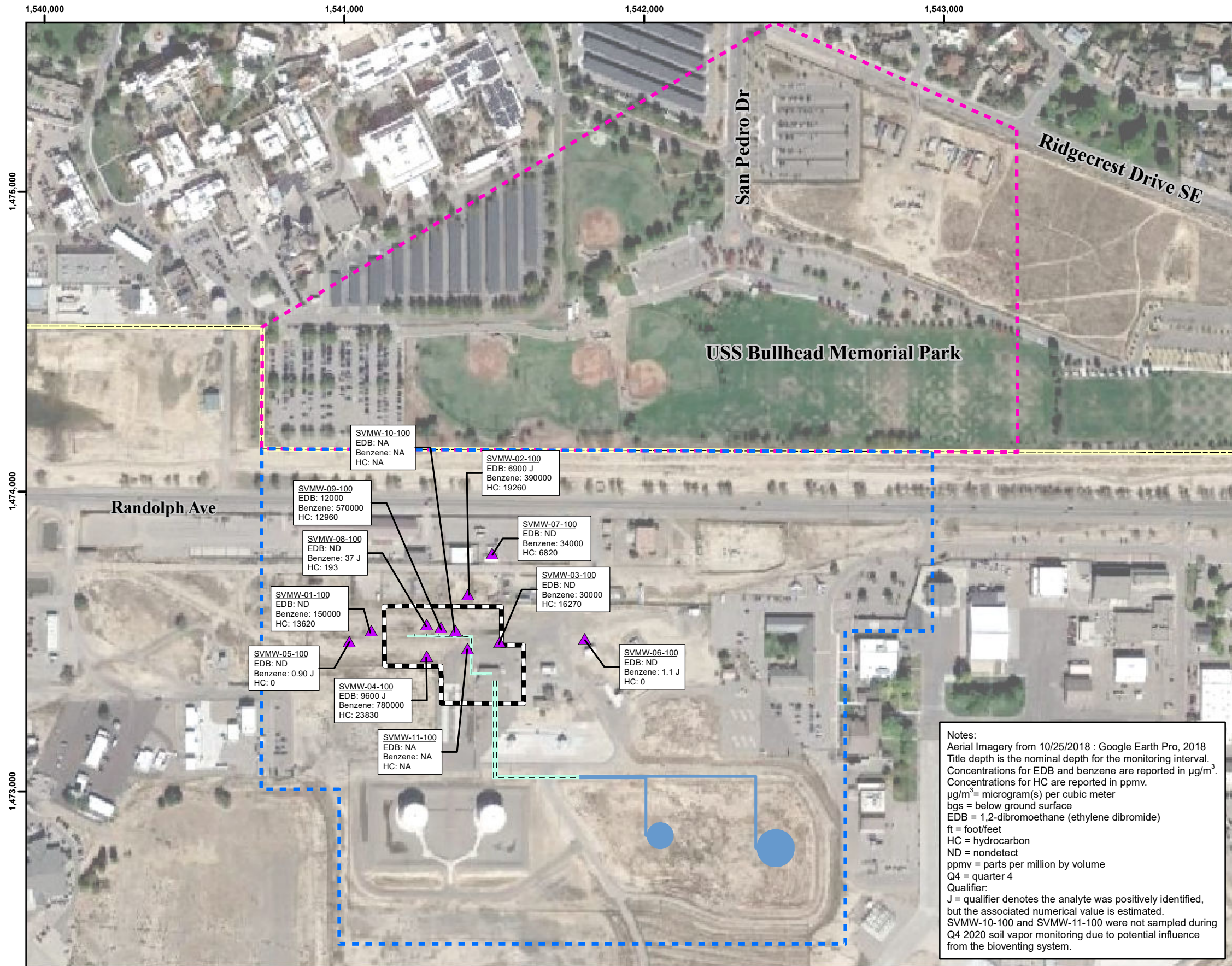
Legend

- ▲ Soil Vapor Monitoring Point
 - Former Aboveground Storage Tank
 - Former Buried Fuel Transfer Line
 - Former Aboveground Fuel Transfer Line
 - Installation Boundary
- Area of Interest**
- Off-Base
 - On-Base Outside of Source Area
 - ▣ Source Area



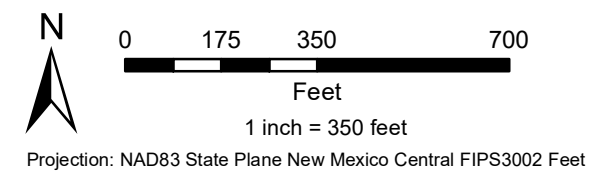
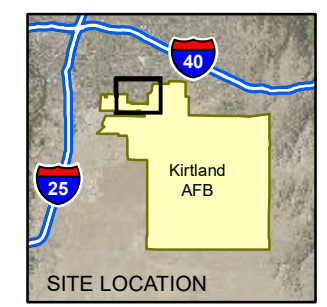
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FIGURE 3-3
**BENZENE, EDB, AND HC CONCENTRATIONS
 IN SOIL VAPOR IN THE SOURCE AREA
 PLUME AT 50 FT BGS, Q4 2020**



Legend

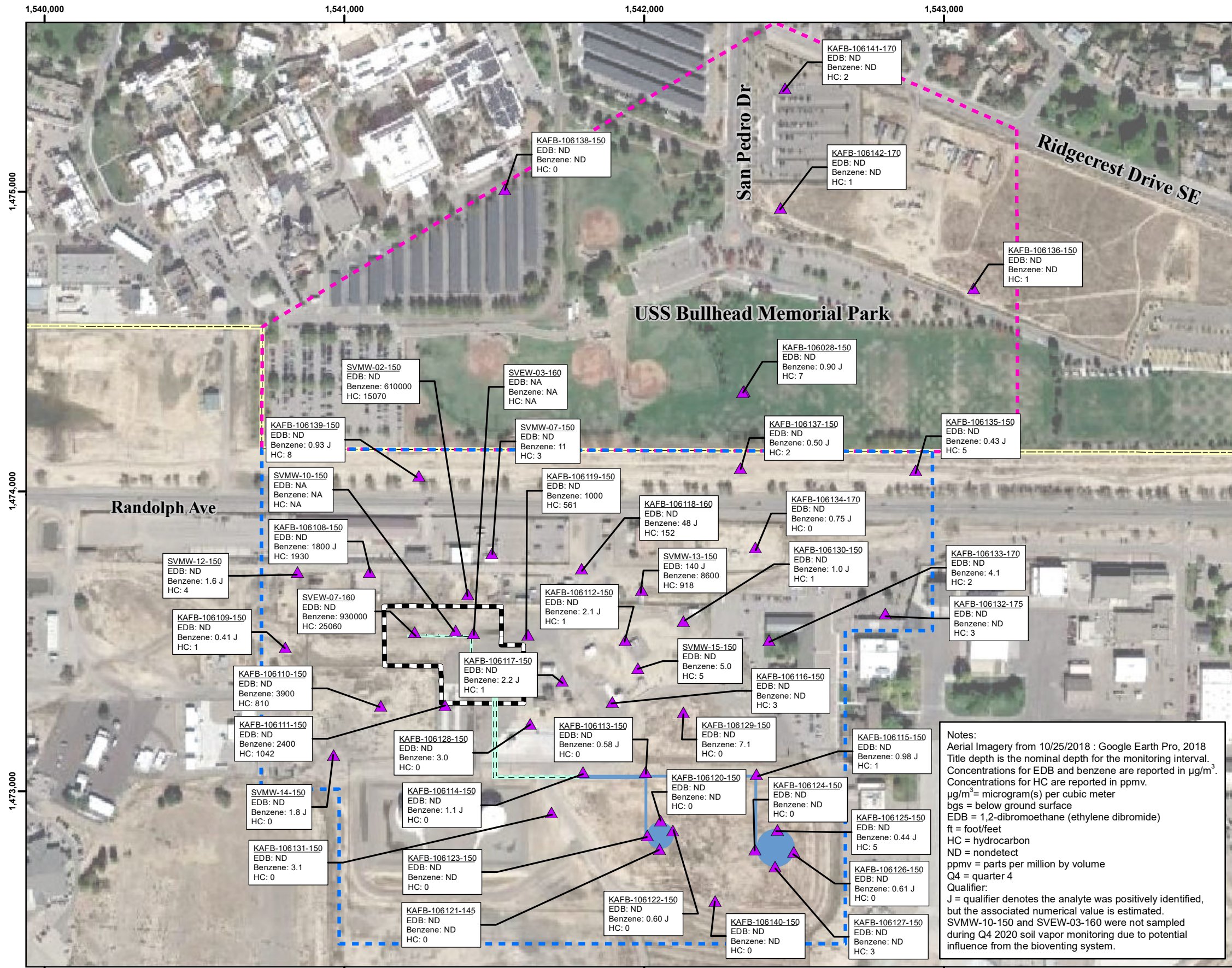
- ▲ Soil Vapor Monitoring Point
 - Former Aboveground Storage
 - Former Buried Fuel Transfer Line
 - Former Aboveground Fuel Transfer Line
 - Installation Boundary
- Area of Interest**
- Off-Base
 - On-Base Outside of Source
 - ▣ Source



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FIGURE 3-4

BENZENE, EDB, AND HC CONCENTRATIONS
 IN SOIL VAPOR IN THE SOURCE AREA
 PLUME AT 100 FT BGS, Q4 2020

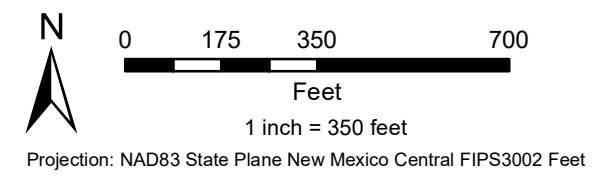
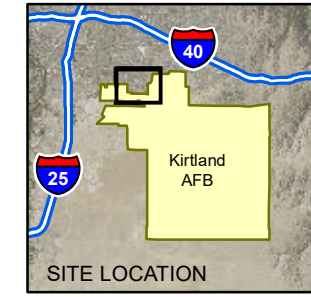


Legend

- ▲ Soil Vapor Monitoring Point
- Former Aboveground Storage
- Former Buried Fuel Transfer Line
- Former Aboveground Fuel Transfer Line
- Installation Boundary

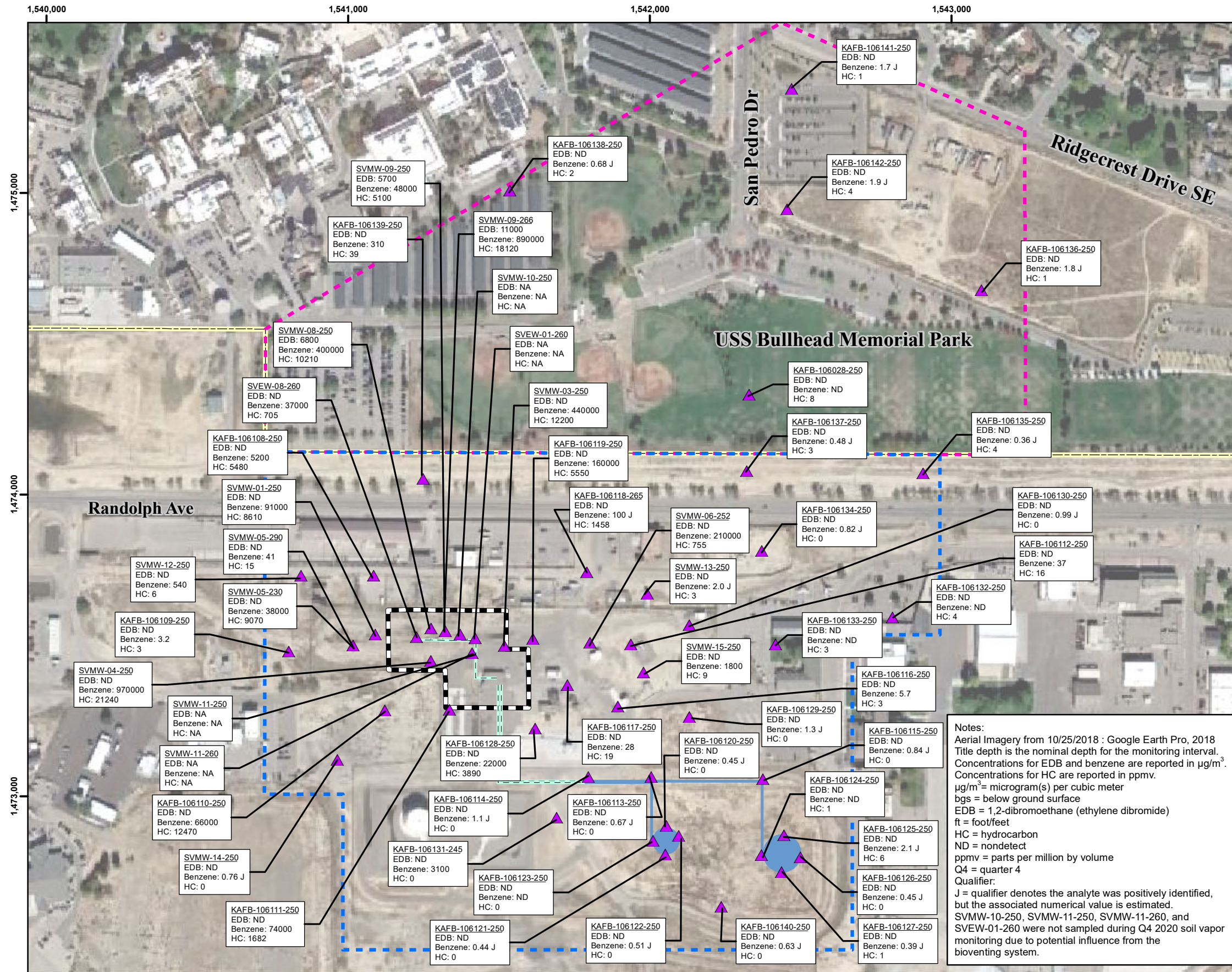
Area of Interest

- Off-Base
- On-Base Outside of Source
- Source



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FIGURE 3-5
 BENZENE, EDB, AND HC CONCENTRATIONS
 IN SOIL VAPOR IN THE SOURCE AREA PLUME
 AT 150 FT BGS, Q4 2020

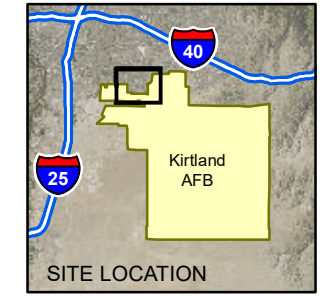


Legend

- ▲ Soil Vapor Monitoring Point
- Former Aboveground Storage
- Former Buried Fuel Transfer Line
- Former Aboveground Fuel Transfer Line
- - - Installation Boundary

Area of Interest

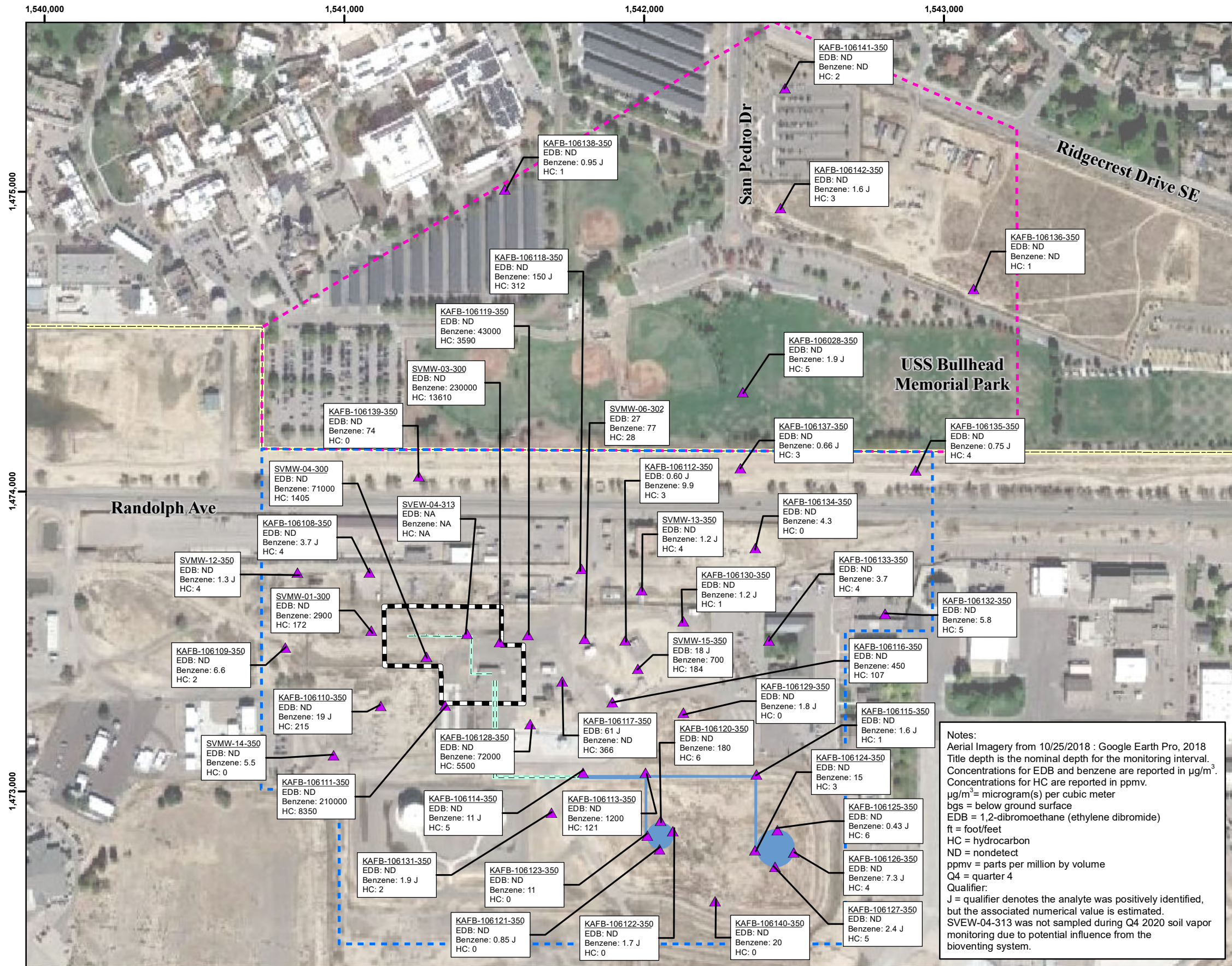
- Off-Base
- On-Base Outside of Source
- Source Area



N
0 175 350 700
Feet
1 inch = 350 feet
Projection: NAD83 State Plane New Mexico Central FIPS3002 Feet

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FIGURE 3-6
BENZENE, EDB, AND HC CONCENTRATIONS
IN SOIL VAPOR IN THE SOURCE AREA PLUME
AT 250 FT BGS, Q4 2020

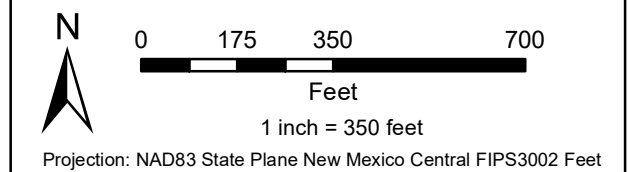
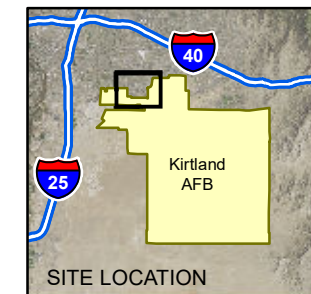


Legend

- Soil Vapor Monitoring Point
- Former Aboveground Storage Tank
- Former Buried Fuel Transfer Line
- Former Aboveground Fuel Transfer Line
- Installation Boundary

Area of Interest

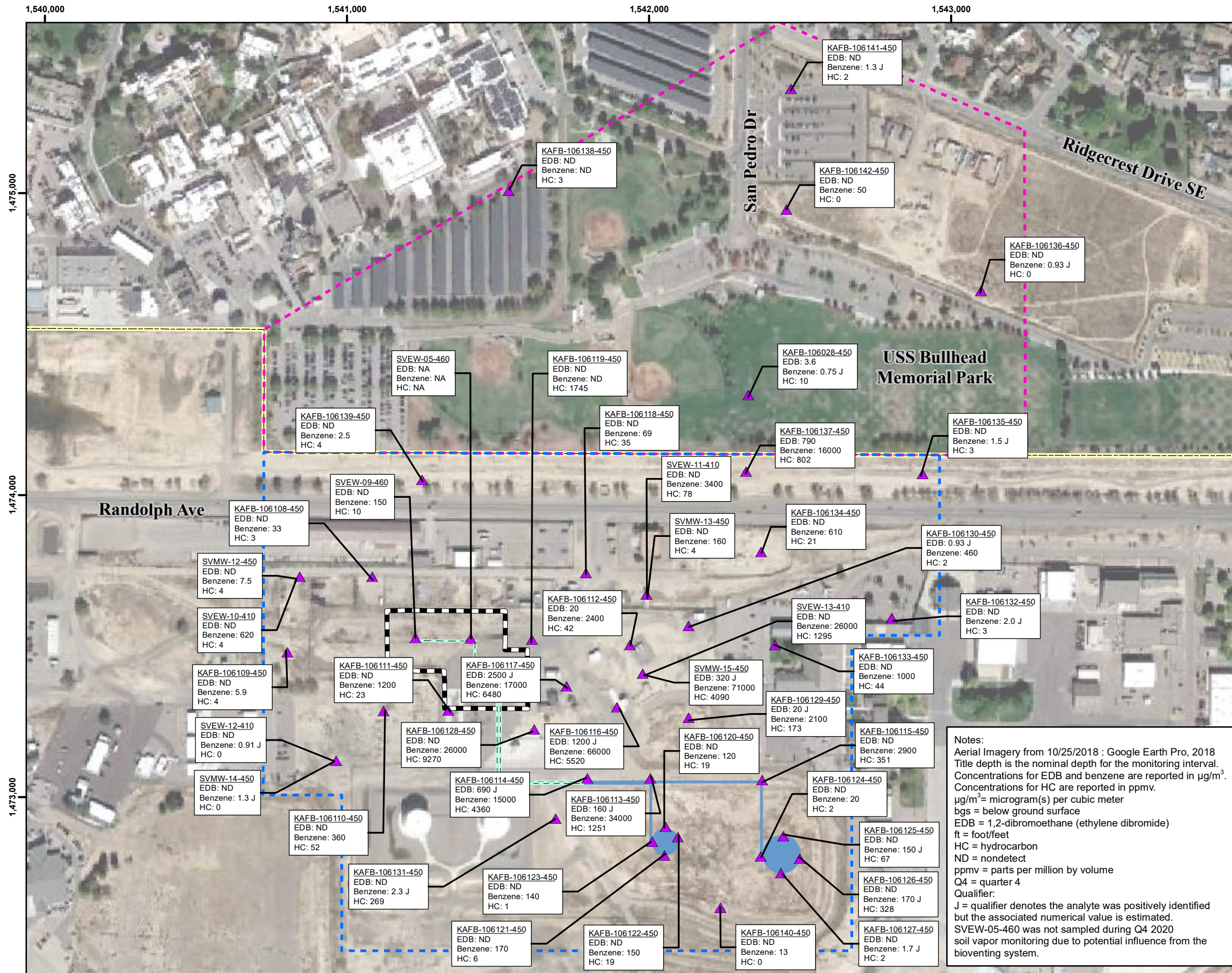
- Off-Base
- On-Base Outside of Source Area
- Source Area



Notes:
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018
 Title depth is the nominal depth for the monitoring interval.
 Concentrations for EDB and benzene are reported in $\mu\text{g}/\text{m}^3$.
 Concentrations for HC are reported in ppmv.
 $\mu\text{g}/\text{m}^3$ = microgram(s) per cubic meter
 bgs = below ground surface
 EDB = 1,2-dibromoethane (ethylene dibromide)
 ft = foot/feet
 HC = hydrocarbon
 ND = nondetect
 ppmv = parts per million by volume
 Q4 = quarter 4
 Qualifier:
 J = qualifier denotes the analyte was positively identified, but the associated numerical value is estimated.
 SVEW-04-313 was not sampled during Q4 2020 soil vapor monitoring due to potential influence from the bioventing system.

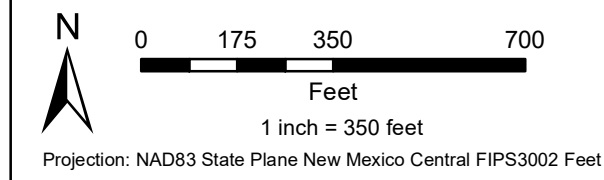
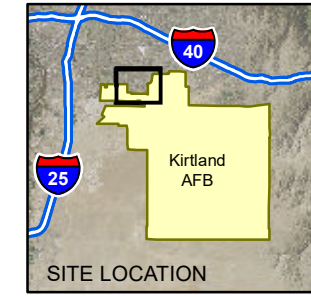
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FIGURE 3-7
 BENZENE, EDB, AND HC CONCENTRATIONS
 IN SOIL VAPOR IN THE SOURCE AREA PLUME
 AT 350 FT BGS, Q4 2020



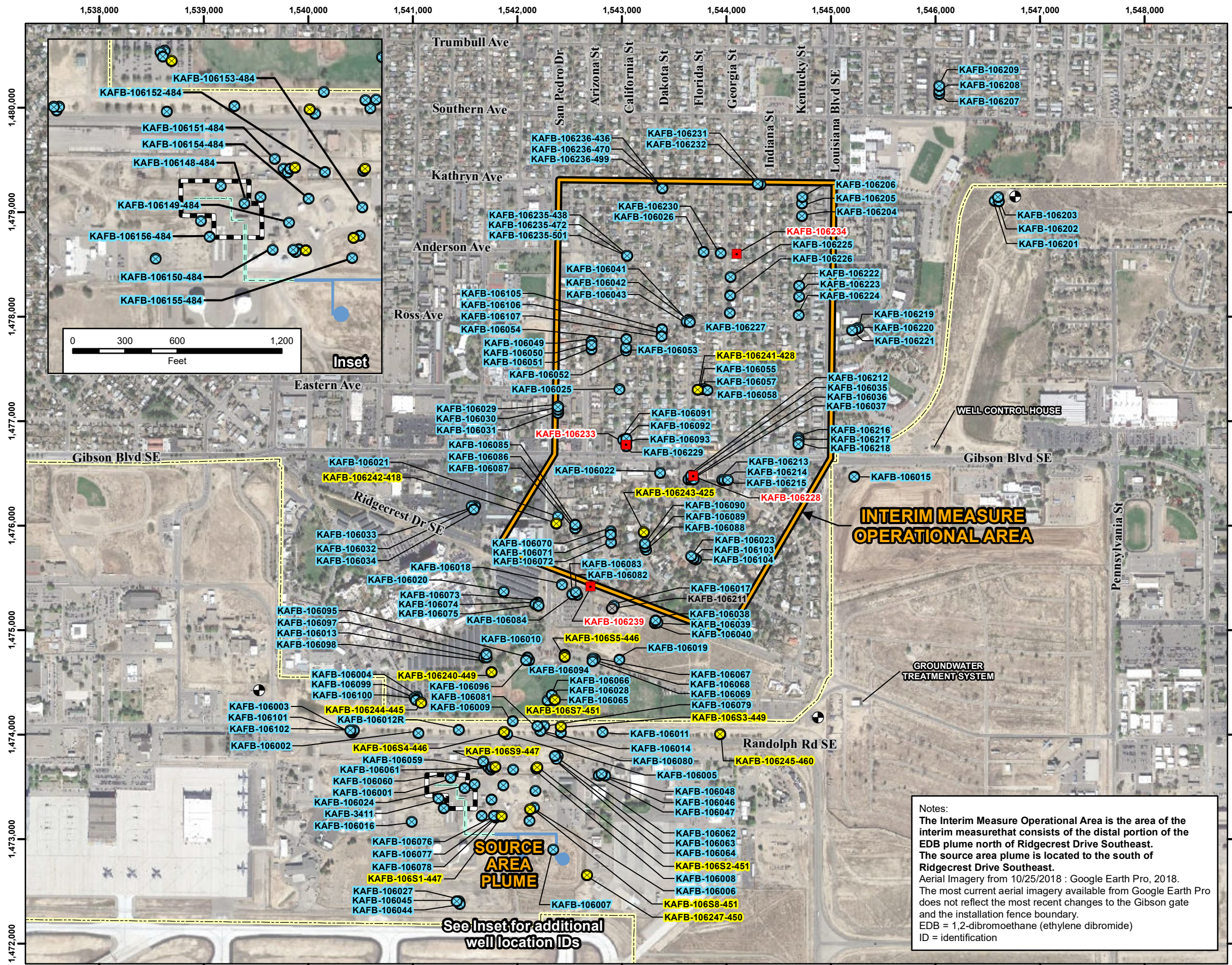
Legend

- Soil Vapor Monitoring Point
 - Former Aboveground Storage Tank
 - Former Buried Fuel Transfer Line
 - Former Aboveground Fuel Transfer Line
 - Installation Boundary
- Area of Interest**
- Off-Base
 - On-Base Outside of Source Area
 - Source Area



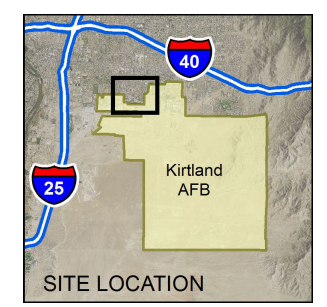
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FIGURE 3-8
BENZENE, EDB, AND HC CONCENTRATIONS
IN SOIL VAPOR IN THE SOURCE AREA PLUME
AT 450 FT BGS, Q4 2020



Legend

- Groundwater Monitoring Well
- Extraction Well
- Drinking Water Supply Well
- Monitoring Well (pending water table rise)
- Data Gap Wells Installed in 2018 and 2019
- Former Aboveground Storage Tank
- Former Buried Fuel Transfer Line
- Former Aboveground Fuel Transfer Line
- Installation Fence Boundary
- Interim Measure Operational Area
- Source Area



N

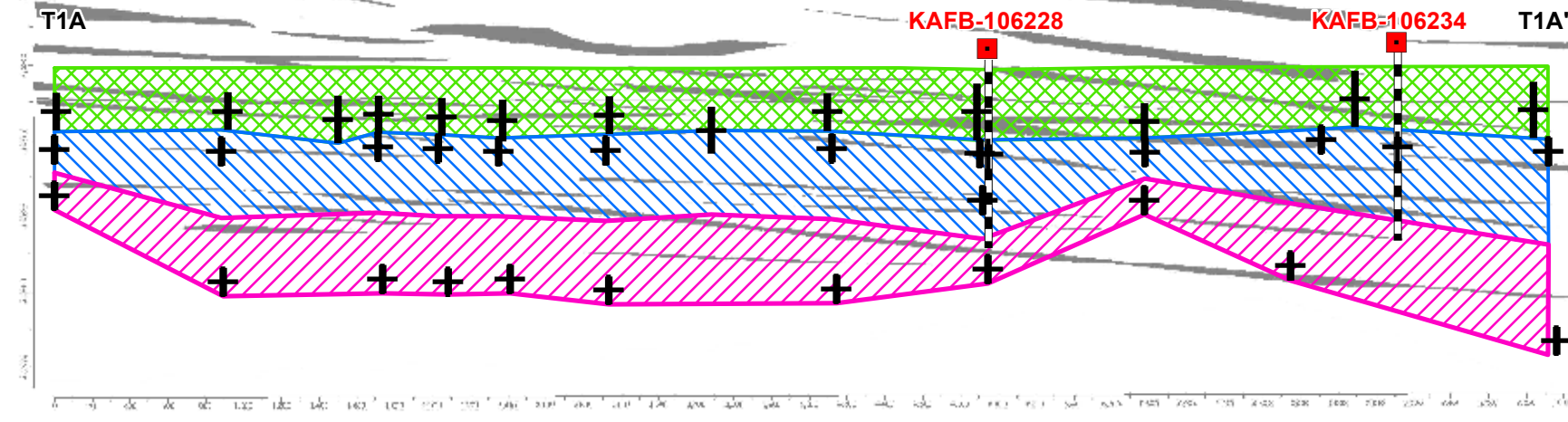
0 500 1,000 2,000
Feet
1 inch = 1,000 feet
Projection: NAD83 State Plane New Mexico Central FIPS3002 Feet

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FIGURE 4-1
GROUNDWATER MONITORING NETWORK,
DRINKING WATER SUPPLY WELL,
AND EXTRACTION WELL LOCATIONS

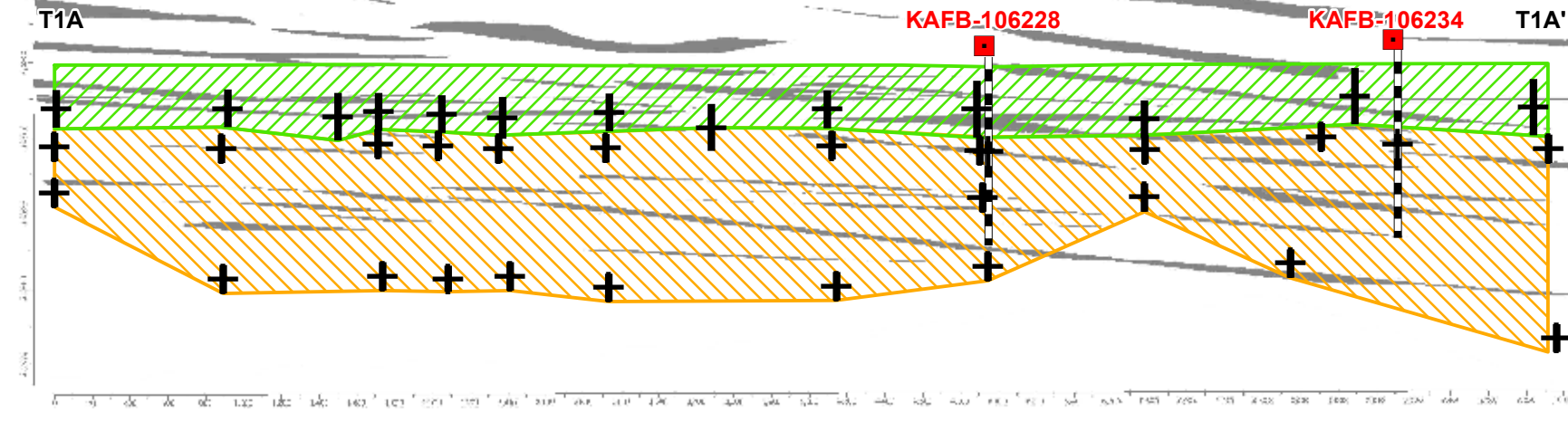
Notes:
The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgecrest Drive Southeast. The source area plume is located to the south of Ridgecrest Drive Southeast.
Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018.
The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
EDB = 1,2-dibromoethane (ethylene dibromide)
ID = identification

Horizontal Capture Intervals



Stratigraphy along AECOM T1A transect

Vertical Containment Intervals



Stratigraphy along AECOM T1A transect

Legend

- Groundwater Monitoring Well Screen (With Midpoint)
- Extraction Well Screen
- Extraction Well
- Groundwater Monitoring Well
- T1A Transect
- AECOM Defined Fine Grained Lithology
- Interim Measure Operational Area

Reference Elevation Interval For Horizontal Capture

- 4857 (ft AMSL)
- 4838 (ft AMSL)
- 4814 (ft AMSL)

Reference Elevation Interval For Vertical Containment

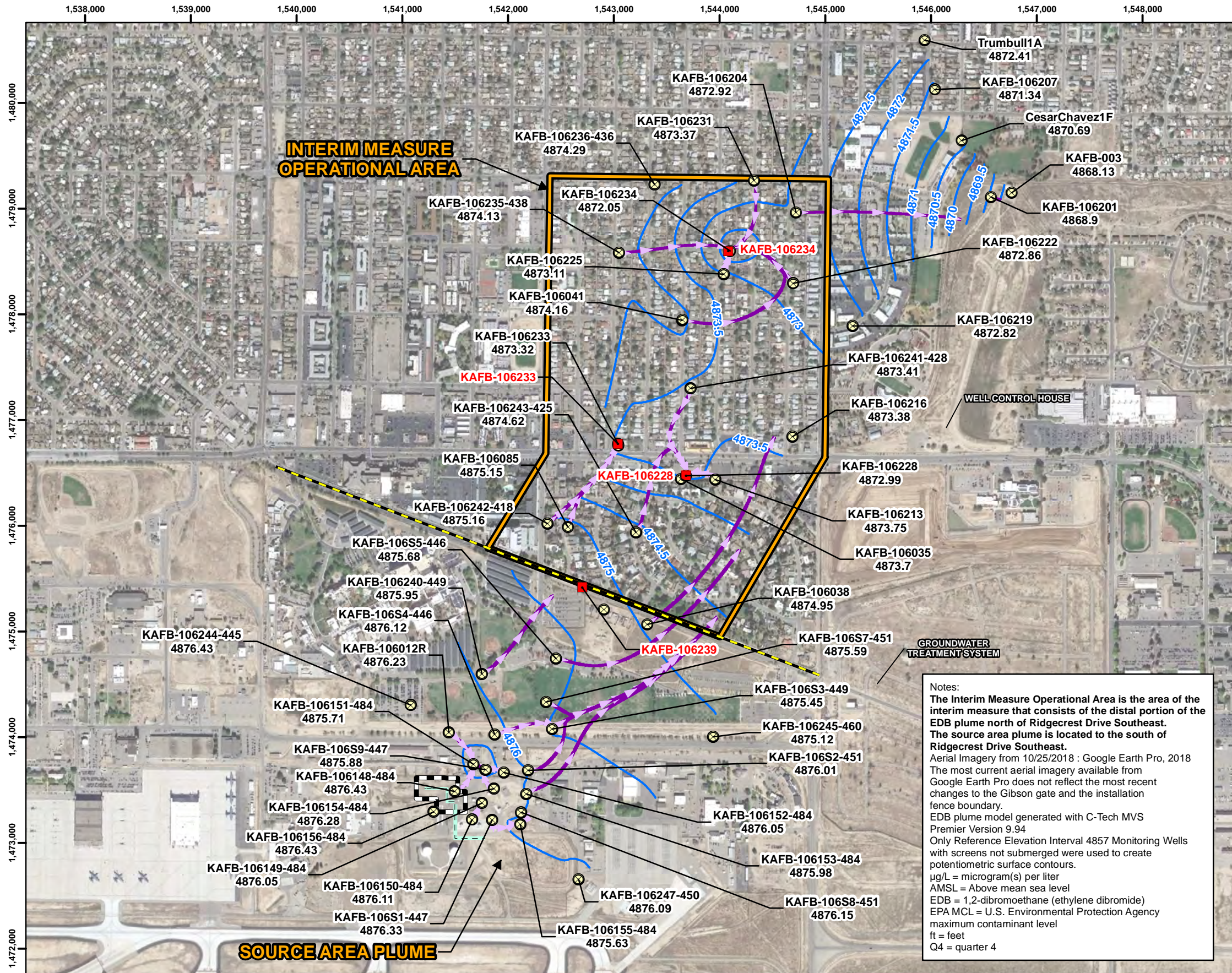
- Above 4838 Midpoint (ft AMSL)
- Below 4838 Midpoint (ft AMSL)

Notes:
 EDB plume model generated with C-Tech MVS Premier Version 9.94
 ft AMSL = feet above mean sea level
 µg/L = micrograms per liter
 EDB = 1,2-dibromoethane (ethylene dibromide)
 EPA MCL = United States Environmental Protection Agency Maximum Contaminant Level
 AECOM = Architecture, Engineering, Consulting, Operations, and Maintenance
 Q4 = quarter 4

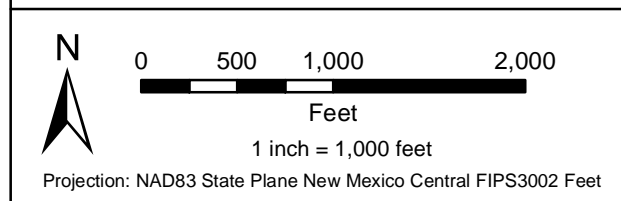
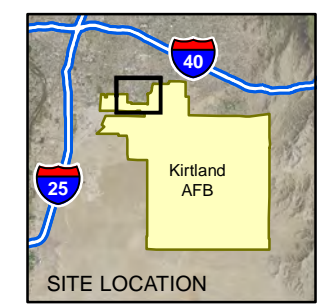
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FIGURE 4-2

REFERENCE ELEVATION CAPTURE AND CONTAINMENT INTERVALS, Q4 2020



- Legend**
- ⊗ Reference Elevation Interval 4857 Monitoring Well (Screen Not Submerged)
 - Extraction Well
 - Groundwater Level Contour (0.5 ft interval) (dashed where inferred)
 - Particle Flow Lines (Direction of Flow)
 - Target Capture Zone Boundary
 - ▭ Interim Measure Operational Area
 - ▭ Installation Fence Boundary
 - ▭ Source Area

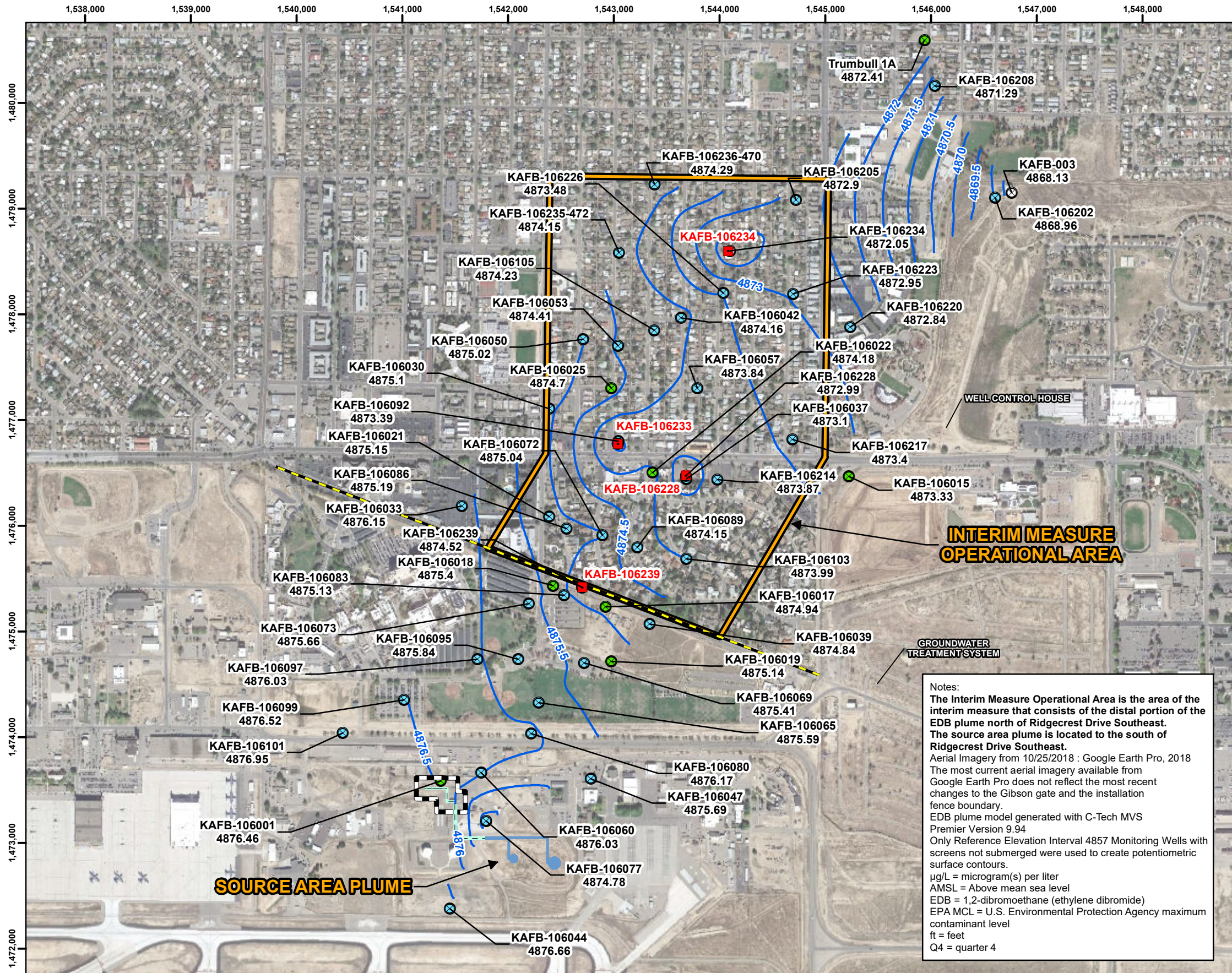


Notes:
 The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgcrest Drive Southeast. The source area plume is located to the south of Ridgcrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018
 The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
 EDB plume model generated with C-Tech MVS Premier Version 9.94
 Only Reference Elevation Interval 4857 Monitoring Wells with screens not submerged were used to create potentiometric surface contours.
 µg/L = microgram(s) per liter
 AMSL = Above mean sea level
 EDB = 1,2-dibromoethane (ethylene dibromide)
 EPA MCL = U.S. Environmental Protection Agency maximum contaminant level
 ft = feet
 Q4 = quarter 4

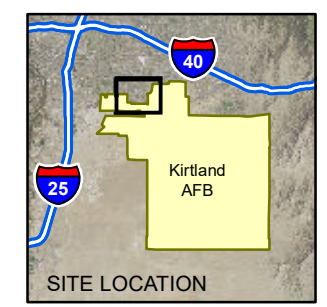
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FIGURE 4-3

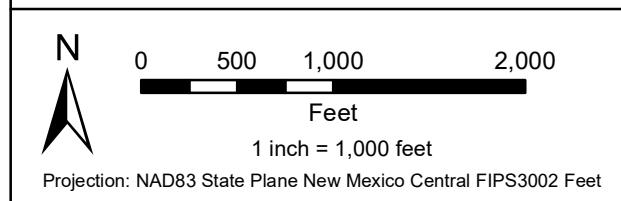
**POTENTIOMETRIC SURFACE
 OF THE WATER TABLE, Q4 2020**



- Legend**
- Reference Elevation Interval 4857/4838 Monitoring Well (Screen Submerged)
 - ⊗ Reference Elevation Interval 4838 Monitoring Well (Screen Submerged)
 - ⊗ Other Gauged Wells
 - Extraction Well
 - Groundwater Level Contour (0.5 ft interval)
 - Former Aboveground Storage
 - Former Buried Fuel Transfer Line
 - Former Aboveground Fuel Transfer
 - Target Capture Zone Boundary
 - Interim Measure Operational
 - Installation Fence Boundary
 - Source Area

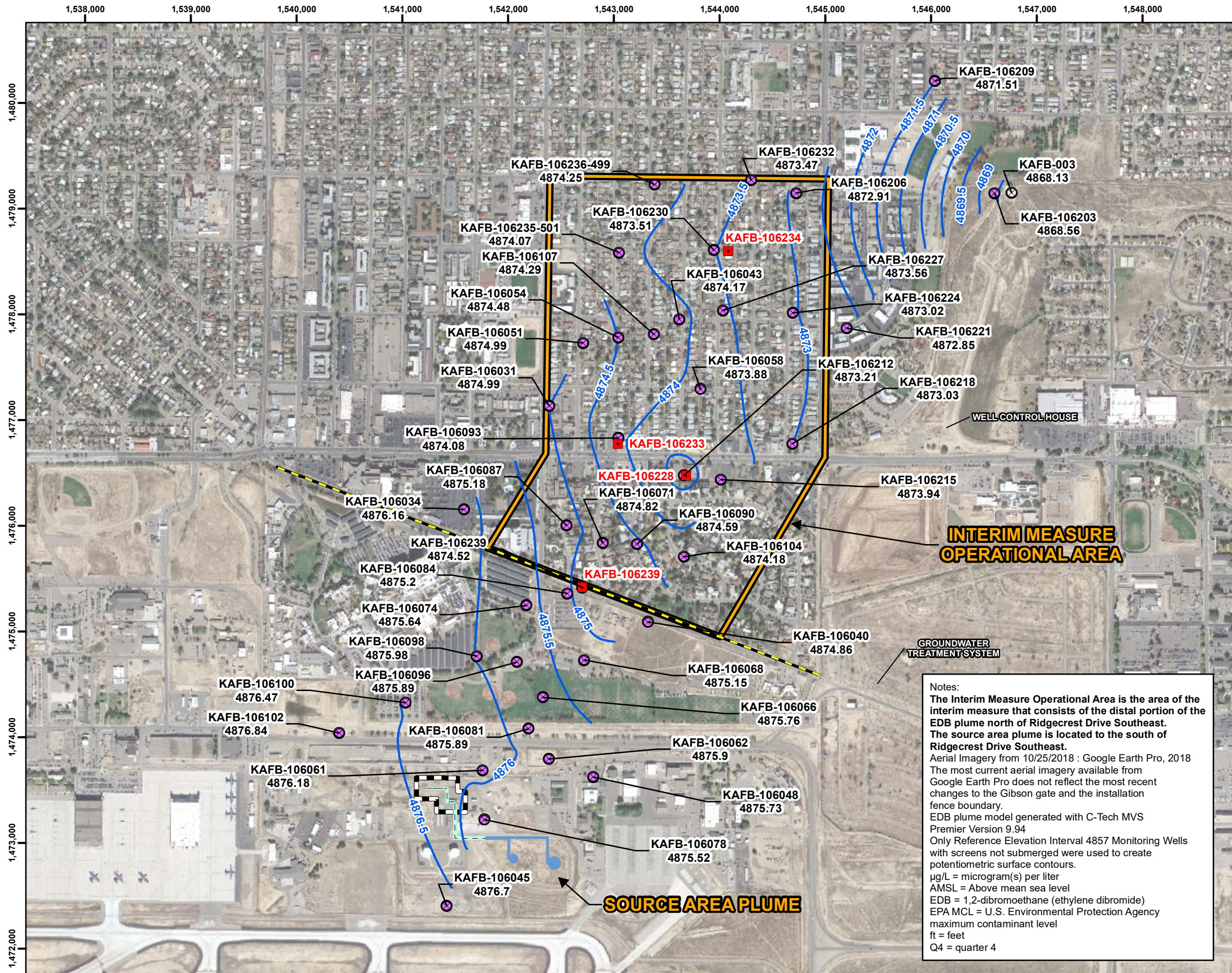


Notes:
 The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgcrest Drive Southeast. The source area plume is located to the south of Ridgcrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018
 The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
 EDB plume model generated with C-Tech MVS Premier Version 9.94
 Only Reference Elevation Interval 4857 Monitoring Wells with screens not submerged were used to create potentiometric surface contours.
 µg/L = microgram(s) per liter
 AMSL = Above mean sea level
 EDB = 1,2-dibromoethane (ethylene dibromide)
 EPA MCL = U.S. Environmental Protection Agency maximum contaminant level
 ft = feet
 Q4 = quarter 4

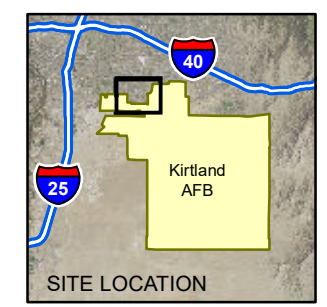


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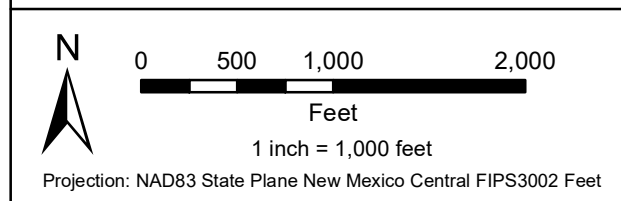
FIGURE 4-4
 POTENTIOMETRIC SURFACE
 REI 4838, Q4 2020



- ### Legend
- Reference Elevation Interval 4814 Monitoring Well (Screen Submerged)
 - Other Gauged Wells
 - Extraction Well
 - Groundwater Level Contour (0.5 ft interval)
 - Former Aboveground Storage Tank
 - Former Buried Fuel Transfer Line
 - Former Aboveground Fuel Transfer Line
 - Target Capture Zone Boundary
 - Interim Measure Operational Area
 - Installation Fence Boundary
 - Source Area

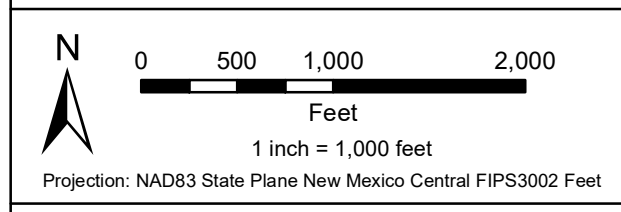
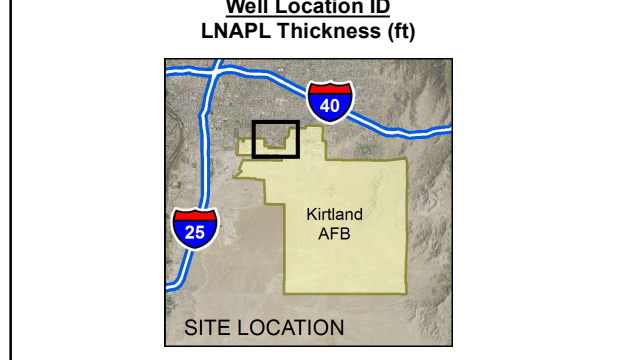
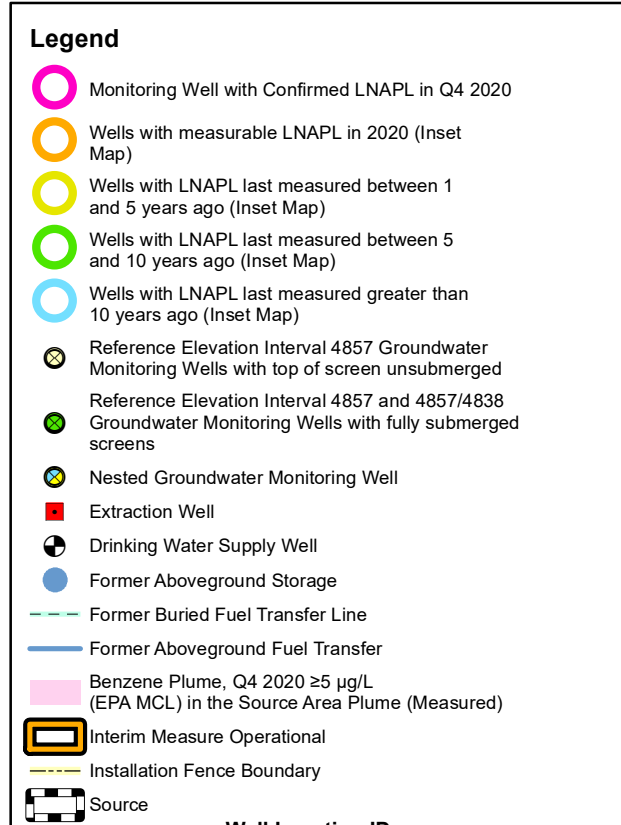
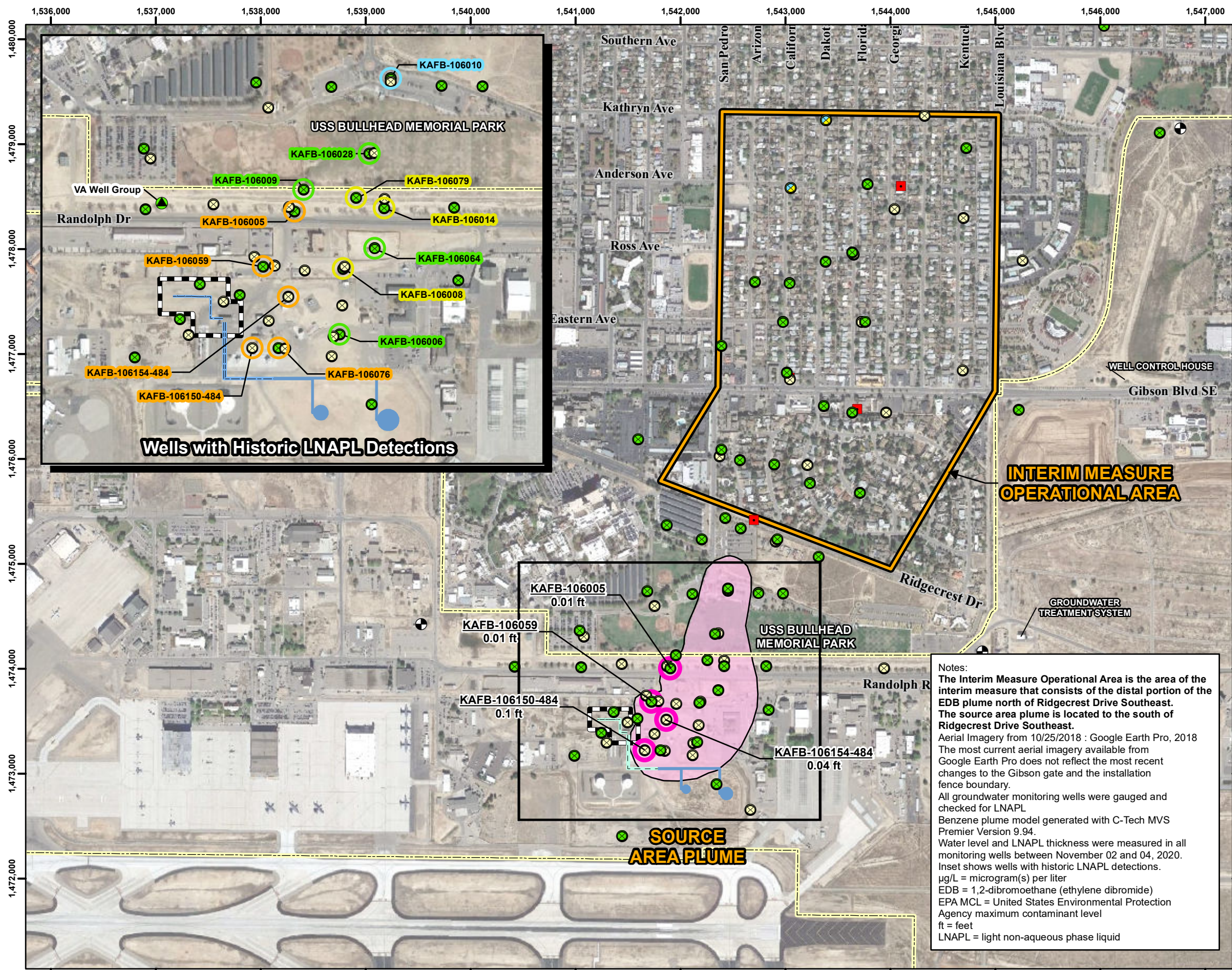


Notes:
 The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgcrest Drive Southeast. The source area plume is located to the south of Ridgcrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018
 The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
 EDB plume model generated with C-Tech MVS Premier Version 9.94
 Only Reference Elevation Interval 4857 Monitoring Wells with screens not submerged were used to create potentiometric surface contours.
 µg/L = microgram(s) per liter
 AMSL = Above mean sea level
 EDB = 1,2-dibromoethane (ethylene dibromide)
 EPA MCL = U.S. Environmental Protection Agency maximum contaminant level
 ft = feet
 Q4 = quarter 4



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FIGURE 4-5
 POTENTIOMETRIC SURFACE
 REI 4814, Q4 2020

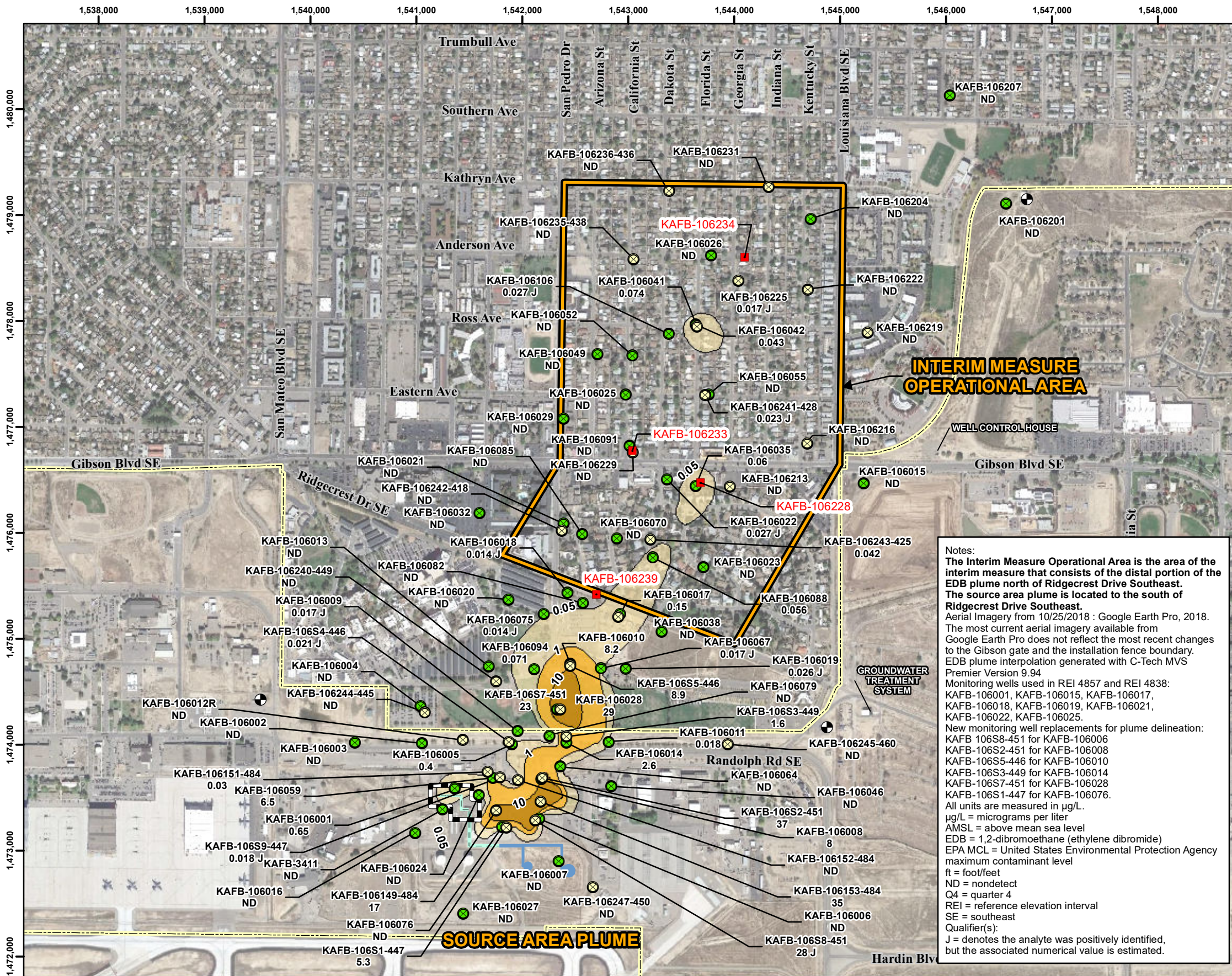


Notes:
The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgecrest Drive Southeast. The source area plume is located to the south of Ridgecrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018
 The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
 All groundwater monitoring wells were gauged and checked for LNAPL
 Benzene plume model generated with C-Tech MVS Premier Version 9.94.
 Water level and LNAPL thickness were measured in all monitoring wells between November 02 and 04, 2020.
 Inset shows wells with historic LNAPL detections.
 $\mu\text{g/L}$ = microgram(s) per liter
 EDB = 1,2-dibromoethane (ethylene dibromide)
 EPA MCL = United States Environmental Protection Agency maximum contaminant level
 ft = feet
 LNAPL = light non-aqueous phase liquid

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FIGURE 4-6

GROUNDWATER MONITORING WELLS
 WITH MEASURABLE LNAPL

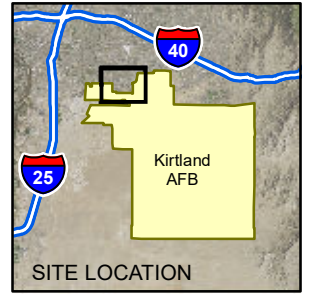


Legend

- ⊗ Reference Elevation Interval 4857 Monitoring Well (Screen Not Submerged)
- ⊙ Reference Elevation Interval 4857 and 4857/4838 Monitoring Well (Screen Submerged)
- Extraction Well
- ⊕ Drinking Water Supply Well
- Former Aboveground Storage Tank
- Former Buried Fuel Transfer Line
- Former Aboveground Fuel Transfer Line
- - - Installation Fence Boundary
- EDB Concentration Isocontour (µg/L)
- ▭ Interim Measure Operational Area
- ▭ Source Area

Measured EDB Concentration Range

Light Yellow	0.05 (EPA MCL) - 1.0 µg/L
Yellow	1.0 - 10 µg/L
Orange	10 - 500 µg/L



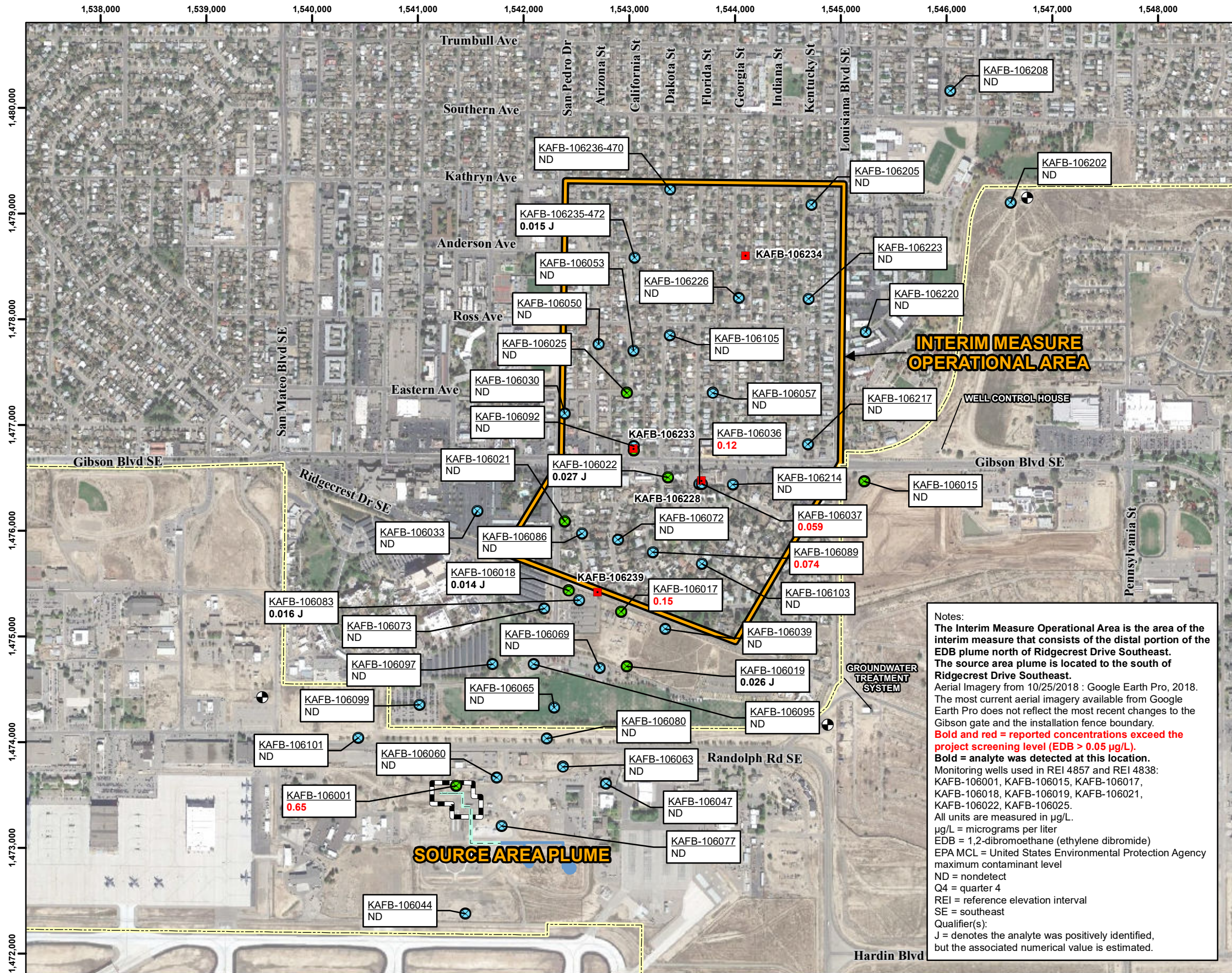
Notes:
 The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgecrest Drive Southeast. The source area plume is located to the south of Ridgecrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018. The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary. EDB plume interpolation generated with C-Tech MVS Premier Version 9.94
 Monitoring wells used in REI 4857 and REI 4838: KAFB-106001, KAFB-106015, KAFB-106017, KAFB-106018, KAFB-106019, KAFB-106021, KAFB-106022, KAFB-106025.
 New monitoring well replacements for plume delineation: KAFB 106S8-451 for KAFB-106006, KAFB-106S2-451 for KAFB-106008, KAFB-106S5-446 for KAFB-106010, KAFB-106S3-449 for KAFB-106014, KAFB-106S7-451 for KAFB-106028, KAFB-106S1-447 for KAFB-106076.
 All units are measured in µg/L.
 µg/L = micrograms per liter
 AMSL = above mean sea level
 EDB = 1,2-dibromoethane (ethylene dibromide)
 EPA MCL = United States Environmental Protection Agency maximum contaminant level
 ft = foot/feet
 ND = nondetect
 Q4 = quarter 4
 REI = reference elevation interval
 SE = southeast
 Qualifier(s):
 J = denotes the analyte was positively identified, but the associated numerical value is estimated.

N

0 500 1,000 2,000
 Feet
 1 inch = 1,000 feet
 Projection: NAD83 State Plane New Mexico Central FIPS3002 Feet

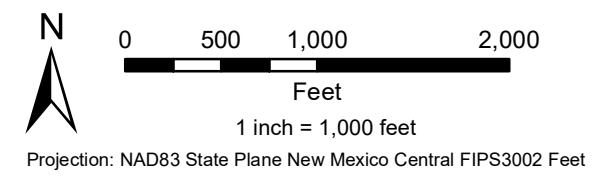
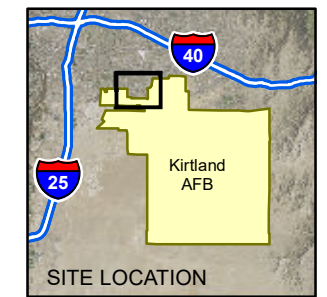
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FIGURE 4-7
 EDB CONCENTRATIONS IN GROUNDWATER
 REFERENCE ELEVATION INTERVAL 4857,
 Q4 2020



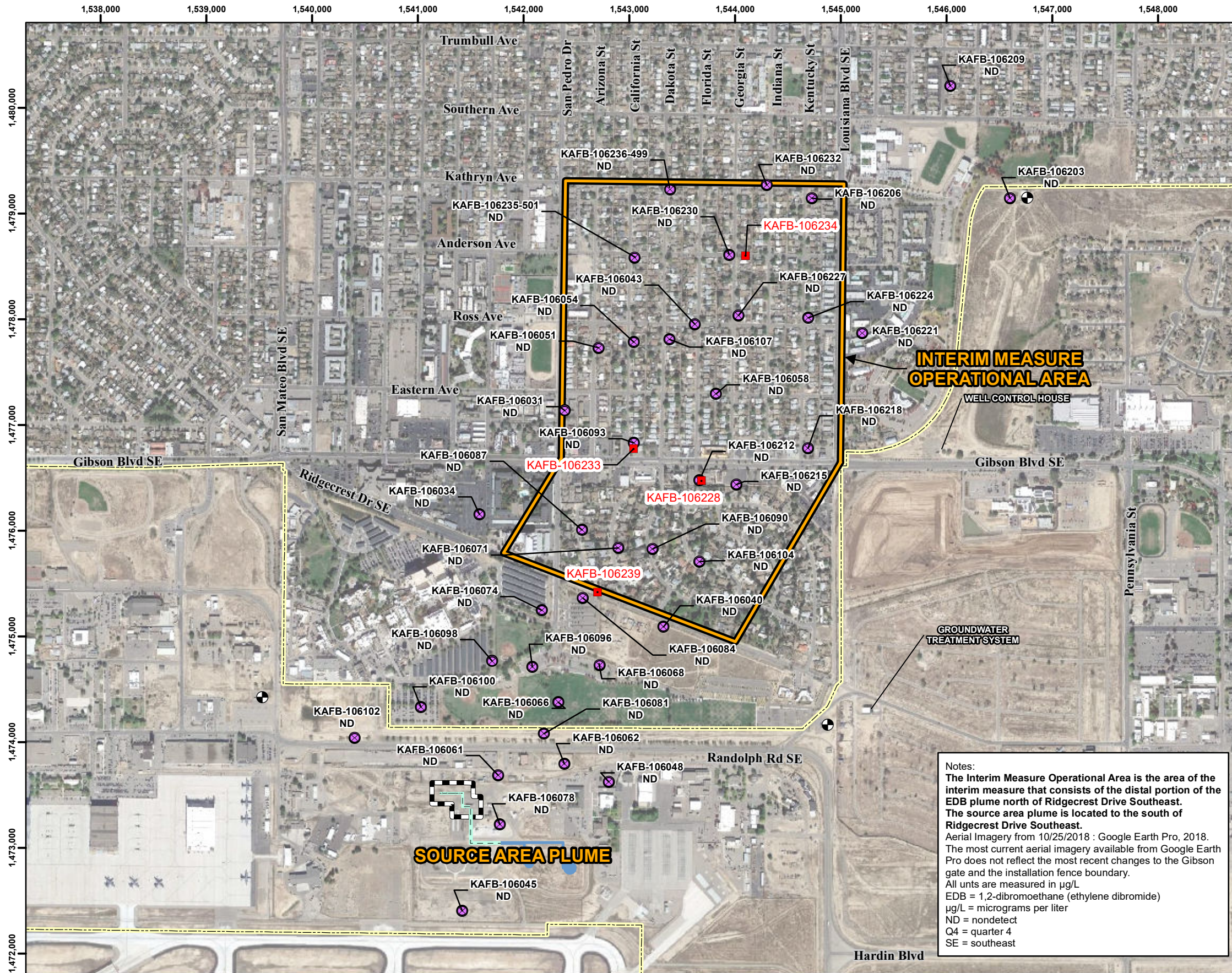
Notes:
The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgecrest Drive Southeast. The source area plume is located to the south of Ridgecrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018. The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
Bold and red = reported concentrations exceed the project screening level (EDB > 0.05 µg/L).
Bold = analyte was detected at this location.
 Monitoring wells used in REI 4857 and REI 4838: KAFB-106001, KAFB-106015, KAFB-106017, KAFB-106018, KAFB-106019, KAFB-106021, KAFB-106022, KAFB-106025.
 All units are measured in µg/L.
 µg/L = micrograms per liter
 EDB = 1,2-dibromoethane (ethylene dibromide)
 EPA MCL = United States Environmental Protection Agency maximum contaminant level
 ND = nondetect
 Q4 = quarter 4
 REI = reference elevation interval
 SE = southeast
 Qualifier(s):
 J = denotes the analyte was positively identified, but the associated numerical value is estimated.

- ### Legend
- Reference Elevation Interval 4857/4838 Monitoring Well (Screen Submerged)
 - ⊗ Reference Elevation Interval 4838 Monitoring Well (Screen Submerged)
 - Extraction Well
 - ⊕ Drinking Water Supply Well
 - Former Aboveground Storage Tank
 - Former Buried Fuel Transfer Line
 - Former Aboveground Fuel Transfer Line
 - Interim Measure Operational
 - Installation Fence Boundary
 - Source

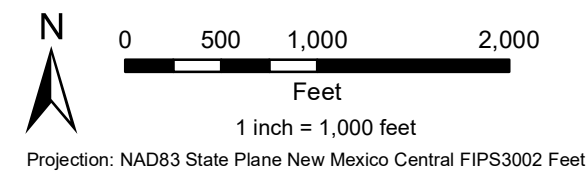
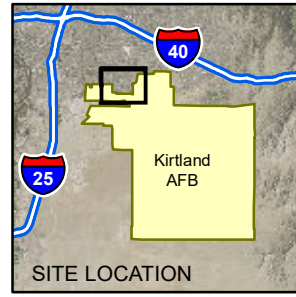


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FIGURE 4-8
EDB CONCENTRATIONS IN GROUNDWATER
REFERENCE ELEVATION INTERVAL 4838,
Q4 2020



- Legend**
- ⊗ Reference Elevation Interval 4814 Monitoring Well (Screen Submerged)
 - Extraction Well
 - ⊕ Drinking Water Supply Well
 - Former Aboveground Storage Tank
 - Former Buried Fuel Transfer Line
 - Former Aboveground Fuel Transfer Line
 - - - Installation Fence Boundary
 - ▭ Interim Measure Operational Area
 - ▭ Source Area

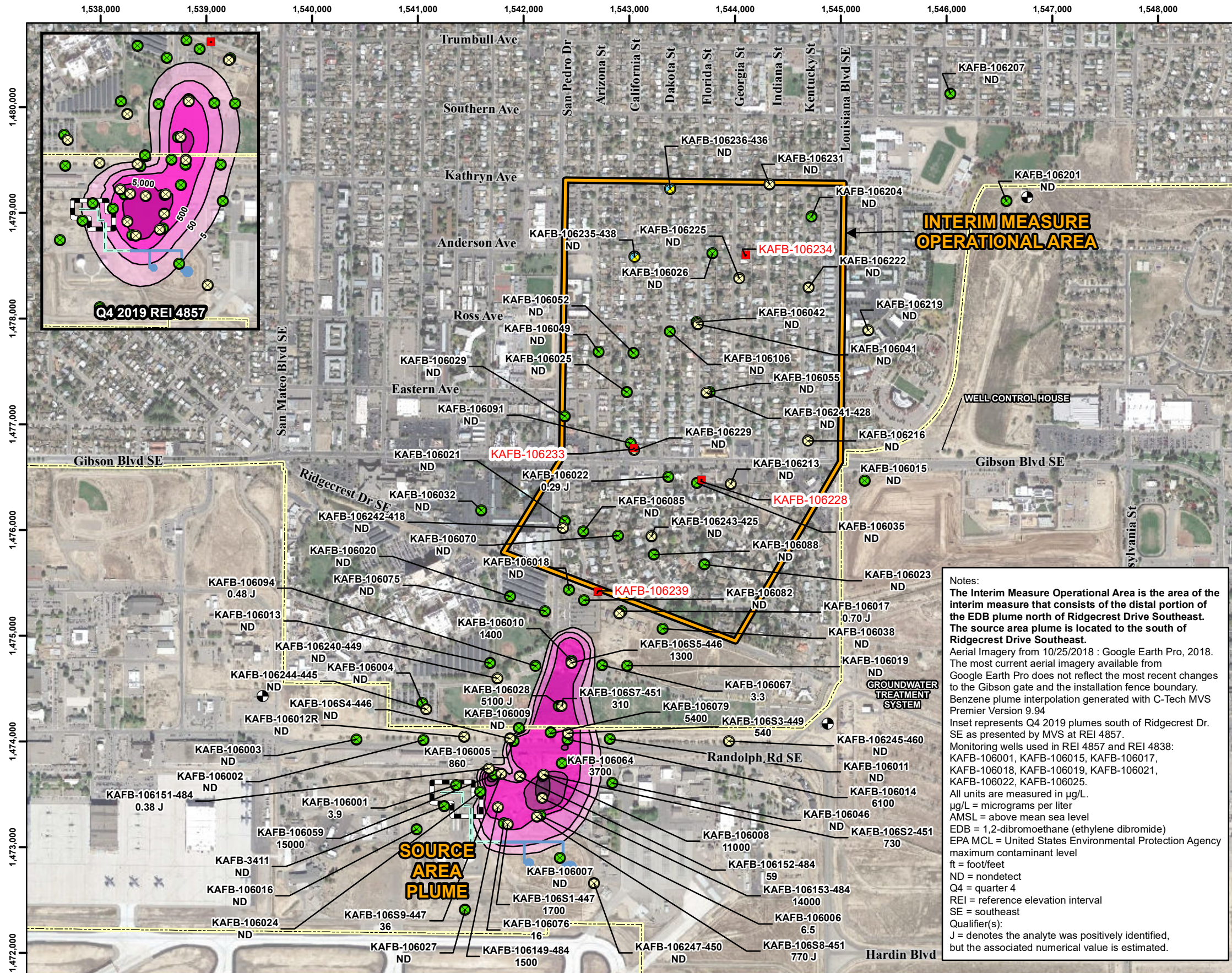


Notes:
 The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgecrest Drive Southeast. The source area plume is located to the south of Ridgecrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018. The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
 All units are measured in µg/L
 EDB = 1,2-dibromoethane (ethylene dibromide)
 µg/L = micrograms per liter
 ND = nondetect
 Q4 = quarter 4
 SE = southeast

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FIGURE 4-9

EDB CONCENTRATIONS IN GROUNDWATER
 REFERENCE ELEVATION INTERVAL 4814,
 Q4 2020



Legend

- Reference Elevation Interval 4857 Monitoring Well (Screen Not Submerged)
- Reference Elevation Interval 4857 and 4857/4838 Monitoring Well (Screen Submerged)
- Nested Groundwater Monitoring Well
- Extraction Well
- Drinking Water Supply Well
- Former Aboveground Storage Tank
- Former Buried Fuel Transfer Line
- Former Aboveground Fuel Transfer Line
- Installation Fence Boundary
- Benzene Concentration Isocontour (µg/L)
- Interim Measure Operational Area
- Source

Measured Benzene Concentration Range

- 5.0 (EPA MCL) - 50 µg/L
- 50 - 500 µg/L
- 500 - 5,000 µg/L
- 5,000 - 10,000 µg/L
- > 10,000 µg/L

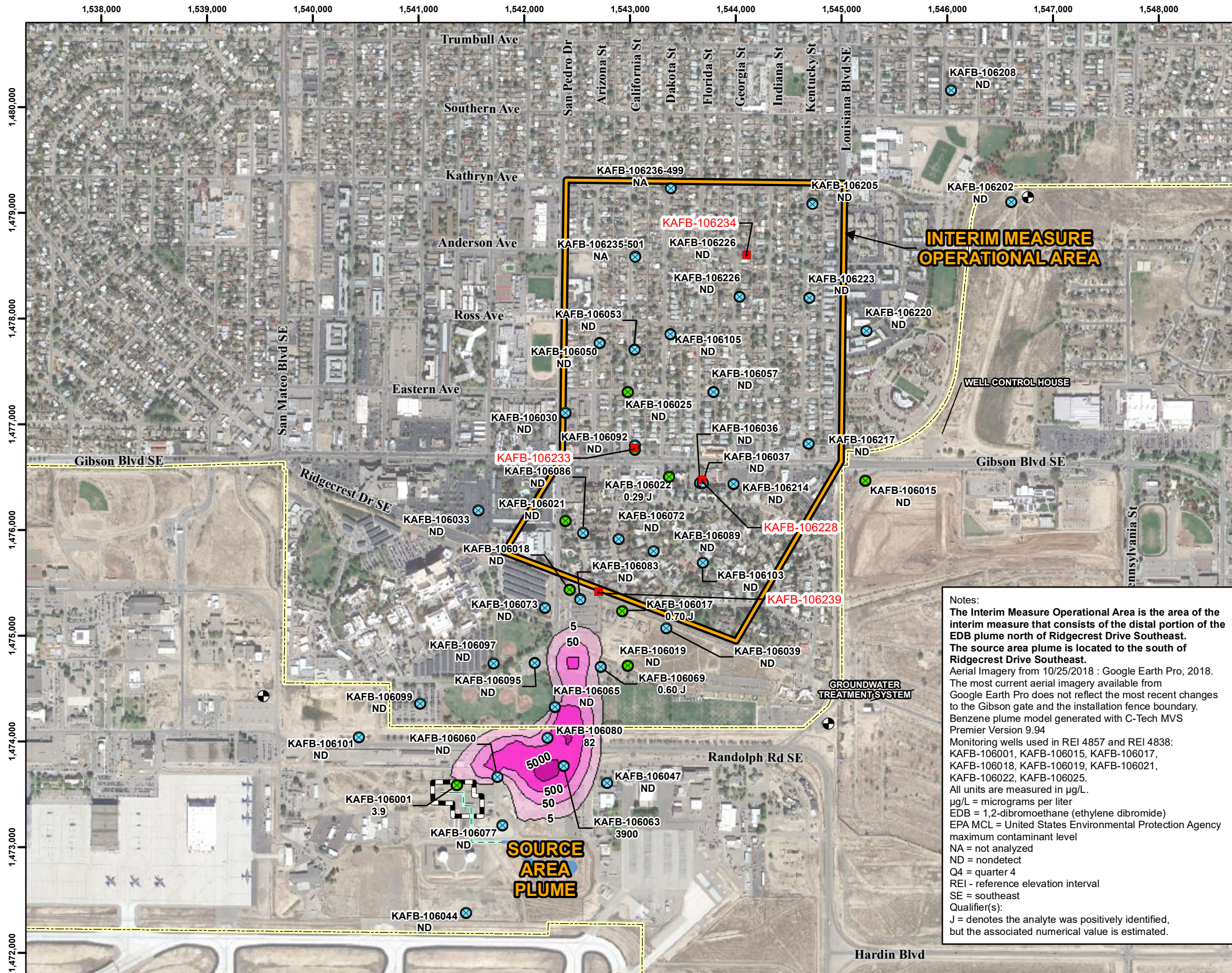
Notes:
 The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgecrest Drive Southeast. The source area plume is located to the south of Ridgecrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018. The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary. Benzene plume interpolation generated with C-Tech MVS Premier Version 9.94
 Inset represents Q4 2019 plumes south of Ridgecrest Dr. SE as presented by MVS at REI 4857.
 Monitoring wells used in REI 4857 and REI 4838: KAFB-106001, KAFB-106015, KAFB-106017, KAFB-106018, KAFB-106019, KAFB-106021, KAFB-106022, KAFB-106025.
 All units are measured in µg/L.
 µg/L = micrograms per liter
 AMSL = above mean sea level
 EDB = 1,2-dibromoethane (ethylene dibromide)
 EPA MCL = United States Environmental Protection Agency maximum contaminant level
 ft = foot/feet
 ND = nondetect
 Q4 = quarter 4
 REI = reference elevation interval
 SE = southeast
 Qualifier(s):
 J = denotes the analyte was positively identified, but the associated numerical value is estimated.

Scale: 0 500 1,000 2,000 Feet
 1 inch = 1,000 feet
 Projection: NAD83 State Plane New Mexico Central FIPS3002 Feet

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FIGURE 4-10

**BENZENE CONCENTRATIONS IN
 GROUNDWATER REFERENCE ELEVATION
 INTERVAL 4857, Q4 2020**

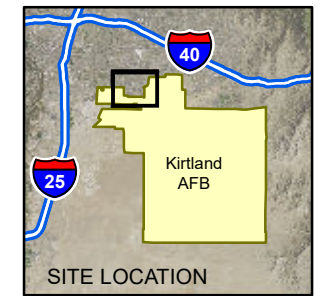


Legend

- Reference Elevation Interval 4858/4838 Monitoring Well (Screen Submerged)
- ⊗ Reference Elevation Interval 4838 Monitoring Well (Screen Submerged)
- Extraction Well
- Drinking Water Supply Well
- Former Aboveground Storage Tank
- Former Buried Fuel Transfer Line
- Former Aboveground Fuel Transfer Line
- Installation Fence Boundary
- Benzene Concentration Isocontour (µg/L)
- Interim Measure Operational Area
- Source

Measured Benzene Concentration Range

	5.0 (EPA MCL) - 50 µg/L
	50 - 500 µg/L
	500 - 5,000 µg/L
	>5,000 µg/L



Notes:
 The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgecrest Drive Southeast. The source area plume is located to the south of Ridgecrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018. The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary. Benzene plume model generated with C-Tech MVS Premier Version 9.94
 Monitoring wells used in REI 4857 and REI 4838: KAFB-106001, KAFB-106015, KAFB-106017, KAFB-106018, KAFB-106019, KAFB-106021, KAFB-106022, KAFB-106025.
 All units are measured in µg/L.
 µg/L = micrograms per liter
 EDB = 1,2-dibromoethane (ethylene dibromide)
 EPA MCL = United States Environmental Protection Agency maximum contaminant level
 NA = not analyzed
 ND = nondetect
 Q4 = quarter 4
 REI - reference elevation interval
 SE = southeast
 Qualifier(s):
 J = denotes the analyte was positively identified, but the associated numerical value is estimated.

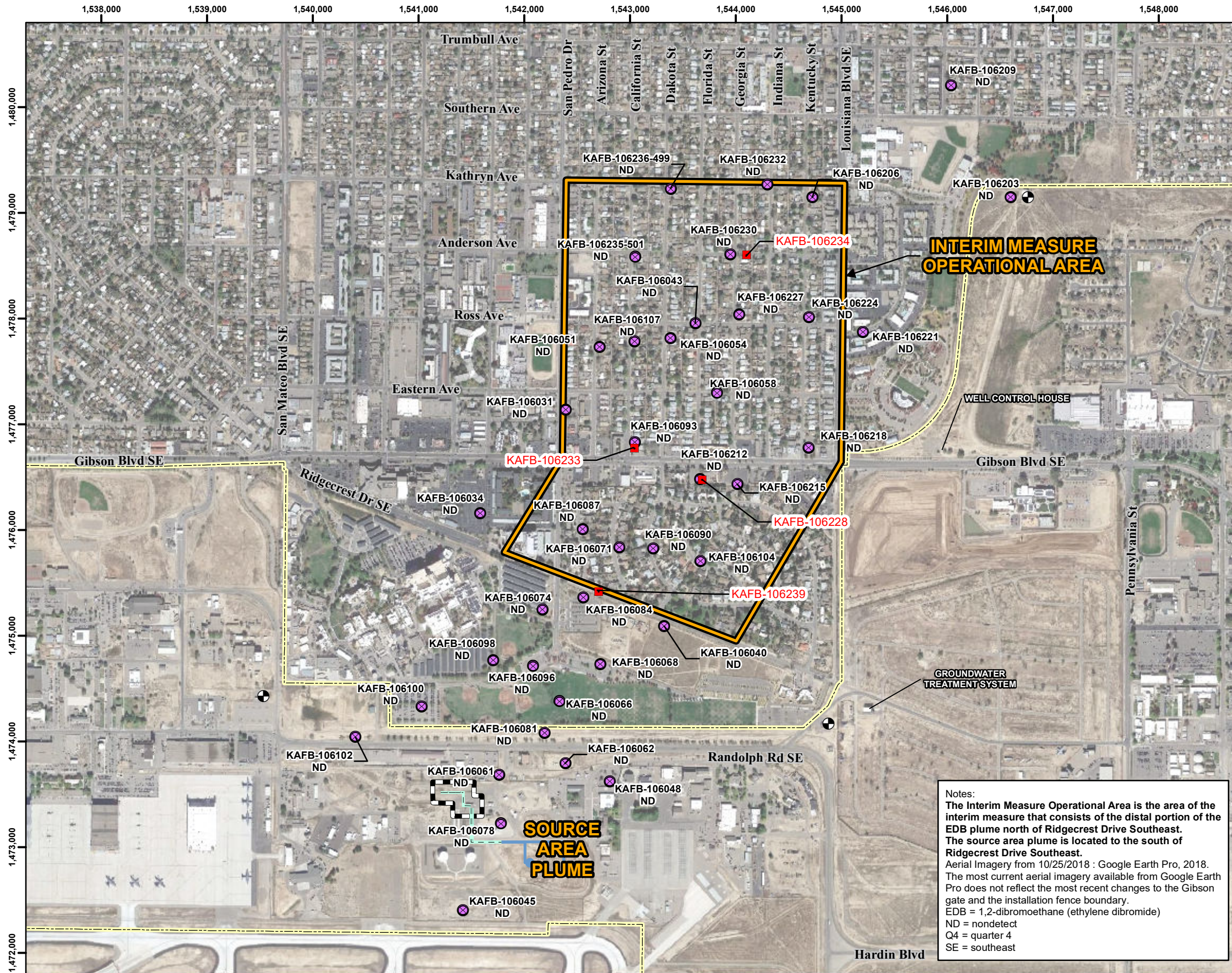
N

0 500 1,000 2,000
Feet
1 inch = 1,000 feet
Projection: NAD83 State Plane New Mexico Central FIPS3002 Feet

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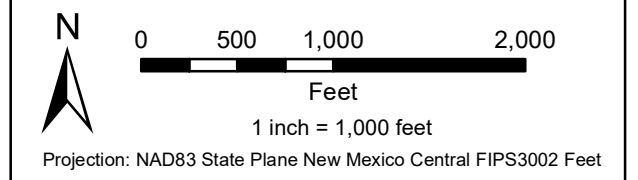
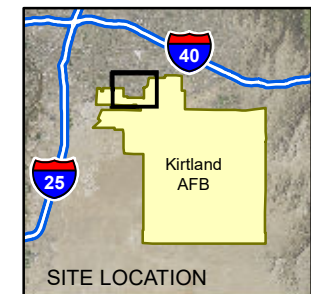
FIGURE 4-11

**BENZENE CONCENTRATIONS IN
 GROUNDWATER REFERENCE ELEVATION
 INTERVAL 4838, Q4 2020**



Legend

- Reference Elevation Interval 4814 Monitoring Well (Screen Submerged)
- Extraction Well
- Drinking Water Supply Well
- Former Aboveground Storage Tank
- Former Buried Fuel Transfer Line
- Former Aboveground Fuel Transfer Line
- Installation Fence Boundary
- Interim Measure Operational
- Source

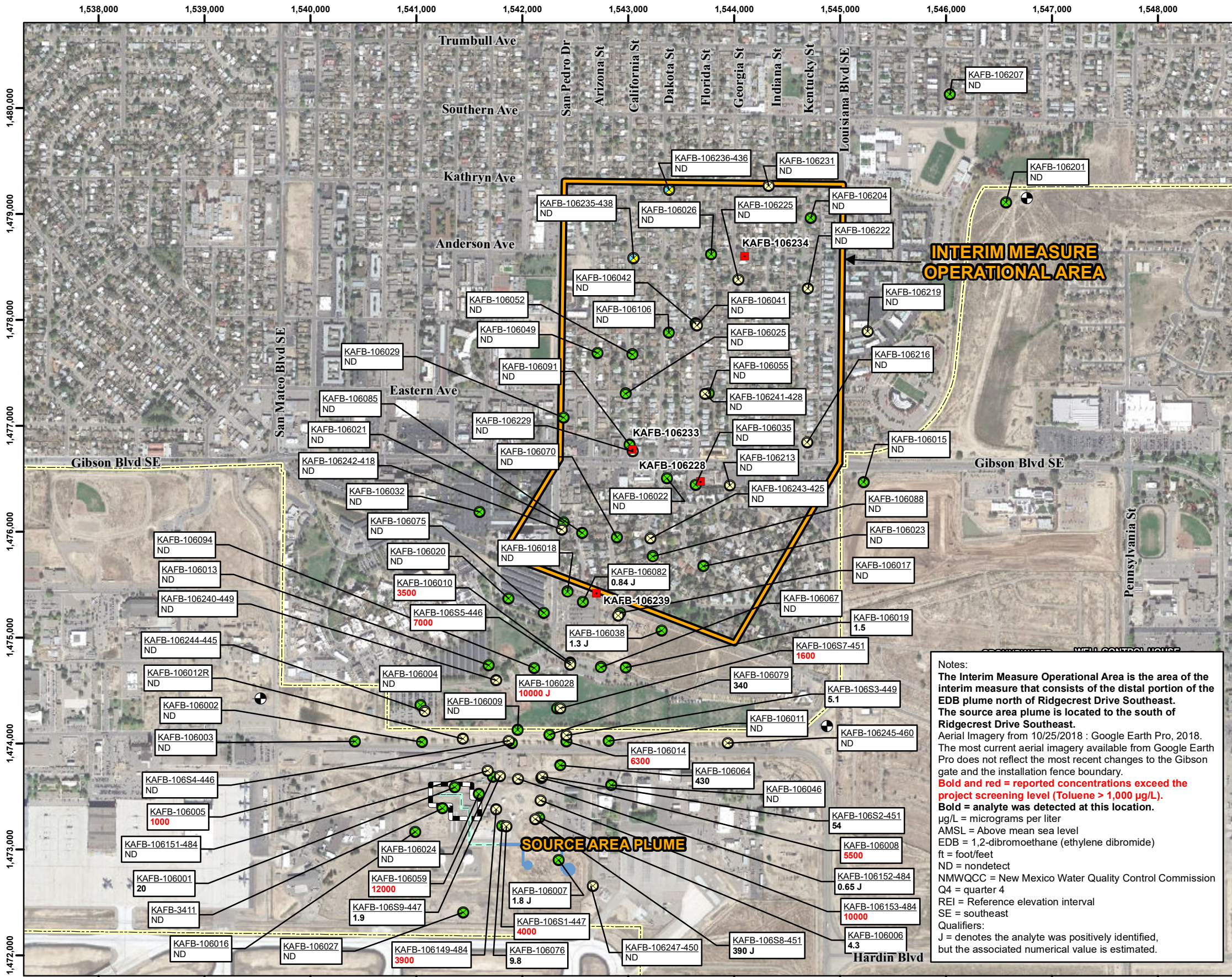


Notes:
The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgecrest Drive Southeast. The source area plume is located to the south of Ridgecrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018. The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
 EDB = 1,2-dibromoethane (ethylene dibromide)
 ND = nondetect
 Q4 = quarter 4
 SE = southeast

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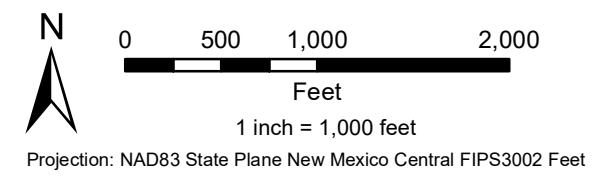
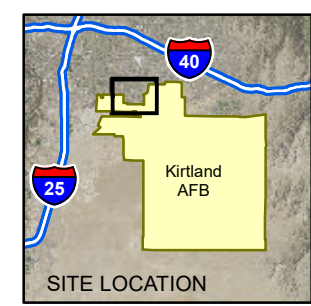
FIGURE 4-12

**BENZENE CONCENTRATIONS IN
 GROUNDWATER REFERENCE ELEVATION
 INTERVAL 4814, Q4 2020**



Notes:
The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgcrest Drive Southeast. The source area plume is located to the south of Ridgcrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018. The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
Bold and red = reported concentrations exceed the project screening level (Toluene > 1,000 µg/L).
Bold = analyte was detected at this location.
 µg/L = micrograms per liter
 AMSL = Above mean sea level
 EDB = 1,2-dibromoethane (ethylene dibromide)
 ft = foot/feet
 ND = nondetect
 NMWQCC = New Mexico Water Quality Control Commission
 Q4 = quarter 4
 REI = Reference elevation interval
 SE = southeast
 Qualifiers:
 J = denotes the analyte was positively identified, but the associated numerical value is estimated.

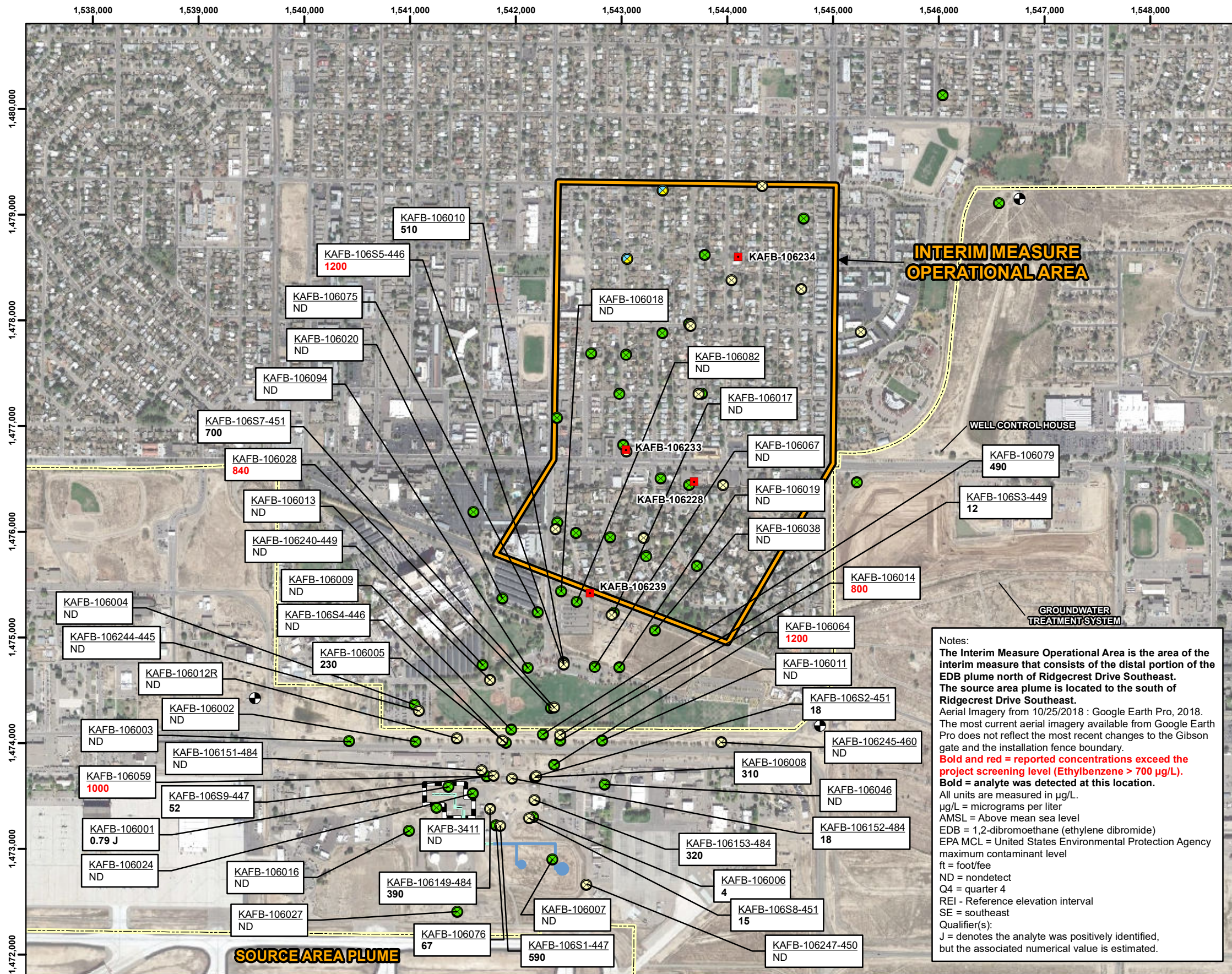
- ### Legend
- ⊗ Reference Elevation Interval 4857 Monitoring Well (Screen Not Submerged)
 - ⊗ Reference Elevation Interval 4857 and 4857/4838 Monitoring Well (Screen Submerged)
 - ⊗ Nested Groundwater Monitoring Well
 - Extraction Well
 - Drinking Water Supply Well
 - Former Aboveground Storage Tank
 - Former Buried Fuel Transfer Line
 - Former Aboveground Fuel Transfer Line
 - ▭ Interim Measure Operational Area
 - Installation Fence Boundary
 - ▭ Source Area



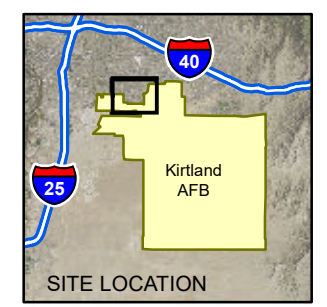
PERIODIC MONITORING AND INTERIM MEASURES REPORT
 OCTOBER - DECEMBER 2020
 BULK FUELS FACILITY
 SOLID WASTE MANAGEMENT UNITS ST-106/SS-111
 KIRTLAND AIR FORCE BASE, NEW MEXICO

FIGURE 4-13

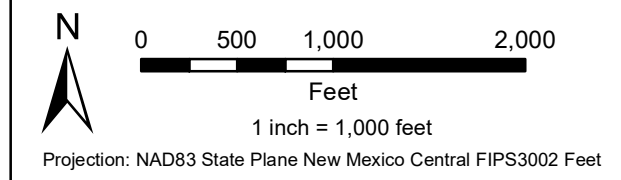
TOLUENE CONCENTRATIONS IN GROUNDWATER REFERENCE ELEVATION INTERVAL 4857, Q4 2020



- Legend**
- ⊗ Reference Elevation Interval 4857 Monitoring Well (Screen Not Submerged)
 - ⊗ Reference Elevation Interval 4857 and 4857/4838 Monitoring Well (Screen Submerged)
 - ⊗ Nested Groundwater Monitoring Well
 - Extraction Well
 - ⊕ Drinking Water Supply Well
 - Former Aboveground Storage Tank
 - Former Buried Fuel Transfer Line
 - Former Aboveground Fuel Transfer Line
 - ▭ Interim Measure Operational Area
 - ▭ Installation Fence Boundary
 - ▭ Source Area

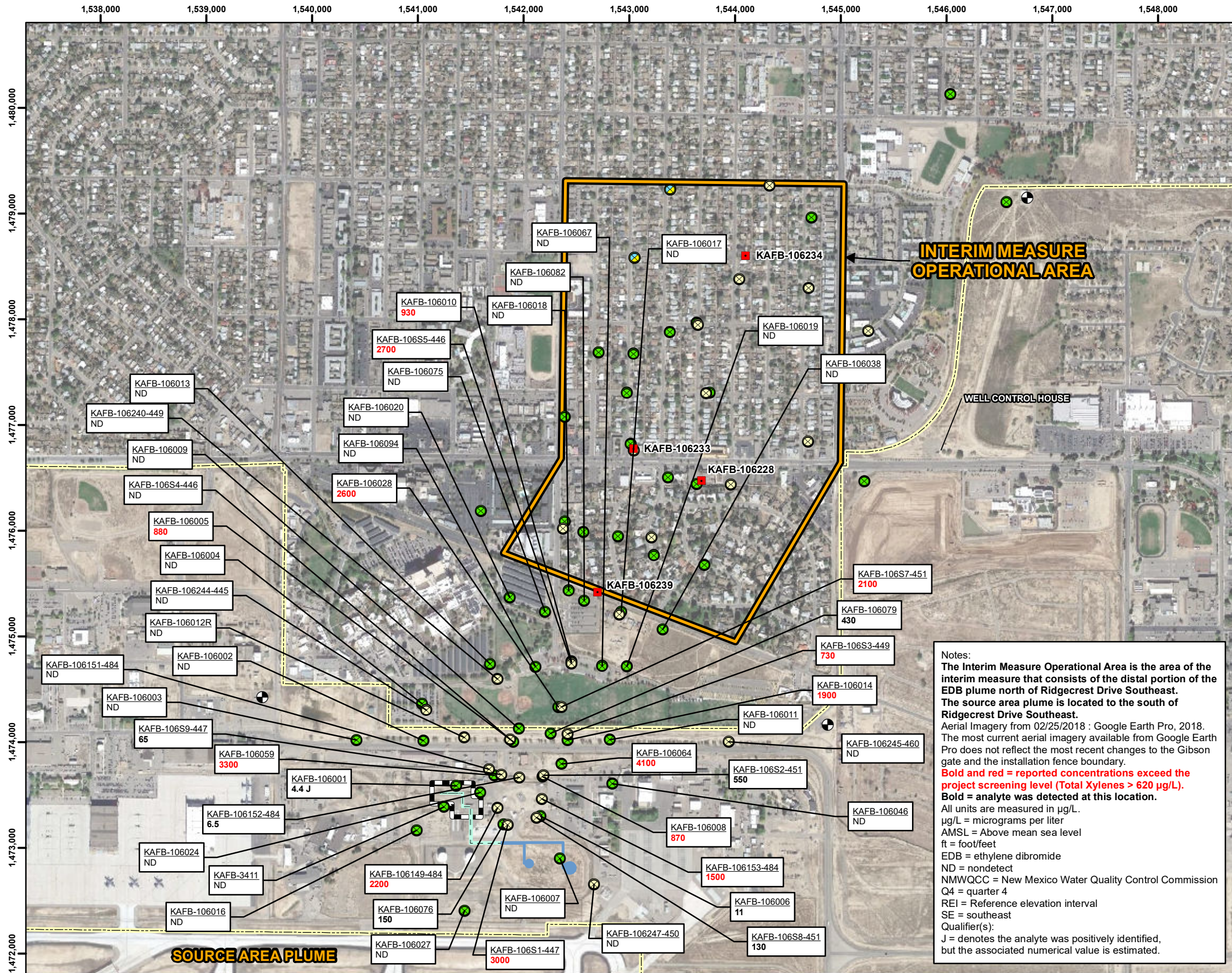


Notes:
 The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgcrest Drive Southeast. The source area plume is located to the south of Ridgcrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018. The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
Bold and red = reported concentrations exceed the project screening level (Ethylbenzene > 700 µg/L).
Bold = analyte was detected at this location.
 All units are measured in µg/L.
 µg/L = micrograms per liter
 AMSL = Above mean sea level
 EDB = 1,2-dibromoethane (ethylene dibromide)
 EPA MCL = United States Environmental Protection Agency maximum contaminant level
 ft = foot/feet
 ND = nondetect
 Q4 = quarter 4
 REI - Reference elevation interval
 SE = southeast
 Qualifier(s):
 J = denotes the analyte was positively identified, but the associated numerical value is estimated.



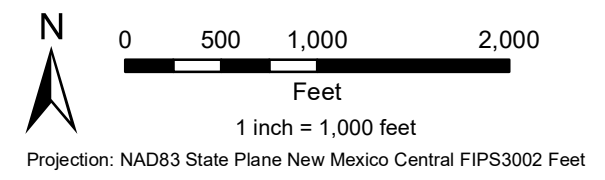
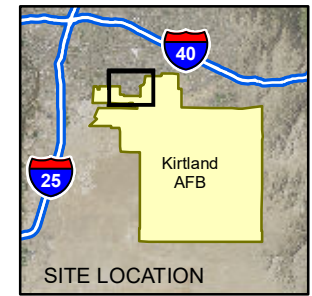
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FIGURE 4-14
 ETHYLBENZENE CONCENTRATIONS IN
 GROUNDWATER REFERENCE ELEVATION
 INTERVAL 4857, Q4 2020



Legend

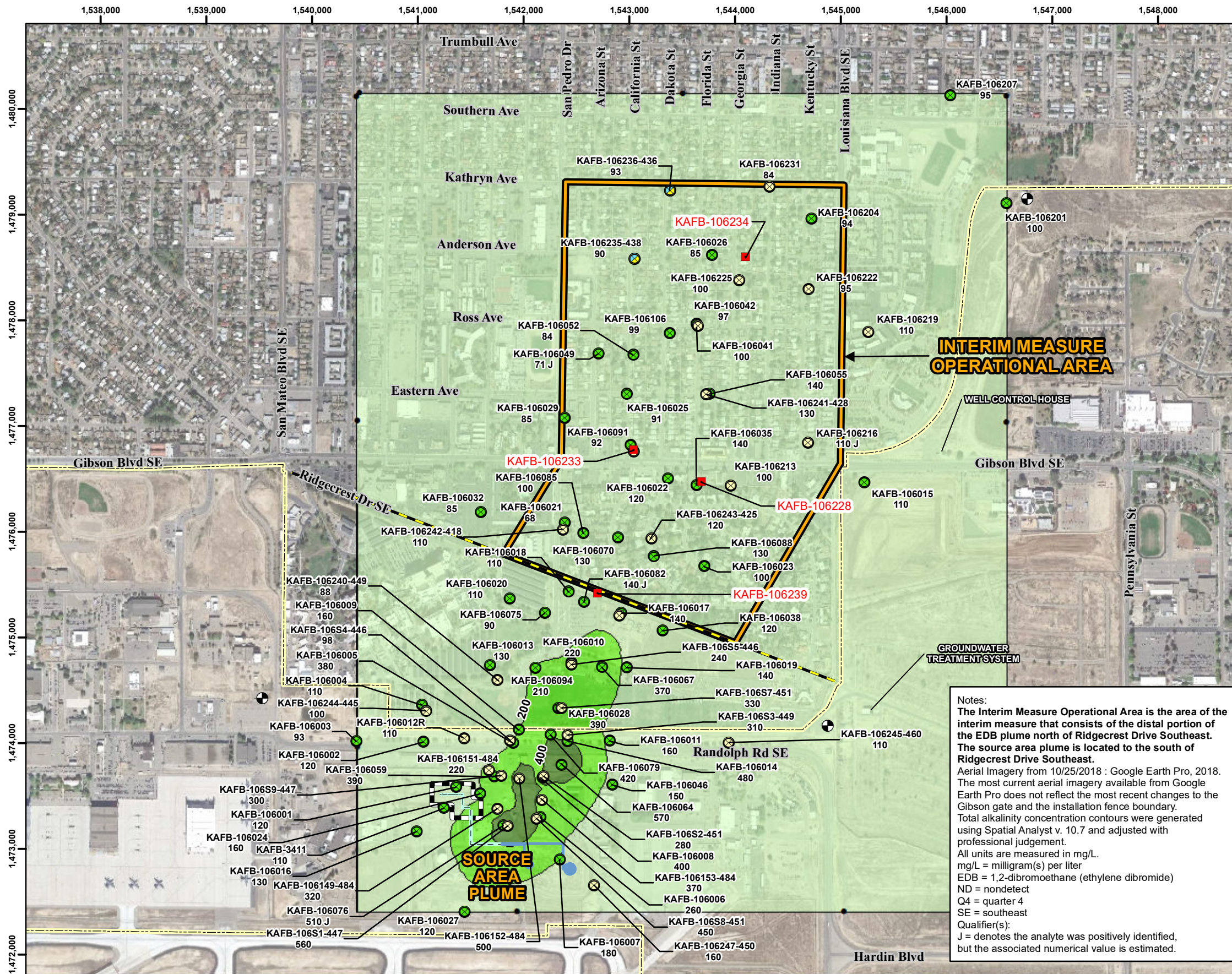
- Reference Elevation Interval 4857 Monitoring Well (Screen Not Submerged)
- Reference Elevation Interval 4857 and 4857/4838 Monitoring Well (Screen Submerged)
- Nested Groundwater Monitoring Well
- Extraction Well
- Drinking Water Supply Well
- Former Aboveground Storage Tank
- Former Buried Fuel Transfer Line
- Former Aboveground Fuel Transfer Line
- Interim Measure Operational
- Installation Fence Boundary
- Source Area



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FIGURE 4-15

TOTAL XYLENES CONCENTRATIONS IN GROUNDWATER REFERENCE ELEVATION INTERVAL 4857, Q4 2020

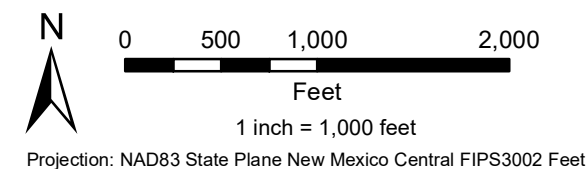
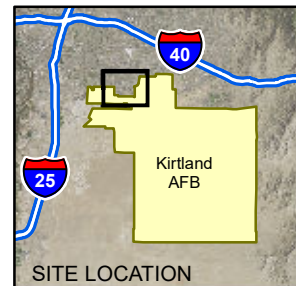


Legend

- Reference Elevation Interval 4857 Monitoring Well (Screen Not Submerged)
- Reference Elevation Interval 4857 and 4857/4838 Monitoring Well (Screen Submerged)
- Nested Groundwater Monitoring Well
- Extraction Well
- Drinking Water Supply Well
- Former Aboveground Storage Tank
- Former Buried Fuel Transfer Line
- Former Aboveground Fuel Transfer Line
- Installation Fence Boundary
- Target Capture Zone Boundary
- Interim Measure Operational Area
- Source Area
- Total Alkalinity Concentration Isocontour (dashed where inferred)
- Model Extent

Measured Total Alkalinity Concentration Range

- 0 - 200 mg/L
- 201 - 400 mg/L
- > 400 mg/L

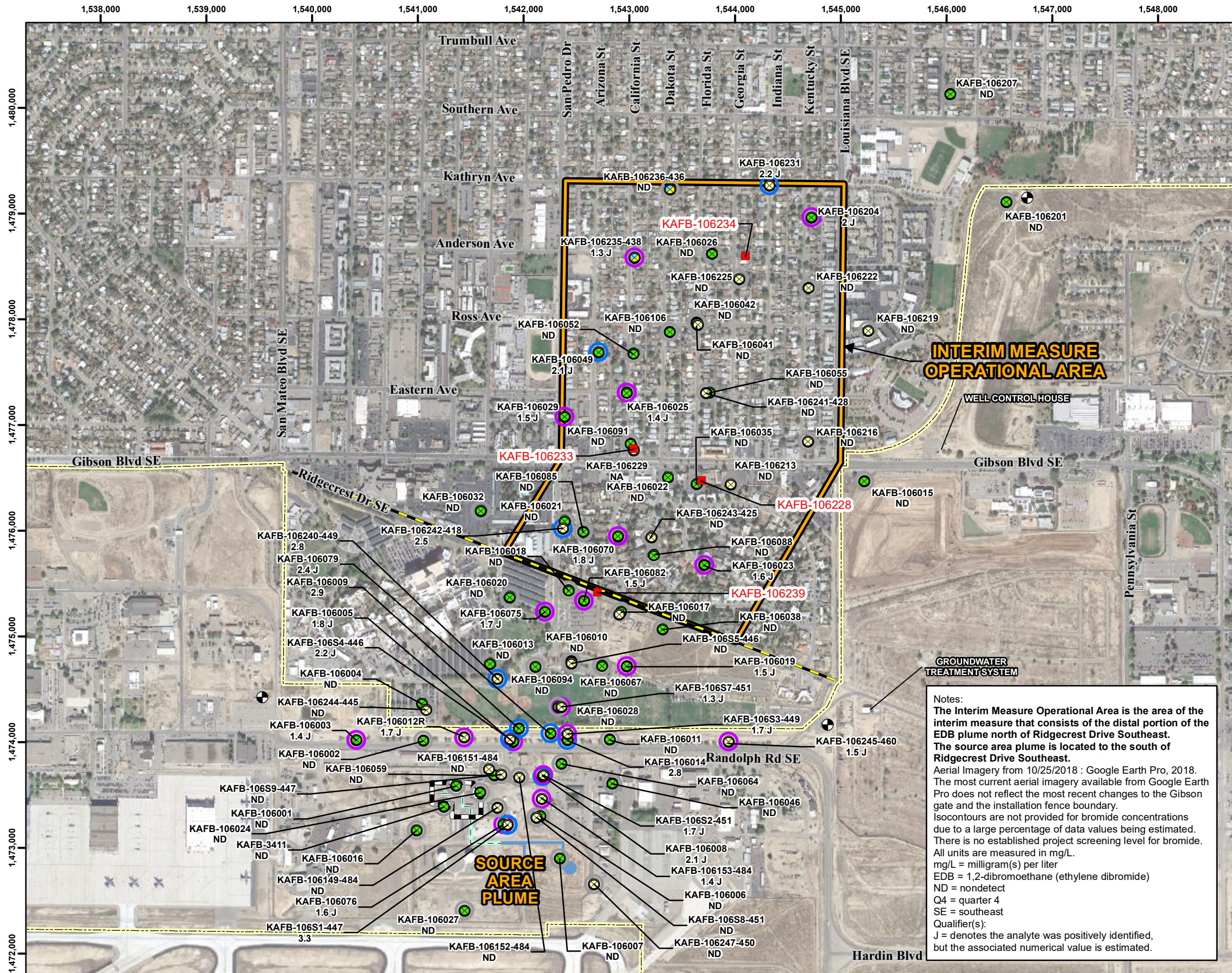


Notes:
The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgcrest Drive Southeast. The source area plume is located to the south of Ridgcrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018. The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary. Total alkalinity concentration contours were generated using Spatial Analyst v. 10.7 and adjusted with professional judgement. All units are measured in mg/L. mg/L = milligram(s) per liter. EDB = 1,2-dibromoethane (ethylene dibromide). ND = nondetect. Q4 = quarter 4. SE = southeast. Qualifier(s): J = denotes the analyte was positively identified, but the associated numerical value is estimated.

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FIGURE 4-16

**TOTAL ALKALINITY CONCENTRATIONS IN
 GROUNDWATER REFERENCE ELEVATION
 INTERVAL 4857, Q4 2020**

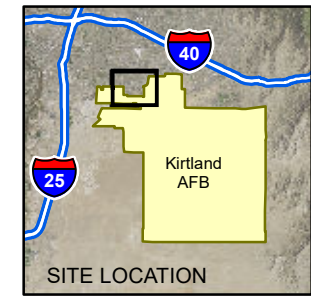


Legend

- Reference Elevation Interval 4857 Monitoring Well (Screen Not Submerged)
- Reference Elevation Interval 4857 and 4857/4838 Monitoring Well (Screen Submerged)
- Nested Groundwater Monitoring Well
- Extraction Well
- Drinking Water Supply Well
- Former Aboveground Storage Tank
- Former Buried Fuel Transfer Line
- Former Aboveground Fuel Transfer Line
- Installation Fence Boundary
- Target Capture Zone Boundary
- Interim Measure Operational
- Source

Measured Bromide Concentration Range

- Nondetect
- 1.0 - 2.0 mg/L
- 2.1 - 5.0 mg/L



N

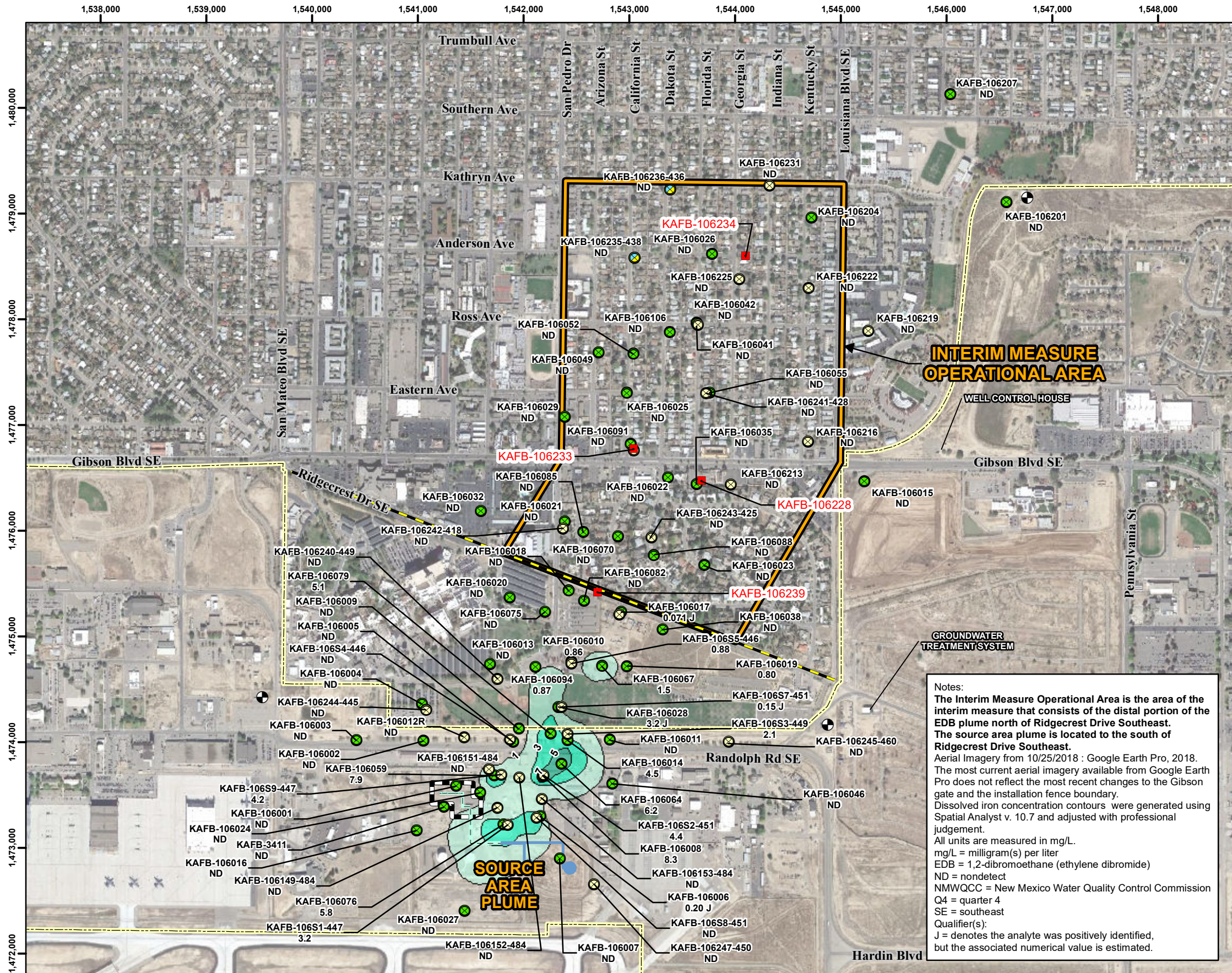
0 500 1,000 2,000
Feet
1 inch = 1,000 feet

Projection: NAD83 State Plane New Mexico Central FIPS3002 Feet

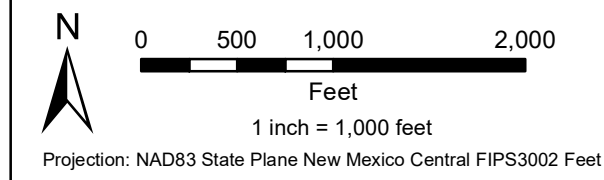
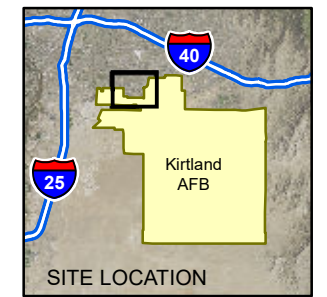
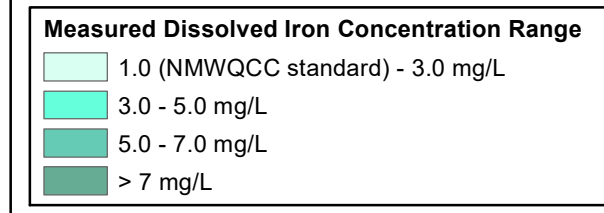
Notes:
The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgecrest Drive Southeast. The source area plume is located to the south of Ridgecrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018. The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary. Isocontours are not provided for bromide concentrations due to a large percentage of data values being estimated. There is no established project screening level for bromide. All units are measured in mg/L.
 mg/L = milligram(s) per liter
 EDB = 1,2-dibromoethane (ethylene dibromide)
 ND = nondetect
 Q4 = quarter 4
 SE = southeast
 Qualifier(s):
 J = denotes the analyte was positively identified, but the associated numerical value is estimated.

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FIGURE 4-17
 BROMIDE CONCENTRATIONS IN
 GROUNDWATER REFERENCE ELEVATION
 INTERVAL 4857, Q4 2020



- Legend**
- ⊗ Reference Elevation Interval 4857 Monitoring Well (Screen Not Submerged)
 - ⊙ Reference Elevation Interval 4857 and 4857/4838 Monitoring Well (Screen Submerged)
 - ⊗ Nested Groundwater Monitoring Well
 - Extraction Well
 - ⊕ Drinking Water Supply Well
 - Former Aboveground Storage Tank
 - Former Buried Fuel Transfer Line
 - Former Aboveground Fuel Transfer Line
 - Installation Fence Boundary
 - Dissolved Iron Isocontour (mg/L)
 - Target Capture Zone Boundary
 - ▭ Interim Measure Operational
 - ⊠ Source

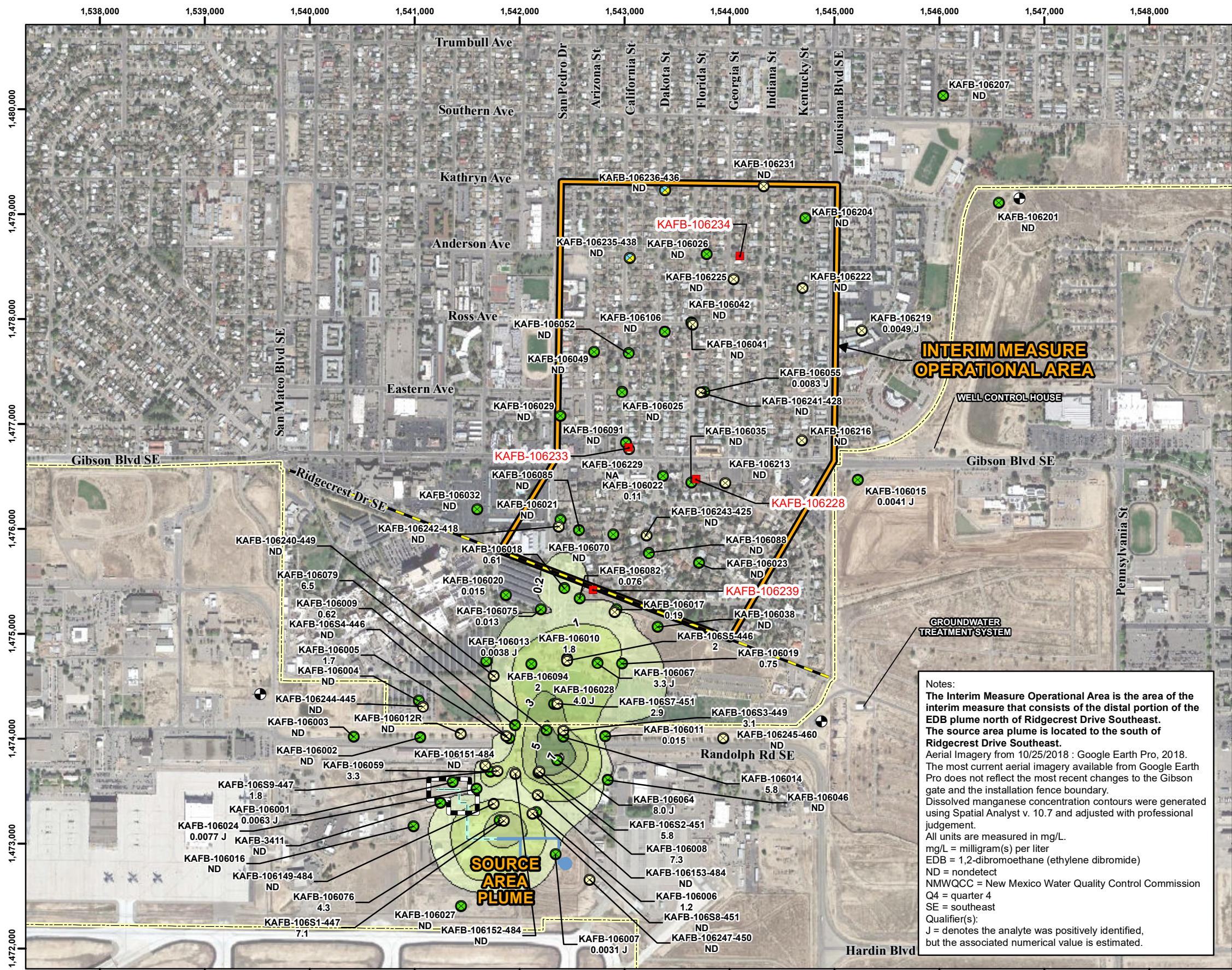


Notes:
 The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgcrest Drive Southeast. The source area plume is located to the south of Ridgcrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018. The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
 Dissolved iron concentration contours were generated using Spatial Analyst v. 10.7 and adjusted with professional judgement.
 All units are measured in mg/L.
 mg/L = milligram(s) per liter
 EDB = 1,2-dibromoethane (ethylene dibromide)
 ND = nondetect
 NMWQCC = New Mexico Water Quality Control Commission
 Q4 = quarter 4
 SE = southeast
 Qualifier(s):
 J = denotes the analyte was positively identified, but the associated numerical value is estimated.

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FIGURE 4-18

DISSOLVED IRON CONCENTRATIONS IN GROUNDWATER REFERENCE ELEVATION INTERVAL 4857, Q4 2020

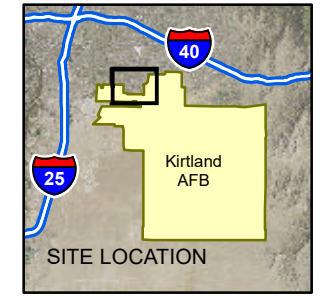


Legend

- ⊗ Reference Elevation Interval 4857 Monitoring Well (Screen Not Submerged)
- ⊗ Reference Elevation Interval 4857 and 4857/4838 Monitoring Well (Screen Submerged)
- ⊗ Nested Groundwater Monitoring Well
- Extraction Well
- ⊕ Drinking Water Supply Well
- Former Aboveground Storage Tank
- Former Buried Fuel Transfer Line
- Former Aboveground Fuel Transfer Line
- Installation Fence Boundary
- Dissolved Manganese Isocontour (mg/L)
- Target Capture Zone Boundary
- ▭ Interim Measure Operational Area
- ▭ Source Area

Measured Dissolved Manganese Concentration Range

- 0.2 (NMWQCC standard) - 1.0 mg/L
- 1.0 - 3.0 mg/L
- 3.0 - 5.0 mg/L
- 5.0 - 7.0 mg/L
- >7.0 mg/L



N

0 500 1,000 2,000

Feet

1 inch = 1,000 feet

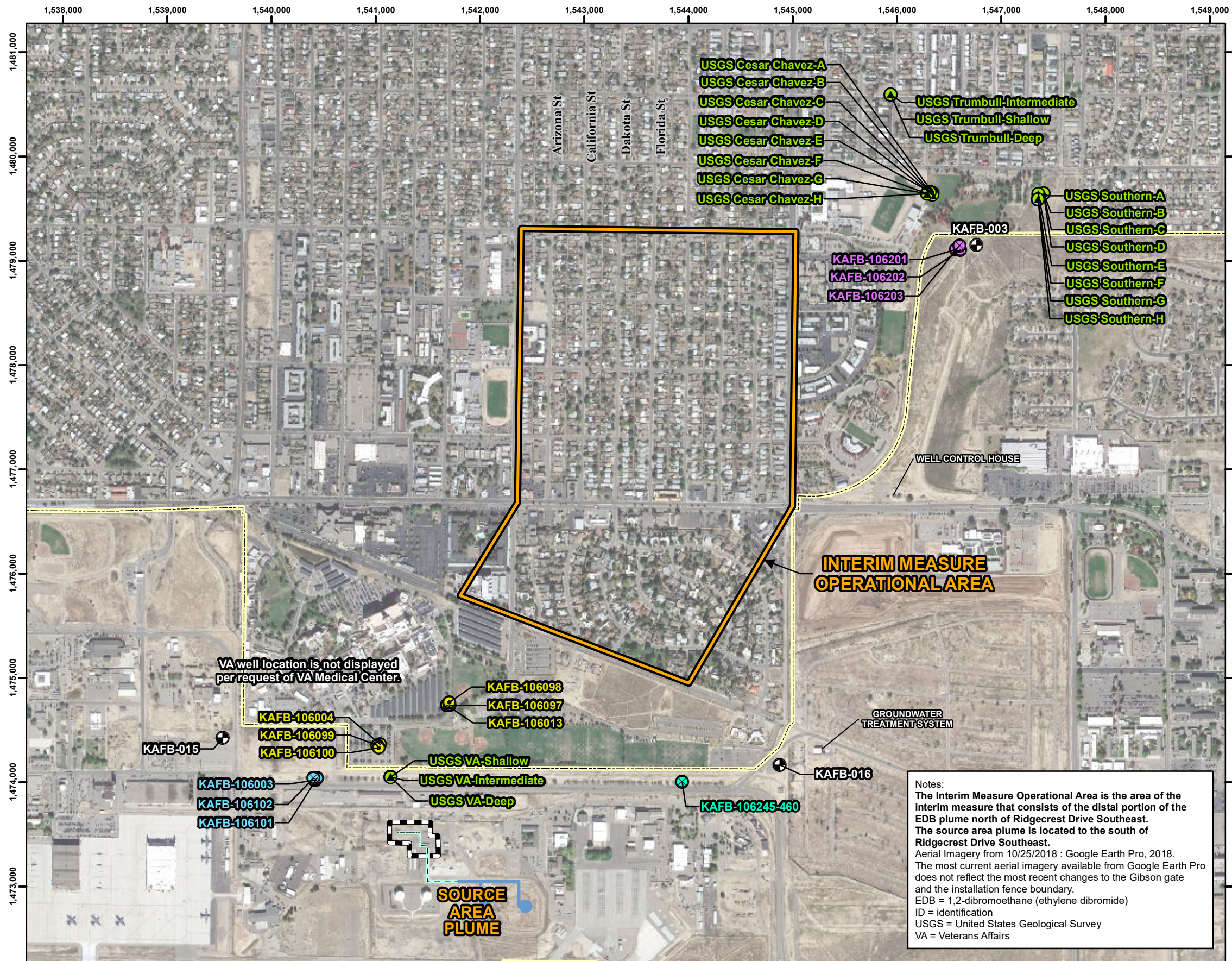
Projection: NAD83 State Plane New Mexico Central FIPS3002 Feet

Notes:
 The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgecrest Drive Southeast. The source area plume is located to the south of Ridgecrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018. The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
 Dissolved manganese concentration contours were generated using Spatial Analyst v. 10.7 and adjusted with professional judgement.
 All units are measured in mg/L.
 mg/L = milligram(s) per liter
 EDB = 1,2-dibromoethane (ethylene dibromide)
 ND = nondetect
 NMWQCC = New Mexico Water Quality Control Commission
 Q4 = quarter 4
 SE = southeast
 Qualifier(s):
 J = denotes the analyte was positively identified, but the associated numerical value is estimated.

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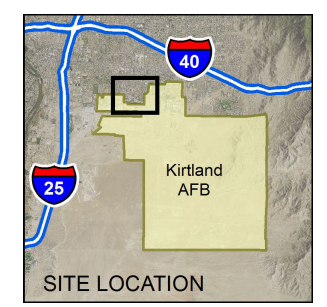
FIGURE 4-19

DISSOLVED MANGANESE CONCENTRATIONS IN GROUNDWATER REFERENCE ELEVATION INTERVAL 4857, Q4 2020



Legend

- KAFB-016 Sentinel
- KAFB-003 Sentinel
- VA Proximal and KAFB-015 Sentinel
- Drinking Water Supply Well
- USGS Sentinel
- VA Proximal
- Former Aboveground Storage Tank
- Former Buried Fuel Transfer Line
- Former Aboveground Fuel Transfer Line
- Installation Fence Boundary
- Interim Measure Operational Area
- Source Area



N

0 500 1,000 2,000
Feet

1 inch = 1,000 feet

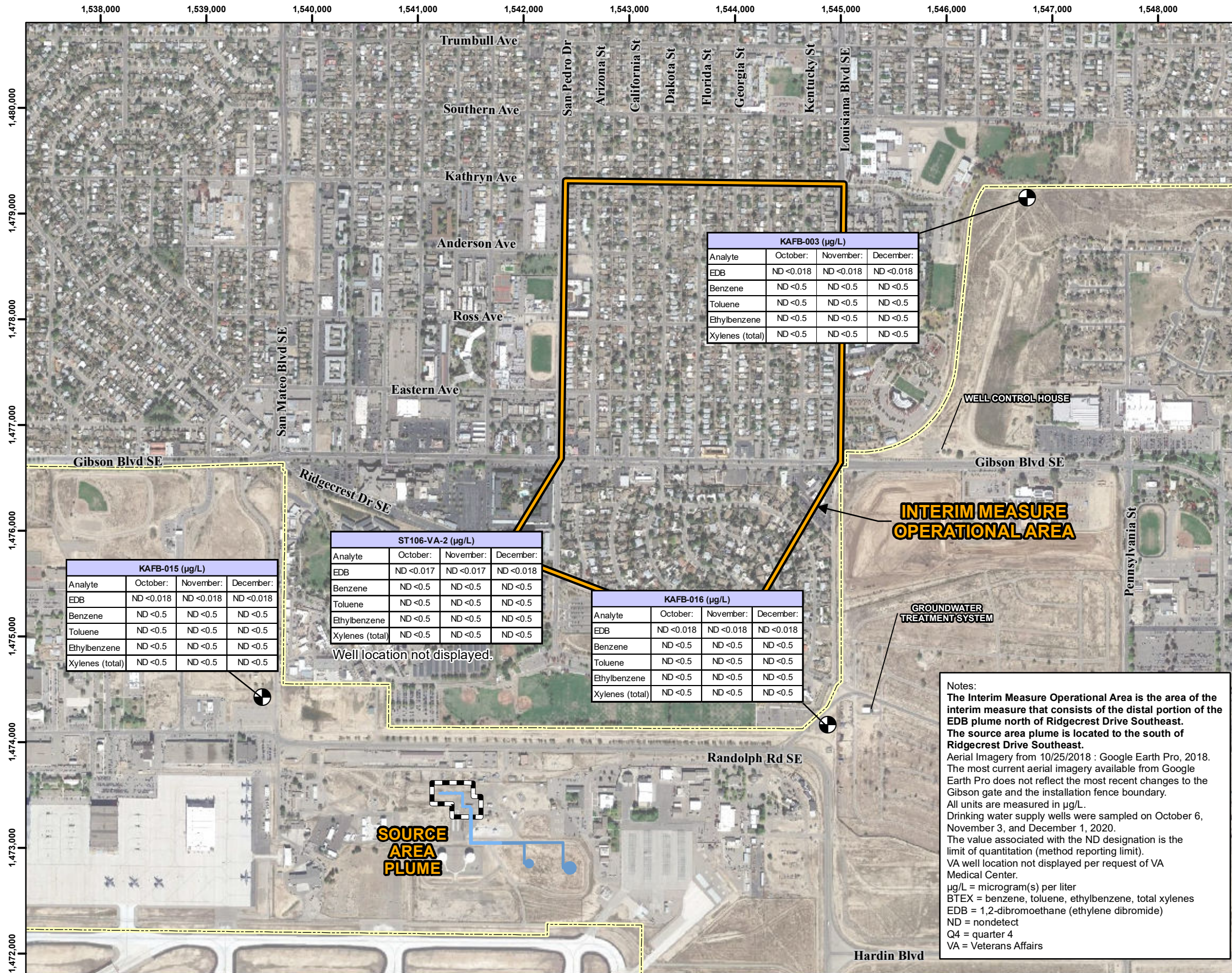
Projection: NAD83 State Plane New Mexico Central FIPS3002 Feet

Notes:
 The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgcrest Drive Southeast. The source area plume is located to the south of Ridgcrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018. The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
 EDB = 1,2-dibromoethane (ethylene dibromide)
 ID = identification
 USGS = United States Geological Survey
 VA = Veterans Affairs

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FIGURE 4-20

SENTINEL WELL LOCATIONS



KAFB-003 (µg/L)			
Analyte	October:	November:	December:
EDB	ND <0.018	ND <0.018	ND <0.018
Benzene	ND <0.5	ND <0.5	ND <0.5
Toluene	ND <0.5	ND <0.5	ND <0.5
Ethylbenzene	ND <0.5	ND <0.5	ND <0.5
Xylenes (total)	ND <0.5	ND <0.5	ND <0.5

KAFB-015 (µg/L)			
Analyte	October:	November:	December:
EDB	ND <0.018	ND <0.018	ND <0.018
Benzene	ND <0.5	ND <0.5	ND <0.5
Toluene	ND <0.5	ND <0.5	ND <0.5
Ethylbenzene	ND <0.5	ND <0.5	ND <0.5
Xylenes (total)	ND <0.5	ND <0.5	ND <0.5

ST106-VA-2 (µg/L)			
Analyte	October:	November:	December:
EDB	ND <0.017	ND <0.017	ND <0.018
Benzene	ND <0.5	ND <0.5	ND <0.5
Toluene	ND <0.5	ND <0.5	ND <0.5
Ethylbenzene	ND <0.5	ND <0.5	ND <0.5
Xylenes (total)	ND <0.5	ND <0.5	ND <0.5

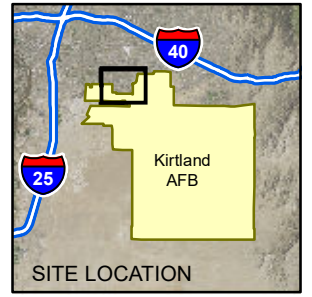
KAFB-016 (µg/L)			
Analyte	October:	November:	December:
EDB	ND <0.018	ND <0.018	ND <0.018
Benzene	ND <0.5	ND <0.5	ND <0.5
Toluene	ND <0.5	ND <0.5	ND <0.5
Ethylbenzene	ND <0.5	ND <0.5	ND <0.5
Xylenes (total)	ND <0.5	ND <0.5	ND <0.5

Well location not displayed.

Notes:
The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgecrest Drive Southeast. The source area plume is located to the south of Ridgecrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018. The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary. All units are measured in µg/L. Drinking water supply wells were sampled on October 6, November 3, and December 1, 2020. The value associated with the ND designation is the limit of quantitation (method reporting limit). VA well location not displayed per request of VA Medical Center.
 µg/L = microgram(s) per liter
 BTEX = benzene, toluene, ethylbenzene, total xylenes
 EDB = 1,2-dibromoethane (ethylene dibromide)
 ND = nondetect
 Q4 = quarter 4
 VA = Veterans Affairs

Legend

- Drinking Water Supply Wells
- Former Buried Fuel Transfer Line
- Former Aboveground Fuel Transfer Line
- Installation Fence Boundary
- Former Aboveground Storage Tank
- Interim Measure Operational Area
- Source Area



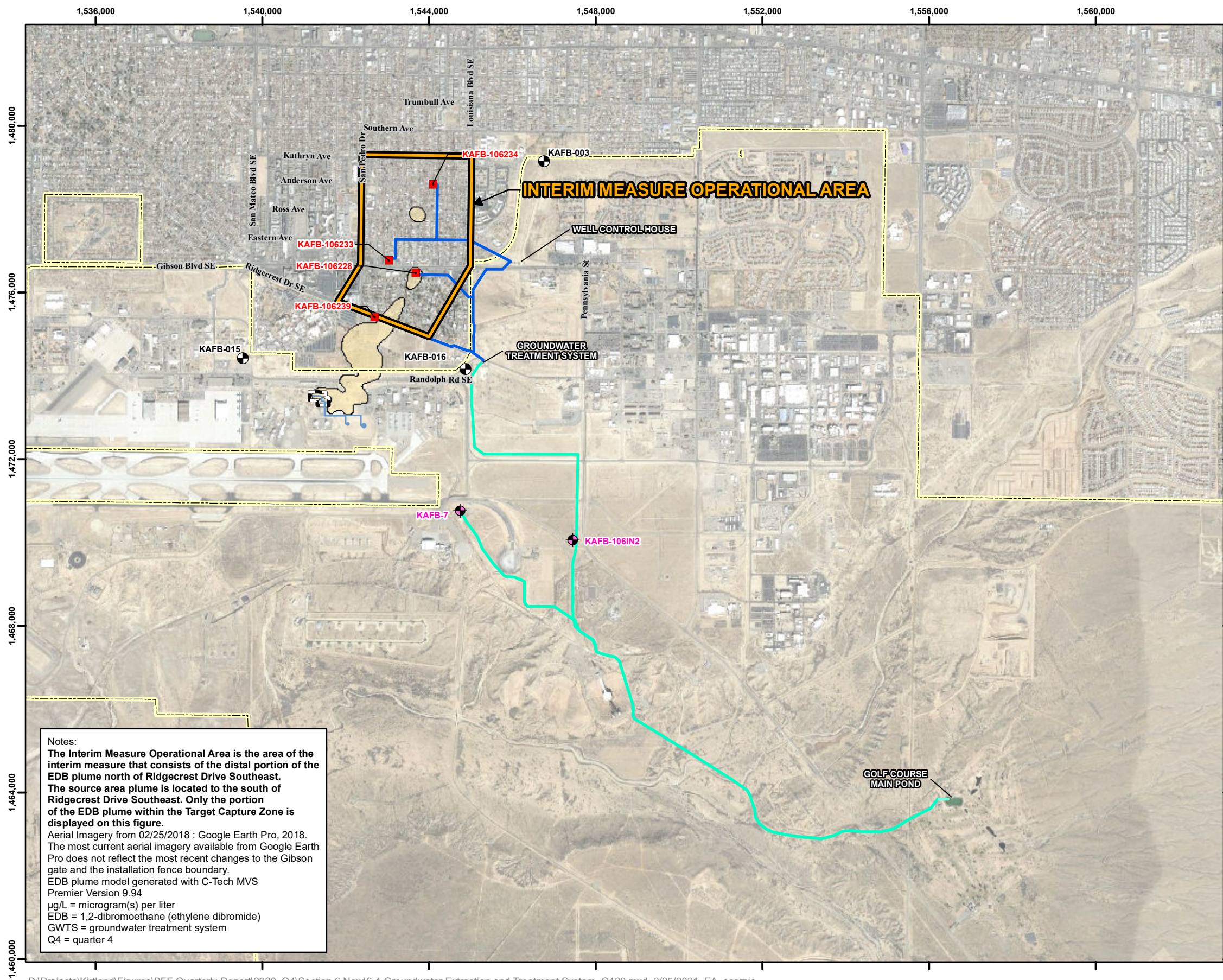
N

0 500 1,000 2,000
Feet
1 inch = 1,000 feet
Projection: NAD83 State Plane New Mexico Central FIPS3002 Feet

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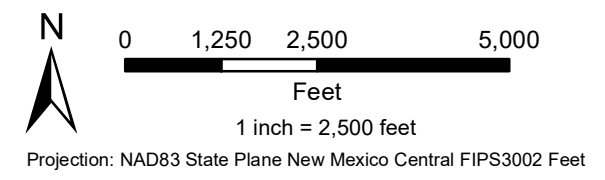
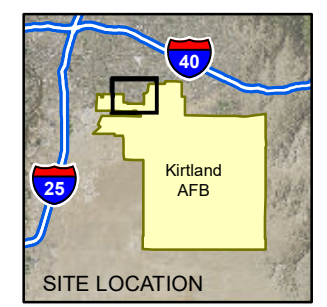
FIGURE 5-1

EDB AND BTEX RESULTS IN DRINKING WATER SUPPLY WELLS, Q4 2020



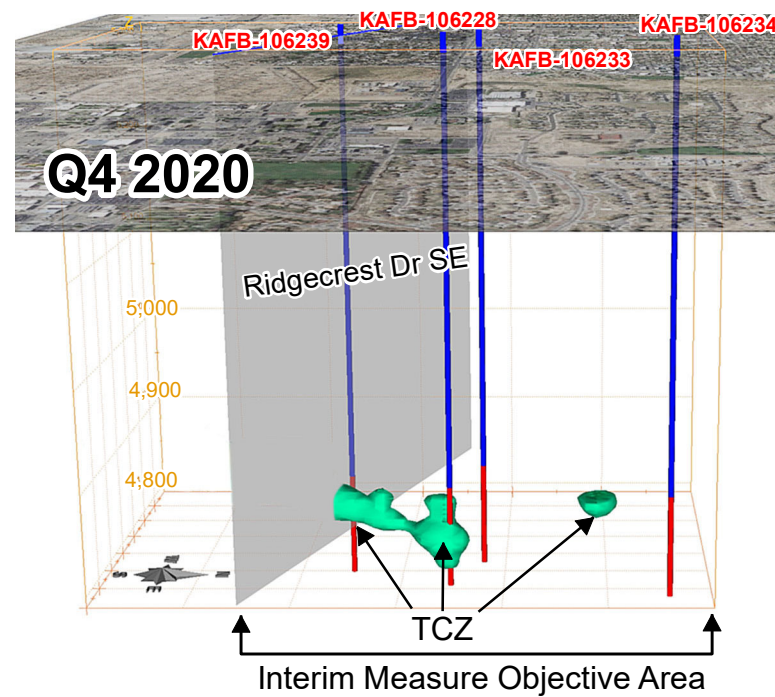
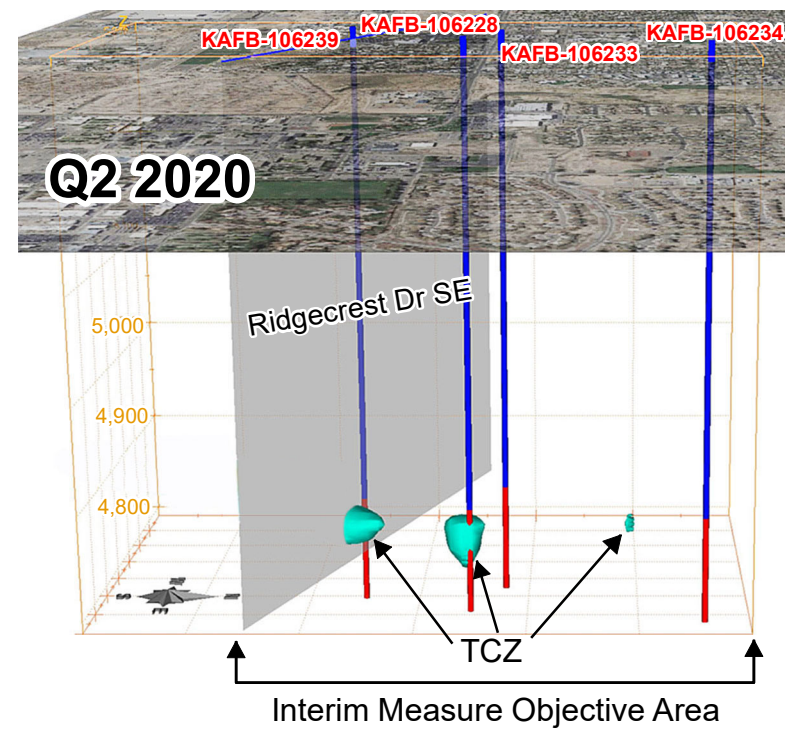
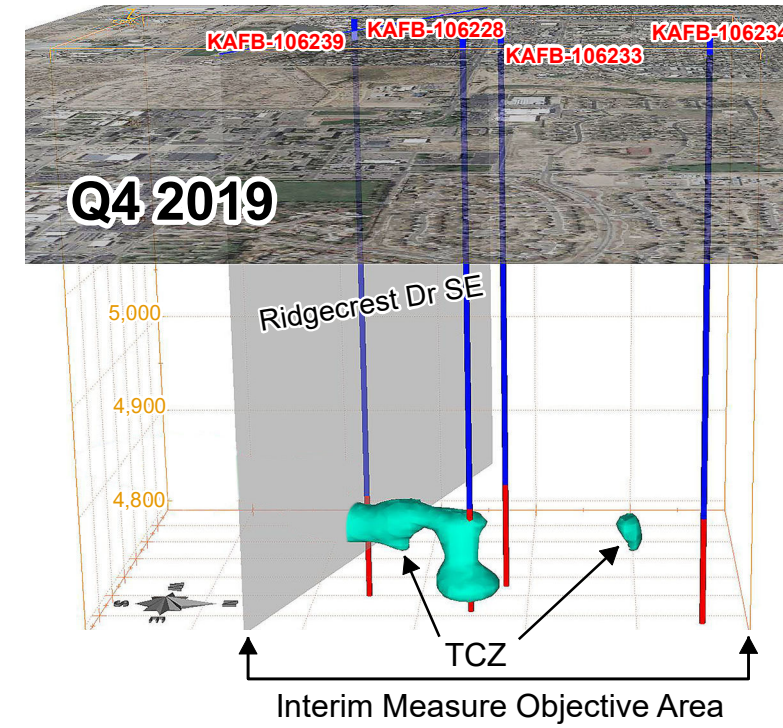
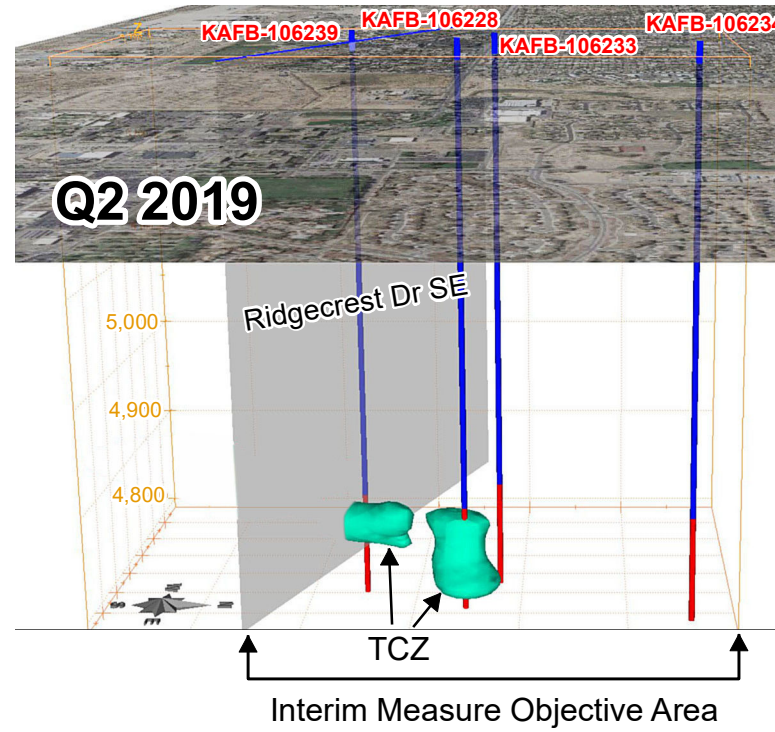
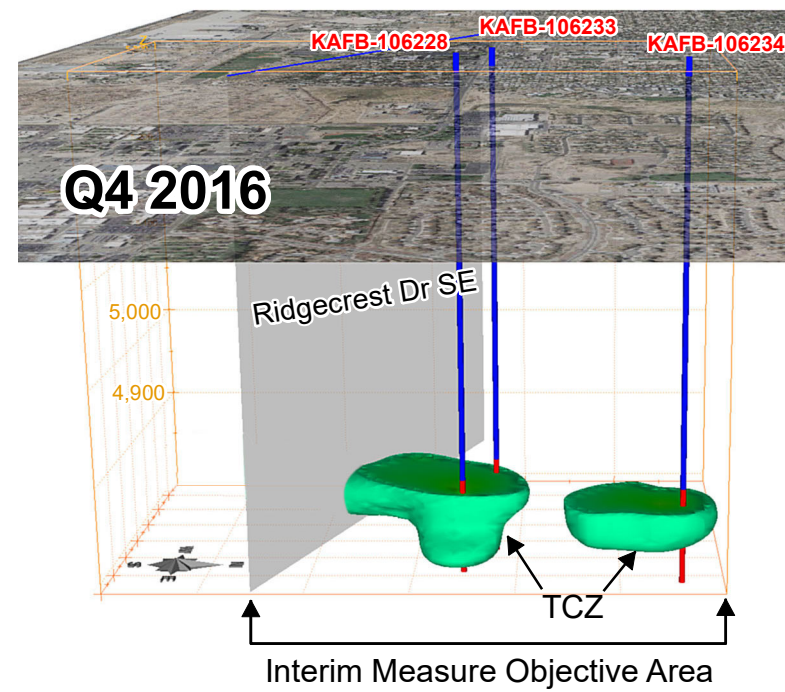
Notes:
 The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgecrest Drive Southeast. The source area plume is located to the south of Ridgecrest Drive Southeast. Only the portion of the EDB plume within the Target Capture Zone is displayed on this figure.
 Aerial Imagery from 02/25/2018 : Google Earth Pro, 2018.
 The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
 EDB plume model generated with C-Tech MVS Premier Version 9.94
 µg/L = microgram(s) per liter
 EDB = 1,2-dibromoethane (ethylene dibromide)
 GWTS = groundwater treatment system
 Q4 = quarter 4

- Legend**
- Injection Well
 - Extraction Well
 - Drinking Water Supply Well
 - Former Aboveground Storage Tank
 - Former Fuel Transfer Line
 - GWTS Influent Piping
 - GWTS Effluent Piping
 - Installation Fence Boundary
 - Interim Measure Operational
 - Source
 - EDB Plume within the Target Capture Zone Q4 2020 (> 0.05 µg/L) (Simulated)

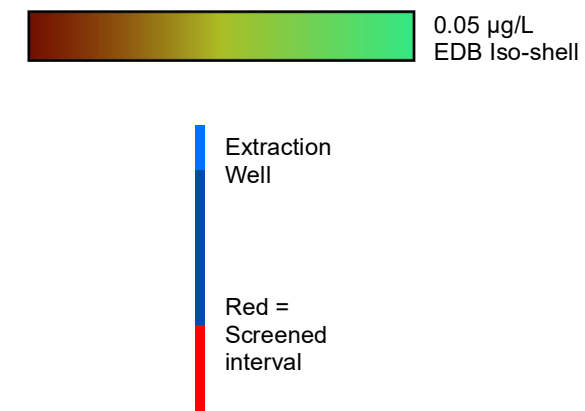


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FIGURE 6-1
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM LOCATION



Legend

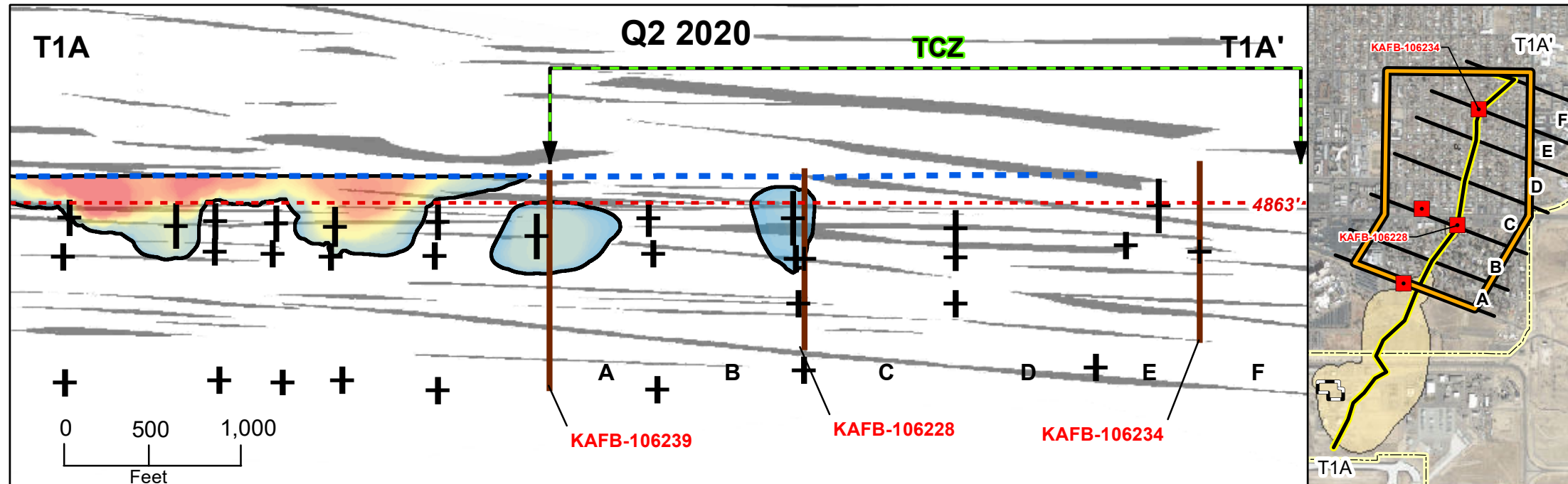


Notes:
 Aerial Imagery from 04/22/2017 :
 Google Earth Pro, 2017
 Q4 2016 is baseline TCZ plume morphology.
 Figure shows the last four TCZ plume morphologies.
 EDB plume model generated with C-Tech MVS Premier Version 9.94.
 3D models vertically exaggerated by a factor of 10.
 Target Capture Zone is EDB plume >0.05 µg/L north of Ridgecrest Drive SE.
 µg/L = microgram(s) per liter
 EDB = 1,2-dibromoethane (ethylene dibromide)
 TCZ = Target Capture Zone
 Q2 = quarter 2
 Q4 = quarter 4

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FIGURE 6-2

COMPARISON OF EDB
 TARGET CAPTURE ZONE MORPHOLOGY
 Q4 2016 - Q4 2020

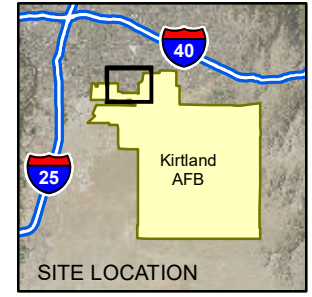


V	V	V	V	V	V	V
2,539,200 cf	1,566,100 cf	536,800 cf	48,264 cf	0 cf	0 cf	0 cf
M	M	M	M	M	M	M
1.4 g	0.7 g	0.2 g	0.02 g	0 g	0 g	0 g

2020 Q2 Plume Totals
 Iso-Shell Volume (V) =
 4,690,364 cubic feet (cf)
 EDB Mass (M) = 2.4 grams (g)
 assuming a total porosity of 25%

- Legend**
- + Groundwater Monitoring Well Screen
 - Extraction Well
 - - - Reference Elevation Interval 4863
 - Water Table Level
 - Volumetric Lines
 - Installation Boundary
 - Interim Measure Operational Area
 - EDB Plume with Concentration > 0.05 µg/L (EPA MCLs) (Simulated)
 - AECOM Defined Fine Grained Lithology
 - EDB Concentration of 0.05 µg/L (Simulated)
 - EDB Concentration of 1.00 µg/L (Simulated)
 - EDB Concentration of > 30.0 µg/L (Simulated)

Notes:
 Aerial Imagery from 02/25/2018 : Google Earth Pro, 2018. The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
 EDB plume model generated with C-Tech MVS Premier Version 9.94.
 3D model vertical exaggeration depicted by a factor of 10. Simulated EDB concentrations were screened against the EPA MCL (0.05 µg/L).
 AECOM = Architecture, Engineering, Consulting, Operations, and Maintenance
 cf = cubic feet
 EDB = 1,2-dibromoethane (ethylene dibromide)
 EPA MCL = U.S. Environmental Protection Agency maximum contaminant level
 g = grams
 V = volume
 M = mass
 TCZ = Target Capture Zone
 µg/L = microgram(s) per liter
 Q2 = quarter 2
 Q4 = quarter 4

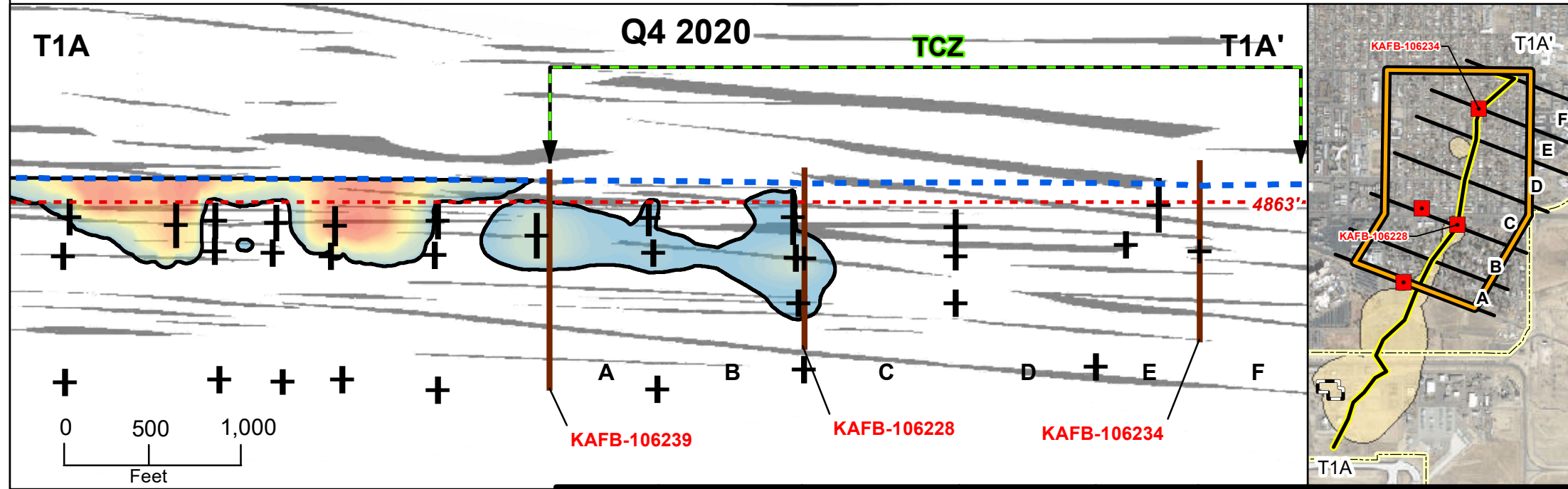


Projection: NAD83 State Plane New Mexico Central FIPS3002 Feet

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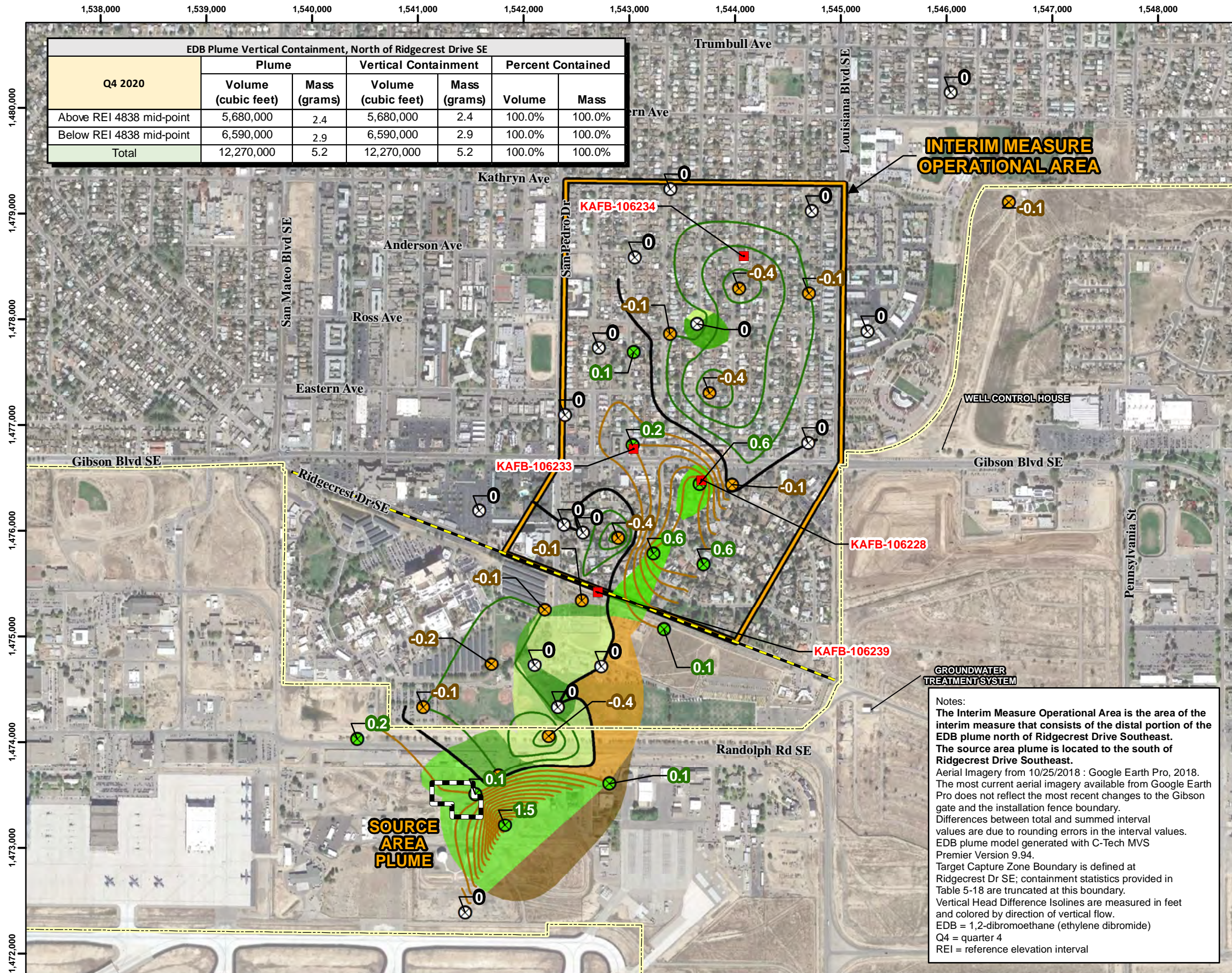
FIGURE 6-3

T1A PLUME CROSS SECTION
 COMPARISON
 Q2 2020 - Q4 2020



V	V	V	V	V	V	V
3,868,200 cf	5,164,300 cf	1,506,600 cf	1,713,900 cf	0 cf	0 cf	0 cf
M	M	M	M	M	M	M
2 g	2.2 g	0.7 g	0.71 g	0 g	0 g	0 g

2020 Q4 Plume Totals
 Iso-Shell Volume (V) =
 12,253,000 cubic feet (cf)
 EDB Mass (M) = 5.2 grams (g)
 assuming a total porosity of 25%



EDB Plume Vertical Containment, North of Ridgcrest Drive SE						
Q4 2020	Plume		Vertical Containment		Percent Contained	
	Volume (cubic feet)	Mass (grams)	Volume (cubic feet)	Mass (grams)	Volume	Mass
Above REI 4838 mid-point	5,680,000	2.4	5,680,000	2.4	100.0%	100.0%
Below REI 4838 mid-point	6,590,000	2.9	6,590,000	2.9	100.0%	100.0%
Total	12,270,000	5.2	12,270,000	5.2	100.0%	100.0%

Legend

- Extraction Well
- Centroid of Nested Monitoring Well Pair
 - Monitoring Well Defining Upward Vertical Flow
 - Monitoring Well Defining Downward Vertical Flow
 - Monitoring Well Defining No Vertical Flow
- Installation Fence Boundary
- Target Capture Zone Boundary
- Vertical Head Difference Isolines (ft)
 - Upward Vertical Flow
 - Downward Vertical Flow
 - No Flow
- Plume Area Vertical Containment Analysis
 - Contained Above and Below Mid-point
 - Contained Below Mid-point
 - Contained Above Mid-point
 - Not Contained
 - Undefined
 - Interim Measure Operational Area
 - Source Area

SITE LOCATION

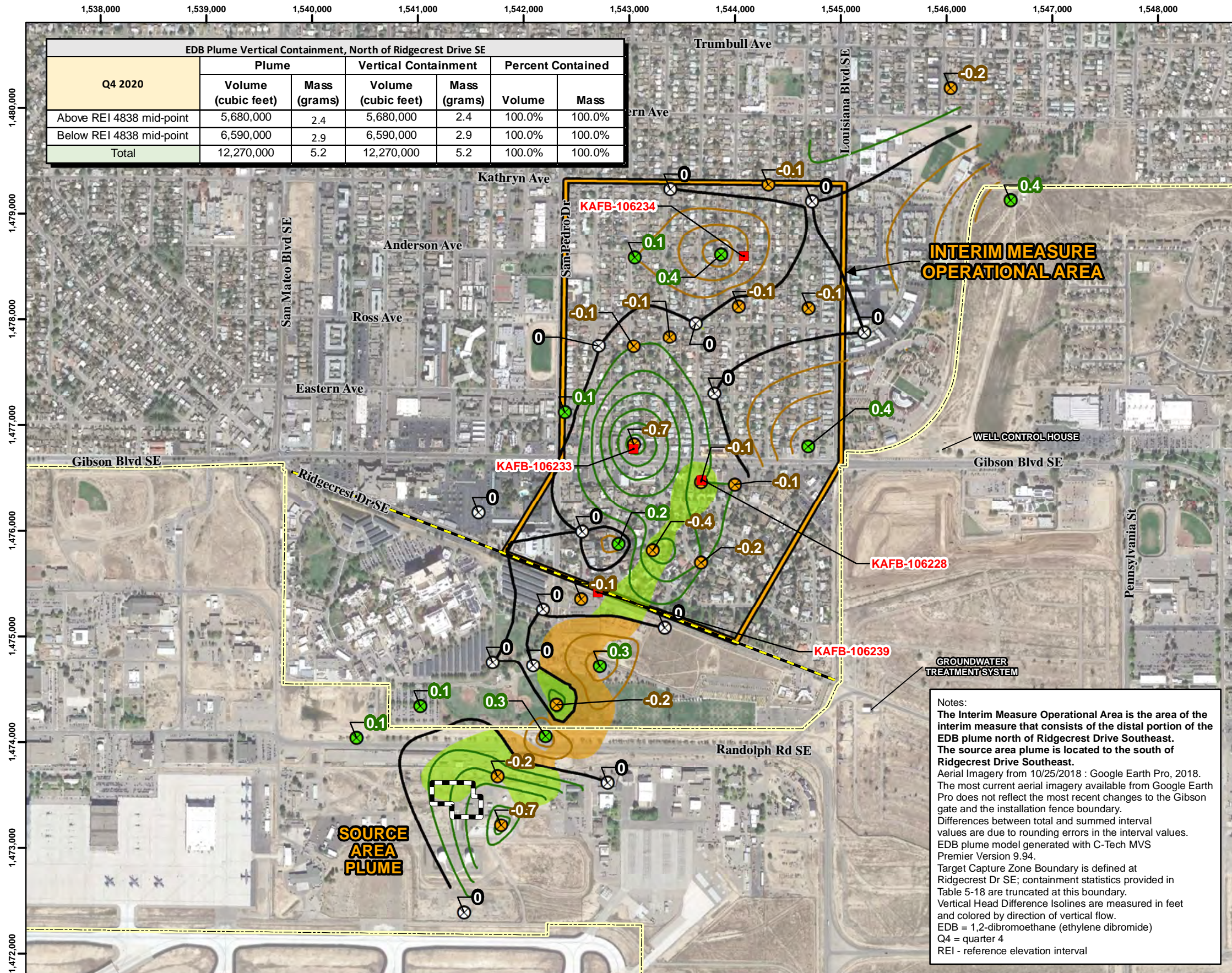
Notes:

The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgcrest Drive Southeast. The source area plume is located to the south of Ridgcrest Drive Southeast.

Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018. The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary. Differences between total and summed interval values are due to rounding errors in the interval values. EDB plume model generated with C-Tech MVS Premier Version 9.94. Target Capture Zone Boundary is defined at Ridgcrest Dr SE; containment statistics provided in Table 5-18 are truncated at this boundary. Vertical Head Difference Isolines are measured in feet and colored by direction of vertical flow. EDB = 1,2-dibromoethane (ethylene dibromide) Q4 = quarter 4 REI = reference elevation interval

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FIGURE 6-4
 VERTICAL CONTAINMENT ABOVE REFERENCE ELEVATION INTERVAL 4838 MID-POINT, Q4 2020



Legend

- Extraction Well
- Centroid of Nested Monitoring Well Pair
 - Monitoring Well Defining Upward Vertical Flow
 - Monitoring Well Defining Downward Vertical Flow
 - ⊗ Monitoring Well Defining No Vertical Flow
- Installation Fence Boundary
- Target Capture Zone Boundary
- Vertical Head Difference Isolines (ft)**
 - Upward Vertical Flow
 - Downward Vertical Flow
 - No Flow
- Plume Area Vertical Containment Analysis**
 - Contained Below Mid-point
 - Not Contained
 - ▭ Interim Measure Operational Area
 - ▭ Source Area

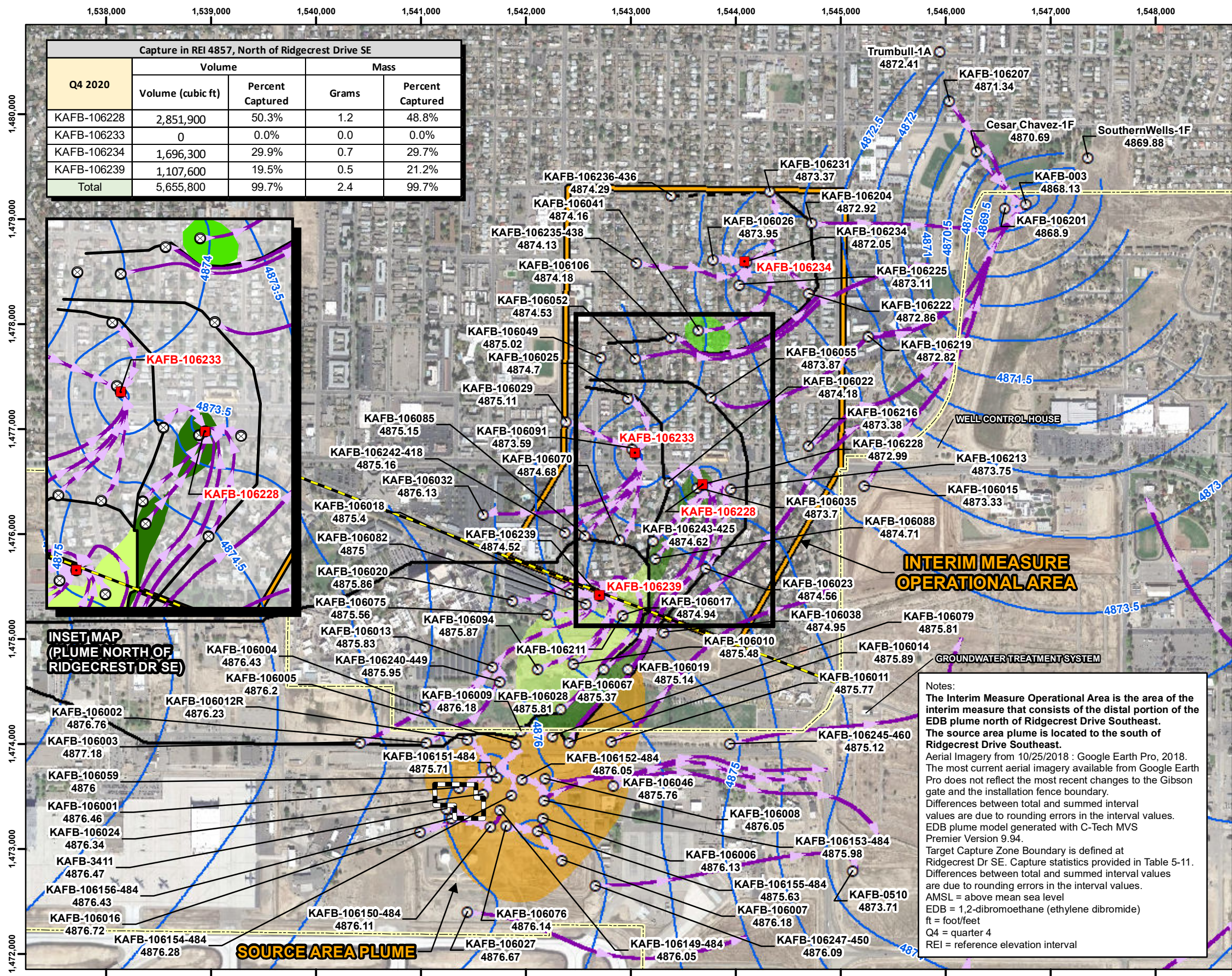
SITE LOCATION

N

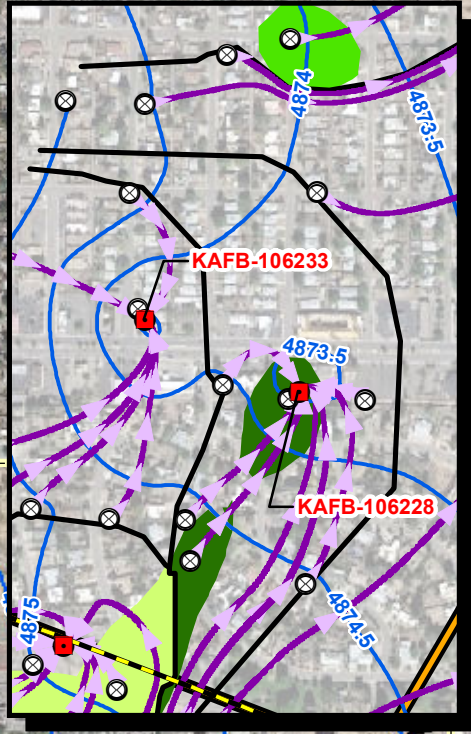
0 500 1,000 2,000
Feet
1 inch = 1,000 feet
Projection: NAD83 State Plane New Mexico Central FIPS3002 Feet

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FIGURE 6-5
VERTICAL CONTAINMENT BELOW REFERENCE ELEVATION INTERVAL 4838 MID-POINT, Q4 2020



Capture in REI 4857, North of Ridgecrest Drive SE				
Q4 2020	Volume		Mass	
	Volume (cubic ft)	Percent Captured	Grams	Percent Captured
KAFB-106228	2,851,900	50.3%	1.2	48.8%
KAFB-106233	0	0.0%	0.0	0.0%
KAFB-106234	1,696,300	29.9%	0.7	29.7%
KAFB-106239	1,107,600	19.5%	0.5	21.2%
Total	5,655,800	99.7%	2.4	99.7%



**INSET MAP
(PLUME NORTH OF
RIDGECREST DR SE)**

SOURCE AREA PLUME

**INTERIM MEASURE
OPERATIONAL AREA**

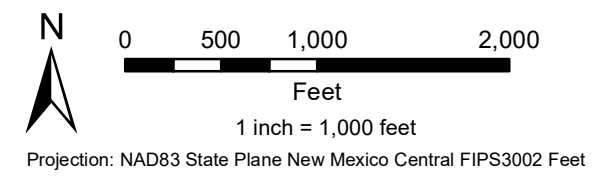
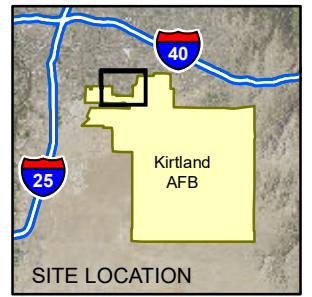
Notes:
 The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgecrest Drive Southeast. The source area plume is located to the south of Ridgecrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018. The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
 Differences between total and summed interval values are due to rounding errors in the interval values. EDB plume model generated with C-Tech MVS Premier Version 9.94.
 Target Capture Zone Boundary is defined at Ridgecrest Dr SE. Capture statistics provided in Table 5-11. Differences between total and summed interval values are due to rounding errors in the interval values.
 AMSL = above mean sea level
 EDB = 1,2-dibromoethane (ethylene dibromide)
 ft = foot/feet
 Q4 = quarter 4
 REI = reference elevation interval

Legend

- Extraction Well
- ⊗ Groundwater Monitoring Well
- Groundwater Level Contour (0.5 ft interval)
- Hydraulic Divide
- - - Inferred Hydraulic Divide
- Particle Flow Lines (Direction of Flow)
- Installation Fence Boundary
- Target Capture Zone Boundary

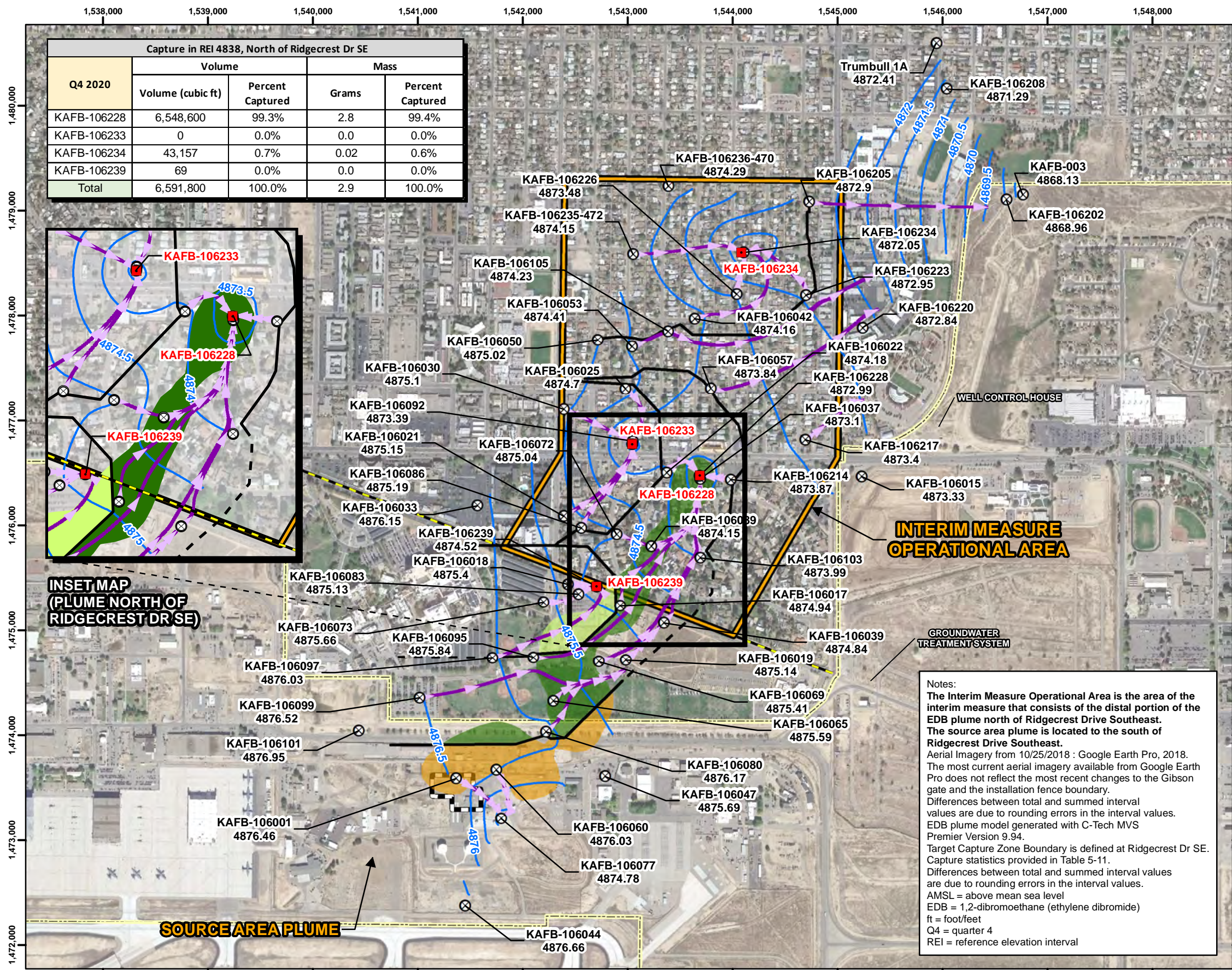
Plume Area Horizontal Capture Analysis

- Captured by KAFB-106228
- Captured by KAFB-106233
- Captured by KAFB-106234
- Captured by KAFB-106239
- Plume Not Captured
- Source Area
- Interim Measure Operational Area

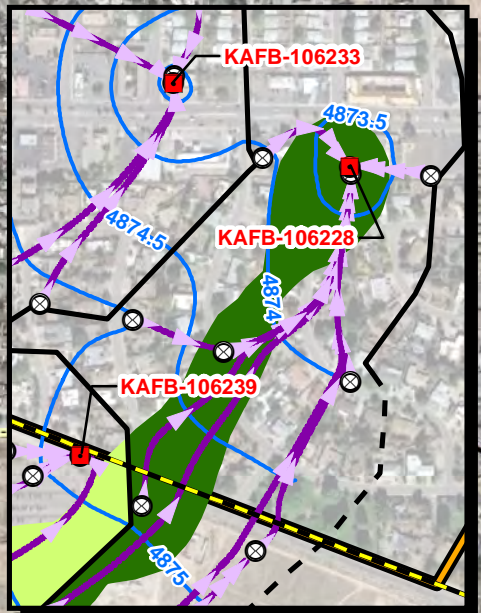


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FIGURE 6-6
**HORIZONTAL CAPTURE OF EDB IN
 REFERENCE ELEVATION INTERVAL 4857,
 Q4 2020**



Capture in REI 4838, North of Ridgcrest Dr SE				
Q4 2020	Volume		Mass	
	Volume (cubic ft)	Percent Captured	Grams	Percent Captured
KAFB-106228	6,548,600	99.3%	2.8	99.4%
KAFB-106233	0	0.0%	0.0	0.0%
KAFB-106234	43,157	0.7%	0.02	0.6%
KAFB-106239	69	0.0%	0.0	0.0%
Total	6,591,800	100.0%	2.9	100.0%



**INSET MAP
(PLUME NORTH OF
RIDGCREST DR SE)**

SOURCE AREA PLUME

**INTERIM MEASURE
OPERATIONAL AREA**

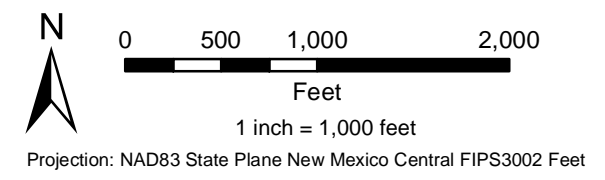
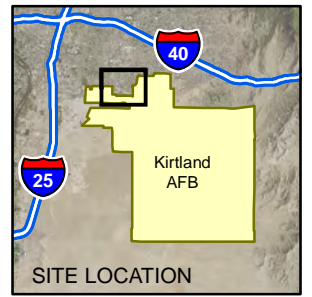
Notes:
 The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgcrest Drive Southeast. The source area plume is located to the south of Ridgcrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018. The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
 Differences between total and summed interval values are due to rounding errors in the interval values.
 EDB plume model generated with C-Tech MVS Premier Version 9.94.
 Target Capture Zone Boundary is defined at Ridgcrest Dr SE. Capture statistics provided in Table 5-11.
 Differences between total and summed interval values are due to rounding errors in the interval values.
 AMSL = above mean sea level
 EDB = 1,2-dibromoethane (ethylene dibromide)
 ft = foot/feet
 Q4 = quarter 4
 REI = reference elevation interval

Legend

- Extraction Well
- ⊗ Groundwater Monitoring Well
- Groundwater Level Contour (0.5 ft interval)
- Hydraulic Divide
- - - Inferred Hydraulic Divide
- Particle Flow Lines (Direction of Flow)
- Installation Fence Boundary
- Target Capture Zone Boundary

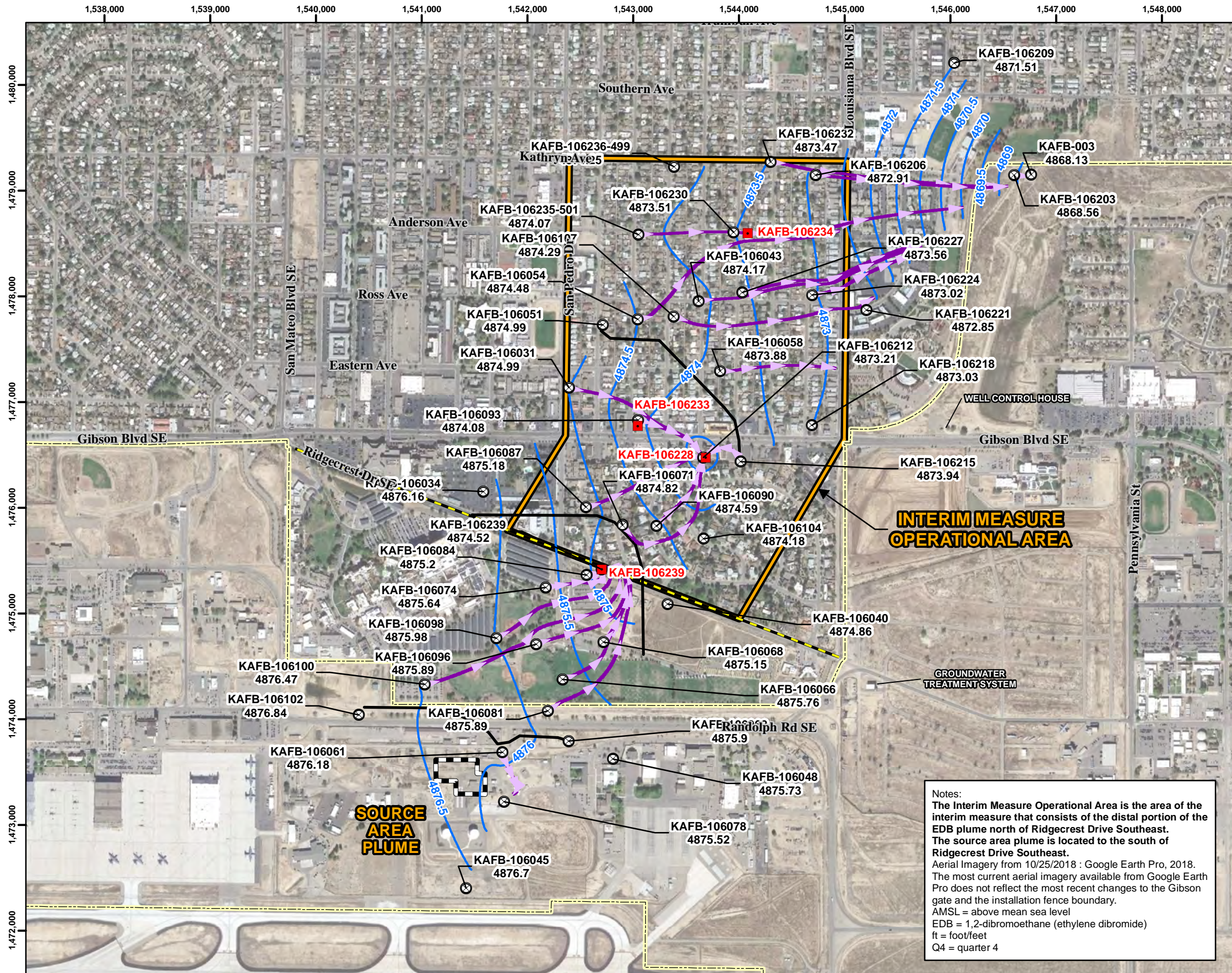
Plume Area Horizontal Capture Analysis

- Captured by KAFB-106228
- Captured by KAFB-106234
- Captured by KAFB-106239
- Plume Not Captured
- ▭ Source Area
- ▭ Interim Measure Operational Area

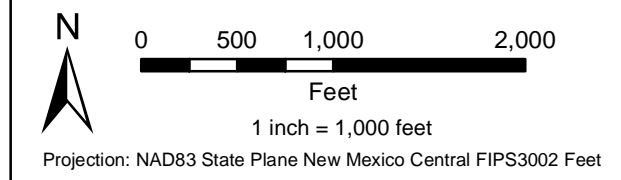
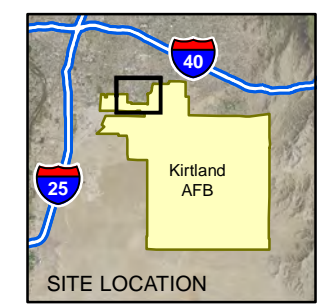


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FIGURE 6-7
**HORIZONTAL CAPTURE OF EDB IN
 REFERENCE ELEVATION INTERVAL 4838,
 Q4 2020**



- Legend**
- Extraction Well
 - ⊗ Groundwater Monitoring Well
 - Groundwater Level Contour (0.5 ft interval)
 - Hydraulic Divide
 - - - Inferred Hydraulic Divide
 - Particle Flow Lines (Direction of Flow)
 - - - Installation Fence Boundary
 - - - Target Capture Zone Boundary
 - ▭ Interim Measure Operational Area
 - ▭ Source Area

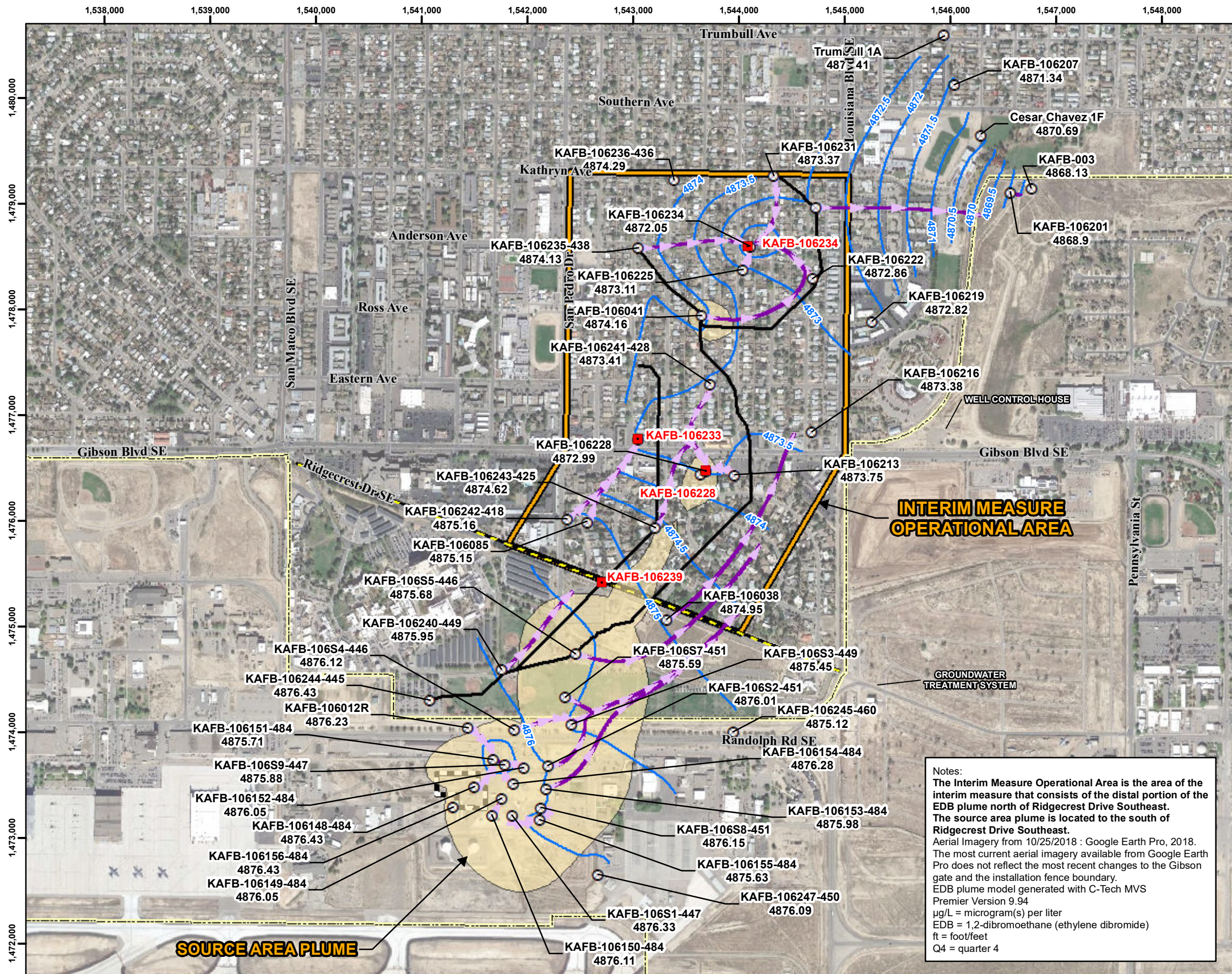


Notes:
 The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgcrest Drive Southeast. The source area plume is located to the south of Ridgcrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018. The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
 AMSL = above mean sea level
 EDB = 1,2-dibromoethane (ethylene dibromide)
 ft = foot/feet
 Q4 = quarter 4

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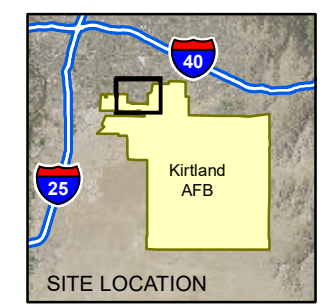
FIGURE 6-8

**HORIZONTAL CAPTURE OF EDB IN
 REFERENCE ELEVATION INTERVAL 4814,
 Q4 2020**



Legend

- Extraction Well
- ⊗ Groundwater Monitoring Well
- Groundwater Level Contour (0.5 ft interval)
- Hydraulic Divide
- Inferred Hydraulic Divide
- Particle Flow Lines (Direction of Flow)
- Installation Fence Boundary
- Target Capture Zone Boundary
- EDB Plume Q4 2020 (> 0.05 µg/L) (Simulated)
- Interim Measure Operational Area
- Source Area



N

0 500 1,000 2,000

Feet

1 inch = 1,000 feet

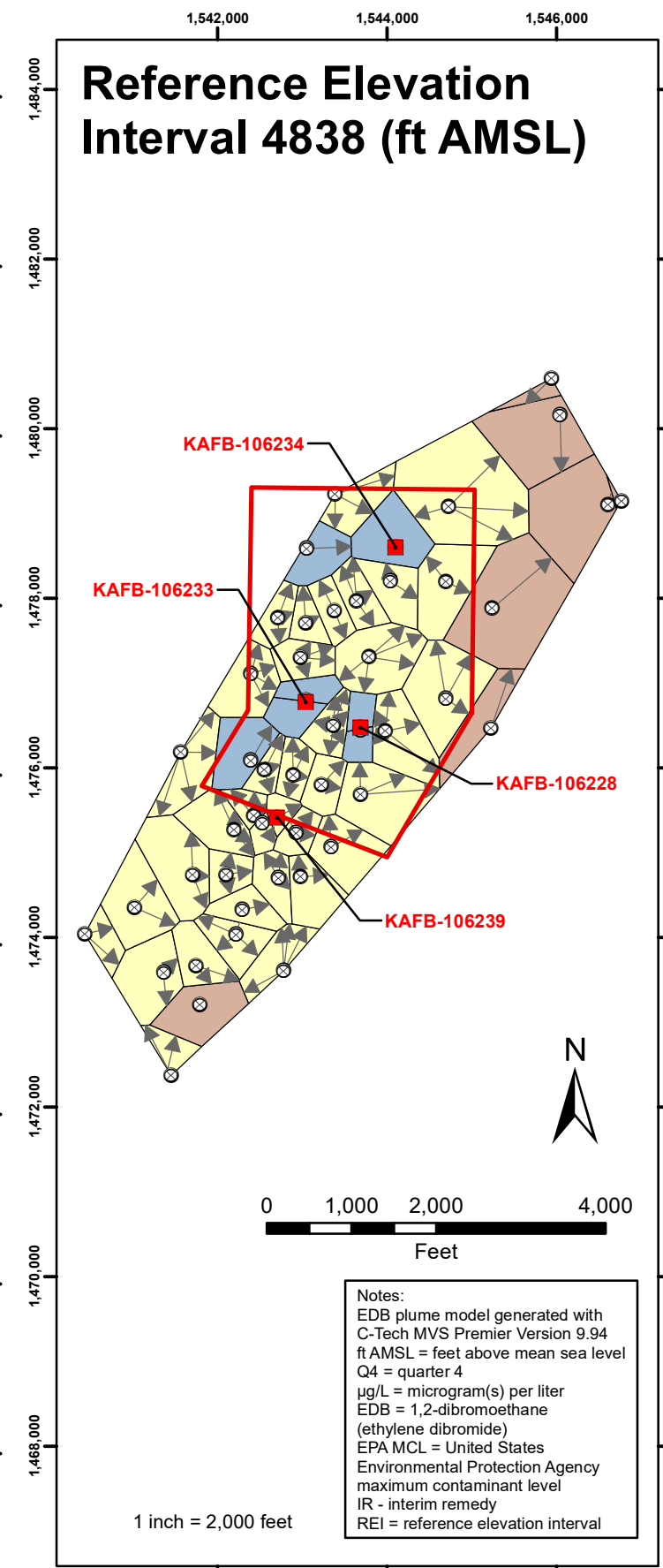
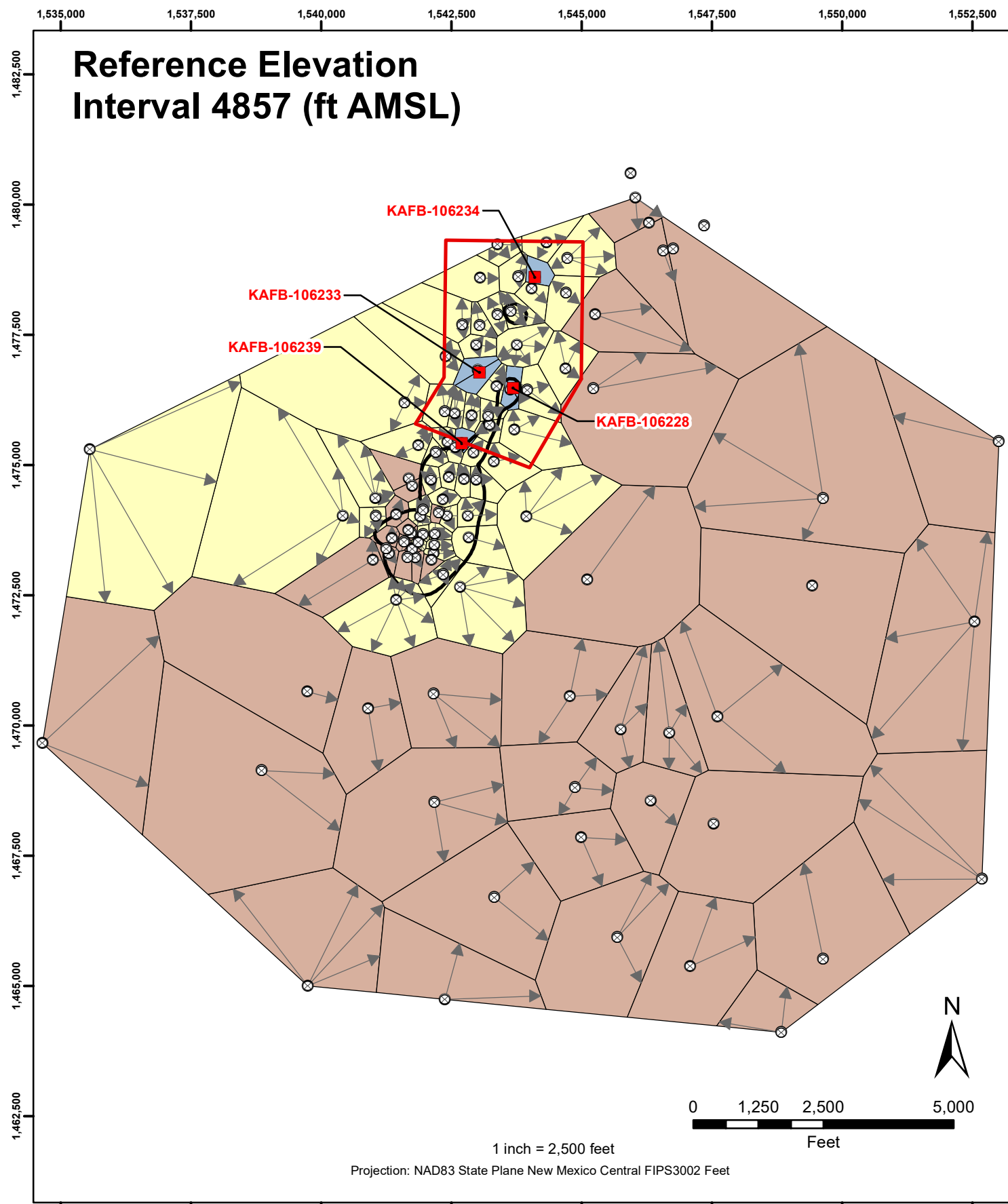
Projection: NAD83 State Plane New Mexico Central FIPS3002 Feet

Notes:
 The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgecrest Drive Southeast. The source area plume is located to the south of Ridgecrest Drive Southeast.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018.
 The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
 EDB plume model generated with C-Tech MVS Premier Version 9.94
 µg/L = microgram(s) per liter
 ft = foot/feet
 Q4 = quarter 4

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FIGURE 6-9

HORIZONTAL CAPTURE AT
 THE WATER TABLE, Q4 2020



Legend

- ⊗ Groundwater Monitoring Well Pairs with Groundwater Elevation (ft AMSL)
- Extraction Well
- ⊖ Q4 2020 EDB Plume >0.05 µg/L (EPA MCL) (Simulated)
- ▭ Interim Measure Operational Area

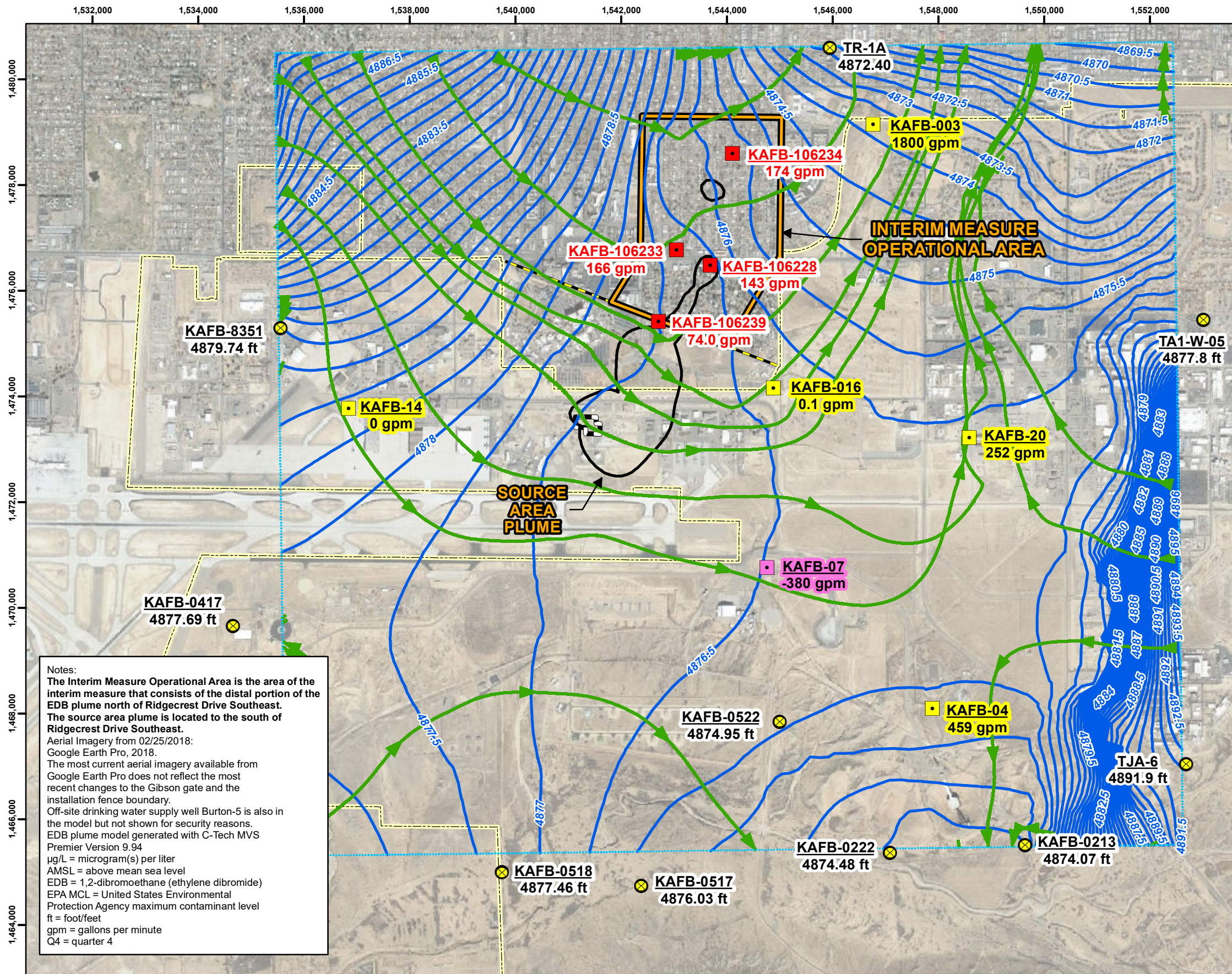
Captured by Extraction Well

- ▭ Will Be Captured by an IR Extraction Well
- ▭ Can Be Captured by an IR Extraction Well
- ▭ Will Not Be Captured by an IR Extraction Well

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FIGURE 6-10

WATER LEVEL PAIRS
 REI 4857 AND REI 4838
 Q4 2020



Notes:
 The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgcrest Drive Southeast. The source area plume is located to the south of Ridgcrest Drive Southeast.
 Aerial Imagery from 02/25/2018:
 Google Earth Pro, 2018.
 The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
 Off-site drinking water supply well Burton-5 is also in the model but not shown for security reasons.
 EDB plume model generated with C-Tech MVS Premier Version 9.94
 µg/L = microgram(s) per liter
 AMSL = above mean sea level
 EDB = 1,2-dibromoethane (ethylene dibromide)
 EPA MCL = United States Environmental Protection Agency maximum contaminant level
 ft = foot/feet
 gpm = gallons per minute
 Q4 = quarter 4

Legend

- Model Assigned Interim Remedy Extraction Well (Extraction Rate)
- Model Assigned Injection Well (Injection Rate)
- Model Assigned Base Drinking Water Supply Well (Extraction Rate)
- ⊗ Groundwater Monitoring Boundary Well (groundwater elevation - ft AMSL)
- Constant Head Boundary
- ➔ Pre-Extraction Particle Track (Flow Direction)
- Pre-Extraction Potentiometric Surface Contours (ft AMSL)
- ⊗ EDB Plume with Concentration > 0.05 µg/L (EPA MCL) The depicted boundary represents the 0.05 µg/L concentration contour (Simulated)
- Target Capture Zone Boundary
- Installation Fence Boundary
- ▭ Interim Measure Operational Source Area

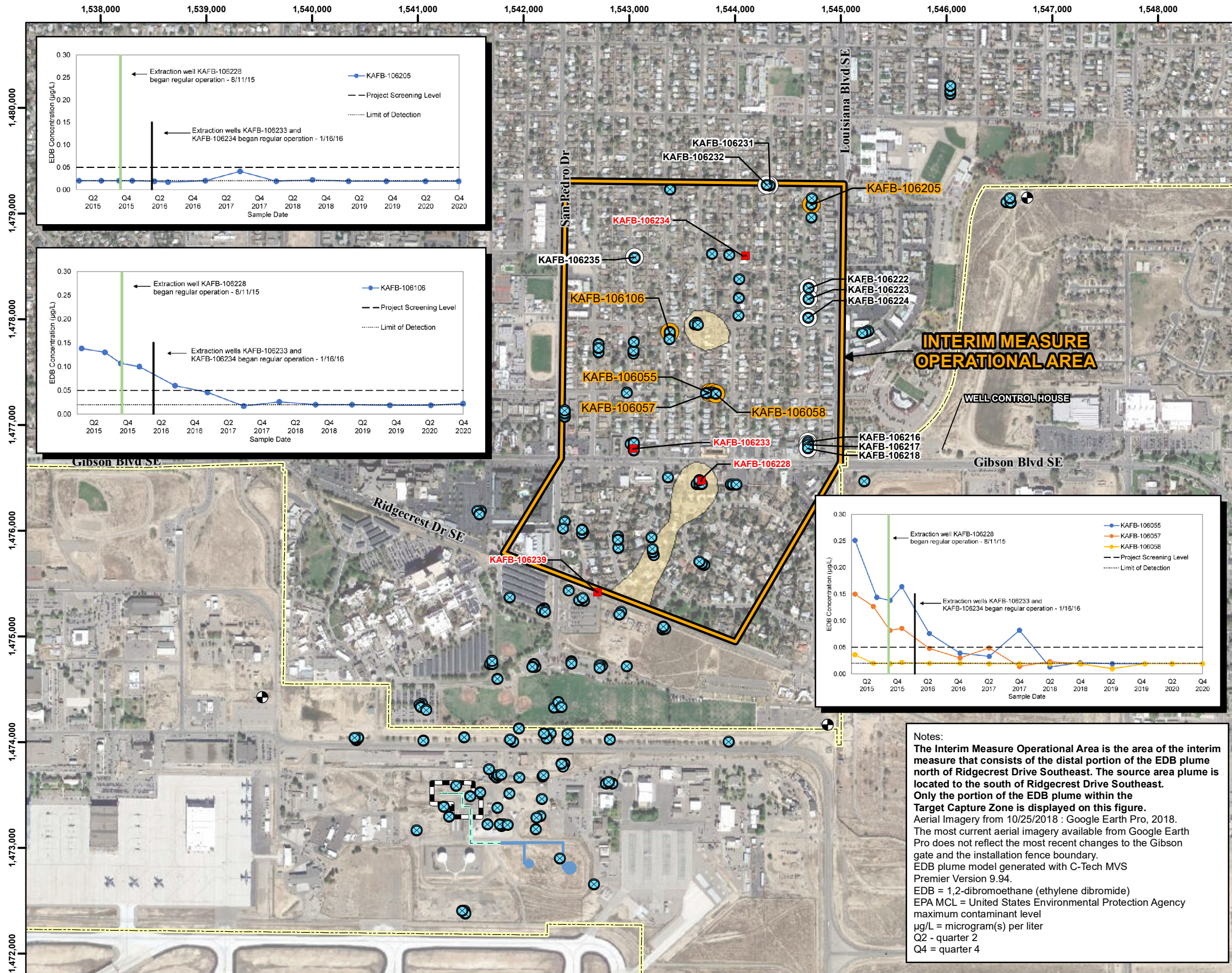
0 1,000 2,000 4,000
Feet

Projection: NAD83 State Plane New Mexico Central FIPS3002 Feet

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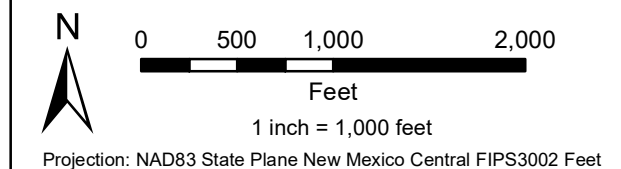
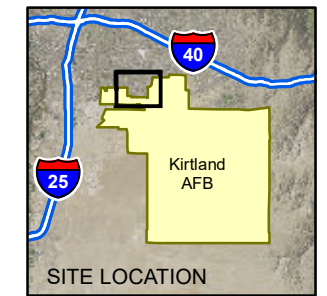
FIGURE 6-11

GROUNDWATER FLOW MODEL DOMAIN, KEY FEATURES AND NON-EXTRACTION FLOW FIELD, Q4 2020



Legend

- Performance Monitoring Well (Performance Assessment)
- Sentinel Well (Performance Assessment)
- Groundwater Monitoring Well
- Extraction Well
- Drinking Water Supply Well
- Former Aboveground Storage Tank
- Former Buried Fuel Transfer Line
- Former Aboveground Fuel Transfer
- Installation Boundary
- Q4 2020 EDB Plume within the Target Capture Zone with Concentration > 0.05 µg/L (EPA MCL) (Simulated)
- Interim Measure Operational
- Source Area



Notes:
The Interim Measure Operational Area is the area of the interim measure that consists of the distal portion of the EDB plume north of Ridgcrest Drive Southeast. The source area plume is located to the south of Ridgcrest Drive Southeast. Only the portion of the EDB plume within the Target Capture Zone is displayed on this figure.
 Aerial Imagery from 10/25/2018 : Google Earth Pro, 2018.
 The most current aerial imagery available from Google Earth Pro does not reflect the most recent changes to the Gibson gate and the installation fence boundary.
 EDB plume model generated with C-Tech MVS Premier Version 9.94.
 EDB = 1,2-dibromoethane (ethylene dibromide)
 EPA MCL = United States Environmental Protection Agency maximum contaminant level
 µg/L = microgram(s) per liter
 Q2 - quarter 2
 Q4 = quarter 4

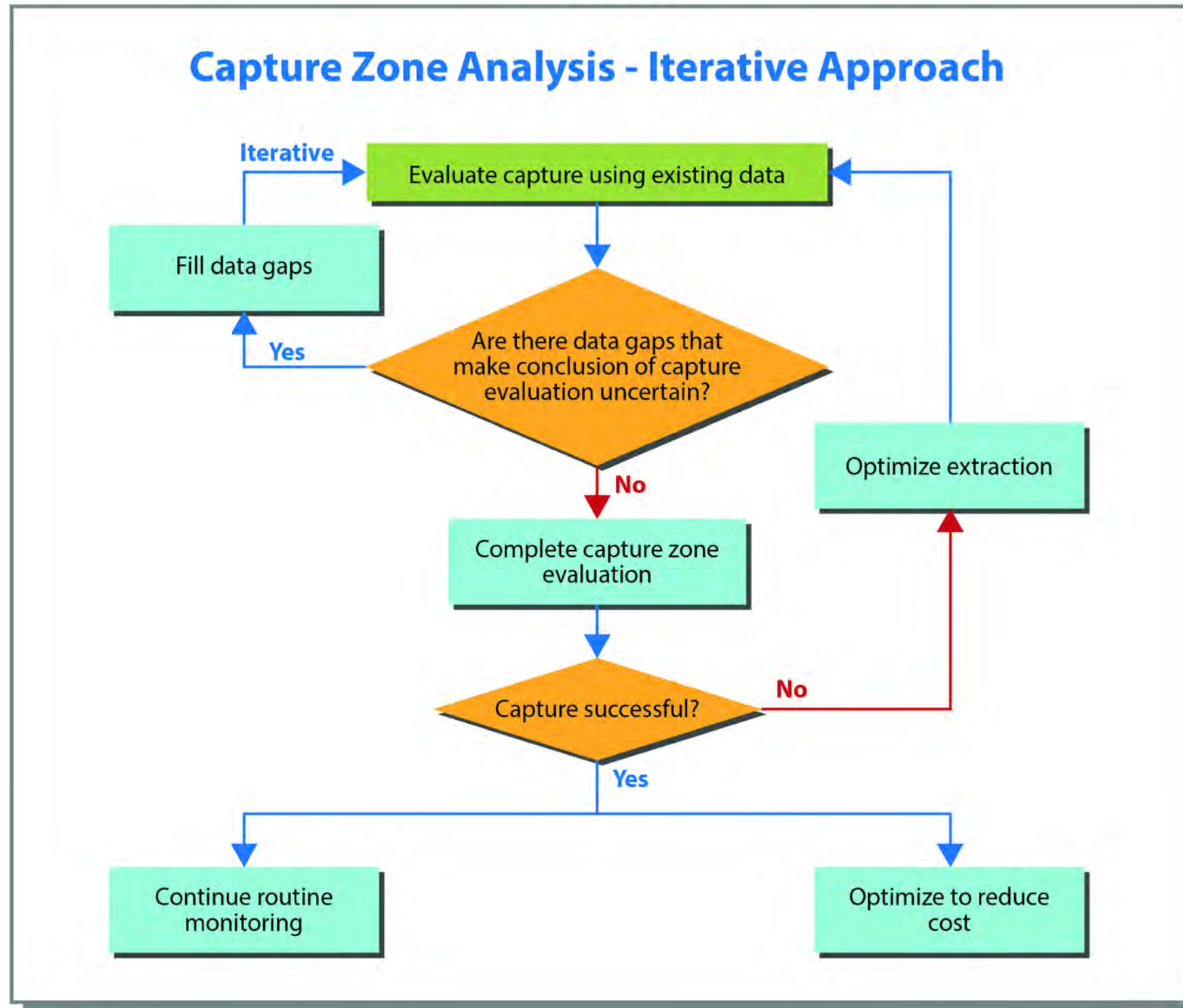
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FIGURE 6-12

CONCENTRATION TRENDS IN PERFORMANCE MONITORING WELLS, 2015 - 2020

Exhibit 7

Capture Zone Analysis - Iterative Approach



Notes:
 Exhibit 7 reproduced from
A Systematic Approach for Evaluation of Capture Zones at Pump and Treat Systems: Final Project Report.
 U.S. Environmental Protection Agency (EPA) 600/R-08/003.
 January. pp. 166.

EPA = U.S. Environmental Protection Agency

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FIGURE 6-13

EPA CAPTURE ZONE ANALYSIS -
 ITERATIVE APPROACH (EXHIBIT 7)

TABLES

**Table 3-1
Soil Vapor Well Construction Parameters and Pre-Calculated Purge Volumes**

AOI	Sample Location	Location ID ^a	Screened Interval (ft bgs)		Well Diameter (in)	Casing Area (ft ²)	Filter Pack Volume ^b (ft ³)	Purge Volume (ft ³)
			Top	Bottom				
Off Base	KAFB-106028	KAFB-106028-150	148.75	151.25	1/2	0.00136	0.409	0.615
		KAFB-106028-250	248.75	251.25	1/2	0.00136	0.409	0.752
		KAFB-106028-350	348.75	351.25	1/2	0.00136	0.409	0.888
		KAFB-106028-450	448.75	451.25	1/2	0.00136	0.409	1.024
	KAFB-106136	KAFB-106136-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106136-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106136-150	140	150	3/4	0.00307	1.636	2.096
		KAFB-106136-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106136-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106136-450	440	450	3	0.04909	1.636	23.725
	KAFB-106138	KAFB-106138-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106138-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106138-150	140	150	3/4	0.00307	1.636	2.096
		KAFB-106138-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106138-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106138-450	440	450	3	0.04909	1.636	23.725
	KAFB-106141	KAFB-106141-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106141-050	50	60	3/4	0.00307	1.636	1.820
		KAFB-106141-170	160	170	3/4	0.00307	1.636	2.158
		KAFB-106141-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106141-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106141-450	440	450	3	0.04909	1.636	23.725
	KAFB-106142	KAFB-106142-030	20	30	3/4	0.00307	1.636	1.728
		KAFB-106142-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106142-170	160	170	3/4	0.00307	1.636	2.158
		KAFB-106142-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106142-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106142-450	440	450	3	0.04909	1.636	23.725

**Table 3-1
Soil Vapor Well Construction Parameters and Pre-Calculated Purge Volumes**

AOI	Sample Location	Location ID ^a	Screened Interval (ft bgs)		Well Diameter (in)	Casing Area (ft ²)	Filter Pack Volume ^b (ft ³)	Purge Volume (ft ³)
			Top	Bottom				
On Base (Outside the Source Area)	KAFB-106108	KAFB-106108-025	15.3	25.3	3/4	0.00307	1.636	1.714
		KAFB-106108-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106108-150	140.2	150.2	3/4	0.00307	1.636	2.097
		KAFB-106108-250	240.3	250.3	3/4	0.00307	1.636	2.404
		KAFB-106108-350	340.3	350.3	3/4	0.00307	1.636	2.711
		KAFB-106108-450	440	450	3	0.04909	1.636	23.725
	KAFB-106109	KAFB-106109-025	15.2	25.2	3/4	0.00307	1.636	1.713
		KAFB-106109-050	40.1	50.1	3/4	0.00307	1.636	1.790
		KAFB-106109-150	140	150	3/4	0.00307	1.636	2.096
		KAFB-106109-250	240.2	250.2	3/4	0.00307	1.636	2.404
		KAFB-106109-350	340.6	350.6	3/4	0.00307	1.636	2.712
		KAFB-106109-450	440	450	3	0.04909	1.636	23.725
	KAFB-106110	KAFB-106110-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106110-050	40.1	50.1	3/4	0.00307	1.636	1.790
		KAFB-106110-150	140.3	150.3	3/4	0.00307	1.636	2.097
		KAFB-106110-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106110-350	340.2	350.2	3/4	0.00307	1.636	2.710
		KAFB-106110-450	440	450	3	0.04909	1.636	23.725
	KAFB-106111	KAFB-106111-025	15.2	25.2	3/4	0.00307	1.636	1.713
		KAFB-106111-050	40.1	50.1	3/4	0.00307	1.636	1.790
		KAFB-106111-150	140.3	150.3	3/4	0.00307	1.636	2.097
		KAFB-106111-250	240.3	250.3	3/4	0.00307	1.636	2.404
		KAFB-106111-350	340.4	350.4	3/4	0.00307	1.636	2.711
		KAFB-106111-450	440.3	450.3	3	0.04909	1.636	23.740
	KAFB-106112	KAFB-106112-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106112-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106112-150	140	150	3/4	0.00307	1.636	2.096
		KAFB-106112-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106112-350	339	349	3/4	0.00307	1.636	2.707
		KAFB-106112-450	439	449	3	0.04909	1.636	23.676

**Table 3-1
Soil Vapor Well Construction Parameters and Pre-Calculated Purge Volumes**

AOI	Sample Location	Location ID ^a	Screened Interval (ft bgs)		Well Diameter (in)	Casing Area (ft ²)	Filter Pack Volume ^b (ft ³)	Purge Volume (ft ³)
			Top	Bottom				
On Base (Outside the Source Area)	KAFB-106113	KAFB-106113-020	10	20	3/4	0.00307	1.636	1.697
		KAFB-106113-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106113-150	140	150	3/4	0.00307	1.636	2.096
	KAFB-106113	KAFB-106113-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106113-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106113-450	440	450	3	0.04909	1.636	23.725
	KAFB-106114	KAFB-106114-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106114-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106114-150	140	150	3/4	0.00307	1.636	2.096
		KAFB-106114-250	235	245	3/4	0.00307	1.636	2.388
		KAFB-106114-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106114-450	439.6	449.6	3	0.04909	1.636	23.706
	KAFB-106115	KAFB-106115-025	14.6	24.6	3/4	0.00307	1.636	1.711
		KAFB-106115-050	39.6	49.6	3/4	0.00307	1.636	1.788
		KAFB-106115-150	144.6	154.6	3/4	0.00307	1.636	2.110
		KAFB-106115-250	239.6	249.6	3/4	0.00307	1.636	2.402
		KAFB-106115-350	339.6	349.6	3/4	0.00307	1.636	2.709
		KAFB-106115-450	439.6	449.6	3	0.04909	1.636	23.706
	KAFB-106116	KAFB-106116-025	10	19.45	3/4	0.00307	1.54602	1.606
		KAFB-106116-050	40	49.45	3/4	0.00307	1.54602	1.698
		KAFB-106116-150	140	149.45	3/4	0.00307	1.54602	2.005
		KAFB-106116-250	240	249.45	3/4	0.00307	1.54602	2.311
		KAFB-106116-350	340	349.45	3/4	0.00307	1.54602	2.618
		KAFB-106116-450	440	448.95	3	0.04909	1.46422	23.502
	KAFB-106117	KAFB-106117-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106117-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106117-150	140	150	3/4	0.00307	1.636	2.096
		KAFB-106117-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106117-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106117-450	440	450	3	0.04909	1.636	23.725

**Table 3-1
Soil Vapor Well Construction Parameters and Pre-Calculated Purge Volumes**

AOI	Sample Location	Location ID ^a	Screened Interval (ft bgs)		Well Diameter (in)	Casing Area (ft ²)	Filter Pack Volume ^b (ft ³)	Purge Volume (ft ³)
			Top	Bottom				
On Base (Outside the Source Area)	KAFB-106118	KAFB-106118-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106118-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106118-160	150	160	3/4	0.00307	1.636	2.127
		KAFB-106118-265	255	265	3/4	0.00307	1.636	2.449
		KAFB-106118-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106118-450	440	450	3	0.04909	1.636	23.725
	KAFB-106119	KAFB-106119-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106119-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106119-150	140	150	3/4	0.00307	1.636	2.096
		KAFB-106119-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106119-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106119-450	440	450	3	0.04909	1.636	23.725
	KAFB-106120	KAFB-106120-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106120-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106120-150	140	150	3/4	0.00307	1.636	2.096
		KAFB-106120-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106120-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106120-450	434	444	3	0.04909	1.636	23.431
	KAFB-106121	KAFB-106121-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106121-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106121-145	135	145	3/4	0.00307	1.636	2.081
		KAFB-106121-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106121-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106121-450	434	444	3	0.04909	1.636	23.431
	KAFB-106122	KAFB-106122-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106122-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106122-150	140	150	3/4	0.00307	1.636	2.096
		KAFB-106122-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106122-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106122-450	434	444	3	0.04909	1.636	23.431

**Table 3-1
Soil Vapor Well Construction Parameters and Pre-Calculated Purge Volumes**

AOI	Sample Location	Location ID ^a	Screened Interval (ft bgs)		Well Diameter (in)	Casing Area (ft ²)	Filter Pack Volume ^b (ft ³)	Purge Volume (ft ³)
			Top	Bottom				
On Base (Outside the Source Area)	KAFB-106123	KAFB-106123-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106123-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106123-150	140	150	3/4	0.00307	1.636	2.096
		KAFB-106123-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106123-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106123-450	432	442	3	0.04909	1.636	23.333
	KAFB-106124	KAFB-106124-025	15.1	25	3/4	0.00307	1.61964	1.696
		KAFB-106124-050	40.1	50	3/4	0.00307	1.61964	1.773
		KAFB-106124-150	140.1	150	3/4	0.00307	1.61964	2.080
		KAFB-106124-250	240.1	250	3/4	0.00307	1.61964	2.387
		KAFB-106124-350	340.1	350	3/4	0.00307	1.61964	2.693
		KAFB-106124-450	440.1	450	3	0.04909	1.61964	23.709
	KAFB-106125	KAFB-106125-025	15.2	25	3/4	0.00307	1.60328	1.680
		KAFB-106125-050	40.2	50	3/4	0.00307	1.60328	1.757
		KAFB-106125-150	140.2	150	3/4	0.00307	1.60328	2.063
		KAFB-106125-250	240.2	250	3/4	0.00307	1.60328	2.370
		KAFB-106125-350	340.2	350	3/4	0.00307	1.60328	2.677
		KAFB-106125-450	440.2	450	3	0.04909	1.60328	23.693
	KAFB-106126	KAFB-106126-025	15.1	25	3/4	0.00307	1.61964	1.696
		KAFB-106126-050	40.1	50	3/4	0.00307	1.61964	1.773
		KAFB-106126-150	140.1	150	3/4	0.00307	1.61964	2.080
		KAFB-106126-250	240.1	250	3/4	0.00307	1.61964	2.387
		KAFB-106126-350	340.1	350	3/4	0.00307	1.61964	2.693
		KAFB-106126-450	440.2	450	3	0.04909	1.60328	23.693
	KAFB-106127	KAFB-106127-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106127-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106127-150	140	150	3/4	0.00307	1.636	2.096
		KAFB-106127-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106127-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106127-450	440	450	3	0.04909	1.636	23.725

**Table 3-1
Soil Vapor Well Construction Parameters and Pre-Calculated Purge Volumes**

AOI	Sample Location	Location ID ^a	Screened Interval (ft bgs)		Well Diameter (in)	Casing Area (ft ²)	Filter Pack Volume ^b (ft ³)	Purge Volume (ft ³)
			Top	Bottom				
On Base (Outside the Source Area)	KAFB-106128	KAFB-106128-025	15.04	25.04	3/4	0.00307	1.636	1.713
		KAFB-106128-050	40.07	50.07	3/4	0.00307	1.636	1.790
		KAFB-106128-150	140.19	150.19	3/4	0.00307	1.636	2.097
		KAFB-106128-250	240.29	250.29	3/4	0.00307	1.636	2.404
		KAFB-106128-350	340.39	350.39	3/4	0.00307	1.636	2.711
		KAFB-106128-450	440.06	450.06	3	0.04909	1.636	23.728
	KAFB-106129	KAFB-106129-025	15.1	25.1	3/4	0.00307	1.636	1.713
		KAFB-106129-050	39.7	49.7	3/4	0.00307	1.636	1.788
		KAFB-106129-150	140.2	150.2	3/4	0.00307	1.636	2.097
	KAFB-106129	KAFB-106129-250	240.1	250.1	3/4	0.00307	1.636	2.403
		KAFB-106129-350	337.4	347.4	3/4	0.00307	1.636	2.702
		KAFB-106129-450	440.7	450.7	3	0.04909	1.636	23.760
	KAFB-106130	KAFB-106130-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106130-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106130-150	150	160	3/4	0.00307	1.636	2.127
		KAFB-106130-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106130-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106130-450	440	450	3	0.04909	1.636	23.725
	KAFB-106131	KAFB-106131-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106131-055	45	55	3/4	0.00307	1.636	1.805
		KAFB-106131-150	140	150	3/4	0.00307	1.636	2.096
		KAFB-106131-245	235	245	3/4	0.00307	1.636	2.388
		KAFB-106131-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106131-450	430	440	3	0.04909	1.636	23.234
	KAFB-106132	KAFB-106132-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106132-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106132-175	164	174	3/4	0.00307	1.636	2.170
		KAFB-106132-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106132-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106132-450	440	450	3	0.04909	1.636	23.725

**Table 3-1
Soil Vapor Well Construction Parameters and Pre-Calculated Purge Volumes**

AOI	Sample Location	Location ID ^a	Screened Interval (ft bgs)		Well Diameter (in)	Casing Area (ft ²)	Filter Pack Volume ^b (ft ³)	Purge Volume (ft ³)
			Top	Bottom				
On Base (Outside the Source Area)	KAFB-106133	KAFB-106133-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106133-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106133-170	160	170	3/4	0.00307	1.636	2.158
		KAFB-106133-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106133-350	339	349	3/4	0.00307	1.636	2.707
		KAFB-106133-450	439	449	3	0.04909	1.636	23.676
	KAFB-106134	KAFB-106134-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106134-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106134-170	160	170	3/4	0.00307	1.636	2.158
		KAFB-106134-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106134-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106134-450	440	450	3	0.04909	1.636	23.725
	KAFB-106135	KAFB-106135-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106135-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106135-150	140	150	3/4	0.00307	1.636	2.096
		KAFB-106135-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106135-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106135-450	440	450	3	0.04909	1.636	23.725
	KAFB-106137	KAFB-106137-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106137-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106137-150	140	150	3/4	0.00307	1.636	2.096
		KAFB-106137-250	240.1	250.1	3/4	0.00307	1.636	2.403
		KAFB-106137-350	340.5	350.5	3/4	0.00307	1.636	2.711
		KAFB-106137-450	440	450	3	0.04909	1.636	23.725
	KAFB-106139	KAFB-106139-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106139-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106139-150	140	150	3/4	0.00307	1.636	2.096
		KAFB-106139-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106139-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106139-450	440	450	3	0.04909	1.636	23.725

**Table 3-1
Soil Vapor Well Construction Parameters and Pre-Calculated Purge Volumes**

AOI	Sample Location	Location ID ^a	Screened Interval (ft bgs)		Well Diameter (in)	Casing Area (ft ²)	Filter Pack Volume ^b (ft ³)	Purge Volume (ft ³)
			Top	Bottom				
On Base (Outside the Source Area)	KAFB-106140	KAFB-106140-025	15	25	3/4	0.00307	1.636	1.713
		KAFB-106140-050	40	50	3/4	0.00307	1.636	1.789
		KAFB-106140-150	141.8	151.8	3/4	0.00307	1.636	2.102
		KAFB-106140-250	240	250	3/4	0.00307	1.636	2.403
		KAFB-106140-350	340	350	3/4	0.00307	1.636	2.710
		KAFB-106140-450	440	450	3	0.04909	1.636	23.725
	SVMW-01	SVMW-01-050	50	52.5	1/2	0.00136	0.409	0.481
		SVMW-01-100	100	102.5	1/2	0.00136	0.409	0.549
		SVMW-01-250	250.7	253.2	1/2	0.00136	0.409	0.754
		SVMW-01-300	308.5	310	1/2	0.00136	0.2454	0.668
	SVMW-02	SVMW-02-050	50	52.5	1/2	0.00136	0.409	0.481
		SVMW-02-100	97	99.5	1/2	0.00136	0.409	0.545
		SVMW-02-150	150	152.5	1/2	0.00136	0.409	0.617
	SVMW-05	SVMW-05-050	50	52.5	1/2	0.00136	0.409	0.481
		SVMW-05-100	100	102.5	1/2	0.00136	0.409	0.549
		SVMW-05-230	229.5	231	1/2	0.00136	0.2454	0.560
		SVMW-05-290	287.5	290	1/2	0.00136	0.409	0.804
	SVMW-06	SVMW-06-050	50	52.5	1/2	0.00136	0.409	0.481
		SVMW-06-100	99.5	102	1/2	0.00136	0.409	0.548
		SVMW-06-252	252	254.5	1/2	0.00136	0.409	0.756
		SVMW-06-302	302.5	305	1/2	0.00136	0.409	0.825
	SVMW-07	SVMW-07-050	49.5	52	1/2	0.00136	0.409	0.480
		SVMW-07-100	95.5	98	1/2	0.00136	0.409	0.543
		SVMW-07-150	147.5	150	1/2	0.00136	0.409	0.614
	SVEW-10/SVMW-12	SVEW-10-410	400	410	2	0.02182	1.636	10.581
		SVMW-12-150	150	152.5	1/2	0.00136	0.409	0.617
		SVMW-12-250	250	252.5	1/2	0.00136	0.409	0.753
		SVMW-12-350	350	352.5	1/2	0.00136	0.409	0.890
		SVMW-12-450	450	452.5	1/2	0.00136	0.409	1.026

**Table 3-1
Soil Vapor Well Construction Parameters and Pre-Calculated Purge Volumes**

AOI	Sample Location	Location ID ^a	Screened Interval (ft bgs)		Well Diameter (in)	Casing Area (ft ²)	Filter Pack Volume ^b (ft ³)	Purge Volume (ft ³)
			Top	Bottom				
On Base (Outside the Source Area)	SVEW-11/SVMW-13	SVEW-11-410	400	410	2	0.02182	1.636	10.581
		SVMW-13-150	150	152.5	1/2	0.00136	0.409	0.617
		SVMW-13-250	250	252.5	1/2	0.00136	0.409	0.753
		SVMW-13-350	350	352.5	1/2	0.00136	0.409	0.890
		SVMW-13-450	450	452.5	1/2	0.00136	0.409	1.026
	SVEW-12/SVMW-14	SVEW-12-410	400	410	2	0.02182	1.636	10.581
		SVMW-14-150	150	152.5	1/2	0.00136	0.409	0.617
		SVMW-14-250	250	252.5	1/2	0.00136	0.409	0.753
		SVMW-14-350	350	352.5	1/2	0.00136	0.409	0.890
		SVMW-14-450	450	452.5	1/2	0.00136	0.409	1.026
	SVEW-13/SVMW-15	SVEW-13-410	400	410	2	0.02182	1.636	10.581
		SVMW-15-150	150	152.5	1/2	0.00136	0.409	0.617
		SVMW-15-250	250	252.5	1/2	0.00136	0.409	0.753
		SVMW-15-350	350	352.5	1/2	0.00136	0.409	0.890
		SVMW-15-450	450	452.5	1/2	0.00136	0.409	1.026

**Table 3-1
Soil Vapor Well Construction Parameters and Pre-Calculated Purge Volumes**

AOI	Sample Location	Location ID ^a	Screened Interval (ft bgs)		Well Diameter (in)	Casing Area (ft ²)	Filter Pack Volume ^b (ft ³)	Purge Volume (ft ³)
			Top	Bottom				
On Base (Inside the Source Area)	SVEW-01	SVEW-01-260	245	260	2	0.02182	2.454	8.126
	SVEW-02/03	SVEW-02-060	45	60	2	0.02182	2.454	3.763
		SVEW-03-160	145	160	2	0.02182	2.454	5.945
	SVEW-04/05	SVEW-04-313	298	313	2	0.02182	2.454	9.283
		SVEW-05-460	445	460	2	0.02182	2.454	12.490
	SVEW-06/07	SVEW-06-060	45	60	2	0.02182	2.454	3.763
		SVEW-07-160	145	160	2	0.02182	2.454	5.945
	SVEW-08/09	SVEW-08-260	245	260	2	0.02182	2.454	8.126
		SVEW-09-460	443	457	2	0.02182	2.2904	12.261
	SVMW-03	SVMW-03-050	50	52.5	1/2	0.00136	0.409	0.481
		SVMW-03-100	100	102.5	1/2	0.00136	0.409	0.549
		SVMW-03-250	250	252.5	1/2	0.00136	0.409	0.753
		SVMW-03-300	300	302.5	1/2	0.00136	0.409	0.821
	SVMW-04	SVMW-04-050	50	52.5	1/2	0.00136	0.409	0.481
		SVMW-04-100	98	100.5	1/2	0.00136	0.409	0.546
		SVMW-04-250	250	252.5	1/2	0.00136	0.409	0.753
		SVMW-04-300	297.5	300	1/2	0.00136	0.409	0.818
	SVMW-08	SVMW-08-050	50	52.5	1/2	0.00136	0.409	0.481
		SVMW-08-100	100	102.5	1/2	0.00136	0.409	0.549
		SVMW-08-250	250	252.5	1/2	0.00136	0.409	0.753
	SVMW-09	SVMW-09-050	50	52.5	1/2	0.00136	0.409	0.481
		SVMW-09-100	100	102.5	1/2	0.00136	0.409	0.549
		SVMW-09-250	250	252.5	1/2	0.00136	0.409	0.753
		SVMW-09-266	266	268.5	1/2	0.00136	0.409	0.775
	SVMW-10	SVMW-10-050	50	52.5	1/2	0.00136	0.409	0.481
		SVMW-10-100	100	102.5	1/2	0.00136	0.409	0.549
		SVMW-10-150	150	152.5	1/2	0.00136	0.409	0.617
		SVMW-10-250	250	252.5	1/2	0.00136	0.409	0.753
	SVMW-11	SVMW-11-050	50	52.5	1/2	0.00136	0.409	0.481
		SVMW-11-100	100	102.5	1/2	0.00136	0.409	0.549
		SVMW-11-250	250	252.5	1/2	0.00136	0.409	0.753
		SVMW-11-260	260	262.5	1/2	0.00136	0.409	0.767

Table 3-1
Soil Vapor Well Construction Parameters and Pre-Calculated Purge Volumes

^a Although screen depths vary across the vapor network, nominal depths of 25, 50, 100, 150, 250, 350 and 450 feet are used to group various screen intervals for evaluation

^b Filter Pack Volume (V) was calculated using the following equation: $((\pi * d^2) / 4) * P * L = V$

$\pi \approx 3.14159$

d = Diameter of the borehole casing (0.833 ft)

P = Porosity of sand (assumed 0.3)

L = Length of the screened interval (ft)

AOI = area of interest

bgs = below ground surface

ft = foot

ft² = square feet

ft³ = cubic feet

ID = identification

in = inch

Table 3-2
Field Measurements for Soil Vapor Monitoring, Q4 2020

AOI	Sample Location	Location ID	Date	Sample ID	Static Pressure (inH ₂ O)	CO ₂ (%)	O ₂ (%)	HC (ppmv)	Volume Purged (ft ³)
Off Base	KAFB-106028	KAFB-106028-150	10/06/20	SV028-150-204	0.0	0.14	19.32	7	0.633
		KAFB-106028-250	10/06/20	SV028-250-204	0.0	0.28	19.53	8	0.767
		KAFB-106028-350	10/06/20	SV028-350-204	0.0	0.32	19.69	5	0.900
		KAFB-106028-450	10/06/20	SV028-450-204	0.0	1.46	18.26	10	1.033
	KAFB-106136	KAFB-106136-025	10/06/20	SV136-025-204	0.0	0.32	20.01	1	1.733
		KAFB-106136-050	10/06/20	SV136-050-204	-0.2	0.28	19.92	2	1.800
		KAFB-106136-150	10/06/20	SV136-150-204	-1.0	0.12	19.86	1	2.133
		KAFB-106136-250	10/06/20	SV136-250-204	-1.2	0.14	20.17	1	2.467
		KAFB-106136-350	10/06/20	SV136-350-204	-1.3	0.16	20.02	1	2.733
		KAFB-106136-450	10/06/20	SV136-450-204	-1.3	0.16	20.16	0	23.733
	KAFB-106138	KAFB-106138-025	10/06/20	SV138-025-204	-0.1	3.56	17.66	1	2.667
		KAFB-106138-050	10/06/20	SV138-050-204	-0.2	3.48	17.49	0	1.800
		KAFB-106138-150	10/06/20	SV138-150-204	-0.9	0.28	19.17	0	2.133
		KAFB-106138-250	10/06/20	SV138-250-204	-1.0	0.02	20.95	2	2.800
		KAFB-106138-350	10/06/20	SV138-350-204	-1.0	0.26	20.28	1	2.800
		KAFB-106138-450	10/06/20	SV138-450-204	-1.1	3.40	18.20	3	23.733
	KAFB-106141	KAFB-106141-025	10/06/20	SV141-025-204	-0.3	1.10	19.43	2	1.733
		KAFB-106141-050	10/06/20	SV141-050-204	-0.3	0.32	19.85	1	1.867
		KAFB-106141-170	10/06/20	SV141-170-204	-0.9	0.20	20.24	2	2.200
		KAFB-106141-250	10/06/20	SV141-250-204	-1.0	0.22	20.35	1	2.467
		KAFB-106141-350	10/06/20	SV141-350-204	-1.1	0.22	20.54	2	2.733
		KAFB-106141-450	10/06/20	SV141-450-204	-1.1	0.30	20.49	2	23.733
	KAFB-106142	KAFB-106142-030	10/05/20	SV142-030-204	0.0	0.36	19.85	3	1.733
		KAFB-106142-050	10/05/20	SV142-050-204	0.0	0.32	19.72	3	1.800
		KAFB-106142-170	10/05/20	SV142-170-204	0.0	0.12	19.72	1	2.200
		KAFB-106142-250	10/05/20	SV142-250-204	0.0	0.14	19.72	4	2.400
		KAFB-106142-350	10/05/20	SV142-350-204	0.0	0.16	19.88	3	2.733
		KAFB-106142-450	10/05/20	SV142-450-204	0.0	0.02	20.27	0	23.733

**Table 3-2
Field Measurements for Soil Vapor Monitoring, Q4 2020**

AOI	Sample Location	Location ID	Date	Sample ID	Static Pressure (inH ₂ O)	CO ₂ (%)	O ₂ (%)	HC (ppmv)	Volume Purged (ft ³)
On Base (Outside the Source Area)	KAFB-106108	KAFB-106108-025	10/19/20	SV108-025-204	0.0	1.08	19.77	2	1.733
		KAFB-106108-050	10/19/20	SV108-050-204	0.0	2.98	16.10	2	1.800
		KAFB-106108-150	10/19/20	SV108-150-204	0.0	2.62	14.08	1930	2.133
		KAFB-106108-250	10/19/20	SV108-250-204	0.0	2.58	14.52	5480	2.467
		KAFB-106108-350	10/19/20	SV108-350-204	0.0	0.32	18.97	4	2.733
		KAFB-106108-450	10/19/20	SV108-450-204	0.0	0.64	19.44	3	23.733
	KAFB-106109	KAFB-106109-025	10/13/20	SV109-025-204	0.0	0.66	20.23	0	1.800
		KAFB-106109-050	10/13/20	SV109-050-204	0.0	1.00	19.93	1	1.800
		KAFB-106109-150	10/13/20	SV109-150-204	-2.2	0.20	18.06	1	2.133
		KAFB-106109-250	10/13/20	SV109-250-204	-2.2	0.34	18.70	3	2.400
		KAFB-106109-350	10/13/20	SV109-350-204	-2.2	0.26	20.01	2	2.733
		KAFB-106109-450	10/13/20	SV109-450-204	-2.3	0.90	19.70	4	23.733
	KAFB-106110	KAFB-106110-025	10/13/20	SV110-025-204	0.0	0.56	20.32	1	1.800
		KAFB-106110-050	10/13/20	SV110-050-204	0.0	1.28	18.88	3	1.867
		KAFB-106110-150	10/13/20	SV110-150-204	-1.6	2.14	12.42	810	2.133
		KAFB-106110-250	10/13/20	SV110-250-204	-1.7	3.74	11.22	12470	2.400
		KAFB-106110-350	10/13/20	SV110-350-204	-2.1	0.28	17.36	215	2.733
		KAFB-106110-450	10/13/20	SV110-450-204	-2.1	0.50	19.49	52	23.733
	KAFB-106111	KAFB-106111-025	10/06/20	SV111-025-204	-0.8	1.66	19.20	0	1.733
		KAFB-106111-050	10/06/20	SV111-050-204	0.0	5.38	14.48	0	1.800
		KAFB-106111-150	10/06/20	SV111-150-204	-0.7	9.50	7.25	1042	2.133
		KAFB-106111-250	10/06/20	SV111-250-204	-0.7	11.30	5.46	1682	2.467
		KAFB-106111-350	10/06/20	SV111-350-204	-0.8	5.64	11.25	8350	2.733
		KAFB-106111-450	10/06/20	SV111-450-204	-0.7	0.98	13.78	23	23.733

**Table 3-2
Field Measurements for Soil Vapor Monitoring, Q4 2020**

AOI	Sample Location	Location ID	Date	Sample ID	Static Pressure (inH ₂ O)	CO ₂ (%)	O ₂ (%)	HC (ppmv)	Volume Purged (ft ³)
On Base (Outside the Source Area)	KAFB-106112	KAFB-106112-025	10/19/20	SV112-025-204	0.0	0.32	19.26	1	1.733
		KAFB-106112-050	10/19/20	SV112-050-204	0.0	0.54	18.16	2	1.800
		KAFB-106112-150	10/19/20	SV112-150-204	0.0	0.74	17.49	1	2.133
		KAFB-106112-250	10/19/20	SV112-250-204	0.7	1.06	15.31	16	2.467
		KAFB-106112-350	10/19/20	SV112-350-204	0.0	1.10	14.63	3	2.733
		KAFB-106112-450	10/19/20	SV112-450-204	0.0	0.98	16.23	42	23.733
	KAFB-106113	KAFB-106113-020	10/13/20	SV113-020-204	-0.2	0.66	20.96	0	1.733
		KAFB-106113-050	10/13/20	SV113-050-204	-0.2	0.62	20.73	0	2.133
		KAFB-106113-150	10/13/20	SV113-150-204	-1.7	0.48	20.49	0	2.133
		KAFB-106113-250	10/13/20	SV113-250-204	-1.9	0.86	19.74	0	2.467
		KAFB-106113-350	10/13/20	SV113-350-204	-2.1	0.52	18.45	121	2.733
		KAFB-106113-450	10/13/20	SV113-450-204	-2.1	2.02	14.18	1251	23.733
	KAFB-106114	KAFB-106114-025	10/06/20	SV114-025-204	0.0	0.64	19.07	2	1.733
		KAFB-106114-050	10/06/20	SV114-050-204	0.0	0.70	18.85	0	1.800
		KAFB-106114-150	10/06/20	SV114-150-204	-0.6	0.60	18.37	0	2.133
		KAFB-106114-250	10/06/20	SV114-250-204	-0.5	1.04	16.54	0	2.400
		KAFB-106114-350	10/06/20	SV114-350-204	-0.6	1.28	13.31	5	2.733
		KAFB-106114-450	10/06/20	SV114-450-204	-0.8	5.06	8.40	4360	23.733
	KAFB-106115	KAFB-106115-025	10/13/20	SV115-025-204	-0.2	0.54	20.36	0	1.733
		KAFB-106115-050	10/13/20	SV115-050-204	-0.3	0.60	20.39	0	1.800
		KAFB-106115-150	10/13/20	SV115-150-204	-2.0	0.60	19.63	1	2.133
		KAFB-106115-250	10/13/20	SV115-250-204	-2.2	0.32	19.90	0	2.467
		KAFB-106115-350	10/13/20	SV115-350-204	-2.4	0.34	19.81	1	2.733
		KAFB-106115-450	10/13/20	SV115-450-204	-2.4	1.14	19.05	351	23.733

**Table 3-2
Field Measurements for Soil Vapor Monitoring, Q4 2020**

AOI	Sample Location	Location ID	Date	Sample ID	Static Pressure (inH ₂ O)	CO ₂ (%)	O ₂ (%)	HC (ppmv)	Volume Purged (ft ³)
On Base (Outside the Source Area)	KAFB-106116	KAFB-106116-025	10/06/20	SV116-025-204	0.0	0.36	20.12	2	1.667
		KAFB-106116-050	10/06/20	SV116-050-204	0.0	0.58	17.85	3	1.733
		KAFB-106116-150	10/06/20	SV116-150-204	-0.7	0.42	19.08	3	2.067
		KAFB-106116-250	10/06/20	SV116-250-204	-0.7	1.08	15.02	3	2.333
		KAFB-106116-350	10/06/20	SV116-350-204	-0.8	1.82	13.42	107	2.667
		KAFB-106116-450	10/06/20	SV116-450-204	-1.0	7.16	7.12	5520	23.333
	KAFB-106117	KAFB-106117-025	10/06/20	SV117-025-204	0.0	2.04	18.47	1	1.733
		KAFB-106117-050	10/06/20	SV117-050-204	0.0	3.52	15.30	1	1.800
		KAFB-106117-150	10/06/20	SV117-150-204	-0.8	4.56	10.96	1	2.133
		KAFB-106117-250	10/06/20	SV117-250-204	-0.9	13.20	1.57	19	2.400
		KAFB-106117-350	10/06/20	SV117-350-204	-1.0	9.58	6.11	366	2.733
		KAFB-106117-450	10/06/20	SV117-450-204	-1.3	13.14	1.07	6480	23.800
	KAFB-106118	KAFB-106118-025	10/19/20	SV118-025-204	0.0	0.64	19.72	4	1.733
		KAFB-106118-050	10/19/20	SV118-050-204	0.0	0.96	18.85	4	2.000
		KAFB-106118-160	10/19/20	SV118-160-204	0.0	1.12	16.33	152	2.133
		KAFB-106118-265	10/19/20	SV118-265-204	0.0	1.26	16.37	1458	2.467
		KAFB-106118-350	10/19/20	SV118-350-204	0.0	0.92	16.13	312	2.733
		KAFB-106118-450	10/19/20	SV118-450-204	0.0	1.66	15.06	35	23.733
	KAFB-106119	KAFB-106119-025	10/20/20	SV119-025-204	0.0	4.18	10.21	0	1.733
		KAFB-106119-050	10/20/20	SV119-050-204	0.3	11.34	1.91	0	1.800
		KAFB-106119-150	10/20/20	SV119-150-204	0.9	14.12	1.73	561	2.133
		KAFB-106119-250	10/20/20	SV119-250-204	1.0	7.58	9.87	5550	2.467
		KAFB-106119-350	10/20/20	SV119-350-204	1.0	5.48	12.31	3590	2.733
		KAFB-106119-450	10/20/20	SV119-450-204	1.0	7.18	5.45	1745	23.733

**Table 3-2
Field Measurements for Soil Vapor Monitoring, Q4 2020**

AOI	Sample Location	Location ID	Date	Sample ID	Static Pressure (inH ₂ O)	CO ₂ (%)	O ₂ (%)	HC (ppmv)	Volume Purged (ft ³)
On Base (Outside the Source Area)	KAFB-106120	KAFB-106120-025	10/12/20	SV120-025-204	-0.2	0.74	20.19	0	1.733
		KAFB-106120-050	10/12/20	SV120-050-204	-0.3	2.08	18.95	0	1.800
		KAFB-106120-150	10/12/20	SV120-150-204	-1.8	0.42	19.91	0	2.133
		KAFB-106120-250	10/12/20	SV120-250-204	-1.9	0.38	19.88	0	2.467
		KAFB-106120-350	10/12/20	SV120-350-204	-1.9	0.40	19.16	6	2.733
		KAFB-106120-450	10/12/20	SV120-450-204	-1.9	0.58	18.36	19	23.467
	KAFB-106121	KAFB-106121-025	10/12/20	SV121-025-204	-0.1	1.10	19.55	0	1.733
		KAFB-106121-050	10/12/20	SV121-050-204	-0.1	1.18	19.66	0	1.800
		KAFB-106121-145	10/12/20	SV121-145-204	-1.7	0.32	19.82	0	2.133
		KAFB-106121-250	10/12/20	SV121-250-204	-1.9	0.28	19.76	0	2.467
		KAFB-106121-350	10/12/20	SV121-350-204	-1.8	0.34	19.67	0	2.733
		KAFB-106121-450	10/12/20	SV121-450-204	-1.9	0.46	19.62	6	23.467
	KAFB-106122	KAFB-106122-025	10/12/20	SV122-025-204	-0.1	0.50	21.09	0	2.000
		KAFB-106122-050	10/12/20	SV122-050-204	-0.3	1.40	20.02	0	1.800
		KAFB-106122-150	10/12/20	SV122-150-204	-1.5	0.36	20.23	0	2.133
		KAFB-106122-250	10/12/20	SV122-250-204	-1.6	0.50	20.10	0	2.467
		KAFB-106122-350	10/12/20	SV122-350-204	-1.5	0.40	19.90	0	2.733
		KAFB-106122-450	10/12/20	SV122-450-204	-1.5	0.52	19.86	19	23.467
	KAFB-106123	KAFB-106123-025	10/12/20	SV123-025-204	0.0	0.78	19.98	1	1.733
		KAFB-106123-050	10/12/20	SV123-050-204	0.0	1.64	19.03	0	1.800
		KAFB-106123-150	10/12/20	SV123-150-204	-1.7	0.26	19.58	0	2.133
		KAFB-106123-250	10/12/20	SV123-250-204	-1.7	0.38	19.54	0	2.467
		KAFB-106123-350	10/12/20	SV123-350-204	-1.7	0.42	19.13	0	2.733
		KAFB-106123-450	10/12/20	SV123-450-204	-1.6	0.84	18.26	1	23.333

**Table 3-2
Field Measurements for Soil Vapor Monitoring, Q4 2020**

AOI	Sample Location	Location ID	Date	Sample ID	Static Pressure (inH ₂ O)	CO ₂ (%)	O ₂ (%)	HC (ppmv)	Volume Purged (ft ³)
On Base (Outside the Source Area)	KAFB-106124	KAFB-106124-025	10/05/20	SV124-025-204	0.0	0.34	20.60	0	1.700
		KAFB-106124-050	10/05/20	SV124-050-204	0.0	0.92	19.71	10	1.800
		KAFB-106124-150	10/05/20	SV124-150-204	-0.8	0.30	20.20	0	2.333
		KAFB-106124-250	10/05/20	SV124-250-204	-0.8	0.20	19.95	1	2.400
		KAFB-106124-350	10/05/20	SV124-350-204	-0.7	0.28	20.37	3	2.800
		KAFB-106124-450	10/05/20	SV124-450-204	-0.7	0.66	19.89	2	23.733
	KAFB-106125	KAFB-106125-025	10/05/20	SV125-025-204	0.0	1.22	19.50	3	1.733
		KAFB-106125-050	10/05/20	SV125-050-204	0.0	2.30	18.42	3	1.800
		KAFB-106125-150	10/05/20	SV125-150-204	-0.7	0.50	19.08	5	2.067
		KAFB-106125-250	10/05/20	SV125-250-204	-0.6	0.20	19.40	6	2.400
		KAFB-106125-350	10/05/20	SV125-350-204	-0.6	0.22	19.87	6	2.733
		KAFB-106125-450	10/05/20	SV125-450-204	-0.7	0.58	19.53	67	23.800
	KAFB-106126	KAFB-106126-025	10/20/20	SV126-025-204	0.0	1.16	19.64	0	1.733
		KAFB-106126-050	10/20/20	SV126-050-204	0.0	1.26	19.35	0	1.800
		KAFB-106126-150	10/20/20	SV126-150-204	0.6	0.26	19.65	0	2.133
		KAFB-106126-250	10/20/20	SV126-250-204	0.7	0.22	19.73	0	2.400
		KAFB-106126-350	10/20/20	SV126-350-204	0.8	0.26	20.24	4	2.733
		KAFB-106126-450	10/20/20	SV126-450-204	0.7	0.56	20.07	328	23.733
	KAFB-106127	KAFB-106127-025	10/05/20	SV127-025-204	0.0	0.58	20.43	1	1.733
		KAFB-106127-050	10/05/20	SV127-050-204	0.0	0.70	20.11	2	1.800
		KAFB-106127-150	10/05/20	SV127-150-204	-0.7	0.24	19.96	3	2.133
		KAFB-106127-250	10/05/20	SV127-250-204	-0.8	0.12	20.31	1	2.467
		KAFB-106127-350	10/05/20	SV127-350-204	-0.9	0.16	20.07	5	2.733
		KAFB-106127-450	10/05/20	SV127-450-204	-1.0	0.70	19.72	2	23.733

**Table 3-2
Field Measurements for Soil Vapor Monitoring, Q4 2020**

AOI	Sample Location	Location ID	Date	Sample ID	Static Pressure (inH ₂ O)	CO ₂ (%)	O ₂ (%)	HC (ppmv)	Volume Purged (ft ³)
On Base (Outside the Source Area)	KAFB-106128	KAFB-106128-025	10/06/20	SV128-025-204	0.1	2.14	16.98	1	1.733
		KAFB-106128-050	10/06/20	SV128-050-204	0.2	3.82	13.22	1	1.800
		KAFB-106128-150	10/06/20	SV128-150-204	-0.1	4.86	8.51	0	2.133
		KAFB-106128-250	10/06/20	SV128-250-204	-0.2	13.26	0.00	3890	2.467
		KAFB-106128-350	10/06/20	SV128-350-204	-0.4	9.12	3.83	5500	2.733
		KAFB-106128-450	10/06/20	SV128-450-204	-0.5	9.10	3.80	9270	23.733
	KAFB-106129	KAFB-106129-025	10/19/20	SV129-025-204	0.0	0.20	20.10	0	1.733
		KAFB-106129-050	10/19/20	SV129-050-204	0.0	0.20	19.88	0	1.800
		KAFB-106129-150	10/19/20	SV129-150-204	0.1	0.22	19.53	0	2.133
		KAFB-106129-250	10/19/20	SV129-250-204	0.1	0.46	19.28	0	2.467
		KAFB-106129-350	10/19/20	SV129-350-204	0.3	0.64	18.28	0	2.733
		KAFB-106129-450	10/19/20	SV129-450-204	0.2	1.82	15.82	173	23.800
	KAFB-106130	KAFB-106130-025	10/20/20	SV130-025-204	0.0	0.16	20.24	3	1.733
		KAFB-106130-050	10/20/20	SV130-050-204	0.0	0.18	20.06	0	1.800
		KAFB-106130-150	10/20/20	SV130-150-204	0.3	0.46	19.55	1	2.133
		KAFB-106130-250	10/20/20	SV130-250-204	0.3	0.74	19.30	0	2.467
		KAFB-106130-350	10/20/20	SV130-350-204	0.5	0.80	18.31	1	2.933
		KAFB-106130-450	10/20/20	SV130-450-204	0.4	0.18	20.72	2	23.733
	KAFB-106131	KAFB-106131-025	10/19/20	SV131-025-204	-0.1	0.42	19.38	1	1.733
		KAFB-106131-055	10/19/20	SV131-055-204	0.0	0.28	19.28	0	1.867
		KAFB-106131-150	10/19/20	SV131-150-204	0.0	0.38	18.90	0	2.133
		KAFB-106131-245	10/19/20	SV131-245-204	0.0	0.46	18.55	0	2.400
		KAFB-106131-350	10/19/20	SV131-350-204	0.0	0.38	15.62	2	2.733
		KAFB-106131-450	10/19/20	SV131-450-204	0.1	0.94	14.29	269	23.267

**Table 3-2
Field Measurements for Soil Vapor Monitoring, Q4 2020**

AOI	Sample Location	Location ID	Date	Sample ID	Static Pressure (inH ₂ O)	CO ₂ (%)	O ₂ (%)	HC (ppmv)	Volume Purged (ft ³)
On Base (Outside the Source Area)	KAFB-106132	KAFB-106132-025	10/12/20	SV132-025-204	0.0	3.06	17.37	3	1.733
		KAFB-106132-050	10/12/20	SV132-050-204	0.0	2.36	17.80	4	1.800
		KAFB-106132-175	10/12/20	SV132-175-204	-1.2	0.74	18.91	3	2.200
		KAFB-106132-250	10/12/20	SV132-250-204	-1.2	0.40	19.55	4	2.400
		KAFB-106132-350	10/12/20	SV132-350-204	-1.1	0.64	19.67	5	2.733
		KAFB-106132-450	10/12/20	SV132-450-204	-1.4	0.88	19.63	3	23.733
	KAFB-106133	KAFB-106133-025	10/06/20	SV133-025-204	0.0	2.70	17.67	2	1.733
		KAFB-106133-050	10/06/20	SV133-050-204	0.0	1.12	19.34	0	1.867
		KAFB-106133-170	10/06/20	SV133-170-204	-1.3	0.54	19.18	2	2.200
		KAFB-106133-250	10/06/20	SV133-250-204	-1.3	0.62	19.25	3	2.400
		KAFB-106133-350	10/06/20	SV133-350-204	-1.3	0.74	19.36	4	2.733
		KAFB-106133-450	10/06/20	SV133-450-204	-1.4	1.30	18.42	44	23.733
	KAFB-106134	KAFB-106134-025	10/12/20	SV134-025-204	0.0	0.28	20.08	1	1.733
		KAFB-106134-050	10/12/20	SV134-050-204	0.0	0.18	20.19	0	1.800
		KAFB-106134-170	10/12/20	SV134-170-204	-1.3	0.22	19.92	0	2.200
		KAFB-106134-250	10/12/20	SV134-250-204	-0.9	0.32	19.72	0	2.400
		KAFB-106134-350	10/12/20	SV134-350-204	-0.9	0.42	19.66	0	2.733
		KAFB-106134-450	10/12/20	SV134-450-204	-1.0	0.58	19.77	21	23.733
	KAFB-106135	KAFB-106135-025	10/12/20	SV135-025-204	0.0	0.40	20.13	2	1.733
		KAFB-106135-050	10/12/20	SV135-050-204	0.0	0.34	20.17	4	1.800
		KAFB-106135-150	10/12/20	SV135-150-204	-1.3	0.18	19.85	5	2.133
		KAFB-106135-250	10/12/20	SV135-250-204	-1.9	0.22	19.98	4	2.467
		KAFB-106135-350	10/12/20	SV135-350-204	-1.7	0.30	20.14	4	2.733
		KAFB-106135-450	10/12/20	SV135-450-204	-1.8	0.28	20.05	3	23.733
	KAFB-106137	KAFB-106137-025	10/12/20	SV137-025-204	0.0	0.32	20.50	4	1.733
		KAFB-106137-050	10/12/20	SV137-050-204	0.0	0.38	20.45	3	1.800
		KAFB-106137-150	10/12/20	SV137-150-204	-1.7	0.26	20.11	2	2.133
KAFB-106137-250		10/12/20	SV137-250-204	-1.8	0.30	20.11	3	2.533	
KAFB-106137-350		10/12/20	SV137-350-204	-2.0	0.36	20.25	3	2.733	
KAFB-106137-450		10/12/20	SV137-450-204	-2.0	1.66	18.35	802	23.733	

**Table 3-2
Field Measurements for Soil Vapor Monitoring, Q4 2020**

AOI	Sample Location	Location ID	Date	Sample ID	Static Pressure (inH ₂ O)	CO ₂ (%)	O ₂ (%)	HC (ppmv)	Volume Purged (ft ³)
On Base (Outside the Source Area)	KAFB-106139	KAFB-106139-025	10/12/20	SV139-025-204	0.0	0.62	20.66	6	1.733
		KAFB-106139-050	10/12/20	SV139-050-204	0.0	0.76	20.33	4	1.800
		KAFB-106139-150	10/12/20	SV139-150-204	-1.6	0.68	19.11	8	2.133
		KAFB-106139-250	10/12/20	SV139-250-204	-1.7	0.60	18.92	39	2.400
		KAFB-106139-350	10/12/20	SV139-350-204	-1.6	0.42	19.51	0	2.733
		KAFB-106139-450	10/12/20	SV139-450-204	-1.5	0.48	20.13	4	23.733
	KAFB-106140	KAFB-106140-025	10/12/20	SV140-025-204	0.0	0.26	20.69	0	1.733
		KAFB-106140-050	10/12/20	SV140-050-204	0.0	0.20	20.59	0	1.800
		KAFB-106140-150	10/12/20	SV140-150-204	-1.4	0.18	20.05	0	2.133
		KAFB-106140-250	10/12/20	SV140-250-204	-1.5	0.22	19.90	0	2.467
		KAFB-106140-350	10/12/20	SV140-350-204	-1.5	0.24	19.84	0	2.733
		KAFB-106140-450	10/12/20	SV140-450-204	-1.5	0.18	19.69	0	23.733
	SVMW-01	SVMW-01-050	10/19/20	SV01-050-204	-0.2	12.26	1.02	0	0.500
		SVMW-01-100	10/19/20	SV01-100-204	-0.3	13.84	0.14	13620	0.567
		SVMW-01-250	10/19/20	SV01-250-204	-0.2	6.68	10.89	8610	0.767
		SVMW-01-300	10/19/20	SV01-300-204	0.0	0.40	17.87	172	0.700
	SVMW-02	SVMW-02-050	10/19/20	SV02-050-204	-0.2	14.64	3.28	222	0.500
		SVMW-02-100	10/19/20	SV02-100-204	-0.1	3.42	14.82	19260	0.567
		SVMW-02-150	10/19/20	SV02-150-204	0.0	0.74	19.40	15070	0.633
	SVMW-05	SVMW-05-050	10/19/20	SV05-050-204	-0.1	6.00	8.45	0	0.500
SVMW-05-100		10/19/20	SV05-100-204	-0.2	8.50	5.68	0	0.567	
SVMW-05-230		10/19/20	SV05-230-204	-0.2	5.20	7.29	9070	0.567	
SVMW-05-290		10/19/20	SV05-290-204	0.3	0.54	17.45	15	0.833	

**Table 3-2
Field Measurements for Soil Vapor Monitoring, Q4 2020**

AOI	Sample Location	Location ID	Date	Sample ID	Static Pressure (inH ₂ O)	CO ₂ (%)	O ₂ (%)	HC (ppmv)	Volume Purged (ft ³)
On Base (Outside the Source Area)	SVMW-06	SVMW-06-050	10/19/20	SV06-050-204	0.2	1.04	16.91	0	0.500
		SVMW-06-100	10/19/20	SV06-100-204	0.4	1.94	15.45	0	0.567
		SVMW-06-252	10/19/20	SV06-252-204	0.5	2.06	13.16	755	0.767
		SVMW-06-302	10/19/20	SV06-302-204	0.6	1.58	14.60	28	0.833
	SVMW-07	SVMW-07-050	10/13/20	SV07-050-204	-1.2	1.74	17.31	12550	0.500
		SVMW-07-100	10/13/20	SV07-100-204	-0.2	4.50	12.38	6820	0.567
		SVMW-07-150	10/13/20	SV07-150-204	0.0	3.12	14.16	3	0.667
	SVEW-10/SVMW-12	SVEW-10-410	10/19/20	SVE10-410-204	0.0	0.26	19.99	4	10.583
		SVMW-12-150	10/19/20	SV12-150-204	0.0	0.24	18.06	4	0.633
		SVMW-12-250	10/19/20	SV12-250-204	0.0	0.28	19.46	6	0.767
		SVMW-12-350	10/19/20	SV12-350-204	0.0	0.66	20.03	4	0.900
		SVMW-12-450	10/19/20	SV12-450-204	0.0	0.28	19.90	4	1.033
	SVEW-11/SVMW-13	SVEW-11-410	10/19/20	SVE11-410-204	0.7	0.92	18.40	78	10.583
		SVMW-13-150	10/19/20	SV13-150-204	0.7	6.40	9.61	918	0.633
		SVMW-13-250	10/19/20	SV13-250-204	0.9	0.64	19.85	3	0.767
		SVMW-13-350	10/19/20	SV13-350-204	1.1	0.70	19.35	4	0.900
		SVMW-13-450	10/19/20	SV13-450-204	0.9	0.84	17.74	4	1.033
	SVEW-12/SVMW-14	SVEW-12-410	10/13/20	SVE12-410-204	-2.4	0.66	19.63	0	10.600
		SVMW-14-150	10/13/20	SV14-150-204	-2.3	0.20	18.42	0	0.633
		SVMW-14-250	10/13/20	SV14-250-204	-2.3	0.26	18.32	0	0.767
		SVMW-14-350	10/13/20	SV14-350-204	-2.4	0.20	19.26	0	0.900
		SVMW-14-450	10/13/20	SV14-450-204	-2.5	0.88	19.67	0	1.033
	SVEW-13/SVMW-15	SVEW-13-410	10/19/20	SVE13-410-204	0.5	2.10	13.51	1295	10.583
		SVMW-15-150	10/19/20	SV15-150-204	0.5	0.54	18.27	5	0.633
		SVMW-15-250	10/19/20	SV15-250-204	0.0	0.66	17.20	9	0.833
		SVMW-15-350	10/19/20	SV15-350-204	0.7	0.98	15.05	184	1.000
		SVMW-15-450	10/19/20	SV15-450-204	0.6	4.72	9.06	4090	1.033

**Table 3-2
Field Measurements for Soil Vapor Monitoring, Q4 2020**

AOI	Sample Location	Location ID	Date	Sample ID	Static Pressure (inH ₂ O)	CO ₂ (%)	O ₂ (%)	HC (ppmv)	Volume Purged (ft ³)
On Base (Inside the Source Area)	SVEW-01	SVEW-01-260 ^b	--	--	--	--	--	--	--
	SVEW-02/03	SVEW-02-060 ^b	--	--	--	--	--	--	--
		SVEW-03-160 ^b	--	--	--	--	--	--	--
	SVEW-04/05	SVEW-04-313 ^b	--	--	--	--	--	--	--
		SVEW-05-460 ^b	--	--	--	--	--	--	--
	SVEW-06/07	SVEW-06-060	10/05/20	SVE06-060-204	0.0	10.28	7.33	5120	3.800
		SVEW-07-160	10/07/20	SVE07-160-204	-0.2	5.48	12.07	25060	6.000
	SVEW-08/09	SVEW-08-260	10/07/20	SVE08-260-204	0.4	3.78	15.31	705	8.200
		SVEW-09-460	10/05/20	SVE09-460-204	-0.5	0.28	20.26	10	12.267
	SVMW-03	SVMW-03-050	10/05/20	SV03-050-204	0.0	16.34	1.00	0	0.500
		SVMW-03-100	10/05/20	SV03-100-204	0.1	11.14	4.88	16270	0.567
		SVMW-03-250	10/05/20	SV03-250-204	0.1	1.04	18.29	12200	0.767
		SVMW-03-300	10/05/20	SV03-300-204	0.0	7.18	9.91	13610	0.833
	SVMW-04	SVMW-04-050	10/05/20	SV04-050-204	0.2	9.96	8.34	5030	0.500
		SVMW-04-100	10/05/20	SV04-100-204	0.5	2.64	16.76	23830	0.567
		SVMW-04-250	10/05/20	SV04-250-204	0.4	2.54	17.13	21240	0.767
SVMW-04-300		10/05/20	SV04-300-204	0.5	1.24	19.37	1405	0.833	

**Table 3-2
Field Measurements for Soil Vapor Monitoring, Q4 2020**

AOI	Sample Location	Location ID	Date	Sample ID	Static Pressure (inH ₂ O)	CO ₂ (%)	O ₂ (%)	HC (ppmv)	Volume Purged (ft ³)
On Base (Inside the Source Area)	SVMW-08	SVMW-08-050	10/05/20	SV08-050-204	-0.6	0.94	19.03	5690	0.533
		SVMW-08-100	10/05/20	SV08-100-204	0.0	9.94	8.52	193	0.567
		SVMW-08-250	10/05/20	SV08-250-204	0.0	3.08	16.59	10210	0.767
	SVMW-09	SVMW-09-050	10/05/20	SV09-050-204	0.4	12.70	4.72	2070	0.500
		SVMW-09-100	10/05/20	SV09-100-204	0.5	2.34	18.41	12960	0.567
		SVMW-09-250	10/05/20	SV09-250-204	1.0	0.24	19.86	5100	0.767
		SVMW-09-266	10/05/20	SV09-266-204	0.8	1.38	18.36	18120	0.800
	SVMW-10	SVMW-10-050 ^b	--	--	--	--	--	--	--
		SVMW-10-100 ^b	--	--	--	--	--	--	--
		SVMW-10-150 ^b	--	--	--	--	--	--	--
		SVMW-10-250 ^b	--	--	--	--	--	--	--
	SVMW-11	SVMW-11-050 ^b	--	--	--	--	--	--	--
		SVMW-11-100 ^b	--	--	--	--	--	--	--
		SVMW-11-250 ^b	--	--	--	--	--	--	--
		SVMW-11-260 ^b	--	--	--	--	--	--	--

Table 3-2
Field Measurements for Soil Vapor Monitoring, Q4 2020

^a Purge rate was not recorded; volume purged is estimated.

^b SVMP was not sampled as part of the Q4 2020 Soil Vapor Monitoring Event. This SVMP was being utilized to perform the Bioventing Pilot Test during Q4 2020 sampling activities.

-- = Parameter or analyte not required for analysis in Q4

AOI = area of interest

CO₂ = carbon dioxide

ft³ = cubic foot

H₂O = water

HC = hydrocarbon

ID = identification

in = inch

O₂ = diatomic oxygen

ppmv = part per million by volume

SVMP = soil vapor monitoring point

Q4 = Fourth Quarter

**Table 3-3
Analytical Data in Off-Base Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106028-150			KAFB-106028-250			KAFB-106028-350			KAFB-106028-450			KAFB-106136-025			KAFB-106136-050		
	Field Sample ID:			SV028-150-204			SV028-250-204			SV028-350-204			SV028-450-204			SV136-025-204			SV136-050-204		
	Sample Date:			10/5/2020			10/5/2020			10/5/2020			10/5/2020			10/6/2020			10/6/2020		
	Sample Type:			REG			REG			REG			REG			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	ND	U	1.3	ND	U	0.81	ND	U	1.2	ND	U	0.91	0.43	J	0.85	0.45	J	0.8	
	1,1-dichloroethane	ug/m ³	ND	U	2.5	ND	U	1.6	4.8	--	2.4	4.5	--	1.8	ND	U	1.6	ND	U	1.6	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	2.4	ND	U	1.5	ND	U	2.3	ND	U	1.7	ND	U	1.6	ND	U	1.5	
	1,2,4-trimethylbenzene	ug/m ³	ND	U	1.3	ND	U	0.81	ND	U	1.2	ND	U	0.91	ND	U	0.85	ND	U	0.8	
	1,2-dibromoethane	ug/m ³	ND	U	1.3	ND	U	0.81	ND	U	1.2	3.6	--	0.91	ND	U	0.85	ND	U	0.8	
	1,2-dichloroethane	ug/m ³	ND	U	1.3	ND	U	0.81	ND	U	1.2	2.5	J	0.91	ND	U	0.85	ND	U	0.8	
	1,3,5-trimethylbenzene	ug/m ³	ND	U	1.3	ND	U	0.81	ND	U	1.2	ND	U	0.91	ND	U	0.85	ND	U	0.8	
	1,3-butadiene	ug/m ³	ND	U	2.4	ND	U	1.5	ND	U	2.3	ND	U	1.7	ND	U	1.6	ND	U	1.5	
	1,4-dioxane	ug/m ³	ND	U	1.3	ND	U	0.81	ND	U	1.2	ND	U	0.91	ND	U	0.85	ND	U	0.8	
	2-butanone	ug/m ³	2.2	J	2.4	ND	U	1.5	10	--	2.3	1.9	J	1.7	ND	U	1.6	ND	U	1.5	
	2-hexanone	ug/m ³	ND	U	1.3	ND	U	0.81	2.6	J	1.2	ND	U	0.91	2.1	J	0.85	1.5	J	0.8	
	4-methyl-2-pentanone	ug/m ³	ND	U	1.3	ND	U	0.81	0.83	J	1.2	ND	U	0.91	0.81	J	0.85	0.56	J	0.8	
	Acetone	ug/m ³	15	J	21	ND	U	13	27	J	20	ND	U	14	120	--	13	77	--	13	
	Benzene	ug/m ³	0.90	J	1.3	ND	U	0.81	1.9	J	1.2	0.75	J	0.91	ND	U	0.85	1.8	J	0.8	
	Bromodichloromethane	ug/m ³	ND	U	1.3	ND	U	0.81	ND	U	1.2	ND	U	0.91	0.87	J	0.85	1.6	J	0.8	
	Bromoform	ug/m ³	ND	U	2.4	ND	U	1.5	ND	U	2.3	ND	U	1.7	ND	U	1.6	ND	U	1.5	
	Carbon disulfide	ug/m ³	12	--	4.1	0.79	J	2.6	2.7	J	4	1.6	J	2.9	12	--	2.7	6.1	--	2.5	
	Carbon tetrachloride	ug/m ³	ND	U	1.3	ND	U	0.81	0.88	J	1.2	0.44	J	0.91	ND	U	0.85	ND	U	0.8	
	Chloroethane	ug/m ³	ND	U	2.4	0.54	J	1.5	13	--	2.3	19	--	1.7	ND	U	1.6	ND	U	1.5	
	Chloroform	ug/m ³	ND	U	1.3	ND	U	0.81	0.62	J	1.2	1.5	J	0.91	4.1	--	0.85	6.6	--	0.8	
	Chloromethane	ug/m ³	1.5	J	2.4	ND	U	1.5	4.1	--	2.3	1.1	J	1.7	ND	U	1.6	1.0	J	1.5	
	Cyclohexane	ug/m ³	ND	U	2.6	ND	U	1.6	3.1	J	2.5	85	--	1.8	ND	U	1.7	ND	U	1.6	
	Dibromochloromethane	ug/m ³	ND	U	1.3	ND	U	0.81	ND	U	1.2	ND	U	0.91	ND	U	0.85	ND	U	0.8	
	Dichlorodifluoromethane	ug/m ³	5.5	--	2.4	9.0	--	1.5	4.8	--	2.3	3.0	--	1.7	2.2	J	1.6	2.2	J	1.5	
	ETHANOL	ug/m ³	2.9	J	6.3	ND	U	3.9	31	J	6.1	6.5	J	4.4	ND	U	4.1	ND	U	3.9	
	Ethyl acetate	ug/m ³	ND	U	4.9	ND	U	3.1	59	--	4.8	ND	U	3.5	ND	U	3.2	120	--	3.1	
	Ethylbenzene	ug/m ³	ND	U	1.3	ND	U	0.81	ND	U	1.2	0.54	J	0.91	ND	U	0.85	0.44	J	0.8	
	Hexane	ug/m ³	ND	U	2.4	ND	U	1.5	4.7	--	2.3	8.7	--	1.7	ND	U	1.6	0.96	J	1.5	
	Isopropyl alcohol (manufacturing-strong)	ug/m ³	ND	U	4.8	ND	U	3	3.9	J	4.6	2.3	J	3.4	ND	U	3.1	6.3	--	3	
	m,p-Xylene	ug/m ³	ND	U	2.6	ND	U	1.6	1.0	J	2.5	0.96	J	1.8	ND	U	1.7	1.4	J	1.6	
	Methylene Chloride	ug/m ³	ND	U	2.4	ND	U	1.5	ND	U	2.3	ND	U	1.7	ND	U	1.6	ND	U	1.5	
	Naphthalene	ug/m ³	ND	U	2.4	ND	U	1.5	ND	U	2.3	ND	U	1.7	ND	U	1.5	ND	U	1.5	
	n-Heptane	ug/m ³	ND	U	2.4	ND	U	1.5	1.4	J	2.3	0.60	J	1.7	ND	U	1.6	1.7	J	1.5	
	o-Xylene	ug/m ³	ND	U	1.3	ND	U	0.81	0.62	J	1.2	0.55	J	0.91	ND	U	0.85	0.52	J	0.8	
	Propylene (propene)	ug/m ³	ND	U	2.4	ND	U	1.5	3.5	J	2.3	6.7	--	1.7	1.4	J	1.6	3.8	--	1.5	
	Styrene	ug/m ³	ND	U	2.4	ND	U	1.5	0.75	J	2.3	ND	U	1.7	ND	U	1.6	ND	U	1.5	
	Tetrachloroethene	ug/m ³	0.78	J	1.3	ND	U	0.81	0.81	J	1.2	2.0	J	0.91	0.45	J	0.85	0.35	J	0.8	
	Tetrahydrofuran	ug/m ³	35	--	1.3	160	--	0.81	5.0	J	1.2	1.7	J	0.91	0.50	J	0.85	1.4	J	0.8	
	Toluene	ug/m ³	1.2	J	1.3	ND	U	0.81	2.8	J	1.2	1.6	J	0.91	ND	U	0.85	8.0	--	0.8	
	Trichloroethene	ug/m ³	ND	U	1.3	ND	U	0.81	ND	U	1.2	ND	U	0.91	ND	U	0.85	ND	U	0.8	
Trichlorofluoromethane	ug/m ³	1.6	J	2.4	2.9	--	1.5	3.5	J	2.3	1.8	J	1.7	1.1	J	1.6	1.1	J	1.5		
Vinyl chloride	ug/m ³	ND	U	1.3	ND	U	0.81	5.5	--	1.2	2.7	J	0.91	ND	U	0.85	ND	U	0.8		
Xylenes, Total	ug/m ³	ND	U	2.6	ND	U	1.6	1.7	J	2.5	1.5	J	1.8	ND	U	1.7	1.9	J	1.6		

**Table 3-3
Analytical Data in Off-Base Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106136-150			KAFB-106136-250			KAFB-106136-350			KAFB-106136-450			KAFB-106138-025			KAFB-106138-050		
	Field Sample ID:			SV136-150-204			SV136-250-204			SV136-350-204			SV136-450-204			SV138-025-204			SV138-050-204		
	Sample Date:			10/6/2020			10/6/2020			10/6/2020			10/6/2020			10/6/2020			10/6/2020		
	Sample Type:			REG			REG			REG			REG			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	0.79	J	0.86	13	--	0.87	0.50	J	0.81	0.37	J	0.8	0.44	J	0.82	0.54	J	0.82	
	1,1-dichloroethane	ug/m ³	ND	U	1.7	ND	U	1.7	ND	U	1.6	1.1	J	1.6	ND	U	1.6	ND	U	1.6	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.6	ND	U	1.6	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	
	1,2,4-trimethylbenzene	ug/m ³	ND	U	0.86	4.5	--	0.87	ND	U	0.81	0.35	J	0.8	ND	U	0.82	ND	U	0.82	
	1,2-dibromoethane	ug/m ³	ND	U	0.86	ND	U	0.87	ND	U	0.81	ND	U	0.8	ND	U	0.82	ND	U	0.82	
	1,2-dichloroethane	ug/m ³	ND	U	0.86	ND	U	0.87	ND	U	0.81	1.3	J	0.8	ND	U	0.82	ND	U	0.82	
	1,3,5-trimethylbenzene	ug/m ³	ND	U	0.86	1.6	J	0.87	ND	U	0.81	ND	U	0.8	ND	U	0.82	ND	U	0.82	
	1,3-butadiene	ug/m ³	ND	U	1.6	ND	U	1.6	ND	U	1.5	0.86	J	1.5	ND	U	1.5	ND	U	1.5	
	1,4-dioxane	ug/m ³	ND	U	0.86	ND	U	0.87	0.35	J	0.81	0.61	J	0.8	ND	U	0.82	ND	U	0.82	
	2-butanone	ug/m ³	ND	U	1.6	ND	U	1.6	ND	U	1.5	ND	U	1.5	ND	U	1.5	1.5	J	1.5	
	2-hexanone	ug/m ³	ND	U	0.86	ND	U	0.87	0.41	J	0.81	ND	U	0.8	ND	U	0.82	ND	U	0.82	
	4-methyl-2-pentanone	ug/m ³	ND	U	0.86	0.43	J	0.87	0.36	J	0.81	ND	U	0.8	ND	U	0.82	ND	U	0.82	
	Acetone	ug/m ³	ND	U	14	120	--	14	ND	U	13	ND	U	13	ND	U	13	9.1	J	13	
	Benzene	ug/m ³	ND	U	0.86	1.8	J	0.87	ND	U	0.81	0.93	J	0.8	0.88	J	0.82	19	--	0.82	
	Bromodichloromethane	ug/m ³	0.65	J	0.86	ND	U	0.87	ND	U	0.81	ND	U	0.8	ND	U	0.82	ND	U	0.82	
	Bromoform	ug/m ³	ND	U	1.6	ND	U	1.6	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	
	Carbon disulfide	ug/m ³	3.4	J	2.7	8.3	--	2.8	8.2	--	2.6	180	--	2.6	4.0	J	2.6	25	--	2.6	
	Carbon tetrachloride	ug/m ³	1.2	J	0.86	6.6	--	0.87	1.7	J	0.81	1.2	J	0.8	ND	U	0.82	ND	U	0.82	
	Chloroethane	ug/m ³	ND	U	1.6	ND	U	1.6	ND	U	1.5	5.4	--	1.5	ND	U	1.5	ND	U	1.5	
	Chloroform	ug/m ³	1.6	J	0.86	2.1	J	0.87	ND	U	0.81	0.52	J	0.8	ND	U	0.82	0.40	J	0.82	
	Chloromethane	ug/m ³	ND	U	1.6	ND	U	1.6	ND	U	1.5	21	--	1.5	ND	U	1.5	ND	U	1.5	
	Cyclohexane	ug/m ³	ND	U	1.7	1.1	J	1.7	ND	U	1.6	ND	U	1.6	ND	U	1.6	0.96	J	1.6	
	Dibromochloromethane	ug/m ³	ND	U	0.86	ND	U	0.87	ND	U	0.81	ND	U	0.8	ND	U	0.82	ND	U	0.82	
	Dichlorodifluoromethane	ug/m ³	3.0	--	1.6	2.1	J	1.6	1.6	J	1.5	1.2	J	1.5	2.3	J	1.5	2.6	--	1.5	
	ETHANOL	ug/m ³	ND	U	4.2	ND	U	4.2	ND	U	3.9	ND	U	3.9	ND	U	4	2.3	J	4	
	Ethyl acetate	ug/m ³	ND	U	3.3	130	--	3.3	ND	U	3.1	ND	U	3.1	ND	U	3.1	ND	U	3.1	
	Ethylbenzene	ug/m ³	ND	U	0.86	0.86	J	0.87	ND	U	0.81	ND	U	0.8	ND	U	0.82	ND	U	0.82	
	Hexane	ug/m ³	ND	U	1.6	1.5	J	1.6	ND	U	1.5	ND	U	1.5	ND	U	1.5	1.3	J	1.5	
	Isopropyl alcohol (manufacturing-strong)	ug/m ³	ND	U	3.2	5.6	--	3.2	ND	U	3	ND	U	3	ND	U	3	ND	U	3	
	m,p-Xylene	ug/m ³	ND	U	1.7	7.9	--	1.7	ND	U	1.6	ND	U	1.6	0.69	J	1.6	ND	U	1.6	
	Methylene Chloride	ug/m ³	ND	U	1.6	ND	U	1.6	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	
	Naphthalene	ug/m ³	ND	U	1.6	ND	U	1.6	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	
	n-Heptane	ug/m ³	ND	U	1.6	4.1	--	1.6	ND	U	1.5	0.60	J	1.5	0.61	J	1.5	ND	U	1.5	
	o-Xylene	ug/m ³	ND	U	0.86	3.3	--	0.87	ND	U	0.81	ND	U	0.8	ND	U	0.82	ND	U	0.82	
	Propylene (propene)	ug/m ³	ND	U	1.6	1.5	J	1.6	ND	U	1.5	4.2	--	1.5	ND	U	1.5	ND	U	1.5	
	Styrene	ug/m ³	ND	U	1.6	ND	U	1.6	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	
	Tetrachloroethene	ug/m ³	0.54	J	0.86	21	--	0.87	0.35	J	0.81	0.88	J	0.8	0.35	J	0.82	2.6	--	0.82	
Tetrahydrofuran	ug/m ³	0.82	J	0.86	7.4	--	0.87	15	--	0.81	76	--	0.8	1.6	J	0.82	0.39	J	0.82		
Toluene	ug/m ³	ND	U	0.86	9.9	--	0.87	ND	U	0.81	ND	U	0.8	ND	U	0.82	9.9	--	0.82		
Trichloroethene	ug/m ³	ND	U	0.86	1700	--	8.7	0.80	J	0.81	ND	U	0.8	ND	U	0.82	ND	U	0.82		
Trichlorofluoromethane	ug/m ³	2.0	J	1.6	0.85	J	1.6	1.5	J	1.5	0.97	J	1.5	8.1	--	1.5	12	--	1.5		
Vinyl chloride	ug/m ³	ND	U	0.86	ND	U	0.87	ND	U	0.81	11	--	0.8	ND	U	0.82	ND	U	0.82		
Xylenes, Total	ug/m ³	ND	U	1.7	11	--	1.7	ND	U	1.6	ND	U	1.6	0.69	J	1.6	ND	U	1.6		

Table 3-3
Analytical Data in Off-Base Soil Vapor Monitoring Points, Q4 2020

Analytical Method	Analyte	Units	KAFB-106138-150			KAFB-106138-150			KAFB-106138-250			KAFB-106138-350			KAFB-106138-450			KAFB-106141-025		
			SV138-150-204			SV138-150-604			SV138-250-204			SV138-350-204			SV138-450-204			SV141-025-204		
			10/6/2020			10/6/2020			10/6/2020			10/6/2020			10/6/2020			10/6/2020		
			REG			FD			REG			REG			REG			REG		
			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	5.5	--	0.79	5.5	--	0.82	0.39	J	0.78	4.4	--	0.81	0.52	J	0.77	0.58	J	0.74
	1,1-dichloroethane	ug/m ³	ND	U	1.5	ND	U	1.6	ND	U	1.5	0.37	J	1.6	ND	U	1.5	ND	U	1.4
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.4	ND	U	1.4
	1,2,4-trimethylbenzene	ug/m ³	ND	U	0.79	ND	U	0.82	ND	U	0.78	ND	U	0.81	ND	U	0.77	ND	U	0.74
	1,2-dibromoethane	ug/m ³	ND	U	0.79	ND	U	0.82	ND	U	0.78	ND	U	0.81	ND	U	0.77	ND	U	0.74
	1,2-dichloroethane	ug/m ³	ND	U	0.79	ND	U	0.82	ND	U	0.78	ND	U	0.81	ND	U	0.77	ND	U	0.74
	1,3,5-trimethylbenzene	ug/m ³	ND	U	0.79	ND	U	0.82	ND	U	0.78	ND	U	0.81	ND	U	0.77	ND	U	0.74
	1,3-butadiene	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.4	ND	U	1.4
	1,4-dioxane	ug/m ³	ND	U	0.79	ND	U	0.82	ND	U	0.78	ND	U	0.81	ND	U	0.77	0.35	J	0.74
	2-butanone	ug/m ³	0.86	J	1.5	3.9	J	1.5	7.6	--	1.5	3.6	J	1.5	ND	U	1.4	ND	U	1.4
	2-hexanone	ug/m ³	ND	U	0.79	ND	U	0.82	1.2	J	0.78	ND	U	0.81	0.31	J	0.77	ND	U	0.74
	4-methyl-2-pentanone	ug/m ³	ND	U	0.79	ND	U	0.82	0.35	J	0.78	ND	U	0.81	ND	U	0.77	ND	U	0.74
	Acetone	ug/m ³	ND	U	13	14	J	13	37	--	12	13	J	13	18	J	12	7.1	J	12
	Benzene	ug/m ³	ND	U	0.79	ND	U	0.82	0.68	J	0.78	0.95	J	0.81	ND	U	0.77	1.3	J	0.74
	Bromodichloromethane	ug/m ³	4.7	--	0.79	4.8	--	0.82	ND	U	0.78	19	--	0.81	ND	U	0.77	ND	U	0.74
	Bromoform	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.4	1.3	J	1.4
	Carbon disulfide	ug/m ³	8.9	J	2.5	28	J	2.6	32	--	2.5	66	--	2.6	31	--	2.4	17	--	2.4
	Carbon tetrachloride	ug/m ³	2.4	--	0.79	2.4	J	0.82	ND	U	0.78	3.1	--	0.81	ND	U	0.77	ND	U	0.74
	Chloroethane	ug/m ³	ND	U	1.5	ND	U	1.5	0.38	J	1.5	ND	U	1.5	ND	U	1.4	ND	U	1.4
	Chloroform	ug/m ³	20	--	0.79	20	--	0.82	ND	U	0.78	89	--	0.81	0.64	J	0.77	2.9	--	0.74
	Chloromethane	ug/m ³	ND	U	1.5	ND	U	1.5	0.83	J	1.5	ND	U	1.5	2.1	J	1.4	ND	U	1.4
	Cyclohexane	ug/m ³	ND	U	1.6	ND	U	1.6	ND	U	1.6	ND	U	1.6	ND	U	1.5	ND	U	1.5
	Dibromochloromethane	ug/m ³	0.50	J	0.79	0.50	J	0.82	ND	U	0.78	2.4	J	0.81	ND	U	0.77	ND	U	0.74
	Dichlorodifluoromethane	ug/m ³	6.2	--	1.5	6.2	--	1.5	2.1	J	1.5	2.9	--	1.5	2.2	J	1.4	7.6	--	1.4
	ETHANOL	ug/m ³	ND	U	3.9	3.1	J	4	10	J	3.8	6.4	J	3.9	3.3	J	3.8	2.6	J	3.6
	Ethyl acetate	ug/m ³	ND	U	3	ND	U	3.1	6.4	J	3	ND	U	3.1	ND	U	2.9	16	J	2.8
	Ethylbenzene	ug/m ³	ND	U	0.79	ND	U	0.82	ND	U	0.78	ND	U	0.81	ND	U	0.77	ND	U	0.74
	Hexane	ug/m ³	ND	U	1.5	ND	U	1.5	1.0	J	1.5	ND	U	1.5	0.60	J	1.4	1.5	J	1.4
	Isopropyl alcohol (manufacturing-strong)	ug/m ³	ND	U	2.9	ND	U	3	3.5	J	2.9	ND	U	3	ND	U	2.9	ND	U	2.8
	m,p-Xylene	ug/m ³	ND	U	1.6	ND	U	1.6	0.81	J	1.6	ND	U	1.6	ND	U	1.5	ND	U	1.5
	Methylene Chloride	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	1.5	0.74	J	1.5	ND	U	1.4	ND	U	1.4
	Naphthalene	ug/m ³	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	1.4
	n-Heptane	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.4	1.2	J	1.4
	o-Xylene	ug/m ³	ND	U	0.79	ND	U	0.82	ND	U	0.78	ND	U	0.81	ND	U	0.77	ND	U	0.74
	Propylene (propene)	ug/m ³	ND	U	1.5	ND	U	1.5	2.2	J	1.5	0.79	J	1.5	1.7	J	1.4	0.88	J	1.4
	Styrene	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.4	ND	U	1.4
	Tetrachloroethene	ug/m ³	1.2	J	0.79	1.2	J	0.82	ND	U	0.78	0.55	J	0.81	0.38	J	0.77	0.64	J	0.74
	Tetrahydrofuran	ug/m ³	1.3	J	0.79	4.8	J	0.82	0.80	J	0.78	0.53	J	0.81	0.76	J	0.77	0.41	J	0.74
	Toluene	ug/m ³	ND	U	0.79	2.1	J	0.82	3.0	--	0.78	0.31	J	0.81	0.35	J	0.77	1.5	J	0.74
	Trichloroethene	ug/m ³	2.2	J	0.79	2.1	J	0.82	0.74	J	0.78	7.1	--	0.81	0.44	J	0.77	ND	U	0.74
	Trichlorofluoromethane	ug/m ³	20	--	1.5	20	--	1.5	1.1	J	1.5	4.7	--	1.5	6.4	--	1.4	7.0	--	1.4
Vinyl chloride	ug/m ³	ND	U	0.79	ND	U	0.82	ND	U	0.78	ND	U	0.81	0.30	J	0.77	ND	U	0.74	
Xylenes, Total	ug/m ³	ND	U	1.6	ND	U	1.6	0.81	J	1.6	ND	U	1.6	ND	U	1.5	ND	U	1.5	

**Table 3-3
Analytical Data in Off-Base Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Analyte	Units	KAFB-106141-050			KAFB-106141-170			KAFB-106141-250			KAFB-106141-350			KAFB-106141-450			KAFB-106142-030		
			Field Sample ID:			Field Sample ID:			Field Sample ID:			Field Sample ID:			Field Sample ID:			Field Sample ID:		
			Sample Date:			Sample Date:			Sample Date:			Sample Date:			Sample Date:			Sample Date:		
			Sample Type:			Sample Type:			Sample Type:			Sample Type:			Sample Type:			Sample Type:		
			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	0.71	J	0.77	0.82	J	0.76	0.82	J	0.78	ND	U	0.91	ND	U	0.78	0.43	J	0.83
	1,1-dichloroethane	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.8	6.0	--	1.5	ND	U	1.6
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.4	ND	U	1.4	ND	U	1.5	ND	U	1.7	ND	U	1.5	ND	U	1.6
	1,2,4-trimethylbenzene	ug/m ³	ND	U	0.77	ND	U	0.76	ND	U	0.78	ND	U	0.91	ND	U	0.78	ND	U	0.83
	1,2-dibromoethane	ug/m ³	ND	U	0.77	ND	U	0.76	ND	U	0.78	ND	U	0.91	ND	U	0.78	ND	U	0.83
	1,2-dichloroethane	ug/m ³	ND	U	0.77	ND	U	0.76	ND	U	0.78	ND	U	0.91	2.6	--	0.78	ND	U	0.83
	1,3,5-trimethylbenzene	ug/m ³	ND	U	0.77	ND	U	0.76	ND	U	0.78	ND	U	0.91	ND	U	0.78	ND	U	0.83
	1,3-butadiene	ug/m ³	ND	U	1.4	ND	U	1.4	ND	U	1.5	ND	U	1.7	0.58	J	1.5	ND	U	1.6
	1,4-dioxane	ug/m ³	ND	U	0.77	ND	U	0.76	ND	U	0.78	ND	U	0.91	0.76	J	0.78	ND	U	0.83
	2-butanone	ug/m ³	8.7	--	1.4	4.4	J	1.4	7.4	--	1.5	1.1	J	1.7	9.8	--	1.5	9.5	--	1.6
	2-hexanone	ug/m ³	1.8	J	0.77	0.97	J	0.76	1.5	J	0.78	ND	U	0.91	0.32	J	0.78	1.7	J	0.83
	4-methyl-2-pentanone	ug/m ³	0.51	J	0.77	ND	U	0.76	1.2	J	0.78	ND	U	0.91	5.3	--	0.78	ND	U	0.83
	Acetone	ug/m ³	37	--	12	22	J	12	29	--	12	ND	U	14	34	--	12	46	--	13
	Benzene	ug/m ³	0.40	J	0.77	ND	U	0.76	1.7	J	0.78	ND	U	0.91	1.3	J	0.78	ND	U	0.83
	Bromodichloromethane	ug/m ³	0.52	J	0.77	2.6	--	0.76	2.3	J	0.78	1.8	J	0.91	ND	U	0.78	ND	U	0.83
	Bromoform	ug/m ³	ND	U	1.4	ND	U	1.4	ND	U	1.5	ND	U	1.7	ND	U	1.5	ND	U	1.6
	Carbon disulfide	ug/m ³	4.7	--	2.4	22	--	2.4	13	--	2.5	9.3	--	2.9	95	--	2.5	6.7	--	2.6
	Carbon tetrachloride	ug/m ³	0.64	J	0.77	1.0	J	0.76	1.0	J	0.78	0.66	J	0.91	0.67	J	0.78	ND	U	0.83
	Chloroethane	ug/m ³	ND	U	1.4	ND	U	1.4	ND	U	1.5	ND	U	1.7	7.3	--	1.5	ND	U	1.6
	Chloroform	ug/m ³	5.2	--	0.77	18	--	0.76	19	--	0.78	8.4	--	0.91	3.1	--	0.78	2.0	J	0.83
	Chloromethane	ug/m ³	0.79	J	1.4	ND	U	1.4	0.49	J	1.5	ND	U	1.7	25	--	1.5	ND	U	1.6
	Cyclohexane	ug/m ³	ND	U	1.5	ND	U	1.5	1.2	J	1.6	ND	U	1.8	ND	U	1.6	ND	U	1.7
	Dibromochloromethane	ug/m ³	ND	U	0.77	ND	U	0.76	0.51	J	0.78	ND	U	0.91	ND	U	0.78	ND	U	0.83
	Dichlorodifluoromethane	ug/m ³	16	--	1.4	19	--	1.4	11	--	1.5	5.1	--	1.7	5.1	--	1.5	2.3	J	1.6
	ETHANOL	ug/m ³	4.7	J	3.8	2.7	J	3.7	45	--	3.8	ND	U	4.4	1.8	J	3.8	7.9	J	4.1
	Ethyl acetate	ug/m ³	ND	U	2.9	ND	U	2.9	440	J	3	11	J	3.5	ND	U	3	ND	U	3.2
	Ethylbenzene	ug/m ³	ND	U	0.77	ND	U	0.76	0.86	J	0.78	ND	U	0.91	ND	U	0.78	ND	U	0.83
	Hexane	ug/m ³	ND	U	1.4	ND	U	1.4	1.7	J	1.5	ND	U	1.7	ND	U	1.5	ND	U	1.6
	Isopropyl alcohol (manufacturing-strength)	ug/m ³	ND	U	2.9	ND	U	2.8	13	--	2.9	ND	U	3.4	ND	U	2.9	2.8	J	3.1
	m,p-Xylene	ug/m ³	ND	U	1.5	ND	U	1.5	2.7	J	1.6	ND	U	1.8	ND	U	1.6	ND	U	1.7
	Methylene Chloride	ug/m ³	ND	U	1.4	ND	U	1.4	2.1	J	1.5	ND	U	1.7	ND	U	1.5	ND	U	1.6
	Naphthalene	ug/m ³	ND	U	1.4	ND	U	1.4	ND	U	1.4	ND	U	1.7	ND	U	1.4	ND	U	1.5
	n-Heptane	ug/m ³	ND	U	1.4	ND	U	1.4	2.1	J	1.5	ND	U	1.7	0.77	J	1.5	ND	U	1.6
	o-Xylene	ug/m ³	ND	U	0.77	ND	U	0.76	1.2	J	0.78	ND	U	0.91	ND	U	0.78	ND	U	0.83
	Propylene (propene)	ug/m ³	0.98	J	1.4	ND	U	1.4	5.1	--	1.5	ND	U	1.7	3.5	--	1.5	2.4	J	1.6
	Styrene	ug/m ³	ND	U	1.4	ND	U	1.4	1.2	J	1.5	ND	U	1.7	ND	U	1.5	ND	U	1.6
	Tetrachloroethene	ug/m ³	1.3	J	0.77	1.6	J	0.76	0.97	J	0.78	ND	U	0.91	0.46	J	0.78	1.4	J	0.83
	Tetrahydrofuran	ug/m ³	ND	U	0.77	3.6	J	0.76	13	--	0.78	8.8	--	0.91	170	--	0.78	0.39	J	0.83
	Toluene	ug/m ³	1.7	J	0.77	ND	U	0.76	24	--	0.78	0.46	J	0.91	0.65	J	0.78	0.40	J	0.83
	Trichloroethene	ug/m ³	ND	U	0.77	ND	U	0.76	0.66	J	0.78	ND	U	0.91	0.94	J	0.78	16	--	0.83
Trichlorofluoromethane	ug/m ³	14	--	1.4	22	--	1.4	21	--	1.5	8.9	--	1.7	6.8	--	1.5	1.3	J	1.6	
Vinyl chloride	ug/m ³	ND	U	0.77	ND	U	0.76	ND	U	0.78	ND	U	0.91	9.1	--	0.78	ND	U	0.83	
Xylenes, Total	ug/m ³	ND	U	1.5	ND	U	1.5	3.9	J	1.6	ND	U	1.8	ND	U	1.6	ND	U	1.7	

Table 3-3
Analytical Data in Off-Base Soil Vapor Monitoring Points, Q4 2020

Analytical Method	Analyte	Units	KAFB-106142-050 SV142-050-204 10/5/2020 REG			KAFB-106142-170 SV142-170-204 10/5/2020 REG			KAFB-106142-170 SV142-170-604 10/5/2020 FD			KAFB-106142-250 SV142-250-204 10/5/2020 REG			KAFB-106142-350 SV142-350-204 10/5/2020 REG			KAFB-106142-450 SV142-450-204 10/5/2020 REG		
			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	0.42	J	0.82	0.60	J	1.1	0.56	J	0.81	0.62	J	0.69	ND	U	0.82	0.42	J	0.82
	1,1-dichloroethane	ug/m ³	ND	U	1.6	ND	U	2.1	ND	U	1.6	ND	U	1.3	ND	U	1.6	ND	U	1.6
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.5	ND	U	2.1	ND	U	1.5	ND	U	1.3	ND	U	1.6	ND	U	1.5
	1,2,4-trimethylbenzene	ug/m ³	ND	U	0.82	ND	U	1.1	ND	U	0.81	0.59	J	0.69	ND	U	0.82	0.53	J	0.82
	1,2-dibromoethane	ug/m ³	ND	U	0.82	ND	U	1.1	ND	U	0.81	ND	U	0.69	ND	U	0.82	ND	U	0.82
	1,2-dichloroethane	ug/m ³	ND	U	0.82	ND	U	1.1	ND	U	0.81	ND	U	0.69	ND	U	0.82	ND	U	0.82
	1,3,5-trimethylbenzene	ug/m ³	ND	U	0.82	ND	U	1.1	ND	U	0.81	0.33	J	0.69	ND	U	0.82	0.84	J	0.82
	1,3-butadiene	ug/m ³	ND	U	1.5	ND	U	2.1	ND	U	1.5	ND	U	1.3	ND	U	1.6	ND	U	1.5
	1,4-dioxane	ug/m ³	0.47	J	0.82	0.63	J	1.1	ND	U	0.81	ND	U	0.69	ND	U	0.82	ND	U	0.82
	2-butanone	ug/m ³	1.1	J	1.5	9.6	--	2.1	2.1	J	1.5	10	--	1.3	1.7	J	1.6	8.4	--	1.5
	2-hexanone	ug/m ³	ND	U	0.82	1.9	J	1.1	ND	U	0.81	2.4	J	0.69	ND	U	0.82	ND	U	0.82
	4-methyl-2-pentanone	ug/m ³	ND	U	0.82	0.66	J	1.1	ND	U	0.81	2.8	J	0.69	ND	U	0.82	ND	U	0.82
	Acetone	ug/m ³	8.9	J	13	48	--	17	9.3	J	13	60	--	11	12	J	13	30	--	13
	Benzene	ug/m ³	0.80	J	0.82	ND	U	1.1	2.4	J	0.81	1.9	J	0.69	1.6	J	0.82	50	--	0.82
	Bromodichloromethane	ug/m ³	ND	U	0.82	ND	U	1.1	ND	U	0.81	ND	U	0.69	ND	U	0.82	ND	U	0.82
	Bromoform	ug/m ³	ND	U	1.5	ND	U	2.1	ND	U	1.5	ND	U	1.3	ND	U	1.6	ND	U	1.5
	Carbon disulfide	ug/m ³	5.0	--	2.6	24	--	3.5	12	--	2.6	7.3	--	2.2	7.6	--	2.6	32	--	2.6
	Carbon tetrachloride	ug/m ³	ND	U	0.82	1.1	J	1.1	1.1	J	0.81	1.4	J	0.69	0.89	J	0.82	ND	U	0.82
	Chloroethane	ug/m ³	ND	U	1.5	ND	U	2.1	ND	U	1.5	ND	U	1.3	ND	U	1.6	ND	U	1.5
	Chloroform	ug/m ³	1.3	J	0.82	ND	U	1.1	0.37	J	0.81	1.6	J	0.69	4.6	--	0.82	ND	U	0.82
	Chloromethane	ug/m ³	ND	U	1.5	0.78	J	2.1	ND	U	1.5	0.41	J	1.3	ND	U	1.6	0.68	J	1.5
	Cyclohexane	ug/m ³	ND	U	1.6	ND	U	2.2	1.6	J	1.6	3.3	J	1.4	0.74	J	1.6	31	--	1.6
	Dibromochloromethane	ug/m ³	ND	U	0.82	ND	U	1.1	ND	U	0.81	ND	U	0.69	ND	U	0.82	ND	U	0.82
	Dichlorodifluoromethane	ug/m ³	2.3	J	1.5	18	--	2.1	21	--	1.5	19	--	1.3	4.9	--	1.6	2.2	J	1.5
	ETHANOL	ug/m ³	2.4	J	4	33	J	5.4	2.6	J	4	120	--	3.4	3.3	J	4	6.8	J	4
	Ethyl acetate	ug/m ³	ND	U	3.1	19	--	4.2	ND	U	3.1	190	--	2.6	6.1	--	3.2	ND	U	3.1
	Ethylbenzene	ug/m ³	ND	U	0.82	ND	U	1.1	ND	U	0.81	2.1	--	0.69	ND	U	0.82	4.0	--	0.82
	Hexane	ug/m ³	ND	U	1.5	0.85	J	2.1	ND	U	1.5	6.0	--	1.3	ND	U	1.6	2.9	--	1.5
	Isopropyl alcohol (manufacturing-strong)	ug/m ³	ND	U	3	5.7	J	4.1	ND	U	3	37	--	2.6	ND	U	3.1	ND	U	3
	m,p-Xylene	ug/m ³	ND	U	1.6	ND	U	2.2	ND	U	1.6	6.9	--	1.4	ND	U	1.6	1.7	J	1.6
	Methylene Chloride	ug/m ³	ND	U	1.5	3.4	--	2.1	ND	U	1.5	6.2	--	1.3	ND	U	1.6	ND	U	1.5
	Naphthalene	ug/m ³	ND	U	1.5	ND	U	2	ND	U	1.5	ND	U	1.3	ND	U	1.5	0.65	J	1.5
	n-Heptane	ug/m ³	ND	U	1.5	0.60	J	2.1	ND	U	1.5	4.0	--	1.3	ND	U	1.6	0.83	J	1.5
	o-Xylene	ug/m ³	ND	U	0.82	ND	U	1.1	ND	U	0.81	3.1	--	0.69	ND	U	0.82	2.6	--	0.82
	Propylene (propene)	ug/m ³	ND	U	1.5	3.0	J	2.1	ND	U	1.5	15	--	1.3	ND	U	1.6	1.6	J	1.5
	Styrene	ug/m ³	1.1	J	1.5	ND	U	2.1	ND	U	1.5	4.1	--	1.3	ND	U	1.6	0.74	J	1.5
	Tetrachloroethene	ug/m ³	ND	U	0.82	0.51	J	1.1	0.52	J	0.81	0.69	J	0.69	ND	U	0.82	ND	U	0.82
	Tetrahydrofuran	ug/m ³	ND	U	0.82	1.1	J	1.1	1.4	J	0.81	4.9	--	0.69	4.7	J	0.82	4.9	--	0.82
	Toluene	ug/m ³	0.33	J	0.82	5.1	--	1.1	0.41	J	0.81	64	--	0.69	ND	U	0.82	5.8	--	0.82
	Trichloroethene	ug/m ³	ND	U	0.82	ND	U	1.1	ND	U	0.81	0.92	J	0.69	ND	U	0.82	ND	U	0.82
	Trichlorofluoromethane	ug/m ³	1.3	J	1.5	12	--	2.1	13	--	1.5	15	--	1.3	6.8	--	1.6	1.0	J	1.5
	Vinyl chloride	ug/m ³	ND	U	0.82	ND	U	1.1	ND	U	0.81	ND	U	0.69	ND	U	0.82	ND	U	0.82
	Xylenes, Total	ug/m ³	ND	U	1.6	ND	U	2.2	ND	U	1.6	10	--	1.4	ND	U	1.6	4.3	J	1.6

Table 3-3
Analytical Data in Off-Base Soil Vapor Monitoring Points, Q4 2020

$\mu\text{g}/\text{m}^3$ = microgram per cubic meter

AFB = Air Force base

ID = identification

KAFB = Kirtland Air Force Base

LOD = limit of detection

ND = not detected

Q4 = Fourth Quarter

REG = normal field sample

Val Qual = validation qualifier

VOC = volatile organic compound

Shading = detected concentrations above the detection limit

Val Quals based on independent data validation

J = Qualifier denotes the analyte was positively identified, but the associated numerical value is estimated.

U = Qualifier denotes the analyte was analyzed but not detected above the detection limit. The value associated with the U-qualifier is the limit of detection.

-- = Validation qualifier not assigned.

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Analyte	Units	Location ID: KAFB-106108-025			KAFB-106108-050			KAFB-106108-150			KAFB-106108-250			KAFB-106108-350			KAFB-106108-350		
			Field Sample ID: SV108-025-204			SV108-050-204			SV108-150-204			SV108-250-204			SV108-350-204			SV108-350-604		
			Sample Date: 10/19/2020			10/19/2020			10/19/2020			10/19/2020			10/19/2020			10/30/2020		
			Sample Type: REG			REG			REG			REG			REG			FD		
			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	99	--	0.78	310	--	0.74	480	J	610	ND	U	1500	2300	--	7.4	2300	--	15
	1,1-dichloroethane	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1200	ND	U	2900	ND	U	5.7	ND	U	5.7
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1200	ND	U	2800	ND	U	5.5	ND	U	5.5
	1,2,4-trimethylbenzene	ug/m ³	3.0	--	0.78	0.76	J	0.74	ND	U	610	ND	U	1500	ND	U	2.9	110	--	2.9
	1,2-dibromoethane	ug/m ³	ND	U	0.78	ND	U	0.74	ND	U	610	ND	U	1500	ND	U	2.9	ND	U	2.9
	1,2-dichloroethane	ug/m ³	ND	U	0.78	ND	U	0.74	ND	U	610	ND	U	1500	ND	U	2.9	ND	U	2.9
	1,3,5-trimethylbenzene	ug/m ³	0.56	J	0.78	ND	U	0.74	ND	U	610	ND	U	1500	ND	U	2.9	30	--	2.9
	1,3-butadiene	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1200	ND	U	2800	ND	U	5.5	ND	U	5.5
	1,4-dioxane	ug/m ³	ND	U	0.78	ND	U	0.74	ND	U	610	ND	U	1500	ND	U	2.9	ND	U	2.9
	2-butanone	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1200	ND	U	2800	ND	U	5.5	27	--	5.5
	2-hexanone	ug/m ³	ND	U	0.78	ND	U	0.74	ND	U	610	ND	U	1500	ND	U	2.9	ND	U	2.9
	4-methyl-2-pentanone	ug/m ³	ND	U	0.78	ND	U	0.74	ND	U	610	ND	U	1500	ND	U	2.9	ND	U	2.9
	Acetone	ug/m ³	24	--	12	22	J	12	ND	U	9700	ND	U	24000	ND	U	47	220	--	46
	Benzene	ug/m ³	0.51	J	0.78	ND	U	0.74	1800	J	610	5200	--	1500	3.7	J	2.9	4	J	2.9
	Bromodichloromethane	ug/m ³	ND	U	0.78	ND	U	0.74	ND	U	610	ND	U	1500	ND	U	2.9	ND	U	2.9
	Bromoform	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1200	ND	U	2800	ND	U	5.5	ND	U	5.5
	Carbon disulfide	ug/m ³	ND	U	2.5	2.6	J	2.4	ND	U	1900	ND	U	4800	18	--	9.3	29	--	9.3
	Carbon tetrachloride	ug/m ³	8.7	--	0.78	33	--	0.74	ND	U	610	ND	U	1500	80	--	2.9	88	--	2.9
	Chloroethane	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1200	ND	U	2800	ND	U	5.5	ND	U	5.5
	Chloroform	ug/m ³	0.49	J	0.78	2.4	--	0.74	ND	U	610	ND	U	1500	8.9	J	2.9	8	J	2.9
	Chloromethane	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1200	ND	U	2800	ND	U	5.5	ND	U	5.5
	Cyclohexane	ug/m ³	3.4	J	1.6	16	--	1.5	250000	--	1200	720000	--	3000	910	--	5.9	480	--	5.8
	Dibromochloromethane	ug/m ³	ND	U	0.78	ND	U	0.74	ND	U	610	ND	U	1500	ND	U	2.9	ND	U	2.9
	Dichlorodifluoromethane	ug/m ³	3.6	--	1.5	9.2	--	1.4	ND	U	1200	ND	U	2800	8.9	J	5.5	8.7	J	5.5
	ETHANOL	ug/m ³	ND	U	3.8	3.9	J	3.6	ND	U	3000	ND	U	7300	ND	U	14	ND	U	14
	Ethyl acetate	ug/m ³	ND	U	3	ND	U	2.8	ND	U	2300	ND	U	5700	ND	U	11	ND	U	11
	Ethylbenzene	ug/m ³	ND	U	0.78	ND	U	0.74	ND	U	610	ND	U	1500	ND	U	2.9	33	--	2.9
	Hexane	ug/m ³	0.58	J	1.5	1.5	J	1.4	220000	--	1200	620000	--	2800	130	--	5.5	63	--	5.5
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	2.9	ND	U	2.8	ND	U	2300	ND	U	5500	ND	U	11	4.8	J	11
	m,p-Xylene	ug/m ³	1.7	J	1.6	ND	U	1.5	ND	U	1200	ND	U	3000	ND	U	5.9	110	--	5.8
	Methylene Chloride	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1200	ND	U	2800	ND	U	5.5	ND	U	5.5
	Naphthalene	ug/m ³	ND	U	1.4	ND	U	1.4	ND	U	1100	ND	U	2700	ND	U	5.4	41	--	5.3
	n-Heptane	ug/m ³	0.77	J	1.5	ND	U	1.4	69000	--	1200	230000	--	2800	23	--	5.5	100	--	5.5
	o-Xylene	ug/m ³	0.53	J	0.78	ND	U	0.74	320	J	610	1100	J	1500	3.1	J	2.9	41	--	2.9
Propylene (propene)	ug/m ³	ND	U	1.5	2.1	J	1.4	3400	--	1200	7200	--	2800	22	--	5.5	23	--	5.5	
Styrene	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1200	ND	U	2800	ND	U	5.5	ND	U	5.5	
Tetrachloroethene	ug/m ³	1.4	J	0.78	3.9	--	0.74	1200	J	610	1400	J	1500	18	--	2.9	18	--	2.9	
Tetrahydrofuran	ug/m ³	ND	U	0.78	ND	U	0.74	ND	U	610	ND	U	1500	4.9	J	2.9	1.3	J	2.9	
Toluene	ug/m ³	1.6	J	0.78	0.40	J	0.74	970	J	610	ND	U	1500	5.2	J	2.9	98	--	2.9	
Trichloroethene	ug/m ³	ND	U	0.78	0.54	J	0.74	470	J	610	ND	U	1500	6.6	J	2.9	11	--	2.9	
Trichlorofluoromethane	ug/m ³	1.7	J	1.5	3.8	--	1.4	ND	U	1200	ND	U	2800	19	--	5.5	20	--	5.5	
Vinyl chloride	ug/m ³	ND	U	0.78	ND	U	0.74	ND	U	610	ND	U	1500	ND	U	2.9	ND	U	2.9	
Xylenes, Total	ug/m ³	2.2	J	1.6	ND	U	1.5	ND	U	1200	ND	U	3000	3.1	J	5.9	150	--	5.8	

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106108-450			KAFB-106109-025			KAFB-106109-050			KAFB-106109-150			KAFB-106109-250			KAFB-106109-350		
	Field Sample ID:			SV108-450-204			SV109-025-204			SV109-050-204			SV109-150-204			SV109-250-204			SV109-350-204		
	Sample Date:			10/19/2020			10/13/2020			10/13/2020			10/13/2020			10/13/2020					
	Sample Type:			REG			REG			REG			REG			REG					
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	99	--	0.79	7.0	--	0.69	100	--	0.72	25	--	0.78	230	--	0.72	190	--	0.74	
	1,1-dichloroethane	ug/m ³	4.7	--	1.5	ND	U	1.3	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	1.4	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.5	ND	U	1.3	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	1.4	
	1,2,4-trimethylbenzene	ug/m ³	ND	U	0.79	0.73	J	0.69	0.34	J	0.72	0.49	J	0.78	0.39	J	0.72	0.32	J	0.74	
	1,2-dibromoethane	ug/m ³	ND	U	0.79	ND	U	0.69	ND	U	0.72	ND	U	0.78	ND	U	0.72	ND	U	0.74	
	1,2-dichloroethane	ug/m ³	2.4	J	0.79	ND	U	0.69	ND	U	0.72	ND	U	0.78	ND	U	0.72	ND	U	0.74	
	1,3,5-trimethylbenzene	ug/m ³	ND	U	0.79	ND	U	0.69	ND	U	0.72	ND	U	0.78	ND	U	0.72	ND	U	0.74	
	1,3-butadiene	ug/m ³	ND	U	1.5	ND	U	1.3	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	1.4	
	1,4-dioxane	ug/m ³	1.1	J	0.79	ND	U	0.69	ND	U	0.72	ND	U	0.78	ND	U	0.72	ND	U	0.74	
	2-butanone	ug/m ³	5.9	--	1.5	2.5	J	1.3	ND	U	1.4	4.1	J	1.5	ND	U	1.4	0.65	J	1.4	
	2-hexanone	ug/m ³	ND	U	0.79	ND	U	0.69	ND	U	0.72	ND	U	0.78	ND	U	0.72	ND	U	0.74	
	4-methyl-2-pentanone	ug/m ³	3.1	J	0.79	ND	U	0.69	ND	U	0.72	ND	U	0.78	ND	U	0.72	ND	U	0.74	
	Acetone	ug/m ³	24	J	13	8.8	J	11	ND	U	11	14	J	12	ND	U	11	ND	U	12	
	Benzene	ug/m ³	33	--	0.79	0.54	J	0.69	0.84	J	0.72	0.41	J	0.78	3.2	--	0.72	6.6	--	0.74	
	Bromodichloromethane	ug/m ³	ND	U	0.79	ND	U	0.69	ND	U	0.72	ND	U	0.78	ND	U	0.72	ND	U	0.74	
	Bromoform	ug/m ³	ND	U	1.5	ND	U	1.3	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	1.4	
	Carbon disulfide	ug/m ³	78	--	2.5	ND	U	2.2	1.9	J	2.3	ND	U	2.5	4.2	J	2.3	8.1	--	2.4	
	Carbon tetrachloride	ug/m ³	11	--	0.79	ND	U	0.69	17	--	0.72	0.96	J	0.78	24	--	0.72	10	--	0.74	
	Chloroethane	ug/m ³	6.2	--	1.5	ND	U	1.3	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	1.4	
	Chloroform	ug/m ³	0.93	J	0.79	ND	U	0.69	0.55	J	0.72	ND	U	0.78	2.9	--	0.72	1.7	J	0.74	
	Chloromethane	ug/m ³	12	--	1.5	ND	U	1.3	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	1.4	
	Cyclohexane	ug/m ³	62	--	1.6	1.3	J	1.4	ND	U	1.4	0.88	J	1.6	2.6	J	1.4	1.8	J	1.5	
	Dibromochloromethane	ug/m ³	ND	U	0.79	ND	U	0.69	ND	U	0.72	ND	U	0.78	ND	U	0.72	ND	U	0.74	
	Dichlorodifluoromethane	ug/m ³	2.2	J	1.5	2.3	--	1.3	44	--	1.4	3.2	--	1.5	27	--	1.4	10	--	1.4	
	ETHANOL	ug/m ³	12	J	3.9	6.7	J	3.4	2.2	J	3.5	4.2	J	3.8	1.6	J	3.5	3.1	J	3.6	
	Ethyl acetate	ug/m ³	4.7	--	3	11	--	2.6	ND	U	2.7	ND	U	3	ND	U	2.8	6.2	--	2.8	
	Ethylbenzene	ug/m ³	0.36	J	0.79	ND	U	0.69	ND	U	0.72	ND	U	0.78	ND	U	0.72	ND	U	0.74	
	Hexane	ug/m ³	43	--	1.5	3.0	--	1.3	1.8	J	1.4	2.2	J	1.5	1.7	J	1.4	1.8	J	1.4	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	1.2	J	2.9	ND	U	2.6	ND	U	2.7	ND	U	2.9	ND	U	2.7	ND	U	2.8	
	m,p-Xylene	ug/m ³	0.91	J	1.6	1.5	J	1.4	0.71	J	1.4	0.87	J	1.6	0.75	J	1.4	0.62	J	1.5	
	Methylene Chloride	ug/m ³	0.88	J	1.5	0.84	J	1.3	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	1.4	
	Naphthalene	ug/m ³	ND	U	1.4	ND	U	1.3	ND	U	1.3	ND	U	1.4	ND	U	1.3	ND	U	1.4	
	n-Heptane	ug/m ³	8.2	--	1.5	6.2	--	1.3	3.4	--	1.4	4.0	--	1.5	2.8	--	1.4	3.0	--	1.4	
	o-Xylene	ug/m ³	ND	U	0.79	0.50	J	0.69	ND	U	0.72	ND	U	0.78	ND	U	0.72	ND	U	0.74	
Propylene (propene)	ug/m ³	5.2	--	1.5	ND	U	1.3	0.88	J	1.4	ND	U	1.5	0.87	J	1.4	1.0	J	1.4		
Styrene	ug/m ³	ND	U	1.5	ND	U	1.3	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	1.4		
Tetrachloroethene	ug/m ³	6.5	--	0.79	3.0	--	0.69	17	--	0.72	0.46	J	0.78	17	--	0.72	5.4	--	0.74		
Tetrahydrofuran	ug/m ³	26	--	0.79	ND	U	0.69	4.5	--	0.72	ND	U	0.78	9.2	--	0.72	12	--	0.74		
Toluene	ug/m ³	71	--	0.79	2.6	--	0.69	0.87	J	0.72	1.1	J	0.78	1.3	J	0.72	1.5	J	0.74		
Trichloroethene	ug/m ³	0.90	J	0.79	ND	U	0.69	190	--	0.72	0.41	J	0.78	120	--	0.72	130	--	0.74		
Trichlorofluoromethane	ug/m ³	1.3	J	1.5	1.2	J	1.3	3.4	--	1.4	1.8	J	1.5	3.3	--	1.4	1.3	J	1.4		
Vinyl chloride	ug/m ³	7.8	--	0.79	ND	U	0.69	ND	U	0.72	ND	U	0.78	ND	U	0.72	ND	U	0.74		
Xylenes, Total	ug/m ³	0.91	J	1.6	2.0	J	1.4	0.71	J	1.4	0.87	J	1.6	0.75	J	1.4	0.62	J	1.5		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Analyte	Units	KAFB-106109-450			KAFB-106109-450			KAFB-106110-025			KAFB-106110-050			KAFB-106110-150			KAFB-106110-250			
			Location ID:	KAFB-106109-450			KAFB-106109-450			KAFB-106110-025			KAFB-106110-050			KAFB-106110-150			KAFB-106110-250		
			Field Sample ID:	SV109-450-204			SV109-450-604			SV110-025-204			SV110-050-204			SV110-150-204			SV110-250-204		
			Sample Date:	10/13/2020			10/13/2020			10/13/2020			10/13/2020			10/13/2020			10/13/2020		
Sample Type:	REG			FD			REG			REG			REG			REG					
Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	6.2	--	0.81	6.9	--	0.74	5.8	--	0.69	30	--	0.81	130	J	230	ND	U	3100	
	1,1-dichloroethane	ug/m ³	4.2	--	1.6	4.8	--	1.4	ND	U	1.3	ND	U	1.6	ND	U	440	ND	U	5900	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1.3	ND	U	1.5	ND	U	420	ND	U	5800	
	1,2,4-trimethylbenzene	ug/m ³	1.1	J	0.81	0.67	J	0.74	ND	U	0.69	0.90	J	0.81	ND	U	230	ND	U	3100	
	1,2-dibromoethane	ug/m ³	ND	U	0.81	ND	U	0.74	ND	U	0.69	ND	U	0.81	ND	U	230	ND	U	3100	
	1,2-dichloroethane	ug/m ³	2.2	J	0.81	2.6	--	0.74	ND	U	0.69	ND	U	0.81	ND	U	230	ND	U	3100	
	1,3,5-trimethylbenzene	ug/m ³	ND	U	0.81	ND	U	0.74	ND	U	0.69	ND	U	0.81	ND	U	230	ND	U	3100	
	1,3-butadiene	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1.3	ND	U	1.5	ND	U	420	ND	U	5800	
	1,4-dioxane	ug/m ³	ND	U	0.81	1.9	J	0.74	ND	U	0.69	ND	U	0.81	ND	U	230	ND	U	3100	
	2-butanone	ug/m ³	4.8	--	1.5	11	--	1.4	2.7	J	1.3	14	--	1.5	ND	U	420	ND	U	5800	
	2-hexanone	ug/m ³	ND	U	0.81	2.2	J	0.74	ND	U	0.69	1.7	J	0.81	ND	U	230	ND	U	3100	
	4-methyl-2-pentanone	ug/m ³	ND	U	0.81	ND	U	0.74	ND	U	0.69	ND	U	0.81	ND	U	230	ND	U	3100	
	Acetone	ug/m ³	19	J	13	21	J	12	11	J	11	35	--	13	ND	U	3600	ND	U	49000	
	Benzene	ug/m ³	5.9	--	0.81	6.3	--	0.74	ND	U	0.69	ND	U	0.81	3900	--	230	66000	--	3100	
	Bromodichloromethane	ug/m ³	ND	U	0.81	ND	U	0.74	ND	U	0.69	ND	U	0.81	ND	U	230	ND	U	3100	
	Bromoform	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1.3	ND	U	1.5	ND	U	420	ND	U	5800	
	Carbon disulfide	ug/m ³	72	--	2.6	81	--	2.3	4.9	--	2.2	4.5	J	2.6	ND	U	720	ND	U	9700	
	Carbon tetrachloride	ug/m ³	1.5	J	0.81	1.7	J	0.74	4.2	--	0.69	18	--	0.81	ND	U	230	ND	U	3100	
	Chloroethane	ug/m ³	5.6	--	1.5	6.8	--	1.4	ND	U	1.3	ND	U	1.5	ND	U	420	ND	U	5800	
	Chloroform	ug/m ³	ND	U	0.81	ND	U	0.74	ND	U	0.69	0.48	J	0.81	ND	U	230	ND	U	3100	
	Chloromethane	ug/m ³	19	--	1.5	21	--	1.4	ND	U	1.3	ND	U	1.5	ND	U	420	ND	U	5800	
	Cyclohexane	ug/m ³	2.3	J	1.6	1.6	J	1.5	ND	U	1.4	ND	U	1.6	140000	--	450	1200000	--	6100	
	Dibromochloromethane	ug/m ³	ND	U	0.81	ND	U	0.74	ND	U	0.69	ND	U	0.81	ND	U	230	ND	U	3100	
	Dichlorodifluoromethane	ug/m ³	1.4	J	1.5	1.3	J	1.4	3.7	--	1.3	11	--	1.5	ND	U	420	ND	U	5800	
	ETHANOL	ug/m ³	ND	U	3.9	4.9	J	3.6	3.2	J	3.4	8.9	J	4	ND	U	1100	ND	U	15000	
	Ethyl acetate	ug/m ³	ND	U	3.1	ND	U	2.8	ND	U	2.6	21	--	3.1	ND	U	860	ND	U	12000	
	Ethylbenzene	ug/m ³	0.61	J	0.81	0.62	J	0.74	ND	U	0.69	ND	U	0.81	ND	U	230	ND	U	3100	
	Hexane	ug/m ³	6.8	--	1.5	2.7	--	1.4	ND	U	1.3	ND	U	1.5	98000	--	420	1500000	--	5800	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	3	ND	U	2.7	ND	U	2.6	2.2	J	3	ND	U	840	ND	U	11000	
	m,p-Xylene	ug/m ³	3.0	J	1.6	2.4	J	1.5	ND	U	1.4	0.79	J	1.6	ND	U	450	13000	J	6100	
	Methylene Chloride	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1.3	ND	U	1.5	ND	U	420	ND	U	5800	
	Naphthalene	ug/m ³	ND	U	1.5	ND	U	1.3	ND	U	1.3	ND	U	1.5	ND	U	410	ND	U	5600	
	n-Heptane	ug/m ³	11	--	1.5	3.2	--	1.4	ND	U	1.3	ND	U	1.5	27000	--	420	1300000	--	5800	
	o-Xylene	ug/m ³	0.87	J	0.81	0.77	J	0.74	ND	U	0.69	ND	U	0.81	180	J	230	2900	J	3100	
	Propylene (propene)	ug/m ³	3.5	--	1.5	4.2	--	1.4	0.53	J	1.3	0.77	J	1.5	3100	--	420	18000	--	5800	
	Styrene	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1.3	ND	U	1.5	ND	U	420	ND	U	5800	
	Tetrachloroethene	ug/m ³	1.0	J	0.81	1.1	J	0.74	1.2	J	0.69	2.9	--	0.81	ND	U	230	ND	U	3100	
	Tetrahydrofuran	ug/m ³	22	--	0.81	24	--	0.74	ND	U	0.69	3.8	J	0.81	ND	U	230	ND	U	3100	
	Toluene	ug/m ³	16	--	0.81	16	--	0.74	0.51	J	0.69	0.74	J	0.81	380	J	230	80000	--	3100	
	Trichloroethene	ug/m ³	8.6	--	0.81	9.6	--	0.74	ND	U	0.69	1.1	J	0.81	ND	U	230	ND	U	3100	
Trichlorofluoromethane	ug/m ³	ND	U	1.5	ND	U	1.4	1.2	J	1.3	1.9	J	1.5	ND	U	420	ND	U	5800		
Vinyl chloride	ug/m ³	7.1	--	0.81	8.2	--	0.74	ND	U	0.69	ND	U	0.81	ND	U	230	ND	U	3100		
Xylenes, Total	ug/m ³	3.9	J	1.6	3.2	J	1.5	ND	U	1.4	0.79	J	1.6	ND	U	450	16000	J	6100		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106110-250			KAFB-106110-350			KAFB-106110-450			KAFB-106111-025			KAFB-106111-050			KAFB-106111-050		
	Field Sample ID:			SV110-250-604			SV110-350-204			SV110-450-204			SV111-025-204			SV111-050-204			SV111-050-604		
	Sample Date:			10/13/2020			10/13/2020			10/13/2020			10/6/2020			10/6/2020			10/6/2020		
	Sample Type:			FD			REG			REG			REG			REG			FD		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	ND	U	2700	200	--	35	ND	U	19	21	--	0.87	53	--	0.8	53	--	0.78	
	1,1-dichloroethane	ug/m ³	ND	U	5200	ND	U	68	ND	U	37	ND	U	1.7	ND	U	1.6	ND	U	1.5	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	5100	ND	U	66	ND	U	36	ND	U	1.6	ND	U	1.5	ND	U	1.5	
	1,2,4-trimethylbenzene	ug/m ³	ND	U	2700	ND	U	35	ND	U	19	4.5	--	0.87	4.4	--	0.8	9.6	--	0.78	
	1,2-dibromoethane	ug/m ³	ND	U	2700	ND	U	35	ND	U	19	ND	U	0.87	ND	U	0.8	ND	U	0.78	
	1,2-dichloroethane	ug/m ³	ND	U	2700	ND	U	35	ND	U	19	ND	U	0.87	ND	U	0.8	ND	U	0.78	
	1,3,5-trimethylbenzene	ug/m ³	ND	U	2700	ND	U	35	ND	U	19	1.3	J	0.87	1.4	J	0.8	2.9	--	0.78	
	1,3-butadiene	ug/m ³	ND	U	5100	ND	U	66	ND	U	36	ND	U	1.6	ND	U	1.5	ND	U	1.5	
	1,4-dioxane	ug/m ³	ND	U	2700	ND	U	35	ND	U	19	ND	U	0.87	ND	U	0.8	ND	U	0.78	
	2-butanone	ug/m ³	ND	U	5100	ND	U	66	ND	U	36	1.9	J	1.6	5.7	J	1.5	26	J	1.5	
	2-hexanone	ug/m ³	ND	U	2700	ND	U	35	ND	U	19	ND	U	0.87	ND	U	0.8	ND	U	0.78	
	4-methyl-2-pentanone	ug/m ³	ND	U	2700	ND	U	35	ND	U	19	ND	U	0.87	ND	U	0.8	ND	U	0.78	
	Acetone	ug/m ³	ND	U	43000	ND	U	560	ND	U	300	30	--	14	38	--	13	52	--	12	
	Benzene	ug/m ³	61000	--	2700	19	J	35	360	--	19	0.44	J	0.87	1.1	J	0.8	1.5	J	0.78	
	Bromodichloromethane	ug/m ³	ND	U	2700	ND	U	35	ND	U	19	ND	U	0.87	ND	U	0.8	ND	U	0.78	
	Bromoform	ug/m ³	ND	U	5100	ND	U	66	ND	U	36	ND	U	1.6	ND	U	1.5	ND	U	1.5	
	Carbon disulfide	ug/m ³	ND	U	8500	ND	U	110	190	--	60	11	--	2.8	38	--	2.5	8.5	--	2.5	
	Carbon tetrachloride	ug/m ³	ND	U	2700	42	J	35	ND	U	19	19	--	0.87	51	--	0.8	51	--	0.78	
	Chloroethane	ug/m ³	ND	U	5100	ND	U	66	ND	U	36	ND	U	1.6	ND	U	1.5	ND	U	1.5	
	Chloroform	ug/m ³	ND	U	2700	ND	U	35	ND	U	19	ND	U	0.87	ND	U	0.8	ND	U	0.78	
	Chloromethane	ug/m ³	ND	U	5100	ND	U	66	39	J	36	ND	U	1.6	0.68	J	1.5	0.71	J	1.5	
	Cyclohexane	ug/m ³	1100000	--	5400	37000	--	71	7400	--	38	ND	U	1.7	1.7	J	1.6	3	J	1.6	
	Dibromochloromethane	ug/m ³	ND	U	2700	ND	U	35	ND	U	19	ND	U	0.87	ND	U	0.8	ND	U	0.78	
	Dichlorodifluoromethane	ug/m ³	ND	U	5100	300	--	66	15	J	36	8.3	--	1.6	21	--	1.5	21	--	1.5	
	ETHANOL	ug/m ³	ND	U	13000	ND	U	170	66	J	93	ND	U	4.3	4.1	J	3.9	15	J	3.8	
	Ethyl acetate	ug/m ³	ND	U	10000	ND	U	130	ND	U	73	ND	U	3.3	ND	U	3.1	2.9	J	3	
	Ethylbenzene	ug/m ³	ND	U	2700	ND	U	35	32	J	19	0.74	J	0.87	0.65	J	0.8	1.4	J	0.78	
	Hexane	ug/m ³	1400000	--	5100	11000	--	66	8600	--	36	ND	U	1.6	1.2	J	1.5	2.5	--	1.5	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	10000	ND	U	130	ND	U	71	ND	U	3.2	ND	U	3	2.7	J	2.9	
	m,p-Xylene	ug/m ³	14000	J	5400	ND	U	71	120	--	38	4.8	J	1.7	6.9	--	1.6	16	--	1.6	
	Methylene Chloride	ug/m ³	ND	U	5100	ND	U	66	170	--	36	ND	U	1.6	ND	U	1.5	ND	U	1.5	
	Naphthalene	ug/m ³	ND	U	4900	ND	U	64	ND	U	35	0.94	J	1.6	1.2	J	1.5	2	J	1.4	
	n-Heptane	ug/m ³	1200000	--	5100	130	--	66	8000	--	36	1.5	J	1.6	3.6	J	1.5	7.9	J	1.5	
	o-Xylene	ug/m ³	3300	J	2700	ND	U	35	27	J	19	1.8	J	0.87	2.5	J	0.8	5.5	--	0.78	
	Propylene (propene)	ug/m ³	16000	--	5100	680	--	66	170	--	36	ND	U	1.6	1	J	1.5	1.3	J	1.5	
	Styrene	ug/m ³	ND	U	5100	ND	U	66	ND	U	36	ND	U	1.6	ND	U	1.5	ND	U	1.5	
	Tetrachloroethene	ug/m ³	ND	U	2700	16	J	35	ND	U	19	2.8	--	0.87	6.1	--	0.8	6.2	--	0.78	
	Tetrahydrofuran	ug/m ³	ND	U	2700	ND	U	35	48	J	19	ND	U	0.87	2	J	0.8	3.3	J	0.78	
	Toluene	ug/m ³	75000	--	2700	81	J	35	840	--	19	1.7	J	0.87	2.8	--	0.8	5.7	--	0.78	
	Trichloroethene	ug/m ³	ND	U	2700	45	J	35	ND	U	19	ND	U	0.87	ND	U	0.8	ND	U	0.78	
Trichlorofluoromethane	ug/m ³	ND	U	5100	22	J	66	ND	U	36	1.8	J	1.6	3	--	1.5	3.1	--	1.5		
Vinyl chloride	ug/m ³	ND	U	2700	ND	U	35	ND	U	19	ND	U	0.87	ND	U	0.8	ND	U	0.78		
Xylenes, Total	ug/m ³	17000	--	5400	ND	U	71	150	--	38	6.6	--	1.7	9.4	J	1.6	21	J	1.6		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106111-150			KAFB-106111-250			KAFB-106111-350			KAFB-106111-450			KAFB-106112-025			KAFB-106112-050		
	Field Sample ID:			SV111-150-204			SV111-250-204			SV111-350-204			SV111-450-204			SV112-025-204			SV112-050-204		
	Sample Date:			10/6/2020			10/6/2020			10/6/2020			10/6/2020			10/19/2020			10/19/2020		
	Sample Type:			REG			REG			REG			REG			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	ND	U	650	270	J	100	ND	U	2200	190	--	11	21	--	0.78	31	--	0.95	
	1,1-dichloroethane	ug/m ³	ND	U	1300	ND	U	200	ND	U	4200	ND	U	22	ND	U	1.5	ND	U	1.8	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1200	ND	U	190	ND	U	4100	ND	U	21	ND	U	1.5	ND	U	1.8	
	1,2,4-trimethylbenzene	ug/m ³	ND	U	650	350	--	100	ND	U	2200	10	J	11	1.7	J	0.78	0.55	J	0.95	
	1,2-dibromoethane	ug/m ³	ND	U	650	ND	U	100	ND	U	2200	ND	U	11	ND	U	0.78	ND	U	0.95	
	1,2-dichloroethane	ug/m ³	ND	U	650	ND	U	100	ND	U	2200	ND	U	11	ND	U	0.78	ND	U	0.95	
	1,3,5-trimethylbenzene	ug/m ³	ND	U	650	1900	--	100	2500	J	2200	8.1	J	11	0.38	J	0.78	ND	U	0.95	
	1,3-butadiene	ug/m ³	ND	U	1200	ND	U	190	ND	U	4100	ND	U	21	ND	U	1.5	ND	U	1.8	
	1,4-dioxane	ug/m ³	ND	U	650	ND	U	100	ND	U	2200	ND	U	11	0.73	J	0.78	0.40	J	0.95	
	2-butanone	ug/m ³	ND	U	1200	ND	U	190	6200	J	4100	ND	U	21	8.3	--	1.5	6.8	--	1.8	
	2-hexanone	ug/m ³	ND	U	650	ND	U	100	ND	U	2200	ND	U	11	1.2	J	0.78	ND	U	0.95	
	4-methyl-2-pentanone	ug/m ³	ND	U	650	ND	U	100	ND	U	2200	ND	U	11	0.41	J	0.78	ND	U	0.95	
	Acetone	ug/m ³	ND	U	10000	ND	U	1600	ND	U	35000	ND	U	180	44	--	12	17	J	15	
	Benzene	ug/m ³	2400	--	650	74000	--	350	210000	--	2200	1200	--	11	0.44	J	0.78	0.48	J	0.95	
	Bromodichloromethane	ug/m ³	ND	U	650	ND	U	100	ND	U	2200	ND	U	11	ND	U	0.78	ND	U	0.95	
	Bromoform	ug/m ³	ND	U	1200	ND	U	190	ND	U	4100	ND	U	21	ND	U	1.5	ND	U	1.8	
	Carbon disulfide	ug/m ³	ND	U	2100	ND	U	320	ND	U	6900	180	--	35	3.8	J	2.5	2.9	J	3	
	Carbon tetrachloride	ug/m ³	ND	U	650	300	J	100	ND	U	2200	11	J	11	9.1	--	0.78	12	--	0.95	
	Chloroethane	ug/m ³	ND	U	1200	ND	U	190	ND	U	4100	ND	U	21	ND	U	1.5	ND	U	1.8	
	Chloroform	ug/m ³	ND	U	650	ND	U	100	ND	U	2200	ND	U	11	15	--	0.78	21	--	0.95	
	Chloromethane	ug/m ³	ND	U	1200	ND	U	190	ND	U	4100	51	--	21	ND	U	1.5	ND	U	1.8	
	Cyclohexane	ug/m ³	3200	J	1300	100000	--	200	1200000	--	4400	2300	--	22	ND	U	1.6	ND	U	1.9	
	Dibromochloromethane	ug/m ³	ND	U	650	ND	U	100	ND	U	2200	ND	U	11	ND	U	0.78	ND	U	0.95	
	Dichlorodifluoromethane	ug/m ³	ND	U	1200	ND	U	190	ND	U	4100	250	--	21	10	--	1.5	13	--	1.8	
	ETHANOL	ug/m ³	ND	U	3200	ND	U	490	ND	U	11000	ND	U	55	12	J	3.8	5.4	J	4.6	
	Ethyl acetate	ug/m ³	ND	U	2500	ND	U	380	ND	U	8400	ND	U	43	ND	U	3	ND	U	3.6	
	Ethylbenzene	ug/m ³	ND	U	650	230	J	100	7500	--	2200	90	--	11	ND	U	0.78	0.46	J	0.95	
	Hexane	ug/m ³	4900	--	1200	92000	--	660	1300000	--	4100	1900	--	21	0.58	J	1.5	ND	U	1.8	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	2400	ND	U	370	ND	U	8100	ND	U	41	ND	U	2.9	ND	U	3.5	
	m,p-Xylene	ug/m ³	ND	U	1300	2700	--	200	21000	--	4400	250	--	22	1.2	J	1.6	1.5	J	1.9	
	Methylene Chloride	ug/m ³	ND	U	1200	ND	U	190	ND	U	4100	ND	U	21	0.74	J	1.5	ND	U	1.8	
	Naphthalene	ug/m ³	ND	U	1200	ND	U	180	ND	U	4000	ND	U	20	ND	U	1.4	ND	U	1.7	
	n-Heptane	ug/m ³	1700	J	1200	52000	--	190	660000	--	4100	2000	--	21	0.57	J	1.5	ND	U	1.8	
	o-Xylene	ug/m ³	ND	U	650	5700	--	100	17000	--	2200	72	--	11	0.46	J	0.78	0.69	J	0.95	
Propylene (propene)	ug/m ³	ND	U	1200	440	--	190	6000	J	4100	61	--	21	1.6	J	1.5	ND	U	1.8		
Styrene	ug/m ³	ND	U	1200	ND	U	190	ND	U	4100	ND	U	21	ND	U	1.5	ND	U	1.8		
Tetrachloroethene	ug/m ³	ND	U	650	ND	U	100	ND	U	2200	ND	U	11	1.7	J	0.78	2.7	J	0.95		
Tetrahydrofuran	ug/m ³	ND	U	650	ND	U	100	ND	U	2200	27	J	11	3.6	J	0.78	7.9	--	0.95		
Toluene	ug/m ³	1200	J	650	4700	--	100	94000	--	2200	2600	--	11	1.3	J	0.78	2.2	J	0.95		
Trichloroethene	ug/m ³	ND	U	650	ND	U	100	2600	J	2200	ND	U	11	ND	U	0.78	0.84	J	0.95		
Trichlorofluoromethane	ug/m ³	ND	U	1200	ND	U	190	ND	U	4100	24	J	21	2.9	--	1.5	3.5	--	1.8		
Vinyl chloride	ug/m ³	ND	U	650	ND	U	100	ND	U	2200	8.5	J	11	ND	U	0.78	ND	U	0.95		
Xylenes, Total	ug/m ³	ND	U	1300	8400	--	200	38000	--	4400	320	--	22	1.7	J	1.6	2.2	J	1.9		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Analyte	Units	KAFB-106112-150			KAFB-106112-250			KAFB-106112-350			KAFB-106112-450			KAFB-106112-450			KAFB-106113-020		
			Field Sample ID:			Field Sample ID:			Field Sample ID:			Field Sample ID:			Field Sample ID:			Field Sample ID:		
			SV112-150-204			SV112-250-204			SV112-350-204			SV112-450-204			SV112-450-604			SV113-020-204		
			10/19/2020			10/19/2020			10/19/2020			10/19/2020			10/19/2020			10/13/2020		
Sample Type:			REG			REG			REG			REG			FD			REG		
			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	24	--	0.82	89	--	6.9	36	--	0.77	71	--	4.6	38	--	2.6	0.86	J	0.99
	1,1-dichloroethane	ug/m ³	ND	U	1.6	ND	U	13	ND	U	1.5	ND	U	8.9	ND	U	5.1	ND	U	1.9
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.6	ND	U	13	ND	U	1.4	ND	U	8.6	ND	U	5	ND	U	1.9
	1,2,4-trimethylbenzene	ug/m ³	0.95	J	0.82	ND	U	6.9	1.1	J	0.77	300	--	4.6	160	--	2.6	ND	U	0.99
	1,2-dibromoethane	ug/m ³	ND	U	0.82	ND	U	6.9	0.60	J	0.77	20	--	4.6	ND	U	2.6	ND	U	0.99
	1,2-dichloroethane	ug/m ³	ND	U	0.82	ND	U	6.9	ND	U	0.77	ND	U	4.6	ND	U	2.6	ND	U	0.99
	1,3,5-trimethylbenzene	ug/m ³	ND	U	0.82	ND	U	6.9	0.52	J	0.77	280	--	4.6	150	--	2.6	ND	U	0.99
	1,3-butadiene	ug/m ³	ND	U	1.6	ND	U	13	ND	U	1.4	ND	U	8.6	ND	U	5	ND	U	1.9
	1,4-dioxane	ug/m ³	0.93	J	0.82	ND	U	6.9	ND	U	0.77	ND	U	4.6	ND	U	2.6	ND	U	0.99
	2-butanone	ug/m ³	6.5	--	1.6	13	J	13	2.2	J	1.4	14	J	8.6	22	--	5	2.1	J	1.9
	2-hexanone	ug/m ³	ND	U	0.82	ND	U	6.9	ND	U	0.77	ND	U	4.6	ND	U	2.6	ND	U	0.99
	4-methyl-2-pentanone	ug/m ³	ND	U	0.82	ND	U	6.9	ND	U	0.77	ND	U	4.6	ND	U	2.6	ND	U	0.99
	Acetone	ug/m ³	33	--	13	ND	U	110	13	J	12	ND	U	73	ND	U	42	14	J	16
	Benzene	ug/m ³	2.1	J	0.82	37	--	6.9	9.9	--	0.77	2400	--	4.6	1300	--	2.6	1.1	J	0.99
	Bromodichloromethane	ug/m ³	ND	U	0.82	ND	U	6.9	ND	U	0.77	ND	U	4.6	ND	U	2.6	ND	U	0.99
	Bromoform	ug/m ³	ND	U	1.6	ND	U	13	ND	U	1.4	ND	U	8.6	ND	U	5	ND	U	1.9
	Carbon disulfide	ug/m ³	18	--	2.6	19	J	22	7.8	--	2.4	51	--	15	29	--	8.4	7.9	--	3.1
	Carbon tetrachloride	ug/m ³	6.6	--	0.82	31	--	6.9	14	--	0.77	21	--	4.6	11	--	2.6	1.1	J	0.99
	Chloroethane	ug/m ³	ND	U	1.6	ND	U	13	ND	U	1.4	1.9	J	8.6	ND	U	5	ND	U	1.9
	Chloroform	ug/m ³	1.1	J	0.82	ND	U	6.9	ND	U	0.77	ND	U	4.6	ND	U	2.6	ND	U	0.99
	Chloromethane	ug/m ³	ND	U	1.6	ND	U	13	ND	U	1.4	7.3	J	8.6	5.4	J	5	ND	U	1.9
	Cyclohexane	ug/m ³	ND	U	1.6	300	--	14	3.4	J	1.5	4100	--	9.1	2200	--	5.3	ND	U	2
	Dibromochloromethane	ug/m ³	ND	U	0.82	ND	U	6.9	ND	U	0.77	ND	U	4.6	ND	U	2.6	ND	U	0.99
	Dichlorodifluoromethane	ug/m ³	12	--	1.6	17	J	13	33	--	1.4	16	--	8.6	10	--	5	3.2	--	1.9
	ETHANOL	ug/m ³	34	--	4	ND	U	34	3.8	J	3.8	ND	U	22	14	J	13	12	J	4.8
	Ethyl acetate	ug/m ³	310	--	3.2	ND	U	27	4.2	J	2.9	ND	U	17	ND	U	10	41	J	3.8
	Ethylbenzene	ug/m ³	0.50	J	0.82	ND	U	6.9	1.5	J	0.77	280	--	4.6	150	--	2.6	ND	U	0.99
	Hexane	ug/m ³	0.78	J	1.6	49	--	13	0.53	J	1.4	2200	--	8.6	1100	--	5	ND	U	1.9
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	2.4	J	3.1	77	--	26	ND	U	2.9	15	J	17	7.7	J	9.8	ND	U	3.7
	m,p-Xylene	ug/m ³	1.7	J	1.6	6.0	J	14	4.6	--	1.5	1600	--	9.1	850	--	5.3	1.0	J	2
	Methylene Chloride	ug/m ³	2.8	--	1.6	ND	U	13	ND	U	1.4	ND	U	8.6	ND	U	5	ND	U	1.9
	Naphthalene	ug/m ³	ND	U	1.5	ND	U	13	ND	U	1.4	14	--	8.3	6.2	J	4.8	ND	U	1.8
	n-Heptane	ug/m ³	0.62	J	1.6	ND	U	13	ND	U	1.4	1500	--	8.6	840	--	5	ND	U	1.9
	o-Xylene	ug/m ³	0.65	J	0.82	3.8	J	6.9	2.9	--	0.77	890	--	4.6	480	--	2.6	ND	U	0.99
Propylene (propene)	ug/m ³	2.1	J	1.6	13	J	13	1.3	J	1.4	43	--	8.6	23	--	5	ND	U	1.9	
Styrene	ug/m ³	ND	U	1.6	ND	U	13	ND	U	1.4	ND	U	8.6	ND	U	5	ND	U	1.9	
Tetrachloroethene	ug/m ³	2.2	J	0.82	4.2	J	6.9	2.2	J	0.77	2.4	J	4.6	1.4	J	2.6	0.54	J	0.99	
Tetrahydrofuran	ug/m ³	7.2	--	0.82	4.4	J	6.9	1.2	J	0.77	4.4	J	4.6	3.4	J	2.6	ND	U	0.99	
Toluene	ug/m ³	9.7	--	0.82	37	--	6.9	29	--	0.77	3700	--	16	2200	--	9.8	2.6	J	0.99	
Trichloroethene	ug/m ³	ND	U	0.82	ND	U	6.9	ND	U	0.77	ND	U	4.6	ND	U	2.6	ND	U	0.99	
Trichlorofluoromethane	ug/m ³	2.9	--	1.6	5.3	J	13	6.3	--	1.4	4.8	J	8.6	3.1	J	5	1.1	J	1.9	
Vinyl chloride	ug/m ³	ND	U	0.82	ND	U	6.9	ND	U	0.77	1.7	J	4.6	1.2	J	2.6	ND	U	0.99	
Xylenes, Total	ug/m ³	2.4	J	1.6	9.8	J	14	7.6	--	1.5	2500	--	9.1	1300	--	5.3	1.0	J	2	

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106113-050			KAFB-106113-150			KAFB-106113-250			KAFB-106113-350			KAFB-106113-450			KAFB-106114-025		
	Field Sample ID:			SV113-050-204			SV113-150-204			SV113-250-204			SV113-350-204			SV113-450-204			SV114-025-204		
	Sample Date:			10/13/2020			10/13/2020			10/13/2020			10/13/2020			10/13/2020			10/6/2020		
	Sample Type:			REG			REG			REG			REG			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	3.1	J	1	3.6	--	1.1	3.9	--	0.67	ND	U	44	ND	U	110	13	--	1.2	
	1,1-dichloroethane	ug/m ³	ND	U	2	ND	U	2.1	ND	U	1.3	ND	U	86	ND	U	210	ND	U	2.3	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.9	ND	U	2	ND	U	1.3	ND	U	83	ND	U	200	ND	U	2.2	
	1,2,4-trimethylbenzene	ug/m ³	ND	U	1	ND	U	1.1	ND	U	0.67	ND	U	44	4300	--	110	4.5	--	1.2	
	1,2-dibromoethane	ug/m ³	ND	U	1	ND	U	1.1	ND	U	0.67	ND	U	44	160	J	110	ND	U	1.2	
	1,2-dichloroethane	ug/m ³	ND	U	1	ND	U	1.1	ND	U	0.67	ND	U	44	ND	U	110	ND	U	1.2	
	1,3,5-trimethylbenzene	ug/m ³	ND	U	1	ND	U	1.1	ND	U	0.67	40	J	44	3900	--	110	1.2	J	1.2	
	1,3-butadiene	ug/m ³	ND	U	1.9	ND	U	2	ND	U	1.3	ND	U	83	ND	U	200	ND	U	2.2	
	1,4-dioxane	ug/m ³	ND	U	1	ND	U	1.1	ND	U	0.67	ND	U	44	ND	U	110	ND	U	1.2	
	2-butanone	ug/m ³	1.7	J	1.9	2.8	J	2	6.1	--	1.3	ND	U	83	120	J	200	46	--	2.2	
	2-hexanone	ug/m ³	ND	U	1	ND	U	1.1	0.82	J	0.67	ND	U	44	ND	U	110	6.2	J	1.2	
	4-methyl-2-pentanone	ug/m ³	ND	U	1	ND	U	1.1	0.40	J	0.67	ND	U	44	ND	U	110	1.7	J	1.2	
	Acetone	ug/m ³	ND	U	16	11	J	17	15	J	11	ND	U	700	ND	U	1700	110	--	19	
	Benzene	ug/m ³	ND	U	1	0.58	J	1.1	0.67	J	0.67	1200	--	44	34000	--	110	4.0	--	1.2	
	Bromodichloromethane	ug/m ³	2.0	J	1	ND	U	1.1	ND	U	0.67	ND	U	44	ND	U	110	ND	U	1.2	
	Bromoform	ug/m ³	ND	U	1.9	ND	U	2	ND	U	1.3	ND	U	83	ND	U	200	ND	U	2.2	
	Carbon disulfide	ug/m ³	1.0	J	3.3	11	--	3.4	13	--	2.1	ND	U	140	150	J	340	4.3	J	3.7	
	Carbon tetrachloride	ug/m ³	13	--	1	21	--	1.1	15	--	0.67	ND	U	44	ND	U	110	7.7	--	1.2	
	Chloroethane	ug/m ³	ND	U	1.9	ND	U	2	ND	U	1.3	ND	U	83	ND	U	200	ND	U	2.2	
	Chloroform	ug/m ³	25	--	1	6.5	--	1.1	2.2	--	0.67	ND	U	44	ND	U	110	0.50	J	1.2	
	Chloromethane	ug/m ³	ND	U	1.9	ND	U	2	0.45	J	1.3	ND	U	83	ND	U	200	ND	U	2.2	
	Cyclohexane	ug/m ³	ND	U	2.1	ND	U	2.1	0.71	J	1.3	5800	--	88	48000	--	210	1.3	J	2.3	
	Dibromochloromethane	ug/m ³	ND	U	1	ND	U	1.1	ND	U	0.67	ND	U	44	ND	U	110	ND	U	1.2	
	Dichlorodifluoromethane	ug/m ³	7.1	--	1.9	13	--	2	36	--	1.3	170	--	83	300	J	200	95	--	2.2	
	ETHANOL	ug/m ³	8.0	J	5	9.3	J	5.2	6.8	J	3.3	ND	U	220	ND	U	520	27	J	5.7	
	Ethyl acetate	ug/m ³	ND	U	3.9	ND	U	4.1	2.4	J	2.6	ND	U	170	ND	U	410	160	--	4.5	
	Ethylbenzene	ug/m ³	ND	U	1	ND	U	1.1	ND	U	0.67	ND	U	44	4300	--	110	4.1	--	1.2	
	Hexane	ug/m ³	ND	U	1.9	ND	U	2	0.45	J	1.3	1400	--	83	44000	--	200	1.5	J	2.2	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	3.8	ND	U	4	0.96	J	2.5	ND	U	160	210	J	400	4.7	J	4.3	
	m,p-Xylene	ug/m ³	ND	U	2.1	ND	U	2.1	0.60	J	1.3	50	J	88	18000	--	210	14	--	2.3	
	Methylene Chloride	ug/m ³	ND	U	1.9	ND	U	2	0.99	J	1.3	ND	U	83	ND	U	200	1.4	J	2.2	
	Naphthalene	ug/m ³	ND	U	1.9	ND	U	2	ND	U	1.2	ND	U	81	ND	U	200	2.4	J	2.1	
	n-Heptane	ug/m ³	0.65	J	1.9	ND	U	2	0.57	J	1.3	67	J	83	39000	--	200	2.8	J	2.2	
	o-Xylene	ug/m ³	ND	U	1	ND	U	1.1	ND	U	0.67	89	J	44	7700	--	110	4.9	--	1.2	
	Propylene (propene)	ug/m ³	ND	U	1.9	ND	U	2	0.84	J	1.3	550	--	83	5600	--	200	2.6	J	2.2	
	Styrene	ug/m ³	ND	U	1.9	ND	U	2	0.87	J	1.3	ND	U	83	ND	U	200	ND	U	2.2	
Tetrachloroethene	ug/m ³	3.5	--	1	3.7	--	1.1	0.70	J	0.67	ND	U	44	ND	U	110	1.0	J	1.2		
Tetrahydrofuran	ug/m ³	3.3	J	1	28	--	1.1	11	--	0.67	ND	U	44	120	J	110	2.3	J	1.2		
Toluene	ug/m ³	1.4	J	1	1.1	J	1.1	1.8	J	0.67	640	--	44	58000	--	110	26	--	1.2		
Trichloroethene	ug/m ³	ND	U	1	ND	U	1.1	ND	U	0.67	ND	U	44	ND	U	110	ND	U	1.2		
Trichlorofluoromethane	ug/m ³	1.3	J	1.9	1.4	J	2	2.5	--	1.3	ND	U	83	ND	U	200	13	--	2.2		
Vinyl chloride	ug/m ³	ND	U	1	ND	U	1.1	ND	U	0.67	ND	U	44	ND	U	110	ND	U	1.2		
Xylenes, Total	ug/m ³	ND	U	2.1	ND	U	2.1	0.60	J	1.3	140	J	88	25000	--	210	19	--	2.3		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106114-050			KAFB-106114-150			KAFB-106114-250			KAFB-106114-250			KAFB-106114-350			KAFB-106114-450		
	Field Sample ID:			SV114-050-204			SV114-150-204			SV114-250-204			SV114-250-604			SV114-350-204			SV114-450-204		
	Sample Date:			10/6/2020			10/6/2020			10/6/2020			10/6/2020			10/6/2020			10/6/2020		
	Sample Type:			REG			REG			REG			FD			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	18	--	1.3	38	--	1.2	28	--	1.1	28	--	0.83	160	--	4.9	230	J	510	
	1,1-dichloroethane	ug/m ³	ND	U	2.5	ND	U	2.4	ND	U	2.2	ND	U	1.6	ND	U	9.5	ND	U	990	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	2.4	ND	U	2.3	ND	U	2.1	ND	U	1.6	ND	U	9.3	ND	U	960	
	1,2,4-trimethylbenzene	ug/m ³	2.5	J	1.3	1.7	J	1.2	1.5	J	1.1	4.5	--	0.83	ND	U	4.9	9900	--	510	
	1,2-dibromoethane	ug/m ³	ND	U	1.3	ND	U	1.2	ND	U	1.1	0.33	J	0.83	ND	U	4.9	690	J	510	
	1,2-dichloroethane	ug/m ³	ND	U	1.3	ND	U	1.2	ND	U	1.1	0.67	J	0.83	ND	U	4.9	ND	U	510	
	1,3,5-trimethylbenzene	ug/m ³	0.67	J	1.3	ND	U	1.2	ND	U	1.1	1.3	J	0.83	ND	U	4.9	8000	--	510	
	1,3-butadiene	ug/m ³	ND	U	2.4	ND	U	2.3	ND	U	2.1	ND	U	1.6	ND	U	9.3	ND	U	960	
	1,4-dioxane	ug/m ³	ND	U	1.3	ND	U	1.2	ND	U	1.1	0.85	J	0.83	ND	U	4.9	ND	U	510	
	2-butanone	ug/m ³	9.3	--	2.4	5.5	J	2.3	1.7	J	2.1	13	--	1.6	ND	U	9.3	1300	J	960	
	2-hexanone	ug/m ³	ND	U	1.3	ND	U	1.2	ND	U	1.1	ND	U	0.83	ND	U	4.9	ND	U	510	
	4-methyl-2-pentanone	ug/m ³	ND	U	1.3	ND	U	1.2	ND	U	1.1	0.82	J	0.83	ND	U	4.9	ND	U	510	
	Acetone	ug/m ³	31	J	20	25	J	20	8.6	J	18	46	--	13	ND	U	78	ND	U	8100	
	Benzene	ug/m ³	1.3	J	1.3	1.1	J	1.2	1.1	J	1.1	4.5	--	0.83	11	J	4.9	15000	--	510	
	Bromodichloromethane	ug/m ³	ND	U	1.3	ND	U	1.2	ND	U	1.1	0.72	J	0.83	ND	U	4.9	ND	U	510	
	Bromoform	ug/m ³	ND	U	2.4	ND	U	2.3	ND	U	2.1	2.5	J	1.6	ND	U	9.3	ND	U	960	
	Carbon disulfide	ug/m ³	3.9	J	4.1	6.6	J	3.9	5.5	J	3.6	8.8	--	2.6	ND	U	16	ND	U	1600	
	Carbon tetrachloride	ug/m ³	14	--	1.3	18	--	1.2	36	--	1.1	36	--	0.83	8.3	J	4.9	ND	U	510	
	Chloroethane	ug/m ³	ND	U	2.4	ND	U	2.3	ND	U	2.1	1.0	J	1.6	ND	U	9.3	ND	U	960	
	Chloroform	ug/m ³	0.69	J	1.3	0.59	J	1.2	5.6	--	1.1	7.5	--	0.83	ND	U	4.9	ND	U	510	
	Chloromethane	ug/m ³	ND	U	2.4	ND	U	2.3	ND	U	2.1	8.3	--	1.6	ND	U	9.3	ND	U	960	
	Cyclohexane	ug/m ³	ND	U	2.6	ND	U	2.5	ND	U	2.3	2.0	J	1.7	15	J	9.8	200000	--	1000	
	Dibromochloromethane	ug/m ³	ND	U	1.3	ND	U	1.2	ND	U	1.1	0.68	J	0.83	ND	U	4.9	ND	U	510	
	Dichlorodifluoromethane	ug/m ³	140	--	2.4	220	--	2.3	340	--	2.1	340	--	1.6	2600	--	9.3	3400	--	960	
	ETHANOL	ug/m ³	7.9	J	6.2	8.5	J	6.1	2.8	J	5.5	11	J	4	ND	U	24	2000	J	2500	
	Ethyl acetate	ug/m ³	ND	U	4.9	ND	U	4.7	ND	U	4.3	ND	U	3.2	ND	U	19	ND	U	2000	
	Ethylbenzene	ug/m ³	1.6	J	1.3	1.1	J	1.2	0.93	J	1.1	4.1	--	0.83	ND	U	4.9	5900	--	510	
	Hexane	ug/m ³	ND	U	2.4	ND	U	2.3	ND	U	2.1	3.4	--	1.6	ND	U	9.3	130000	--	960	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	4.7	ND	U	4.6	ND	U	4.2	1.4	J	3.1	ND	U	18	ND	U	1900	
	m,p-Xylene	ug/m ³	6.0	J	2.6	4.4	J	2.5	3.8	J	2.3	17	--	1.7	4.8	J	9.8	52000	--	1000	
	Methylene Chloride	ug/m ³	ND	U	2.4	ND	U	2.3	ND	U	2.1	0.75	J	1.6	ND	U	9.3	ND	U	960	
	Naphthalene	ug/m ³	ND	U	2.3	1.4	J	2.3	ND	U	2.1	2.2	J	1.5	ND	U	9	540	J	930	
	n-Heptane	ug/m ³	1.0	J	2.4	0.96	J	2.3	0.97	J	2.1	6.6	--	1.6	ND	U	9.3	360000	--	1900	
	o-Xylene	ug/m ³	2.1	J	1.3	1.4	J	1.2	1.3	J	1.1	4.9	--	0.83	2.6	J	4.9	33000	--	510	
	Propylene (propene)	ug/m ³	ND	U	2.4	ND	U	2.3	ND	U	2.1	1.7	J	1.6	6.0	J	9.3	9800	--	960	
	Styrene	ug/m ³	ND	U	2.4	ND	U	2.3	ND	U	2.1	ND	U	1.6	ND	U	9.3	ND	U	960	
Tetrachloroethene	ug/m ³	1.4	J	1.3	1.2	J	1.2	0.67	J	1.1	0.73	J	0.83	5.4	J	4.9	ND	U	510		
Tetrahydrofuran	ug/m ³	160	--	1.3	5.4	J	1.2	1.7	J	1.1	3.1	J	0.83	ND	U	4.9	ND	U	510		
Toluene	ug/m ³	8.4	--	1.3	6.8	--	1.2	6.1	J	1.1	30	J	0.83	6.4	J	4.9	51000	--	510		
Trichloroethene	ug/m ³	ND	U	1.3	ND	U	1.2	0.51	J	1.1	0.50	J	0.83	ND	U	4.9	ND	U	510		
Trichlorofluoromethane	ug/m ³	19	--	2.4	19	--	2.3	32	--	2.1	32	--	1.6	410	--	9.3	540	J	960		
Vinyl chloride	ug/m ³	ND	U	1.3	ND	U	1.2	ND	U	1.1	ND	U	0.83	ND	U	4.9	ND	U	510		
Xylenes, Total	ug/m ³	8.1	--	2.6	5.8	J	2.5	5.1	J	2.3	22	--	1.7	7.4	J	9.8	85000	--	1000		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106115-025			KAFB-106115-025			KAFB-106115-050			KAFB-106115-150			KAFB-106115-250			KAFB-106115-350		
	Field Sample ID:			SV115-025-204			SV115-025-604			SV115-050-204			SV115-150-204			SV115-250-204			SV115-350-204		
	Sample Date:			10/13/2020			10/13/2020			10/13/2020			10/13/2020			10/13/2020			10/13/2020		
	Sample Type:			REG			FD			REG			REG			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	0.48	J	0.79	0.57	J	0.84	0.50	J	0.71	0.93	J	0.83	1.0	J	0.84	ND	U	0.76	
	1,1-dichloroethane	ug/m ³	ND	U	1.5	ND	U	1.6	ND	U	1.4	ND	U	1.6	ND	U	1.6	ND	U	1.5	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.5	ND	U	1.6	ND	U	1.3	ND	U	1.6	ND	U	1.6	ND	U	1.4	
	1,2,4-trimethylbenzene	ug/m ³	3.6	--	0.79	6.3	--	0.84	1.6	J	0.71	2.0	J	0.83	1.2	J	0.84	1.4	J	0.76	
	1,2-dibromoethane	ug/m ³	ND	U	0.79	ND	U	0.84	ND	U	0.71	ND	U	0.83	ND	U	0.84	ND	U	0.76	
	1,2-dichloroethane	ug/m ³	ND	U	0.79	ND	U	0.84	ND	U	0.71	ND	U	0.83	ND	U	0.84	ND	U	0.76	
	1,3,5-trimethylbenzene	ug/m ³	2.6	--	0.79	4.7	--	0.84	1.1	J	0.71	1.4	J	0.83	0.84	J	0.84	0.94	J	0.76	
	1,3-butadiene	ug/m ³	ND	U	1.5	ND	U	1.6	ND	U	1.3	ND	U	1.6	ND	U	1.6	ND	U	1.4	
	1,4-dioxane	ug/m ³	ND	U	0.79	ND	U	0.84	ND	U	0.71	0.57	J	0.83	ND	U	0.84	ND	U	0.76	
	2-butanone	ug/m ³	4.0	J	1.5	4.0	J	1.6	6.5	--	1.3	4.5	J	1.6	3.7	J	1.6	3.6	J	1.4	
	2-hexanone	ug/m ³	ND	U	0.79	ND	U	0.84	1.0	J	0.71	ND	U	0.83	ND	U	0.84	0.49	J	0.76	
	4-methyl-2-pentanone	ug/m ³	ND	U	0.79	ND	U	0.84	ND	U	0.71	ND	U	0.83	ND	U	0.84	ND	U	0.76	
	Acetone	ug/m ³	15	J	13	18	J	13	25	--	11	13	J	13	13	J	13	22	J	12	
	Benzene	ug/m ³	0.73	J	0.79	1.9	J	0.84	0.64	J	0.71	0.98	J	0.83	0.84	J	0.84	1.6	J	0.76	
	Bromodichloromethane	ug/m ³	ND	U	0.79	ND	U	0.84	ND	U	0.71	ND	U	0.83	ND	U	0.84	ND	U	0.76	
	Bromoform	ug/m ³	ND	U	1.5	ND	U	1.6	ND	U	1.3	ND	U	1.6	ND	U	1.6	ND	U	1.4	
	Carbon disulfide	ug/m ³	0.75	J	2.5	1.3	J	2.7	1.8	J	2.3	15	--	2.6	1.7	J	2.7	14	--	2.4	
	Carbon tetrachloride	ug/m ³	1.5	J	0.79	1.5	J	0.84	2.1	J	0.71	13	--	0.83	0.89	J	0.84	ND	U	0.76	
	Chloroethane	ug/m ³	ND	U	1.5	ND	U	1.6	ND	U	1.3	ND	U	1.6	ND	U	1.6	ND	U	1.4	
	Chloroform	ug/m ³	0.39	J	0.79	0.40	J	0.84	0.89	J	0.71	2.7	--	0.83	ND	U	0.84	0.34	J	0.76	
	Chloromethane	ug/m ³	ND	U	1.5	ND	U	1.6	ND	U	1.3	ND	U	1.6	ND	U	1.6	ND	U	1.4	
	Cyclohexane	ug/m ³	ND	U	1.6	0.95	J	1.7	ND	U	1.4	ND	U	1.7	ND	U	1.7	ND	U	1.5	
	Dibromochloromethane	ug/m ³	ND	U	0.79	ND	U	0.84	ND	U	0.71	ND	U	0.83	ND	U	0.84	ND	U	0.76	
	Dichlorodifluoromethane	ug/m ³	2.4	--	1.5	2.5	J	1.6	2.3	--	1.3	1.7	J	1.6	0.72	J	1.6	ND	U	1.4	
	ETHANOL	ug/m ³	10	J	3.9	12	J	4.1	4.6	J	3.5	8.0	J	4	4.1	J	4.1	3.5	J	3.7	
	Ethyl acetate	ug/m ³	ND	U	3	ND	U	3.2	ND	U	2.7	1.4	J	3.2	ND	U	3.2	ND	U	2.9	
	Ethylbenzene	ug/m ³	0.98	J	0.79	1.8	J	0.84	0.65	J	0.71	0.78	J	0.83	0.43	J	0.84	0.57	J	0.76	
	Hexane	ug/m ³	ND	U	1.5	1.0	J	1.6	ND	U	1.3	0.55	J	1.6	ND	U	1.6	ND	U	1.4	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	1.0	J	2.9	ND	U	3.1	ND	U	2.6	ND	U	3.1	ND	U	3.1	ND	U	2.8	
	m,p-Xylene	ug/m ³	4.6	J	1.6	9.1	--	1.7	2.5	J	1.4	3.4	J	1.7	2.1	J	1.7	2.8	J	1.5	
	Methylene Chloride	ug/m ³	0.74	J	1.5	0.88	J	1.6	ND	U	1.3	ND	U	1.6	ND	U	1.6	ND	U	1.4	
	Naphthalene	ug/m ³	0.77	J	1.4	0.86	J	1.5	ND	U	1.3	ND	U	1.5	ND	U	1.5	2.5	--	1.4	
	n-Heptane	ug/m ³	0.92	J	1.5	2.5	J	1.6	0.52	J	1.3	1.1	J	1.6	0.60	J	1.6	0.82	J	1.4	
	o-Xylene	ug/m ³	2.3	J	0.79	4.2	--	0.84	0.95	J	0.71	1.5	J	0.83	0.92	J	0.84	1.1	J	0.76	
Propylene (propene)	ug/m ³	1.2	J	1.5	1.4	J	1.6	0.56	J	1.3	0.96	J	1.6	0.78	J	1.6	0.81	J	1.4		
Styrene	ug/m ³	ND	U	1.5	ND	U	1.6	ND	U	1.3	ND	U	1.6	ND	U	1.6	ND	U	1.4		
Tetrachloroethene	ug/m ³	0.44	J	0.79	0.47	J	0.84	0.71	J	0.71	2.1	J	0.83	ND	U	0.84	0.36	J	0.76		
Tetrahydrofuran	ug/m ³	ND	U	0.79	ND	U	0.84	74	--	0.71	5.7	--	0.83	1.2	J	0.84	27	--	0.76		
Toluene	ug/m ³	5.3	--	0.79	12	--	0.84	2.6	--	0.71	5.4	--	0.83	3.0	--	0.84	4.1	--	0.76		
Trichloroethene	ug/m ³	ND	U	0.79	ND	U	0.84	ND	U	0.71	0.39	J	0.83	0.87	J	0.84	12	--	0.76		
Trichlorofluoromethane	ug/m ³	1.3	J	1.5	1.2	J	1.6	1.2	J	1.3	1.2	J	1.6	0.76	J	1.6	ND	U	1.4		
Vinyl chloride	ug/m ³	ND	U	0.79	ND	U	0.84	ND	U	0.71	ND	U	0.83	ND	U	0.84	ND	U	0.76		
Xylenes, Total	ug/m ³	6.9	--	1.6	13	--	1.7	3.4	J	1.4	4.9	--	1.7	3.0	J	1.7	3.9	J	1.5		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106115-450			KAFB-106116-025			KAFB-106116-050			KAFB-106116-150			KAFB-106116-250			KAFB-106116-350		
	Field Sample ID:			SV115-450-204			SV116-025-204			SV116-050-204			SV116-150-204			SV116-250-204			SV116-350-204		
	Sample Date:			10/13/2020			10/6/2020			10/6/2020			10/6/2020			10/6/2020					
	Sample Type:			REG			REG			REG			REG			REG					
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	ND	U	60	13	--	0.82	38	--	0.8	12	--	1.1	66	--	0.85	31	J	13	
	1,1-dichloroethane	ug/m ³	ND	U	120	ND	U	1.6	ND	U	1.6	ND	U	2.2	ND	U	1.7	ND	U	26	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	110	ND	U	1.6	ND	U	1.5	ND	U	2.2	ND	U	1.6	ND	U	25	
	1,2,4-trimethylbenzene	ug/m ³	48	J	60	0.88	J	0.82	0.71	J	0.8	ND	U	1.1	0.51	J	0.85	ND	U	13	
	1,2-dibromoethane	ug/m ³	ND	U	60	ND	U	0.82	ND	U	0.8	ND	U	1.1	ND	U	0.85	ND	U	13	
	1,2-dichloroethane	ug/m ³	ND	U	60	ND	U	0.82	ND	U	0.8	ND	U	1.1	ND	U	0.85	ND	U	13	
	1,3,5-trimethylbenzene	ug/m ³	61	J	60	ND	U	0.82	ND	U	0.8	ND	U	1.1	ND	U	0.85	38	J	13	
	1,3-butadiene	ug/m ³	ND	U	110	ND	U	1.6	ND	U	1.5	ND	U	2.2	ND	U	1.6	ND	U	25	
	1,4-dioxane	ug/m ³	ND	U	60	ND	U	0.82	ND	U	0.8	ND	U	1.1	ND	U	0.85	ND	U	13	
	2-butanone	ug/m ³	ND	U	110	ND	U	1.6	1.0	J	1.5	1.4	J	2.2	ND	U	1.6	230	--	25	
	2-hexanone	ug/m ³	ND	U	60	ND	U	0.82	ND	U	0.8	ND	U	1.1	ND	U	0.85	ND	U	13	
	4-methyl-2-pentanone	ug/m ³	ND	U	60	ND	U	0.82	ND	U	0.8	ND	U	1.1	1.2	J	0.85	ND	U	13	
	Acetone	ug/m ³	ND	U	950	ND	U	13	ND	U	13	28	J	18	ND	U	14	ND	U	210	
	Benzene	ug/m ³	2900	--	60	ND	U	0.82	ND	U	0.8	ND	U	1.1	5.7	--	0.85	450	--	13	
	Bromodichloromethane	ug/m ³	ND	U	60	ND	U	0.82	ND	U	0.8	ND	U	1.1	ND	U	0.85	ND	U	13	
	Bromoform	ug/m ³	ND	U	110	ND	U	1.6	ND	U	1.5	ND	U	2.2	ND	U	1.6	ND	U	25	
	Carbon disulfide	ug/m ³	82	J	190	0.85	J	2.6	3.4	J	2.5	7.1	--	3.6	8.5	--	2.7	ND	U	42	
	Carbon tetrachloride	ug/m ³	ND	U	60	1.6	J	0.82	12	--	0.8	2.4	J	1.1	21	--	0.85	15	J	13	
	Chloroethane	ug/m ³	ND	U	110	ND	U	1.6	ND	U	1.5	ND	U	2.2	ND	U	1.6	ND	U	25	
	Chloroform	ug/m ³	ND	U	60	0.45	J	0.82	0.87	J	0.8	0.68	J	1.1	0.60	J	0.85	6.2	J	13	
	Chloromethane	ug/m ³	ND	U	110	ND	U	1.6	ND	U	1.5	1.4	J	2.2	ND	U	1.6	ND	U	25	
	Cyclohexane	ug/m ³	2900	--	120	ND	U	1.6	ND	U	1.6	ND	U	2.3	ND	U	1.7	6400	--	26	
	Dibromochloromethane	ug/m ³	ND	U	60	ND	U	0.82	ND	U	0.8	ND	U	1.1	ND	U	0.85	ND	U	13	
	Dichlorodifluoromethane	ug/m ³	ND	U	110	27	--	1.6	84	--	1.5	48	--	2.2	87	--	1.6	320	J	25	
	ETHANOL	ug/m ³	ND	U	290	ND	U	4	ND	U	3.9	11	J	5.6	ND	U	4.2	440	--	64	
	Ethyl acetate	ug/m ³	ND	U	230	ND	U	3.2	ND	U	3.1	2.9	J	4.4	ND	U	3.3	170	--	50	
	Ethylbenzene	ug/m ³	190	--	60	ND	U	0.82	ND	U	0.8	ND	U	1.1	0.57	J	0.85	ND	U	13	
	Hexane	ug/m ³	1100	--	110	ND	U	1.6	ND	U	1.5	ND	U	2.2	ND	U	1.6	540	--	25	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	220	ND	U	3.1	ND	U	3	ND	U	4.2	ND	U	3.2	130	--	49	
	m,p-Xylene	ug/m ³	520	--	120	ND	U	1.6	0.71	J	1.6	ND	U	2.3	1.1	J	1.7	16	J	26	
	Methylene Chloride	ug/m ³	ND	U	110	ND	U	1.6	ND	U	1.5	ND	U	2.2	ND	U	1.6	63	--	25	
	Naphthalene	ug/m ³	ND	U	110	0.94	J	1.5	ND	U	1.5	ND	U	2.1	ND	U	1.6	ND	U	24	
	n-Heptane	ug/m ³	120	J	110	ND	U	1.6	ND	U	1.5	ND	U	2.2	ND	U	1.6	ND	U	25	
	o-Xylene	ug/m ³	230	--	60	ND	U	0.82	ND	U	0.8	ND	U	1.1	1.5	J	0.85	32	J	13	
	Propylene (propene)	ug/m ³	260	--	110	ND	U	1.6	ND	U	1.5	ND	U	2.2	ND	U	1.6	180	--	25	
	Styrene	ug/m ³	ND	U	110	ND	U	1.6	ND	U	1.5	ND	U	2.2	ND	U	1.6	ND	U	25	
	Tetrachloroethene	ug/m ³	ND	U	60	ND	U	0.82	0.74	J	0.8	ND	U	1.1	1.9	J	0.85	ND	U	13	
	Tetrahydrofuran	ug/m ³	74	J	60	0.35	J	0.82	400	--	0.8	3.8	J	1.1	6.1	--	0.85	8.3	J	13	
	Toluene	ug/m ³	4400	--	60	0.62	J	0.82	1.2	J	0.8	ND	U	1.1	8.7	--	0.85	18	J	13	
	Trichloroethene	ug/m ³	ND	U	60	ND	U	0.82	ND	U	0.8	ND	U	1.1	ND	U	0.85	27	J	13	
Trichlorofluoromethane	ug/m ³	ND	U	110	4.0	--	1.6	9.6	--	1.5	4.4	--	2.2	9.7	--	1.6	42	--	25		
Vinyl chloride	ug/m ³	ND	U	60	ND	U	0.82	ND	U	0.8	ND	U	1.1	ND	U	0.85	ND	U	13		
Xylenes, Total	ug/m ³	740	--	120	ND	U	1.6	0.71	J	1.6	ND	U	2.3	2.6	J	1.7	49	J	26		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Analyte	Units	Location ID: KAFB-106116-350			KAFB-106116-450			KAFB-106117-025			KAFB-106117-050			KAFB-106117-150			KAFB-106117-250		
			Field Sample ID: SV116-350-604			SV116-450-204			SV117-025-204			SV117-050-204			SV117-150-204			SV117-250-204		
			Sample Date: 10/6/2020			10/6/2020			10/6/2020			10/6/2020			10/6/2020			10/6/2020		
			Sample Type: FD			REG			REG			REG			REG			REG		
			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	19	J	17	ND	U	1200	23	--	0.72	71	--	0.78	140	--	0.74	290	--	1.6
	1,1-dichloroethane	ug/m ³	ND	U	32	ND	U	2300	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	3
	1,2,4-trichlorobenzene	ug/m ³	ND	U	31	ND	U	2200	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	2.9
	1,2,4-trimethylbenzene	ug/m ³	ND	U	17	6800	--	1200	8.2	--	0.72	2.7	--	0.78	4.6	--	0.74	4.7	J	1.6
	1,2-dibromoethane	ug/m ³	ND	U	17	1200	J	1200	ND	U	0.72	ND	U	0.78	ND	U	0.74	ND	U	1.6
	1,2-dichloroethane	ug/m ³	ND	U	17	ND	U	1200	ND	U	0.72	ND	U	0.78	ND	U	0.74	ND	U	1.6
	1,3,5-trimethylbenzene	ug/m ³	36	J	17	8100	--	1200	6.2	--	0.72	2.1	J	0.78	2.8	--	0.74	6.7	--	1.6
	1,3-butadiene	ug/m ³	ND	U	31	ND	U	2200	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	2.9
	1,4-dioxane	ug/m ³	ND	U	17	ND	U	1200	ND	U	0.72	ND	U	0.78	ND	U	0.74	ND	U	1.6
	2-butanone	ug/m ³	ND	U	31	ND	U	2200	7.2	--	1.4	7.3	--	1.5	13	--	1.4	3.5	J	2.9
	2-hexanone	ug/m ³	ND	U	17	ND	U	1200	ND	U	0.72	ND	U	0.78	ND	U	0.74	ND	U	1.6
	4-methyl-2-pentanone	ug/m ³	ND	U	17	ND	U	1200	ND	U	0.72	ND	U	0.78	ND	U	0.74	ND	U	1.6
	Acetone	ug/m ³	ND	U	260	ND	U	19000	46	--	11	12	J	12	76	--	12	21	J	25
	Benzene	ug/m ³	400	--	17	66000	--	1200	2.5	--	0.72	0.94	J	0.78	2.2	J	0.74	28	--	1.6
	Bromodichloromethane	ug/m ³	ND	U	17	ND	U	1200	ND	U	0.72	ND	U	0.78	ND	U	0.74	ND	U	1.6
	Bromoform	ug/m ³	ND	U	31	ND	U	2200	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	2.9
	Carbon disulfide	ug/m ³	ND	U	53	ND	U	3700	4.5	--	2.3	3.2	J	2.5	10	--	2.4	18	--	5
	Carbon tetrachloride	ug/m ³	ND	U	17	ND	U	1200	4.9	--	0.72	18	--	0.78	32	--	0.74	36	--	1.6
	Chloroethane	ug/m ³	ND	U	31	ND	U	2200	ND	U	1.4	ND	U	1.5	2.4	--	1.4	ND	U	2.9
	Chloroform	ug/m ³	ND	U	17	ND	U	1200	ND	U	0.72	1.0	J	0.78	8.7	--	0.74	2.4	J	1.6
	Chloromethane	ug/m ³	ND	U	31	ND	U	2200	ND	U	1.4	ND	U	1.5	23	--	1.4	ND	U	2.9
	Cyclohexane	ug/m ³	6100	--	33	680000	--	2300	7.2	--	1.4	1.9	J	1.6	1.7	J	1.5	9.7	--	3.1
	Dibromochloromethane	ug/m ³	ND	U	17	ND	U	1200	ND	U	0.72	ND	U	0.78	ND	U	0.74	ND	U	1.6
	Dichlorodifluoromethane	ug/m ³	180	J	31	ND	U	2200	23	--	1.4	75	--	1.5	99	--	1.4	14	--	2.9
	ETHANOL	ug/m ³	ND	U	81	ND	U	5700	8.6	J	3.5	5.2	J	3.8	4.7	J	3.6	3.4	J	7.6
	Ethyl acetate	ug/m ³	ND	U	64	ND	U	4500	34	--	2.8	ND	U	3	ND	U	2.8	ND	U	6
	Ethylbenzene	ug/m ³	ND	U	17	12000	--	1200	3.7	--	0.72	1.3	J	0.78	1.9	J	0.74	1.7	J	1.6
	Hexane	ug/m ³	500	--	31	500000	--	2200	6.1	--	1.4	2.0	J	1.5	1.8	J	1.4	3.3	J	2.9
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	62	ND	U	4300	1.7	J	2.7	ND	U	2.9	1.9	J	2.8	12	--	5.8
	m,p-Xylene	ug/m ³	ND	U	33	54000	--	2300	20	--	1.4	6.8	--	1.6	9.1	--	1.5	9.8	--	3.1
	Methylene Chloride	ug/m ³	ND	U	31	ND	U	2200	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	2.9
	Naphthalene	ug/m ³	ND	U	30	ND	U	2100	0.88	J	1.3	1.2	J	1.4	3.0	--	1.4	ND	U	2.9
	n-Heptane	ug/m ³	ND	U	31	640000	--	2200	26	--	1.4	7.5	--	1.5	5.3	--	1.4	5.7	--	2.9
	o-Xylene	ug/m ³	29	J	17	40000	--	1200	15	--	0.72	5.2	--	0.78	5.7	--	0.74	7.6	--	1.6
Propylene (propene)	ug/m ³	120	--	31	12000	--	2200	0.85	J	1.4	ND	U	1.5	3.1	--	1.4	2.9	J	2.9	
Styrene	ug/m ³	ND	U	31	ND	U	2200	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	2.9	
Tetrachloroethene	ug/m ³	ND	U	17	ND	U	1200	1.1	J	0.72	1.6	J	0.78	2.1	J	0.74	2.4	J	1.6	
Tetrahydrofuran	ug/m ³	ND	U	17	ND	U	1200	1.3	J	0.72	80	--	0.78	2.6	J	0.74	13	--	1.6	
Toluene	ug/m ³	11	J	17	140000	--	1200	18	--	0.72	5.4	--	0.78	12	--	0.74	12	--	1.6	
Trichloroethene	ug/m ³	15	J	17	ND	U	1200	ND	U	0.72	ND	U	0.78	0.59	J	0.74	ND	U	1.6	
Trichlorofluoromethane	ug/m ³	23	J	31	ND	U	2200	4.0	--	1.4	11	--	1.5	13	--	1.4	4.3	J	2.9	
Vinyl chloride	ug/m ³	ND	U	17	ND	U	1200	ND	U	0.72	ND	U	0.78	ND	U	0.74	ND	U	1.6	
Xylenes, Total	ug/m ³	29	J	33	94000	--	2300	34	--	1.4	12	--	1.6	15	--	1.5	17	--	3.1	

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

		Location ID:	KAFB-106117-350			KAFB-106117-450			KAFB-106118-025			KAFB-106118-050			KAFB-106118-160			KAFB-106118-265		
		Field Sample ID:	SV117-350-204			SV117-450-204			SV118-025-204			SV118-050-204			SV118-160-204			SV118-265-204		
		Sample Date:	10/6/2020			10/6/2020			10/19/2020			10/19/2020			10/19/2020			10/19/2020		
		Sample Type:	REG			REG			REG			REG			REG			REG		
Analytical Method	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	160	J	61	ND	U	1600	25	--	0.82	33	--	0.74	110	J	56	83	J	160
	1,1-dichloroethane	ug/m ³	ND	U	120	ND	U	3100	ND	U	1.6	ND	U	1.4	ND	U	110	ND	U	310
	1,2,4-trichlorobenzene	ug/m ³	ND	U	110	ND	U	3000	ND	U	1.5	ND	U	1.4	ND	U	110	ND	U	300
	1,2,4-trimethylbenzene	ug/m ³	140	J	61	34000	--	1600	0.49	J	0.82	0.57	J	0.74	ND	U	56	ND	U	160
	1,2-dibromoethane	ug/m ³	61	J	61	2500	J	1600	ND	U	0.82	ND	U	0.74	ND	U	56	ND	U	160
	1,2-dichloroethane	ug/m ³	ND	U	61	ND	U	1600	ND	U	0.82	ND	U	0.74	ND	U	56	ND	U	160
	1,3,5-trimethylbenzene	ug/m ³	220	--	61	17000	--	1600	ND	U	0.82	ND	U	0.74	ND	U	56	ND	U	160
	1,3-butadiene	ug/m ³	ND	U	110	ND	U	3000	ND	U	1.5	ND	U	1.4	ND	U	110	ND	U	300
	1,4-dioxane	ug/m ³	ND	U	61	ND	U	1600	2.2	J	0.82	1.1	J	0.74	ND	U	56	ND	U	160
	2-butanone	ug/m ³	130	J	110	ND	U	3000	0.80	J	1.5	12	--	1.4	ND	U	110	ND	U	300
	2-hexanone	ug/m ³	ND	U	61	ND	U	1600	ND	U	0.82	1.9	J	0.74	ND	U	56	ND	U	160
	4-methyl-2-pentanone	ug/m ³	ND	U	61	ND	U	1600	ND	U	0.82	0.70	J	0.74	ND	U	56	ND	U	160
	Acetone	ug/m ³	710	J	960	ND	U	26000	5.8	J	13	54	--	12	ND	U	890	ND	U	2600
	Benzene	ug/m ³	ND	U	61	17000	--	1600	0.50	J	0.82	0.59	J	0.74	48	J	56	100	J	160
	Bromodichloromethane	ug/m ³	ND	U	61	ND	U	1600	ND	U	0.82	ND	U	0.74	ND	U	56	ND	U	160
	Bromoform	ug/m ³	ND	U	110	ND	U	3000	ND	U	1.5	ND	U	1.4	ND	U	110	ND	U	300
	Carbon disulfide	ug/m ³	ND	U	190	ND	U	5100	3.2	J	2.6	3.4	J	2.4	ND	U	180	ND	U	510
	Carbon tetrachloride	ug/m ³	ND	U	61	ND	U	1600	9.5	--	0.82	12	--	0.74	30	J	56	ND	U	160
	Chloroethane	ug/m ³	ND	U	110	ND	U	3000	ND	U	1.5	ND	U	1.4	ND	U	110	ND	U	300
	Chloroform	ug/m ³	ND	U	61	ND	U	1600	1.1	J	0.82	1.7	J	0.74	ND	U	56	ND	U	160
	Chloromethane	ug/m ³	ND	U	110	ND	U	3000	ND	U	1.5	0.40	J	1.4	ND	U	110	ND	U	300
	Cyclohexane	ug/m ³	3600	--	120	640000	--	3200	ND	U	1.6	ND	U	1.5	16000	--	110	81000	--	320
	Dibromochloromethane	ug/m ³	ND	U	61	ND	U	1600	ND	U	0.82	ND	U	0.74	ND	U	56	ND	U	160
	Dichlorodifluoromethane	ug/m ³	69	J	110	5300	--	3000	6.9	--	1.5	8.6	--	1.4	ND	U	110	ND	U	300
	ETHANOL	ug/m ³	ND	U	300	ND	U	7800	2.4	J	4	12	J	3.6	ND	U	270	ND	U	780
	Ethyl acetate	ug/m ³	ND	U	230	ND	U	6100	10	--	3.1	15	--	2.8	ND	U	210	ND	U	610
	Ethylbenzene	ug/m ³	ND	U	61	26000	--	1600	ND	U	0.82	ND	U	0.74	ND	U	56	ND	U	160
	Hexane	ug/m ³	890	--	110	400000	--	3000	0.83	J	1.5	1.2	J	1.4	1300	--	110	20000	--	300
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	250	J	220	ND	U	6000	ND	U	3	1.8	J	2.8	ND	U	210	ND	U	600
	m,p-Xylene	ug/m ³	55	J	120	270000	--	3200	ND	U	1.6	ND	U	1.5	ND	U	110	ND	U	320
	Methylene Chloride	ug/m ³	ND	U	110	ND	U	3000	ND	U	1.5	ND	U	1.4	ND	U	110	ND	U	300
	Naphthalene	ug/m ³	ND	U	110	ND	U	2900	ND	U	1.5	ND	U	1.4	ND	U	100	ND	U	290
	n-Heptane	ug/m ³	1600	--	110	720000	--	3000	0.65	J	1.5	0.97	J	1.4	110	J	110	230	J	300
	o-Xylene	ug/m ³	160	J	61	94000	--	1600	ND	U	0.82	ND	U	0.74	ND	U	56	ND	U	160
	Propylene (propene)	ug/m ³	77	J	110	10000	--	3000	ND	U	1.5	1.6	J	1.4	150	J	110	450	J	300
	Styrene	ug/m ³	ND	U	110	ND	U	3000	ND	U	1.5	ND	U	1.4	ND	U	110	ND	U	300
	Tetrachloroethene	ug/m ³	ND	U	61	ND	U	1600	0.60	J	0.82	0.45	J	0.74	39	J	56	73	J	160
	Tetrahydrofuran	ug/m ³	ND	U	61	ND	U	1600	0.86	J	0.82	32	--	0.74	ND	U	56	ND	U	160
	Toluene	ug/m ³	38	J	61	ND	U	1600	0.48	J	0.82	9.9	--	0.74	ND	U	56	130	J	160
	Trichloroethene	ug/m ³	ND	U	61	ND	U	1600	ND	U	0.82	ND	U	0.74	ND	U	56	ND	U	160
Trichlorofluoromethane	ug/m ³	ND	U	110	ND	U	3000	4.4	--	1.5	5.5	--	1.4	ND	U	110	ND	U	300	
Vinyl chloride	ug/m ³	ND	U	61	ND	U	1600	ND	U	0.82	ND	U	0.74	ND	U	56	ND	U	160	
Xylenes, Total	ug/m ³	220	J	120	360000	--	3200	ND	U	1.6	ND	U	1.5	ND	U	110	ND	U	320	

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Analyte	Units	KAFB-106118-350			KAFB-106118-450			KAFB-106118-450			KAFB-106119-025			KAFB-106119-050			KAFB-106119-150					
			Field Sample ID:			SV118-350-204			SV118-450-204			SV118-450-604			SV119-025-204			SV119-050-204			SV119-150-204		
			Sample Date:			10/19/2020			10/19/2020			10/19/2020			10/20/2020			10/20/2020			10/20/2020		
			Sample Type:			REG			REG			FD			REG			REG			REG		
			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD			
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	140	J	280	17	J	8.9	21	J	29	120	--	0.89	140	--	0.8	150	J	190			
	1,1-dichloroethane	ug/m ³	ND	U	530	6.7	J	17	ND	U	56	ND	U	1.7	ND	U	1.6	ND	U	360			
	1,2,4-trichlorobenzene	ug/m ³	ND	U	520	ND	U	17	ND	U	54	ND	U	1.7	ND	U	1.5	ND	U	350			
	1,2,4-trimethylbenzene	ug/m ³	ND	U	280	ND	U	8.9	ND	U	29	0.47	J	0.89	ND	U	0.8	ND	U	190			
	1,2-dibromoethane	ug/m ³	ND	U	280	ND	U	8.9	ND	U	29	ND	U	0.89	ND	U	0.8	ND	U	190			
	1,2-dichloroethane	ug/m ³	ND	U	280	ND	U	8.9	ND	U	29	ND	U	0.89	ND	U	0.8	ND	U	190			
	1,3,5-trimethylbenzene	ug/m ³	ND	U	280	9.2	J	8.9	14	J	29	0.55	J	0.89	ND	U	0.8	ND	U	190			
	1,3-butadiene	ug/m ³	ND	U	520	ND	U	17	ND	U	54	ND	U	1.7	ND	U	1.5	ND	U	350			
	1,4-dioxane	ug/m ³	ND	U	280	ND	U	8.9	ND	U	29	0.5	J	0.89	0.89	J	0.8	ND	U	190			
	2-butanone	ug/m ³	ND	U	520	ND	U	17	ND	U	54	3.5	J	1.7	5.4	--	1.5	ND	U	350			
	2-hexanone	ug/m ³	ND	U	280	ND	U	8.9	ND	U	29	ND	U	0.89	ND	U	0.8	ND	U	190			
	4-methyl-2-pentanone	ug/m ³	ND	U	280	ND	U	8.9	ND	U	29	ND	U	0.89	ND	U	0.8	ND	U	190			
	Acetone	ug/m ³	ND	U	4400	ND	U	140	ND	U	460	19	J	14	22	J	13	ND	U	3000			
	Benzene	ug/m ³	150	J	280	69	--	8.9	84	J	29	0.98	J	0.89	0.99	J	0.8	1000	--	190			
	Bromodichloromethane	ug/m ³	ND	U	280	ND	U	8.9	ND	U	29	ND	U	0.89	ND	U	0.8	ND	U	190			
	Bromoform	ug/m ³	ND	U	520	ND	U	17	ND	U	54	ND	U	1.7	ND	U	1.5	ND	U	350			
	Carbon disulfide	ug/m ³	ND	U	870	350	--	28	360	--	91	25	--	2.8	27	--	2.5	ND	U	590			
	Carbon tetrachloride	ug/m ³	ND	U	280	90	--	8.9	120	--	29	2.7	--	0.89	3	--	0.8	ND	U	190			
	Chloroethane	ug/m ³	ND	U	520	7.8	J	17	ND	U	54	ND	U	1.7	ND	U	1.5	ND	U	350			
	Chloroform	ug/m ³	ND	U	280	9.1	J	8.9	ND	U	29	0.61	J	0.89	ND	U	0.8	ND	U	190			
	Chloromethane	ug/m ³	ND	U	520	49	--	17	72	J	54	ND	U	1.7	ND	U	1.5	ND	U	350			
	Cyclohexane	ug/m ³	270000	--	550	9400	--	18	15000	--	57	5.3	--	1.8	1.2	J	1.6	93000	--	370			
	Dibromochloromethane	ug/m ³	ND	U	280	ND	U	8.9	ND	U	29	ND	U	0.89	ND	U	0.8	ND	U	190			
	Dichlorodifluoromethane	ug/m ³	ND	U	520	4.5	J	17	ND	U	54	8.2	--	1.7	5.6	--	1.5	ND	U	350			
	ETHANOL	ug/m ³	ND	U	1300	ND	U	43	ND	U	140	4.6	J	4.4	4.9	J	3.9	ND	U	910			
	Ethyl acetate	ug/m ³	ND	U	1100	ND	U	34	ND	U	110	ND	U	3.4	ND	U	3.1	ND	U	710			
	Ethylbenzene	ug/m ³	ND	U	280	13	J	8.9	19	J	29	0.81	J	0.89	ND	U	0.8	ND	U	190			
	Hexane	ug/m ³	60000	--	520	810	--	17	940	--	54	ND	U	1.7	ND	U	1.5	3700	--	350			
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	1000	ND	U	33	ND	U	110	ND	U	3.3	ND	U	3	ND	U	690			
	m,p-Xylene	ug/m ³	ND	U	550	23	J	18	34	J	57	5.9	--	1.8	ND	U	1.6	240	J	370			
	Methylene Chloride	ug/m ³	ND	U	520	ND	U	17	ND	U	54	ND	U	1.7	ND	U	1.5	ND	U	350			
	Naphthalene	ug/m ³	ND	U	500	ND	U	16	ND	U	52	ND	U	1.6	ND	U	1.5	ND	U	340			
	n-Heptane	ug/m ³	760	J	520	11	J	17	18	J	54	ND	U	1.7	ND	U	1.5	610	--	350			
o-Xylene	ug/m ³	150	J	280	20	J	8.9	28	J	29	1.5	J	0.89	ND	U	0.8	170	J	190				
Propylene (propene)	ug/m ³	1200	--	520	29	--	17	33	J	54	1.2	J	1.7	2.3	J	1.5	680	--	350				
Styrene	ug/m ³	ND	U	520	ND	U	17	ND	U	54	ND	U	1.7	ND	U	1.5	ND	U	350				
Tetrachloroethene	ug/m ³	ND	U	280	ND	U	8.9	ND	U	29	3.5	--	0.89	3.5	--	0.8	230	J	190				
Tetrahydrofuran	ug/m ³	ND	U	280	68	--	8.9	85	J	29	ND	U	0.89	ND	U	0.8	ND	U	190				
Toluene	ug/m ³	ND	U	280	350	--	8.9	510	--	29	11	--	0.89	1.1	J	0.8	1200	--	190				
Trichloroethene	ug/m ³	ND	U	280	ND	U	8.9	ND	U	29	ND	U	0.89	ND	U	0.8	130	J	190				
Trichlorofluoromethane	ug/m ³	ND	U	520	7.5	J	17	ND	U	54	2.9	--	1.7	2.6	--	1.5	ND	U	350				
Vinyl chloride	ug/m ³	ND	U	280	11	J	8.9	12	J	29	ND	U	0.89	ND	U	0.8	ND	U	190				
Xylenes, Total	ug/m ³	ND	U	550	43	J	18	62	J	57	7.3	--	1.8	ND	U	1.6	410	J	370				

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106119-250			KAFB-106119-350			KAFB-106119-450			KAFB-106120-025			KAFB-106120-025			KAFB-106120-050		
	Field Sample ID:			SV119-250-204			SV119-350-204			SV119-450-204			SV120-025-204			SV120-025-604			SV120-050-204		
	Sample Date:			10/20/2020			10/20/2020			10/20/2020			10/12/2020			10/12/2020			10/12/2020		
	Sample Type:			REG			REG			REG			REG			FD			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	1300	J	1900	650	J	770	670	J	430	0.46	J	0.79	0.41	J	0.71	0.88	J	0.76	
	1,1-dichloroethane	ug/m ³	ND	U	3800	ND	U	1500	ND	U	840	ND	U	1.5	ND	U	1.4	ND	U	1.5	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	3600	ND	U	1500	ND	U	820	0.67	J	1.5	ND	U	1.3	ND	U	1.4	
	1,2,4-trimethylbenzene	ug/m ³	ND	U	1900	1900	J	770	210	J	430	2.3	J	0.79	1.0	J	0.71	ND	U	0.76	
	1,2-dibromoethane	ug/m ³	ND	U	1900	ND	U	770	ND	U	430	ND	U	0.79	ND	U	0.71	ND	U	0.76	
	1,2-dichloroethane	ug/m ³	ND	U	1900	ND	U	770	ND	U	430	ND	U	0.79	ND	U	0.71	ND	U	0.76	
	1,3,5-trimethylbenzene	ug/m ³	2400	J	1900	2200	J	770	1000	J	430	0.74	J	0.79	0.33	J	0.71	ND	U	0.76	
	1,3-butadiene	ug/m ³	ND	U	3600	ND	U	1500	ND	U	820	ND	U	1.5	ND	U	1.3	ND	U	1.4	
	1,4-dioxane	ug/m ³	ND	U	1900	ND	U	770	ND	U	430	1.1	J	0.79	ND	U	0.71	ND	U	0.76	
	2-butanone	ug/m ³	ND	U	3600	ND	U	1500	ND	U	820	5.0	--	1.5	2.2	J	1.3	140	--	1.4	
	2-hexanone	ug/m ³	ND	U	1900	ND	U	770	ND	U	430	1.4	J	0.79	0.55	J	0.71	ND	U	0.76	
	4-methyl-2-pentanone	ug/m ³	ND	U	1900	ND	U	770	ND	U	430	ND	U	0.79	ND	U	0.71	ND	U	0.76	
	Acetone	ug/m ³	ND	U	31000	ND	U	12000	ND	U	6900	15	J	12	13	J	11	78	--	12	
	Benzene	ug/m ³	160000	--	1900	43000	--	770	ND	U	430	1.6	J	0.79	0.85	J	0.71	ND	U	0.76	
	Bromodichloromethane	ug/m ³	ND	U	1900	ND	U	770	ND	U	430	37	--	0.79	38	--	0.71	470	--	7.6	
	Bromoform	ug/m ³	ND	U	3600	ND	U	1500	ND	U	820	ND	U	1.5	ND	U	1.3	0.79	J	1.4	
	Carbon disulfide	ug/m ³	ND	U	6200	ND	U	2500	ND	U	1400	25	--	2.5	1.8	J	2.3	1.9	J	2.4	
	Carbon tetrachloride	ug/m ³	ND	U	1900	ND	U	770	ND	U	430	1.2	J	0.79	1.1	J	0.71	20	--	0.76	
	Chloroethane	ug/m ³	ND	U	3600	ND	U	1500	ND	U	820	ND	U	1.5	ND	U	1.3	ND	U	1.4	
	Chloroform	ug/m ³	ND	U	1900	ND	U	770	ND	U	430	130	--	0.79	130	--	0.71	1200	--	7.6	
	Chloromethane	ug/m ³	ND	U	3600	ND	U	1500	ND	U	820	ND	UJ	1.5	ND	U	1.3	ND	U	1.4	
	Cyclohexane	ug/m ³	600000	--	3900	520000	--	1500	270000	--	870	ND	U	1.6	ND	U	1.4	ND	U	1.5	
	Dibromochloromethane	ug/m ³	ND	U	1900	ND	U	770	ND	U	430	1.2	J	0.79	1.3	J	0.71	92	--	0.76	
	Dichlorodifluoromethane	ug/m ³	ND	U	3600	ND	U	1500	ND	U	820	2.3	J	1.5	2.2	--	1.3	3.2	--	1.4	
	ETHANOL	ug/m ³	ND	U	9500	ND	U	3800	ND	U	2100	2.3	J	3.8	3.1	J	3.5	2.0	J	3.7	
	Ethyl acetate	ug/m ³	ND	U	7400	ND	U	3000	ND	U	1700	ND	U	3	ND	U	2.7	ND	U	2.9	
	Ethylbenzene	ug/m ³	1800	J	1900	ND	U	770	260	J	430	1.7	J	0.79	0.78	J	0.71	ND	U	0.76	
	Hexane	ug/m ³	200000	--	3600	170000	--	1500	46000	--	820	1.5	J	1.5	0.67	J	1.3	ND	U	1.4	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	7200	ND	U	2900	ND	U	1600	ND	U	2.9	ND	U	2.6	ND	U	2.8	
	m,p-Xylene	ug/m ³	11000	J	3900	3800	J	1500	5400	--	870	7.6	--	1.6	3.2	J	1.4	ND	U	1.5	
	Methylene Chloride	ug/m ³	ND	U	3600	ND	U	1500	ND	U	820	ND	U	1.5	ND	U	1.3	6.6	--	1.4	
	Naphthalene	ug/m ³	ND	U	3500	ND	U	1400	ND	U	790	1.0	J	1.4	ND	U	1.3	ND	U	1.4	
	n-Heptane	ug/m ³	150000	--	3600	110000	--	1500	57000	--	820	3.0	--	1.5	1.2	J	1.3	ND	U	1.4	
	o-Xylene	ug/m ³	16000	--	1900	8800	--	770	510	J	430	2.2	J	0.79	1.0	J	0.71	ND	U	0.76	
	Propylene (propene)	ug/m ³	ND	U	3600	1300	J	1500	820	J	820	0.79	J	1.5	0.69	J	1.3	ND	U	1.4	
	Styrene	ug/m ³	ND	U	3600	ND	U	1500	ND	U	820	0.69	J	1.5	ND	U	1.3	ND	U	1.4	
Tetrachloroethene	ug/m ³	2300	J	1900	910	J	770	510	J	430	1.8	J	0.79	1.7	J	0.71	11	--	0.76		
Tetrahydrofuran	ug/m ³	ND	U	1900	ND	U	770	ND	U	430	4.0	J	0.79	1.4	J	0.71	240	--	0.76		
Toluene	ug/m ³	40000	--	1900	2400	--	770	300	J	430	10	--	0.79	5.3	--	0.71	0.79	J	0.76		
Trichloroethene	ug/m ³	1300	J	1900	560	J	770	290	J	430	0.56	J	0.79	0.55	J	0.71	5.0	--	0.76		
Trichlorofluoromethane	ug/m ³	ND	U	3600	ND	U	1500	ND	U	820	1.1	J	1.5	1.0	J	1.3	1.1	J	1.4		
Vinyl chloride	ug/m ³	ND	U	1900	ND	U	770	ND	U	430	ND	U	0.79	ND	U	0.71	ND	U	0.76		
Xylenes, Total	ug/m ³	27000	--	3900	13000	--	1500	5900	--	870	9.7	--	1.6	4.2	J	1.4	ND	U	1.5		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106120-150			KAFB-106120-250			KAFB-106120-350			KAFB-106120-450			KAFB-106121-025			KAFB-106121-050		
	Field Sample ID:			SV120-150-204			SV120-250-204			SV120-350-204			SV120-450-204			SV121-025-204			SV121-050-204		
	Sample Date:			10/12/2020			10/12/2020			10/12/2020			10/12/2020			10/12/2020			10/12/2020		
	Sample Type:			REG			REG			REG			REG			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	1.5	J	0.73	1.3	J	0.73	5.4	J	3.9	ND	U	12	0.65	J	0.74	0.72	J	0.76	
	1,1-dichloroethane	ug/m ³	ND	U	1.4	ND	U	1.4	ND	U	7.5	ND	U	24	ND	U	1.4	ND	U	1.5	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.4	ND	U	1.4	ND	U	7.3	ND	U	23	ND	U	1.4	ND	U	1.4	
	1,2,4-trimethylbenzene	ug/m ³	ND	U	0.73	ND	U	0.73	ND	U	3.9	ND	U	12	ND	U	0.74	ND	U	0.76	
	1,2-dibromoethane	ug/m ³	ND	U	0.73	ND	U	0.73	ND	U	3.9	ND	U	12	ND	U	0.74	ND	U	0.76	
	1,2-dichloroethane	ug/m ³	ND	U	0.73	ND	U	0.73	ND	U	3.9	ND	U	12	ND	U	0.74	ND	U	0.76	
	1,3,5-trimethylbenzene	ug/m ³	ND	U	0.73	ND	U	0.73	ND	U	3.9	7.5	J	12	ND	U	0.74	ND	U	0.76	
	1,3-butadiene	ug/m ³	ND	U	1.4	ND	U	1.4	ND	U	7.3	ND	U	23	ND	U	1.4	ND	U	1.4	
	1,4-dioxane	ug/m ³	1.1	J	0.73	ND	U	0.73	ND	U	3.9	ND	U	12	ND	U	0.74	ND	U	0.76	
	2-butanone	ug/m ³	10	--	1.4	1.2	J	1.4	10	J	7.3	ND	U	23	ND	U	1.4	2.3	J	1.4	
	2-hexanone	ug/m ³	2.6	J	0.73	ND	U	0.73	ND	U	3.9	ND	U	12	ND	U	0.74	ND	U	0.76	
	4-methyl-2-pentanone	ug/m ³	0.55	J	0.73	ND	U	0.73	ND	U	3.9	ND	U	12	ND	U	0.74	ND	U	0.76	
	Acetone	ug/m ³	53	--	12	8.0	J	12	ND	U	61	ND	U	200	12	J	12	23	--	12	
	Benzene	ug/m ³	ND	U	0.73	0.45	J	0.73	180	--	3.9	120	--	12	ND	U	0.74	0.41	J	0.76	
	Bromodichloromethane	ug/m ³	6.6	--	0.73	0.54	J	0.73	ND	U	3.9	ND	U	12	48	--	0.74	52	--	0.76	
	Bromoform	ug/m ³	ND	U	1.4	ND	U	1.4	ND	U	7.3	ND	U	23	ND	U	1.4	ND	U	1.4	
	Carbon disulfide	ug/m ³	4.9	--	2.3	6.8	--	2.3	8.5	J	12	210	--	40	0.79	J	2.3	3.3	J	2.4	
	Carbon tetrachloride	ug/m ³	27	--	0.73	5.0	--	0.73	ND	U	3.9	ND	U	12	11	--	0.74	14	--	0.76	
	Chloroethane	ug/m ³	ND	U	1.4	ND	U	1.4	ND	U	7.3	7.7	J	23	ND	U	1.4	ND	U	1.4	
	Chloroform	ug/m ³	52	--	0.73	3.4	--	0.73	ND	U	3.9	ND	U	12	640	--	7.4	700	--	7.6	
	Chloromethane	ug/m ³	0.52	J	1.4	ND	U	1.4	ND	UJ	7.3	22	J	23	ND	U	1.4	ND	U	1.4	
	Cyclohexane	ug/m ³	ND	U	1.5	ND	U	1.5	210	--	7.7	27	J	25	ND	U	1.5	ND	U	1.5	
	Dibromochloromethane	ug/m ³	ND	U	0.73	ND	U	0.73	ND	U	3.9	ND	U	12	1.7	J	0.74	2.3	J	0.76	
	Dichlorodifluoromethane	ug/m ³	16	--	1.4	23	--	1.4	200	--	7.3	110	--	23	3.4	--	1.4	3.6	--	1.4	
	ETHANOL	ug/m ³	6.4	J	3.6	2.4	J	3.5	9.5	J	19	ND	U	61	82	--	3.6	43	--	3.7	
	Ethyl acetate	ug/m ³	1.3	J	2.8	ND	U	2.8	6.5	J	15	ND	U	48	ND	U	2.8	ND	U	2.9	
	Ethylbenzene	ug/m ³	ND	U	0.73	0.91	J	0.73	ND	U	3.9	8.9	J	12	ND	U	0.74	ND	U	0.76	
	Hexane	ug/m ³	ND	U	1.4	ND	U	1.4	73	--	7.3	27	J	23	ND	U	1.4	ND	U	1.4	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	1.1	J	2.7	ND	U	2.7	ND	U	14	ND	U	46	ND	U	2.7	ND	U	2.8	
	m,p-Xylene	ug/m ³	ND	U	1.5	ND	U	1.5	4.7	J	7.7	17	J	25	0.67	J	1.5	0.95	J	1.5	
	Methylene Chloride	ug/m ³	ND	U	1.4	ND	U	1.4	ND	U	7.3	ND	U	23	ND	U	1.4	ND	U	1.4	
	Naphthalene	ug/m ³	ND	U	1.3	1.2	J	1.3	ND	U	7.1	ND	U	23	ND	U	1.3	ND	U	1.4	
	n-Heptane	ug/m ³	ND	U	1.4	ND	U	1.4	2.1	J	7.3	ND	U	23	ND	U	1.4	ND	U	1.4	
	o-Xylene	ug/m ³	ND	U	0.73	ND	U	0.73	4.3	J	3.9	12	J	12	ND	U	0.74	ND	U	0.76	
Propylene (propene)	ug/m ³	1.4	J	1.4	ND	U	1.4	26	--	7.3	11	J	23	ND	U	1.4	ND	U	1.4		
Styrene	ug/m ³	ND	U	1.4	ND	U	1.4	ND	U	7.3	ND	U	23	ND	U	1.4	ND	U	1.4		
Tetrachloroethene	ug/m ³	4.3	--	0.73	0.45	J	0.73	ND	U	3.9	ND	U	12	4.6	--	0.74	4.9	--	0.76		
Tetrahydrofuran	ug/m ³	6.7	--	0.73	16	--	0.73	ND	U	3.9	21	J	12	ND	U	0.74	9.3	--	0.76		
Toluene	ug/m ³	0.81	J	0.73	0.65	J	0.73	13	--	3.9	160	--	12	0.83	J	0.74	1.4	J	0.76		
Trichloroethene	ug/m ³	0.31	J	0.73	ND	U	0.73	ND	U	3.9	ND	U	12	2.5	--	0.74	2.5	--	0.76		
Trichlorofluoromethane	ug/m ³	1.4	J	1.4	1.8	J	1.4	21	--	7.3	11	J	23	1.2	J	1.4	1.2	J	1.4		
Vinyl chloride	ug/m ³	ND	U	0.73	ND	U	0.73	ND	U	3.9	9.2	J	12	ND	U	0.74	ND	U	0.76		
Xylenes, Total	ug/m ³	ND	U	1.5	ND	U	1.5	8.9	J	7.7	28	J	25	0.67	J	1.5	0.95	J	1.5		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106121-145			KAFB-106121-145			KAFB-106121-250			KAFB-106121-350			KAFB-106121-440			KAFB-106122-025		
	Field Sample ID:			SV121-145-204			SV121-145-604			SV121-250-204			SV121-350-204			SV121-450-204			SV122-025-204		
	Sample Date:			10/12/2020			10/12/2020			10/12/2020			10/12/2020			10/12/2020					
	Sample Type:			REG			FD			REG			REG			REG					
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	1.3	J	0.74	1.2	J	0.71	1.8	J	0.77	3.8	--	0.75	2.9	J	3.8	ND	U	0.91	
	1,1-dichloroethane	ug/m ³	ND	U	1.4	ND	U	1.4	ND	U	1.5	ND	U	1.5	6.4	J	7.5	ND	U	1.8	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.4	ND	U	1.3	ND	U	1.4	ND	U	1.4	ND	U	7.2	ND	U	1.7	
	1,2,4-trimethylbenzene	ug/m ³	ND	U	0.74	2.3	--	0.71	ND	U	0.77	0.37	J	0.75	2.4	J	3.8	2.3	J	0.91	
	1,2-dibromoethane	ug/m ³	ND	U	0.74	ND	U	0.71	ND	U	0.77	ND	U	0.75	ND	U	3.8	ND	U	0.91	
	1,2-dichloroethane	ug/m ³	ND	U	0.74	ND	U	0.71	ND	U	0.77	ND	U	0.75	2.7	J	3.8	ND	U	0.91	
	1,3,5-trimethylbenzene	ug/m ³	ND	U	0.74	0.67	J	0.71	ND	U	0.77	ND	U	0.75	ND	U	3.8	0.62	J	0.91	
	1,3-butadiene	ug/m ³	ND	U	1.4	ND	U	1.3	ND	U	1.4	ND	U	1.4	ND	U	7.2	ND	U	1.7	
	1,4-dioxane	ug/m ³	0.54	J	0.74	1.0	J	0.71	0.49	J	0.77	ND	U	0.75	ND	U	3.8	ND	U	0.91	
	2-butanone	ug/m ³	7.6	--	1.4	5.5	--	1.3	8.2	--	1.4	9.8	--	1.4	3.7	J	7.2	3.9	J	1.7	
	2-hexanone	ug/m ³	0.53	J	0.74	ND	U	0.71	2.2	J	0.77	0.81	J	0.75	ND	U	3.8	3.6	J	0.91	
	4-methyl-2-pentanone	ug/m ³	ND	U	0.74	ND	U	0.71	0.46	J	0.77	ND	U	0.75	ND	U	3.8	ND	U	0.91	
	Acetone	ug/m ³	22	J	12	16	J	11	44	--	12	35	--	12	ND	U	61	11	J	15	
	Benzene	ug/m ³	ND	U	0.74	0.92	J	0.71	0.44	J	0.77	0.85	J	0.75	170	--	3.8	1.6	J	0.91	
	Bromodichloromethane	ug/m ³	5.4	--	0.74	5.5	--	0.71	ND	U	0.77	ND	U	0.75	ND	U	3.8	7.1	--	0.91	
	Bromoform	ug/m ³	ND	U	1.4	ND	U	1.3	ND	U	1.4	ND	U	1.4	ND	U	7.2	ND	U	1.7	
	Carbon disulfide	ug/m ³	16	--	2.4	23	--	2.3	52	--	2.4	4.5	--	2.4	250	--	12	6.7	--	2.9	
	Carbon tetrachloride	ug/m ³	19	--	0.74	19	--	0.71	3.7	--	0.77	0.53	J	0.75	ND	U	3.8	1.3	J	0.91	
	Chloroethane	ug/m ³	ND	U	1.4	ND	U	1.3	ND	U	1.4	ND	U	1.4	7.7	J	7.2	ND	U	1.7	
	Chloroform	ug/m ³	65	--	0.74	65	--	0.71	2.5	--	0.77	0.66	J	0.75	ND	U	3.8	81	--	0.91	
	Chloromethane	ug/m ³	ND	UJ	1.4	ND	U	1.3	ND	UJ	1.4	0.43	J	1.4	57	--	7.2	ND	U	1.7	
	Cyclohexane	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1.5	ND	U	1.5	73	--	7.7	1.2	J	1.8	
	Dibromochloromethane	ug/m ³	ND	U	0.74	ND	U	0.71	ND	U	0.77	ND	U	0.75	ND	U	3.8	ND	U	0.91	
	Dichlorodifluoromethane	ug/m ³	22	--	1.4	22	--	1.3	41	--	1.4	110	--	1.4	120	--	7.2	2.4	J	1.7	
	ETHANOL	ug/m ³	18	J	3.6	29	--	3.5	34	--	3.8	29	--	3.7	ND	U	19	3.1	J	4.5	
	Ethyl acetate	ug/m ³	1.5	J	2.8	ND	U	2.7	ND	U	2.9	53	--	2.9	ND	U	15	9.1	J	3.5	
	Ethylbenzene	ug/m ³	ND	U	0.74	0.91	J	0.71	ND	U	0.77	ND	U	0.75	31	--	3.8	1.4	J	0.91	
	Hexane	ug/m ³	ND	U	1.4	0.51	J	1.3	ND	U	1.4	0.50	J	1.4	14	--	7.2	1.1	J	1.7	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	2.8	ND	U	2.6	2.0	J	2.9	2.0	J	2.8	ND	U	14	ND	U	3.4	
	m,p-Xylene	ug/m ³	ND	U	1.5	5.5	--	1.4	ND	U	1.5	0.84	J	1.5	44	--	7.7	5.6	--	1.8	
	Methylene Chloride	ug/m ³	ND	U	1.4	ND	U	1.3	ND	U	1.4	2.9	--	1.4	ND	U	7.2	ND	U	1.7	
	Naphthalene	ug/m ³	ND	U	1.4	ND	U	1.3	1.3	J	1.4	ND	U	1.4	ND	U	7	1.3	J	1.7	
	n-Heptane	ug/m ³	ND	U	1.4	0.75	J	1.3	ND	U	1.4	ND	U	1.4	4.0	J	7.2	1.5	J	1.7	
	o-Xylene	ug/m ³	ND	U	0.74	2.2	J	0.71	ND	U	0.77	ND	U	0.75	15	--	3.8	2.1	J	0.91	
Propylene (propene)	ug/m ³	0.69	J	1.4	0.89	J	1.3	6.6	--	1.4	1.4	J	1.4	7.4	J	7.2	ND	U	1.7		
Styrene	ug/m ³	ND	U	1.4	ND	U	1.3	ND	U	1.4	ND	U	1.4	ND	U	7.2	ND	U	1.7		
Tetrachloroethene	ug/m ³	3.3	--	0.74	3.2	--	0.71	0.46	J	0.77	0.47	J	0.75	ND	U	3.8	1.1	J	0.91		
Tetrahydrofuran	ug/m ³	36	--	0.74	36	--	0.71	5.5	--	0.77	1.1	J	0.75	46	--	3.8	ND	U	0.91		
Toluene	ug/m ³	0.54	J	0.74	4.6	--	0.71	0.76	J	0.77	2.9	--	0.75	570	--	3.8	7.0	--	0.91		
Trichloroethene	ug/m ³	0.54	J	0.74	0.45	J	0.71	0.72	J	0.77	ND	U	0.75	ND	U	3.8	0.65	J	0.91		
Trichlorofluoromethane	ug/m ³	2.0	J	1.4	2.0	J	1.3	3.2	--	1.4	13	--	1.4	13	--	7.2	1.1	J	1.7		
Vinyl chloride	ug/m ³	ND	U	0.74	ND	U	0.71	ND	U	0.77	ND	U	0.75	11	J	3.8	ND	U	0.91		
Xylenes, Total	ug/m ³	ND	U	1.5	7.6	--	1.4	ND	U	1.5	0.84	J	1.5	59	--	7.7	7.7	--	1.8		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106122-050			KAFB-106122-150			KAFB-106122-250			KAFB-106122-350			KAFB-106122-450			KAFB-106123-025		
	Field Sample ID:			SV122-050-204			SV122-150-204			SV122-250-204			SV122-350-204			SV122-450-204			SV123-025-204		
	Sample Date:			10/12/2020			10/12/2020			10/12/2020			10/12/2020			10/12/2020					
	Sample Type:			REG			REG			REG			REG			REG					
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	0.51	J	0.77	0.56	J	0.76	1.2	J	0.77	3.4	--	0.74	ND	U	11	0.44	J	0.77	
	1,1-dichloroethane	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.4	ND	U	21	ND	U	1.5	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.4	ND	U	1.4	ND	U	1.4	ND	U	1.4	ND	U	20	ND	U	1.4	
	1,2,4-trimethylbenzene	ug/m ³	0.84	J	0.77	0.62	J	0.76	0.81	J	0.77	1.1	J	0.74	ND	U	11	0.36	J	0.77	
	1,2-dibromoethane	ug/m ³	ND	U	0.77	ND	U	0.76	ND	U	0.77	ND	U	0.74	ND	U	11	ND	U	0.77	
	1,2-dichloroethane	ug/m ³	ND	U	0.77	ND	U	0.76	ND	U	0.77	ND	U	0.74	ND	U	11	ND	U	0.77	
	1,3,5-trimethylbenzene	ug/m ³	ND	U	0.77	ND	U	0.76	ND	U	0.77	ND	U	0.74	ND	U	11	ND	U	0.77	
	1,3-butadiene	ug/m ³	ND	U	1.4	ND	U	1.4	ND	U	1.4	ND	U	1.4	ND	U	20	ND	U	1.4	
	1,4-dioxane	ug/m ³	ND	U	0.77	ND	U	0.76	0.54	J	0.77	ND	U	0.74	ND	U	11	ND	U	0.77	
	2-butanone	ug/m ³	5.7	--	1.4	2.5	J	1.4	14	--	1.4	2.2	J	1.4	31	J	20	6.7	--	1.4	
	2-hexanone	ug/m ³	1.5	J	0.77	ND	U	0.76	2.7	J	0.77	0.72	J	0.74	ND	U	11	1.6	J	0.77	
	4-methyl-2-pentanone	ug/m ³	ND	U	0.77	ND	U	0.76	0.77	J	0.77	ND	U	0.74	ND	U	11	ND	U	0.77	
	Acetone	ug/m ³	17	J	12	6.9	J	12	46	--	12	9.7	J	12	ND	U	170	25	--	12	
	Benzene	ug/m ³	0.54	J	0.77	0.60	J	0.76	0.51	J	0.77	1.7	J	0.74	150	--	11	ND	U	0.77	
	Bromodichloromethane	ug/m ³	51	--	0.77	2.1	J	0.76	ND	U	0.77	ND	U	0.74	ND	U	11	120	--	0.77	
	Bromoform	ug/m ³	ND	U	1.4	ND	U	1.4	ND	U	1.4	ND	U	1.4	ND	U	20	ND	U	1.4	
	Carbon disulfide	ug/m ³	12	--	2.4	4.9	--	2.4	7.6	--	2.4	9.4	--	2.4	210	--	34	5.9	--	2.4	
	Carbon tetrachloride	ug/m ³	9.3	--	0.77	13	--	0.76	4.3	--	0.77	0.50	J	0.74	ND	U	11	2.6	--	0.77	
	Chloroethane	ug/m ³	ND	U	1.4	ND	U	1.4	0.82	J	1.4	ND	U	1.4	ND	U	20	ND	U	1.4	
	Chloroform	ug/m ³	380	--	0.77	23	--	0.76	0.76	J	0.77	0.58	J	0.74	ND	U	11	270	--	0.77	
	Chloromethane	ug/m ³	ND	U	1.4	ND	U	1.4	2.1	J	1.4	ND	U	1.4	46	--	20	ND	U	1.4	
	Cyclohexane	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	53	J	22	ND	U	1.5	
	Dibromochloromethane	ug/m ³	1.6	J	0.77	ND	U	0.76	ND	U	0.77	ND	U	0.74	ND	U	11	13	--	0.77	
	Dichlorodifluoromethane	ug/m ³	2.9	--	1.4	7.3	--	1.4	27	--	1.4	120	--	1.4	51	--	20	2.3	J	1.4	
	ETHANOL	ug/m ³	7.0	J	3.7	ND	U	3.7	6.9	J	3.7	3.7	J	3.6	ND	U	53	4.6	J	3.8	
	Ethyl acetate	ug/m ³	ND	U	2.9	2.9	J	2.9	ND	U	2.9	3.1	J	2.8	ND	U	41	ND	U	2.9	
	Ethylbenzene	ug/m ³	0.52	J	0.77	0.51	J	0.76	0.39	J	0.77	1.2	J	0.74	26	J	11	ND	U	0.77	
	Hexane	ug/m ³	ND	U	1.4	0.63	J	1.4	ND	U	1.4	0.55	J	1.4	31	J	20	ND	U	1.4	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	2.8	J	2.8	ND	U	2.8	ND	U	2.8	ND	U	2.8	ND	U	40	1.4	J	2.9	
	m,p-Xylene	ug/m ³	2.1	J	1.5	2.2	J	1.5	1.8	J	1.5	4.1	J	1.5	42	J	22	0.75	J	1.5	
	Methylene Chloride	ug/m ³	ND	U	1.4	ND	U	1.4	ND	U	1.4	ND	U	1.4	ND	U	20	0.90	J	1.4	
	Naphthalene	ug/m ³	ND	U	1.4	ND	U	1.4	ND	U	1.4	ND	U	1.4	ND	U	20	ND	U	1.4	
	n-Heptane	ug/m ³	0.56	J	1.4	0.90	J	1.4	ND	U	1.4	0.76	J	1.4	ND	U	20	ND	U	1.4	
o-Xylene	ug/m ³	0.76	J	0.77	0.72	J	0.76	0.63	J	0.77	1.2	J	0.74	15	J	11	ND	U	0.77		
Propylene (propene)	ug/m ³	1.2	J	1.4	ND	U	1.4	0.91	J	1.4	ND	U	1.4	8.5	J	20	6.9	--	1.4		
Styrene	ug/m ³	ND	U	1.4	ND	U	1.4	ND	U	1.4	ND	U	1.4	ND	U	20	ND	U	1.4		
Tetrachloroethene	ug/m ³	4.0	--	0.77	1.8	J	0.76	ND	U	0.77	0.83	J	0.74	ND	U	11	2.3	J	0.77		
Tetrahydrofuran	ug/m ³	ND	U	0.77	40	--	0.76	3.9	J	0.77	ND	U	0.74	140	--	11	2.6	J	0.77		
Toluene	ug/m ³	2.5	--	0.77	3.0	--	0.76	1.8	J	0.77	11	--	0.74	510	--	11	0.89	J	0.77		
Trichloroethene	ug/m ³	1.3	J	0.77	ND	U	0.76	ND	U	0.77	4.6	--	0.74	ND	U	11	0.69	J	0.77		
Trichlorofluoromethane	ug/m ³	1.1	J	1.4	0.72	J	1.4	2.0	J	1.4	12	--	1.4	ND	U	20	1.0	J	1.4		
Vinyl chloride	ug/m ³	ND	U	0.77	ND	U	0.76	ND	U	0.77	ND	U	0.74	8.1	J	11	ND	U	0.77		
Xylenes, Total	ug/m ³	2.8	J	1.5	2.9	J	1.5	2.4	J	1.5	5.3	--	1.5	58	J	22	0.75	J	1.5		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106123-050			KAFB-106123-150			KAFB-106123-250			KAFB-106123-350			KAFB-106123-450			KAFB-106124-025		
	Field Sample ID:			SV123-050-204			SV123-150-204			SV123-250-204			SV123-350-204			SV123-450-204			SV124-025-204		
	Sample Date:			10/12/2020			10/12/2020			10/12/2020			10/12/2020			10/12/2020			10/5/2020		
	Sample Type:			REG			REG			REG			REG			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	0.87	J	0.81	2.1	J	0.81	2.6	--	0.82	5.2	--	0.84	4.0	J	2.6	0.45	J	0.75	
	1,1-dichloroethane	ug/m ³	ND	U	1.6	ND	U	1.6	ND	U	1.6	ND	U	1.6	5.2	J	5	ND	U	1.5	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	4.9	ND	U	1.4	
	1,2,4-trimethylbenzene	ug/m ³	ND	U	0.81	ND	U	0.81	ND	U	0.82	5.9	--	0.84	7.7	J	2.6	6.4	--	0.75	
	1,2-dibromoethane	ug/m ³	ND	U	0.81	ND	U	0.81	ND	U	0.82	ND	U	0.84	ND	U	2.6	ND	U	0.75	
	1,2-dichloroethane	ug/m ³	ND	U	0.81	ND	U	0.81	ND	U	0.82	ND	U	0.84	2.0	J	2.6	ND	U	0.75	
	1,3,5-trimethylbenzene	ug/m ³	ND	U	0.81	ND	U	0.81	ND	U	0.82	1.8	J	0.84	2.9	J	2.6	1.2	J	0.75	
	1,3-butadiene	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	4.9	ND	U	1.4	
	1,4-dioxane	ug/m ³	ND	U	0.81	ND	U	0.81	ND	U	0.82	ND	U	0.84	ND	U	2.6	1.3	J	0.75	
	2-butanone	ug/m ³	3.0	J	1.5	1.0	J	1.5	1.5	J	1.5	11	--	1.6	46	--	4.9	2.2	J	1.4	
	2-hexanone	ug/m ³	ND	U	0.81	ND	U	0.81	ND	U	0.82	ND	U	0.84	ND	U	2.6	0.79	J	0.75	
	4-methyl-2-pentanone	ug/m ³	ND	U	0.81	ND	U	0.81	ND	U	0.82	ND	U	0.84	ND	U	2.6	ND	U	0.75	
	Acetone	ug/m ³	13	J	13	6.8	J	13	9.6	J	13	32	--	13	ND	U	41	12	J	12	
	Benzene	ug/m ³	0.46	J	0.81	ND	U	0.81	ND	U	0.82	11	--	0.84	140	--	2.6	1.5	J	0.75	
	Bromodichloromethane	ug/m ³	480	--	8.1	6.4	--	0.81	2.9	--	0.82	0.74	J	0.84	ND	U	2.6	21	--	0.75	
	Bromoform	ug/m ³	9.0	--	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	4.9	ND	U	1.4	
	Carbon disulfide	ug/m ³	3.3	J	2.6	1.7	J	2.6	1.3	J	2.6	110	--	2.7	260	--	8.3	15	--	2.4	
	Carbon tetrachloride	ug/m ³	17	--	0.81	17	--	0.81	5.1	--	0.82	1.5	J	0.84	ND	U	2.6	0.70	J	0.75	
	Chloroethane	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	1.5	0.46	J	1.6	6.2	J	4.9	ND	U	1.4	
	Chloroform	ug/m ³	1100	--	8.1	29	--	0.81	6.9	--	0.82	3.5	--	0.84	1.3	J	2.6	120	--	0.75	
	Chloromethane	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	1.5	1.0	J	1.6	37	--	4.9	ND	U	1.4	
	Cyclohexane	ug/m ³	ND	U	1.6	ND	U	1.6	ND	U	1.6	2.5	J	1.7	64	--	5.2	0.77	J	1.5	
	Dibromochloromethane	ug/m ³	84	--	0.81	ND	U	0.81	0.47	J	0.82	ND	U	0.84	ND	U	2.6	0.49	J	0.75	
	Dichlorodifluoromethane	ug/m ³	4.9	--	1.5	41	--	1.5	59	--	1.5	160	--	1.6	140	--	4.9	2.2	J	1.4	
	ETHANOL	ug/m ³	2.9	J	3.9	ND	U	4	4.6	J	4	3.4	J	4.1	ND	U	13	7.0	J	3.7	
	Ethyl acetate	ug/m ³	ND	U	3.1	ND	U	3.1	50	--	3.1	ND	U	3.2	ND	U	9.9	ND	U	2.9	
	Ethylbenzene	ug/m ³	ND	U	0.81	2.3	J	0.81	ND	U	0.82	5.9	--	0.84	31	--	2.6	0.84	J	0.75	
	Hexane	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	1.5	9.7	--	1.6	20	--	4.9	ND	U	1.4	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	3	ND	U	3	ND	U	3	ND	U	3.1	4.8	J	9.6	1.0	J	2.8	
	m,p-Xylene	ug/m ³	0.91	J	1.6	ND	U	1.6	ND	U	1.6	25	--	1.7	62	--	5.2	3.1	J	1.5	
	Methylene Chloride	ug/m ³	17	--	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	4.9	0.73	J	1.4	
	Naphthalene	ug/m ³	ND	U	1.5	2.5	--	1.5	ND	U	1.5	0.88	J	1.5	ND	U	4.7	7.3	--	1.4	
	n-Heptane	ug/m ³	0.46	J	1.5	ND	U	1.5	ND	U	1.5	14	--	1.6	20	--	4.9	0.73	J	1.4	
	o-Xylene	ug/m ³	ND	U	0.81	ND	U	0.81	ND	U	0.82	7.0	--	0.84	19	--	2.6	1.3	J	0.75	
Propylene (propene)	ug/m ³	0.83	J	1.5	ND	U	1.5	ND	U	1.5	3.5	--	1.6	7.0	J	4.9	ND	U	1.4		
Styrene	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	4.9	ND	U	1.4		
Tetrachloroethene	ug/m ³	8.8	--	0.81	2.7	--	0.81	ND	U	0.82	0.71	J	0.84	1.3	J	2.6	1.1	J	0.75		
Tetrahydrofuran	ug/m ³	0.52	J	0.81	ND	U	0.81	0.75	J	0.82	25	--	0.84	89	--	2.6	0.85	J	0.75		
Toluene	ug/m ³	1.8	J	0.81	0.56	J	0.81	1.7	J	0.82	36	--	0.84	500	--	2.6	2.6	--	0.75		
Trichloroethene	ug/m ³	5.4	--	0.81	ND	U	0.81	ND	U	0.82	0.72	J	0.84	13	--	2.6	0.98	J	0.75		
Trichlorofluoromethane	ug/m ³	1.2	J	1.5	3.1	--	1.5	4.7	--	1.5	17	--	1.6	16	--	4.9	1.1	J	1.4		
Vinyl chloride	ug/m ³	ND	U	0.81	ND	U	0.81	ND	U	0.82	0.59	J	0.84	8.1	--	2.6	ND	U	0.75		
Xylenes, Total	ug/m ³	0.91	J	1.6	ND	U	1.6	ND	U	1.6	32	--	1.7	81	--	5.2	4.4	J	1.5		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106124-050			KAFB-106124-150			KAFB-106124-250			KAFB-106124-250			KAFB-106124-350			KAFB-106124-450		
	Field Sample ID:			SV124-050-204			SV124-150-204			SV124-250-204			SV124-250-604			SV124-350-204			SV124-450-204		
	Sample Date:			10/5/2020			10/5/2020			10/5/2020			10/5/2020			10/5/2020			10/5/2020		
	Sample Type:			REG			REG			REG			FD			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	0.41	J	0.86	0.35	J	0.78	ND	U	1.1	ND	U	0.77	ND	U	2.2	0.38	J	0.81	
	1,1-dichloroethane	ug/m ³	ND	U	1.7	ND	U	1.5	ND	U	2.2	ND	U	1.5	ND	U	4.3	0.71	J	1.6	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.6	ND	U	1.5	ND	U	2.1	ND	U	1.4	ND	U	4.2	ND	U	1.5	
	1,2,4-trimethylbenzene	ug/m ³	4.1	--	0.86	1.1	J	0.78	4.1	--	1.1	5.5	--	0.77	ND	U	2.2	1.2	J	0.81	
	1,2-dibromoethane	ug/m ³	ND	U	0.86	ND	U	0.78	ND	U	1.1	ND	U	0.77	ND	U	2.2	ND	U	0.81	
	1,2-dichloroethane	ug/m ³	ND	U	0.86	ND	U	0.78	ND	U	1.1	ND	U	0.77	ND	U	2.2	ND	U	0.81	
	1,3,5-trimethylbenzene	ug/m ³	0.68	J	0.86	ND	U	0.78	0.67	J	1.1	0.81	J	0.77	ND	U	2.2	0.50	J	0.81	
	1,3-butadiene	ug/m ³	ND	U	1.6	ND	U	1.5	ND	U	2.1	ND	U	1.4	ND	U	4.2	ND	U	1.5	
	1,4-dioxane	ug/m ³	ND	U	0.86	ND	U	0.78	1.5	J	1.1	ND	U	0.77	ND	U	2.2	ND	U	0.81	
	2-butanone	ug/m ³	96	--	1.6	3.9	J	1.5	4.8	J	2.1	1.2	J	1.4	ND	U	4.2	8.6	--	1.5	
	2-hexanone	ug/m ³	ND	U	0.86	0.97	J	0.78	1.1	J	1.1	ND	U	0.77	ND	U	2.2	ND	U	0.81	
	4-methyl-2-pentanone	ug/m ³	ND	U	0.86	ND	U	0.78	0.56	J	1.1	ND	U	0.77	ND	U	2.2	ND	U	0.81	
	Acetone	ug/m ³	93	--	14	15	J	12	21	J	18	9.4	J	12	ND	U	35	ND	U	13	
	Benzene	ug/m ³	ND	U	0.86	ND	U	0.78	ND	U	1.1	ND	U	0.77	15	--	2.2	20	--	0.81	
	Bromodichloromethane	ug/m ³	220	--	0.86	22	--	0.78	ND	U	1.1	ND	U	0.77	ND	U	2.2	39	--	0.81	
	Bromoform	ug/m ³	12	--	1.6	ND	U	1.5	ND	U	2.1	ND	U	1.4	ND	U	4.2	ND	U	1.5	
	Carbon disulfide	ug/m ³	5.0	J	2.7	23	--	2.5	120	--	3.6	14	--	2.4	8.0	J	7.1	54	--	2.6	
	Carbon tetrachloride	ug/m ³	19	--	0.86	39	--	0.78	4.3	--	1.1	4.4	--	0.77	ND	U	2.2	40	--	0.81	
	Chloroethane	ug/m ³	ND	U	1.6	ND	U	1.5	ND	U	2.1	ND	U	1.4	ND	U	4.2	0.95	J	1.5	
	Chloroform	ug/m ³	1600	--	8.6	210	--	0.78	3.6	--	1.1	4.1	--	0.77	ND	U	2.2	310	--	0.81	
	Chloromethane	ug/m ³	ND	U	1.6	ND	U	1.5	ND	U	2.1	0.49	J	1.4	ND	U	4.2	3.1	--	1.5	
	Cyclohexane	ug/m ³	ND	U	1.7	ND	U	1.6	ND	U	2.2	ND	U	1.5	6.9	J	4.5	13	--	1.6	
	Dibromochloromethane	ug/m ³	45	--	0.86	1.9	J	0.78	ND	U	1.1	ND	U	0.77	ND	U	2.2	4.0	--	0.81	
	Dichlorodifluoromethane	ug/m ³	2.0	J	1.6	1.7	J	1.5	0.80	J	2.1	0.84	J	1.4	ND	U	4.2	1.8	J	1.5	
	ETHANOL	ug/m ³	3.2	J	4.2	4.5	J	3.8	4.8	J	5.5	2.3	J	3.8	ND	U	11	2.2	J	4	
	Ethyl acetate	ug/m ³	ND	U	3.3	ND	U	3	ND	U	4.3	17	--	2.9	ND	U	8.5	ND	U	3.1	
	Ethylbenzene	ug/m ³	0.49	J	0.86	ND	U	0.78	ND	U	1.1	0.41	J	0.77	ND	U	2.2	1.8	J	0.81	
	Hexane	ug/m ³	ND	U	1.6	ND	U	1.5	ND	U	2.1	ND	U	1.4	ND	U	4.2	1.7	J	1.5	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	4.2	J	3.2	ND	U	2.9	ND	U	4.1	ND	U	2.9	ND	U	8.3	ND	U	3	
	m,p-Xylene	ug/m ³	2.0	J	1.7	ND	U	1.6	1.0	J	2.2	1.9	J	1.5	ND	U	4.5	3.5	J	1.6	
	Methylene Chloride	ug/m ³	2.0	J	1.6	ND	U	1.5	ND	U	2.1	ND	U	1.4	5.1	J	4.2	ND	U	1.5	
	Naphthalene	ug/m ³	0.85	J	1.6	0.98	J	1.4	3.4	J	2	4.9	--	1.4	ND	U	4.1	0.67	J	1.5	
	n-Heptane	ug/m ³	ND	U	1.6	ND	U	1.5	ND	U	2.1	ND	U	1.4	ND	U	4.2	ND	U	1.5	
	o-Xylene	ug/m ³	0.68	J	0.86	ND	U	0.78	ND	U	1.1	0.62	J	0.77	ND	U	2.2	2.8	--	0.81	
Propylene (propene)	ug/m ³	ND	U	1.6	ND	U	1.5	ND	U	2.1	ND	U	1.4	ND	U	4.2	0.71	J	1.5		
Styrene	ug/m ³	ND	U	1.6	ND	U	1.5	ND	U	2.1	ND	U	1.4	ND	U	4.2	ND	U	1.5		
Tetrachloroethene	ug/m ³	10	--	0.86	9.5	--	0.78	0.55	J	1.1	0.48	J	0.77	ND	U	2.2	10	--	0.81		
Tetrahydrofuran	ug/m ³	560	--	0.86	6.9	--	0.78	4.9	J	1.1	7.5	--	0.77	2.5	J	2.2	36	--	0.81		
Toluene	ug/m ³	1.8	J	0.86	0.50	J	0.78	0.76	J	1.1	2.0	J	0.77	ND	U	2.2	32	--	0.81		
Trichloroethene	ug/m ³	5.1	--	0.86	0.71	J	0.78	ND	U	1.1	ND	U	0.77	1.5	J	2.2	2.2	J	0.81		
Trichlorofluoromethane	ug/m ³	1.0	J	1.6	1.0	J	1.5	0.79	J	2.1	0.80	J	1.4	ND	U	4.2	1.0	J	1.5		
Vinyl chloride	ug/m ³	ND	U	0.86	ND	U	0.78	ND	U	1.1	ND	U	0.77	ND	U	2.2	1.2	J	0.81		
Xylenes, Total	ug/m ³	2.6	J	1.7	ND	U	1.6	1.0	J	2.2	2.5	J	1.5	ND	U	4.5	6.3	--	1.6		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106125-025			KAFB-106125-050			KAFB-106125-150			KAFB-106125-250			KAFB-106125-350			KAFB-106125-450		
	Field Sample ID:			SV125-025-204			SV125-050-204			SV125-150-204			SV125-250-204			SV125-350-204			SV125-450-204		
	Sample Date:			10/5/2020			10/5/2020			10/5/2020			10/5/2020			10/5/2020			10/5/2020		
	Sample Type:			REG			REG			REG			REG			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	ND	U	1.3	ND	U	0.81	0.37	J	0.8	ND	U	0.8	ND	U	0.83	ND	U	65	
	1,1-dichloroethane	ug/m ³	ND	U	2.4	ND	U	1.6	ND	U	1.6	ND	U	1.6	ND	U	1.6	ND	U	130	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	2.4	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	120	
	1,2,4-trimethylbenzene	ug/m ³	1.2	J	1.3	0.76	J	0.81	0.69	J	0.8	0.55	J	0.8	0.55	J	0.83	ND	U	65	
	1,2-dibromoethane	ug/m ³	ND	U	1.3	ND	U	0.81	ND	U	0.8	ND	U	0.8	ND	U	0.83	ND	U	65	
	1,2-dichloroethane	ug/m ³	ND	U	1.3	ND	U	0.81	ND	U	0.8	ND	U	0.8	ND	U	0.83	ND	U	65	
	1,3,5-trimethylbenzene	ug/m ³	ND	U	1.3	ND	U	0.81	ND	U	0.8	ND	U	0.8	ND	U	0.83	ND	U	65	
	1,3-butadiene	ug/m ³	ND	U	2.4	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	120	
	1,4-dioxane	ug/m ³	ND	U	1.3	ND	U	0.81	ND	U	0.8	ND	U	0.8	1.0	J	0.83	ND	U	65	
	2-butanone	ug/m ³	ND	U	2.4	4.4	J	1.5	1.6	J	1.5	2.2	J	1.5	7.0	--	1.6	ND	U	120	
	2-hexanone	ug/m ³	ND	U	1.3	1.0	J	0.81	ND	U	0.8	ND	U	0.8	1.8	J	0.83	ND	U	65	
	4-methyl-2-pentanone	ug/m ³	ND	U	1.3	ND	U	0.81	ND	U	0.8	ND	U	0.8	ND	U	0.83	ND	U	65	
	Acetone	ug/m ³	11	J	20	19	J	13	ND	U	13	34	--	13	43	--	13	ND	U	1000	
	Benzene	ug/m ³	ND	U	1.3	0.40	J	0.81	0.44	J	0.8	2.1	J	0.8	0.43	J	0.83	150	J	65	
	Bromodichloromethane	ug/m ³	42	--	1.3	180	--	0.81	3.1	--	0.8	ND	U	0.8	ND	U	0.83	ND	U	65	
	Bromoform	ug/m ³	ND	U	2.4	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	120	
	Carbon disulfide	ug/m ³	1.7	J	4	45	--	2.6	3.6	J	2.6	5.7	--	2.6	9.2	--	2.6	190	J	210	
	Carbon tetrachloride	ug/m ³	1.7	J	1.3	13	--	0.81	38	--	0.8	1.3	J	0.8	ND	U	0.83	ND	U	65	
	Chloroethane	ug/m ³	ND	U	2.4	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	120	
	Chloroform	ug/m ³	390	--	1.3	1100	--	8.1	82	--	0.8	1.1	J	0.8	ND	U	0.83	ND	U	65	
	Chloromethane	ug/m ³	ND	U	2.4	ND	U	1.5	0.42	J	1.5	ND	U	1.5	0.54	J	1.6	35	J	120	
	Cyclohexane	ug/m ³	ND	U	2.5	ND	U	1.6	ND	U	1.6	ND	U	1.6	1.4	J	1.7	ND	U	130	
	Dibromochloromethane	ug/m ³	ND	U	1.3	6.3	--	0.81	ND	U	0.8	ND	U	0.8	ND	U	0.83	ND	U	65	
	Dichlorodifluoromethane	ug/m ³	2.1	J	2.4	2.0	J	1.5	1.5	J	1.5	0.48	J	1.5	ND	U	1.6	ND	U	120	
	ETHANOL	ug/m ³	ND	U	6.1	4.8	J	4	ND	U	3.9	ND	U	3.9	5.1	J	4	ND	U	320	
	Ethyl acetate	ug/m ³	ND	U	4.8	ND	U	3.1	ND	U	3.1	ND	U	3.1	ND	U	3.2	ND	U	250	
	Ethylbenzene	ug/m ³	ND	U	1.3	ND	U	0.81	ND	U	0.8	ND	U	0.8	ND	U	0.83	ND	U	65	
	Hexane	ug/m ³	ND	U	2.4	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	120	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	4.7	1.2	J	3	ND	U	3	ND	U	3	1.4	J	3.1	ND	U	240	
	m,p-Xylene	ug/m ³	ND	U	2.5	0.78	J	1.6	ND	U	1.6	ND	U	1.6	ND	U	1.7	ND	U	130	
	Methylene Chloride	ug/m ³	ND	U	2.4	2.6	--	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	120	
	Naphthalene	ug/m ³	ND	U	2.3	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	120	
	n-Heptane	ug/m ³	ND	U	2.4	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	120	
	o-Xylene	ug/m ³	ND	U	1.3	ND	U	0.81	ND	U	0.8	ND	U	0.8	ND	U	0.83	ND	U	65	
	Propylene (propene)	ug/m ³	ND	U	2.4	1.2	J	1.5	ND	U	1.5	ND	U	1.5	2.0	J	1.6	ND	U	120	
	Styrene	ug/m ³	ND	U	2.4	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	120	
	Tetrachloroethene	ug/m ³	4.2	--	1.3	12	--	0.81	12	--	0.8	ND	U	0.8	ND	U	0.83	ND	U	65	
	Tetrahydrofuran	ug/m ³	33	--	1.3	100	--	0.81	19	--	0.8	14	--	0.8	14	--	0.83	27	J	65	
	Toluene	ug/m ³	1.1	J	1.3	1.1	J	0.81	0.91	J	0.8	1.4	J	0.8	0.57	J	0.83	340	--	65	
	Trichloroethene	ug/m ³	ND	U	1.3	2.5	--	0.81	0.38	J	0.8	ND	U	0.8	6.1	--	0.83	ND	U	65	
Trichlorofluoromethane	ug/m ³	1.0	J	2.4	0.99	J	1.5	1.1	J	1.5	0.88	J	1.5	ND	U	1.6	ND	U	120		
Vinyl chloride	ug/m ³	ND	U	1.3	ND	U	0.81	ND	U	0.8	ND	U	0.8	ND	U	0.83	ND	U	65		
Xylenes, Total	ug/m ³	ND	U	2.5	0.78	J	1.6	ND	U	1.6	ND	U	1.6	ND	U	1.7	ND	U	130		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106126-025			KAFB-106126-050			KAFB-106126-150			KAFB-106126-250			KAFB-106126-350			KAFB-106126-450		
	Field Sample ID:			SV126-025-204			SV126-050-204			SV126-150-204			SV126-250-204			SV126-350-204			SV126-450-204		
	Sample Date:			10/20/2020			10/20/2020			10/20/2020			10/20/2020			10/20/2020					
	Sample Type:			REG			REG			REG			REG			REG					
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	0.54	J	0.79	0.43	J	0.92	ND	U	0.8	ND	U	0.91	ND	U	5.4	140	J	200	
	1,1-dichloroethane	ug/m ³	ND	U	1.5	ND	U	1.8	ND	U	1.6	ND	U	1.8	ND	U	10	ND	U	390	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.5	ND	U	1.7	ND	U	1.5	ND	U	1.7	ND	U	10	ND	U	380	
	1,2,4-trimethylbenzene	ug/m ³	ND	U	0.79	ND	U	0.92	0.92	J	0.8	ND	U	0.91	ND	U	5.4	ND	U	200	
	1,2-dibromoethane	ug/m ³	ND	U	0.79	ND	U	0.92	ND	U	0.8	ND	U	0.91	ND	U	5.4	ND	U	200	
	1,2-dichloroethane	ug/m ³	ND	U	0.79	ND	U	0.92	ND	U	0.8	ND	U	0.91	ND	U	5.4	ND	U	200	
	1,3,5-trimethylbenzene	ug/m ³	ND	U	0.79	ND	U	0.92	ND	U	0.8	ND	U	0.91	ND	U	5.4	ND	U	200	
	1,3-butadiene	ug/m ³	ND	U	1.5	ND	U	1.7	ND	U	1.5	ND	U	1.7	ND	U	10	ND	U	380	
	1,4-dioxane	ug/m ³	ND	U	0.79	ND	U	0.92	0.71	J	0.8	0.85	J	0.91	ND	U	5.4	150	J	200	
	2-butanone	ug/m ³	8.7	--	1.5	8.3	--	1.7	7.1	--	1.5	4.4	J	1.7	48	--	10	ND	U	380	
	2-hexanone	ug/m ³	1.1	J	0.79	1.4	J	0.92	ND	U	0.8	ND	U	0.91	22	J	5.4	ND	U	200	
	4-methyl-2-pentanone	ug/m ³	ND	U	0.79	ND	U	0.92	ND	U	0.8	ND	U	0.91	5.2	J	5.4	ND	U	200	
	Acetone	ug/m ³	40	--	12	34	--	15	19	J	13	7.6	J	14	100	J	86	ND	U	3200	
	Benzene	ug/m ³	0.76	J	0.79	0.59	J	0.92	0.61	J	0.8	0.45	J	0.91	7.3	J	5.4	170	J	200	
	Bromodichloromethane	ug/m ³	20	--	0.79	61	--	0.92	1.6	J	0.8	ND	U	0.91	ND	U	5.4	ND	U	200	
	Bromoform	ug/m ³	ND	U	1.5	ND	U	1.7	ND	U	1.5	ND	U	1.7	ND	U	10	ND	U	380	
	Carbon disulfide	ug/m ³	ND	U	2.5	11	--	2.9	4.5	J	2.6	3.8	J	2.9	ND	U	17	ND	U	640	
	Carbon tetrachloride	ug/m ³	7	--	0.79	20	--	0.92	13	--	0.8	2.4	J	0.91	ND	U	5.4	ND	U	200	
	Chloroethane	ug/m ³	ND	U	1.5	ND	U	1.7	ND	U	1.5	ND	U	1.7	ND	U	10	ND	U	380	
	Chloroform	ug/m ³	260	--	0.79	440	--	9.2	30	--	0.8	1.4	J	0.91	ND	U	5.4	ND	U	200	
	Chloromethane	ug/m ³	ND	U	1.5	ND	U	1.7	ND	U	1.5	0.52	J	1.7	4.9	J	10	ND	U	380	
	Cyclohexane	ug/m ³	ND	U	1.6	ND	U	1.8	ND	U	1.6	ND	U	1.8	37	--	11	4500	--	410	
	Dibromochloromethane	ug/m ³	ND	U	0.79	1.2	J	0.92	ND	U	0.8	ND	U	0.91	ND	U	5.4	ND	U	200	
	Dichlorodifluoromethane	ug/m ³	2.8	--	1.5	2.2	J	1.7	0.91	J	1.5	0.53	J	1.7	ND	U	10	ND	U	380	
	ETHANOL	ug/m ³	24	J	3.8	7.8	J	4.5	4	J	3.9	ND	U	4.4	13	J	26	ND	U	990	
	Ethyl acetate	ug/m ³	4.1	J	3	5.6	--	3.5	26	--	3.1	3.2	J	3.5	52	--	21	ND	U	780	
	Ethylbenzene	ug/m ³	ND	U	0.79	ND	U	0.92	ND	U	0.8	ND	U	0.91	ND	U	5.4	ND	U	200	
	Hexane	ug/m ³	0.56	J	1.5	ND	U	1.7	ND	U	1.5	ND	U	1.7	5.4	J	10	1200	--	380	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	2.9	J	2.9	1.5	J	3.4	1.1	J	3	ND	U	3.4	ND	U	20	ND	U	750	
	m,p-Xylene	ug/m ³	1	J	1.6	ND	U	1.8	1.5	J	1.6	ND	U	1.8	ND	U	11	ND	U	410	
	Methylene Chloride	ug/m ³	2.9	--	1.5	1.1	J	1.7	ND	U	1.5	ND	U	1.7	ND	U	10	ND	U	380	
	Naphthalene	ug/m ³	ND	U	1.4	ND	U	1.7	ND	U	1.5	ND	U	1.7	ND	U	9.8	ND	U	370	
	n-Heptane	ug/m ³	0.5	J	1.5	ND	U	1.7	ND	U	1.5	ND	U	1.7	ND	U	10	ND	U	380	
	o-Xylene	ug/m ³	ND	U	0.79	ND	U	0.92	0.73	J	0.8	ND	U	0.91	ND	U	5.4	ND	U	200	
	Propylene (propene)	ug/m ³	2.3	J	1.5	1.9	J	1.7	0.88	J	1.5	ND	U	1.7	12	J	10	ND	U	380	
	Styrene	ug/m ³	ND	U	1.5	ND	U	1.7	0.51	J	1.5	ND	U	1.7	ND	U	10	ND	U	380	
Tetrachloroethene	ug/m ³	2.7	--	0.79	13	--	0.92	2.6	--	0.8	ND	U	0.91	ND	U	5.4	250	J	200		
Tetrahydrofuran	ug/m ³	ND	U	0.79	33	--	0.92	150	--	0.8	99	--	0.91	2.2	J	5.4	ND	U	200		
Toluene	ug/m ³	2.1	J	0.79	1.1	J	0.92	2.9	--	0.8	0.75	J	0.91	4.7	J	5.4	150	J	200		
Trichloroethene	ug/m ³	0.86	J	0.79	7.2	--	0.92	ND	U	0.8	ND	U	0.91	3	J	5.4	140	J	200		
Trichlorofluoromethane	ug/m ³	1.3	J	1.5	1.2	J	1.7	1.4	J	1.5	1.2	J	1.7	ND	U	10	ND	U	380		
Vinyl chloride	ug/m ³	ND	U	0.79	ND	U	0.92	ND	U	0.8	ND	U	0.91	ND	U	5.4	ND	U	200		
Xylenes, Total	ug/m ³	1	J	1.6	ND	U	1.8	2.2	J	1.6	ND	U	1.8	ND	U	11	ND	U	410		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106127-025			KAFB-106127-050			KAFB-106127-150			KAFB-106127-250			KAFB-106127-250			KAFB-106127-350		
	Field Sample ID:			SV127-025-204			SV127-050-204			SV127-150-204			SV127-250-204			SV127-250-604			SV127-350-204		
	Sample Date:			10/5/2020			10/5/2020			10/5/2020			10/5/2020			10/5/2020			10/5/2020		
	Sample Type:			REG			REG			REG			REG			FD			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	0.41	J	0.78	0.40	J	0.82	ND	U	0.81	ND	U	0.85	ND	U	0.79	ND	U	0.8	
	1,1-dichloroethane	ug/m ³	ND	U	1.5	ND	U	1.6	ND	U	1.6	ND	U	1.7	ND	U	1.5	ND	U	1.6	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.5	
	1,2,4-trimethylbenzene	ug/m ³	3.0	--	0.78	0.64	J	0.82	0.55	J	0.81	0.80	J	0.85	2.9	--	0.79	0.88	J	0.8	
	1,2-dibromoethane	ug/m ³	ND	U	0.78	ND	U	0.82	ND	U	0.81	ND	U	0.85	ND	U	0.79	ND	U	0.8	
	1,2-dichloroethane	ug/m ³	ND	U	0.78	ND	U	0.82	ND	U	0.81	ND	U	0.85	ND	U	0.79	ND	U	0.8	
	1,3,5-trimethylbenzene	ug/m ³	0.48	J	0.78	ND	U	0.82	ND	U	0.81	ND	U	0.85	0.45	J	0.79	ND	U	0.8	
	1,3-butadiene	ug/m ³	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.5	
	1,4-dioxane	ug/m ³	ND	U	0.78	0.64	J	0.82	ND	U	0.81	0.55	J	0.85	ND	U	0.79	ND	U	0.8	
	2-butanone	ug/m ³	3.4	J	1.5	81	--	1.6	4.3	J	1.5	3.4	J	1.6	4.5	J	1.5	ND	U	1.5	
	2-hexanone	ug/m ³	ND	U	0.78	ND	U	0.82	ND	U	0.81	0.80	J	0.85	0.74	J	0.79	0.85	J	0.8	
	4-methyl-2-pentanone	ug/m ³	ND	U	0.78	ND	U	0.82	ND	U	0.81	ND	U	0.85	ND	U	0.79	ND	U	0.8	
	Acetone	ug/m ³	12	J	12	25	J	13	15	J	13	18	J	14	22	J	13	ND	U	13	
	Benzene	ug/m ³	0.63	J	0.78	0.39	J	0.82	ND	U	0.81	0.39	J	0.85	ND	U	0.79	2.4	J	0.8	
	Bromodichloromethane	ug/m ³	48	--	0.78	78	--	0.82	8.4	--	0.81	ND	U	0.85	ND	U	0.79	ND	U	0.8	
	Bromoform	ug/m ³	ND	U	1.5	4.0	--	1.6	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.5	
	Carbon disulfide	ug/m ³	1.5	J	2.5	3.1	J	2.6	7.4	--	2.6	16	--	2.7	16	--	2.5	13	--	2.6	
	Carbon tetrachloride	ug/m ³	5.3	--	0.78	19	--	0.82	22	--	0.81	4.0	--	0.85	4.0	--	0.79	ND	U	0.8	
	Chloroethane	ug/m ³	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.5	
	Chloroform	ug/m ³	450	--	0.78	520	--	8.2	96	--	0.81	3.7	--	0.85	4.1	--	0.79	ND	U	0.8	
	Chloromethane	ug/m ³	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.6	0.45	J	1.5	ND	U	1.5	
	Cyclohexane	ug/m ³	3.8	J	1.6	ND	U	1.6	ND	U	1.6	ND	U	1.7	ND	U	1.6	6.6	--	1.6	
	Dibromochloromethane	ug/m ³	0.93	J	0.78	22	--	0.82	0.37	J	0.81	ND	U	0.85	ND	U	0.79	ND	U	0.8	
	Dichlorodifluoromethane	ug/m ³	2.1	J	1.5	2.0	J	1.6	1.2	J	1.5	0.71	J	1.6	0.70	J	1.5	0.69	J	1.5	
	ETHANOL	ug/m ³	2.0	J	3.8	60	--	4	3.1	J	3.9	2.7	J	4.2	3.6	J	3.9	4.3	J	3.9	
	Ethyl acetate	ug/m ³	ND	U	3	32	--	3.2	ND	U	3.1	ND	U	3.3	2.3	J	3	ND	U	3.1	
	Ethylbenzene	ug/m ³	0.90	J	0.78	ND	U	0.82	ND	U	0.81	ND	U	0.85	ND	U	0.79	ND	U	0.8	
	Hexane	ug/m ³	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.6	ND	U	1.5	2.1	J	1.5	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	2.9	ND	U	3.1	ND	U	3	ND	U	3.2	ND	U	2.9	ND	U	3	
	m,p-Xylene	ug/m ³	2.1	J	1.6	ND	U	1.6	ND	U	1.6	ND	U	1.7	1.1	J	1.6	1.1	J	1.6	
	Methylene Chloride	ug/m ³	2.0	J	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.5	
	Naphthalene	ug/m ³	1.3	J	1.4	ND	U	1.5	ND	U	1.5	1.3	J	1.6	0.91	J	1.4	ND	U	1.5	
	n-Heptane	ug/m ³	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.5	
	o-Xylene	ug/m ³	0.62	J	0.78	ND	U	0.82	ND	U	0.81	ND	U	0.85	ND	U	0.79	0.41	J	0.8	
	Propylene (propene)	ug/m ³	ND	U	1.5	ND	U	1.6	ND	U	1.5	1.7	J	1.6	ND	U	1.5	ND	U	1.5	
	Styrene	ug/m ³	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.5	
	Tetrachloroethene	ug/m ³	2.5	--	0.78	6.7	--	0.82	4.7	--	0.81	0.44	J	0.85	0.42	J	0.79	0.56	J	0.8	
	Tetrahydrofuran	ug/m ³	ND	U	0.78	400	--	0.82	1.4	J	0.81	0.61	J	0.85	1.3	J	0.79	2.0	J	0.8	
	Toluene	ug/m ³	3.6	--	0.78	1.2	J	0.82	0.80	J	0.81	0.59	J	0.85	0.91	J	0.79	1.2	J	0.8	
	Trichloroethene	ug/m ³	3.3	--	0.78	3.1	--	0.82	0.36	J	0.81	ND	U	0.85	ND	U	0.79	1.0	J	0.8	
Trichlorofluoromethane	ug/m ³	0.98	J	1.5	1.0	J	1.6	0.95	J	1.5	1.0	J	1.6	1.0	J	1.5	ND	U	1.5		
Vinyl chloride	ug/m ³	ND	U	0.78	ND	U	0.82	ND	U	0.81	ND	U	0.85	ND	U	0.79	ND	U	0.8		
Xylenes, Total	ug/m ³	2.7	J	1.6	ND	U	1.6	ND	U	1.6	ND	U	1.7	1.1	J	1.6	1.5	J	1.6		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106127-450			KAFB-106128-025			KAFB-106128-050			KAFB-106128-150			KAFB-106128-250			KAFB-106128-350		
	Field Sample ID:			SV127-450-204			SV128-025-204			SV128-050-204			SV128-150-204			SV128-250-204			SV128-350-204		
	Sample Date:			10/5/2020			10/6/2020			10/6/2020			10/6/2020			10/6/2020					
	Sample Type:			REG			REG			REG			REG			REG					
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	0.43	J	0.77	53	--	0.86	99	--	0.84	130	--	0.82	260	J	450	ND	U	650	
	1,1-dichloroethane	ug/m ³	ND	U	1.5	ND	U	1.7	ND	U	1.6	ND	U	1.6	ND	U	870	ND	U	1300	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.4	ND	U	1.6	ND	U	1.6	ND	U	1.6	ND	U	850	ND	U	1200	
	1,2,4-trimethylbenzene	ug/m ³	0.38	J	0.77	14	--	0.86	16	--	0.84	4.3	--	0.82	1700	--	450	4200	--	650	
	1,2-dibromoethane	ug/m ³	ND	U	0.77	0.43	J	0.86	ND	U	0.84	ND	U	0.82	ND	U	450	ND	U	650	
	1,2-dichloroethane	ug/m ³	ND	U	0.77	ND	U	0.86	ND	U	0.84	ND	U	0.82	ND	U	450	ND	U	650	
	1,3,5-trimethylbenzene	ug/m ³	ND	U	0.77	7.4	--	0.86	6.1	--	0.84	1.8	J	0.82	1700	--	450	4800	--	650	
	1,3-butadiene	ug/m ³	ND	U	1.4	ND	U	1.6	ND	U	1.6	ND	U	1.6	ND	U	850	ND	U	1200	
	1,4-dioxane	ug/m ³	ND	U	0.77	ND	U	0.86	5.6	--	0.84	ND	U	0.82	ND	U	450	ND	U	650	
	2-butanone	ug/m ³	2.5	J	1.4	ND	U	1.6	ND	U	1.6	ND	U	1.6	ND	U	850	ND	U	1200	
	2-hexanone	ug/m ³	ND	U	0.77	ND	U	0.86	4.5	J	0.84	ND	U	0.82	ND	U	450	ND	U	650	
	4-methyl-2-pentanone	ug/m ³	ND	U	0.77	0.53	J	0.86	1.1	J	0.84	0.38	J	0.82	ND	U	450	ND	U	650	
	Acetone	ug/m ³	8.9	J	12	ND	U	14	ND	U	13	ND	U	13	ND	U	7200	ND	U	10000	
	Benzene	ug/m ³	1.7	J	0.77	5.0	--	0.86	10	--	0.84	3.0	--	0.82	22000	--	450	72000	--	650	
	Bromodichloromethane	ug/m ³	72	--	0.77	ND	U	0.86	ND	U	0.84	ND	U	0.82	ND	U	450	ND	U	650	
	Bromoform	ug/m ³	2.0	J	1.4	ND	U	1.6	ND	U	1.6	ND	U	1.6	ND	U	850	ND	U	1200	
	Carbon disulfide	ug/m ³	8.8	--	2.4	46	--	2.7	80	--	2.7	35	--	2.6	ND	U	1400	ND	U	2100	
	Carbon tetrachloride	ug/m ³	18	--	0.77	67	--	0.86	110	--	0.84	150	--	0.82	ND	U	450	ND	U	650	
	Chloroethane	ug/m ³	ND	U	1.4	ND	U	1.6	0.34	J	1.6	ND	U	1.6	ND	U	850	ND	U	1200	
	Chloroform	ug/m ³	560	--	7.7	9.6	--	0.86	1.9	J	0.84	47	--	0.82	ND	U	450	ND	U	650	
	Chloromethane	ug/m ³	1.0	J	1.4	ND	U	1.6	0.73	J	1.6	0.49	J	1.6	ND	U	850	ND	U	1200	
	Cyclohexane	ug/m ³	ND	U	1.5	4.1	J	1.7	9.4	--	1.7	2.0	J	1.6	420000	--	900	410000	--	1300	
	Dibromochloromethane	ug/m ³	15	--	0.77	ND	U	0.86	ND	U	0.84	ND	U	0.82	ND	U	450	ND	U	650	
	Dichlorodifluoromethane	ug/m ³	2.1	J	1.4	300	--	1.6	550	--	1.6	520	--	1.6	ND	U	850	1500	J	1200	
	ETHANOL	ug/m ³	ND	U	3.8	ND	U	4.2	ND	U	4.1	ND	U	4	ND	U	2200	ND	U	3200	
	Ethyl acetate	ug/m ³	ND	U	2.9	10	--	3.3	ND	U	3.2	ND	U	3.2	ND	U	1700	ND	U	2500	
	Ethylbenzene	ug/m ³	ND	U	0.77	5.4	--	0.86	7.3	--	0.84	2.4	J	0.82	16000	--	450	17000	--	650	
	Hexane	ug/m ³	ND	U	1.4	7.2	--	1.6	4.4	--	1.6	2.9	--	1.6	250000	--	850	270000	--	1200	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	2.9	ND	U	3.2	10	--	3.1	ND	U	3.1	ND	U	1700	ND	U	2400	
	m,p-Xylene	ug/m ³	ND	U	1.5	35	--	1.7	29	--	1.7	13	--	1.6	36000	--	900	100000	--	1300	
	Methylene Chloride	ug/m ³	ND	U	1.4	ND	U	1.6	ND	U	1.6	ND	U	1.6	ND	U	850	ND	U	1200	
	Naphthalene	ug/m ³	ND	U	1.4	3.8	--	1.6	12	--	1.5	1.3	J	1.5	ND	U	820	ND	U	1200	
	n-Heptane	ug/m ³	ND	U	1.4	18	--	1.6	12	--	1.6	9.7	--	1.6	540000	--	3400	360000	--	1200	
	o-Xylene	ug/m ³	ND	U	0.77	19	--	0.86	13	--	0.84	5.6	--	0.82	ND	U	450	43000	--	650	
	Propylene (propene)	ug/m ³	ND	U	1.4	1.0	J	1.6	8.2	--	1.6	3.9	--	1.6	ND	U	850	11000	--	1200	
	Styrene	ug/m ³	ND	U	1.4	ND	U	1.6	ND	U	1.6	ND	U	1.6	ND	U	850	ND	U	1200	
Tetrachloroethene	ug/m ³	5.9	--	0.77	2.2	J	0.86	2.3	J	0.84	3.2	--	0.82	ND	U	450	ND	U	650		
Tetrahydrofuran	ug/m ³	2.0	J	0.77	1.0	J	0.86	0.95	J	0.84	29	--	0.82	ND	U	450	ND	U	650		
Toluene	ug/m ³	2.3	J	0.77	33	--	0.86	35	--	0.84	18	--	0.82	ND	U	450	290000	--	650		
Trichloroethene	ug/m ³	2.4	--	0.77	0.83	J	0.86	1.1	J	0.84	18	--	0.82	ND	U	450	ND	U	650		
Trichlorofluoromethane	ug/m ³	1.0	J	1.4	52	--	1.6	80	--	1.6	69	--	1.6	ND	U	850	ND	U	1200		
Vinyl chloride	ug/m ³	0.32	J	0.77	ND	U	0.86	ND	U	0.84	ND	U	0.82	ND	U	450	ND	U	650		
Xylenes, Total	ug/m ³	ND	U	1.5	54	--	1.7	42	--	1.7	19	--	1.6	36000	--	900	150000	--	1300		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106128-450			KAFB-106129-025			KAFB-106129-050			KAFB-106129-150			KAFB-106129-250			KAFB-106129-350		
	Field Sample ID:			SV128-450-204			SV129-025-204			SV129-050-204			SV129-150-204			SV129-250-204			SV129-350-204		
	Sample Date:			10/6/2020			10/19/2020			10/19/2020			10/19/2020			10/19/2020					
	Sample Type:			REG			REG			REG			REG			REG					
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	ND	U	1300	1.7	J	0.79	2.2	J	0.82	4.1	--	0.87	4.5	--	0.94	2.3	J	0.89	
	1,1-dichloroethane	ug/m ³	ND	U	2600	ND	U	1.5	ND	U	1.6	ND	U	1.7	ND	U	1.8	ND	U	1.7	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	2500	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	1.8	ND	U	1.7	
	1,2,4-trimethylbenzene	ug/m ³	5000	--	1300	1.4	J	0.79	1.3	J	0.82	1.3	J	0.87	0.84	J	0.94	0.8	J	0.89	
	1,2-dibromoethane	ug/m ³	ND	U	1300	ND	U	0.79	ND	U	0.82	ND	U	0.87	ND	U	0.94	ND	U	0.89	
	1,2-dichloroethane	ug/m ³	ND	U	1300	ND	U	0.79	ND	U	0.82	ND	U	0.87	ND	U	0.94	ND	U	0.89	
	1,3,5-trimethylbenzene	ug/m ³	4400	--	1300	0.69	J	0.79	0.56	J	0.82	0.6	J	0.87	ND	U	0.94	ND	U	0.89	
	1,3-butadiene	ug/m ³	ND	U	2500	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	1.8	ND	U	1.7	
	1,4-dioxane	ug/m ³	ND	U	1300	0.82	J	0.79	1.1	J	0.82	ND	U	0.87	ND	U	0.94	2.2	J	0.89	
	2-butanone	ug/m ³	960	J	2500	9.7	--	1.5	20	--	1.5	7.5	--	1.6	8.6	--	1.8	2.9	J	1.7	
	2-hexanone	ug/m ³	ND	U	1300	1.7	J	0.79	2	J	0.82	ND	U	0.87	0.95	J	0.94	0.5	J	0.89	
	4-methyl-2-pentanone	ug/m ³	2700	J	1300	0.57	J	0.79	1.3	J	0.82	ND	U	0.87	ND	U	0.94	ND	U	0.89	
	Acetone	ug/m ³	ND	U	21000	62	--	12	94	--	13	17	J	14	19	J	15	15	J	14	
	Benzene	ug/m ³	26000	--	1300	1.8	J	0.79	1.8	J	0.82	7.1	--	0.87	1.3	J	0.94	1.8	J	0.89	
	Bromodichloromethane	ug/m ³	ND	U	1300	ND	U	0.79	ND	U	0.82	ND	U	0.87	ND	U	0.94	ND	U	0.89	
	Bromoform	ug/m ³	ND	U	2500	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	1.8	ND	U	1.7	
	Carbon disulfide	ug/m ³	ND	U	4300	6.1	--	2.5	41	--	2.6	3.7	J	2.8	5.6	--	3	64	--	2.8	
	Carbon tetrachloride	ug/m ³	ND	U	1300	1.6	J	0.79	2.4	J	0.82	3	--	0.87	3.4	--	0.94	1.5	J	0.89	
	Chloroethane	ug/m ³	ND	U	2500	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	1.8	ND	U	1.7	
	Chloroform	ug/m ³	ND	U	1300	0.68	J	0.79	0.97	J	0.82	1.2	J	0.87	0.64	J	0.94	ND	U	0.89	
	Chloromethane	ug/m ³	ND	U	2500	0.83	J	1.5	1.5	J	1.5	ND	U	1.6	ND	U	1.8	ND	U	1.7	
	Cyclohexane	ug/m ³	800000	--	2700	0.89	J	1.6	1	J	1.6	1.9	J	1.7	ND	U	1.9	ND	U	1.8	
	Dibromochloromethane	ug/m ³	ND	U	1300	ND	U	0.79	ND	U	0.82	ND	U	0.87	ND	U	0.94	ND	U	0.89	
	Dichlorodifluoromethane	ug/m ³	2300	J	2500	3	--	1.5	3.5	--	1.5	4.1	--	1.6	6.1	--	1.8	19	--	1.7	
	ETHANOL	ug/m ³	ND	U	6600	8.2	J	3.8	6.7	J	4	5.7	J	4.3	31	--	4.6	9.9	J	4.3	
	Ethyl acetate	ug/m ³	ND	U	5100	ND	U	3	ND	U	3.1	3.3	J	3.3	4	J	3.6	42	--	3.4	
	Ethylbenzene	ug/m ³	13000	--	1300	0.91	J	0.79	0.81	J	0.82	1.1	J	0.87	0.66	J	0.94	0.51	J	0.89	
	Hexane	ug/m ³	630000	--	2500	1.6	J	1.5	1.6	J	1.5	3.8	--	1.6	1.3	J	1.8	1.2	J	1.7	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	5000	26	--	2.9	5.4	--	3	ND	U	3.2	2.6	J	3.5	ND	U	3.3	
	m,p-Xylene	ug/m ³	220000	--	2700	4.7	--	1.6	4.2	J	1.6	6.2	--	1.7	3.2	J	1.9	2.6	J	1.8	
	Methylene Chloride	ug/m ³	ND	U	2500	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	1.8	ND	U	1.7	
	Naphthalene	ug/m ³	ND	U	2500	ND	U	1.4	ND	U	1.5	ND	U	1.6	ND	U	1.7	ND	U	1.6	
	n-Heptane	ug/m ³	1500000	--	6300	3.7	--	1.5	3.4	--	1.5	8.4	--	1.6	2.6	J	1.8	2.4	J	1.7	
	o-Xylene	ug/m ³	60000	--	1300	1.5	J	0.79	1.4	J	0.82	1.7	J	0.87	1	J	0.94	0.85	J	0.89	
Propylene (propene)	ug/m ³	19000	--	2500	11	--	1.5	3.2	--	1.5	0.77	J	1.6	1.8	J	1.8	2.3	J	1.7		
Styrene	ug/m ³	ND	U	2500	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	1.8	ND	U	1.7		
Tetrachloroethene	ug/m ³	ND	U	1300	1.6	J	0.79	140	--	0.82	1.7	J	0.87	2.1	J	0.94	1.6	J	0.89		
Tetrahydrofuran	ug/m ³	ND	U	1300	5.2	--	0.79	10	--	0.82	3.7	J	0.87	2.4	J	0.94	2.8	J	0.89		
Toluene	ug/m ³	160000	--	1300	9.5	--	0.79	8.1	--	0.82	15	--	0.87	7.1	--	0.94	7.1	--	0.89		
Trichloroethene	ug/m ³	ND	U	1300	3.5	--	0.79	0.42	J	0.82	1.7	J	0.87	2.5	J	0.94	5.4	--	0.89		
Trichlorofluoromethane	ug/m ³	ND	U	2500	1.1	J	1.5	1.1	J	1.5	1.1	J	1.6	0.87	J	1.8	1.9	J	1.7		
Vinyl chloride	ug/m ³	ND	U	1300	ND	U	0.79	ND	U	0.82	ND	U	0.87	ND	U	0.94	ND	U	0.89		
Xylenes, Total	ug/m ³	280000	--	2700	6.2	--	1.6	5.6	--	1.6	7.9	--	1.7	4.2	J	1.9	3.5	J	1.8		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106129-450			KAFB-106130-025			KAFB-106130-050			KAFB-106130-150			KAFB-106130-250			KAFB-106130-350		
	Field Sample ID:			SV129-450-204			SV130-025-204			SV130-050-204			SV130-150-204			SV130-250-204			SV130-350-204		
	Sample Date:			10/19/2020			10/20/2020			10/20/2020			10/20/2020			10/20/2020					
	Sample Type:			REG			REG			REG			REG			REG					
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	27	J	41	4.9	--	0.93	4.3	--	0.91	7.0	--	0.9	5.8	--	0.91	1.7	J	0.86	
	1,1-dichloroethane	ug/m ³	ND	U	80	ND	U	1.8	ND	U	1.8	ND	U	1.7	ND	U	1.8	ND	U	1.7	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	78	ND	U	1.8	ND	U	1.7	ND	U	1.7	0.93	J	1.7	ND	U	1.6	
	1,2,4-trimethylbenzene	ug/m ³	30	J	41	0.59	J	0.93	ND	U	0.91	1.6	J	0.9	ND	U	0.91	ND	U	0.86	
	1,2-dibromoethane	ug/m ³	20	J	41	ND	U	0.93	ND	U	0.91	ND	U	0.9	ND	U	0.91	ND	U	0.86	
	1,2-dichloroethane	ug/m ³	ND	U	41	ND	U	0.93	ND	U	0.91	ND	U	0.9	ND	U	0.91	ND	U	0.86	
	1,3,5-trimethylbenzene	ug/m ³	150	--	41	ND	U	0.93	ND	U	0.91	0.44	J	0.9	ND	U	0.91	ND	U	0.86	
	1,3-butadiene	ug/m ³	ND	U	78	ND	U	1.8	ND	U	1.7	ND	U	1.7	ND	U	1.7	ND	U	1.6	
	1,4-dioxane	ug/m ³	33	J	41	0.54	J	0.93	ND	U	0.91	ND	U	0.9	ND	U	0.91	0.73	J	0.86	
	2-butanone	ug/m ³	89	J	78	2.1	J	1.8	2.7	J	1.7	1.5	J	1.7	4.5	J	1.7	9.8	--	1.6	
	2-hexanone	ug/m ³	ND	U	41	0.82	J	0.93	ND	U	0.91	ND	U	0.9	1.1	J	0.91	1.0	J	0.86	
	4-methyl-2-pentanone	ug/m ³	ND	U	41	0.41	J	0.93	ND	U	0.91	ND	U	0.9	ND	U	0.91	0.51	J	0.86	
	Acetone	ug/m ³	ND	U	660	15	J	15	19	J	14	7.1	J	14	33	--	14	76	--	14	
	Benzene	ug/m ³	2100	--	41	0.65	J	0.93	ND	U	0.91	1.0	J	0.9	0.99	J	0.91	1.2	J	0.86	
	Bromodichloromethane	ug/m ³	ND	U	41	ND	U	0.93	ND	U	0.91	ND	U	0.9	ND	U	0.91	ND	U	0.86	
	Bromoform	ug/m ³	ND	U	78	ND	U	1.8	ND	U	1.7	ND	U	1.7	ND	U	1.7	ND	U	1.6	
	Carbon disulfide	ug/m ³	220	J	130	15	--	3	1.6	J	2.9	13	--	2.9	11	--	2.9	22	--	2.7	
	Carbon tetrachloride	ug/m ³	ND	U	41	1.3	J	0.93	1.1	J	0.91	0.91	J	0.9	0.85	J	0.91	0.98	J	0.86	
	Chloroethane	ug/m ³	ND	U	78	ND	U	1.8	ND	U	1.7	ND	U	1.7	ND	U	1.7	ND	U	1.6	
	Chloroform	ug/m ³	ND	U	41	1.5	J	0.93	1.2	J	0.91	ND	U	0.9	0.47	J	0.91	0.89	J	0.86	
	Chloromethane	ug/m ³	49	J	78	ND	U	1.8	ND	U	1.7	ND	U	1.7	ND	U	1.7	0.76	J	1.6	
	Cyclohexane	ug/m ³	680	--	83	ND	U	1.9	ND	U	1.8	ND	U	1.8	ND	U	1.8	ND	U	1.7	
	Dibromochloromethane	ug/m ³	ND	U	41	ND	U	0.93	ND	U	0.91	ND	U	0.9	ND	U	0.91	ND	U	0.86	
	Dichlorodifluoromethane	ug/m ³	ND	U	78	4.5	--	1.8	3.9	--	1.7	5.6	--	1.7	3.2	--	1.7	2.8	--	1.6	
	ETHANOL	ug/m ³	ND	U	200	4.8	J	4.5	ND	U	4.4	2.9	J	4.4	8.0	J	4.4	17	J	4.2	
	Ethyl acetate	ug/m ³	ND	U	160	11	--	3.6	6.1	--	3.5	7.1	--	3.4	23	--	3.5	22	--	3.3	
	Ethylbenzene	ug/m ³	120	J	41	1.1	J	0.93	ND	U	0.91	ND	U	0.9	ND	U	0.91	0.39	J	0.86	
	Hexane	ug/m ³	470	--	78	ND	U	1.8	ND	U	1.7	ND	U	1.7	ND	U	1.7	ND	U	1.6	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	87	J	150	ND	U	3.4	ND	U	3.4	ND	U	3.3	3.5	J	3.4	4.2	J	3.2	
	m,p-Xylene	ug/m ³	350	--	83	2.3	J	1.9	ND	U	1.8	4.7	J	1.8	0.83	J	1.8	1.3	J	1.7	
	Methylene Chloride	ug/m ³	ND	U	78	ND	U	1.8	ND	U	1.7	ND	U	1.7	ND	U	1.7	ND	U	1.6	
	Naphthalene	ug/m ³	ND	U	75	1.4	J	1.7	ND	U	1.7	ND	U	1.6	ND	U	1.7	ND	U	1.6	
	n-Heptane	ug/m ³	470	--	78	ND	U	1.8	ND	U	1.7	0.73	J	1.7	ND	U	1.7	ND	U	1.6	
	o-Xylene	ug/m ³	240	--	41	0.62	J	0.93	ND	U	0.91	1.1	J	0.9	ND	U	0.91	1.3	J	0.86	
	Propylene (propene)	ug/m ³	150	--	78	ND	U	1.8	ND	U	1.7	0.84	J	1.7	1.8	J	1.7	3.3	--	1.6	
	Styrene	ug/m ³	ND	U	78	ND	U	1.8	ND	U	1.7	ND	U	1.7	ND	U	1.7	ND	U	1.6	
	Tetrachloroethene	ug/m ³	45	J	41	2.7	J	0.93	2.3	J	0.91	6.7	--	0.9	7.5	--	0.91	6.9	--	0.86	
	Tetrahydrofuran	ug/m ³	51	J	41	0.46	J	0.93	40	--	0.91	7.5	--	0.9	4.6	J	0.91	10	--	0.86	
	Toluene	ug/m ³	3100	--	41	2.6	J	0.93	0.80	J	0.91	4.5	--	0.9	2.9	--	0.91	4.4	--	0.86	
	Trichloroethene	ug/m ³	41	J	41	4.4	--	0.93	4.2	--	0.91	2.6	J	0.9	14	--	0.91	7.2	--	0.86	
Trichlorofluoromethane	ug/m ³	ND	U	78	1.3	J	1.8	1.0	J	1.7	1.2	J	1.7	1.1	J	1.7	1.1	J	1.6		
Vinyl chloride	ug/m ³	ND	U	41	ND	U	0.93	ND	U	0.91	ND	U	0.9	ND	U	0.91	ND	U	0.86		
Xylenes, Total	ug/m ³	600	--	83	2.9	J	1.9	ND	U	1.8	5.9	--	1.8	0.83	J	1.8	2.6	J	1.7		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106130-450			KAFB-106130-450			KAFB-106131-025			KAFB-106131-055			KAFB-106131-150			KAFB-106131-245		
	Field Sample ID:			SV130-450-204			SV130-450-604			SV131-025-204			SV131-055-204			SV131-150-204			SV131-245-204		
	Sample Date:			10/20/2020			10/20/2020			10/19/2020			10/19/2020			10/19/2020			10/19/2020		
	Sample Type:			REG			FD			REG			REG			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	1.1	J	0.78	1.0	J	0.79	29	--	0.89	40	--	0.81	22	--	0.65	35	--	0.94	
	1,1-dichloroethane	ug/m ³	1.7	J	1.5	1.7	J	1.5	ND	U	1.7	ND	U	1.6	ND	U	1.3	ND	U	1.8	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	1.7	ND	U	1.5	ND	U	1.2	ND	U	1.8	
	1,2,4-trimethylbenzene	ug/m ³	4.4	--	0.78	4.3	--	0.79	7.7	--	0.89	3.1	--	0.81	2.4	--	0.65	2.0	J	0.94	
	1,2-dibromoethane	ug/m ³	0.93	J	0.78	0.96	J	0.79	ND	U	0.89	ND	U	0.81	ND	U	0.65	ND	U	0.94	
	1,2-dichloroethane	ug/m ³	1.5	J	0.78	1.6	J	0.79	ND	U	0.89	ND	U	0.81	2.3	--	0.65	ND	U	0.94	
	1,3,5-trimethylbenzene	ug/m ³	2.8	--	0.78	2.7	--	0.79	3.2	--	0.89	1.3	J	0.81	0.88	J	0.65	0.84	J	0.94	
	1,3-butadiene	ug/m ³	0.42	J	1.5	ND	U	1.5	ND	U	1.7	ND	U	1.5	ND	U	1.2	ND	U	1.8	
	1,4-dioxane	ug/m ³	0.38	J	0.78	1.3	J	0.79	ND	U	0.89	ND	U	0.81	ND	U	0.65	ND	U	0.94	
	2-butanone	ug/m ³	58	--	1.5	48	--	1.5	1.7	J	1.7	1.4	J	1.5	16	--	1.2	1.6	J	1.8	
	2-hexanone	ug/m ³	2.3	J	0.78	2.1	J	0.79	ND	U	0.89	ND	U	0.81	ND	U	0.65	ND	U	0.94	
	4-methyl-2-pentanone	ug/m ³	9.0	--	0.78	8.5	--	0.79	ND	U	0.89	ND	U	0.81	1.7	J	0.65	ND	U	0.94	
	Acetone	ug/m ³	94	--	12	58	--	13	7.8	J	14	6.0	J	13	64	--	10	ND	U	15	
	Benzene	ug/m ³	460	--	0.78	460	--	0.79	3.6	--	0.89	2.0	J	0.81	3.1	--	0.65	2.3	J	0.94	
	Bromodichloromethane	ug/m ³	ND	U	0.78	ND	U	0.79	0.46	J	0.89	ND	U	0.81	ND	U	0.65	ND	U	0.94	
	Bromoform	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	1.7	ND	U	1.5	ND	U	1.2	ND	U	1.8	
	Carbon disulfide	ug/m ³	110	--	2.5	120	--	2.5	3.1	J	2.8	2.7	J	2.6	4.0	--	2.1	9.5	--	3	
	Carbon tetrachloride	ug/m ³	ND	U	0.78	ND	U	0.79	9.1	--	0.89	14	--	0.81	14	--	0.65	49	--	0.94	
	Chloroethane	ug/m ³	2.2	J	1.5	2.1	J	1.5	ND	U	1.7	ND	U	1.5	ND	U	1.2	ND	U	1.8	
	Chloroform	ug/m ³	ND	U	0.78	ND	U	0.79	3.4	--	0.89	2.0	J	0.81	1.1	J	0.65	6.6	--	0.94	
	Chloromethane	ug/m ³	3.5	--	1.5	5.5	--	1.5	ND	U	1.7	ND	U	1.5	0.38	J	1.2	ND	U	1.8	
	Cyclohexane	ug/m ³	3.3	J	1.6	3.3	J	1.6	2.7	J	1.8	1.7	J	1.6	3.6	J	1.3	1.9	J	1.9	
	Dibromochloromethane	ug/m ³	ND	U	0.78	ND	U	0.79	ND	U	0.89	ND	U	0.81	ND	U	0.65	ND	U	0.94	
	Dichlorodifluoromethane	ug/m ³	2.9	--	1.5	2.2	J	1.5	120	--	1.7	180	--	1.5	230	--	1.2	580	--	18	
	ETHANOL	ug/m ³	21	J	3.8	ND	U	3.9	5.1	J	4.4	2.4	J	3.9	170	--	3.2	2.9	J	4.6	
	Ethyl acetate	ug/m ³	4.3	J	3	4.0	J	3	ND	U	3.4	ND	U	3.1	52	--	2.5	4.0	J	3.6	
	Ethylbenzene	ug/m ³	36	--	0.78	36	--	0.79	3.6	--	0.89	1.6	J	0.81	3.2	--	0.65	1.2	J	0.94	
	Hexane	ug/m ³	10	--	1.5	9.9	--	1.5	3.2	--	1.7	2.4	J	1.5	7.4	--	1.2	2.5	J	1.8	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	2.5	J	2.9	1.5	J	2.9	ND	U	3.3	ND	U	3	11	--	2.4	ND	U	3.5	
	m,p-Xylene	ug/m ³	94	--	1.6	94	--	1.6	19	--	1.8	9.1	--	1.6	12	--	1.3	6.6	--	1.9	
	Methylene Chloride	ug/m ³	1.4	J	1.5	ND	U	1.5	ND	U	1.7	ND	U	1.5	8.6	--	1.2	ND	U	1.8	
	Naphthalene	ug/m ³	ND	U	1.4	ND	U	1.4	0.81	J	1.6	ND	U	1.5	ND	U	1.2	ND	U	1.7	
	n-Heptane	ug/m ³	9.1	--	1.5	9.3	--	1.5	9.2	--	1.7	5.9	--	1.5	7.7	--	1.2	5.6	--	1.8	
	o-Xylene	ug/m ³	23	--	0.78	25	--	0.79	7.1	--	0.89	3.1	--	0.81	4.2	--	0.65	2.2	J	0.94	
	Propylene (propene)	ug/m ³	4.0	--	1.5	2.5	--	1.5	ND	U	1.7	ND	U	1.5	4.9	--	1.2	ND	U	1.8	
	Styrene	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	1.7	ND	U	1.5	1.1	J	1.2	ND	U	1.8	
Tetrachloroethene	ug/m ³	1.7	J	0.78	0.64	J	0.79	ND	U	0.89	1.1	J	0.81	2.9	--	0.65	ND	U	0.94		
Tetrahydrofuran	ug/m ³	53	--	0.78	55	--	0.79	ND	U	0.89	11	--	0.81	3.9	--	0.65	80	--	0.94		
Toluene	ug/m ³	810	--	7.8	870	--	7.9	30	--	0.89	17	--	0.81	35	--	0.65	14	--	0.94		
Trichloroethene	ug/m ³	2.7	--	0.78	2.5	--	0.79	ND	U	0.89	ND	U	0.81	0.73	J	0.65	0.73	J	0.94		
Trichlorofluoromethane	ug/m ³	1.2	J	1.5	0.97	J	1.5	14	--	1.7	20	--	1.5	23	--	1.2	64	--	1.8		
Vinyl chloride	ug/m ³	2.5	--	0.78	2.5	J	0.79	ND	U	0.89	ND	U	0.81	ND	U	0.65	ND	U	0.94		
Xylenes, Total	ug/m ³	120	--	1.6	120	--	1.6	26	--	1.8	12	--	1.6	16	--	1.3	8.8	--	1.9		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106131-350			KAFB-106131-450			KAFB-106132-025			KAFB-106132-050			KAFB-106132-175			KAFB-106132-250		
	Field Sample ID:			SV131-350-204			SV131-450-204			SV132-025-204			SV132-050-204			SV132-175-204			SV132-250-204		
	Sample Date:			10/19/2020			10/19/2020			10/12/2020			10/12/2020			10/12/2020			10/12/2020		
	Sample Type:			REG			REG			REG			REG			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	320	--	0.91	520	J	220	10	--	0.83	8.9	--	0.93	29	--	2.8	12	--	2.7	
	1,1-dichloroethane	ug/m ³	ND	U	1.8	ND	U	420	ND	U	1.6	ND	U	1.8	ND	U	5.4	ND	U	5.3	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.7	200	J	410	ND	U	1.6	ND	U	1.7	ND	U	5.2	ND	U	5.2	
	1,2,4-trimethylbenzene	ug/m ³	1.3	J	0.91	ND	U	220	11	--	0.83	2.1	J	0.93	2.4	J	2.8	1.4	J	2.7	
	1,2-dibromoethane	ug/m ³	ND	U	0.91	ND	U	220	ND	U	0.83	ND	U	0.93	ND	U	2.8	ND	U	2.7	
	1,2-dichloroethane	ug/m ³	ND	U	0.91	ND	U	220	ND	U	0.83	ND	U	0.93	ND	U	2.8	ND	U	2.7	
	1,3,5-trimethylbenzene	ug/m ³	0.59	J	0.91	130	J	220	5.2	--	0.83	1.0	J	0.93	1.3	J	2.8	ND	U	2.7	
	1,3-butadiene	ug/m ³	ND	U	1.7	ND	U	410	ND	U	1.6	ND	U	1.7	ND	U	5.2	ND	U	5.2	
	1,4-dioxane	ug/m ³	ND	U	0.91	220	J	220	ND	U	0.83	ND	U	0.93	ND	U	2.8	ND	U	2.7	
	2-butanone	ug/m ³	2.6	J	1.7	ND	U	410	3.7	J	1.6	2.8	J	1.7	ND	U	5.2	15	J	5.2	
	2-hexanone	ug/m ³	ND	U	0.91	ND	U	220	ND	U	0.83	ND	U	0.93	ND	U	2.8	ND	U	2.7	
	4-methyl-2-pentanone	ug/m ³	ND	U	0.91	ND	U	220	ND	U	0.83	ND	U	0.93	ND	U	2.8	ND	U	2.7	
	Acetone	ug/m ³	15	J	15	ND	U	3400	15	J	13	15	J	15	ND	U	44	ND	U	44	
	Benzene	ug/m ³	1.9	J	0.91	3100	--	220	0.83	J	0.83	4.4	--	0.93	ND	U	2.8	ND	U	2.7	
	Bromodichloromethane	ug/m ³	ND	U	0.91	ND	U	220	ND	U	0.83	ND	U	0.93	ND	U	2.8	ND	U	2.7	
	Bromoform	ug/m ³	ND	U	1.7	ND	U	410	ND	U	1.6	ND	U	1.7	ND	U	5.2	ND	U	5.2	
	Carbon disulfide	ug/m ³	7.0	--	2.9	310	J	680	85	--	2.6	5.3	J	2.9	7.8	J	8.9	4.6	J	8.7	
	Carbon tetrachloride	ug/m ³	11	--	0.91	ND	U	220	4.9	--	0.83	4.9	--	0.93	22	--	2.8	11	--	2.7	
	Chloroethane	ug/m ³	ND	U	1.7	ND	U	410	ND	U	1.6	ND	U	1.7	ND	U	5.2	ND	U	5.2	
	Chloroform	ug/m ³	1.2	J	0.91	ND	U	220	11	--	0.83	10	--	0.93	21	--	2.8	22	--	2.7	
	Chloromethane	ug/m ³	ND	U	1.7	ND	U	410	ND	U	1.6	ND	U	1.7	ND	U	5.2	ND	U	5.2	
	Cyclohexane	ug/m ³	130	--	1.8	1300	--	430	ND	U	1.7	ND	U	1.9	ND	U	5.6	ND	U	5.5	
	Dibromochloromethane	ug/m ³	ND	U	0.91	ND	U	220	ND	U	0.83	ND	U	0.93	ND	U	2.8	ND	U	2.7	
	Dichlorodifluoromethane	ug/m ³	4800	--	28	6400	--	410	2.5	--	1.6	2.0	J	1.7	3.7	J	5.2	1.6	J	5.2	
	ETHANOL	ug/m ³	8.3	J	4.5	520	J	1100	13	J	4	11	J	4.5	7.7	J	14	6.8	J	13	
	Ethyl acetate	ug/m ³	13	--	3.5	ND	U	820	ND	U	3.2	ND	U	3.5	7.9	J	11	ND	U	11	
	Ethylbenzene	ug/m ³	0.95	J	0.91	180	J	220	0.42	J	0.83	ND	U	0.93	ND	U	2.8	ND	U	2.7	
	Hexane	ug/m ³	2.9	--	1.7	520	J	410	ND	U	1.6	ND	U	1.7	ND	U	5.2	ND	U	5.2	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	3.4	ND	U	800	2.4	J	3.1	1.4	J	3.4	ND	U	10	ND	U	10	
	m,p-Xylene	ug/m ³	4.6	J	1.8	470	J	430	6.6	--	1.7	1.8	J	1.9	ND	U	5.6	ND	U	5.5	
	Methylene Chloride	ug/m ³	ND	U	1.7	ND	U	410	ND	U	1.6	0.88	J	1.7	ND	U	5.2	ND	U	5.2	
	Naphthalene	ug/m ³	ND	U	1.7	ND	U	390	0.74	J	1.5	ND	U	1.7	ND	U	5.1	ND	U	5	
	n-Heptane	ug/m ³	4.2	--	1.7	820	--	410	ND	U	1.6	ND	U	1.7	ND	U	5.2	ND	U	5.2	
	o-Xylene	ug/m ³	1.9	J	0.91	210	J	220	5.5	--	0.83	1.3	J	0.93	1.3	J	2.8	ND	U	2.7	
	Propylene (propene)	ug/m ³	32	--	1.7	ND	U	410	1.3	J	1.6	0.96	J	1.7	ND	U	5.2	ND	U	5.2	
	Styrene	ug/m ³	ND	U	1.7	ND	U	410	0.44	J	1.6	ND	U	1.7	ND	U	5.2	ND	U	5.2	
	Tetrachloroethene	ug/m ³	14	--	0.91	330	J	220	19	--	0.83	16	--	0.93	59	--	2.8	22	--	2.7	
	Tetrahydrofuran	ug/m ³	3.1	J	0.91	ND	U	220	ND	U	0.83	1.4	J	0.93	4.7	J	2.8	440	--	2.7	
	Toluene	ug/m ³	10	--	0.91	3300	--	220	1.7	J	0.83	1.1	J	0.93	ND	U	2.8	2.0	J	2.7	
	Trichloroethene	ug/m ³	0.45	J	0.91	160	J	220	4100	--	13	3900	--	15	22000	--	70	12000	--	23	
Trichlorofluoromethane	ug/m ³	730	--	28	1000	--	410	1.2	J	1.6	0.93	J	1.7	1.8	J	5.2	ND	U	5.2		
Vinyl chloride	ug/m ³	ND	U	0.91	ND	U	220	ND	U	0.83	ND	U	0.93	ND	U	2.8	ND	U	2.7		
Xylenes, Total	ug/m ³	6.5	--	1.8	680	J	430	12	--	1.7	3.1	J	1.9	ND	U	5.6	ND	U	5.5		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106132-350			KAFB-106132-450			KAFB-106133-025			KAFB-106133-050			KAFB-106133-170			KAFB-106133-250		
	Field Sample ID:			SV132-350-204			SV132-450-204			SV133-025-204			SV133-050-204			SV133-170-204			SV133-250-204		
	Sample Date:			10/12/2020			10/12/2020			10/6/2020			10/6/2020			10/6/2020			10/6/2020		
	Sample Type:			REG			REG			REG			REG			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	1.1	J	0.9	1.0	J	0.81	2.6	J	0.88	3.0	--	0.8	9.9	--	0.79	1.0	J	0.84	
	1,1-dichloroethane	ug/m ³	ND	U	1.7	4.0	--	1.6	ND	U	1.7	ND	U	1.6	ND	U	1.5	ND	U	1.6	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.7	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.5	ND	U	1.6	
	1,2,4-trimethylbenzene	ug/m ³	2.4	J	0.9	2.1	J	0.81	16	--	0.88	10	--	0.8	5.0	--	0.79	ND	U	0.84	
	1,2-dibromoethane	ug/m ³	ND	U	0.9	ND	U	0.81	ND	U	0.88	ND	U	0.8	ND	U	0.79	ND	U	0.84	
	1,2-dichloroethane	ug/m ³	ND	U	0.9	1.5	J	0.81	ND	U	0.88	ND	U	0.8	ND	U	0.79	ND	U	0.84	
	1,3,5-trimethylbenzene	ug/m ³	1.1	J	0.9	0.96	J	0.81	5.3	--	0.88	3.7	--	0.8	1.9	J	0.79	ND	U	0.84	
	1,3-butadiene	ug/m ³	ND	U	1.7	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.5	ND	U	1.6	
	1,4-dioxane	ug/m ³	ND	U	0.9	ND	U	0.81	ND	U	0.88	ND	U	0.8	ND	U	0.79	0.47	J	0.84	
	2-butanone	ug/m ³	1.9	J	1.7	16	--	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.5	ND	U	1.6	
	2-hexanone	ug/m ³	ND	U	0.9	ND	U	0.81	ND	U	0.88	ND	U	0.8	1.9	J	0.79	ND	U	0.84	
	4-methyl-2-pentanone	ug/m ³	ND	U	0.9	ND	U	0.81	0.65	J	0.88	0.62	J	0.8	0.45	J	0.79	ND	U	0.84	
	Acetone	ug/m ³	ND	U	14	30	--	13	320	--	14	330	--	13	180	--	13	ND	U	13	
	Benzene	ug/m ³	5.8	--	0.9	2.0	J	0.81	0.53	J	0.88	0.69	J	0.8	4.1	--	0.79	ND	U	0.84	
	Bromodichloromethane	ug/m ³	ND	U	0.9	ND	U	0.81	ND	U	0.88	ND	U	0.8	ND	U	0.79	ND	U	0.84	
	Bromoform	ug/m ³	ND	U	1.7	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.5	ND	U	1.6	
	Carbon disulfide	ug/m ³	8.3	--	2.8	38	--	2.6	1.5	J	2.8	37	--	2.5	25	--	2.5	9.8	--	2.7	
	Carbon tetrachloride	ug/m ³	1.6	J	0.9	1.1	J	0.81	ND	U	0.88	ND	U	0.8	2.0	J	0.79	2.9	--	0.84	
	Chloroethane	ug/m ³	ND	U	1.7	4.8	--	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.5	ND	U	1.6	
	Chloroform	ug/m ³	8.7	--	0.9	1.6	J	0.81	0.56	J	0.88	0.73	J	0.8	0.95	J	0.79	ND	U	0.84	
	Chloromethane	ug/m ³	ND	U	1.7	19	--	1.5	ND	U	1.6	0.50	J	1.5	0.45	J	1.5	ND	U	1.6	
	Cyclohexane	ug/m ³	ND	U	1.8	ND	U	1.6	1.3	J	1.8	0.85	J	1.6	0.80	J	1.6	ND	U	1.7	
	Dibromochloromethane	ug/m ³	ND	U	0.9	ND	U	0.81	ND	U	0.88	ND	U	0.8	ND	U	0.79	ND	U	0.84	
	Dichlorodifluoromethane	ug/m ³	ND	U	1.7	ND	U	1.5	2.4	J	1.6	2.4	J	1.5	3.0	--	1.5	2.8	--	1.6	
	ETHANOL	ug/m ³	27	J	4.4	11	J	4	ND	U	4.3	ND	U	3.9	ND	U	3.9	ND	U	4.1	
	Ethyl acetate	ug/m ³	ND	U	3.4	ND	U	3.1	ND	U	3.3	ND	U	3.1	ND	U	3	ND	U	3.2	
	Ethylbenzene	ug/m ³	ND	U	0.9	ND	U	0.81	1.8	J	0.88	1.4	J	0.8	0.75	J	0.79	ND	U	0.84	
	Hexane	ug/m ³	ND	U	1.7	1.1	J	1.5	1.2	J	1.6	0.92	J	1.5	0.80	J	1.5	ND	U	1.6	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	3.3	ND	U	3	ND	U	3.2	ND	U	3	41	--	2.9	ND	U	3.1	
	m,p-Xylene	ug/m ³	2.3	J	1.8	1.6	J	1.6	25	--	1.8	16	--	1.6	8.3	--	1.6	ND	U	1.7	
	Methylene Chloride	ug/m ³	ND	U	1.7	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.5	ND	U	1.6	
	Naphthalene	ug/m ³	ND	U	1.6	ND	U	1.5	1.9	J	1.6	1.1	J	1.5	0.80	J	1.4	ND	U	1.5	
	n-Heptane	ug/m ³	ND	U	1.7	0.62	J	1.5	5.4	--	1.6	3.8	--	1.5	3.0	--	1.5	ND	U	1.6	
	o-Xylene	ug/m ³	1.3	J	0.9	0.85	J	0.81	10	--	0.88	6.9	--	0.8	3.4	--	0.79	ND	U	0.84	
	Propylene (propene)	ug/m ³	1.2	J	1.7	3.5	--	1.5	0.92	J	1.6	1.7	J	1.5	17	--	1.5	ND	U	1.6	
	Styrene	ug/m ³	ND	U	1.7	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.5	ND	U	1.6	
	Tetrachloroethene	ug/m ³	3.0	--	0.9	2.3	J	0.81	2.8	--	0.88	3.2	--	0.8	13	--	0.79	1.0	J	0.84	
	Tetrahydrofuran	ug/m ³	8.2	--	0.9	47	--	0.81	0.91	J	0.88	68	--	0.8	34	--	0.79	3.0	J	0.84	
	Toluene	ug/m ³	2.2	J	0.9	12	--	0.81	4.4	--	0.88	ND	U	0.8	ND	U	0.79	ND	U	0.84	
	Trichloroethene	ug/m ³	880	--	9	950	--	8.1	28	--	0.88	47	--	0.8	310	--	0.79	0.59	J	0.84	
Trichlorofluoromethane	ug/m ³	ND	U	1.7	ND	U	1.5	1.0	J	1.6	1.1	J	1.5	1.2	J	1.5	2.8	--	1.6		
Vinyl chloride	ug/m ³	ND	U	0.9	6.3	--	0.81	ND	U	0.88	ND	U	0.8	ND	U	0.79	ND	U	0.84		
Xylenes, Total	ug/m ³	3.6	J	1.8	2.4	J	1.6	35	--	1.8	23	--	1.6	12	--	1.6	ND	U	1.7		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106133-250			KAFB-106133-350			KAFB-106133-450			KAFB-106134-025			KAFB-106134-050			KAFB-106134-170		
	Field Sample ID:			SV133-250-604			SV133-350-204			SV133-450-204			SV134-025-204			SV134-050-204			SV134-170-204		
	Sample Date:			10/6/2020			10/6/2020			10/6/2020			10/12/2020			10/12/2020			10/12/2020		
	Sample Type:			FD			REG			REG			REG			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	14	--	0.86	1.9	J	0.86	ND	U	14	0.44	J	0.79	0.87	J	0.82	1.5	J	1.2	
	1,1-dichloroethane	ug/m ³	ND	U	1.7	ND	U	1.7	ND	U	27	ND	U	1.5	ND	U	1.6	ND	U	2.3	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.6	ND	U	1.6	ND	U	27	ND	U	1.5	ND	U	1.5	ND	U	2.2	
	1,2,4-trimethylbenzene	ug/m ³	18	--	0.86	3.2	--	0.86	ND	U	14	0.78	J	0.79	0.73	J	0.82	0.75	J	1.2	
	1,2-dibromoethane	ug/m ³	ND	U	0.86	ND	U	0.86	ND	U	14	ND	U	0.79	ND	U	0.82	ND	U	1.2	
	1,2-dichloroethane	ug/m ³	ND	U	0.86	ND	U	0.86	ND	U	14	ND	U	0.79	ND	U	0.82	ND	U	1.2	
	1,3,5-trimethylbenzene	ug/m ³	6.7	--	0.86	1.2	J	0.86	ND	U	14	ND	U	0.79	ND	U	0.82	ND	U	1.2	
	1,3-butadiene	ug/m ³	ND	U	1.6	ND	U	1.6	ND	U	27	ND	U	1.5	ND	U	1.5	ND	U	2.2	
	1,4-dioxane	ug/m ³	ND	U	0.86	ND	U	0.86	ND	U	14	ND	U	0.79	ND	U	0.82	ND	U	1.2	
	2-butanone	ug/m ³	ND	U	1.6	ND	U	1.6	230	--	27	ND	U	1.5	5.6	--	1.5	4.5	J	2.2	
	2-hexanone	ug/m ³	ND	U	0.86	ND	U	0.86	ND	U	14	ND	U	0.79	0.88	J	0.82	ND	U	1.2	
	4-methyl-2-pentanone	ug/m ³	ND	U	0.86	ND	U	0.86	32	J	14	ND	U	0.79	ND	U	0.82	ND	U	1.2	
	Acetone	ug/m ³	120	--	14	64	--	14	ND	U	220	8.2	J	12	37	--	13	42	--	19	
	Benzene	ug/m ³	4.6	--	0.86	3.7	--	0.86	1000	--	14	ND	U	0.79	0.45	J	0.82	0.75	J	1.2	
	Bromodichloromethane	ug/m ³	ND	U	0.86	ND	U	0.86	ND	U	14	ND	U	0.79	ND	U	0.82	ND	U	1.2	
	Bromoform	ug/m ³	ND	U	1.6	ND	U	1.6	ND	U	27	ND	U	1.5	ND	U	1.5	ND	U	2.2	
	Carbon disulfide	ug/m ³	14	--	2.7	15	--	2.7	110	--	45	ND	U	2.5	6.0	--	2.6	9.0	--	3.7	
	Carbon tetrachloride	ug/m ³	6.9	--	0.86	1.7	J	0.86	ND	U	14	ND	U	0.79	ND	U	0.82	ND	U	1.2	
	Chloroethane	ug/m ³	ND	U	1.6	ND	U	1.6	ND	U	27	ND	U	1.5	ND	U	1.5	ND	U	2.2	
	Chloroform	ug/m ³	2.3	J	0.86	3.9	--	0.86	ND	U	14	ND	U	0.79	ND	U	0.82	0.49	J	1.2	
	Chloromethane	ug/m ³	ND	U	1.6	0.94	J	1.6	32	J	27	ND	U	1.5	ND	U	1.5	ND	U	2.2	
	Cyclohexane	ug/m ³	2.8	J	1.7	ND	U	1.7	1500	--	28	ND	U	1.6	ND	U	1.6	ND	U	2.3	
	Dibromochloromethane	ug/m ³	ND	U	0.86	ND	U	0.86	ND	U	14	ND	U	0.79	ND	U	0.82	ND	U	1.2	
	Dichlorodifluoromethane	ug/m ³	2.0	J	1.6	0.61	J	1.6	ND	U	27	1.6	J	1.5	2.4	J	1.5	2.6	J	2.2	
	ETHANOL	ug/m ³	ND	U	4.2	ND	U	4.2	ND	U	69	48	--	3.8	18	J	4	9.2	J	5.7	
	Ethyl acetate	ug/m ³	ND	U	3.3	ND	U	3.3	ND	U	54	ND	U	3	1.5	J	3.1	ND	U	4.5	
	Ethylbenzene	ug/m ³	2.9	--	0.86	0.45	J	0.86	25	J	14	ND	U	0.79	ND	U	0.82	ND	U	1.2	
	Hexane	ug/m ³	3.6	--	1.6	0.63	J	1.6	710	--	27	ND	U	1.5	0.97	J	1.5	ND	U	2.2	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	3.2	ND	U	3.2	ND	U	52	ND	U	2.9	ND	U	3	ND	U	4.3	
	m,p-Xylene	ug/m ³	35	--	1.7	5.0	J	1.7	41	J	28	0.67	J	1.6	0.92	J	1.6	1.0	J	2.3	
	Methylene Chloride	ug/m ³	ND	U	1.6	ND	U	1.6	ND	U	27	ND	U	1.5	ND	U	1.5	ND	U	2.2	
	Naphthalene	ug/m ³	1.8	J	1.6	ND	U	1.6	ND	U	26	ND	U	1.4	ND	U	1.5	ND	U	2.1	
	n-Heptane	ug/m ³	14	--	1.6	2.0	J	1.6	350	--	27	ND	U	1.5	0.67	J	1.5	ND	U	2.2	
	o-Xylene	ug/m ³	14	--	0.86	2.0	J	0.86	26	J	14	0.36	J	0.79	0.42	J	0.82	ND	U	1.2	
Propylene (propene)	ug/m ³	1.0	J	1.6	1.8	J	1.6	120	--	27	ND	U	1.5	1.2	J	1.5	ND	U	2.2		
Styrene	ug/m ³	ND	U	1.6	ND	U	1.6	ND	U	27	ND	U	1.5	ND	U	1.5	ND	U	2.2		
Tetrachloroethene	ug/m ³	22	J	0.86	2.7	--	0.86	ND	U	14	ND	U	0.79	0.64	J	0.82	1.4	J	1.2		
Tetrahydrofuran	ug/m ³	10	--	0.86	11	--	0.86	91	--	14	ND	U	0.79	0.40	J	0.82	3.5	J	1.2		
Toluene	ug/m ³	10	--	0.86	ND	U	0.86	450	--	14	0.40	J	0.79	1.5	J	0.82	1.2	J	1.2		
Trichloroethene	ug/m ³	1700	J	8.6	390	--	0.86	140	--	14	5.9	--	0.79	16	--	0.82	59	--	1.2		
Trichlorofluoromethane	ug/m ³	0.85	J	1.6	ND	U	1.6	ND	U	27	0.71	J	1.5	1.1	J	1.5	1.1	J	2.2		
Vinyl chloride	ug/m ³	ND	U	0.86	ND	U	0.86	5.8	J	14	ND	U	0.79	ND	U	0.82	ND	U	1.2		
Xylenes, Total	ug/m ³	49	--	1.7	7.0	--	1.7	68	J	28	1.0	J	1.6	1.3	J	1.6	1.0	J	2.3		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106134-250			KAFB-106134-350			KAFB-106134-350			KAFB-106134-450			KAFB-106135-025			KAFB-106135-050		
	Field Sample ID:			SV134-250-204			SV134-350-204			SV134-350-604			SV134-450-204			SV135-025-204			SV135-050-204		
	Sample Date:			10/12/2020			10/12/2020			10/12/2020			10/12/2020			10/12/2020			10/12/2020		
	Sample Type:			REG			REG			FD			REG			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	1.6	J	0.9	1.0	J	1.1	0.93	J	0.66	ND	U	28	0.73	J	0.75	0.83	J	0.9	
	1,1-dichloroethane	ug/m ³	ND	U	1.7	ND	U	2.2	ND	U	1.3	ND	U	55	ND	U	1.5	ND	U	1.7	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.7	ND	U	2.1	ND	U	1.2	ND	U	54	ND	U	1.4	ND	U	1.7	
	1,2,4-trimethylbenzene	ug/m ³	1.2	J	0.9	0.77	J	1.1	1.8	J	0.66	ND	U	28	3.4	--	0.75	5.3	--	0.9	
	1,2-dibromoethane	ug/m ³	ND	U	0.9	ND	U	1.1	ND	U	0.66	ND	U	28	ND	U	0.75	ND	U	0.9	
	1,2-dichloroethane	ug/m ³	ND	U	0.9	ND	U	1.1	ND	U	0.66	ND	U	28	ND	U	0.75	ND	U	0.9	
	1,3,5-trimethylbenzene	ug/m ³	ND	U	0.9	ND	U	1.1	0.48	J	0.66	43	J	28	2.4	--	0.75	3.4	--	0.9	
	1,3-butadiene	ug/m ³	ND	U	1.7	ND	U	2.1	ND	U	1.2	ND	U	54	ND	U	1.4	ND	U	1.7	
	1,4-dioxane	ug/m ³	ND	U	0.9	0.77	J	1.1	0.76	J	0.66	ND	U	28	ND	U	0.75	ND	U	0.9	
	2-butanone	ug/m ³	2.1	J	1.7	3.9	J	2.1	14	--	1.2	ND	U	54	2.7	J	1.4	3.1	J	1.7	
	2-hexanone	ug/m ³	ND	U	0.9	ND	U	1.1	2.2	J	0.66	ND	U	28	ND	U	0.75	ND	U	0.9	
	4-methyl-2-pentanone	ug/m ³	ND	U	0.9	ND	U	1.1	0.48	J	0.66	ND	U	28	ND	U	0.75	ND	U	0.9	
	Acetone	ug/m ³	12	J	14	13	J	18	74	--	10	ND	U	450	11	J	12	8.6	J	14	
	Benzene	ug/m ³	0.82	J	0.9	4.3	--	1.1	1.1	J	0.66	610	--	28	0.97	J	0.75	0.90	J	0.9	
	Bromodichloromethane	ug/m ³	ND	U	0.9	ND	U	1.1	ND	U	0.66	ND	U	28	ND	U	0.75	ND	U	0.9	
	Bromoform	ug/m ³	ND	U	1.7	ND	U	2.1	ND	U	1.2	ND	U	54	ND	U	1.4	ND	U	1.7	
	Carbon disulfide	ug/m ³	8.5	--	2.9	26	--	3.6	24	--	2.1	110	J	90	12	--	2.4	8.7	--	2.9	
	Carbon tetrachloride	ug/m ³	0.53	J	0.9	0.51	J	1.1	0.52	J	0.66	ND	U	28	ND	U	0.75	ND	U	0.9	
	Chloroethane	ug/m ³	ND	U	1.7	ND	U	2.1	0.55	J	1.2	ND	U	54	ND	U	1.4	ND	U	1.7	
	Chloroform	ug/m ³	0.50	J	0.9	0.78	J	1.1	0.72	J	0.66	ND	U	28	0.47	J	0.75	0.64	J	0.9	
	Chloromethane	ug/m ³	ND	U	1.7	ND	U	2.1	0.65	J	1.2	31	J	54	ND	U	1.4	ND	U	1.7	
	Cyclohexane	ug/m ³	ND	U	1.8	ND	U	2.2	ND	U	1.3	56	J	57	ND	U	1.5	ND	U	1.8	
	Dibromochloromethane	ug/m ³	ND	U	0.9	ND	U	1.1	ND	U	0.66	ND	U	28	ND	U	0.75	ND	U	0.9	
	Dichlorodifluoromethane	ug/m ³	2.5	J	1.7	2.6	J	2.1	2.7	--	1.2	ND	U	54	2.3	J	1.4	2.3	J	1.7	
	ETHANOL	ug/m ³	10	J	4.4	9.6	J	5.5	22	--	3.2	ND	U	140	9.6	J	3.7	9.2	J	4.4	
	Ethyl acetate	ug/m ³	2.6	J	3.4	ND	U	4.3	2.9	J	2.5	110	J	110	130	--	2.9	64	--	3.4	
	Ethylbenzene	ug/m ³	ND	U	0.9	ND	U	1.1	0.40	J	0.66	19	J	28	0.62	J	0.75	0.83	J	0.9	
	Hexane	ug/m ³	ND	U	1.7	ND	U	2.1	0.53	J	1.2	74	J	54	ND	U	1.4	ND	U	1.7	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	3.3	ND	U	4.2	2.6	J	2.4	ND	U	110	1.3	J	2.8	ND	U	3.3	
	m,p-Xylene	ug/m ³	1.5	J	1.8	1.1	J	2.2	2.5	J	1.3	ND	U	57	12	--	1.5	21	--	1.8	
	Methylene Chloride	ug/m ³	6.2	--	1.7	ND	U	2.1	28	--	1.2	ND	U	54	0.93	J	1.4	ND	U	1.7	
	Naphthalene	ug/m ³	ND	U	1.6	ND	U	2	ND	U	1.2	ND	U	52	ND	U	1.4	ND	U	1.6	
	n-Heptane	ug/m ³	ND	U	1.7	ND	U	2.1	0.61	J	1.2	44	J	54	0.58	J	1.4	0.49	J	1.7	
	o-Xylene	ug/m ³	0.65	J	0.9	ND	U	1.1	1.1	J	0.66	84	J	28	8.1	--	0.75	13	--	0.9	
	Propylene (propene)	ug/m ³	0.83	J	1.7	1.2	J	2.1	2.3	--	1.2	ND	U	54	0.66	J	1.4	ND	U	1.7	
	Styrene	ug/m ³	ND	U	1.7	ND	U	2.1	ND	U	1.2	ND	U	54	ND	U	1.4	ND	U	1.7	
	Tetrachloroethene	ug/m ³	1.2	J	0.9	0.71	J	1.1	0.62	J	0.66	ND	U	28	0.33	J	0.75	0.43	J	0.9	
	Tetrahydrofuran	ug/m ³	8.2	--	0.9	7.6	--	1.1	6.0	--	0.66	22	J	28	1.4	J	0.75	31	--	0.9	
	Toluene	ug/m ³	1.7	J	0.9	1.5	J	1.1	4.9	--	0.66	99	--	28	8.2	--	0.75	5.2	--	0.9	
	Trichloroethene	ug/m ³	60	--	0.9	21	--	1.1	18	--	0.66	18	J	28	82	--	0.75	140	--	0.9	
Trichlorofluoromethane	ug/m ³	0.99	J	1.7	1.0	J	2.1	1.0	J	1.2	ND	U	54	1.3	J	1.4	1.4	J	1.7		
Vinyl chloride	ug/m ³	ND	U	0.9	ND	U	1.1	ND	U	0.66	ND	U	28	ND	U	0.75	ND	U	0.9		
Xylenes, Total	ug/m ³	2.2	J	1.8	1.1	J	2.2	3.6	J	1.3	84	J	57	20	--	1.5	34	--	1.8		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106135-150			KAFB-106135-250			KAFB-106135-250			KAFB-106135-350			KAFB-106135-450			KAFB-106137-025		
	Field Sample ID:			SV135-150-204			SV135-250-204			SV135-250-604			SV135-350-204			SV135-450-204			SV137-025-204		
	Sample Date:			10/12/2020			10/12/2020			10/12/2020			10/12/2020			10/12/2020					
	Sample Type:			REG			REG			FD			REG			REG					
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	2.2	J	0.82	1.6	J	0.77	1.6	J	1.2	ND	U	1.1	1.0	J	0.81	ND	U	1.2	
	1,1-dichloroethane	ug/m ³	ND	U	1.6	ND	U	1.5	ND	U	2.3	ND	U	2.2	0.81	J	1.6	ND	U	2.3	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	2.3	ND	U	2.1	ND	U	1.5	ND	U	2.2	
	1,2,4-trimethylbenzene	ug/m ³	1.5	J	0.82	1.1	J	0.77	4.5	--	1.2	1.6	J	1.1	0.81	J	0.81	0.55	J	1.2	
	1,2-dibromoethane	ug/m ³	ND	U	0.82	ND	U	0.77	ND	U	1.2	ND	U	1.1	ND	U	0.81	ND	U	1.2	
	1,2-dichloroethane	ug/m ³	ND	U	0.82	ND	U	0.77	ND	U	1.2	ND	U	1.1	2.7	--	0.81	ND	U	1.2	
	1,3,5-trimethylbenzene	ug/m ³	1.0	J	0.82	0.61	J	0.77	2.8	J	1.2	1.0	J	1.1	0.45	J	0.81	ND	U	1.2	
	1,3-butadiene	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	2.3	ND	U	2.1	0.68	J	1.5	ND	U	2.2	
	1,4-dioxane	ug/m ³	ND	U	0.82	ND	U	0.77	ND	U	1.2	ND	U	1.1	ND	U	0.81	ND	U	1.2	
	2-butanone	ug/m ³	43	--	1.5	4.4	J	1.5	3.6	J	2.3	7.7	--	2.1	14	--	1.5	1.3	J	2.2	
	2-hexanone	ug/m ³	1.6	J	0.82	ND	U	0.77	ND	U	1.2	ND	U	1.1	1.1	J	0.81	ND	U	1.2	
	4-methyl-2-pentanone	ug/m ³	0.94	J	0.82	0.46	J	0.77	ND	U	1.2	ND	U	1.1	4.9	--	0.81	ND	U	1.2	
	Acetone	ug/m ³	70	--	13	ND	U	12	16	J	19	30	J	18	35	--	13	ND	U	18	
	Benzene	ug/m ³	0.43	J	0.82	0.36	J	0.77	2.1	J	1.2	0.75	J	1.1	1.5	J	0.81	ND	U	1.2	
	Bromodichloromethane	ug/m ³	ND	U	0.82	ND	U	0.77	ND	U	1.2	ND	U	1.1	ND	U	0.81	ND	U	1.2	
	Bromoform	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	2.3	ND	U	2.1	ND	U	1.5	ND	U	2.2	
	Carbon disulfide	ug/m ³	9.7	--	2.6	7.8	--	2.5	12	--	3.8	4.9	J	3.6	53	--	2.6	2.3	J	3.7	
	Carbon tetrachloride	ug/m ³	1.1	J	0.82	0.89	J	0.77	0.87	J	1.2	0.58	J	1.1	0.74	J	0.81	ND	U	1.2	
	Chloroethane	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	2.3	ND	U	2.1	4.5	--	1.5	ND	U	2.2	
	Chloroform	ug/m ³	1.4	J	0.82	1.6	J	0.77	1.6	J	1.2	ND	U	1.1	1.2	J	0.81	ND	U	1.2	
	Chloromethane	ug/m ³	0.92	J	1.5	ND	U	1.5	ND	U	2.3	ND	U	2.1	9.1	--	1.5	ND	U	2.2	
	Cyclohexane	ug/m ³	ND	U	1.6	ND	U	1.5	ND	U	2.4	ND	U	2.3	ND	U	1.6	ND	U	2.3	
	Dibromochloromethane	ug/m ³	ND	U	0.82	ND	U	0.77	ND	U	1.2	ND	U	1.1	ND	U	0.81	ND	U	1.2	
	Dichlorodifluoromethane	ug/m ³	2.2	J	1.5	1.3	J	1.5	1.5	J	2.3	1.4	J	2.1	0.99	J	1.5	2.4	J	2.2	
	ETHANOL	ug/m ³	13	J	4	6.7	J	3.8	10	J	5.9	20	J	5.5	34	--	3.9	4.5	J	5.7	
	Ethyl acetate	ug/m ³	17	--	3.1	2.9	J	3	ND	U	4.6	ND	U	4.3	2.8	J	3.1	ND	U	4.5	
	Ethylbenzene	ug/m ³	0.44	J	0.82	ND	U	0.77	0.74	J	1.2	ND	U	1.1	1.4	J	0.81	ND	U	1.2	
	Hexane	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	2.3	ND	U	2.1	ND	U	1.5	ND	U	2.2	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	1.9	J	3	ND	U	2.9	ND	U	4.5	1.5	J	4.2	1.1	J	3	ND	U	4.3	
	m,p-Xylene	ug/m ³	5.4	--	1.6	3.6	J	1.5	16	--	2.4	4.2	J	2.3	6.6	--	1.6	ND	U	2.3	
	Methylene Chloride	ug/m ³	1.2	J	1.5	1.2	J	1.5	ND	U	2.3	2.3	J	2.1	ND	U	1.5	ND	U	2.2	
	Naphthalene	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	2.2	ND	U	2.1	ND	U	1.5	ND	U	2.1	
	n-Heptane	ug/m ³	0.72	J	1.5	0.73	J	1.5	ND	U	2.3	ND	U	2.1	0.93	J	1.5	ND	U	2.2	
	o-Xylene	ug/m ³	3.2	--	0.82	2.2	J	0.77	9.3	--	1.2	2.9	J	1.1	2.2	J	0.81	ND	U	1.2	
Propylene (propene)	ug/m ³	1.5	J	1.5	0.62	J	1.5	1.3	J	2.3	1.2	J	2.1	2.5	--	1.5	ND	U	2.2		
Styrene	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	2.3	ND	U	2.1	0.52	J	1.5	ND	U	2.2		
Tetrachloroethene	ug/m ³	1.9	J	0.82	1.3	J	0.77	1.3	J	1.2	ND	U	1.1	1.3	J	0.81	ND	U	1.2		
Tetrahydrofuran	ug/m ³	34	--	0.82	3.7	J	0.77	4.7	J	1.2	23	--	1.1	33	--	0.81	ND	U	1.2		
Toluene	ug/m ³	2.6	--	0.82	1.6	J	0.77	3.8	--	1.2	1.6	J	1.1	11	--	0.81	ND	U	1.2		
Trichloroethene	ug/m ³	910	--	8.2	460	--	7.7	580	--	1.2	33	--	1.1	280	--	0.81	ND	U	1.2		
Trichlorofluoromethane	ug/m ³	1.1	J	1.5	0.63	J	1.5	0.75	J	2.3	0.79	J	2.1	0.56	J	1.5	1.2	J	2.2		
Vinyl chloride	ug/m ³	ND	U	0.82	ND	U	0.77	ND	U	1.2	ND	U	1.1	3.9	--	0.81	ND	U	1.2		
Xylenes, Total	ug/m ³	8.6	--	1.6	5.8	--	1.5	26	--	2.4	7.1	--	2.3	8.8	--	1.6	ND	U	2.3		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106137-050			KAFB-106137-150			KAFB-106137-250			KAFB-106137-350			KAFB-106137-450			KAFB-106139-025		
	Field Sample ID:			SV137-050-204			SV137-150-204			SV137-250-204			SV137-350-204			SV137-450-204			SV139-025-204		
	Sample Date:			10/12/2020			10/12/2020			10/12/2020			10/12/2020			10/12/2020					
	Sample Type:			REG			REG			REG			REG			REG					
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	ND	U	1.1	0.47	J	0.76	0.50	J	0.84	0.41	J	0.77	ND	U	140	18	--	0.74	
	1,1-dichloroethane	ug/m ³	ND	U	2.2	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	270	ND	U	1.4	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	2.1	ND	U	1.4	ND	U	1.6	ND	U	1.5	ND	U	260	ND	U	1.4	
	1,2,4-trimethylbenzene	ug/m ³	1.3	J	1.1	0.38	J	0.76	ND	U	0.84	0.46	J	0.77	10000	--	140	2.9	--	0.74	
	1,2-dibromoethane	ug/m ³	ND	U	1.1	ND	U	0.76	ND	U	0.84	ND	U	0.77	790	--	140	ND	U	0.74	
	1,2-dichloroethane	ug/m ³	ND	U	1.1	ND	U	0.76	ND	U	0.84	ND	U	0.77	120	J	140	ND	U	0.74	
	1,3,5-trimethylbenzene	ug/m ³	ND	U	1.1	ND	U	0.76	ND	U	0.84	ND	U	0.77	12000	--	140	0.57	J	0.74	
	1,3-butadiene	ug/m ³	ND	U	2.1	ND	U	1.4	ND	U	1.6	ND	U	1.5	ND	U	260	ND	U	1.4	
	1,4-dioxane	ug/m ³	ND	U	1.1	0.52	J	0.76	ND	U	0.84	ND	U	0.77	ND	U	140	ND	U	0.74	
	2-butanone	ug/m ³	3.4	J	2.1	1.8	J	1.4	0.97	J	1.6	8.3	--	1.5	120	J	260	11	--	1.4	
	2-hexanone	ug/m ³	ND	U	1.1	0.36	J	0.76	ND	U	0.84	1.1	J	0.77	ND	U	140	1.2	J	0.74	
	4-methyl-2-pentanone	ug/m ³	ND	U	1.1	ND	U	0.76	ND	U	0.84	0.34	J	0.77	ND	U	140	0.54	J	0.74	
	Acetone	ug/m ³	23	J	18	8.7	J	12	ND	U	13	31	--	12	ND	U	2200	53	--	12	
	Benzene	ug/m ³	0.54	J	1.1	0.50	J	0.76	0.48	J	0.84	0.66	J	0.77	16000	--	140	0.50	J	0.74	
	Bromodichloromethane	ug/m ³	ND	U	1.1	ND	U	0.76	ND	U	0.84	ND	U	0.77	ND	U	140	ND	U	0.74	
	Bromoform	ug/m ³	ND	U	2.1	ND	U	1.4	ND	U	1.6	ND	U	1.5	ND	U	260	ND	U	1.4	
	Carbon disulfide	ug/m ³	3.6	J	3.5	3.7	J	2.4	2.0	J	2.7	3.8	J	2.5	160	J	440	3.0	J	2.3	
	Carbon tetrachloride	ug/m ³	ND	U	1.1	ND	U	0.76	ND	U	0.84	0.76	J	0.77	ND	U	140	8.3	--	0.74	
	Chloroethane	ug/m ³	ND	U	2.1	ND	U	1.4	ND	U	1.6	ND	U	1.5	ND	U	260	ND	U	1.4	
	Chloroform	ug/m ³	0.55	J	1.1	ND	U	0.76	ND	U	0.84	ND	U	0.77	ND	U	140	1.3	J	0.74	
	Chloromethane	ug/m ³	ND	U	2.1	ND	U	1.4	ND	U	1.6	0.41	J	1.5	ND	U	260	ND	U	1.4	
	Cyclohexane	ug/m ³	ND	U	2.2	ND	U	1.5	ND	U	1.7	ND	U	1.5	18000	--	280	ND	U	1.5	
	Dibromochloromethane	ug/m ³	ND	U	1.1	ND	U	0.76	ND	U	0.84	ND	U	0.77	ND	U	140	ND	U	0.74	
	Dichlorodifluoromethane	ug/m ³	2.7	J	2.1	3.4	--	1.4	4.0	--	1.6	3.7	--	1.5	ND	U	260	2.4	--	1.4	
	ETHANOL	ug/m ³	14	J	5.4	7.1	J	3.7	3.7	J	4.1	14	J	3.8	ND	U	670	21	J	3.6	
	Ethyl acetate	ug/m ³	ND	U	4.3	ND	U	2.9	ND	U	3.2	4.3	J	3	ND	U	530	29	--	2.8	
	Ethylbenzene	ug/m ³	ND	U	1.1	ND	U	0.76	ND	U	0.84	ND	U	0.77	4300	--	140	0.33	J	0.74	
	Hexane	ug/m ³	ND	U	2.1	ND	U	1.4	ND	U	1.6	ND	U	1.5	700	--	260	ND	U	1.4	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	4.8	J	4.1	ND	U	2.8	ND	U	3.1	ND	U	2.9	310	J	510	ND	U	2.7	
	m,p-Xylene	ug/m ³	1.1	J	2.2	ND	U	1.5	ND	U	1.7	ND	U	1.5	150000	--	280	1.7	J	1.5	
	Methylene Chloride	ug/m ³	1.1	J	2.1	ND	U	1.4	ND	U	1.6	ND	U	1.5	ND	U	260	ND	U	1.4	
	Naphthalene	ug/m ³	ND	U	2	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	250	2.3	J	1.3	
	n-Heptane	ug/m ³	ND	U	2.1	ND	U	1.4	ND	U	1.6	ND	U	1.5	920	--	260	0.54	J	1.4	
	o-Xylene	ug/m ³	ND	U	1.1	ND	U	0.76	ND	U	0.84	ND	U	0.77	66000	--	410	0.67	J	0.74	
Propylene (propene)	ug/m ³	2.9	J	2.1	ND	U	1.4	ND	U	1.6	1.2	J	1.5	510	--	260	1.1	J	1.4		
Styrene	ug/m ³	ND	U	2.1	ND	U	1.4	ND	U	1.6	ND	U	1.5	ND	U	260	ND	U	1.4		
Tetrachloroethene	ug/m ³	ND	U	1.1	0.36	J	0.76	0.38	J	0.84	0.33	J	0.77	160	J	140	ND	U	0.74		
Tetrahydrofuran	ug/m ³	1.7	J	1.1	1.1	J	0.76	21	--	0.84	6.0	--	0.77	70	J	140	0.37	J	0.74		
Toluene	ug/m ³	1.2	J	1.1	0.46	J	0.76	0.39	J	0.84	0.94	J	0.77	61000	--	140	2.1	J	0.74		
Trichloroethene	ug/m ³	ND	U	1.1	ND	U	0.76	0.97	J	0.84	0.96	J	0.77	140	J	140	ND	U	0.74		
Trichlorofluoromethane	ug/m ³	1.3	J	2.1	1.3	J	1.4	1.5	J	1.6	2.1	J	1.5	ND	U	260	2.1	J	1.4		
Vinyl chloride	ug/m ³	ND	U	1.1	ND	U	0.76	ND	U	0.84	ND	U	0.77	ND	U	140	ND	U	0.74		
Xylenes, Total	ug/m ³	1.1	J	2.2	ND	U	1.5	ND	U	1.7	ND	U	1.5	220000	--	830	2.3	J	1.5		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106139-050			KAFB-106139-050			KAFB-106139-150			KAFB-106139-250			KAFB-106139-350			KAFB-106139-450		
	Field Sample ID:			SV139-050-204			SV139-050-604			SV139-150-204			SV139-250-204			SV139-350-204			SV139-450-204		
	Sample Date:			10/12/2020			10/12/2020			10/12/2020			10/12/2020			10/12/2020			10/12/2020		
	Sample Type:			REG			FD			REG			REG			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	31	--	0.82	31	--	0.74	540	--	7.9	870	--	12	800	--	7.4	23	--	0.77	
	1,1-dichloroethane	ug/m ³	ND	U	1.6	ND	U	1.4	ND	U	1.5	ND	U	24	ND	U	1.4	0.53	J	1.5	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.6	ND	U	1.4	ND	U	1.5	ND	U	23	ND	U	1.4	ND	U	1.5	
	1,2,4-trimethylbenzene	ug/m ³	1.9	J	0.82	7.0	--	0.74	1.2	J	0.79	ND	U	12	0.91	J	0.74	0.93	J	0.77	
	1,2-dibromoethane	ug/m ³	ND	U	0.82	ND	U	0.74	ND	U	0.79	ND	U	12	ND	U	0.74	ND	U	0.77	
	1,2-dichloroethane	ug/m ³	ND	U	0.82	ND	U	0.74	ND	U	0.79	ND	U	12	ND	U	0.74	4.4	--	0.77	
	1,3,5-trimethylbenzene	ug/m ³	0.37	J	0.82	1.2	J	0.74	ND	U	0.79	ND	U	12	ND	U	0.74	ND	U	0.77	
	1,3-butadiene	ug/m ³	ND	U	1.6	ND	U	1.4	ND	U	1.5	ND	U	23	ND	U	1.4	ND	U	1.5	
	1,4-dioxane	ug/m ³	ND	U	0.82	0.51	J	0.74	ND	U	0.79	ND	U	12	ND	U	0.74	ND	U	0.77	
	2-butanone	ug/m ³	12	--	1.6	5.5	--	1.4	11	--	1.5	ND	U	23	ND	U	1.4	9.9	--	1.5	
	2-hexanone	ug/m ³	2.4	J	0.82	1.3	J	0.74	ND	U	0.79	ND	U	12	0.81	J	0.74	1.4	J	0.77	
	4-methyl-2-pentanone	ug/m ³	ND	U	0.82	ND	U	0.74	ND	U	0.79	ND	U	12	ND	U	0.74	0.56	J	0.77	
	Acetone	ug/m ³	34	--	13	30	--	12	ND	U	12	ND	U	200	ND	U	12	41	--	12	
	Benzene	ug/m ³	ND	U	0.82	0.77	J	0.74	0.93	J	0.79	310	--	12	74	--	0.74	2.5	--	0.77	
	Bromodichloromethane	ug/m ³	ND	U	0.82	ND	U	0.74	1.5	J	0.79	ND	U	12	10	--	0.74	4.4	--	0.77	
	Bromoform	ug/m ³	ND	U	1.6	ND	U	1.4	ND	U	1.5	ND	U	23	ND	U	1.4	ND	U	1.5	
	Carbon disulfide	ug/m ³	1.9	J	2.6	9.2	--	2.4	ND	U	2.5	ND	U	39	ND	U	2.3	61	--	2.5	
	Carbon tetrachloride	ug/m ³	7.6	--	0.82	15	--	0.74	220	--	0.79	260	--	12	150	--	0.74	70	--	0.77	
	Chloroethane	ug/m ³	ND	U	1.6	ND	U	1.4	ND	U	1.5	ND	U	23	0.29	J	1.4	7.6	--	1.5	
	Chloroform	ug/m ³	3.1	--	0.82	2.9	--	0.74	190	--	0.79	380	--	12	540	--	7.4	49	--	0.77	
	Chloromethane	ug/m ³	ND	U	1.6	ND	U	1.4	ND	U	1.5	ND	U	23	ND	U	1.4	22	--	1.5	
	Cyclohexane	ug/m ³	ND	U	1.6	ND	U	1.5	280	--	1.6	6000	--	25	31	--	1.5	ND	U	1.5	
	Dibromochloromethane	ug/m ³	ND	U	0.82	ND	U	0.74	ND	U	0.79	ND	U	12	ND	U	0.74	0.51	J	0.77	
	Dichlorodifluoromethane	ug/m ³	2.6	--	1.6	2.5	--	1.4	4.6	--	1.5	6.3	J	23	3.8	--	1.4	1.5	J	1.5	
	ETHANOL	ug/m ³	20	J	4	10	J	3.6	12	J	3.8	ND	U	60	7.9	J	3.6	11	J	3.8	
	Ethyl acetate	ug/m ³	4.6	J	3.2	22	--	2.8	43	--	3	ND	U	47	ND	U	2.8	ND	U	3	
	Ethylbenzene	ug/m ³	ND	U	0.82	0.67	J	0.74	ND	U	0.79	ND	U	12	0.38	J	0.74	3.6	--	0.77	
	Hexane	ug/m ³	ND	U	1.6	0.78	J	1.4	1.7	J	1.5	7100	--	23	ND	U	1.4	0.76	J	1.5	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	1.6	J	3.1	ND	U	2.8	1.4	J	2.9	ND	U	46	ND	U	2.7	2.0	J	2.9	
	m,p-Xylene	ug/m ³	1.1	J	1.6	4.1	J	1.5	0.95	J	1.6	ND	U	25	1.6	J	1.5	11	--	1.5	
	Methylene Chloride	ug/m ³	1.1	J	1.6	ND	U	1.4	ND	U	1.5	ND	U	23	ND	U	1.4	ND	U	1.5	
	Naphthalene	ug/m ³	ND	U	1.5	4.7	--	1.4	0.97	J	1.4	ND	U	22	0.60	J	1.3	ND	U	1.4	
	n-Heptane	ug/m ³	ND	U	1.6	0.89	J	1.4	ND	U	1.5	2800	--	23	ND	U	1.4	0.93	J	1.5	
	o-Xylene	ug/m ³	0.44	J	0.82	1.3	J	0.74	0.38	J	0.79	ND	U	12	1.1	J	0.74	2.5	--	0.77	
Propylene (propene)	ug/m ³	1.6	J	1.6	1.6	J	1.4	ND	U	1.5	260	--	23	ND	U	1.4	6.1	--	1.5		
Styrene	ug/m ³	ND	U	1.6	0.61	J	1.4	ND	U	1.5	ND	U	23	ND	U	1.4	ND	U	1.5		
Tetrachloroethene	ug/m ³	0.44	J	0.82	0.40	J	0.74	2.4	J	0.79	ND	U	12	4.9	--	0.74	5.7	--	0.77		
Tetrahydrofuran	ug/m ³	17	--	0.82	19	--	0.74	21	--	0.79	10	J	12	3.8	J	0.74	26	--	0.77		
Toluene	ug/m ³	1.0	J	0.82	6.6	--	0.74	ND	U	0.79	260	--	12	52	--	0.74	2.3	J	0.77		
Trichloroethene	ug/m ³	ND	U	0.82	ND	U	0.74	0.49	J	0.79	ND	U	12	4.5	--	0.74	21	--	0.77		
Trichlorofluoromethane	ug/m ³	2.9	--	1.6	2.9	--	1.4	36	--	1.5	55	--	23	66	--	1.4	2.9	--	1.5		
Vinyl chloride	ug/m ³	ND	U	0.82	ND	U	0.74	ND	U	0.79	ND	U	12	ND	U	0.74	6.3	--	0.77		
Xylenes, Total	ug/m ³	1.5	J	1.6	5.4	--	1.5	1.3	J	1.6	ND	U	25	2.6	J	1.5	14	--	1.5		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106140-025			KAFB-106140-050			KAFB-106140-150			KAFB-106140-250			KAFB-106140-350			KAFB-106140-450		
	Field Sample ID:			SV140-025-204			SV140-050-204			SV140-150-204			SV140-250-204			SV140-350-204			SV140-450-204		
	Sample Date:			10/12/2020			10/12/2020			10/12/2020			10/12/2020			10/12/2020			10/12/2020		
	Sample Type:			REG			REG			REG			REG			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	0.48	J	0.78	0.57	J	0.77	0.42	J	0.74	0.75	J	0.79	0.67	J	0.73	ND	U	0.73	
	1,1-dichloroethane	ug/m ³	ND	U	1.5	ND	U	1.5	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	1.4	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	1.4	
	1,2,4-trimethylbenzene	ug/m ³	1.4	J	0.78	1.4	J	0.77	ND	U	0.74	ND	U	0.79	ND	U	0.73	ND	U	0.73	
	1,2-dibromoethane	ug/m ³	ND	U	0.78	ND	U	0.77	ND	U	0.74	ND	U	0.79	ND	U	0.73	ND	U	0.73	
	1,2-dichloroethane	ug/m ³	ND	U	0.78	ND	U	0.77	ND	U	0.74	ND	U	0.79	ND	U	0.73	0.95	J	0.73	
	1,3,5-trimethylbenzene	ug/m ³	0.50	J	0.78	0.49	J	0.77	ND	U	0.74	ND	U	0.79	ND	U	0.73	ND	U	0.73	
	1,3-butadiene	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	1.4	
	1,4-dioxane	ug/m ³	ND	U	0.78	0.76	J	0.77	ND	U	0.74	ND	U	0.79	ND	U	0.73	1.3	J	0.73	
	2-butanone	ug/m ³	46	--	1.5	8.1	--	1.4	5.2	--	1.4	4.2	J	1.5	2.0	J	1.4	83	--	1.4	
	2-hexanone	ug/m ³	ND	U	0.78	ND	U	0.77	1.2	J	0.74	ND	U	0.79	ND	U	0.73	ND	U	0.73	
	4-methyl-2-pentanone	ug/m ³	0.77	J	0.78	0.45	J	0.77	0.59	J	0.74	ND	U	0.79	ND	U	0.73	2.2	J	0.73	
	Acetone	ug/m ³	54	--	12	28	--	12	28	--	12	ND	U	13	ND	U	12	88	--	12	
	Benzene	ug/m ³	5.3	--	0.78	2.2	J	0.77	ND	U	0.74	0.63	J	0.79	20	--	0.73	13	--	0.73	
	Bromodichloromethane	ug/m ³	ND	U	0.78	ND	U	0.77	ND	U	0.74	ND	U	0.79	ND	U	0.73	ND	U	0.73	
	Bromoform	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	1.4	
	Carbon disulfide	ug/m ³	21	--	2.5	29	--	2.4	2.6	J	2.3	18	--	2.5	9.1	--	2.3	14	--	2.3	
	Carbon tetrachloride	ug/m ³	2.8	--	0.78	3.6	--	0.77	10	--	0.74	3.5	--	0.79	ND	U	0.73	4.0	--	0.73	
	Chloroethane	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1.4	ND	U	1.5	ND	U	1.4	1.3	J	1.4	
	Chloroform	ug/m ³	1.9	J	0.78	3.8	--	0.77	4.3	--	0.74	1.8	J	0.79	ND	U	0.73	2.2	J	0.73	
	Chloromethane	ug/m ³	0.90	J	1.5	0.48	J	1.4	ND	U	1.4	ND	U	1.5	ND	U	1.4	2.8	--	1.4	
	Cyclohexane	ug/m ³	1.5	J	1.6	ND	U	1.5	ND	U	1.5	2.0	J	1.6	15	--	1.5	4.3	J	1.5	
	Dibromochloromethane	ug/m ³	ND	U	0.78	ND	U	0.77	ND	U	0.74	ND	U	0.79	ND	U	0.73	ND	U	0.73	
	Dichlorodifluoromethane	ug/m ³	2.7	--	1.5	2.4	--	1.4	3.1	--	1.4	11	--	1.5	26	--	1.4	3.9	--	1.4	
	ETHANOL	ug/m ³	3.0	J	3.8	10	J	3.8	4.7	J	3.6	2.8	J	3.9	1.7	J	3.6	3.8	J	3.6	
	Ethyl acetate	ug/m ³	ND	U	3	180	--	2.9	ND	U	2.8	ND	U	3	ND	U	2.8	5.8	--	2.8	
	Ethylbenzene	ug/m ³	1.7	J	0.78	1.3	J	0.77	ND	U	0.74	ND	U	0.79	0.62	J	0.73	1.5	J	0.73	
	Hexane	ug/m ³	2.3	J	1.5	1.7	J	1.4	ND	U	1.4	2.4	--	1.5	1.3	J	1.4	2.4	--	1.4	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	2.1	J	2.9	1.3	J	2.9	ND	U	2.7	ND	U	2.9	ND	U	2.7	ND	U	2.7	
	m,p-Xylene	ug/m ³	7.1	--	1.6	5.9	--	1.5	ND	U	1.5	0.74	J	1.6	1.2	J	1.5	3.2	J	1.5	
	Methylene Chloride	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	1.4	
	Naphthalene	ug/m ³	0.70	J	1.4	ND	U	1.4	ND	U	1.3	ND	U	1.4	ND	U	1.3	ND	U	1.3	
	n-Heptane	ug/m ³	3.3	--	1.5	2.8	--	1.4	ND	U	1.4	1.2	J	1.5	0.86	J	1.4	0.96	J	1.4	
	o-Xylene	ug/m ³	2.0	J	0.78	1.7	J	0.77	ND	U	0.74	ND	U	0.79	ND	U	0.73	0.89	J	0.73	
	Propylene (propene)	ug/m ³	1.5	J	1.5	1.5	J	1.4	0.80	J	1.4	0.84	J	1.5	1.1	J	1.4	1.2	J	1.4	
	Styrene	ug/m ³	ND	U	1.5	ND	U	1.4	ND	U	1.4	ND	U	1.5	ND	U	1.4	ND	U	1.4	
Tetrachloroethene	ug/m ³	0.71	J	0.78	0.67	J	0.77	1.0	J	0.74	ND	U	0.79	0.92	J	0.73	0.31	J	0.73		
Tetrahydrofuran	ug/m ³	28	--	0.78	17	--	0.77	94	--	0.74	22	--	0.79	20	--	0.73	30	--	0.73		
Toluene	ug/m ³	18	--	0.78	14	--	0.77	0.69	J	0.74	1.1	J	0.79	2.8	--	0.73	31	--	0.73		
Trichloroethene	ug/m ³	ND	U	0.78	ND	U	0.77	ND	U	0.74	ND	U	0.79	ND	U	0.73	0.40	J	0.73		
Trichlorofluoromethane	ug/m ³	1.1	J	1.5	1.2	J	1.4	0.80	J	1.4	1.2	J	1.5	2.8	--	1.4	0.61	J	1.4		
Vinyl chloride	ug/m ³	ND	U	0.78	ND	U	0.77	ND	U	0.74	ND	U	0.79	ND	U	0.73	0.95	J	0.73		
Xylenes, Total	ug/m ³	9.0	--	1.6	7.6	--	1.5	ND	U	1.5	0.74	J	1.6	1.2	J	1.5	4.1	J	1.5		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			KAFB-106140-450			SVEW-10-410			SVEW-10-410			SVEW-11-410			SVEW-11-410			SVEW-12-410		
	Field Sample ID:			SV140-450-604			SVE10-410-204			SVE10-410-604			SVE11-410-204			SVE11-410-604			SVE12-410-204		
	Sample Date:			10/12/2020			10/19/2020			10/19/2020			10/19/2020			10/19/2020			10/13/2020		
	Sample Type:			FD			REG			FD			REG			FD			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	ND	U	0.77	1100	--	4.7	1200	--	4	12	J	9.5	14	J	22	63	--	0.77	
	1,1-dichloroethane	ug/m ³	ND	U	1.5	ND	U	9.1	ND	U	7.8	ND	U	18	ND	U	44	ND	U	1.5	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.4	ND	U	8.8	ND	U	7.6	ND	U	18	ND	U	42	ND	U	1.5	
	1,2,4-trimethylbenzene	ug/m ³	0.40	J	0.77	6.3	J	4.7	6.5	J	4	200	--	9.5	250	--	22	0.90	J	0.77	
	1,2-dibromoethane	ug/m ³	ND	U	0.77	ND	U	4.7	ND	U	4	ND	U	9.5	ND	U	22	ND	U	0.77	
	1,2-dichloroethane	ug/m ³	0.78	J	0.77	1.7	J	4.7	1.7	J	4	ND	U	9.5	ND	U	22	ND	U	0.77	
	1,3,5-trimethylbenzene	ug/m ³	ND	U	0.77	5.3	J	4.7	4.1	J	4	210	--	9.5	280	--	22	0.42	J	0.77	
	1,3-butadiene	ug/m ³	ND	U	1.4	ND	U	8.8	ND	U	7.6	ND	U	18	ND	U	42	ND	U	1.5	
	1,4-dioxane	ug/m ³	ND	U	0.77	ND	U	4.7	ND	U	4	ND	U	9.5	ND	U	22	ND	U	0.77	
	2-butanone	ug/m ³	200	--	1.4	5.8	J	8.8	4.2	J	7.6	ND	U	18	ND	U	42	5.9	--	1.5	
	2-hexanone	ug/m ³	ND	U	0.77	ND	U	4.7	ND	U	4	ND	U	9.5	ND	U	22	0.66	J	0.77	
	4-methyl-2-pentanone	ug/m ³	2.2	J	0.77	ND	U	4.7	ND	U	4	ND	U	9.5	ND	U	22	0.41	J	0.77	
	Acetone	ug/m ³	170	--	12	ND	U	74	ND	U	64	ND	U	150	ND	U	360	28	--	12	
	Benzene	ug/m ³	12	--	0.77	620	--	4.7	620	--	4	3400	--	9.5	3900	--	22	0.91	J	0.77	
	Bromodichloromethane	ug/m ³	ND	U	0.77	ND	U	4.7	ND	U	4	ND	U	9.5	ND	U	22	ND	U	0.77	
	Bromoform	ug/m ³	ND	U	1.4	ND	U	8.8	ND	U	7.6	ND	U	18	ND	U	42	ND	U	1.5	
	Carbon disulfide	ug/m ³	14	--	2.4	31	--	15	31	--	13	20	J	30	ND	U	71	15	--	2.5	
	Carbon tetrachloride	ug/m ³	3.4	--	0.77	16	--	4.7	16	--	4	5.9	J	9.5	ND	U	22	32	--	0.77	
	Chloroethane	ug/m ³	1.1	J	1.4	ND	U	8.8	ND	U	7.6	ND	U	18	ND	U	42	ND	U	1.5	
	Chloroform	ug/m ³	1.9	J	0.77	5.7	J	4.7	6.0	J	4	7.1	J	9.5	ND	U	22	0.74	J	0.77	
	Chloromethane	ug/m ³	2.3	J	1.4	49	--	8.8	46	--	7.6	13	J	18	16	J	42	ND	U	1.5	
	Cyclohexane	ug/m ³	3.9	J	1.5	57	--	9.3	58	--	8.1	9600	--	19	11000	--	45	ND	U	1.5	
	Dibromochloromethane	ug/m ³	ND	U	0.77	ND	U	4.7	ND	U	4	ND	U	9.5	ND	U	22	ND	U	0.77	
	Dichlorodifluoromethane	ug/m ³	3.8	--	1.4	6.9	J	8.8	6.8	J	7.6	ND	U	18	ND	U	42	130	--	1.5	
	ETHANOL	ug/m ³	5.0	J	3.7	ND	U	23	ND	U	20	ND	U	46	ND	U	110	4.0	J	3.8	
	Ethyl acetate	ug/m ³	ND	U	2.9	ND	U	18	ND	U	15	ND	U	36	ND	U	86	ND	U	3	
	Ethylbenzene	ug/m ³	1.6	J	0.77	55	--	4.7	49	--	4	130	--	9.5	170	--	22	1.7	J	0.77	
	Hexane	ug/m ³	2.6	--	1.4	160	--	8.8	160	--	7.6	1600	--	18	1900	--	42	0.54	J	1.5	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	1.1	J	2.8	ND	U	17	ND	U	15	ND	U	35	ND	U	83	ND	U	2.9	
	m,p-Xylene	ug/m ³	3.8	J	1.5	210	--	9.3	180	--	8.1	2100	--	19	2700	--	45	1.5	J	1.5	
	Methylene Chloride	ug/m ³	ND	U	1.4	ND	U	8.8	ND	U	7.6	ND	U	18	ND	U	42	ND	U	1.5	
	Naphthalene	ug/m ³	ND	U	1.4	ND	U	8.5	ND	U	7.4	ND	U	17	ND	U	41	0.98	J	1.4	
	n-Heptane	ug/m ³	1.4	J	1.4	64	--	8.8	65	--	7.6	1400	--	18	1700	--	42	ND	U	1.5	
	o-Xylene	ug/m ³	1.0	J	0.77	53	--	4.7	46	--	4	720	--	9.5	950	--	22	ND	U	0.77	
	Propylene (propene)	ug/m ³	1.5	J	1.4	14	J	8.8	14	--	7.6	91	--	18	110	--	42	0.78	J	1.5	
	Styrene	ug/m ³	ND	U	1.4	ND	U	8.8	ND	U	7.6	ND	U	18	ND	U	42	ND	U	1.5	
Tetrachloroethene	ug/m ³	ND	U	0.77	11	J	4.7	11	J	4	3.9	J	9.5	ND	U	22	14	--	0.77		
Tetrahydrofuran	ug/m ³	70	--	0.77	43	--	4.7	47	--	4	16	J	9.5	18	J	22	0.91	J	0.77		
Toluene	ug/m ³	29	--	0.77	2800	--	9.3	2700	--	16	2900	--	9.5	3700	--	22	0.76	J	0.77		
Trichloroethene	ug/m ³	ND	U	0.77	31	--	4.7	27	--	4	ND	U	9.5	ND	U	22	31	--	0.77		
Trichlorofluoromethane	ug/m ³	0.70	J	1.4	2.9	J	8.8	3.0	J	7.6	ND	U	18	ND	U	42	20	--	1.5		
Vinyl chloride	ug/m ³	0.81	J	0.77	3.2	J	4.7	3.2	J	4	ND	U	9.5	ND	U	22	ND	U	0.77		
Xylenes, Total	ug/m ³	4.8	--	1.5	260	--	9.3	230	--	8.1	2800	--	19	3600	--	45	1.5	J	1.5		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Analyte	Units	Location ID:			SVMW-01-050			SVMW-01-100			SVMW-01-250			SVMW-01-300			SVMW-02-050		
			Field Sample ID:			SVMW-01-050			SVMW-01-100			SVMW-01-250			SVMW-01-300			SVMW-02-050		
			Sample Date:			SVMW-01-050			SVMW-01-100			SVMW-01-250			SVMW-01-300			SVMW-02-050		
			Sample Type:			REG			REG			REG			REG			REG		
			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	230	J	280	76	--	0.83	2300	J	3200	1700	J	2100	1100	--	42	110	J	240
	1,1-dichloroethane	ug/m ³	ND	U	540	ND	U	1.6	ND	U	6300	ND	U	4100	ND	U	81	ND	U	480
	1,2,4-trichlorobenzene	ug/m ³	ND	U	520	ND	U	1.6	ND	U	6100	ND	U	4000	ND	U	78	ND	U	460
	1,2,4-trimethylbenzene	ug/m ³	ND	U	280	ND	U	0.83	7400	J	3200	ND	U	2100	29	J	42	ND	U	240
	1,2-dibromoethane	ug/m ³	ND	U	280	ND	U	0.83	ND	U	3200	ND	U	2100	ND	U	42	ND	U	240
	1,2-dichloroethane	ug/m ³	ND	U	280	ND	U	0.83	ND	U	3200	ND	U	2100	ND	U	42	ND	U	240
	1,3,5-trimethylbenzene	ug/m ³	620	J	280	ND	U	0.83	6400	J	3200	ND	U	2100	23	J	42	ND	U	240
	1,3-butadiene	ug/m ³	ND	U	520	ND	U	1.6	ND	U	6100	ND	U	4000	ND	U	78	ND	U	460
	1,4-dioxane	ug/m ³	ND	U	280	ND	U	0.83	ND	U	3200	ND	U	2100	ND	U	42	110	J	240
	2-butanone	ug/m ³	ND	U	520	ND	U	1.6	ND	U	6100	ND	U	4000	ND	U	78	ND	U	460
	2-hexanone	ug/m ³	ND	U	280	ND	U	0.83	ND	U	3200	ND	U	2100	ND	U	42	ND	U	240
	4-methyl-2-pentanone	ug/m ³	ND	U	280	ND	U	0.83	ND	U	3200	ND	U	2100	ND	U	42	ND	U	240
	Acetone	ug/m ³	ND	U	4400	ND	U	13	ND	U	52000	ND	U	34000	ND	U	660	ND	U	3900
	Benzene	ug/m ³	26000	--	280	0.58	J	0.83	150000	--	3200	91000	--	2100	2900	--	42	ND	U	240
	Bromodichloromethane	ug/m ³	ND	U	280	ND	U	0.83	ND	U	3200	ND	U	2100	ND	U	42	ND	U	240
	Bromoform	ug/m ³	ND	U	520	ND	U	1.6	ND	U	6100	ND	U	4000	ND	U	78	ND	U	460
	Carbon disulfide	ug/m ³	ND	U	890	3.7	J	2.6	ND	U	10000	ND	U	6700	ND	U	130	ND	U	780
	Carbon tetrachloride	ug/m ³	ND	U	280	ND	U	0.83	ND	U	3200	ND	U	2100	38	J	42	ND	U	240
	Chloroethane	ug/m ³	ND	U	520	ND	U	1.6	ND	U	6100	ND	U	4000	ND	U	78	ND	U	460
	Chloroform	ug/m ³	ND	U	280	ND	U	0.83	ND	U	3200	ND	U	2100	ND	U	42	ND	U	240
	Chloromethane	ug/m ³	ND	U	520	ND	U	1.6	ND	U	6100	ND	U	4000	ND	U	78	ND	U	460
	Cyclohexane	ug/m ³	270000	--	560	2.1	J	1.7	2900000	--	6500	1800000	--	4200	24000	--	83	ND	U	490
	Dibromochloromethane	ug/m ³	ND	U	280	ND	U	0.83	ND	U	3200	ND	U	2100	ND	U	42	ND	U	240
	Dichlorodifluoromethane	ug/m ³	ND	U	520	4.6	--	1.6	ND	U	6100	ND	U	4000	ND	U	78	ND	U	460
	ETHANOL	ug/m ³	ND	U	1400	ND	U	4	ND	U	16000	ND	U	10000	ND	U	200	ND	U	1200
	Ethyl acetate	ug/m ³	ND	U	1100	ND	U	3.2	ND	U	12000	ND	U	8100	ND	U	160	ND	U	940
	Ethylbenzene	ug/m ³	210	J	280	ND	U	0.83	11000	--	3200	2500	J	2100	ND	U	42	ND	U	240
	Hexane	ug/m ³	160000	--	1300	3.7	--	1.6	3100000	--	24000	1300000	--	12000	9900	--	78	ND	U	460
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	1000	ND	U	3.1	ND	U	12000	ND	U	7900	ND	U	150	ND	U	910
	m,p-Xylene	ug/m ³	690	J	560	1.1	J	1.7	62000	--	6500	2900	J	4200	130	J	83	ND	U	490
	Methylene Chloride	ug/m ³	ND	U	520	ND	U	1.6	ND	U	6100	ND	U	4000	ND	U	78	ND	U	460
	Naphthalene	ug/m ³	ND	U	510	ND	U	1.5	ND	U	5900	ND	U	3900	ND	U	76	ND	U	450
	n-Heptane	ug/m ³	140000	--	1300	9.5	--	1.6	1000000	--	6100	1300000	--	12000	8100	--	78	ND	U	460
	o-Xylene	ug/m ³	1400	--	280	0.39	J	0.83	21000	--	3200	5800	J	2100	82	J	42	ND	U	240
Propylene (propene)	ug/m ³	2900	--	520	5.5	--	1.6	4900	J	6100	13000	--	4000	210	--	78	ND	U	460	
Styrene	ug/m ³	ND	U	520	ND	U	1.6	ND	U	6100	ND	U	4000	ND	U	78	ND	U	460	
Tetrachloroethene	ug/m ³	360	J	280	2.9	--	0.83	4300	J	3200	2700	J	2100	47	J	42	200	J	240	
Tetrahydrofuran	ug/m ³	ND	U	280	ND	U	0.83	ND	U	3200	ND	U	2100	ND	U	42	ND	U	240	
Toluene	ug/m ³	4200	--	280	2.3	J	0.83	140000	--	3200	28000	--	2100	140	--	42	ND	U	240	
Trichloroethene	ug/m ³	300	J	280	ND	U	0.83	2500	J	3200	1600	J	2100	39	J	42	110	J	240	
Trichlorofluoromethane	ug/m ³	ND	U	520	28	--	1.6	ND	U	6100	ND	U	4000	ND	U	78	ND	U	460	
Vinyl chloride	ug/m ³	ND	U	280	ND	U	0.83	ND	U	3200	ND	U	2100	ND	U	42	ND	U	240	
Xylenes, Total	ug/m ³	2000	--	560	1.4	J	1.7	82000	--	6500	8700	J	4200	220	J	83	ND	U	490	

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

		Location ID:	SVMW-02-100			SVMW-02-150			SVMW-02-150			SVMW-05-050			SVMW-05-050			SVMW-05-100		
		Field Sample ID:	SV02-100-204			SV02-150-204			SV02-150-604			SV05-050-204			SV05-050-604			SV05-100-204		
		Sample Date:	10/19/2020			10/19/2020			10/19/2020			10/19/2020			10/19/2020					
		Sample Type:	REG			REG			FD			REG			FD			REG		
Analytical Method	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	ND	U	5200	ND	U	6000	ND	U	3600	65	--	0.62	59	--	0.75	86	--	0.58
	1,1-dichloroethane	ug/m ³	ND	U	10000	ND	U	12000	ND	U	6900	ND	U	1.2	ND	U	1.5	ND	U	1.1
	1,2,4-trichlorobenzene	ug/m ³	ND	U	9900	ND	U	11000	ND	U	6700	ND	U	1.2	ND	U	1.4	ND	U	1.1
	1,2,4-trimethylbenzene	ug/m ³	11000	J	5200	13000	J	6000	10000	J	3600	0.55	J	0.62	1.3	J	0.75	0.34	J	0.58
	1,2-dibromoethane	ug/m ³	6900	J	5200	ND	U	6000	1800	J	3600	ND	U	0.62	ND	U	0.75	ND	U	0.58
	1,2-dichloroethane	ug/m ³	ND	U	5200	ND	U	6000	ND	U	3600	ND	U	0.62	ND	U	0.75	ND	U	0.58
	1,3,5-trimethylbenzene	ug/m ³	7100	J	5200	9000	J	6000	7500	J	3600	ND	U	0.62	1.9	J	0.75	ND	U	0.58
	1,3-butadiene	ug/m ³	ND	U	9900	ND	U	11000	ND	U	6700	ND	U	1.2	ND	U	1.4	ND	U	1.1
	1,4-dioxane	ug/m ³	2700	J	5200	ND	U	6000	ND	U	3600	ND	U	0.62	ND	U	0.75	0.44	J	0.58
	2-butanone	ug/m ³	ND	U	9900	ND	U	11000	ND	U	6700	4.8	--	1.2	8.8	--	1.4	3.9	--	1.1
	2-hexanone	ug/m ³	ND	U	5200	ND	U	6000	ND	U	3600	1.2	J	0.62	ND	U	0.75	ND	U	0.58
	4-methyl-2-pentanone	ug/m ³	ND	U	5200	ND	U	6000	ND	U	3600	ND	U	0.62	ND	U	0.75	ND	U	0.58
	Acetone	ug/m ³	ND	U	83000	ND	U	95000	ND	U	57000	17	J	9.9	28	--	12	14	J	9.2
	Benzene	ug/m ³	390000	--	5200	610000	--	6000	710000	--	3600	0.71	J	0.62	22	--	0.75	0.9	J	0.58
	Bromodichloromethane	ug/m ³	ND	U	5200	ND	U	6000	ND	U	3600	ND	U	0.62	ND	U	0.75	ND	U	0.58
	Bromoform	ug/m ³	ND	U	9900	ND	U	11000	ND	U	6700	ND	U	1.2	ND	U	1.4	ND	U	1.1
	Carbon disulfide	ug/m ³	ND	U	17000	ND	U	19000	ND	U	11000	2.4	J	2	25	--	2.4	7.2	--	1.8
	Carbon tetrachloride	ug/m ³	ND	U	5200	ND	U	6000	ND	U	3600	0.97	J	0.62	0.99	J	0.75	0.99	J	0.58
	Chloroethane	ug/m ³	ND	U	9900	ND	U	11000	ND	U	6700	ND	U	1.2	0.83	J	1.4	ND	U	1.1
	Chloroform	ug/m ³	ND	U	5200	ND	U	6000	ND	U	3600	ND	U	0.62	0.75	J	0.75	ND	U	0.58
	Chloromethane	ug/m ³	ND	U	9900	ND	U	11000	ND	U	6700	ND	U	1.2	1.4	J	1.4	ND	U	1.1
	Cyclohexane	ug/m ³	1500000	--	10000	2100000	--	12000	2600000	--	7100	ND	U	1.2	180	--	1.5	35	--	1.2
	Dibromochloromethane	ug/m ³	ND	U	5200	ND	U	6000	ND	U	3600	ND	U	0.62	ND	U	0.75	ND	U	0.58
	Dichlorodifluoromethane	ug/m ³	ND	U	9900	ND	U	11000	ND	U	6700	5.1	--	1.2	4.8	--	1.4	7.1	--	1.1
	ETHANOL	ug/m ³	ND	U	26000	ND	U	29000	ND	U	17000	20	--	3	4.4	J	3.7	24	--	2.8
	Ethyl acetate	ug/m ³	ND	U	20000	ND	U	23000	ND	U	14000	4.1	--	2.4	ND	U	2.9	4	--	2.2
	Ethylbenzene	ug/m ³	50000	--	5200	72000	--	6000	70000	--	3600	0.35	J	0.62	3.8	--	0.75	0.29	J	0.58
	Hexane	ug/m ³	1100000	--	9900	1700000	--	11000	2100000	--	6700	0.54	J	1.2	220	--	1.4	4.4	--	1.1
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	19000	ND	U	22000	ND	U	13000	1.2	J	2.3	ND	U	2.8	1.4	J	2.1
	m,p-Xylene	ug/m ³	250000	--	10000	250000	--	12000	240000	--	7100	1.3	J	1.2	24	--	1.5	0.89	J	1.2
	Methylene Chloride	ug/m ³	ND	U	9900	ND	U	11000	ND	U	6700	5.6	--	1.2	ND	U	1.4	7.8	--	1.1
	Naphthalene	ug/m ³	ND	U	9600	ND	U	11000	ND	U	6500	ND	U	1.1	ND	U	1.4	ND	U	1.1
	n-Heptane	ug/m ³	2200000	--	9900	3000000	--	11000	3100000	--	17000	0.85	J	1.2	380	--	14	0.39	J	1.1
	o-Xylene	ug/m ³	53000	--	5200	78000	--	6000	71000	--	3600	0.61	J	0.62	9.1	--	0.75	0.43	J	0.58
Propylene (propene)	ug/m ³	ND	U	9900	ND	U	11000	ND	U	6700	1.9	--	1.2	2.8	--	1.4	3.9	--	1.1	
Styrene	ug/m ³	ND	U	9900	ND	U	11000	ND	U	6700	ND	U	1.2	ND	U	1.4	ND	U	1.1	
Tetrachloroethene	ug/m ³	4100	J	5200	4800	J	6000	2800	J	3600	1.6	J	0.62	8.6	--	0.75	2.1	--	0.58	
Tetrahydrofuran	ug/m ³	ND	U	5200	ND	U	6000	ND	U	3600	46	--	0.62	110	--	0.75	2.4	J	0.58	
Toluene	ug/m ³	1800000	--	5200	1600000	--	6000	1900000	--	3600	2.3	--	0.62	88	--	0.75	1.4	J	0.58	
Trichloroethene	ug/m ³	2700	J	5200	2600	J	6000	1800	J	3600	ND	U	0.62	0.37	J	0.75	ND	U	0.58	
Trichlorofluoromethane	ug/m ³	ND	U	9900	ND	U	11000	ND	U	6700	12	--	1.2	11	--	1.4	4.7	--	1.1	
Vinyl chloride	ug/m ³	ND	U	5200	ND	U	6000	ND	U	3600	ND	U	0.62	ND	U	0.75	ND	U	0.58	
Xylenes, Total	ug/m ³	310000	--	10000	330000	--	12000	310000	--	7100	1.9	J	1.2	33	--	1.5	1.3	J	1.2	

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:	SVMW-05-230			SVMW-05-290			SVMW-06-050			SVMW-06-100			SVMW-06-100			SVMW-06-252			
	Field Sample ID:	SV05-230-204			SV05-290-204			SV06-050-204			SV06-100-204			SV06-100-604			SV06-252-204			
	Sample Date:	10/19/2020			10/19/2020			10/19/2020			10/19/2020			10/19/2020			10/19/2020			
	Sample Type:	REG			REG			REG			REG			FD			REG			
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	570	J	950	920	--	2.2	32	--	0.91	42	--	0.77	41	--	0.77	180	J	160
	1,1-dichloroethane	ug/m ³	ND	U	1800	ND	U	4.2	ND	U	1.8	ND	U	1.5	ND	U	1.5	ND	U	320
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1800	ND	U	4.1	ND	U	1.7	ND	U	1.5	ND	U	1.5	ND	U	310
	1,2,4-trimethylbenzene	ug/m ³	ND	U	950	ND	U	2.2	0.7	J	0.91	0.78	J	0.77	2	J	0.77	120	J	160
	1,2-dibromoethane	ug/m ³	ND	U	950	ND	U	2.2	ND	U	0.91	ND	U	0.77	ND	U	0.77	ND	U	160
	1,2-dichloroethane	ug/m ³	ND	U	950	ND	U	2.2	ND	U	0.91	ND	U	0.77	ND	U	0.77	ND	U	160
	1,3,5-trimethylbenzene	ug/m ³	ND	U	950	1.3	J	2.2	ND	U	0.91	0.4	J	0.77	0.89	J	0.77	180	J	160
	1,3-butadiene	ug/m ³	ND	U	1800	ND	U	4.1	ND	U	1.7	ND	U	1.5	0.77	J	1.5	ND	U	310
	1,4-dioxane	ug/m ³	ND	U	950	ND	U	2.2	1	J	0.91	1.2	J	0.77	ND	U	0.77	ND	U	160
	2-butanone	ug/m ³	ND	U	1800	5	J	4.1	5.8	--	1.7	3.9	J	1.5	830	--	1.5	ND	U	310
	2-hexanone	ug/m ³	ND	U	950	ND	U	2.2	0.78	J	0.91	0.57	J	0.77	12	--	0.77	ND	U	160
	4-methyl-2-pentanone	ug/m ³	ND	U	950	ND	U	2.2	ND	U	0.91	ND	U	0.77	40	--	0.77	ND	U	160
	Acetone	ug/m ³	ND	U	15000	ND	U	34	31	--	14	18	J	12	1400	--	12	ND	U	2600
	Benzene	ug/m ³	38000	--	950	41	--	2.2	1.1	J	0.91	1.1	J	0.77	3.4	--	0.77	210000	--	820
	Bromodichloromethane	ug/m ³	ND	U	950	ND	U	2.2	ND	U	0.91	ND	U	0.77	ND	U	0.77	ND	U	160
	Bromoform	ug/m ³	ND	U	1800	ND	U	4.1	ND	U	1.7	ND	U	1.5	ND	U	1.5	ND	U	310
	Carbon disulfide	ug/m ³	ND	U	3000	ND	U	6.9	41	--	2.9	33	--	2.5	55	--	2.5	ND	U	520
	Carbon tetrachloride	ug/m ³	ND	U	950	35	--	2.2	12	--	0.91	11	--	0.77	9.7	--	0.77	ND	U	160
	Chloroethane	ug/m ³	ND	U	1800	ND	U	4.1	ND	U	1.7	ND	U	1.5	6.3	--	1.5	ND	U	310
	Chloroform	ug/m ³	ND	U	950	ND	U	2.2	ND	U	0.91	2.7	--	0.77	3	--	0.77	ND	U	160
	Chloromethane	ug/m ³	ND	U	1800	ND	U	4.1	ND	U	1.7	ND	U	1.5	6.2	--	1.5	ND	U	310
	Cyclohexane	ug/m ³	1200000	--	11000	2200	--	19	ND	U	1.8	ND	U	1.5	3.3	J	1.5	140000	--	330
	Dibromochloromethane	ug/m ³	ND	U	950	ND	U	2.2	ND	U	0.91	ND	U	0.77	ND	U	0.77	ND	U	160
	Dichlorodifluoromethane	ug/m ³	ND	U	1800	27	--	4.1	23	--	1.7	26	--	1.5	26	--	1.5	ND	U	310
	ETHANOL	ug/m ³	ND	U	4600	9.6	J	11	27	J	4.4	5.2	J	3.8	24	J	3.8	ND	U	800
	Ethyl acetate	ug/m ³	ND	U	3600	ND	U	8.3	7.9	--	3.5	ND	U	3	2.9	J	3	ND	U	620
	Ethylbenzene	ug/m ³	1800	J	950	1.7	J	2.2	0.54	J	0.91	0.43	J	0.77	1.7	J	0.77	120	J	160
	Hexane	ug/m ³	1300000	--	11000	1900	--	18	0.91	J	1.7	0.67	J	1.5	5.4	--	1.5	17000	--	310
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	3500	ND	U	8	ND	U	3.4	ND	U	2.9	14	--	2.9	ND	U	600
	m,p-Xylene	ug/m ³	9200	--	1900	16	--	4.3	2.6	J	1.8	2.4	J	1.5	9.4	--	1.5	1200	--	330
	Methylene Chloride	ug/m ³	ND	U	1800	ND	U	4.1	1.1	J	1.7	ND	U	1.5	ND	U	1.5	ND	U	310
	Naphthalene	ug/m ³	ND	U	1700	ND	U	4	ND	U	1.7	1.8	J	1.4	3.4	--	1.4	ND	U	300
	n-Heptane	ug/m ³	1300000	--	11000	1200	--	18	1.7	J	1.7	1.3	J	1.5	9	--	1.5	310	J	310
	o-Xylene	ug/m ³	2900	J	950	6.6	J	2.2	0.88	J	0.91	0.83	J	0.77	2.6	--	0.77	2900	--	160
	Propylene (propene)	ug/m ³	14000	--	1800	18	--	4.1	1.4	J	1.7	0.78	J	1.5	100	--	1.5	290	J	310
	Styrene	ug/m ³	ND	U	1800	ND	U	4.1	ND	U	1.7	ND	U	1.5	1.2	J	1.5	ND	U	310
	Tetrachloroethene	ug/m ³	720	J	950	24	--	2.2	1.5	J	0.91	1.6	J	0.77	1.5	J	0.77	140	J	160
	Tetrahydrofuran	ug/m ³	ND	U	950	ND	U	2.2	1.7	J	0.91	0.38	J	0.77	2.7	J	0.77	ND	U	160
	Toluene	ug/m ³	67000	--	950	52	--	2.2	5.5	--	0.91	4.4	--	0.77	19	--	0.77	7700	--	160
	Trichloroethene	ug/m ³	510	J	950	2.5	J	2.2	ND	U	0.91	ND	U	0.77	ND	U	0.77	86	J	160
Trichlorofluoromethane	ug/m ³	ND	U	1800	5	J	4.1	4.5	--	1.7	4.7	--	1.5	4.6	--	1.5	ND	U	310	
Vinyl chloride	ug/m ³	ND	U	950	ND	U	2.2	ND	U	0.91	ND	U	0.77	ND	U	0.77	ND	U	160	
Xylenes, Total	ug/m ³	12000	--	1900	23	--	4.3	3.5	J	1.8	3.2	J	1.5	12	--	1.5	4100	--	330	

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			SVMW-06-302			SVMW-07-050			SVMW-07-100			SVMW-07-150			SVMW-12-150			SVMW-12-250		
	Field Sample ID:			SV06-302-204			SV07-050-204			SV07-100-204			SV07-150-204			SV12-150-204			SV12-250-204		
	Sample Date:			10/19/2020			10/13/2020			10/13/2020			10/13/2020			10/19/2020			10/19/2020		
	Sample Type:			REG			REG			REG			REG			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	140	--	8.8	ND	U	1600	ND	U	1800	26	--	0.9	510	--	7.8	1300	--	8.2	
	1,1-dichloroethane	ug/m ³	ND	U	17	ND	U	3100	ND	U	3500	ND	U	1.7	ND	U	1.5	ND	U	1.6	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	16	ND	U	3000	ND	U	3400	ND	U	1.7	ND	U	1.5	ND	U	1.5	
	1,2,4-trimethylbenzene	ug/m ³	ND	U	8.8	ND	U	1600	ND	U	1800	0.92	J	0.9	1	J	0.78	0.71	J	0.82	
	1,2-dibromoethane	ug/m ³	27	--	8.8	ND	U	1600	ND	U	1800	ND	U	0.9	ND	U	0.78	ND	U	0.82	
	1,2-dichloroethane	ug/m ³	ND	U	8.8	ND	U	1600	ND	U	1800	ND	U	0.9	ND	U	0.78	ND	U	0.82	
	1,3,5-trimethylbenzene	ug/m ³	4.8	J	8.8	ND	U	1600	ND	U	1800	0.64	J	0.9	ND	U	0.78	1.6	J	0.82	
	1,3-butadiene	ug/m ³	ND	U	16	ND	U	3000	ND	U	3400	ND	U	1.7	ND	U	1.5	ND	U	1.5	
	1,4-dioxane	ug/m ³	ND	U	8.8	ND	U	1600	ND	U	1800	ND	U	0.9	ND	U	0.78	ND	U	0.82	
	2-butanone	ug/m ³	ND	U	16	ND	U	3000	ND	U	3400	ND	U	1.7	7.7	--	1.5	1	J	1.5	
	2-hexanone	ug/m ³	ND	U	8.8	ND	U	1600	ND	U	1800	ND	U	0.9	0.75	J	0.78	ND	U	0.82	
	4-methyl-2-pentanone	ug/m ³	ND	U	8.8	ND	U	1600	ND	U	1800	ND	U	0.9	0.34	J	0.78	ND	U	0.82	
	Acetone	ug/m ³	ND	U	140	ND	U	25000	ND	U	29000	20	J	14	36	--	12	ND	U	13	
	Benzene	ug/m ³	77	--	8.8	53000	--	1600	34000	--	1800	11	--	0.9	1.6	J	0.78	540	--	8.2	
	Bromodichloromethane	ug/m ³	ND	U	8.8	ND	U	1600	ND	U	1800	ND	U	0.9	ND	U	0.78	ND	U	0.82	
	Bromoform	ug/m ³	ND	U	16	ND	U	3000	ND	U	3400	ND	U	1.7	ND	U	1.5	ND	U	1.5	
	Carbon disulfide	ug/m ³	ND	U	28	ND	U	5000	ND	U	5700	ND	U	2.9	5	--	2.5	8.9	--	2.6	
	Carbon tetrachloride	ug/m ³	53	--	8.8	ND	U	1600	ND	U	1800	6.3	--	0.9	36	--	0.78	37	--	0.82	
	Chloroethane	ug/m ³	ND	U	16	ND	U	3000	ND	U	3400	ND	U	1.7	ND	U	1.5	0.35	J	1.5	
	Chloroform	ug/m ³	11	J	8.8	ND	U	1600	ND	U	1800	ND	U	0.9	4.7	--	0.78	11	--	0.82	
	Chloromethane	ug/m ³	ND	U	16	ND	U	3000	ND	U	3400	ND	U	1.7	0.55	J	1.5	ND	U	1.5	
	Cyclohexane	ug/m ³	6300	--	18	1000000	--	3100	750000	--	3600	60	--	1.8	3.5	J	1.6	800	--	1.6	
	Dibromochloromethane	ug/m ³	ND	U	8.8	ND	U	1600	ND	U	1800	ND	U	0.9	ND	U	0.78	ND	U	0.82	
	Dichlorodifluoromethane	ug/m ³	26	J	16	ND	U	3000	ND	U	3400	3.6	--	1.7	32	--	1.5	18	--	1.5	
	ETHANOL	ug/m ³	ND	U	43	ND	U	7700	ND	U	8800	4.7	J	4.4	14	J	3.8	1.8	J	4	
	Ethyl acetate	ug/m ³	ND	U	33	ND	U	6000	ND	U	6900	ND	U	3.4	3.6	J	3	ND	U	3.1	
	Ethylbenzene	ug/m ³	ND	U	8.8	5600	--	1600	930	J	1800	2.4	J	0.9	ND	U	0.78	1.1	J	0.82	
	Hexane	ug/m ³	330	--	16	1100000	--	12000	570000	--	3400	54	--	1.7	0.92	J	1.5	260	--	1.5	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	32	ND	U	5800	ND	U	6700	1.8	J	3.3	1.6	J	2.9	ND	U	3	
	m,p-Xylene	ug/m ³	ND	U	18	11000	--	3100	4600	J	3600	8.7	--	1.8	1.7	J	1.6	4.8	J	1.6	
	Methylene Chloride	ug/m ³	ND	U	16	ND	U	3000	ND	U	3400	ND	U	1.7	2.3	J	1.5	ND	U	1.5	
	Naphthalene	ug/m ³	ND	U	16	ND	U	2900	ND	U	3300	1.1	J	1.6	ND	U	1.4	ND	U	1.5	
	n-Heptane	ug/m ³	ND	U	16	940000	--	12000	380000	--	3400	120	--	1.7	0.56	J	1.5	2.4	J	1.5	
	o-Xylene	ug/m ³	11	J	8.8	1900	J	1600	1500	J	1800	2.4	J	0.9	0.49	J	0.78	9.4	--	0.82	
	Propylene (propene)	ug/m ³	34	--	16	2500	J	3000	ND	U	3400	1.7	J	1.7	2.3	J	1.5	18	--	1.5	
	Styrene	ug/m ³	ND	U	16	ND	U	3000	ND	U	3400	ND	U	1.7	ND	U	1.5	ND	U	1.5	
	Tetrachloroethene	ug/m ³	ND	U	8.8	ND	U	1600	ND	U	1800	1.2	J	0.9	19	--	0.78	18	--	0.82	
	Tetrahydrofuran	ug/m ³	ND	U	8.8	ND	U	1600	ND	U	1800	2.1	J	0.9	2.6	J	0.78	2.4	J	0.82	
	Toluene	ug/m ³	14	J	8.8	97000	--	1600	45000	--	1800	40	--	0.9	3.6	--	0.78	68	--	0.82	
	Trichloroethene	ug/m ³	ND	U	8.8	ND	U	1600	ND	U	1800	ND	U	0.9	110	--	0.78	110	--	0.82	
Trichlorofluoromethane	ug/m ³	14	J	16	ND	U	3000	ND	U	3400	4.3	--	1.7	5.2	--	1.5	5.5	--	1.5		
Vinyl chloride	ug/m ³	ND	U	8.8	ND	U	1600	ND	U	1800	ND	U	0.9	5.2	--	0.78	9	--	0.82		
Xylenes, Total	ug/m ³	11	J	18	13000	--	3100	6200	J	3600	11	--	1.8	2.2	J	1.6	14	--	1.6		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			SVMW-12-350			SVMW-12-450			SVMW-13-150			SVMW-13-250			SVMW-13-350			SVMW-13-450		
	Field Sample ID:			SV12-350-204			SV12-450-204			SV13-150-204			SV13-250-204			SV13-350-204			SV13-450-204		
	Sample Date:			10/19/2020			10/19/2020			10/19/2020			10/19/2020			10/19/2020			10/19/2020		
	Sample Type:			REG			REG			REG			REG			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	31	--	0.78	1000	--	9	ND	U	82	5.5	--	0.91	11	--	0.8	2.4	J	0.86	
	1,1-dichloroethane	ug/m ³	ND	U	1.5	ND	U	1.7	ND	U	160	ND	U	1.8	ND	U	1.6	ND	U	1.7	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.5	ND	U	1.7	ND	U	150	ND	U	1.7	ND	U	1.5	ND	U	1.6	
	1,2,4-trimethylbenzene	ug/m ³	0.59	J	0.78	0.59	J	0.9	1700	--	82	2.5	J	0.91	1.3	J	0.8	0.88	J	0.86	
	1,2-dibromoethane	ug/m ³	ND	U	0.78	ND	U	0.9	140	J	82	ND	U	0.91	ND	U	0.8	ND	U	0.86	
	1,2-dichloroethane	ug/m ³	2.9	--	0.78	ND	U	0.9	ND	U	82	ND	U	0.91	0.29	J	0.8	1.2	J	0.86	
	1,3,5-trimethylbenzene	ug/m ³	ND	U	0.78	ND	U	0.9	2300	--	82	1.9	J	0.91	0.79	J	0.8	5.5	--	0.86	
	1,3-butadiene	ug/m ³	ND	U	1.5	ND	U	1.7	ND	U	150	ND	U	1.7	ND	U	1.5	ND	U	1.6	
	1,4-dioxane	ug/m ³	ND	U	0.78	ND	U	0.9	ND	U	82	ND	U	0.91	4.6	--	0.8	ND	U	0.86	
	2-butanone	ug/m ³	7.4	--	1.5	5.9	--	1.7	110	J	150	1.1	J	1.7	15	--	1.5	1.4	J	1.6	
	2-hexanone	ug/m ³	1.9	J	0.78	0.84	J	0.9	ND	U	82	ND	U	0.91	ND	U	0.8	ND	U	0.86	
	4-methyl-2-pentanone	ug/m ³	0.4	J	0.78	ND	U	0.9	ND	U	82	ND	U	0.91	0.54	J	0.8	ND	U	0.86	
	Acetone	ug/m ³	34	--	12	34	--	14	ND	U	1300	7	J	14	44	--	13	ND	U	14	
	Benzene	ug/m ³	1.3	J	0.78	7.5	--	0.9	8600	--	82	2	J	0.91	1.2	J	0.8	160	--	0.86	
	Bromodichloromethane	ug/m ³	ND	U	0.78	ND	U	0.9	ND	U	82	ND	U	0.91	ND	U	0.8	ND	U	0.86	
	Bromoform	ug/m ³	ND	U	1.5	ND	U	1.7	ND	U	150	ND	U	1.7	ND	U	1.5	ND	U	1.6	
	Carbon disulfide	ug/m ³	35	--	2.5	13	--	2.9	ND	U	260	3.8	J	2.9	3.1	J	2.5	5.6	--	2.7	
	Carbon tetrachloride	ug/m ³	3.9	--	0.78	20	--	0.9	ND	U	82	1.7	J	0.91	4.3	--	0.8	3.5	--	0.86	
	Chloroethane	ug/m ³	14	--	1.5	ND	U	1.7	ND	U	150	ND	U	1.7	ND	U	1.5	ND	U	1.6	
	Chloroform	ug/m ³	0.53	J	0.78	3.6	--	0.9	ND	U	82	ND	U	0.91	ND	U	0.8	ND	U	0.86	
	Chloromethane	ug/m ³	0.72	J	1.5	ND	U	1.7	ND	U	150	ND	U	1.7	ND	U	1.5	ND	U	1.6	
	Cyclohexane	ug/m ³	8.5	--	1.6	2.5	J	1.8	40000	--	160	2.1	J	1.8	8.7	--	1.6	450	--	1.7	
	Dibromochloromethane	ug/m ³	ND	U	0.78	ND	U	0.9	ND	U	82	ND	U	0.91	ND	U	0.8	ND	U	0.86	
	Dichlorodifluoromethane	ug/m ³	1.1	J	1.5	8	--	1.7	ND	U	150	9.3	--	1.7	5.4	--	1.5	4	--	1.6	
	ETHANOL	ug/m ³	49	--	3.8	9.6	J	4.4	280	J	400	2.8	J	4.4	15	J	3.9	2.1	J	4.2	
	Ethyl acetate	ug/m ³	ND	U	3	ND	U	3.4	ND	U	310	ND	U	3.5	ND	U	3.1	ND	U	3.3	
	Ethylbenzene	ug/m ³	ND	U	0.78	ND	U	0.9	400	--	82	ND	U	0.91	ND	U	0.8	0.55	J	0.86	
	Hexane	ug/m ³	2.7	--	1.5	0.67	J	1.7	930	--	150	1.1	J	1.7	1.1	J	1.5	29	--	1.6	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	1.9	J	2.9	ND	U	3.3	290	J	300	ND	U	3.4	1.3	J	3	ND	U	3.2	
	m,p-Xylene	ug/m ³	1.7	J	1.6	ND	U	1.8	6100	--	160	3.9	J	1.8	2.1	J	1.6	2.8	J	1.7	
	Methylene Chloride	ug/m ³	ND	U	1.5	1.3	J	1.7	ND	U	150	ND	U	1.7	ND	U	1.5	ND	U	1.6	
	Naphthalene	ug/m ³	ND	U	1.4	ND	U	1.6	ND	U	150	ND	U	1.7	ND	U	1.5	ND	U	1.6	
	n-Heptane	ug/m ³	0.74	J	1.5	ND	U	1.7	740	--	150	1.5	J	1.7	1.2	J	1.5	0.95	J	1.6	
	o-Xylene	ug/m ³	0.38	J	0.78	ND	U	0.9	3900	--	82	2.2	J	0.91	0.99	J	0.8	4.1	--	0.86	
	Propylene (propene)	ug/m ³	11	--	1.5	1.6	J	1.7	430	--	150	ND	U	1.7	2.6	--	1.5	15	--	1.6	
	Styrene	ug/m ³	ND	U	1.5	ND	U	1.7	ND	U	150	ND	U	1.7	ND	U	1.5	ND	U	1.6	
	Tetrachloroethene	ug/m ³	3.1	--	0.78	14	--	0.9	59	J	82	1.1	J	0.91	1.2	J	0.8	0.84	J	0.86	
	Tetrahydrofuran	ug/m ³	2.5	J	0.78	0.85	J	0.9	480	--	82	1.9	J	0.91	21	--	0.8	0.51	J	0.86	
	Toluene	ug/m ³	1.9	J	0.78	1.5	J	0.9	10000	--	82	4.2	--	0.91	2.9	--	0.8	2.8	--	0.86	
	Trichloroethene	ug/m ³	0.68	J	0.78	39	--	0.9	38	J	82	ND	U	0.91	ND	U	0.8	0.62	J	0.86	
Trichlorofluoromethane	ug/m ³	0.41	J	1.5	3.8	--	1.7	ND	U	150	1.9	J	1.7	2.5	--	1.5	2.3	J	1.6		
Vinyl chloride	ug/m ³	620	--	7.8	7.1	--	0.9	110	J	82	5.3	--	0.91	7	--	0.8	5.7	--	0.86		
Xylenes, Total	ug/m ³	2	J	1.6	ND	U	1.8	10000	--	160	6.1	--	1.8	3.1	J	1.6	6.9	--	1.7		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			SVMW-14-150			SVMW-14-250			SVMW-14-350			SVMW-14-450			SVMW-14-450			SVMW-15-150		
	Field Sample ID:			SV14-150-204			SV14-250-204			SV14-350-204			SV14-450-204			SV14-450-604			SV15-150-204		
	Sample Date:			10/13/2020			10/13/2020			10/13/2020			10/13/2020			10/13/2020			10/19/2020		
	Sample Type:			REG			REG			REG			REG			FD			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	150	--	0.72	160	--	0.86	43	--	0.7	0.58	J	0.87	0.55	J	0.73	10	--	0.77	
	1,1-dichloroethane	ug/m ³	ND	U	1.4	ND	U	1.7	1.4	J	1.4	ND	U	1.7	ND	U	1.4	ND	U	1.5	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1.4	ND	U	1.6	ND	U	1.3	ND	U	1.6	ND	U	1.4	ND	U	1.5	
	1,2,4-trimethylbenzene	ug/m ³	0.85	J	0.72	0.64	J	0.86	0.49	J	0.7	0.75	J	0.87	0.65	J	0.73	0.63	J	0.77	
	1,2-dibromoethane	ug/m ³	ND	U	0.72	ND	U	0.86	ND	U	0.7	ND	U	0.87	ND	U	0.73	ND	U	0.77	
	1,2-dichloroethane	ug/m ³	ND	U	0.72	ND	U	0.86	ND	U	0.7	ND	U	0.87	ND	U	0.73	ND	U	0.77	
	1,3,5-trimethylbenzene	ug/m ³	0.47	J	0.72	0.43	J	0.86	0.39	J	0.7	0.40	J	0.87	0.36	J	0.73	1	J	0.77	
	1,3-butadiene	ug/m ³	ND	U	1.4	ND	U	1.6	ND	U	1.3	ND	U	1.6	ND	U	1.4	ND	U	1.5	
	1,4-dioxane	ug/m ³	ND	U	0.72	ND	U	0.86	ND	U	0.7	ND	U	0.87	ND	U	0.73	0.33	J	0.77	
	2-butanone	ug/m ³	7.0	--	1.4	6.9	--	1.6	310	--	1.3	7.7	--	1.6	5.4	--	1.4	2	J	1.5	
	2-hexanone	ug/m ³	ND	U	0.72	ND	U	0.86	0.54	J	0.7	ND	U	0.87	ND	U	0.73	ND	U	0.77	
	4-methyl-2-pentanone	ug/m ³	0.71	J	0.72	ND	U	0.86	ND	U	0.7	ND	U	0.87	ND	U	0.73	ND	U	0.77	
	Acetone	ug/m ³	23	--	11	27	--	14	530	--	11	28	--	14	17	J	12	13	J	12	
	Benzene	ug/m ³	1.8	J	0.72	0.76	J	0.86	5.5	--	0.7	1.3	J	0.87	1.5	J	0.73	5	--	0.77	
	Bromodichloromethane	ug/m ³	ND	U	0.72	ND	U	0.86	ND	U	0.7	ND	U	0.87	ND	U	0.73	ND	U	0.77	
	Bromoform	ug/m ³	ND	U	1.4	ND	U	1.6	ND	U	1.3	ND	U	1.6	ND	U	1.4	ND	U	1.5	
	Carbon disulfide	ug/m ³	3.6	J	2.3	6.9	--	2.7	15	--	2.2	4.2	J	2.8	6.9	--	2.3	25	--	2.5	
	Carbon tetrachloride	ug/m ³	270	--	0.72	320	--	0.86	60	--	0.7	2.4	J	0.87	2.4	--	0.73	2.6	--	0.77	
	Chloroethane	ug/m ³	ND	U	1.4	ND	U	1.6	ND	U	1.3	ND	U	1.6	ND	U	1.4	ND	U	1.5	
	Chloroform	ug/m ³	2.6	--	0.72	3.2	--	0.86	3.2	--	0.7	ND	U	0.87	ND	U	0.73	0.71	J	0.77	
	Chloromethane	ug/m ³	0.49	J	1.4	0.52	J	1.6	1.4	J	1.3	ND	U	1.6	0.42	J	1.4	ND	U	1.5	
	Cyclohexane	ug/m ³	25	--	1.4	3.8	J	1.7	ND	U	1.4	ND	U	1.7	ND	U	1.5	13	--	1.5	
	Dibromochloromethane	ug/m ³	ND	U	0.72	ND	U	0.86	ND	U	0.7	ND	U	0.87	ND	U	0.73	ND	U	0.77	
	Dichlorodifluoromethane	ug/m ³	46	--	1.4	56	--	1.6	660	--	13	12	--	1.6	12	--	1.4	10	--	1.5	
	ETHANOL	ug/m ³	26	--	3.5	5.4	J	4.2	4.0	J	3.4	4.8	J	4.3	2.0	J	3.5	2.7	J	3.8	
	Ethyl acetate	ug/m ³	180	--	2.7	2.7	J	3.3	ND	U	2.7	ND	U	3.3	ND	U	2.8	ND	U	3	
	Ethylbenzene	ug/m ³	0.88	J	0.72	ND	U	0.86	0.62	J	0.7	0.80	J	0.87	0.42	J	0.73	0.47	J	0.77	
	Hexane	ug/m ³	0.82	J	1.4	ND	U	1.6	ND	U	1.3	ND	U	1.6	0.62	J	1.4	10	--	1.5	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	2.1	J	2.7	ND	U	3.2	1.1	J	2.6	ND	U	3.2	ND	U	2.7	ND	U	2.9	
	m,p-Xylene	ug/m ³	2.1	J	1.4	0.82	J	1.7	1.7	J	1.4	3.1	J	1.7	1.5	J	1.5	1.1	J	1.5	
	Methylene Chloride	ug/m ³	1.5	J	1.4	ND	U	1.6	ND	U	1.3	ND	U	1.6	ND	U	1.4	ND	U	1.5	
	Naphthalene	ug/m ³	ND	U	1.3	ND	U	1.6	ND	U	1.3	ND	U	1.6	ND	U	1.3	ND	U	1.4	
	n-Heptane	ug/m ³	1.7	J	1.4	ND	U	1.6	ND	U	1.3	ND	U	1.6	0.59	J	1.4	19	--	1.5	
	o-Xylene	ug/m ³	0.87	J	0.72	0.39	J	0.86	0.88	J	0.7	1.5	J	0.87	0.52	J	0.73	1.5	J	0.77	
	Propylene (propene)	ug/m ³	1.6	J	1.4	1.1	J	1.6	1.2	J	1.3	0.86	J	1.6	ND	U	1.4	ND	U	1.5	
	Styrene	ug/m ³	0.52	J	1.4	ND	U	1.6	ND	U	1.3	ND	U	1.6	ND	U	1.4	ND	U	1.5	
Tetrachloroethene	ug/m ³	81	--	0.72	110	--	0.86	43	--	0.7	2.8	--	0.87	2.8	--	0.73	2.9	--	0.77		
Tetrahydrofuran	ug/m ³	280	--	0.72	180	--	0.86	430	--	0.7	19	--	0.87	29	--	0.73	27	--	0.77		
Toluene	ug/m ³	9.2	--	0.72	1.4	J	0.86	10	--	0.7	7.7	--	0.87	4.2	--	0.73	5.7	--	0.77		
Trichloroethene	ug/m ³	190	--	0.72	260	--	0.86	180	--	0.7	1.5	J	0.87	1.6	J	0.73	ND	U	0.77		
Trichlorofluoromethane	ug/m ³	7.7	--	1.4	8.9	--	1.6	56	--	1.3	0.62	J	1.6	0.57	J	1.4	1.7	J	1.5		
Vinyl chloride	ug/m ³	ND	U	0.72	ND	U	0.86	1.2	J	0.7	1.4	J	0.87	2.1	J	0.73	ND	U	0.77		
Xylenes, Total	ug/m ³	3.0	J	1.4	1.2	J	1.7	2.6	J	1.4	4.5	J	1.7	2.0	J	1.5	2.7	J	1.5		

**Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			SVMW-15-250			SVMW-15-350			SVMW-15-450		
	Field Sample ID:			SV15-250-204			SV15-350-204			SV15-450-204		
	Sample Date:			10/19/2020			10/19/2020			10/19/2020		
	Sample Type:			REG			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	38	--	1.4	22	J	39	390	J	850	
	1,1-dichloroethane	ug/m ³	ND	U	2.7	ND	U	76	ND	U	1700	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	2.6	ND	U	74	ND	U	1600	
	1,2,4-trimethylbenzene	ug/m ³	4	J	1.4	ND	U	39	1100	J	850	
	1,2-dibromoethane	ug/m ³	ND	U	1.4	18	J	39	320	J	850	
	1,2-dichloroethane	ug/m ³	ND	U	1.4	ND	U	39	ND	U	850	
	1,3,5-trimethylbenzene	ug/m ³	2.9	J	1.4	27	J	39	2100	J	850	
	1,3-butadiene	ug/m ³	ND	U	2.6	ND	U	74	ND	U	1600	
	1,4-dioxane	ug/m ³	ND	U	1.4	ND	U	39	ND	U	850	
	2-butanone	ug/m ³	1.6	J	2.6	ND	U	74	810	J	1600	
	2-hexanone	ug/m ³	ND	U	1.4	ND	U	39	ND	U	850	
	4-methyl-2-pentanone	ug/m ³	ND	U	1.4	ND	U	39	ND	U	850	
	Acetone	ug/m ³	ND	U	22	ND	U	620	ND	U	14000	
	Benzene	ug/m ³	1800	--	7	700	--	39	71000	--	850	
	Bromodichloromethane	ug/m ³	ND	U	1.4	ND	U	39	ND	U	850	
	Bromoform	ug/m ³	ND	U	2.6	ND	U	74	ND	U	1600	
	Carbon disulfide	ug/m ³	4.8	J	4.4	ND	U	120	ND	U	2700	
	Carbon tetrachloride	ug/m ³	9.2	--	1.4	ND	U	39	ND	U	850	
	Chloroethane	ug/m ³	ND	U	2.6	ND	U	74	ND	U	1600	
	Chloroform	ug/m ³	ND	U	1.4	ND	U	39	ND	U	850	
	Chloromethane	ug/m ³	ND	U	2.6	ND	U	74	ND	U	1600	
	Cyclohexane	ug/m ³	1700	--	14	40000	--	79	900000	--	1700	
	Dibromochloromethane	ug/m ³	ND	U	1.4	ND	U	39	ND	U	850	
	Dichlorodifluoromethane	ug/m ³	18	--	2.6	46	J	74	ND	U	1600	
	ETHANOL	ug/m ³	ND	U	6.8	ND	U	190	ND	U	4200	
	Ethyl acetate	ug/m ³	ND	U	5.3	360	--	150	ND	U	3300	
	Ethylbenzene	ug/m ³	1.5	J	1.4	ND	U	39	9800	--	850	
	Hexane	ug/m ³	140	--	2.6	2500	--	74	650000	--	6400	
	Isopropyl alcohol (manufacturing-strong acid)	ug/m ³	ND	U	5.2	ND	U	150	ND	U	3200	
	m,p-Xylene	ug/m ³	21	--	2.8	47	J	79	24000	--	1700	
	Methylene Chloride	ug/m ³	ND	U	2.6	ND	U	74	ND	U	1600	
	Naphthalene	ug/m ³	1.4	J	2.5	ND	U	72	ND	U	1600	
	n-Heptane	ug/m ³	42	--	2.6	ND	U	74	730000	--	6400	
	o-Xylene	ug/m ³	18	--	1.4	69	J	39	11000	--	850	
Propylene (propene)	ug/m ³	7.3	--	2.6	ND	U	74	7200	--	1600		
Styrene	ug/m ³	ND	U	2.6	ND	U	74	ND	U	1600		
Tetrachloroethene	ug/m ³	4.4	--	1.4	29	J	39	670	J	850		
Tetrahydrofuran	ug/m ³	4.1	J	1.4	ND	U	39	ND	U	850		
Toluene	ug/m ³	52	--	1.4	180	--	39	200000	--	850		
Trichloroethene	ug/m ³	4.1	J	1.4	61	J	39	540	J	850		
Trichlorofluoromethane	ug/m ³	3.1	J	2.6	ND	U	74	ND	U	1600		
Vinyl chloride	ug/m ³	2.5	J	1.4	ND	U	39	ND	U	850		
Xylenes, Total	ug/m ³	39	--	2.8	120	J	79	35000	--	1700		

Table 3-4
Analytical Data in On-Base (Outside the Source Area) Soil Vapor Monitoring Points, Q4 2020

$\mu\text{g}/\text{m}^3$ = microgram per cubic meter

ID = identification

LOD = limit of detection

ND = not detected

Q4 = Fourth Quarter

REG = normal field sample

Val Qual = validation qualifier

VOC = volatile organic compound

Shading = detected concentrations above the detection limit

Val Quals based on independent data validation

J = Qualifier denotes the analyte was positively identified, but the associated numerical value is estimated.

U = Qualifier denotes the analyte was analyzed but not detected above the detection limit. The value associated with the U-qualifier is the limit of detection.

-- = Validation qualifier not assigned.

**Table 3-5
Analytical Data in On-Base (Inside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:			SVEW-06-060			SVEW-06-060			SVEW-07-160			SVEW-08-260			SVEW-09-460			SVMW-03-050		
	Field Sample ID:			SVE06-060-204			SVE06-060-604			SVE07-160-204			SVE08-260-204			SVE09-460-204			SV03-050-204		
	Sample Date:			10/5/2020			10/5/2020			10/7/2020			10/7/2020			10/5/2020			10/5/2020		
	Sample Type:			REG			FD			REG			REG			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	ND	U	1600	ND	U	1800	ND	U	6900	ND	U	68	0.85	J	0.82	77	--	0.82	
	1,1-dichloroethane	ug/m ³	ND	U	3200	ND	U	3400	ND	U	13000	ND	U	130	ND	U	1.6	ND	U	1.6	
	1,2,4-trichlorobenzene	ug/m ³	ND	U	3100	ND	U	3300	ND	U	13000	ND	U	130	ND	U	1.5	ND	U	1.5	
	1,2,4-trimethylbenzene	ug/m ³	42000	J	1600	20000	J	1800	25000	--	6900	ND	U	68	37	--	0.82	4.5	--	0.82	
	1,2-dibromoethane	ug/m ³	ND	U	1600	ND	U	1800	ND	U	6900	ND	U	68	ND	U	0.82	ND	U	0.82	
	1,2-dichloroethane	ug/m ³	ND	U	1600	ND	U	1800	ND	U	6900	ND	U	68	ND	U	0.82	ND	U	0.82	
	1,3,5-trimethylbenzene	ug/m ³	14000	J	1600	6700	J	1800	9700	J	6900	ND	U	68	12	--	0.82	1.1	J	0.82	
	1,3-butadiene	ug/m ³	ND	U	3100	ND	U	3300	ND	U	13000	ND	U	130	ND	U	1.5	ND	U	1.5	
	1,4-dioxane	ug/m ³	ND	U	1600	ND	U	1800	ND	U	6900	ND	U	68	ND	U	0.82	ND	U	0.82	
	2-butanone	ug/m ³	43000	--	3100	27000	--	3300	130000	--	13000	48	J	130	18	--	1.5	4.0	J	1.5	
	2-hexanone	ug/m ³	ND	U	1600	ND	U	1800	ND	U	6900	ND	U	68	ND	U	0.82	ND	U	0.82	
	4-methyl-2-pentanone	ug/m ³	ND	U	1600	ND	U	1800	ND	U	6900	ND	U	68	1.1	J	0.82	ND	U	0.82	
	Acetone	ug/m ³	170000	--	26000	110000	--	28000	310000	--	110000	ND	U	1100	82	--	13	28	--	13	
	Benzene	ug/m ³	220000	--	1600	140000	--	1800	930000	--	6900	37000	--	68	150	--	0.82	6.0	--	0.82	
	Bromodichloromethane	ug/m ³	ND	U	1600	ND	U	1800	ND	U	6900	ND	U	68	ND	U	0.82	ND	U	0.82	
	Bromoform	ug/m ³	ND	U	3100	ND	U	3300	ND	U	13000	ND	U	130	ND	U	1.5	ND	U	1.5	
	Carbon disulfide	ug/m ³	ND	U	5200	ND	U	5600	ND	U	22000	ND	U	210	3.2	J	2.6	65	--	2.6	
	Carbon tetrachloride	ug/m ³	ND	U	1600	ND	U	1800	ND	U	6900	ND	U	68	0.47	J	0.82	5.2	--	0.82	
	Chloroethane	ug/m ³	ND	U	3100	ND	U	3300	ND	U	13000	ND	U	130	ND	U	1.5	ND	U	1.5	
	Chloroform	ug/m ³	ND	U	1600	ND	U	1800	ND	U	6900	ND	U	68	0.66	J	0.82	ND	U	0.82	
	Chloromethane	ug/m ³	ND	U	3100	ND	U	3300	ND	U	13000	ND	U	130	0.59	J	1.5	ND	U	1.5	
	Cyclohexane	ug/m ³	970000	--	3200	700000	--	3500	3600000	--	14000	23000	--	140	120	--	1.6	3.8	J	1.6	
	Dibromochloromethane	ug/m ³	ND	U	1600	ND	U	1800	ND	U	6900	ND	U	68	ND	U	0.82	ND	U	0.82	
	Dichlorodifluoromethane	ug/m ³	ND	U	3100	ND	U	3300	ND	U	13000	ND	U	130	2.3	J	1.5	2.4	J	1.5	
	ETHANOL	ug/m ³	22000	J	7900	13000	J	8500	ND	U	34000	ND	U	330	13	J	4	3.2	J	4	
	Ethyl acetate	ug/m ³	ND	U	6200	ND	U	6700	ND	U	27000	ND	U	260	ND	U	3.1	ND	U	3.1	
	Ethylbenzene	ug/m ³	110000	J	1600	63000	J	1800	99000	--	6900	ND	U	68	39	--	0.82	2.0	J	0.82	
	Hexane	ug/m ³	960000	--	3100	700000	--	3300	8200000	--	93000	1700	--	130	56	--	1.5	2.7	--	1.5	
	Isopropyl alcohol (manufacturing-strong)	ug/m ³	7900	J	6000	4800	J	6500	ND	U	26000	130	J	250	6.7	--	3	2.5	J	3	
	m,p-Xylene	ug/m ³	120000	J	3200	64000	J	3500	200000	--	14000	ND	U	140	56	--	1.6	6.8	--	1.6	
	Methylene Chloride	ug/m ³	ND	U	3100	ND	U	3300	ND	U	13000	ND	U	130	ND	U	1.5	ND	U	1.5	
	Naphthalene	ug/m ³	1500	J	3000	ND	U	3200	ND	U	13000	ND	U	120	5.1	--	1.5	3.4	--	1.5	
	n-Heptane	ug/m ³	860000	--	3100	600000	--	3300	2700000	--	13000	180	J	130	86	--	1.5	4.8	--	1.5	
	o-Xylene	ug/m ³	47000	J	1600	24000	J	1800	61000	--	6900	ND	U	68	20	--	0.82	2.2	J	0.82	
	Propylene (propene)	ug/m ³	4100	J	3100	3200	J	3300	20000	J	13000	53	J	130	6.4	--	1.5	2.5	--	1.5	
	Styrene	ug/m ³	ND	U	3100	ND	U	3300	ND	U	13000	ND	U	130	ND	U	1.5	ND	U	1.5	
	Tetrachloroethene	ug/m ³	1500	J	1600	ND	U	1800	ND	U	6900	28	J	68	1.8	J	0.82	4.6	--	0.82	
	Tetrahydrofuran	ug/m ³	ND	U	1600	ND	U	1800	ND	U	6900	ND	U	68	ND	U	0.82	ND	U	0.82	
	Toluene	ug/m ³	450000	--	1600	290000	--	1800	940000	--	6900	ND	U	68	100	--	0.82	14	--	0.82	
	Trichloroethene	ug/m ³	1000	J	1600	ND	U	1800	ND	U	6900	ND	U	68	ND	U	0.82	ND	U	0.82	
Trichlorofluoromethane	ug/m ³	ND	U	3100	ND	U	3300	ND	U	13000	ND	U	130	1.5	J	1.5	1.6	J	1.5		
Vinyl chloride	ug/m ³	ND	U	1600	ND	U	1800	ND	U	6900	ND	U	68	ND	U	0.82	ND	U	0.82		
Xylenes, Total	ug/m ³	170000	J	3200	88000	J	3500	260000	--	14000	ND	U	140	76	--	1.6	9.0	--	1.6		

**Table 3-5
Analytical Data in On-Base (Inside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

		Location ID: SVMW-03-100			SVMW-03-250			SVMW-03-300			SVMW-04-050			SVMW-04-050			SVMW-04-100			
		Field Sample ID: SV03-100-204			SV03-250-204			SV03-300-204			SV04-050-204			SV04-050-604			SV04-100-204			
		Sample Date: 10/5/2020			10/5/2020			10/5/2020			10/5/2020			10/5/2020			10/5/2020			
		Sample Type: REG			REG			REG			REG			FD			REG			
Analytical Method	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	ND	U	790	ND	U	3300	ND	U	2600	ND	U	1700	ND	U	1800	ND	U	4200
	1,1-dichloroethane	ug/m ³	ND	U	1500	ND	U	6500	ND	U	5100	ND	U	3400	ND	U	3500	ND	U	8100
	1,2,4-trichlorobenzene	ug/m ³	ND	U	1500	ND	U	6300	ND	U	4900	ND	U	3300	ND	U	3400	ND	U	7900
	1,2,4-trimethylbenzene	ug/m ³	460	J	790	12000	--	3300	24000	--	2600	ND	U	1700	ND	U	1800	9300	J	4200
	1,2-dibromoethane	ug/m ³	ND	U	790	ND	U	3300	ND	U	2600	ND	U	1700	ND	U	1800	9600	J	4200
	1,2-dichloroethane	ug/m ³	ND	U	790	ND	U	3300	ND	U	2600	ND	U	1700	ND	U	1800	ND	U	4200
	1,3,5-trimethylbenzene	ug/m ³	2200	J	790	9200	J	3300	10000	--	2600	ND	U	1700	ND	U	1800	5600	J	4200
	1,3-butadiene	ug/m ³	ND	U	1500	ND	U	6300	ND	U	4900	ND	U	3300	ND	U	3400	ND	U	7900
	1,4-dioxane	ug/m ³	ND	U	790	ND	U	3300	ND	U	2600	ND	U	1700	ND	U	1800	ND	U	4200
	2-butanone	ug/m ³	ND	U	1500	ND	U	6300	ND	U	4900	ND	U	3300	ND	U	3400	ND	U	7900
	2-hexanone	ug/m ³	ND	U	790	ND	U	3300	ND	U	2600	ND	U	1700	ND	U	1800	ND	U	4200
	4-methyl-2-pentanone	ug/m ³	ND	U	790	ND	U	3300	ND	U	2600	ND	U	1700	2300	J	1800	ND	U	4200
	Acetone	ug/m ³	ND	U	13000	ND	U	53000	ND	U	42000	ND	U	28000	ND	U	29000	ND	U	66000
	Benzene	ug/m ³	30000	--	790	440000	--	3300	230000	--	2600	200000	J	1700	110000	J	1800	780000	--	4200
	Bromodichloromethane	ug/m ³	ND	U	790	ND	U	3300	ND	U	2600	ND	U	1700	ND	U	1800	ND	U	4200
	Bromoform	ug/m ³	ND	U	1500	ND	U	6300	ND	U	4900	ND	U	3300	ND	U	3400	ND	U	7900
	Carbon disulfide	ug/m ³	ND	U	2500	ND	U	11000	ND	U	8400	ND	U	5500	ND	U	5800	ND	U	13000
	Carbon tetrachloride	ug/m ³	ND	U	790	ND	U	3300	ND	U	2600	ND	U	1700	ND	U	1800	ND	U	4200
	Chloroethane	ug/m ³	ND	U	1500	ND	U	6300	ND	U	4900	ND	U	3300	ND	U	3400	ND	U	7900
	Chloroform	ug/m ³	ND	U	790	ND	U	3300	ND	U	2600	ND	U	1700	ND	U	1800	ND	U	4200
	Chloromethane	ug/m ³	ND	U	1500	ND	U	6300	ND	U	4900	ND	U	3300	ND	U	3400	ND	U	7900
	Cyclohexane	ug/m ³	1900000	--	7900	1300000	--	6700	940000	--	5300	8400	J	3500	7500	J	3600	2200000	--	8300
	Dibromochloromethane	ug/m ³	ND	U	790	ND	U	3300	ND	U	2600	ND	U	1700	ND	U	1800	ND	U	4200
	Dichlorodifluoromethane	ug/m ³	ND	U	1500	ND	U	6300	ND	U	4900	ND	U	3300	ND	U	3400	ND	U	7900
	ETHANOL	ug/m ³	ND	U	3900	ND	U	16000	ND	U	13000	ND	U	8500	ND	U	8900	10000	J	20000
	Ethyl acetate	ug/m ³	ND	U	3000	ND	U	13000	ND	U	10000	ND	U	6700	ND	U	7000	ND	U	16000
	Ethylbenzene	ug/m ³	12000	--	790	84000	--	3300	75000	--	2600	ND	U	1700	ND	U	1800	120000	--	4200
	Hexane	ug/m ³	890000	--	7400	1400000	--	6300	950000	--	4900	2300	J	3300	3600	J	3400	2200000	--	7900
	Isopropyl alcohol (manufacturing-strong)	ug/m ³	ND	U	2900	ND	U	12000	ND	U	9700	ND	U	6500	ND	U	6700	ND	U	15000
	m,p-Xylene	ug/m ³	17000	--	1600	260000	--	6700	200000	--	5300	ND	U	3500	ND	U	3600	310000	--	8300
	Methylene Chloride	ug/m ³	ND	U	1500	ND	U	6300	ND	U	4900	ND	U	3300	ND	U	3400	ND	U	7900
	Naphthalene	ug/m ³	ND	U	1400	ND	U	6100	ND	U	4800	ND	U	3200	ND	U	3300	ND	U	7600
	n-Heptane	ug/m ³	580000	--	7400	1400000	--	6300	740000	--	4900	2200	J	3300	3500	J	3400	2200000	--	7900
	o-Xylene	ug/m ³	5400	--	790	79000	--	3300	60000	--	2600	ND	U	1700	ND	U	1800	79000	--	4200
	Propylene (propene)	ug/m ³	680	J	1500	ND	U	6300	ND	U	4900	ND	U	3300	ND	U	3400	ND	U	7900
	Styrene	ug/m ³	ND	U	1500	ND	U	6300	ND	U	4900	ND	U	3300	ND	U	3400	ND	U	7900
	Tetrachloroethene	ug/m ³	ND	U	790	ND	U	3300	ND	U	2600	ND	U	1700	ND	U	1800	ND	U	4200
	Tetrahydrofuran	ug/m ³	ND	U	790	ND	U	3300	ND	U	2600	ND	U	1700	ND	U	1800	ND	U	4200
	Toluene	ug/m ³	67000	--	790	980000	--	3300	700000	--	2600	2300	J	1700	3900	J	1800	2000000	--	4200
	Trichloroethene	ug/m ³	ND	U	790	ND	U	3300	ND	U	2600	ND	U	1700	ND	U	1800	1800	J	4200
Trichlorofluoromethane	ug/m ³	ND	U	1500	ND	U	6300	ND	U	4900	ND	U	3300	ND	U	3400	ND	U	7900	
Vinyl chloride	ug/m ³	ND	U	790	ND	U	3300	ND	U	2600	ND	U	1700	ND	U	1800	ND	U	4200	
Xylenes, Total	ug/m ³	22000	--	1600	340000	--	6700	260000	--	5300	ND	U	3500	ND	U	3600	390000	--	8300	

**Table 3-5
Analytical Data in On-Base (Inside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Location ID:		SVMW-04-250			SVMW-04-300			SVMW-08-050			SVMW-08-100			SVMW-08-250			SVMW-09-050			
Field Sample ID:		SV04-250-204			SV04-300-204			SV08-050-204			SV08-100-204			SV08-250-204			SV09-050-204			
Sample Date:		10/5/2020			10/5/2020			10/5/2020			10/5/2020			10/5/2020			10/5/2020			
Sample Type:		REG			REG			REG			REG			REG			REG			
Analytical Method	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	ND	U	6100	ND	U	320	ND	U	520	ND	U	17	ND	U	1400	ND	U	890
	1,1-dichloroethane	ug/m ³	ND	U	12000	ND	U	630	ND	U	1000	ND	U	33	ND	U	2700	ND	U	1700
	1,2,4-trichlorobenzene	ug/m ³	ND	U	11000	ND	U	610	ND	U	970	ND	U	32	ND	U	2600	ND	U	1700
	1,2,4-trimethylbenzene	ug/m ³	3900	J	6100	1300	--	320	2800	--	520	11	J	17	22000	--	1400	ND	U	890
	1,2-dibromoethane	ug/m ³	ND	U	6100	ND	U	320	900	J	520	ND	U	17	6800	--	1400	ND	U	890
	1,2-dichloroethane	ug/m ³	ND	U	6100	ND	U	320	ND	U	520	ND	U	17	ND	U	1400	ND	U	890
	1,3,5-trimethylbenzene	ug/m ³	3700	J	6100	1100	--	320	3000	--	520	ND	U	17	10000	--	1400	ND	U	890
	1,3-butadiene	ug/m ³	ND	U	11000	ND	U	610	ND	U	970	ND	U	32	ND	U	2600	ND	U	1700
	1,4-dioxane	ug/m ³	ND	U	6100	ND	U	320	ND	U	520	ND	U	17	ND	U	1400	ND	U	890
	2-butanone	ug/m ³	ND	U	11000	ND	U	610	ND	U	970	22	J	32	ND	U	2600	ND	U	1700
	2-hexanone	ug/m ³	ND	U	6100	ND	U	320	ND	U	520	ND	U	17	ND	U	1400	ND	U	890
	4-methyl-2-pentanone	ug/m ³	ND	U	6100	ND	U	320	ND	U	520	ND	U	17	ND	U	1400	ND	U	890
	Acetone	ug/m ³	ND	U	96000	ND	U	5200	ND	U	8200	130	J	270	ND	U	22000	ND	U	14000
	Benzene	ug/m ³	970000	--	6100	71000	--	320	140000	--	520	37	J	17	400000	--	1400	ND	U	890
	Bromodichloromethane	ug/m ³	ND	U	6100	ND	U	320	ND	U	520	ND	U	17	ND	U	1400	ND	U	890
	Bromoform	ug/m ³	ND	U	11000	ND	U	610	ND	U	970	ND	U	32	ND	U	2600	ND	U	1700
	Carbon disulfide	ug/m ³	ND	U	19000	ND	U	1000	ND	U	1600	ND	U	53	ND	U	4400	ND	U	2800
	Carbon tetrachloride	ug/m ³	ND	U	6100	ND	U	320	ND	U	520	ND	U	17	ND	U	1400	ND	U	890
	Chloroethane	ug/m ³	ND	U	11000	ND	U	610	ND	U	970	ND	U	32	ND	U	2600	ND	U	1700
	Chloroform	ug/m ³	ND	U	6100	ND	U	320	ND	U	520	ND	U	17	ND	U	1400	ND	U	890
	Chloromethane	ug/m ³	ND	U	11000	ND	U	610	ND	U	970	ND	U	32	ND	U	2600	ND	U	1700
	Cyclohexane	ug/m ³	2900000	--	12000	150000	--	650	310000	--	1000	28	J	34	1000000	--	2800	ND	U	1800
	Dibromochloromethane	ug/m ³	ND	U	6100	ND	U	320	ND	U	520	ND	U	17	ND	U	1400	ND	U	890
	Dichlorodifluoromethane	ug/m ³	ND	U	11000	ND	U	610	ND	U	970	ND	U	32	ND	U	2600	ND	U	1700
	ETHANOL	ug/m ³	ND	U	30000	ND	U	1600	ND	U	2500	ND	U	82	ND	U	6800	ND	U	4400
	Ethyl acetate	ug/m ³	ND	U	23000	ND	U	1200	ND	U	2000	210	--	64	ND	U	5300	ND	U	3400
	Ethylbenzene	ug/m ³	37000	--	6100	820	J	320	5500	--	520	10	J	17	51000	--	1400	ND	U	890
	Hexane	ug/m ³	3500000	--	11000	130000	--	610	190000	--	970	29	J	32	760000	--	2600	ND	U	1700
	Isopropyl alcohol (manufacturing-strong)	ug/m ³	ND	U	22000	ND	U	1200	ND	U	1900	100	--	62	ND	U	5100	ND	U	3300
	m,p-Xylene	ug/m ³	150000	--	12000	6800	--	650	79000	--	1000	91	J	34	170000	--	2800	ND	U	1800
	Methylene Chloride	ug/m ³	ND	U	11000	ND	U	610	ND	U	970	ND	U	32	ND	U	2600	ND	U	1700
	Naphthalene	ug/m ³	ND	U	11000	ND	U	590	ND	U	940	ND	U	31	ND	U	2500	ND	U	1600
	n-Heptane	ug/m ³	2900000	--	11000	150000	--	610	450000	--	2300	150	--	32	560000	--	2600	ND	U	1700
	o-Xylene	ug/m ³	48000	--	6100	2700	--	320	28000	--	520	30	J	17	53000	--	1400	ND	U	890
	Propylene (propene)	ug/m ³	8200	J	11000	440	J	610	1200	J	970	48	J	32	2600	J	2600	ND	U	1700
	Styrene	ug/m ³	ND	U	11000	ND	U	610	ND	U	970	ND	U	32	ND	U	2600	ND	U	1700
	Tetrachloroethene	ug/m ³	ND	U	6100	ND	U	320	ND	U	520	ND	U	17	ND	U	1400	ND	U	890
	Tetrahydrofuran	ug/m ³	ND	U	6100	ND	U	320	ND	U	520	ND	U	17	ND	U	1400	ND	U	890
	Toluene	ug/m ³	670000	--	6100	11000	--	320	140000	--	520	120	--	17	770000	--	1400	490	J	890
	Trichloroethene	ug/m ³	ND	U	6100	ND	U	320	ND	U	520	ND	U	17	ND	U	1400	ND	U	890
Trichlorofluoromethane	ug/m ³	ND	U	11000	ND	U	610	ND	U	970	ND	U	32	ND	U	2600	ND	U	1700	
Vinyl chloride	ug/m ³	ND	U	6100	ND	U	320	ND	U	520	ND	U	17	ND	U	1400	ND	U	890	
Xylenes, Total	ug/m ³	200000	--	12000	9500	--	650	110000	--	1000	120	--	34	230000	--	2800	ND	U	1800	

**Table 3-5
Analytical Data in On-Base (Inside the Source Area) Soil Vapor Monitoring Points, Q4 2020**

Analytical Method	Location ID:		SVMW-09-100			SVMW-09-250			SVMW-09-266		
	Field Sample ID:		SV09-100-204			SV09-250-204			SV09-266-204		
	Sample Date:		10/5/2020			10/5/2020			10/5/2020		
	Sample Type:		REG			REG			REG		
	Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m ³	ND	U	2100	ND	U	410	ND	U	3300
	1,1-dichloroethane	ug/m ³	ND	U	4200	ND	U	810	ND	U	6500
	1,2,4-trichlorobenzene	ug/m ³	ND	U	4000	ND	U	780	ND	U	6300
	1,2,4-trimethylbenzene	ug/m ³	20000	--	2100	4000	--	410	28000	--	3300
	1,2-dibromoethane	ug/m ³	12000	--	2100	5700	--	410	11000	--	3300
	1,2-dichloroethane	ug/m ³	ND	U	2100	ND	U	410	ND	U	3300
	1,3,5-trimethylbenzene	ug/m ³	12000	--	2100	3300	--	410	13000	--	3300
	1,3-butadiene	ug/m ³	ND	U	4000	ND	U	780	ND	U	6300
	1,4-dioxane	ug/m ³	ND	U	2100	ND	U	410	ND	U	3300
	2-butanone	ug/m ³	ND	U	4000	ND	U	780	ND	U	6300
	2-hexanone	ug/m ³	ND	U	2100	ND	U	410	ND	U	3300
	4-methyl-2-pentanone	ug/m ³	ND	U	2100	ND	U	410	ND	U	3300
	Acetone	ug/m ³	ND	U	34000	ND	U	6600	ND	U	53000
	Benzene	ug/m ³	570000	--	2100	48000	--	410	890000	--	3300
	Bromodichloromethane	ug/m ³	ND	U	2100	ND	U	410	ND	U	3300
	Bromoform	ug/m ³	ND	U	4000	ND	U	780	ND	U	6300
	Carbon disulfide	ug/m ³	ND	U	6800	ND	U	1300	ND	U	11000
	Carbon tetrachloride	ug/m ³	ND	U	2100	ND	U	410	ND	U	3300
	Chloroethane	ug/m ³	ND	U	4000	ND	U	780	ND	U	6300
	Chloroform	ug/m ³	ND	U	2100	ND	U	410	ND	U	3300
	Chloromethane	ug/m ³	ND	U	4000	ND	U	780	ND	U	6300
	Cyclohexane	ug/m ³	1200000	--	4300	110000	--	830	2000000	--	6700
	Dibromochloromethane	ug/m ³	ND	U	2100	ND	U	410	ND	U	3300
	Dichlorodifluoromethane	ug/m ³	ND	U	4000	ND	U	780	ND	U	6300
	ETHANOL	ug/m ³	ND	U	10000	ND	U	2000	ND	U	16000
	Ethyl acetate	ug/m ³	ND	U	8200	ND	U	1600	ND	U	13000
	Ethylbenzene	ug/m ³	120000	--	2100	34000	--	410	150000	--	3300
	Hexane	ug/m ³	1300000	--	4000	95000	--	780	2000000	--	13000
	Isopropyl alcohol (manufacturing-strong)	ug/m ³	ND	U	7900	ND	U	1500	ND	U	12000
	m,p-Xylene	ug/m ³	340000	--	4300	160000	--	830	390000	--	6700
	Methylene Chloride	ug/m ³	ND	U	4000	ND	U	780	ND	U	6300
	Naphthalene	ug/m ³	ND	U	3900	ND	U	760	ND	U	6100
	n-Heptane	ug/m ³	1300000	--	4000	290000	--	3900	1700000	--	13000
	o-Xylene	ug/m ³	110000	--	2100	44000	--	410	110000	--	3300
	Propylene (propene)	ug/m ³	3200	J	4000	1300	--	780	5700	J	6300
	Styrene	ug/m ³	ND	U	4000	ND	U	780	ND	U	6300
	Tetrachloroethene	ug/m ³	ND	U	2100	ND	U	410	ND	U	3300
	Tetrahydrofuran	ug/m ³	ND	U	2100	ND	U	410	ND	U	3300
	Toluene	ug/m ³	1300000	--	2100	400000	--	2100	2000000	--	3300
	Trichloroethene	ug/m ³	ND	U	2100	ND	U	410	ND	U	3300
Trichlorofluoromethane	ug/m ³	ND	U	4000	ND	U	780	ND	U	6300	
Vinyl chloride	ug/m ³	ND	U	2100	ND	U	410	ND	U	3300	
Xylenes, Total	ug/m ³	450000	--	4300	210000	--	830	490000	--	6700	

Table 3-5
Analytical Data in On-Base (Inside the Source Area) Soil Vapor Monitoring Points, Q4 2020

$\mu\text{g}/\text{m}^3$ = microgram per cubic meter

FD = field duplicate

ID = identification

LOD = limit of detection

ND = not detected

Q4 = Fourth Quarter

REG = normal field sample

Val Qual = validation qualifier

VOC = volatile organic compound

Shading = detected concentrations above the detection limit

Val Quals based on independent data validation

J = Qualifier denotes the analyte was positively identified, but the associated numerical value is estimated.

U = Qualifier denotes the analyte was analyzed but not detected above the detection limit. The value associated with the U-qualifier is the limit of detection.

-- = Validation qualifier not assigned.

**Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020**

Analytical Method	Location ID:		NMED Residential Soil Gas VISL ¹	KAFB-106108-025 SV108-025-204 10/19/2020 REG			KAFB-106109-025 SV109-025-204 10/13/2020 REG			KAFB-106110-025 SV110-025-204 10/13/2020 REG			KAFB-106111-025 SV111-025-204 10/6/2020 REG		
	Field Sample ID:			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
	Sample Date:														
	Sample Type:														
Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD		
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	µg/m ³	1.04E+06	99	--	0.78	7	--	0.69	5.8	--	0.69	21	--	0.87
	1,1-dichloroethane	µg/m ³	5.85E+02	ND	U	1.5	ND	U	1.3	ND	U	1.3	ND	U	1.7
	1,2,4-trichlorobenzene	µg/m ³	6.95E+01	ND	U	1.5	ND	U	1.3	ND	U	1.3	ND	U	1.6
	1,2,4-trimethylbenzene	µg/m ³	NS	3	--	0.78	0.73	J	0.69	ND	U	0.69	4.5	--	0.87
	1,2-dibromoethane	µg/m ³	1.56E+00	ND	U	0.78	ND	U	0.69	ND	U	0.69	ND	U	0.87
	1,2-dichloroethane	µg/m ³	3.60E+01	ND	U	0.78	ND	U	0.69	ND	U	0.69	ND	U	0.87
	1,3,5-trimethylbenzene	µg/m ³	NS	0.56	J	0.78	ND	U	0.69	ND	U	0.69	1.3	J	0.87
	1,3-butadiene	µg/m ³	3.12E+01	ND	U	1.5	ND	U	1.3	ND	U	1.3	ND	U	1.6
	1,4-dioxane	µg/m ³	1.87E+02	ND	U	0.78	ND	U	0.69	ND	U	0.69	ND	U	0.87
	2-butanone	µg/m ³	1.74E+05	ND	U	1.5	2.5	J	1.3	2.7	J	1.3	1.9	J	1.6
	2-hexanone	µg/m ³	NS	ND	U	0.78	ND	U	0.69	ND	U	0.69	ND	U	0.87
	4-methyl-2-pentanone	µg/m ³	1.04E+05	ND	U	0.78	ND	U	0.69	ND	U	0.69	ND	U	0.87
	Acetone	µg/m ³	1.08E+06	24	--	12	8.8	J	11	11	J	11	30	--	14
	Benzene	µg/m ³	1.20E+02	0.51	J	0.78	0.54	J	0.69	ND	U	0.69	0.44	J	0.87
	Bromodichloromethane	µg/m ³	2.53E+01	ND	U	0.78	ND	U	0.69	ND	U	0.69	ND	U	0.87
	Bromoform	µg/m ³	8.51E+02	ND	U	1.5	ND	U	1.3	ND	U	1.3	ND	U	1.6
	Carbon disulfide	µg/m ³	2.43E+04	ND	U	2.5	ND	U	2.2	4.9	--	2.2	11	--	2.8
	Carbon tetrachloride	µg/m ³	1.56E+02	8.7	--	0.78	ND	U	0.69	4.2	--	0.69	19	--	0.87
	Chloroethane	µg/m ³	3.48E+05	ND	U	1.5	ND	U	1.3	ND	U	1.3	ND	U	1.6
	Chloroform	µg/m ³	4.07E+01	0.49	J	0.78	ND	U	0.69	ND	U	0.69	ND	U	0.87
Chloromethane	µg/m ³	5.20E+02	ND	U	1.5	ND	U	1.3	ND	U	1.3	ND	U	1.6	
Cyclohexane	µg/m ³	NS	3.4	J	1.6	1.3	J	1.4	ND	U	1.4	ND	U	1.7	

**Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020**

Analytical Method	Location ID:		NMED Residential Soil Gas VISL ¹	KAFB-106108-025 SV108-025-204 10/19/2020 REG			KAFB-106109-025 SV109-025-204 10/13/2020 REG			KAFB-106110-025 SV110-025-204 10/13/2020 REG			KAFB-106111-025 SV111-025-204 10/6/2020 REG		
	Field Sample ID:			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
	Sample Date:														
	Sample Type:														
Analyte	Units		Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	Dibromochloromethane	µg/m ³	3.47E+01	ND	U	0.78	ND	U	0.69	ND	U	0.69	ND	U	0.87
	Dichlorodifluoromethane	µg/m ³	3.48E+03	3.6	--	1.5	2.3	--	1.3	3.7	--	1.3	8.3	--	1.6
	Ethanol	µg/m ³	NS	ND	U	3.8	6.7	J	3.4	3.2	J	3.4	ND	U	4.3
	Ethyl acetate	µg/m ³	2.43E+03	ND	U	3	11	--	2.6	ND	U	2.6	ND	U	3.3
	Ethylbenzene	µg/m ³	3.74E+02	ND	U	0.78	ND	U	0.69	ND	U	0.69	0.74	J	0.87
	Hexane	µg/m ³	2.43E+04	0.58	J	1.5	3	--	1.3	ND	U	1.3	ND	U	1.6
	Isopropyl alcohol (manufacturing-strong acid)	µg/m ³	NS	ND	U	2.9	ND	U	2.6	ND	U	2.6	ND	U	3.2
	m,p-Xylene	µg/m ³	3.48E+03	1.7	J	1.6	1.5	J	1.4	ND	U	1.4	4.8	J	1.7
	Methylene Chloride	µg/m ³	2.09E+04	ND	U	1.5	0.84	J	1.3	ND	U	1.3	ND	U	1.6
	Naphthalene	µg/m ³	2.75E+01	ND	U	1.4	ND	U	1.3	ND	U	1.3	0.94	J	1.6
	n-Heptane	µg/m ³	NS	0.77	J	1.5	6.2	--	1.3	ND	U	1.3	1.5	J	1.6
	o-Xylene	µg/m ³	3.48E+03	0.53	J	0.78	0.5	J	0.69	ND	U	0.69	1.8	J	0.87
	Propylene (propene)	µg/m ³	NS	ND	U	1.5	ND	U	1.3	0.53	J	1.3	ND	U	1.6
	Styrene	µg/m ³	NS	ND	U	1.5	ND	U	1.3	ND	U	1.3	ND	U	1.6
	Tetrachloroethene	µg/m ³	1.39E+03	1.4	J	0.78	3	--	0.69	1.2	J	0.69	2.8	--	0.87
	Tetrahydrofuran	µg/m ³	NS	ND	U	0.78	ND	U	0.69	ND	U	0.69	ND	U	0.87
	Toluene	µg/m ³	1.74E+05	1.6	J	0.78	2.6	--	0.69	0.51	J	0.69	1.7	J	0.87
	Trichloroethene	µg/m ³	6.95E+01	ND	U	0.78	ND	U	0.69	ND	U	0.69	ND	U	0.87
	Trichlorofluoromethane	µg/m ³	2.43E+04	1.7	J	1.5	1.2	J	1.3	1.2	J	1.3	1.8	J	1.6
	Vinyl chloride	µg/m ³	5.59E+01	ND	U	0.78	ND	U	0.69	ND	U	0.69	ND	U	0.87
	Xylenes, Total	µg/m ³	3.48E+03	2.2	J	1.6	2	J	1.4	ND	U	1.4	6.6	--	1.7

**Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020**

Analytical Method	Location ID:		NMED Residential Soil Gas VISL ¹	KAFB-106112-025 SV112-025-204 10/19/2020 REG			KAFB-106113-020 SV113-020-204 10/13/2020 REG			KAFB-106114-025 SV114-025-204 10/6/2020 REG			KAFB-106115-025 SV115-025-204 10/13/2020 REG		
	Field Sample ID:			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
	Sample Date:														
	Sample Type:			Units											
Analyte	Units		Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	µg/m ³	1.04E+06	21	--	0.78	0.86	J	0.99	13	--	1.2	0.48	J	0.79
	1,1-dichloroethane	µg/m ³	5.85E+02	ND	U	1.5	ND	U	1.9	ND	U	2.3	ND	U	1.5
	1,2,4-trichlorobenzene	µg/m ³	6.95E+01	ND	U	1.5	ND	U	1.9	ND	U	2.2	ND	U	1.5
	1,2,4-trimethylbenzene	µg/m ³	NS	1.7	J	0.78	ND	U	0.99	4.5	--	1.2	3.6	--	0.79
	1,2-dibromoethane	µg/m ³	1.56E+00	ND	U	0.78	ND	U	0.99	ND	U	1.2	ND	U	0.79
	1,2-dichloroethane	µg/m ³	3.60E+01	ND	U	0.78	ND	U	0.99	ND	U	1.2	ND	U	0.79
	1,3,5-trimethylbenzene	µg/m ³	NS	0.38	J	0.78	ND	U	0.99	1.2	J	1.2	2.6	--	0.79
	1,3-butadiene	µg/m ³	3.12E+01	ND	U	1.5	ND	U	1.9	ND	U	2.2	ND	U	1.5
	1,4-dioxane	µg/m ³	1.87E+02	0.73	J	0.78	ND	U	0.99	ND	U	1.2	ND	U	0.79
	2-butanone	µg/m ³	1.74E+05	8.3	--	1.5	2.1	J	1.9	46	--	2.2	4	J	1.5
	2-hexanone	µg/m ³	NS	1.2	J	0.78	ND	U	0.99	6.2	J	1.2	ND	U	0.79
	4-methyl-2-pentanone	µg/m ³	1.04E+05	0.41	J	0.78	ND	U	0.99	1.7	J	1.2	ND	U	0.79
	Acetone	µg/m ³	1.08E+06	44	--	12	14	J	16	110	--	19	15	J	13
	Benzene	µg/m ³	1.20E+02	0.44	J	0.78	1.1	J	0.99	4	--	1.2	0.73	J	0.79
	Bromodichloromethane	µg/m ³	2.53E+01	ND	U	0.78	ND	U	0.99	ND	U	1.2	ND	U	0.79
	Bromoform	µg/m ³	8.51E+02	ND	U	1.5	ND	U	1.9	ND	U	2.2	ND	U	1.5
	Carbon disulfide	µg/m ³	2.43E+04	3.8	J	2.5	7.9	--	3.1	4.3	J	3.7	0.75	J	2.5
	Carbon tetrachloride	µg/m ³	1.56E+02	9.1	--	0.78	1.1	J	0.99	7.7	--	1.2	1.5	J	0.79
	Chloroethane	µg/m ³	3.48E+05	ND	U	1.5	ND	U	1.9	ND	U	2.2	ND	U	1.5
	Chloroform	µg/m ³	4.07E+01	15	--	0.78	ND	U	0.99	0.5	J	1.2	0.39	J	0.79
	Chloromethane	µg/m ³	5.20E+02	ND	U	1.5	ND	U	1.9	ND	U	2.2	ND	U	1.5
	Cyclohexane	µg/m ³	NS	ND	U	1.6	ND	U	2	1.3	J	2.3	ND	U	1.6

**Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020**

Analytical Method	Location ID:		NMED Residential Soil Gas VISL ¹	KAFB-106112-025 SV112-025-204 10/19/2020 REG			KAFB-106113-020 SV113-020-204 10/13/2020 REG			KAFB-106114-025 SV114-025-204 10/6/2020 REG			KAFB-106115-025 SV115-025-204 10/13/2020 REG		
	Field Sample ID:			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
	Sample Date:														
	Sample Type:														
Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD		
VOCs by EPA method TO-15	Dibromochloromethane	µg/m ³	3.47E+01	ND	U	0.78	ND	U	0.99	ND	U	1.2	ND	U	0.79
	Dichlorodifluoromethane	µg/m ³	3.48E+03	10	--	1.5	3.2	--	1.9	95	--	2.2	2.4	--	1.5
	Ethanol	µg/m ³	NS	12	J	3.8	12	J	4.8	27	J	5.7	10	J	3.9
	Ethyl acetate	µg/m ³	2.43E+03	ND	U	3	41	J	3.8	160	--	4.5	ND	U	3
	Ethylbenzene	µg/m ³	3.74E+02	ND	U	0.78	ND	U	0.99	4.1	--	1.2	0.98	J	0.79
	Hexane	µg/m ³	2.43E+04	0.58	J	1.5	ND	U	1.9	1.5	J	2.2	ND	U	1.5
	Isopropyl alcohol (manufacturing-strong acid)	µg/m ³	NS	ND	U	2.9	ND	U	3.7	4.7	J	4.3	1	J	2.9
	m,p-Xylene	µg/m ³	3.48E+03	1.2	J	1.6	1	J	2	14	--	2.3	4.6	J	1.6
	Methylene Chloride	µg/m ³	2.09E+04	0.74	J	1.5	ND	U	1.9	1.4	J	2.2	0.74	J	1.5
	Naphthalene	µg/m ³	2.75E+01	ND	U	1.4	ND	U	1.8	2.4	J	2.1	0.77	J	1.4
	n-Heptane	µg/m ³	NS	0.57	J	1.5	ND	U	1.9	2.8	J	2.2	0.92	J	1.5
	o-Xylene	µg/m ³	3.48E+03	0.46	J	0.78	ND	U	0.99	4.9	--	1.2	2.3	J	0.79
	Propylene (propene)	µg/m ³	NS	1.6	J	1.5	ND	U	1.9	2.6	J	2.2	1.2	J	1.5
	Styrene	µg/m ³	NS	ND	U	1.5	ND	U	1.9	ND	U	2.2	ND	U	1.5
	Tetrachloroethene	µg/m ³	1.39E+03	1.7	J	0.78	0.54	J	0.99	1	J	1.2	0.44	J	0.79
	Tetrahydrofuran	µg/m ³	NS	3.6	J	0.78	ND	U	0.99	2.3	J	1.2	ND	U	0.79
	Toluene	µg/m ³	1.74E+05	1.3	J	0.78	2.6	J	0.99	26	--	1.2	5.3	--	0.79
	Trichloroethene	µg/m ³	6.95E+01	ND	U	0.78	ND	U	0.99	ND	U	1.2	ND	U	0.79
	Trichlorofluoromethane	µg/m ³	2.43E+04	2.9	--	1.5	1.1	J	1.9	13	--	2.2	1.3	J	1.5
	Vinyl chloride	µg/m ³	5.59E+01	ND	U	0.78	ND	U	0.99	ND	U	1.2	ND	U	0.79
Xylenes, Total	µg/m ³	3.48E+03	1.7	J	1.6	1	J	2	19	--	2.3	6.9	--	1.6	

**Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020**

Analytical Method	Location ID:		NMED Residential Soil Gas VISL ¹	KAFB-106115-025 SV115-025-604 10/13/2020 FD			KAFB-106116-025 SV116-025-204 10/6/2020 REG			KAFB-106117-025 SV117-025-204 10/6/2020 REG			KAFB-106118-025 SV118-025-204 10/19/2020 REG		
	Field Sample ID:			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
	Sample Date:														
	Sample Type:														
Analyte	Units		Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	µg/m ³	1.04E+06	0.57	J	0.84	13	--	0.82	23	--	0.72	25	--	0.82
	1,1-dichloroethane	µg/m ³	5.85E+02	ND	U	1.6	ND	U	1.6	ND	U	1.4	ND	U	1.6
	1,2,4-trichlorobenzene	µg/m ³	6.95E+01	ND	U	1.6	ND	U	1.6	ND	U	1.4	ND	U	1.5
	1,2,4-trimethylbenzene	µg/m ³	NS	6.3	--	0.84	0.88	J	0.82	8.2	--	0.72	0.49	J	0.82
	1,2-dibromoethane	µg/m ³	1.56E+00	ND	U	0.84	ND	U	0.82	ND	U	0.72	ND	U	0.82
	1,2-dichloroethane	µg/m ³	3.60E+01	ND	U	0.84	ND	U	0.82	ND	U	0.72	ND	U	0.82
	1,3,5-trimethylbenzene	µg/m ³	NS	4.7	--	0.84	ND	U	0.82	6.2	--	0.72	ND	U	0.82
	1,3-butadiene	µg/m ³	3.12E+01	ND	U	1.6	ND	U	1.6	ND	U	1.4	ND	U	1.5
	1,4-dioxane	µg/m ³	1.87E+02	ND	U	0.84	ND	U	0.82	ND	U	0.72	2.2	J	0.82
	2-butanone	µg/m ³	1.74E+05	4	J	1.6	ND	U	1.6	7.2	--	1.4	0.8	J	1.5
	2-hexanone	µg/m ³	NS	ND	U	0.84	ND	U	0.82	ND	U	0.72	ND	U	0.82
	4-methyl-2-pentanone	µg/m ³	1.04E+05	ND	U	0.84	ND	U	0.82	ND	U	0.72	ND	U	0.82
	Acetone	µg/m ³	1.08E+06	18	J	13	ND	U	13	46	--	11	5.8	J	13
	Benzene	µg/m ³	1.20E+02	1.9	J	0.84	ND	U	0.82	2.5	--	0.72	0.5	J	0.82
	Bromodichloromethane	µg/m ³	2.53E+01	ND	U	0.84	ND	U	0.82	ND	U	0.72	ND	U	0.82
	Bromoform	µg/m ³	8.51E+02	ND	U	1.6	ND	U	1.6	ND	U	1.4	ND	U	1.5
	Carbon disulfide	µg/m ³	2.43E+04	1.3	J	2.7	0.85	J	2.6	4.5	--	2.3	3.2	J	2.6
	Carbon tetrachloride	µg/m ³	1.56E+02	1.5	J	0.84	1.6	J	0.82	4.9	--	0.72	9.5	--	0.82
	Chloroethane	µg/m ³	3.48E+05	ND	U	1.6	ND	U	1.6	ND	U	1.4	ND	U	1.5
	Chloroform	µg/m ³	4.07E+01	0.4	J	0.84	0.45	J	0.82	ND	U	0.72	1.1	J	0.82
	Chloromethane	µg/m ³	5.20E+02	ND	U	1.6	ND	U	1.6	ND	U	1.4	ND	U	1.5
	Cyclohexane	µg/m ³	NS	0.95	J	1.7	ND	U	1.6	7.2	--	1.4	ND	U	1.6

**Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020**

Analytical Method	Location ID:		NMED Residential Soil Gas VISL ¹	KAFB-106115-025 SV115-025-604 10/13/2020 FD			KAFB-106116-025 SV116-025-204 10/6/2020 REG			KAFB-106117-025 SV117-025-204 10/6/2020 REG			KAFB-106118-025 SV118-025-204 10/19/2020 REG		
	Field Sample ID:			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
	Sample Date:														
	Sample Type:														
Analyte	Units		Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	Dibromochloromethane	µg/m ³	3.47E+01	ND	U	0.84	ND	U	0.82	ND	U	0.72	ND	U	0.82
	Dichlorodifluoromethane	µg/m ³	3.48E+03	2.5	J	1.6	27	--	1.6	23	--	1.4	6.9	--	1.5
	Ethanol	µg/m ³	NS	12	J	4.1	ND	U	4	8.6	J	3.5	2.4	J	4
	Ethyl acetate	µg/m ³	2.43E+03	ND	U	3.2	ND	U	3.2	34	--	2.8	10	--	3.1
	Ethylbenzene	µg/m ³	3.74E+02	1.8	J	0.84	ND	U	0.82	3.7	--	0.72	ND	U	0.82
	Hexane	µg/m ³	2.43E+04	1	J	1.6	ND	U	1.6	6.1	--	1.4	0.83	J	1.5
	Isopropyl alcohol (manufacturing-strong acid)	µg/m ³	NS	ND	U	3.1	ND	U	3.1	1.7	J	2.7	ND	U	3
	m,p-Xylene	µg/m ³	3.48E+03	9.1	--	1.7	ND	U	1.6	20	--	1.4	ND	U	1.6
	Methylene Chloride	µg/m ³	2.09E+04	0.88	J	1.6	ND	U	1.6	ND	U	1.4	ND	U	1.5
	Naphthalene	µg/m ³	2.75E+01	0.86	J	1.5	0.94	J	1.5	0.88	J	1.3	ND	U	1.5
	n-Heptane	µg/m ³	NS	2.5	J	1.6	ND	U	1.6	26	--	1.4	0.65	J	1.5
	o-Xylene	µg/m ³	3.48E+03	4.2	--	0.84	ND	U	0.82	15	--	0.72	ND	U	0.82
	Propylene (propene)	µg/m ³	NS	1.4	J	1.6	ND	U	1.6	0.85	J	1.4	ND	U	1.5
	Styrene	µg/m ³	NS	ND	U	1.6	ND	U	1.6	ND	U	1.4	ND	U	1.5
	Tetrachloroethene	µg/m ³	1.39E+03	0.47	J	0.84	ND	U	0.82	1.1	J	0.72	0.6	J	0.82
	Tetrahydrofuran	µg/m ³	NS	ND	U	0.84	0.35	J	0.82	1.3	J	0.72	0.86	J	0.82
	Toluene	µg/m ³	1.74E+05	12	--	0.84	0.62	J	0.82	18	--	0.72	0.48	J	0.82
	Trichloroethene	µg/m ³	6.95E+01	ND	U	0.84	ND	U	0.82	ND	U	0.72	ND	U	0.82
	Trichlorofluoromethane	µg/m ³	2.43E+04	1.2	J	1.6	4	--	1.6	4	--	1.4	4.4	--	1.5
	Vinyl chloride	µg/m ³	5.59E+01	ND	U	0.84	ND	U	0.82	ND	U	0.72	ND	U	0.82
	Xylenes, Total	µg/m ³	3.48E+03	13	--	1.7	ND	U	1.6	34	--	1.4	ND	U	1.6

**Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020**

Analytical Method	Location ID:		NMED Residential Soil Gas VISL ¹	KAFB-106119-025 SV119-025-204 10/20/2020 REG			KAFB-106120-025 SV120-025-204 10/12/2020 REG			KAFB-106120-025 SV120-025-604 10/12/2020 FD			KAFB-106121-025 SV121-025-204 10/12/2020 REG		
	Field Sample ID:			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
	Sample Date:														
	Sample Type:														
Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD		
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	µg/m ³	1.04E+06	120	--	0.89	0.46	J	0.79	0.41	J	0.71	0.65	J	0.74
	1,1-dichloroethane	µg/m ³	5.85E+02	ND	U	1.7	ND	U	1.5	ND	U	1.4	ND	U	1.4
	1,2,4-trichlorobenzene	µg/m ³	6.95E+01	ND	U	1.7	0.67	J	1.5	ND	U	1.3	ND	U	1.4
	1,2,4-trimethylbenzene	µg/m ³	NS	0.47	J	0.89	2.3	J	0.79	1	J	0.71	ND	U	0.74
	1,2-dibromoethane	µg/m ³	1.56E+00	ND	U	0.89	ND	U	0.79	ND	U	0.71	ND	U	0.74
	1,2-dichloroethane	µg/m ³	3.60E+01	ND	U	0.89	ND	U	0.79	ND	U	0.71	ND	U	0.74
	1,3,5-trimethylbenzene	µg/m ³	NS	0.55	J	0.89	0.74	J	0.79	0.33	J	0.71	ND	U	0.74
	1,3-butadiene	µg/m ³	3.12E+01	ND	U	1.7	ND	U	1.5	ND	U	1.3	ND	U	1.4
	1,4-dioxane	µg/m ³	1.87E+02	0.5	J	0.89	1.1	J	0.79	ND	U	0.71	ND	U	0.74
	2-butanone	µg/m ³	1.74E+05	3.5	J	1.7	5	--	1.5	2.2	J	1.3	ND	U	1.4
	2-hexanone	µg/m ³	NS	ND	U	0.89	1.4	J	0.79	0.55	J	0.71	ND	U	0.74
	4-methyl-2-pentanone	µg/m ³	1.04E+05	ND	U	0.89	ND	U	0.79	ND	U	0.71	ND	U	0.74
	Acetone	µg/m ³	1.08E+06	19	J	14	15	J	12	13	J	11	12	J	12
	Benzene	µg/m ³	1.20E+02	0.98	J	0.89	1.6	J	0.79	0.85	J	0.71	ND	U	0.74
	Bromodichloromethane	µg/m ³	2.53E+01	ND	U	0.89	37	--	0.79	38	--	0.71	48	--	0.74
	Bromoform	µg/m ³	8.51E+02	ND	U	1.7	ND	U	1.5	ND	U	1.3	ND	U	1.4
	Carbon disulfide	µg/m ³	2.43E+04	25	--	2.8	25	--	2.5	1.8	J	2.3	0.79	J	2.3
	Carbon tetrachloride	µg/m ³	1.56E+02	2.7	--	0.89	1.2	J	0.79	1.1	J	0.71	11	--	0.74
	Chloroethane	µg/m ³	3.48E+05	ND	U	1.7	ND	U	1.5	ND	U	1.3	ND	U	1.4
	Chloroform	µg/m ³	4.07E+01	0.61	J	0.89	130	--	0.79	130	--	0.71	640	--	7.4
Chloromethane	µg/m ³	5.20E+02	ND	U	1.7	ND	UJ	1.5	ND	U	1.3	ND	U	1.4	
Cyclohexane	µg/m ³	NS	5.3	--	1.8	ND	U	1.6	ND	U	1.4	ND	U	1.5	

**Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020**

Analytical Method	Location ID:		NMED Residential Soil Gas VISL ¹	KAFB-106119-025 SV119-025-204 10/20/2020 REG			KAFB-106120-025 SV120-025-204 10/12/2020 REG			KAFB-106120-025 SV120-025-604 10/12/2020 FD			KAFB-106121-025 SV121-025-204 10/12/2020 REG		
	Field Sample ID:			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
	Sample Date:														
	Sample Type:														
Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD		
VOCs by EPA method TO-15	Dibromochloromethane	µg/m ³	3.47E+01	ND	U	0.89	1.2	J	0.79	1.3	J	0.71	1.7	J	0.74
	Dichlorodifluoromethane	µg/m ³	3.48E+03	8.2	--	1.7	2.3	J	1.5	2.2	--	1.3	3.4	--	1.4
	Ethanol	µg/m ³	NS	4.6	J	4.4	2.3	J	3.8	3.1	J	3.5	82	--	3.6
	Ethyl acetate	µg/m ³	2.43E+03	ND	U	3.4	ND	U	3	ND	U	2.7	ND	U	2.8
	Ethylbenzene	µg/m ³	3.74E+02	0.81	J	0.89	1.7	J	0.79	0.78	J	0.71	ND	U	0.74
	Hexane	µg/m ³	2.43E+04	ND	U	1.7	1.5	J	1.5	0.67	J	1.3	ND	U	1.4
	Isopropyl alcohol (manufacturing-strong acid)	µg/m ³	NS	ND	U	3.3	ND	U	2.9	ND	U	2.6	ND	U	2.7
	m,p-Xylene	µg/m ³	3.48E+03	5.9	--	1.8	7.6	--	1.6	3.2	J	1.4	0.67	J	1.5
	Methylene Chloride	µg/m ³	2.09E+04	ND	U	1.7	ND	U	1.5	ND	U	1.3	ND	U	1.4
	Naphthalene	µg/m ³	2.75E+01	ND	U	1.6	1	J	1.4	ND	U	1.3	ND	U	1.3
	n-Heptane	µg/m ³	NS	ND	U	1.7	3	--	1.5	1.2	J	1.3	ND	U	1.4
	o-Xylene	µg/m ³	3.48E+03	1.5	J	0.89	2.2	J	0.79	1	J	0.71	ND	U	0.74
	Propylene (propene)	µg/m ³	NS	1.2	J	1.7	0.79	J	1.5	0.69	J	1.3	ND	U	1.4
	Styrene	µg/m ³	NS	ND	U	1.7	0.69	J	1.5	ND	U	1.3	ND	U	1.4
	Tetrachloroethene	µg/m ³	1.39E+03	3.5	--	0.89	1.8	J	0.79	1.7	J	0.71	4.6	--	0.74
	Tetrahydrofuran	µg/m ³	NS	ND	U	0.89	4	J	0.79	1.4	J	0.71	ND	U	0.74
	Toluene	µg/m ³	1.74E+05	11	--	0.89	10	--	0.79	5.3	--	0.71	0.83	J	0.74
	Trichloroethene	µg/m ³	6.95E+01	ND	U	0.89	0.56	J	0.79	0.55	J	0.71	2.5	--	0.74
	Trichlorofluoromethane	µg/m ³	2.43E+04	2.9	--	1.7	1.1	J	1.5	1	J	1.3	1.2	J	1.4
	Vinyl chloride	µg/m ³	5.59E+01	ND	U	0.89	ND	U	0.79	ND	U	0.71	ND	U	0.74
Xylenes, Total	µg/m ³	3.48E+03	7.3	--	1.8	9.7	--	1.6	4.2	J	1.4	0.67	J	1.5	

**Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020**

Analytical Method	Location ID:		NMED Residential Soil Gas VISL ¹	KAFB-106122-025 SV122-025-204 10/12/2020 REG			KAFB-106123-025 SV123-025-204 10/12/2020 REG			KAFB-106124-025 SV124-025-204 10/5/2020 REG			KAFB-106125-025 SV125-025-204 10/5/2020 REG		
	Field Sample ID:			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
	Sample Date:														
	Sample Type:														
Analyte	Units														
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	µg/m ³	1.04E+06	ND	U	0.91	0.44	J	0.77	0.45	J	0.75	ND	U	1.3
	1,1-dichloroethane	µg/m ³	5.85E+02	ND	U	1.8	ND	U	1.5	ND	U	1.5	ND	U	2.4
	1,2,4-trichlorobenzene	µg/m ³	6.95E+01	ND	U	1.7	ND	U	1.4	ND	U	1.4	ND	U	2.4
	1,2,4-trimethylbenzene	µg/m ³	NS	2.3	J	0.91	0.36	J	0.77	6.4	--	0.75	1.2	J	1.3
	1,2-dibromoethane	µg/m ³	1.56E+00	ND	U	0.91	ND	U	0.77	ND	U	0.75	ND	U	1.3
	1,2-dichloroethane	µg/m ³	3.60E+01	ND	U	0.91	ND	U	0.77	ND	U	0.75	ND	U	1.3
	1,3,5-trimethylbenzene	µg/m ³	NS	0.62	J	0.91	ND	U	0.77	1.2	J	0.75	ND	U	1.3
	1,3-butadiene	µg/m ³	3.12E+01	ND	U	1.7	ND	U	1.4	ND	U	1.4	ND	U	2.4
	1,4-dioxane	µg/m ³	1.87E+02	ND	U	0.91	ND	U	0.77	1.3	J	0.75	ND	U	1.3
	2-butanone	µg/m ³	1.74E+05	3.9	J	1.7	6.7	--	1.4	2.2	J	1.4	ND	U	2.4
	2-hexanone	µg/m ³	NS	3.6	J	0.91	1.6	J	0.77	0.79	J	0.75	ND	U	1.3
	4-methyl-2-pentanone	µg/m ³	1.04E+05	ND	U	0.91	ND	U	0.77	ND	U	0.75	ND	U	1.3
	Acetone	µg/m ³	1.08E+06	11	J	15	25	--	12	12	J	12	11	J	20
	Benzene	µg/m ³	1.20E+02	1.6	J	0.91	ND	U	0.77	1.5	J	0.75	ND	U	1.3
	Bromodichloromethane	µg/m ³	2.53E+01	7.1	--	0.91	120	--	0.77	21	--	0.75	42	--	1.3
	Bromoform	µg/m ³	8.51E+02	ND	U	1.7	ND	U	1.4	ND	U	1.4	ND	U	2.4
	Carbon disulfide	µg/m ³	2.43E+04	6.7	--	2.9	5.9	--	2.4	15	--	2.4	1.7	J	4
	Carbon tetrachloride	µg/m ³	1.56E+02	1.3	J	0.91	2.6	--	0.77	0.7	J	0.75	1.7	J	1.3
	Chloroethane	µg/m ³	3.48E+05	ND	U	1.7	ND	U	1.4	ND	U	1.4	ND	U	2.4
	Chloroform	µg/m ³	4.07E+01	81	--	0.91	270	--	0.77	120	--	0.75	390	--	1.3
Chloromethane	µg/m ³	5.20E+02	ND	U	1.7	ND	U	1.4	ND	U	1.4	ND	U	2.4	
Cyclohexane	µg/m ³	NS	1.2	J	1.8	ND	U	1.5	0.77	J	1.5	ND	U	2.5	

**Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020**

Analytical Method	Location ID:		NMED Residential Soil Gas VISL ¹	KAFB-106122-025 SV122-025-204 10/12/2020 REG			KAFB-106123-025 SV123-025-204 10/12/2020 REG			KAFB-106124-025 SV124-025-204 10/5/2020 REG			KAFB-106125-025 SV125-025-204 10/5/2020 REG		
	Field Sample ID:			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
	Sample Date:														
	Sample Type:			Units											
Analyte	Units		Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	Dibromochloromethane	µg/m ³	3.47E+01	ND	U	0.91	13	--	0.77	0.49	J	0.75	ND	U	1.3
	Dichlorodifluoromethane	µg/m ³	3.48E+03	2.4	J	1.7	2.3	J	1.4	2.2	J	1.4	2.1	J	2.4
	Ethanol	µg/m ³	NS	3.1	J	4.5	4.6	J	3.8	7	J	3.7	ND	U	6.1
	Ethyl acetate	µg/m ³	2.43E+03	9.1	J	3.5	ND	U	2.9	ND	U	2.9	ND	U	4.8
	Ethylbenzene	µg/m ³	3.74E+02	1.4	J	0.91	ND	U	0.77	0.84	J	0.75	ND	U	1.3
	Hexane	µg/m ³	2.43E+04	1.1	J	1.7	ND	U	1.4	ND	U	1.4	ND	U	2.4
	Isopropyl alcohol (manufacturing-strong acid)	µg/m ³	NS	ND	U	3.4	1.4	J	2.9	1	J	2.8	ND	U	4.7
	m,p-Xylene	µg/m ³	3.48E+03	5.6	--	1.8	0.75	J	1.5	3.1	J	1.5	ND	U	2.5
	Methylene Chloride	µg/m ³	2.09E+04	ND	U	1.7	0.9	J	1.4	0.73	J	1.4	ND	U	2.4
	Naphthalene	µg/m ³	2.75E+01	1.3	J	1.7	ND	U	1.4	7.3	--	1.4	ND	U	2.3
	n-Heptane	µg/m ³	NS	1.5	J	1.7	ND	U	1.4	0.73	J	1.4	ND	U	2.4
	o-Xylene	µg/m ³	3.48E+03	2.1	J	0.91	ND	U	0.77	1.3	J	0.75	ND	U	1.3
	Propylene (propene)	µg/m ³	NS	ND	U	1.7	6.9	--	1.4	ND	U	1.4	ND	U	2.4
	Styrene	µg/m ³	NS	ND	U	1.7	ND	U	1.4	ND	U	1.4	ND	U	2.4
	Tetrachloroethene	µg/m ³	1.39E+03	1.1	J	0.91	2.3	J	0.77	1.1	J	0.75	4.2	--	1.3
	Tetrahydrofuran	µg/m ³	NS	ND	U	0.91	2.6	J	0.77	0.85	J	0.75	33	--	1.3
	Toluene	µg/m ³	1.74E+05	7	--	0.91	0.89	J	0.77	2.6	--	0.75	1.1	J	1.3
	Trichloroethene	µg/m ³	6.95E+01	0.65	J	0.91	0.69	J	0.77	0.98	J	0.75	ND	U	1.3
	Trichlorofluoromethane	µg/m ³	2.43E+04	1.1	J	1.7	1	J	1.4	1.1	J	1.4	1	J	2.4
	Vinyl chloride	µg/m ³	5.59E+01	ND	U	0.91	ND	U	0.77	ND	U	0.75	ND	U	1.3
	Xylenes, Total	µg/m ³	3.48E+03	7.7	--	1.8	0.75	J	1.5	4.4	J	1.5	ND	U	2.5

**Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020**

Analytical Method	Location ID:		NMED Residential Soil Gas VISL ¹	KAFB-106126-025 SV126-025-204 10/20/2020 REG			KAFB-106127-025 SV127-025-204 10/5/2020 REG			KAFB-106128-025 SV128-025-204 10/6/2020 REG			KAFB-106129-025 SV129-025-204 10/19/2020 REG		
	Field Sample ID:			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
	Sample Date:														
	Sample Type:														
Analyte	Units		Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	µg/m ³	1.04E+06	0.54	J	0.79	0.41	J	0.78	53	--	0.86	1.7	J	0.79
	1,1-dichloroethane	µg/m ³	5.85E+02	ND	U	1.5	ND	U	1.5	ND	U	1.7	ND	U	1.5
	1,2,4-trichlorobenzene	µg/m ³	6.95E+01	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	1.5
	1,2,4-trimethylbenzene	µg/m ³	NS	ND	U	0.79	3	--	0.78	14	--	0.86	1.4	J	0.79
	1,2-dibromoethane	µg/m ³	1.56E+00	ND	U	0.79	ND	U	0.78	0.43	J	0.86	ND	U	0.79
	1,2-dichloroethane	µg/m ³	3.60E+01	ND	U	0.79	ND	U	0.78	ND	U	0.86	ND	U	0.79
	1,3,5-trimethylbenzene	µg/m ³	NS	ND	U	0.79	0.48	J	0.78	7.4	--	0.86	0.69	J	0.79
	1,3-butadiene	µg/m ³	3.12E+01	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	1.5
	1,4-dioxane	µg/m ³	1.87E+02	ND	U	0.79	ND	U	0.78	ND	U	0.86	0.82	J	0.79
	2-butanone	µg/m ³	1.74E+05	8.7	--	1.5	3.4	J	1.5	ND	U	1.6	9.7	--	1.5
	2-hexanone	µg/m ³	NS	1.1	J	0.79	ND	U	0.78	ND	U	0.86	1.7	J	0.79
	4-methyl-2-pentanone	µg/m ³	1.04E+05	ND	U	0.79	ND	U	0.78	0.53	J	0.86	0.57	J	0.79
	Acetone	µg/m ³	1.08E+06	40	--	12	12	J	12	ND	U	14	62	--	12
	Benzene	µg/m ³	1.20E+02	0.76	J	0.79	0.63	J	0.78	5	--	0.86	1.8	J	0.79
	Bromodichloromethane	µg/m ³	2.53E+01	20	--	0.79	48	--	0.78	ND	U	0.86	ND	U	0.79
	Bromoform	µg/m ³	8.51E+02	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	1.5
	Carbon disulfide	µg/m ³	2.43E+04	ND	U	2.5	1.5	J	2.5	46	--	2.7	6.1	--	2.5
	Carbon tetrachloride	µg/m ³	1.56E+02	7	--	0.79	5.3	--	0.78	67	--	0.86	1.6	J	0.79
	Chloroethane	µg/m ³	3.48E+05	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	1.5
	Chloroform	µg/m ³	4.07E+01	260	--	0.79	450	--	0.78	9.6	--	0.86	0.68	J	0.79
	Chloromethane	µg/m ³	5.20E+02	ND	U	1.5	ND	U	1.5	ND	U	1.6	0.83	J	1.5
	Cyclohexane	µg/m ³	NS	ND	U	1.6	3.8	J	1.6	4.1	J	1.7	0.89	J	1.6

**Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020**

Analytical Method	Location ID:		NMED Residential Soil Gas VISL ¹	KAFB-106126-025 SV126-025-204 10/20/2020 REG			KAFB-106127-025 SV127-025-204 10/5/2020 REG			KAFB-106128-025 SV128-025-204 10/6/2020 REG			KAFB-106129-025 SV129-025-204 10/19/2020 REG		
	Field Sample ID:			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
	Sample Date:														
	Sample Type:			Units											
Analyte	Units		Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	Dibromochloromethane	µg/m ³	3.47E+01	ND	U	0.79	0.93	J	0.78	ND	U	0.86	ND	U	0.79
	Dichlorodifluoromethane	µg/m ³	3.48E+03	2.8	--	1.5	2.1	J	1.5	300	--	1.6	3	--	1.5
	Ethanol	µg/m ³	NS	24	J	3.8	2	J	3.8	ND	U	4.2	8.2	J	3.8
	Ethyl acetate	µg/m ³	2.43E+03	4.1	J	3	ND	U	3	10	--	3.3	ND	U	3
	Ethylbenzene	µg/m ³	3.74E+02	ND	U	0.79	0.9	J	0.78	5.4	--	0.86	0.91	J	0.79
	Hexane	µg/m ³	2.43E+04	0.56	J	1.5	ND	U	1.5	7.2	--	1.6	1.6	J	1.5
	Isopropyl alcohol (manufacturing-strong acid)	µg/m ³	NS	2.9	J	2.9	ND	U	2.9	ND	U	3.2	26	--	2.9
	m,p-Xylene	µg/m ³	3.48E+03	1	J	1.6	2.1	J	1.6	35	--	1.7	4.7	--	1.6
	Methylene Chloride	µg/m ³	2.09E+04	2.9	--	1.5	2	J	1.5	ND	U	1.6	ND	U	1.5
	Naphthalene	µg/m ³	2.75E+01	ND	U	1.4	1.3	J	1.4	3.8	--	1.6	ND	U	1.4
	n-Heptane	µg/m ³	NS	0.5	J	1.5	ND	U	1.5	18	--	1.6	3.7	--	1.5
	o-Xylene	µg/m ³	3.48E+03	ND	U	0.79	0.62	J	0.78	19	--	0.86	1.5	J	0.79
	Propylene (propene)	µg/m ³	NS	2.3	J	1.5	ND	U	1.5	1	J	1.6	11	--	1.5
	Styrene	µg/m ³	NS	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	1.5
	Tetrachloroethene	µg/m ³	1.39E+03	2.7	--	0.79	2.5	--	0.78	2.2	J	0.86	1.6	J	0.79
	Tetrahydrofuran	µg/m ³	NS	ND	U	0.79	ND	U	0.78	1	J	0.86	5.2	--	0.79
	Toluene	µg/m ³	1.74E+05	2.1	J	0.79	3.6	--	0.78	33	--	0.86	9.5	--	0.79
	Trichloroethene	µg/m ³	6.95E+01	0.86	J	0.79	3.3	--	0.78	0.83	J	0.86	3.5	--	0.79
	Trichlorofluoromethane	µg/m ³	2.43E+04	1.3	J	1.5	0.98	J	1.5	52	--	1.6	1.1	J	1.5
	Vinyl chloride	µg/m ³	5.59E+01	ND	U	0.79	ND	U	0.78	ND	U	0.86	ND	U	0.79
	Xylenes, Total	µg/m ³	3.48E+03	1	J	1.6	2.7	J	1.6	54	--	1.7	6.2	--	1.6

**Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020**

Analytical Method	Location ID:		NMED Residential Soil Gas VISL ¹	KAFB-106130-025 SV130-025-204 10/20/2020 REG			KAFB-106131-025 SV131-025-204 10/19/2020 REG			KAFB-106132-025 SV132-025-204 10/12/2020 REG			KAFB-106133-025 SV133-025-204 10/6/2020 REG		
	Field Sample ID:			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
	Sample Date:														
	Sample Type:														
Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD		
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	µg/m ³	1.04E+06	4.9	--	0.93	29	--	0.89	10	--	0.83	2.6	J	0.88
	1,1-dichloroethane	µg/m ³	5.85E+02	ND	U	1.8	ND	U	1.7	ND	U	1.6	ND	U	1.7
	1,2,4-trichlorobenzene	µg/m ³	6.95E+01	ND	U	1.8	ND	U	1.7	ND	U	1.6	ND	U	1.6
	1,2,4-trimethylbenzene	µg/m ³	NS	0.59	J	0.93	7.7	--	0.89	11	--	0.83	16	--	0.88
	1,2-dibromoethane	µg/m ³	1.56E+00	ND	U	0.93	ND	U	0.89	ND	U	0.83	ND	U	0.88
	1,2-dichloroethane	µg/m ³	3.60E+01	ND	U	0.93	ND	U	0.89	ND	U	0.83	ND	U	0.88
	1,3,5-trimethylbenzene	µg/m ³	NS	ND	U	0.93	3.2	--	0.89	5.2	--	0.83	5.3	--	0.88
	1,3-butadiene	µg/m ³	3.12E+01	ND	U	1.8	ND	U	1.7	ND	U	1.6	ND	U	1.6
	1,4-dioxane	µg/m ³	1.87E+02	0.54	J	0.93	ND	U	0.89	ND	U	0.83	ND	U	0.88
	2-butanone	µg/m ³	1.74E+05	2.1	J	1.8	1.7	J	1.7	3.7	J	1.6	ND	U	1.6
	2-hexanone	µg/m ³	NS	0.82	J	0.93	ND	U	0.89	ND	U	0.83	ND	U	0.88
	4-methyl-2-pentanone	µg/m ³	1.04E+05	0.41	J	0.93	ND	U	0.89	ND	U	0.83	0.65	J	0.88
	Acetone	µg/m ³	1.08E+06	15	J	15	7.8	J	14	15	J	13	320	--	14
	Benzene	µg/m ³	1.20E+02	0.65	J	0.93	3.6	--	0.89	0.83	J	0.83	0.53	J	0.88
	Bromodichloromethane	µg/m ³	2.53E+01	ND	U	0.93	0.46	J	0.89	ND	U	0.83	ND	U	0.88
	Bromoform	µg/m ³	8.51E+02	ND	U	1.8	ND	U	1.7	ND	U	1.6	ND	U	1.6
	Carbon disulfide	µg/m ³	2.43E+04	15	--	3	3.1	J	2.8	85	--	2.6	1.5	J	2.8
	Carbon tetrachloride	µg/m ³	1.56E+02	1.3	J	0.93	9.1	--	0.89	4.9	--	0.83	ND	U	0.88
	Chloroethane	µg/m ³	3.48E+05	ND	U	1.8	ND	U	1.7	ND	U	1.6	ND	U	1.6
	Chloroform	µg/m ³	4.07E+01	1.5	J	0.93	3.4	--	0.89	11	--	0.83	0.56	J	0.88
Chloromethane	µg/m ³	5.20E+02	ND	U	1.8	ND	U	1.7	ND	U	1.6	ND	U	1.6	
Cyclohexane	µg/m ³	NS	ND	U	1.9	2.7	J	1.8	ND	U	1.7	1.3	J	1.8	

**Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020**

Analytical Method	Location ID:		NMED Residential Soil Gas VISL ¹	KAFB-106130-025 SV130-025-204 10/20/2020 REG			KAFB-106131-025 SV131-025-204 10/19/2020 REG			KAFB-106132-025 SV132-025-204 10/12/2020 REG			KAFB-106133-025 SV133-025-204 10/6/2020 REG		
	Field Sample ID:			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
	Sample Date:														
	Sample Type:														
Analyte	Units		Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
VOCs by EPA method TO-15	Dibromochloromethane	µg/m ³	3.47E+01	ND	U	0.93	ND	U	0.89	ND	U	0.83	ND	U	0.88
	Dichlorodifluoromethane	µg/m ³	3.48E+03	4.5	--	1.8	120	--	1.7	2.5	--	1.6	2.4	J	1.6
	Ethanol	µg/m ³	NS	4.8	J	4.5	5.1	J	4.4	13	J	4	ND	U	4.3
	Ethyl acetate	µg/m ³	2.43E+03	11	--	3.6	ND	U	3.4	ND	U	3.2	ND	U	3.3
	Ethylbenzene	µg/m ³	3.74E+02	1.1	J	0.93	3.6	--	0.89	0.42	J	0.83	1.8	J	0.88
	Hexane	µg/m ³	2.43E+04	ND	U	1.8	3.2	--	1.7	ND	U	1.6	1.2	J	1.6
	Isopropyl alcohol (manufacturing-strong acid)	µg/m ³	NS	ND	U	3.4	ND	U	3.3	2.4	J	3.1	ND	U	3.2
	m,p-Xylene	µg/m ³	3.48E+03	2.3	J	1.9	19	--	1.8	6.6	--	1.7	25	--	1.8
	Methylene Chloride	µg/m ³	2.09E+04	ND	U	1.8	ND	U	1.7	ND	U	1.6	ND	U	1.6
	Naphthalene	µg/m ³	2.75E+01	1.4	J	1.7	0.81	J	1.6	0.74	J	1.5	1.9	J	1.6
	n-Heptane	µg/m ³	NS	ND	U	1.8	9.2	--	1.7	ND	U	1.6	5.4	--	1.6
	o-Xylene	µg/m ³	3.48E+03	0.62	J	0.93	7.1	--	0.89	5.5	--	0.83	10	--	0.88
	Propylene (propene)	µg/m ³	NS	ND	U	1.8	ND	U	1.7	1.3	J	1.6	0.92	J	1.6
	Styrene	µg/m ³	NS	ND	U	1.8	ND	U	1.7	0.44	J	1.6	ND	U	1.6
	Tetrachloroethene	µg/m ³	1.39E+03	2.7	J	0.93	ND	U	0.89	19	--	0.83	2.8	--	0.88
	Tetrahydrofuran	µg/m ³	NS	0.46	J	0.93	ND	U	0.89	ND	U	0.83	0.91	J	0.88
	Toluene	µg/m ³	1.74E+05	2.6	J	0.93	30	--	0.89	1.7	J	0.83	4.4	--	0.88
	Trichloroethene	µg/m ³	6.95E+01	4.4	--	0.93	ND	U	0.89	4100	--	13	28	--	0.88
	Trichlorofluoromethane	µg/m ³	2.43E+04	1.3	J	1.8	14	--	1.7	1.2	J	1.6	1	J	1.6
	Vinyl chloride	µg/m ³	5.59E+01	ND	U	0.93	ND	U	0.89	ND	U	0.83	ND	U	0.88
	Xylenes, Total	µg/m ³	3.48E+03	2.9	J	1.9	26	--	1.8	12	--	1.7	35	--	1.8

**Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020**

Analytical Method	Location ID:		NMED Residential Soil Gas VISL ¹	KAFB-106134-025 SV134-025-204 10/12/2020 REG			KAFB-106135-025 SV135-025-204 10/12/2020 REG			KAFB-106136-025 SV136-025-204 10/6/2020 REG			KAFB-106137-025 SV137-025-204 10/12/2020 REG		
	Field Sample ID:			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
	Sample Date:														
	Sample Type:														
Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD		
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	µg/m ³	1.04E+06	0.44	J	0.79	0.73	J	0.75	0.43	J	0.85	ND	U	1.2
	1,1-dichloroethane	µg/m ³	5.85E+02	ND	U	1.5	ND	U	1.5	ND	U	1.6	ND	U	2.3
	1,2,4-trichlorobenzene	µg/m ³	6.95E+01	ND	U	1.5	ND	U	1.4	ND	U	1.6	ND	U	2.2
	1,2,4-trimethylbenzene	µg/m ³	NS	0.78	J	0.79	3.4	--	0.75	ND	U	0.85	0.55	J	1.2
	1,2-dibromoethane	µg/m ³	1.56E+00	ND	U	0.79	ND	U	0.75	ND	U	0.85	ND	U	1.2
	1,2-dichloroethane	µg/m ³	3.60E+01	ND	U	0.79	ND	U	0.75	ND	U	0.85	ND	U	1.2
	1,3,5-trimethylbenzene	µg/m ³	NS	ND	U	0.79	2.4	--	0.75	ND	U	0.85	ND	U	1.2
	1,3-butadiene	µg/m ³	3.12E+01	ND	U	1.5	ND	U	1.4	ND	U	1.6	ND	U	2.2
	1,4-dioxane	µg/m ³	1.87E+02	ND	U	0.79	ND	U	0.75	ND	U	0.85	ND	U	1.2
	2-butanone	µg/m ³	1.74E+05	ND	U	1.5	2.7	J	1.4	ND	U	1.6	1.3	J	2.2
	2-hexanone	µg/m ³	NS	ND	U	0.79	ND	U	0.75	2.1	J	0.85	ND	U	1.2
	4-methyl-2-pentanone	µg/m ³	1.04E+05	ND	U	0.79	ND	U	0.75	0.81	J	0.85	ND	U	1.2
	Acetone	µg/m ³	1.08E+06	8.2	J	12	11	J	12	120	--	13	ND	U	18
	Benzene	µg/m ³	1.20E+02	ND	U	0.79	0.97	J	0.75	ND	U	0.85	ND	U	1.2
	Bromodichloromethane	µg/m ³	2.53E+01	ND	U	0.79	ND	U	0.75	0.87	J	0.85	ND	U	1.2
	Bromoform	µg/m ³	8.51E+02	ND	U	1.5	ND	U	1.4	ND	U	1.6	ND	U	2.2
	Carbon disulfide	µg/m ³	2.43E+04	ND	U	2.5	12	--	2.4	12	--	2.7	2.3	J	3.7
	Carbon tetrachloride	µg/m ³	1.56E+02	ND	U	0.79	ND	U	0.75	ND	U	0.85	ND	U	1.2
	Chloroethane	µg/m ³	3.48E+05	ND	U	1.5	ND	U	1.4	ND	U	1.6	ND	U	2.2
	Chloroform	µg/m ³	4.07E+01	ND	U	0.79	0.47	J	0.75	4.1	--	0.85	ND	U	1.2
Chloromethane	µg/m ³	5.20E+02	ND	U	1.5	ND	U	1.4	ND	U	1.6	ND	U	2.2	
Cyclohexane	µg/m ³	NS	ND	U	1.6	ND	U	1.5	ND	U	1.7	ND	U	2.3	

**Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020**

		Location ID:	NMED	KAFB-106134-025			KAFB-106135-025			KAFB-106136-025			KAFB-106137-025		
		Field Sample ID:	Residential	SV134-025-204			SV135-025-204			SV136-025-204			SV137-025-204		
		Sample Date:	Soil Gas	10/12/2020			10/12/2020			10/6/2020			10/12/2020		
		Sample Type:	VISL ¹	REG			REG			REG			REG		
Analytical Method	Analyte	Units		Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs by EPA method TO-15	Dibromochloromethane	µg/m ³	3.47E+01	ND	U	0.79	ND	U	0.75	ND	U	0.85	ND	U	1.2
	Dichlorodifluoromethane	µg/m ³	3.48E+03	1.6	J	1.5	2.3	J	1.4	2.2	J	1.6	2.4	J	2.2
	Ethanol	µg/m ³	NS	48	--	3.8	9.6	J	3.7	ND	U	4.1	4.5	J	5.7
	Ethyl acetate	µg/m ³	2.43E+03	ND	U	3	130	--	2.9	ND	U	3.2	ND	U	4.5
	Ethylbenzene	µg/m ³	3.74E+02	ND	U	0.79	0.62	J	0.75	ND	U	0.85	ND	U	1.2
	Hexane	µg/m ³	2.43E+04	ND	U	1.5	ND	U	1.4	ND	U	1.6	ND	U	2.2
	Isopropyl alcohol (manufacturing-strong acid)	µg/m ³	NS	ND	U	2.9	1.3	J	2.8	ND	U	3.1	ND	U	4.3
	m,p-Xylene	µg/m ³	3.48E+03	0.67	J	1.6	12	--	1.5	ND	U	1.7	ND	U	2.3
	Methylene Chloride	µg/m ³	2.09E+04	ND	U	1.5	0.93	J	1.4	ND	U	1.6	ND	U	2.2
	Naphthalene	µg/m ³	2.75E+01	ND	U	1.4	ND	U	1.4	ND	U	1.5	ND	U	2.1
	n-Heptane	µg/m ³	NS	ND	U	1.5	0.58	J	1.4	ND	U	1.6	ND	U	2.2
	o-Xylene	µg/m ³	3.48E+03	0.36	J	0.79	8.1	--	0.75	ND	U	0.85	ND	U	1.2
	Propylene (propene)	µg/m ³	NS	ND	U	1.5	0.66	J	1.4	1.4	J	1.6	ND	U	2.2
	Styrene	µg/m ³	NS	ND	U	1.5	ND	U	1.4	ND	U	1.6	ND	U	2.2
	Tetrachloroethene	µg/m ³	1.39E+03	ND	U	0.79	0.33	J	0.75	0.45	J	0.85	ND	U	1.2
	Tetrahydrofuran	µg/m ³	NS	ND	U	0.79	1.4	J	0.75	0.5	J	0.85	ND	U	1.2
	Toluene	µg/m ³	1.74E+05	0.4	J	0.79	8.2	--	0.75	ND	U	0.85	ND	U	1.2
	Trichloroethene	µg/m ³	6.95E+01	5.9	--	0.79	82	--	0.75	ND	U	0.85	ND	U	1.2
	Trichlorofluoromethane	µg/m ³	2.43E+04	0.71	J	1.5	1.3	J	1.4	1.1	J	1.6	1.2	J	2.2
	Vinyl chloride	µg/m ³	5.59E+01	ND	U	0.79	ND	U	0.75	ND	U	0.85	ND	U	1.2
Xylenes, Total	µg/m ³	3.48E+03	1	J	1.6	20	--	1.5	ND	U	1.7	ND	U	2.3	

**Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020**

Analytical Method	Location ID:		NMED Residential Soil Gas VISL ¹	KAFB-106138-025 SV138-025-204 10/6/2020 REG			KAFB-106139-025 SV139-025-204 10/12/2020 REG			KAFB-106140-025 SV140-025-204 10/12/2020 REG		
	Field Sample ID:			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
	Sample Date:											
	Sample Type:											
Analyte	Units											
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	µg/m ³	1.04E+06	0.44	J	0.82	18	--	0.74	0.48	J	0.78
	1,1-dichloroethane	µg/m ³	5.85E+02	ND	U	1.6	ND	U	1.4	ND	U	1.5
	1,2,4-trichlorobenzene	µg/m ³	6.95E+01	ND	U	1.5	ND	U	1.4	ND	U	1.5
	1,2,4-trimethylbenzene	µg/m ³	NS	ND	U	0.82	2.9	--	0.74	1.4	J	0.78
	1,2-dibromoethane	µg/m ³	1.56E+00	ND	U	0.82	ND	U	0.74	ND	U	0.78
	1,2-dichloroethane	µg/m ³	3.60E+01	ND	U	0.82	ND	U	0.74	ND	U	0.78
	1,3,5-trimethylbenzene	µg/m ³	NS	ND	U	0.82	0.57	J	0.74	0.5	J	0.78
	1,3-butadiene	µg/m ³	3.12E+01	ND	U	1.5	ND	U	1.4	ND	U	1.5
	1,4-dioxane	µg/m ³	1.87E+02	ND	U	0.82	ND	U	0.74	ND	U	0.78
	2-butanone	µg/m ³	1.74E+05	ND	U	1.5	11	--	1.4	46	--	1.5
	2-hexanone	µg/m ³	NS	ND	U	0.82	1.2	J	0.74	ND	U	0.78
	4-methyl-2-pentanone	µg/m ³	1.04E+05	ND	U	0.82	0.54	J	0.74	0.77	J	0.78
	Acetone	µg/m ³	1.08E+06	ND	U	13	53	--	12	54	--	12
	Benzene	µg/m ³	1.20E+02	0.88	J	0.82	0.5	J	0.74	5.3	--	0.78
	Bromodichloromethane	µg/m ³	2.53E+01	ND	U	0.82	ND	U	0.74	ND	U	0.78
	Bromoform	µg/m ³	8.51E+02	ND	U	1.5	ND	U	1.4	ND	U	1.5
	Carbon disulfide	µg/m ³	2.43E+04	4	J	2.6	3	J	2.3	21	--	2.5
	Carbon tetrachloride	µg/m ³	1.56E+02	ND	U	0.82	8.3	--	0.74	2.8	--	0.78
	Chloroethane	µg/m ³	3.48E+05	ND	U	1.5	ND	U	1.4	ND	U	1.5
	Chloroform	µg/m ³	4.07E+01	ND	U	0.82	1.3	J	0.74	1.9	J	0.78
Chloromethane	µg/m ³	5.20E+02	ND	U	1.5	ND	U	1.4	0.9	J	1.5	
Cyclohexane	µg/m ³	NS	ND	U	1.6	ND	U	1.5	1.5	J	1.6	

**Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020**

Analytical Method	Location ID:		NMED Residential Soil Gas VISL ¹	KAFB-106138-025 SV138-025-204 10/6/2020 REG			KAFB-106139-025 SV139-025-204 10/12/2020 REG			KAFB-106140-025 SV140-025-204 10/12/2020 REG		
	Field Sample ID:			Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
	Sample Date:											
	Sample Type:											
Analyte	Units	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD		
VOCs by EPA method TO-15	Dibromochloromethane	µg/m ³	3.47E+01	ND	U	0.82	ND	U	0.74	ND	U	0.78
	Dichlorodifluoromethane	µg/m ³	3.48E+03	2.3	J	1.5	2.4	--	1.4	2.7	--	1.5
	Ethanol	µg/m ³	NS	ND	U	4	21	J	3.6	3	J	3.8
	Ethyl acetate	µg/m ³	2.43E+03	ND	U	3.1	29	--	2.8	ND	U	3
	Ethylbenzene	µg/m ³	3.74E+02	ND	U	0.82	0.33	J	0.74	1.7	J	0.78
	Hexane	µg/m ³	2.43E+04	ND	U	1.5	ND	U	1.4	2.3	J	1.5
	Isopropyl alcohol (manufacturing-strong acid)	µg/m ³	NS	ND	U	3	ND	U	2.7	2.1	J	2.9
	m,p-Xylene	µg/m ³	3.48E+03	0.69	J	1.6	1.7	J	1.5	7.1	--	1.6
	Methylene Chloride	µg/m ³	2.09E+04	ND	U	1.5	ND	U	1.4	ND	U	1.5
	Naphthalene	µg/m ³	2.75E+01	ND	U	1.5	2.3	J	1.3	0.7	J	1.4
	n-Heptane	µg/m ³	NS	0.61	J	1.5	0.54	J	1.4	3.3	--	1.5
	o-Xylene	µg/m ³	3.48E+03	ND	U	0.82	0.67	J	0.74	2	J	0.78
	Propylene (propene)	µg/m ³	NS	ND	U	1.5	1.1	J	1.4	1.5	J	1.5
	Styrene	µg/m ³	NS	ND	U	1.5	ND	U	1.4	ND	U	1.5
	Tetrachloroethene	µg/m ³	1.39E+03	0.35	J	0.82	ND	U	0.74	0.71	J	0.78
	Tetrahydrofuran	µg/m ³	NS	1.6	J	0.82	0.37	J	0.74	28	--	0.78
	Toluene	µg/m ³	1.74E+05	ND	U	0.82	2.1	J	0.74	18	--	0.78
	Trichloroethene	µg/m ³	6.95E+01	ND	U	0.82	ND	U	0.74	ND	U	0.78
	Trichlorofluoromethane	µg/m ³	2.43E+04	8.1	--	1.5	2.1	J	1.4	1.1	J	1.5
	Vinyl chloride	µg/m ³	5.59E+01	ND	U	0.82	ND	U	0.74	ND	U	0.78
Xylenes, Total	µg/m ³	3.48E+03	0.69	J	1.6	2.3	J	1.5	9	--	1.6	

**Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020**

Analytical Method	Location ID:		NMED Residential Soil Gas VISL ¹	KAFB-106141-025 SV141-025-204 10/6/2020 REG			KAFB-106142-030 SV142-030-204 10/5/2020 REG		
	Field Sample ID:			Result	Val Qual	LOD	Result	Val Qual	LOD
	Sample Date:								
	Sample Type:								
Analyte	Units								
VOCs by EPA method TO-15	1,1,2-Trichloro-1,2,2-trifluoroethane	µg/m ³	1.04E+06	0.58	J	0.74	0.43	J	0.83
	1,1-dichloroethane	µg/m ³	5.85E+02	ND	U	1.4	ND	U	1.6
	1,2,4-trichlorobenzene	µg/m ³	6.95E+01	ND	U	1.4	ND	U	1.6
	1,2,4-trimethylbenzene	µg/m ³	NS	ND	U	0.74	ND	U	0.83
	1,2-dibromoethane	µg/m ³	1.56E+00	ND	U	0.74	ND	U	0.83
	1,2-dichloroethane	µg/m ³	3.60E+01	ND	U	0.74	ND	U	0.83
	1,3,5-trimethylbenzene	µg/m ³	NS	ND	U	0.74	ND	U	0.83
	1,3-butadiene	µg/m ³	3.12E+01	ND	U	1.4	ND	U	1.6
	1,4-dioxane	µg/m ³	1.87E+02	0.35	J	0.74	ND	U	0.83
	2-butanone	µg/m ³	1.74E+05	ND	U	1.4	9.5	--	1.6
	2-hexanone	µg/m ³	NS	ND	U	0.74	1.7	J	0.83
	4-methyl-2-pentanone	µg/m ³	1.04E+05	ND	U	0.74	ND	U	0.83
	Acetone	µg/m ³	1.08E+06	7.1	J	12	46	--	13
	Benzene	µg/m ³	1.20E+02	1.3	J	0.74	ND	U	0.83
	Bromodichloromethane	µg/m ³	2.53E+01	ND	U	0.74	ND	U	0.83
	Bromoform	µg/m ³	8.51E+02	1.3	J	1.4	ND	U	1.6
	Carbon disulfide	µg/m ³	2.43E+04	17	--	2.4	6.7	--	2.6
	Carbon tetrachloride	µg/m ³	1.56E+02	ND	U	0.74	ND	U	0.83
	Chloroethane	µg/m ³	3.48E+05	ND	U	1.4	ND	U	1.6
	Chloroform	µg/m ³	4.07E+01	2.9	--	0.74	2	J	0.83
Chloromethane	µg/m ³	5.20E+02	ND	U	1.4	ND	U	1.6	
Cyclohexane	µg/m ³	NS	ND	U	1.5	ND	U	1.7	

**Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020**

		Location ID:	NMED Residential Soil Gas VISL ¹	KAFB-106141-025 SV141-025-204 10/6/2020 REG			KAFB-106142-030 SV142-030-204 10/5/2020 REG		
		Field Sample ID:		Result	Val Qual	LOD	Result	Val Qual	LOD
		Sample Date:							
		Sample Type:							
Analytical Method	Analyte	Units							
VOCs by EPA method TO-15	Dibromochloromethane	µg/m ³	3.47E+01	ND	U	0.74	ND	U	0.83
	Dichlorodifluoromethane	µg/m ³	3.48E+03	7.6	--	1.4	2.3	J	1.6
	Ethanol	µg/m ³	NS	2.6	J	3.6	7.9	J	4.1
	Ethyl acetate	µg/m ³	2.43E+03	16	J	2.8	ND	U	3.2
	Ethylbenzene	µg/m ³	3.74E+02	ND	U	0.74	ND	U	0.83
	Hexane	µg/m ³	2.43E+04	1.5	J	1.4	ND	U	1.6
	Isopropyl alcohol (manufacturing-strong acid)	µg/m ³	NS	ND	U	2.8	2.8	J	3.1
	m,p-Xylene	µg/m ³	3.48E+03	ND	U	1.5	ND	U	1.7
	Methylene Chloride	µg/m ³	2.09E+04	ND	U	1.4	ND	U	1.6
	Naphthalene	µg/m ³	2.75E+01	ND	U	1.4	ND	U	1.5
	n-Heptane	µg/m ³	NS	1.2	J	1.4	ND	U	1.6
	o-Xylene	µg/m ³	3.48E+03	ND	U	0.74	ND	U	0.83
	Propylene (propene)	µg/m ³	NS	0.88	J	1.4	2.4	J	1.6
	Styrene	µg/m ³	NS	ND	U	1.4	ND	U	1.6
	Tetrachloroethene	µg/m ³	1.39E+03	0.64	J	0.74	1.4	J	0.83
	Tetrahydrofuran	µg/m ³	NS	0.41	J	0.74	0.39	J	0.83
	Toluene	µg/m ³	1.74E+05	1.5	J	0.74	0.4	J	0.83
	Trichloroethene	µg/m ³	6.95E+01	ND	U	0.74	16	--	0.83
	Trichlorofluoromethane	µg/m ³	2.43E+04	7	--	1.4	1.3	J	1.6
	Vinyl chloride	µg/m ³	5.59E+01	ND	U	0.74	ND	U	0.83
Xylenes, Total	µg/m ³	3.48E+03	ND	U	1.5	ND	U	1.7	

Table 3-6
Results of Soil Vapor Monitoring Data in the 25-foot Nominal Depth Horizon, Q4 2020

$\mu\text{g}/\text{m}^3$ = microgram per cubic meter

AFB = Air Force Base

ID = identification

KAFB = Kirtland Air Force Base

LOD = limit of detection

ND = not detected

NS = not specified

REG = normal field sample

Val Qual = validation qualifier

VOC = volatile organic compound

Shading = detected concentrations above the detection limit

Bold = detected concentrations above the VISL

Val Quals based on independent data validation

J = Qualifier denotes the analyte was positively identified, but the associated numerical value is estimated.

U = Qualifier denotes the analyte was analyzed but not detected above the detection limit. The value associated with the U-qualifier is the limit of detection.

-- = Validation qualifier not assigned.

**Table 3-7
Mann-Kendall Trend Analysis Summary, Soil Vapor Monitoring Points, Q4 2020**

AOI	SVMP Location ID^a	HC	EDB	Benzene
Off Base	KAFB-106028-450	NT	NT	decreasing
On-Base Inside the Source Area	SVMW-03-050	NT	--	NT
	SVMW-04-050	NT	--	NT
	SVMW-08-050	increasing	--	increasing
	SVMW-09-050	NT	--	NT
	SVEW-06-060	increasing	--	increasing
	SVMW-03-100	NT	decreasing	NT
	SVMW-04-100	increasing	--	NT
	SVMW-08-100	increasing	NT	NT
	SVMW-09-100	NT	NT	NT
	SVEW-07-160	NT	--	NT
	SVMW-03-250	NT	NT	NT
	SVMW-04-250	increasing	--	NT
	SVMW-08-250	NT	--	NT
	SVMW-09-250	NT	--	NT
	SVEW-08-260	NT	--	NT
	SVMW-09-266	NT	NT	NT
	SVMW-03-300	NT	decreasing	decreasing
	SVMW-04-300	increasing	--	increasing
	SVEW-09-460	NT	--	NT
	On-Base Outside the Source Area	KAFB-106111-050	NT	--
KAFB-106117-050		NT	--	decreasing
KAFB-106128-050		NT	--	NT
SVMW-02-050		NT	--	decreasing
SVMW-07-050		NT	--	NT
SVMW-01-100		increasing	--	NT
SVMW-02-100		increasing	NT	increasing
SVMW-07-100		increasing	--	NT
KAFB-106108-150		increasing	--	NT
KAFB106110-150		increasing	--	increasing
KAFB-106111-150		NT	--	NT
KAFB-106118-150		NT	--	decreasing
KAFB-106119-150		NT	--	NT
SVMW-02-150		increasing	--	increasing
SVMW-13-150		NT	--	NT
SVMW-05-230		increasing	--	increasing
KAFB-106108-250		NT	NT	NT
KAFB-106110-250		increasing	--	increasing
KAFB-106111-250		increasing	--	increasing
KAFB-106112-250		NT	decreasing	decreasing
KAFB-106116-250		decreasing	--	decreasing
KAFB-106117-250		decreasing	--	decreasing
KAFB-106119-250		increasing	NT	NT
KAFB-106128-250		NT	--	NT
KAFB-106139-250		NT	--	increasing
SVMW-01-250		increasing	--	increasing
SVMW-15-250		decreasing	--	decreasing
SVMW-06-252		decreasing	--	decreasing
KAFB-106118-265		decreasing	decreasing	decreasing
SVMW-01-300		increasing	--	increasing

**Table 3-7
Mann-Kendall Trend Analysis Summary, Soil Vapor Monitoring Points, Q4 2020**

AOI	SVMP Location ID^a	HC	EDB	Benzene	
On-Base Outside the Source Area	SVMW-06-302	decreasing	decreasing	decreasing	
	KAFB-106110-350	increasing	--	NT	
	KAFB-106111-350	increasing	--	increasing	
	KAFB-106113-350	increasing	--	increasing	
	KAFB-106116-350	increasing	decreasing	decreasing	
	KAFB-106117-350	NT	NT	decreasing	
	KAFB-106118-350	NT	--	NT	
	KAFB-106119-350	increasing	--	increasing	
	KAFB-106128-350	increasing	NT	increasing	
	SVMW-15-350	increasing	decreasing	decreasing	
	SVEW-11-410	increasing	--	NT	
	SVEW-13-410	increasing	increasing	increasing	
	KAFB-106110-450	increasing	--	NT	
	KAFB-106111-450	increasing	--	NT	
	KAFB-106112-450	NT	NT	NT	
	KAFB-106113-450	increasing	NT	increasing	
	KAFB-106114-450	increasing	decreasing	decreasing	
	KAFB-106115-450	decreasing	--	increasing	
	KAFB-106116-450	increasing	increasing	increasing	
	KAFB-106117-450	increasing	NT	decreasing	
	KAFB-106118-450	increasing	--	decreasing	
	KAFB-106119-450	increasing	NT	decreasing	
	KAFB-106124-450	NT	--	NT	
	KAFB-106125-450	decreasing	--	decreasing	
	KAFB-106126-450	NT	--	NT	
	KAFB-106127-450	NT	--	NT	
	KAFB-106128-450	increasing	decreasing	decreasing	
	KAFB-106129-450	increasing	--	NT	
	KAFB-106130-450	increasing	--	NT	
	KAFB-106131-450	increasing	--	decreasing	
	KAFB-106133-450	increasing	--	increasing	
	KAFB-106134-450	NT	--	NT	
	KAFB-106137-450	decreasing	NT	decreasing	
	SVMW-15-450	increasing	NA	increasing	
	Locations with enough detections to evaluate trend		50	12	46
	Number increasing		41	2	22
	Number decreasing		9	9	24
	Number NA		0	1	0

Table 3-7
Mann-Kendall Trend Analysis Summary, Soil Vapor Monitoring Points, Q4 2020

^aThe Mann-Kendall trend analysis was performed on SVMPs with HC concentrations greater than 20 ppmv at any time between 2016 and 2020 (HC concentrations less than 20 ppmv are considered background concentrations for the purposes of this report). Out of 284 total SVMPs, 187 had HC concentrations below 20 ppmv between Q1 2016 and Q4 2020 and were identified as background. The remaining 84 SVMPs are included in this table.

-- = there were 6 or more non-detect concentrations since Q1 2016, which means the dataset contains 50% or more non-detect values. No trend analysis was performed because at least 50% of the data points would be estimated, which would not provide an adequate dataset for statistical evaluation. Only locations where HC has been greater than 20 ppmv at least one quarter since Q1 2016 were evaluated

AOI = area of interest

EDB = 1,2-dibromoethane (ethylene dibromide)

HC = hydrocarbon

ID = identification

NT = no trend observed

ppmv = parts per million by volume

Q1 = First Quarter

Q4 = Fourth Quarter

SVMP = soil vapor monitoring point

**Table 4-1
Groundwater Monitoring Program**

Well Location ID	1st Quarter (January-March)	2nd Quarter Semiannual (April-June)	3rd Quarter (July-September)	4th Quarter Annual (October-December)	Former Well Designation and Current Monitoring Well Objective ^a
Groundwater Monitoring Wells^b					
KAFB-106001	None	EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Groundwater Monitoring
KAFB-106002	None	EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Groundwater Monitoring
KAFB-106003	BTEX, EDB, FP	BTEX, EDB, metals, anions, alkalinity, FP	BTEX, EDB, FP	EDB, VOCs, metals, anions, alkalinity, FP	VA Proximal, KAFB-015 Sentinel
KAFB-106004	BTEX, EDB, FP	BTEX, EDB, metals, anions, alkalinity, FP	BTEX, EDB, FP	EDB, VOCs, metals, anions, alkalinity, FP	VA Proximal
KAFB-106005	BTEX, EDB, metals, anions, alkalinity, FP	BTEX, EDB, metals, anions, alkalinity, FP	BTEX, EDB, metals, anions, alkalinity, FP	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106006	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106007	None	EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Groundwater Monitoring
KAFB-106008	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106009	BTEX, EDB, metals, anions, alkalinity, FP	BTEX, EDB, metals, anions, alkalinity, FP	BTEX, EDB, metals, anions, alkalinity, FP	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106010	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106011	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106012R	BTEX, EDB, metals, anions, alkalinity, FP	BTEX, EDB, metals, anions, alkalinity, FP	BTEX, EDB, metals, anions, alkalinity, FP	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106013	BTEX, EDB, FP	BTEX, EDB, metals, anions, alkalinity, FP	BTEX, EDB, FP	EDB, VOCs, metals, anions, alkalinity, FP	VA Proximal
KAFB-106014	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106015 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106016	None	EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Groundwater Monitoring
KAFB-106017	None	BTEX, Naphthalene, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Signal
KAFB-106018	None	BTEX, Naphthalene, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Signal
KAFB-106019	None	EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Groundwater Monitoring
KAFB-106020	None	EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Groundwater Monitoring
KAFB-106021 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106022 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106023 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106024	None	EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Groundwater Monitoring
KAFB-106025 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106026 ^{c,d}	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106027	None	EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Groundwater Monitoring
KAFB-106028	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106029 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Former Downgradient Proximal; Current Upgradient Well
KAFB-106030 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Former Downgradient Proximal; Current Upgradient Well
KAFB-106031 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Former Downgradient Proximal; Current Upgradient Well
KAFB-106032 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Former Downgradient Proximal; Current Upgradient Well
KAFB-106033 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Former Downgradient Proximal; Current Upgradient Well
KAFB-106034 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Former Downgradient Proximal; Current Upgradient Well
KAFB-106035 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring; Groundwater well paired with KAFB-106228 extraction well
KAFB-106036 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring; Groundwater well paired with KAFB-106228 extraction well

**Table 4-1
Groundwater Monitoring Program**

Well Location ID	1st Quarter (January-March)	2nd Quarter Semiannual (April-June)	3rd Quarter (July-September)	4th Quarter Annual (October-December)	Former Well Designation and Current Monitoring Well Objective^a
KAFB-106037 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring; Groundwater well paired with KAFB-106228 extraction well
KAFB-106038	None	BTEX, Naphthalene, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Signal
KAFB-106039	None	EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Groundwater Monitoring
KAFB-106040	None	EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Groundwater Monitoring
KAFB-106041 ^c	EDB, metals, anions, alkalinity	EDB, metals, anions, alkalinity	EDB, metals, anions, alkalinity	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106042 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106043 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106044	None	EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Groundwater Monitoring
KAFB-106045	None	EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Groundwater Monitoring
KAFB-106046	None	EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Groundwater Monitoring
KAFB-106047	None	EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Groundwater Monitoring
KAFB-106048	None	EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Groundwater Monitoring
KAFB-106049 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Former Downgradient Proximal; Current Upgradient Well
KAFB-106050 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Former Downgradient Proximal; Current Upgradient Well
KAFB-106051 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Former Downgradient Proximal; Current Upgradient Well
KAFB-106052 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106053 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106054 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106055 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106057 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106058 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106059	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106060	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106061	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106062	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106063	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106064	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106065	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106066	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106067	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106068	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106069	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106070 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106071 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106072 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106073	None	EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Groundwater Monitoring
KAFB-106074	None	EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Groundwater Monitoring
KAFB-106075	None	EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Groundwater Monitoring
KAFB-106076	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106077	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106078	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106079	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106080	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area
KAFB-106081	None	BTEX, EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Source Area

**Table 4-1
Groundwater Monitoring Program**

Well Location ID	1st Quarter (January-March)	2nd Quarter Semiannual (April-June)	3rd Quarter (July-September)	4th Quarter Annual (October-December)	Former Well Designation and Current Monitoring Well Objective^a
KAFB-106218 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Downgradient Proximal (Seasonal)
KAFB-106219 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106220 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106221 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106222 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Downgradient Proximal (Seasonal)
KAFB-106223 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Downgradient Proximal (Seasonal)
KAFB-106224 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Downgradient Proximal (Seasonal)
KAFB-106225 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106226 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106227 ^c	None	EDB, metals, anions, alkalinity	None	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106229 ^{c,f}	None	EDB	None	EDB	Groundwater well paired with KAFB-106233 extraction well
KAFB-106230 ^{c,d}	EDB, metals, anions, alkalinity	EDB, metals, anions, alkalinity	EDB, metals, anions, alkalinity	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106231 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Former Downgradient Proximal; Current Upgradient Well
KAFB-106232 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Former Downgradient Proximal; Current Upgradient Well
KAFB-106235-438 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Former Downgradient Proximal; Current Upgradient Well
KAFB-106235-472 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Former Downgradient Proximal; Current Upgradient Well
KAFB-106235-501 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Former Downgradient Proximal; Current Upgradient Well
KAFB-106236-436 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Former Downgradient Proximal; Current Upgradient Well
KAFB-106236-470 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Former Downgradient Proximal; Current Upgradient Well
KAFB-106236-499 ^c	EDB	EDB, metals, anions, alkalinity	EDB	EDB, VOCs, metals, anions, alkalinity	Former Downgradient Proximal; Current Upgradient Well
KAFB-106240-449 ^c	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	EDB, VOCs, metals, anions, alkalinity	VA Proximal
KAFB-106241-428 ^c	EDB, metals, anions, alkalinity	EDB, metals, anions, alkalinity	EDB, metals, anions, alkalinity	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106242-418 ^c	EDB, metals, anions, alkalinity	EDB, metals, anions, alkalinity	EDB, metals, anions, alkalinity	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106243-425 ^c	EDB, metals, anions, alkalinity	EDB, metals, anions, alkalinity	EDB, metals, anions, alkalinity	EDB, VOCs, metals, anions, alkalinity	Groundwater Monitoring
KAFB-106244-445 ^c	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	EDB, VOCs, metals, anions, alkalinity	VA Proximal
KAFB-106245-460 ^c	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	EDB, VOCs, metals, anions, alkalinity	KAFB-016 Sentinel
KAFB-106247-450 ^c	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	EDB, VOCs, metals, anions, alkalinity	Downgradient Proximal (Seasonal)
KAFB-106S1-447 ^c	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	EDB, VOCs, metals, anions, alkalinity	Source Area
KAFB-106S2-451 ^c	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	EDB, VOCs, metals, anions, alkalinity	Source Area
KAFB-106S3-449 ^c	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	EDB, VOCs, metals, anions, alkalinity	Source Area
KAFB-106S4-446 ^c	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	EDB, VOCs, metals, anions, alkalinity	Source Area
KAFB-106S5-446 ^c	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	EDB, VOCs, metals, anions, alkalinity	Source Area
KAFB-106S7-451 ^c	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	EDB, VOCs, metals, anions, alkalinity	Source Area
KAFB-106S8-451 ^c	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	EDB, VOCs, metals, anions, alkalinity	Source Area
KAFB-106S9-447 ^c	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	BTEX, EDB, metals, anions, alkalinity	EDB, VOCs, metals, anions, alkalinity	Source Area
KAFB-3411	None	EDB, metals, anions, alkalinity, FP	None	EDB, VOCs, metals, anions, alkalinity, FP	Groundwater Monitoring

Table 4-1
Groundwater Monitoring Program

^a Monitoring Well Objective:

Downgradient Proximal (Seasonal) Wells—Primarily located north of Ridgecrest Drive SE surrounding the historical EDB plume to the north and east into the distal portion of the GWM network. One well located to the south and east of the Benzene plume. Groundwater flow direction varies seasonally; these wells are downgradient of the EDB plume during part of each year. Analytical data for these wells have been historically below the maximum contaminant level (MCL) for EDB. Sampled every quarter. These wells assist in plume boundary definition.

Former Downgradient Proximal; Current Upgradient Wells—Primarily located north of Ridgecrest Drive SE to the west and north of the historical EDB plume. These wells were previously downgradient of the historical EDB plume, but as groundwater flow direction has shifted, they are currently upgradient. Sampled every quarter.

Groundwater Monitoring Wells—Primarily located north of Ridgecrest Drive SE within the historical footprint of the EDB plume. Analytical data from these wells help to estimate the volume and mass of the EDB plume throughout the GWM network. Sampled in Q2 and Q4 at a minimum, with wells previously designated as newly added sampled every quarter.

KAFB-003 Sentinel Wells—One set of nested wells located west of drinking water production well KAFB-003. Sampled every quarter. These wells help to assess any potential contaminant migration towards KAFB-003.

KAFB-015 Sentinel Wells—One set of nested wells located east of drinking water production well KAFB-015. Sampled every quarter. These wells help to assess any potential contaminant migration towards KAFB-015.

KAFB-016 Sentinel Well—One well located west of drinking water production well KAFB-016. Sampled every quarter. This well helps to assess the potential for contaminant migration towards KAFB-016.

Paired wells—Wells located near a GWM IM extraction well to assess the quality of the water entering the extraction well.

Signal Wells—Three wells located along the south side of Ridgecrest Drive SE to monitor BTEX and provide early indication if the benzene plume is migrating from the source area into the interim measure target area capture zone created by the groundwater extraction wells. Sampled during Q2 and Q4.

Source Area Wells—Primarily located in the Bulk Fuels Facility south of Randolph Road SE and proximal to the spill site on-Base. Sampled during Q2 and Q4 at a minimum, with some sampled every quarter. These wells monitor the higher concentrations of dissolved-phase plumes on-Base.

Veterans Affairs (VA) Proximal Wells—Three sets of nested wells located between the historical EDB plume south of Ridgecrest Drive SE and the Raymond G. Murphy VA Medical Center as a means to observe for potential contaminant migration towards the VA medical campus. Sampled every quarter. These wells provide additional wellhead protection monitoring for the VA supply well.

^b The groundwater monitoring network consists of 162 wells, 161 wells that are currently sampled, and one well which will be sampled once water level has risen sufficiently. Select wells are identified for additional or more frequent monitoring of risk-driving constituents. Metals analysis consists of select total metals (arsenic, calcium, lead, potassium, magnesium, and sodium) and select dissolved metals (iron and manganese). Anions analysis consists of bromide, chloride, nitrate/nitrite nitrogen, and sulfate. Field parameters include pH, specific conductivity, dissolved oxygen, oxidation reduction potential, temperature, and turbidity.

Newly Added Wells—Newly added wells can include both existing wells that are added to the GWM network as well as newly installed wells. Newly added GWM wells require a minimum of four quarters of baseline full-suite analytical sampling. These wells have been added to assess the plume boundaries and provide additional water table monitoring due to the rising groundwater elevation.

Groundwater Monitoring Wells—Wells which have completed the minimum four quarters of baseline full-suite analytical sampling. These wells can have any of the objectives described above.

^c Well sampled with passive sampling methodology; field parameter measurements are not representative and therefore are not collected.

^d Well was removed from the groundwater monitoring network due to safety concerns after Q2 2016. These concerns were mitigated and sampling resumed in Q4 2019; sampling at this well is considered supplemental to the groundwater monitoring program.

^e KAFB-106211 will be included for sampling when it has enough saturated water column to deploy passive samplers (former air sparge well).

^f KAFB-106229 is not formally part of the groundwater monitoring network. However, it gets sampled semiannually for EDB.

BTEX = benzene, toluene, ethylbenzene, and total xylenes

EDB = 1,2-dibromoethane (ethylene dibromide)

FP = field parameter

GWM = groundwater monitoring

ID = identification

Q2 = second quarter

Q4 = fourth quarter

SE = Southeast

SWMU = Solid Waste Management Unit

VA = Veterans Affairs

VOC = volatile organic compound

**Table 4-2
Groundwater Elevation and Light Non-Aqueous Phase Liquid Thickness, Q4 2020**

Well Location ID	Reference Elevation Interval (ft AMSL)	Measurement Date and Time	MRP Elevation (ft AMSL)	Well Depth ^a (ft MRP)	Screened Interval (ft AMSL)	Depth to LNAPL ^b (ft MRP)	Depth to Water ^b (ft MRP)	Screen Submergence Depth ^c (ft)	Measured LNAPL Thickness (ft)	LNAPL Elevation (ft AMSL)	Groundwater Elevation Corrected for LNAPL Thickness ^d (ft AMSL)
KAFB-106001 ^e	4857/4838	11/3/2020 11:02	5344.90	512.90	4859-4834	—	468.44	17.46	—	—	4876.46
KAFB-106002 ^f	4857	11/3/2020 12:10	5342.24	506.39	4861-4836	—	465.48	15.76	—	—	4876.76
KAFB-106003	4857	11/3/2020 11:58	5340.28	506.58	4861-4836	—	463.10	16.18	—	—	4877.18
KAFB-106004	4857	11/4/2020 09:27	5345.81	512.89	4859-4834	—	469.38	17.43	—	—	4876.43
KAFB-106005	4857	11/3/2020 09:06	5346.91	509.55	4865-4840	470.71	470.72	11.20	0.01	4876.20	4876.20
KAFB-106006	4857	11/3/2020 09:32	5351.48	514.78	4865-4840	—	475.35	11.13	—	—	4876.13
KAFB-106007	4857	11/3/2020 10:46	5349.60	516.25	4861-4836	—	473.42	15.18	—	—	4876.18
KAFB-106008	4857	11/3/2020 08:22	5351.77	513.25	4863-4838	—	475.72	13.05	—	—	4876.05
KAFB-106009	4857	11/3/2020 12:31	5348.55	510.14	4865-4840	—	472.37	11.18	—	—	4876.18
KAFB-106010	4857	11/2/2020 13:42	5343.26	510.24	4860-4835	—	467.77	15.49	—	—	4875.49
KAFB-106011 ^f	4857	11/3/2020 12:47	5353.15	519.05	4864-4839	—	477.38	11.77	—	—	4875.77
KAFB-106012R	4857	11/3/2020 12:22	5345.00	502.87	4877-4847	—	468.77	-0.77	—	—	4876.23
KAFB-106013	4857	11/4/2020 09:09	5350.62	519.39	4861-4836	—	474.79	14.83	—	—	4875.83
KAFB-106014	4857	11/3/2020 10:46	5350.22	519.53	4861-4836	—	474.33	14.89	—	—	4875.89
KAFB-106015 ^e	4857/4838	11/4/2020 09:14	5342.44	518.56	4855-4830	—	469.11	18.33	—	—	4873.33
KAFB-106016 ^f	4857	11/4/2020 08:06	5342.43	508.29	4864-4839	—	465.71	12.72	—	—	4876.72
KAFB-106017 ^{e,f}	4857/4838	11/4/2020 11:20	5342.52	515.61	4857-4832	—	467.58	17.94	—	—	4874.94
KAFB-106018 ^{e,f}	4857/4838	11/4/2020 10:19	5336.31	510.94	4857-4832	—	460.91	18.40	—	—	4875.40
KAFB-106019 ^e	4857/4838	11/4/2020 12:08	5354.62	525.90	4859-4834	—	479.48	16.14	—	—	4875.14
KAFB-106020	4857	11/4/2020 08:17	5341.05	510.63	4859-4834	—	465.18	16.86	—	—	4875.87
KAFB-106021	4838	11/2/2020 12:19	5314.33	487.05	4856-4831	—	439.18	--	—	—	4875.15
KAFB-106022 ^e	4857/4838	11/4/2020 12:39	5318.06	491.92	4856-4831	—	443.88	18.18	—	—	4874.18
KAFB-106023	4857	11/4/2020 12:25	5328.76	502.87	4856-4831	—	454.20	18.56	—	—	4874.56
KAFB-106024 ^f	4857	11/3/2020 11:14	5343.55	511.00	4863-4838	—	467.21	13.34	—	—	4876.34
KAFB-106025 ^e	4857/4838	11/3/2020 11:11	5317.28	494.75	4852-4827	—	442.58	22.70	—	—	4874.70
KAFB-106026	4857	11/3/2020 08:34	5322.68	491.28	4857-4837	—	448.73	16.95	—	—	4873.95
KAFB-106027 ^f	4857	11/3/2020 07:21	5348.62	509.16	4864-4844	—	471.95	12.67	—	—	4876.67
KAFB-106028	4857	11/3/2020 12:42	5348.89	516.75	4863-4838	—	473.08	12.81	—	—	4875.81
KAFB-106029	4857	11/2/2020 11:44	5310.94	476.83	4860-4840	—	435.83	15.11	—	—	4875.11
KAFB-106030	4838	11/2/2020 11:25	5311.03	490.97	4842-4827	—	435.93	--	—	—	4875.10
KAFB-106031	4814	11/2/2020 09:20	5311.06	515.87	4815-4802	—	436.07	--	—	—	4874.99
KAFB-106032	4857	11/3/2020 11:32	5317.60	480.40	4862-4842	—	441.47	14.13	—	—	4876.13
KAFB-106033	4838	11/3/2020 11:25	5317.76	497.16	4841-4826	—	441.61	--	—	—	4876.15
KAFB-106034	4814	11/3/2020 11:29	5318.63	523.32	4817-4802	—	442.47	--	—	—	4876.16
KAFB-106035	4857	11/4/2020 10:30	5321.58	486.92	4869-4839	—	447.88	4.70	—	—	4873.70
KAFB-106036	4838	11/4/2020 10:38	5321.85	501.36	4840-4825	—	448.35	--	—	—	4873.50
KAFB-106037	4838	11/4/2020 10:16	5322.10	527.09	4815-4800	—	449.00	--	—	—	4873.10
KAFB-106038	4857	11/4/2020 11:48	5351.61	515.19	4870-4840	—	476.66	4.95	—	—	4874.95
KAFB-106039	4838	11/4/2020 11:44	5351.32	530.25	4840-4825	—	476.48	--	—	—	4874.84
KAFB-106040	4814	11/4/2020 11:53	5350.26	552.41	4817-4802	—	475.40	--	—	—	4874.86
KAFB-106041	4857	11/3/2020 09:32	5324.35	473.48	4875-4855	—	450.19	-0.84	—	—	4874.16
KAFB-106042	4857	11/3/2020 09:38	5324.07	488.39	4855-4841	—	449.91	19.16	—	—	4874.16
KAFB-106043	4814	11/3/2020 09:29	5324.30	561.90	4781-4767	—	450.13	--	—	—	4874.17
KAFB-106044 ^f	4838	11/3/2020 07:30	5348.79	524.09	4841-4826	—	472.13	--	—	—	4876.66
KAFB-106045	4814	11/3/2020 07:35	5348.52	551.04	4817-4802	—	471.82	--	—	—	4876.70
KAFB-106046 ^f	4857	11/4/2020 07:47	5352.84	515.04	4863-4843	—	477.08	12.76	—	—	4875.76
KAFB-106047 ^f	4838	11/4/2020 07:39	5352.81	532.01	4841-4826	—	477.12	--	—	—	4875.69
KAFB-106048	4814	11/4/2020 07:23	5352.58	556.26	4817-4802	—	476.85	--	—	—	4875.73

**Table 4-2
Groundwater Elevation and Light Non-Aqueous Phase Liquid Thickness, Q4 2020**

Well Location ID	Reference Elevation Interval (ft AMSL)	Measurement Date and Time	MRP Elevation (ft AMSL)	Well Depth ^a (ft MRP)	Screened Interval (ft AMSL)	Depth to LNAPL ^b (ft MRP)	Depth to Water ^b (ft MRP)	Screen Submergence Depth ^c (ft)	Measured LNAPL Thickness (ft)	LNAPL Elevation (ft AMSL)	Groundwater Elevation Corrected for LNAPL Thickness ^d (ft AMSL)
KAFB-106049	4857	11/2/2020 12:38	5316.10	479.96	4859-4839	—	441.08	16.02	—	—	4875.02
KAFB-106050	4838	11/2/2020 12:26	5315.51	494.15	4841-4826	—	440.49	--	—	—	4875.02
KAFB-106051	4814	11/2/2020 12:34	5315.78	520.50	4815-4800	—	440.78	--	—	—	4875.00
KAFB-106052	4857	11/2/2020 13:02	5318.86	483.98	4869-4839	—	444.33	5.53	—	—	4874.53
KAFB-106053	4838	11/2/2020 12:57	5318.67	497.95	4840-4825	—	444.26	--	—	—	4874.41
KAFB-106054	4814	11/2/2020 12:52	5318.38	523.25	4814-4799	—	443.90	--	—	—	4874.48
KAFB-106055	4857	11/2/2020 10:08	5325.09	490.29	4859-4839	—	451.22	14.87	—	—	4873.87
KAFB-106057	4838	11/2/2020 14:14	5325.46	505.35	4841-4826	—	451.62	--	—	—	4873.84
KAFB-106058	4814	11/2/2020 10:20	5326.05	530.73	4814-4799	—	452.17	--	—	—	4873.88
KAFB-106059	4857	11/2/2020 08:19	5347.87	511.03	4861-4841	471.87	471.88	15.00	0.01	4876.00	4876.00
KAFB-106060 ^f	4838	11/4/2020 08:48	5345.32	523.12	4842-4827	—	469.29	--	—	—	4876.03
KAFB-106061	4814	11/4/2020 08:54	5345.43	593.00	4772-4757	—	469.25	--	—	—	4876.18
KAFB-106062 ^f	4814	11/4/2020 08:20	5351.20	598.10	4773-4758	—	475.30	--	—	—	4875.90
KAFB-106063 ^{f,g}	4838	10/14/2020 09:00	5351.86	528.36	4844-4829	—	475.70	--	—	—	4876.16
KAFB-106064 ^{f,g}	4857	10/14/2020 09:00	5351.08	513.18	4863-4843	—	474.93	13.15	—	—	4876.15
KAFB-106065 ^f	4838	11/2/2020 13:08	5348.76	528.06	4841-4826	—	473.17	--	—	—	4875.59
KAFB-106066 ^f	4814	11/4/2020 13:15	5349.09	595.79	4773-4758	—	473.33	--	—	—	4875.76
KAFB-106067 ^f	4857	11/3/2020 13:04	5347.50	509.90	4862-4842	—	472.13	13.37	—	—	4875.37
KAFB-106068 ^f	4814	11/4/2020 12:54	5347.23	600.03	4767-4752	—	472.08	--	—	—	4875.15
KAFB-106069	4838	11/4/2020 13:03	5347.25	525.45	4841-4826	—	471.84	--	—	—	4875.41
KAFB-106070	4857	11/4/2020 12:31	5318.54	483.75	4859-4839	—	443.86	15.68	—	—	4874.68
KAFB-106071	4814	11/4/2020 12:26	5320.90	567.30	4773-4758	—	446.08	--	—	—	4874.82
KAFB-106072	4838	11/3/2020 13:15	5319.29	494.45	4844-4824	—	444.25	--	—	—	4875.04
KAFB-106073	4838	11/3/2020 08:43	5339.87	519.16	4840-4825	—	464.21	--	—	—	4875.66
KAFB-106074	4814	11/4/2020 08:30	5340.59	588.95	4771-4756	—	464.95	--	—	—	4875.64
KAFB-106075 ^f	4857	11/4/2020 08:37	5340.50	505.00	4860-4840	—	464.94	15.56	—	—	4875.56
KAFB-106076	4857	11/3/2020 12:18	5344.92	499.75	4865-4845	—	468.78	11.14	—	—	4876.14
KAFB-106077	4838	11/3/2020 10:57	5344.72	522.35	4841-4826	—	469.94	--	—	—	4874.78
KAFB-106078 ^f	4814	11/3/2020 11:04	5344.60	593.50	4771-4756	—	469.08	--	—	—	4875.52
KAFB-106079	4857	11/3/2020 11:57	5349.67	511.40	4863-4843	—	473.86	12.81	—	—	4875.81
KAFB-106080 ^f	4838	11/3/2020 12:05	5348.48	526.28	4843-4828	—	472.31	--	—	—	4876.17
KAFB-106081	4814	11/3/2020 12:41	5349.48	596.23	4772-4757	—	473.59	--	—	—	4875.89
KAFB-106082	4857	11/4/2020 09:57	5335.26	495.89	4863-4843	—	460.26	12.00	—	—	4875.00
KAFB-106083	4838	11/4/2020 10:08	5335.04	514.69	4840-4825	—	459.91	--	—	—	4875.13
KAFB-106084	4814	11/4/2020 10:03	5337.94	587.92	4768-4753	—	462.74	--	—	—	4875.20
KAFB-106085	4857	11/4/2020 13:07	5317.23	480.90	4871-4841	—	442.08	4.15	—	—	4875.15
KAFB-106086	4838	11/4/2020 12:58	5317.65	494.92	4842-4827	—	442.46	--	—	—	4875.19
KAFB-106087	4814	11/4/2020 12:50	5316.87	565.43	4771-4756	—	441.69	--	—	—	4875.18
KAFB-106088	4857	11/3/2020 13:30	5324.27	484.41	4864-4844	—	449.56	10.71	—	—	4874.71
KAFB-106089	4838	11/4/2020 11:50	5323.54	501.82	4842-4827	—	449.39	--	—	—	4874.15
KAFB-106090	4814	11/4/2020 11:42	5322.85	524.65	4768-4753	—	448.26	--	—	—	4874.59
KAFB-106091	4857	11/2/2020 11:52	5314.33	479.51	4860-4840	—	440.74	13.59	—	—	4873.59
KAFB-106092	4838	11/2/2020 12:04	5314.51	493.48	4841-4826	—	441.12	--	—	—	4873.39
KAFB-106093	4814	11/2/2020 11:57	5314.62	563.00	4771-4756	—	440.54	--	—	—	4874.08
KAFB-106094 ^f	4857	11/3/2020 12:54	5345.07	509.17	4861-4841	—	469.20	14.87	—	—	4875.87
KAFB-106095	4838	11/4/2020 13:23	5344.66	522.47	4841-4826	—	468.82	--	—	—	4875.84
KAFB-106096 ^f	4814	11/4/2020 13:28	5345.31	595.08	4769-4754	—	469.42	--	—	—	4875.89
KAFB-106097	4838	11/4/2020 09:13	5347.74	525.98	4842-4827	—	471.71	--	—	—	4876.03
KAFB-106098	4814	11/4/2020 09:18	5347.83	550.78	4817-4802	—	471.84	--	—	—	4875.99

**Table 4-2
Groundwater Elevation and Light Non-Aqueous Phase Liquid Thickness, Q4 2020**

Well Location ID	Reference Elevation Interval (ft AMSL)	Measurement Date and Time	MRP Elevation (ft AMSL)	Well Depth ^a (ft MRP)	Screened Interval (ft AMSL)	Depth to LNAPL ^b (ft MRP)	Depth to Water ^b (ft MRP)	Screen Submergence Depth ^c (ft)	Measured LNAPL Thickness (ft)	LNAPL Elevation (ft AMSL)	Groundwater Elevation Corrected for LNAPL Thickness ^d (ft AMSL)
KAFB-106099	4838	11/4/2020 09:18	5342.85	521.10	4842-4827	—	466.33	--	—	—	4876.52
KAFB-106100	4814	11/4/2020 09:36	5342.85	546.55	4817-4802	—	466.38	--	—	—	4876.47
KAFB-106101	4838	11/3/2020 11:54	5340.32	514.83	4842-4826	—	463.37	--	—	—	4876.95
KAFB-106102	4814	11/3/2020 11:49	5340.32	539.80	4816-4803	—	463.48	--	—	—	4876.84
KAFB-106103	4838	11/4/2020 11:23	5328.44	505.25	4843-4828	—	454.45	--	—	—	4873.99
KAFB-106104	4814	11/4/2020 11:28	5328.08	528.30	4818-4803	—	453.90	--	—	—	4874.18
KAFB-106105	4838	11/3/2020 10:55	5321.96	503.90	4838-4823	—	447.73	--	—	—	4874.23
KAFB-106106	4857	11/3/2020 11:00	5321.80	483.04	4868-4838	—	447.62	6.18	—	—	4874.18
KAFB-106107	4814	11/3/2020 10:48	5322.12	529.15	4812-4797	—	447.83	--	—	—	4874.29
KAFB-106148-484 ^h	4857	11/3/2020 10:48	5344.24	479.68	4990-4860	—	467.81	-113.81	—	—	4876.43
KAFB-106149-484 ^h	4857	11/2/2020 07:58	5345.94	479.90	4992-4862	—	469.89	-115.95	—	—	4876.05
KAFB-106150-484 ^h	4857	11/3/2020 11:10	5344.10	480.08	4989-4860	467.97	468.07	-112.89	0.10	4876.13	4876.11
KAFB-106151-484 ^h	4857	11/3/2020 08:11	5345.49	480.10	4990-4861	—	469.78	-114.29	—	—	4875.71
KAFB-106152-484 ^h	4857	11/3/2020 08:38	5347.68	482.60	4992-4863	—	471.63	-115.95	—	—	4876.05
KAFB-106153-484 ^h	4857	11/3/2020 10:14	5348.99	480.49	4994-4865	—	473.01	-118.02	—	—	4875.98
KAFB-106154-484 ^h	4857	11/3/2020 09:55	5347.34	481.15	4992-4863	471.05	471.09	-115.72	0.04	4876.29	4876.28
KAFB-106155-484 ^h	4857	11/3/2020 09:44	5347.13	481.16	4992-4863	—	471.50	-116.37	—	—	4875.63
KAFB-106156-484 ^h	4857	11/3/2020 08:00	5341.19	481.82	4996-4857	—	464.76	-119.57	—	—	4876.43
KAFB-106201	4857	11/2/2020 07:32	5357.00	524.11	4867-4837	—	488.10	1.90	—	—	4868.90
KAFB-106202	4838	11/2/2020 07:29	5357.80	538.94	4838-4823	—	488.84	--	—	—	4868.96
KAFB-106203	4814	11/2/2020 07:41	5357.52	642.02	4734-4719	—	488.96	--	—	—	4868.56
KAFB-106204	4857	11/2/2020 08:27	5332.86	497.48	4870-4840	—	459.94	2.92	—	—	4872.92
KAFB-106205	4838	11/2/2020 08:33	5333.29	512.46	4841-4826	—	460.39	--	—	—	4872.90
KAFB-106206	4814	11/2/2020 08:40	5333.46	613.58	4740-4725	—	460.55	--	—	—	4872.91
KAFB-106207	4857	11/2/2020 08:16	5344.20	507.40	4871-4841	—	472.86	0.34	—	—	4871.34
KAFB-106208	4838	11/2/2020 08:10	5343.85	522.48	4841-4826	—	472.56	--	—	—	4871.29
KAFB-106209	4814	11/2/2020 08:04	5343.38	623.85	4740-4726	—	471.87	--	—	—	4871.51
KAFB-106211 ^g	4857	11/4/2020	5342.51	466.72	4903-4875.79	—	NA	NA	—	—	NA
KAFB-106212	4814	11/4/2020 10:16	5321.80	562.97	4779-4764	—	448.59	--	—	—	4873.21
KAFB-106213	4857	11/4/2020 10:06	5325.19	482.79	4877-4847	—	451.44	-3.25	—	—	4873.75
KAFB-106214	4838	11/4/2020 09:59	5325.45	497.80	4847-4833	—	451.58	--	—	—	4873.87
KAFB-106215	4814	11/4/2020 09:50	5325.77	566.87	4779-4764	—	451.83	--	—	—	4873.94
KAFB-106216	4857	11/2/2020 09:35	5333.91	489.80	4878-4848	—	460.53	-4.62	—	—	4873.38
KAFB-106217	4838	11/2/2020 09:40	5333.85	505.47	4849-4834	—	460.45	--	—	—	4873.40
KAFB-106218	4814	11/2/2020 09:46	5333.64	572.31	4782-4767	—	460.61	--	—	—	4873.03
KAFB-106219	4857	11/3/2020 08:17	5340.41	498.79	4878-4848	—	467.59	-5.18	—	—	4872.82
KAFB-106220	4838	11/3/2020 08:22	5340.34	513.50	4847-4832	—	467.50	--	—	—	4872.84
KAFB-106221	4814	11/3/2020 08:10	5340.10	581.25	4779-4764	—	467.25	--	—	—	4872.85
KAFB-106222	4857	11/2/2020 09:03	5333.24	493.33	4875-4845	—	460.38	-2.14	—	—	4872.86
KAFB-106223	4838	11/2/2020 09:09	5333.96	506.71	4846-4831	—	461.01	--	—	—	4872.95
KAFB-106224	4814	11/2/2020 09:18	5335.08	575.88	4780-4765	—	462.06	--	—	—	4873.02
KAFB-106225	4857	11/2/2020 10:39	5326.36	482.88	4876-4846	—	453.25	-2.89	—	—	4873.11
KAFB-106226	4838	11/2/2020 10:45	5327.31	500.10	4847-4832	—	453.83	--	—	—	4873.48
KAFB-106227	4814	11/2/2020 10:52	5328.09	568.36	4780-4765	—	454.53	--	—	—	4873.56
KAFB-106229 ^{e,h}	4857/4838	11/2/2020 12:09	5314.31	536.27	4883-4783	—	440.89	-9.58	—	—	4873.42
KAFB-106230	4814	11/3/2020 09:50	5324.51	520.32	4824-4809	—	451.00	--	—	—	4873.51
KAFB-106231	4857	11/2/2020 10:40	5327.56	479.89	4888-4853	—	454.19	-14.63	—	—	4873.37
KAFB-106232	4814	11/2/2020 11:00	5327.20	523.10	4824-4809	—	453.73	--	—	—	4873.47
KAFB-106235-438	4857	11/3/2020 09:07	5315.67	465.50	4878-4853	—	441.54	-3.87	—	—	4874.13

**Table 4-2
Groundwater Elevation and Light Non-Aqueous Phase Liquid Thickness, Q4 2020**

Well Location ID	Reference Elevation Interval (ft AMSL)	Measurement Date and Time	MRP Elevation (ft AMSL)	Well Depth ^a (ft MRP)	Screened Interval (ft AMSL)	Depth to LNAPL ^b (ft MRP)	Depth to Water ^b (ft MRP)	Screen Submergence Depth ^c (ft)	Measured LNAPL Thickness (ft)	LNAPL Elevation (ft AMSL)	Groundwater Elevation Corrected for LNAPL Thickness ^d (ft AMSL)
KAFB-106235-472	4838	11/3/2020 09:10	5315.67	494.14	4844-4824	—	441.52	--	—	—	4874.15
KAFB-106235-501	4814	11/3/2020 09:14	5315.67	522.48	4815-4795	—	441.60	--	—	—	4874.07
KAFB-106236-436	4857	11/3/2020 08:43	5316.02	463.30	4880-4855	—	441.73	-5.71	—	—	4874.29
KAFB-106236-470	4838	11/3/2020 08:48	5316.02	492.17	4846-4826	—	441.73	--	—	—	4874.29
KAFB-106236-499	4814	11/3/2020 08:53	5316.02	519.94	4817-4797	—	441.77	--	—	—	4874.25
KAFB-106240-449	4857	11/3/2020 09:01	5347.57	491.05	4899-4859	—	471.62	-23.05	—	—	4875.95
KAFB-106241-428	4857	11/2/2020 10:01	5324.06	470.10	4896-4856	—	450.65	-22.59	—	—	4873.41
KAFB-106242-418	4857	11/2/2020 12:03	5316.15	459.94	4898-4858	—	440.99	-22.84	—	—	4875.16
KAFB-106243-425	4857	11/4/2020 11:59	5320.57	567.30	4896-4856	—	445.95	-21.38	—	—	4874.62
KAFB-106244-445	4857	11/4/2020 09:45	5343.51	487.12	4898-4858	—	467.08	-21.57	—	—	4876.43
KAFB-106245-460	4857	11/4/2020 08:31	5360.90	505.51	4897-4857	—	485.78	-21.88	—	—	4875.12
KAFB-106247-450	4857	11/3/2020 10:35	5351.60	495.12	4901-4861	—	475.51	-24.91	—	—	4876.09
KAFB-106S1-447	4857	11/3/2020 10:34	5345.22	489.53	4898-4858	—	468.89	-21.67	—	—	4876.33
KAFB-106S2-451	4857	11/3/2020 08:28	5352.40	496.45	4898-4858	—	476.39	-21.99	—	—	4876.01
KAFB-106S3-449	4857	11/3/2020 11:42	5351.01	493.62	4899-4859	—	475.56	-23.55	—	—	4875.45
KAFB-106S4-446	4857	11/4/2020 07:47	5346.57	491.09	4898-4858	—	470.45	-21.88	—	—	4876.12
KAFB-106S5-446	4857	11/2/2020 13:35	5343.58	488.18	4898-4858	—	467.90	-22.32	—	—	4875.68
KAFB-106S7-451	4857	11/2/2020 13:15	5348.88	492.02	4898-4858	—	473.29	-22.41	—	—	4875.59
KAFB-106S8-451	4857	11/3/2020 10:26	5351.45	491.42	4900-4860	—	475.30	-23.85	—	—	4876.15
KAFB-106S9-447	4857	11/3/2020 11:22	5345.82	489.19	4899-4859	—	469.94	-23.12	—	—	4875.88
KAFB-3411	4857	11/4/2020 07:57	5343.49	504.68	4863-4838	—	467.02	13.47	—	—	4876.47

^a Well depths were measured in December 2020 in wells without a dedicated pump. For wells with a dedicated pump, the total depth is based on the information provided in the well completion diagram.

^b See appendix table E-2-2 for corrections to water level and LNAPL depths based on interface probe calibration.

^c Screen submergence depth is calculated for wells which intersected the water table when they were installed; those located in REI 4857 and 4857/4838. It is the difference between the groundwater elevation corrected for LNAPL thickness and the top of screen elevation. Negative values reflect the length of screen remaining above the water table.

^d Groundwater elevation corrected for LNAPL thickness was calculated by the following formula: MRP Elevation - Depth to LNAPL/water interface + (LNAPL Thickness * Specific Gravity of Weathered JP4/JP8 Fuel) where the specific gravity of JP4/JP8 fuel is 0.7592. The specific gravity is based on the December 13, 2018 site-specific fuel testing report from PTS Laboratories using LNAPL collected from wells KAFB-106014, KAFB-106059, and KAFB-106079.

^e Well used in analyses for both REI 4857 and 4838.

^f This well contains a dedicated pump; therefore, a sounder was not deployed to avoid entanglement and the total depth is based on the information provided in the well completion diagram.

^g Well was not gauged in November due to presence of monitoring equipment. Gauging occurred prior to sampling in October and is presented here for information purposes only. Data was not used in the creation of potentiometric surface maps or used in the performance assessment.

^h Well not permanently designated in REI listed.

-- = Well was designed with the screened interval fully submerged to capture conditions at depths below the water table

— = LNAPL not detected

AMSL = above mean sea level

ft = foot/feet

ID = identification

JP = jet propellant

LNAPL = light non-aqueous phase liquid

MRP = measurement reference point

Q4 = fourth quarter

REI = reference elevation interval

**Table 4-3
Groundwater Monitoring Wells Sampled in Q4 2020**

Location ID	Reference Elevation Interval (ft AMSL)	Well Installation Date ^a	Date Sampled	Screen Interval ^b (ft bgs)	Screen Interval ^b (ft AMSL)	Sampling System	Screen Submerged ^c (Yes/No)?	Estimated Sample Depth ^{d,e,f} (ft bgs)	Analytical Suite ^g
Reference Elevation Interval 4857 (ft AMSL) Groundwater Monitoring Wells									
KAFB-106001	4857/4838	11/10/2000	10/30/2020	483-508	4859-4834	Portable pump	Yes	485	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106002	4857	3/26/2002	10/20/2020	479-504	4861-4836	Dedicated pump	Yes	492	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106003	4857	1/25/2003	10/13/2020	476-501	4861-4836	Portable pump	Yes	478	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106004	4857	1/4/2006	10/14/2020	484-509	4859-4834	Portable pump	Yes	486	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106005	4857	1/22/2007	10/23/2020	479-504	4865-4840	Portable pump	Yes	481	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106006	4857	10/31/2007	10/29/2020	484-509	4865-4840	Portable pump	Yes	486	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106007	4857	11/14/2007	10/5/2020	484-509	4861-4836	Portable pump	Yes	486	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106008	4857	11/21/2007	10/21/2020	486-511	4863-4838	Portable pump	Yes	488	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106009	4857	11/28/2007	10/12/2020	480-505	4865-4840	Portable pump	Yes	482	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106010	4857	12/6/2007	10/22/2020	483-508	4860-4835	Portable pump	Yes	485	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106011	4857	9/23/2008	10/1/2020	486-511	4864-4839	Dedicated pump	Yes	499	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106012R	4857	4/22/2014	10/2/2020	466-495	4877-4847	Portable pump	No	493	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106013	4857	9/19/2008	10/13/2020	487-512	4861-4836	Portable pump	Yes	489	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106014	4857	10/3/2008	10/29/2020	486-511	4861-4836	Portable pump	Yes	488	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106015	4857/4838	10/14/2008	10/13/2020	485-510	4855-4830	Passive sampler	Yes	488	EDB, VOCs, metals, anions, alkalinity
KAFB-106016	4857	10/17/2008	10/1/2020	475-500	4864-4839	Dedicated pump	Yes	488	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106017	4857/4838	11/19/2008	10/19/2020	482-507	4857-4832	Dedicated pump	Yes	495	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106018	4857/4838	11/24/2008	10/28/2020	476-501	4857-4832	Portable pump	Yes	478	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106019	4857/4838	12/9/2008	10/8/2020	493-518	4859-4834	Portable pump	Yes	495	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106020	4857	12/19/2008	10/29/2020	482-507	4859-4834	Portable pump	Yes	484	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106022	4857/4838	6/12/2009	10/9/2020	462-487	4856-4831	Passive sampler	Yes	463	EDB, VOCs, metals, anions, alkalinity
KAFB-106023	4857	6/27/2009	10/13/2020	473-498	4856-4831	Passive sampler	Yes	474	EDB, VOCs, metals, anions, alkalinity
KAFB-106024	4857	8/3/2009	10/21/2020	481-506	4863-4838	Dedicated pump	Yes	494	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106025	4857/4838	12/5/2010	10/15/2020	465-490	4852-4827	Passive sampler	Yes	466	EDB, VOCs, metals, anions, alkalinity
KAFB-106026	4857	4/23/2010	10/12/2020	466-486	4857-4837	Passive sampler	Yes	467	EDB, VOCs, metals, anions, alkalinity
KAFB-106027	4857	5/1/2010	10/1/2020	481-501	4864-4844	Dedicated pump	Yes	491	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106028	4857	5/16/2010	10/22/2020	486-511	4863-4838	Portable pump	Yes	488	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106029	4857	6/4/2011	10/6/2020	451-471	4860-4840	Passive sampler	Yes	452	EDB, VOCs, metals, anions, alkalinity
KAFB-106032	4857	6/24/2011	10/8/2020	456-476	4862-4842	Passive sampler	Yes	457	EDB, VOCs, metals, anions, alkalinity
KAFB-106035	4857	8/9/2011	10/9/2020	452-482	4869-4839	Passive sampler	Yes	453	EDB, VOCs, metals, anions, alkalinity
KAFB-106038	4857	8/5/2011	10/5/2020	478-508	4870-4840	Portable pump	Yes	480	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106041	4857	6/6/2011	10/8/2020	449-469	4875-4855	Passive sampler	No	450	EDB, VOCs, metals, anions, alkalinity
KAFB-106042	4857	5/31/2011	10/8/2020	469-484	4855-4841	Passive sampler	Yes	470	EDB, VOCs, metals, anions, alkalinity
KAFB-106046	4857	4/8/2011	10/20/2020	490-510	4863-4843	Dedicated pump	Yes	500	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106049	4857	5/13/2011	10/12/2020	457-477	4859-4839	Passive sampler	Yes	458	EDB, VOCs, metals, anions, alkalinity
KAFB-106052	4857	7/25/2011	10/12/2020	450-480	4869-4839	Passive sampler	Yes	450	EDB, VOCs, metals, anions, alkalinity
KAFB-106055	4857	6/24/2011	10/8/2020	466-486	4859-4839	Passive sampler	Yes	467	EDB, VOCs, metals, anions, alkalinity
KAFB-106059	4857	4/7/2011	10/23/2020	483-503	4861-4841	Portable pump	Yes	485	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106064	4857	3/24/2011	10/14/2020	485-505	4863-4843	Bladder pump	Yes	493	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106067	4857	5/11/2011	10/19/2020	485-505	4862-4842	Dedicated pump	Yes	495	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106070	4857	5/23/2011	10/13/2020	460-480	4859-4839	Passive sampler	Yes	461	EDB, VOCs, metals, anions, alkalinity

**Table 4-3
Groundwater Monitoring Wells Sampled in Q4 2020**

Location ID	Reference Elevation Interval (ft AMSL)	Well Installation Date ^a	Date Sampled	Screen Interval ^b (ft bgs)	Screen Interval ^b (ft AMSL)	Sampling System	Screen Submerged ^c (Yes/No)?	Estimated Sample Depth ^{d,e,f} (ft bgs)	Analytical Suite ^g
KAFB-106075	4857	4/17/2011	10/23/2020	480-500	4860-4840	Dedicated pump	Yes	490	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106076	4857	4/8/2011	10/30/2020	480-500	4865-4845	Portable pump	Yes	482	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106079	4857	3/22/2011	10/30/2020	484-504	4863-4843	Portable pump	Yes	486	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106082	4857	4/5/2011	10/6/2020	472-492	4863-4843	Portable pump	Yes	474	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106085	4857	7/8/2011	10/13/2020	447-477	4871-4841	Passive sampler	Yes	447	EDB, VOCs, metals, anions, alkalinity
KAFB-106088	4857	6/3/2011	10/15/2020	460-480	4864-4844	Passive sampler	Yes	461	EDB, VOCs, metals, anions, alkalinity
KAFB-106091	4857	6/4/2011	10/9/2020	454-474	4860-4840	Passive sampler	Yes	455	EDB, VOCs, metals, anions, alkalinity
KAFB-106094	4857	6/26/2011	10/19/2020	484-504	4861-4841	Dedicated pump	Yes	494	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106106	4857	8/10/2011	10/8/2020	454-484	4868-4838	Passive sampler	Yes	454	EDB, VOCs, metals, anions, alkalinity
KAFB-106149-484	4857	9/16/2011	10/21/2020	354-484	4992-4862	Passive sampler	No	472	EDB, VOCs, metals, anions, alkalinity
KAFB-106151-484	4857	9/30/2011	10/21/2020	355-484	4990-4861	Passive sampler	No	470	EDB, VOCs, metals, anions, alkalinity
KAFB-106152-484	4857	10/7/2011	10/21/2020	355-484	4992-4863	Passive sampler	No	472	EDB, VOCs, metals, anions, alkalinity
KAFB-106153-484	4857	10/27/2011	10/21/2020	355-484	4994-4865	Passive sampler	No	475	EDB, VOCs, metals, anions, alkalinity
KAFB-106201	4857	9/24/2012	10/7/2020	487-517	4867-4837	Passive sampler	Yes	490	EDB, VOCs, metals, anions, alkalinity
KAFB-106204	4857	8/22/2012	10/6/2020	463-493	4870-4840	Passive sampler	Yes	463	EDB, VOCs, metals, anions, alkalinity
KAFB-106207	4857	8/22/2012	10/5/2020	473-503	4871-4841	Passive sampler	Yes	474	EDB, VOCs, metals, anions, alkalinity
KAFB-106213	4857	2/10/2015	10/14/2020	448-478	4877-4847	Passive sampler	No	451	EDB, VOCs, metals, anions, alkalinity
KAFB-106216	4857	2/17/2015	10/7/2020	456-486	4878-4848	Passive sampler	No	461	EDB, VOCs, metals, anions, alkalinity
KAFB-106219	4857	3/20/2015	10/7/2020	463-493	4878-4848	Passive sampler	No	469	EDB, VOCs, metals, anions, alkalinity
KAFB-106222	4857	1/15/2015	10/14/2020	458-488	4875-4845	Passive sampler	No	461	EDB, VOCs, metals, anions, alkalinity
KAFB-106225	4857	1/19/2015	10/7/2020	450-480	4876-4846	Passive sampler	No	453	EDB, VOCs, metals, anions, alkalinity
KAFB-106229 ^h	4857/4838	8/20/2015	10/9/2020	431-531	4883-4783	Passive sampler	No	442	EDB
KAFB-106231	4857	9/15/2015	10/6/2020	440-475	4888-4853	Passive sampler	No	454	EDB, VOCs, metals, anions, alkalinity
KAFB-106235-438	4857	10/31/2016	10/5/2020	438-463	4878-4853	Passive sampler	No	441	EDB, VOCs, metals, anions, alkalinity
KAFB-106236-436	4857	11/23/2016	10/5/2020	436-461	4880-4855	Passive sampler	No	442	EDB, VOCs, metals, anions, alkalinity
KAFB-106240-449	4857	6/14/2018	10/15/2020	449-489	4899-4859	Passive sampler	No	473	EDB, VOCs, metals, anions, alkalinity
KAFB-106241-428	4857	8/16/2018	10/12/2020	428-468	4896-4856	Passive sampler	No	452	EDB, VOCs, metals, anions, alkalinity
KAFB-106242-418	4857	8/23/2018	10/6/2020	418-458	4898-4858	Passive sampler	No	442	EDB, VOCs, metals, anions, alkalinity
KAFB-106243-425	4857	7/27/2018	10/13/2020	425-465	4896-4856	Passive sampler	No	447	EDB, VOCs, metals, anions, alkalinity
KAFB-106244-445	4857	7/12/2018	10/14/2020	445-485	4898-4858	Passive sampler	No	469	EDB, VOCs, metals, anions, alkalinity
KAFB-106245-460	4857	9/7/2018	10/14/2020	461-501	4897-4857	Passive sampler	No	485	EDB, VOCs, metals, anions, alkalinity
KAFB-106247-450	4857	3/1/2019	10/14/2020	450-490	4898-4858	Passive sampler	No	477	EDB, VOCs, metals, anions, alkalinity
KAFB-106S1-447	4857	2/18/2019	10/21/2020	447-487	4898-4858	Passive sampler	No	471	EDB, VOCs, metals, anions, alkalinity
KAFB-106S2-451	4857	11/21/2018	10/22/2020	451-491	4898-4858	Passive sampler	No	478	EDB, VOCs, metals, anions, alkalinity
KAFB-106S3-449	4857	11/29/2018	10/22/2020	449-489	4899-4859	Passive sampler	No	476	EDB, VOCs, metals, anions, alkalinity
KAFB-106S4-446	4857	11/16/2018	10/22/2020	446-486	4897-4857	Passive sampler	No	471	EDB, VOCs, metals, anions, alkalinity
KAFB-106S5-446	4857	11/5/2018	10/22/2020	446-486	4898-4858	Passive sampler	No	468	EDB, VOCs, metals, anions, alkalinity
KAFB-106S7-451	4857	2/4/2019	10/22/2020	451-491	4898-4858	Passive sampler	No	475	EDB, VOCs, metals, anions, alkalinity
KAFB-106S8-451	4857	3/1/2019	10/21/2020	451-491	4897-4857	Passive sampler	No	476	EDB, VOCs, metals, anions, alkalinity
KAFB-106S9-447	4857	11/8/2019	10/21/2020	447-487	4899-4859	Passive sampler	No	471	EDB, VOCs, metals, anions, alkalinity
KAFB-3411	4857	11/10/1999	10/2/2020	477-502	4863-4838	Portable pump	Yes	479	EDB, VOCs, metals, anions, alkalinity, FP

**Table 4-3
Groundwater Monitoring Wells Sampled in Q4 2020**

Location ID	Reference Elevation Interval (ft AMSL)	Well Installation Date ^a	Date Sampled	Screen Interval ^b (ft bgs)	Screen Interval ^b (ft AMSL)	Sampling System	Screen Submerged ^c (Yes/No)?	Estimated Sample Depth ^{d,e,f} (ft bgs)	Analytical Suite ^g
Reference Elevation Interval 4838 (ft AMSL) Groundwater Monitoring Wells									
KAFB-106021	4838	6/7/2009	10/6/2020	458-483	4856-4831	Passive sampler	Yes	459	EDB, VOCs, metals, anions, alkalinity
KAFB-106030	4838	5/25/2011	10/6/2020	470-485	4842-4827	Passive sampler	Yes	470	EDB, VOCs, metals, anions, alkalinity
KAFB-106033	4838	6/18/2011	10/8/2020	477-492	4841-4826	Passive sampler	Yes	478	EDB, VOCs, metals, anions, alkalinity
KAFB-106036	4838	8/5/2011	10/12/2020	482-497	4840-4825	Passive sampler	Yes	483	EDB, VOCs, metals, anions, alkalinity
KAFB-106037	4838	7/14/2011	10/9/2020	507-522	4815-4800	Passive sampler	Yes	508	EDB, VOCs, metals, anions, alkalinity
KAFB-106039	4838	7/26/2011	10/5/2020	508-523	4840-4825	Portable pump	Yes	510	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106044	4838	1/7/2011	10/1/2020	504-519	4841-4826	Dedicated pump	Yes	512	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106047	4838	4/8/2011	10/20/2020	512-527	4841-4826	Dedicated pump	Yes	520	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106050	4838	5/2/2011	10/12/2020	474-489	4841-4826	Passive sampler	Yes	475	EDB, VOCs, metals, anions, alkalinity
KAFB-106053	4838	7/11/2011	10/9/2020	478-493	4840-4825	Passive sampler	Yes	479	EDB, VOCs, metals, anions, alkalinity
KAFB-106057	4838	6/19/2011	10/8/2020	485-500	4841-4826	Passive sampler	Yes	486	EDB, VOCs, metals, anions, alkalinity
KAFB-106060	4838	4/16/2011	10/20/2020	503-518	4842-4827	Dedicated pump	Yes	511	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106063	4838	4/8/2011	10/14/2020	505-520	4844-4829	Bladder pump	Yes	511	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106065	4838	5/17/2011	10/19/2020	508-523	4841-4826	Dedicated pump	Yes	516	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106069	4838	5/1/2011	10/16/2020	506-521	4841-4826	Portable pump	Yes	508	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106072	4838	5/1/2011	10/15/2020	475-495	4844-4824	Passive sampler	Yes	476	EDB, VOCs, metals, anions, alkalinity
KAFB-106073	4838	5/5/2011	10/12/2020	500-515	4840-4825	Portable pump	Yes	502	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106077	4838	4/8/2011	10/9/2020	504-519	4841-4826	Portable pump	Yes	506	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106080	4838	4/17/2011	11/24/2020	503-518	4843-4828	Portable pump	Yes	505	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106083	4838	4/15/2011	10/6/2020	496-511	4840-4825	Portable pump	Yes	498	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106086	4838	6/26/2011	10/13/2020	476-491	4842-4827	Passive sampler	Yes	477	EDB, VOCs, metals, anions, alkalinity
KAFB-106089	4838	5/23/2011	10/13/2020	482-497	4842-4827	Passive sampler	Yes	482	EDB, VOCs, metals, anions, alkalinity
KAFB-106092	4838	5/24/2011	10/8/2020	474-489	4841-4826	Passive sampler	Yes	475	EDB, VOCs, metals, anions, alkalinity
KAFB-106095	4838	6/24/2011	10/7/2020	504-519	4841-4826	Portable pump	Yes	506	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106097	4838	4/27/2011	10/13/2020	506-521	4842-4827	Portable pump	Yes	508	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106099	4838	5/12/2011	10/14/2020	501-516	4842-4827	Portable pump	Yes	503	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106101	4838	2/21/2011	10/14/2020	496-511	4842-4826	Portable pump	Yes	498	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106103	4838	6/21/2011	10/13/2020	485-500	4843-4828	Passive sampler	Yes	486	EDB, VOCs, metals, anions, alkalinity
KAFB-106105	4838	8/19/2011	10/12/2020	484-499	4838-4823	Passive sampler	Yes	485	EDB, VOCs, metals, anions, alkalinity
KAFB-106202	4838	9/23/2012	10/7/2020	517-532	4838-4823	Passive sampler	Yes	521	EDB, VOCs, metals, anions, alkalinity
KAFB-106205	4838	8/15/2012	10/6/2020	493-508	4841-4826	Passive sampler	Yes	493	EDB, VOCs, metals, anions, alkalinity
KAFB-106208	4838	8/16/2012	10/6/2020	503-518	4841-4826	Passive sampler	Yes	504	EDB, VOCs, metals, anions, alkalinity
KAFB-106214	4838	3/13/2015	10/14/2020	478-493	4847-4833	Passive sampler	Yes	479	EDB, VOCs, metals, anions, alkalinity
KAFB-106217	4838	2/17/2015	10/7/2020	485-500	4849-4834	Passive sampler	Yes	486	EDB, VOCs, metals, anions, alkalinity
KAFB-106220	4838	3/20/2015	10/7/2020	493-508	4847-4832	Passive sampler	Yes	494	EDB, VOCs, metals, anions, alkalinity
KAFB-106223	4838	2/17/2015	10/14/2020	488-503	4846-4831	Passive sampler	Yes	489	EDB, VOCs, metals, anions, alkalinity
KAFB-106226	4838	2/3/2015	10/7/2020	480-495	4847-4832	Passive sampler	Yes	481	EDB, VOCs, metals, anions, alkalinity
KAFB-106235-472	4838	10/31/2016	10/5/2020	472-492	4844-4824	Passive sampler	Yes	473	EDB, VOCs, metals, anions, alkalinity
KAFB-106236-470	4838	11/23/2016	10/5/2020	470-490	4846-4826	Passive sampler	Yes	471	EDB, VOCs, metals, anions, alkalinity

**Table 4-3
Groundwater Monitoring Wells Sampled in Q4 2020**

Location ID	Reference Elevation Interval (ft AMSL)	Well Installation Date ^a	Date Sampled	Screen Interval ^b (ft bgs)	Screen Interval ^b (ft AMSL)	Sampling System	Screen Submerged ^c (Yes/No)?	Estimated Sample Depth ^{d,e,f} (ft bgs)	Analytical Suite ^g
Reference Elevation Interval 4814 (ft AMSL) Groundwater Monitoring Wells									
KAFB-106031	4814	5/25/2011	10/6/2020	496-510	4815-4802	Passive sampler	Yes	497	EDB, VOCs, metals, anions, alkalinity
KAFB-106034	4814	6/24/2011	10/8/2020	502-517	4817-4802	Passive sampler	Yes	503	EDB, VOCs, metals, anions, alkalinity
KAFB-106040	4814	7/19/2011	10/7/2020	531-546	4817-4802	Portable pump	Yes	533	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106043	4814	5/18/2011	10/12/2020	543-558	4781-4767	Passive sampler	Yes	544	EDB, VOCs, metals, anions, alkalinity
KAFB-106045	4814	1/17/2011	10/8/2020	528-543	4817-4802	Portable pump	Yes	530	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106048	4814	4/8/2011	10/15/2020	536-551	4817-4802	Portable pump	Yes	538	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106051	4814	4/26/2011	10/15/2020	501-516	4815-4800	Passive sampler	Yes	502	EDB, VOCs, metals, anions, alkalinity
KAFB-106054	4814	6/28/2011	10/9/2020	504-519	4814-4799	Passive sampler	Yes	505	EDB, VOCs, metals, anions, alkalinity
KAFB-106058	4814	6/14/2011	10/8/2020	512-527	4814-4799	Passive sampler	Yes	513	EDB, VOCs, metals, anions, alkalinity
KAFB-106061	4814	4/8/2011	10/15/2020	573-588	4772-4757	Portable pump	Yes	575	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106062	4814	3/19/2011	10/20/2020	575-590	4773-4758	Dedicated pump	Yes	583	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106066	4814	5/16/2011	10/16/2020	576-591	4773-4758	Dedicated pump	Yes	584	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106068	4814	5/2/2011	10/16/2020	580-595	4767-4752	Dedicated pump	Yes	588	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106071	4814	5/13/2011	10/13/2020	548-563	4773-4758	Passive sampler	Yes	549	EDB, VOCs, metals, anions, alkalinity
KAFB-106074	4814	4/28/2011	10/12/2020	570-585	4771-4756	Portable pump	Yes	572	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106078	4814	4/8/2011	10/20/2020	574-589	4771-4756	Dedicated pump	Yes	582	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106081	4814	4/16/2011	10/15/2020	575-589	4772-4757	Portable pump	Yes	577	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106084	4814	4/5/2011	10/6/2020	566-581	4768-4753	Portable pump	Yes	568	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106087	4814	6/19/2011	10/13/2020	546-561	4771-4756	Passive sampler	Yes	547	EDB, VOCs, metals, anions, alkalinity
KAFB-106090	4814	5/23/2011	10/13/2020	555-570	4768-4753	Passive sampler	Yes	556	EDB, VOCs, metals, anions, alkalinity
KAFB-106093	4814	5/24/2011	10/8/2020	544-559	4771-4756	Passive sampler	Yes	545	EDB, VOCs, metals, anions, alkalinity
KAFB-106096	4814	6/7/2011	10/7/2020	576-591	4769-4754	Portable pump	Yes	578	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106098	4814	4/17/2011	10/13/2020	531-546	4817-4802	Portable pump	Yes	533	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106100	4814	5/3/2011	10/14/2020	526-541	4817-4802	Portable pump	Yes	528	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106102	4814	3/3/2011	10/15/2020	521-535	4816-4803	Portable pump	Yes	523	EDB, VOCs, metals, anions, alkalinity, FP
KAFB-106104	4814	6/15/2011	10/13/2020	510-525	4818-4803	Passive sampler	Yes	511	EDB, VOCs, metals, anions, alkalinity
KAFB-106107	4814	8/30/2011	10/12/2020	510-525	4812-4797	Passive sampler	Yes	511	EDB, VOCs, metals, anions, alkalinity
KAFB-106203	4814	9/9/2012	10/7/2020	620-635	4734-4719	Passive sampler	Yes	624	EDB, VOCs, metals, anions, alkalinity
KAFB-106206	4814	7/16/2012	10/12/2020	594-608	4740-4725	Passive sampler	Yes	594	EDB, VOCs, metals, anions, alkalinity
KAFB-106209	4814	8/7/2012	10/6/2020	603-617	4740-4726	Passive sampler	Yes	604	EDB, VOCs, metals, anions, alkalinity
KAFB-106212	4814	2/25/2015	10/9/2020	543-558	4779-4764	Passive sampler	Yes	544	EDB, VOCs, metals, anions, alkalinity
KAFB-106215	4814	4/22/2015	10/14/2020	547-562	4779-4764	Passive sampler	Yes	548	EDB, VOCs, metals, anions, alkalinity
KAFB-106218	4814	5/26/2015	10/7/2020	552-567	4782-4767	Passive sampler	Yes	553	EDB, VOCs, metals, anions, alkalinity
KAFB-106221	4814	6/18/2015	10/7/2020	561-576	4779-4764	Passive sampler	Yes	562	EDB, VOCs, metals, anions, alkalinity
KAFB-106224	4814	5/22/2015	10/14/2020	555-570	4780-4765	Passive sampler	Yes	556	EDB, VOCs, metals, anions, alkalinity
KAFB-106227	4814	5/19/2015	10/7/2020	548-563	4780-4765	Passive sampler	Yes	549	EDB, VOCs, metals, anions, alkalinity
KAFB-106230	4814	9/1/2015	10/12/2020	501-516	4824-4809	Passive sampler	Yes	502	EDB, VOCs, metals, anions, alkalinity
KAFB-106232	4814	9/15/2015	10/6/2020	503-518	4824-4809	Passive sampler	Yes	504	EDB, VOCs, metals, anions, alkalinity
KAFB-106235-501	4814	10/31/2016	10/5/2020	501-521	4815-4795	Passive sampler	Yes	502	EDB, VOCs, metals, anions, alkalinity
KAFB-106236-499	4814	11/23/2016	10/5/2020	499-519	4817-4797	Passive sampler	Yes	500	EDB, VOCs, metals, anions, alkalinity

Table 4-3
Groundwater Monitoring Wells Sampled in Q4 2020

^a Well installation date is the date provided in ERPIMS, except where the date in ERPIMS is the start of drilling, in which case the well installation date is the date provided in the well completion diagram submitted to the NMOSE.

^b Screen interval is rounded to the nearest foot.

^c Well screens in REI 4857 wells intersected the water table when they were installed and current screen submergence is the result of water table rise. Well screens in REI 4838 and 4814 wells were designed with the screened interval fully submerged to capture conditions at depths below the water table.

^d Portable equipment sampling depths are estimated to the nearest foot as 2 ft below top of screen if submerged or 2 ft above bottom of screen if not submerged.

^e Dedicated pump sampling depth is estimated as half-way between top and bottom of screen.

^f Passive sampling depth is estimated to the nearest foot as the depth to the top of the highest sampler.

^g The analytical methods for EDB and VOCs (including BTEX) are 8011 and 8260C, respectively. Metals analyses consisted of select total metals (arsenic, calcium, lead, potassium, magnesium, and sodium by analytical Method 6020A/6010C and select and dissolved metals (iron and manganese) (6010C). Anions analysis consisted of bromide by Method 300.0A, chloride by Method 300.0A, nitrate/nitrite nitrogen by Method 353.2, and sulfate by Method 300.0A. Field parameters include pH, specific conductivity, dissolved oxygen, oxidation reduction potential, temperature, and turbidity.

^h Well not permanently designated in the REI listed.

-- = pump intake depth is not applicable for passive samples

AMSL = above mean sea level

bgs = below ground surface

BTEX = benzene, toluene, ethylbenzene, and total xylene

EDB = 1,2-dibromoethane (ethylene dibromide)

ERPIMS = Environmental Resources Program Information Management System

FP = field parameters

ft = foot/feet

ID = identification

NMOSE = New Mexico Office of the State Engineer

Q4 = fourth quarter

REI = reference elevation interval

VOC = volatile organic compound

**Table 4-4
Changes in Groundwater Elevation and Light Non-Aqueous Phase Liquid Thickness**

Well Location ID	Q4 2019			Q2 2020			Q4 2020			Difference between Q4 2020 and Q2 2020		Difference between Q4 2020 and Q4 2019	
	Date of Measurement	Measured LNAPL Thickness (ft)	Groundwater Elevation Corrected for LNAPL Thickness (ft AMSL) ^a	Date of Measurement	Measured LNAPL Thickness (ft)	Groundwater Elevation Corrected for LNAPL Thickness (ft AMSL) ^a	Date of Measurement	Measured LNAPL Thickness (ft)	Groundwater Elevation Corrected for LNAPL Thickness (ft AMSL) ^a	LNAPL Thickness (ft)	Groundwater Elevations (ft)	LNAPL Thickness (ft)	Groundwater Elevations (ft)
Reference Elevation Interval 4857 (ft AMSL) Groundwater Monitoring Wells													
KAFB-106001 ^b	9/30/2019	0	4875.73	4/16/2020	0	4878.18	11/3/2020	0	4876.46	-	-1.72	-	0.73
KAFB-106002	9/30/2019	0	4876.02	4/14/2020	0	4878.12	11/3/2020	0	4876.76	-	-1.36	-	0.74
KAFB-106003	9/30/2019	0	4876.14	4/14/2020	0	4878.15	11/3/2020	0	4877.18	-	-0.97	-	1.04
KAFB-106004	10/1/2019	0	4876.10	4/14/2020	0	4878.28	11/4/2020	0	4876.43	-	-1.85	-	0.33
KAFB-106005	9/30/2019	0	4875.71	4/16/2020	0	4878.28	11/3/2020	0.01	4876.20	0.01	-2.08	0.01	0.49
KAFB-106006	10/1/2019	0	4875.59	4/15/2020	0	4877.89	11/3/2020	0	4876.13	-	-1.76	-	0.54
KAFB-106007	10/1/2019	0	4875.56	4/15/2020	0	4877.81	11/3/2020	0	4876.18	-	-1.63	-	0.62
KAFB-106008	9/30/2019	0	4875.57	4/16/2020	0	4878.13	11/3/2020	0	4876.05	-	-2.08	-	0.48
KAFB-106009	9/30/2019	0	4875.64	4/16/2020	0	4878.25	11/3/2020	0	4876.18	-	-2.07	-	0.54
KAFB-106010	10/1/2019	0	4875.41	4/15/2020	0	4877.89	11/2/2020	0	4875.49	-	-2.40	-	0.08
KAFB-106011	9/30/2019	0	4875.51	4/15/2020	0	4877.85	11/3/2020	0	4875.77	-	-2.08	-	0.26
KAFB-106012R	9/30/2019	0	4875.57	4/15/2020	0	4877.89	11/3/2020	0	4876.23	-	-1.66	-	0.66
KAFB-106013	10/1/2019	0	4875.66	4/15/2020	0	4877.97	11/4/2020	0	4875.83	-	-2.14	-	0.17
KAFB-106014	9/30/2019	0	4875.60	4/15/2020	0	4877.97	11/3/2020	0	4875.89	-	-2.08	-	0.29
KAFB-106015 ^b	9/30/2019	0	4874.96	4/15/2020	0	4877.93	11/4/2020	0	4873.33	-	-4.60	-	-1.63
KAFB-106016	9/30/2019	0	4875.86	4/15/2020	0	4877.99	11/4/2020	0	4876.72	-	-1.27	-	0.86
KAFB-106017 ^b	9/30/2019	0	4874.99	4/14/2020	0	4877.56	11/4/2020	0	4874.94	-	-2.62	-	-0.05
KAFB-106018 ^b	9/30/2019	0	4875.32	4/14/2020	0	4877.74	11/4/2020	0	4875.40	-	-2.34	-	0.08
KAFB-106019 ^b	9/30/2019	0	4875.12	4/14/2020	0	4877.56	11/4/2020	0	4875.14	-	-2.42	-	0.02
KAFB-106020	10/1/2019	0	4875.75	4/15/2020	0	4878.17	11/4/2020	0	4875.87	-	-2.30	-	0.12
KAFB-106022 ^{b,c}	9/30/2019	0	4874.80	4/15/2020	0	4877.91	11/4/2020	0	4874.18	-	-3.73	-	-0.62
KAFB-106023	9/30/2019	0	4875.05	4/15/2020	0	4877.91	11/4/2020	0	4874.56	-	-3.35	-	-0.49
KAFB-106024	10/1/2019	0	4875.68	4/14/2020	0	4877.77	11/3/2020	0	4876.34	-	-1.43	-	0.66
KAFB-106025 ^b	9/30/2019	0	4875.44	4/15/2020	0	4878.42	11/3/2020	0	4874.70	-	-3.72	-	-0.74
KAFB-106026	10/8/2019	0	4875.73	4/15/2020	0	4878.68	11/3/2020	0	4873.95	-	-4.73	-	-1.78
KAFB-106027	9/30/2019	0	4875.75	4/15/2020	0	4877.79	11/3/2020	0	4876.67	-	-1.12	-	0.92
KAFB-106028	10/1/2019	0	4875.43	4/15/2020	0	4877.80	11/3/2020	0	4875.81	-	-1.99	-	0.38
KAFB-106029	10/2/2019	0	4875.66	4/14/2020	0	4878.52	11/2/2020	0	4875.11	-	-3.41	-	-0.55
KAFB-106032	10/1/2019	0	4876.02	4/15/2020	0	4878.54	11/3/2020	0	4876.13	-	-2.41	-	0.11
KAFB-106035 ^c	9/30/2019	0	4874.40	4/14/2020	0	4877.38	11/4/2020	0	4873.70	-	-3.68	-	-0.70
KAFB-106038	9/30/2019	0	4875.11	4/14/2020	0	4877.68	11/4/2020	0	4874.95	-	-2.73	-	-0.16
KAFB-106041	10/1/2019	0	4875.55	4/15/2020	0	4878.50	11/3/2020	0	4874.16	-	-4.34	-	-1.39
KAFB-106042	10/1/2019	0	4875.52	4/15/2020	0	4878.47	11/3/2020	0	4874.16	-	-4.31	-	-1.36
KAFB-106046	9/30/2019	0	4875.43	4/14/2020	0	4877.65	11/4/2020	0	4875.76	-	-1.89	-	0.33
KAFB-106049	10/1/2019	0	4875.87	4/15/2020	0	4878.74	11/2/2020	0	4875.02	-	-3.72	-	-0.85
KAFB-106052	10/1/2019	0	4875.54	4/15/2020	0	4878.45	11/2/2020	0	4874.53	-	-3.92	-	-1.01
KAFB-106055	9/30/2019	0	4875.21	4/15/2020	0	4878.22	11/2/2020	0	4873.87	-	-4.35	-	-1.34
KAFB-106059	10/1/2019	0	4875.69	4/15/2020	0.15	4877.93	11/2/2020	0.01	4876.00	-0.14	-1.93	0.01	0.31
KAFB-106064 ^d	NA	NA	NA	5/19/2020	0	4877.17	10/14/2020	0	4876.15	-	-1.02	NA	NA

**Table 4-4
Changes in Groundwater Elevation and Light Non-Aqueous Phase Liquid Thickness**

Well Location ID	Q4 2019			Q2 2020			Q4 2020			Difference between Q4 2020 and Q2 2020		Difference between Q4 2020 and Q4 2019	
	Date of Measurement	Measured LNAPL Thickness (ft)	Groundwater Elevation Corrected for LNAPL Thickness (ft AMSL) ^a	Date of Measurement	Measured LNAPL Thickness (ft)	Groundwater Elevation Corrected for LNAPL Thickness (ft AMSL) ^a	Date of Measurement	Measured LNAPL Thickness (ft)	Groundwater Elevation Corrected for LNAPL Thickness (ft AMSL) ^a	LNAPL Thickness (ft)	Groundwater Elevations (ft)	LNAPL Thickness (ft)	Groundwater Elevations (ft)
KAFB-106067	9/30/2019	0	4875.19	4/14/2020	0	4877.49	11/3/2020	0	4875.37	-	-2.12	-	0.18
KAFB-106070	9/30/2019	0	4874.94	4/16/2020	0	4877.99	11/4/2020	0	4874.68	-	-3.31	-	-0.26
KAFB-106075	10/1/2019	0	4875.59	4/15/2020	0	4878.03	11/4/2020	0	4875.56	-	-2.47	-	-0.03
KAFB-106076	9/30/2019	0.01	4875.41	4/15/2020	0.01	4877.67	11/3/2020	0	4876.14	-0.01	-1.53	-0.01	0.73
KAFB-106079	10/1/2019	0	4875.39	4/15/2020	0	4877.76	11/3/2020	0	4875.81	-	-1.95	-	0.42
KAFB-106082	9/30/2019	0	4875.12	4/14/2020	0	4877.57	11/4/2020	0	4875.00	-	-2.57	-	-0.12
KAFB-106085	9/30/2019	0	4875.28	4/14/2020	0	4877.93	11/4/2020	0	4875.15	-	-2.78	-	-0.13
KAFB-106088	9/30/2019	0	4874.90	4/14/2020	0	4877.62	11/3/2020	0	4874.71	-	-2.91	-	-0.19
KAFB-106091 ^e	9/30/2019	0	4874.38	4/15/2020	0	4878.22	11/2/2020	0	4873.59	-	-4.63	-	-0.79
KAFB-106094	9/30/2019	0	4875.57	4/14/2020	0	4877.83	11/3/2020	0	4875.87	-	-1.96	-	0.30
KAFB-106106	10/1/2019	0	4875.34	4/15/2020	0	4878.28	11/3/2020	0	4874.18	-	-4.10	-	-1.16
KAFB-106148-484	10/1/2019	0	4875.62	4/15/2020	0	4877.94	11/3/2020	0	4876.43	-	-1.51	-	0.81
KAFB-106149-484	10/1/2019	0	4875.34	4/16/2020	0	4877.72	11/2/2020	0	4876.05	-	-1.67	-	0.71
KAFB-106150-484	10/1/2019	0.04	4875.24	4/15/2020	0.38	4877.51	11/3/2020	0.1	4876.11	-0.28	-1.40	0.06	0.86
KAFB-106151-484	10/1/2019	0	4875.02	4/16/2020	0	4877.48	11/3/2020	0	4875.71	-	-1.77	-	0.69
KAFB-106152-484	10/1/2019	0	4875.42	4/16/2020	0	4877.89	11/3/2020	0	4876.05	-	-1.84	-	0.63
KAFB-106153-484	10/1/2019	0	4875.31	4/16/2020	0	4877.77	11/3/2020	0	4875.98	-	-1.79	-	0.67
KAFB-106154-484	10/1/2019	0.16	4875.51	4/15/2020	0	4877.91	11/3/2020	0.04	4876.28	0.04	-1.63	-0.12	0.77
KAFB-106155-484	10/1/2019	0	4874.91	4/15/2020	0	4877.25	11/3/2020	0	4875.63	-	-1.62	-	0.72
KAFB-106156-484	10/1/2019	0	4875.63	4/15/2020	0	4877.88	11/3/2020	0	4876.43	-	-1.45	-	0.80
KAFB-106201 ^f	9/30/2019	0	4874.67	4/16/2020	0	4877.45	11/2/2020	0	4868.90	-	-8.55	-	-5.77
KAFB-106204	9/30/2019	0	4875.74	4/14/2020	0	4878.76	11/2/2020	0	4872.92	-	-5.84	-	-2.82
KAFB-106207	9/30/2019	0	4875.97	4/15/2020	0	4879.35	11/2/2020	0	4871.34	-	-8.01	-	-4.63
KAFB-106211 ^g	10/1/2019	NA	NA	4/14/2020	0	4877.89	11/4/2020	NA	NA	NA	NA	NA	NA
KAFB-106213	9/30/2019	0	4874.63	4/14/2020	0	4877.55	11/4/2020	0	4873.75	-	-3.80	-	-0.88
KAFB-106216	9/30/2019	0	4875.00	4/14/2020	0	4877.91	11/2/2020	0	4873.38	-	-4.53	-	-1.62
KAFB-106219	10/2/2019	0	4875.11	4/14/2020	0	4878.34	11/3/2020	0	4872.82	-	-5.52	-	-2.29
KAFB-106222	9/30/2019	0	4875.30	4/15/2020	0	4878.37	11/2/2020	0	4872.86	-	-5.51	-	-2.44
KAFB-106225	9/30/2019	0	4875.03	4/15/2020	0	4878.12	11/2/2020	0	4873.11	-	-5.01	-	-1.92
KAFB-106229 ^{b,e}	9/30/2019	0	4874.14	4/15/2020	0	4878.29	11/2/2020	0	4873.42	-	-4.87	-	-0.72
KAFB-106231	10/2/2019	0	4875.76	4/14/2020	0	4878.90	11/2/2020	0	4873.37	-	-5.53	-	-2.39
KAFB-106235-438	9/30/2019	0	4875.34	4/15/2020	0	4878.38	11/3/2020	0	4874.13	-	-4.25	-	-1.21
KAFB-106236-436	9/30/2019	0	4875.93	4/15/2020	0	4878.93	11/3/2020	0	4874.29	-	-4.64	-	-1.64
KAFB-106240-449	10/1/2019	0	4875.58	4/15/2020	0	4878.08	11/3/2020	0	4875.95	-	-2.13	-	0.37
KAFB-106241-428	9/30/2019	0	4874.56	4/15/2020	0	4877.64	11/2/2020	0	4873.41	-	-4.23	-	-1.15
KAFB-106242-418	10/2/2019	0	4875.19	4/14/2020	0	4877.95	11/2/2020	0	4875.16	-	-2.79	-	-0.03
KAFB-106243-425	10/1/2019	0	4874.94	4/14/2020	0	4877.73	11/4/2020	0	4874.62	-	-3.11	-	-0.32
KAFB-106244-445	10/1/2019	0	4875.86	4/14/2020	0	4878.21	11/4/2020	0	4876.43	-	-1.78	-	0.57
KAFB-106245-460	9/30/2019	0	4875.07	4/14/2020	0	4877.54	11/4/2020	0	4875.12	-	-2.42	-	0.05
KAFB-106247-450	10/2/2019	0	4875.34	4/14/2020	0	4877.57	11/3/2020	0	4876.09	-	-1.48	-	0.75
KAFB-106S1-447	10/1/2019	0	4875.66	4/15/2020	0	4877.91	11/3/2020	0	4876.33	-	-1.58	-	0.67
KAFB-106S2-451	10/1/2019	0	4875.54	4/15/2020	0	4877.89	11/3/2020	0	4876.01	-	-1.88	-	0.47
KAFB-106S3-449	10/1/2019	0	4875.01	4/15/2020	0	4877.42	11/3/2020	0	4875.45	-	-1.97	-	0.44
KAFB-106S4-446	10/1/2019	0	4875.69	4/15/2020	0	4878.06	11/4/2020	0	4876.12	-	-1.94	-	0.43
KAFB-106S5-446	10/1/2019	0	4875.48	4/16/2020	0	4878.20	11/2/2020	0	4875.68	-	-2.52	-	0.20

**Table 4-4
Changes in Groundwater Elevation and Light Non-Aqueous Phase Liquid Thickness**

Well Location ID	Q4 2019			Q2 2020			Q4 2020			Difference between Q4 2020 and Q2 2020		Difference between Q4 2020 and Q4 2019	
	Date of Measurement	Measured LNAPL Thickness (ft)	Groundwater Elevation Corrected for LNAPL Thickness (ft AMSL) ^a	Date of Measurement	Measured LNAPL Thickness (ft)	Groundwater Elevation Corrected for LNAPL Thickness (ft AMSL) ^a	Date of Measurement	Measured LNAPL Thickness (ft)	Groundwater Elevation Corrected for LNAPL Thickness (ft AMSL) ^a	LNAPL Thickness (ft)	Groundwater Elevations (ft)	LNAPL Thickness (ft)	Groundwater Elevations (ft)
KAFB-106S7-451	10/1/2019	0	4875.35	4/16/2020	0	4878.01	11/2/2020	0	4875.59	-	-2.42	-	0.24
KAFB-106S8-451	10/1/2019	0	4875.57	4/15/2020	0	4877.84	11/3/2020	0	4876.15	-	-1.69	-	0.58
KAFB-106S9-447	10/1/2019	0	4875.25	4/16/2020	0	4877.74	11/3/2020	0	4875.88	-	-1.86	-	0.63
KAFB-3411	9/30/2019	0	4875.74	4/15/2020	0	4877.95	11/4/2020	0	4876.47	-	-1.48	-	0.73
Reference Elevation Interval 4838 (ft AMSL) Groundwater Monitoring Wells													
KAFB-106021 ^b	10/2/2019	0	4875.24	4/14/2020	0	4878.02	11/2/2020	0	4875.15	-	-2.87	-	-0.09
KAFB-106030	10/2/2019	0	4875.63	4/14/2020	0	4878.49	11/2/2020	0	4875.10	-	-3.39	-	-0.53
KAFB-106033	10/1/2019	0	4876.04	4/15/2020	0	4878.54	11/3/2020	0	4876.15	-	-2.39	-	0.11
KAFB-106036 ^c	9/30/2019	0	4874.22	4/14/2020	0	4877.17	11/4/2020	0	4873.50	-	-3.67	-	-0.72
KAFB-106037 ^c	9/30/2019	0	4873.84	4/14/2020	0	4876.79	11/4/2020	0	4873.10	-	-3.69	-	-0.74
KAFB-106039	9/30/2019	0	4875.03	4/14/2020	0	4877.58	11/4/2020	0	4874.84	-	-2.74	-	-0.19
KAFB-106044	9/30/2019	0	4875.78	4/15/2020	0	4877.82	11/3/2020	0	4876.66	-	-1.16	-	0.88
KAFB-106047	9/30/2019	0	4875.30	4/14/2020	0	4877.55	11/4/2020	0	4875.69	-	-1.86	-	0.39
KAFB-106050	10/1/2019	0	4875.90	4/15/2020	0	4878.76	11/2/2020	0	4875.02	-	-3.74	-	-0.88
KAFB-106053	10/1/2019	0	4875.42	4/15/2020	0	4878.34	11/2/2020	0	4874.41	-	-3.93	-	-1.01
KAFB-106057	9/30/2019	0	4875.20	4/15/2020	0	4878.24	11/2/2020	0	4873.84	-	-4.40	-	-1.36
KAFB-106060	9/30/2019	0	4875.50	4/15/2020	0	4877.79	11/4/2020	0	4876.03	-	-1.76	-	0.53
KAFB-106063 ^d	NA	NA	NA	5/19/2020	0	4877.95	10/14/2020	0	4876.16	-	-1.79	NA	NA
KAFB-106065	10/1/2019	0	4875.42	4/15/2020	0	4877.73	11/2/2020	0	4875.59	-	-2.14	-	0.17
KAFB-106069	9/30/2019	0	4875.33	4/14/2020	0	4877.64	11/4/2020	0	4875.41	-	-2.23	-	0.08
KAFB-106072	9/30/2019	0	4875.17	4/16/2020	0	4878.25	11/3/2020	0	4875.04	-	-3.21	-	-0.13
KAFB-106073	10/1/2019	0	4875.65	4/15/2020	0	4878.11	11/3/2020	0	4875.66	-	-2.45	-	0.01
KAFB-106077	9/30/2019	0	4874.12	4/15/2020	0	4876.37	11/3/2020	0	4874.78	-	-1.59	-	0.66
KAFB-106080	9/30/2019	0	4875.58	4/15/2020	0	4878.03	11/3/2020	0	4876.17	-	-1.86	-	0.59
KAFB-106083	10/1/2010	0	4875.21	4/14/2020	0	4877.70	11/4/2020	0	4875.13	-	-2.57	-	-0.08
KAFB-106086	9/30/2019	0	4875.31	4/14/2020	0	4877.99	11/4/2020	0	4875.19	-	-2.80	-	-0.12
KAFB-106089	9/30/2019	0	4874.49	4/14/2020	0	4877.21	11/4/2020	0	4874.15	-	-3.06	-	-0.34
KAFB-106092 ^e	9/30/2019	0	4874.18	4/15/2020	0	4878.26	11/2/2020	0	4873.39	-	-4.87	-	-0.79
KAFB-106095	9/30/2019	0	4875.59	4/14/2020	0	4877.87	11/4/2020	0	4875.84	-	-2.03	-	0.25
KAFB-106097	10/1/2019	0	4875.82	4/15/2020	0	4878.15	11/4/2020	0	4876.03	-	-2.12	-	0.21
KAFB-106099	10/1/2019	0	4876.17	4/14/2020	0	4878.35	11/4/2020	0	4876.52	-	-1.83	-	0.35
KAFB-106101	9/30/2019	0	4876.01	4/14/2020	0	4878.05	11/3/2020	0	4876.95	-	-1.10	-	0.94
KAFB-106103	9/30/2019	0	4874.48	4/15/2020	0	4877.34	11/4/2020	0	4873.99	-	-3.35	-	-0.49
KAFB-106105	10/1/2019	0	4875.37	4/15/2020	0	4878.31	11/3/2020	0	4874.23	-	-4.08	-	-1.14
KAFB-106202 ^f	9/30/2019	0	4874.92	4/16/2020	0	4877.22	11/2/2020	0	4868.96	-	-8.26	-	-5.96
KAFB-106205	9/30/2019	0	4875.80	4/14/2020	0	4878.82	11/2/2020	0	4872.90	-	-5.92	-	-2.90
KAFB-106208	9/30/2019	0	4875.93	4/15/2020	0	4879.29	11/2/2020	0	4871.29	-	-8.00	-	-4.64

**Table 4-4
Changes in Groundwater Elevation and Light Non-Aqueous Phase Liquid Thickness**

Well Location ID	Q4 2019			Q2 2020			Q4 2020			Difference between Q4 2020 and Q2 2020		Difference between Q4 2020 and Q4 2019	
	Date of Measurement	Measured LNAPL Thickness (ft)	Groundwater Elevation Corrected for LNAPL Thickness (ft AMSL) ^a	Date of Measurement	Measured LNAPL Thickness (ft)	Groundwater Elevation Corrected for LNAPL Thickness (ft AMSL) ^a	Date of Measurement	Measured LNAPL Thickness (ft)	Groundwater Elevation Corrected for LNAPL Thickness (ft AMSL) ^a	LNAPL Thickness (ft)	Groundwater Elevations (ft)	LNAPL Thickness (ft)	Groundwater Elevations (ft)
KAFB-106214	9/30/2019	0	4874.77	4/14/2020	0	4877.69	11/4/2020	0	4873.87	-	-3.82	-	-0.90
KAFB-106217	9/30/2019	0	4875.04	4/14/2020	0	4877.95	11/2/2020	0	4873.40	-	-4.55	-	-1.64
KAFB-106220	10/2/2019	0	4875.10	4/14/2020	0	4878.34	11/3/2020	0	4872.84	-	-5.50	-	-2.26
KAFB-106223	9/30/2019	0	4875.34	4/15/2020	0	4878.50	11/2/2020	0	4872.95	-	-5.55	-	-2.39
KAFB-106226	9/30/2019	0	4875.35	4/15/2020	0	4878.46	11/2/2020	0	4873.48	-	-4.98	-	-1.87
KAFB-106235-472	9/30/2019	0	4875.36	4/15/2020	0	4878.39	11/3/2020	0	4874.15	-	-4.24	-	-1.21
KAFB-106236-470	9/30/2019	0	4875.96	4/15/2020	0	4878.95	11/3/2020	0	4874.29	-	-4.66	-	-1.67
Reference Elevation Interval 4814 (ft AMSL) Groundwater Monitoring Wells													
KAFB-106031	10/2/2019	0	4875.62	4/14/2020	0	4878.50	11/2/2020	0	4874.99	-	-3.51	-	-0.63
KAFB-106034	10/1/2019	0	4876.06	4/15/2020	0	4878.57	11/3/2020	0	4876.16	-	-2.41	-	0.10
KAFB-106040	9/30/2019	0	4875.06	4/14/2020	0	4877.62	11/4/2020	0	4874.86	-	-2.76	-	-0.20
KAFB-106043	10/1/2019	0	4875.52	4/15/2020	0	4878.45	11/3/2020	0	4874.17	-	-4.28	-	-1.35
KAFB-106045	9/30/2019	0	4875.80	4/15/2020	0	4877.82	11/3/2020	0	4876.70	-	-1.12	-	0.90
KAFB-106048	9/30/2019	0	4875.35	4/14/2020	0	4877.59	11/4/2020	0	4875.73	-	-1.86	-	0.38
KAFB-106051	10/1/2019	0	4875.86	4/15/2020	0	4878.72	11/2/2020	0	4875.00	-	-3.72	-	-0.86
KAFB-106054	10/1/2019	0	4875.55	4/15/2020	0	4878.47	11/2/2020	0	4874.48	-	-3.99	-	-1.07
KAFB-106058	9/30/2019	0	4875.26	4/15/2020	0	4878.26	11/2/2020	0	4873.88	-	-4.38	-	-1.38
KAFB-106061	9/30/2019	0	4875.65	4/15/2020	0	4877.95	11/4/2020	0	4876.18	-	-1.77	-	0.53
KAFB-106062	10/1/2019	0	4875.53	4/14/2020	0	4877.74	11/4/2020	0	4875.90	-	-1.84	-	0.37
KAFB-106066	10/1/2019	0	4875.53	4/15/2020	0	4877.86	11/4/2020	0	4875.76	-	-2.10	-	0.23
KAFB-106068	9/30/2019	0	4875.11	4/14/2020	0	4877.44	11/4/2020	0	4875.15	-	-2.29	-	0.04
KAFB-106071	9/30/2019	0	4875.08	4/16/2020	0	4878.08	11/4/2020	0	4874.82	-	-3.26	-	-0.26
KAFB-106074	10/1/2019	0	4875.62	4/15/2020	0	4878.09	11/4/2020	0	4875.64	-	-2.45	-	0.02
KAFB-106078	9/30/2019	0	4874.84	4/15/2020	0	4877.11	11/3/2020	0	4875.52	-	-1.59	-	0.68
KAFB-106081	9/30/2019	0	4875.43	4/15/2020	0	4877.83	11/3/2020	0	4875.89	-	-1.94	-	0.46
KAFB-106084	9/30/2019	0	4875.34	4/14/2020	0	4877.80	11/4/2020	0	4875.20	-	-2.60	-	-0.14
KAFB-106087	9/30/2019	0	4875.34	4/14/2020	0	4878.06	11/4/2020	0	4875.18	-	-2.88	-	-0.16
KAFB-106090	9/30/2019	0	4874.96	4/14/2020	0	4877.68	11/4/2020	0	4874.59	-	-3.09	-	-0.37
KAFB-106093 ^e	9/30/2019	0	4874.92	4/15/2020	0	4878.29	11/2/2020	0	4874.08	-	-4.21	-	-0.84
KAFB-106096	9/30/2019	0	4875.64	4/14/2020	0	4877.87	11/4/2020	0	4875.89	-	-1.98	-	0.25
KAFB-106098	10/1/2019	0	4875.82	4/15/2020	0	4878.16	11/4/2020	0	4875.99	-	-2.17	-	0.17
KAFB-106100	10/1/2019	0	4876.16	4/14/2020	0	4878.33	11/4/2020	0	4876.47	-	-1.86	-	0.31
KAFB-106102	9/30/2019	0	4875.90	4/14/2020	0	4877.91	11/3/2020	0	4876.84	-	-1.07	-	0.94
KAFB-106104	9/30/2019	0	4874.69	4/16/2020	0	4877.74	11/4/2020	0	4874.18	-	-3.56	-	-0.51
KAFB-106107	10/1/2019	0	4875.41	4/15/2020	0	4878.36	11/3/2020	0	4874.29	-	-4.07	-	-1.12
KAFB-106203 ^f	9/30/2019	0	4874.83	4/16/2020	0	4876.51	11/2/2020	0	4868.56	-	-7.95	-	-6.27
KAFB-106206	9/30/2019	0	4875.82	4/14/2020	0	4878.85	11/2/2020	0	4872.91	-	-5.94	-	-2.91

**Table 4-4
Changes in Groundwater Elevation and Light Non-Aqueous Phase Liquid Thickness**

Well Location ID	Q4 2019			Q2 2020			Q4 2020			Difference between Q4 2020 and Q2 2020		Difference between Q4 2020 and Q4 2019	
	Date of Measurement	Measured LNAPL Thickness (ft)	Groundwater Elevation Corrected for LNAPL Thickness (ft AMSL) ^a	Date of Measurement	Measured LNAPL Thickness (ft)	Groundwater Elevation Corrected for LNAPL Thickness (ft AMSL) ^a	Date of Measurement	Measured LNAPL Thickness (ft)	Groundwater Elevation Corrected for LNAPL Thickness (ft AMSL) ^a	LNAPL Thickness (ft)	Groundwater Elevations (ft)	LNAPL Thickness (ft)	Groundwater Elevations (ft)
KAFB-106209	9/30/2019	0	4876.10	4/15/2020	0	4879.48	11/2/2020	0	4871.51	-	-7.97	-	-4.59
KAFB-106212 ^c	9/30/2019	0	4873.99	4/14/2020	0	4876.94	11/4/2020	0	4873.21	-	-3.73	-	-0.78
KAFB-106215	9/30/2019	0	4874.88	4/14/2020	0	4877.78	11/4/2020	0	4873.94	-	-3.84	-	-0.94
KAFB-106218	9/30/2019	0	4874.70	4/14/2020	0	4877.59	11/2/2020	0	4873.03	-	-4.56	-	-1.67
KAFB-106221	10/2/2019	0	4875.09	4/14/2020	0	4878.30	11/3/2020	0	4872.85	-	-5.45	-	-2.24
KAFB-106224	9/30/2019	0	4875.32	4/15/2020	0	4878.47	11/2/2020	0	4873.02	-	-5.45	-	-2.30
KAFB-106227	9/30/2019	0	4875.38	4/15/2020	0	4878.47	11/2/2020	0	4873.56	-	-4.91	-	-1.82
KAFB-106230 ^h	10/8/2019	0	4881.48	4/15/2020	0	4878.43	11/3/2020	0	4873.51	-	-4.92	-	-7.97
KAFB-106232	10/2/2019	0	4875.87	4/14/2020	0	4878.98	11/2/2020	0	4873.47	-	-5.51	-	-2.40
KAFB-106235-501	9/30/2019	0	4875.32	4/15/2020	0	4878.35	11/3/2020	0	4874.07	-	-4.28	-	-1.25
KAFB-106236-499	9/30/2019	0	4875.92	4/15/2020	0	4878.91	11/3/2020	0	4874.25	-	-4.66	-	-1.67

^a Groundwater elevation corrected for LNAPL thickness was calculated using the following formula: MRP Elevation - Depth to LNAPL/water interface + (LNAPL Thickness * Specific Gravity of Weathered JP4/JP8 Fuel). A specific gravity of 0.7592 is used, based on the December 13, 2018 site-specific fuel testing report from PTS Laboratories using LNAPL collected from wells KAFB-106014, KAFB-106059, and KAFB-106079.

^b Well used in analyses for both REI 4857 and 4838.

^c Well within immediate proximity of groundwater extraction well KAFB-106228, which was pumping during gauging in Q4 2019, Q2 2020, and Q4 2020.

^d Well was not gauged during the synoptic gauging events due to presence of monitoring equipment. Gauging occurred prior to sampling in Q2 and Q4 2020 (May and October) and is presented here for informational purposes only. Data was not used in the creation of potentiometric surface maps or for performance assessment.

^e Well within immediate proximity of groundwater extraction well KAFB-106233, which was pumping during gauging in Q4 2019 and Q4 2020, and was off during gauging in Q2 2020.

^f Well within immediate proximity of drinking water supply well KAFB-003, which was in operation during Q4 2019, Q2 2020, and Q4 2020. While in operation, the pump typically runs from 0700 to 1300 and 2000 to 0100, but may run for additional hours as needed.

^g The bottom of the screened interval in KAFB-106211 is near the top of the water table. Due to changing water levels, KAFB-106211 was dry in Q4 2019 and Q4 2020, but had measurable water column in Q2 2020.

^h Well was not gauged during the synoptic gauging event in Q4 2019. This well had previously not been gauged since Q2 2016 due to security concerns, and gauging in Q4 2019 took place during passive sampler deployment when security measures were in place. The water level is presented for informational purposes only and was not used in contouring or the performance assessment.

- = LNAPL not detected in either quarter

AMSL = above mean sea level

ft = foot/feet

ID = identification

JP = jet propellant

LNAPL = light non-aqueous phase liquid

MRP = measurement reference point

NA = not applicable

Q2 = second quarter

Q4 = fourth quarter

REI = reference elevation interval

**Table 4-5
Water Quality Field Measurements for Groundwater Monitoring Well Samples, Q4 2020**

Well Location ID ^a	Sample Date	Temperature (°C)	pH (S.U.)	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
KAFB-106001	10/30/2020	19.8	7.60	322.2	1.94	205.6	4.78
KAFB-106002	10/20/2020	18.6	7.46	431.7	6.72	339.4	0.27
KAFB-106003	10/13/2020	17.9	7.80	983	8.52	412.0	1.49
KAFB-106004	10/14/2020	19.7	7.73	484.1	5.83	332.1	0.59
KAFB-106005	10/23/2020	20.1	7.37	1172	0.11	-324.8	9.16
KAFB-106006	10/29/2020	18.4	7.48	588	1.23	-98.1	2.49
KAFB-106007	10/5/2020	18.9	7.31	529.7	0.56	379.4	1.24
KAFB-106008	10/21/2020	19.7	6.84	1,138	0.13	-156.3	6.82
KAFB-106009	10/12/2020	21.9	6.89	1,774	0.28	156.5	1.04
KAFB-106010	10/22/2020	19.4	7.03	539.0	0.19	-182.1	5.01
KAFB-106011	10/1/2020	18.8	7.80	967	1.00	178.1	1.36
KAFB-106012R	10/2/2020	21.3	7.27	1,610	7.44	195.8	0.97
KAFB-106013	10/13/2020	19.0	7.70	496.7	2.55	439.6	5.08
KAFB-106014	10/29/2020	18.6	6.96	1,487	3.47	-66.2	7.32
KAFB-106016	10/1/2020	19.4	7.95	368.7	1.93	149.5	3.97
KAFB-106017	10/19/2020	18.2	7.55	513.6	0.19	-54.2	1.14
KAFB-106018	10/28/2020	16.6	7.76	539.2	2.10	347.6	1.82
KAFB-106019	10/8/2020	18.5	7.60	810	0.72	375.3	27.6
KAFB-106020	10/29/2020	18.2	7.61	563.3	6.11	242.1	123
KAFB-106024	10/21/2020	20.6	7.38	424.7	0.32	224.4	1.25
KAFB-106027	10/1/2020	19.4	8.07	388.5	3.03	152.9	0.71
KAFB-106028	10/22/2020	19.1	6.93	936	0.11	-228.7	1.71
KAFB-106038	10/5/2020	23.1	7.69	478.0	6.43	420.0	1.12
KAFB-106039	10/5/2020	24.0	7.58	776	2.41	383.1	2.68
KAFB-106040	10/7/2020	18.4	7.51	554.8	3.42	405.1	1.31
KAFB-106044	10/1/2020	19.5	8.17	374.4	3.10	167.9	0.64
KAFB-106045	10/8/2020	22.4	7.72	347.7	3.08	393.5	0.46
KAFB-106046	10/20/2020	19.5	7.58	482.7	1.70	367.0	0.95
KAFB-106047	10/20/2020	19.1	7.79	445.0	3.84	374.0	1.97
KAFB-106048	10/15/2020	21.1	7.90	387.0	5.92	399.4	27.6
KAFB-106059	10/23/2020	19.4	6.82	767	0.24	-117.8	3.34
KAFB-106060	10/20/2020	18.9	7.59	735	6.32	338.9	0.98
KAFB-106061	10/15/2020	22.4	7.85	364.9	2.27	388.0	2.81
KAFB-106062	10/20/2020	19.0	7.73	391.4	4.04	358.3	6.18
KAFB-106063 ^b	10/14/2020	18.3	6.87	868	0.21	-129.9	9.38
KAFB-106064 ^b	10/14/2020	17.5	6.72	1189	0.00	-100.9	9.30
KAFB-106065	10/19/2020	16.5	7.16	644	5.80	201.3	2.82
KAFB-106066	10/16/2020	16.7	7.80	333.4	4.47	340.4	1.17
KAFB-106067	10/19/2020	18.6	7.08	979	0.13	-96.7	1.07
KAFB-106068	10/16/2020	18.4	7.75	345.1	5.85	300.7	5.30
KAFB-106069	10/16/2020	17.0	7.69	558.2	0.26	-54.9	0.73
KAFB-106073	10/12/2020	19.7	7.54	654	0.24	310.9	9.77
KAFB-106074	10/12/2020	18.0	7.68	522.4	3.45	399.5	1.21
KAFB-106075	10/23/2020	18.1	7.43	1,062	4.78	287.8	6.62
KAFB-106076	10/30/2020	18.5	6.72	1,042	0.24	-65.5	11.6

**Table 4-5
Water Quality Field Measurements for Groundwater Monitoring Well Samples, Q4 2020**

Well Location ID ^a	Sample Date	Temperature (°C)	pH (S.U.)	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
KAFB-106077	10/9/2020	23.9	7.69	384.7	3.84	372.9	1.99
KAFB-106078	10/20/2020	20.2	7.67	373.0	2.51	352.1	16.6
KAFB-106079	10/30/2020	18.6	6.88	1,204	0.22	-83.6	9.80
KAFB-106080	11/24/2020	18.1	6.89	1,186	0.25	-69.0	1.39
KAFB-106081	10/15/2020	21.8	7.80	375.8	4.32	402.6	0.71
KAFB-106082	10/6/2020	22.6	7.54	641	0.52	305.8	0.83
KAFB-106083	10/6/2020	18.8	7.79	419.2	0.23	257.2	0.61
KAFB-106084	10/6/2020	23.3	7.77	363.8	3.15	336.9	1.22
KAFB-106094	10/19/2020	18.9	7.33	856	0.21	-118.6	2.23
KAFB-106095	10/7/2020	23.7	7.37	624	0.22	356.4	2.27
KAFB-106096	10/7/2020	21.7	7.67	352.4	2.63	397.2	5.23
KAFB-106097	10/13/2020	19.7	7.80	442.5	2.76	419.0	0.92
KAFB-106098	10/13/2020	19.3	7.83	490.2	2.92	441.9	0.62
KAFB-106099	10/14/2020	18.5	7.83	442.8	4.60	403.8	0.49
KAFB-106100	10/14/2020	20.7	7.81	369.6	3.69	340.1	6.26
KAFB-106101	10/14/2020	20.4	7.69	794	7.28	340.6	1.29
KAFB-106102	10/15/2020	18.3	7.92	389.0	3.89	387.5	0.66
KAFB-3411	10/2/2020	23.9	7.71	364.4	1.74	165.2	1.28

^a Field parameters are collected at wells sampled using low-flow methodology. Field parameters are not collected at wells sampled using passive methodology, and therefore those wells are not presented in this table.

^b Specific conductance not collected at this location.

— = Samples collected via passive sampling methodology; no field water quality measurement available.

°C = degrees Celsius

µS/cm = microSiemens per centimeter

DO = dissolved oxygen

ID = identification

mg/L = milligram per liter

NA = not applicable

mV = millivolt

NTU = nephelometric turbidity unit

ORP = oxidation reduction potential

Spec. Cond. = specific conductivity

S.U. = standard unit

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106001			KAFB-106002			KAFB-106003						
		Field Sample ID:		GW001-204			GW002-204			GW003-204						
		Sample Date:		10/30/2020			10/20/2020			10/13/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		485			484			482						
		Reference Elevation Interval (ft AMSL):		4857 & 4838			4857			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	0.65	--	0.097	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	0.44	J	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	0.82	J	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	6.1	J	2	ND	U	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	3.9	--	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	UJ	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106001			KAFB-106002			KAFB-106003						
		Field Sample ID:		GW001-204			GW002-204			GW003-204						
		Sample Date:		10/30/2020			10/20/2020			10/13/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		485			484			482						
		Reference Elevation Interval (ft AMSL):		4857 & 4838			4857			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	0.79	J	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	U	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	2.8	J	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	1.6	--	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	20	--	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	UJ	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	4.4	J	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106004			KAFB-106005			KAFB-106006						
		Field Sample ID:		GW004-204			GW005-204			GW006-204						
		Sample Date:		10/14/2020			10/23/2020			10/29/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		488.74			482.57			509.68						
		Reference Elevation Interval (ft AMSL):		4857			4857			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	0.4	--	0.096	ND	UJ	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	2.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	2.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	2.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	2.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	2.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	2.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	2.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	5	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	2.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	5	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	98	--	10	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	5	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	2.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	2.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	2.5	2.4	--	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	2.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	25	--	5	0.41	J	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	2.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	2.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	2.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	2.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	13	J	5	1.4	J	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	2.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	UJ	5	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	2.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	15	J	2.5	1.2	J	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	5	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	28	J	10	ND	UJ	20
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	25	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	5	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	860	--	2.5	6.5	--	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	2.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	2.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	2.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	10	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106004			KAFB-106005			KAFB-106006						
		Field Sample ID:		GW004-204			GW005-204			GW006-204						
		Sample Date:		10/14/2020			10/23/2020			10/29/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		488.74			482.57			509.68						
		Reference Elevation Interval (ft AMSL):		4857			4857			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	UJ	0.5	ND	U	2.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	2.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	2.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	2.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	0.5	ND	UJ	2.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	2.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	UJ	0.5	ND	UJ	2.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	2.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	2.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	2.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	2.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	2.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	230	--	4	4	--	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	UJ	20	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	18	J	2.5	13	--	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	510	--	10	6.7	--	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	2.5	0.9	J	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	2.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	64	--	10	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	3.4	J	2.5	0.37	J	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	17	J	2.5	3	J	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	370	--	4	4.2	--	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	16	J	2.5	1	J	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	2.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	5	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	2.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	1,000	--	2.5	4.3	--	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	2.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	2.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	2.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	2.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	10	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	UJ	0.5	ND	UJ	2.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	880	--	10	11	--	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106007			KAFB-106008			KAFB-106008					
		Field Sample ID:			GW007-204			GW008-204			GW008-604					
		Sample Date:			10/5/2020			10/21/2020			10/21/2020					
		Sample Type:			REG			REG			Field Duplicate					
		Sample Depth (ft bgs):			490			488			488					
		Reference Elevation Interval (ft AMSL):			4857			4857			4857					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	8	--	1.9	8.3	--	1.9
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	UJ	0.5	ND	U	10	ND	U	10
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	UJ	0.5	ND	U	10	ND	U	10
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	UJ	0.5	ND	U	10	ND	U	10
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	UJ	0.5	ND	U	10	ND	U	10
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	UJ	0.5	ND	U	10	ND	U	10
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	UJ	0.5	ND	U	10	ND	U	10
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	UJ	0.5	ND	U	10	ND	U	10
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	UJ	1	ND	U	20	ND	U	20
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	UJ	0.5	ND	U	10	ND	U	10
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	UJ	1	ND	U	20	ND	U	20
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	UJ	2	63	J	40	61	J	40
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	UJ	1	ND	U	20	ND	U	20
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	UJ	0.5	ND	U	10	ND	U	10
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	UJ	0.5	ND	U	10	ND	U	10
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	UJ	0.5	ND	U	10	ND	U	10
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	UJ	0.5	ND	U	10	ND	U	10
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	UJ	1	19	J	20	18	J	20
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	UJ	0.5	ND	U	10	ND	U	10
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	UJ	0.5	ND	U	10	ND	U	10
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	UJ	0.5	ND	U	10	ND	U	10
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	UJ	0.5	ND	U	10	ND	U	10
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	UJ	1	39	J	20	35	J	20
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	UJ	0.5	ND	U	10	ND	U	10
		2-Hexanone	591-78-6	NS	NS	38	38	ND	UJ	1	380	--	20	390	--	20
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	UJ	0.5	ND	U	10	ND	U	10
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	UJ	0.5	17	J	10	18	J	10
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	UJ	1	230	--	20	270	--	20
		Acetone	67-64-1	NS	NS	14,000	14,000	0.73	J	2	110	J	40	96	J	40
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	UJ	5	ND	U	100	ND	U	100
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	UJ	1	ND	U	20	ND	U	20
		Benzene	71-43-2	5	5	4.6	5	ND	UJ	0.5	11,000	--	100	11,000	--	100
		Bromobenzene	108-86-1	NS	NS	62	62	ND	UJ	0.5	ND	U	10	ND	U	10
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	UJ	0.5	ND	U	10	ND	U	10
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	UJ	0.5	ND	U	10	ND	U	10		
Bromoform	75-25-2	NS	80	33	80	ND	UJ	2	ND	U	40	ND	U	40		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106007	KAFB-106008			KAFB-106008								
		Field Sample ID:		GW007-204	GW008-204			GW008-604								
		Sample Date:		10/5/2020	10/21/2020			10/21/2020								
		Sample Type:		REG	REG			Field Duplicate								
		Sample Depth (ft bgs):		490	488			488								
		Reference Elevation Interval (ft AMSL):		4857	4857			4857								
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	UJ	0.5	ND	U	10	ND	U	10
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	UJ	0.5	ND	U	10	ND	U	10
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	UJ	0.5	ND	U	10	ND	U	10
		Chlorobenzene	108-90-7	NS	100	78	100	ND	UJ	0.5	ND	U	10	ND	U	10
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	0.5	ND	U	10	ND	U	10
		Chloroform	67-66-3	100	80	2.2	80	ND	UJ	0.5	ND	U	10	ND	U	10
		Chloromethane	74-87-3	NS	NS	190	190	ND	UJ	0.5	ND	U	10	ND	U	10
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	UJ	0.5	ND	U	10	ND	U	10
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	UJ	0.5	ND	U	10	ND	U	10
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	UJ	0.5	ND	U	10	ND	U	10
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	UJ	0.5	ND	U	10	ND	U	10
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	2.3	J	0.5	ND	U	10	ND	U	10
		Ethylbenzene	100-41-4	700	700	15	700	ND	UJ	0.8	310	--	16	310	--	16
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	ND	U	80	ND	U	80
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	UJ	0.5	80	J	10	83	J	10
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	UJ	2	640	--	40	660	--	40
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	UJ	0.5	ND	U	10	ND	U	10
		Methylene chloride	75-09-2	5	5	110	5	ND	UJ	0.5	ND	U	10	ND	U	10
		Naphthalene	91-20-3	30	NS	1.2	30	ND	UJ	2	29	J	40	30	J	40
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	UJ	0.5	ND	U	10	ND	U	10
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	UJ	0.5	18	J	10	18	J	10
		o-Xylene	95-47-6	NS	NS	190	190	ND	UJ	0.8	230	--	16	220	--	16
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	UJ	0.5	ND	U	10	ND	U	10
		Styrene	100-42-5	100	100	1,200	100	ND	UJ	0.5	ND	U	10	ND	U	10
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	UJ	1	ND	U	20	ND	U	20
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	U	10	ND	U	10
		Toluene	108-88-3	1,000	1,000	1,100	1,000	1.8	J	0.5	5,500	--	10	5,700	--	10
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	UJ	0.5	ND	U	10	ND	U	10
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	UJ	0.5	ND	U	10	ND	U	10
		Trichloroethene	79-01-6	5	5	4.9	5	ND	UJ	0.5	ND	U	10	ND	U	10
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	UJ	0.5	ND	U	10	ND	U	10
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	UJ	2	ND	U	40	ND	U	40
Vinyl chloride	75-01-4	2	2	0.19	2	ND	UJ	0.5	ND	U	10	ND	U	10		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	UJ	2	870	--	40	880	--	40		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106009			KAFB-106010			KAFB-106010						
		Field Sample ID:		GW009-204			GW010-204			GW010-604						
		Sample Date:		10/12/2020			10/22/2020			10/22/2020						
		Sample Type:		REG			REG			Field Duplicate						
		Sample Depth (ft bgs):		484.39			506			506						
		Reference Elevation Interval (ft AMSL):		4857			4857			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	0.017	J	0.019	8.2	--	0.96	7.8	--	0.96
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	5	ND	U	5	ND	U	2.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	5	ND	U	5	ND	U	2.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	5	ND	U	5	ND	U	2.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	5	ND	U	5	ND	U	2.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	5	ND	U	5	ND	U	2.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	5	ND	U	5	ND	U	2.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	5	ND	U	5	ND	U	2.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	10	ND	U	10	ND	U	5
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	5	ND	U	5	ND	U	2.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	10	ND	U	10	ND	U	5
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	20	43	J	20	44	--	10
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	10	ND	U	10	ND	U	5
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	5	8.1	J	5	8.1	--	2.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	5	ND	U	5	ND	U	2.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	5	ND	U	5	ND	U	2.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	5	ND	U	5	ND	U	2.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	10	16	J	10	16	J	5
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	5	ND	U	5	ND	U	2.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	5	ND	U	5	ND	U	2.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	5	ND	U	5	ND	U	2.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	5	ND	U	5	ND	U	2.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	UJ	10	ND	U	10	1.6	J	5
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	5	ND	U	5	ND	U	2.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	10	ND	UJ	10	ND	UJ	5
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	5	ND	U	5	ND	U	2.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	5	27	J	5	15	J	2.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	10	ND	U	10	ND	U	5
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	UJ	20	14	J	20	12	J	10
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	50	ND	U	50	ND	U	25
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	10	ND	U	10	ND	U	5
		Benzene	71-43-2	5	5	4.6	5	ND	U	5	1,400	--	5	1,400	--	2.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	5	ND	U	5	ND	U	2.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	5	ND	U	5	ND	U	2.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	5	ND	U	5	ND	U	2.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	20	ND	U	20	ND	U	10		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106009			KAFB-106010			KAFB-106010						
		Field Sample ID:		GW009-204			GW010-204			GW010-604						
		Sample Date:		10/12/2020			10/22/2020			10/22/2020						
		Sample Type:		REG			REG			Field Duplicate						
		Sample Depth (ft bgs):		484.39			506			506						
		Reference Elevation Interval (ft AMSL):		4857			4857			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	5	ND	U	5	ND	U	2.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	5	ND	U	5	ND	U	2.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	5	ND	U	5	ND	U	2.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	5	ND	U	5	ND	U	2.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	5	ND	UJ	5	ND	UJ	2.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	5	ND	U	5	ND	U	2.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	5	ND	UJ	5	ND	UJ	2.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	5	ND	U	5	ND	U	2.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	5	ND	U	5	ND	U	2.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	5	ND	U	5	ND	U	2.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	5	ND	U	5	ND	U	2.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	5	ND	U	5	ND	U	2.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	8	510	--	8	520	--	4
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	40	ND	UJ	40	ND	UJ	20
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	5	30	J	5	31	--	2.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	20	610	--	20	620	--	10
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	5	ND	U	5	ND	U	2.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	5	ND	U	5	ND	U	2.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	20	24	J	20	25	--	10
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	5	ND	U	5	ND	U	2.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	5	20	J	5	20	J	2.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	8	320	--	8	320	--	4
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	5	25	J	5	14	J	2.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	5	ND	U	5	ND	U	2.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	10	ND	U	10	ND	U	5
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	5	ND	U	5	ND	U	2.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	5	3,500	--	50	3,400	--	25
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	5	ND	U	5	ND	U	2.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	5	ND	U	5	ND	U	2.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	5	ND	U	5	ND	U	2.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	5	ND	U	5	ND	U	2.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	20	ND	U	20	ND	U	10
		Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	5	ND	UJ	5	ND	UJ	2.5
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	20	930	--	20	940	--	10		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106011			KAFB-106012R			KAFB-106013					
		Field Sample ID:			GW011-204			GW012R-204			GW013-204					
		Sample Date:			10/1/2020			10/2/2020			10/13/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			489			495			491					
		Reference Elevation Interval (ft AMSL):			4857			4857			4857					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	0.018	J	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	0.38	J	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	8.3	J	2	ND	UJ	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	UJ	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	UJ	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106011			KAFB-106012R			KAFB-106013						
		Field Sample ID:		GW011-204			GW012R-204			GW013-204						
		Sample Date:		10/1/2020			10/2/2020			10/13/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		489			495			491						
		Reference Elevation Interval (ft AMSL):		4857			4857			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	ND	UJ	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	6.8	--	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	0.41	J	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	1.1	J	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106014			KAFB-106014			KAFB-106015						
		Field Sample ID:		GW014-204			GW014-604			GW015-204						
		Sample Date:		10/29/2020			10/29/2020			10/13/2020						
		Sample Type:		REG			Field Duplicate			REG						
		Sample Depth (ft bgs):		491			491			488.22						
		Reference Elevation Interval (ft AMSL):		4857			4857			4857 & 4838						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	2.6	--	0.19	2.7	--	0.19	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	5	ND	U	25	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	5	ND	U	25	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	5	ND	U	25	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	5	ND	U	25	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	5	ND	U	25	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	5	ND	U	25	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	5	ND	U	25	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	10	ND	U	50	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	5	ND	U	25	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	10	ND	U	50	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	130	--	20	110	J	100	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	10	ND	U	50	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	5	ND	U	25	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	5	ND	U	25	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	6.9	J	5	ND	U	25	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	5	ND	U	25	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	43	J	10	40	J	50	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	5	ND	U	25	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	5	ND	U	25	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	5	ND	U	25	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	5	ND	U	25	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	9.5	J	10	ND	U	50	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	5	ND	U	25	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	180	--	10	180	J	50	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	5	ND	U	25	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	47	J	5	39	J	25	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	230	--	10	220	J	50	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	UJ	20	--	--	--	ND	UJ	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	50	ND	U	250	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	10	ND	U	50	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	6,100	--	50	5,700	--	25	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	5	ND	U	25	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	5	ND	U	25	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	5	ND	U	25	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	20	ND	U	100	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106014			KAFB-106014			KAFB-106015						
		Field Sample ID:		GW014-204			GW014-604			GW015-204						
		Sample Date:		10/29/2020			10/29/2020			10/13/2020						
		Sample Type:		REG			Field Duplicate			REG						
		Sample Depth (ft bgs):		491			491			488.22						
		Reference Elevation Interval (ft AMSL):		4857			4857			4857 & 4838						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	5	ND	U	25	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	5	ND	U	25	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	5	ND	U	25	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	5	ND	U	25	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	5	ND	U	25	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	5	ND	U	25	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	5	ND	U	25	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	5	ND	U	25	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	5	ND	U	25	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	5	ND	U	25	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	5	ND	U	25	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	UJ	5	ND	UJ	25	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	800	--	8	770	--	40	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	40	ND	U	200	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	320	--	5	280	--	25	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	1,300	--	20	1,200	--	100	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	5	ND	U	25	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	5	ND	U	25	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	83	--	20	72	J	100	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	2.1	J	5	ND	U	25	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	33	J	5	30	J	25	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	570	--	8	520	--	40	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	4.8	J	5	ND	U	25	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	5	ND	U	25	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	10	ND	U	50	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	5	ND	U	25	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	6,300	--	50	5,800	--	25	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	5	ND	U	25	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	5	ND	U	25	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	5	ND	U	25	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	5	ND	U	25	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	20	ND	U	100	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	5	ND	U	25	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	1,900	--	20	1,700	--	100	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106016			KAFB-106017			KAFB-106017						
		Field Sample ID:		GW016-204			GW017-204			GW017-604						
		Sample Date:		10/1/2020			10/19/2020			10/19/2020						
		Sample Type:		REG			REG			Field Duplicate						
		Sample Depth (ft bgs):		478												
		Reference Elevation Interval (ft AMSL):		4857			4857 & 4838			4857 & 4838						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	0.15	--	0.019	0.15	--	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	0.3	J	0.5	0.31	J	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	1.9	--	0.5	2	--	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	7.5	J	2	6.2	J	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	0.7	J	0.5	0.74	J	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106016			KAFB-106017			KAFB-106017						
		Field Sample ID:		GW016-204			GW017-204			GW017-604						
		Sample Date:		10/1/2020			10/19/2020			10/19/2020						
		Sample Type:		REG			REG			Field Duplicate						
		Sample Depth (ft bgs):		478												
		Reference Elevation Interval (ft AMSL):		4857			4857 & 4838			4857 & 4838						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	ND	UJ	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	14	--	0.5	16	--	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	0.43	J	0.5	0.44	J	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	0.62	J	0.5	0.4	J	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	5	ND	U	5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	4.8	J	1	4.8	J	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	0.37	J	0.5	0.36	J	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7		620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2	

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106018			KAFB-106019			KAFB-106020					
		Field Sample ID:			GW018-204			GW019-204			GW020-204					
		Sample Date:			10/28/2020			10/8/2020			10/29/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			481			498			484					
		Reference Elevation Interval (ft AMSL):			4857 & 4838			4857 & 4838			4857					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	0.014	J	0.019	0.026	J	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	UJ	2	10	J	2	ND	UJ	20
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106018			KAFB-106019			KAFB-106020					
		Field Sample ID:			GW018-204			GW019-204			GW020-204					
		Sample Date:			10/28/2020			10/8/2020			10/29/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			481			498			484					
		Reference Elevation Interval (ft AMSL):			4857 & 4838			4857 & 4838			4857					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	U	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	1.5	--	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106021			KAFB-106022			KAFB-106023						
		Field Sample ID:		GW021-204			GW022-204			GW023-204						
		Sample Date:		10/6/2020			10/9/2020			10/13/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		458.7			462.7			473.74						
		Reference Elevation Interval (ft AMSL):		4838			4857 & 4838			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	0.027	J	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	UJ	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	UJ	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	UJ	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	UJ	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	1.5	J	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	UJ	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	UJ	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	UJ	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	UJ	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	UJ	2	7.2	J	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	UJ	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	UJ	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	0.29	J	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	UJ	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	UJ	2	ND	UJ	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106021	KAFB-106022			KAFB-106023							
		Field Sample ID:			GW021-204	GW022-204			GW023-204							
		Sample Date:			10/6/2020	10/9/2020			10/13/2020							
		Sample Type:			REG	REG			REG							
		Sample Depth (ft bgs):			458.7	462.7			473.74							
		Reference Elevation Interval (ft AMSL):			4838	4857 & 4838			4857							
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	UJ	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	UJ	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	1.2	J	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	UJ	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	0.27	J	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	UJ	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	UJ	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	0.54	J	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	UJ	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	UJ	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	UJ	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	UJ	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106024			KAFB-106025			KAFB-106026						
		Field Sample ID:		GW024-204			GW025-204			GW026-204						
		Sample Date:		10/21/2020			10/15/2020			10/12/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		486			465.7			466.7						
		Reference Elevation Interval (ft AMSL):		4857			4857 & 4838			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	UJ	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	ND	U	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	UJ	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106024			KAFB-106025			KAFB-106026						
		Field Sample ID:		GW024-204			GW025-204			GW026-204						
		Sample Date:		10/21/2020			10/15/2020			10/12/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		486			465.7			466.7						
		Reference Elevation Interval (ft AMSL):		4857			4857 & 4838			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	U	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	UJ	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	UJ	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106027			KAFB-106028			KAFB-106029						
		Field Sample ID:		GW027-204			GW028-204			GW029-204						
		Sample Date:		10/1/2020			10/22/2020			10/6/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		484			488			451.5						
		Reference Elevation Interval (ft AMSL):		4857			4857			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	29	--	3.8	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	5	ND	UJ	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	10	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	10	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	130	--	20	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	10	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	29	--	5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	41	J	10	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	5.3	J	10	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	UJ	10	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	36	J	5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	25	J	10	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	ND	U	20	ND	UJ	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	50	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	10	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	5,100	J	50	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	20	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106027		KAFB-106028		KAFB-106029								
		Field Sample ID:		GW027-204		GW028-204		GW029-204								
		Sample Date:		10/1/2020		10/22/2020		10/6/2020								
		Sample Type:		REG		REG		REG								
		Sample Depth (ft bgs):		484		488		451.5								
		Reference Elevation Interval (ft AMSL):		4857		4857		4857								
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	UJ	5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	UJ	5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	840	--	8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	ND	UJ	40	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	75	--	5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	1,600	--	20	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	76	--	20	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	2	J	5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	34	J	5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	990	--	8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	27	J	5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	10	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	10,000	J	50	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	20	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	UJ	5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	2,600	--	20	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106030			KAFB-106031			KAFB-106032						
		Field Sample ID:		GW030-204			GW031-204			GW032-204						
		Sample Date:		10/6/2020			10/6/2020			10/8/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		470.2			496.5			456.7						
		Reference Elevation Interval (ft AMSL):		4838			4814			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	UJ	2	ND	UJ	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106030			KAFB-106031			KAFB-106032						
		Field Sample ID:		GW030-204			GW031-204			GW032-204						
		Sample Date:		10/6/2020			10/6/2020			10/8/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		470.2			496.5			456.7						
		Reference Elevation Interval (ft AMSL):		4838			4814			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	U	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2		
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106033			KAFB-106034			KAFB-106035						
		Field Sample ID:		GW033-204			GW034-204			GW035-204						
		Sample Date:		10/8/2020			10/8/2020			10/9/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		477.7			502.7			452.83						
		Reference Elevation Interval (ft AMSL):		4838			4814			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	0.06	--	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	0.8	J	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	UJ	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	UJ	2	0.88	J	2	4.7	J	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106033			KAFB-106034			KAFB-106035						
		Field Sample ID:		GW033-204			GW034-204			GW035-204						
		Sample Date:		10/8/2020			10/8/2020			10/9/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		477.7			502.7			452.83						
		Reference Elevation Interval (ft AMSL):		4838			4814			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	U	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7		620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2	

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106036			KAFB-106037			KAFB-106037						
		Field Sample ID:		GW036-204			GW037-204			GW037-604						
		Sample Date:		10/12/2020			10/9/2020			10/9/2020						
		Sample Type:		REG			REG			Field Duplicate						
		Sample Depth (ft bgs):		482.58			507.75			507.75						
		Reference Elevation Interval (ft AMSL):		4838			4838			4838						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	0.12	--	0.019	0.059	J	0.019	0.09	J	0.02
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	UJ	1	ND	UJ	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	0.95	J	2	ND	UJ	2	ND	UJ	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106036			KAFB-106037			KAFB-106037						
		Field Sample ID:		GW036-204			GW037-204			GW037-604						
		Sample Date:		10/12/2020			10/9/2020			10/9/2020						
		Sample Type:		REG			REG			Field Duplicate						
		Sample Depth (ft bgs):		482.58			507.75			507.75						
		Reference Elevation Interval (ft AMSL):		4838			4838			4838						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	U	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	--	0.5
Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2		
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106038			KAFB-106039			KAFB-106040					
		Field Sample ID:			GW038-204			GW039-204			GW040-204					
		Sample Date:			10/5/2020			10/5/2020			10/7/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			483			513			535					
		Reference Elevation Interval (ft AMSL):			4857			4838			4814					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	UJ	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	UJ	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	UJ	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	UJ	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	UJ	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	UJ	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	UJ	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	UJ	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	UJ	2	ND	UJ	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	UJ	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	UJ	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	UJ	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	UJ	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106038			KAFB-106039			KAFB-106040						
		Field Sample ID:		GW038-204			GW039-204			GW040-204						
		Sample Date:		10/5/2020			10/5/2020			10/7/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		483			513			535						
		Reference Elevation Interval (ft AMSL):		4857			4838			4814						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	UJ	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	ND	U	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	UJ	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	UJ	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	UJ	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	UJ	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	1.3	J	0.5	0.92	J	0.5	1.4	--	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	UJ	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	UJ	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	UJ	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106041	KAFB-106042			KAFB-106043							
		Field Sample ID:			GW041-204	GW042-204			GW043-204							
		Sample Date:			10/8/2020	10/8/2020			10/12/2020							
		Sample Type:			REG	REG			REG							
		Sample Depth (ft bgs):			452.3	469.7			543.7							
		Reference Elevation Interval (ft AMSL):			4857	4857			4814							
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	0.074	--	0.019	0.043	--	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	1	J	2	ND	U	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	UJ	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106041			KAFB-106042			KAFB-106043						
		Field Sample ID:		GW041-204			GW042-204			GW043-204						
		Sample Date:		10/8/2020			10/8/2020			10/12/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		452.3			469.7			543.7						
		Reference Elevation Interval (ft AMSL):		4857			4857			4814						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	U	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7		620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2	

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106044			KAFB-106044			KAFB-106045						
		Field Sample ID:		GW044-204			GW044-604			GW045-204						
		Sample Date:		10/1/2020			10/1/2020			10/8/2020						
		Sample Type:		REG			Field Duplicate			REG						
		Sample Depth (ft bgs):		506.2			506.2			533.72						
		Reference Elevation Interval (ft AMSL):		4838			4838			4814						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	ND	U	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106044			KAFB-106044			KAFB-106045						
		Field Sample ID:		GW044-204			GW044-604			GW045-204						
		Sample Date:		10/1/2020			10/1/2020			10/8/2020						
		Sample Type:		REG			Field Duplicate			REG						
		Sample Depth (ft bgs):		506.2			506.2			533.72						
		Reference Elevation Interval (ft AMSL):		4838			4838			4814						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	UJ	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	0.68	J	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2		
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106046			KAFB-106047			KAFB-106048						
		Field Sample ID:		GW046-204			GW047-204			GW048-204						
		Sample Date:		10/20/2020			10/20/2020			10/15/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		505			520			538						
		Reference Elevation Interval (ft AMSL):		4857			4838			4814						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	UJ	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	UJ	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	5	ND	U	5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	ND	U	2	ND	UJ	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	UJ	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	UJ	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106046			KAFB-106047			KAFB-106048						
		Field Sample ID:		GW046-204			GW047-204			GW048-204						
		Sample Date:		10/20/2020			10/20/2020			10/15/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		505			520			538						
		Reference Elevation Interval (ft AMSL):		4857			4838			4814						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	0.36	J	0.5	0.36	J	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	ND	UJ	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	0.2	J	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	5	ND	U	0.5	ND	U	5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	0.87	J	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7		620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2	

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106049			KAFB-106050			KAFB-106051					
		Field Sample ID:			GW049-204			GW050-204			GW051-204					
		Sample Date:			10/12/2020			10/12/2020			10/15/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			457.5			475.1			501.5					
		Reference Elevation Interval (ft AMSL):			4857			4838			4814					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	UJ	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	UJ	1	ND	UJ	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	UJ	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	UJ	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	UJ	2	ND	U	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106049	KAFB-106050			KAFB-106051							
		Field Sample ID:			GW049-204	GW050-204			GW051-204							
		Sample Date:			10/12/2020	10/12/2020			10/15/2020							
		Sample Type:			REG	REG			REG							
		Sample Depth (ft bgs):			457.5	475.1			501.5							
		Reference Elevation Interval (ft AMSL):			4857	4838			4814							
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	UJ	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	U	0.5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	UJ	0.5		
Xylenes, total	1330-20-7		620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2	

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106051			KAFB-106052			KAFB-106053						
		Field Sample ID:		GW051-604			GW052-204			GW053-204						
		Sample Date:		10/15/2020			10/12/2020			10/9/2020						
		Sample Type:		Field Duplicate			REG			REG						
		Sample Depth (ft bgs):		501.5			450.3			479.1						
		Reference Elevation Interval (ft AMSL):		4814			4857			4838						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	UJ	1	ND	UJ	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	UJ	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	UJ	2	ND	UJ	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	UJ	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	UJ	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106051	KAFB-106052			KAFB-106053							
		Field Sample ID:			GW051-604	GW052-204			GW053-204							
		Sample Date:			10/15/2020	10/12/2020			10/9/2020							
		Sample Type:			Field Duplicate	REG			REG							
		Sample Depth (ft bgs):			501.5	450.3			479.1							
		Reference Elevation Interval (ft AMSL):			4814	4857			4838							
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	ND	U	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	UJ	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106054			KAFB-106055			KAFB-106057						
		Field Sample ID:		GW054-204			GW055-204			GW057-204						
		Sample Date:		10/9/2020			10/8/2020			10/8/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		504.7			466.5			485.6						
		Reference Elevation Interval (ft AMSL):		4814			4857			4838						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	0.6	J	0.5	0.33	J	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	UJ	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	UJ	2	1.6	J	2	1.6	J	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106054			KAFB-106055			KAFB-106057					
		Field Sample ID:			GW054-204			GW055-204			GW057-204					
		Sample Date:			10/9/2020			10/8/2020			10/8/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			504.7			466.5			485.6					
		Reference Elevation Interval (ft AMSL):			4814			4857			4838					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	U	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7		620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2	

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106058			KAFB-106059			KAFB-106060					
		Field Sample ID:			GW058-204			GW059-204			GW060-204					
		Sample Date:			10/8/2020			10/23/2020			10/20/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			512.5			504			508					
		Reference Elevation Interval (ft AMSL):			4814			4857			4838					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	6.5	--	0.95	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	10	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	10	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	10	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	10	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	10	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	10	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	10	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	20	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	10	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	20	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	250	--	40	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	20	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	6.2	J	10	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	10	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	10	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	10	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	78	J	20	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	10	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	10	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	10	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	10	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	UJ	20	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	10	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	65	J	20	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	10	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	12	J	10	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	25	J	20	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	33	J	40	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	100	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	20	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	15,000	--	100	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	10	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	10	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	10	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	40	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106058			KAFB-106059			KAFB-106060						
		Field Sample ID:		GW058-204			GW059-204			GW060-204						
		Sample Date:		10/8/2020			10/23/2020			10/20/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		512.5			504			508						
		Reference Elevation Interval (ft AMSL):		4814			4857			4838						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	10	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	10	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	10	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	10	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	10	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	10	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	10	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	10	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	10	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	10	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	10	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	10	ND	UJ	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	1,000	--	16	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	U	80	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	56	J	10	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	2,300	--	40	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	10	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	10	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	100	--	40	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	6.3	J	10	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	56	J	10	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	950	--	16	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	9	J	10	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	10	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	20	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	10	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	12,000	--	100	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	10	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	10	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	10	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	10	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	40	ND	UJ	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	10	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	3,300	--	40	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106061			KAFB-106062			KAFB-106063						
		Field Sample ID:		GW061-204			GW062-204			GW063-204						
		Sample Date:		10/15/2020			10/20/2020			10/14/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		501.5			585			510.13						
		Reference Elevation Interval (ft AMSL):		4814			4814			4838						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	10
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	10
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	260	--	20
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	10
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	3.6	J	5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	76	--	10
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	UJ	1	ND	U	1	ND	U	10
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	UJ	1	ND	U	1	ND	U	10
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	33	J	5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	37	J	10
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	UJ	2	ND	U	2	ND	UJ	20
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	UJ	5	ND	U	5	ND	U	50
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	UJ	1	ND	U	1	ND	U	10
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	3,900	--	50
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	20		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106061	KAFB-106062			KAFB-106063							
		Field Sample ID:			GW061-204	GW062-204			GW063-204							
		Sample Date:			10/15/2020	10/20/2020			10/14/2020							
		Sample Type:			REG	REG			REG							
		Sample Depth (ft bgs):			501.5	585			510.13							
		Reference Elevation Interval (ft AMSL):			4814	4814			4838							
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	U	5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	U	5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	1,000	--	8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	ND	UJ	4	ND	U	40
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	190	--	5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	2,000	--	20
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	97	--	20
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	8.2	J	5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	79	--	5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	1,000	--	8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	5	ND	U	0.5	14	J	5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	10
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	UJ	5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	0.4	J	0.5	ND	U	0.5	1,700	--	5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	20
		Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	5
Xylenes, total	1330-20-7		620	10,000	190	620	ND	U	2	ND	U	2	3,000	--	20	

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106064			KAFB-106065			KAFB-106066						
		Field Sample ID:		GW064-204			GW065-204			GW066-204						
		Sample Date:		10/14/2020			10/19/2020			10/16/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		491			513			585						
		Reference Elevation Interval (ft AMSL):		4857			4838			4814						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	2.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	2.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	2.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	2.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	2.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	2.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	2.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	5	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	2.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	5	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	430	--	10	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	5	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	2.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	2.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	2.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	4.3	J	2.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	140	--	5	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	2.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	2.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	2.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	2.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	5	ND	U	1	ND	UJ	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	2.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	5	ND	U	1	ND	UJ	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	2.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	71	--	2.5	ND	U	5	ND	U	5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	5	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	26	J	10	ND	U	2	ND	UJ	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	25	ND	U	5	ND	UJ	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	5	ND	U	1	ND	UJ	1
		Benzene	71-43-2	5	5	4.6	5	3,700	--	25	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	2.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	2.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	2.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	10	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106064	KAFB-106065			KAFB-106066							
		Field Sample ID:			GW064-204	GW065-204			GW066-204							
		Sample Date:			10/14/2020	10/19/2020			10/16/2020							
		Sample Type:			REG	REG			REG							
		Sample Depth (ft bgs):			491	513			585							
		Reference Elevation Interval (ft AMSL):			4857	4838			4814							
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	UJ	2.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	2.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	2.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	2.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	2.5	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	2.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	UJ	2.5	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	2.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	2.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	2.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	2.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	2.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	1,200	--	4	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	20	ND	UJ	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	210	--	2.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	2,700	--	10	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	2.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	2.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	160	--	10	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	20	J	2.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	120	--	2.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	1,400	--	4	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	21	J	2.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	2.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	5	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	2.5	ND	U	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	430	--	2.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	2.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	2.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	2.5	ND	U	0.5	ND	U	0.5
Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	2.5	ND	U	0.5	ND	U	0.5		
Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	10	ND	U	2	ND	U	2		
Vinyl chloride	75-01-4	2	2	0.19	2	ND	UJ	2.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	4,100	--	10	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106067			KAFB-106068			KAFB-106069						
		Field Sample ID:		GW067-204			GW068-204			GW069-204						
		Sample Date:		10/19/2020			10/16/2020			10/16/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		490			582			508						
		Reference Elevation Interval (ft AMSL):		4857			4814			4838						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	0.017	J	0.019	ND	U	0.019	ND	--	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	1	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	1	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	25	--	1	ND	U	0.5	11	--	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	1	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	1	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	1	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	1	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	2	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	11	--	1	ND	U	0.5	4.1	J	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	2	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	4	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	2	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	1	ND	U	0.5	0.35	J	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	1	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	5	--	1	ND	U	0.5	2.6	--	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	1	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	8.7	J	2	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	1	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	1	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	1	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	1	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	2	ND	UJ	1	ND	UJ	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	0.89	J	1	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	2	ND	UJ	1	ND	UJ	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	0.41	J	1	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	20	--	1	ND	U	5	ND	U	5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	2	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	11	J	4	ND	UJ	2	11	J	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	10	ND	UJ	5	ND	UJ	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	2	ND	UJ	1	ND	UJ	1
		Benzene	71-43-2	5	5	4.6	5	3.3	--	1	ND	U	0.5	0.6	J	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	1	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	1	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	1	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	4	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106067	KAFB-106068		KAFB-106069									
		Field Sample ID:		GW067-204	GW068-204		GW069-204									
		Sample Date:		10/19/2020	10/16/2020		10/16/2020									
		Sample Type:		REG	REG		REG									
		Sample Depth (ft bgs):		490	582		508									
		Reference Elevation Interval (ft AMSL):		4857	4814		4838									
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	1	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	1	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	1	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	1	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	1	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	1	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	1	0.21	J	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	1	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	1	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	1	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	1	ND	U	0.5	0.41	J	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	1	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	1.6	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	8	ND	UJ	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	97	--	1	ND	U	0.5	34	--	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	4	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	1	ND	U	0.5	0.55	J	0.5
		Methylene chloride	75-09-2	5	5	110	5	1.3	J	1	ND	U	0.5	0.86	J	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	4	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	1	ND	U	0.5	0.45	J	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	1.2	J	1	ND	U	0.5	1.4	J	0.5
		o-Xylene	95-47-6	NS	NS	190	190	1.3	J	1.6	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	10	ND	U	0.5	ND	U	5
		Styrene	100-42-5	100	100	1,200	100	ND	U	1	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	10	--	2	ND	U	1	4.9	J	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	1	ND	U	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	1	ND	U	0.5	0.64	J	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	1	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	1	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	1	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	1	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	4	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	1	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	4	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106070			KAFB-106070			KAFB-106071						
		Field Sample ID:		GW070-204			GW070-604			GW071-204						
		Sample Date:		10/13/2020			10/13/2020			10/13/2020						
		Sample Type:		REG			Field Duplicate			REG						
		Sample Depth (ft bgs):		460.7			460.7			548.7						
		Reference Elevation Interval (ft AMSL):		4857			4857			4814						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	0.31	J	0.5	0.37	J	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	2.1	J	2	2.3	J	2	ND	UJ	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106070			KAFB-106070			KAFB-106071						
		Field Sample ID:		GW070-204			GW070-604			GW071-204						
		Sample Date:		10/13/2020			10/13/2020			10/13/2020						
		Sample Type:		REG			Field Duplicate			REG						
		Sample Depth (ft bgs):		460.7			460.7			548.7						
		Reference Elevation Interval (ft AMSL):		4857			4857			4814						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	U	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106072	KAFB-106073			KAFB-106074							
		Field Sample ID:			GW072-204	GW073-204			GW074-204							
		Sample Date:			10/15/2020	10/12/2020			10/12/2020							
		Sample Type:			REG	REG			REG							
		Sample Depth (ft bgs):			475.7	501			572							
		Reference Elevation Interval (ft AMSL):			4838	4838			4814							
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	5.7	J	2	ND	U	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	UJ	2	ND	UJ	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106072	KAFB-106073			KAFB-106074							
		Field Sample ID:			GW072-204	GW073-204			GW074-204							
		Sample Date:			10/15/2020	10/12/2020			10/12/2020							
		Sample Type:			REG	REG			REG							
		Sample Depth (ft bgs):			475.7	501			572							
		Reference Elevation Interval (ft AMSL):			4838	4838			4814							
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	UJ	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	0.69	J	0.5	1.7	--	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	UJ	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106075			KAFB-106076			KAFB-106076						
		Field Sample ID:		GW075-204			GW076-204			GW076-604						
		Sample Date:		10/23/2020			10/30/2020			10/30/2020						
		Sample Type:		REG			REG			Field Duplicate						
		Sample Depth (ft bgs):		485			482			482						
		Reference Elevation Interval (ft AMSL):		4857			4857			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	0.014	J	0.019	ND	U	0.096	ND	U	0.096
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	47	--	2	47	--	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	11	--	1	11	--	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	9.9	J	1	10	--	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	UJ	1	400	--	1	410	--	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	2.4	J	0.5	3.3	J	0.5	3.2	J	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	220	--	1	220	--	1
		Acetone	67-64-1	NS	NS	14,000	14,000	1.4	J	2	53	J	2	48	J	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	16	--	0.5	17	--	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106075			KAFB-106076			KAFB-106076						
		Field Sample ID:		GW075-204			GW076-204			GW076-604						
		Sample Date:		10/23/2020			10/30/2020			10/30/2020						
		Sample Type:		REG			REG			Field Duplicate						
		Sample Depth (ft bgs):		485			482			482						
		Reference Elevation Interval (ft AMSL):		4857			4857			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	67	--	0.8	68	--	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	ND	U	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	13	--	0.5	13	--	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	130	--	2	130	--	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	0.28	J	0.5	0.27	J	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	20	--	2	20	--	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	1.9	J	0.5	1.8	J	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	13	--	0.5	14	--	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	17	--	0.8	17	--	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	2.3	J	0.5	3.7	J	0.5	3.6	J	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	9.8	--	0.5	10	--	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	UJ	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	150	--	2	150	--	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106077			KAFB-106078			KAFB-106079						
		Field Sample ID:		GW077-204			GW078-204			GW079-204						
		Sample Date:		10/9/2020			10/20/2020			10/30/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		506			578			498.78						
		Reference Elevation Interval (ft AMSL):		4838			4814			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	5
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	5
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	100	--	10
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	5
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	23	J	5
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	2.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	2.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	UJ	1	ND	U	1	ND	U	5
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	2.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	5
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	2.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	8.9	J	2.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	11	J	5
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	UJ	2	ND	U	2	13	J	10
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	25
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	5
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	5,400	--	25
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	2.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	2.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	10		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106077			KAFB-106078			KAFB-106079						
		Field Sample ID:		GW077-204			GW078-204			GW079-204						
		Sample Date:		10/9/2020			10/20/2020			10/30/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		506			578			498.78						
		Reference Elevation Interval (ft AMSL):		4838			4814			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	1.6	J	2.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	U	2.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	2.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	490	--	4
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	UJ	4	ND	U	20
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	31	--	2.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	400	--	10
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	44	--	10
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	1.7	J	2.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	23	J	2.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	26	--	4
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	5.1	J	2.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	2.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	5
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	U	0.5	ND	U	2.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	1.7	--	0.5	ND	U	0.5	340	--	2.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	2.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	10
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	2.5		
Xylenes, total	1330-20-7			620	10,000	190	620	ND	U	2	ND	U	2	430	--	10

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106080			KAFB-106081			KAFB-106082						
		Field Sample ID:		GW080-204			GW081-204			GW082-204						
		Sample Date:		11/24/2020			10/15/2020			10/6/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		506			580			474						
		Reference Elevation Interval (ft AMSL):		4838			4814			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	2.7	--	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	UJ	1	ND	UJ	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	UJ	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	0.23	J	0.5	ND	U	5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	UJ	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	UJ	2	ND	UJ	2	0.79	J	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	UJ	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	UJ	1	ND	UJ	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	82	--	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	UJ	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106080			KAFB-106081			KAFB-106082					
		Field Sample ID:			GW080-204			GW081-204			GW082-204					
		Sample Date:			11/24/2020			10/15/2020			10/6/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			506			580			474					
		Reference Elevation Interval (ft AMSL):			4838			4814			4857					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	5.9	--	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	ND	UJ	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	1.1	J	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	0.35	J	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	1.5	--	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	1.1	J	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	0.35	J	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	U	0.5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	1	0.49	J	0.5	0.84	J	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	1.5	J	2.8	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106083			KAFB-106084			KAFB-106085						
		Field Sample ID:		GW083-204			GW084-204			GW085-204						
		Sample Date:		10/6/2020			10/6/2020			10/13/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		498			571			447.2						
		Reference Elevation Interval (ft AMSL):		4838			4814			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	0.016	J	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	UJ	2	ND	U	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	UJ	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106083			KAFB-106084			KAFB-106085						
		Field Sample ID:		GW083-204			GW084-204			GW085-204						
		Sample Date:		10/6/2020			10/6/2020			10/13/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		498			571			447.2						
		Reference Elevation Interval (ft AMSL):		4838			4814			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	UJ	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	U	0.5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	1.1	--	0.5	0.69	J	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2		
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	UJ	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106085			KAFB-106086			KAFB-106087					
		Field Sample ID:			GW085-604			GW086-204			GW087-204					
		Sample Date:			10/13/2020			10/13/2020			10/13/2020					
		Sample Type:			Field Duplicate			REG			REG					
		Sample Depth (ft bgs):			447.2			476.7			546.7					
		Reference Elevation Interval (ft AMSL):			4857			4838			4814					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	ND	U	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	UJ	2	ND	UJ	2	ND	UJ	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106085			KAFB-106086			KAFB-106087						
		Field Sample ID:		GW085-604			GW086-204			GW087-204						
		Sample Date:		10/13/2020			10/13/2020			10/13/2020						
		Sample Type:		Field Duplicate			REG			REG						
		Sample Depth (ft bgs):		447.2			476.7			546.7						
		Reference Elevation Interval (ft AMSL):		4857			4838			4814						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	ND	UJ	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106088			KAFB-106089			KAFB-106090					
		Field Sample ID:			GW088-204			GW089-204			GW090-204					
		Sample Date:			10/15/2020			10/13/2020			10/13/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			460.7			482.26			555.78					
		Reference Elevation Interval (ft AMSL):			4857			4838			4814					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	0.056	--	0.019	0.074	--	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	1.3	J	2	ND	U	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	UJ	2	ND	UJ	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106088	KAFB-106089			KAFB-106090							
		Field Sample ID:			GW088-204	GW089-204			GW090-204							
		Sample Date:			10/15/2020	10/13/2020			10/13/2020							
		Sample Type:			REG	REG			REG							
		Sample Depth (ft bgs):			460.7	482.26			555.78							
		Reference Elevation Interval (ft AMSL):			4857	4838			4814							
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	UJ	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	0.26	UJ	0.5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	UJ	0.5	ND	U	0.5	ND	U	0.5		
Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2		
Vinyl chloride	75-01-4	2	2	0.19	2	ND	UJ	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106091			KAFB-106091			KAFB-106092						
		Field Sample ID:		GW091-204			GW091-604			GW092-204						
		Sample Date:		10/9/2020			10/9/2020			10/8/2020						
		Sample Type:		REG			Field Duplicate			REG						
		Sample Depth (ft bgs):		454.7			454.7			474.7						
		Reference Elevation Interval (ft AMSL):		4857			4857			4838						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	UJ	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	UJ	2	ND	U	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106091			KAFB-106091			KAFB-106092					
		Field Sample ID:			GW091-204			GW091-604			GW092-204					
		Sample Date:			10/9/2020			10/9/2020			10/8/2020					
		Sample Type:			REG			Field Duplicate			REG					
		Sample Depth (ft bgs):			454.7			454.7			474.7					
		Reference Elevation Interval (ft AMSL):			4857			4857			4838					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	--	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	UJ	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2		
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5		
Xylenes, total	1330-20-7		620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2	

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106093			KAFB-106094			KAFB-106095					
		Field Sample ID:			GW093-204			GW094-204			GW095-204					
		Sample Date:			10/8/2020			10/19/2020			10/7/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			544.7						505.85					
		Reference Elevation Interval (ft AMSL):			4814			4857			4838					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	0.071	-	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	0.54	J	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	UJ	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	2.4	J	2	1.6	J	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	0.48	J	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106093			KAFB-106094			KAFB-106095						
		Field Sample ID:		GW093-204			GW094-204			GW095-204						
		Sample Date:		10/8/2020			10/19/2020			10/7/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		544.7						505.85						
		Reference Elevation Interval (ft AMSL):		4814			4857			4838						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	UJ	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	0.66	J	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	0.61	J	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2		
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7		620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2	

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106096			KAFB-106096			KAFB-106097						
		Field Sample ID:		GW096-204			GW096-604			GW097-204						
		Sample Date:		10/7/2020			10/7/2020			10/13/2020						
		Sample Type:		REG			Field Duplicate			REG						
		Sample Depth (ft bgs):		578.3			578.3			508						
		Reference Elevation Interval (ft AMSL):		4814			4814			4838						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	ND	U	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106096			KAFB-106096			KAFB-106097						
		Field Sample ID:		GW096-204			GW096-604			GW097-204						
		Sample Date:		10/7/2020			10/7/2020			10/13/2020						
		Sample Type:		REG			Field Duplicate			REG						
		Sample Depth (ft bgs):		578.3			578.3			508						
		Reference Elevation Interval (ft AMSL):		4814			4814			4838						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	ND	UJ	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	0.8	J	0.5	0.83	J	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
		Vinyl chloride	75-01-4	2	2	0.19	2	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106098			KAFB-106099			KAFB-106100					
		Field Sample ID:			GW098-204			GW099-204			GW100-204					
		Sample Date:			10/13/2020			10/14/2020			10/14/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			533			503			528					
		Reference Elevation Interval (ft AMSL):			4814			4838			4814					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	ND	U	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	UJ	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106098			KAFB-106099			KAFB-106100					
		Field Sample ID:			GW098-204			GW099-204			GW100-204					
		Sample Date:			10/13/2020			10/14/2020			10/14/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			533			503			528					
		Reference Elevation Interval (ft AMSL):			4814			4838			4814					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	ND	U	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	0.25	J	0.5	ND	U	0.5
Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2		
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5		
Xylenes, total	1330-20-7		620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2	

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106101			KAFB-106102			KAFB-106103					
		Field Sample ID:			GW101-204			GW102-204			GW103-204					
		Sample Date:			10/14/2020			10/15/2020			10/13/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			505			526			485.76					
		Reference Elevation Interval (ft AMSL):			4838			4814			4838					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	UJ	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	UJ	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	ND	UJ	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	UJ	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	UJ	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	UJ	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106101			KAFB-106102			KAFB-106103					
		Field Sample ID:			GW101-204			GW102-204			GW103-204					
		Sample Date:			10/14/2020			10/15/2020			10/13/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			505			526			485.76					
		Reference Elevation Interval (ft AMSL):			4838			4814			4838					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	UJ	0.5	ND	U	0.5	ND	UJ	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	0.5	ND	U	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	UJ	0.5	ND	U	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	UJ	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	U	0.5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	UJ	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7			620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106104			KAFB-106105			KAFB-106106						
		Field Sample ID:		GW104-204			GW105-204			GW106-204						
		Sample Date:		10/13/2020			10/12/2020			10/8/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		510.75			484.7			454.3						
		Reference Elevation Interval (ft AMSL):		4814			4838			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	0.027	J	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	ND	U	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	UJ	2	ND	UJ	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106104	KAFB-106105			KAFB-106106							
		Field Sample ID:			GW104-204	GW105-204			GW106-204							
		Sample Date:			10/13/2020	10/12/2020			10/8/2020							
		Sample Type:			REG	REG			REG							
		Sample Depth (ft bgs):			510.75	484.7			454.3							
		Reference Elevation Interval (ft AMSL):			4814	4838			4857							
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	ND	U	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106106			KAFB-106107			KAFB-106149-484						
		Field Sample ID:		GW106-604			GW107-204			GW149-484-204						
		Sample Date:		10/8/2020			10/12/2020			10/21/2020						
		Sample Type:		Field Duplicate			REG			REG						
		Sample Depth (ft bgs):		454.3			510.9			472						
		Reference Elevation Interval (ft AMSL):		4857			4814			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	0.03	--	0.019	ND	U	0.019	17	--	3.8
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	5
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	5
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	310	--	10
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	5
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	100	--	5
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	2.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	2.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	2.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	25	J	5
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	2.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	71	--	5
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	2.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	10	J	2.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	28	J	5
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	ND	U	2	86	J	10
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	25
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	5
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	1,500	--	2.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	2.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	2.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	UJ	2	ND	U	10		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106106			KAFB-106107			KAFB-106149-484						
		Field Sample ID:		GW106-604			GW107-204			GW149-484-204						
		Sample Date:		10/8/2020			10/12/2020			10/21/2020						
		Sample Type:		Field Duplicate			REG			REG						
		Sample Depth (ft bgs):		454.3			510.9			472						
		Reference Elevation Interval (ft AMSL):		4857			4814			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	U	2.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	2.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	390	--	4
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	U	4	ND	U	20
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	44	--	2.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	1,400	--	10
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	140	--	10
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	8.5	J	2.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	53	--	2.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	760	--	4
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	2.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	5
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	3,900	--	25
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	2.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	2.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	10
		Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	2.5
Xylenes, total	1330-20-7		620	10,000	190	620	ND	U	2	ND	U	2	2,200	--	10	

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106151-484	KAFB-106151-484	KAFB-106152-484									
		Field Sample ID:			GW151-484-204	GW151-484-604	GW152-484-204									
		Sample Date:			10/21/2020	10/21/2020	10/21/2020									
		Sample Type:			REG	Field Duplicate	REG									
		Sample Depth (ft bgs):			472.19	472.19	474.88									
		Reference Elevation Interval (ft AMSL):			4857	4857	4857									
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	0.03	--	0.019	0.03	--	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	20	--	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	UJ	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	1.7	J	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	0.24	J	0.5	0.99	J	0.5	7.8	--	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	2.2	J	1
		Acetone	67-64-1	NS	NS	14,000	14,000	3.2	J	2	4.3	J	2	7	J	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	0.38	J	0.5	0.27	J	0.5	59	--	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106151-484	KAFB-106151-484	KAFB-106152-484										
		Field Sample ID:		GW151-484-204	GW151-484-604	GW152-484-204										
		Sample Date:		10/21/2020	10/21/2020	10/21/2020										
		Sample Type:		REG	Field Duplicate	REG										
		Sample Depth (ft bgs):		472.19	472.19	474.88										
		Reference Elevation Interval (ft AMSL):		4857	4857	4857										
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	0.44	J	0.5	0.42	J	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	18	--	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	U	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	51	--	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	6.9	--	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	4.2	J	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	6.5	--	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	2.4	J	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	0.65	J	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	UJ	2	ND	UJ	2
		Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	0.5
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	6.5	--	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID: KAFB-106153-484			KAFB-106201			KAFB-106202								
		Field Sample ID: GW153-484-204			GW201-204			GW202-204								
		Sample Date: 10/21/2020			10/7/2020			10/7/2020								
		Sample Type: REG			REG			REG								
		Sample Depth (ft bgs): 474.89			490.35			520.6								
		Reference Elevation Interval (ft AMSL): 4857			4857			4838								
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	35	--	3.8	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	10	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	10	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	10	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	10	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	10	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	10	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	10	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	20	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	10	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	20	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	150	--	40	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	20	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	49	--	10	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	10	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	10	ND	--	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	10	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	58	J	20	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	10	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	10	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	10	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	10	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	1,000	--	20	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	10	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	1,600	--	20	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	10	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	500	--	10	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	890	--	20	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	2,500	--	40	6.3	J	2	1.3	J	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	100	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	20	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	14,000	--	100	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	10	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	10	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	10	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	40	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106153-484	KAFB-106201			KAFB-106202								
		Field Sample ID:		GW153-484-204	GW201-204			GW202-204								
		Sample Date:		10/21/2020	10/7/2020			10/7/2020								
		Sample Type:		REG	REG			REG								
		Sample Depth (ft bgs):		474.89	490.35			520.6								
		Reference Elevation Interval (ft AMSL):		4857	4857			4838								
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	10	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	10	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	10	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	10	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	10	ND	UJ	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	10	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	10	ND	UJ	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	10	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	10	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	10	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	10	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	UJ	10	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	320	--	16	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	80	ND	UJ	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	94	J	10	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	960	--	40	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	10	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	10	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	420	--	40	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	10	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	36	J	10	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	520	--	16	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	8.1	J	10	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	10	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	20	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	10	ND	U	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	10,000	--	100	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	10	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	10	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	10	ND	U	0.5	ND	U	0.5
Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	10	ND	U	0.5	ND	U	0.5		
Vinyl acetate	108-05-4	NS	NS	410	410	ND	UJ	40	ND	U	2	ND	U	2		
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	10	ND	UJ	0.5	ND	UJ	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	1,500	--	40	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106203			KAFB-106204			KAFB-106205					
		Field Sample ID:			GW203-204			GW204-204			GW205-204					
		Sample Date:			10/7/2020			10/6/2020			10/6/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			623.78			463.2			493.2					
		Reference Elevation Interval (ft AMSL):			4814			4857			4838					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	ND	UJ	2	ND	UJ	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106203			KAFB-106204			KAFB-106205						
		Field Sample ID:		GW203-204			GW204-204			GW205-204						
		Sample Date:		10/7/2020			10/6/2020			10/6/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		623.78			463.2			493.2						
		Reference Elevation Interval (ft AMSL):		4814			4857			4838						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	ND	U	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	UJ	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106206			KAFB-106207			KAFB-106208					
		Field Sample ID:			GW206-204			GW207-204			GW208-204					
		Sample Date:			10/12/2020			10/5/2020			10/6/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			594.2			473.7			503.7					
		Reference Elevation Interval (ft AMSL):			4814			4857			4838					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	UJ	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	UJ	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	UJ	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	UJ	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	ND	U	2	ND	UJ	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106206	KAFB-106207			KAFB-106208							
		Field Sample ID:			GW206-204	GW207-204			GW208-204							
		Sample Date:			10/12/2020	10/5/2020			10/6/2020							
		Sample Type:			REG	REG			REG							
		Sample Depth (ft bgs):			594.2	473.7			503.7							
		Reference Elevation Interval (ft AMSL):			4814	4857			4838							
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	ND	UJ	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	UJ	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106208			KAFB-106209			KAFB-106212						
		Field Sample ID:		GW208-604			GW209-204			GW212-204						
		Sample Date:		10/6/2020			10/6/2020			10/9/2020						
		Sample Type:		Field Duplicate			REG			REG						
		Sample Depth (ft bgs):		503.7			603.7			543.9						
		Reference Elevation Interval (ft AMSL):		4838			4814			4814						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	UU	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	UJ	2	ND	UJ	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106208			KAFB-106209			KAFB-106212					
		Field Sample ID:			GW208-604			GW209-204			GW212-204					
		Sample Date:			10/6/2020			10/6/2020			10/9/2020					
		Sample Type:			Field Duplicate			REG			REG					
		Sample Depth (ft bgs):			503.7			603.7			543.9					
		Reference Elevation Interval (ft AMSL):			4838			4814			4814					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	U	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	UJ	0.5		
Xylenes, total	1330-20-7		620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2	

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106213			KAFB-106214			KAFB-106215						
		Field Sample ID:		GW213-204			GW214-204			GW215-204						
		Sample Date:		10/14/2020			10/14/2020			10/14/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		451.3			478.95			547.7						
		Reference Elevation Interval (ft AMSL):		4857			4838			4814						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	3.1	J	2	ND	U	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106213	KAFB-106214			KAFB-106215							
		Field Sample ID:			GW213-204	GW214-204			GW215-204							
		Sample Date:			10/14/2020	10/14/2020			10/14/2020							
		Sample Type:			REG	REG			REG							
		Sample Depth (ft bgs):			451.3	478.95			547.7							
		Reference Elevation Interval (ft AMSL):			4857	4838			4814							
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	U	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106216			KAFB-106217			KAFB-106218					
		Field Sample ID:			GW216-204			GW217-204			GW218-204					
		Sample Date:			10/7/2020			10/7/2020			10/7/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			461.4			485.7			552.7					
		Reference Elevation Interval (ft AMSL):			4857			4838			4814					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.02	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	20	ND	U	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106216			KAFB-106217			KAFB-106218					
		Field Sample ID:			GW216-204			GW217-204			GW218-204					
		Sample Date:			10/7/2020			10/7/2020			10/7/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			461.4			485.7			552.7					
		Reference Elevation Interval (ft AMSL):			4857			4838			4814					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	UJ	0.5	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	ND	U	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	UJ	0.5	ND	U	0.5	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106219			KAFB-106220			KAFB-106221						
		Field Sample ID:		GW219-204			GW220-204			GW221-204						
		Sample Date:		10/7/2020			10/7/2020			10/7/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		466			493.7			561.7						
		Reference Elevation Interval (ft AMSL):		4857			4838			4814						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	UJ	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	UJ	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	UJ	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	UJ	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	UJ	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	UJ	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	--	0.5	ND	UJ	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	UJ	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	UJ	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	ND	U	2	ND	UJ	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	UJ	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	UJ	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	UJ	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	UJ	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106219	KAFB-106220			KAFB-106221							
		Field Sample ID:			GW219-204	GW220-204			GW221-204							
		Sample Date:			10/7/2020	10/7/2020			10/7/2020							
		Sample Type:			REG	REG			REG							
		Sample Depth (ft bgs):			466	493.7			561.7							
		Reference Elevation Interval (ft AMSL):			4857	4838			4814							
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	UJ	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	ND	UJ	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	UJ	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	UJ	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	UJ	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	UJ	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	UJ	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5		
Xylenes, total	1330-20-7		620	10,000	190	620	ND	U	2	ND	U	2	ND	UJ	2	

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106222			KAFB-106223			KAFB-106224					
		Field Sample ID:			GW222-204			GW223-204			GW224-204					
		Sample Date:			10/14/2020			10/14/2020			10/14/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			461.1			488.5			555.7					
		Reference Elevation Interval (ft AMSL):			4857			4838			4814					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	ND	U	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106222	KAFB-106223			KAFB-106224							
		Field Sample ID:			GW222-204	GW223-204			GW224-204							
		Sample Date:			10/14/2020	10/14/2020			10/14/2020							
		Sample Type:			REG	REG			REG							
		Sample Depth (ft bgs):			461.1	488.5			555.7							
		Reference Elevation Interval (ft AMSL):			4857	4838			4814							
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	U	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2		
Vinyl chloride	75-01-4	2	2	0.19	2	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106225			KAFB-106225			KAFB-106226						
		Field Sample ID:		GW225-204			GW225-604			GW226-204						
		Sample Date:		10/7/2020			10/7/2020			10/7/2020						
		Sample Type:		REG			Field Duplicate			REG						
		Sample Depth (ft bgs):		453.3			453.3			480.7						
		Reference Elevation Interval (ft AMSL):		4857			4857			4838						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	0.017	J	0.019	0.021	J	0.02	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	ND	U	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106225	KAFB-106225	KAFB-106226									
		Field Sample ID:			GW225-204	GW225-604	GW226-204									
		Sample Date:			10/7/2020	10/7/2020	10/7/2020									
		Sample Type:			REG	Field Duplicate	REG									
		Sample Depth (ft bgs):			453.3	453.3	480.7									
		Reference Elevation Interval (ft AMSL):			4857	4857	4838									
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	ND	UJ	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	UU	2	ND	UU	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5		
Xylenes, total	1330-20-7		620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2	

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106227			KAFB-106229			KAFB-106230						
		Field Sample ID:		GW227-204			GW229-204			GW230-204						
		Sample Date:		10/7/2020			10/9/2020			10/12/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		548.7			442.1			501.7						
		Reference Elevation Interval (ft AMSL):		4814			4857/4838			4814						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	—	—	—	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	—	—	—	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	—	—	—	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	—	—	—	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	—	—	—	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	—	—	—	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	—	—	—	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	—	—	—	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	—	—	—	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	—	—	—	ND	UJ	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	—	—	—	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	—	—	—	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	—	—	—	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	—	—	—	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	—	—	—	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	—	—	—	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	—	—	—	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	—	—	—	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	—	—	—	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	—	—	—	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	—	—	—	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	—	—	—	ND	UJ	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	—	—	—	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	—	—	—	ND	UJ	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	—	—	—	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	—	—	—	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	—	—	—	ND	UJ	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	—	—	—	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	—	—	—	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	—	—	—	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	—	—	—	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	—	—	—	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	—	—	—	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	—	—	—	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	—	—	—	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106227	KAFB-106229			KAFB-106230								
		Field Sample ID:		GW227-204	GW229-204			GW230-204								
		Sample Date:		10/7/2020	10/9/2020			10/12/2020								
		Sample Type:		REG	REG			REG								
		Sample Depth (ft bgs):		548.7	442.1			501.7								
		Reference Elevation Interval (ft AMSL):		4814	4857/4838			4814								
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	—	—	—	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	—	—	—	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	—	—	—	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	—	—	—	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	0.5	—	—	—	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	—	—	—	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	UJ	0.5	—	—	—	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	—	—	—	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	—	—	—	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	—	—	—	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	—	—	—	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	—	—	—	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	—	—	—	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	—	—	—	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	—	—	—	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	—	—	—	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	—	—	—	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	—	—	—	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	—	—	—	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	—	—	—	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	—	—	—	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	—	—	—	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	—	—	—	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	—	—	—	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	—	—	—	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	—	—	—	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	—	—	—	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	—	—	—	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	—	—	—	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	—	—	—	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	—	—	—	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	—	—	—	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	UJ	0.5	—	—	—	ND	U	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	—	—	—	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106231	KAFB-106232			KAFB-106235-438							
		Field Sample ID:			GW231-204	GW232-204			GW235-438-204							
		Sample Date:			10/6/2020	10/6/2020			10/5/2020							
		Sample Type:			REG	REG			REG							
		Sample Depth (ft bgs):			453.7	503.7			443.9							
		Reference Elevation Interval (ft AMSL):			4857	4814			4857							
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	UJ	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	UJ	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	UJ	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	UJ	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	UJ	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	UJ	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	UJ	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	UJ	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	UJ	2	ND	UJ	2	ND	UJ	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	UJ	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	UJ	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	UJ	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	UJ	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106231			KAFB-106232			KAFB-106235-438					
		Field Sample ID:			GW231-204			GW232-204			GW235-438-204					
		Sample Date:			10/6/2020			10/6/2020			10/5/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			453.7			503.7			443.9					
		Reference Elevation Interval (ft AMSL):			4857			4814			4857					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	UJ	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	U	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	UJ	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	UJ	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	UJ	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	UJ	0.5	0.52	J	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	UJ	0.5
Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	UJ	2		
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	UJ	0.5		
Xylenes, total	1330-20-7			620	10,000	190	620	ND	U	2	ND	U	2	ND	UJ	2

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106235-472			KAFB-106235-501			KAFB-106236-436					
		Field Sample ID:			GW235-472-204			GW235-501-204			GW236-436-204					
		Sample Date:			10/5/2020			10/5/2020			10/5/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			472.7			501.7			441.9					
		Reference Elevation Interval (ft AMSL):			4838			4814			4857					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	0.015	J	0.02	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	UJ	1	ND	UJ	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	UJ	1	ND	UJ	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	UJ	2	ND	UJ	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	UJ	1	ND	UJ	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	UJ	1	ND	UJ	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	UJ	1	ND	UJ	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	UJ	1	ND	UJ	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	UJ	1	ND	UJ	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	ND	UJ	2	ND	UJ	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	UJ	5	ND	UJ	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	UJ	1	ND	UJ	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	UJ	2	ND	UJ	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106235-472	KAFB-106235-501	KAFB-106236-436									
		Field Sample ID:			GW235-472-204	GW235-501-204	GW236-436-204									
		Sample Date:			10/5/2020	10/5/2020	10/5/2020									
		Sample Type:			REG	REG	REG									
		Sample Depth (ft bgs):			472.7	501.7	441.9									
		Reference Elevation Interval (ft AMSL):			4838	4814	4857									
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	UJ	0.8	ND	UJ	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	UJ	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	UJ	2	ND	UJ	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	UJ	2	ND	UJ	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	UJ	0.8	ND	UJ	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	UJ	1	ND	UJ	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5
Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	UJ	2	ND	UJ	2		
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5		
Xylenes, total	1330-20-7		620	10,000	190	620	ND	U	2	ND	UJ	2	ND	UJ	2	

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106236-470			KAFB-106236-499			KAFB-106240-449						
		Field Sample ID:		GW236-470-204			GW236-499-204			GW240-449-204						
		Sample Date:		10/5/2020			10/5/2020			10/15/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		470.7			499.7			473.14						
		Reference Elevation Interval (ft AMSL):		4838			4814			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	UJ	1	ND	UJ	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	UJ	1	ND	UJ	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	UJ	2	ND	UJ	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	UJ	1	ND	UJ	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	UJ	1	ND	UJ	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	UJ	1	ND	UJ	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	UJ	1	ND	UJ	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	UJ	1	ND	UJ	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	UJ	2	ND	UJ	2	0.71	J	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	UJ	5	ND	UJ	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	UJ	1	ND	UJ	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	UJ	2	ND	UJ	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106236-470	KAFB-106236-499	KAFB-106240-449									
		Field Sample ID:			GW236-470-204	GW236-499-204	GW240-449-204									
		Sample Date:			10/5/2020	10/5/2020	10/15/2020									
		Sample Type:			REG	REG	REG									
		Sample Depth (ft bgs):			470.7	499.7	473.14									
		Reference Elevation Interval (ft AMSL):			4838	4814	4857									
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	UJ	0.8	ND	UJ	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	UJ	4	ND	UJ	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	UJ	2	ND	UJ	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	UJ	2	ND	UJ	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	UJ	0.8	ND	UJ	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	UJ	1	ND	UJ	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	UJ	0.5	ND	UJ	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	UJ	2	ND	UJ	2	ND	U	2
Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	UJ	0.5	ND	UJ	0.5		
Xylenes, total	1330-20-7	620	10,000	190	620	ND	UJ	2	ND	UJ	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106241-428			KAFB-106242-418			KAFB-106243-425					
		Field Sample ID:			GW241-428-204			GW242-418-204			GW243-425-204					
		Sample Date:			10/12/2020			10/6/2020			10/13/2020					
		Sample Type:			REG			REG			REG					
		Sample Depth (ft bgs):			452.2			442.24			449.14					
		Reference Elevation Interval (ft AMSL):			4857			4857			4857					
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	0.023	J	0.019	ND	U	0.019	0.042	--	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	UJ	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	0.75	J	2	ND	UJ	2	ND	UJ	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106241-428	KAFB-106242-418	KAFB-106243-425									
		Field Sample ID:			GW241-428-204	GW242-418-204	GW243-425-204									
		Sample Date:			10/12/2020	10/6/2020	10/13/2020									
		Sample Type:			REG	REG	REG									
		Sample Depth (ft bgs):			452.2	442.24	449.14									
		Reference Elevation Interval (ft AMSL):			4857	4857	4857									
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	0.51	J	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	U	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
		Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5	ND	U	0.5
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106244-445	KAFB-106245-460			KAFB-106247-450							
		Field Sample ID:			GW244-445-204	GW245-460-204			GW247-450-204							
		Sample Date:			10/14/2020	10/14/2020			10/14/2020							
		Sample Type:			REG	REG			REG							
		Sample Depth (ft bgs):			469.19	487.77			477.42							
		Reference Elevation Interval (ft AMSL):			4857	4857			4857							
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	ND	U	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	ND	U	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	ND	U	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106244-445	KAFB-106245-460	KAFB-106247-450									
		Field Sample ID:			GW244-445-204	GW245-460-204	GW247-450-204									
		Sample Date:			10/14/2020	10/14/2020	10/14/2020									
		Sample Type:			REG	REG	REG									
		Sample Depth (ft bgs):			469.19	487.77	477.42									
		Reference Elevation Interval (ft AMSL):			4857	4857	4857									
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		Chloroform	67-66-3	100	80	2.2	80	0.74	J	0.5	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	U	4	ND	U	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	ND	U	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	ND	U	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	ND	U	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	ND	U	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	UJ	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2	ND	U	2
		Vinyl chloride	75-01-4	2	2	0.19	2	ND	UJ	0.5	ND	UJ	0.5	ND	UJ	0.5
Xylenes, total	1330-20-7	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106S1-447			KAFB-106S2-451			KAFB-106S3-449						
		Field Sample ID:		GWS1-447-204			GWS2-451-204			GWS3-449-204						
		Sample Date:		10/21/2020			10/22/2020			10/22/2020						
		Sample Type:		REG			REG			REG						
		Sample Depth (ft bgs):		471.12			478.15			478.91						
		Reference Elevation Interval (ft AMSL):		4857			4857			4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	5.3	--	0.96	37	--	3.9	1.6	--	0.38
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	50	ND	U	2.5	ND	U	1
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	50	ND	U	2.5	ND	U	1
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	50	ND	U	2.5	ND	U	1
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	50	ND	U	2.5	ND	U	1
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	50	ND	U	2.5	ND	U	1
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	50	ND	U	2.5	ND	U	1
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	50	ND	U	2.5	ND	U	1
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	100	ND	U	5	ND	U	2
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	50	ND	U	2.5	ND	U	1
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	100	ND	U	5	ND	U	2
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	250	J	200	34	--	10	35	--	4
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	100	ND	U	5	ND	U	2
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	50	44	--	2.5	ND	U	1
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	50	ND	U	2.5	ND	U	1
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	50	6.2	--	2.5	4.1	--	1
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	50	ND	U	2.5	ND	U	1
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	79	J	100	20	J	5	40	--	2
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	50	ND	U	2.5	ND	U	1
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	50	ND	U	2.5	ND	U	1
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	50	ND	U	2.5	ND	U	1
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	50	ND	U	2.5	ND	U	1
		2-Butanone	78-93-3	NS	NS	5,600	5,600	1,100	--	100	150	--	5	7	J	2
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	50	ND	U	2.5	ND	U	1
		2-Hexanone	591-78-6	NS	NS	38	38	1,100	--	100	710	J	5	ND	UJ	2
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	50	ND	U	2.5	ND	U	1
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	290	J	50	210	--	2.5	110	D	1
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	830	J	100	430	--	5	ND	U	2
		Acetone	67-64-1	NS	NS	14,000	14,000	2,000	--	200	400	--	10	45	--	4
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	500	ND	U	25	ND	U	10
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	100	ND	U	5	ND	U	2
		Benzene	71-43-2	5	5	4.6	5	1,700	--	50	730	--	2.5	540	--	1
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	50	ND	U	2.5	ND	U	1
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	50	ND	U	2.5	ND	U	1
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	50	ND	U	2.5	ND	U	1		
Bromoform	75-25-2	NS	80	33	80	ND	U	200	ND	U	10	ND	U	4		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106S1-447	KAFB-106S2-451	KAFB-106S3-449									
		Field Sample ID:			GWS1-447-204	GWS2-451-204	GWS3-449-204									
		Sample Date:			10/21/2020	10/22/2020	10/22/2020									
		Sample Type:			REG	REG	REG									
		Sample Depth (ft bgs):			471.12	478.15	478.91									
		Reference Elevation Interval (ft AMSL):			4857	4857	4857									
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	50	ND	U	2.5	ND	U	1
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	50	ND	U	2.5	ND	U	1
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	50	ND	U	2.5	ND	U	1
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	50	ND	U	2.5	ND	U	1
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	50	ND	UJ	2.5	ND	UJ	1
		Chloroform	67-66-3	100	80	2.2	80	ND	U	50	ND	U	2.5	ND	U	1
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	50	ND	UJ	2.5	ND	UJ	1
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	50	ND	U	2.5	ND	U	1
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	50	ND	U	2.5	ND	U	1
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	50	ND	U	2.5	ND	U	1
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	50	ND	U	2.5	ND	U	1
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	UJ	50	ND	U	2.5	ND	U	1
		Ethylbenzene	100-41-4	700	700	15	700	590	--	80	18	--	4	12	--	1.6
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	400	ND	UJ	20	ND	UJ	8
		Isopropylbenzene	98-82-8	NS	NS	450	450	72	J	50	100	--	2.5	72	--	1
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	1,900	--	200	120	--	10	25	--	4
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	50	1.3	J	2.5	0.8	J	1
		Methylene chloride	75-09-2	5	5	110	5	ND	U	50	ND	U	2.5	ND	U	1
		Naphthalene	91-20-3	30	NS	1.2	30	150	J	200	66	--	10	36	--	4
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	50	ND	U	2.5	0.49	J	1
		n-Propylbenzene	103-65-1	NS	NS	660	660	59	J	50	3	J	2.5	3.5	J	1
		o-Xylene	95-47-6	NS	NS	190	190	1,100	--	80	430	--	4	700	--	16
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	50	12	J	2.5	5.4	J	1
		Styrene	100-42-5	100	100	1,200	100	ND	U	50	ND	U	2.5	ND	U	1
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	100	ND	U	5	ND	U	2
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	50	ND	U	2.5	ND	U	1
		Toluene	108-88-3	1,000	1,000	1,100	1,000	4,000	--	50	54	--	2.5	5.1	--	1
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	50	ND	U	2.5	ND	U	1
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	50	ND	U	2.5	ND	U	1
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	50	ND	U	2.5	ND	U	1
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	50	ND	U	2.5	ND	U	1
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	UJ	200	ND	U	10	ND	U	4
		Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	50	ND	UJ	2.5	ND	UJ	1
Xylenes, total	1330-20-7	620	10,000	190	620	3,000	--	200	550	--	10	730	--	40		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106S4-446	KAFB-106S5-446		KAFB-106S5-446									
		Field Sample ID:		GWS4-446-204	GWS5-446-204		GWS5-446-604									
		Sample Date:		10/22/2020		10/22/2020		10/22/2020								
		Sample Type:		REG		REG		Field Duplicate								
		Sample Depth (ft bgs):		473.04		470.1		470.1								
		Reference Elevation Interval (ft AMSL):		4857		4857		4857								
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	0.021	J	0.019	8.9	--	0.97	8.4	--	0.96
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	5	ND	U	5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	5	ND	U	5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	5	ND	U	5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	5	ND	U	5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	5	ND	U	5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	5	ND	U	5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	5	ND	U	5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	10	ND	U	10
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	5	ND	U	5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	10	ND	U	10
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	ND	U	2	180	--	20	180	--	20
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	10	ND	U	10
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	8.8	J	5	8.5	J	5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	5	ND	U	5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	5	ND	U	5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	5	ND	U	5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	ND	U	1	82	--	10	82	--	10
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	5	ND	U	5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	5	ND	U	5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	5	ND	U	5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	5	ND	U	5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	UJ	1	ND	UJ	10	ND	UJ	10
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	5	ND	U	5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	10	ND	U	10
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	5	ND	U	5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	ND	U	0.5	15	J	5	15	J	5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	10	ND	U	10
		Acetone	67-64-1	NS	NS	14,000	14,000	ND	U	2	17	J	20	19	J	20
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	50	ND	U	50
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	10	ND	U	10
		Benzene	71-43-2	5	5	4.6	5	ND	U	0.5	1,300	--	5	1,300	--	5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	5	ND	U	5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	5	ND	U	5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	1	ND	U	5	ND	U	5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	20	ND	U	20		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106S4-446	KAFB-106S5-446	KAFB-106S5-446										
		Field Sample ID:		GWS4-446-204	GWS5-446-204	GWS5-446-604										
		Sample Date:		10/22/2020	10/22/2020	10/22/2020										
		Sample Type:		REG	REG	Field Duplicate										
		Sample Depth (ft bgs):		473.04	470.1	470.1										
		Reference Elevation Interval (ft AMSL):		4857	4857	4857										
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	5	ND	U	5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	5	ND	U	5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	1.9	--	0.5	ND	U	5	ND	U	5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	5	ND	U	5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	5	ND	U	5
		Chloroform	67-66-3	100	80	2.2	80	1	--	0.5	ND	U	5	ND	U	5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	5	ND	U	5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	5	ND	U	5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	5	ND	U	5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	5	ND	U	5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	5	ND	U	5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	5	ND	U	5
		Ethylbenzene	100-41-4	700	700	15	700	ND	U	0.8	1,200	--	8	1,200	--	8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	U	40	ND	U	40
		Isopropylbenzene	98-82-8	NS	NS	450	450	ND	U	0.5	79	--	5	80	--	5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	ND	U	2	1,800	--	20	1,900	--	20
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	5	ND	U	5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	5	ND	U	5
		Naphthalene	91-20-3	30	NS	1.2	30	ND	U	2	110	--	20	110	--	20
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	5.8	J	5	5.8	J	5
		n-Propylbenzene	103-65-1	NS	NS	660	660	ND	U	0.5	81	--	5	83	--	5
		o-Xylene	95-47-6	NS	NS	190	190	ND	U	0.8	870	--	8	870	--	8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	ND	U	0.5	13	J	5	13	J	5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	5	ND	U	5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	10	ND	U	10
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	5	ND	U	5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	ND	U	0.5	7,000	--	50	6,900	--	50
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	5	ND	U	5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	5	ND	U	5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	5	ND	U	5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	5	ND	U	5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	20	ND	U	20
		Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	5	ND	U	5
Xylenes, total	1330-20-7		620	10,000	190	620	ND	U	2	2,700	--	20	2,800	--	20	

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

				Well Location ID:		KAFB-106S7-451	KAFB-106S8-451						
				Field Sample ID:		GWS7-451-204	GWS8-451-204						
				Sample Date:		10/22/2020	10/21/2020						
				Sample Type:		REG	REG						
				Sample Depth (ft bgs):		475.1	478.32						
				Reference Elevation Interval (ft AMSL):		4857	4857						
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	23	--	3.8	28	J	3.8
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	2.5	ND	U	2.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	2.5	ND	U	2.5
		1,1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	2.5	ND	U	2.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	2.5	ND	U	2.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	2.5	ND	U	2.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	2.5	ND	U	2.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	2.5	ND	U	2.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	5	ND	U	5
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	2.5	ND	U	2.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	5	ND	U	5
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	200	--	10	6	J	10
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	5	ND	U	5
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	23	--	2.5	32	--	2.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	2.5	ND	U	2.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	3.4	J	2.5	ND	U	2.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	2.5	ND	U	2.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	75	--	5	2.8	J	5
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	2.5	ND	U	2.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	2.5	ND	U	2.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	2.5	ND	U	2.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	2.5	ND	U	2.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	11	J	5	86	--	5
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	2.5	ND	U	2.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	5	490	J	5
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	2.5	ND	U	2.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	44	--	2.5	30	--	2.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	5.6	J	5	190	--	5
		Acetone	67-64-1	NS	NS	14,000	14,000	59	J	10	670	--	10
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	25	ND	U	25
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	5	ND	U	5
		Benzene	71-43-2	5	5	4.6	5	310	--	2.5	770	J	2.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	2.5	ND	U	2.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	2.5	ND	U	2.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	2.5	ND	U	2.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	10	ND	U	10		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106S7-451		KAFB-106S8-451							
		Field Sample ID:		GWS7-451-204		GWS8-451-204							
		Sample Date:		10/22/2020		10/21/2020							
		Sample Type:		REG		REG							
		Sample Depth (ft bgs):		475.1		478.32							
		Reference Elevation Interval (ft AMSL):		4857		4857							
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	2.5	ND	U	2.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	2.5	ND	U	2.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	2.5	ND	U	2.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	2.5	ND	U	2.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	2.5	ND	U	2.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	2.5	ND	U	2.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	2.5	ND	U	2.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	2.5	ND	U	2.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	2.5	ND	U	2.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	2.5	ND	U	2.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	2.5	ND	U	2.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	2.5	ND	UJ	2.5
		Ethylbenzene	100-41-4	700	700	15	700	700	--	4	15	--	4
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	20	ND	U	20
		Isopropylbenzene	98-82-8	NS	NS	450	450	130	D	2.5	200	J	2.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	1,400	--	10	75	--	10
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	2.5	ND	U	2.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	2.5	ND	U	2.5
		Naphthalene	91-20-3	30	NS	1.2	30	88	--	10	17	J	10
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	6.2	J	2.5	ND	U	2.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	60	--	2.5	1.1	J	2.5
		o-Xylene	95-47-6	NS	NS	190	190	720	--	4	51	J	4
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	9.2	J	2.5	ND	U	2.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	2.5	ND	U	2.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	5	ND	U	5
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	2.5	ND	U	2.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	1,600	--	25	390	J	2.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	2.5	ND	U	2.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	2.5	ND	U	2.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	2.5	ND	U	2.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	2.5	ND	U	2.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	10	ND	UJ	10
		Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	2.5	ND	U	2.5
Xylenes, total	1330-20-7	620	10,000	190	620	2,100	--	10	130	--	10		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106S9-447		KAFB-3411							
		Field Sample ID:		GWS9-447-204		GW3411-204							
		Sample Date:		10/21/2020		10/2/2020							
		Sample Type:		REG		REG							
		Sample Depth (ft bgs):		473.7		482							
		Reference Elevation Interval (ft AMSL):		4857		4857							
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC^a	EPA MCL^b	EPA RSL^c	Project Screening Level^d	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	0.018	J	0.019	ND	U	0.02
VOCs	Method SW8260C (µg/L)	1,1,1,2-Tetrachloroethane	630-20-6	NS	NS	5.7	5.7	ND	U	0.5	ND	U	0.5
		1,1,1-Trichloroethane	71-55-6	200	200	8,000	200	ND	U	0.5	ND	U	0.5
		1,1,2,2-Tetrachloroethane	79-34-5	10	NS	0.76	10	ND	U	0.5	ND	U	0.5
		1,1,2-Trichloroethane	79-00-5	5	5	2.8	5	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethane	75-34-3	25	NS	28	25	ND	U	0.5	ND	U	0.5
		1,1-Dichloroethene	75-35-4	7	7	280	7	ND	U	0.5	ND	U	0.5
		1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5
		1,2,3-Trichlorobenzene	87-61-6	NS	NS	7	7	ND	U	1	ND	U	1
		1,2,3-Trichloropropane	96-18-4	NS	NS	0.0075	0.0075	ND	U	0.5	ND	U	0.5
		1,2,4-Trichlorobenzene	120-82-1	70	70	12	70	ND	U	1	ND	U	1
		1,2,4-Trimethylbenzene	95-63-6	NS	NS	56	56	45	--	2	ND	U	2
		1,2-Dibromo-3-chloropropane	96-12-8	NS	0.2	0.0033	0.2	ND	U	1	ND	U	1
		1,2-Dibromoethane	106-93-4	0.05	0.05	0.075	0.05	ND	U	0.5	ND	U	0.5
		1,2-Dichlorobenzene	95-50-1	600	600	300	600	ND	U	0.5	ND	U	0.5
		1,2-Dichloroethane	107-06-2	5	5	1.7	5	ND	U	0.5	ND	U	0.5
		1,2-Dichloropropane	78-87-5	5	5	8.5	5	ND	U	0.5	ND	U	0.5
		1,3,5-Trimethylbenzene	108-67-8	NS	NS	60	60	1.3	J	1	ND	U	1
		1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5
		1,3-Dichloropropane	142-28-9	NS	NS	370	370	ND	U	0.5	ND	U	0.5
		1,4-Dichlorobenzene	106-46-7	75	75	4.8	75	ND	U	0.5	ND	U	0.5
		2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	ND	U	0.5	ND	U	0.5
		2-Butanone	78-93-3	NS	NS	5,600	5,600	ND	U	1	ND	U	1
		2-Chlorotoluene	95-49-8	NS	NS	240	240	ND	U	0.5	ND	U	0.5
		2-Hexanone	591-78-6	NS	NS	38	38	ND	U	1	ND	U	1
		4-Chlorotoluene	106-43-4	NS	NS	250	250	ND	U	0.5	ND	U	0.5
		4-Isopropyltoluene	99-87-6	NS	NS	NS	NS	12	--	0.5	ND	U	0.5
		4-Methyl-2-pentanone	108-10-1	NS	NS	6,300	6,300	ND	U	1	ND	U	1
		Acetone	67-64-1	NS	NS	14,000	14,000	2.9	J	2	ND	U	2
		Acrolein	107-02-8	NS	NS	0.042	0.042	ND	U	5	ND	U	5
		Acrylonitrile	107-13-1	NS	NS	0.52	0.52	ND	U	1	ND	U	1
		Benzene	71-43-2	5	5	4.6	5	36	--	0.5	ND	U	0.5
		Bromobenzene	108-86-1	NS	NS	62	62	ND	U	0.5	ND	U	0.5
		Bromochloromethane	74-97-5	NS	NS	83	83	ND	U	0.5	ND	U	0.5
Bromodichloromethane	75-27-4	NS	80	1.3	80	ND	U	0.5	ND	U	0.5		
Bromoform	75-25-2	NS	80	33	80	ND	U	2	ND	U	2		

**Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106S9-447		KAFB-3411							
		Field Sample ID:		GWS9-447-204		GW3411-204							
		Sample Date:		10/21/2020		10/2/2020							
		Sample Type:		REG		REG							
		Sample Depth (ft bgs):		473.7		482							
		Reference Elevation Interval (ft AMSL):		4857		4857							
Parameter	Analytical Method	Analyte	CAS_RN	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD
VOCs	Method SW8260C (µg/L)	Bromomethane	74-83-9	NS	NS	7.5	7.5	ND	U	0.5	ND	U	0.5
		Carbon disulfide	75-15-0	NS	NS	810	810	ND	U	0.5	ND	U	0.5
		Carbon tetrachloride	56-23-5	5	5	4.6	5	ND	U	0.5	ND	U	0.5
		Chlorobenzene	108-90-7	NS	100	78	100	ND	U	0.5	ND	U	0.5
		Chloroethane	75-00-3	NS	NS	21,000	21,000	ND	U	0.5	ND	U	0.5
		Chloroform	67-66-3	100	80	2.2	80	ND	U	0.5	ND	U	0.5
		Chloromethane	74-87-3	NS	NS	190	190	ND	U	0.5	ND	U	0.5
		cis-1,2-Dichloroethene	156-59-2	70	70	36	70	ND	U	0.5	ND	U	0.5
		cis-1,3-Dichloropropene	10061-01-5	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5
		Dibromochloromethane	124-48-1	NS	80	8.7	80	ND	U	0.5	ND	U	0.5
		Dibromomethane	74-95-3	NS	NS	8.3	8.3	ND	U	0.5	ND	U	0.5
		Dichlorodifluoromethane	75-71-8	NS	NS	200	200	ND	U	0.5	ND	U	0.5
		Ethylbenzene	100-41-4	700	700	15	700	52	--	0.8	ND	U	0.8
		Hexachloro-1,3-butadiene	87-68-3	NS	NS	1.4	1.4	ND	U	4	ND	UJ	4
		Isopropylbenzene	98-82-8	NS	NS	450	450	11	--	0.5	ND	U	0.5
		m- & p-Xylenes	179601-23-1	NS	NS	NS	NS	2.1	J	2	ND	U	2
		Methyl tert-butyl ether	1634-04-4	100	NS	140	100	ND	U	0.5	ND	U	0.5
		Methylene chloride	75-09-2	5	5	110	5	ND	U	0.5	ND	U	0.5
		Naphthalene	91-20-3	30	NS	1.2	30	13	--	2	ND	U	2
		n-Butylbenzene	104-51-8	NS	NS	1,000	1,000	ND	U	0.5	ND	U	0.5
		n-Propylbenzene	103-65-1	NS	NS	660	660	14	--	0.5	ND	U	0.5
		o-Xylene	95-47-6	NS	NS	190	190	63	--	0.8	ND	U	0.8
		sec-Butylbenzene	135-98-8	NS	NS	2,000	2,000	3.6	J	0.5	ND	U	0.5
		Styrene	100-42-5	100	100	1,200	100	ND	U	0.5	ND	U	0.5
		tert-Butylbenzene	98-06-6	NS	NS	690	690	ND	U	1	ND	U	1
		Tetrachloroethene	127-18-4	5	5	110	5	ND	U	0.5	ND	U	0.5
		Toluene	108-88-3	1,000	1,000	1,100	1,000	1.9	--	0.5	ND	U	0.5
		trans-1,2-Dichloroethene	156-60-5	100	100	68	100	ND	U	0.5	ND	U	0.5
		trans-1,3-Dichloropropene	10061-02-6	NS	NS	4.7	4.7	ND	U	0.5	ND	U	0.5
		Trichloroethene	79-01-6	5	5	4.9	5	ND	U	0.5	ND	U	0.5
		Trichlorofluoromethane	75-69-4	NS	NS	5,200	5,200	ND	U	0.5	ND	U	0.5
		Vinyl acetate	108-05-4	NS	NS	410	410	ND	U	2	ND	U	2
		Vinyl chloride	75-01-4	2	2	0.19	2	ND	U	0.5	ND	U	0.5
Xylenes, total	1330-20-7	620	10,000	190	620	65	--	2	ND	U	2		

Table 4-6
Groundwater Analytical Results for Organic Compounds for Groundwater Monitoring Wells, Q4 2020

^a NM WQCC numeric standards per the NMAC Title 20.6.2.3101A, Standards for Ground Water of 10,000 mg/L Total Dissolved Solids Concentration or Less (NMAC 2018). For metals, the NM WQCC numeric standard applies to dissolved metals.

^b EPA National Primary Drinking Water Regulations, MCLs and Secondary MCLs, Title 40CFR Part 141, 143 (May 2018).

^c EPA Region 6 RSL for Tapwater (November 2020) for hazard index = 1.0 for noncarcinogens and a 10-5 cancer risk level for carcinogens.

^d The project screening level was selected to satisfy the requirements of the Kirtland AFB Hazardous Waste Permit Number NM9570024423 as the lowest of (1) NM WQCC numeric standard or (2) EPA MCL. If no NM WQCC standard or MCL exists for any analyte, then the project screening level will be the EPA RSL.

µg/L = microgram per liter

AFB = Air Force Base

AMSL = above mean sea level

bgs = below ground surface

CFR = Code of Federal Regulations

EDB = 1,2-dibromoethane (ethylene dibromide)

EPA = U.S. Environmental Protection Agency

ft = foot (feet)

ID = identification

LOD = limit of detection

MCL = maximum contaminant level

mg/L = milligrams per liter

NM = New Mexico

ND = not detected

NMAC = New Mexico Administrative Code

NS = not specified

Q4 = fourth quarter

REG = normal field sample

RSL = regional screening level

Val Qual = validation qualifier

VOCs = Volatile organic compounds

WQCC = Water Quality Control Commission

Shading = detected concentrations above the detection limit

Shading = detected concentrations above the detection limit
Bold/Shading = reported concentrations exceed the project screening level

Val Quals based on independent data validation

J = Qualifier denotes the analyte was positively identified, but the associated numerical value is estimated.

U = Qualifier denotes the analyte was analyzed but not detected above the detection limit. The value associated with the U-qualifier is the LOD.

-- = Validation qualifier not assigned.

— = Compound not analyzed for.

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:	KAFB-106001			KAFB-106002			KAFB-106003						
		Field Sample ID:	GW001-204			GW002-204			GW003-204						
		Sample Date:	10/30/2020			10/20/2020			10/13/2020						
		Sample Type:	REG			REG			REG						
		Sample Depth (ft bgs):	485			484			482						
		Reference Elevation Interval (ft AMSL):	4857 & 4838			4857			4857						
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	39	--	0.15	49	--	0.15	100	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	5.7	--	0.075	7.1	--	0.075	16	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	0.0063	J	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.4	--	0.38	2.5	--	0.38	3.6	--	0.38
		Sodium	NS	NS	NS	NS	22	--	0.50	23	--	0.50	34	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.0015	J	0.0016	0.00087	J	0.0016	ND	U	0.0016
		Lead	0.015	0.015	0.015	0.015	0.00013	J	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	ND	U	2.0	1.4	J	2.0
		Chloride	250	NS	NS	250	7.0	--	1.5	32	--	3.0	65	--	15
		Sulfate	600	250	NS	250	25	--	4.5	44	--	4.5	190	--	45
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.12	--	0.090	1.5	--	0.090	2.6	--	0.18
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	120	--	6.0	120	--	6.0	93	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	120	--	6.0	120	--	6.0	93	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106004	KAFB-106005	KAFB-106006									
		Field Sample ID:		GW004-204	GW005-204	GW006-204									
		Sample Date:		10/14/2020	10/23/2020	10/29/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		488.74	482.57	509.68									
		Reference Elevation Interval (ft AMSL):		4857	4857	4857									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	45	--	0.15	170	--	0.15	68	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	0.20	J	0.10
		Magnesium	NS	NS	NS	NS	6.2	--	0.075	27	--	0.075	22	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	1.7	--	0.0052	1.2	--	0.0052
		Potassium	NS	NS	NS	NS	2.5	--	0.38	4.0	--	0.38	2.7	--	0.38
		Sodium	NS	NS	NS	NS	22	--	0.50	72	--	0.50	73	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00095	J	0.0016	0.0014	J	0.0016	0.0017	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	0.00030	J	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	1.8	J	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	20	--	1.5	180	--	30	10	--	1.5
		Sulfate	600	250	NS	250	35	--	4.5	3.5	J	4.5	3.0	J	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	1.0	--	0.090	0.059	J	0.090	ND	U	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	110	--	6.0	380	--	6.0	260	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	110	--	6.0	380	--	6.0	260	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106007	KAFB-106008	KAFB-106008									
		Field Sample ID:		GW007-204	GW008-204	GW008-604									
		Sample Date:		10/5/2020	10/21/2020	10/21/2020									
		Sample Type:		REG	REG	Field Duplicate									
		Sample Depth (ft bgs):		490	488	488									
		Reference Elevation Interval (ft AMSL):		4857	4857	4857									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	53	--	0.15	150	--	0.15	140	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.1	8.3	--	0.10	8.2	--	0.10
		Magnesium	NS	NS	NS	NS	7.7	--	0.075	24	--	0.075	24	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	0.0031	J	0.0052	7.3	--	0.0052	7.2	--	0.0052
		Potassium	NS	NS	NS	NS	2.6	--	0.38	3.6	--	0.38	3.5	--	0.38
		Sodium	NS	NS	NS	NS	25	--	0.5	39	--	0.50	38	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00071	J	0.0016	0.0013	J	0.0016	0.0013	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	0.00048	J	0.00025	0.00049	J	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2	2.1	J	2.0	1.7	J	2.0
		Chloride	250	NS	NS	250	11	--	1.5	91	--	6.0	89	--	7.5
		Sulfate	600	250	NS	250	31	--	4.5	1.6	J	4.5	1.9	J	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	ND	U	0.09	ND	U	0.090	ND	U	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	180	--	6	400	--	6.0	390	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	180	--	6	400	--	6.0	390	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106009	KAFB-106010	KAFB-106010									
		Field Sample ID:		GW009-204	GW010-204	GW010-604									
		Sample Date:		10/12/2020	10/22/2020	10/22/2020									
		Sample Type:		REG	REG	Field Duplicate									
		Sample Depth (ft bgs):		484.39	506	506									
		Reference Elevation Interval (ft AMSL):		4857	4857	4857									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	180	--	0.15	65	--	0.15	66	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	0.86	--	0.10	0.85	--	0.10
		Magnesium	NS	NS	NS	NS	26	--	0.075	9.4	--	0.075	9.5	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	0.62	--	0.0052	1.8	--	0.0052	1.7	--	0.0052
		Potassium	NS	NS	NS	NS	4.9	--	0.38	2.7	--	0.38	2.7	--	0.38
		Sodium	NS	NS	NS	NS	66	--	0.50	29	--	0.50	29	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	ND	U	0.0016	ND	U	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	0.000091	J	0.00025	0.00010	J	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	2.9	--	2.0	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	190	--	15	23	--	1.5	23	--	1.5
		Sulfate	600	250	NS	250	250	--	45	3.1	J	4.5	3.1	J	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	4.8	--	0.90	ND	U	0.090	ND	U	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	160	--	6.0	220	--	6.0	220	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	160	--	6.0	220	--	6.0	220	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106011	KAFB-106012R	KAFB-106013									
		Field Sample ID:		GW011-204	GW012R-204	GW013-204									
		Sample Date:		10/1/2020	10/2/2020	10/13/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		489	495	491									
		Reference Elevation Interval (ft AMSL):		4857	4857	4857									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	110	--	0.15	170	--	0.15	46	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	UJ	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	16	--	0.075	26	--	0.075	7.0	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	0.015	--	0.0052	ND	UJ	0.0052	0.0038	J	0.0052
		Potassium	NS	NS	NS	NS	3.4	--	0.38	5.0	--	0.38	2.5	--	0.38
		Sodium	NS	NS	NS	NS	37	--	0.50	67	--	0.50	22	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00071	J	0.0016	ND	UJ	0.0016	ND	U	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00050	0.000087	J	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	UJ	20	1.7	J	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	98	J	15	170	--	15	23	--	1.5
		Sulfate	600	250	NS	250	120	J	45	300	--	45	35	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	2.8	--	0.90	4.5	--	0.45	0.40	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	160	--	6.0	110	--	6.0	130	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	160	--	6.0	110	--	6.0	130	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106014	KAFB-106014	KAFB-106015									
		Field Sample ID:		GW014-204	GW014-604	GW015-204									
		Sample Date:		10/29/2020	10/29/2020	10/13/2020									
		Sample Type:		REG	Field Duplicate	REG									
		Sample Depth (ft bgs):		491	491	488.22									
		Reference Elevation Interval (ft AMSL):		4857	4857	4857 & 4838									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	180	--	0.15	180	--	0.15	43	J	0.15
		Iron, dissolved	1.0	NS	14	1.0	4.5	--	0.10	4.5	--	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	29	--	0.075	29	--	0.075	5.1	J	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	5.8	--	0.0052	5.9	--	0.0052	0.0041	J	0.0052
		Potassium	NS	NS	NS	NS	4.9	--	0.38	4.9	--	0.38	2.2	J	0.38
		Sodium	NS	NS	NS	NS	45	--	0.50	45	--	0.50	20	J	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.0030	--	0.0016	0.0033	--	0.0016	ND	U	0.0016
		Lead	0.015	0.015	0.015	0.015	0.0039	--	0.00025	0.0034	--	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	2.8	--	2.0	2.8	--	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	130	--	15	130	--	15	20	--	1.5
		Sulfate	600	250	NS	250	ND	U	4.5	ND	U	4.5	28	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	ND	U	0.090	ND	U	0.090	0.33	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	480	--	6.0	480	--	6.0	110	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	480	--	6.0	480	--	6.0	110	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106016	KAFB-106017	KAFB-106017									
		Field Sample ID:		GW016-204	GW017-204	GW017-604									
		Sample Date:		10/1/2020	10/19/2020	10/19/2020									
		Sample Type:		REG	REG	Field Duplicate									
		Sample Depth (ft bgs):		478											
		Reference Elevation Interval (ft AMSL):		4857	4857 & 4838	4857 & 4838									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	39	--	0.15	52	--	0.15	51	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	0.071	J	0.10	0.088	J	0.10
		Magnesium	NS	NS	NS	NS	6.0	--	0.075	7.4	--	0.075	7.3	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	0.19	--	0.0052	0.19	--	0.0052
		Potassium	NS	NS	NS	NS	2.2	--	0.38	2.5	--	0.38	2.5	--	0.38
		Sodium	NS	NS	NS	NS	20	--	0.50	26	--	0.50	26	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.0011	J	0.0016	0.0011	J	0.0016	0.00095	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	UJ	2.0	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	16	J	15	17	--	1.5	16	--	1.5
		Sulfate	600	250	NS	250	27	J	4.5	38	--	4.5	38	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.088	J	0.090	ND	U	0.090	ND	U	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	130	--	6.0	140	--	6.0	140	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	130	--	6.0	140	--	6.0	140	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106018	KAFB-106019	KAFB-106020									
		Field Sample ID:		GW018-204	GW019-204	GW020-204									
		Sample Date:		10/28/2020	10/8/2020	10/29/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		481	498	484									
		Reference Elevation Interval (ft AMSL):		4857 & 4838	4857 & 4838	4857									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	55	--	0.15	82	--	0.15	58	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	0.80	--	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	8.4	--	0.075	13	--	0.075	8.6	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	0.61	--	0.0052	0.75	--	0.0052	0.015	--	0.0052
		Potassium	NS	NS	NS	NS	2.7	--	0.38	3.2	--	0.38	2.6	--	0.38
		Sodium	NS	NS	NS	NS	25	--	0.50	37	--	0.50	25	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	0.0015	J	0.0016	0.0058	--	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00050	0.00028	J	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	1.5	J	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	43	--	15	96	--	15	38	U	15
		Sulfate	600	250	NS	250	58	--	4.5	79	--	45	73	U	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	1.1	--	0.090	2.5	J	0.090	0.93	U	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	110	--	6.0	140	--	6.0	110	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	110	--	6.0	140	--	6.0	110	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106021	KAFB-106022	KAFB-106023								
		Field Sample ID:			GW021-204	GW022-204	GW023-204								
		Sample Date:			10/6/2020	10/9/2020	10/13/2020								
		Sample Type:			REG	REG	REG								
		Sample Depth (ft bgs):			458.7	462.7	473.74								
		Reference Elevation Interval (ft AMSL):			4838	4857 & 4838	4857								
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	29	--	0.15	48	--	0.15	51	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.1	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	2.8	--	0.075	6.6	--	0.075	7.2	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	0.11	--	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.4	--	0.38	2.1	--	0.38	2.5	--	0.38
		Sodium	NS	NS	NS	NS	12	--	0.5	24	--	0.50	31	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	0.00070	J	0.0016	0.00082	J	0.0016
		Lead	0.015	0.015	0.015	0.015	0.0002	J	0.00025	ND	U	0.00025	0.000073	J	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2	ND	--	20	1.6	J	2.0
		Chloride	250	NS	NS	250	12	--	1.5	41	--	15	68	--	15
		Sulfate	600	250	NS	250	18	--	4.5	41	--	4.5	34	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	ND	U	0.09	ND	U	0.090	2.1	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	68	--	6	120	--	6.0	100	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	68	--	6	120	--	6.0	100	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106024	KAFB-106025	KAFB-106026								
		Field Sample ID:			GW024-204	GW025-204	GW026-204								
		Sample Date:			10/21/2020	10/15/2020	10/12/2020								
		Sample Type:			REG	REG	REG								
		Sample Depth (ft bgs):			486	465.7	466.7								
		Reference Elevation Interval (ft AMSL):			4857	4857 & 4838	4857								
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	47	--	0.15	53	--	0.15	55	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	7.7	--	0.075	7.4	--	0.075	7.2	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	0.0077	J	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.8	--	0.38	5.1	--	0.38	2.8	--	0.38
		Sodium	NS	NS	NS	NS	24	--	0.50	30	--	0.50	25	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.0013	J	0.0016	0.00072	J	0.0016	0.00073	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	0.00049	J	0.00025	0.00021	J	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	1.4	J	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	9.8	--	1.5	56	--	15	53	--	15
		Sulfate	600	250	NS	250	30	--	4.5	61	--	4.5	58	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	ND	U	0.090	1.7	--	0.090	1.3	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	160	--	6.0	91	--	6.0	85	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	160	--	6.0	91	--	6.0	85	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106027	KAFB-106028	KAFB-106029									
		Field Sample ID:		GW027-204	GW028-204	GW029-204									
		Sample Date:		10/1/2020	10/22/2020	10/6/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		484	488	451.5									
		Reference Elevation Interval (ft AMSL):		4857	4857	4857									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	39	--	0.15	120	J	0.15	66	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	3.2	J	0.10	ND	U	0.1
		Magnesium	NS	NS	NS	NS	5.9	--	0.075	19	J	0.075	9.4	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	4.0	J	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.2	--	0.38	3.5	--	0.38	2.7	--	0.38
		Sodium	NS	NS	NS	NS	22	--	0.50	39	J	0.50	24	--	0.5
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00087	J	0.0016	ND	U	0.0016	ND	U	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	0.00043	J	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	UJ	2.0	ND	U	2.0	1.5	J	2
		Chloride	250	NS	NS	250	16	J	15	46	--	3.0	67	--	15
		Sulfate	600	250	NS	250	29	J	4.5	4.2	J	4.5	120	--	45
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	1.6	--	0.090	ND	U	0.090	2.7	--	0.18
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	120	--	6.0	390	--	6.0	85	--	6
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	120	--	6.0	390	--	6.0	85	--	6

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106030	KAFB-106031	KAFB-106032									
		Field Sample ID:		GW030-204	GW031-204	GW032-204									
		Sample Date:		10/6/2020	10/6/2020	10/8/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		470.2	496.5	456.7									
		Reference Elevation Interval (ft AMSL):		4838	4814	4857									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	64	--	0.15	85	--	0.15	89	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.1	ND	U	0.1	ND	U	0.10
		Magnesium	NS	NS	NS	NS	8.8	--	0.075	12	--	0.075	13	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.7	--	0.38	3.5	--	0.38	3.4	--	0.38
		Sodium	NS	NS	NS	NS	25	--	0.5	30	--	0.5	30	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	0.00075	J	0.0016	0.00068	J	0.0016
		Lead	0.015	0.015	0.015	0.015	0.00012	J	0.00025	0.000072	J	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	1.4	J	2	1.7	J	2	ND	U	20
		Chloride	250	NS	NS	250	62	--	15	81	--	15	84	--	15
		Sulfate	600	250	NS	250	72	--	4.5	120	--	45	140	--	45
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	2.2	--	0.18	2.2	--	0.18	2.3	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	86	--	6	85	--	6	85	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6	ND	U	6	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	86	--	6	85	--	6	85	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:	KAFB-106033			KAFB-106034			KAFB-106035						
		Field Sample ID:	GW033-204			GW034-204			GW035-204						
		Sample Date:	10/8/2020			10/8/2020			10/9/2020						
		Sample Type:	REG			REG			REG						
		Sample Depth (ft bgs):	477.7			502.7			452.83						
		Reference Elevation Interval (ft AMSL):	4838			4814			4857						
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	79	--	0.15	59	--	0.15	45	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	12	--	0.075	8.7	--	0.075	6.2	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.6	--	0.38	2.9	--	0.38	2.0	--	0.38
		Sodium	NS	NS	NS	NS	27	--	0.50	24	--	0.50	25	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00073	J	0.0016	ND	U	0.0016	0.00097	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	UJ	2.0	ND	U	20	ND	UJ	2.0
		Chloride	250	NS	NS	250	70	--	15	48	--	15	18	--	1.5
		Sulfate	600	250	NS	250	96	--	45	68	--	4.5	39	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	1.7	--	0.090	0.98	--	0.090	0.049	J	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	75	--	6.0	89	--	6.0	140	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	75	J	6.0	89	--	6.0	140	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106036	KAFB-106037	KAFB-106037									
		Field Sample ID:		GW036-204	GW037-204	GW037-604									
		Sample Date:		10/12/2020	10/9/2020	10/9/2020									
		Sample Type:		REG	REG	Field Duplicate									
		Sample Depth (ft bgs):		482.58	507.75	507.75									
		Reference Elevation Interval (ft AMSL):		4838	4838	4838									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	42	--	0.15	36	--	0.15	38	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	5.8	--	0.075	5.0	--	0.075	5.2	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.2	--	0.38	1.7	--	0.38	1.8	--	0.38
		Sodium	NS	NS	NS	NS	25	--	0.50	22	--	0.50	22	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00074	J	0.0016	0.00087	J	0.0016	0.0010	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	ND	UJ	2.0	ND	UJ	2.0
		Chloride	250	NS	NS	250	16	--	1.5	14	--	1.5	15	--	1.5
		Sulfate	600	250	NS	250	41	--	4.5	33	--	4.5	35	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.061	J	0.090	0.27	U	0.090	0.26	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	120	--	6.0	110	--	6.0	110	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	120	--	6.0	110	--	6.0	110	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:	KAFB-106038			KAFB-106039			KAFB-106040						
		Field Sample ID:	GW038-204			GW039-204			GW040-204						
		Sample Date:	10/5/2020			10/5/2020			10/7/2020						
		Sample Type:	REG			REG			REG						
		Sample Depth (ft bgs):	483			513			535						
		Reference Elevation Interval (ft AMSL):	4857			4838			4814						
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	41	--	0.15	83	--	0.15	54	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.1	ND	U	0.1	0.044	J	0.10
		Magnesium	NS	NS	NS	NS	5.8	--	0.075	11	--	0.075	7.4	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.4	--	0.38	3.1	--	0.38	2.6	--	0.38
		Sodium	NS	NS	NS	NS	28	--	0.5	34	--	0.5	29	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	UJ	0.0016	ND	U	0.0016	ND	U	0.0016
		Lead	0.015	0.015	0.015	0.015	0.000072	J	0.00025	0.000082	J	0.00025	0.000074	J	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2	1.6	J	2	ND	U	20
		Chloride	250	NS	NS	250	23	--	1.5	67	--	15	25	--	1.5
		Sulfate	600	250	NS	250	39	--	4.5	93	--	45	55	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.44	--	0.09	2.1	--	0.09	0.82	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	120	--	6	130	--	6	120	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6	ND	U	6	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	120	--	6	130	--	6	120	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:	KAFB-106041			KAFB-106042			KAFB-106043						
		Field Sample ID:	GW041-204			GW042-204			GW043-204						
		Sample Date:	10/8/2020			10/8/2020			10/12/2020						
		Sample Type:	REG			REG			REG						
		Sample Depth (ft bgs):	452.3			469.7			543.7						
		Reference Elevation Interval (ft AMSL):	4857			4857			4814						
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	89	--	0.15	110	--	0.15	55	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	12	--	0.075	15	--	0.075	7.6	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	3.8	--	0.38	4.1	--	0.38	2.8	--	0.38
		Sodium	NS	NS	NS	NS	33	--	0.50	36	--	0.50	26	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	ND	U	0.0016	0.00092	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	20	ND	U	20	ND	U	2.0
		Chloride	250	NS	NS	250	68	--	15	89	--	15	41	--	6.0
		Sulfate	600	250	NS	250	120	--	45	150	--	45	65	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	1.8	--	0.090	2.1	--	0.090	0.94	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	100	--	6.0	97	--	6.0	96	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	100	--	6.0	97	--	6.0	96	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106044	KAFB-106044	KAFB-106045									
		Field Sample ID:		GW044-204	GW044-604	GW045-204									
		Sample Date:		10/1/2020	10/1/2020	10/8/2020									
		Sample Type:		REG	Field Duplicate	REG									
		Sample Depth (ft bgs):		506.2	506.2	533.72									
		Reference Elevation Interval (ft AMSL):		4838	4838	4814									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	37	--	0.15	35	--	0.15	32	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	4.9	--	0.075	5.2	--	0.075	4.8	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.2	--	0.38	2.2	--	0.38	2.1	--	0.38
		Sodium	NS	NS	NS	NS	21	--	0.50	21	--	0.50	21	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.0012	J	0.0016	0.0013	J	0.0016	0.00097	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	UJ	2.0	ND	J	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	22	J	15	24	J	15	8.1	--	1.5
		Sulfate	600	250	NS	250	31	J	4.5	30	J	4.5	25	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	1.9	--	0.090	1.9	--	0.090	ND	U	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	100	--	6.0	100	--	6.0	100	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	100	--	6.0	100	--	6.0	100	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106046	KAFB-106047	KAFB-106048								
		Field Sample ID:			GW046-204	GW047-204	GW048-204								
		Sample Date:			10/20/2020	10/20/2020	10/15/2020								
		Sample Type:			REG	REG	REG								
		Sample Depth (ft bgs):			505	520	538								
		Reference Elevation Interval (ft AMSL):			4857	4838	4814								
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	43	--	0.15	37	--	0.15	34	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	6.0	--	0.075	5.0	--	0.075	4.9	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.4	--	0.38	2.2	--	0.38	2.0	--	0.38
		Sodium	NS	NS	NS	NS	26	--	0.50	24	--	0.50	22	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.0014	J	0.0016	0.0015	J	0.0016	0.0012	J	0.0016
		Lead	0.015	0.015	0.015	0.015	0.00012	J	0.00025	ND	U	0.00025	0.00091	--	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	11	--	1.5	11	--	1.5	9.1	--	1.5
		Sulfate	600	250	NS	250	27	--	4.5	32	--	4.5	30	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.10	--	0.090	0.55	--	0.090	0.45	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	150	--	6.0	120	--	6.0	100	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	150	--	6.0	120	--	6.0	100	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:	KAFB-106049	KAFB-106050	KAFB-106051										
		Field Sample ID:	GW049-204	GW050-204	GW051-204										
		Sample Date:	10/12/2020	10/12/2020	10/15/2020										
		Sample Type:	REG	REG	REG										
		Sample Depth (ft bgs):	457.5	475.1	501.5										
		Reference Elevation Interval (ft AMSL):	4857	4838	4814										
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	200	--	0.15	63	--	0.15	73	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	30	--	0.075	9.2	--	0.075	10	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	4.6	--	0.38	3.1	--	0.38	2.9	--	0.38
		Sodium	NS	NS	NS	NS	38	--	0.50	26	--	0.50	29	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00068	J	0.0016	0.00089	J	0.0016	0.00077	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	2.1	J	2.0	1.6	J	2.0	1.7	J	2.0
		Chloride	250	NS	NS	250	150	--	15	71	--	15	84	--	15
		Sulfate	600	250	NS	250	370	--	45	69	--	4.5	98	--	45
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	4.6	--	0.45	1.8	--	0.18	2.4	--	0.18
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	71	--	6.0	82	--	6.0	80	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	71	J	6.0	82	--	6.0	80	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106051	KAFB-106052	KAFB-106053									
		Field Sample ID:		GW051-604	GW052-204	GW053-204									
		Sample Date:		10/15/2020	10/12/2020	10/9/2020									
		Sample Type:		Field Duplicate	REG	REG									
		Sample Depth (ft bgs):		501.5	450.3	479.1									
		Reference Elevation Interval (ft AMSL):		4814	4857	4838									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	73	--	0.15	75	--	0.15	110	J	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	10	--	0.075	10	--	0.075	16	J	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.9	--	0.38	3.7	--	0.38	3.8	--	0.38
		Sodium	NS	NS	NS	NS	29	--	0.50	30	--	0.50	34	J	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00072	J	0.0016	0.00087	J	0.0016	ND	U	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	1.8	J	2.0	ND	U	2.0	ND	UJ	20
		Chloride	250	NS	NS	250	84	--	15	75	J	6.0	100	--	15
		Sulfate	600	250	NS	250	110	--	45	120	--	45	210	--	45
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	2.5	--	0.18	2.3	--	0.090	3.4	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	79	--	6.0	84	--	6.0	84	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	79	J	6.0	84	--	6.0	84	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106054	KAFB-106055	KAFB-106057									
		Field Sample ID:		GW054-204	GW055-204	GW057-204									
		Sample Date:		10/9/2020	10/8/2020	10/8/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		504.7	466.5	485.6									
		Reference Elevation Interval (ft AMSL):		4814	4857	4838									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	58	--	0.15	64	--	0.15	46	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	8.0	--	0.075	9.0	--	0.075	6.4	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	0.0083	J	0.0052	0.016	--	0.0052
		Potassium	NS	NS	NS	NS	2.5	--	0.38	2.9	--	0.38	2.4	--	0.38
		Sodium	NS	NS	NS	NS	25	--	0.50	30	--	0.50	25	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00073	J	0.0016	ND	U	0.0016	ND	U	0.0016
		Lead	0.015	0.015	0.015	0.015	0.00011	J	0.00025	0.000078	J	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	UJ	20	ND	U	20	ND	U	2.0
		Chloride	250	NS	NS	250	60	--	15	60	--	15	18	J	1.5
		Sulfate	600	250	NS	250	59	--	4.5	54	--	4.5	35	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	1.7	--	0.090	0.050	J	0.090	ND	U	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	89	--	6.0	140	--	6.0	110	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	89	--	6.0	140	--	6.0	110	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106058	KAFB-106059	KAFB-106060									
		Field Sample ID:		GW058-204	GW059-204	GW060-204									
		Sample Date:		10/8/2020	10/23/2020	10/20/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		512.5	504	508									
		Reference Elevation Interval (ft AMSL):		4814	4857	4838									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	38	--	0.15	120	--	0.15	66	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	7.9	--	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	5.3	--	0.075	20	--	0.075	9.8	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	3.3	--	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.2	--	0.38	3.6	--	0.38	3.0	--	0.38
		Sodium	NS	NS	NS	NS	23	--	0.50	36	--	0.50	30	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00074	J	0.0016	0.0031	--	0.0016	ND	U	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	0.00062	--	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	11	--	1.5	36	--	6.0	19	--	1.5
		Sulfate	600	250	NS	250	28	--	4.5	ND	U	4.5	41	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	ND	U	0.090	ND	U	0.090	ND	U	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	110	--	6.0	390	--	6.0	220	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	110	--	6.0	390	--	6.0	220	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106061	KAFB-106062	KAFB-106063									
		Field Sample ID:		GW061-204	GW062-204	GW063-204									
		Sample Date:		10/15/2020	10/20/2020	10/14/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		501.5	585	510.13									
		Reference Elevation Interval (ft AMSL):		4814	4814	4838									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	31	--	0.15	32	--	0.15	140	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	4.9	--	0.10
		Magnesium	NS	NS	NS	NS	4.4	--	0.075	4.4	--	0.075	22	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	5.7	--	0.0052
		Potassium	NS	NS	NS	NS	1.8	--	0.38	2.1	--	0.38	3.8	--	0.38
		Sodium	NS	NS	NS	NS	21	--	0.50	22	--	0.50	42	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.0013	J	0.0016	0.0014	J	0.0016	0.0026	--	0.0016
		Lead	0.015	0.015	0.015	0.015	0.00015	J	0.00025	ND	U	0.00025	0.00022	J	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	8.7	--	1.5	7.8	--	1.5	46	--	6.0
		Sulfate	600	250	NS	250	26	--	4.5	29	--	4.5	2.5	J	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.047	J	0.090	0.099	J	0.090	ND	U	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	100	--	6.0	110	--	6.0	430	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	100	--	6.0	110	--	6.0	430	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106064	KAFB-106065	KAFB-106066									
		Field Sample ID:		GW064-204	GW065-204	GW066-204									
		Sample Date:		10/14/2020	10/19/2020	10/16/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		491	513	585									
		Reference Elevation Interval (ft AMSL):		4857	4838	4814									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	150	--	0.15	57	--	0.15	32	J	0.15
		Iron, dissolved	1.0	NS	14	1.0	6.2	--	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	23	--	0.075	9.1	--	0.075	4.5	J	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	8.0	J	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	5.9	--	0.38	2.8	--	0.38	2.0	--	0.38
		Sodium	NS	NS	NS	NS	95	--	0.50	31	--	0.50	21	J	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.0028	--	0.0016	ND	U	0.0016	0.0012	J	0.0016
		Lead	0.015	0.015	0.015	0.015	0.00051	--	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	47	--	6.0	20	--	1.5	7.8	--	1.5
		Sulfate	600	250	NS	250	ND	U	4.5	35	--	4.5	27	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.083	J	0.090	ND	U	0.090	0.43	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	570	--	6.0	190	--	6.0	110	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	570	--	6.0	190	--	6.0	110	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106067	KAFB-106068	KAFB-106069									
		Field Sample ID:		GW067-204	GW068-204	GW069-204									
		Sample Date:		10/19/2020	10/16/2020	10/16/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		490	582	508									
		Reference Elevation Interval (ft AMSL):		4857	4814	4838									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	100	--	0.15	34	--	0.15	58	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	1.5	--	0.10	ND	U	0.10	0.096	J	0.10
		Magnesium	NS	NS	NS	NS	15	--	0.075	4.7	--	0.075	8.3	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	3.3	J	0.0052	ND	U	0.0052	0.35	--	0.0052
		Potassium	NS	NS	NS	NS	3.6	--	0.38	2.0	--	0.38	2.7	--	0.38
		Sodium	NS	NS	NS	NS	41	--	0.50	22	--	0.50	27	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.0010	J	0.0016	0.0010	J	0.0016	0.00075	J	0.0016
		Lead	0.015	0.015	0.015	0.015	0.000083	J	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	ND	U	2.0	1.5	J	2.0
		Chloride	250	NS	NS	250	27	--	1.5	7.9	--	1.5	42	--	1.5
		Sulfate	600	250	NS	250	5.7	--	4.5	28	--	4.5	29	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	ND	U	0.090	0.25	--	0.090	ND	U	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	370	--	6.0	110	--	6.0	150	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	370	--	6.0	110	--	6.0	150	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106070	KAFB-106070	KAFB-106071									
		Field Sample ID:		GW070-204	GW070-604	GW071-204									
		Sample Date:		10/13/2020	10/13/2020	10/13/2020									
		Sample Type:		REG	Field Duplicate	REG									
		Sample Depth (ft bgs):		460.7	460.7	548.7									
		Reference Elevation Interval (ft AMSL):		4857	4857	4814									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	71	--	0.15	73	J	0.15	33	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	10	--	0.075	10	J	0.075	4.7	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	3.1	--	0.38	3.1	--	0.38	2.1	--	0.38
		Sodium	NS	NS	NS	NS	28	--	0.50	29	J	0.50	21	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	ND	U	0.0016	0.00092	J	0.0016
		Lead	0.015	0.015	0.015	0.015	0.00016	J	0.00025	0.00015	J	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	1.8	J	2.0	1.8	J	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	78	--	15	82	--	15	11	--	1.5
		Sulfate	600	250	NS	250	56	U	4.5	59	--	4.5	27	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	ND	U	0.090	ND	U	0.090	ND	U	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	130	--	6.0	130	--	6.0	100	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	130	--	6.0	130	--	6.0	100	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106072	KAFB-106073	KAFB-106074									
		Field Sample ID:		GW072-204	GW073-204	GW074-204									
		Sample Date:		10/15/2020	10/12/2020	10/12/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		475.7	501	572									
		Reference Elevation Interval (ft AMSL):		4838	4838	4814									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	46	--	0.15	61	--	0.15	47	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	6.5	--	0.075	8.8	--	0.075	6.5	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	0.033	--	0.0052	0.0085	J	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.3	--	0.38	2.9	--	0.38	2.3	--	0.38
		Sodium	NS	NS	NS	NS	24	--	0.50	27	--	0.50	25	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	ND	U	0.0016	0.00075	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	0.00020	J	0.00025	0.00011	J	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	1.4	J	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	25	--	1.5	53	--	15	22	--	1.5
		Sulfate	600	250	NS	250	35	--	4.5	52	--	4.5	67	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.094	J	0.090	1.4	--	0.090	0.81	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	120	--	6.0	120	--	6.0	98	U	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	120	--	6.0	120	--	6.0	98	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:	KAFB-106075			KAFB-106076			KAFB-106076						
		Field Sample ID:	GW075-204			GW076-204			GW076-604						
		Sample Date:	10/23/2020			10/30/2020			10/30/2020						
		Sample Type:	REG			REG			Field Duplicate						
		Sample Depth (ft bgs):	485			482			482						
		Reference Elevation Interval (ft AMSL):	4857			4857			4857						
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	160	--	0.15	170	--	0.15	170	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	5.8	--	0.10	5.8	--	0.10
		Magnesium	NS	NS	NS	NS	21	--	0.075	25	--	0.075	24	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	0.013	--	0.0052	4.3	--	0.0052	4.3	--	0.0052
		Potassium	NS	NS	NS	NS	4.3	--	0.38	4.3	--	0.38	4.2	--	0.38
		Sodium	NS	NS	NS	NS	43	--	0.50	39	--	0.50	38	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	0.00095	J	0.0016	0.00078	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	0.00057	--	0.00025	0.00053	--	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	1.7	J	2.0	1.6	J	2.0	1.5	J	2.0
		Chloride	250	NS	NS	250	160	--	30	28	--	1.5	28	--	1.5
		Sulfate	600	250	NS	250	220	--	90	ND	U	4.5	2.2	J	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	6.1	--	0.45	ND	U	0.090	ND	U	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	90	--	6.0	510	--	6.0	500	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	90	--	6.0	510	J	6.0	500	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106077	KAFB-106078	KAFB-106079									
		Field Sample ID:		GW077-204	GW078-204	GW079-204									
		Sample Date:		10/9/2020	10/20/2020	10/30/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		506	578	498.78									
		Reference Elevation Interval (ft AMSL):		4838	4814	4857									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	33	--	0.15	30	--	0.15	160	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	5.1	--	0.10
		Magnesium	NS	NS	NS	NS	4.9	--	0.075	4.2	--	0.075	29	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	6.5	--	0.0052
		Potassium	NS	NS	NS	NS	1.8	--	0.38	2.1	--	0.38	4.2	--	0.38
		Sodium	NS	NS	NS	NS	20	--	0.50	21	--	0.50	47	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.0010	J	0.0016	0.0015	J	0.0016	ND	U	0.0016
		Lead	0.015	0.015	0.015	0.015	0.00013	J	0.00025	0.00094	--	0.00025	0.0012	--	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	UJ	2.0	ND	U	0.40	2.4	J	2.0
		Chloride	250	NS	NS	250	7.1	J	1.5	6.7	--	1.5	150	--	15
		Sulfate	600	250	NS	250	25	--	4.5	28	--	4.5	ND	U	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.094	J	0.090	ND	U	0.090	ND	U	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	110	--	6.0	100	--	6.0	420	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	110	--	6.0	100	--	6.0	420	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:	KAFB-106080	KAFB-106081	KAFB-106082										
		Field Sample ID:	GW080-204	GW081-204	GW082-204										
		Sample Date:	11/24/2020	10/15/2020	10/6/2020										
		Sample Type:	REG	REG	REG										
		Sample Depth (ft bgs):	506	580	474										
		Reference Elevation Interval (ft AMSL):	4838	4814	4857										
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	120	--	0.15	31	--	0.15	62	J	0.15
		Iron, dissolved	1.0	NS	14	1.0	2.7	--	0.10	ND	U	0.10	ND	U	0.1
		Magnesium	NS	NS	NS	NS	22	--	0.075	4.5	--	0.075	8.9	J	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	0.076	--	0.0052
		Potassium	NS	NS	NS	NS	3.6	--	0.45	1.8	--	0.38	2.9	J	0.38
		Sodium	NS	NS	NS	NS	42	--	0.50	21	--	0.50	27	J	0.5
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	0.0011	J	0.0016	ND	U	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00050	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	2.2	J	2.0	ND	U	2.0	1.5	J	2
		Chloride	250	NS	NS	250	160	J	15	7.2	--	1.5	58	--	15
		Sulfate	600	250	NS	250	54	--	4.5	24	--	4.5	54	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	ND	U	0.090	0.10	--	0.090	ND	U	0.09
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	260	--	6.0	110	--	6.0	140	--	6
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	260	J	6.0	110	--	6.0	140	J	6

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106083	KAFB-106084	KAFB-106085									
		Field Sample ID:		GW083-204	GW084-204	GW085-204									
		Sample Date:		10/6/2020	10/6/2020	10/13/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		498	571	447.2									
		Reference Elevation Interval (ft AMSL):		4838	4814	4857									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	40	--	0.15	32	--	0.15	69	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.1	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	5.7	--	0.075	4.5	--	0.075	10	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	0.12	--	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.3	--	0.38	2.1	--	0.38	3.1	--	0.38
		Sodium	NS	NS	NS	NS	23	--	0.5	21	--	0.50	29	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00078	J	0.0016	0.0013	J	0.0016	0.00068	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	11	--	1.5	8.4	--	1.5	81	--	15
		Sulfate	600	250	NS	250	32	--	4.5	27	--	4.5	65	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	ND	U	0.09	ND	U	0.090	1.3	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	120	--	6	120	--	6.0	100	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	120	--	6	120	--	6.0	100	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106085	KAFB-106086	KAFB-106087									
		Field Sample ID:		GW085-604	GW086-204	GW087-204									
		Sample Date:		10/13/2020	10/13/2020	10/13/2020									
		Sample Type:		Field Duplicate	REG	REG									
		Sample Depth (ft bgs):		447.2	476.7	546.7									
		Reference Elevation Interval (ft AMSL):		4857	4838	4814									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	67	--	0.15	49	--	0.15	40	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	9.6	--	0.075	6.8	--	0.075	5.6	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	3.0	--	0.38	2.5	--	0.38	2.2	--	0.38
		Sodium	NS	NS	NS	NS	29	--	0.50	24	--	0.50	22	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	ND	U	0.0016	0.00083	J	0.0016
		Lead	0.015	0.015	0.015	0.015	0.00012	J	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	1.3	J	2.0	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	79	--	15	25	--	3.0	34	J	15
		Sulfate	600	250	NS	250	63	--	4.5	57	--	4.5	43	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	1.3	--	0.090	0.56	--	0.090	0.64	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	98	--	6.0	110	--	6.0	96	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	98	--	6.0	110	--	6.0	96	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106088	KAFB-106089	KAFB-106090								
		Field Sample ID:			GW088-204	GW089-204	GW090-204								
		Sample Date:			10/15/2020	10/13/2020	10/13/2020								
		Sample Type:			REG	REG	REG								
		Sample Depth (ft bgs):			460.7	482.26	555.78								
		Reference Elevation Interval (ft AMSL):			4857	4838	4814								
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	44	--	0.15	43	--	0.15	33	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	6.0	--	0.075	6.0	--	0.075	4.6	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.3	--	0.38	2.3	--	0.38	2.0	--	0.38
		Sodium	NS	NS	NS	NS	24	--	0.50	23	--	0.50	21	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00086	J	0.0016	ND	U	0.0016	0.00078	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	0.000086	J	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	14	--	1.5	15	--	1.5	8.3	--	1.5
		Sulfate	600	250	NS	250	34	--	4.5	39	--	4.5	28	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	ND	U	0.090	0.38	--	0.090	0.11	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	130	--	6.0	120	--	6.0	110	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	130	--	6.0	120	--	6.0	110	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:	KAFB-106091			KAFB-106091			KAFB-106092						
		Field Sample ID:	GW091-204			GW091-604			GW092-204						
		Sample Date:	10/9/2020			10/9/2020			10/8/2020						
		Sample Type:	REG			Field Duplicate			REG						
		Sample Depth (ft bgs):	454.7			454.7			474.7						
		Reference Elevation Interval (ft AMSL):	4857			4857			4838						
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	66	--	0.15	67	--	0.15	68	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	9.0	--	0.075	9.1	--	0.075	9.3	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.6	--	0.38	3.5	--	0.38	3.4	--	0.38
		Sodium	NS	NS	NS	NS	26	--	0.50	27	--	0.50	29	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	ND	U	0.0016	0.00079	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	ND	UJ	20	ND	UJ	20
		Chloride	250	NS	NS	250	67	--	15	61	--	15	65	--	15
		Sulfate	600	250	NS	250	77	--	45	78	--	45	90	--	45
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	1.8	J	0.090	1.8	--	0.090	1.6	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	92	--	6.0	89	--	6.0	95	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	92	--	6.0	89	--	6.0	95	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106093	KAFB-106094	KAFB-106095									
		Field Sample ID:		GW093-204	GW094-204	GW095-204									
		Sample Date:		10/8/2020	10/19/2020	10/7/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		544.7		505.85									
		Reference Elevation Interval (ft AMSL):		4814	4857	4838									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	48	--	0.15	90	--	0.15	57	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	0.87	--	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	6.5	--	0.075	14	--	0.075	8.5	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	2.0	--	0.0052	0.026	J	0.0052
		Potassium	NS	NS	NS	NS	2.6	--	0.38	3.3	--	0.38	2.9	--	0.38
		Sodium	NS	NS	NS	NS	30	--	0.50	33	--	0.50	27	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	0.0013	J	0.0016	ND	U	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	51	--	15	62	--	6.0	59	--	15
		Sulfate	600	250	NS	250	50	--	4.5	37	--	4.5	37	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	1.2	--	0.090	ND	U	0.090	0.25	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	91	--	6.0	210	--	6.0	120	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	91	--	6.0	210	--	6.0	120	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:	KAFB-106096			KAFB-106096			KAFB-106097						
		Field Sample ID:	GW096-204			GW096-604			GW097-204						
		Sample Date:	10/7/2020			10/7/2020			10/13/2020						
		Sample Type:	REG			Field Duplicate			REG						
		Sample Depth (ft bgs):	578.3			578.3			508						
		Reference Elevation Interval (ft AMSL):	4814			4814			4838						
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	31	--	0.15	30	--	0.15	39	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	4.5	--	0.075	4.4	--	0.075	5.8	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.0	--	0.38	2.0	--	0.38	2.3	--	0.38
		Sodium	NS	NS	NS	NS	21	--	0.50	20	--	0.50	21	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.0015	J	0.0016	0.0013	J	0.0016	0.00075	J	0.0016
		Lead	0.015	0.015	0.015	0.015	0.00021	J	0.00025	0.00021	J	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	7.7	--	1.5	7.8	--	1.5	18	--	1.5
		Sulfate	600	250	NS	250	27	--	4.5	26	--	4.5	38	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	ND	U	0.090	ND	U	0.090	0.55	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	100	--	6.0	100	--	6.0	110	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	100	--	6.0	100	--	6.0	110	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:	KAFB-106098			KAFB-106099			KAFB-106100						
		Field Sample ID:	GW098-204			GW099-204			GW100-204						
		Sample Date:	10/13/2020			10/14/2020			10/14/2020						
		Sample Type:	REG			REG			REG						
		Sample Depth (ft bgs):	533			503			528						
		Reference Elevation Interval (ft AMSL):	4814			4838			4814						
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	45	--	0.15	41	--	0.15	34	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	6.5	--	0.075	5.6	--	0.075	4.6	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.4	--	0.38	2.4	--	0.38	2.1	--	0.38
		Sodium	NS	NS	NS	NS	23	--	0.50	21	--	0.50	19	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00091	J	0.0016	0.0013	J	0.0016	0.0013	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	20	--	1.5	22	--	1.5	11	J	1.5
		Sulfate	600	250	NS	250	49	--	4.5	38	--	4.5	27	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.80	--	0.090	0.95	--	0.090	ND	U	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	110	--	6.0	96	--	6.0	99	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	110	--	6.0	96	--	6.0	99	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106101	KAFB-106102	KAFB-106103								
		Field Sample ID:			GW101-204	GW102-204	GW103-204								
		Sample Date:			10/14/2020	10/15/2020	10/13/2020								
		Sample Type:			REG	REG	REG								
		Sample Depth (ft bgs):			505	526	485.76								
		Reference Elevation Interval (ft AMSL):			4838	4814	4838								
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	77	--	0.15	33	--	0.15	45	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	12	--	0.075	5.0	--	0.075	6.2	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	3.3	--	0.38	2.0	--	0.38	2.4	--	0.38
		Sodium	NS	NS	NS	NS	33	--	0.50	21	--	0.50	28	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00093	J	0.0016	0.0012	J	0.0016	0.00071	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	0.00046	J	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	1.3	J	2.0	ND	U	2.0	1.3	J	2.0
		Chloride	250	NS	NS	250	56	--	15	10	--	1.5	41	--	15
		Sulfate	600	250	NS	250	140	--	45	29	--	4.5	37	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	2.1	--	0.18	0.39	--	0.090	1.4	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	94	--	6.0	100	--	6.0	110	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	94	--	6.0	100	--	6.0	110	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106104	KAFB-106105	KAFB-106106								
		Field Sample ID:			GW104-204	GW105-204	GW106-204								
		Sample Date:			10/13/2020	10/12/2020	10/8/2020								
		Sample Type:			REG	REG	REG								
		Sample Depth (ft bgs):			510.75	484.7	454.3								
		Reference Elevation Interval (ft AMSL):			4814	4838	4857								
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	32	--	0.15	57	--	0.15	49	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	4.4	--	0.075	7.3	--	0.075	6.8	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.1	--	0.38	2.9	--	0.38	2.9	--	0.38
		Sodium	NS	NS	NS	NS	24	--	0.50	25	--	0.50	25	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00075	J	0.0016	0.00076	J	0.0016	ND	U	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	0.00022	J	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	ND	U	2.0	ND	U	20
		Chloride	250	NS	NS	250	7.8	--	1.5	48	--	15	37	--	15
		Sulfate	600	250	NS	250	27	--	4.5	60	--	4.5	50	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.10	--	0.090	1.4	--	0.090	0.83	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	110	--	6.0	91	--	6.0	99	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	110	--	6.0	91	--	6.0	99	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106106	KAFB-106107	KAFB-106149-484								
		Field Sample ID:			GW106-604	GW107-204	GW149-484-204								
		Sample Date:			10/8/2020	10/12/2020	10/21/2020								
		Sample Type:			Field Duplicate	REG	REG								
		Sample Depth (ft bgs):			454.3	510.9	472								
		Reference Elevation Interval (ft AMSL):			4857	4814	4857								
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	51	--	0.15	49	--	0.15	93	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	7.1	--	0.075	6.4	--	0.075	15	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	3.1	--	0.38	2.6	--	0.38	3.4	--	0.38
		Sodium	NS	NS	NS	NS	26	--	0.50	24	--	0.50	32	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00079	J	0.0016	0.00073	J	0.0016	0.0038	--	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00025	0.00057	--	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	34	--	15	37	--	15	13	--	1.5
		Sulfate	600	250	NS	250	51	--	4.5	52	--	4.5	ND	U	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.85	--	0.090	0.83	--	0.090	ND	U	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	96	--	6.0	95	--	6.0	320	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	96	--	6.0	95	--	6.0	320	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106151-484	KAFB-106151-484	KAFB-106152-484									
		Field Sample ID:		GW151-484-204	GW151-484-604	GW152-484-204									
		Sample Date:		10/21/2020	10/21/2020	10/21/2020									
		Sample Type:		REG	Field Duplicate	REG									
		Sample Depth (ft bgs):		472.19	472.19	474.88									
		Reference Elevation Interval (ft AMSL):		4857	4857	4857									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	160	--	0.15	160	--	0.15	160	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	25	--	0.075	25	--	0.075	27	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	0.19	--	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	4.1	--	0.38	4.1	--	0.38	5.0	--	0.38
		Sodium	NS	NS	NS	NS	40	--	0.50	40	--	0.50	44	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	ND	U	0.0016	0.0048	--	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00025	0.00025	J	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	78	--	15	79	--	15	77	--	6.0
		Sulfate	600	250	NS	250	330	--	45	310	--	45	38	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.36	--	0.090	0.40	--	0.090	ND	U	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	220	--	6.0	200	--	6.0	500	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	220	--	6.0	200	--	6.0	500	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106153-484	KAFB-106201	KAFB-106202									
		Field Sample ID:		GW153-484-204	GW201-204	GW202-204									
		Sample Date:		10/21/2020	10/7/2020	10/7/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		474.89	490.35	520.6									
		Reference Elevation Interval (ft AMSL):		4857	4857	4838									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	130	--	0.15	64	--	0.15	42	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	20	--	0.075	8.8	--	0.075	5.7	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	4.1	--	0.38	2.7	--	0.38	2.4	--	0.38
		Sodium	NS	NS	NS	NS	39	--	0.50	30	--	0.50	30	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.0039	--	0.0016	ND	U	0.0016	0.00082	J	0.0016
		Lead	0.015	0.015	0.015	0.015	0.00013	J	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	1.4	J	2.0	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	14	--	1.5	48	--	15	21	--	1.5
		Sulfate	600	250	NS	250	1.8	J	4.5	84	--	45	38	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	ND	U	0.090	1.8	--	0.090	0.51	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	370	--	6.0	100	--	6.0	110	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	370	--	6.0	100	--	6.0	110	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106203	KAFB-106204	KAFB-106205									
		Field Sample ID:		GW203-204	GW204-204	GW205-204									
		Sample Date:		10/7/2020	10/6/2020	10/6/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		623.78	463.2	493.2									
		Reference Elevation Interval (ft AMSL):		4814	4857	4838									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	37	--	0.15	89	--	0.15	63	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.1	ND	U	0.1
		Magnesium	NS	NS	NS	NS	4.9	--	0.075	12	--	0.075	8.7	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.2	--	0.38	3.6	--	0.38	3.5	--	0.38
		Sodium	NS	NS	NS	NS	21	--	0.50	36	--	0.5	31	--	0.5
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00086	J	0.0016	ND	U	0.0016	ND	U	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	2	J	2	1.6	J	2
		Chloride	250	NS	NS	250	10	--	1.5	120	--	15	72	--	15
		Sulfate	600	250	NS	250	30	--	4.5	110	--	45	65	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.044	J	0.090	2.5	--	0.18	1.8	--	0.09
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	110	--	6.0	94	--	6	120	--	6
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6	ND	U	6
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	110	--	6.0	94	--	6	120	--	6

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106206	KAFB-106207	KAFB-106208									
		Field Sample ID:		GW206-204	GW207-204	GW208-204									
		Sample Date:		10/12/2020	10/5/2020	10/6/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		594.2	473.7	503.7									
		Reference Elevation Interval (ft AMSL):		4814	4857	4838									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	43	--	0.15	58	--	0.15	49	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.1	ND	U	0.1
		Magnesium	NS	NS	NS	NS	5.7	--	0.075	8.2	--	0.075	6.7	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.5	--	0.38	2.9	--	0.38	2.7	--	0.38
		Sodium	NS	NS	NS	NS	26	--	0.50	24	--	0.5	26	--	0.5
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	ND	UJ	0.0016	0.0008	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	UJ	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	ND	U	2	1.5	J	2
		Chloride	250	NS	NS	250	54	--	15	77	--	15	44	--	15
		Sulfate	600	250	NS	250	56	--	4.5	50	--	4.5	49	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	1.1	--	0.090	1.4	--	0.09	0.96	--	0.09
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	92	--	6.0	95	--	6	97	--	6
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6	ND	U	6
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	92	--	6.0	95	--	6	97	--	6

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106208	KAFB-106209	KAFB-106212									
		Field Sample ID:		GW208-604	GW209-204	GW212-204									
		Sample Date:		10/6/2020	10/6/2020	10/9/2020									
		Sample Type:		Field Duplicate	REG	REG									
		Sample Depth (ft bgs):		503.7	603.7	543.9									
		Reference Elevation Interval (ft AMSL):		4838	4814	4814									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	50	--	0.15	36	--	0.15	35	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.1	ND	U	0.1	ND	U	0.10
		Magnesium	NS	NS	NS	NS	6.9	--	0.075	5	--	0.075	4.9	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.8	--	0.38	2.4	--	0.38	1.7	--	0.38
		Sodium	NS	NS	NS	NS	27	--	0.5	23	--	0.5	24	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	0.00081	J	0.0016	0.0010	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	1.3	J	2	ND	U	2	ND	UJ	2.0
		Chloride	250	NS	NS	250	45	--	15	13	--	1.5	23	--	1.5
		Sulfate	600	250	NS	250	50	--	4.5	30	--	4.5	23	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.94	--	0.09	0.086	J	0.09	0.093	J	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	97	--	6	110	--	6	110	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6	ND	U	6	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	97	--	6	110	--	6	110	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:	KAFB-106213			KAFB-106214			KAFB-106215						
		Field Sample ID:	GW213-204			GW214-204			GW215-204						
		Sample Date:	10/14/2020			10/14/2020			10/14/2020						
		Sample Type:	REG			REG			REG						
		Sample Depth (ft bgs):	451.3			478.95			547.7						
		Reference Elevation Interval (ft AMSL):	4857			4838			4814						
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	46	--	0.15	47	--	0.15	34	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	5.7	--	0.075	5.9	--	0.075	4.2	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.4	--	0.38	2.4	--	0.38	2.0	--	0.38
		Sodium	NS	NS	NS	NS	28	--	0.50	29	--	0.50	25	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00068	J	0.0016	ND	U	0.0016	0.00090	J	0.0016
		Lead	0.015	0.015	0.015	0.015	0.00040	J	0.00025	0.00068	--	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	40	--	15	43	--	15	10	--	1.5
		Sulfate	600	250	NS	250	32	--	4.5	39	--	4.5	27	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.89	--	0.090	1.1	--	0.090	ND	U	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	100	--	6.0	100	--	6.0	110	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	100	--	6.0	100	--	6.0	110	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106216	KAFB-106217	KAFB-106218								
		Field Sample ID:			GW216-204	GW217-204	GW218-204								
		Sample Date:			10/7/2020	10/7/2020	10/7/2020								
		Sample Type:			REG	REG	REG								
		Sample Depth (ft bgs):			461.4	485.7	552.7								
		Reference Elevation Interval (ft AMSL):			4857	4838	4814								
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	40	--	0.15	54	--	0.15	35	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	5.5	--	0.075	7.0	--	0.075	4.3	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.2	--	0.38	2.5	--	0.38	2.1	--	0.38
		Sodium	NS	NS	NS	NS	20	--	0.50	24	--	0.50	22	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00068	J	0.0016	ND	U	0.0016	0.00079	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	1.5	J	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	26	--	1.5	61	--	15	8.7	--	1.5
		Sulfate	600	250	NS	250	30	--	4.5	37	--	4.5	26	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.42	--	0.090	1.3	--	0.090	0.047	J	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	110	--	6.0	100	--	6.0	110	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	110	J	6.0	100	--	6.0	110	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:	KAFB-106219			KAFB-106220			KAFB-106221						
		Field Sample ID:	GW219-204			GW220-204			GW221-204						
		Sample Date:	10/7/2020			10/7/2020			10/7/2020						
		Sample Type:	REG			REG			REG						
		Sample Depth (ft bgs):	466			493.7			561.7						
		Reference Elevation Interval (ft AMSL):	4857			4838			4814						
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	46	--	0.15	36	--	0.15	35	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	6.6	--	0.075	4.8	--	0.075	4.5	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	0.0049	J	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.3	--	0.38	2.1	--	0.38	2.1	--	0.38
		Sodium	NS	NS	NS	NS	21	--	0.50	19	--	0.50	21	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	0.00070	J	0.0016	ND	U	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00025	0.00025	J	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	25	--	1.5	12	J	1.5	9.8	--	1.5
		Sulfate	600	250	NS	250	42	--	4.5	29	--	4.5	28	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.93	--	0.090	0.11	--	0.090	ND	U	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	110	--	6.0	120	--	6.0	110	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	110	--	6.0	120	--	6.0	110	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106222	KAFB-106223	KAFB-106224									
		Field Sample ID:		GW222-204	GW223-204	GW224-204									
		Sample Date:		10/14/2020	10/14/2020	10/14/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		461.1	488.5	555.7									
		Reference Elevation Interval (ft AMSL):		4857	4838	4814									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	63	--	0.15	54	--	0.15	34	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	7.9	--	0.075	6.9	--	0.075	4.2	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.9	--	0.38	2.6	--	0.38	2.1	--	0.38
		Sodium	NS	NS	NS	NS	30	--	0.50	29	--	0.50	26	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	ND	U	0.0016	0.00093	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00025	0.00011	J	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	--	2.0	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	61	U	15	35	--	15	11	--	1.5
		Sulfate	600	250	NS	250	49	--	4.5	55	--	4.5	28	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	3.1	--	0.18	1.3	--	0.090	0.17	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	95	--	6.0	100	--	6.0	110	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	95	--	6.0	100	--	6.0	110	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106225	KAFB-106225	KAFB-106226									
		Field Sample ID:		GW225-204	GW225-604	GW226-204									
		Sample Date:		10/7/2020	10/7/2020	10/7/2020									
		Sample Type:		REG	Field Duplicate	REG									
		Sample Depth (ft bgs):		453.3	453.3	480.7									
		Reference Elevation Interval (ft AMSL):		4857	4857	4838									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	56	J	0.15	62	--	0.15	42	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	7.8	J	0.075	8.7	--	0.075	5.9	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.7	--	0.38	3.1	--	0.38	2.3	--	0.38
		Sodium	NS	NS	NS	NS	26	J	0.50	28	--	0.50	24	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	ND	U	0.0016	0.00069	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	0.000089	J	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	44	--	15	40	--	15	16	--	1.5
		Sulfate	600	250	NS	250	79	--	45	80	--	45	37	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	1.3	--	0.090	1.2	--	0.090	0.089	J	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	100	--	6.0	100	--	6.0	120	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	100	--	6.0	100	--	6.0	120	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106227	KAFB-106229	KAFB-106230									
		Field Sample ID:		GW227-204	GW229-204	GW230-204									
		Sample Date:		10/7/2020	10/9/2020	10/12/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		548.7	442.1	501.7									
		Reference Elevation Interval (ft AMSL):		4814	4857	4814									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	40	--	0.15	--	--	--	44	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	--	--	--	ND	U	0.10
		Magnesium	NS	NS	NS	NS	5.6	--	0.075	--	--	--	6.1	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	--	--	--	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.4	--	0.38	--	--	--	2.5	--	0.38
		Sodium	NS	NS	NS	NS	24	--	0.50	--	--	--	23	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	--	--	--	0.0010	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	--	--	--	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	--	--	--	ND	U	2.0
		Chloride	250	NS	NS	250	18	--	1.5	--	--	--	28	--	1.5
		Sulfate	600	250	NS	250	41	--	4.5	--	--	--	48	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.21	--	0.090	--	--	--	0.74	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	110	--	6.0	--	--	--	96	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	--	--	--	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	110	--	6.0	--	--	--	96	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106231	KAFB-106232	KAFB-106235-438								
		Field Sample ID:			GW231-204	GW232-204	GW235-438-204								
		Sample Date:			10/6/2020	10/6/2020	10/5/2020								
		Sample Type:			REG	REG	REG								
		Sample Depth (ft bgs):			453.7	503.7	443.9								
		Reference Elevation Interval (ft AMSL):			4857	4814	4857								
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	84	--	0.15	60	--	0.15	44	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.1	ND	U	0.1	ND	U	0.1
		Magnesium	NS	NS	NS	NS	12	--	0.075	8.3	--	0.075	6.5	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	3.7	--	0.38	3	--	0.38	3.1	--	0.38
		Sodium	NS	NS	NS	NS	36	--	0.5	28	--	0.5	22	--	0.5
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	0.00072	J	0.0016	0.00068	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	2.2	J	2	1.6	J	2	1.3	J	2
		Chloride	250	NS	NS	250	140	--	15	60	--	15	45	--	15
		Sulfate	600	250	NS	250	38	--	4.5	58	--	4.5	49	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	1.1	--	0.09	1.6	--	0.09	1.1	--	0.09
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	84	--	6	93	--	6	90	--	6
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6	ND	U	6	ND	U	6
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	84	--	6	93	--	6	90	--	6

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106235-472	KAFB-106235-501	KAFB-106236-436									
		Field Sample ID:		GW235-472-204	GW235-501-204	GW236-436-204									
		Sample Date:		10/5/2020	10/5/2020	10/5/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		472.7	501.7	441.9									
		Reference Elevation Interval (ft AMSL):		4838	4814	4857									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	53	--	0.15	55	--	0.15	42	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.1	ND	U	0.1	ND	U	0.1
		Magnesium	NS	NS	NS	NS	7.2	--	0.075	7.7	--	0.075	6.2	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	3.2	--	0.38	3.2	--	0.38	3.2	--	0.38
		Sodium	NS	NS	NS	NS	24	--	0.5	26	--	0.5	23	--	0.5
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00079	J	0.0016	0.001	J	0.0016	0.00086	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.0005	0.00015	J	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2	1.4	J	2	ND	U	2
		Chloride	250	NS	NS	250	54	--	15	58	--	15	40	--	15
		Sulfate	600	250	NS	250	65	--	4.5	64	--	4.5	50	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	1	--	0.09	1.1	--	0.09	0.84	--	0.09
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	90	--	6	86	--	6	93	--	6
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6	ND	U	6	ND	U	6
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	90	--	6	86	--	6	93	--	6

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106236-470	KAFB-106236-499	KAFB-106240-449									
		Field Sample ID:		GW236-470-204	GW236-499-204	GW240-449-204									
		Sample Date:		10/5/2020	10/5/2020	10/15/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		470.7	499.7	473.14									
		Reference Elevation Interval (ft AMSL):		4838	4814	4857									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	47	--	0.15	51	--	0.15	160	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.1	ND	U	0.1	ND	U	0.10
		Magnesium	NS	NS	NS	NS	6.8	--	0.075	7.2	--	0.075	23	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.9	--	0.38	2.8	--	0.38	4.1	--	0.38
		Sodium	NS	NS	NS	NS	22	--	0.5	24	--	0.5	39	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	ND	U	0.0016	0.00089	J	0.0016
		Lead	0.015	0.015	0.015	0.015	0.00012	J	0.00025	0.00017	J	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2	ND	U	2	2.8	--	2.0
		Chloride	250	NS	NS	250	53	--	15	53	--	15	180	--	15
		Sulfate	600	250	NS	250	58	--	4.5	63	--	4.5	230	--	45
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.81	--	0.09	0.89	--	0.09	5.5	--	0.18
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	91	--	6	85	--	6	88	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6	ND	U	6	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	91	--	6	85	--	6	88	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:			KAFB-106241-428	KAFB-106242-418	KAFB-106243-425								
		Field Sample ID:			GW241-428-204	GW242-418-204	GW243-425-204								
		Sample Date:			10/12/2020	10/6/2020	10/13/2020								
		Sample Type:			REG	REG	REG								
		Sample Depth (ft bgs):			452.2	442.24	449.14								
		Reference Elevation Interval (ft AMSL):			4857	4857	4857								
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	51	--	0.15	140	--	0.15	45	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.1	ND	U	0.10
		Magnesium	NS	NS	NS	NS	6.9	--	0.075	20	--	0.075	6.3	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.7	--	0.38	4.5	--	0.38	2.4	--	0.38
		Sodium	NS	NS	NS	NS	26	--	0.50	42	--	0.5	26	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	ND	U	0.0016	0.0012	J	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	ND	U	0.00025	0.000079	J	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	2.5	--	2	ND	U	2.0
		Chloride	250	NS	NS	250	38	--	15	150	--	15	23	--	1.5
		Sulfate	600	250	NS	250	44	--	4.5	130	--	45	35	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.48	--	0.090	5.2	--	0.45	0.076	J	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	130	--	6.0	110	--	6	120	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	130	--	6.0	110	--	6	120	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106244-445	KAFB-106245-460	KAFB-106247-450									
		Field Sample ID:		GW244-445-204	GW245-460-204	GW247-450-204									
		Sample Date:		10/14/2020	10/14/2020	10/14/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		469.19	487.77	477.42									
		Reference Elevation Interval (ft AMSL):		4857	4857	4857									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	150	--	0.15	68	--	0.15	49	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	ND	U	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	21	--	0.075	9.4	--	0.075	6.4	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	4.7	--	0.38	2.6	--	0.38	2.6	--	0.38
		Sodium	NS	NS	NS	NS	59	--	0.50	27	--	0.50	26	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00083	J	0.0016	0.00088	J	0.0016	ND	U	0.0016
		Lead	0.015	0.015	0.015	0.015	0.000081	J	0.00025	ND	U	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	1.5	J	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	110	--	15	62	--	15	10	--	1.5
		Sulfate	600	250	NS	250	280	--	45	72	--	4.5	27	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	3.8	--	0.18	1.8	--	0.18	0.50	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	100	--	6.0	110	--	6.0	160	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	100	--	6.0	110	--	6.0	160	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106S1-447	KAFB-106S2-451	KAFB-106S3-449									
		Field Sample ID:		GWS1-447-204	GWS2-451-204	GWS3-449-204									
		Sample Date:		10/21/2020	10/22/2020	10/22/2020									
		Sample Type:		REG	REG	REG									
		Sample Depth (ft bgs):		471.12	478.15	478.91									
		Reference Elevation Interval (ft AMSL):		4857	4857	4857									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	200	--	0.15	110	--	0.15	92	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	3.2	--	0.10	4.4	--	0.10	2.1	--	0.10
		Magnesium	NS	NS	NS	NS	34	--	0.075	20	--	0.075	15	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	7.1	--	0.0052	5.8	--	0.0052	3.1	--	0.0052
		Potassium	NS	NS	NS	NS	4.8	--	0.38	4.0	--	0.38	3.1	--	0.38
		Sodium	NS	NS	NS	NS	48	--	0.50	38	--	0.50	36	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.0046	--	0.0016	0.0033	--	0.0016	0.0048	--	0.0016
		Lead	0.015	0.015	0.015	0.015	0.00027	J	0.00025	0.00090	--	0.00025	0.00017	J	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	3.3	--	2.0	1.7	J	2.0	1.7	J	2.0
		Chloride	250	NS	NS	250	55	--	3.0	89	--	6.0	110	--	7.5
		Sulfate	600	250	NS	250	ND	U	4.5	1.8	J	4.5	ND	U	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	ND	U	0.090	ND	U	0.090	ND	U	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	560	--	6.0	280	--	6.0	310	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	560	--	6.0	280	--	6.0	310	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106S4-446	KAFB-106S5-446	KAFB-106S5-446									
		Field Sample ID:		GWS4-446-204	GWS5-446-204	GWS5-446-604									
		Sample Date:		10/22/2020	10/22/2020	10/22/2020									
		Sample Type:		REG	REG	Field Duplicate									
		Sample Depth (ft bgs):		473.04	470.1	470.1									
		Reference Elevation Interval (ft AMSL):		4857	4857	4857									
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	190	--	0.15	65	--	0.15	65	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.10	0.88	--	0.10	0.82	--	0.10
		Magnesium	NS	NS	NS	NS	29	--	0.075	11	--	0.075	11	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	2.0	--	0.0052	2.0	--	0.0052
		Potassium	NS	NS	NS	NS	5.0	--	0.38	2.9	--	0.38	2.7	--	0.38
		Sodium	NS	NS	NS	NS	65	--	0.50	28	--	0.50	27	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.00078	J	0.0016	0.0025	--	0.0016	0.0024	--	0.0016
		Lead	0.015	0.015	0.015	0.015	ND	U	0.00025	0.00075	--	0.00025	0.00050	--	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	2.2	J	2.0	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	290	--	150	23	--	1.5	23	--	1.5
		Sulfate	600	250	NS	250	340	J	450	ND	U	4.5	ND	U	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	6.5	--	0.45	ND	U	0.090	ND	U	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	98	--	6.0	240	--	6.0	240	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	98	--	6.0	240	--	6.0	240	--	6.0

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106S7-451		KAFB-106S8-451						
		Field Sample ID:		GWS7-451-204		GWS8-451-204						
		Sample Date:		10/22/2020		10/21/2020						
		Sample Type:		REG		REG						
		Sample Depth (ft bgs):		475.1		478.32						
		Reference Elevation Interval (ft AMSL):		4857		4857						
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	100	--	0.15	110	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	0.15	J	0.10	6	J	0.1
		Magnesium	NS	NS	NS	NS	17	--	0.075	20	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	2.9	--	0.0052	2.2	J	0.0052
		Potassium	NS	NS	NS	NS	3.2	--	0.38	4.4	--	0.38
		Sodium	NS	NS	NS	NS	38	--	0.50	33	--	0.5
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.0061	--	0.0016	0.01	--	0.0016
		Lead	0.015	0.015	0.015	0.015	0.00027	J	0.00025	0.00023	J	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	1.3	J	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	39	--	3.0	12	--	1.5
		Sulfate	600	250	NS	250	3.7	J	4.5	4.5	J	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	ND	U	0.090	ND	U	0.09
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	330	--	6.0	450	--	6
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	330	--	6.0	450	--	6

**Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020**

		Well Location ID:		KAFB-106S9-447		KAFB-3411						
		Field Sample ID:		GWS9-447-204		GW3411-204						
		Sample Date:		10/21/2020		10/2/2020						
		Sample Type:		REG		REG						
		Sample Depth (ft bgs):		473.7		482						
		Reference Elevation Interval (ft AMSL):		4857		4857						
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	190	--	0.15	36	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	4.2	--	0.10	ND	U	0.10
		Magnesium	NS	NS	NS	NS	28	--	0.075	5.4	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	1.8	--	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	4.5	--	0.38	2.2	--	0.38
		Sodium	NS	NS	NS	NS	41	--	0.50	20	--	0.50
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	0.0023	--	0.0016	ND	U	0.0016
		Lead	0.015	0.015	0.015	0.015	0.00011	J	0.00025	ND	U	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2.0	ND	U	2.0
		Chloride	250	NS	NS	250	79	--	15	8.1	--	1.5
		Sulfate	600	250	NS	250	370	--	45	26	--	4.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	ND	U	0.090	0.12	--	0.090
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	300	--	6.0	110	--	6.0
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6.0	ND	U	6.0
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	300	--	6.0	110	--	6.0

Table 4-7
Groundwater Analytical Results for Inorganic Compounds for Groundwater Monitoring Wells, Q4 2020

^a NM WQCC numeric standards per the NMAC Title 20.6.2.3101A, Standards for Ground Water of 10,000 mg/L Total Dissolved Solids Concentration or Less (NMAC 2018). For metals, the NM WQCC numeric standard applies to dissolved metals.

^b EPA National Primary Drinking Water Regulations, MCLs and Secondary MCLs, Title 40CFR Part 141, 143 (May 2018).

^c EPA Region 6 RSL for Tapwater (November 2020) for hazard index = 1.0 for noncarcinogens and a 10-5 cancer risk level for carcinogens.

^d The project screening level was selected to satisfy the requirements of the Kirtland AFB Hazardous Waste Permit Number NM9570024423 as the lowest of (1) NM WQCC numeric standard or (2) EPA MCL. If no NM WQCC standard or MCL exists for any analyte, then the project screening level will be the EPA RSL.

^e The analytical method utilized to analyze for total nitrate/nitrite nitrogen concentrations (Method 353.2) cannot identify individual nitrate and nitrite concentrations without modification. Typically, in highly oxidizing and near neutral aquifers, nitrate is the primary nitrogen species found in groundwater (Langmuir, 1997). Previous studies in the Albuquerque Basin have used total nitrate/nitrite nitrogen concentrations as equivalent to nitrate nitrogen concentrations (Longmire, 2016; Anderholm et al., 1995). Therefore, total nitrate/nitrite nitrogen concentrations were compared to screening levels for nitrate in this report.

AFB = Air Force Base

AMSL = above mean sea level

bgs = below ground surface

CaCO₃ = calcium carbonate

CFR = Code of Federal Regulations

EPA = U.S. Environmental Protection Agency

ft = foot (feet)

ID = identification

LOD = limit of detection

MCL = maximum contaminant level

mg/L = milligram per liter

ND = not detected

NM = New Mexico

NMAC = New Mexico Administrative Code

NS = not specified

Q4 = fourth quarter

REG = normal field sample

RSL = regional screening level

Val Qual = validation qualifier

WQCC = Water Quality Control Commission

Shading = detected concentrations above the detection limit

Bold/Shading = reported concentrations exceed the project screening level

Val Quals based on independent data validation

J = Qualifier denotes the analyte was positively identified, but the associated numerical value is estimated.

U = Qualifier denotes the analyte was analyzed but not detected above the detection limit. The value associated with the U-qualifier is the LOD.

-- = Validation qualifier not assigned.

Anderholm, S.K., M.J. Radell, and S.F. Richey. 1995. *Water-quality Assessment of the Rio Grande Valley Study Unit, Colorado, New Mexico, and Texas – Analysis of Selected Nutrient, Suspended-sediment, and Pesticide Data*. U.S. Geological Survey. 167 p.

Langmuir, D. 1997. *Aqueous Environmental Geochemistry*. Prentice-Hall, Upper Saddle River, New Jersey. 600 p.

Longmire, D. 2016. *Application of PHREEQC for Evaluating Precipitation of Reactive Phases During Injection of Treated Effluent Water at Well KAFB-7, Kirtland Air Force Base, Albuquerque, New Mexico*. NMED. 9 p. February 2.

**Table 4-8
Historical LNAPL Thickness**

Well ID	KAFB-106005	KAFB-106006	KAFB-106008	KAFB-106009	KAFB-106010	KAFB-106014	KAFB-106028	KAFB-106059	KAFB-106064	KAFB-106076	KAFB-106079	KAFB-106150-484	KAFB-106154-484
REI	4857	4857	4857	4857	4857	4857	4857	4857		4857	4857	4857	4857
Sampling Quarter	LNAPL Thickness (feet)												
Q1 2007	1.44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q1 2008	NA	0.58	0.99	1.39	0.61	NA	NA	NA	NA	NA	NA	NA	NA
Q2 2008	NA	NA	1.03	1.48	0.73	NA	NA	NA	NA	NA	NA	NA	NA
Q3 2008	NA	0.28	1.87	1.78	0.89	NA	NA	NA	NA	NA	NA	NA	NA
Q4 2008	NA	0.82	1.65	1.92	0.89	1.55	NA	NA	NA	NA	NA	NA	NA
Q1 2009	NA	0.73	1.26	1.42	NA	0.61	NA	NA	NA	NA	NA	NA	NA
Q3 2009	3.01	1.47	2.71	1.77	0.89	1.07	NA	NA	NA	NA	NA	NA	NA
Q1 2010	0.25	0.2	2.38	1.09	0.05	0.62	NA	NA	NA	NA	NA	NA	NA
Q2 2010	3.33	2.45	3.8	0.79	1.18	0.23	NA	NA	NA	NA	NA	NA	NA
Q3 2010	4.03	0.88	2.83	1.01	0.06	0.21	0.15	NA	NA	NA	NA	NA	NA
Q4 2010	1.54	1.04	1.24	1.1	0.15	0.21	0.22	NA	NA	NA	NA	NA	NA
Q1 2011	0.33	0.55	0.83	0.42	--	--	0.09	NA	NA	NA	NA	NA	NA
Q2 2011	0.06	0.33	0.02	--	--	--	--	0.23	--	0.26	--	NA	NA
Q3 2011	0.86	0.85	0.17	2.42	--	--	0.2	1.25	0.11	1.07	--	NA	NA
Q4 2011	0.26	0.88	0.44	0.33	--	--	0.38	0.94	--	1.38	--	NA	NA
Q1 2012	--	--	--	--	--	--	--	0.72	--	0.46	--	NA	NA
Q2 2012	--	--	--	--	--	--	--	--	--	0.64	--	NA	NA
Q3 2012	--	--	--	--	--	--	--	--	--	0.55	--	NA	NA
Q4 2012	--	--	--	--	--	--	--	0.14	--	0.8	--	NA	NA
Q1 2103	--	--	--	--	--	--	--	--	--	0.04	--	NA	NA
Q2 2103	0.01	--	--	--	--	--	--	--	--	--	--	NA	NA
Q3 2013	--	--	--	--	--	--	--	0.38	--	--	--	NA	NA
Q4 2013	0.03	--	--	--	--	--	--	--	--	0.25	--	NA	NA
Q1 2014	--	--	--	--	--	--	--	--	--	--	--	NA	NA
Q2 2014	--	--	--	--	--	--	--	--	--	--	--	NA	NA
Q3 2014	--	--	--	--	--	--	--	--	--	--	--	NA	NA
Q4 2014	--	0.06	--	0.05	--	--	--	--	--	--	--	NA	NA
Q1 2015	--	--	--	--	--	--	--	--	--	--	--	NA	NA
Q2 2015	--	--	--	--	--	--	--	--	--	--	--	NA	NA
Q3 2015	--	--	--	--	--	--	--	--	--	--	--	NA	NA
Q4 2015	--	--	--	--	--	--	--	--	--	0.02	--	NA	NA
Q1 2016	0.1	NA	NA	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Q2 2016	0.01	--	0.05	--	--	--	--	--	--	0.01	--	NA	NA
Q3 2016	0.01	--	0.04	--	--	--	--	--	--	0.01	--	NA	NA
Q4 2016	--	--	0.03	--	--	--	--	--	--	--	--	NA	NA
Q1 2017	--	--	0.01	--	--	--	--	--	--	--	--	NA	NA
Q2 2017	--	--	--	--	--	--	--	--	--	--	--	NA	NA
Q3 2017	--	--	--	--	--	--	--	--	NA	--	--	NA	NA
Q4 2017	--	--	--	--	--	--	--	--	NA	--	--	0.03	0.03
Q1 2018	--	--	--	--	--	--	--	--	NA	0.01	0.02	0.03	0.02
Q2 2018	--	--	--	--	--	--	--	--	NA	--	0.03	0.06	0.03
Q3 2018	--	--	--	--	--	--	--	--	NA	--	0.03	0.05	0.02
Q4 2018	--	--	--	--	--	--	--	--	NA	0.01	--	0.11	0.04
Q1 2019	--	--	--	--	--	0.11	--	0.34	NA	0.02	0.18	--	0.11
Q2 2019	--	--	--	--	--	0.10	--	0.21	NA	0.01	0.14	--	--
Q3 2019	--	--	--	--	--	0.06	--	0.21	NA	0.01	0.15	--	0.21
Q4 2019	--	--	--	--	--	--	--	--	NA	0.01	--	0.04	0.16
Q1 2020	--	--	--	--	--	--	--	0.16	--	0.04	--	0.11	--
Q2 2020	--	--	--	--	--	--	--	0.15	--	0.01	--	0.38	--
Q3 2020	--	--	--	--	--	--	--	0.01	--	--	--	0.27	0.02
Q4 2020	0.01	--	--	--	--	--	--	0.01	--	--	--	0.10	0.04

**Table 4-8
Historical LNAPL Thickness**

-- = no LNAPL detected

ID = identification

LNAPL = light non-aqueous phase liquid

NA = not applicable; this well was not gauged in the sampling quarter.

Q1 = first quarter

Q2 = second quarter

Q3 = third quarter

Q4 = fourth quarter

REI = reference elevation interval

**Table 4-9
Historical EDB Concentrations**

Analyte:			EDB (1,2-dibromoethane)		
EPA MCL ^a :			0.05 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD
KAFB-106001 ^c	10/30/2020	Q4 2020	0.65	--	0.097
	4/16/2020	Q2 2020	2.4	--	0.38
	11/1/2019	Q4 2019	0.76	--	0.19
	10/30/2018	Q4 2018	1.2	--	0.19
KAFB-106002	10/20/2020	Q4 2020	ND	U	0.019
	4/17/2020	Q2 2020	ND	U	0.019
	10/11/2019	Q4 2019	ND	U	0.019
	4/2/2019	Q2 2019	ND	U	0.019
KAFB-106003	10/13/2020	Q4 2020	ND	U	0.019
	7/15/2020	Q3 2020	ND	U	0.019
	1/17/2020	Q1 2020	ND	U	0.019
	10/28/2019	Q4 2019	ND	U	0.019
KAFB-106004	10/14/2020	Q4 2020	ND	U	0.019
	7/16/2020	Q3 2020	ND	U	0.02
	5/5/2020	Q2 2020	ND	U	0.019
	1/16/2020	Q1 2020	ND	U	0.019
KAFB-106005	10/23/2020	Q4 2020	0.40	--	0.096
	7/13/2020	Q3 2020	1.9	J	0.39
	4/16/2020	Q2 2020	0.016	J	0.019
	1/8/2020	Q1 2020	0.045	--	0.019
KAFB-106006	10/29/2020	Q4 2020	ND	UJ	0.019
	4/24/2020	Q2 2020	ND	U	0.019
	11/4/2019	Q4 2019	ND	U	0.019
	4/25/2019	Q2 2019	0.035	--	0.019
KAFB-106007	10/5/2020	Q4 2020	ND	U	0.019
	4/24/2020	Q2 2020	ND	U	0.019
	10/18/2019	Q4 2019	ND	U	0.019
	4/24/2019	Q2 2019	ND	U	0.019
KAFB-106008 ^c	10/21/2020	Q4 2020	8.0	--	1.9
	4/16/2020	Q2 2020	0.71	--	0.095
	11/7/2019	Q4 2019	4.6	--	1.9
	10/22/2018	Q4 2018	20	--	3.8
KAFB-106009	10/12/2020	Q4 2020	0.017	J	0.019
	7/9/2020	Q3 2020	0.019	J	0.019
	4/16/2020	Q2 2020	0.016	J	0.019
	1/8/2020	Q1 2020	ND	U	0.019
KAFB-106010	10/22/2020	Q4 2020	8.2	--	0.96
	4/24/2020	Q2 2020	0.11	--	0.019
	11/5/2019	Q4 2019	0.89	J	0.38
	4/23/2019	Q2 2019	0.65	--	0.19
KAFB-106011	10/1/2020	Q4 2020	0.018	J	0.019
	4/17/2020	Q2 2020	ND	U	0.019
	10/14/2019	Q4 2019	ND	U	0.019
	4/2/2019	Q2 2019	0.013	J	0.019
KAFB-106012R	10/2/2020	Q4 2020	ND	U	0.019
	7/14/2020	Q3 2020	ND	U	0.019
	4/23/2020	Q2 2020	ND	U	0.019
	1/14/2020	Q1 2020	ND	U	0.019
KAFB-106013	10/13/2020	Q4 2020	ND	U	0.019
	7/15/2020	Q3 2020	ND	UJ	0.019
	5/1/2020	Q2 2020	ND	U	0.019
	1/15/2020	Q1 2020	ND	U	0.019
KAFB-106014	10/29/2020	Q4 2020	2.6	--	0.19
	4/24/2020	Q2 2020	0.043	--	0.019
	11/4/2019	Q4 2019	ND	U	0.019
	5/1/2019	Q2 2019	0.1	--	0.019
KAFB-106015	10/13/2020	Q4 2020	ND	U	0.019
	4/6/2020	Q2 2020	ND	U	0.019
	10/30/2019	Q4 2019	ND	U	0.019
	4/16/2019	Q2 2019	ND	U	0.019
KAFB-106016	10/1/2020	Q4 2020	ND	U	0.019
	4/17/2020	Q2 2020	ND	U	0.019
	10/11/2019	Q4 2019	ND	U	0.019
	4/2/2019	Q2 2019	ND	U	0.019
KAFB-106017	10/19/2020	Q4 2020	0.15	--	0.019
	4/21/2020	Q2 2020	0.28	--	0.019
	10/15/2019	Q4 2019	0.25	J	0.095
	4/2/2019	Q2 2019	0.2	--	0.019
KAFB-106018	10/28/2020	Q4 2020	0.014	J	0.019
	5/8/2020	Q2 2020	0.017	J	0.019
	10/15/2019	Q4 2019	ND	U	0.019
	4/4/2019	Q2 2019	0.038	--	0.019
KAFB-106019	10/8/2020	Q4 2020	0.026	J	0.019
	4/23/2020	Q2 2020	ND	U	0.019
	10/16/2019	Q4 2019	0.052	--	0.019
	5/1/2019	Q2 2019	0.016	J	0.019

**Table 4-9
Historical EDB Concentrations**

Analyte:			EDB (1,2-dibromoethane)		
EPA MCL ^a :			0.05 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD
KAFB-106020	10/29/2020	Q4 2020	ND	U	0.019
	4/28/2020	Q2 2020	ND	U	0.019
	10/17/2019	Q4 2019	ND	U	0.019
	5/2/2019	Q2 2019	ND	U	0.019
KAFB-106021	10/6/2020	Q4 2020	ND	U	0.019
	4/6/2020	Q2 2020	ND	U	0.019
	10/28/2019	Q4 2019	ND	U	0.019
	4/15/2019	Q2 2019	ND	U	0.019
KAFB-106022	10/9/2020	Q4 2020	0.027	J	0.019
	4/6/2020	Q2 2020	0.017	J	0.019
	10/24/2019	Q4 2019	ND	U	0.019
	4/15/2019	Q2 2019	0.022	J	0.019
KAFB-106023	10/13/2020	Q4 2020	ND	U	0.019
	4/10/2020	Q2 2020	ND	U	0.019
	10/31/2019	Q4 2019	ND	U	0.019
	4/9/2019	Q2 2019	ND	U	0.019
KAFB-106024	10/21/2020	Q4 2020	ND	U	0.019
	4/20/2020	Q2 2020	ND	U	0.019
	10/16/2019	Q4 2019	ND	U	0.019
	4/3/2019	Q2 2019	ND	U	0.019
KAFB-106025	10/15/2020	Q4 2020	ND	U	0.019
	4/8/2020	Q2 2020	ND	U	0.019
	10/30/2019	Q4 2019	ND	U	0.019
	4/9/2019	Q2 2019	ND	U	0.019
KAFB-106026 ^d	10/12/2020	Q4 2020	ND	UJ	0.019
	4/10/2020	Q2 2020	ND	U	0.019
	10/29/2019	Q4 2019	ND	U	0.019
	11/12/2015	Q4 2015	0.0214	J	0.0285
KAFB-106027	10/1/2020	Q4 2020	ND	U	0.019
	4/20/2020	Q2 2020	ND	U	0.019
	10/15/2019	Q4 2019	ND	U	0.019
	4/1/2019	Q2 2019	ND	U	0.019
KAFB-106028 ^e	10/22/2020	Q4 2020	29	--	3.8
	4/10/2020	Q2 2020	2.9	J	0.38
	4/22/2019	Q2 2019	0.34	--	0.095
	10/22/2018	Q4 2018	13	--	1.9
KAFB-106029	10/6/2020	Q4 2020	ND	U	0.019
	7/9/2020	Q3 2020	ND	U	0.019
	4/6/2020	Q2 2020	ND	U	0.019
	1/6/2020	Q1 2020	ND	U	0.019
KAFB-106030	10/6/2020	Q4 2020	ND	U	0.019
	7/9/2020	Q3 2020	ND	U	0.019
	4/6/2020	Q2 2020	ND	U	0.019
	1/6/2020	Q1 2020	ND	U	0.019
KAFB-106031	10/6/2020	Q4 2020	ND	U	0.019
	7/9/2020	Q3 2020	ND	U	0.019
	4/6/2020	Q2 2020	ND	U	0.019
	1/6/2020	Q1 2020	ND	U	0.019
KAFB-106032	10/8/2020	Q4 2020	ND	U	0.019
	7/8/2020	Q3 2020	ND	U	0.019
	4/8/2020	Q2 2020	ND	U	0.019
	1/6/2020	Q1 2020	ND	U	0.019
KAFB-106033	10/8/2020	Q4 2020	ND	U	0.019
	7/8/2020	Q3 2020	ND	U	0.019
	4/8/2020	Q2 2020	ND	U	0.019
	1/6/2020	Q1 2020	ND	U	0.019
KAFB-106034	10/8/2020	Q4 2020	ND	U	0.019
	7/8/2020	Q3 2020	ND	U	0.019
	4/8/2020	Q2 2020	ND	U	0.019
	1/6/2020	Q1 2020	ND	U	0.019
KAFB-106035	10/9/2020	Q4 2020	0.060	--	0.019
	4/8/2020	Q2 2020	0.093	--	0.019
	10/29/2019	Q4 2019	0.12	--	0.019
	4/10/2019	Q2 2019	0.12	--	0.019
KAFB-106036	10/12/2020	Q4 2020	0.12	--	0.019
	4/8/2020	Q2 2020	0.063	--	0.019
	10/29/2019	Q4 2019	0.097	--	0.019
	4/10/2019	Q2 2019	0.13	--	0.019
KAFB-106037		Q4 2020			
	4/8/2020	Q2 2020	ND	U	0.019
	10/29/2019	Q4 2019	0.15	--	0.019
	4/10/2019	Q2 2019	0.13	--	0.019
KAFB-106038	10/5/2020	Q4 2020	ND	U	0.019
	4/22/2020	Q2 2020	ND	U	0.019
	10/17/2019	Q4 2019	ND	U	0.019
	4/4/2019	Q2 2019	ND	U	0.019
KAFB-106039	10/5/2020	Q4 2020	ND	U	0.019
	4/22/2020	Q2 2020	ND	U	0.019
	10/17/2019	Q4 2019	ND	U	0.019
	4/22/2019	Q2 2019	ND	U	0.019

**Table 4-9
Historical EDB Concentrations**

Analyte:			EDB (1,2-dibromoethane)		
EPA MCL ^a :			0.05 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD
KAFB-106040	10/7/2020	Q4 2020	ND	U	0.019
	4/23/2020	Q2 2020	ND	U	0.019
	10/16/2019	Q4 2019	ND	U	0.019
	4/22/2019	Q2 2019	ND	U	0.019
KAFB-106041	10/8/2020	Q4 2020	0.074	--	0.019
	7/8/2020	Q3 2020	0.016	J	0.019
	4/9/2020	Q2 2020	0.054	--	0.019
	1/9/2020	Q1 2020	0.049	--	0.019
KAFB-106042	10/8/2020	Q4 2020	0.043	--	0.019
	4/9/2020	Q2 2020	0.032	--	0.019
	10/30/2019	Q4 2019	0.057	J	0.019
	4/8/2019	Q2 2019	0.027	J	0.019
KAFB-106043	10/12/2020	Q4 2020	ND	U	0.019
	4/9/2020	Q2 2020	ND	U	0.019
	10/30/2019	Q4 2019	ND	U	0.019
	4/8/2019	Q2 2019	ND	U	0.019
KAFB-106044	10/1/2020	Q4 2020	ND	U	0.019
	4/20/2020	Q2 2020	ND	U	0.019
	10/15/2019	Q4 2019	ND	U	0.019
	4/1/2019	Q2 2019	ND	U	0.019
KAFB-106045	10/8/2020	Q4 2020	ND	U	0.019
	4/24/2020	Q2 2020	ND	U	0.019
	10/21/2019	Q4 2019	ND	U	0.019
	4/24/2019	Q2 2019	ND	U	0.019
KAFB-106046	10/20/2020	Q4 2020	ND	U	0.019
	4/22/2020	Q2 2020	ND	U	0.019
	10/14/2019	Q4 2019	ND	U	0.019
	4/3/2019	Q2 2019	ND	U	0.019
KAFB-106047	10/20/2020	Q4 2020	ND	U	0.019
	4/17/2020	Q2 2020	ND	U	0.019
	10/14/2019	Q4 2019	ND	U	0.019
	4/3/2019	Q2 2019	ND	U	0.019
KAFB-106048	10/15/2020	Q4 2020	ND	U	0.019
	4/29/2020	Q2 2020	ND	U	0.019
	10/22/2019	Q4 2019	ND	U	0.019
	4/26/2019	Q2 2019	ND	U	0.019
KAFB-106049	10/12/2020	Q4 2020	ND	U	0.019
	7/8/2020	Q3 2020	ND	U	0.019
	4/9/2020	Q2 2020	ND	U	0.019
	1/8/2020	Q1 2020	ND	U	0.019
KAFB-106050	10/12/2020	Q4 2020	ND	U	0.019
	7/8/2020	Q3 2020	ND	U	0.019
	4/9/2020	Q2 2020	ND	U	0.019
	1/8/2020	Q1 2020	ND	U	0.019
KAFB-106051	10/15/2020	Q4 2020	ND	U	0.019
	7/8/2020	Q3 2020	ND	U	0.019
	4/9/2020	Q2 2020	ND	U	0.019
	1/8/2020	Q1 2020	ND	U	0.019
KAFB-106052	10/12/2020	Q4 2020	ND	U	0.019
	4/8/2020	Q2 2020	ND	U	0.019
	10/30/2019	Q4 2019	ND	U	0.019
	4/8/2019	Q2 2019	ND	U	0.019
KAFB-106053	10/9/2020	Q4 2020	ND	U	0.019
	4/8/2020	Q2 2020	ND	U	0.019
	10/30/2019	Q4 2019	ND	U	0.019
	4/8/2019	Q2 2019	ND	U	0.019
KAFB-106054	10/9/2020	Q4 2020	ND	U	0.019
	4/8/2020	Q2 2020	ND	U	0.019
	10/30/2019	Q4 2019	ND	U	0.019
	4/8/2019	Q2 2019	ND	U	0.019
KAFB-106055	10/8/2020	Q4 2020	ND	U	0.019
	4/7/2020	Q2 2020	ND	U	0.019
	10/28/2019	Q4 2019	ND	U	0.019
	4/15/2019	Q2 2019	0.019	J	0.019
KAFB-106057	10/8/2020	Q4 2020	ND	U	0.019
	4/7/2020	Q2 2020	ND	U	0.019
	10/28/2019	Q4 2019	ND	U	0.019
	4/15/2019	Q2 2019	0.01	J	0.019
KAFB-106058	10/8/2020	Q4 2020	ND	U	0.019
	4/9/2020	Q2 2020	ND	U	0.019
	10/28/2019	Q4 2019	ND	U	0.019
	4/15/2019	Q2 2019	0.0095	J	0.019
KAFB-106059	10/23/2020	Q4 2020	6.5	--	0.95
	5/6/2020	Q2 2020	0.03	--	0.019
	10/21/2019	Q4 2019	1.7	J	0.38
	4/26/2019	Q2 2019	3.1	--	0.38
KAFB-106060	10/20/2020	Q4 2020	ND	U	0.019
	4/20/2020	Q2 2020	ND	U	0.019
	10/11/2019	Q4 2019	0.14	--	0.019
	4/1/2019	Q2 2019	0.049	--	0.019

**Table 4-9
Historical EDB Concentrations**

Analyte:			EDB (1,2-dibromoethane)		
EPA MCL ^a :			0.05 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD
KAFB-106061	10/15/2020	Q4 2020	ND	U	0.019
	4/27/2020	Q2 2020	ND	U	0.019
	11/5/2019	Q4 2019	ND	U	0.019
	4/2/2019	Q2 2019	ND	U	0.019
KAFB-106062	10/20/2020	Q4 2020	ND	U	0.019
	4/21/2020	Q2 2020	ND	UJ	0.019
	10/14/2019	Q4 2019	ND	U	0.019
	4/4/2019	Q2 2019	ND	U	0.019
KAFB-106063 ^f	10/14/2020	Q4 2020	ND	U	0.019
	5/19/2020	Q2 2020	ND	U	0.019
	10/4/2018	Q4 2018	3.6	J	0.38
	4/10/2018	Q2 2018	3.7	--	0.95
KAFB-106064 ^f	10/14/2020	Q4 2020	ND	U	0.019
	5/19/2020	Q2 2020	ND	U	0.019
	10/4/2018	Q4 2018	0.25	--	0.019
	4/10/2018	Q2 2018	12	--	1.9
KAFB-106065	10/19/2020	Q4 2020	ND	U	0.019
	4/22/2020	Q2 2020	ND	U	0.019
	10/11/2019	Q4 2019	ND	U	0.019
	4/2/2019	Q2 2019	ND	U	0.019
KAFB-106066	10/16/2020	Q4 2020	ND	U	0.019
	4/22/2020	Q2 2020	ND	U	0.019
	10/10/2019	Q4 2019	ND	U	0.019
	4/2/2019	Q2 2019	ND	U	0.019
KAFB-106067	10/19/2020	Q4 2020	0.017	J	0.019
	4/21/2020	Q2 2020	ND	UJ	0.019
	10/14/2019	Q4 2019	ND	U	0.019
	4/1/2019	Q2 2019	0.027	J	0.019
KAFB-106068	10/16/2020	Q4 2020	ND	U	0.019
	4/20/2020	Q2 2020	ND	U	0.019
	10/11/2019	Q4 2019	ND	U	0.019
	4/1/2019	Q2 2019	ND	U	0.019
KAFB-106069	10/16/2020	Q4 2020	ND	U	0.019
	4/23/2020	Q2 2020	0.014	J	0.019
	10/16/2019	Q4 2019	ND	U	0.019
	4/30/2019	Q2 2019	0.014	J	0.019
KAFB-106070	10/13/2020	Q4 2020	ND	U	0.019
	4/16/2020	Q2 2020	ND	U	0.019
	11/1/2019	Q4 2019	ND	U	0.019
	4/16/2019	Q2 2019	ND	U	0.026
KAFB-106071	10/13/2020	Q4 2020	ND	U	0.019
	4/16/2020	Q2 2020	ND	U	0.019
	11/1/2019	Q4 2019	ND	U	0.019
	4/16/2019	Q2 2019	ND	U	0.019
KAFB-106072	10/15/2020	Q4 2020	ND	U	0.019
	4/16/2020	Q2 2020	ND	U	0.019
	11/1/2019	Q4 2019	ND	U	0.019
	4/16/2019	Q2 2019	0.03	--	0.019
KAFB-106073	10/12/2020	Q4 2020	ND	U	0.019
	4/30/2020	Q2 2020	ND	U	0.019
	10/17/2019	Q4 2019	ND	U	0.019
	5/2/2019	Q2 2019	0.015	J	0.019
KAFB-106074	10/12/2020	Q4 2020	ND	U	0.019
	4/30/2020	Q2 2020	ND	U	0.019
	10/22/2019	Q4 2019	ND	U	0.019
	4/25/2019	Q2 2019	ND	U	0.019
KAFB-106075	10/23/2020	Q4 2020	0.014	J	0.019
	4/20/2020	Q2 2020	0.023	J	0.019
	10/14/2019	Q4 2019	0.034	--	0.019
	4/3/2019	Q2 2019	0.043	--	0.019
KAFB-106076	10/30/2020	Q4 2020	ND	U	0.096
	4/28/2020	Q2 2020	0.024	J	0.019
	10/16/2019	Q4 2019	0.035	--	0.019
	5/2/2019	Q2 2019	0.047	--	0.019
KAFB-106077	10/9/2020	Q4 2020	ND	U	0.019
	4/27/2020	Q2 2020	ND	U	0.019
	10/18/2019	Q4 2019	ND	U	0.019
	4/23/2019	Q2 2019	ND	U	0.019
KAFB-106078	10/20/2020	Q4 2020	ND	U	0.019
	4/21/2020	Q2 2020	ND	U	0.019
	10/15/2019	Q4 2019	ND	U	0.019
	4/2/2019	Q2 2019	ND	U	0.019
KAFB-106079 ^c	10/30/2020	Q4 2020	ND	U	0.019
	4/10/2020	Q2 2020	0.012	J	0.019
	10/23/2019	Q4 2019	0.027	J	0.019
	10/23/2018	Q4 2018	0.011	J	0.019
KAFB-106080	11/24/2020	Q4 2020	ND	U	0.019
	4/23/2020	Q2 2020	ND	U	0.019
	10/16/2019	Q4 2019	ND	U	0.019
	4/3/2019	Q2 2019	ND	U	0.019

**Table 4-9
Historical EDB Concentrations**

Analyte:			EDB (1,2-dibromoethane)		
EPA MCL ^a :			0.05 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD
KAFB-106081	10/15/2020	Q4 2020	ND	U	0.019
	4/29/2020	Q2 2020	ND	U	0.019
	10/18/2019	Q4 2019	ND	U	0.019
	4/24/2019	Q2 2019	ND	U	0.019
KAFB-106082	10/6/2020	Q4 2020	ND	U	0.019
	4/28/2020	Q2 2020	ND	U	0.019
	10/18/2019	Q4 2019	ND	U	0.019
	4/29/2019	Q2 2019	ND	U	0.019
KAFB-106083	10/6/2020	Q4 2020	0.016	J	0.019
	4/28/2020	Q2 2020	0.022	J	0.019
	10/18/2019	Q4 2019	ND	U	0.019
	4/30/2019	Q2 2019	0.026	J	0.019
KAFB-106084	10/6/2020	Q4 2020	ND	U	0.019
	4/28/2020	Q2 2020	ND	U	0.019
	10/22/2019	Q4 2019	ND	U	0.019
	4/29/2019	Q2 2019	ND	U	0.095
KAFB-106085	10/13/2020	Q4 2020	ND	U	0.019
	4/6/2020	Q2 2020	ND	U	0.019
	11/4/2019	Q4 2019	0.014	J	0.019
	4/10/2019	Q2 2019	0.014	J	0.019
KAFB-106086	10/13/2020	Q4 2020	ND	U	0.019
	4/6/2020	Q2 2020	ND	U	0.019
	11/4/2019	Q4 2019	ND	U	0.019
	4/10/2019	Q2 2019	ND	U	0.019
KAFB-106087	10/13/2020	Q4 2020	ND	U	0.019
	4/6/2020	Q2 2020	ND	U	0.019
	11/4/2019	Q4 2019	ND	U	0.019
	4/10/2019	Q2 2019	ND	U	0.019
KAFB-106088	10/15/2020	Q4 2020	0.056	--	0.019
	4/9/2020	Q2 2020	0.041	--	0.019
	11/4/2019	Q4 2019	0.11	--	0.019
	4/10/2019	Q2 2019	0.085	--	0.019
KAFB-106089	10/13/2020	Q4 2020	0.074	--	0.019
	4/9/2020	Q2 2020	ND	U	0.036
	11/4/2019	Q4 2019	0.064	--	0.019
	4/10/2019	Q2 2019	0.058	--	0.019
KAFB-106090	10/13/2020	Q4 2020	ND	U	0.019
	4/9/2020	Q2 2020	ND	U	0.019
	11/4/2019	Q4 2019	ND	U	0.019
	4/10/2019	Q2 2019	ND	U	0.019
KAFB-106091	10/9/2020	Q4 2020	ND	U	0.019
	4/8/2020	Q2 2020	ND	U	0.019
	10/31/2019	Q4 2019	ND	U	0.019
	4/10/2019	Q2 2019	ND	U	0.019
KAFB-106092	10/8/2020	Q4 2020	ND	U	0.019
	4/8/2020	Q2 2020	ND	U	0.019
	10/31/2019	Q4 2019	ND	U	0.019
	4/16/2019	Q2 2019	ND	U	0.019
KAFB-106093	10/8/2020	Q4 2020	ND	U	0.019
	4/8/2020	Q2 2020	ND	U	0.019
	10/31/2019	Q4 2019	ND	U	0.019
	4/16/2019	Q2 2019	ND	U	0.019
KAFB-106094	10/19/2020	Q4 2020	0.071	--	0.019
	4/21/2020	Q2 2020	ND	UJ	0.019
	10/14/2019	Q4 2019	ND	U	0.019
	4/3/2019	Q2 2019	0.019	J	0.019
KAFB-106095	10/7/2020	Q4 2020	ND	U	0.019
	4/29/2020	Q2 2020	ND	U	0.019
	10/21/2019	Q4 2019	ND	U	0.019
	5/2/2019	Q2 2019	ND	U	0.019
KAFB-106096	10/7/2020	Q4 2020	ND	U	0.019
	5/8/2020	Q2 2020	ND	U	0.019
	10/10/2019	Q4 2019	ND	U	0.019
	4/1/2019	Q2 2019	ND	U	0.019
KAFB-106097	10/13/2020	Q4 2020	ND	U	0.019
	7/16/2020	Q3 2020	ND	U	0.019
	5/1/2020	Q2 2020	ND	U	0.019
	1/15/2020	Q1 2020	ND	U	0.019
KAFB-106098	10/13/2020	Q4 2020	ND	U	0.019
	7/15/2020	Q3 2020	ND	U	0.019
	5/1/2020	Q2 2020	ND	U	0.019
	1/15/2020	Q1 2020	ND	U	0.019
KAFB-106099	10/14/2020	Q4 2020	ND	U	0.019
	7/16/2020	Q3 2020	ND	U	0.019
	5/5/2020	Q2 2020	ND	U	0.019
	1/16/2020	Q1 2020	ND	U	0.019

**Table 4-9
Historical EDB Concentrations**

Analyte:			EDB (1,2-dibromoethane)		
EPA MCL ^a :			0.05 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD
KAFB-106100	10/14/2020	Q4 2020	ND	U	0.019
	7/16/2020	Q3 2020	ND	U	0.019
	5/5/2020	Q2 2020	ND	U	0.019
	1/16/2020	Q1 2020	ND	U	0.019
KAFB-106101	10/14/2020	Q4 2020	ND	U	0.019
	7/15/2020	Q3 2020	ND	U	0.019
	5/4/2020	Q2 2020	ND	U	0.019
	1/17/2020	Q1 2020	ND	U	0.019
KAFB-106102	10/15/2020	Q4 2020	ND	U	0.019
	7/15/2020	Q3 2020	ND	U	0.019
	5/4/2020	Q2 2020	ND	U	0.019
	1/17/2020	Q1 2020	ND	U	0.019
KAFB-106103	10/13/2020	Q4 2020	ND	U	0.019
	4/10/2020	Q2 2020	ND	U	0.019
	10/31/2019	Q4 2019	ND	U	0.019
	4/9/2019	Q2 2019	ND	U	0.019
KAFB-106104	10/13/2020	Q4 2020	ND	U	0.019
	4/16/2020	Q2 2020	ND	U	0.019
	10/31/2019	Q4 2019	ND	U	0.019
	4/9/2019	Q2 2019	ND	U	0.019
KAFB-106105	10/12/2020	Q4 2020	ND	U	0.019
	4/8/2020	Q2 2020	ND	U	0.019
	10/30/2019	Q4 2019	ND	U	0.019
	4/9/2019	Q2 2019	ND	U	0.019
KAFB-106106	10/8/2020	Q4 2020	0.027	J	0.019
	4/8/2020	Q2 2020	0.022	J	0.019
	10/30/2019	Q4 2019	ND	U	0.019
	4/9/2019	Q2 2019	ND	U	0.019
KAFB-106107	10/12/2020	Q4 2020	ND	U	0.019
	4/8/2020	Q2 2020	ND	U	0.019
	10/30/2019	Q4 2019	ND	U	0.019
	4/9/2019	Q2 2019	ND	U	0.019
KAFB-106149-484	10/21/2020	Q4 2020	17	--	3.8
	7/10/2020	Q3 2020	11	--	1.9
	4/16/2020	Q2 2020	78	--	19
	1/9/2020	Q1 2020	40	--	9.6
KAFB-106151-484	10/21/2020	Q4 2020	0.030	--	0.019
	7/10/2020	Q3 2020	0.023	J	0.019
	4/16/2020	Q2 2020	2.6	--	0.38
	1/9/2020	Q1 2020	3.4	--	0.96
KAFB-106152-484	10/21/2020	Q4 2020	ND	U	0.019
	7/10/2020	Q3 2020	0.019	J	0.019
	4/16/2020	Q2 2020	ND	U	0.019
	1/9/2020	Q1 2020	ND	U	0.019
KAFB-106153-484	10/21/2020	Q4 2020	35	--	3.8
	7/10/2020	Q3 2020	30	--	3.8
	4/16/2020	Q2 2020	140	--	19
	1/9/2020	Q1 2020	460	--	96
KAFB-106201	10/7/2020	Q4 2020	ND	U	0.019
	7/9/2020	Q3 2020	ND	U	0.019
	4/7/2020	Q2 2020	ND	U	0.019
	1/7/2020	Q1 2020	ND	U	0.019
KAFB-106202	10/7/2020	Q4 2020	ND	U	0.019
	7/9/2020	Q3 2020	ND	U	0.019
	4/7/2020	Q2 2020	ND	U	0.019
	1/7/2020	Q1 2020	ND	U	0.019
KAFB-106203	10/7/2020	Q4 2020	ND	U	0.019
	7/9/2020	Q3 2020	ND	U	0.019
	4/7/2020	Q2 2020	ND	U	0.019
	1/7/2020	Q1 2020	ND	U	0.019
KAFB-106204	10/6/2020	Q4 2020	ND	U	0.019
	7/7/2020	Q3 2020	ND	U	0.019
	4/7/2020	Q2 2020	ND	U	0.019
	1/8/2020	Q1 2020	ND	U	0.019
KAFB-106205	10/6/2020	Q4 2020	ND	U	0.019
	7/7/2020	Q3 2020	ND	U	0.019
	4/7/2020	Q2 2020	ND	U	0.019
	1/8/2020	Q1 2020	0.022	J	0.019
KAFB-106206	10/12/2020	Q4 2020	ND	U	0.019
	7/7/2020	Q3 2020	ND	U	0.019
	4/7/2020	Q2 2020	ND	U	0.019
	1/8/2020	Q1 2020	ND	U	0.019
KAFB-106207	10/5/2020	Q4 2020	ND	U	0.019
	7/7/2020	Q3 2020	ND	U	0.019
	4/10/2020	Q2 2020	ND	U	0.019
	1/8/2020	Q1 2020	ND	U	0.019

**Table 4-9
Historical EDB Concentrations**

Analyte:			EDB (1,2-dibromoethane)		
EPA MCL ^a :			0.05 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD
KAFB-106208	10/6/2020	Q4 2020	ND	U	0.019
	7/7/2020	Q3 2020	ND	U	0.019
	4/10/2020	Q2 2020	ND	U	0.019
	1/8/2020	Q1 2020	ND	U	0.019
KAFB-106209	10/6/2020	Q4 2020	ND	U	0.019
	7/7/2020	Q3 2020	ND	U	0.019
	4/10/2020	Q2 2020	ND	U	0.019
	1/8/2020	Q1 2020	ND	U	0.019
KAFB-106212	10/6/2020	Q4 2020	ND	U	0.019
	4/8/2020	Q2 2020	ND	U	0.019
	10/29/2019	Q4 2019	ND	U	0.019
	4/10/2019	Q2 2019	ND	U	0.019
KAFB-106213	10/14/2020	Q4 2020	ND	U	0.019
	4/8/2020	Q2 2020	ND	U	0.019
	10/29/2019	Q4 2019	ND	U	0.019
	4/16/2019	Q2 2019	ND	U	0.019
KAFB-106214	10/14/2020	Q4 2020	ND	U	0.019
	4/8/2020	Q2 2020	ND	U	0.019
	10/29/2019	Q4 2019	ND	U	0.019
	4/16/2019	Q2 2019	ND	U	0.019
KAFB-106215	10/14/2020	Q4 2020	ND	U	0.019
	4/8/2020	Q2 2020	ND	U	0.019
	10/29/2019	Q4 2019	ND	U	0.019
	4/10/2019	Q2 2019	ND	U	0.019
KAFB-106216	10/7/2020	Q4 2020	ND	U	0.019
	7/7/2020	Q3 2020	ND	U	0.019
	4/7/2020	Q2 2020	ND	U	0.019
	1/7/2020	Q1 2020	ND	U	0.019
KAFB-106217	10/7/2020	Q4 2020	ND	U	0.020
	7/7/2020	Q3 2020	ND	U	0.019
	4/7/2020	Q2 2020	ND	U	0.019
	1/7/2020	Q1 2020	ND	U	0.019
KAFB-106218	10/7/2020	Q4 2020	ND	U	0.019
	7/7/2020	Q3 2020	ND	U	0.019
	4/7/2020	Q2 2020	ND	U	0.019
	1/7/2020	Q1 2020	ND	U	0.019
KAFB-106219	10/7/2020	Q4 2020	ND	U	0.019
	4/7/2020	Q2 2020	ND	U	0.019
	11/5/2019	Q4 2019	ND	U	0.019
	4/10/2019	Q2 2019	ND	U	0.019
KAFB-106220	10/7/2020	Q4 2020	ND	U	0.019
	4/7/2020	Q2 2020	ND	U	0.019
	11/4/2019	Q4 2019	ND	U	0.019
	4/10/2019	Q2 2019	ND	U	0.019
KAFB-106221	10/7/2020	Q4 2020	ND	U	0.019
	4/7/2020	Q2 2020	ND	U	0.019
	11/4/2019	Q4 2019	ND	U	0.019
	4/10/2019	Q2 2019	ND	U	0.019
KAFB-106222	10/14/2020	Q4 2020	ND	U	0.019
	7/7/2020	Q3 2020	ND	U	0.019
	4/7/2020	Q2 2020	ND	U	0.019
	1/7/2020	Q1 2020	ND	U	0.019
KAFB-106223	10/14/2020	Q4 2020	ND	U	0.019
	7/7/2020	Q3 2020	ND	U	0.019
	4/7/2020	Q2 2020	ND	U	0.019
	1/7/2020	Q1 2020	ND	U	0.019
KAFB-106224	10/14/2020	Q4 2020	ND	U	0.019
	7/7/2020	Q3 2020	ND	U	0.019
	4/7/2020	Q2 2020	ND	U	0.019
	1/7/2020	Q1 2020	ND	U	0.019
KAFB-106225	10/7/2020	Q4 2020	0.017	J	0.019
	4/6/2020	Q2 2020	ND	U	0.019
	10/29/2019	Q4 2019	ND	U	0.019
	4/9/2019	Q2 2019	0.018	J	0.019
KAFB-106226	10/7/2020	Q4 2020	ND	U	0.019
	4/6/2020	Q2 2020	ND	U	0.019
	10/29/2019	Q4 2019	ND	U	0.019
	4/9/2019	Q2 2019	ND	U	0.019
KAFB-106227	10/7/2020	Q4 2020	ND	U	0.019
	4/6/2020	Q2 2020	ND	U	0.019
	10/29/2019	Q4 2019	ND	U	0.019
	4/9/2019	Q2 2019	ND	U	0.019
KAFB-106229	10/9/2020	Q4 2020	ND	U	0.019
	4/7/2020	Q2 2020	ND	U	0.019
	10/29/2019	Q4 2019	ND	U	0.019
	4/8/2019	Q2 2019	ND	U	0.019
KAFB-106230	10/12/2020	Q4 2020	ND	U	0.019
	7/8/2020	Q3 2020	ND	U	0.019
	4/10/2020	Q2 2020	ND	U	0.019
	1/7/2020	Q1 2020	ND	U	0.019

**Table 4-9
Historical EDB Concentrations**

Analyte:			EDB (1,2-dibromoethane)		
EPA MCL ^a :			0.05 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD
KAFB-106231	10/6/2020	Q4 2020	ND	U	0.019
	7/7/2020	Q3 2020	ND	U	0.019
	4/6/2020	Q2 2020	ND	U	0.019
	1/6/2020	Q1 2020	ND	U	0.019
KAFB-106232	10/6/2020	Q4 2020	ND	U	0.019
	7/7/2020	Q3 2020	ND	U	0.019
	4/6/2020	Q2 2020	ND	U	0.019
	1/6/2020	Q1 2020	ND	U	0.019
KAFB-106235-438	10/5/2020	Q4 2020	ND	U	0.019
	7/6/2020	Q3 2020	ND	U	0.019
	4/6/2020	Q2 2020	ND	U	0.019
	1/6/2020	Q1 2020	ND	U	0.019
KAFB-106235-472	10/5/2020	Q4 2020	0.015	J	0.020
	7/6/2020	Q3 2020	ND	U	0.019
	4/6/2020	Q2 2020	ND	U	0.019
	1/6/2020	Q1 2020	ND	U	0.019
KAFB-106235-501	10/5/2020	Q4 2020	ND	U	0.019
	7/6/2020	Q3 2020	ND	U	0.019
	4/6/2020	Q2 2020	ND	U	0.019
	1/6/2020	Q1 2020	ND	U	0.019
KAFB-106236-436	10/5/2020	Q4 2020	ND	U	0.019
	7/6/2020	Q3 2020	ND	U	0.019
	4/6/2020	Q2 2020	ND	U	0.019
	1/7/2020	Q1 2020	ND	U	0.019
KAFB-106236-470	10/5/2020	Q4 2020	ND	U	0.019
	7/6/2020	Q3 2020	ND	U	0.019
	4/6/2020	Q2 2020	ND	U	0.019
	1/7/2020	Q1 2020	ND	U	0.019
KAFB-106236-499	10/5/2020	Q4 2020	ND	U	0.019
	7/6/2020	Q3 2020	ND	U	0.019
	4/6/2020	Q2 2020	ND	U	0.019
	10/29/2019	Q4 2019	ND	U	0.019
KAFB-106240-449	10/15/2020	Q4 2020	ND	U	0.019
	7/8/2020	Q3 2020	ND	U	0.020
	4/9/2020	Q2 2020	ND	U	0.019
	10/30/2019	Q4 2019	ND	U	0.019
KAFB-106241-428	10/12/2020	Q4 2020	0.015	J	0.019
	7/8/2020	Q3 2020	ND	U	0.019
	4/9/2020	Q2 2020	0.015	J	0.019
	1/8/2020	Q1 2020	0.021	J	0.017
KAFB-106242-418	10/6/2020	Q4 2020	ND	U	0.019
	7/7/2020	Q3 2020	ND	U	0.02
	4/6/2020	Q2 2020	ND	U	0.019
	1/6/2020	Q1 2020	ND	U	0.019
KAFB-106243-425	10/13/2020	Q4 2020	0.042	--	0.019
	7/9/2020	Q3 2020	0.035	--	0.019
	4/9/2020	Q2 2020	0.02	J	0.019
	1/6/2020	Q1 2020	0.042	--	0.019
KAFB-106244-445	10/14/2020	Q4 2020	ND	U	0.019
	7/8/2020	Q3 2020	ND	U	0.02
	4/9/2020	Q2 2020	ND	U	0.019
	1/7/2020	Q1 2020	ND	U	0.019
KAFB-106245-460	10/14/2020	Q4 2020	ND	U	0.019
	7/9/2020	Q3 2020	ND	U	0.019
	4/9/2020	Q2 2020	ND	U	0.019
	1/8/2020	Q1 2020	ND	U	0.019
KAFB-106247-450	10/14/2020	Q4 2020	ND	U	0.019
	7/8/2020	Q3 2020	ND	U	0.019
	4/9/2020	Q2 2020	ND	U	0.019
	1/6/2020	Q1 2020	ND	U	0.019
KAFB-106S1-447	10/21/2020	Q4 2020	5.3	--	0.96
	7/10/2020	Q3 2020	28	J	3.9
	4/9/2020	Q2 2020	390	--	190
	1/9/2020	Q1 2020	450	J	95
KAFB-106S2-451	10/22/2020	Q4 2020	37	--	3.9
	7/10/2020	Q3 2020	150	--	38
	4/9/2020	Q2 2020	120	--	19
	1/6/2020	Q1 2020	170	--	38
KAFB-106S3-449	10/22/2020	Q4 2020	1.6	--	3.8
	7/10/2020	Q3 2020	75	--	9.6
	4/10/2020	Q2 2020	35	J	7.6
	1/9/2020	Q1 2020	1.5	--	0.38
KAFB-106S4-446	10/22/2020	Q4 2020	0.021	J	0.019
	7/9/2020	Q3 2020	0.035	--	0.019
	4/9/2020	Q2 2020	ND	U	0.048
	1/6/2020	Q1 2020	0.026	J	0.019

**Table 4-9
Historical EDB Concentrations**

Analyte:			EDB (1,2-dibromoethane)		
EPA MCL ^a :			0.05 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD
KAFB-106S5-446	10/22/2020	Q4 2020	8.9	--	0.97
	7/10/2020	Q3 2020	3.1	--	0.39
	4/16/2020	Q2 2020	11	--	1.9
	1/9/2020	Q1 2020	13	--	3.8
KAFB-106S7-451	10/22/2020	Q4 2020	26	--	3.8
	7/10/2020	Q3 2020	36	--	3.8
	4/16/2020	Q2 2020	39	--	7.5
	1/9/2020	Q1 2020	2.0	--	0.38
KAFB-106S8-451	10/21/2020	Q4 2020	28	J	3.8
	7/10/2020	Q3 2020	310	--	38
	4/10/2020	Q2 2020	400	J	76
	1/6/2020	Q1 2020	34	--	9.4
KAFB-106S9-447	10/21/2020	Q4 2020	0.018	J	0.019
	7/10/2020	Q3 2020	0.21	--	0.019
	4/16/2020	Q2 2020	35	--	7.6
	1/9/2020	Q1 2020	130	--	38
KAFB-3411	10/2/2020	Q4 2020	ND	U	0.020
	4/24/2020	Q2 2020	ND	U	0.019
	10/17/2019	Q4 2019	ND	U	0.019
	4/23/2019	Q2 2019	ND	U	0.019

^a The project screening level was selected to satisfy the requirements of the Kirtland AFB Hazardous Waste Permit Number NM9570024423 as the lowest of (1) NM WQCC numeric standard or (2) EPA MCL. If no NM WQCC standard or MCL exists for any analyte, then the project screening level will be the EPA RSL. For EDB, the EPA MCL and the NM WQCC numeric standard are both 0.05 µg/L.

^b Data presented includes results from the current quarter where applicable along with the three most recent historical results. The sampling plan is provided in Table 3-1.

^c This well was not sampled in Q2 2019 due to suspected biofouling in the well.

^d This well was not sampled between Q4 2015 and Q4 2019 due to security issues.

^e This well was not sampled in Q4 2019 due to suspected biofouling in the well.

^f This well was not sampled in 2019 due to the presence of dedicated downhole equipment related to the EDB *in situ* biodegradation pilot test. Monitoring resumed in 2020.

µg/L = microgram per liter

AFB = Air Force Base

EDB = 1,2-dibromoethane (ethylene dibromide)

EPA = U.S. Environmental Protection Agency

ID = identification

LOD = limit of detection

MCL = maximum contaminant level

ND = not detected

NM = New Mexico

Q1 = first quarter

Q2 = second quarter

Q3 = third quarter

Q4 = fourth quarter

RSL = regional screening level

Val Qual = validation qualifier

WQCC = Water Quality Control Commission

Shading = detected concentrations above the detection limit

Bold/Shading = reported concentrations exceed the project screening level

Val Quals based on independent data validation

J = Qualifier denotes the analyte was positively identified, but the associated numerical value is estimated.

U = Qualifier denotes the analyte was analyzed but not detected above the detection limit. The value associated with the U-qualifier is the

-- = Validation qualifier not assigned.

**Table 4-10
Historical BTEX Concentrations**

Analyte:			Benzene			Ethylbenzene			Toluene			Xylenes, Total		
Project Screening Level ^a :			5 µg/L			700 µg/L			1,000 µg/L			620 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
KAFB-106001	10/30/2020	Q4 2020	3.9	--	0.50	0.79	J	0.80	20	--	0.50	4.4	J	2.0
	11/1/2019	Q4 2019	4	--	0.5	ND	U	0.8	11	--	0.5	2	J	2
	10/30/2018	Q4 2018	6	--	0.5	0.8	J	0.8	34	--	0.5	6	--	2
	10/31/2017	Q4 2017	1	--	1	ND	U	1	12	--	1	4	--	1
KAFB-106002	10/20/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/11/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/17/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/25/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106003	10/12/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	7/15/2020	Q3 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	4/30/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	1/17/2020	Q1 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106004	10/14/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	7/16/2020	Q3 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	5/5/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	1/16/2020	Q1 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106005	10/23/2020	Q4 2020	860	--	2.5	230	--	4.0	1,000	--	2.5	880	--	10
	7/13/2020	Q3 2020	1,700	--	10	220	--	1.6	1,800	--	10	840	--	4
	4/16/2020	Q2 2020	12	J	0.5	110	--	0.8	2	--	0.5	160	--	2
	1/8/2020	Q1 2020	21	--	0.5	100	--	0.8	4	--	0.5	160	--	2
KAFB-106006	10/29/2020	Q4 2020	6.5	--	0.50	4.0	--	0.80	4.3	--	0.50	11	--	2.0
	4/24/2020	Q2 2020	11	--	0.5	2	--	0.8	0.3	J	0.5	5	J	2
	11/4/2019	Q4 2019	3	--	0.5	1	--	0.8	3	--	0.5	4	J	2
	4/25/2019	Q2 2019	22	--	0.5	0.8	J	0.8	27	--	0.5	5	--	2
KAFB-106007	10/5/2020	Q4 2020	ND	UJ	0.5	ND	UJ	0.8	1.8	J	0.5	ND	UJ	2
	10/18/2019	Q4 2019	ND	U	0.5	ND	U	0.8	4	--	0.5	ND	U	2
	10/25/2018	Q4 2018	ND	U	0.5	ND	U	0.8	0.5	J	0.5	ND	U	2
	10/26/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106008	10/21/2020	Q4 2020	11,000	--	100	310	--	16	5,500	--	10	870	--	40
	4/16/2020	Q2 2020	8,900	--	100	380	--	16	4,000	--	10	1,000	--	40
	11/7/2019	Q4 2019	3,400	--	10	230	--	2	950	--	10	480	--	4
	10/22/2018	Q4 2018	5,800	--	50	180	J	8	2,700	--	5	540	--	20
KAFB-106009	10/12/2020	Q4 2020	ND	U	5.0	ND	U	8.0	ND	U	5.0	ND	U	20
	7/9/2020	Q3 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	4/16/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	1/8/2020	Q1 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106010	10/22/2020	Q4 2020	1,400	--	5.0	510	--	8.0	3,500	--	50	930	--	20
	4/24/2020	Q2 2020	600	--	3	150	--	4	160	--	3	120	--	10
	11/5/2019	Q4 2019	280	--	5	190	--	0.8	180	--	0.5	150	--	2
	4/23/2019	Q2 2019	280	--	0.5	130	--	0.8	28	--	0.5	40	--	2
KAFB-106011	10/1/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	4/17/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/14/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	4/2/2019	Q2 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2

**Table 4-10
Historical BTEX Concentrations**

Analyte:			Benzene			Ethylbenzene			Toluene			Xylenes, Total		
Project Screening Level ^a :			5 µg/L			700 µg/L			1,000 µg/L			620 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
KAFB-106012R	10/2/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	7/14/2020	Q3 2020	ND	U	0.50	ND	U	0.80	ND	--	0.50	ND	U	2.0
	4/23/2020	Q2 2020	ND	U	0.5	ND	U	0.8	1	--	0.5	ND	U	2
	1/14/2020	Q1 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106013	10/13/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	7/15/2020	Q3 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	5/1/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	1/15/2020	Q1 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106014	10/29/2020	Q4 2020	6,100	--	50	800	--	8.0	6,300	--	50	1,900	--	20
	4/24/2020	Q2 2020	86	--	0.5	8	--	0.8	76	--	0.5	16	--	2
	11/4/2019	Q4 2019	15	--	0.5	20	--	0.8	2	--	0.5	20	--	2
	5/1/2019	Q2 2019	53	--	0.5	67	--	0.8	460	--	5	190	--	2
KAFB-106015	10/13/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/30/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/5/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106016	10/1/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/11/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/18/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/26/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106017	10/19/2020	Q4 2020	0.70	J	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	4/21/2020	Q2 2020	0.5	J	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/15/2019	Q4 2019	0.8	J	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	4/2/2019	Q2 2019	0.6	J	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106018	10/28/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	5/8/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/15/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	4/4/2019	Q2 2019	0.2	J	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106019	10/8/2020	Q4 2020	ND	U	0.50	ND	U	0.80	1.5		0.50	ND	U	2.0
	10/16/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/29/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/12/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106020	10/29/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/17/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	11/6/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/9/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106021	10/6/2020	Q4 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/28/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/8/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/6/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1

**Table 4-10
Historical BTEX Concentrations**

Analyte:			Benzene			Ethylbenzene			Toluene			Xylenes, Total		
Project Screening Level ^a :			5 µg/L			700 µg/L			1,000 µg/L			620 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
KAFB-106022	10/9/2020	Q4 2020	0.29	J	0.50	ND	UJ	0.80	ND	UJ	0.50	ND	UJ	2.0
	10/24/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	0.2	J	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/6/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106023	10/13/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/31/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106024	10/21/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/16/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/17/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/26/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106025	10/15/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/30/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/6/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106026 ^c	10/12/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	11/12/2015	Q4 2015	ND	U	1	ND	U	1	ND	U	1	ND	U	3
	8/17/2015	Q3 2015	ND	U	1	ND	U	1	ND	U	1	ND	U	3
KAFB-106027	10/1/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/15/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/16/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/12/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106028	10/22/2020	Q4 2020	5,100	J	50	840	--	8.0	10,000	J	50	2,600	--	20
	4/10/2020	Q2 2020	1,100	--	5	190	--	0.8	180	--	0.5	42	--	2
	4/22/2019	Q2 2019	220	--	0.5	130	--	0.8	77	--	0.5	38	--	2
	10/22/2018	Q4 2018	6,800	--	100	1,400	--	16	15,000	--	100	3,000	--	40
KAFB-106029	10/6/2020	Q4 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/28/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/8/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/6/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106030	10/6/2020	Q4 2020	ND	U	0.5	ND	U	0.8	ND	UJ	0.5	ND	U	2
	10/28/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/8/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/6/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106031	10/6/2020	Q4 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/28/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/8/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/6/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1

**Table 4-10
Historical BTEX Concentrations**

Analyte:			Benzene			Ethylbenzene			Toluene			Xylenes, Total		
Project Screening Level ^a :			5 µg/L			700 µg/L			1,000 µg/L			620 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
KAFB-106032	10/8/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/5/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106033	10/8/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/5/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106034	10/8/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/5/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106035	10/9/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106036	10/12/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106037	10/9/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106038	10/5/2020	Q4 2020	ND	UJ	0.5	ND	UJ	0.8	1.3	J	0.5	ND	UJ	2
	4/22/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/17/2019	Q4 2019	ND	U	0.5	ND	U	0.8	1	--	0.5	ND	U	2
	4/4/2019	Q2 2019	ND	U	0.5	ND	U	0.8	63	--	0.5	ND	U	2
KAFB-106039	10/5/2020	Q4 2020	ND	U	0.5	ND	U	0.8	0.92	J	0.5	ND	U	2
	10/17/2019	Q4 2019	ND	U	0.5	ND	U	0.8	4	--	0.5	ND	U	2
	11/7/2018	Q4 2018	ND	U	0.5	ND	U	0.8	0.5	J	0.5	ND	U	2
	10/9/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106040	10/7/2020	Q4 2020	ND	U	0.50	ND	U	0.80	1.4	--	0.50	ND	U	2.0
	10/16/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	11/7/2018	Q4 2018	ND	U	0.5	ND	U	0.8	0.3	J	0.5	ND	U	2
	10/25/2017	Q4 2017	ND	U	1	ND	U	1	0.5	J	1	ND	U	1

**Table 4-10
Historical BTEX Concentrations**

Analyte:			Benzene			Ethylbenzene			Toluene			Xylenes, Total		
Project Screening Level ^a :			5 µg/L			700 µg/L			1,000 µg/L			620 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
KAFB-106041	10/8/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/30/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/16/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106042	10/8/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/30/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106043	10/12/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/30/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106044	10/1/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/15/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/16/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/12/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106045	10/8/2020	Q4 2020	ND	U	0.50	ND	U	0.80	0.68	J	0.50	ND	U	2.0
	10/21/2019	Q4 2019	ND	U	0.5	ND	U	0.8	3	--	0.5	ND	U	2
	10/25/2018	Q4 2018	ND	U	0.5	ND	U	0.8	0.3	J	0.5	ND	U	2
	10/30/2017	Q4 2017	ND	U	1	ND	U	1	0.7	J	1	ND	U	1
KAFB-106046	10/20/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/14/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/18/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	11/1/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106047	10/20/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/14/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/17/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	11/1/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106048	10/15/2020	Q4 2020	ND	U	0.50	ND	U	0.80	0.87	J	0.50	ND	U	2.0
	10/22/2019	Q4 2019	ND	U	0.5	ND	U	0.8	1	--	0.5	ND	U	2
	11/13/2018	Q4 2018	ND	U	0.5	ND	U	0.8	0.4	J	0.5	ND	U	2
	11/1/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106049	10/12/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/31/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106050	10/12/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/31/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1

**Table 4-10
Historical BTEX Concentrations**

Analyte:			Benzene			Ethylbenzene			Toluene			Xylenes, Total		
Project Screening Level ^a :			5 µg/L			700 µg/L			1,000 µg/L			620 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
KAFB-106051	10/15/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/31/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106052	10/12/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/30/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/5/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106053	10/9/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/30/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/5/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106054	10/9/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/30/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/5/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106055	10/8/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/28/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/5/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106057	10/8/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/28/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/9/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/5/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106058	10/8/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/28/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/5/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106059	10/23/2020	Q4 2020	15,000	--	100	1,000	--	16	12,000	--	100	3,300	--	40
	5/6/2020	Q2 2020	2,300	--	13	580	--	20	1,600	--	13	1,800	--	50
	10/21/2019	Q4 2019	13,000	--	50	640	--	8	12,000	--	50	2,000	--	20
	4/26/2019	Q2 2019	12,000	--	50	900	--	8	15,000	--	50	3,100	--	20
KAFB-106060	10/20/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	4/20/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/11/2019	Q4 2019	0.2	J	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	4/1/2019	Q2 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2

**Table 4-10
Historical BTEX Concentrations**

Analyte:			Benzene			Ethylbenzene			Toluene			Xylenes, Total		
Project Screening Level ^a :			5 µg/L			700 µg/L			1,000 µg/L			620 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
KAFB-106061	10/15/2020	Q4 2020	ND	U	0.50	ND	U	0.80	0.40	J	0.50	ND	U	2.0
	4/27/2020	Q2 2020	ND	U	0.5	ND	U	0.8	1	--	0.5	ND	U	2
	11/5/2019	Q4 2019	ND	U	0.5	ND	U	0.8	4	--	0.5	ND	U	2
	4/2/2019	Q2 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106062	10/20/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	4/21/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/14/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	4/4/2019	Q2 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106063 ^d	10/14/2020	Q4 2020	3,900	--	50	1,000	--	8.0	1,700	--	5.0	3,000	--	20
	5/19/2020	Q2 2020	5,700	--	50	1,700	--	8	18,000	--	50	5,100	--	20
	10/4/2018	Q4 2018	6,400	--	50	2,000	--	8	20,000	--	50	5,700	--	20
	4/10/2018	Q2 2018	2,000	--	10	710	--	10	3,600	--	100	1,200	--	10
KAFB-106064 ^d	10/14/2020	Q4 2020	3,700	--	25	1,200	--	4.0	430	--	2.5	4,100	--	10
	5/19/2020	Q2 2020	3,600	--	25	1,500	--	40	380	--	3	4,700	--	100
	10/4/2018	Q4 2018	3,600	--	50	1,200	--	8	12,000	--	50	3,800	--	20
	4/10/2018	Q2 2018	3,800	--	100	2,100	--	100	15,000	--	100	5,900	--	100
KAFB-106065	10/19/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	4/22/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/11/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	4/2/2019	Q2 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106066	10/16/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	4/22/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/10/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	4/2/2019	Q2 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106067	10/19/2020	Q4 2020	3.3	--	1.0	ND	U	1.6	ND	U	1.0	ND	U	4.0
	4/21/2020	Q2 2020	1	--	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/14/2019	Q4 2019	1	--	0.5	0.7	J	0.8	ND	U	0.5	ND	U	2
	4/1/2019	Q2 2019	1	--	0.5	2	--	0.8	ND	U	0.5	ND	U	2
KAFB-106068	10/16/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	4/20/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/11/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	4/1/2019	Q2 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106069	10/16/2020	Q4 2020	0.60	J	0.50	ND	U	0.80	0.64	J	0.50	ND	U	2.0
	4/23/2020	Q2 2020	0.2	J	0.5	ND	U	0.8	1	--	0.5	ND	U	2
	10/16/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	4/30/2019	Q2 2019	ND	U	0.5	ND	U	0.8	0.2	J	0.5	ND	U	2

**Table 4-10
Historical BTEX Concentrations**

Analyte:			Benzene			Ethylbenzene			Toluene			Xylenes, Total		
Project Screening Level ^a :			5 µg/L			700 µg/L			1,000 µg/L			620 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
KAFB-106070	10/13/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	11/1/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/5/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106071	10/13/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	11/1/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/5/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106072	10/15/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	11/1/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/5/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106073	10/12/2020	Q4 2020	ND	U	0.50	ND	U	0.80	0.69	J	0.50	ND	U	2.0
	10/17/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	11/6/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/10/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106074	10/12/2020	Q4 2020	ND	U	0.50	ND	U	0.80	1.7	--	0.50	ND	U	2.0
	10/22/2019	Q4 2019	ND	U	0.5	ND	U	0.8	1	--	0.5	ND	U	2
	11/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	0.3	J	0.5	ND	U	2
	10/10/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106075	10/23/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/14/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/23/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/12/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106076	10/30/2020	Q4 2020	16	--	0.50	67	--	0.80	9.8	--	0.50	150	--	2.0
	4/28/2020	Q2 2020	0.6	J	0.5	7	--	0.8	2	--	0.5	12	--	2
	10/16/2019	Q4 2019	1	--	0.5	37	--	0.8	ND	U	0.5	100	--	2
	5/2/2019	Q2 2019	4	--	0.5	40	--	0.8	41	--	0.5	100	--	2
KAFB-106077	10/9/2020	Q4 2020	ND	U	0.50	ND	U	0.80	1.7	--	0.50	ND	U	2.0
	4/27/2020	Q2 2020	ND	U	0.5	ND	U	0.8	3	--	0.5	ND	U	2
	10/18/2019	Q4 2019	ND	U	0.5	ND	U	0.8	2	--	0.5	ND	U	2
	4/23/2019	Q2 2019	ND	U	0.5	ND	U	0.8	0.5	J	0.5	ND	U	2
KAFB-106078	10/20/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	4/21/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/15/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	4/2/2019	Q2 2019	ND	U	0.5	ND	--	0.8	ND	U	0.5	ND	U	2
KAFB-106079	10/30/2020	Q4 2020	5,400	--	25	490	--	4.0	340	--	2.5	430	--	10
	4/10/2020	Q2 2020	1	--	0.5	0.5	J	0.8	0.3	J	0.5	ND	U	2
	10/23/2019	Q4 2019	140	--	0.5	34	--	0.8	66	--	0.5	79	--	2
	10/23/2018	Q4 2018	1,800	--	5	200	--	0.8	51	--	0.5	380	--	2

**Table 4-10
Historical BTEX Concentrations**

Analyte:			Benzene			Ethylbenzene			Toluene			Xylenes, Total		
Project Screening Level ^a :			5 µg/L			700 µg/L			1,000 µg/L			620 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
KAFB-106080	10/24/2020	Q4 2020	82	--	0.50	5.9	--	0.80	ND	U	1.0	1.5	J	2.8
	4/23/2020	Q2 2020	8	--	0.5	3	--	0.8	ND	U	0.5	ND	U	2
	10/16/2019	Q4 2019	170	--	0.5	9	--	0.8	ND	U	0.5	4	J	2
	4/3/2019	Q2 2019	8	--	0.5	5	--	0.8	0.3	J	0.5	ND	U	2
KAFB-106081	10/15/2020	Q4 2020	ND	U	0.50	ND	U	0.80	0.49	J	0.50	ND	U	2.0
	4/29/2020	Q2 2020	ND	U	0.5	ND	U	0.8	0.7	J	0.5	ND	U	2
	10/18/2019	Q4 2019	ND	U	0.5	ND	U	0.8	1	--	0.5	ND	U	2
	4/24/2019	Q2 2019	ND	U	0.5	ND	U	0.8	3	--	0.5	ND	U	2
KAFB-106082	10/6/2020	Q4 2020	ND	U	0.5	ND	U	0.8	0.84	J	0.5	ND	U	2
	10/18/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/31/2018	Q4 2018	ND	U	0.5	ND	U	0.8	0.4	J	0.5	ND	U	2
	10/10/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106083	10/6/2020	Q4 2020	ND	U	0.5	ND	U	0.8	1.1	--	0.5	ND	U	2
	10/18/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/31/2018	Q4 2018	ND	U	0.5	ND	U	0.8	0.6	J	0.5	ND	U	2
	10/10/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106084	10/6/2020	Q4 2020	ND	U	0.50	ND	U	0.80	0.69	J	0.50	ND	U	2.0
	10/22/2019	Q4 2019	ND	U	0.5	ND	U	0.8	2	--	0.5	ND	U	2
	10/31/2018	Q4 2018	ND	U	0.5	ND	U	0.8	0.5	J	0.5	ND	U	2
	10/10/2017	Q4 2017	ND	U	1	ND	U	1	0.6	J	1	ND	U	1
KAFB-106085	10/13/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	11/4/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106086	10/13/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	11/4/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106087	10/13/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	11/4/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106088	10/15/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	11/4/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	0.2	J	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106089	10/13/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	11/4/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106090	10/13/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	11/4/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1

**Table 4-10
Historical BTEX Concentrations**

Analyte:			Benzene			Ethylbenzene			Toluene			Xylenes, Total		
Project Screening Level ^a :			5 µg/L			700 µg/L			1,000 µg/L			620 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
KAFB-106091	10/9/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/31/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/6/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106092	10/8/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/31/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/6/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106093	10/8/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/31/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106094	10/19/2020	Q4 2020	0.48	J	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/14/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/16/2018	Q4 2018	0.3	J	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/11/2017	Q4 2017	1	--	1	0.7	J	1	ND	U	1	ND	U	1
KAFB-106095	10/7/2020	Q4 2020	ND	U	0.50	ND	U	0.80	0.61	J	0.50	ND	U	2.0
	10/21/2019	Q4 2019	ND	U	0.5	ND	U	0.8	2	--	0.5	ND	U	2
	11/13/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/11/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106096	10/7/2020	Q4 2020	ND	U	0.50	ND	U	0.80	0.80	J	0.50	ND	U	2.0
	10/10/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/16/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/11/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106097	10/13/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	7/16/2020	Q3 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	5/1/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	1/15/2020	Q1 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106098	10/13/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	7/15/2020	Q3 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	5/1/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	1/15/2020	Q1 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106099	10/14/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	7/16/2020	Q3 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	5/5/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	1/16/2020	Q1 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106100	10/14/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	7/16/2020	Q3 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	5/5/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	1/16/2020	Q1 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106101	10/14/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	7/15/2020	Q3 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	5/4/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	1/17/2020	Q1 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2

**Table 4-10
Historical BTEX Concentrations**

Analyte:			Benzene			Ethylbenzene			Toluene			Xylenes, Total		
Project Screening Level ^a :			5 µg/L			700 µg/L			1,000 µg/L			620 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
KAFB-106102	10/15/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	7/15/2020	Q3 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	5/4/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	1/17/2020	Q1 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106103	10/13/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/31/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106104	10/13/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/31/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106105	10/12/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/30/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106106	10/8/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/30/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106107	10/12/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/30/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106149-484	10/21/2020	Q4 2020	1,500	--	2.5	390	--	4.0	3,900	--	25	2,200	--	10
	4/16/2020	Q2 2020	1,900	--	25	270	--	4	3,300	--	25	1,200	--	10
	11/1/2019	Q4 2019	8,200	--	50	560	--	8	10,000	--	50	2,300	--	20
	4/16/2019	Q2 2019	26,000	--	250	1,600	--	400	33,000	--	250	6,000	--	1,000
KAFB-106151-484	10/21/2020	Q4 2020	0.38	J	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	4/16/2020	Q2 2020	2,100	--	25	690	--	4	1,700	--	25	890	--	10
	11/1/2019	Q4 2019	1,100	--	10	540	--	2	20	--	1	230	--	4
	4/18/2019	Q2 2019	1,900	--	10	600	--	16	70	--	1	350	--	4
KAFB-106152-484	10/21/2020	Q4 2020	59	--	0.50	18	--	0.80	0.65	J	0.50	6.5	--	2.0
	4/16/2020	Q2 2020	540	--	5	310	--	8	26	--	0.5	320	--	20
	11/1/2019	Q4 2019	1,500	--	3	330	--	4	850	--	3	360	--	10
	4/18/2019	Q2 2019	430	--	5	300	--	8	12	--	0.5	290	--	20

**Table 4-10
Historical BTEX Concentrations**

Analyte:			Benzene			Ethylbenzene			Toluene			Xylenes, Total		
Project Screening Level ^a :			5 µg/L			700 µg/L			1,000 µg/L			620 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
KAFB-106153-484	10/21/2020	Q4 2020	14,000	--	100	320	--	16	10,000	--	100	1,500	--	40
	4/16/2020	Q2 2020	8,300	--	100	380	--	16	7,800	--	100	1,700	--	40
	11/1/2019	Q4 2019	9,000	--	100	400	--	16	7,100	--	100	1,800	--	40
	4/18/2019	Q2 2019	9,200	--	100	440	--	160	9,100	--	100	1,800	--	400
KAFB-106201	10/7/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/30/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106202	10/7/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/30/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/18/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106203	10/7/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/30/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/18/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106204	10/6/2020	Q4 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/23/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106205	10/6/2020	Q4 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/23/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106206	10/12/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/23/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106207	10/5/2020	Q4 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/24/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106208	10/6/2020	Q4 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/24/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106209	10/6/2020	Q4 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/24/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106212	10/9/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1

**Table 4-10
Historical BTEX Concentrations**

Analyte:			Benzene			Ethylbenzene			Toluene			Xylenes, Total		
Project Screening Level ^a :			5 µg/L			700 µg/L			1,000 µg/L			620 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
KAFB-106213	10/14/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106214	10/14/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106215	10/14/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106216	10/7/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/24/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106217	10/7/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/24/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106218	10/7/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/24/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106219	10/7/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	11/5/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/6/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106220	10/7/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	11/4/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/6/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106221	10/7/2020	Q4 2020	ND	UJ	0.50	ND	UJ	0.80	ND	UJ	0.50	ND	UJ	2.0
	11/4/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/4/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/6/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106222	10/14/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/24/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1

**Table 4-10
Historical BTEX Concentrations**

Analyte:			Benzene			Ethylbenzene			Toluene			Xylenes, Total		
Project Screening Level ^a :			5 µg/L			700 µg/L			1,000 µg/L			620 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
KAFB-106223	10/14/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/24/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106224	10/14/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/24/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106225	10/7/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106226	10/7/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2017	Q4 2017	0.9	J	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106227	10/7/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/3/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106229 ^e	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	11/20/2015	Q4 2015	0.376	J	1	ND	U	1	ND	U	1	ND	U	3
KAFB-106230 ^f	10/12/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	4/7/2016	Q2 2016	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	11/18/2015	Q4 2015	ND	U	1	ND	U	1	ND	U	1	ND	U	3
KAFB-106231	10/6/2020	Q4 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/28/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/8/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/6/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106232	10/6/2020	Q4 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/28/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/8/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/6/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1

**Table 4-10
Historical BTEX Concentrations**

Analyte:			Benzene			Ethylbenzene			Toluene			Xylenes, Total		
Project Screening Level ^a :			5 µg/L			700 µg/L			1,000 µg/L			620 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
KAFB-106235-438	10/5/2020	Q4 2020	ND	UJ	0.5	ND	UJ	0.8	ND	UJ	0.5	ND	UJ	2
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106235-472	10/5/2020	Q4 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106235-501	10/5/2020	Q4 2020	ND	UJ	0.5	ND	UJ	0.8	ND	UJ	0.5	ND	UJ	2
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106236-436	10/5/2020	Q4 2020	ND	UJ	0.5	ND	UJ	0.8	ND	UJ	0.5	ND	UJ	2
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106236-470	10/5/2020	Q4 2020	ND	UJ	0.5	ND	UJ	0.8	ND	UJ	0.5	ND	UJ	2
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106236-499	10/5/2020	Q4 2020	ND	UJ	0.5	ND	UJ	0.8	ND	UJ	0.5	ND	UJ	2
	10/29/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/1/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1
KAFB-106240-449	10/15/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	7/8/2020	Q3 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	4/9/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	1/7/2020	Q1 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2

**Table 4-10
Historical BTEX Concentrations**

Analyte:			Benzene			Ethylbenzene			Toluene			Xylenes, Total		
Project Screening Level ^a :			5 µg/L			700 µg/L			1,000 µg/L			620 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
KAFB-106241-428	10/12/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/30/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106242-418	10/6/2020	Q4 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/28/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/8/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106243-425	10/13/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/30/2019	Q4 2019	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	10/2/2018	Q4 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	9/4/2018	Q3 2018	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106244-445	10/14/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	7/8/2020	Q3 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	4/9/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	1/7/2020	Q1 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106245-460	10/14/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	7/9/2020	Q3 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2
	4/9/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2.0
	1/8/2020	Q1 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106247-450	10/14/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	7/8/2020	Q3 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	4/9/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	1/6/2020	Q1 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106S1-447	10/21/2020	Q4 2020	1,700	--	50	590	--	80	4,000	--	50	3,000	--	200
	7/10/2020	Q3 2020	5,000	--	50	500	J	8	6,300	--	50	2,800	J	20
	4/9/2020	Q2 2020	7,900	--	50	710	--	8	9,300	--	50	3,300	--	20
	1/9/2020	Q1 2020	7,800	--	50	620	--	8	10,000	--	50	2,600	--	20
KAFB-106S2-451	10/22/2020	Q4 2020	730	--	2.5	18	--	4.0	54	--	2.5	550	--	10
	7/10/2020	Q3 2020	1,100	--	5	130	--	8	320	--	5	1,200	--	20
	4/9/2020	Q2 2020	4,900	--	25	420	--	4	2,500	--	25	2,700	--	10
	1/6/2020	Q1 2020	9,800	--	50	880	--	8	12,000	--	50	4,600	--	20
KAFB-106S3-449	10/22/2020	Q4 2020	540	--	1.0	12	--	1.6	5.1	--	1.0	730	--	40
	7/10/2020	Q3 2020	200	--	5	24	--	8	5	J	5	450	--	20
	4/10/2020	Q2 2020	3,800	--	25	720	--	4	1,300	--	3	2,200	--	10
	1/9/2020	Q1 2020	5,500	--	25	1,400	--	4	4,900	--	25	4,200	--	10
KAFB-106S4-446	10/22/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	7/9/2020	Q3 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	4/9/2020	Q2 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
	1/6/2020	Q1 2020	ND	U	0.5	ND	U	0.8	ND	U	0.5	ND	U	2
KAFB-106S5-446	10/22/2020	Q4 2020	1,300	--	5.0	1,200	--	8.0	7,000	--	50	2,700	--	20
	7/10/2020	Q3 2020	990	--	10	1,300	--	16	3,400	--	10	2,400	--	40
	4/16/2020	Q2 2020	1,900	--	5	1,500	--	8	5,200	--	50	2,900	--	20
	1/9/2020	Q1 2020	1,500	--	10	1,600	--	16	4,900	--	10	3,100	--	40

**Table 4-10
Historical BTEX Concentrations**

Analyte:			Benzene			Ethylbenzene			Toluene			Xylenes, Total		
Project Screening Level ^a :			5 µg/L			700 µg/L			1,000 µg/L			620 µg/L		
Well Location ID	Sample Date	Sampling Quarter ^b	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
KAFB-106S7-451	10/22/2020	Q4 2020	310	--	2.5	700	--	4.0	1,600	--	25	2,100	--	10
	7/10/2020	Q3 2020	520	--	5	1,000	--	8	1,700	--	5	3,300	--	20
	4/16/2020	Q2 2020	1,200	--	10	640	--	16	1,700	--	10	2,200	--	40
	1/9/2020	Q1 2020	6,700	--	50	1,200	--	8	7,700	--	50	4,000	--	20
KAFB-106S8-451	10/21/2020	Q4 2020	770	J	2.5	15	--	4	390	J	2.5	130	--	10
	7/10/2020	Q3 2020	5,000	--	50	150	--	80	3,300	--	50	2,000	--	200
	4/10/2020	Q2 2020	4,400	--	25	210	--	4	6,400	--	25	2,100	--	10
	1/6/2020	Q1 2020	200	--	0.5	27	--	0.8	470	--	5	160	--	2
KAFB-106S9-447	10/21/2020	Q4 2020	36	--	0.50	52	--	0.80	1.9	--	0.50	65	--	2.0
	7/10/2020	Q3 2020	4,200	--	50	620	--	8	1,700	--	5	1,300	--	20
	4/16/2020	Q2 2020	9,900	--	100	1,100	--	16	12,000	--	100	3,400	--	40
	1/9/2020	Q1 2020	7,300	--	50	970	--	8	11,000	--	50	2,700	--	20
KAFB-3411	10/2/2020	Q4 2020	ND	U	0.50	ND	U	0.80	ND	U	0.50	ND	U	2.0
	10/17/2019	Q4 2019	ND	U	0.5	ND	U	0.8	1	--	0.5	ND	U	2
	10/22/2018	Q4 2018	ND	U	0.5	ND	U	0.8	0.5	J	0.5	ND	U	2
	10/30/2017	Q4 2017	ND	U	1	ND	U	1	ND	U	1	ND	U	1

^a The project screening level was selected to satisfy the requirements of the Kirtland AFB Hazardous Waste Permit Number NM9570024423 as the lowest of (1) NM WQCC numeric standard or (2) EPA MCL. If no NM WQCC standard or MCL exists for any analyte, then the project screening level will be the EPA Tapwater RSL. For benzene, ethylbenzene, and toluene, the project screening level is the EPA MCL. For total xylenes, the project screening level is the NM WQCC numeric standard.

^b Data presented include results from the current quarter where applicable along with the three most recent historical results. The sampling plan is provided in Table 3-1.

^c This well was not sampled between Q4 2015 and Q4 2019 due to security issues.

^d This well was not sampled in 2019 due to the presence of dedicated downhole equipment related to the EDB *in situ* biodegradation pilot test. Monitoring was resumed in 2020.

^e This well has not been sampled three times for these analytes, all historical data from this well is presented here.

^f This well was not sampled between Q2 2016 and Q4 2019 due to security issues.

µg/L = microgram per liter

AFB = Air Force Base

BTEX = benzene, toluene, ethylbenzene, and total xylenes

EDB = 1,2-dibromoethane (ethylene dibromide)

EPA = U.S. Environmental Protection Agency

ID = identification

LOD = limit of detection

MCL = maximum contaminant level

ND = not detected

NM = New Mexico

Q1 = first quarter

Q2 = second quarter

Q3 = third quarter

Q4 = fourth quarter

RSL = regional screening level

Val Qual = validation qualifier

WQCC = New Mexico Water Quality Control Commission

Shading = detected concentrations above the detection limit

Bold/Shading = reported concentrations exceed the project screening level

Val Quals based on independent data validation

J = Qualifier denotes the analyte was positively identified, but the associated numerical value is estimated.

U = Qualifier denotes the analyte was analyzed but not detected above the detection limit. The value associated with the U-qualifier is the LOD.

-- = Validation qualifier not assigned.

**Table 5-1
Drinking Water Supply Well Analytical Results, Q4 2020**

		Well Location ID: KAFB-003			KAFB-015			KAFB-016			ST106-VA2			KAFB-003				
		Field Sample ID: GWK003-2041			GWK015-2041			GWK016-2041			GWVA2-2041			GWK003-2042				
		Sample Date: 10/6/2020			10/6/2020			10/6/2020			10/6/2020			11/3/2020				
		Sample Type: REG			REG			REG			REG			REG				
Parameter	Analytical Method	Analyte	EPA MCL	Result	Val Qual	LOQ	Result	Val Qual	LOQ	Result	Val Qual	LOQ	Result	Val Qual	LOQ	Result	Val Qual	LOQ
EDB	Method E504.1 (µg/L)	1,2-Dibromoethane	0.05	ND	U	0.018	ND	U	0.018	ND	U	0.018	ND	U	0.017	ND	U	0.018
BTEX	Method E524.2 (µg/L)	Benzene	5	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	700	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Toluene	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Xylenes, total	10,000	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
Field Parameters		Temperature (°C)	NS	21.1			26.1			25.3			22.0			20.3		
		Specific Conductance (µS/cm)	NS	431.9			479.6			513			412.9			172.6		
		pH (S.U.)	NS	7.88			7.86			7.78			7.87			7.81		
		ORP (mV)	NS	147.5			126.6			141.8			111.3			308.6		
		DO (mg/L)	NS	4.26			0.54			0.62			1.37			4.26		
		Turbidity (NTU)	NS	0.17			0.30			0.71			0.57			0.16		

**Table 5-1
Drinking Water Supply Well Analytical Results, Q4 2020**

		Well Location ID: KAFB-015			KAFB-016			ST106-VA2			ST106-VA2			KAFB-003				
		Field Sample ID: GWK015-2042			GWK016-2042			GWVA2-2042			GWVA2-6042			GWK003-2043				
		Sample Date: 11/3/2020			11/3/2020			11/3/2020			11/3/2020			12/1/2020				
		Sample Type: REG			REG			REG			Field Duplicate			REG				
Parameter	Analytical Method	Analyte	EPA MCL	Result	Val Qual	LOQ	Result	Val Qual	LOQ	Result	Val Qual	LOQ	Result	Val Qual	LOQ	Result	Val Qual	LOQ
EDB	Method E504.1 (µg/L)	1,2-Dibromoethane	0.05	ND	U	0.018	ND	U	0.018	ND	U	0.017	ND	U	0.018	ND	U	0.018
BTEX	Method E524.2 (µg/L)	Benzene	5	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	700	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Toluene	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Xylenes, total	10,000	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
Field Parameters		Temperature (°C)	NS	25.6			24.5			21.5			21.5			19.9		
		Specific Conductance (µS/cm)	NS	356.2			246.7			181.9			181.9			267.5		
		pH (S.U.)	NS	7.87			7.16			7.74			7.74			7.84		
		ORP (mV)	NS	154.3			179.5			339.7			339.7			241.8		
		DO (mg/L)	NS	0.73			0.93			1.48			1.48			4.39		
		Turbidity (NTU)	NS	0.13			0.58			0.26			0.26			1.19		

**Table 5-1
Drinking Water Supply Well Analytical Results, Q4 2020**

		Well Location ID:	KAFB-015	KAFB-016	ST106-VA2							
		Field Sample ID:	GWK015-2043	GWK016-2043	GWVA2-2043							
		Sample Date:	12/1/2020	12/1/2020	12/1/2020							
		Sample Type:	REG	REG	REG							
Parameter	Analytical Method	Analyte	EPA MCL	Result	Val Qual	LOQ	Result	Val Qual	LOQ	Result	Val Qual	LOQ
EDB	Method E504.1 (µg/L)	1,2-Dibromoethane	0.05	ND	U	0.018	ND	U	0.018	ND	U	0.018
BTEX	Method E524.2 (µg/L)	Benzene	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	700	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Toluene	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Xylenes, total	10,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
Field Parameters		Temperature (°C)	NS	23.4			21.2			20.6		
		Specific Conductance (µS/cm)	NS	420.2			464.7			212.6		
		pH (S.U.)	NS	7.96			7.46			7.88		
		ORP (mV)	NS	96.9			162.0			293.3		
		DO (mg/L)	NS	0.78			0.63			1.13		
		Turbidity (NTU)	NS	0.60			0.99			0.60		

Table 5-1
Drinking Water Supply Well Analytical Results, Q4 2020

µg/L = micrograms per liter
µS/cm = micro siemens per centimeter
°C = degree Celsius
BTEX = benzene, toluene, ethylbenzene, and total xylenes
DO = dissolved oxygen
EDB = 1,2-dibromoethane (ethylene dibromide)
EPA = U.S. Environmental Protection Agency
GW = groundwater
ID = identification
LOQ = limit of quantitation
MCL = maximum contaminant level
mg/L = milligram per liter
mV = millivolt
ND = nondetect
NS = not specified
NTU = nephelometric turbidity unit
ORP = oxidation reduction potential
Q4 = fourth quarter
REG = normal field sample
S.U. = standard units
VA = U.S. Department of Veterans Affairs
Val Qual = validation qualifier
Val Quals based on independent data validation:
U = Qualifier denotes the analyte was analyzed but not detected above the detection limit. The value associated with the U-qualifier is the LOQ.
J = Qualifier denotes the analyte was positively identified, but the associated numerical value is estimated.
-- = Validation qualifier not assigned.

**Table 5-2
Drinking Water Supply Well Semi-Annual Inorganic Analytical Results, Q4 2020**

		Well Location ID:		KAFB-003		KAFB-015		KAFB-016		ST106-VA2								
		Field Sample ID:		GWK003-2041		GWK015-2041		GWK016-2041		GWVA2-2041								
		Sample Date:		10/6/2020		10/6/2020		10/6/2020		10/6/2020								
		Sample Type:		REG		REG		REG		REG								
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOQ	Result	Val Qual	LOQ	Result	Val Qual	LOQ	Result	Val Qual	LOQ
Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	40	--	0.15	29	--	0.15	45	--	0.15	34	--	0.15
		Iron, dissolved	1.0	NS	14	1.0	ND	U	0.1	ND	U	0.1	ND	UJ	0.1	ND	U	0.1
		Magnesium	NS	NS	NS	NS	5	--	0.075	7.3	--	0.075	5.2	--	0.075	6.4	--	0.075
		Manganese, dissolved	0.2	NS	0.43	0.2	ND	U	0.0052	0.025	--	0.0052	0.0066	J	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	NS	2.4	--	0.38	6.4	--	0.38	3.6	--	0.38	3.4	--	0.38
		Sodium	NS	NS	NS	NS	23	--	0.5	35	--	0.5	27	--	0.5	22	--	0.5
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.00052	0.01	ND	U	0.0016	0.015	--	0.0016	0.023	J	0.0016	0.0017	J	0.0016
		Lead	0.015	0.015	0.015	0.015	0.00033	J	0.00025	0.00014	J	0.00025	0.00013	J	0.00025	0.00043	J	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	ND	U	2	ND	U	2	ND	U	2	ND	U	2
		Chloride	250	NS	NS	250	25	--	1.5	59	--	15	62	--	15	30	--	1.5
		Sulfate	600	250	NS	250	31	--	4.5	31	--	4.5	31	--	4.5	26	--	4.5
	Method SM4500S2F (mg/L)	Sulfide	NS	NS	NS	NS	0.75	J	1.5	ND	U	1.5	0.94	J	1.5	ND	U	1.5
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	0.41	--	0.09	ND	U	0.09	ND	U	0.09	ND	U	0.09
	Method SM4500NH3B/C (mg/L)	Nitrogen, ammonia	NS	NS	NS	NS	ND	U	0.6	ND	U	0.6	ND	U	0.6	ND	U	0.6
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	110	--	6	94	--	6	93	--	6	100	--	6
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	ND	U	6	ND	U	6	ND	U	6	ND	U	6
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	110	--	6	94	--	6	93	--	6	100	--	6
Field Parameters	Temperature (°C)		NS	NS	NS	NS	21.1			26.1			25.3			22.0		
	Specific Conductance (µS/cm)		NS	NS	NS	NS	431.9			479.6			513			412.9		
	pH (S.U.)		NS	NS	NS	NS	7.88			7.86			7.78			7.87		
	ORP (mV)		NS	NS	NS	NS	147.5			126.6			141.8			111.3		
	DO (mg/L)		NS	NS	NS	NS	4.26			0.54			0.62			1.37		
	Turbidity (NTU)		NS	NS	NS	NS	0.17			0.30			0.71			0.57		

Table 5-2
Drinking Water Supply Well Semi-Annual Inorganic Analytical Results, Q4 2020

^a NM WQCC numeric standards per the NMAC Title 20.6.2.3101A, Standards for Ground Water of 10,000 mg/L Total Dissolved Solids Concentration or Less (NMAC 2018).

^b EPA National Primary Drinking Water Regulations, MCLs and Secondary MCLs, Title 40CFR Part 141, 143 (May 2018).

^c EPA Region 6 RSL for Tapwater (November 2020) for hazard index = 1.0 for non-carcinogens and a 10-5 cancer risk level for carcinogens.

^d The project screening level was selected to satisfy the requirements of the Kirtland AFB Hazardous Waste Permit Number NM9570024423 as the lowest of (1) NM WQCC numeric standard or (2) EPA MCL. If no NM WQCC numeric standard or MCL exists for any analyte, then the project screening level will be the EPA RSL.

^e The analytical method utilized to analyze for total nitrate/nitrite nitrogen concentrations (Method 353.2) cannot identify individual nitrate and nitrite concentrations without modification. Typically, in highly oxidizing and near neutral aquifers, nitrate is the primary nitrogen species found in groundwater (Langmuir, 1997). Previous studies in the Albuquerque Basin have used total nitrate/nitrite nitrogen concentrations as equivalent to nitrate nitrogen concentrations (Longmire, 2016; Anderholm et al., 1995). Therefore, total nitrate/nitrite nitrogen concentrations were compared to screening levels for nitrate in this report.

µg/L = micrograms per liter

µS/cm = micro siemens per centimeter

°C = degree Celsius

CFR = Code of Federal Regulations

DO = dissolved oxygen

EPA = U.S. Environmental Protection Agency

GW = groundwater

ID = identification

LOQ = limit of quantitation

MCL = maximum contaminant level

mg/L = milligram per liter

mV = millivolt

ND = nondetect

NM = New Mexico

NMAC = New Mexico Administrative Code

NS = not specified

NTU = nephelometric turbidity unit

ORP = oxidation reduction potential

Q4 = fourth quarter

REG = normal field sample

RSL = regional screening level

S.U. = standard units

VA = U.S. Department of Veterans Affairs

Val Qual = validation qualifier

WQCC = Water Quality Control Commission

Val Quals based on independent data validation:

U = Qualifier denotes the analyte was analyzed but not detected above the detection limit. The value associated with the U-qualifier is the LOQ.

J = Qualifier denotes the analyte was positively identified, but the associated numerical value is estimated.

-- = Validation qualifier not assigned.

Anderholm, S.K., M.J. Radell, and S.F. Richey. 1995. *Water-quality Assessment of the Rio Grande Valley Study Unit, Colorado, New Mexico, and Texas – Analysis of Selected Nutrient, Suspended-sediment, and Pesticide Data*. U.S. Geological Survey. 167

Langmuir, D. 1997. *Aqueous Environmental Geochemistry*. Prentice-Hall, Upper Saddle River, New Jersey. 600 p.

Longmire, D. 2016. *Application of PHREEQC for Evaluating Precipitation of Reactive Phases During Injection of Treated Effluent Water at Well KAFB-7, Kirtland Air Force Base, Albuquerque, New Mexico*. NMED. 9 p. February 2.

**Table 6-1
DP-1839 Discharge Permit Terms and Conditions, Operations and Maintenance Plan Cross References**

Condition No.	Terms and Conditions	Reference Location in Quarterly Report
15	The Permittee shall ensure the treated effluent conveyance system, i.e., piping, between the GWTS and the UIC well(s) does not leak and shall report any such leakage to the NMED GWQB in accordance with 20.6.2.1203(A) NMAC and copy the NMED HWB.	6.3.4 Effluent Conveyance Line Integrity (not applicable in Q4 2020)
	Within 1 year of the effective date of this Discharge Permit, the Permittee shall demonstrate the structural integrity of the treated effluent conveyance system between the GWTS and KAFB-7.	6.3.4 Effluent Conveyance Line Integrity (not applicable in Q4 2020)
	Prior to testing, the Permittee shall propose for NMED approval the test method to be used.	6.3.4 Effluent Conveyance Line Integrity (not applicable in Q4 2020)
	The results of the mechanical integrity testing shall be submitted to NMED within 60 days of test completion.	6.3.4 Effluent Conveyance Line Integrity (not applicable in Q4 2020)
	The Permittee shall integrity test the treated effluent conveyance system between GWTS and the UIC well(s) prior to submitting a permit renewal application. [20.6.2.3106(C) NMAC, 20.6.2.3107(A) NMAC]	6.3.4 Effluent Conveyance Line Integrity (not applicable in Q4 2020)
17	The Permittee shall conduct the monitoring, operations, and reporting listed below.	6.1 Groundwater Treatment System Operation
	Unless otherwise specified, all periodic monitoring results or general information obtained shall be reported in the forthcoming quarterly report. [20.6.2.3107 NMAC]	6.1 Groundwater Treatment System Operation
18	Unless otherwise approved by NMED, the Permittee shall conduct sampling in accordance with standard industry practice.	6.2 Groundwater Treatment System Performance Monitoring and 1,2-Dibromoethane Removal
	Sampling in accordance with the most current version of the GWTS Sampling and Analysis Plan (Appendix L of the O&M Plan), which includes sampling locations, procedures, field measurements, quality control samples, handling and custody, analytical methods, quality control, analytical validation, and reporting requirements, satisfies this Condition. [20.6.2.3107(B) NMAC]	6.2 Groundwater Treatment System Performance Monitoring and 1,2-Dibromoethane Removal
19	The Permittee shall submit quarterly and annual reports to NMED pursuant to the most recent NMED HWB approved Work Plans.	6.2 Groundwater Treatment System Performance Monitoring and 1,2 Dibromoethane Removal
	The Permittee shall identify the portions of these reports pertaining to this Discharge Permit with a table in the reports that identifies those portions.	Table 6-1 DP-1839 Discharge Permit Terms and Conditions, Operations and Maintenance Plan Cross References
	Quarterly reports shall be submitted as specified below unless otherwise authorized by NMED: • January 1st through March 31st - due by June 30th • April 1st through June 30th - due by September 30th • July 1st through September 30th - due by December 31st • October 1st through December 31st - due by March 31st	Noted
	Annual reporting requirements for the previous year, i.e., January 1 through December 31, shall be reported in the March 31 quarterly report. [20.6.2.3107(A) NMAC]	Noted
20	The Permittee shall monitor the concentration of all COCs listed on Table 2 in GWTS treated effluent. Associated sampling and analysis shall be performed monthly at a minimum.	6.2 Groundwater Treatment System Performance Monitoring and 1,2-Dibromoethane Removal Table 6-8 Monthly Groundwater Treatment System Performance Analytical Results for Train 1, Q4 2020 Table 6-9 Monthly Groundwater Treatment System Performance Analytical Results for Train 2, Q4 2020
	When groundwater from a new extraction well is first introduced to the GWTS, COC monitoring of the GWTS treated effluent shall occur daily for the first week of treatment, weekly for the first month of treatment, and monthly thereafter.	Not applicable in Q4 2020
	If alterations to, or conditions at, the GWTS result in a potential impact to effluent quality, the Permittee will repeat this sampling sequence as directed by NMED.	No effluent quality impacts in Q4 2020
20	A representative sample of GWTS influent and effluent shall be analyzed annually for the constituents identified in Table 3.	Performed in Q3 2019; last reported in Q3 2019; Not applicable to Q4 2020
	A representative sample of GWTS influent and effluent shall be analyzed every 5 years for the constituents identified in Table 4	Performed in Q3 2017; last reported in Q3 2017; Not applicable to Q4 2020
	The first analysis of the 5-year constituent list shall occur in July 2017. Any newly identified constituents detected during the 5-year sampling events will be added to the annual sampling constituent list in Table 3.	Performed in Q3 2017; last reported in Q3 2017; Not applicable to Q4 2020
	All analysis of GWTS influent and effluent shall utilize analytical methods with detection limits that are sufficiently low to allow comparison to the standards included in the above referenced state and federal regulations.	6.2 Groundwater Treatment System Performance Monitoring and 1,2-Dibromoethane Removal Table 6-8 Monthly Groundwater Treatment System Performance Analytical Results for Train 1, Q4 2020 Table 6-9 Monthly Groundwater Treatment System Performance Analytical Results for Train 2, Q4 2020
	All sampling, analysis, and reporting shall comply with the most recent approved Work Plans. [20.6.2.3107(A) NMAC and 20.6.2.3107(B) NMAC]	6.2 Groundwater Treatment System Performance Monitoring and 1,2-Dibromoethane Removal

**Table 6-1
DP-1839 Discharge Permit Terms and Conditions, Operations and Maintenance Plan Cross References**

Condition No.	Terms and Conditions	Reference Location in Quarterly Report
21	The Permittee shall report the volume of treated GWTS effluent discharged to each UIC well each quarter. This report shall include the following:	See Below
	a. Monthly average, maximum, and minimum values for flow rate and volume of treated effluent transferred to each UIC well	Table 6-5 Groundwater Treatment System Injection Well Performance, Q4 2020 Table 6-6 Annual Groundwater Treatment System Injection Well Performance, Q4 2020
	b. The totalized monthly volume of treated effluent transferred to all UIC wells	Table 6-3 Quantities of Groundwater Treated and Discharged, Q4 2020
	c. Monthly average, maximum, and minimum head values of injection water for each UIC well.	Table 6-5 Groundwater Treatment System Injection Well Performance, Q4 2020 Table 6-6 Annual Groundwater Treatment System Injection Well Performance, Q4 2020
	The Permittee shall monitor the GWTS effluent volume utilizing an effluent flow meter installed on the effluent pump skid after the GAC units. Each UIC well shall have a dedicated flowmeter. Flowmeters shall be inspected and calibrated in accordance with the associated manufacturer's recommendations. [20.6.2.3107 NMAC]	Table 6-5 Groundwater Treatment System Injection Well Performance, Q4 2020 Table 6-12 Groundwater Treatment System Routine Maintenance Schedule, Q4 2020
22	The Permittee shall include the following results and general information in quarterly reports to NMED:	See Below
	a. Any mechanical integrity (tests) conducted on either the GWTS or a UIC well	6.3.3 Non-Routine Maintenance Activities Table 6-13 Groundwater Treatment System Non-Routine Maintenance Items, Q4 2020
	b. Any replacement of GAC media and the associated data that initiated the decision to replace the media	6.3.3 Non-Routine Maintenance Activities Table 6-13 Groundwater Treatment System Non-Routine Maintenance Items, Q4 2020
	c. Any UIC well rehabilitation conducted	6.3.1 Routine Maintenance Activities Table 6-12 Groundwater Treatment System Routine Maintenance Items, Q4 2020 6.3.3 Non-Routine Maintenance Activities Table 6-13 Groundwater Treatment System Non-Routine Maintenance Items, Q4 2018
	d. Any malfunction, repair, or replacement of a flowmeter	6.3.3 Non-Routine Maintenance Activities Table 6-13 Groundwater Treatment System Non-Routine Maintenance Items, Q4 2020
	e. Any additional operational changes with the potential to affect the discharge. [20.6.2.3107 NMAC]	6.3.3 Non-Routine Maintenance Activities Table 6-13 Groundwater Treatment System Non-Routine Maintenance Items, Q4 2020
23	The Permittee shall monitor the groundwater wells in the vicinity of KAFB-7 and in the vicinity of any newly installed UIC well(s) to determine any change to aquifer chemistry that may be the result of injection.	Table 6-11 Groundwater Analytical Results for Wells in the Vicinity of KAFB-7, Q4 2020
	This monitoring shall be performed annually, shall conform to the procedures of the most current approved Work Plan, and shall measure the COCs listed in Table 2. This chemistry will be reported in the Annual Report for BFF.	Provided in this Q4 2020 Report; Section 6.2.1.1
	ST-105 Annual Report includes elevation contour mapping and analytical parameters identified in the Stage 2 Abatement Plan.	Reported annually in the ST-105 Annual Report
	The Permittee shall develop a groundwater elevation contour map depicting the groundwater flow direction in the vicinity of each UIC well and report it in the ST-105 Annual Report.	Reported annually in the ST-105 Annual Report Also reported in Q4 of each year, last reported in Q4 2018
	If the chemical quality of the treated groundwater being injected changes over time, NMED may require the Permittee to repeat geochemical modeling (numeric or analytical) to predict the interaction between the treated effluent and receiving groundwater. [20.6.2.3107 NMAC]	Not applicable in Q4 2020
24	The Permittee shall post all reports required by this Discharge Permit on Kirtland AFB's most current website (e.g., https://kirtlandafb.tlisolutions.com/main.aspx .) [20.6.2.3107(A) NMAC]	http://afcec.publicadmin-record.us.af.mil/search.aspx

**Table 6-1
DP-1839 Discharge Permit Terms and Conditions, Operations and Maintenance Plan Cross References**

Condition No.	Terms and Conditions	Reference Location in Quarterly Report
34	In the event the Permittee proposes a change to the facility or the facility's discharge that would result in a change in the volume discharged; the location of the discharge; or in the amount or character of water contaminants received, treated, or discharged by the facility that differs from the terms and conditions in this Discharge Permit, the Permittee shall notify NMED prior to implementing such changes.	Noted
	The Permittee shall obtain approval (which may require modification of this Discharge Permit) by NMED prior to implementing such changes. [20.6.2.7(P) NMAC, 20.6.2.3107(C) NMAC, 20.6.2.3109(E) and (G) NMAC]	Noted
35	In the event the Permittee proposes to construct or change an existing system such that the quantity or quality of the discharge will change substantially from that authorized by this Discharge Permit, the Permittee shall submit construction plans and specifications to NMED for the proposed system or process unit prior to the commencement of construction.	Noted
	In the event the Permittee implements changes to an existing system authorized by this Discharge Permit which will result in only a minor effect on the quality of the discharge, the Permittee shall report such changes (including the submission of record drawings, where applicable) in the next quarterly report to NMED. [20.6.2.1202(A) and (C) NMAC, New Mexico Statutes Annotated 1978, §§ 61-23-1 through 61-23-32]	Not applicable in Q4 2020

BFF = Bulk Fuels Facility
 COC = contaminant of concern
 GAC = granular activated carbon
 GWTS = groundwater treatment system
 GWQB = Groundwater Quality Bureau
 HWB = Hazardous Waste Bureau
 NMAC = New Mexico Administrative Code
 NMED = New Mexico Environment Department
 No. = number
 O&M = Operation and maintenance
 Q3 = third quarter
 Q4 = fourth quarter
 UIC = underground injection control

**Table 6-2
Groundwater Treatment System Extraction Well Performance, Q4 2020**

Well ID	Well Parameter	October	November	December	Q4 (Average)
KAFB-106228	Average Operational Flow Rate ^a (gpm)	140.6	139.7	138.9	139.6
	Flow Rate Range ^b (gpm; min-max)	0.0 - 141.1	139.3 - 140.3	137.8 - 142.0	0.0 - 142.0
	Average Drawdown ^c (ft)	17.2	19.6	19.5	18.8
	Water Level Elevation Range ^b (ft AMSL; min-max)	4856.5 - 4876.9	4856.5 - 4859.1	4856.9 - 4858.4	4856.5 - 4876.9
	Average Specific Capacity ^d (gpm/ft)	7.2	7.1	7.1	7.1
	Average Transmissivity ^d (gpd/ft)	10,770	10,720	10,668	10,715
	Run Time % ^e	89.5%	97.9%	98.0%	95.1%
	Notes	NA	NA	NA	NA
KAFB-106233	Average Operational Flow Rate ^a (gpm)	161.3	160.0	159.1	160.1
	Flow Rate Range ^b (gpm; min-max)	0.0 - 161.9	159.6 - 160.9	158.5 - 159.8	0.0 - 161.9
	Average Drawdown ^c (ft)	5.3	5.9	5.9	5.7
	Water Level Elevation Range ^b (ft AMSL; min-max)	4868.9 - 4875.3	4868.9 - 4869.9	4869.0 - 4869.7	4868.9 - 4875.3
	Average Specific Capacity ^d (gpm/ft)	27.8	27.0	27.0	27.3
	Average Transmissivity ^d (gpd/ft)	41,669	40,783	40,467	40,973
	Run Time % ^e	89.9%	94.3%	98.0%	94.1%
	Notes	Intermittently Online ^f	Intermittently Online ^f	Intermittently Online ^f	Intermittently Online ^f
KAFB-106234	Average Operational Flow Rate ^a (gpm)	173.8	173.8	173.7	173.8
	Flow Rate Range ^b (gpm; min-max)	0.0 - 174.3	173.3 - 174.3	173.4 - 174.1	0.0 - 174.3
	Average Drawdown ^c (ft)	5.5	6.1	5.9	5.8
	Water Level Elevation Range ^b (ft AMSL; min-max)	4868.5 - 4875.1	4868.5 - 4869.5	4868.5 - 4869.5	4868.5 - 4875.1
	Average Specific Capacity ^d (gpm/ft)	28.7	28.8	29.3	28.9
	Average Transmissivity ^d (gpd/ft)	43,024	43,125	43,956	43,406
	Run Time % ^e	91.2%	94.2%	98.2%	94.5%
	Notes	NA	NA	NA	NA
KAFB-106239	Average Operational Flow Rate ^a (gpm)	75.1	73.3	72.2	73.4
	Flow Rate Range ^b (gpm; min-max)	0.0 - 75.8	72.5 - 74.3	70.2 - 73.8	0.0 - 75.8
	Average Drawdown ^c (ft)	10.5	12.2	12.0	11.6
	Water Level Elevation Range ^b (ft AMSL; min-max)	4871.2 - 4883.4	4871.0 - 4871.4	4857.4 - 4874.4	4857.4 - 4883.4
	Average Specific Capacity ^d (gpm/ft)	6.3	6.0	6.2	6.1
	Average Transmissivity ^d (gpd/ft)	9,403	8,995	9,275	9,218
	Run Time % ^e	89.5%	97.9%	95.4%	94.2%
	Notes	NA	NA	NA	NA
Combined Extraction Well Totals	Combined Average Operational Flow Rate ^g (gpm)	543.1	546.9	543.9	544.6
	Combined Flow Rate Range (gpm)	0.0 - 552.8	545.3 - 549.4	541.0 - 545.5	0.0 - 552.8
	Run Time % ^h	91.2%	97.9%	98.2%	95.1%

Table 6-2
Groundwater Treatment System Extraction Well Performance, Q4 2020

^a Flow rate calculation is an average rate that only includes time while the system was operational; average values were computed from daily values throughout Q4 2020.

^b Ranges are provided from daily values throughout Q4 2020.

^c Average drawdown is calculated from the approximate static water elevation in Q4 2020, only includes time while system was operational and does not account for dynamic water elevation increases in the aquifer; average values were computed from daily values throughout Q4 that were obtained from the SCADA for all the extraction wells.

^d Specific capacity and transmissivity average values only include pump run time (i.e., pump down time is not factored into the calculation); average values were computed from daily values throughout Q4.

^e Percent run time is calculated when the given well is running at a minimum of 50 gpm; dataset includes readings for every minute throughout Q4.

^f KAFB-106233 was intermittently online to maintain water level at injection well KAFB-7.

^g Combined Average Operation Flow Rate is the average influent flow rate to the GWTS.

^h The combined extraction well percent run time is based on the percentage of time that water is entering the GWTS from any combination of extraction wells.

% = percent

AMSL = above mean sea level

ft = foot (feet)

gpd = gallons per day

gpm = gallons per minute

GWTS = groundwater treatment system

HMI = human machine interface

ID = identification

max = maximum

min = minimum

NA = not applicable

Q4 = fourth quarter

**Table 6-3
Cumulative Quantities of Groundwater Treated and Discharged through Q4 2020**

GWTS Operating Month	Train 1 Total Groundwater Treated (gallons)	Train 2 Total Groundwater Treated (gallons)	Total Groundwater Extracted (gallons)	Treated Groundwater Injected to Injection Well KAFB-7 (gallons)	Treated Groundwater Injected to Injection Well KAFB-IN2^a (gallons)	Treated Groundwater Discharged to the GCMP^b (gallons)
Totalizing Flowmeter ^c	FE/FIT-3108	FE/FIT-3208	FE/FIT-3108 + FE/FIT-3208	FE/FIT-3108 + FE/FIT-3208	KAFB-IN2 Flowmeter	FE/FIT-3108 + FE/FIT-3208
December 2015 ^d	17,664,900	0	17,664,900	0	--	17,664,900
2015 Total	17,664,900	0	17,664,900	0	--	17,664,900
January 2016	1,777,200	0	1,777,200	0	--	1,777,200
February 2016	881,000	0	881,000	181,300	--	699,700
March 2016	22,168,080	0	22,168,080	1,231,350	--	20,936,730
April 2016	12,649,920	0	12,649,920	582,570	--	12,067,350
May 2016	12,090,000	0	12,090,000	0	--	12,090,000
June 2016	8,850,000	0	8,850,000	0	--	8,850,000
July 2016	9,940,000	0	9,940,000	0	--	9,940,000
August 2016	9,400,000	0	9,400,000	0	--	9,400,000
September 2016	12,980,000	0	12,980,000	0	--	12,980,000
October 2016	8,300,000	0	8,300,000	0	--	8,300,000
November 2016	7,200,000	0	7,200,000	2,970,000	--	4,230,000
December 2016	14,570,100	0	14,570,100	14,501,190	--	68,910
2016 Total	120,806,300	0	120,806,300	19,466,410	--	101,339,890
January 2017	6,089,700	87,300	6,177,000	5,877,600	--	299,400
February 2017	1,637,100	2,357,400	3,994,500	2,216,600	--	1,777,900
March 2017	5,551,200	5,705,400	11,256,600	5,172,800	--	6,083,800
April 2017	7,269,000	6,712,700	13,981,700	2,248,062	--	11,733,638
May 2017	9,234,900	9,453,700	18,688,600	4,722,563	--	13,966,037
June 2017	9,706,100	9,055,100	18,761,200	1,592,700	--	17,168,500
July 2017	13,260,800	10,875,200	24,136,000	3,023,500	--	21,112,500
August 2017	9,461,200	8,999,500	18,460,700	4,847,500	--	13,613,200
September 2017	9,734,500	9,227,600	18,962,100	6,752,400	--	12,209,700
October 2017	8,684,700	12,941,900	21,626,600	14,775,800	--	6,850,800
November 2017	0	12,513,400	12,513,400	3,734,900	--	8,778,500
December 2017	0	13,304,300	13,304,300	10,724,700	--	2,579,600
2017 Total	80,629,200	101,233,500	181,862,700	65,689,125	--	116,173,575

**Table 6-3
Cumulative Quantities of Groundwater Treated and Discharged through Q4 2020**

GWTS Operating Month	Train 1 Total Groundwater Treated (gallons)	Train 2 Total Groundwater Treated (gallons)	Total Groundwater Extracted (gallons)	Treated Groundwater Injected to Injection Well KAFB-7 (gallons)	Treated Groundwater Injected to Injection Well KAFB-IN2^a (gallons)	Treated Groundwater Discharged to the GCMP^b (gallons)
January 2018	9,865,000	5,497,700	15,362,700	13,887,700	--	1,475,000
February 2018	10,785,300	6,786,100	17,571,400	13,765,300	--	3,806,100
March 2018	11,006,000	7,092,900	18,098,900	9,235,300	--	8,863,600
April 2018	7,468,200	5,800,700	13,268,900	0 ^e	--	13,268,900
May 2018	11,238,400	8,061,600	19,300,000	0 ^e	--	19,300,000
June 2018	14,746,800	10,186,400	24,933,200	0 ^e	--	24,933,200
July 2018	12,038,500	7,901,100	19,939,600	0 ^e	--	19,939,600
August 2018	14,973,100	9,583,900	24,557,000	0 ^e	--	24,557,000
September 2018	9,516,900	7,509,600	17,026,500	0 ^e	--	17,026,500
October 2018	1,572,600	7,288,500	8,861,100	0 ^e	--	8,861,100
November 2018	7,788,300	4,682,900	12,471,200	7,517,100	--	4,954,100
December 2018	15,521,500	10,282,100	25,803,600	23,080,800	--	2,722,800
2018 Total	126,520,600	90,673,500	217,194,100	67,486,200	--	149,707,900
January 2019	10,768,450	9,747,250	21,536,900	19,494,500	--	2,042,400
February 2019	6,949,200	8,342,400	15,291,600	13,624,600	--	7,640,500
March 2019	9,046,600	10,172,500	19,219,100	13,435,900	--	13,080,600
April 2019	7,164,400	8,618,600	15,783,000	7,170,800	--	14,031,100
May 2019	12,933,100	10,866,200	23,799,300	5,779,900	--	17,091,400
June 2019	12,585,900	7,964,600	20,550,500	1,512,500	--	15,855,000
July 2019	12,281,000	4,909,900	17,190,900	551,100	--	17,351,400
August 2019	16,276,400	10,668,100	26,944,500	5,494,800	--	22,177,400
September 2019	12,823,300	8,452,900	21,276,200	2,916,700	--	17,279,700
October 2019	15,250,400	9,773,900	25,024,300	17,177,900	--	6,326,400
November 2019	12,505,600	8,260,300	20,765,900	14,525,700	--	1,081,700
Dec-19	13,113,700	8,016,000	21,129,700	15,695,800	--	134,000
2019 Total	141,698,050	105,792,650	247,490,700	117,380,200	--	134,091,600

**Table 6-3
Cumulative Quantities of Groundwater Treated and Discharged through Q4 2020**

GWTS Operating Month	Train 1 Total Groundwater Treated (gallons)	Train 2 Total Groundwater Treated (gallons)	Total Groundwater Extracted (gallons)	Treated Groundwater Injected to Injection Well KAFB-7 (gallons)	Treated Groundwater Injected to Injection Well KAFB-IN2^a (gallons)	Treated Groundwater Discharged to the GCMP^b (gallons)
January 2020	9,025,600	10,401,500	19,427,100	18,919,600	--	507,500
February 2020	6,985,200	8,249,600	15,234,800	12,237,600	--	2,997,200
March 2020	7,280,800	8,168,800	15,449,600	4,246,900	--	11,202,700
April 2020	9,547,500	10,804,400	20,351,900	5,110,300	--	15,241,600
May 2020	10,550,000	8,680,400	19,230,400	395,600	--	18,834,800
June 2020	12,585,900	7,964,600	20,550,500	0	--	20,550,500
July 2020	15,683,800	7,048,500	22,732,300	1,550,800	--	21,181,500
August 2020	12,873,600	8,529,500	21,403,100	3,737,000	--	17,666,100
September 2020	12,823,300	8,452,900	21,276,200	4,711,800	--	16,564,400
October 2020	15,250,400	9,773,900	25,024,300	14,033,400	--	10,990,900
November 2020	12,505,600	8,260,300	20,765,900	11,704,300	83,100	8,978,500
December 2020 ^f	16,478,900	10,121,600	26,600,500	23,482,400	57,600	3,060,500
Q4 2020 Total	44,234,900	28,155,800	72,390,700	49,220,100	140,700	23,029,900
2020 Total^f	141,590,600	106,456,000	248,046,600	100,129,700	140,700	147,776,200
Cumulative Total	628,909,650	404,155,650	1,033,065,300	370,151,635	140,700	666,754,065

^a Injection well KAFB-IN2 became active on November 13, 2020.

^b Corrected volumes from human machine interface datasets.

^c Flowmeters are inspected monthly, see Appendix I-1.

^d Train 1 treatment volume for December 2015 includes all water treated by the temporary treatment system and water treated by Train 1 during December 2015.

^e On March 14, 2018 at 0206, the KAFB-7 V-Smart valve hydraulic assembly failed downhole. Repairs to KAFB-7 were completed on November 14, 2018. All treated water between March 14, 2018 and November 15, 2018 was discharged to the GCMP.

^f Treatment volumes for December 2020 are calculated through January 3, 2021.

^g Cumulative 2020 total through January 3, 2021.

FE/FIT-3208 = Flowmeter/flow meter transmitter (followed by the component designation)

GCMP = Tijeras Arroyo Golf Course main pond

GWTS = groundwater treatment system

Q4 = fourth quarter

**Table 6-4
Annual Groundwater Treatment System Extraction Well Performance, 2020**

Location ID	Well Parameter	Q1	Q2	Q3	Q4	2020 (Average)
KAFB-106228	Average Operational Flow Rate ^a (gpm)	143.7	143.3	142.5	139.6	142.3
	Flow Rate Range ^b (gpm; min-max)	142.6 - 148.0	142.5 - 146.3	0.0 - 145.1	0.0 - 142.0	0.0 - 148.0
	Average Drawdown ^c (ft)	15.2	19.7	20.6	18.8	18.6
	Water Level Elevation Range ^b (ft AMSL; min-max)	4859.7 - 4864.4	4858.9 - 4863.7	4856.8 - 4879.6	4856.5 - 4876.9	4856.5 - 4879.6
	Average Specific Capacity ^d (gpm/ft)	9.5	7.3	6.9	7.1	7.7
	Average Transmissivity ^d (gpd/ft)	14,189	10,931	10,286	10,715	11530
	Run Time % ^e	97.8%	99.0%	95.7%	95.1%	96.9%
	Notes	NA	NA	NA	NA	NA
KAFB-106233 ^f	Average Operational Flow Rate ^a (gpm)	161.8	165.1	164.1	160.1	162.8
	Flow Rate Range ^b (gpm; min-max)	0.0 - 162.3	0.0 - 166.3	0.0 - 166.2	0.0 - 161.9	0.0 - 166.3
	Average Drawdown ^c (ft)	4.8	37.5	6.2	5.7	13.5
	Water Level Elevation Range ^b (ft AMSL; min-max)	4871.8 - 4878.5	4871.8 - 4878.4	4869.4 - 4877.9	4868.9 - 4875.3	4868.9 - 4878.5
	Average Specific Capacity ^d (gpm/ft)	34.1	4.8	23.2	27.3	22.3
	Average Transmissivity ^d (gpd/ft)	51,079	7,126	34,729	40,973	33,477
	Run Time % ^e	0.4%	45.0%	78.1%	94.1%	54.4%
	Notes	Intermittently Online ^f	Intermittently Online ^f	Intermittently Online ^f	Intermittently Online ^f	Intermittently Online ^f
KAFB-106234	Average Operational Flow Rate ^a (gpm)	175.7	175.0	174.4	173.8	174.7
	Flow Rate Range ^b (gpm; min-max)	174.4 - 177.5	174.0 - 176.1	0.0 - 175.9	0.0 - 174.3	0.0 - 177.5
	Average Drawdown ^c (ft)	3.0	27.7	7.8	5.8	11.1
	Water Level Elevation Range ^b (ft AMSL; min-max)	4871.8 - 4875.7	4872.6 - 4875.7	4868.8 - 4878.5	4868.5 - 4875.1	4868.5 - 4878.5
	Average Specific Capacity ^d (gpm/ft)	65.7	6.3	22.9	28.9	31.0
	Average Transmissivity ^d (gpd/ft)	98,595	9,470	34,398	43,406	46,467
	Run Time % ^e	98.3%	99.9%	95.8%	94.5%	97.1%
	Notes	NA	NA	NA	NA	NA
KAFB-106239	Average Operational Flow Rate ^a (gpm)	75.2	74.4	72.7	73.4	73.9
	Flow Rate Range ^b (gpm; min-max)	32.3 - 76.0	66.0 - 78.0	0.0 - 75.9	0.0 - 75.8	0.0 - 78.0
	Average Drawdown ^c (ft)	8.6	18.6	11.6	11.6	12.6
	Water Level Elevation Range ^b (ft AMSL; min-max)	4872.1 - 4879.0	4873.9 - 4885.3	4871.9 - 4885.3	4857.4 - 4883.4	4857.4 - 4885.3
	Average Specific Capacity ^d (gpm/ft)	8.7	4.1	6.4	6.1	6.3
	Average Transmissivity ^d (gpd/ft)	13,017	6,115	9,568	9,218	9,479
	Run Time % ^e	95.8%	94.9%	94.6%	94.2%	94.9%
	Notes	NA	NA	NA	NA	NA
Combined Extraction Well Totals	Combined Average Operational Flow Rate ^g (gpm)	401.8	469.0	529.4	544.6	486.2
	Combined Flow Rate Range (gpm; min-max)	352.1 - 556.6	385.2 - 559.9	0.0 - 559.2	0.0 - 552.8	0.0 - 559.9
	Run Time % ^h	99.4%	99.9%	96.0%	95.1%	97.6%

Table 6-4
Annual Groundwater Treatment System Extraction Well Performance, 2020

^a Flow rate calculation is an average rate that only includes time while the system was operational; average values were computed from daily values throughout each quarter.

^b Ranges are provided from daily values throughout each quarter.

^c Average drawdown is calculated from the approximate static water elevation in each respective quarter of 2020, only includes time while system was operational and does not account for dynamic water elevation increases in the aquifer; average values were computed from daily values throughout each quarter that were obtained from the HMI for all four extraction wells.

^d Specific capacity and transmissivity average values only include pump run time (i.e., pump down time is not factored into the calculation); average values were computed from daily values throughout each quarter.

^e Percent run time is calculated when the given well is running at a minimum of 50 gpm; dataset includes readings for every minute throughout each quarter.

^f KAFB-106233 was intermittently online to maintain water level at injection well KAFB-7.

^g Combined Average Operation Flow Rate is the average influent flow rate to the GWTS.

^h The combined extraction well percent run time is based on the percentage of time that water is entering the GWTS from any combination of extraction wells.

% = percent

AMSL = above mean sea level

ft = foot (feet)

gpd = gallons per day

gpm = gallons per minute

HMI = human machine interface

ID = identification

max = maximum

min = minimum

NA = not applicable

Q1 = first quarter

Q2 = second quarter

Q3 = third quarter

Q4 = fourth quarter

**Table 6-5
Groundwater Treatment System Injection Well Performance, Q4 2020**

Well ID	Well Parameter	October	November	December	Q4 (average)
KAFB-7	Average Operational Flow Rate ^a (gpm)	655.4	675.6	641.1	654.7
	Flow Rate Range ^b (gpm; min-max)	0.0 - 681.4	0.0 - 684.6	0.0 - 652.8	0.0 - 684.6
	Volume Injected ^c (gal)	14,033,400	11,704,300	23,482,400	16,406,700
	Average Water Level Elevation ^d (ft AMSL)	4913.7	4914.4	4937.3	4,921.8
	Water Level Elevation Range ^d (ft AMSL; min-max)	4882.3 - 4944.3	4882.6 - 4946.8	4826.0 - 4953.8	4826.0 - 4953.8
	Run Time % ^e	58.0%	56.7%	87.1%	67.4%
	Notes	NA	NA	NA	NA
KAFB-IN2 ^e	Average Operational Flow Rate ^a (gpm)	--	436.1	642.2	539.1
	Flow Rate Range ^b (gpm; min-max)	--	0.0 - 674.5	0.0 - 642.2	0.0 - 674.5
	Volume Injected ^c (gal)	--	83,100	57,600	70,350
	Average Water Level Elevation ^d (ft AMSL)	--	4889.5	4884.4	4,886.4
	Water Level Elevation Range ^d (ft AMSL; min-max)	--	4862.3 - 4889.8	4862.4 - 4889.9	4862.3 - 4889.9
	Run Time % ^e	--	10.0%	3.2%	4.3%
	Notes	--	Online ^f	Online ^f	NA
GWTS Effluent	Average Operational Flow Rate ^a (gpm)	662.3	673.7	641.3	658.8
	Flow Rate Range ^b (gpm; min-max)	0.0 - 684.6	666.7 - 684.6	0.0 - 678.2	0.0 - 684.6

^a Flow rate calculation is an average rate that only includes time while the system was operational; average values were computed from SCADA values throughout Q4 2020.

^b Ranges are provided from SCADA values throughout Q4 2020. KAFB-7 flow rate fluctuates due to surging, etc. and is not consistent with GWTS effluent flow rates.

^c Volume injected is calculated using totalizer readings from flow meters installed on the GWTS effluent skids. December injection volume calculated through January 3, 2021.

^d Water level elevation averages and ranges include times when injection wells are not being utilized and data was collected from the SCADA for Q4 2020.

^e Percent run time is calculated when the given well is running at a minimum of 50 gpm; dataset includes readings for every minute throughout Q4.

^f Injection well KAFB-IN2 became active on November 13, 2020.

AMSL = above mean sea level

ft = foot (feet)

gal = gallon(s)

gpm = gallons per minute

GWTS = groundwater treatment system

SCADA = human machine interface

ID = identification

max = maximum

min = minimum

NA = not applicable

Q4 = fourth quarter

**Table 6-6
Annual Groundwater Treatment System Injection Well Performance, 2020**

Location ID	Well Parameter	Q1	Q2	Q3	Q4	2020
KAFB-7	Average Operational Flow Rate ^a (gpm)	411.4	545.6	638.6	654.7	562.6
	Flow Rate Range ^b (gpm; min-max)	0.0 - 1029.0	0.0 - 557.65	0.0 - 672.8	0.0 - 684.6	0.0 - 944.0
	Volume Injected ^c (gal)	35,404,100	5,505,900	9,999,600	49,220,100	100,129,700
	Average Water Level Elevation ^d (ft AMSL)	4904.2	4890.1	4896.5	4921.8	4903.1
	Water Level Elevation Range ^d (ft AMSL; min-max)	4876.2 - 4943.6	4882.6 - 4927.0	4881.9 - 4939.7	4882.3 - 4953.8	4826.0 - 4934.6
	Run Time % ^e	74.7%	9.9%	26.1%	67.4%	44.5%
	Notes	NA	NA	NA	NA	NA
KAFB-IN2 ^e	Average Operational Flow Rate ^a (gpm)	--	--	--	539.1	539.1
	Flow Rate Range ^b (gpm; min-max)	--	--	--	0.0 - 674.5	0.0 - 674.5
	Volume Injected ^c (gal)	--	--	--	140,700	140,700
	Average Water Level Elevation ^d (ft AMSL)	--	--	--	4886.4	4886.4
	Water Level Elevation Range ^d (ft AMSL; min-max)	--	--	--	4862.3 - 4889.9	4862.3 - 4889.9
	Run Time % ^e	--	--	--	4.3%	1.1%
	Notes	--	--	--	Online ^f	NA
GWTS Effluent	Average Operational Flow Rate ^a (gpm)	413	598	607	659	505
	Flow Rate Range ^b (gpm; min-max)	0.0 - 765.1	529.0 - 662.9	0.0 - 652.1	0.0 - 782.2	0.0 - 823.8

Table 6-6
Annual Groundwater Treatment System Injection Well Performance, 2020

^a Flow rate calculation is an average rate that only includes time while the system was operational; average values were computed from SCADA values throughout Q4 2020.

^b Ranges are provided from SCADA values throughout Q4 2020. KAFB-7 flow rate fluctuates due to surging, etc. and is not consistent with GWTS effluent flow rates.

^c Volume injected is calculated using totalizer readings from flow meters installed on the GWTS effluent skids. December injection volume calculated through January 3, 2021.

^d Water level elevation averages and ranges include times when injection wells are not being utilized and data was collected from the SCADA for Q4 2020.

^e Percent run time is calculated when the given well is running at a minimum of 50 gpm; dataset includes readings for every minute throughout Q4.

^f Injection well KAFB-IN2 became active on November 13, 2020.

AMSL = above mean sea level

ft = foot (feet)

gal = gallons

gpm = gallons per minute

GWTS = groundwater treatment system

HMI = human machine interface

ID = identification

max = maximum

min = minimum

NA = not applicable

Q1 = first quarter

Q2 = second quarter

Q3 = third quarter

Q4 = fourth quarter

Table 6-7
Groundwater Treatment System 1,2-Dibromoethane Removal, Q4 2020

Treatment Train	Month	Date ^a	Cumulative Volume Extracted (gal)	Monthly Volume Treated (gal)	Influent EDB Concentration (µg/L) ^b	Cumulative Mass of EDB Extracted (mg)	Mass of EDB Removed (mg) ^c
Train 1	October	9/28/2020	586,707,000	15,250,400	ND < 0.019	81,582	0
		10/5/2020	589,400,000		ND < 0.019	81,582	
		10/12/2020	591,898,000		ND < 0.019	81,582	
		10/19/2020	595,257,900		ND < 0.019	81,582	
		10/26/2020	598,588,000		ND < 0.019	81,582	
		11/2/2020	601,957,400		ND < 0.019	81,582	
	November	11/9/2020	605,323,000	12,505,600	ND < 0.019	81,582	0
		11/16/2020	608,646,300		ND < 0.019	81,582	
		11/23/2020	611,158,600		ND < 0.019	81,582	
		11/30/2020	614,463,000		ND < 0.019	81,582	
	December	12/7/2020	617,649,500	16,478,900	ND < 0.019	81,582	0
		12/14/2020	620,966,100		ND < 0.019	81,582	
		12/21/2020	624,287,400		ND < 0.019	81,582	
		12/28/2020	627,576,700		ND < 0.019	81,582	
		1/4/2021	630,941,900		ND < 0.019	81,582	
Train 2	October	9/28/2020	377,948,700	9,773,900	0.028	49,510	888
		10/5/2020	379,722,100		0.024	49,671	
		10/12/2020	381,306,600		0.024	49,815	
		10/19/2020	383,460,500		0.024	50,011	
		10/26/2020	385,595,900		0.024	50,205	
		11/2/2020	387,722,600		0.024	50,398	
	November	11/9/2020	389,835,300	8,260,300	0.024	50,590	750
		11/16/2020	391,892,800		0.024	50,777	
		11/23/2020	393,910,000		0.024	50,960	
		11/30/2020	395,982,900		0.024	51,148	
	December	12/7/2020	397,968,800	10,121,600	0.018	51,284	413
		12/14/2020	400,024,400		0.018	51,424	
		12/21/2020	402,043,200		0.018	51,561	
		12/28/2020	403,998,900		0.018	51,561	
		1/4/2021	406,104,500		0.018	51,561	
Q4 2020 Train 1 Total				44,234,900			0
Q4 2020 Train 2 Total				28,155,800			2,051
Q4 2020 Total				72,390,700			2,051

Table 6-7
Groundwater Treatment System 1,2-Dibromoethane Removal, Q4 2020

^a Monthly date ranges may include dates falling outside of the actual month as weekly SCADA data retrievals occur every Monday.

^b The analytical result from the most recent monthly sample is used for the influent EDB concentration (Tables 5-6 and 5-7). Where EDB is non-detect, a concentration of 0 is used for the purpose of mass calculation and is displayed in this table as ND < [LOD].

^c The mass of EDB removed is the sum of the weekly mass of EDB removed, which is the influent EDB concentration multiplied by the weekly treated volume, which is calculated each Monday from the difference in effluent totalizer readings since the previous Monday.

< = less than

µg/L = microgram per liter

EDB = 1,2-dibromoethane (ethylene dibromide)

gal = gallon(s)

LOD = limit of detection

mg = milligram(s)

ND = nondetect

Q4 = fourth quarter

**Table 6-8
Monthly Groundwater Treatment System Performance Analytical Results for Train 1, Q4 2020**

							Well Location ID:	GWTS-BFF-INF1			GWTS-BFF-GAC1			GWTS-BFF-EFF1			GWTS-BFF-INF1		
							Field Sample ID:	GWTS-INF1-100120			GWTS-GAC1-100120			GWTS-EFF1-100120			GWTS-INF1-111120		
							Sample Date:	10/1/2020			10/1/2020			10/1/2020			11/11/2020		
							Sample Type:	REG			REG			REG			REG		
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	0.1	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019	ND	U	0.019	
VOCs	Method SW8260C (µg/L)	Benzene	5	5	4.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5	
		Ethylbenzene	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8	ND	U	0.8	
		Toluene	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5	
		Xylenes, total	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2	ND	U	3	
Dissolved Metals	Method SW6010C (mg/L)	Iron, dissolved	1.0	NS	NS	1.0	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	
		Manganese, dissolved	0.2	NS	NS	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052	
Field Parameters		Temperature (°C)	NS	NS	NS	NS			20.2			20.2			20.3			19.9	
		Spec Cond (µS/cm)	NS	NS	NS	NS			479.8			479.2			479.2			457	
		pH (S.U.)	NS	NS	NS	NS			7.87			7.59			7.38			7.78	
		ORP (mV)	NS	NS	NS	NS			284.0			258.1			339.2			105.1	
		DO (mg/L)	NS	NS	NS	NS			6.36			4.15			6.73			6.36	

**Table 6-8
Monthly Groundwater Treatment System Performance Analytical Results for Train 1, Q4 2020**

							Well Location ID:	GWTS-BFF-GAC1			GWTS-BFF-EFF1			GWTS-BFF-EFF1		
							Field Sample ID:	GWTS-GAC1-111120			GWTS-EFF1-111120			GWTS-EFF1DUP-111120		
							Sample Date:	11/11/2020			11/11/2020			11/11/2020		
							Sample Type:	REG			REG			Field Duplicate		
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	0.1	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019	
VOCs	Method SW8260C (µg/L)	Benzene	5	5	4.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5	
		Ethylbenzene	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8	
		Toluene	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5	
		Xylenes, total	620	10,000	190	620	ND	U	3	ND	U	3	ND	U	3	
Dissolved Metals	Method SW6010C (mg/L)	Iron, dissolved	1.0	NS	NS	1.0	ND	U	0.1	ND	U	0.1	ND	U	0.1	
		Manganese, dissolved	0.2	NS	NS	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052	
Field Parameters		Temperature (°C)	NS	NS	NS	NS			19.5			18.2			18.2	
		Spec Cond (µS/cm)	NS	NS	NS	NS			456.2			452.1			452.1	
		pH (S.U.)	NS	NS	NS	NS			7.51			7.44			7.44	
		ORP (mV)	NS	NS	NS	NS			144.5			243.1			243.1	
		DO (mg/L)	NS	NS	NS	NS			4.29			6.21			6.21	

**Table 6-8
Monthly Groundwater Treatment System Performance Analytical Results for Train 1, Q4 2020**

							Well Location ID:			GWTS-BFF-INF1			GWTS-BFF-GAC1			GWTS-BFF-EFF1		
							Field Sample ID:			GWTS-INF1-120320			GWTS-GAC1-120320			GWTS-EFF1-120320		
							Sample Date:			12/3/2020			12/3/2020			12/3/2020		
							Sample Type:			REG			REG			REG		
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD			
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	0.1	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019			
VOCs	Method SW8260C (µg/L)	Benzene	5	5	4.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5			
		Ethylbenzene	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8			
		Toluene	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5			
		Xylenes, total	620	10,000	190	620	ND	U	2.8	ND	U	2.8	ND	U	2.8			
Dissolved Metals	Method SW6010C (mg/L)	Iron, dissolved	1.0	NS	NS	1.0	ND	U	0.1	ND	U	0.1	ND	U	0.1			
		Manganese, dissolved	0.2	NS	NS	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052			
Field Parameters		Temperature (°C)	NS	NS	NS	NS			19.4			19.3			19.5			
		Spec Cond (µS/cm)	NS	NS	NS	NS			584.1			547.8			647			
		pH (S.U.)	NS	NS	NS	NS			7.71			7.43			7.29			
		ORP (mV)	NS	NS	NS	NS			181.1			229.5			317			
		DO (mg/L)	NS	NS	NS	NS			6.94			4.82			6.46			

Table 6-8
Monthly Groundwater Treatment System Performance Analytical Results for Train 1, Q4 2020

^a NM WQCC numeric standards per the New Mexico Administrative Code Title 20.6.2.3101A, Standards for Groundwater of 10,000 mg/L Total Dissolved Solids Concentration or Less (NMAC, 2018).

^b EPA National Primary Drinking Water Regulations, MCLs and Secondary MCLs, Title 40CFR Part 141, 143 (May 2018).

^c EPA Region 6 RSL for Tapwater (November 2020) for hazard index = 1.0 for noncarcinogens and a 10-5 cancer risk level for carcinogens.

^d The project screening level was selected to satisfy the requirements of the Kirtland AFB Hazardous Waste Permit Number NM9570024423 as the lowest of (1) NM WQCC numeric standard or (2) EPA MCL. If no NM WQCC numeric standard or MCL exists for any analyte, then the project screening level will be the EPA RSL.

µg/L = microgram per liter

µS/cm = microSiemens per centimeter

°C = degree Celsius

AFB = Air Force Base

DO = dissolved oxygen

EDB = 1,2-dibromoethane (ethylene dibromide)

EPA = U.S. Environmental Protection Agency

ID = identification

LOD = limit of detection

MCL = maximum contaminant level

mg/L = milligram per liter

mV = millivolt

ND = nondetect

NM = New Mexico

NMAC = New Mexico Administrative Code

NS = not specified

ORP = oxidation reduction potential

Q4 = fourth quarter

REG = normal field sample

RSL = regional screening level

Spec Cond = specific conductivity

S.U. = standard unit

Val Qual = validation qualifier

VOC = volatile organic compound

WQCC = Water Quality Control Commission

Shading = detected concentrations above the detection limit

Bold/Shading = reported concentrations exceed the project screening level

Val Quals based on independent data validation:

J = Qualifier denotes the analyte was positively identified, but the associated numerical value is estimated.

U = Qualifier denotes the analyte was analyzed but not detected above the detection limit. The value associated with the U-qualifier is the LOD.

-- = Validation qualifier not assigned.

**Table 6-9
Monthly Groundwater Treatment System Performance Analytical Results for Train 2, Q4 2020**

							Well Location ID:			GWTS-BFF-INF2			GWTS-BFF-GAC2			GWTS-BFF-EFF2			GWTS-BFF-EFF2		
							Field Sample ID:			GWTS-INF2-100120			GWTS-GAC2-100120			GWTS-EFF2-100120			GWTS-EFF2DUP-100120		
							Sample Date:			10/1/2020			10/1/2020			10/1/2020			10/1/2020		
							Sample Type:			REG			REG			REG			Field Duplicate		
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD			
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	0.1	0.05	0.075	0.05	0.024	J	0.019	ND	U	0.02	ND	U	0.019	ND	U	0.019			
VOCs	Method SW8260C (µg/L)	Benzene	5	5	4.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5			
		Ethylbenzene	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8	ND	U	0.8			
		Toluene	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5			
		Xylenes, total	620	10,000	190	620	ND	U	2	ND	U	2	ND	U	2	ND	U	2			
Dissolved Metals	Method SW6010C (mg/L)	Iron, dissolved	1.0	NS	NS	1.0	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1			
		Manganese, dissolved	0.2	NS	NS	0.2	0.023	--	0.0052	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052			
Field Parameters		Temperature (°C)	NS	NS	NS	NS	20.4			20.5			20.5			20.5					
		Spec Cond (µS/cm)	NS	NS	NS	NS	371.3			370.5			367.1			367.1					
		pH (S.U.)	NS	NS	NS	NS	7.48			7.45			7.36			7.36					
		ORP (mV)	NS	NS	NS	NS	528.3			182.3			172.4			172.4					
		DO (mg/L)	NS	NS	NS	NS	5.65			1.22			4.73			4.73					

**Table 6-9
Monthly Groundwater Treatment System Performance Analytical Results for Train 2, Q4 2020**

		Well Location ID:		GWTS-BFF-INF2		GWTS-BFF-GAC2		GWTS-BFF-EFF2		GWTS-BFF-INF2								
		Field Sample ID:		GWTS-INF2-111120		GWTS-GAC2-111120		GWTS-EFF2-111120		GWTS-INF2-120320								
		Sample Date:		11/11/2020		11/11/2020		11/11/2020		12/3/2020								
		Sample Type:		REG		REG		REG		REG								
Parameter	Analytical Method	Analyte	NMAC NM WQCC^a	EPA MCL^b	EPA RSL^c	Project Screening Level^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	0.1	0.05	0.075	0.05	0.024	J	0.019	ND	U	0.019	ND	U	0.019	0.018	J	0.019
VOCs	Method SW8260C (µg/L)	Benzene	5	5	4.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Toluene	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Xylenes, total	620	10,000	190	620	ND	U	3	ND	U	3	ND	U	3	ND	U	2.8
Dissolved Metals	Method SW6010C (mg/L)	Iron, dissolved	1.0	NS	NS	1.0	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1
		Manganese, dissolved	0.2	NS	NS	0.2	0.0057	J	0.0052	ND	U	0.0052	ND	U	0.0052	0.0039	J	0.0052
Field Parameters		Temperature (°C)	NS	NS	NS	NS	19.9		20		20.2		19.7					
		Spec Cond (µS/cm)	NS	NS	NS	NS	351		349.7		350.4		420.7					
		pH (S.U.)	NS	NS	NS	NS	7.75		7.37		7.19		7.67					
		ORP (mV)	NS	NS	NS	NS	198.4		206.9		133.1		130.4					
		DO (mg/L)	NS	NS	NS	NS	5.73		1.61		4.61		6.2					

**Table 6-9
Monthly Groundwater Treatment System Performance Analytical Results for Train 2, Q4 2020**

							Well Location ID:			GWTS-BFF-EFF2			GWTS-BFF-EFF2		
							Field Sample ID:			GWTS-GAC2-120320			GWTS-EFF2-120320		
							Sample Date:			12/3/2020			12/3/2020		
							Sample Type:			REG			REG		
										Field Duplicate					
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	0.1	0.05	0.075	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	Benzene	5	5	4.5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	700	700	15	700	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Toluene	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Xylenes, total	620	10,000	190	620	ND	U	2.8	ND	U	2.8	ND	U	2.8
Dissolved Metals	Method SW6010C (mg/L)	Iron, dissolved	1.0	NS	NS	1.0	ND	U	0.1	ND	U	0.1	ND	U	0.1
		Manganese, dissolved	0.2	NS	NS	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
Field Parameters		Temperature (°C)	NS	NS	NS	NS	19.8			19.5			19.5		
		Spec Cond (µS/cm)	NS	NS	NS	NS	420.3			449.7			449.7		
		pH (S.U.)	NS	NS	NS	NS	7.28			7.29			7.29		
		ORP (mV)	NS	NS	NS	NS	100.2			68.9			68.9		
		DO (mg/L)	NS	NS	NS	NS	1.76			5.25			5.25		

Table 6-9
Monthly Groundwater Treatment System Performance Analytical Results for Train 2, Q4 2020

^a NM WQCC numeric standards per the New Mexico Administrative Code Title 20.6.2.3101A, Standards for Groundwater of 10,000 mg/L Total Dissolved Solids Concentration or Less (NMAC, 2018).

^b EPA National Primary Drinking Water Regulations, MCLs and Secondary MCLs, Title 40CFR Part 141, 143 (May 2018).

^c EPA Region 6 RSL for Tapwater (November 2020) for hazard index = 1.0 for noncarcinogens and a 10-5 cancer risk level for carcinogens.

^d The project screening level was selected to satisfy the requirements of the Kirtland AFB Hazardous Waste Permit Number NM9570024423 as the lowest of (1) NM WQCC numeric standard or (2) EPA MCL. If no NM WQCC numeric standard or MCL exists for any analyte, then the project screening level will be the EPA RSL.

µg/L = microgram per liter

µS/cm = microSiemens per centimeter

°C = degree Celsius

AFB = Air Force Base

DO = dissolved oxygen

EDB = 1,2-dibromoethane (ethylene dibromide)

EPA = U.S. Environmental Protection Agency

ID = identification

LOD = limit of detection

MCL = maximum contaminant level

mg/L = milligram per liter

mV = millivolt

ND = nondetect

NM = New Mexico

NMAC = New Mexico Administrative Code

NS = not specified

ORP = oxidation reduction potential

Q4 = fourth quarter

REG = normal field sample

RSL = regional screening level

Spec Cond = specific conductivity

S.U. = standard unit

Val Qual = validation qualifier

VOC = volatile organic compound

WQCC = Water Quality Control Commission

Shading = detected concentrations above the detection limit

Bold/Shading = reported concentrations exceed the project screening level

Val Quals based on independent data validation:

J = Qualifier denotes the analyte was positively identified, but the associated numerical value is estimated.

U = Qualifier denotes the analyte was analyzed but not detected above the detection limit. The value associated with the U-qualifier is the LOD.

-- = Validation qualifier not assigned.

**Table 6-10
Annual Groundwater Treatment System EDB Removal, 2020**

Treatment Train	Month	Date ^a	Cumulative Volume Extracted (gal)	Monthly Volume Treated (gal)	EDB concentration (µg/L) ^b	Cumulative Mass of EDB Extracted (mg)	Mass of EDB Removed (mg) ^c	
Train 1	January	12/30/2019	489,351,300	9,025,600	ND < 0.019	80,510	319	
		1/6/2020	491,116,300		ND < 0.019	80,510		
		1/13/2020	493,114,000		ND < 0.019	80,510		
		1/20/2020	494,888,800		0.016	80,617		
		1/27/2020	496,647,100		0.016	80,724		
		2/3/2020	498,376,900		0.016	80,829		
	February	2/10/2020	500,141,900	6,985,200	0.016	80,936	423	
		2/17/2020	501,849,200		0.016	81,039		
		2/24/2020	503,596,300		0.016	81,145		
		3/1/2020	505,362,100		0.016	81,252		
	March	3/8/2020	507,137,800	7,280,800	0.012	81,332	331	
		3/15/2020	508,870,800		0.012	81,411		
		3/22/2020	510,641,200		0.012	81,491		
		3/29/2020	512,642,900		0.012	81,582		
	Q1 2020 Total				23,291,600			1,073
Train 1	April	4/6/2020	514,405,600	9,547,500	ND < 0.019	81,582	0	
		4/13/2020	516,182,000		ND < 0.019	81,582		
		4/20/2020	517,961,800		ND < 0.019	81,582		
		4/27/2020	519,807,300		ND < 0.019	81,582		
	May	5/4/2020	522,190,400	10,550,000	ND < 0.019	81,582	0	
		5/11/2020	524,516,600		ND < 0.019	81,582		
		5/18/2020	526,880,300		ND < 0.019	81,582		
		5/26/2020	530,007,700		ND < 0.019	81,582		
	June	6/1/2020	532,740,400	12,585,900	ND < 0.019	81,582	0	
		6/8/2020	535,951,100		ND < 0.019	81,582		
		6/15/2020	538,978,000		ND < 0.019	81,582		
		6/22/2020	542,381,100		ND < 0.019	81,582		
		6/29/2020	545,326,300		ND < 0.019	81,582		
	Q2 2020 Total				32,683,400			0

**Table 6-10
Annual Groundwater Treatment System EDB Removal, 2020**

Treatment Train	Month	Date ^a	Cumulative Volume Extracted (gal)	Monthly Volume Treated (gal)	EDB concentration (µg/L) ^b	Cumulative Mass of EDB Extracted (mg)	Mass of EDB Removed (mg) ^c	
Train 1	July	6/29/2020	545,326,300	15,683,800	ND < 0.019	81,582	0	
		7/6/2020	548,895,900		ND < 0.019	81,582		
		7/13/2020	551,284,100		ND < 0.019	81,582		
		7/20/2020	554,220,300		ND < 0.019	81,582		
		7/27/2020	557,607,300		ND < 0.019	81,582		
	August	8/3/2020	561,010,100	12,873,600	ND < 0.019	81,582	0	
		8/10/2020	564,437,200		ND < 0.019	81,582		
		8/17/2020	567,814,400		ND < 0.019	81,582		
		8/24/2020	571,169,600		ND < 0.019	81,582		
		8/31/2020	573,883,700		ND < 0.019	81,582		
	September	9/8/2020	577,015,900	12,823,300	ND < 0.019	81,582	440	
		9/14/2020	579,939,100		0.012	81,715		
		9/21/2020	583,328,400		0.012	81,869		
		9/28/2020	586,707,000		0.012	82,023		
Q3 2020 Total				41,380,700			440	
Train 1	October	9/28/2020	586,707,000	15,250,400	ND < 0.019	81,582	0	
		10/5/2020	589,400,000		ND < 0.019	81,582		
		10/12/2020	591,898,000		ND < 0.019	81,582		
		10/19/2020	595,257,900		ND < 0.019	81,582		
		10/26/2020	598,588,000		ND < 0.019	81,582		
		11/2/2020	601,957,400		ND < 0.019	81,582		
	November	11/9/2020	605,323,000	12,505,600	ND < 0.019	81,582	0	
		11/16/2020	608,646,300		ND < 0.019	81,582		
		11/23/2020	611,158,600		ND < 0.019	81,582		
		11/30/2020	614,463,000		ND < 0.019	81,582		
	December	12/7/2020	617,649,500	16,478,900	ND < 0.019	81,582	0	
		12/14/2020	620,966,100		ND < 0.019	81,582		
		12/21/2020	624,287,400		ND < 0.019	81,582		
		12/28/2020	627,576,700		ND < 0.019	81,582		
		1/4/2021	630,941,900		ND < 0.019	81,582		
	Q4 2020 Total				44,234,900			0

**Table 6-10
Annual Groundwater Treatment System EDB Removal, 2020**

Treatment Train	Month	Date ^a	Cumulative Volume Extracted (gal)	Monthly Volume Treated (gal)	EDB concentration (µg/L) ^b	Cumulative Mass of EDB Extracted (mg)	Mass of EDB Removed (mg) ^c
Train 2	January	12/30/2020	299,648,500	10,401,500	0.019	43,324	797
		1/6/2020	301,802,200		0.019	43,479	
		1/13/2020	303,656,700		0.019	43,613	
		1/20/2020	305,804,500		0.021	43,783	
		1/27/2020	307,953,500		0.021	43,954	
		2/3/2020	310,050,000		0.021	44,121	
	February	2/10/2020	312,174,700	8,249,600	0.025	44,322	781
		2/17/2020	314,199,700		0.025	44,514	
		2/24/2020	316,295,900		0.025	44,712	
		3/1/2020	318,299,600		0.025	44,902	
	March	3/8/2020	320,265,500	8,168,800	0.016	45,021	495
		3/15/2020	322,147,400		0.016	45,135	
		3/22/2020	324,304,100		0.016	45,265	
		3/29/2020	326,468,400		0.016	45,396	
Q1 2020 Total				26,819,900			2,072
Train 2	April	3/29/2020	326,468,400	10,804,400	0.016	45,396	326
		4/6/2020	328,615,500		0.010	45,478	
		4/13/2020	330,779,400		0.010	45,559	
		4/20/2020	332,930,800		0.010	45,641	
		4/27/2020	335,087,000		0.010	45,723	
	May	5/4/2020	337,272,800	8,680,400	0.010	45,805	445
		5/11/2020	339,533,500		0.014	45,925	
		5/18/2020	341,640,300		0.014	46,037	
		5/26/2020	344,100,700		0.014	46,167	
	June	6/1/2020	345,953,200	7,964,600	0.014	46,265	822
		6/8/2020	348,107,200		0.024	46,461	
		6/15/2020	350,145,000		0.024	46,646	
		6/22/2020	352,221,400		0.024	46,835	
		6/29/2020	353,917,800		0.024	46,989	
Q2 2020 Total				27,449,400			1,593

**Table 6-10
Annual Groundwater Treatment System EDB Removal, 2020**

Treatment Train	Month	Date ^a	Cumulative Volume Extracted (gal)	Monthly Volume Treated (gal)	EDB concentration (µg/L) ^b	Cumulative Mass of EDB Extracted (mg)	Mass of EDB Removed (mg) ^c	
Train 2	July	6/29/2020	353,917,800	7,048,500	0.024	46,989	486	
		7/6/2020	355,144,700		0.024	47,100		
		7/13/2020	355,214,800		0.024	47,107		
		7/20/2020	356,695,200		0.024	47,241		
		7/27/2020	358,827,700		0.029	47,475		
	August	8/3/2020	360,966,300	8,529,500	0.029	47,710	1139	
		8/10/2020	363,112,900		0.028	47,938		
		8/17/2020	365,231,000		0.028	48,162		
		8/24/2020	367,345,700		0.028	48,386		
		8/31/2020	369,495,800		0.028	48,614		
	September	9/8/2020	371,930,600	8,452,900	0.028	48,872	805	
		9/14/2020	373,650,400		0.024	49,028		
		9/21/2020	375,801,700		0.024	49,224		
		9/28/2020	377,948,700		0.024	49,419		
	Q3 2020 Total				24,030,900			2,430
	Train 2	October	9/28/2020	377,948,700	9,773,900	0.028	49,419	888
			10/5/2020	379,722,100		0.024	49,580	
10/12/2020			381,306,600	0.024		49,724		
10/19/2020			383,460,500	0.024		49,920		
10/26/2020			385,595,900	0.024		50,114		
11/2/2020			387,722,600	0.024		50,307		
November		11/9/2020	389,835,300	8,260,300	0.024	50,499	750	
		11/16/2020	391,892,800		0.024	50,686		
		11/23/2020	393,910,000		0.024	50,869		
		11/30/2020	395,982,900		0.024	51,057		
December		12/7/2020	397,968,800	10,121,600	0.018	51,193	690	
		12/14/2020	400,024,400		0.018	51,333		
		12/21/2020	402,043,200		0.018	51,470		
		12/28/2020	403,998,900		0.018	51,604		
		1/4/2021	406,104,500		0.018	51,747		
Q4 2020 Total				28,155,800			2,023	

**Table 6-10
Annual Groundwater Treatment System EDB Removal, 2020**

Treatment Train	Month	Date ^a	Cumulative Volume Extracted (gal)	Monthly Volume Treated (gal)	EDB concentration (µg/L) ^b	Cumulative Mass of EDB Extracted (mg)	Mass of EDB Removed (mg) ^c
			Train 1 2020 Total	141,590,600			1,513
			Train 2 2020 Total	106,456,000			8,118
			Annual Total	248,046,600			9,631

^a Monthly date ranges may include dates falling outside of the actual month as weekly SCADA data retrievals occur every Monday.

^b Estimated EDB concentrations from monthly EDB sampling.

^c Quantities of mass = sum of monthly influent concentration multiplied by respective monthly treated volume.

µg/L = micrograms per liter

EDB = 1,2-dibromoethane (ethylene dibromide)

gal = gallon(s)

mg = milligram(s)

Q1 = first quarter

Q2 = second quarter

Q3 = third quarter

Q4 = fourth quarter

**Table 6-11
Groundwater Analytical Results for Wells in the Vicinity of KAFB-7**

		Location ID:	KAFB-0505	KAFB-0508-MW	ST105MW507R	ST105MW507R											
		EA Field Sample ID:	GW0505-203	GW0508-203	GW0507R-203	GW0507R-603											
		Sample Date:	7/27/2020	7/27/2020	7/27/2020	7/27/2020											
		Sample Type:	REG	REG	REG	Field Duplicate											
		Sample Depth (ft bgs):	497.0	497.0	497.0	497.0											
Parameter	Analytical Method	Analyte	NMAC NM WQCC ^a	EPA MCL ^b	Project Screening Level ^c	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	0.1	0.05	0.05	ND	U	0.019	ND	U	0.019	ND	U	0.019	ND	U	0.019
VOCs	Method SW8260C (µg/L)	Benzene	10	5	5	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	750	700	700	ND	U	0.8	ND	U	0.8	ND	U	0.8	ND	U	0.8
		Toluene	1,000	1000	1000	2.1	--	0.5	4.1	--	0.5	1.7	--	0.5	1.7	--	0.5
		Xylenes, total	620	10000	620	ND	U	2	ND	U	2	ND	U	2	ND	U	2
Metals, dissolved	Methods SW6010C and SW6020C (mg/L)	Aluminum	5.0	NS	5.0	ND	U	0.16	ND	U	0.16	ND	U	0.16	ND	U	0.16
		Barium	2	2	2	0.075	--	0.0026	0.11	--	0.0026	0.063	--	0.0026	0.063	--	0.0026
		Calcium	NS	NS	NS	73	J	0.15	46	--	0.15	73	--	0.15	72	--	0.15
		Iron	1.0	NS	1.0	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1
		Magnesium	NS	NS	NS	13	J	0.077	6.7	--	0.077	11	--	0.077	11	--	0.077
		Manganese	0.2	NS	0.2	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052	ND	U	0.0052
		Potassium	NS	NS	NS	2.5	--	0.39	2	--	0.39	2.3	--	0.39	2.3	--	0.39
		Sodium	NS	NS	NS	28	J	0.52	25	--	0.52	29	--	0.52	28	--	0.52
		Arsenic	0.01	0.01	0.01	ND	UJ	0.0016	0.001	J	0.0016	ND	U	0.0016	ND	U	0.0016
Silica	Method SM4500SIO2C (mg/L)	Silica	NS	NS	NS	0.51	J	0.00082	0.33	--	0.00082	0.46	--	0.00082	0.46	--	0.00082
Field Parameters		Temperature (°C)	NS	NS	NS	21.8			19.9			22.6			22.6		
		Spec Cond (µS/cm)	NS	NS	NS	671			464.4			662			662		
		pH (S.U.)	NS	NS	NS	7.31			7.75			7.45			7.45		
		ORP (mV)	NS	NS	NS	424.0			427.3			426.9			426.9		
		DO (mg/L)	NS	NS	NS	4.98			8.13			7.18			7.18		

Table 6-11
Groundwater Analytical Results for Wells in the Vicinity of KAFB-7

^a NM WQCC numeric standards per the New Mexico Administrative Code Title 20.6.2.3101A, Standards for Groundwater of 10,000 mg/L Total Dissolved Solids Concentration or Less (NMAC 2018).

^b EPA National Primary Drinking Water Regulations, MCLs and Secondary MCLs, Title 40CFR Part 141, 143 (May 2018).

^c The project screening level was selected to satisfy the requirements of the Kirtland AFB Hazardous Waste Permit Number NM9570024423 as the lowest of (1) NM WQCC numeric standard or (2) EPA MCL. If no NMWQCC numeric standard or MCL exists for any analyte, then the project screening level will be the EPA RSL.

µg/L = microgram per liter

µS/cm = microSiemens per centimeter

°C = degree Celsius

EDB = 1,2-dibromoethane (ethylene dibromide)

EPA = U.S. Environmental Protection Agency

ft = foot/feet

ID = identification

LOD = limit of detection

MCL = maximum contaminant level

mg/L = milligram per liter

mV = millivolt

ND = nondetect

NM = New Mexico

NMAC = New Mexico Administrative Code

ORP = oxidation reduction potential

REG = normal field sample

RSL = regional screening level

Spec Cond = specific conductivity

S.U. = standard unit

Val Qual = validation qualifier

VOC = volatile organic compound

WQCC = Water Quality Control Commission

Shading = detected concentrations above the detection limit

Val Quals based on independent data validation:

J = Qualifier denotes the analyte was positively identified, but the associated numerical value is estimated.

U = Qualifier denotes the analyte was analyzed but not detected above the detection limit. The value associated with the U-qualifier is the LOD.

-- = Validation qualifier not assigned.

**Table 6-12
Groundwater Treatment System Routine Maintenance Schedule, Q4 2020**

Maintenance Activity	Frequency			
	Daily	Weekly	Monthly	As Needed
Recording and inspecting influent, GAC vessel, and effluent skid pressure, flow rate, and totalizer readings from their respective gauges and the human machine interface	X			
Recording extraction well pressure, flow rate, and totalizer readings from the human machine interface	X			
Recording extraction well pressure, flow rate, and totalizer readings from the gauges at the well vaults		X		
Inspecting well control house and recording well control house pressure, flow rate, and totalizer readings		X		
Recording totalizer reading at KAFB-7		X		
Running and inspecting the GWTS air compressor		X		
Inspecting extraction well, conveyance line, and air release valve vaults			X	
Inspecting wellhead and associated equipment of injection well KAFB-7			X	
Inspecting and performing maintenance of flowmeters throughout the system			X	
Inspecting and performing maintenance on actuating valves throughout the system			X	
Performing confined space entries			X	
Gauging extraction well filter pack			X	
Semiannual inspections and maintenance of Tijeras Arroyo Gold Course ponds				X
Logging lockout-tagout entries				X
Logging system shutdowns				X
Emptying storm water runoff flooded vaults				X
Performing air compressor maintenance				X
Cleaning GWTS sumps				X
Draining air release valve containment vessels				X
Grounds keeping including vegetation control				X
Inspecting and cleaning the GWTS Wye-strainer/basket strainer				X
Performing flow meter calibration				X ^a
Greasing pump bearings				X ^b
Changing process pump oil				X ^b
Changing air filter on control room air conditioner				X ^b
Changing bag filters				X ^c
Changing out GAC				X ^c
Disinfection of extraction wells and conveyance lines				X ^d
Testing of alarms and interlocks				X ^e
Cleaning coils and replacing air filter for the Well Control House air conditioner				X ^f
GAC Skimming of the lead GAC vessel				X ^g

Table 6-12
Groundwater Treatment System Routine Maintenance Schedule, Q4 2020

- ^a Flowmeters are calibrated at a minimum of once per year, but may be calibrated more often as needed.
- ^b Changing of process pump oil, greasing pump bearings, and replacing the air filter in the air conditioning unit are required every 3 months, but may be changed more often as needed.
- ^c Bag filters are scheduled for change out when the pressure differential across a bag filter vessel exceeds 15 psi and GAC is scheduled for change out when the pressure differential across a GAC vessel exceeds 10 psi.
- ^d Disinfection of extraction wells and conveyance lines occurs semiannually or more often as needed.
- ^e Testing of alarms and interlocks occurs annually or more often as needed.
- ^f Cleaning of the coil and replacing of the air filter are scheduled as quarterly activities, but frequency may be adjusted as necessary.
- ^g GAC skimming is performed when the differential pressure in the lead GAC vessel has increased from the operational differential pressure by at least 7 psi.

GAC = granular activated carbon

GWTS = groundwater treatment system

psi = pound per square inch

Q4 = fourth quarter

**Table 6-13
Groundwater Treatment System Non-Routine Maintenance Items, Q4 2020**

Date	Extent of Shutdown	Approximate Downtime (hours)	Cause of Shutdown
10/5/2020	KAFB-106228 and KAFB-106239	17.0	An on-base power interruption shutdown wells KAFB-106228 and KAFB-106239. Notification of the shut down was made to the NMED on October 6, 2020 at 4:00 pm.
10/6/2020	Entire GWTS	24.0	An on-base power interruption on 05OCT20 shutdown wells KAFB-106228 and KAFB-106239, but due to a failure in the GWTS control room UPS, no alerts were sent out to GWTS personnel, and KAFB-106233 and KAFB-106234 were not automatically shutdown, causing an overflow into the GWTS through the Train 1 influent tank. Notification of the shut down was made to the NMED on October 6, 2020 at 4:00 pm.
10/7/2020	Entire GWTS	12.0	An on-base power interruption on 05OCT20 shutdown wells KAFB-106228 and KAFB-106239, but due to a failure in the GWTS control room UPS, no alerts were sent out to GWTS personnel, and KAFB-106233 and KAFB-106234 were not automatically shutdown, causing an overflow into the GWTS through the Train 1 influent tank. Notification of the shut down was made to the NMED on October 6, 2020 at 4:00 pm.
12/21/2020	KAFB-106239	24.0	Disinfect extraction well KAFB-106239.

GWTS = groundwater treatment system
Q4 = fourth quarter
UPS = uninterruptable power supply
NMED = New Mexico Environment Department

**Table 6-14
Annual Non-Routine Operations and Maintenance Summary, 2020**

Month	KAFB-106228	KAFB-106233	KAFB-106234	KAFB-106239	Well Control House	GWTS Building	Influent Skid	GAC Vessels	Effluent Skid	ARV Vaults	KAFB-7	KAFB-IN2
January	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
February	NA	NA	NA	Disinfected on February 26	NA	NA	NA	NA	Installed check valves on Train 1 and Train 2 effluent lines	NA	NA	NA
March	NA	NA	NA	NA	NA	NA	NA	NA	Replaced Train 2 effluent skid motor (P-218)	NA	NA	NA
April	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
May	NA	NA	NA	NA	NA	NA	Replaced Train 2 influent skid motor (P-212B)	NA	Replaced Train 1 effluent skid motor (P-118)	NA	NA	NA
June	NA	NA	NA	Rehabilitated between June 22 and 26	NA	NA	Replaced Train 2 influent skid motor (P-212B)	NA	NA	NA	NA	NA
July	NA	Well was shut off to route remaining wells through Train 1 after Train 2 influent tank level transmitter failed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
August	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
September	NA	NA	NA	Disinfected on September 10	NA	NA	NA	NA	NA	NA	NA	NA
October	NA	NA	NA	NA	NA	Failed UPS and on-base power interruption caused overflow of KAFB-106233 and KAFB-106234 into GWTS building	NA	NA	NA	NA	NA	NA
November	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
December	NA	NA	NA	Disinfected on December 21	NA	NA	NA	NA	NA	NA	NA	NA

GWTS = groundwater treatment system.

NA = not applicable

UPS = uninterruptable power supply

**Table 6-15
Annual Groundwater Treatment System Alarm Testing Results, 2020**

Alarm Condition	Desired System Effect	Date Tested	Actual System Effect	Pass/Fail
Influent Tank TK-110 Level Switch Low	Shutdown Train 1 Influent pumps P-112A and P-112B	11/17/2020	Shutdown Train 1 Influent pumps P-112A and P-112B	PASS
Well Control House E-stop	Shutdown GWTS, and alarm	11/17/2020	Shutdown GWTS, and alarm	PASS
Eastern Avenue Vault, Leak Detect	Shutdown KAFB-106233 AND KAFB-106234, and send alarm	11/17/2020	Shutdown KAFB-106233 AND KAFB-106234, and send alarm	PASS
KAFB-106239 Louisiana Vault, Leak Detect (Walker Street)	Shutdown KAFB-106228 and KAFB-106239, and send alarm	11/30/2020	Shutdown KAFB-106228 and KAFB-106239, and send alarm	PASS
KAFB-106239 Vault, Door Open	Send alarm	11/17/2020	Send alarm	PASS
KAFB-106233 Level Low	Shutdown KAFB-106233, send alarm	11/17/2020	Shutdown KAFB-106233, send alarm	PASS
KAFB-106234 Level Low	Shutdown KAFB-106234, send alarm	11/17/2020	Shutdown KAFB-106234, send alarm	PASS
KAFB-106239 Vault, Conveyance Line Leak Detect	Shutdown KAFB-106239, send alarm	11/17/2020	Shutdown KAFB-106239, send alarm	PASS
KAFB-106233/234 Louisiana Vault, Leak Detect	Shutdown KAFB-106233/234, and alarm	11/17/2020	Shutdown KAFB-106233/234, and alarm	PASS
KAFB-106239 Vault, Leak Detect	Shutdown KAFB-106239, and alarm	11/17/2020	Shutdown KAFB-106239, and alarm	PASS
KAFB-106233 Pump Failure	Shutdown KAFB-106233	11/17/2020	Shutdown KAFB-106233	PASS
KAFB-106234 Pump Failure	Shutdown KAFB-106234	11/17/2020	Shutdown KAFB-106234	PASS
KAFB-7 High Level	Shutdown GWTS, and alarm	11/17/2020	Shutdown GWTS, and alarm	PASS
KAFB-106233 Vault, Leak Detect	Shutdown KAFB-106233, and alarm	11/17/2020	Shutdown KAFB-106233, and alarm	PASS
KAFB-106233 Conveyance Line, Leak Detect	Shutdown KAFB-106233, and alarm	11/17/2020	Shutdown KAFB-106233, and alarm	PASS
KAFB-106234 Vault, Leak Detect	Shutdown KAFB-106234, and alarm	11/17/2020	Shutdown KAFB-106234, and alarm	PASS
KAFB-106234 Conveyance Line, Leak Detect	Shutdown KAFB-106234, and alarm	11/17/2020	Shutdown KAFB-106234, and alarm	PASS
Well Control House Building, Leak Detect	Shutdown KAFB-106233/234, and alarm	11/17/2020	Shutdown KAFB-106233/234, and alarm	PASS
Influent Pump P-112A Failure	Alarm reported	11/17/2020	Alarm reported	PASS
Influent Pump P-112A Communication Failure	Alarm reported	11/17/2020	Alarm reported	PASS
Influent Pump P-112B Failure	Alarm reported	11/17/2020	Alarm reported	PASS
Influent Pump P-112B Communication Failure	Alarm reported	11/17/2020	Alarm reported	PASS
Influent Train 1 Bag Filter Differential Switch High	Alarm reported	11/17/2020	Alarm reported	PASS
Influent Train 1 Skid Pressure Switch High	Alarm reported	11/17/2020	Alarm reported	PASS
Influent Tank TK-110 Level Switch High	Shutdown KAFB-106228/233/234/239, and alarm	11/17/2020	Shutdown KAFB-106228/233/234/239, and alarm	PASS
Train 1 Sand Filter Backwash	Alarm reported	11/17/2020	Alarm reported	PASS
Carbon Absorber V-114AB Pressure Switch High	Alarm reported	11/17/2020	Alarm reported	PASS
Effluent Train 1 Skid Press Switch High	Alarm reported	11/17/2020	Alarm reported	PASS
Effluent Pump P-118 Failure	Alarm reported	11/17/2020	Alarm reported	PASS
Effluent Pump P-118 Communication Failure	Alarm reported	11/17/2020	Alarm reported	PASS
Treated Water Tank TK-116 Level Switch High	Shutdown P-112A, P-112B; and alarm	11/17/2020	Shutdown P-112A, P-112B; and alarm	PASS
Treated Water Tank TK-116 Level Switch Low	Shutdown P-118, and alarm	11/17/2020	Shutdown P-118, and alarm	PASS
Train 1 Not in Process Mode	Alarm reported	11/17/2020	Alarm reported	PASS
Influent Pump P-212A Failure	Alarm reported	11/17/2020	Alarm reported	PASS
Influent Pump P-212A Communication Failure	Alarm reported	11/17/2020	Alarm reported	PASS
Influent Pump P-212B Failure	Alarm reported	11/17/2020	Alarm reported	PASS
Influent Pump P-212B Communication Failure	Alarm reported	11/17/2020	Alarm reported	PASS
Influent Train 2 Bag Filter Differential Switch High	Alarm reported	11/17/2020	Alarm reported	PASS
Influent Train 2 Skid Pressure Switch High	Alarm reported	11/17/2020	Alarm reported	PASS
Influent Tank TK-210 Level Switch High	Shutdown KAFB-106228/233/234/239, and alarm	11/17/2020	Shutdown KAFB-106228/233/234/239, and alarm	PASS
Influent Tank TK-210 Level Switch Low	Shutdown P-212A, P-212B; and alarm	11/17/2020	Shutdown P-212A, P-212B; and alarm	PASS
Train 2 Sand Filter Backwash	Alarm reported	11/17/2020	Alarm reported	PASS
Carbon Absorber V-214AB Pressure Switch High	Alarm reported	11/17/2020	Alarm reported	PASS
Effluent Train 2 Skid Press Switch High	Alarm reported	11/17/2020	Alarm reported	PASS
Effluent Pump P-218 Failure	Alarm reported	11/17/2020	Alarm reported	PASS
Effluent Pump P-218 Communication Failure	Alarm reported	11/17/2020	Alarm reported	PASS
Treated Water Tank TK-216 Level Switch High	Shutdown P-212A, P-212B; and alarm	11/17/2020	Shutdown P-212A, P-212B; and alarm	PASS
Treated Water Tank TK-216 Level Switch Low	Shutdown P-218, and alarm	11/17/2020	Shutdown P-218, and alarm	PASS
Train 2 Not in Process Mode	Alarm reported	11/17/2020	Alarm reported	PASS
Effluent Downstream Pressure High	Shutdown GWTS, and alarm	11/17/2020	Shutdown GWTS, and alarm	PASS
Golf Course Pond Level High	Shutdown GWTS, and alarm	11/17/2020	Shutdown GWTS, and alarm	PASS
KAFB-7 High Level	Shutdown GWTS, and alarm	11/17/2020	Shutdown GWTS, and alarm	PASS
Internal Sump	Shutdown GWTS, and alarm	11/17/2020	Shutdown GWTS, and alarm	PASS

**Table 6-15
Annual Groundwater Treatment System Alarm Testing Results, 2020**

Alarm Condition	Desired System Effect	Date Tested	Actual System Effect	Pass/Fail
External Sump	Shutdown GWTS, and alarm	11/17/2020	Shutdown GWTS, and alarm	PASS
Interior E-stop	Shutdown GWTS, and alarm	11/17/2020	Shutdown GWTS, and alarm	PASS
Exterior E-stop	Shutdown GWTS, and alarm	11/17/2020	Shutdown GWTS, and alarm	PASS
Intrusion	Alarm reported	11/17/2020	Alarm reported	PASS
KAFB-106228 Vault, Leak Detect	Shutdown KAFB-106228, and alarm	11/17/2020	Shutdown KAFB-106228, and alarm	PASS
KAFB-106228 Conveyance Line, Leak Detect	Shutdown KAFB-106228, and alarm	11/17/2020	Shutdown KAFB-106228, and alarm	PASS
KAFB-106228 Louisiana Vault, Leak Detect	Shutdown KAFB-106228, and alarm	11/17/2020	Shutdown KAFB-106228, and alarm	PASS
KAFB-106228 Louisiana Conveyance Line, Leak Detect	Shutdown KAFB-106228, and alarm	11/17/2020	Shutdown KAFB-106228, and alarm	PASS
KAFB-106233 Vault, Leak Detect	Shutdown KAFB-106233, and alarm	11/17/2020	Shutdown KAFB-106233, and alarm	PASS
KAFB-106233 Conveyance Line, Leak Detect	Shutdown KAFB-106233, and alarm	11/17/2020	Shutdown KAFB-106233, and alarm	PASS
KAFB-106234 Vault, Leak Detect	Shutdown KAFB-106234, and alarm	11/17/2020	Shutdown KAFB-106234, and alarm	PASS
KAFB-106234 Conveyance Line, Leak Detect	Shutdown KAFB-106234, and alarm	11/17/2020	Shutdown KAFB-106234, and alarm	PASS
Well Control House Building, Leak Detect	Shutdown KAFB-106233/234, and alarm	11/17/2020	Shutdown KAFB-106233/234, and alarm	PASS
KAFB-106228 Pump Failure	Shutdown KAFB-106228, and alarm	11/17/2020	Shutdown KAFB-106228, and alarm	PASS
KAFB-106228 Level Low	Shutdown KAFB-106228, and alarm	11/17/2020	Shutdown KAFB-106228, and alarm	PASS
KAFB-106239 Pump Failure	Shutdown KAFB-106239, and alarm	11/17/2020	Shutdown KAFB-106239, and alarm	PASS
KAFB-106239 Level Low	Shutdown KAFB-106239, and alarm	11/17/2020	Shutdown KAFB-106239, and alarm	PASS

ft = foot (feet)

SCADA = supervisory control and data acquisition

NA = not applicable

GWTS = groundwater treatment system

**Table 6-16
Plume Volume and Mass Comparison for the Target Capture Zone**

Interval	Well		Q4 2016		Q2 2017		Q4 2017	
	From	To	Volume (ft ³)	Mass ^a (grams)	Volume (ft ³)	Mass ^a (grams)	Volume (ft ³)	Mass ^a (grams)
A	Ridgecrest ^b	KAFB-106090	18,450,000	13	4,328,300	2	10,891,000	7
B	KAFB-106090	KAFB-106228	33,142,000	31	33,313,000	26	25,969,000	20
C	KAFB-106228	KAFB-106058	19,645,000	17	32,423,000	28	27,318,000	21
D	KAFB-106058	KAFB-106227	16,209,000	11	1,350,400	1	10,599,000	6
E	KAFB-106227	KAFB-106234	21,380,000	29	11,231,000	19	18,561,000	22
F	KAFB-106234	KAFB-106206	5,836,100	4	6,130,300	6	5,499,400	4
Total A-F^c (interim remedy TCZ)			114,662,100	104	88,776,000	82	98,837,400	80
Interval	Well		Q2 2018		Q4 2018		Q2 2019	
	From	To	Volume (ft ³)	Mass ^a (grams)	Volume (ft ³)	Mass ^a (grams)	Volume (ft ³)	Mass ^a (grams)
A	Ridgecrest ^b	KAFB-106090	8,896,200	4	6,275,400	4	7,731,200	4
B	KAFB-106090	KAFB-106228	15,300,000	8	8,242,000	5	8,553,400	4
C	KAFB-106228	KAFB-106058	5,550,900	3	5,762,500	3	5,783,300	3
D	KAFB-106058	KAFB-106227	248,520	0	0	0	0	0
E	KAFB-106227	KAFB-106234	5,841,800	3	6,037,500	4	0	0
F	KAFB-106234	KAFB-106206	963,770	0	2,193,000	1	0	0
Total A-F^c (interim remedy TCZ)			36,801,190	19	28,510,400	16	22,067,900	11
Interval	Well		Q4 2019		Q2 2020		Q4 2020	
	From	To	Volume (ft ³)	Mass ^a (grams)	Volume (ft ³)	Mass ^a (grams)	Volume (ft ³)	Mass ^a (grams)
A	Ridgecrest ^b	KAFB-106090	5,660,700	3	2,539,200	1	3,868,200	2
B	KAFB-106090	KAFB-106228	8,464,800	4	1,566,100	0.7	5,164,300	2.2
C	KAFB-106228	KAFB-106058	3,607,800	2	536,800	0.2	1,506,600	0.7
D	KAFB-106058	KAFB-106227	750,080	0.3	48,264	0.02	1,713,900	0.71
E	KAFB-106227	KAFB-106234	0	0	0	0	0	0
F	KAFB-106234	KAFB-106206	0	0	0	0	0	0
Total A-F^c (interim remedy TCZ)			18,483,380	9.1	4,690,364	2.4	12,253,000	5.2

Table 6-16
Plume Volume and Mass Comparison for the Target Capture Zone

^a Mass value assumes a uniform total porosity of 25% for the contaminated thickness of the aquifer.

^b Ridgecrest Drive SE

^c Differences between total and summed interval values are due to rounding errors in the interval values.

% = percent

ft³ = cubic feet

Q2 = second quarter

Q4 = fourth quarter

TCZ = target capture zone

Table 6-17
Horizontal Capture Analysis for the Target Capture Zone

Sample Period	Capture Interval	Plume		Horizontal Capture		Percent Captured	
		Volume (ft ³)	Mass ^a (grams)	Volume (ft ³)	Mass ^a (grams)	Volume	Mass ^a
2016 Q4	REI 4857	6.57E+07	64	6.57E+07	64	100.0%	100.0%
	REI 4838	4.90E+07	40	4.53E+07	38	92.5%	95.0%
	Total ^b	1.15E+08	104	1.11E+08	102	96.8%	98.1%
2017 Q2	REI 4857	4.75E+07	47	4.75E+07	47	100.0%	100.0%
	REI 4838	4.13E+07	34	4.13E+07	34	100.0%	100.0%
	Total ^b	8.88E+07	82	8.88E+07	82	100.0%	100.0%
2017 Q4	REI 4857	5.30E+07	45	5.30E+07	45	100.0%	100.0%
	REI 4838	4.58E+07	35	4.58E+07	35	100.0%	100.0%
	Total ^b	9.89E+07	80	9.89E+07	80	100.0%	100.0%
2018 Q2	REI 4857	2.24E+07	11	2.24E+07	11	100.0%	100.0%
	REI 4838	1.44E+07	8	1.44E+07	8	100.0%	100.0%
	Total ^b	3.68E+07	19	3.68E+07	19	100.0%	100.0%
2018 Q4	REI 4857	1.92E+07	12	1.92E+07	12	100.0%	100.0%
	REI 4838	9.39E+06	5	9.39E+06	5	100.0%	100.0%
	Total ^b	2.85E+07	17	2.85E+07	17	100.0%	100.0%
2019 Q2	REI 4857	9.65E+06	5	9.65E+06	5	100.0%	100.0%
	REI 4838	1.24E+07	6	1.24E+07	6	100.0%	100.0%
	Total ^b	2.21E+07	11	2.21E+07	11	100.0%	100.0%
2019 Q4	REI 4857	1.02E+07	5	1.02E+07	5	100.0%	100.0%
	REI 4838	8.34E+06	4	8.33E+06	4	99.9%	99.9%
	Total ^b	1.85E+07	9	1.85E+07	9	99.9%	100.0%

Table 6-17
Horizontal Capture Analysis for the Target Capture Zone

Sample Period	Capture Interval	Plume		Horizontal Capture		Percent Captured	
		Volume (ft ³)	Mass ^a (grams)	Volume (ft ³)	Mass ^a (grams)	Volume	Mass ^a
2020 Q2	REI 4857	3.63E+06	1.8	3.63E+06	1.8	100.0%	100.0%
	REI 4838	1.09E+06	0.6	1.09E+06	0.6	100.0%	100.0%
	Total ^b	4.72E+06	2.4	4.72E+06	2.4	100.0%	100.0%
2020 Q4	REI 4857	5.67E+06	2.4	5.66E+06	2.4	99.7%	99.7%
	REI 4838	6.59E+06	2.9	6.59E+06	2.9	100.0%	100.0%
	Total ^b	1.23E+07	5.2	1.22E+07	5.2	99.9%	99.9%

^a Plume mass value assumes a uniform total porosity of 25% for the aquifer.

^b Differences between total and summed interval values are due to rounding errors in the interval values.

% = percent

ft³ = cubic feet

Q2 = second quarter

Q4 = fourth quarter

REI = reference elevation interval (feet above mean sea level)

Table 6-18
Extraction Well Horizontal Capture Analysis for the Target Capture Zone

Sample Period	Dissolved EDB Plume Segment North of Ridgecrest	REI 4857				REI 4838			
		Volume		Mass ^a		Volume		Mass ^a	
		Cubic Feet	Percent Captured	Grams	Percent Captured	Cubic Feet	Percent Captured	Grams	Percent Captured
2016 Q4	KAFB-106228 cb	4.27E+07	65.0%	37	57.4%	3.24E+07	66.0%	25	63.0%
	KAFB-106233 cb	0.00E+00	0.0%	0	0.0%	0.00E+00	0.0%	0	0.0%
	KAFB-106234 cb	2.30E+07	35.0%	27	42.6%	1.29E+07	26.0%	12	31.0%
	Total ^b	6.57E+07	100.0%	64	100.0%	4.53E+07	92.0%	38	94.0%
2017 Q2	KAFB-106228 cb	1.27E+07	26.8%	13	27.7%	2.47E+07	59.8%	24	69.0%
	KAFB-106233 cb	1.83E+07	38.5%	10	21.3%	1.44E+07	35.0%	9	26.0%
	KAFB-106234 cb	1.65E+07	34.7%	24	51.1%	2.15E+06	5.2%	2	4.9%
	Total ^b	4.75E+07	100.0%	47	100.0%	4.13E+07	100.0%	34	100.0%
2017 Q4	KAFB-106228 cb	2.86E+07	54.0%	21	46.7%	3.26E+07	71.1%	25	71.4%
	KAFB-106233 cb	3.94E+06	7.4%	2	4.4%	4.30E+06	9.4%	2	5.7%
	KAFB-106234 cb	2.05E+07	38.6%	22	48.9%	8.95E+06	19.5%	8	22.9%
	Total ^b	5.30E+07	100.0%	45	100.0%	4.58E+07	100.0%	35	100.0%
2018 Q2	KAFB-106228 cb	6.86E+06	30.6%	3	31.3%	1.41E+07	97.8%	8	98.2%
	KAFB-106233 cb	8.63E+06	38.6%	4	35.4%	8.19E+01	0.0%	0	0.0%
	KAFB-106234 cb	6.74E+06	30.1%	4	32.4%	3.18E+05	2.2%	0	1.8%
	KAFB-106239 cb	1.58E+05	0.7%	0	0.8%	0.00E+00	0.0%	0	0.0%
	Total ^b	2.24E+07	100.0%	11	100.0%	1.44E+07	100.0%	8	100.0%

Table 6-18
Extraction Well Horizontal Capture Analysis for the Target Capture Zone

Sample Period	Dissolved EDB Plume Segment North of Ridgecrest	REI 4857				REI 4838			
		Volume		Mass ^a		Volume		Mass ^a	
		Cubic Feet	Percent Captured	Grams	Percent Captured	Cubic Feet	Percent Captured	Grams	Percent Captured
2018 Q4	KAFB-106228 cb	6.66E+06	34.8%	4	32.2%	8.49E+06	90.4%	4	90.7%
	KAFB-106233 cb	0.00E+00	0.0%	0	0.0%	0.00E+00	0.0%	0	0.0%
	KAFB-106234 cb	7.42E+06	38.8%	5	41.4%	8.09E+05	8.6%	0	8.4%
	KAFB-106239 cb	5.07E+06	26.4%	3	26.4%	9.62E+04	1.0%	0	0.9%
	Total ^b	1.92E+07	100.0%	12	100.0%	9.39E+06	100.0%	5	100.0%
2019 Q2	KAFB-106228 cb	4.96E+06	51.4%	2	50.4%	8.57E+06	68.9%	4	68.9%
	KAFB-106233 cb	5.08E+03	0.1%	0	—	1.72E+05	1.4%	0	1.0%
	KAFB-106234 cb	0.00E+00	0.0%	0	0.0%	0.00E+00	0.0%	0	0.0%
	KAFB-106239 cb	4.69E+06	48.5%	2	49.6%	3.69E+06	29.7%	2	30.1%
	Total ^b	9.65E+06	100.0%	5	100.0%	1.24E+07	100.0%	6	100.0%
2019 Q4	KAFB-106228 cb	9.37E+06	92.1%	4	90.8%	8.30E+06	99.6%	4	99.7%
	KAFB-106233 cb	0.00E+00	0.0%	0.0	0.0%	0.00E+00	0.0%	0.00	0.0%
	KAFB-106234 cb	2.35E+05	2.3%	0.1	1.9%	3.16E+04	0.4%	0.01	0.3%
	KAFB-106239 cb	5.68E+05	5.6%	0.4	7.4%	0.00E+00	0.0%	0.00	0.0%
	Total ^b	1.02E+07	100.0%	5	100.0%	8.33E+06	100.0%	4	100.0%
2020 Q2	KAFB-106228 cb	2.08E+06	57.4%	0.9	51.3%	9.15E+05	84.3%	0.5	85.3%
	KAFB-106233 cb	0.00E+00	0.0%	0.0	0.0%	0.00E+00	0.0%	0.00	0.0%
	KAFB-106234 cb	0.00E+00	0.0%	0.0	0.0%	0.00E+00	0.0%	0.00	0.0%
	KAFB-106239 cb	1.55E+06	42.6%	0.9	48.7%	1.71E+05	15.7%	0.1	14.8%
	Total ^b	3.63E+06	100.0%	1.8	100.0%	1.09E+06	100.0%	0.6	100.0%

Table 6-18
Extraction Well Horizontal Capture Analysis for the Target Capture Zone

Sample Period	Dissolved EDB Plume Segment North of Ridgecrest	REI 4857				REI 4838			
		Volume		Mass ^a		Volume		Mass ^a	
		Cubic Feet	Percent Captured	Grams	Percent Captured	Cubic Feet	Percent Captured	Grams	Percent Captured
2020 Q4	KAFB-106228 cb	2.85E+06	50.3%	1.2	48.8%	6.55E+06	99.3%	2.8	99.4%
	KAFB-106233 cb	0.00E+00	0.0%	0.0	0.0%	0.00E+00	0.0%	0.0	0.0%
	KAFB-106234 cb	1.70E+06	29.9%	0.7	29.7%	4.32E+04	0.7%	0.02	0.6%
	KAFB-106239 cb	1.11E+06	19.5%	0.5	21.2%	6.86E+01	0.0%	0.00	0.0%
	Total ^b	5.67E+06	99.7%	2.4	99.7%	6.59E+06	100.0%	2.9	100.0%

^a Plume mass value assumes a uniform total porosity of 25% for the aquifer.

^b Differences between total and summed interval values are due to rounding errors in the interval values.

% = percent

cb = capture basin

EDB = 1,2-dibromoethane (ethylene dibromide)

Q2 = second quarter

Q4 = fourth quarter

REI = reference elevation interval (feet above mean sea level)

Table 6-19
Step 3 Target Capture Zone Horizontal Capture Statistics Summary

Component	Evaluation Period	Quarter Total	Estimated Captured	Remainder	Percent of Quarter Captured	Percent of Initial Captured
Target Capture Zone Volume (ft³)	Q4 2016 ^a	1.15E+08	1.11E+08	3.63E+06	96.8%	96.8%
	Q2 2017	8.88E+07	8.88E+07	0.00E+00	100.0%	100.0%
	Q4 2017	9.88E+07	9.89E+07	0.00E+00	100.0%	100.0%
	Q2 2018	3.68E+07	3.68E+07	0.00E+00	100.0%	100.0%
	Q4 2018	2.85E+07	2.85E+07	0.00E+00	100.0%	100.0%
	Q2 2019	2.21E+07	2.21E+07	0.00E+00	100.0%	100.0%
	Q4 2019	1.85E+07	1.85E+07	1.03E+04	99.9%	100.0%
	Q2 2020	4.72E+06	4.72E+06	0.00E+00	100.0%	100.0%
	Q4 2020	1.23E+07	1.22E+07	1.64E+04	99.9%	100.0%
Target Capture Zone Mass (grams)	Q4 2016 ^a	103.9	102.0	1.9	98.1%	98.1%
	Q2 2017	81.8	81.8	0.0	100.0%	100.0%
	Q4 2017	79.9	79.9	0.0	100.0%	100.0%
	Q2 2018	18.6	18.6	0.0	100.0%	100.0%
	Q4 2018	16.5	16.5	0.0	100.0%	100.0%
	Q2 2019	11.3	11.3	0.0	100.0%	100.0%
	Q4 2019	9.2	9.2	0.0	100.0%	100.0%
	Q2 2020	2.4	2.4	0.0	100.0%	100.0%
	Q4 2020	5.2	5.2	0.0	99.9%	100.0%

^a Q4 2016 is the initial evaluation period for comparison purposes

% = percent

ft³ = cubic feet

Q2 = second quarter evaluation period

Q4 = fourth quarter evaluation period

ne = capture not evaluated by numerical flow model analysis

**Table 6-20
Vertical Containment Analysis for the Target Capture Zone**

Sample Period	Dissolved EDB Plume Segment North of Ridgcrest Drive SE	Plume		Vertical Containment		Percent Contained	
		Volume (ft ³)	Mass ^a (grams)	Volume (ft ³)	Mass ^a (grams)	Volume	Mass
2016 Q4	Above REI 4838 mid-point	8.31E+07	80	6.35E+07	59	76.3%	73.8%
	Below REI 4838 mid-point	3.15E+07	24	1.73E+07	14	54.8%	58.3%
	Total ^b	1.15E+08	104	8.08E+07	73	70.4%	70.2%
2017 Q2	Above REI 4838 mid-point	5.87E+07	55	5.24E+07	47	89.3%	85.0%
	Below REI 4838 mid-point	3.01E+07	26	2.36E+07	18	78.5%	68.5%
	Total ^b	8.88E+07	82	7.60E+07	65	85.6%	79.9%
2017 Q4	Above REI 4838 mid-point	6.81E+07	58	5.77E+07	48	84.7%	82.8%
	Below REI 4838 mid-point	3.07E+07	22	2.23E+07	15	72.5%	68.2%
	Total ^b	9.89E+07	80	8.00E+07	63	80.9%	78.8%
2018 Q2	Above REI 4838 mid-point	2.24E+07	11	1.44E+07	7	64.4%	63.4%
	Below REI 4838 mid-point	1.44E+07	8	7.99E+06	4	55.3%	51.9%
	Total ^b	3.68E+07	19	2.24E+07	11	60.8%	58.6%
2018 Q4	Above REI 4838 mid-point	1.92E+07	12	1.92E+07	12	100.0%	100.0%
	Below REI 4838 mid-point	9.39E+06	5	9.14E+06	5	97.4%	97.6%
	Total ^b	2.85E+07	17	2.83E+07	16	99.1%	99.3%
2019 Q2	Above REI 4838 mid-point	9.65E+06	5	9.65E+06	5	100.0%	100.0%
	Below REI 4838 mid-point	1.24E+07	6	1.24E+07	6	100.0%	100.0%
	Total ^b	2.21E+07	11	2.21E+07	11	100.0%	100.0%
2019 Q4	Above REI 4838 mid-point	1.02E+07	5	1.02E+07	5	100.0%	100.0%
	Below REI 4838 mid-point	8.34E+06	4	8.34E+06	4	100.0%	100.0%
	Total ^b	1.85E+07	9	1.85E+07	9	100.0%	100.0%

**Table 6-20
Vertical Containment Analysis for the Target Capture Zone**

Sample Period	Dissolved EDB Plume Segment North of Ridgcrest Drive SE	Plume		Vertical Containment		Percent Contained	
		Volume (ft ³)	Mass ^a (grams)	Volume (ft ³)	Mass ^a (grams)	Volume	Mass
2020 Q2	Above REI 4838 mid-point	3.63E+06	1.8	3.63E+06	1.8	99.8%	99.9%
	Below REI 4838 mid-point	1.09E+06	0.6	1.09E+06	0.6	100.0%	100.0%
	Total ^b	4.72E+06	2.4	4.71E+06	2.4	99.9%	99.9%
2020 Q4	Above REI 4838 mid-point	5.68E+06	2.4	5.68E+06	2.4	100.0%	100.0%
	Below REI 4838 mid-point	6.59E+06	2.9	6.59E+06	2.9	100.0%	100.0%
	Total ^b	1.23E+07	5.2	1.23E+07	5.2	100.0%	100.0%

^a Plume mass value assumes a uniform total porosity of 25% for the aquifer.

^b Differences between total and summed interval values are due to rounding errors in the interval values.

% = percent

EDB = 1,2-dibromoethane (ethylene dibromide)

ft³ = cubic feet

Q2 = second quarter

Q4 = fourth quarter

REI = reference elevation interval (feet above mean sea level)

SE = southeast

Table 6-21
Step 3 Target Capture Zone Vertical Capture Statistics Summary

Component	Evaluation Period	Quarter Total	Estimated Captured	Remainder	Percent of Quarter Captured	Percent of Initial Captured
Target Capture Zone Volume (ft³)	Q4 2016 ^a	1.15E+08	8.08E+07	3.39E+07	70.4%	70.4%
	Q2 2017	8.88E+07	7.60E+07	1.28E+07	85.6%	88.9%
	Q4 2017	9.88E+07	8.00E+07	1.88E+07	80.9%	83.6%
	Q2 2018	3.68E+07	2.24E+07	1.44E+07	60.8%	87.4%
	Q4 2018	2.85E+07	2.83E+07	2.48E+05	99.1%	99.8%
	Q2 2019	2.21E+07	2.21E+07	4.41E+03	100.0%	100.0%
	Q4 2019	1.85E+07	1.85E+07	0.00E+00	100.0%	100.0%
	Q2 2020	4.72E+06	4.71E+06	5.75E+03	99.9%	100.0%
	Q4 2020	1.23E+07	1.23E+07	0.00E+00	100.0%	100.0%
Target Capture Zone Mass (grams)	Q4 2016 ^a	103.9	73.0	30.9	70.3%	70.3%
	Q2 2017	81.8	65.3	16.5	79.9%	84.1%
	Q4 2017	79.9	63.0	16.9	78.8%	83.7%
	Q2 2018	18.6	10.9	7.7	58.6%	92.6%
	Q4 2018	16.5	16.4	0.1	99.3%	99.9%
	Q2 2019	11.3	11.3	0.0	100.0%	100.0%
	Q4 2019	9.2	9.2	0.0	100.0%	100.0%
	Q2 2020	2.4	2.4	0.0	99.9%	100.0%
	Q4 2020	5.2	5.2	0.0	100.0%	100.0%

^a Q4 2016 is the initial evaluation period for comparison purposes

% = percent

ft³ = cubic feet

Q2 = second quarter evaluation period

Q4 = fourth quarter evaluation period

ne = capture not evaluated by numerical flow model analysis

Table 6-22
Step 4 Target Capture Zone Three-Dimensional Capture Statistics Summary

Component	Evaluation Period	Quarter Total	Estimated Captured	Remainder	Percent of Quarter Captured	Percent of Initial Captured
Target Capture Zone Volume (ft ³)	Q4 2016 ^a	114,662,100	ne	ne	ne	ne
	Q2 2017	88,776,000	ne	ne	ne	ne
	Q4 2017	98,837,400	ne	ne	ne	ne
	Q2 2018	36,833,122	36,833,122	0	100%	100%
	Q4 2018	28,545,200	26,244,100	2,301,100	92%	98%
	Q2 2019	22,088,000	22,086,530	1,470	100%	100%
	Q4 2019	18,497,000	17,796,100	700,900	96%	99%
	Q2 2020	4,716,800	3,100,430	1,616,370	66%	99%
	Q4 2020	12,266,000	8,830,770	3,435,230	72%	97%
Target Capture Zone Mass (grams)	Q4 2016 ^a	103.9	ne	ne	ne	ne
	Q2 2017	81.8	ne	ne	ne	ne
	Q4 2017	79.9	ne	ne	ne	ne
	Q2 2018	18.6	18.6	0.0	100%	100%
	Q4 2018	16.5	15.1	1.4	91%	99%
	Q2 2019	11.3	11.3	0.0	100%	100%
	Q4 2019	9.2	8.9	0.3	97%	100%
	Q2 2020	2.4	1.5	0.9	64%	99%
	Q4 2020	5.2	3.7	1.5	71%	99%

^a Q4 2016 is the initial evaluation period for comparison purposes

% = percent

ft³ = cubic feet

Q2 = second quarter evaluation period

Q4 = fourth quarter evaluation period

ne = capture not evaluated by numerical flow model analysis

**Table 6-23
Comparison of Capture Zone Evaluation Methods for the Target Capture Zone**

Sample Period	Dissolved EDB Plume Segment North of Ridgecrest	Step 3: Potentiometric Surface Analysis				Step 4: Numerical Flow Model			
		Volume		Mass ^a		Volume		Mass ^a	
		Cubic Feet	Percent Captured	Grams	Percent Captured	Cubic Feet	Percent Captured	Grams	Percent Captured
2020 Q4	KAFB-106228 cb	9.40E+06	77%	4.0	77%	8.57E+06	70%	3.6	69%
	KAFB-106233 cb	0.00E+00	0%	0.0	0%	0.00E+00	0%	0.0	0%
	KAFB-106234 cb	1.74E+06	14%	0.7	14%	0.00E+00	0%	0.0	0%
	KAFB-106239 cb	1.11E+06	9%	0.5	10%	2.65E+05	2%	0.1	2%
	Total ^b	1.23E+07	99.9%	5.2	99.9%	1.23E+07	72%	5.2	71%

^a Plume mass value assumes a uniform total porosity of 25% for the aquifer.

^b Total volume (cubic feet) and mass (grams) are for the entire TCZ. Total percent captured is the percentage of the total volume and mass captured by the extraction well capture basins.

% = percent

cb = capture basin

EDB = 1,2-dibromoethane (ethylene dibromide)

Q4 = fourth quarter

TCZ = target capture zone

**Table 6-24
Summary of Q4 2020 Target Capture Zone Evaluation**

Step	Summary/Conclusions
Step 1: Review site data, site conceptual model, remedy objectives	Completed, all determined to be up-to-date and adequate.
Step 2: Define TCZ	Updated and clearly defined, illustrated on maps. Does not pertain to entire thickness of aquifer. Dissolved ethylene dibromide plume volume and mass have been delineated at and above the Maximum Contaminant Level value in three dimensions. An isolated region concentration rebound around monitoring wells KAFB-106041 has persisted, and the concentration has increased (0.054 µg/L > 0.074 µg/L). Overall, the TCZ has undergone a 160% increase in volume and a 120% increase in mass when compared to the Q2 2020 delineation. This increase is likely due to an increased flow potential northward from the source area resulting from on-Base and off-Base drought response extractions increasing the magnitude of the gradient in the project area.
Step 3a: Water level maps: Potentiometric Surface Analysis	Analysis is performed within the two reference elevation intervals shown to contain portions of the TCZ. Interpreted capture zone is larger than the TCZ within the Interim Remedy Objective Area in both reference elevation intervals. Analysis estimates 100% capture of the initial TCZ under Q4 2020 conditions.
Step 3b: Water level maps: Vertical Difference Analysis	Analysis is performed across the TCZ area at three distinct elevation intervals at depth within the aquifer. Analysis estimates containment of greater than 100% of the initial TCZ in the vertical direction under Q4 2020 conditions.
Step 3c: Water level pairs	Inward flow not evident at all pairs along the TCZ boundary within the Interim Remedy Objective Area. However, analysis does indicate the potential for entire TCZ to flow towards one or more interim measure extraction wells under Q4 2020 conditions.
Step 4: Perform Calculations	Simple two-dimensional horizontal capture calculations were performed in 2016 but are not considered to be adequate to represent capture in this system and, therefore, were not updated in this reporting effort.
Step 4b: Groundwater flow modeling with particle tracking	Three-dimensional simulation of groundwater flow based on measured aquifer parameters and current extraction rates, injection rates, and regional flow-field. Particle tracking results indicate capture of greater than 97% of the initial TCZ volume and mass for steady-state pumping at current rates and conditions.
Step 5: Concentration trends	Updated with current water chemistry data and indicates that the plume has not migrated into previously "clean" or previously remediated aquifer. Due to rising water table elevation, this analysis is not strongly relied upon for short-term evaluation of capture.
Step 6: Interpret actual capture and Compare to TCZ	Comparison of capture estimates from Steps 3 and 4 lead to the conclusion that at least 97% of the initial TCZ volume and mass is being contained by IM extraction under Q4 2020 groundwater conditions. In addition, step 5 shows that no plume migration into previously "clean" regions has occurred between assessment periods. Capture evaluation will continue to be performed every second and fourth quarter in order to address changes in capture zones due to changes in aquifer stresses (Interim Remedy and non-Interim Remedy based) and changes in regional flow-field.

Table 6-24
Summary of Q4 2020 Target Capture Zone Evaluation

% = percent
µg/L = microgram per liter
gpm = gallon per minute
Q2 = second quarter
Q4 = fourth quarter
TCZ = Target Capture Zone

APPENDICES
(Provided electronically via compact disc)

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From: [KOTTKAMP, SHEEN T GS-13 USAF AFCEC AFCEC/CZOW](#)
To: [Cobrain, Dave, NMENV](#)
Cc: [Pierard, Kevin, NMENV](#); [LYNNES, KATHRYN D HQE USAF AFGSC 377 MSG/SAF/IEE](#); [SEGURA, CHRISTOPHER G GS-14 USAF AFCEC/CZO](#)
Subject: BFF GWTS Release
Date: Tuesday, October 6, 2020 5:19:00 PM

Good afternoon Dave. A follow up to the voice message I left this afternoon. We had a failure at the GWTS yesterday evening resulting in an overflow of the influent tank. At the time of the failure wells 106228 and 106239 shut off immediately. However wells 106233 and 106234 remained operational and resulted in the overflow and eventual release to the environment. These wells have recently shown non detect for EDB. All discharged water remained on base. Appropriate notification to the hot line has been accomplished as well as notification (voice mail and e-mail) to Mr. Stephen Connolly. This e-mail serves as formal notification that the GWTS remains off-line at this juncture until we can resolve the cause of the failure and prepare the system to be brought back on-line with confidence in the operational viability of the system. Formal notification will be provided per permit conditions as well as NMAC 20.6.2.1203 requirements. Please reach out to me tomorrow if you have any questions. Thank you. Sheen

Sheen T. Kottkamp GS-13
Environmental Program Manager/Scientist
Kirtland ISS, AFCEC/CZO
505-846-7674
DSN 246-7674
Cell 806-463-0811

From: [Cobrain, Dave, NMENV](#)
To: [KOTTKAMP, SHEEN T GS-13 USAF AFCEC AFCEC/CZOW](#); [Pierard, Kevin, NMENV](#)
Subject: [Non-DoD Source] RE: GWTS Release Reporting Extension Request
Date: Thursday, October 8, 2020 11:33:53 AM

Sheen,

In accordance with Permit Section 1.27 Item 2, your request is hereby approved. The report summarizing the release and related response action conducted at the Groundwater Treatment System must be submitted no later than October 20, 2020.

Dave Cobrain
 New Mexico Environment Department
 Hazardous Waste Bureau
 2905 Rodeo Park Drive East Bldg 1
 Santa Fe, NM 87505-6313
 Main Office Phone 505-476-6000
 Direct Line 505-476-6055
 Fax 505-476-6030

From: KOTTKAMP, SHEEN T GS-13 USAF AFCEC AFCEC/CZOW <sheen.kottkamp.1@us.af.mil>
Sent: Thursday, October 8, 2020 11:21 AM
To: [Pierard, Kevin, NMENV](mailto:Kevin.Pierard@state.nm.us) <Kevin.Pierard@state.nm.us>; [Cobrain, Dave, NMENV](mailto:dave.cobrain@state.nm.us) <dave.cobrain@state.nm.us>
Subject: [EXT] GWTS Release Reporting Extension Request

Good morning gentlemen. In accordance with the Kirtland AFB Resource Conservation and Recovery Act Permit NM9570024423, Section 1.27, I am formally requesting a 15 day extension request regarding the release of influent water from the Kirtland bulk fuels facility ground water treatment system that occurred Monday October 5th 2020. The request will allow for adequate time to receive the analytical data from sampling of media, compiling the report, and staffing the report for Wing CC signature. Upon approval of the request, Kirtland AFB will submit the written report to the New Mexico Environment Department October 20th 2020 meeting the requirements as specified in Section 1.27 of the permit. Thank you.

Respectfully,

Sheen T. Kottkamp GS-13
 Environmental Program Manager/Scientist
 Kirtland ISS, AFCEC/CZO
 505-846-7674
 DSN 246-7674
 Cell 806-463-0811



Michelle Lujan Grisham
Governor

Howie C. Morales
Lt. Governor

**NEW MEXICO
ENVIRONMENT DEPARTMENT**

Hazardous Waste Bureau

2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6313
Phone (505) 476-6000 Fax (505) 476-6030
www.env.nm.gov



James C. Kenney
Cabinet Secretary

Jennifer J. Pruett
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

September 2, 2020

Colonel David S. Miller
Base Commander
377 ABW/CC
2000 Wyoming Blvd SE
Kirtland AFB, NM 87117

Lt. Colonel Wayne J. Acosta
Civil Engineer Office
377 Civil engineer Division
2050 Wyoming Blvd SE, Suite 116
Kirtland AFB, NM 87117

**RE: REPORTING REQUIREMENTS FOR ALL DOCUMENT SUBMITTALS
KIRTLAND AIR FORCE BASE, NEW MEXICO
EPA ID# NM6213820974
HWB-KAFB-20-MISC**

Dear Colonel Miller and Lt. Colonel Acosta:

In our discussions with Kirtland Air Force Base (KAFB or Permittee) staff, a concern was raised that New Mexico Environment Department (NMED) comments on specific submittals contained direction that more broadly applies to various activities conducted at KAFB. Your staff indicated that this creates difficulty for them in tracking directions provided by NMED. To respond to such concerns, NMED is providing the following compilation to clarify requirements for all documents submitted to NMED by the Permittee.

In general, many KAFB submittals to NMED consistently contain a substantial number of errors that should be identified during quality assurance and quality control reviews prior to submittal. In discussions with KAFB staff, NMED staff was assured that steps are being taken to review and enhance document quality control and address these recurring issues to assist NMED in expediting document reviews and to assist the public in better understanding the documents that are submitted by the Permittee.

- 1. Laboratory Deliverables:** Section 6.5.18.2, Laboratory Deliverables, of the KAFB Resource Conservation and Recovery Act (RCRA) Permit (KAFB Permit), states the requirements for analytical laboratory reporting. The section states, “[l]aboratory analytical data packages shall be prepared in accordance with EPA-established Level III or IV analytical support protocols.” The final paragraph of the permit section goes on to state, “[t]he Permittee shall present summary tables of these data and Level II QC results to the Department in reports or other documents prepared in accordance with Permit Section 6.2.4. Raw analytical data, including calibration curves, instrument calibration data, data calculation work sheets, and other laboratory supporting data for samples from this project, shall be compiled and kept on file at the Facility for reference. The Permittee shall make all data available to the Department upon request.” Therefore, for purposes of reporting, Level II QC results are necessary. Level III and IV data must be maintained by the Permittee to be made available upon request.
- 2. General Guidelines:** NMED has included an attachment titled *General Reporting Guidelines* that provides guidance regarding its expectations of submittals to the Hazardous Waste Bureau. The Permittee must consult the guidance during document preparation.
- 3. Document Scopes of Work:** In order to avoid confusion, all work plans must be written for one specific scope of work.
- 4. Document Titles vs. Content:** All future document titles on cover pages must include all major scope activities incorporated within that document, including those presented in appendices. The names of all future documents and scopes of work must not change during the RCRA corrective action process (i.e., work plans through reports).
- 5. Responses to NMED Comments:** Responses to NMED comments must be included as Appendix A of every document revision. Redline-strikeout versions must include all changes made to the corresponding revised document.
- 6. Field Methods:** All field methods for the project must be documented in the text of the document or an appendix. The documentation must be specific to each monitoring activity, such as soil vapor monitoring, groundwater monitoring, or operation and maintenance of the groundwater treatment system. References to quality assurance project plans (QAPPs), standard operating procedures (SOPs), previous work plans, or other documents are not acceptable. All deviations from approved work plans must be discussed and explained in a Deviations section.

- 7. Well Designations:** Wells must be consistently referred to by the same name/designation in all sections of the text, all tables, and all figures. The designation must also match that provided in the digital analytical data files.

- 8. Data Tables, Figures, and Appendices:**
 - a. Sampling data tables must be logically arranged, either chronologically or by investigation, to facilitate location of information.
 - b. Sampling data tables must include the practical quantitation limit (PQL) and reporting detection limit for each analysis. Method detection limits must also be provided for each analytical method.
 - c. Sampling data tables must include the appropriate screening levels for data comparison.
 - d. Analytical data tables in digital format must include a column that indicates which analytical data report the specific sample information can be found. This link must correspond to the analytical data report file name.
 - e. Data from analyses where the PQL (or LOQ) exceeds 20% of the screening level are data quality exceptions and must be identified as such in all tables and figures.
 - f. Analytical data provided in digital format such as Excel files must be provided in a sortable, searchable format that can be uploaded into a database. Previous reports have provided digital data in the same format as the tables in the text which are not sortable or searchable.
 - g. Data in tables and figures must be presented with a consistent and appropriate number of significant figures.
 - h. All points (wells), structures, infrastructure, roads, etc. depicted on figures must be labeled.
 - i. All tables, figures, and appendices must be appropriately numbered and titled.
 - j. All figures must include a scale and a north arrow.
 - k. Data tables and figures must undergo quality assurance and quality control review prior to submittal to NMED.

- 9. Document organization:** Every page of each submittal, including all pages within all sections and appendices, must be numbered either sequentially or in some other logical format.

Many of the issues listed above were discussed during a conference call between NMED and KAFB that was held on May 7, 2020; KAFB staff stated that they understood these issues and agreed to correct these problems. While NMED made every attempt to be comprehensive, other issues may arise. If NMED identifies further issues that occur in multiple submittals, NMED will contact KAFB staff informally to discuss the issues and follow up with further correspondence and direction.

Should you have any questions or wish to meet with us to discuss these comments, please contact me at (505) 476-6035 or your staff may contact Ben Wear at (505) 476-6041.

Sincerely,

Kevin M. Pierard, Chief
Hazardous Waste Bureau

Attachment

cc: D. Cobrain, NMED HWB
B. Wear, NMED HWB
L. Andress, NMED HWB
M. Suzuki, NMED HWB
R. Murphy, NMED HWB
L. King EPA Region 6 (6LCRRC)
C. Cash, KAFB
S. Kottkamp, KAFB
K. Lynnes, KAFB

File: KAFB 2020 Bulk Fuels Facility Spill and Reading

Attachment

GENERAL REPORTING GUIDELINES

1. Overview

The purpose of this guidance document is to provide the general requirements and formats for documents related to corrective action activities required under the Resource Conservation and Recovery Act (RCRA). This guidance is not intended to provide document requirements for every potential corrective action conducted at the facility. Therefore, the formats for all types of documents are not presented below. The formats described include the general reporting requirements and formats for site-specific investigation work plans, investigation reports, routine monitoring reports, risk assessment reports, and corrective measures evaluations. Permittees should generally consider the documents to be the equivalents of RCRA facility investigation (RFI) work plans, RFI reports, periodic monitoring reports, risk assessments, and corrective measures study (CMS) reports, respectively, for the purposes of RCRA compliance. Permittees must include detailed, site-specific requirements in all interim status unit, solid waste management unit (SWMU), and Area of Concern (AOC) investigation work plans, investigation reports, monitoring reports, and corrective measures evaluations. All plans and reports should be prepared with technical and regulatory input from the NMED. All work plans and reports must be submitted to the NMED in the form of two paper copies and an electronic copy.

The document requirements listed do not include all sections that may be necessary to complete each type of document listed. A permittee or the NMED may determine that additional sections are required to address additional site-specific issues or information collected during corrective action or monitoring activities not listed below. However, permittees must submit variations of the general report format and the formats for documents not listed in this guidance in outline form to the NMED for approval prior to submittal of the documents. The NMED will approve or disapprove, in writing, the proposed document outline after receipt of the outline. If the NMED disapproves the report outline, the NMED will notify the permittee, in writing, of the outline's deficiencies and will specify a date for submittal of a revised report outline. All documents submitted by the Permittee must follow the general approach and limitations for data presentation described in this guidance document. If in conflict with a facilities RCRA Permit, the Permit condition should be followed.

2. Investigation Work Plan

Permittees must fulfill the requirements for preparation of work plans for unit-specific or corrective action activities at the facility using the general outline below. The minimum requirements for describing proposed activities within each section are included. All research, locations, depths and methods of exploration, field procedures, analytical analyses, data collection methods, and schedules must be included in each work plan. In general, interpretation of data acquired during previous investigations must be presented only in the background sections of the work plans. The other text sections of the work plans must be reserved for presentation of anticipated site-specific activities and procedures relevant to the project. The general work plan outline is provided below.

2.1 Title Page

The title page must include the type of document, facility name and the unit, SWMU, or AOC name(s) and the submittal date. A signature block providing spaces for the name, title, and organization of the preparer and the responsible representative of the facility must be provided on the title page in accordance with the signature requirements in 40 CFR 270.11(b).

2.2 Executive Summary (Abstract)

The executive summary (or abstract) must provide a brief summary of the purpose and scope of the investigation to be conducted at the subject site. The facility, unit, SWMU, or AOC name, revision number if applicable, and location must be included in the executive summary.

2.3 Table of Contents

The table of contents must list all text sections and subsections, tables, figures, and appendices or attachments included in the work plan. The corresponding page numbers for the titles of each section of the work plan must be included in the table of contents.

2.4 Introduction

The introduction must include the facility name, unit name and location, and unit status (e.g., active operations, closed, corrective action). General information on the current site usage and status must be included in this section. A brief description of the purpose of the investigation and the type of site investigation to be conducted must be provided in this section.

2.5 Background

The background section must describe relevant background information. This section must briefly summarize historical site uses including the locations of current and former site structures and features. A labeled figure must be included in the document showing the locations of current and former site structures and features. The locations of pertinent subsurface features such as pipelines, underground tanks, utility lines, and other subsurface structures must be included in the background summary and labeled on the site plan.

This section must identify potential receptors, including groundwater, and include a brief summary of the type and characteristics of all waste and all contaminants, the known and possible sources of contamination, the history of releases or discharges of contamination, and the known extent of contamination. This section must include brief summaries of results of previous investigations, including references to pertinent figures, data summary tables, and text in previous reports. At a minimum, detections of contaminants encountered during previous investigations must be presented in table format, with an accompanying figure showing sample locations. References to previous reports must include page, table, and figure numbers for referenced information. Summary data tables and site plans showing relevant investigation locations must be included in the Tables and Figures sections of the document, respectively.

2.6 Site Conditions

2.6.1 Surface Conditions

A section on surface conditions must provide a detailed description of current site topography, features, and structures including a description of drainages, vegetation, erosional features, and a detailed description of current site uses and operations at the site. In addition, descriptions of features located in surrounding sites that may have an impact on the subject site regarding sediment transport, surface water runoff, or contaminant fate and transport must be included in this section.

2.6.2 Subsurface Conditions

A section on subsurface conditions must provide a brief, detailed description of the site conditions observed during previous subsurface investigations, including relevant soil horizons, stratigraphy, presence of vadose zone fluids and groundwater, and other relevant information. A site plan showing the locations of all borings and excavations advanced during previous investigations must be included in the Figures section of the work plan. A brief description of the anticipated stratigraphic units that may be encountered during the investigation may be included in this section, if no previous investigations have been conducted at the site.

2.7 Scope of Activities

A section on the scope of activities must briefly describe a list of all anticipated activities to be performed during the investigation, including background information research, health and safety requirements that may affect or limit the completion of tasks, drilling, test pit or other excavations, well construction, field data collection, survey data collection, chemical analytical testing, aquifer testing, and IDW storage, disposal, and reporting.

2.8 Investigation Methods

A section on investigation methods must provide a description of all anticipated locations and methods for conducting the activities to be performed during the investigation. This section must include, but is not limited to, research methods, health and safety practices that may affect the completion of tasks, drilling methods, test pit or other excavation methods, sampling intervals and methods, well construction methods, field data collection methods, geophysical and land survey methods, field screening methods, chemical analytical testing, materials testing, aquifer testing, pilot testing, and other proposed investigation and testing methods. This information may also be summarized in table format, if appropriate.

2.9 Monitoring and Sampling Program

A section on monitoring and sampling must describe the anticipated monitoring and sampling program to be implemented after the initial investigation activities are completed. This section must provide a description of the anticipated vadose zone fluids, groundwater, vadose zone vapor, vadose zone moisture, and other monitoring and sampling programs to be implemented at the unit.

2.10 Schedule

A section must provide the anticipated schedule for completion of field investigation, pilot testing, and monitoring/sampling activities. In addition, this section must provide a schedule for submittal of reports and data to the NMED, including a schedule for submitting status reports, preliminary data, and the final investigation report.

2.11 Tables

The following summary tables may be included in the investigation work plans if previous investigations have been conducted at the unit. Data presented in the tables must include information on dates of data collection, analytical methods, detection limits, and significant data quality exceptions. All data tables must include only detected analytes and data quality exceptions that could potentially mask detections. The following tables must be included in investigation work plans, as applicable;

- a. summaries of regulatory criteria, background, and applicable cleanup levels (may be included in the analytical data tables instead of as separate tables);
- b. summaries of historical field survey location data;
- c. summaries of historical field screening and field parameter measurements of soil, rock, sediments, groundwater, surface water, and air quality;
- d. summaries of historical soil, rock, or sediment laboratory analytical data must include the analytical methods, detection limits, and significant data quality exceptions that could influence interpretation of the data;
- e. summaries of historical groundwater elevation and depth to groundwater data. The table must include the monitoring well depths, the screened intervals in each well, and the dates and times measurements were taken;
- f. summaries of historical groundwater laboratory analytical data. The analytical data tables must include the analytical methods, detection limits, and significant data quality exceptions that could influence interpretation of the data;
- g. summary of historical surface water laboratory analytical data. The analytical data tables must include the analytical methods, detection limits, and significant data quality exceptions that could influence interpretation of the data;
- h. summary of historical air sample screening and chemical analytical data. The data tables must include the screening instruments used, laboratory analytical methods, detection limits, and significant data quality exceptions that could influence interpretation of the data; and

- i. summary of historical pilot test or other test data, if applicable, including units of measurement and types of instruments used to obtain measurements.

2.12 Figures

The following figures must be included with each investigation work plan for each site, including presentation of data where previous investigations have been conducted. All figures must include an accurate bar scale and a north arrow. An explanation must be included on each figure for all abbreviations, symbols, acronyms, and qualifiers. The following figures must be included in investigation work plans, as applicable:

- a. a vicinity map showing topography and the general location of the site relative to surrounding features and properties;
- b. a unit site plan that presents pertinent site features and structures, underground utilities, well locations, and remediation system locations and details; off-site well locations and other relevant features must be included on the site plan, if appropriate; additional site plans may be required to present the locations of relevant off-site well locations, structures, and features;
- c. figures showing historical and proposed soil boring locations, excavation locations, and sampling locations;
- d. figures presenting historical soil sample field screening and laboratory analytical data;
- e. figures presenting the locations of all existing and proposed borings and vapor monitoring point locations,
- f. figures presenting historical vadose zone organic vapor data;
- g. figures showing all existing and proposed monitoring wells and piezometers;
- h. figures presenting historical groundwater and vadose zone fluid elevation data, and indicating groundwater and vadose zone fluid flow directions;
- i. figures presenting historical groundwater and vadose zone fluid laboratory analytical data, if applicable; the chemical analytical data corresponding to each sampling location can be presented in tabular form on the figure or as an isoconcentration map;
- j. figures presenting historical and proposed vadose zone fluid neutron probe access tube locations and field measurement data for soil moisture, if applicable;
- k. figures presenting historical surface water laboratory analytical data, if applicable;

- l. figures showing historical and proposed air sampling locations and presenting historical air quality data, if applicable;
- m. figures presenting historical pilot testing locations and data, where applicable, including site plans and graphic data presentation; and
- n. figures presenting geologic cross-sections based on outcrop and borehole data acquired during previous investigations, if applicable.

2.13 Appendices

An IDW management plan must be included as an appendix to the investigation work plan. Additional appendices may be necessary to present additional data or documentation not listed above.

3. Investigation Report

Permittees must prepare investigation reports at the facility using the general outline below. Investigation Reports are the reporting mechanism for presenting the results of completed Investigation Work Plans. This section describes the minimum requirements for reporting on site investigations. All data collected during each site investigation event in the reporting period must be included in the reports. In general, interpretation of data must be presented only in the background, conclusions, and recommendations sections of the reports. The other text sections of the reports must be reserved for presentation of facts and data without interpretation or qualifications. The general report outline is provided below.

3.1 Title Page

The title page must include the type of document and version number, the facility name, the unit, SWMU, or AOC, and the submittal date. A signature block providing spaces for the name, title, and organization of the preparer and the responsible facility representative must be provided on the title page in accordance with the signature requirements in 40 CFR 270.11(b).

3.2 Executive Summary

The executive summary must provide a brief summary of the purpose, scope, and results of the investigation conducted at the subject site during the reporting period. In addition, this section must include a brief summary of conclusions based on the investigation data collected and recommendations for future investigation, monitoring, remedial action, or site closure.

3.3 Table of Contents

The table of contents must list all text sections, subsections, tables, figures, and appendices or attachments included in the report. The corresponding page numbers for the titles of each section of the report must be included in the table of contents.

3.4 Introduction

The introduction section must include the facility name, unit name and location, and unit status (e.g., active operations, closed, corrective action). General information on the site usage and status must be included in this section. A brief description of the purpose of the investigation, the type of site investigation conducted, and the type of results presented in the report also must be provided in this section.

3.5 Background

The background section must describe relevant background information. This section must briefly summarize historical site uses including the locations of current and former site structures and features. A labeled figure must be included in the document showing the locations of current and former site structures and features. The locations of subsurface features such as pipelines, underground tanks, utility lines, and other subsurface structures must be included in the background summary and labeled on the figure. In addition, this section must include a brief summary of the possible sources of contamination, the history of releases or discharges of contamination, the known extent of contamination, and the results of previous investigations including references to previous reports. The references to previous reports must include page, table, and figure numbers for referenced information. A site plan showing relevant investigation locations and summary data tables must be included in the Figures and Tables sections of the document, respectively.

3.6 Scope of Activities

This section on the scope of activities must briefly describe all activities performed during the investigation event including background information research, implemented health and safety measures that affected or limited the completion of tasks, drilling, test pit or other excavation methods, well construction methods, field data collection, survey data collection, chemical analytical testing, aquifer testing, remediation system pilot testing, and IDW storage or disposal.

3.7 Field Investigation Results

A section must provide a summary of the procedures used and the results of all field investigation activities conducted at the site including, but not limited to, the dates that investigation activities were conducted, the type and purpose of field investigation activities performed, field screening measurements, logging and sampling results, pilot test results, construction details, and conditions observed. Field observations or conditions that altered the planned work or may have influenced the results of sampling, testing, and logging must be reported in this section. At a minimum, the following subsections must be included, where appropriate.

3.7.1 Surface Conditions

A section on surface conditions must describe current site topography, features, and structures including topographic drainages, man-made drainages, vegetation, and erosional features. It must also include a description of current site uses and any operations at the site. In addition, descriptions of features located in surrounding sites that may have an impact on the subject site

regarding sediment transport, surface water runoff, or contaminant transport must be included in this section.

3.7.2 Exploratory Drilling or Excavation Investigations

A section must describe the locations, methods, and depths of subsurface explorations. The description must include the types of equipment used, the logging procedures, exploration equipment, decontamination procedures, and conditions encountered that may have affected or limited the investigation. Samples obtained from all exploratory borings and excavations must be visually inspected and the soil or rock type classified in general accordance with ASTM D2487 (Unified Soil Classification System) and D2488, or AGI Methods for soil and rock classification. Detailed logs of each boring must be completed in the field by a qualified engineer or geologist.

A description of the site conditions observed during subsurface investigation activities must be included in this section, including soil horizon and stratigraphic information. Site plans showing the locations of all borings and excavations must be included in the Figures section of the report. Boring and test pit logs for all exploratory borings and test pits must be presented in an appendix or attachment to the report.

3.7.3 Subsurface Conditions

A section on subsurface conditions must describe known subsurface lithology and structures based on observations made during the current and previous subsurface investigations, including interpretation of geophysical logs and as-built drawings of man-made structures. A description of the known locations of pipelines, utility lines, and observed geologic structures must also be included in this section. A site plan showing boring and excavation locations and the locations of the site's above- and below-ground structures must be included in the Figures section of the report. In addition, cross-sections must be constructed, if appropriate, to provide additional visual presentation of site or regional subsurface conditions.

3.7.4 Monitoring Well Construction, Boring, or Excavation Abandonment

A section must describe the methods and details of monitoring well construction and the methods used to abandon or backfill exploratory borings and excavations. The description must include the dates of well construction, boring abandonment, or excavation backfilling. In addition, boring logs, test pit logs, and well construction diagrams must be included in an attachment or appendix. Well construction diagrams must be included with the associated boring logs for borings that are converted to monitoring wells.

3.7.5 Groundwater Conditions

A section must describe groundwater conditions observed beneath the subject site and relate local groundwater conditions to regional groundwater conditions. A description of the depths to water, aquifer thickness, and groundwater flow directions must be included in this section for alluvial groundwater, shallow perched groundwater, intermediate perched groundwater, and regional groundwater, as appropriate to the investigation. Figures showing well locations,

surrounding area, groundwater elevations, and flow directions for each hydrologic zone must be included in the Figures section of the report.

3.7.6 Surface Water Conditions

A section must describe surface water conditions and include a description of surface water runoff, surface water drainage, surface water sediment transport, and contaminant transport in surface water as suspended load and as a dissolved phase in surface water via natural and man-made drainages, if applicable. A description of contaminant fate and transport must be included, if appropriate.

3.7.7 Subsurface Air and Soil Moisture Conditions

A section must describe subsurface air monitoring and sampling methods used during the site investigation. It must also describe observations made during the site investigation regarding subsurface flow pathways and the subsurface air-flow regime.

3.7.8 Materials Testing Results

A section must discuss the materials testing results, such as core permeability testing, grain size analysis, or other materials testing results. Sample collection methods, locations, and depths must also be included. Corresponding summary tables must be included in the Tables section of the report.

3.7.9 Pilot Testing Results

A section must discuss the results of any pilot testing. Pilot testing is typically conducted after initial subsurface investigations are completed and the need for additional investigation or remediation has been evaluated. Pilot testing, including aquifer testing and remediation system pilot testing, must be addressed through separate pilot test work plans and reports. The format for pilot test work plans and reports must be approved by the NMED prior to submittal.

3.8 Regulatory Criteria

A section must set forth the applicable cleanup standards, screening levels, and risk-based cleanup goals for each pertinent medium at the subject site. The appropriate cleanup levels for each site must be included if site-specific levels have been established at separate facility sites or units. A table summarizing the applicable cleanup standards must be included as part of the document. Alternately, the report may include applicable cleanup standards as a column in the data tables. Risk-based evaluation procedures, if used to calculate cleanup levels, must be presented in a separate document or in an appendix to this report. If cleanup levels calculated in a risk evaluation are employed, the risk evaluation document must be referenced and must include pertinent page numbers for referenced information.

3.9 Site Contamination

A section must provide a description of sampling intervals and methods for detection of surface and subsurface contamination in soils, rock, sediments, groundwater, surface water, and as vapor-phase contamination. Only factual information must be included in this section. Interpretation of the data must be reserved for the summary and conclusions sections of the report. Tables summarizing all sampling, testing, and screening results for detected contaminants must be prepared in a format approved by the NMED. The tables must be presented in the Tables section of the report.

3.9.1 Soil, Rock, and Sediment Sampling

A section must describe the sampling of soil, rock and sediment. It must include the dates, locations, and methods of sample collection, sampling intervals, sample logging methods, screening sample selection methods, and laboratory sample selection methods including the collection depths for samples submitted for laboratory analyses. A site plan showing the sample locations must be included in the Figures section of the report.

3.9.2 Sample Field Screening Results

A section must describe the field screening methods used during the investigation and the field screening results. Field screening results also must be presented in summary tables in the Tables section of the document. The limitations of field screening instrumentation and any conditions that influenced the results of field screening must be discussed in this subsection.

3.9.3 Soil, Rock, and Sediment Sampling Chemical Analytical Results

A section must briefly summarize the laboratory analyses conducted, the analytical methods and results and provide a comparison of the data to cleanup standards or established cleanup levels for the site. The laboratory results also must be presented in summary tables in the Tables section of the document. Field conditions and sample collection methods that could potentially affect the analytical results must be described in this section. If appropriate, soil analytical data must be presented with sample locations on a site plan and included in the Figures section of the report.

3.9.4 Subsurface Vapor Sampling

A section must describe the air and subsurface vapor sampling. It must describe the dates, locations, methods of sample collection, methods for sample logging, and methods for laboratory sample selection. A site plan showing all air and subsurface vapor sampling locations must be provided in the Figures section of the report.

3.9.5 Subsurface Vapor Field Screening Results

A section must describe the subsurface vapor field screening results. It must describe the field screening methods used for ambient air and subsurface vapors during the investigation and the field screening results. Field screening results must also be presented in summary tables in the Tables section of the report. The locations of ambient air and subsurface vapor screening sample

collection must be presented on a site plan included in the Figures section of the report. The limitations of field screening instrumentation and any conditions that influenced the results of field screening must be discussed in this section.

3.9.6 Air and Subsurface Vapor Laboratory Analytical Results

This section must describe the results of air and subsurface vapor laboratory analyses. It must describe the air sampling laboratory analytical methods and results and provide a comparison of the data to applicable cleanup levels for the site. The rationale or purpose for altering or modifying the subsurface vapor sampling program outlined in the site investigation work plan also must be provided in this section. Field conditions that may have affected the analytical results during sample collection must be described in this section. Tables summarizing the air sample laboratory, field, and analytical QA/QC data; applicable cleanup levels; and modifications to the air sampling program must be provided in the Tables section of the report. Contaminant concentrations must be presented as data tables or as isoconcentration contours on a map included in the Figures section of the report.

3.10 Conclusions

A conclusions section must provide a brief summary of the investigation activities and a discussion of the conclusions of the investigation conducted at the site. In addition, this section must provide a comparison of the results to applicable cleanup levels, and to relevant historical investigation results and analytical data. Potential receptors, including groundwater, must be identified and discussed. An explanation must be provided with regard to data gaps. A risk assessment may be included as an appendix to the investigation report; however, the risk analysis must be presented in the risk assessment format described in Permit Section 6.5. References to the risk analysis must be presented only in the summary and conclusions sections of the Investigation Report.

3.11 Recommendations

A section must discuss the need for further investigation, corrective measures, risk assessment and monitoring, or recommendations for corrective action completed based on the conclusions provided in the Conclusions section. It must include explanations regarding additional sampling, monitoring, and site closure. A corresponding schedule for further action regarding the site must also be provided.

3.12 Tables

This section must provide the following summary tables. Data presented in the tables must include the current data, dates of data collection, analytical methods, detection limits, and significant data quality exceptions. All summary data tables must include only detected analytes and data quality exceptions that could potentially mask detections. The following tables must be included in investigation reports, as applicable:

- a. tables summarizing regulatory criteria, background levels, and applicable cleanup levels; this information may be included in the analytical data tables instead of as separate tables;

- b. tables summarizing field survey location data; separate tables must be prepared for well locations and individual medium sampling locations except where the locations are the same for more than one medium;
- c. tables summarizing field screening and field parameter measurements of soil, sediment, vadose zone fluid, vadose zone vapor, vadose zone moisture, and groundwater, surface water, and air quality;
- d. a table summarizing soil laboratory analytical data; it must include the analytical methods, detection limits, and significant data quality exceptions that would influence interpretation of the data;
- e. a table summarizing the groundwater elevations and depth-to-water data; the table must include the monitoring well depths and the screened intervals in each well;
- f. a table summarizing the groundwater laboratory analytical data; the analytical data tables must include the analytical methods, detection limits, and significant data quality exceptions that would influence interpretation of the data;
- g. a table summarizing the surface water laboratory analytical data; the analytical data tables must include the analytical methods, detection limits, and significant data quality exceptions that would influence interpretation of the data;
- h. A table summarizing the air sample screening and laboratory analytical data; the data tables must include the screening instruments used, laboratory analytical methods, detection limits, and significant data quality exceptions that would influence interpretation of the data;
- i. tables summarizing the pilot testing data, if applicable, including units of measurement and types of instruments used to obtain measurements; and
- j. a table summarizing the materials testing data, if applicable.

3.13 Figures

All figures must be included with each investigation report, as appropriate. All figures must include a scale and a north arrow. An explanation must be provided on each figure for all abbreviations, symbols, acronyms, and qualifiers. All maps must have a date. A section must provide the following figures:

- a. a vicinity map showing topography and the general location of the site relative to surrounding features and properties;

- b. a site plan that presents pertinent site features and structures, underground utilities, well locations, and remediation system locations and details; off-site well locations and other relevant features must be included on the site plan; additional site plans may be required to present the locations of relevant off-site well locations, structures and features;
- c. figures showing boring, excavation, and sampling locations;
- d. figures presenting soil sample field screening and laboratory analytical data;
- e. figures displaying the locations of all newly installed and existing wells and borings;
- f. figures presenting monitoring well locations, groundwater elevation data, and groundwater flow directions;
- g. figures presenting groundwater laboratory analytical data, including any past data requested by the NMED; the chemical analytical data corresponding to each sampling location may be presented in table form on the figure or as an isoconcentration map;
- h. figures presenting surface water sample locations and field measurement data including any past data requested by the NMED;
- i. figures presenting surface water laboratory analytical data including any past data, if applicable; the laboratory analytical data corresponding to each sampling location may be presented in tabular form on the figure;
- j. figures showing air and subsurface vapor sampling locations and presenting air and subsurface vapor quality data; the field screening or laboratory analytical data corresponding to each sampling location may be presented in tabular form on the figure or as an isoconcentration map;
- k. figures presenting geologic cross-sections based on outcrop and borehole data; and
- l. figures presenting pilot testing locations and data, where applicable, including site plans or graphic data presentation.

3.14 Appendices

Each investigation report must include the following appendices. Additional appendices may be necessary to present data or documentation not listed below.

3.14.1 Field Methods

An appendix must provide detailed descriptions of the methods used to acquire field measurements of each media that was surveyed or tested during the investigation. Methods must include, but are not limited to, exploratory drilling or excavation methods, the methods and types

of instruments used to obtain field screening, field analytical or field parameter measurements, instrument calibration procedures, sampling methods for each medium investigated, decontamination procedures, sample handling procedures, documentation procedures, and a description of field conditions that affected procedural or sample testing results. Methods of measuring and sampling during pilot testing must be reported in this appendix, if applicable. Copies of IDW disposal documentation must be provided in a separate appendix.

3.14.2 Boring/Test Pit Logs and Well Construction Diagrams

An appendix must provide boring logs, test pit or other excavation logs, and well construction details. In addition, a key to symbols and a soil or rock classification system must be included in this appendix. Geophysical logs must be provided in a separate section of this appendix.

3.14.3 Chemical Analytical Program

Chemical analytical methods, a summary of data quality objectives, and a summary of data quality review procedures must be reported in an appendix. A summary of data quality exceptions and their effect on the acceptability of the field and laboratory analytical data with regard to the investigation and the site status must be included in this appendix, along with references to case narratives provided in the laboratory reports.

3.14.4 Chemical Analytical Reports

A section must include all laboratory chemical analytical data generated for the reporting period. The reports must include all chain-of-custody records and QA/QC results provided by the laboratory. The laboratory reports may be provided electronically in a format approved by the NMED and must be in the form of a final laboratory report. Laboratory report data tables may be submitted in Microsoft Excel format. Hard (paper) copies of the chain-of-custody forms must be submitted with the reports regardless of whether the final laboratory report is submitted electronically or in hard copy.

3.14.5 Other Appendices

Other appendices containing additional information must be included as required by the NMED or as otherwise appropriate.

4. Periodic Monitoring Report

The Permittee must use the following guidance for preparing periodic monitoring reports. The reports must present the results of periodic groundwater, surface water, vapor, and remediation system monitoring at the facility. The following sections provide a general outline for monitoring reports and the minimum requirements for reporting of periodic monitoring conducted at the facility. All data collected during each monitoring or sampling event in the reporting period must be included in the reports. In general, interpretation of data must be presented only in the background, conclusions, and recommendations sections of the reports. The other text sections of the reports must be reserved for presentation of facts and data without interpretation or qualifications.

4.1 Title Page

The title page must include the type of document, revision number if applicable, the facility name, the unit, SWMU, or AOC name(s), and the submittal date. A signature block providing spaces for the name, title, and organization of the preparer and the responsible representative of the facility must be provided on the title page in accordance with the signature requirements in 40 CFR 270.11(b).

4.2 Executive Summary

The executive summary must provide a brief summary of the purpose, scope, and results of the monitoring conducted at the subject site during the reporting period. The facility, unit, SWMU, and AOC name(s) and location(s) must be included in the executive summary. In addition, this section must include a brief summary of conclusions based on the monitoring data collected.

4.3 Table of Contents

The table of contents must list all text sections, subsections, tables, figures, and appendices or attachments included in the report. The corresponding page numbers for the titles of each section of the report must be included in the table of contents.

4.4 Introduction

The introduction section must include the facility name and the unit name(s), location(s), and status (e.g. active operations, closed, corrective action). General information on the site usage and status must be included in this section. A brief description of the purpose of the monitoring, type of monitoring conducted, and the type of results presented in the report also must be provided in this section.

4.5 Scope of Activities

A section on the scope of activities must briefly describe all activities performed during the monitoring event or reporting period including field data collection, analytical testing, if applicable, and purge/decontamination water storage and disposal.

4.6 Regulatory Criteria

A section on regulatory criteria must provide information regarding applicable cleanup standards, risk-based screening levels, and risk-based cleanup goals for the site. A table summarizing the applicable cleanup standards, or inclusion of applicable cleanup standards as a column in the data tables, can be substituted for this section. The appropriate cleanup levels for each site must be included if site-specific levels have been established at separate sites. Risk-based evaluation procedures, if used to calculate cleanup levels, must either be included as an attachment or submitted as a separate document and referenced. The specific document and page numbers must be included for all referenced materials.

4.7 Monitoring Results

A section must provide a summary of the results of monitoring conducted at the site. This section must include the dates and times that monitoring was conducted, the measured depths to groundwater, directions of groundwater and vadose zone fluids flow, field air and water quality measurements, static pressures, field measurements, and a comparison to previous monitoring results. Field observations or conditions that may influence the results of monitoring must be reported in this section. Tables summarizing leachate and vapor-monitoring parameters, groundwater and vadose zone fluid elevations, depth-to-water measurements, and other field measurements may be substituted for this section. The tables must include all information required in Permit Section 6.4.11.

4.8 Chemical Analytical Data Results

A section must discuss the results of the chemical analyses. It must provide the dates of sampling and the analytical results. It must also provide a comparison of the data to previous results and to any cleanup standards or established cleanup levels for the site. The rationale or purpose for altering or modifying the sampling program must be provided in this section. A table summarizing the laboratory analytical data, QA/QC data, applicable cleanup levels, and modifications to the sampling program may be substituted for this section. The tables must include all information required in Permit Section 6.4.11.

4.9 Remediation System Monitoring

A section must discuss remediation system monitoring. It must summarize the remediation system's capabilities and performance. It must also provide monitoring data, treatment system discharge sampling requirements, and system influent and effluent sample analytical results. The dates of operation, system failures, and modifications made to the remediation system during the reporting period must also be included in this section. A summary table may be substituted for this section. The tables must include all information required in Permit Section 6.4.11.

4.10 Summary

A summary section must provide a discussion and conclusions of the monitoring conducted at the site. In addition, this section must provide a comparison of the results to applicable cleanup levels and to relevant historical monitoring and chemical analytical data. An explanation must be provided with regard to data gaps. A discussion of remediation system performance, monitoring results, modifications if applicable, and compliance with discharge requirements must be provided in this section. Recommendations and explanations regarding future monitoring, remedial actions, or site closure must also be included in this section.

4.11 Tables

A section must provide the following summary tables for the media sampled. With prior approval from the NMED, the Permittee may combine one or more of the tables. Data presented in the tables must include the current sampling and monitoring data, as well as data from the three previous monitoring events or, if data from less than three monitoring events is available, data

acquired during previous investigations. Remediation system monitoring data also must be presented. The dates of data collection must be included in the tables. Summary tables may be substituted for portions of the text. The analytical data tables must include only detected analytes and data quality exceptions that could potentially mask detections. The following tables must be included, as applicable:

- a. a table summarizing the regulatory criteria (a regulatory criteria text section may be substituted for this table or the applicable cleanup levels may be included in the analytical data tables);
- b. a table summarizing groundwater and vadose zone fluid elevations, and depths to water data; the table must include the monitoring well depths, casing elevations, the screened intervals in each well, and the dates and times of measurements;
- c. a table summarizing field measurements of surface water quality data, if applicable;
- d. a table summarizing field measurements of subsurface vapor monitoring and soil moisture data (including historical vapor monitoring data as described above);
- e. a table summarizing field measurements of groundwater and vadose zone fluid quality data (including historical water quality data as described above);
- f. a table summarizing subsurface vapors chemical analytical data, if applicable (including historical analytical data as described above);
- g. a table summarizing surface water chemical analytical data, if applicable (including historical surface water analytical data as described above);
- h. a table summarizing groundwater and vadose zone fluid chemical analytical data (including historical groundwater analytical data as described above); and
- i. a table summarizing remediation system monitoring data, if applicable (including historical remediation system monitoring data as described above).

4.12 Figures

A section must include the following figures. All figures must include a scale and north arrow. An explanation must be provided on each figure for all abbreviations, symbols, acronyms, and qualifiers. All figures must have a date. The following figures must be included, as applicable:

- a. a vicinity map showing topography and the general location of the site relative to surrounding features or properties;
- b. a facility site plan that presents pertinent site features and structures, well and piezometer

neutron probe access tubes locations and remediation system location(s) and features; off-site well locations and pertinent features must be included on the site plan, if practical; additional site plans may be required to present the locations of relevant off-site well locations, structures, and features;

- c. figures presenting the locations of neutron probe access tubes, monitoring and other well locations, groundwater and vadose zone fluid elevation data, and groundwater and vadose zone fluid flow directions;
- d. figures presenting groundwater and vadose zone fluid analytical data for the current monitoring event; the analytical data corresponding to each sampling location may be presented in tabular form on the figure or as an isoconcentration map;
- e. figures presenting surface water sampling locations and analytical data for the current monitoring period;
- f. figures presenting vertical profiles of soil moisture content for neutron probe measurements for the current monitoring period;
- g. figures presenting subsurface vapor sampling locations and analytical data for the current monitoring event; the analytical data corresponding to each sampling location may be presented in table form on the figure or as an isoconcentration map; and
- h. figures presenting geologic cross-sections based on outcrop and borehole data, if applicable.

4.13 Appendices

Each monitoring report must include the following appendices. Additional appendices may be necessary to present data or documentation not listed below.

4.13.1 Field Methods

The report must include a section that outlines the methods used to acquire field measurements of groundwater and vadose zone fluid elevations, subsurface vapor, soil moisture, water quality data, subsurface vapor samples, vadose zone fluid samples, and groundwater samples. It must include the methods and types of instruments used to measure depths to water, air, headspace, or subsurface vapor parameters, soil moisture information, and water quality parameters. In addition, decontamination, well purging techniques, well sampling techniques, and sample handling procedures must be provided in this appendix. Methods of measuring and sampling remediation systems must be reported in this section, if applicable. Purge and decontamination water storage and disposal methods must also be presented in this appendix. Copies of purge and decontamination water disposal documentation must be provided in a separate appendix.

4.13.2 Chemical Analytical Program

An appendix must discuss the analytical program. It must include the analytical methods, a summary of data quality objectives, and data quality review procedures. A summary of data quality exceptions and their effect on the acceptability of the analytical data with regard to the monitoring event and the site status must be included in this appendix along with references to case narratives provided in the laboratory reports.

4.13.3 Chemical Analytical Reports

An appendix must include all laboratory chemical analytical data generated for the reporting period. The data may be submitted electronically on a compact disc in Microsoft Excel or other format acceptable to the NMED. The reports must include all chain-of-custody records and QA/QC results provided by the laboratory. Hard (paper) copies of all chain-of-custody records must be submitted as part of this appendix.

5. Risk Assessment Report

The Permittee must prepare risk assessment reports for sites requiring corrective action at the facility using the format described below. This section provides a general outline for risk assessments and also sets forth the minimum requirements for describing risk assessment elements. In general, interpretation of data must be presented only in the background, conceptual site model, and conclusions and recommendations sections of the reports. The other text sections of the risk assessment report must be reserved for presentation of sampling results from all investigations, conceptual and mathematical elements of the risk assessment, and presentations of toxicity information and screening values used in the risk assessment. The human health and ecological risk assessments must be presented in separate sections, but the general risk assessment outline applicable to both sections is provided below.

5.1 Title Page

The title page must include the type of document, revision number if applicable, the facility name, the unit, SWMU, or AOC name(s), and the submittal date. A signature block providing spaces for the name, title, and organization of the preparer and the responsible representative of the facility must be provided on the title page in accordance with the signature requirements in 40 CFR 270.11(b).

5.2 Executive Summary

The executive summary section must provide a brief summary of the purpose and scope of the risk assessment of the subject site. The executive summary must also briefly summarize the conclusions of the risk assessment. The facility, unit, SWMU, or AOC name(s) and location(s) must be included in the executive summary.

5.3 Table of Contents

The table of contents must list all text sections, subsections, tables, figures, and appendices or attachments included in the risk assessment. The corresponding page numbers for the titles of each unit of the report must be included in the table of contents.

5.4 Introduction

The introduction section must include the facility name, unit name(s) and location(s), and unit status (e.g., active operations, closed, corrective action). General information on the current site usage and status must be included in this section.

5.5 Background

The background section must describe relevant background information. This section must briefly summarize historical site uses including the locations of current and former site structures and features. A labeled figure must be included in the document showing the locations of current and former site structures and features.

5.5.1 Site Description

A section must provide a description of current site topography, features, and structures including a description of drainages, erosional features, current site uses, and other data relevant to assessing risk at the site. Depth to groundwater, vadose zone fluids, and directions of groundwater and vadose zone fluids flow must be included in this section. The presence and location of surface water bodies such as springs or wetlands must be noted in this section. Photos of the site may be incorporated into this section, if desired. Ecological features of the site must be described here, including type and amount of vegetative cover, observed and expected wildlife receptors, and level of disturbance of the site. A topographical map of the site and general vicinity of the site showing habitat types, boundaries of each habitat, and any surface water features must be included in the Figures section of the document.

5.5.2 Sampling Results

A section must include a summary of the history of releases of contaminants, known and possible sources of contamination, and the vertical and lateral extent of contamination present in each media. This section must include summaries of sampling results of all investigations, including site plans (included in the Figures section of the document), showing locations of detected contaminants. This section must reference pertinent figures, data summary tables, and citations for references to previous reports. References to previous reports must include page, table, and figure numbers for referenced information. Summaries of sampling data for each constituent must include the maximum value detected, the detection limit, the 95% UCL of the mean value detected (if applicable to the data set) and whether that 95% UCL of the mean was calculated based on a normal or lognormal distribution. Background values used for comparison to inorganic constituents at the site must be presented in this subsection. The table of background values must appear in the Tables section of the document and include actual values used as well as the origin

of the values (facility-wide, site-specific, UCL, UTL). This section must also include a discussion of how “non-detect” sample results were handled in the averaging of data.

5.6 Conceptual Site Model

A section must present the conceptual site model. It must include information on the expected fate and transport of contaminants detected at the site. This section must provide a list of all sources of contamination at the site. Sources that are no longer considered to be ongoing but represent the point of origination for contaminants transported to other locations must be included. The discussion of fate and transport must address potential migration of each contaminant in each medium, potential breakdown products and their migration, and anticipated pathways of exposure for human or ecological receptors. Diagrammatic representations of the conceptual site model must appear in the Figures section of the document.

For human health risk assessments, the conceptual site model must include residential land use as the future land use for all risk assessments. In addition, site-specific future land use may be included, provided that written approval to consider a site-specific future land use has been obtained from the NMED prior to inclusion in the risk assessment. If a site-specific future land use scenario appears in the risk assessment, all values for exposure parameters and the source of those values must be included in table format and presented in the Tables section of the document.

Conceptual site models presented for ecological risk assessments must identify assessment endpoints and measurement receptors for the site. The discussion of the model must explain how the measurement receptors for the site are protective of wildlife receptors.

5.7 Risk Screening Levels

A section must present the actual screening values used for each contaminant for comparison to all human health and ecological risk screening levels. A discussion of the methods used to calculate the screening levels in accordance with Permit Section 3.5 and any variances from those procedures must be included in this Section. If no valid toxicological studies exist for the receptor or contaminant, the contaminant and receptor combination must be addressed using qualitative methods. If an approved site-specific risk scenario is used for the human health risk assessment, this section must include all toxicity information and exposure assessment equations used for the site-specific scenario, as well as the sources for that information. Other regulatory levels applicable to screening the site, such as drinking water MCLs, must also be included in this section.

5.8 Risk Assessment Results

This section must present all risk values, Hazard Quotients (HQs), and Hazard Indices (HIs) for human health under projected future residential scenario and any site-specific scenarios. This section must also present the HQ and HI for each contaminant for each ecological receptor. IN

addition, this section must include discussion of qualitative, semi-quantitative, and quantitative uncertainty in the risk assessment and estimate the potential impact of the various uncertainties.

5.9 Conclusions and Recommendations

This section must include an interpretation of the results of the risk assessment and any recommendations for future disposition of the site. This section may include additional information and considerations that the Permittee believes are relevant to the analysis of the site.

5.10 Tables

Data presented in the summary tables must include information on detection limits and significant data quality exceptions. All data tables must include only detected analytes and data quality exceptions that could potentially mask detections. A section must provide the following summary tables, as appropriate. With prior approval from the NMED, the Permittee may combine one or more of the tables:

- a. a table presenting background values used for comparison to inorganic constituents at the site; the table must include actual values used as well as the origin of the values (facility-wide, site-specific, UCL, UTL, or maximum);
- b. a table summarizing sampling data must include, for each constituent, all detected values above background, the maximum value detected, the 95 percent UCL of the mean value detected (if applicable to the data set), and whether that 95 percent UCL of the mean was calculated based on a normal or lognormal distribution;
- c. a table of all screening values used and the sources of those values;
- d. a table presenting all risk values, HQs, and HIs under projected future residential scenario;
- e. a table presenting all risk values, HQs, and HIs under approved additional site-specific future land use scenario; and
- f. a table presenting the HQ and HI for each contaminant for each ecological receptor.

5.11 Figures

This section must present the following figures for each site, as appropriate. With prior approval from the NMED, the Permittee may combine one or more of the figures. All figures must include a scale and a north arrow. An explanation must be provided on each figure for all abbreviations, symbols, acronyms, and qualifiers. The following figures must be included, as applicable:

- a. a vicinity map showing topography and the general location of the site relative to surrounding features or properties;

- b. for human health risk assessments, a site plan that presents pertinent site features and structures, underground utilities, well locations, and remediation system locations and its details; off-site well locations and other relevant features must be included on the site plan if practical; additional site plans may be required to present the locations of relevant off-site wells, structures, and features;
- c. for ecological risk assessments, a topographical map of the site and general vicinity of the site showing habitat types, boundaries of each habitat, and any surface water features; and
- d. conceptual site model diagrams for both human health and ecological risk assessments.

5.12 Appendices

Appendices may be included to present additional relevant information for the risk analysis such as the results of statistical analyses of data sets and comparisons of data, ecological checklists for the site, full sets of results of all sampling investigations at the site, or other data as appropriate.

6. Corrective Measures Evaluation

The Permittee must prepare corrective measures evaluations for sites requiring corrective measures using the format described below. This section provides a general outline for corrective measures evaluations and sets forth the minimum requirements for describing corrective measures when preparing these documents. All investigation summaries, site condition descriptions, corrective action goals, corrective action options, remedial options selection criteria, and schedules must be included in the corrective measures evaluations. In general, interpretation of historical investigation data must be presented only in the background sections of the corrective measures evaluations. At a minimum, detections of contaminants encountered during previous site investigations must be presented in the corrective measures evaluations in table format with an accompanying site plan depicting sample locations. The other text sections of the corrective measures evaluations must be reserved for presentation of corrective action-related information regarding anticipated or potential site-specific corrective action options and methods relevant to the project. The general corrective measures evaluation outline is provided below.

6.1 Title Page

The title page must include the type of document, revision number if applicable, the facility name, the unit, SWMU, or AOC name(s), and the submittal date. A signature block providing spaces for the name, title, and organization of the preparer and the responsible facility representative must be provided on the title page in accordance with the signature requirements in 40 CFR 270.11(b).

6.2 Executive Summary

The executive summary must provide a brief summary of the purpose and scope of the corrective measures evaluation to be conducted at the site. The executive summary or abstract must also

briefly summarize the conclusions of the evaluation. The facility, unit, SWMU, or AOC name(s) and location(s) must be included in the executive summary.

6.3 Table of Contents

The table of contents must list all text sections, subsections, tables, figures, and appendices or attachments included in the corrective measures evaluation. The corresponding page numbers for the titles of each section of the report must be included in the table of contents.

6.4 Introduction

The introduction section must include the facility name, unit name(s) and location(s) and unit status (e.g., active operations, closed, corrective action). General information on the current site use and status must be included in this section. A brief description of the purpose of the corrective measures evaluation and the corrective action objectives for the project also must be provided in this section.

6.5 Background

The background section must describe the relevant background information. This section must briefly summarize historical site activities including the locations of current and former site structures and features. A labeled figure must be included in the document showing the locations of current and former site structures and features. The locations of subsurface features such as pipelines, underground tanks, utility lines, and other subsurface structures must be included in the background section and labeled on the site plan.

This section must include contaminant and waste characteristics, a brief summary of the history of contaminant releases, known and possible sources of contamination, and the vertical and lateral extent of contamination present in each medium. This section must include brief summaries of results of previous investigations, including references to pertinent figures, data summary tables, and text in previous reports. References to previous reports must include page, table, and figure numbers for referenced information. Summary tables and site plans showing relevant investigation locations must be referenced and included in the Tables and Figures sections of the document, respectively.

6.6 Site Conditions

6.6.1 Surface Conditions

A section on surface conditions must describe current and historic site topography, features, and structures, including a description of topographic drainages, man-made drainages, vegetation, and erosional features. It must also include a description of current uses of the site and any current operations at the site. This section must also include a description of those features that could potentially influence corrective action option selection or implementation such as archeological sites, wetlands, or other features that may affect remedial activities. In addition, descriptions of features located in surrounding sites that may have an effect on the subject site regarding sediment transport, surface water runoff, or contaminant transport must be included in

this section. A site plan displaying the locations of all pertinent surface features and structures must be included in the Figures section of the corrective measures evaluation.

6.6.2 Subsurface Conditions

A section on subsurface conditions must describe the site conditions observed during previous subsurface investigations. It must include relevant soil horizon and stratigraphic information, groundwater and vadose zone fluid conditions, fracture data, and subsurface vapor information. A site plan displaying the locations of all borings and excavations advanced during previous investigations must be included in the Figures section of the corrective measures evaluation.

6.7 Potential Receptors

6.7.1 Sources

A section must provide a list of all sources of contamination at the site where corrective measures are to be considered or are required. Sources that are no longer considered to be releasing contaminants at the site, but may be the point of origination for contaminants transported to other locations, must be included in this section.

6.7.2 Pathways

A section must describe potential migration pathways that could result in either acute or chronic exposures to contaminants. It must include such pathways as utility trenches, paleochannels, surface exposures, surface drainages, stratigraphic units, fractures, structures, and other features. The migration pathways for each contaminant and each medium must be tied to the potential receptors for each pathway. A discussion of contaminant characteristics relating to fate and transport of contaminants through each pathway must also be included in this section.

6.7.3 Receptors

A section must provide a listing and description of all anticipated potential receptors that could possibly be affected by the contamination present at the site. Potential receptors must include human and ecological receptors, groundwater, and other potential receptors. This section must identify relevant pathways, such as pathways that could divert or accelerate the transport of contamination to human receptors, ecological receptors, and/or groundwater.

6.8 Regulatory Criteria

A section must set forth the applicable cleanup standards, risk-based screening levels, and risk-based cleanup goals for each medium at the site. The appropriate cleanup levels for each site must be included, if site-specific levels have been established. A table summarizing the applicable cleanup standards must be included as part of the document. Alternately, the report may include applicable cleanup standards as a column in the data tables. If cleanup levels calculated in a risk evaluation are employed, the risk evaluation document must be referenced including pertinent page numbers for referenced information.

6.9 Identification of Corrective Measures Options

A section must identify and describe potential corrective measures for source, pathway, and receptor controls. Corrective measures options must include the range of available options including, but not limited to, a no action alternative, institutional controls, engineering controls, in-situ and onsite remediation alternatives, complete removal, and any combination of alternatives that would potentially achieve cleanup goals.

6.10 Evaluation of Corrective Measures Options

A section must provide an evaluation of the corrective measures options identified in Section 6.6.9 above. The evaluation must be based on the applicability, technical feasibility, effectiveness, implementability, impacts to human health and the environment, and cost of each option. A table summarizing the corrective measures alternatives and the criteria listed below must be included in the Tables section of this document. The general basis for evaluation of corrective measures options is described below.

6.10.1 Applicability

Applicability addresses the overall suitability for the corrective action option for containment or remediation of the contaminants in the relevant media with regard to protection of human health and the environment.

6.10.2 Technical Feasibility

Technical feasibility describes the uncertainty in designing, constructing, and operating a specific remedial alternative. The description must include an evaluation of historical applications of the remedial alternative including performance, reliability, and minimization of hazards.

6.10.3 Effectiveness

Effectiveness assesses the ability of the corrective measure to mitigate the measured or potential impact of contamination in a medium under the current and projected site conditions. The assessment also must include the anticipated duration for the technology to attain regulatory compliance. In general, all corrective measures described above will have the ability to mitigate the impacts of contamination at the site, but not all remedial options will be equally effective at achieving the desired cleanup goals to the degree and within the same time frame as other options. Each remedy must be evaluated for both short-term and long-term effectiveness.

6.10.4 Implementability

Implementability characterizes the degree of difficulty involved during the installation, construction, and operation of the corrective measure. Operation and maintenance of the alternative must be addressed in this section.

6.10.5 Human Health and Ecological Protectiveness

This category evaluates the short-term (remedy installation-related) and long-term (remedy operation-related) hazards to human health and the environment of implementing the corrective measure. The assessment must include whether the technology will create a hazard or increase existing hazards and the possible methods of hazard reduction.

6.10.6 Cost

A section must discuss the anticipated cost of implementing the corrective measure. The costs must be divided into: 1) capital costs associated with construction, installation, pilot testing, evaluation, permitting, and reporting of the effectiveness of the alternative; and 2) continuing costs associated with operating, maintaining, monitoring, testing, and reporting on the use and effectiveness of the technology.

6.11 Selection of Preferred Corrective Measure

The Permittee must propose the preferred corrective measures at the site and provide a justification for the selection in this section. The proposal must be based upon the ability of the remedial alternative to: 1) achieve cleanup standard objectives in a timely manner; 2) protect human and ecological receptors; 3) control or eliminate the sources of contamination; 4) control migration of released contaminants; and 5) manage remediation waste in accordance with State and Federal regulations. The justification must include the supporting rationale for the remedy selection, based on the factors listed in Permit Section 6.6.10, and a discussion of short- and long-term objectives for the site. The benefits and possible hazards of each potential corrective measure alternative must be included in this section.

6.12 Design Criteria to Meet Cleanup Objectives

The Permittee must present descriptions of the preliminary design for the selected corrective measures in this section. The description must include appropriate preliminary plans and specifications to effectively illustrate the technology and the anticipated implementation of the remedial option at the site. The preliminary design must discuss the design life of the alternative and provide engineering calculations for proposed remediation systems.

6.13 Schedule

A section must set forth a proposed schedule for completion of remedy-related activities such as bench testing, pilot testing, construction, installation, remedial excavation, cap construction, installation of monitoring points, and other remedial actions. The anticipated duration of corrective action operations and the schedule for conducting monitoring and sampling activities must also be presented. In addition, this section must provide a schedule for submittal of reports and data to the NMED, including a schedule for submitting all status reports and preliminary data.

6.14 Tables

A section must present the following summary tables, as appropriate. Data presented in the summary tables must include information on dates of sample collection, analytical methods, detection limits, and significant data quality exceptions. All data tables must include only detected analytes and data quality exceptions that could potentially mask detections. The following summary tables must be included in the corrective measures evaluations, as appropriate:

- a. a table summarizing regulatory criteria, background, and the applicable cleanup standards;
- b. a table summarizing historical field survey location data;
- c. tables summarizing historical field screening and field parameter measurements for each media;
- d. tables summarizing historical soil, rock, or sediment laboratory analytical data; the summary tables must include the analytical methods, detection limits, and significant data quality exceptions that would influence interpretation of the data;
- e. a table summarizing historical groundwater elevation and depth to water data; the table must include the monitoring well depths and the screened intervals in each well;
- f. tables summarizing historical groundwater and vadose zone laboratory analytical data; the analytical data tables must include the analytical methods, detection limits, and significant data quality exceptions that would influence interpretation of the data;
- g. tables summarizing historical surface water laboratory analytical data; the analytical data tables must include the analytical methods, detection limits, and significant data quality exceptions that would influence interpretation of the data;
- h. tables summarizing historical air sample screening and analytical data; the data tables must include the screening instruments used, laboratory analytical methods, detection limits, and significant data quality exceptions that would influence interpretation of the data;
- i. tables summarizing historical pilot or other testing data, if applicable, including units of measurement and types of instruments used to obtain measurements;
- j. a table summarizing the corrective measures alternatives and evaluation criteria; and
- k. a table presenting the schedule for installation, construction, implementation, and reporting of selected corrective measures.

6.15 Figures

This section must present the following figures for each site, as appropriate. All figures must include a scale. All plan view figures must include a north arrow. An explanation must be provided on each figure for all abbreviations, symbols, acronyms, and qualifiers. All figures must contain a date. The following figures must be included, as applicable:

- a. a vicinity map showing topography and the general location of the subject site relative to surrounding features or properties;
- b. a unit site plan that presents pertinent site features and structures, underground utilities, well locations, and remediation system locations and details; off-site well locations and other relevant features must be included on the site plan if practical; additional site plans may be required to present the locations of relevant off-site well locations, structures, and features;
- c. figures showing historical soil boring locations, excavation locations, and sampling locations;
- d. figures presenting historical soil sample field screening and laboratory analytical data, if appropriate;
- e. figures showing all existing wells including vapor monitoring wells and piezometers; the figures must present historical groundwater elevation data and indicate groundwater flow directions;
- f. figures presenting historical groundwater laboratory analytical data including past data, if applicable; the analytical data corresponding to each sampling location may be presented as individual concentrations, in table form on the figure, or as an isoconcentration map;
- g. figures presenting historical surface water sample locations and analytical data including past data, if applicable; the laboratory analytical data corresponding to each sampling location may be presented as individual concentrations or in table form on the figure;
- h. figures presenting historical air sampling locations and presenting air quality data; the field screening or laboratory analytical data corresponding to each sampling location may be presented as individual concentrations, in table form on the figure or as an isoconcentration map;
- i. figures presenting historical pilot or other test locations and data, where applicable, including site plans or graphic data presentation;
- j. figures presenting geologic cross-sections based on outcrop and borehole data, if applicable;

- k. figures presenting the locations of existing and proposed remediation systems;
- l. figures presenting existing remedial system design and construction details; and
- m. figures presenting preliminary design and construction details for preferred corrective measures.

6.16 Appendices

Each corrective measures evaluation must include, as appropriate, as an appendix, the management plan for waste, including investigation derived waste, generated as a result of construction, installation, or operation of remedial systems or activities conducted. Each corrective measures evaluation must include additional appendices presenting relevant additional data, such as pilot or other test or investigation data, remediation system design specifications, system performance data, or cost analyses as necessary.



Michelle Lujan Grisham
Governor

Howie C. Morales
Lt. Governor

**NEW MEXICO
ENVIRONMENT DEPARTMENT**

Hazardous Waste Bureau

2905 Rodeo Park Drive East, Building 1
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James C. Kenney
Cabinet Secretary

Jennifer J. Pruett
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

July 11, 2019

Colonel David S. Miller
Base Commander
377 ABW/CC
2000 Wyoming Blvd SE
Kirtland AFB, NM 87117

Lt. Colonel Wayne J. Acosta
Civil Engineer Office
377 Civil engineer Division
2050 Wyoming Blvd SE, Suite 116
Kirtland AFB, NM 87117

**RE: QUARTERLY MONITORING REPORT FOR APRIL-JUNE 2019
BULK FUELS FACILITY SOLID WASTE MANAGEMENT UNITS ST-106/SS-111
KIRTLAND AIR FORCE BASE, NEW MEXICO
EPA ID# NM6213820974
HWB-KAFB-19-017**

Dear Colonel Miller and Lt. Colonel Acosta:

The New Mexico Environment Department (NMED) is in receipt of the Kirtland Air Force Base (Permittee) *Quarterly Monitoring Report for April-June 2019, Bulk Fuels Facility, Solid Waste Management Unit ST-106/SS-11* (Report), dated September 2019 and received September 27, 2019.

No revision to the Report is required. NMED's attached comments are intended to provide direction to the Permittee in the preparation of future quarterly monitoring reports. Necessary changes based upon NMED's comments should be incorporated into future reports. The Permittee must ensure that future monitoring reports fully comply with Kirtland Air Force Base (KAFB) Hazardous Waste Facility Permit (Permit) Section 6.1.6. Quarterly Progress Reports, Section 6.2.4.1. Quarterly Reporting, and Section 6.2.4.4. Periodic Monitoring Reports. Additional guidance on preparing groundwater monitoring reports can be found in NMED's *General Reporting Requirements for Routine Groundwater Monitoring at RCRA Sites*.

Col. Miller and Lt. Col. Acosta
Quarterly Monitoring Report for April-June 2019
Page 2 of 2

Should you have any questions please Rob Murphy of my staff at robert.murphy@state.nm.us
or (505) 476-6022.

Sincerely,

Kevin
Pierard

Digitally signed
by Kevin Pierard
Date: 2020.07.11
08:25:15 -06'00'

Kevin M. Pierard, Chief
Hazardous Waste Bureau

Attachments I

cc: D. Cobrain, NMED HWB
B. Wear, NMED HWB
L. Andress, NMED HWB
R. Murphy, NMED HWB
L. King EPA Region 6 (GLCRRC)
S. Clark, KAFB
K. Lynnes, KAFB

File: KAFB 2020 Bulk Fuels Facility Spill and Reading

Attachment

KAFB-19-017

July 2020

March 2021

Col. Miller and Lt. Acosta
 Quarterly Monitoring Report for April-June 2019
 Attachment, Page 1 of 4

GENERAL COMMENTS:

1. Monitoring Report Contents

NMED Comment:

Based on issues identified in this Report and other periodic reports, NMED is providing the following reporting requirements which the Permittee must incorporate into future reports. Permittee is required to include the following as applicable:

- a. The response to NMED's comments must be included as Appendix A of each document revision.
- b. All field methods for the project must be documented in an appendix, as required by Permit Section 6.2.4.4.11. The documentation must be specific to each monitoring activity, such as soil vapor monitoring, groundwater monitoring, or operation and maintenance of the groundwater treatment system. References to quality assurance project plans (QAPPs), standard operating procedures (SOPs), or work plans are not acceptable. All deviations from approved work plans must be discussed and explained in a Deviations section.
- c. Wells must be consistently referred to by the same name/designation in all periodic reports, sections of the text, tables, and figures. The designations must match those provided in the digital analytical data files.
- d. Sampling data tables must include the practical quantitation limit (PQL) and listed laboratory report detection limit (RDL) for each analysis.
- e. Sampling data tables must include the appropriate screening levels for data comparison.
- f. Analytical data tables in digital format must include a column that indicates which analytical data report the specific sample information can be found. This link must correspond to the analytical data report file name.
- g. Data quality exceptions, such as when the PQL exceeds the corresponding screening level, must be identified as such in all tables and figures (see Permit Section 6.5.18).
- h. Analytical data provided in digital format such as Microsoft Excel or Access files must be provided in a sortable, searchable format. Previous reports have provided digital data in the same format as the printed tables. These tables are not sortable or searchable. Provide the tables in a standard database format.
- i. Analytical data packages must be submitted in accordance with KAFB Permit Section 6.5.18.2, Laboratory Deliverables.
- j. All tables, figures, and appendices must be appropriately numbered and titled.
- k. Every page of every submittal, including all pages within all sections and appendices, must be numbered either sequentially or in some other format acceptable to NMED.

2. Analytical Data Detection and Quantitation Limits

Col. Miller and Lt. Acosta
 Quarterly Monitoring Report for April-June 2019
 Attachment, Page 2 of 4

NMED Comment: Many of the analytical data tables presented in the Report list the limit of detection (LOD) for each sample analysis; however, it is not clear if this value represents the laboratory method detection limit or reporting detection limit. Some tables list the LOD and some the limit of quantification (LOQ). The permittee must provide the method detection limit (MDL) in the data tables. In addition, the Permittee must include the reporting detection limit (assuming this is the Permittee's "LOD") and the PQL (assuming this is the Permittee's "LOQ") for each sample analyzed in the data tables.

The Permittee's Quality Assurance Project Plans (QAPPs) indicate that the Permittee is using three different variations of terminology for method reporting limits, including one which seems to be backwards. The Permittee's QAPP for Vadose Zone Treatability Studies Attachment 1, Tables 1-1a, Method Reporting Limits – Drinking Water, 1-1b, Method Report Limits – Soil and Investigation Derived Waste, and 1-1c, Method Reporting Limits – Volatile Organic Compounds in Air, all seemingly use LOQ appropriately (as the PQL), but there is a lack of consistency between the method detection limit and reporting detection limit.

In Table 1-1a, Drinking Water, "MDL" appears to equate to the method detection limit, and "LOD" appears to equate to the reporting detection limit. In Table 1-1b, Soil, "LOD" appears to equate to the method detection limit and "DL" appears to equate to the reporting detection limit. In Table 1-1c, Air, "DL" appears to equate to the method detection limit and "LOD" appears to equate to the reporting detection limit. Based on the fact that the PQL must be greater than the reporting detection limit and the reporting detection limit must be greater than the method detection limit, Table 1-1b, Soil, appears to be wrong. NMED is assuming that similar tables appear in the QAPP for quarterly monitoring.

These issues cause confusion for the reviewer, community stakeholders, and the public, and increases the time required to review submittals from the Permittee. The Permittee must use appropriate and consistent terms for Quality Assurance /Quality Control in all periodic reporting submittals and for all media (e.g., use MDL consistently instead of DL). While NMED does not review or approve QAPPs, the Permittee must assure that they are providing their contractors with the appropriate information to provide appropriate, consistent, and accurate information to NMED. Consistency in reporting by the Permittee will reduce both agency and Air Force internal review times.

SPECIFIC COMMENTS:

3. Table of Contents, Appendix B, page iv:

NMED Comment: Appendix B, New Activities Supporting Information, contains well completion reports for four new wells installed and developed in accordance with the NMED-approved 2017 *Work Plan for Vadose Zone Coring, Vapor Monitoring, and Water Supply Sampling*. KAFB Permit Section 6.2.2.1.2, Site Investigations-Investigation Reports,

Col. Miller and Lt. Acosta
 Quarterly Monitoring Report for April-June 2019
 Attachment, Page 3 of 4

and Section 6.2.4.3, Reporting Requirements-Investigation Reports, require that the information and data collected from all investigation activities conducted during the quarter be submitted to NMED as separate, stand-alone reports. The Permittee must submit individual reports for all investigation activities conducted in support of the ongoing investigation of the bulk fuels facility spill, rather than submit the information as appendices in quarterly reports.

4. Section 2.5 Q2 2019 Soil Vapor Data, page 2-4:

Permittee Statement: “The RCRA permit does not specify cleanup levels for soil vapor. The quarterly reports are not intended to assess risk; the vapor data are used to assess concentration trends. The risk assessment (USACE,2017e) compares vapor concentrations to the vapor intrusion screening levels in the NMED Risk Assessment Guidance for Site Investigations and Remediation. All EDB and benzene concentrations are compared against 3,800 and 3,200 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), respectively. HC concentrations are compared against 1,000 parts per million by volume (ppmv). The comparison concentrations used in this report were determined by historical maximum and minimum soil vapor results to show which SVMPs had relatively high or low concentrations.”

NMED Comment: The Permittee must clarify if the comparison values for EDB, benzene, and HC represent the historical maximum or minimum, or some other calculated value so that changes relative to the values can be evaluated. The Permittee must also provide a reference for the historical soil vapor values. The Permittee accurately states that quarterly reports are not intended to assess risk; however, the Permittee must provide a comparison of detected concentrations to a regulatory standard for the purpose of assessing the presence and location of contaminants of concern. NMED’s *Risk Assessment Guidance for Site Investigations and Remediation* (2019 and as updated) vapor intrusion screening levels (VISLs) must be used as a first-tier screening assessment.

5. Section 2.2 Bioventing Pilot Test, page 2-2:

Permittee Statement: “A bioventing report will be submitted on January 31, 2020 as requested by NMED in a letter dated February 25, 2019 (NMED, 2019). This report will include data collected up to Q4 2019. Data collected after Q4 2019 will be provided in the relevant quarterly monitoring reports. The Q4 2020 Quarterly and Annual Monitoring Report will include results to date, and the final results of the bioventing pilot test will be provided in the Q4 2021 Quarterly and Annual Monitoring Report.”

NMED Comment: Bioventing pilot test data is collected each quarter; therefore, the Permittee must provide quarterly data updates in separate quarterly status reports specific to the bioventing pilot study to allow NMED to provide timely adjustment and inputs to the bioventing system. The final results of the bioventing pilot test must be submitted as a stand-alone document rather than as an appendix to the Q4 2021 Quarterly and Annual

Col. Miller and Lt. Acosta
Quarterly Monitoring Report for April-June 2019
Attachment, Page 4 of 4

Monitoring Report.

6. Section 3.3.1 Sampling Deviations, page 3-3:

Permittee Statement: "Groundwater samples were not obtained from seven wells in Q2 2019. Three wells (KAFB-106001, KAFB-106008, and KABF-106079) could not be sampled due to suspected biofouling. These wells will be sampled using passive sampling techniques in the future after well rehabilitation is evaluated."

NMED Comment: The Permittee must provide additional information in a subsequent quarterly report on suspected biofouling of wells KAFB-106001, KAFB-106008, and KABF-106079, such as evidence for biofouling, the source of biofouling, and the date when biofouling was first suspected. Well KABF-106079 is less than 1000ft from interim measure extraction well KAFB-106239. Provide information on the potential for suspected biofouling at KAFB-106079 to impact KAFB-106239 and the Groundwater Treatment System. The Permittee must also submit a work plan for evaluating and conducting rehabilitation of the three wells. Use of passive sampling techniques for wells KAFB-106001 and KABF-106079 is contingent upon NMED approval. Because LNAPL was previously detected in well KAFB-106008, use of passive sampling is not appropriate.

7. Section 3.6.1.1 EDB Analytical Results, page 3-5:

Permittee Statement: *Five EDB exceedances were from wells north of Ridgecrest Drive SE but none were north of Gibson Boulevard SE.*

NMED Comment: Figures 3-5 and 3-6 present EDB concentrations in groundwater for reference elevation 4857 and 4838, respectively. Both figures depict the northern extent of the EDB plume as being north of Gibson Boulevard SE. The Permittee must revise the statement and figures for accuracy if they are included in future periodic reports.

Common Comment and Response Worksheet (Version 3)				
Date	Reviewer	Document Title (version)		Contract/TO Number
7/11/2020	NMED HWB	Quarterly Monitoring Report for April-June 2019 Bulk Fuels Facility Solid Waste Management Units ST-106/SS-111 Kirtland Air Force Base, New Mexico		NMED Permit No. NM9570024423
Item	Section	Page	Comment	Response
1	General Comments	1	1. Monitoring Report Contents NMED Comment: Based on the issues identified in this report and other periodic reports, NMED is providing the following reporting requirements which the Permittee must incorporate into future reports. Permittee is required to include the following as applicable: a. The response to NMED's comments must be included as Appendix A of each document revision.	The response to NMED's comments are included as Appendix A-2 beginning with the Q2 2020 Quarterly Report and going forward.
2	General Comments	1	1. Monitoring Report Contents NMED Comment: Based on the issues identified in this report and other periodic reports, NMED is providing the following reporting requirements which the Permittee must incorporate into future reports. Permittee is required to include the following as applicable: b. All field methods for the project must be documented in an appendix, as required by Permit Section 6.2.4.4.11. The documentation must be specific to each monitoring activity, such as soil vapor monitoring, groundwater monitoring, or operation and maintenance of the groundwater treatment system. References to quality assurance project plans (QAPPs), standard operating procedures (SOPs), or work plans are not acceptable. All deviations from approved work plans must be discussed and explained in a Deviations section.	Field methods for the project are included as Appendix B-1 beginning with the Q3 2020 Quarterly Report and going forward. References to QAPPs and SOPs were not included in the field methods appendix. Deviations are discussed in the main text.
3	General Comments	1	1. Monitoring Report Contents NMED Comment: Based on the issues identified in this report and other periodic reports, NMED is providing the following reporting requirements which the Permittee must incorporate into future reports. Permittee is required to include the following as applicable: c. Wells must be consistently referred to by the same name/designation in all periodic reports, sections of the text, tables, and figures. The designations must match those provided in the digital analytical data files.	Wells are referred to consistently throughout this document. A table listing any historical changes to well designations that can be used for cross reference purposes is provided as Appendix B-2 beginning with the Q3 2020 Quarterly Report and going forward.
4	General Comments	1	1. Monitoring Report Contents NMED Comment: Based on the issues identified in this report and other periodic reports, NMED is providing the following reporting requirements which the Permittee must incorporate into future reports. Permittee is required to include the following as applicable: d. Sampling data tables must include the practical quantitation limit (PQL) and listed laboratory report detection limit (RDL) for each analysis.	Since this project is being performed under a DoD contract, the laboratory is required to use specific DoD Quality Systems Manual (QSM) reporting limit nomenclature when reporting data. However, the DoD nomenclature is comparable to EPA method reporting nomenclature. To clarify, beginning with the Q2 2020 report and going forward, an analytical data Excel flat file is being provided in an appendix with each sample matrix type to include the PQL (LOQ per DoD), RDL (LOD per DoD) and MDL (DL per DoD). See response to comment 8 below.
5	General Comments	1	1. Monitoring Report Contents NMED Comment: Based on the issues identified in this report and other periodic reports, NMED is providing the following reporting requirements which the Permittee must incorporate into future reports. Permittee is required to include the following as applicable: e. Sampling data tables must include the appropriate screening levels for data comparison.	Sampling data tables will include the relevant appropriate screening levels. As discussed in Section 2, soil vapor results were compared to VISLs at the 25-foot depth interval. Soil vapor data tables listing results for deeper SVMPs are not compared to VISLs.
6	General Comments	1	1. Monitoring Report Contents NMED Comment: Based on the issues identified in this report and other periodic reports, NMED is providing the following reporting requirements which the Permittee must incorporate into future reports. Permittee is required to include the following as applicable: f. Analytical data tables in digital format must include a column that indicates which analytical data report the specific sample information can be found. This link must correspond to the analytical data report file name.	Analytical data flat files in Excel are being provided in the appendices (see response to comment 8 below) and include a column which identifies the analytical laboratory data report file name where the specific sample information can be located.
7	General Comments	1	1. Monitoring Report Contents NMED Comment: Based on the issues identified in this report and other periodic reports, NMED is providing the following reporting requirements which the Permittee must incorporate into future reports. Permittee is required to include the following as applicable: g. Data quality exceptions, such as when the PQL exceeds the corresponding screening level, must be identified as such in all tables and figures (see Permit Section 6.5.18).	Exceedances of the PQL are provided in the sortable, searchable Excel tables provided as Appendices in the Q2 2020 report and future reports (see response to comment 8 below). Beginning in the Q3 2020 quarterly report, a discussion and table of PQL exceedances above the corresponding screening level where the analytical result is estimated (J-flagged) are included in the Data Quality Evaluation Report appendices to the Quarterly Report. The exceptions will also be noted on figures.
8	General Comments	1	1. Monitoring Report Contents NMED Comment: Based on the issues identified in this report and other periodic reports, NMED is providing the following reporting requirements which the Permittee must incorporate into future reports. Permittee is required to include the following as applicable: h. Analytical data provided in digital format such as Microsoft Excel or Access files must be provided in a sortable, searchable format. Previous reports have provided digital data in the same format as the printed tables. These tables are not sortable or searchable. Provide the tables in a standard database format.	Beginning in the Q2 2020 quarterly report and going forward, analytical data tables provided as appendices will be provided in a sortable, searchable standard database format (Excel). The tables being provided can be found in: Appendix D-3: Soil Vapor Analytical Data (Q2 and Q4 reports only) Appendix F-4: Groundwater Analytical Data Appendix H-3: Drinking Water Supply Well Analytical Data Appendix I-6: Groundwater Treatment System Performance Analytical Data
9	General Comments	1	1. Monitoring Report Contents NMED Comment: Based on the issues identified in this report and other periodic reports, NMED is providing the following reporting requirements which the Permittee must incorporate into future reports. Permittee is required to include the following as applicable: i. Analytical data packages must be submitted in accordance with KAFB Permit Section 6.5.18.2, Laboratory Deliverables.	Beginning in the Q3 2020 quarterly report and going forward, EPA Level II data packages will be provided with the report, and Levels III and IV will be maintained and available to NMED upon request in accordance with RCRA Permit Section 6.5.18.2 (see response to Item 20 below).

Common Comment and Response Worksheet (Version 3)				
Date	Reviewer	Document Title (version)		Contract/TO Number
7/11/2020	NMED HWB	Quarterly Monitoring Report for April-June 2019 Bulk Fuels Facility Solid Waste Management Units ST-106/SS-111 Kirtland Air Force Base, New Mexico		NMED Permit No. NM9570024423
Item	Section	Page	Comment	Response
10	General Comments	1	1. Monitoring Report Contents NMED Comment: Based on the issues identified in this report and other periodic reports, NMED is providing the following reporting requirements which the Permittee must incorporate into future reports. Permittee is required to include the following as applicable: j. All tables, figures, and appendices must be appropriately numbered and titled.	Tables, figures, and appendices will be appropriately numbered and titled in this document. Headers and footers with appropriate page numbering and titles will be applied to all figures, tables, and appendices.
11	General Comments	1	1. Monitoring Report Contents NMED Comment: Based on the issues identified in this report and other periodic reports, NMED is providing the following reporting requirements which the Permittee must incorporate into future reports. Permittee is required to include the following as applicable: k. Every page of every submittal, including all pages within all sections and appendices, must be numbered either sequentially or in some other format acceptable to NMED.	See response to item 10 above.
12	General Comments	2	2. Analytical Data Detection and Quantitation Limits NMED Comment: (Paragraph 1) Many of the analytical data tables presented in the Report list the limit of detection (LOD) for each sample analysis, however, it is not clear if this value represents the laboratory method detection limit or reporting detection limit. Some tables list the LOD and some the limit of quantification (LOQ). The permittee must provide the method detection limit (MDL) in the data tables. In addition, the Permittee must include the reporting detection limit (assuming this is the Permittee's "LOD") and the PQL (assuming this is the Permittee's "LOQ") for each sample analyzed in the data tables.	As noted in Comment 4 above, the required laboratory reporting is per contract required DoD QSM reporting requirements. For clarification, the DoD DL is equivalent to the EPA MDL; the DoD LOD is equivalent to the EPA RDL; and the DoD LOQ is equivalent to the EPA PQL. To further clarify this, we have included an analytical data Excel flat file in an appendix with each sample matrix type to show the specific PQL, RDL and MDL for each sample analyte.
13	General Comments	2	2. Analytical Data Detection and Quantitation Limits NMED Comment: (Paragraphs 2 and 3) The Permittee's Quality Assurance Project Plans (QAPPs) indicate that the Permittee is using three different variations of terminology for method reporting limits, including one which seems to be backwards. The Permittee's QAPP for Vadose Zone Treatability Studies Attachment 1, Tables 1-1a, Method Reporting Limits – Drinking Water, 1-1b, Method Report Limits – Soil and Investigation Derived Waste, and 1-1c, Method Reporting Limits – Volatile Organic Compounds in Air, all seeming use the LOQ appropriately (as the PQL), but there is a lack of consistency between the method detection limit and reporting detection limit. In Table 1-1a, Drinking Water, "MDL" appears to equate to the method detection limit, and "LOD" appears to equate to the reporting detection limit. In Table 1-1b, Soil, "LOD" appears to equate to the method detection limit and "DL" appears to equate to the reporting detection limit. Based on the fact that the PQL must be greater than the reporting detection limit and the reporting detection limit must be greater than the method detection limit, Table 1-1b, Soil, appears to be wrong. NMED is assuming that similar tables appear in the QAPP for quarterly monitoring.	The Vadose Zone Treatability QAPP includes method reporting limit tables for TestAmerica, Inc. laboratories for drinking water, soil coring and investigation derived waste, and for soil vapor. It appears on the reporting limit table 1-1b, Soil, the values in the LOD and DL columns were inadvertently switched. It is correct that the LOQ/PQL is greater than the LOD/RDL which is greater than the DL/MDL. The reporting limit tables in the QAPP for the Dissolved-Phase Plume and Groundwater Treatment System Design (quarterly groundwater monitoring), Attachment 1 (Eurofins Lancaster Laboratories) are confirmed to be correct.
14	General Comments	2	2. Analytical Data Detection and Quantitation Limits NMED Comment: (Paragraph 4) These issues [items 12 and 13 above] cause confusion for the reviewer, community stakeholders, and the public, and increases the time required to review submittals from the Permittee. The Permittee must use appropriate and consistent terms for Quality Assurance/Quality Control in all periodic reporting submittals and for all media (e.g., use MDL consistently instead of DL). While NMED does not review or approve QAPPs, the Permittee must assure that they are providing their contractors with the appropriate information to provide appropriate, consistent, and accurate information to NMED. Consistency in reporting by the Permittee will reduce both agency and Air Force internal review times.	See responses to items 12 and 13 above.
15	Specific Comments	2/3	3. Table of Contents, Appendix B, page iv: NMED Comment: Appendix B, New Activities Supporting Information, contains well completion reports for four new wells installed and developed in accordance with the NMED-approved 2017 Work Plan for Vadose Zone Coring, Vapor Monitoring, and Water Supply Sampling. KAFB Permit Section 6.2.2.1.2, Site Investigations – Investigation Reports, and Section 6.2.4.3, Reporting Requirements – Investigation Reports, require that the information and data collected from all investigation activities conducted during the quarter be submitted to NMED as separate, stand-alone reports. The Permittee must submit individual reports for all investigation activities conducted in support of the ongoing investigation of the Bulk Fuels Facility spill, rather than submit the information as appendices in quarterly reports.	The information and data collected from investigation activities, such as well completion reports, will be provided as stand-alone reports or as otherwise required by NMED and will not be provided as appendices to quarterly reports.

Common Comment and Response Worksheet (Version 3)				
Date	Reviewer	Document Title (version)		Contract/TO Number
7/11/2020	NMED HWB	Quarterly Monitoring Report for April-June 2019 Bulk Fuels Facility Solid Waste Management Units ST-106/SS-111 Kirtland Air Force Base, New Mexico		NMED Permit No. NM9570024423
Item	Section	Page	Comment	Response
16	Specific Comments	3	<p>4. Section 2.5 Q2 2019 Soil Vapor Data, page 2-4: Permittee Statement: "The RCRA permit does not specify cleanup levels for soil vapor. The quarterly reports are not intended to assess risk; the vapor data are used to assess concentration trends. The risk assessment (USACE, 2017e) compares vapor concentrations to the vapor intrusion screening levels in the NMED Risk Assessment Guidance for Site Investigations and Remediation. All EDB and benzene concentrations are compared against 3,800 and 3,200 micrograms per cubic meter (µg/m³), respectively. HC concentrations are compared against 1,000 parts per million by volume (ppmv). The comparison concentrations used in this report were determined by historical maximum and minimum soil vapor results to show which WVMPs had relatively high or low concentrations."</p> <p>NMED Comment: The Permittee must clarify if the comparison values for EDB, benzene, and HC represent the historical maximum or minimum, or some other calculated value so that changes relative to the values can be evaluated. The Permittee must also provide a reference for the historical soil vapor values. The Permittee accurately states that quarterly reports are not intended to assess risk; however, the Permittee must provide a comparison of detected concentrations to a regulatory standard for the purpose of assessing the presence and location of contaminants of concern. NMED's Risk Assessment Guidance for Site Investigations and Remediation (2019 and as updated) vapor intrusion screening levels (VISLs) must be used a first-tier screening assessment.</p>	<p>In the Q2 2020 report, language was revised to clarify that the comparison values were set based on a qualitative analysis of soil vapor data in Q2 2016 to help the reader distinguish areas of relatively high or low soil vapor concentrations (Section 2.3). They were not intended to be screening levels, rather their purpose is as a helpful tool for the reader to evaluate trends. Comparison levels were removed from the report beginning in Q4 2020.</p> <p>Beginning in Q4 2020, NMED's Risk Assessment Guidance for Site Investigations and Remediation (2019 and as updated) vapor intrusion screening levels (VISLs) were used as a first-tier screening assessment. NMED VISLs were calculated utilizing EPA default attenuation factors which are based on conservative assumptions and empirical data. VISLs are intended to be screened against soil vapor samples collected from below building foundations (sub slab samples). However, the shallowest soil vapor monitoring points (SVMPs) at SWMUs ST-106/SS-111 are screened from 15 to 25 feet (ft) below ground surface (bgs). Therefore, using NMED VISLs as a first-tier screening level for soil vapor concentrations at the 25 ft horizon provides a conservative estimate. NMED VISLs are not appropriate screening levels for deeper SVMPs. Kirtland AFB is currently in coordination with USACE-Albuquerque District to determine the most appropriate screening criteria for evaluating soil vapor at depth at the Kirtland Bulk Fuels Facility. Pending resolution, data will be screened in the manner indicated above in future reports. Table 3-6 includes the results of screening the 25-foot horizon against residential soil gas VISLs. This screening is for comparison purposes only, and should not be considered an evaluation of exposure or risk.</p>
17	Specific Comments	3	<p>5. Section 2.2. Bioventing Pilot Test, page 2-2 Permittee Statement: "A bioventing report will be submitted on January 31, 2020 as requested by NMED in a letter dated February 25, 2019 (NMED, 2019). This report will include data collected up to Q4 2019. Data collected after Q4 2019 will be provided in the relevant quarterly monitoring reports. The Q4 2020 Quarterly and Annual Monitoring Report will include results to date, and the final results of the bioventing pilot test will be provided in the Q4 2021 Quarterly and Annual Monitoring Report."</p> <p>NMED Comment: Bioventing pilot test data is collected each quarter; therefore, the Permittee must provide quarterly data updates in separate quarterly status reports specific to the bioventing pilot study to allow NMED to provide timely adjustment and inputs to the bioventing system. The final results of the bioventing pilot test must be submitted as a stand-alone document rather than as an appendix to the Q4 2021 Quarterly and Annual Monitoring Report.</p>	<p>Future bioventing reports will be removed from quarterly reports. The final results of the bioventing pilot test will be submitted as a stand-alone document.</p>

Common Comment and Response Worksheet (Version 3)				
Date	Reviewer	Document Title (version)		Contract/TO Number
7/11/2020	NMED HWB	Quarterly Monitoring Report for April-June 2019 Bulk Fuels Facility Solid Waste Management Units ST-106/SS-111 Kirtland Air Force Base, New Mexico		NMED Permit No. NM9570024423
Item	Section	Page	Comment	Response
18	Specific Comments	3	<p>6. Section 3.3.1 Sampling Deviations, page 3-3</p> <p>Permittee Statement: "Groundwater samples were not obtained from seven wells in Q2 2019. Three wells (KAFB-106001, KAFB-106008, and KAFB-106079) could not be sampled due to suspected biofouling. These wells will be sampled using passive sampling techniques in the future after well rehabilitation is evaluated."</p> <p>NMED Comment: The Permittee must provide additional information in a subsequent quarterly report on suspected biofouling of wells KAFB-106001, KAFB-106008, and KAFB-106079, such as evidence for biofouling, the source of biofouling, and the date when biofouling was first suspected. Well KAFB-106079 is less than 1000 ft from interim measure extraction well KAFB-106239. Provide information on the potential for suspected biofouling at KAFB-106079 to impact KAFB-106239 and the Groundwater Treatment System. The Permittee must also submit a work plan for evaluating and conducting rehabilitation of the three wells. Use of passive sampling techniques for wells KAFB-106001 and KAFB-106079 is contingent upon NMED approval. Because LNAPL was previously detected in well KAFB-106008, use of passive sampling is not appropriate.</p>	<p>The following additional information on suspected biofouling of wells KAFB-106001, KAFB-106008, and KAFB-106079, along with a discussion of the potential for biofouling at KAFB-106239, is provided only in this response to comments table, as this was not part of Q3 2020 groundwater monitoring activities discussed in the main text of this quarterly report. A similar discussion will be included in future quarterly reports for wells suspected of biofouling during the relevant quarter.</p> <p>During the Q2 2019 groundwater sampling event, the sampling team was unable to purge wells KAFB-106001, KAFB-106008, and KAFB-106079. Sampling was attempted at these three wells on May 1, April 23, and April 26, 2019, respectively. The pumps were removed, and biologic films were observed on the pump screens. The biologic films were thick enough to prevent water from entering the screens. The screens were cleaned, and another attempt to pump was made, however, the biologic material occluded the screens again preventing water from entering the pump. These wells were disinfected in Q3 2019 in accordance with the approved procedures (see paragraph below), and disinfection was reported in the Q3 2019 Quarterly Report. These three wells are located in areas with historically high BTEX concentrations and anaerobic conditions. As discussed in Section 7 of the Phase I RCRA Facility Investigation Report (Kirtland AFB, 2018, <i>Phase I RCRA Facility Investigation Report, Bulk Fuels Facility Releases, Solid Waste Management Unit ST-106/SS-111</i>. Prepared by Sundance Consulting, Inc. for Kirtland AFB under USACE-Albuquerque District Contract No. W912PP-16-C-0002. August.), concentrations of microbial indicator compounds suggest that microbial degradation is occurring in this area. KAFB-106239 experiences a periodic decrease in pumping rates, which is an indicator of biofouling. When this occurs, it is disinfected in accordance with approved procedures (see paragraph below), and disinfection is discussed in the relevant quarterly report.</p> <p>Standard well disinfection procedures were provided in the O&M Plan (Kirtland AFB. 2016. Operations and Maintenance Plan, Groundwater Treatment System, Bulk Fuels Facility, SWMUs ST-106/SS-111, Kirtland Air Force Base, New Mexico.), which was approved by NMED in a letter dated December 12, 2016 (Correspondence from Kathryn Roberts, Director, Resource Protection Division to Colonel Eric H. Froehlich, Base Commander, Kirtland AFB, New Mexico, and MR. John Pike, Director, Environmental Management Division, 377 MSG, Kirtland AFB, New Mexico, re: Operation and Maintenance Plan, Groundwater Treatment System, Bulk Fuels Facility Solid Waste Management Units ST-106/SS-111, Kirtland Air Force Base, EPA ID No. NM9570024423, HWB-KAFB-13-MISC.) Disinfection of these wells took place in September, 2019 and was reported on in the Q3 2019 quarterly report.</p> <p>Wells KAFB-106001, KAFB-106079, and KAFB-106008 will be sampled using portable pumps in future monitoring quarters until such time as passive sampling is approved by NMED.</p>
19	Specific Comments	4	<p>7. Section 3.6.1.1 EDB Analytical Results, page 3-5</p> <p>Permittee Statement: "Five EDB exceedances were from wells north of Ridgecrest Drive SE but none were north of Gibson Boulevard SE."</p> <p>NMED Comment: Figures 3-5 and 3-6 present EDB concentrations in groundwater for reference elevation 4857 and 4838, respectively. Both figures depict the northern extent of the EDB plume as being north of Gibson Boulevard SE. The Permittee must revise the statement and figures for accuracy if they are included in future periodic reports.</p>	<p>The Permittee statement from the Q2 2019 report was verified as accurate. While some wells north of Gibson Boulevard SE had EDB detections, there were no EDB exceedances above the EPA MCL of 0.05 µg/L in wells sampled north of Gibson in Q2 2019. Because some of the wells with exceedances were immediately south of Gibson, interpolation of the plume boundary shows the northern boundary extending approximately 100 ft to the north of Gibson. However, no wells located north of Gibson are included within the plume boundary.</p>

Date	Reviewer	Document Title (version)		Contract/TO Number
9/2/2020	NMED HWB	Reporting Requirements for All Document Submittals Kirtland Air Force Base, New Mexico EPA ID # NM6213820974 HWB-KAFB-20-MISC		NMED Permit No. NM9570024423
The following items address comments provided in the September 2, 2020 letter that were not addressed in the by the July 11, 2020 letter.				
Item	Section	Page	Comment	Response
20	Letter	2	1. Laboratory Deliverables: Section 6.5.18.2, Laboratory Deliverables, of the KAFB Resource Conservation and Recovery Act (RCRA) Permit (KAFB Permit), states the requirements for analytical laboratory reporting. The section states, “[l]aboratory analytical data packages shall be prepared in accordance with EPA-established Level III or IV analytical support protocols.” The final paragraph of the permit section goes on to state, “[t]he Permittee shall present summary tables of these data and Level II QC results to the Department in reports or other documents prepared in accordance with Permit Section 6.2.4. Raw analytical data, including calibration curves, instrument calibration data, data calculation work sheets, and other laboratory supporting data for samples from this project, shall be compiled and kept on file at the Facility for reference. The Permittee shall make all data available to the Department upon request.” Therefore, for purposes of reporting, Level II Qc results are necessary. Level III and IV data must be maintained by the Permittee to be made available upon request.	This comment clarifies Item 9 above. Beginning with the Q3 2020 Quarterly Report and going forward, Level II rather than Level IV data packages will be provided with the report, and Level III and Level IV will be available upon request.
21	Letter	2	2. General Guidelines: NMED has included an attachment titled <i>General Reporting Guidelines</i> that provides guidance regarding its expectations of submittals to the Hazardous Waste Bureau. The Permittee must consult the guidance during document preparation.	Section 4 of the <i>General Reporting Guidelines</i> , Periodic Monitoring Report, was consulted during the preparation of the Q3 2020 Quarterly Report, and revisions were made as discussed in Items 22 and 23 below.
22	General Reporting Guidelines	17	Section 4.11 Tables The following tables must be included, as applicable: b. a table summarizing groundwater and vadose zone fluid elevations, and depths to water data; the table must include the monitoring well depths, casing elevations, the screened intervals in each well, and the dates and times of measurements.	Beginning in Q3 2020, Table 3-2, Groundwater Elevation and Light Non-Aqueous Phase Liquid Thickness, will be revised to include well depth, bottom of screen, and measurement times. The other required information, including top of screen, is already present in the table.
23	General Reporting Guidelines	17	Section 4.11 Tables The following tables must be included, as applicable: e. a table summarizing field measurements of groundwater and vadose zone fluid quality data (including historical water quality data as described above).	A table summarizing field measurements, including historical water quality data, was added to Appendix E-3. In Q2 and Q4, a table summarizing field measurements from the current sampling event will continue to be provided (Table 3-5 in the Q2 2020 report).

The Permit Requirement	Report Location
RCRA Permit No. NM9570024423– Section 6.2.4.4, Periodic Monitoring Reports	
1. Title Page and Signature Block (for the name, title and organization of the preparer and the responsible Facility representative)	Following the cover page
2. Executive Summary (Abstract)	Abstract provided on Report Documentation Page. Executive Summary provided as pages ES-1 and ES-2.
3. Table of Contents	Pages i through vi
4. Introduction	Section 1
5. Scope of Activities	Section 1.1
6. Regulatory Criteria	Section 2
7. Monitoring Results	Provided for each task: SVM: Section 3.3, Tables 3-2 through 3-5 GWM: Gauging - Section 4.2.1, Table 4-2; Sampling - Section 4.5, Tables 4-5 through 4-7 Drinking Water Supply Well Monitoring: Section 5.3, Tables 5-1 and 5-2 Interim Measure Performance: Section 6.2, Tables 5-2 through 6-11
8. Conclusions and Recommendations	Section 8
9. Tables - include explanation for all abbreviations, symbols, acronyms, and qualifiers	Tables section follows the Figures section, with explanations provided for each table. Each table includes notes which provide an explanation of the abbreviations, symbols, acronyms and qualifiers used.
10. Figures (1) - map figures include accurate bar scale and north arrow	Figures section follows the report text. Map figures include accurate bar scales and north arrows.
10. Figures (2) - non-map figures include a bar scale if appropriate	Non-map figures include a bar scale where appropriate.
10. Figures (3) - all figures include an explanation for abbreviations, symbols, acronyms and qualifiers	Figures include an explanation and notes for abbreviations, symbols, acronyms, and qualifiers.
11. Appendices (1) - field methods	Appendix B-1
11. Appendices (2) - boring/test pit logs and well construction diagrams	Not applicable to Q4 2020.
11. Appendices (3) - chemical analytical reports	SVM: Appendix D-2 GWM: Appendix F-2 Drinking Water Supply Wells: Appendix H-2 Interim Measure Performance Evaluation: Appendix I-5
11. Appendices (4) - Other appendices as required by NMED	Appendices are provided digitally on a CD accompanying the report.
Discharge Permit DP-1839	
Terms and Conditions #17 – 24	Table 6-1 gives the relevant text references where each of these conditions is addressed.
RCRA Permit No. NM9570024423– Section 6.2.4.1, Quarterly Reporting	
1. A description of the work completed and an estimate of the percentage of total planned work completed.	Section 1.1.
2. Summaries of all findings, including summaries of laboratory data.	Provided for each task: SVM: Section 3.3, Tables 3-2 through 3-5 GWM: Gauging - Section 4.2.1, Table 4-2; Sampling - Section 4.5, Tables 4-5 through 4-7 Drinking Water Supply Well Monitoring: Section 5.3, Tables 5-1 and 5-2 GWTS Operation and Performance: Section 6.2, Tables 5-2 through 6-11
3. Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify problems.	Provided for each task: Soil vapor sampling deviations: Section 3.1.1 Gauging deviations: Section 4.2.2 Groundwater sampling deviations: Section 4.3.1.
4. Planned work for the next reporting period.	Section 8.3.1

The Permit Requirement	Report Location
5. Summaries of contacts pertaining to corrective action with representatives of the local community, public interest groups, or State government during the reporting period.	Regulatory correspondence is provided in Appendix A-1, and response to regulator comments is provided in Appendix A-2.
6. Changes in key project personnel during the reporting period.	Not applicable in Q4 2020.
7. Summaries of any variances from approved investigation or remediation work plans.	Provided for each task: Soil vapor sampling deviations: Section 3.1.1 Gauging deviations: Section 4.2.2 Groundwater sampling deviations: Section 4.3.1.
8. Brief summaries of any periodic monitoring reports prepared in accordance with the requirements in Permit Section 6.2.4.4.	Executive Summary Section 1 Section 8.

APPENDIX B-1
FIELD METHODS

LIST OF ACRONYMS AND ABBREVIATIONS

%	Percent
AFB	Air Force Base
CFR	Code of Federal Regulations
DMS	dual membrane sampler
DO	dissolved oxygen
ft	foot/feet
GWM	groundwater monitoring
GWTS	groundwater treatment system
IDW	investigation-derived waste
LNAPL	light non-aqueous phase liquid
NMED No.	New Mexico Environment Department Number
ORP	oxidation reduction potential
PID	photoionization detector
psi	pound(s) per square inch
Q4	fourth quarter
RCRA	Resource Conservation and Recovery Act

B-1.1 FIELD EQUIPMENT USED IN MULTIPLE SETTINGS

During the fourth quarter (Q4) 2020, field equipment was calibrated and maintained in accordance with the Part 6.5.4 of Resource Conservation and Recovery Act (RCRA) Hazardous Waste Treatment Facility Operating Permit Number (No.) NM9570024423 (RCRA Permit) (New Mexico Environment Department [NMED], 2010), and decontaminated where applicable in accordance with Part 6.5.3.

B-1.1.1 HEADSPACE

Headspace air quality measurements were collected each time a groundwater monitoring (GWM) well was opened to ensure a safe working environment. Headspace was monitored using a photoionization detector (PID) reading total volatile organic compounds in parts per million volume. During use, each PID was calibrated in accordance with the manufacturer's instructions weekly and bump tested daily. The PID was calibrated when the results of the bump test fell outside of the accepted range.

B-1.1.2 WATER QUALITY

Water quality measurements were collected as part of multiple sampling events, including GWM, drinking water production well monitoring, and sampling at the groundwater treatment system (GWTS). A multiparameter meter equipped with both a flow-through cell and a sample cup for use in various settings was used to measure temperature, dissolved oxygen (DO), specific conductance, pH, and oxidation reduction potential (ORP). While it was in use, each multiparameter meter was calibrated in accordance with the manufacturer's instructions weekly and bump tested daily. When the results of the bump test fell outside of the accepted range, the instrument was calibrated. A separate turbidimeter was used to measure turbidity. While it was in use, the turbidimeter was calibrated at the beginning of the quarter and bump tested weekly. When the results of the bump test fell outside of the accepted range, the instrument was calibrated.

B-1.1.3 LIQUID LEVELS

Liquid levels were measured using an oil-water interface probe of appropriate length based on historical water levels. Individual interface probes were dedicated to a group of wells with similar historical analytical results to reduce the risk of cross-contamination. In addition, interface probes were cleaned between wells to further minimize the risk of cross-contamination.

B-1.2 METHODS USED IN MULTIPLE SETTINGS

B-1.2.1 OPENING GROUNDWATER MONITORING WELLS

GWM wells were opened during synoptic gauging, groundwater sampling, and in conjunction with other periodic activities as needed (i.e., well rehabilitation). Field teams donned personal protective equipment appropriate to the task prior to opening well vaults, removed the bolts, and carefully set the vault lid to the side. In wells that did not contain dedicated equipment, the well cap was unscrewed and set to the side. In wells that did contain dedicated equipment, the stopper was removed from the drop pipe and set to the side. The PID was used to determine the total volatile organic compounds at the top of the well to ensure a safe working environment. When the headspace reading was greater than 5.0 parts per million by volume in the breathing zone, fieldwork at that location was conducted using an air purifying respirator.

B-1.2.2 LIQUID LEVELS

Liquid levels were measured in accordance with the requirements in Part 6.5.17.2 of the RCRA Permit (NMED, 2010). Liquid levels were measured during the synoptic gauging event, in conjunction with groundwater sampling as needed, and in conjunction with other periodic activities as needed (i.e., well rehabilitation). Interface probes were decontaminated prior to use. The interface probe was deployed in the well, and depth to light non-aqueous phase liquid (LNAPL) (if applicable) and water was measured to the individual well's measuring reference point, the top of the well vault, using a straight edge placed across the vault.

B-1.2.3 SHIPPING ON ICE

Samples were shipped in accordance with the requirements in Part 6.5.5.2 of the RCRA Permit (NMED, 2010). Samples were shipped in coolers with ice for groundwater sampling, drinking water sampling, and GWTS sampling. If the cooler had a spout, it was duct taped shut. The cooler was then lined with two plastic bags. Samples were surrounded by ice in the interior bag, and temperature blanks and trip blanks were included as required. The bags were then sealed shut, chain-of-custody forms attached to the lid within a sealed plastic bag, and the cooler was sealed using packing tape with custody seals attached on opposing corners. Samples were shipped overnight to ensure arrival at the lab at the required temperature.

B-1.2.4 FIELD PARAMETER MEASUREMENTS

Field parameters were collected in accordance with the requirements in Part 6.2.2.1 of the RCRA Permit (NMED, 2010).

B-1.2.4.1 Field Parameter Measurements Using a Flow-Through Cell

Field parameters were measured using a flow-through cell for GWM low-flow sampling and monthly GWTS sampling. The multiparameter meter probe was placed into the flow-through cell, and purge water entered the cell through the bottom and exited through the top into the required sample container to be held in the appropriate investigation-derived waste (IDW) yard pending disposal at the GWTS or analysis, depending on the historical analytical results from the sample location. The multiparameter meter displayed instantaneous measurements that updated as the chemistry of the water flowing through the cell changed. Data were recorded on a field form at the frequency required for the activity.

B-1.2.4.2 Field Parameter Measurements Using a Sample Cup

Field parameters were measured using a sample cup for drinking water sampling and in conjunction with other periodic activities as needed (i.e., well development). The sample cup was filled from the sampling port, and the multiparameter meter probe was inserted into the sample cup. Once the readings stabilized, they were recorded on a field form.

B-1.3 SOIL VAPOR SAMPLING

Soil vapor sampling was conducted in Q4 2020 in accordance with the requirements in Part 6.5.16 of the RCRA Permit (NMED, 2010).

B-1.3.1 EQUIPMENT

Soil vapor samples were collected in Summa canisters; each canister had a unique regulator. A sample train consisting of 0.5-inch fluorinated ethylene propylene tubing and a four-way stainless steel Swagelok cross equipped with quick connects was used in coordination with a Horiba Mexa-584L emissions

analyzer and a Gast rotary vane pump to purge the well, measure field parameters, and collect the soil vapor sample. While in use, the Horiba Mexa-584L was calibrated in accordance with the manufacturer's instructions daily before sampling and bump tested halfway through the day. If the results of the bump test fell outside of the accepted range, the instrument was calibrated. In addition, the instrument was recalibrated if readings began to drift, based on the professional judgement of the sampling team. A digital manometer was used to gauge pressure in the well and a PID was used to ensure a safe working environment. The digital manometer did not require field calibration. The Swagelok fittings and tubing assembly underwent a pressure test at the beginning, middle, and end of each day by sealing the assembly, using the pump to apply a vacuum, and using the digital manometer to measure the vacuum pressure over a 10-minute period to confirm that there was no leakage in the assembly.

B-1.3.2 METHODS

Upon removing the well cap, the well head was connected to the sample train via a quick connect port. The manometer was added to the system to gauge the initial well pressure and then removed. The well was then purged of a pre-calculated vapor volume based upon the well dimensions; the rotary vane pump controlled the purge flow rate. The initial pressure of the Summa canister was recorded.

Once the purge was complete, the field parameters of carbon dioxide, oxygen, and total hydrocarbons were measured by the Horiba and the manometer was used to read the post-purge pressure. Field parameters were recorded on field data sheets and a photo was then taken for documentation. A sample was collected by connecting the Summa canister into the system and filling it to a vacuum pressure within from 0 to -5.0 inches of mercury of vacuum. The final pressure of the Summa canister was recorded on a field form, and the sample was shipped to a laboratory for analysis.

B-1.4 SYNOPTIC GAUGING

Synoptic gauging was conducted in accordance with the requirements in Part 6.5.17.2 of the RCRA Permit (NMED, 2010).

B-1.4.1 METHODS

Depths to groundwater and LNAPL were measured in Q4 2020 during a 3-day synoptic gauging event. Interface probes were decontaminated between wells. Field forms were used to record the depth to water and LNAPL (where applicable), date, time, and interface probe used. Prior to synoptic gauging, the interface probes designated for use were decontaminated and used to measure depths to water in three GWM wells located south of the source area (KAFB-106027, KAFB-106044, and KAFB-106045) to quantify any measurement difference from a control probe. Over a 3-day period, barometric pressure changes at the site can cause water levels in a given well to vary by up to 0.15 feet (ft), even after diurnal variations are taken into account. This was determined by observing the change in water levels due to barometric pressure at three wells during a 7-day background monitoring period prior to aquifer testing at KAFB-106228 (Kirtland Air Force Base [AFB], 2016). Therefore, a measurement difference between probes of up to 0.03 ft, or less than 20 percent (%) of 0.15 ft, is negligible as compared to these naturally occurring changes. If a probe consistently measured greater than 0.03 ft different from the control probe, water levels taken using that probe were corrected by the value of the difference. Water levels were compared to the previous quarter and professional judgement was used to determine wells that required re-gauging.

B-1.5 GROUNDWATER SAMPLING

Groundwater was sampled in accordance with the requirements in Part 6.5.17.2 of the RCRA Permit (NMED, 2010), and subsequent NMED approval to use passive sampling methods in select wells (NMED, 2017a).

B-1.5.1 PASSIVE SAMPLING

B-1.5.1.1 Equipment Used

Passive sampling was conducted using dual membrane samplers (DMS) attached to a tether dedicated to the individual well. Each tether was equipped with a series of rings beginning at the top of screen depth and continuing every 2.6 ft, with the lowest ring positioned 2.6 ft above the bottom of the screen. Interface probes and PIDs were also used during passive sampling.

B-1.5.1.2 Methods

Deployment

Each DMS was deployed a minimum of 3 weeks prior the planned sampling date. If the screened interval of the well was partially submerged or submerged by less than 5 ft, the depth to water was measured using an interface probe. The number of DMSs deployed in each well was based on the water volume needed for the required samples. Each sampler was filled with deionized water and attached to a ring on the sampler. In wells where the screened interval was fully submerged, the uppermost DMS was attached to the ring positioned at the top of screen depth. In wells where the screened interval was partially submerged or submerged by less than 5 ft, the uppermost DMS was attached to the highest ring, which was submerged. Additional required DMSs were individually attached to subsequent lower rings. The tether was secured to the well cap, and the well and well vault were sealed until sampling.

Sampling

As the tether was reeled up, each DMS was removed from the well and the contents were decanted into the required laboratory supplied sample bottles. Sample bottles were immediately placed on ice pending shipping. After sample bottles were filled, any remaining water was transferred into the required storage container and held in the appropriate IDW yard pending disposal or analysis, based on the historical analytical results from the GWM well. The dedicated tether was placed in a labeled, protective bag for storage until the next sampling event.

B-1.5.2 LOW FLOW SAMPLING

B-1.5.2.1 Instruments Used

Low flow sampling was conducted using either a portable or dedicated Bennett pump. Interface probes, PIDs, multi-parameter meters with a flow-through cell attached, and turbidimeters were also used during low-flow sampling. Wells without a dedicated pump were designated, based on historical analytical data, as either clean, intermediate, or expected hazardous. Decontaminated, non-dedicated tubing and portable low flow pumps were used to sample wells designated as clean, with the sampling assembly decontaminated following use at each well. Dedicated tubing specific to a given well was used for wells designated as intermediate or expected hazardous.

B-1.5.2.2 Methods

Where a portable pump was required, the pump was lowered into the GWM well to a depth of approximately 2 ft below the top of screen for wells where the screened interval was fully submerged. Where the screened interval was partially submerged, the pump intake was placed approximately 2 ft above the bottom of the screen.

Where a dedicated pump was present, an air compressor and tubing for the purge water were connected to the dedicated equipment. The pump intake was approximately in the middle of the screened interval in wells with dedicated pumps. There were no dedicated pumps in wells with partially submerged screened intervals.

Purging was conducted in accordance with Part 6.5.17.4 of the RCRA Permit (NMED, 2010), with an approved variance to the purge completion requirements (NMED, 2017a). Purging was conducted at a rate of approximately 0.5 liters per minute, with a maximum flow rate of 1 liter per minute and a minimum flow rate of 0.1 liters per minute. Purge water moved through the flow-through cell on the multiparameter meter and then into an appropriate storage container to be held in the appropriate IDW yard pending disposal or analysis. During purging, field parameters including DO, pH, ORP, turbidity, conductivity, specific conductance, and temperature were measured using the multiparameter meter and turbidimeter and recorded on field forms at a minimum of 5-minute intervals. Purging was complete when the field parameters stabilized for three consecutive measurements to within 10% for specific conductivity, DO, and temperature; below 5 nephelometric turbidity units or within 10% for turbidity; and within 0.5 standard units for pH. When stabilization did not occur within an hour of purging, the well was sampled and this was noted on field documentation.

After purging was completed, samples were collected and handled in accordance with Part 6.5.5 of the RCRA Permit (NMED, 2010). The required sampling containers were filled and placed on ice pending shipping.

B-1.6 PRODUCTION WELL DRINKING WATER SAMPLING

Production well drinking water sampling is not discussed in the RCRA Permit (NMED, 2010).

B-1.6.1 INSTRUMENTS USED

Drinking water sampling was conducted using a multiparameter meter with a sample cup and a turbidimeter.

B-1.6.2 METHODS

Prior to sampling at a production well, the pump ran for a minimum of 15 minutes and the sample tap was flushed for a minimum of 1 minute to purge any entrained sediment. Field parameters, including temperature, specific conductance, pH, ORP, DO, and turbidity, were measured using a multiparameter meter with a sample cup and a turbidimeter. Values were recorded on a field form as a snapshot of water quality at the time of sampling. The required sampling containers were filled and sealed, checked for headspace bubbles, and placed on ice pending shipping. Purge water was collected in a 5-gallon bucket, labeled, and held pending disposal.

B-1.7 GROUNDWATER TREATMENT SYSTEM

The GWTS was sampled in accordance with the requirements in the Class V Underground Injection Well Discharge Permit No. 1839 (NMED, 2017b).

B-1.7.1 SAMPLING

B-1.7.1.1 Instruments Used

GWTS sampling was conducted using a multiparameter meter with a flow-through cell and a turbidimeter.

B-1.7.1.2 Methods

GWTS samples were collected from ports located before the influent skid pumps, between the granular activated carbon vessels, and after the effluent skid pumps. Prior to sampling, the port was flushed for a minimum of 1 minute. Field parameters, including temperature, specific conductance, pH, ORP, DO, and turbidity, were measured using a multiparameter meter with a flow-through cell and a turbidimeter. Values were recorded on a field form as a snapshot of water quality at the time of sampling. The required sampling containers were filled and placed on ice pending shipping.

B-1.7.2 EXTRACTION WELL DISINFECTION

B-1.7.2.1 Methods

Extraction well KAFB-106239 was disinfected in Q4 2020. A pre-disinfection sample was taken before disinfection occurs. Sodium hypochlorite solution was added to 500 gallons of water to provide a concentration of at least 50 parts per million free chlorine when added to an extraction well. The extraction well was shut down, and the diluted sodium hypochlorite solution was gravity-fed down well. The extraction well was kept offline for approximately 24 hours. The well was then turned back online, and its water was pumped down through the conveyance line to the GWTS. This water was discharged to an external sump, bypassing the carbon canisters, where any remaining free chlorine in the well water was allowed to evaporate. A post-disinfection sample was taken after pumping the well free of remaining free chlorine. Pre- and post-disinfection samples were collected from a sample port in the well vault. Prior to sampling, the pump ran for a minimum of 30 minutes and the sample ports were open for a minimum of 10 seconds to flush any entrained sediment. Samples were analyzed for chlorite, bromate, and perchlorate.

B-1.7.3 EFFLUENT LINE PRESSURE TEST

B-1.7.3.1 Instruments Used

The preinstalled in-line pressure gauge at the GWTS effluent tree was used for the effluent line pressure test.

B-1.7.3.2 Methods

The GWTS was shut down and water was directed toward injection well KAFB-7. The isolation valve at KAFB-7 was closed, and valves before and after the effluent skid pumps in the GWTS were closed. The effluent line was pressurized with the 100 pounds per square inch (psi) Kirtland AFB supply water line located on the south wall of the GWTS to 150% of GWTS operating pressure (50 psi). Due to expansion

in the line, 30 minutes was allowed before increasing the pressure back up to 50 psi. After 1 hour, a final pressure reading was taken; and, if the final pressure was within 30% of 50 psi, the pressure test passed.

B-1.8 PURGE AND DECONTAMINATION WATER MANAGEMENT AND DISPOSAL

Purge and decontamination water was managed and disposed of in accordance with the requirements in Part 6.5.7 of the RCRA Permit (NMED, 2010). Prior to GWM sampling for the quarter, historical data from each monitoring well were evaluated to determine how purge or well maintenance water was initially managed. Purge water was managed in one of three categories: (1) non-hazardous water that met GWTS discharge criteria, (2) non-hazardous water that required evaluation/approval prior to discharge to the GWTS, and (3) hazardous or suspected hazardous water that was managed as hazardous waste. In addition, ancillary fluids (i.e., decontamination water and calibration fluids) were also managed and, if appropriate, discharged at the GWTS after review/approval of analytical data.

B-1.8.1 NON-HAZARDOUS PURGE WATER MANAGEMENT

Non-hazardous IDW purge water collected during sampling of the GWM wells was placed in 55-gallon plastic (poly) drums. The drums were sealed with matching plastic lids with steel, locking-ring collars, labeled with vinyl non-hazardous waste labels, and transferred to the designated non-hazardous IDW yard located on Kirtland AFB. Small volumes of IDW water, typically generated from the sampling of passive sampling devices or sampling of drinking water wells, were placed in labeled, 5-gallon plastic buckets (pails) with sealing lids.

Eligibility for discharge of non-hazardous liquid IDW to the GWTS was determined by comparing historical, well-specific data from the previous two quarters to the acceptance criteria of the GWTS. Liquid IDW from monitoring wells that had historically met the GWTS acceptance criteria was placed on an Auto-Approval List that authorizes discharge to the facility without further review. Any liquid IDW on the Auto-Approval List that was collected, but not yet processed through the GWTS, was temporarily held in the “Pending Disposal” area of the IDW yard.

Liquid IDW sourced from wells with historical data from the previous two quarters that exceeded the GWTS acceptance criteria was held for further evaluation in the “Pending Analysis” area of the IDW yard. Upon receipt of the laboratory analytical data for each well, the data were evaluated against GWTS acceptance criteria. If the data were within GWTS acceptance criteria, the purge water was approved for GWTS discharge. If the data indicated one or more constituents are outside GWTS parameters, the purge water was processed for offsite disposal at a permitted facility.

B-1.8.2 HAZARDOUS PURGE WATER MANAGEMENT

All liquid hazardous waste (purge or well development water) was placed in 55-gallon steel drums with steel tops and locking rings (UN designation 1A2/Y1.2/100/**). When small volumes (less than 5 gallons) of waste were generated at a well, a plastic container with threaded top (jerrican) was used to contain the liquid. The jerrican was then placed in a steel, 55-gallon drum for more secure storage. All waste containers were properly labeled, sealed, and placed on secondary containment pallets located within the appropriate less than 90-day accumulation area. The accumulation areas and waste containers were inspected on a weekly basis by trained personnel as required under 40 Code of Federal Regulations (CFR) 262.34.

Hazardous or suspected hazardous IDW was accumulated in one of two RCRA less than 90-day accumulation areas associated with the Kirtland AFB Bulk Fuels Facility Project. Hazardous waste

generated from routine GWM sampling or well maintenance activities (purge, well development or well rehabilitation water) was placed in the Kirtland AFB Bulk Fuels Facility RCRA less than 90-day accumulation area. Hazardous or suspected hazardous waste generated during drilling activities was held in the Kirtland AFB Zia Park temporary RCRA less than 90-day accumulation area.

Prior to the start of each quarterly GWM sampling event, a preliminary evaluation was made to identify monitoring wells that are anticipated to generate characteristically hazardous liquid IDW for initial waste segregation purposes. Based on historical analytical data available for each well, the water was suspected to be characteristically hazardous if the concentration of benzene exceeded 500 micrograms per liter (per 40 CFR Part 261.24) in either of the previous two sampling events. Liquid IDW from these wells was managed as a potentially characteristically hazardous waste pending confirmation from laboratory analytical results.

For monitoring wells located in the source area of the groundwater plume that show consistent data that indicate purge water was hazardous, “Generator Knowledge” was used for hazardous waste determination. Use of generator knowledge to determine if solid waste is hazardous is permitted under RCRA regulations 40 CFR 262.11(d)(1).

Upon receipt of analytical data, the IDW remained in the less than 90-day accumulation area if confirmed to be a hazardous waste. If the IDW was determined to not meet hazardous criteria based on analytical data, the non-hazardous waste was transferred to the “Pending Disposal” area of the non-hazardous IDW yard.

All hazardous waste was removed from Kirtland AFB and properly disposed of off-Base within the required 90-day accumulation time limit. Hazardous waste was transported off Kirtland AFB after it was properly profiled, manifested, and approved for transport by the Kirtland AFB Hazardous Waste Management Group. Waste was transported by a licensed hazardous waste hauler to a permitted treatment, storage, and disposal facility.

B-1.9 REFERENCES

Kirtland Air Force Base (AFB). 2016. *Aquifer Test Report for Groundwater Extraction Well KAFB-106228, Bulk Fuels Facility, Solid Waste Management Unit ST-106/SS-111, Kirtland Air Force Base, New Mexico*. Prepared by CB&I Federal Services for Kirtland AFB under USACE–Albuquerque District Contract No. W912DY-10-D-0014. July.

New Mexico Environment Department (NMED). 2010. Hazardous Waste Treatment Facility Operating Permit, EPA ID No. NM9570024423, issued to U.S. Air Force for the Open Detonation Unit Located at Kirtland Air Force Base, Bernalillo County, New Mexico, by the NMED Hazardous Waste Bureau. July.

NMED. 2017a. Correspondence from Juan Carlos Borrego, Deputy Secretary, Environment Department to Colonel Eric H. Froehlich, Base Commander, Kirtland AFB, New Mexico, and Lieutenant Colonel Wayne J. Acosta, Civil Engineer Office, Kirtland AFB, New Mexico, regarding the *Work Plan for Bulk Fuels Facility Expansion of the Dissolved-Phase Plume Groundwater Treatment System Design Revision 2, Bulk Fuels Facility Solid Waste Management Unit ST-106/SS-111, Kirtland Air Force Base, EPA ID No. NM9570024423, HWB-KAFB-13-MISC*. May 31.

NMED. 2017b. *Discharge Permit Issuance DP-1839, Kirtland Air Force Base, Bernalillo County, New Mexico*. By the New Mexico Environment Department Groundwater Quality Bureau. April.

Table B-2
Current and Former Well Designations

Current Well Designation	Previous Well Designation	REI Assignment	Previous Aquifer Assignment
KAFB-003	KAFB-3, KAFB003	—	Regional Deep
KAFB-015	KAFB-15, KAFB015	—	Regional Deep
KAFB-016	KAFB-16, KAFB016	—	Regional Deep
KAFB-106001	KAFB-1061	4857 & 4838	Shallow
KAFB-106002	KAFB-1062	4857	Shallow
KAFB-106003	KAFB-1063	4857	Shallow
KAFB-106004	KAFB-1064	4857	Shallow
KAFB-106005	KAFB-1065	4857	Shallow
KAFB-106006	KAFB-1066	4857	Shallow
KAFB-106007	KAFB-1067	4857	Shallow
KAFB-106008	KAFB-1068	4857	Shallow
KAFB-106009	KAFB-1069	4857	Shallow
KAFB-106010	KAFB-10610	4857	Shallow
KAFB-106011	KAFB-10611	4857	Shallow
KAFB-106012R	KAFB-10612R	4857	Shallow
KAFB-106013	KAFB-10613	4857	Shallow
KAFB-106014	KAFB-10614	4857	Shallow
KAFB-106015	KAFB-10615	4857 & 4838	Shallow
KAFB-106016	KAFB-10616	4857	Shallow
KAFB-106017	KAFB-10617	4857 & 4838	Shallow
KAFB-106018	KAFB-10618	4857 & 4838	Shallow
KAFB-106019	KAFB-10619	4857 & 4838	Shallow
KAFB-106020	KAFB-10620	4857	Shallow
KAFB-106021	KAFB-10621	4857 & 4838	Shallow
KAFB-106022	KAFB-10622	4857 & 4838	Shallow
KAFB-106023	KAFB-10623	4857	Shallow
KAFB-106024	KAFB-10624	4857	Shallow
KAFB-106025	KAFB-10625	4857 & 4838	Shallow
KAFB-106026	KAFB-10626	4857	Shallow
KAFB-106027	KAFB-10627	4857	Shallow
KAFB-106028	KAFB-10628-510	4857	Shallow
KAFB-106029	—	4857	Shallow
KAFB-106030	—	4838	Intermediate
KAFB-106031	—	4814	Deep
KAFB-106032	—	4857	Shallow
KAFB-106033	—	4838	Intermediate
KAFB-106034	—	4814	Deep
KAFB-106035	—	4857	Shallow
KAFB-106036	—	4838	Intermediate
KAFB-106037	—	4814	Deep
KAFB-106038	—	4857	Shallow
KAFB-106039	—	4838	Intermediate
KAFB-106040	—	4814	Deep
KAFB-106041	—	4857	—
KAFB-106042	—	4857	Shallow
KAFB-106043	—	4814	Deep
KAFB-106044	—	4838	Intermediate
KAFB-106045	—	4814	Deep
KAFB-106046	—	4857	Shallow
KAFB-106047	—	4838	Intermediate
KAFB-106048	—	4814	Deep
KAFB-106049	—	4857	Shallow
KAFB-106050	—	4838	Intermediate
KAFB-106051	—	4814	Deep

Table B-2
Current and Former Well Designations

Current Well Designation	Previous Well Designation	REI Assignment	Previous Aquifer Assignment
KAFB-106052	—	4857	Shallow
KAFB-106053	—	4838	Intermediate
KAFB-106054	—	4814	Deep
KAFB-106055	—	4857	Shallow
KAFB-106057	—	4838	Intermediate
KAFB-106058	—	4814	Deep
KAFB-106059	—	4857	Shallow
KAFB-106060	—	4838	Intermediate
KAFB-106061	—	4814	Deep
KAFB-106062	—	4814	Deep
KAFB-106063	—	4838	Intermediate
KAFB-106064	—	4857	Shallow
KAFB-106065	—	4838	Intermediate
KAFB-106066	—	4814	Deep
KAFB-106067	—	4857	Shallow
KAFB-106068	—	4814	Deep
KAFB-106069	—	4838	Intermediate
KAFB-106070	—	4857	Shallow
KAFB-106071	—	4814	Deep
KAFB-106072	—	4838	Intermediate
KAFB-106073	—	4838	Intermediate
KAFB-106074	—	4814	Deep
KAFB-106075	—	4857	Shallow
KAFB-106076	—	4857	Shallow
KAFB-106077	—	4838	Intermediate
KAFB-106078	—	4814	Deep
KAFB-106079	—	4857	Shallow
KAFB-106080	—	4838	Intermediate
KAFB-106081	—	4814	Deep
KAFB-106082	—	4857	Shallow
KAFB-106083	—	4838	Intermediate
KAFB-106084	—	4814	Deep
KAFB-106085	—	4857	Shallow
KAFB-106086	—	4838	Intermediate
KAFB-106087	—	4814	Deep
KAFB-106088	—	4857	Shallow
KAFB-106089	—	4838	Intermediate
KAFB-106090	—	4814	Deep
KAFB-106091	—	4857	Shallow
KAFB-106092	—	4838	Intermediate
KAFB-106093	—	4814	Deep
KAFB-106094	—	4857	Shallow
KAFB-106095	—	4838	Intermediate
KAFB-106096	—	4814	Deep
KAFB-106097	—	4838	Intermediate
KAFB-106098	—	4814	Deep
KAFB-106099	—	4838	Intermediate
KAFB-106100	—	4814	Deep
KAFB-106101	—	4838	Intermediate
KAFB-106102	—	4814	Deep
KAFB-106103	—	4838	Intermediate
KAFB-106104	—	4814	Deep
KAFB-106105	—	4838	Intermediate
KAFB-106106	—	4857	Shallow

Table B-2
Current and Former Well Designations

Current Well Designation	Previous Well Designation	REI Assignment	Previous Aquifer Assignment
KAFB-106107	—	4814	Deep
KAFB-106148-484	—	4857	—
KAFB-106149-484	—	4857	—
KAFB-106150-484	—	4857	—
KAFB-106151-484	—	4857	—
KAFB-106152-484	—	4857	—
KAFB-106153-484	—	4857	—
KAFB-106154-484	—	4857	—
KAFB-106155-484	—	4857	—
KAFB-106156-484	—	4857	—
KAFB-106201	—	4857	Shallow
KAFB-106202	—	4838	Intermediate
KAFB-106203	—	4814	Deep
KAFB-106204	—	4857	Shallow
KAFB-106205	—	4838	Intermediate
KAFB-106206	—	4814	Deep
KAFB-106207	—	4857	Shallow
KAFB-106208	—	4838	Intermediate
KAFB-106209	—	4814	Deep
KAFB-106212	—	4814	Deep
KAFB-106213	—	4857	Shallow
KAFB-106214	—	4838	Intermediate
KAFB-106215	—	4814	Deep
KAFB-106216	—	4857	Shallow
KAFB-106217	—	4838	Intermediate
KAFB-106218	—	4814	Deep
KAFB-106219	—	4857	Shallow
KAFB-106220	—	4838	Intermediate
KAFB-106221	—	4814	Deep
KAFB-106222	—	4857	Shallow
KAFB-106223	—	4838	Intermediate
KAFB-106224	—	4814	Deep
KAFB-106225	—	4857	Shallow
KAFB-106226	—	4838	Intermediate
KAFB-106227	—	4814	Deep
KAFB-106228	—	—	—
KAFB-106229	—	4857	Shallow, Intermediate, and Deep
KAFB-106230	—	4838	Intermediate
KAFB-106231	—	4857	Shallow
KAFB-106232	—	4838	Intermediate
KAFB-106233	—	—	—
KAFB-106234	—	—	—
KAFB-106235-438	KAFB-106235-463	4857	—
KAFB-106235-472	KAFB-106235-492	4838	—
KAFB-106235-501	KAFB-106235-521	4814	—
KAFB-106236-436	KAFB-106236-461	4857	—
KAFB-106236-470	KAFB-106236-490	4838	—
KAFB-106236-499	KAFB-106236-519	4814	—
KAFB-106240-449	—	4857	—
KAFB-106241-428	—	4857	—
KAFB-106242-418	—	4857	—
KAFB-106243-425	—	4857	—
KAFB-106244-445	—	4857	—
KAFB-106245-460	—	4857	—

**Table B-2
Current and Former Well Designations**

Current Well Designation	Previous Well Designation	REI Assignment	Previous Aquifer Assignment
KAFB-106247-490	—	4857	—
KAFB-106S1-447	—	4857	—
KAFB-106S2-451	—	4857	—
KAFB-106S3-449	—	4857	—
KAFB-106S4-446	—	4857	—
KAFB-106S5-446	—	4857	—
KAFB-106S7-491	—	4857	—
KAFB-106S8-491	—	4857	—
KAFB-106S9-447	—	4857	—
KAFB-3411	KAFB3411	4857	Shallow
ST106-VA2	VA HOSPITAL WELL	—	Regional Deep

— = not applicable

ID = identification

REI = reference elevation interval

VA = Veteran's Affairs