ENTERED

CB&I Federal Services LLC
2440 Louisiana Blvd. NE, Suite 300
Albuquerque, NM 87110
Tel: +1 505 262 8800
Fax: +1 505 262 8855
www.CBI.com

October 15, 2014

Subject: **Kirtland Air Force Base Bulk Fuel Facility – Air Sparge and Soil-Vapor Extraction Monthly Report for September 2014**

This Kirtland Air Force Base Air Sparge (AS)/Soil-Vapor Extraction (SVE) Pilot Monthly Report has been prepared by CB&I Federal Services LLC for the New Mexico Environment Department (NMED) in accordance with the NMED letter dated May 12, 2014, titled "Kirtland Air Force Base – Air Sparge and SVE Pilot Implementation Work Plan." This monthly report outlines all activities conducted at the AS/SVE system from September 1 through September 30, 2014.

Activities Conducted

The AS/SVE system began operation on June 30, 2014 and has been fully operational for the month of September. However, the field sheet containing readings from September 1 through September 11, 2014 was misplaced prior to entering the data into the electronic spreadsheet, so those field data are not available. Corrective actions have been taken to enter field data into the spreadsheet each day they are collected,

Field Measurements and Observations

Total hydrocarbons, percent oxygen, carbon monoxide, and carbon dioxide are monitored at the wellhead, along the pipeline before vapor enters the knock-out tank, and inlet and outlet of the carbon beds on a daily basis using a field Horiba MEXA 584L emissions analyzer. Photoionization detection (PID) readings are also collected from the inlet and outlet of the carbon beds using a hand-held MiniRAE 2000 PID instrument. Field Horiba and PID measurements collected for this reporting period are provided as Table 1.

The average hydrocarbon readings, using the field Horiba instrument, generally range from 0 to 2.6 parts per million (ppm) during this reporting period. In "clean" air the Horiba frequently shows 3 to 5 ppm of hydrocarbon. The method TO-15 analytical results from the September 2014 Bottle-Vac™ samples confirms that the hydrocarbons coming from the SVE wellhead and the granular-activated carbon (GAC) exhaust are certainly below 5 ppm, and below the reliable quantification limit for the Horiba instrument.

For laboratory analytical data, the total volatile organic compound (VOC) concentrations for the SVE wellhead and GAC exhaust were calculated by totaling the individual VOC compound vapor concentrations (method TO-15) plus the total petroleum hydrocarbon (TPH) results for detected analytes. Total VOC concentrations were calculated at 0.18 ppm for the SVE wellhead and 0.28 ppm for the GAC exhaust. PID readings collected from this reporting period were all below the background detection capability of the instrument, which is determined to be 3 ppm.

Operational data, including temperature, vacuum, humidity, and differential pressure, were collected at least four times per week. AS/SVE operational readings are provided as Table 2. Flow rates for the SVE well and the dilution air were calculated and are provided in Table 3.

Water levels were collected prior to sampling well Kirtland Air Force Base (KAFB)-10617 on a weekly basis for the first 4 weeks of operation, and will be collected on a biweekly basis for a following eight weeks. Water levels for this reporting period were measured between 480.00 and 480.03 feet below top of casing, approximately 4.91 and 4.88 feet above the top of the well screen (484.91 feet below top of casing), respectively. A groundwater level time-series graph is presented on Figure 1. Based on Figure 1, water levels at KAFB-10617 unexpectedly rose approximately 3.77 feet from Fourth Quarter calendar year (CY) 2013 to Second Quarter CY 2014, thus resulting in the top of screen being flooded and below the current water table. A smaller rise in the water table was seen at nearby groundwater monitoring well Clusters 4 and 19, where the water levels rose approximately 2 feet from Fourth Quarter CY 2013 to Second Quarter CY 2014. Water-level measurements and groundwater field quality measurements collected prior to sampling well KAFB-10617 are included in Table 4.

Analytical Results

During this reporting period, the third (GW1689) and final biweekly (GW1690) groundwater samples were collected from KAFB-10617. Data were also received for the second biweekly sample that was collected on August 20, 2014. Analytical results for the three remaining biweekly groundwater samples collected from KAFB-10617 are provided in Table 5.Groundwater samples were analyzed for VOCs; 1,2-dibromoethane (EDB), TPH-diesel range organics, TPH-gasoline range organics, iron, and sulfide/sulfate in accordance with the NMED-approved Air Sparge and Soil-Vapor Extraction Pilot Implementation Work Plan (USACE, 2014). Groundwater results were compared to the more conservative screening level between the U.S. Environmental Protection Agency (EPA) maximum contaminant levels (MCLs) (EPA, 2013) and the NMED Groundwater Protection Standards (New Mexico Administrative Code 20.6.2.3103). The EPA regional screening level for tap water was used where there was no MCL or NMED Groundwater Protection Standard established for a given parameter.

EDB was detected in all three remaining biweekly groundwater samples (GW1688, GW1689, and GW1690) at concentrations exceeding the EPA MCL of 0.05 microgram per liter. The maximum detected concentration of EDB (EPA Method 8011) during this reporting period was 0.267 microgram per liter collected on September 3, 2014 from KAFB-10617. The analyte 1,2-dichloroethane was detected at concentrations well below its screening level in all three remaining biweekly groundwater samples (GW1688, GW1689, and GW1690) collected from KAFB-10617. TPH-diesel range organics and TPH-gasoline range organics were detected in the third biweekly groundwater sample (GW1689), and acetone was detected in both the second and third biweekly groundwater samples (GW1688 and GW1689) all at concentrations well below applicable screening levels. Concentrations of detected analytes are fluctuating between being slightly higher and slightly lower than the baseline sample results. Benzene has not been detected in the groundwater at this well. Tetrachloroethene (whose source is unknown) is the only detected analyte that appears to be decreasing in concentration for each sample collected.

Two soil-vapor samples (VA9135 and VA9146) were collected from KAFB-106211 on August 27, 2014 from both the SVE wellhead and GAC exhaust using pre-evacuated Bottle-Vac™ canisters. The monthly soil-vapor samples were analyzed for air-phase hydrocarbons, VOCs, EDB, and fixed gases (carbons dioxide, carbon monoxide, methane, nitrogen, and oxygen) in accordance with the NMED-approved Air Sparge and Soil-Vapor Extraction Pilot Implementation Work Plan (USACE, 2014).

EDB was not detected in either of the August monthly soil-vapor samples collected from the SVE wellhead and GAC exhaust. TPH (C5-C8) and TPH (C9-C12) were detected in the soil-vapor sample collected from the SVE wellhead (VA9135) at concentrations of 200 and 390 micrograms per cubic meter (73.8 and 65.9 parts per billion by volume), respectively. TPH (C5-C8), TPH (C9-C10), and TPH (C9-C12) were detected in the GAC soil-vapor sample (VA9146) at concentrations of 240, 22, and 620 micrograms per cubic meter, respectively (88.6, 4.1, and 104.8 parts per billion by volume). Eighteen VOCs were also detected in the two August soil-vapor samples. Eight analytical parameters were detected at concentrations above the baseline soil-vapor sample collected on June 21, 2014. Most of the VOCs detected appear to be components of the polyvinyl chloride cement used in fabrication of the piping from the wellhead to the treatment system and were detected at very low concentrations. The only VOCs detected above trace levels were acetone and tetrahydrofuran, both are found in polyvinyl chloride cement and cleaner. There are no regulatory values for soil-vapor for comparison. Analytical results for the monthly soil-vapor samples for August are provided in Table 6. The monthly soil-vapor samples for September were collected from the SVE system wellhead and GAC exhaust on September 30, 2014. Analytical results for these samples have not been received and will be included in the next monthly report.

References

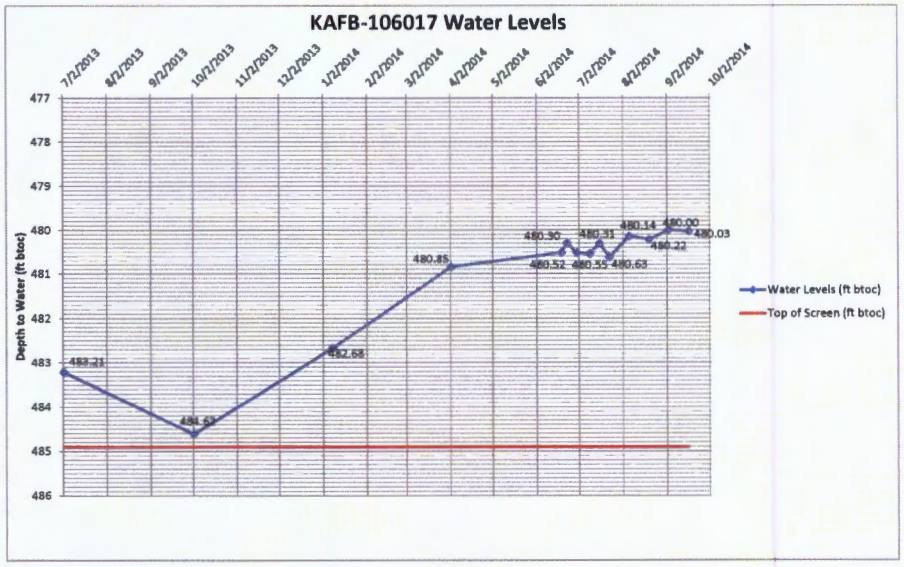
EPA. 2013. National Primary Drinking Water Standards, EPA 816-F-09-0004, U.S. Environmental Protection Agency, Washington, D.C., May.

USACE. 2014. Kirtland Air Force Base – *Air Sparge and Soil-Vapor Extraction Pilot Implementation Work Plan*, Prepared by CB&I Federal Services, LLC. For the USACE Albuquerque District under USACE Contract No. W912DY-10-D-0014, Delivery Order 0002, May.

FIGURES

Figure 1
KAFB-10617 Groundwater Time-Series Graph

Date	GWL (ft btoc)	Screen Top (ft btoc)	GWL above screen (ft)
7/2/2013	483.21	484.91	1.7
10/2/2013	484.62	484.91	0.29
1/8/2014	482.68	484.91	2.23
4/2/2014	480.85	484.91	4.06
6/19/2014	480.52	484.91	4.39
6/23/2014	480.30	484.91	4.61
6/30/2014	480.52	484.91	4.39
7/9/2014	480.55	484.91	4.36
7/16/2014	480.31	484.91	4.6
7/23/2014	480.63	484.91	4.28
8/6/2014	480.14	484.91	4.77
8/20/2014	480.22	484.91	4.69
9/3/2014	480.00	484.91	4.91
9/17/2014	480.03	484.91	4.88



TABLES

Table 1
Horiba Field Readings

Date and Time	SVE Well[a]					SVE Well[b]					Pre Carbon					Post 1st Carbon Bed				
	HC[c]	CO_2	O_2	CO	PID[d]	HC[c]	CO_2	O_2	CO	PID[d]	HC[c]	CO_2	O_2	CO	PID[d]	HC[c]	CO_2	O_2	CO	PID[d]
	ppm	% vol	% vol	% vol	ppm	ppm	% vol	% vol	% vol	ppm	ppm	% vol	% vol	% vol	ppm	ppm	% vol	% vol	% vol	ppm
9/15/2014 8:20	< 5	0.16%	19.80%	0.00%	NA	< 5	0.16%	19.44%	0.00%	NA	< 5	0.22%	21.10%	0.00%	< 3	< 5	0.20%	21.02%	0.00%	< 3
9/16/2014 10:32	< 5	0.14%	20.26%	0.00%	NA	< 5	0.14%	20.21%	0.00%	NA	< 5	0.12%	20.48%	0.00%	< 3	< 5	0.18%	20.65%	0.00%	< 3
9/17/2014 15:50	< 5	0.16%	20.37%	0.00%	NA	< 5	0.16%	20.40%	0.00%	NA	< 5	0.18%	20.51%	0.00%	< 3	< 5	0.20%	20.64%	0.00%	< 3
9/18/2014 14:15	< 5	0.16%	20.17%	0.00%	NA	< 5	0.16%	20.27%	0.00%	NA	< 5	0.20%	20.34%	0.00%	< 3	< 5	0.18%	20.54%	0.00%	< 3
9/22/2014 11:30	7	0.20%	20.23%	0.00%	NA	7	0.18%	20.18%	0.00%	NA	< 5	0.16%	20.54%	0.00%	< 3	< 5	0.16%	20.51%	0.00%	< 3
9/23/2014 13:00	< 5	0.18%	20.18%	0.00%	NA	< 5	0.18%	20.20%	0.00%	NA	< 5	0.18%	20.67%	0.00%	< 3	< 5	0.18%	20.64%	0.00%	< 3
9/24/2014 12:01	< 5	0.20%	20.47%	0.00%	NA	< 5	0.16%	20.24%	0.00%	NA	< 5	0.18%	20.74%	0.00%	< 3	< 5	0.20%	20.61%	0.00%	< 3
9/25/2014 13:00	< 5	0.20%	20.41%	0.00%	NA	< 5	0.18%	20.47%	0.00%	NA	< 5	0.18%	20.81%	0.00%	< 3	< 5	0.18%	20.64%	0.00%	< 3
9/29/2014 8:30	< 5	0.18%	19.51%	0.00%	NA	< 5	0.18%	19.50%	0.00%	NA	< 5	0.18%	20.81%	0.00%	< 3	< 5	0.18%	20.77%	0.00%	< 3
9/30/2014 8:50	< 5	0.18%	19.67%	0.00%	NA	< 5	0.18%	19.54%	0.00%	NA	< 5	0.18%	20.83%	0.00%	< 3	< 5	0.18%	20.80%	0.00%	< 3

Notes:

Readings for HC, CO_2, O_2, and CO were collected using a Horiba MEXA 584L emissions analyzer. PID readings were collected using a hand-held MiniRAE 2000 PID instrument.

Soil-vapor analytical results for hydrocarbons, using Method TO-15, are provided in Table 6 of the Air Sparge/SVE Monthly Report.

Field measurements from September 1 through September 11, 2014 were misplaced prior to being entered into this table.

[a] Sample port is located on the SVE wellhead.

[b] Sample port is located on the pipeline just before vapor enters the knockout tank.

[c] Field readings using the Horiba analyzer at concentrations between 0 and 5 ppm and were reported as " < 5 ppm." Readings below 5 ppm are considered to be below the background detection capability of the instrument.

[d] Field readings for hydrocarbons using the MiniRae PID at concentrations between 0 and 3 ppm and were reported as "< 3 ppm." Readings below 3 ppm are considered to be below the background detection capability of the instrument.

% = Percent.

< = Less than.

CO = Carbon monoxide.

CO2 = Carbon dioxide.

HC = Total hydrocarbons.

NA = Not applicable.

NR = Not recorded.

O2 = Oxygen.

PID = Photoionization detector.

ppm = Parts per million.

SVE = Soil-vapor extraction.

vol = Volume.

Table 2
Air Sparge and SVE System Operational Data

Time and Date	Air Sparge						SVE																																	
								SVE Well									Dilution				Pre Carbon Vessels			Hours Operational		SVE	Calculated Flows (Sim Flow Calcs Table)				DRE*		THC	
	Flow Meter	Correction Factor	Corrected Flow	Compressor Pressure	Regulator Pressure	Temperature	Well Valve % Open	Vacuum	Differential Pressure	Vacuum (Well Head)	Differential Pressure (Well Head)	Temperature	Humidity	Vacuum Gauge Pre Knockout	Differential Pressure Pre Knockout	Differential Pressure for Blower Filter	Vacuum	Differential Pressure	Temperature	Humidity	Vacuum Post Blower	Temperature Pre HX	Temperature Post HX	SVE	Air Sparge	Output Proportion	SVE Well	Dilution	Total Flows	Sparge Flows	Post 1st Bed	Total	Pre Carbon	Exhaust
	FI-101		FI-101	PI-101	PI-102	TI-101	Sample Port							PI-201	PI-201	PI-202	Sample Port				PI-203	TI-201	TI-202											
	SCFM		SCFM	psi	psi	°F	%	in WC	in WC	in WC	in WC	°F	%	in WC	in WC	in WC	in WC	in WC	°F	%	in WC	°F	°F	hrs	hrs	%	SCFM	SCFM	SCFM	SCFM	%	%	lb/hr	lb/hr
8/15/2014 9:20	13	1.106	14.41	110	6	80	100%	34.16	0.09	34.46	0.49	71.8	52.0	40	0.18	0.0	N/A	N/A	74.70	53.1%	27.5	98	115	1802.9	1776.5	30%	213	0	213	14.41	N/A	N/A	0.00	0.00
8/16/2014 10:53	13	1.106	14.41	100	6	87	100%	34.44	0.11	34.72	0.54	77.7	48.1	40.5	0.20	0.0	N/A	N/A	96.55	40.6%	27.5	100	120	1828.7	1804.3	30%	223	0	223	14.41	N/A	N/A	0.00	0.00
8/17/2014 15:09	13	1.106	14.41	110	6	78	100%	34.21	0.11	34.97	0.53	70.1	67.5	40	0.20	0.0	N/A	N/A	79.90	49.3%	27.5	95	115	1858.0	1833.8	30%	221	0	221	14.41	N/A	N/A	0.00	0.00
8/18/2014 14:15	13.5	1.106	14.98	110	6	86	100%	33.79	0.11	34.03	0.52	80.4	58.6	40	0.19	0.0	N/A	N/A	87.70	58.4%	27.5	105	120	1882.3	1855.9	30%	218	0	218	14.98	N/A	N/A	0.00	0.00
8/22/2014 11:30	12	1.108	13.30	110	6	90	100%	34.48	0.13	34.99	0.57	79.1	42.7	40	0.20	0.0	N/A	N/A	89.70	39.8%	27.5	105	120	1973.7	1949.3	30%	228	0	228	13.30	N/A	N/A	0.00	0.00
9/3/2014 13:00	12.25	1.108	13.57	110	6	92	100%	34.28	0.11	34.47	0.58	81.3	39.9	40	0.20	0.0	N/A	N/A	87.80	28.4%	27.5	105	120	2001.2	1976.8	30%	228	0	228	13.57	0%	100%	0.00	0.00
9/4/2014 12:01	12.25	1.108	13.57	110	6	87	100%	33.79	0.11	34.01	0.55	75.4	19.1	40	0.20	0.0	N/A	N/A	81.70	42.1%	27.5	105	120	2024.2	1998.8	30%	225	0	225	13.57	N/A	N/A	0.00	0.00
9/5/2014 13:00	12.5	1.108	13.85	110	6	91	100%	34.24	0.11	34.67	0.65	80.3	42.5	40	0.20	0.0	N/A	N/A	90.90	38.7%	27.5	105	120	2043.2	2024.8	30%	224	0	224	13.85	N/A	N/A	0.00	0.00
9/29/2014 9:30	13.75	1.108	15.24	105	6	80	100%	32.94	0.11	32.98	0.58	68.5	57.6	38.5	0.20	0.0	N/A	N/A	71.90	56.9%	27.5	98	115	2138.7	2114.3	30%	232	0	232	15.24	N/A	N/A	0.00	0.00
9/30/2014 8:50	13.5	1.108	14.96	110	6	85	100%	32.47	0.11	32.76	0.56	70.1	55.4	39	0.20	0.0	N/A	N/A	80.10	54.1%	27.5	100	115	2161.0	2138.6	30%	228	0	228	14.96	N/A	N/A	0.00	0.00

Notes:

Field measurements from September 1 through September 11, 2014 were misplaced prior to being entered into this table.

* DRE values are calculated as follows: (Influent Concentration - Effluent Concentration)/Influent Concentration * 100

% = Percent

°F = Degrees Fahrenheit

DRE = Dilbustion removal efficiency

mWC = Inches of water column

lb/hr = Pounds per hour

N/A = Not applicable

NR = Not recorded

psi = Pounds per square inch

SCFM = Standard cubic feet per minute

SVE = Soil vapor extraction

THC = Total hydrocarbons

Table 3
Flow Calculations

	SVE Well												Dilution											
Date and Time	Relative Humidity (%)	Temperature (°F)	Barometric Pressure (inHg)	Well Vacuum (inWC)	Well Head Absolute Pressure (inHg)	Differential Pressure (inWC)	Correction Factor	Density (lbs/ft^3)	Area (ft^2)	Velocity (ft/min)	Flow Rate (ACFM)	Flow Rate (SCFM)	Relative Humidity (%)	Temperature (°F)	Barometric Pressure (inHg)	Pipe Vacuum (inWC)	Well Head Absolute Pressure (inHg)	Differential Pressure (inWC)	Correction Factor	Density (lbs/ft^3)	Area (ft^2)	Velocity (ft/min)	Flow Rate (ACFM)	Flow Rate (SCFM)
9/15/2014 8:20	52.00%	71.60	30.26	34.46	22.36	0.49	0.996	0.056	0.09	3258	288	**213**	53.1%	74.70	30.26	0.00	24.90	N/A	0.994	0.061	0.02	N/A	N/A	N/A
9/16/2014 10:32	48.10%	77.70	30.32	34.72	22.40	0.54	0.994	0.055	0.09	3441	304	**223**	40.8%	86.50	30.32	0.00	24.96	N/A	0.992	0.060	0.02	N/A	N/A	N/A
9/17/2014 15:50	67.80%	70.10	30.13	34.97	22.19	0.53	0.993	0.055	0.09	3402	301	**221**	69.3%	78.90	30.13	0.00	24.77	N/A	0.990	0.060	0.02	N/A	N/A	N/A
9/18/2014 14:15	58.60%	80.40	30.01	34.02	22.14	0.52	0.991	0.054	0.09	3410	301	**216**	56.4%	87.70	30.01	0.00	24.65	N/A	0.990	0.059	0.02	N/A	N/A	N/A
9/22/2014 11:30	42.70%	79.50	30.32	34.56	22.41	0.57	0.994	0.055	0.09	3540	313	**229**	39.6%	86.70	30.32	0.00	24.96	N/A	0.992	0.060	0.02	N/A	N/A	N/A
9/23/2014 13:00	39.90%	81.30	30.26	34.47	22.36	0.56	0.994	0.054	0.09	3519	311	**226**	38.4%	87.60	30.26	0.00	24.90	N/A	0.992	0.060	0.02	N/A	N/A	N/A
9/24/2014 12:01	10.10%	79.80	30.28	34.01	22.41	0.55	0.998	0.055	0.09	3471	307	**225**	40.1%	81.70	30.28	0.00	24.92	N/A	0.994	0.061	0.02	N/A	N/A	N/A
9/25/2014 13:00	42.30%	80.30	30.25	34.57	22.34	0.55	0.994	0.054	0.09	3485	308	**224**	38.7%	80.90	30.25	0.00	24.89	N/A	0.994	0.061	0.02	N/A	N/A	N/A
9/29/2014 8:30	57.60%	68.50	30.10	32.58	22.34	0.58	0.994	0.056	0.09	3540	313	**232**	56.8%	71.90	30.10	0.00	24.74	N/A	0.995	0.061	0.02	N/A	N/A	N/A
9/30/2014 8:50	55.40%	70.10	30.06	32.70	22.29	0.56	0.995	0.055	0.09	3486	308	**228**	54.7%	80.10	30.06	0.00	24.70	N/A	0.992	0.060	0.02	N/A	N/A	N/A

Notes:
Field measurements from September 1 through September 11, 2014 were misplaced prior to being entered into this table.
% = Percent.
°F = Degrees Fahrenheit.
ACFM = Actual cubic feet per minute.
ft = Feet.
inHg = Inches of mercury.
inWC = Inches of water column.
lbs = Pounds.
min = Minute.
N/A = Not applicable.
SCFM = Standard cubic feet per minute.

Table 4
KAFB-106017 Groundwater Field Quality Parameter Measurements Prior to Sampling

Location Name	Sample No.	Date	Time	Gallons Removed	Depth to Ground-water (ft btoc)	Temperature (°C)	pH (S.U.)	Spec Cond (μS/cm^2	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Alkalinity (mg/L as $CaCO_3$)
Baseline Groundwater Samples												
KAFB-106017	GW1682	6/19/2014	1718	51	480.52	19.27	8.06	368.0	8.58	209	0.71	NA
KAFB-106017	NA*	6/23/2014	1657	51	480.30	19.54	7.37	381.8	8.68	243	0.41	NA
KAFB-106017	GW1683	6/30/2014	1215	51	480.52	20.22	7.65	397.2	6.08	203	1.17	160
Weekly Groundwater Samples												
KAFB-106017	GW1684	7/9/2014	1053	51	480.55	19.45	7.76	380.9	9.73	169	0.75	148
KAFB-106017	GW1685	7/16/2014	1123	51	480.31	18.85	7.82	375.9	7.80	182	0.88	140
KAFB-106017	GW1686	7/23/2014	1113	51	480.63	19.08	7.72	354.7	8.47	189	0.57	105
Biweekly Groundwater Samples												
KAFB-106017	GW1687	8/6/2014	1057	51	480.14	18.86	7.66	379.3	9.40	190	0.28	136
KAFB-106017	GW1688	8/20/2014	1023	51	480.22	18.76	7.69	365.5	9.13	230	0.27	136
KAFB-106017	GW1689	9/3/2014	1104	51	480.00	19.01	7.79	357.0	6.52	175	1.52	152
KAFB-106017	GW1690	9/17/2014	1159	51	480.03	18.38	7.98	407.4	7.98	196	0.44	160

*Sample was not collected.
°C = Degrees Celsius.
μS/cm$_2$ = Microsiemens per square centimeter.
$CaCO_3$ = Calcium carbonate.
DO = Dissolved oxygen.
ft btoc = Feet below top of casing.
KAFB = Kirtland Air Force Base.
mg/L = Milligram per liter.
mV = Millivolt.
NA = Not applicable.
No. = Number.
NTU = Nephelometric Turbidity Unit.
ORP = Oxidation reduction potential.
S.U. = Standard unit.

Table 5 Groundwater Analytical Results

Chemical Class & Analytical Method[a]	Parameter	EPA MCL[b]	NMED Approved Background[c]	Groundwater Protection Standards (NMAC 20.6.2.3103)[d]	EPA Tap Water RSLs[b]	Result	VAL QUAL	LOQ	DL	Result	VAL QUAL	LOQ	DL	Result	VAL QUAL	LOQ	DL	Result	VAL QUAL	LOQ	DL	Result	VAL QUAL	LOQ	DL
					Sample Type	Baseline GW Samples								First Weekly GW Sample				Second Weekly GW Sample				Third Weekly GW Sample			
					Location Code	KAFB-10617				KAFB-10617				KAFB-10617				KAFB-10617				KAFB-10617			
					Sample Number	GW1682				GW1683				GW1684				GW1685				GW1686			
					Sample Date	19-Jun-14				30-Jun-14				9-Jul-14				16-Jul-14				23-Jul-14			
					Sample Purpose	REG				REG				REG				REG				REG			
					Sample Depth	482-507 FT				482-507 FT				482-507 FT				482-507 FT				482-507 FT			
EDB (µg/L) Method 8011	1,2-DIBROMOETHANE	0.05	NE	0.1	0.0075	[illegible]		0.0283	0.00942	[illegible]		0.0278	0.00928	[illegible]		0.0281	0.00936	[illegible]		0.0279	0.00931	[illegible]		0.0283	0.00942
Anions (mg/L) Method E300.0	SULFATE	NE	NE	600	NE	36.5		2.5	0.33	36.4		2.5	0.33	35.5		2.5	0.33	36.2		2.5	0.33	36.1		2.5	0.33
	SULFIDE, TOTAL	NE	NE	NE	NE	ND	U	3.51	0.702	ND	U	3.39	0.678	ND	U	4	0.8	ND	U	3.7	0.741	ND	U	3.85	0.789
Metals (mg/L) Method 6010B	IRON	NE	NE	1	14	ND	U	0.1	0.03	ND	U	0.1	0.03	ND	U	0.1	0.03	ND	U	0.1	0.03	ND	U	0.1	0.03
TPH (mg/L) Method 8015B	DIESEL RANGE ORGANICS	NE	NE	0.55[e]	NE	[illegible]	J	0.385	0.0962	ND	U	0.37	0.0926	ND	U	0.2	0.1	[illegible]	J	0.192	0.0962	ND	U	0.385	0.0962
	GASOLINE RANGE ORGANICS	NE	NE	0.55[e]	NE	[illegible]	J	0.15	0.05	ND	U	0.15	0.05	ND	U	0.15	0.05	ND	U	0.15	0.05	ND	U	0.15	0.05
VOCs (µg/L) Method 8260B	1,1,1,2-TETRACHLOROETHANE	NE	NE	NE	0.57	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,1,1-TRICHLOROETHANE	200	NE	60	8000	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,1,2,2-TETRACHLOROETHANE	NE	NE	10	0.076	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,1,2-TRICHLOROETHANE	5	NE	10	0.28	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,1-DICHLOROETHANE	NE	NE	25	2.7	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,1-DICHLOROETHENE	7	NE	5	280	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,1-DICHLOROPROPENE	NE	NE	NE	NE	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,2,3-TRICHLOROBENZENE	NE	NE	NE	7	ND	U	2	0.25	ND	U	2	0.25	ND	U	2	0.25	ND	U	2	0.25	ND	U	2	0.25
	1,2,3-TRICHLOROPROPANE	NE	NE	NE	0.00075	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5
	1,2,4-TRICHLOROBENZENE	70	NE	NE	1.1	ND	U	2	0.25	ND	U	2	0.25	ND	U	2	0.25	ND	U	2	0.25	ND	U	2	0.25
	1,2,4-TRIMETHYLBENZENE	NE	NE	NE	15	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,2-DIBROMO-3-CHLOROPROPANE	0.2	NE	NE	0.00033	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5
	1,2-DIBROMOETHANE	0.05	NE	0.1	0.0075	[illegible]	J	1	0.25	ND	U	1	0.25	ND	U	1	0.25	[illegible]	J	1	0.25	[illegible]	J	1	0.25
	1,2-DICHLOROBENZENE	600	NE	NE	300	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,2-DICHLOROETHANE	5	NE	10	0.17	[illegible]	J	1	0.25	[illegible]	J	1	0.25	[illegible]	J	1	0.25	[illegible]	J	1	0.25	[illegible]	J	1	0.25
	1,2-DICHLOROPROPANE	5	NE	NE	0.44	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,3,5-TRIMETHYLBENZENE	NE	NE	NE	120	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,3-DICHLOROBENZENE	NE	NE	NE	NE	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,3-DICHLOROPROPANE	NE	NE	NE	370	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,4-DICHLOROBENZENE	75	NE	NE	0.48	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	2,2-DICHLOROPROPANE	NE	NE	NE	NE	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	2-BUTANONE	NE	NE	NE	5600	ND	U	10	2.5	ND	U	10	2.5	ND	U	10	2.5	ND	U	10	2.5	ND	U	10	2.5
	2-CHLOROTOLUENE	NE	NE	NE	240	ND	UJ	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	2-HEXANONE	NE	NE	NE	38	ND	U	5	1.25	ND	U	5	1.25	ND	U	5	1.25	ND	U	5	1.25	ND	U	5	1.25
	4-CHLOROTOLUENE	NE	NE	NE	250	ND	UJ	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	4-METHYL-2-PENTANONE	NE	NE	NE	1200	ND	U	5	1.25	ND	U	5	1.25	ND	U	5	1.25	ND	U	5	1.25	ND	U	5	1.25
	ACETONE	NE	NE	NE	14000	[illegible]	J	10	2.5	ND	U	10	2.5	[illegible]	J	10	2.5	[illegible]	J+	10	2.5	ND	U	10	2.5
	BENZENE	5	NE	10	0.45	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	BROMOBENZENE	NE	NE	NE	62	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	BROMOCHLOROMETHANE	NE	NE	NE	83	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	BROMODICHLOROMETHANE	80	NE	NE	0.13	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	BROMOFORM	80	NE	NE	9.2	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	BROMOMETHANE	NE	NE	NE	7.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5
	CARBON DISULFIDE	NE	NE	NE	810	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	CARBON TETRACHLORIDE	5	NE	10	0.45	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	CHLOROBENZENE	100	NE	NE	78	[illegible]	J	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	CHLOROETHANE	NE	NE	NE	21000	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5
	CHLOROFORM	80	NE	100	0.22	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	CHLOROMETHANE	NE	NE	NE	190	ND	UJ	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	CIS-1,2-DICHLOROETHENE	70	NE	NE	36	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	CIS-1,3-DICHLOROPROPENE	NE	NE	NE	NE	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	DIBROMOCHLOROMETHANE	80	NE	NE	0.17	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	DIBROMOMETHANE	NE	NE	NE	8	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	DICHLORODIFLUOROMETHANE	NE	NE	NE	200	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5
	ETHYLBENZENE	700	NE	750	1.5	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	HEXACHLOROBUTADIENE	NE	NE	NE	0.3	ND	U	2	0.25	ND	U	2	0.25	ND	U	2	0.25	ND	U	2	0.25	ND	U	2	0.25
	ISOPROPYLBENZENE	NE	NE	NE	450	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	METHYL TERT-BUTYL ETHER	NE	NE	NE	14	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	METHYLENE CHLORIDE	5	NE	100	11	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5
	NAPHTHALENE	NE	NE	30	0.17	ND	U	2	0.25	ND	U	2	0.25	ND	U	2	0.25	ND	U	2	0.25	ND	U	2	0.25
	N-BUTYLBENZENE	NE	NE	NE	1000	ND	UJ	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	N-PROPYLBENZENE	NE	NE	NE	660	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	P-ISOPROPYLTOLUENE	NE	NE	NE	NE	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	SEC-BUTYLBENZENE	NE	NE	NE	2000	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	STYRENE	100	NE	NE	1200	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	TERT-BUTYLBENZENE	NE	NE	NE	690	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	TETRACHLOROETHENE	5	NE	20	11	[illegible]	J	1	0.25	[illegible]	J	1	0.25	ND	U	1	0.25	[illegible]	J	1	0.25	ND	U	1	0.25
	TOLUENE	1000	NE	750	1100	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	TRANS-1,2-DICHLOROETHENE	100	NE	NE	360	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25

Table 5 Groundwater Analytical Results

				Sample Type		Baseline GW Samples								First Weekly GW Sample				Second Weekly GW Sample				Third Weekly GW Sample			
				Location Code		KAFB-10617				KAFB-10617				KAFB-10617				KAFB-10617				KAFB-10617			
				Sample Number		GW1682				GW1683				GW1684				GW1685				GW1686			
				Sample Date		19-Jun-14				30-Jun-14				9-Jul-14				16-Jul-14				23-Jul-14			
				Sample Purpose		REG				REG				REG				REG				REG			
				Sample Depth		482-507 FT				482-507 FT				482-507 FT				482-507 FT				482-507 FT			
Chemical Class & Analytical Method[a]	Parameter	EPA MCL[b]	NMED Approved Background[c]	Groundwater Protection Standards (NMAC 20.6.2.3103)[d]	EPA Tap Water RSL[e]	Result	VAL QUAL	LOQ	DL	Result	VAL QUAL	LOQ	DL	Result	VAL QUAL	LOQ	DL	Result	VAL QUAL	LOQ	DL	Result	VAL QUAL	LOQ	DL
VOCs (µg/L) Method 8260B	TRANS-1,3-DICHLOROPROPENE	NE	NE	NE	NE	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	TRICHLOROETHENE	5	NE	100	0.49	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	TRICHLOROFLUOROMETHANE	NE	NE	NE	1100	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5
	VINYL CHLORIDE	2	NE	1	0.019	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	XYLENES	10000	NE	620	190	ND	U	3	0.75	ND	U	3	0.75	ND	U	3	0.75	ND	U	3	0.75	ND	U	3	0.75

a. EPA analytical methods listed are for the most recent sampling event.
b. U.S. Environmental Protection Agency (EPA), 2010a, National Primary Drinking Water Regulations: List of Drinking Water Contaminants and Maximum Contaminant Levels.
c. NMED-HWB Approved Background Concentrations, SNL/Kirtland AFB, Chemical Constituents in Ground Water.
d. New Mexico Water Quality Control Commission, Water Quality Standards, New Mexico Administrative Code 20.6.2.3103
e. NMED TPH screening guideline for kerosene and jet fuel for potable groundwater.
Shading indicates the analyte was detected.
Bold indicates analyte detected greater than regulatory standard.
ug/L = Micrograms per liter.
DL = Detection limit.
EPA = Environmental Protection Agency.
FT = Feet.
J = Estimated value, concentration is less than LOQ but greater than laboratory method detection limit (DL).
LOQ = Limit of Quantitation.
MCL = Maximum contaminant level.
mg/L = Milligram per liter.
ND = Not detected.
NE = Not established.
NMAC = New Mexico Administrative Code.
NMED = New Mexico Environment Department.
REG = Regular sample.
RSL = Regional Screening Level.
TPH = Total petroleum hydrocarbons.
U = Analyte was not detected. The reported numerical value is at or below the LOQ.
UJ = Analyte was tentatively not detected. The reported numerical value is at or below the LOQ.
VAL QUAL = Validation Qualifier.
VOC = Volatile organic compound.

Table 5 Groundwater Analytical Results

					Sample Type	First Biweekly GW Sample				Second Biweekly GW Sample				Third Biweekly GW Sample				Fourth Biweekly GW Sample			
					Location Code	KAFB-10817				KAFB-10817				KAFB-10817				KAFB-10817			
					Sample Number	GW1887				GW1888				GW1889				GW1890			
					Sample Date	6-Aug-14				20-Aug-14				3-Sep-14				17-Sep-14			
					Sample Purpose	REG				REG				REG				REG			
					Sample Depth	482-507 FT				482-507 FT				482-507 FT				482-507 FT			
Chemical Class & Analytical Method[a]	Parameter	EPA MCL[b]	NMED Approved Background[c]	Groundwater Protection Standards (NMAC 20.6.2.3103)[d]	EPA Tap Water RSLs[e]	Result	VAL QUAL	LOQ	DL	Result	VAL QUAL	LOQ	DL	Result	VAL QUAL	LOQ	DL	Result	VAL QUAL	LOQ	DL
EDB (µg/L) Method 8011	1,2-DIBROMOETHANE	0.05	NE	0.1	0.0075	0.294		0.0277	0.00922	0.280		0.0282	0.0094	0.347		0.0277	0.00925	0.178		0.0281	0.00937
Anions (mg/L) Method E300.0	SULFATE	NE	NE	800	NE	35.2		2.5	0.33	35.7		2.5	0.33	35.3		2.5	0.33	35.1		2.5	0.33
	SULFIDE, TOTAL	NE	NE	NE	NE	ND	U	3.92	0.784	ND	U	4	0.8	ND	U	3.45	0.69	ND	U	3.77	0.755
Metals (mg/L) Method 6010B	IRON	NE	NE	1	14	ND	U	0.1	0.03	ND	U	0.1	0.03	ND	U	0.1	0.03	ND	U	0.1	0.03
TPH (mg/L) Method 8015B	DIESEL RANGE ORGANICS	NE	NE	0.55*	NE	0.141	J	0.4	0.1	ND	U	0.4	0.1	0.202	J	0.377	0.0943	ND	U	0.408	0.102
	GASOLINE RANGE ORGANICS	NE	NE	0.55*	NE	0.0608	J	0.15	0.05	ND	U	0.15	0.05	0.0421	J	0.15	0.05	ND	U	0.15	0.05
VOCs (µg/L) Method 8260B	1,1,1,2-TETRACHLOROETHANE	NE	NE	NE	0.57	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,1,1-TRICHLOROETHANE	200	NE	60	8000	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,1,2,2-TETRACHLOROETHANE	NE	NE	10	0.076	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,1,2-TRICHLOROETHANE	5	NE	10	0.28	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,1-DICHLOROETHANE	NE	NE	25	2.7	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,1-DICHLOROETHENE	7	NE	5	280	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,1-DICHLOROPROPENE	NE	NE	NE	NE	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,2,3-TRICHLOROBENZENE	NE	NE	NE	7	ND	U	2	0.25	ND	U	2	0.25	ND	U	2	0.25	ND	U	2	0.25
	1,2,3-TRICHLOROPROPANE	NE	NE	NE	0.00075	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5
	1,2,4-TRICHLOROBENZENE	70	NE	NE	1.1	ND	U	2	0.25	ND	U	2	0.25	ND	U	2	0.25	ND	U	2	0.25
	1,2,4-TRIMETHYLBENZENE	NE	NE	NE	15	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,2-DIBROMO-3-CHLOROPROPANE	0.2	NE	NE	0.00033	ND	U	2	0.5	ND	UJ	2	0.5	ND	U	2	0.5	ND	UJ	2	0.5
	1,2-DIBROMOETHANE	0.05	NE	0.1	0.0075	0.348	J	1	0.25	ND	U	1	0.25	0.0815	J	1	0.25	ND	U	1	0.25
	1,2-DICHLOROBENZENE	600	NE	NE	300	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,2-DICHLOROETHANE	5	NE	10	0.17	0.386	J	1	0.25	0.405	J	1	0.25	0.0785	J	1	0.25	0.0815	J	1	0.25
	1,2-DICHLOROPROPANE	5	NE	NE	0.44	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,3,5-TRIMETHYLBENZENE	NE	NE	NE	120	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,3-DICHLOROBENZENE	NE	NE	NE	NE	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,3-DICHLOROPROPANE	NE	NE	NE	370	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	1,4-DICHLOROBENZENE	75	NE	NE	0.48	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	2,2-DICHLOROPROPANE	NE	NE	NE	NE	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	2-BUTANONE	NE	NE	NE	5600	ND	U	10	2.5	ND	U	10	2.5	ND	U	10	2.5	ND	U	10	2.5
	2-CHLOROTOLUENE	NE	NE	NE	240	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	2-HEXANONE	NE	NE	NE	38	ND	U	5	1.25	ND	U	5	1.25	ND	U	5	1.25	ND	U	5	1.25
	4-CHLOROTOLUENE	NE	NE	NE	250	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	4-METHYL-2-PENTANONE	NE	NE	NE	1200	ND	U	5	1.25	ND	U	5	1.25	ND	U	5	1.25	ND	U	5	1.25
	ACETONE	NE	NE	NE	14000	5.54		10	2.5	2.68	J+	10	2.5	2.28	J	10	2.5	ND	U	10	2.5
	BENZENE	5	NE	10	0.45	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	BROMOBENZENE	NE	NE	NE	62	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	BROMOCHLOROMETHANE	NE	NE	NE	83	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	BROMODICHLOROMETHANE	80	NE	NE	0.13	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	BROMOFORM	80	NE	NE	9.2	ND	UJ	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	BROMOMETHANE	NE	NE	NE	7.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5
	CARBON DISULFIDE	NE	NE	NE	810	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	CARBON TETRACHLORIDE	5	NE	10	0.45	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	CHLOROBENZENE	100	NE	NE	78	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	CHLOROETHANE	NE	NE	NE	21000	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5
	CHLOROFORM	80	NE	100	0.22	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	CHLOROMETHANE	NE	NE	NE	190	ND	U	1	0.25	ND	UJ	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	CIS-1,2-DICHLOROETHENE	70	NE	NE	36	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	CIS-1,3-DICHLOROPROPENE	NE	NE	NE	NE	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	DIBROMOCHLOROMETHANE	80	NE	NE	0.17	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	DIBROMOMETHANE	NE	NE	NE	8	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	DICHLORODIFLUOROMETHANE	NE	NE	NE	200	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5
	ETHYLBENZENE	700	NE	750	1.5	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	HEXACHLOROBUTADIENE	NE	NE	NE	0.3	ND	U	2	0.25	ND	U	2	0.25	ND	U	2	0.25	ND	U	2	0.25
	ISOPROPYLBENZENE	NE	NE	NE	450	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	METHYL TERT-BUTYL ETHER	NE	NE	NE	14	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	METHYLENE CHLORIDE	5	NE	100	11	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5
	NAPHTHALENE	NE	NE	30	0.17	ND	UJ	2	0.25	ND	U	2	0.25	ND	U	2	0.25	ND	U	2	0.25
	N-BUTYLBENZENE	NE	NE	NE	1000	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	N-PROPYLBENZENE	NE	NE	NE	860	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	P-ISOPROPYLTOLUENE	NE	NE	NE	NE	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	SEC-BUTYLBENZENE	NE	NE	NE	2000	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	STYRENE	100	NE	NE	1200	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	TERT-BUTYLBENZENE	NE	NE	NE	690	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	TETRACHLOROETHENE	5	NE	20	11	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	TOLUENE	1000	NE	750	1100	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	TRANS-1,2-DICHLOROETHENE	100	NE	NE	360	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25

Table 5 Groundwater Analytical Results

				Sample Type	First Biweekly GW Sample				Second Biweekly GW Sample				Third Biweekly GW Sample				Fourth Biweekly GW Sample			
				Location Code	KAFB-10817				KAFB-10817				KAFB-10817				KAFB-10817			
				Sample Number	GW1687				GW1688				GW1689				GW1690			
				Sample Date	6-Aug-14				20-Aug-14				3-Sep-14				17-Sep-14			
				Sample Purpose	REG				REG				REG				REG			
				Sample Depth	482-507 FT				482-507 FT				482-507 FT				482-507 FT			
Chemical Class & Analytical Method[a]	Parameter	EPA MCL[b]	NMED Approved Background[c]	Groundwater Protection Standards (NMAC 20.6.2.3103)[d]	EPA Tap Water RSL[e]	Result	VAL QUAL	LOQ	DL	Result	VAL QUAL	LOQ	DL	Result	VAL QUAL	LOQ	DL	Result	VAL QUAL	LOQ	DL
VOCs (µg/L)	TRANS-1,3-DICHLOROPROPENE	NE	NE	NE	NE	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
Method 8260B	TRICHLOROETHENE	5	NE	100	0.49	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	TRICHLOROFLUOROMETHANE	NE	NE	NE	1100	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5	ND	U	2	0.5
	VINYL CHLORIDE	2	NE	1	0.019	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25	ND	U	1	0.25
	XYLENES	10000	NE	620	190	ND	U	3	0.75	ND	U	3	0.75	ND	U	3	0.75	ND	U	3	0.75

a. EPA analytical methods listed are for the most recent sampling event.
b. U.S. Environmental Protection Agency (EPA), 2010a, National Primary Drinking Water Regulations: List of Drinki
c. NMED-HWB Approved Background Concentrations, SNL/Kirtland AFB, Chemical Constituents in Ground Water.
d. New Mexico Water Quality Control Commission, Water Quality Standards, New Mexico Administrative Code 20.6
e. NMED TPH screening guideline for kerosene and jet fuel for potable groundwater.
Shading indicates the analyte was detected.
Bold indicates analyte detected greater than regulatory standard.
ug/L = Microgram per liter.
DL = Detection limit.
EPA = Environmental Protection Agency
FT = Feet.
J = Estimated value, concentration is less than LOQ but greater than laboratory method detection limit (DL).
LOQ = Limit of Quantitation.
MCL = Maximum contaminant level.
mg/L = Milligram per liter.
ND = Not detected.
NE = Not established.
NMAC = New Mexico Administrative Code.
NMED = New Mexico Environment Department.
REG = Regular sample.
RSL = Regional Screening Level.
TPH = Total petroleum hydrocarbons.
U = Analyte was not detected. The reported numerical value is at or below the LOQ.
UJ = Analyte was tentatively not detected. The reported numerical value is at or below the LOQ.
VAL QUAL = Validation Qualifier.
VOC = Volatile organic compound.

Table 6 Soil-Vapor Analytical Results

	Sample Type	Baseline SV Sample				July Monthly SV Sample								Exhaust - Wellhead (July)
	Location Code	KAFB-106211				KAFB-106211				KAFB-106211-GAC				
	Sample Number	VA9133[a]				VA9134-R[a]				VA9145[b]				
	Sample Date	21-Jun-14				7-Aug-14				7-Aug-14				
	Sample Purpose	REG				REG				REG				
	Sample Depth	0 - 0.01 FT				0 - 0.02 FT				0 - 0.08 FT				
Chemical Class and Analytical Method[c]	Parameter	Result	VAL QUAL	LOQ	DL	Result	VAL QUAL	LOQ	DL	Result	VAL QUAL	LOQ	DL	
EDB (ppbv)	1,2-DIBROMOETHANE	0.5		0.85	0.1	ND	U	0.85	0.1	ND	U	0.8	0.09	
Fixed Gases (percent) Method E3C	CARBON DIOXIDE	ND	U	0.17	0.17	0.137		0.17	0.17	0.17		0.16	0.16	0.033
	CARBON MONOXIDE	ND	U	0.17	0.17	ND	U	0.17	0.17	ND	U	0.16	0.16	
	METHANE	ND	U	0.17	0.17	ND	U	0.17	0.17	ND	U	0.16	0.16	
	NITROGEN	79.1		0.17	0.17	78.1		0.17	0.17	78.2		0.16	0.16	0.1
	OXYGEN	21.8		0.17	0.17	21.6		0.17	0.17	21.7		0.16	0.16	-0.1
TPH (µg/m³) Method MADEP APH	C5-C8 ALIPHATIC HYDROCARBONS	85,000		1400	1400	ND	U	170	170	ND	U	250	250	
	C9-C10 AROMATIC HYDROCARBONS	180		170	170	ND	U	21	21	ND	U	32	32	
	C9-C12 ALIPHATIC HYDROCARBONS	8,000		680	680	100		85	85	540		130	130	440
VOCs (ppbv) Method TO15	1,1,1-TRICHLOROETHANE	ND	U	6.2	2.1	ND	U	0.77	0.26	ND	U	1.2	0.4	
	1,1,2,2-TETRACHLOROETHANE	ND	U	5	1.5	ND	U	0.62	0.18	ND	U	0.93	0.28	
	1,1,2-TRICHLOROETHANE	ND	U	6.2	2	ND	U	0.77	0.25	ND	U	1.2	0.37	
	1,1-DICHLOROETHANE	ND	U	8.4	2.7	ND	U	1	0.33	ND	U	1.6	0.5	
	1,1-DICHLOROETHENE	ND	U	8.6	2.9	ND	U	1.1	0.36	ND	U	1.6	0.55	
	1,2,4-TRICHLOROBENZENE	ND	U	4.6	1.5	ND	U	0.57	0.18	ND	U	0.86	0.27	
	1,2,4-TRIMETHYLBENZENE	4.7	J	6.9	2.1	0.27	J	0.86	0.26	ND	U	1.3	0.39	
	1,2-DIBROMOETHANE	5.9		4.4	1.4	ND	U	0.55	0.18	ND	U	0.83	0.26	
	1,2-DICHLOROBENZENE	ND	U	5.7	1.7	ND	U	0.7	0.21	ND	U	1.1	0.32	
	1,2-DICHLOROETHANE	ND	U	8.4	2.7	ND	U	1	0.33	ND	U	1.6	0.5	
	1,2-DICHLOROPROPANE	ND	U	7.4	2.4	ND	U	0.91	0.29	ND	U	1.4	0.44	
	1,3,5-TRIMETHYLBENZENE	3.6	J	6.9	2.2	ND	U	0.86	0.28	ND	U	1.3	0.41	
	1,3-DICHLOROBENZENE	ND	U	5.7	1.7	ND	U	0.7	0.21	ND	U	1.1	0.32	
	1,4-DICHLOROBENZENE	ND	U	5.7	1.6	ND	U	0.7	0.2	ND	U	1.1	0.3	
	2-BUTANONE	100		120	4.8	1.8	J	14	0.6	150	J	22	0.91	148.4
	2-HEXANONE	ND	U	8.3	2.7	ND	U	1	0.33	1.4	J	1.6	0.5	
	4-METHYL-2-PENTANONE	8.5		8.3	2.7	ND	U	1	0.33	ND	U	1.6	0.5	
	ACETONE	510		140	22	17	J	18	2.7	250	J	27	4.1	243
	BENZENE	460		11	3.4	3.4		1.3	0.42	ND	U	2	0.64	
	BENZENE, (CHLOROMETHYL)-	ND	U	6.6	1.4	ND	U	0.82	0.18	ND	U	1.2	0.27	
	BROMODICHLOROMETHANE	ND	U	5.1	1.5	ND	U	0.63	0.19	ND	U	0.95	0.28	
	BROMOFORM	ND	U	3.3	0.99	ND	U	0.41	0.12	ND	U	0.62	0.18	
	BROMOMETHANE	ND	U	8.8	3.3	ND	U	1.1	0.41	ND	U	1.6	0.62	
	CARBON DISULFIDE	10	J	110	3.3	ND	U	14	0.41	ND	U	20	0.61	
	CARBON TETRACHLORIDE	ND	U	5.4	1.6	ND	U	0.67	0.2	ND	U	1	0.3	
	CHLOROBENZENE	ND	U	7.4	2.4	ND	U	0.92	0.29	ND	U	1.4	0.44	
	CHLOROETHANE	ND	U	13	4.4	ND	U	1.6	0.54	ND	U	2.4	0.82	
	CHLOROFORM	ND	U	7	2.4	ND	U	0.87	0.29	ND	U	1.3	0.44	
	CHLOROMETHANE	ND	U	16	4.9	ND	U	2	0.61	ND	U	3.1	0.92	
	CIS-1,2-DICHLOROETHENE	ND	U	8.6	2.7	ND	U	1.1	0.34	ND	U	1.6	0.51	
	CIS-1,3-DICHLOROPROPENE	ND	U	7.5	2.1	ND	U	0.93	0.26	ND	U	1.4	0.39	
	CYCLOHEXANE	600		20	5.7	ND	U	2.5	0.71	ND	U	3.7	1.1	
	DIBROMOCHLOROMETHANE	ND	U	4	1.3	ND	U	0.5	0.16	ND	U	0.75	0.24	
	DICHLORODIFLUOROMETHANE	ND	U	6.9	2.3	5.4	J	0.85	0.29	0.47	J	1.3	0.44	0.07
	ERYTHRENE	ND	U	15	6.6	ND	U	1.9	0.84	ND	U	2.9	1.3	
	ETHYL ACETATE	ND	U	19	6.6	ND	U	2.3	0.82	ND	U	3.5	1.2	
	ETHYLBENZENE	79		7.8	2.5	0.45	J	0.97	0.31	0.78	J	1.5	0.47	0.28
	FREON 113 (1,1,2-TRICHLORO-1,2,2-TRIFLOUROETHANE)	ND	U	4.4	1.5	ND	U	0.55	0.19	ND	U	0.83	0.28	

Table 6 Soil-Vapor Analytical Results

	Sample Type	Baseline SV Sample				July Monthly SV Sample								Exhaust - Wellhead (July)
	Location Code	KAFB-106211				KAFB-106211				KAFB-106211-GAC				
	Sample Number	VA9133[a]				VA9134-R[a]				VA9145[b]				
	Sample Date	21-Jun-14				7-Aug-14				7-Aug-14				
	Sample Purpose	REG				REG				REG				
	Sample Depth	0 - 0.01 FT				0 - 0.02 FT				0 - 0.08 FT				
Chemical Class and Analytical Method[c]	Parameter	Result	VAL QUAL	LOQ	DL	Result	VAL QUAL	LOQ	DL	Result	VAL QUAL	LOQ	DL	
VOCs (ppbv) Method TO15	HEPTANE	870		8.3	2.8	0.3	J	1	0.35	1	J	1.6	0.53	0.5
	HEXACHLOROBUTADIENE	ND	U	3.2	0.89	ND	U	0.4	0.11	ND	U	0.6	0.17	
	HEXANE	420		9.7	2.9	ND	U	1.2	0.36	ND	U	1.8	0.54	
	M,P-XYLENES	190		16	4.7	1.3	J	1.9	0.58	1.1	J	2.9	0.88	-0.2
	METHYL TERT-BUTYL ETHER	ND	U	9.4	3.2	ND	U	1.2	0.4	ND	U	1.8	0.6	
	METHYLENE CHLORIDE	ND	U	9.8	3.3	ND	U	1.2	0.41	ND	U	1.8	0.62	
	NAPHTHALENE	ND	U	6.5	2.3	ND	U	0.81	0.29	ND	U	1.2	0.44	
	O-XYLENE	52		7.8	2.3	0.53	J	0.97	0.29	0.48	J	1.5	0.44	-0.07
	PROPYLENE	ND	U	20	5.5	ND	U	2.5	0.69	4.2		3.7	1	
	STYRENE	ND	U	8	2.4	0.8	J	0.99	0.3	ND	U	1.5	0.45	
	TETRACHLOROETHENE	ND	U	5	1.4	ND	U	0.62	0.17	ND	U	0.94	0.26	
	THF	11	J	12	4.6	0.6	J	1.4	0.57	870	J	5.4	2.2	819.4
	TOLUENE	1,900		9	3.1	3.9		1.1	0.38	27		1.7	0.57	23.1
	TRANS-1,2-DICHLOROETHENE	ND	U	8.6	3.3	ND	U	1.1	0.41	ND	U	1.6	0.61	
	TRANS-1,3-DICHLOROPROPENE	ND	U	7.5	2.4	ND	U	0.93	0.3	ND	U	1.4	0.45	
	TRICHLOROETHENE	ND	U	6.3	1.8	ND	U	0.79	0.22	ND	U	1.2	0.33	
	TRICHLOROFLUOROMETHANE	ND	U	6.1	2.1	ND	U	0.75	0.26	ND	U	1.1	0.38	
	VINYL ACETATE	ND	U	97	13	ND	U	12	1.6	ND	U	18	2.3	
	VINYL CHLORIDE	ND	U	13	4.5	ND	U	1.7	0.56	ND	U	2.5	0.85	
	XYLENES	240		16	4.7	1.8	J	1.9	0.58	1.6	J	2.9	0.88	

[a] Soil-vapor sample was collected at the SVE wellhead.
[b] Soil-vapor sample was collected at the GAC exhaust.
[c] EPA analytical methods listed are for the most recent sampling event.
Shading indicates the analyte was detected.
GAC = Granulated activated carbon.
DL = Detection limit.
FT = Feet.
J = Estimated value, concentration is less than LOQ but greater than laboratory method detection limit (DL).
KAFB = Kirtland Air Force Base.
LOQ = Reporting limit.
ND = Not detected.
ppbv = Parts per billion by volume.
REG = Regular sample.
SV = Soil-vapor.
TPH = Total petroleum hydrocarbon.
U = Analyte was not detected. The reported numerical value is at or below the DL.
VAL QUAL = Validation qualifier.
VOC = Volatile organic compound.

Table 6 Soil-Vapor Analytical Results

	Sample Type	August Monthly SV Sample								Exhaust - Wellhead (August)
	Location Code	KAFB-106211				KAFB-106211-GAC				
	Sample Number	VA9135[a]				VA9146[b]				
	Sample Date	27-Aug-14				27-Aug-14				
	Sample Purpose	REG				REG				
	Sample Depth	0 - 0.03 FT				0 - 0.01 FT				
Chemical Class and Analytical Method[c]	Parameter	Result	VAL QUAL	LOQ	DL	Result	VAL QUAL	LOQ	DL	
EDB (ppbv)	1,2-DIBROMOETHANE	ND	U	0.8	0.094	ND	U	0.8	0.094	
Fixed Gases (percent) Method E3C	CARBON DIOXIDE	0.130		0.16	0.16	0.21		0.16	0.16	0.082
	CARBON MONOXIDE	ND	U	0.16	0.16	ND	U	0.16	0.16	
	METHANE	ND	U	0.16	0.16	ND	U	0.16	0.16	
	NITROGEN	78		0.16	0.16	78		0.16	0.16	0
	OXYGEN	21.8		0.16	0.16	21.8		0.16	0.16	-0.1
TPH ($\mu g/m^3$) Method MADEP APH	C5-C8 ALIPHATIC HYDROCARBONS	202		160	160	240		160	160	40
	C9-C10 AROMATIC HYDROCARBONS	ND	U	20	20	22		20	20	22
	C9-C12 ALIPHATIC HYDROCARBONS	98		80	80	320		80	80	230
VOCs (ppbv) Method TO15	1,1,1-TRICHLOROETHANE	ND	U	0.73	0.25	ND	U	0.73	0.25	
	1,1,2,2-TETRACHLOROETHANE	ND	U	0.58	0.17	ND	U	0.58	0.17	
	1,1,2-TRICHLOROETHANE	ND	U	0.73	0.23	ND	U	0.73	0.23	
	1,1-DICHLOROETHANE	ND	U	0.98	0.31	ND	U	0.98	0.31	
	1,1-DICHLOROETHENE	ND	U	1	0.34	ND	U	1	0.34	
	1,2,4-TRICHLOROBENZENE	ND	U	0.54	0.17	ND	U	0.54	0.17	
	1,2,4-TRIMETHYLBENZENE	0.71	J	0.81	0.24	0.76	J	0.81	0.24	0.05
	1,2-DIBROMOETHANE	ND	U	0.52	0.17	ND	U	0.52	0.17	
	1,2-DICHLOROBENZENE	ND	U	0.66	0.2	ND	U	0.66	0.2	
	1,2-DICHLOROETHANE	ND	U	0.98	0.31	ND	U	0.98	0.31	
	1,2-DICHLOROPROPANE	ND	U	0.86	0.28	ND	U	0.86	0.28	
	1,3,5-TRIMETHYLBENZENE	0.29	J	0.81	0.26	0.29	J	0.81	0.26	0.03
	1,3-DICHLOROBENZENE	ND	U	0.66	0.2	ND	U	0.66	0.2	
	1,4-DICHLOROBENZENE	ND	U	0.66	0.19	ND	U	0.66	0.19	
	2-BUTANONE	8.4	J	13	0.57	7.3	J	13	0.57	4.8
	2-HEXANONE	0.38	J	0.97	0.31	0.5	J	0.97	0.31	0.14
	4-METHYL-2-PENTANONE	ND	U	0.97	0.31	ND	U	0.97	0.31	
	ACETONE	15	J	17	2.6	24		17	2.6	9
	BENZENE	3.4		1.2	0.4	0.63	J	1.2	0.4	-2.77
	BENZENE, (CHLOROMETHYL)-	ND	U	0.77	0.17	ND	U	0.77	0.17	
	BROMODICHLOROMETHANE	ND	U	0.59	0.18	ND	U	0.59	0.18	
	BROMOFORM	ND	U	0.38	0.12	ND	U	0.38	0.12	
	BROMOMETHANE	ND	U	1	0.39	ND	U	1	0.39	
	CARBON DISULFIDE	ND	U	13	0.38	2.8	J	13	0.38	2.8
	CARBON TETRACHLORIDE	ND	U	0.63	0.19	ND	U	0.63	0.19	
	CHLOROBENZENE	ND	U	0.86	0.28	ND	U	0.86	0.28	
	CHLOROETHANE	ND	U	1.5	0.51	ND	U	1.5	0.51	
	CHLOROFORM	ND	U	0.81	0.28	ND	U	0.81	0.28	
	CHLOROMETHANE	ND	U	1.9	0.58	ND	U	1.9	0.58	
	CIS-1,2-DICHLOROETHENE	ND	U	1	0.32	ND	U	1	0.32	
	CIS-1,3-DICHLOROPROPENE	ND	U	0.88	0.25	ND	U	0.88	0.25	
	CYCLOHEXANE	ND	U	2.3	0.67	ND	U	2.3	0.67	
	DIBROMOCHLOROMETHANE	ND	U	0.47	0.15	ND	U	0.47	0.15	
	DICHLORODIFLUOROMETHANE	0.47	J	0.8	0.27	0.55	J	0.8	0.27	0.08
	ERYTHRENE	ND	U	1.8	0.79	ND	U	1.8	0.79	
	ETHYL ACETATE	ND	U	2.2	0.77	ND	U	2.2	0.77	
	ETHYLBENZENE	0.82	J	0.92	0.29	0.52	J	0.92	0.29	0
	FREON 113 (1,1,2-TRICHLORO-1,2,2-TRIFLOUROETHANE)	ND	U	0.52	0.18	ND	U	0.52	0.18	

Table 6 Soil-Vapor Analytical Results

	Sample Type	August Monthly SV Sample								Exhaust - Wellhead (August)
	Location Code	KAFB-106211				KAFB-106211-GAC				
	Sample Number	VA9135[a]				VA9146[b]				
	Sample Date	27-Aug-14				27-Aug-14				
	Sample Purpose	REG				REG				
	Sample Depth	0 - 0.03 FT				0 - 0.01 FT				
Chemical Class and Analytical Method[c]	Parameter	Result	VAL QUAL	LOQ	DL	Result	VAL QUAL	LOQ	DL	
VOCs (ppbv) Method	HEPTANE	0.47	J	0.97	0.33	0.53	J	0.97	0.33	0.06
TO15	HEXACHLOROBUTADIENE	ND	U	0.37	0.1	ND	U	0.37	0.1	
	HEXANE	ND	U	1.1	0.34	ND	U	1.1	0.34	
	M,P-XYLENES	1.9		1.8	0.55	2		1.8	0.55	0.1
	METHYL TERT-BUTYL ETHER	ND	U	1.1	0.38	ND	U	1.1	0.38	
	METHYLENE CHLORIDE	ND	U	1.1	0.39	ND	U	1.1	0.39	
	NAPHTHALENE	ND	U	0.76	0.27	3.9		0.76	0.27	3.9
	O-XYLENE	0.89		0.92	0.27	0.96		0.92	0.27	-0.03
	PROPYLENE	0.83	J	2.3	0.65	1.1	J	2.3	0.65	0.27
	STYRENE	ND	U	0.93	0.28	ND	U	0.93	0.28	
	TETRACHLOROETHENE	ND	U	0.59	0.16	ND	U	0.59	0.16	
	THF	0.98	J	1.3	0.54	26		1.3	0.54	25.14
	TOLUENE	3.7		1.1	0.36	4.8		1.1	0.36	1.1
	TRANS-1,2-DICHLOROETHENE	ND	U	1	0.38	ND	U	1	0.38	
	TRANS-1,3-DICHLOROPROPENE	ND	U	0.88	0.28	ND	U	0.88	0.28	
	TRICHLOROETHENE	ND	U	0.74	0.21	ND	U	0.74	0.21	
	TRICHLOROFLUOROMETHANE	0.27	J	0.71	0.24	ND	U	0.71	0.24	
	VINYL ACETATE	ND	U	11	1.5	ND	U	11	1.5	
	VINYL CHLORIDE	ND	U	1.6	0.53	ND	U	1.6	0.53	
	XYLENES	2.9		1.8	0.55	2.9		1.8	0.55	0

[a] Soil-vapor sample was collected at the SVE wellhead.
[b] Soil-vapor sample was collected at the GAC exhaust.
[c] EPA analytical methods listed are for the most recent sampling event.
Shading indicates the analyte was detected.
GAC = Granulated activated carbon.
DL = Detection limit.
FT = Feet.
J = Estimated value, concentration is less than LOQ but greater than laboratory method detec
KAFB = Kirtland Air Force Base.
LOQ = Reporting limit.
ND = Not detected.
ppbv = Parts per billion by volume.
REG = Regular sample.
SV = Soil-vapor.
TPH = Total petroleum hydrocarbon.
U = Analyte was not detected. The reported numerical value is at or below the DL.
VAL QUAL = Validation qualifier.
VOC = Volatile organic compound.