



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS 377TH AIR BASE WING (AFMC)

ENTERED



APR 02 2012

Colonel John C. Kubinec  
377 ABW/CC  
2000 Wyoming Blvd SE  
Kirtland AFB NM 87117-5600

Mr. John Kieling, Manager  
RCRA Permits Management Program  
Hazardous Waste Bureau (HWB)  
New Mexico Environment Department (NMED)  
2905 Rodeo Park Road  
Santa Fe New Mexico 87505

Dear Mr. Kieling

Attached please find *Additional Groundwater Monitoring Wells (GMW), Addendum to Groundwater Investigation Work Plan (GIWP), March 2011, Bulk Fuels Facility Spill, Solid Waste Management Units ST-106 and SS-111, Kirtland Air Force Base, New Mexico, dated March 16, 2012*. The letter addendum discusses a proposal to install three (3) additional shallow groundwater monitoring wells in order to address data gaps identified in the characterization of the dissolved-phase groundwater plume. Included in the proposal is information detailing the correlation between 1, 2-dibromomethane (EDB) detections in shallow wells whenever detections were observed in intermediate and deep wells in accordance with the request 15 February 2012 by Dr. Jim Davis.

Please contact Mr. Wayne L. Bitner at (505) 853-3484 or at [ludie.bitner@kirtland.af.mil](mailto:ludie.bitner@kirtland.af.mil) or Ms. Victoria R. Martinez at (505) 846-6362 or at [victoria.martinez@kirtland.af.mil](mailto:victoria.martinez@kirtland.af.mil) if you have any questions.

Sincerely

  
JOHN C. KUBINEC, Colonel, USAF  
Commander

Attachment:  
March 16, 2012, Additional GMW, Addendum to GIWP, March 2011



cc:

NMED-RPD (Davis), w/out attach

NMED-HWB (Moats, McDonald, Salem, Brandwein), w/ attach

NMED-GWQB (J. Schoepner), w/ attach

NMED-OGC (L. Barnhart), w/out attach

EPA Region 6 (L. King), w/out attach

AFCEE/CMSE (Mr. Oyelowo), w/out attach

/EXEC (Mr. Urrutia), w/out attach

Public Info Repository (Central New Mexico), w/ attach

Administrative Record/Information Repository (AR/IR), w/ attach


File, w/ attach

**40 CFR 270.11  
DOCUMENT CERTIFICATION  
March 2012**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

  
\_\_\_\_\_  
JOHN C. KUBINEC, Colonel, USAF  
Commander

This document has been approved for public release.

  
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KIRTLAND AIR FORCE BASE  
377 ABW Public Affairs



March 16, 2012

**Subject: Additional Groundwater Monitoring Wells  
Addendum to Groundwater Investigation Work Plan, March 2011  
Bulk Fuels Facility Spill, Solid Waste Management Units ST-106 and SS-111  
Kirtland Air Force Base, New Mexico**

This letter is being submitted as an addendum to the Groundwater Investigation Work Plan, prepared by Shaw Environmental and Infrastructure, Inc. (Shaw) for the U.S. Army Corps of Engineers (USACE) under contract W912DY-10-D-0014, Delivery Order 0002. This letter describes Shaw's proposal to install three additional groundwater monitoring wells in order to address data gaps identified in the characterization of the dissolved-phase groundwater plume as part of the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) for groundwater.

During the analysis and evaluation of data collected during the Third Quarter 2011 (July – August) sampling event, it was determined that additional data is needed at the downgradient portion of the 1,2-dibromomethane (EDB) dissolved phase plume. Concentrations of EDB were greater than the maximum contaminant level (MCL) in the northeastern most groundwater monitoring wells (Figure 1).

As part of the evaluation, Shaw conducted an internal review of data which included site-specific data collected as part of the Groundwater Investigation Work Plan. This data includes hydraulic conductivity obtained from slug tests performed on 38 monitoring wells, bucket sample analyses for the screened interval of each groundwater monitoring well, lithology logs, and the results of the pumping test conducted at the Nitrate Abatement site that were included in the model. Shaw obtained recent, daily pumping rates for Ridgecrest Wells 3 and 5, as well as for KAFB-3, to evaluate the influence of the three water supply wells on the movement of the downgradient plume. Additionally, the United States Geological Survey (USGS) has continuous recording water level piezometers in the vicinity of the site and the data from these wells were evaluated. Figure 2 is a plot of the USGS water level contours from 2002 monitoring well data. This map illustrates that the general groundwater flow direction, and therefore the direction of flow for the dissolved phase EDB plume, is north-northeast towards the Ridgecrest 5 water supply well. This conceptual model is consistent with 2011 water levels measured in new wells at the site. These data, as well as numerical model-predicted flow contours, are presented in Figure 3.

Table 1 summarizes the EDB data from Fourth Quarter 2011 for all of the groundwater monitoring wells; the Fourth Quarter 2011 is the first dataset with data from all newly installed groundwater monitoring wells. EDB was detected in 16 shallow groundwater monitoring wells, 13 intermediate wells, and 2 deep wells. The two deep wells with detected concentrations of EDB are KAFB-106037 and KAFB-106058 and in both cases, there are also detected EDB concentrations in the shallow and intermediate wells of the clusters. Only one cluster (GWM-22) has an intermediate detection of EDB and no detection of EDB in the shallow monitoring well. All remaining 27 clusters also have shallow EDB concentrations where there is intermediate and deep detections of EDB. Clusters located in the plume core indicate that there is minimal to no vertical EDB gradients between the shallow, intermediate, and deep well intervals. Wells located outside of the plume core have concentrations of EDB in the three intervals that are on average  $\pm 0.2 \mu\text{g/L}$ . The largest upward EDB gradient in the wells outside of the plume core is observed at cluster GWM 15 between the shallow (KAFB-106070) and intermediate (KAFB106072) wells and is on the order of 1.1; no

EDB was detected in the deep well at this cluster location. The trends observed in the Fourth Quarter 2011 data shows similar trends at each individual well cluster in the previous quarterly data (Third Quarter 2011).

Table 5-1 from the Fourth Quarter 2011 report is included as Attachment A to this letter. This table includes the complete groundwater monitoring analytical data for Fourth Quarter 2011.

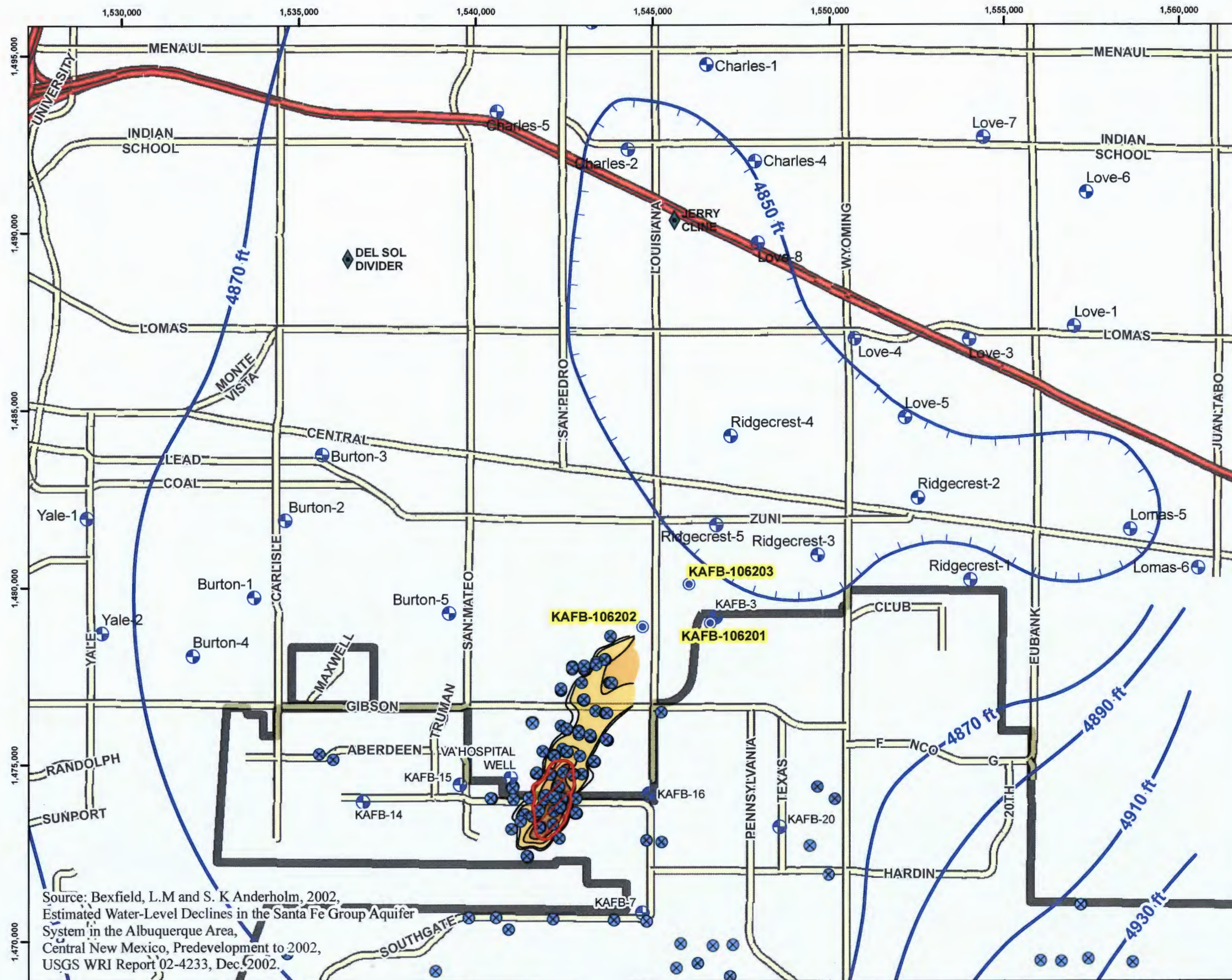
The USGS 2002 water level data (Figure 2) was used to inform the placement of the proposed locations of the additional groundwater monitoring wells (Figure 3). There are no existing monitoring wells in the vicinity of the three water supply wells of interest (Ridgecrest wells 3 and 5 and KAFB-3) and therefore additional data is required to verify groundwater elevations near the wells. Additionally, there is no monitoring well data for EDB in that area and additional data is required to verify the simulated current conditions with regard to the extent of the EDB plume.

Figure 3 illustrates the proposed locations of three new groundwater monitoring wells (KAFB-106201, -106202, and -106203). Shaw proposes drilling and installing the wells with the same construction as the shallow groundwater monitoring wells, as described in Sections 4.2.3 and 4.2.4 of the Groundwater Investigation Work Plan. The well construction will include the change to a 30-foot screen length as approved in the 24 June 2011 New Mexico Environment Department (NMED) letter. Each of the three wells will be geophysically logged following Section 4.2.5 of the work plan.

Once installed and developed, the wells will be integrated into the monitoring well program and sampled on a quarterly basis. Dedicated pumps will be installed in the three new wells.

Pneumatic slug testing will be conducted at each of the three new wells, in accordance with Section 5.1.2 of the LNAPL Containment Interim Measures Work Plan Part I – Characterization. The data of the slug tests will be analyzed to determine hydraulic conductivity values.

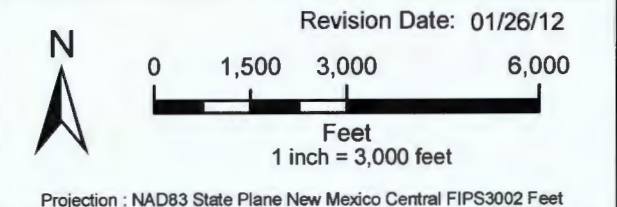
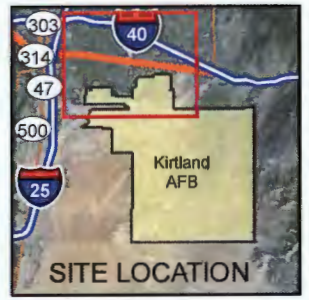




Source: Bexfield, L.M and S. K. Anderholm, 2002, Estimated Water-Level Declines in the Santa Fe Group Aquifer System in the Albuquerque Area, Central New Mexico, Predevelopment to 2002, USGS WRI Report 02-4233, Dec. 2002.

**Legend**

- Detection Piezometer
- ◆ USGS Piezometer Cluster
- Historical Area of Observed NAPL (July 2009)
- USGS Water Level Contours 2002**
- Contour
- Closed Contour
- ⊕ Water Supply Well
- ⊗ Monitor Well
- EDB Concentration (ug/L)
- 0.05 - 0.1
- 0.1 - 1
- 1.0 - 10
- 10 - 100
- 100 - 370
- Interstate
- Major Road
- Installation Boundary



Projection : NAD83 State Plane New Mexico Central FIPS3002 Feet

BULK FUELS FACILITY  
KIRTLAND AIR FORCE BASE, NEW MEXICO

**FIGURE 2**

2002 REGIONAL WATER  
LEVEL ELEVATIONS, USGS





**Table 1. EDB Concentration Comparison – Fourth Quarter 2011**

NMED GMW Locations	Well ID	Interval	EDB Sample Result Oct-Dec 2011 (µg/kg)	Validation Qualifier	Δ Shallow/ Intermediate	Δ Intermediate/ Deep	Notes
3	KAFB-106035	Shallow	0.43		0.15	0.036	
	KAFB-106036	Intermediate	0.277				
	KAFB-106037	Deep	0.241				
5	KAFB-106041*	Not Measured			NA	NA	*KAFB-106041 was not sampled (dry well)
	KAFB-106042	Shallow	0.645	J+			
	KAFB-106043	Deep	ND	U			
10	KAFB-106055	Shallow	0.645		-0.125	0.204	
	KAFB-106057	Intermediate	0.77				
	KAFB-106058	Deep	0.566				
11	KAFB-106059	Shallow	186		NA	NA	
	KAFB-106060	Intermediate	ND	U			
	KAFB-106061	Deep	ND	U			
12	KAFB-106064	Shallow	5.26		NA	NA	
	KAFB-106063	Intermediate	ND	U			
	KAFB-106062	Deep	ND	U			
13	KAFB-10628	Shallow	8.42		NA	NA	
	KAFB-106065	Intermediate	ND	U			
	KAFB-106066	Deep	ND	U			
14	KAFB-106067	Shallow	0.097		-0.120	NA	
	KAFB-106069	Intermediate	0.217				
	KAFB-106068	Deep	ND	U			
15	KAFB-106070	Shallow	0.0618		-1.08	NA	
	KAFB-106072	Intermediate	1.14				
	KAFB-106071	Deep	ND	U			
16	KAFB-106075	Shallow	0.207		0.154	NA	
	KAFB-106073	Intermediate	0.0531				
	KAFB-106074	Deep	ND	U			
17	KAFB-106076	Shallow	110	D	110	NA	The sample from KAFB-106078 was rejected due to site contamination
	KAFB-106077	Intermediate	0.0208	J			
	KAFB-106078	Deep	R	R			
18	KAFB-106079	Shallow	162		162	NA	
	KAFB-106080	Intermediate	0.246				
	KAFB-106081	Deep	ND	U			
19	KAFB-106082	Shallow	1.01		0.321	NA	
	KAFB-106083	Intermediate	0.689				
	KAFB-106084	Deep	ND	U			
20	KAFB-106085	Shallow	0.0387		-0.513	NA	
	KAFB-106086	Intermediate	0.552				
	KAFB-106087	Deep	ND	U			
21	KAFB-106088	Shallow	0.262		-0.0690	NA	
	KAFB-106089	Intermediate	0.331				
	KAFB-106090	Deep	ND	U			
22	KAFB-106091	Shallow	ND	U	NA	NA	
	KAFB-106092	Intermediate	0.146	J			
	KAFB-106093	Deep	ND	U			

**Table 1. EDB Concentration Comparison – Fourth Quarter 2011 (concluded)**

NMED GMW Locations	Well ID	Interval	EDB Sample Result Oct-Dec 2011 (µg/kg)	Validation Qualifier	Δ Shallow/ Intermediate	Δ Intermediate/ Deep	Notes
23	KAFB-106094	Shallow	<b>2.32</b>		2.28	NA	
	KAFB-106095	Intermediate	0.0375	J			
	KAFB-106096	Deep	ND	U			
28	KAFB-106106	Shallow	<b>0.203</b>	J	0.126	NA	
	KAFB-106105	Intermediate	0.0775	J			
	KAFB-106107	Deep	ND	U			

Plume core groundwater monitoring wells

0.15 Calculated downward EDB gradient

-0.125 Calculated upward EDB gradient

**Bold indicated** analyte detected greater than regulatory standard.

Δ = Delta/difference

EDB Ethylene dibromide.

GMW Groundwater monitoring well.

ID Identification.

J Estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL).

J+ Estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL); biased high.

J- Estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL); biased high.

ND Not detected.

NMED New Mexico Environment Department.

U Analyte was not detected. The reported numerical value is at or below the RL.

UJ Analyte was *tentatively* not detected. The reported numerical value is at or below the RL.

R Sample data rejected due to site contamination.

**ATTACHMENT A**  
**Fourth Quarter 2011 Groundwater Analytical Results**



Table 5-1  
Groundwater Analytical Results  
October - December 2011

Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec 20.6.2.3103) <sup>b</sup>	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>c,d</sup>	KAFB-3		KAFB-15		KAFB-16		KAFB-1061		KAFB-1062		KAFB-1063		KAFB-1064		KAFB-1065		KAFB-1066				
					Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL
SVOCs (µg/L) Method 8270C	1,1-BIPHENYL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	1,2-DIPHENYLHYDRAZINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	2,4,5-TRICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	2,4,6-TRICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	2,4-DICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	2,4-DIMETHYLPHENOL	N/A	N/A	N/A	ND	U	18.9	ND	U	18.5	ND	U	18.7	ND	U	18.9	ND	U	19.2	ND	U	19.2	ND	U	18.9
	2,4-DINITROPHENOL	N/A	N/A	N/A	ND	U	47.2	ND	U	46.3	ND	U	46.7	ND	U	47.2	ND	U	48.1	ND	U	48.1	ND	U	47.2
	2,4-DINITROTOLUENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	2,6-DINITROTOLUENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	2-CHLORONAPHTHALENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	2-CHLOROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	2-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	2-NITROANILINE	N/A	N/A	N/A	ND	U	18.9	ND	U	18.5	ND	U	18.7	ND	U	18.9	ND	U	19.2	ND	U	19.2	ND	U	18.9
	2-NITROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	3,3'-DICHLOROBENZIDINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	3-METHYLPHENOL AND 4-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	3-NITROANILINE	N/A	N/A	N/A	ND	U	18.9	ND	U	18.5	ND	U	18.7	ND	U	18.9	ND	U	19.2	ND	U	19.2	ND	U	18.9
	4,6-DINITRO-2-METHYLPHENOL	N/A	N/A	N/A	ND	U	18.9	ND	U	18.5	ND	U	18.7	ND	U	18.9	ND	U	19.2	ND	U	19.2	ND	U	18.9
	4-BROMOPHENYL PHENYL ETHER	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	4-CHLORO-3-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	4-CHLOROANILINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	4-CHLOROPHENYL PHENYL ETHER	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	4-NITROANILINE	N/A	N/A	N/A	ND	U	18.9	ND	U	18.5	ND	U	18.7	ND	U	18.9	ND	U	19.2	ND	U	19.2	ND	U	18.9
	4-NITROPHENOL	N/A	N/A	N/A	ND	U	18.9	ND	U	18.5	ND	U	18.7	ND	U	18.9	ND	U	19.2	ND	U	19.2	ND	U	18.9
	ACETOPHENONE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	ATRAZINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	BENZALDEHYDE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	BENZIDINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	BENZOIC ACID	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	BIS(2-CHLOROETHOXY)METHANE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	BIS(2-CHLOROETHYL)ETHER	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	BIS(2-CHLOROISOPROPYL)ETHER	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	BIS(2-ETHYLHEXYL)PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	BUTYL BENZYL PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	CAPROLACTAM	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	CARBAZOLE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	DIBENZOFURAN	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	DIETHYL PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	DIMETHYL PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	DI-N-BUTYL PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	DI-N-OCTYL PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	HEXACHLOROBENZENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	HEXACHLOROBUTADIENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	HEXACHLOROCYCLOPENTADIENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	HEXACHLOROETHANE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	ISOPHORONE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	NITROBENZENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	N-NITROSO-DI-N-PROPYLAMINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	N-NITROSDIPHENYLAMINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	PENTACHLOROPHENOL	N/A	N/A	N/A	ND	U	18.9	ND	U	18.5	ND	U	18.7	ND	U	18.9	ND	U	19.2	ND	U	19.2	ND	U	18.9
	PHENOL	N/A	N/A	5	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
PAHs (µg/L) Method 8270C	1-METHYL NAPHTHALENE	N/A	N/A	30	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	2-METHYL NAPHTHALENE	N/A	N/A	30	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
Low detection limit	ACENAPHTHENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81	ND	U	4.72
	ACENAPHTHYLENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.63	ND	U	4.67	ND	U	4.72	ND	U	4.81	ND	U	4.81			

**Table 5-1  
Groundwater Analytical Results  
October - December 2011**

Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec 20.6.2.3103) <sup>b</sup>	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>c,d</sup>	KAFB-3		KAFB-15		KAFB-16		KAFB-1061		KAFB-1062		KAFB-1063		KAFB-1064		KAFB-1065		KAFB-1066										
					Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL						
Metals (mg/L)	CALCIUM	N/A	N/A	N/A	42.6	U	5	30.9	U	5	51.1	U	5	49	U	5	46.1	U	5	111	U	5	63.9	U	5	137	U	5	47.9	U	5
Method 6010B	IRON, DISSOLVED	1	N/A	0.3	ND	U	0.1	ND	U	0.1	ND	U	0.1	0.0866	J	5	ND	U	0.1	ND	U	0.1	ND	U	0.1	2.46	J+	0.1	0.0572	J+	0.1
	LEAD	0.05	0.01	0.015	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003
	MAGNESIUM	N/A	N/A	N/A	5.52	U	5	7.4	U	5	5.58	U	5	7.36	U	5	6.96	U	5	17	U	5	22.6	U	5	6.58	U	5	6.58	U	5
	MANGANESE, DISSOLVED	0.2	N/A	0.05	ND	U	0.015	0.0236	U	0.015	0.00618	J	0.015	0.342	U	0.015	ND	U	0.015	ND	U	0.015	ND	U	0.015	4.55	U	0.015	0.0652	U	0.015
	POTASSIUM	N/A	N/A	N/A	2.24	J	5	6.32	U	5	3.75	J	5	2.58	J	5	2.55	J	5	4.12	J	5	2.97	J	5	5.01	U	5	2.46	J	5
	SODIUM	N/A	N/A	N/A	21.6	U	5	35.3	U	5	29.3	U	5	23.4	U	5	23.7	U	5	51.3	J+	5	27.3	U	5	71.7	U	5	27.2	U	5
Anions (mg/L)	AMMONIA (AS N) (Method 4500NH3B)	N/A	N/A	N/A	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	0.178	J	0.3	ND	U	0.3
Method E300.0	CHLORIDE	250	N/A	250	26.9	U	10	43.1	U	10	49.9	U	10	12.7	U	10	19.9	J+	2.5	91.1	U	10	42.9	J+	2.5	137	U	0.5	10.5	U	0.5
	NITROGEN, NITRATE-NITRITE (Method E353.2)	N/A	4	N/A	0.549	J	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	0.744	J	1.5	3.41	U	1.5	2.78	U	1.5	ND	U	1.5	ND	U	1.5
	SULFATE	600	N/A	250	34.7	U	20	31.3	U	20	30.5	U	20	31.1	U	20	46.5	U	2.5	167	U	20	89.5	U	2.5	19	U	2	26	U	2
	SULFIDE, TOTAL (Method 4500SC2F)	N/A	N/A	N/A	0.741	J	3.7	ND	U	3.7	0.741	J	3.7	ND	U	3.45	ND	U	3.7	ND	U	3.39	ND	U	3.45	1.3	J	3.7	1.4	J	3.45
Alkalinity (mg/L)	ALKALINITY, BICARBONATE (AS CaCO3)	N/A	N/A	N/A	114	U	1	86.1	U	1	91.9	U	1	144	U	1	102	U	1	80.8	U	1	81.5	U	1	294	U	1	128	U	1
Method SM2320B	ALKALINITY, CARBONATE (AS CaCO3)	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
Field Parameters	Temperature (°C)	N/A	N/A	N/A	19.80			27.21			27.77			19.99			18.08			19.01			18.35			19.52			18.67		
	pH (S U)	N/A	N/A	N/A	7.99			7.20			7.57			7.44			7.71			7.73			7.55			6.61			7.60		
	Spec Cond (µS/cm2)	N/A	N/A	N/A	373.1			401.0			433.2			368.9			373.3			847.8			484.9			1029.0			350.9		
	DO (mg/L)	N/A	N/A	N/A	4.92			1.87			1.79			1.05			4.55			7.95			5.99			NR-EF			0.57		
	ORP (mV)	N/A	N/A	N/A	203			186			185			-80			314			109			197			-239			-171		
	Turbidity (NTU)	N/A	N/A	N/A	0.57			0.56			0.49			0.99			1.15			0.64			0.68			114.00			0.55		
	Alkalinity (mg/L as CaCO3)	N/A	N/A	N/A	107			103			100			140			156			90			98			320			160		

The NMWQCC standard and EPA MCL for m,p- xylene and o-xylene is for total xylenes.  
a EPA analytical methods listed are for the most recent sampling event.  
b NMED-HWB Approved Background Concentrations, SNL/Kirtland AFB, Chemical Constituents in Ground Water.  
Concentrations exceeding background are shown in italics, if applicable.  
c EPA National Primary Drinking Water Standards - Maximum Contaminant Levels (MCLs), or if more stringent, New Mexico Water Quality Control Commission (WQCC) Regulations as denoted by \*\*\*.  
Concentrations exceeding standards are BOLD.  
d The WQCC regulation for PAHs of 30 ug/L is a total of the concentrations of naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene.  
Shading indicates the analyte was detected.  
Bold indicated analyte detected greater than regulatory standard.  
J = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL).  
J+ = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased high.  
J- = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased high.  
U = Analyte was not detected. The reported numerical value is at or below the RL.  
UJ = Analyte was tentatively not detected. The reported numerical value is at or below the RL.  
N/A = Not applicable  
ND = Not detected  
NM = Not measured due to equipment malfunction.  
NR = Not recorded or reported due to operational error  
NR-EF = Not recorded due to equipment malfunction or failure  
R = sample data rejected due to site contamination

**Table 5-1  
Groundwater Analytical Results  
October - December 2011**

Chemical Class & Analytical Method	Parameter	NMED Ground Water Protection Standards (Sec. 20.6.2.3103)	NMED Approved Background	EPA MCLs <sup>d</sup>	KAFB-1067		KAFB-1068		KAFB-1069		KAFB-10610		KAFB-10610		KAFB-10611		KAFB-10612		KAFB-10613		KAFB-10614							
					Result	VAL QUAL	Result	VAL QUAL	Result	VAL QUAL	Result	VAL QUAL	Result	VAL QUAL	Result	VAL QUAL	Result	VAL QUAL	Result	VAL QUAL	Result	VAL QUAL	Result	VAL QUAL	Result	VAL QUAL		
TPH (µg/l)	DIESEL RANGE ORGANICS	N/A	N/A	N/A	ND	U	94.3	10100	J	1890	14900	980	61100	1960	72900	1960	ND	U	94.3	ND	U	94.3	196	J	96.2	22100	962	
Method 8015B	GASOLINE RANGE ORGANICS	N/A	N/A	N/A	ND	U	150	5960	U	750	20100	1500	56100	7500	56300	7500	222	U	150	ND	U	150	ND	U	150	21900	J+	3750
VOCs (µg/L)	1,1,1,2-TETRACHLOROETHANE	N/A	N/A	N/A	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
Method 8260B	1,1,1-TRICHLOROETHANE	60	N/A	60	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	1,1,2-TETRACHLOROETHANE	10	N/A	10	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	1,1,2-TRICHLOROETHANE	100	N/A	5	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	1,1-DICHLOROETHANE	25	N/A	25	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	1,1-DICHLOROETHENE	5	N/A	5	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	1,1-DICHLOROPROPENE	N/A	N/A	N/A	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	1,2,3-TRICHLOROBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	1,2,3-TRICHLOROPROPANE	N/A	N/A	N/A	ND	U	2	ND	U	40	ND	U	100	ND	U	200	ND	U	2	ND	U	2	ND	U	2	ND	U	100
	1,2,4-TRICHLOROBENZENE	N/A	N/A	70	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	1,2,4-TRIMETHYLBENZENE	N/A	N/A	N/A	ND	U	1	73.4	U	20	67.8	U	50	325	U	100	338	U	1	ND	U	1	ND	U	1	230	U	50
	1,2-DIBROMO-3-CHLOROPROPANE	N/A	N/A	0.2	ND	U	2	ND	U	40	ND	U	100	ND	U	200	ND	U	2	ND	U	2	ND	U	2	ND	U	100
	1,2-DIBROMOETHANE	0.1	N/A	0.05	ND	U	1	ND	U	20	ND	U	50	125	U	100	138	U	1	ND	U	1	ND	U	1	110	U	50
	1,2-DIBROMOETHANE (Method 8011)	0.1	N/A	0.05	ND	U	0.0284	0.803	U	0.0281	1.12	J	0.0281	125	U	5.66	129	U	5.6	ND	U	0.0285	ND	U	0.0282	118	J	14.2
	1,2-DICHLOROETHANE	N/A	N/A	600	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	1,2-DICHLOROPROPANE	10	N/A	5	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	1,2-DICHLOROPROPANE	N/A	N/A	5	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	1,3,5-TRIMETHYLBENZENE	N/A	N/A	N/A	ND	U	1	32.9	U	20	43.1	J	50	112	U	100	112	U	1	ND	U	1	ND	U	1	82.6	U	50
	1,3-DICHLOROBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	1,3-DICHLOROPROPANE	N/A	N/A	N/A	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	1,4-DICHLOROBENZENE	N/A	N/A	75	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	2,2-DICHLOROPROPANE	N/A	N/A	N/A	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	2-BUTANONE	N/A	N/A	N/A	ND	U	10	ND	U	200	ND	U	500	1300	U	1000	1330	U	10	ND	U	10	ND	U	10	325	J	500
	2-CHLOROTOLUENE	N/A	N/A	N/A	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	2-HEXANONE	N/A	N/A	N/A	ND	U	5	76.2	J	100	ND	U	250	293	J	500	320	J	500	ND	U	5	ND	U	5	136	J	250
	4-CHLOROTOLUENE	N/A	N/A	N/A	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	4-METHYL-2-PENTANONE	N/A	N/A	N/A	ND	U	5	83.9	J	100	75.4	J	250	269	J	500	275	J	500	ND	U	5	ND	U	5	86.4	J	250
	ACETONE	N/A	N/A	N/A	ND	U	10	64.1	J+	200	ND	U	500	3160	U	1000	3330	U	10	ND	U	10	ND	U	10	965	U	500
	BENZENE	10	N/A	5	ND	U	1	1470	U	20	5440	U	50	7820	U	100	7880	U	1	ND	U	1	ND	U	1	3500	U	50
	BROMOBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	BROMOCHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	BROMODICHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	BROMOFORM	N/A	N/A	N/A	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	BROMOMETHANE	N/A	N/A	N/A	ND	U	2	ND	U	40	ND	U	100	ND	U	200	ND	U	2	ND	U	2	ND	U	2	ND	U	100
	CARBON DISULFIDE	N/A	N/A	N/A	ND	U	1	96.7	U	20	ND	U	50	26.5	J	100	107	U	1	ND	U	1	ND	U	1	ND	U	50
	CARBON TETRACHLORIDE	10	N/A	5	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	CHLOROBENZENE	N/A	N/A	100	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	CHLOROETHANE	N/A	N/A	N/A	ND	U	2	ND	U	40	ND	U	100	ND	U	200	ND	U	2	ND	U	2	ND	U	2	ND	U	100
	CHLOROFORM	100	N/A	100	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	13.4	J	50
	CHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	CIS-1,2-DICHLOROETHENE	N/A	N/A	70	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	CIS-1,3-DICHLOROPROPENE	N/A	N/A	N/A	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	DIBROMOCHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	DIBROMOMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	DICHLORODIFLUOROMETHANE	N/A	N/A	N/A	ND	U	2	ND	U	40	ND	U	100	ND	U	200	ND	U	2	ND	U	2	ND	U	2	ND	U	100
	ETHYLBENZENE	750	N/A	700	ND	U	1	130	U	20	967	U	50	1690	U	100	1760	U	1	ND	U	1	ND	U	1	886	U	50
	HEXACHLOROBUTADIENE	N/A	N/A	N/A	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	ISOPROPYLBENZENE	N/A	N/A	N/A	ND	U	1	28.6	U	20	68.2	U	50	108	U	100	112	U	1	ND	U	1	ND	U	1	89.5	U	50
	METHYL TERT-BUTYL ETHER	N/A	N/A	N/A	ND	U	1	ND	U	20	ND	U	50	ND	U	100	ND	U	1	ND	U	1	ND	U	1	ND	U	50
	METHYLENE CHLORIDE	100	N/A	5	ND	U	2	ND	U	40	ND	U	100	ND	U	200	ND	U	2	ND	U	2	ND	U	2	ND	U	100
	NAPHTHALENE	N/A	N/A	30																								

**Table 5-1  
Groundwater Analytical Results  
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Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec 20.6.2.3103) <sup>b</sup>	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>c,d</sup>	KAFB-1067			KAFB-1068			KAFB-1069			KAFB-10610			KAFB-10611			KAFB-10612			KAFB-10613			KAFB-10614					
					Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL
SVOCs (µg/L) Method 8270C	1,1-DIPHENYL	N/A	N/A	N/A	ND	U	4.72	12.4	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9
	1,2-DIPHENYLHYDRAZINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9
	2,4,5-TRICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9
	2,4,6-TRICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9
	2,4-DICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9
	2,4-DIMETHYLPHENOL	N/A	N/A	N/A	ND	U	18.9	ND	U	19.6	ND	U	19.6	ND	U	200	ND	U	196	ND	U	18.9	ND	U	18.9	ND	U	19.2	ND	U	19.6
	2,4-DINITROPHENOL	N/A	N/A	N/A	ND	UJ	4.72	ND	U	4.9	ND	U	4.9	ND	U	500	ND	U	490	ND	UJ	4.72	ND	U	4.72	ND	UJ	4.81	ND	U	4.9
	2,4-DINITROTOLUENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9
	2,6-DINITROTOLUENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9
	2-CHLORONAPHTHALENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	UJ	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	UJ	4.9
	2-CHLOROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	5.31	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	5.35	U	4.9
	2-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9
	2-NITROANILINE	N/A	N/A	N/A	ND	U	18.9	ND	U	19.6	ND	U	19.6	ND	U	200	ND	U	196	ND	U	18.9	ND	U	18.9	ND	U	19.2	ND	U	19.6
	2-NITROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9
	3,3-DICHLOROBENZIDINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9
	3-METHYLPHENOL AND 4-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.72	2.57	J	4.9	24.1	U	24.5	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9
	3-NITROANILINE	N/A	N/A	N/A	ND	U	18.9	ND	U	19.6	ND	U	19.6	ND	U	200	ND	U	196	ND	U	18.9	ND	U	18.9	ND	U	19.2	ND	U	19.6
	4,6-DINITRO-2-METHYLPHENOL	N/A	N/A	N/A	ND	UJ	18.9	ND	U	19.6	ND	U	19.6	ND	U	200	ND	U	196	ND	UJ	18.9	ND	U	18.9	ND	UJ	19.2	ND	U	19.6
	4-BROMOPHENYL PHENYL ETHER	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9
	4-CHLORO-3-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9
	4-CHLOROANILINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9
	4-CHLOROPHENYL PHENYL ETHER	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9
	4-NITROANILINE	N/A	N/A	N/A	ND	U	18.9	ND	U	19.6	ND	U	19.6	ND	U	200	ND	U	196	ND	U	18.9	ND	U	18.9	ND	UJ	19.2	ND	U	19.6
	4-NITROPHENOL	N/A	N/A	N/A	ND	U	18.9	ND	U	19.6	ND	U	19.6	ND	U	200	ND	U	196	ND	U	18.9	ND	U	18.9	ND	U	19.2	ND	U	19.6
	ACETOPHENONE	N/A	N/A	N/A	ND	U	4.72	881	J	4.9	180	U	24.5	5470	J	500	7070	J	490	ND	U	4.72	ND	U	4.72	ND	U	4.81	1930	U	245
ATRAZINE	N/A	N/A	N/A	ND	UJ	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	UJ	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	
BENZALDEHYDE	N/A	N/A	N/A	ND	UJ	4.72	ND	U	4.9	ND	UJ	4.9	ND	UJ	50	ND	UJ	49	ND	UJ	4.72	ND	UJ	4.72	ND	UJ	4.81	ND	U	4.9	
BENZIDINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	500	ND	U	490	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	
BENZOIC ACID	N/A	N/A	N/A	ND	UJ	4.72	ND	U	4.9	ND	U	4.9	ND	U	500	ND	U	490	ND	UJ	4.72	ND	U	4.72	ND	UJ	4.81	ND	U	4.9	
BIS(2-CHLOROETHOXY)METHANE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	
BIS(2-CHLOROETHYL)ETHER	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	
BIS(2-CHLOROISOPROPYL)ETHER	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	UJ	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	UJ	4.72	ND	U	4.81	ND	UJ	4.9	
BIS(2-ETHYLHEXYL)PHTHALATE	N/A	N/A	N/A	ND	U	4.72	3.28	J	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	
BUTYL BENZYL PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	
CAPROLACTAM	N/A	N/A	N/A	ND	UJ	4.72	ND	U	4.9	ND	UJ	4.9	ND	UJ	50	ND	UJ	49	ND	UJ	4.72	ND	UJ	4.72	ND	UJ	4.81	ND	UJ	4.9	
CARBAZOLE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	
DIBENZOFURAN	N/A	N/A	N/A	ND	U	4.72	2.93	J	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	
DIETHYL PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	28.1	J	50	29.6	J	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	
DIMETHYL PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	
DI-N-BUTYL PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	
DI-N-OCTYL PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	
HEXACHLOROBENZENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	
HEXACHLOROBUTADIENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	
HEXACHLOROCCYCLOPENTADIENE	N/A	N/A	N/A	ND	UJ	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	UJ	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	
HEXACHLOROETHANE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	UJ	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	UJ	4.81	ND	UJ	4.9	
ISOPHORONE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	50	ND	U	49	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	
NITROBENZENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U																				



**Table 5-1  
Groundwater Analytical Results  
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Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec. 20.6.2.3103) <sup>b</sup>	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>c,d</sup>	KAFB-1067		KAFB-1068		KAFB-1069		KAFB-10610		KAFB-10610		KAFB-10611		KAFB-10612		KAFB-10613		KAFB-10614			
					Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL
Metals (mg/L)	CALCIUM	N/A	N/A	N/A	71.4	5	52.6	5	120	5	84.6	5	84.4	5	53.9	5	104	5	67.1	5	56.2	5		
Method 6010B	IRON, DISSOLVED	1	N/A	0.3	ND	U	0.0728	J+	0.1	0.1	0.145	0.1	0.139	0.1	ND	U	0.1	0.129	0.1	0.0411	J	0.1	0.433	
	LEAD	0.05	0.01	0.015	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U
	MAGNESIUM	N/A	N/A	N/A	10.1	5	7.7	5	19	5	11.8	5	11.8	5	7.21	5	15.3	5	8.38	5	7.65	5		
	MANGANESE, DISSOLVED	0.2	N/A	0.05	0.208	0.015	1.28	0.015	5.44	0.015	1.16	0.015	1.12	0.015	0.0384	0.015	0.0444	0.015	0.0184	0.015	0.784	0.015		
	POTASSIUM	N/A	N/A	N/A	2.89	J	2.49	J	3.98	J	3.12	J	3.11	J	2.63	J	3.64	J	2.73	J	2.6	J	5	
	SODIUM	N/A	N/A	N/A	28.7	5	26.4	5	34.5	5	30.8	5	30.3	5	26.9	5	40.1	5	26.3	5	27	5		
Anions (mg/L)	AMMONIA (AS N) (Method 4500NH3BG)	N/A	N/A	N/A	ND	U	0.3	0.0458	0.03	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	
Method E300.0	CHLORIDE	250	N/A	250	12.3	J-	10	12.3	0.5	83.9	10	56.3	0.5	57.4	0.5	10.2	J-	10	84.4	25	22.9	10	15.4	
	NITROGEN, NITRATE-NITRITE (Method E353.2)	N/A	4	N/A	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	2.71	J-	1.5	ND	U
	SULFATE	600	N/A	250	27.6	20	15.2	2	4.13	J	20	39.2	2	38.6	2	23.9	20	123	25	36.4	20	26.3	20	
	SULFIDE, TOTAL (Method 4500SC2F)	N/A	N/A	N/A	ND	U	3.39	1.99	J	3.39	ND	U	3.7	1.38	J	3.45	ND	U	3.45	ND	U	3.45	ND	U
Alkalinity (mg/L)	ALKALINITY, BICARBONATE (AS CaCO3)	N/A	N/A	N/A	226	1	168	1	328	1	167	1	159	1	189	1	169	1	148	1	148	1	157	
Method SM2320B	ALKALINITY, CARBONATE (AS CaCO3)	N/A	N/A	N/A	1.65	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
Field Parameters	Temperature (°C)	N/A	N/A	N/A	18.91	18.49	20.00	17.57	17.57	18.69	18.19	19.10	19.05											
	pH (S.U.)	N/A	N/A	N/A	7.23	7.46	6.75	7.35	7.35	7.63	7.25	7.43												
	Spec Cond (µS/cm2)	N/A	N/A	N/A	524.6	391.8	922.6	621.2	621.2	432.8	820.0	443.6	447.3											
	DO (mg/L)	N/A	N/A	N/A	0.82	0.02	0.06	0.10	0.10	0.80	2.17	3.27	NR-EF											
	ORP (mV)	N/A	N/A	N/A	0	-255	-147	-269	-20	21	-6	-185												
	Turbidity (NTU)	N/A	N/A	N/A	1.06	7.99	4.83	4.95	0.66	2.64	2.62	1.34												
	Alkalinity (mg/L as CaCO3)	N/A	N/A	N/A	180	192	356	205	205	198	194	180												

The NMWQCC standard and EPA MCL for m,p- xylene and o-xylene is for total xylenes.  
<sup>a</sup> EPA analytical methods listed are for the most recent sampling event.  
<sup>b</sup> NMED-HWB Approved Background Concentrations, SNL/Kirtland AFB, Chemical Constituents in Ground Water. Concentrations exceeding background are shown in italics, if applicable.  
<sup>c</sup> EPA National Primary Drinking Water Standards - Maximum Contaminant Levels (MCLs), or if more stringent, New Mexico Water Quality Control Commission (WQCC) Regulations as denoted by \*\*\*. Concentrations exceeding standards are BOLD.  
<sup>d</sup> The WQCC regulation for PAHs of 30 ug/L is a total of the concentrations of naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene.  
 Shading indicates the analyte was detected.  
 Bold indicated analyte detected greater than regulatory standard.  
 J = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL).  
 J+ = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased high.  
 J- = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased low.  
 U = Analyte was not detected. The reported numerical value is at or below the RL.  
 UJ = Analyte was tentatively not detected. The reported numerical value is at or below the RL.  
 N/A = Not applicable  
 ND = Not detected  
 NM = Not measured due to equipment malfunction.  
 NR = Not recorded or reported due to operational error.  
 NR-EF = Not recorded due to equipment malfunction or failure.  
 R = sample data rejected due to site contamination.

**Table 5-1  
Groundwater Analytical Results  
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Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec. 20.6.2.3103) <sup>c</sup>	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>d</sup>	KAFB-10615			KAFB-10616			KAFB-10617			KAFB-10618			KAFB-10619			KAFB-10620			KAFB-10621			KAFB-10622								
					Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL						
					QUAL	U	U	QUAL	U	U	QUAL	U	U	QUAL	U	U	QUAL	U	U	QUAL	U	U	QUAL	U	U	QUAL	U	U	QUAL	U	U			
					U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U			
TPH (µg/l)	DIESEL RANGE ORGANICS	N/A	N/A	N/A	ND	U	100	ND	U	96.2	ND	UJ	200	2220	J	200	ND	U	99	ND	U	94.3	ND	U	96.2	ND	U	98	107	J	95.2			
Method 8015B	GASOLINE RANGE ORGANICS	N/A	N/A	N/A	ND	U	150	ND	U	150	ND	U	150	742	J	150	114	U	150	ND	U	150	ND	U	150	52.1	J	150	84.8	J	150			
Method 8260B	1,1,1,2-TETRACHLOROETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	1,1,1-TRICHLOROETHANE	60	N/A	60	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	1,1,2,2-TETRACHLOROETHANE	10	N/A	10	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	1,1,2-TRICHLOROETHANE	100	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	1,1-DICHLOROETHANE	25	N/A	25	ND	U	1	ND	U	1	ND	UJ	1	ND	UJ	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	1,1-DICHLOROETHENE	5	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	1,1-DICHLOROPROPENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	1,2,3-TRICHLOROBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	1,2,3-TRICHLOROPROPANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2			
	1,2,4-TRICHLOROBENZENE	N/A	N/A	70	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	1,2,4-TRIMETHYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	2.85	J	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	1,2-DIBROMO-3-CHLOROPROPANE	N/A	N/A	0.2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2			
	1,2-DIBROMOETHANE	0.1	N/A	0.05	ND	U	1	ND	U	1	0.868	J	1	0.9	J	1	0.342	J	1	ND	U	1	ND	U	1	ND	U	1	0.957	J	1			
	1,2-DIBROMOETHANE (Method 8011)	0.1	N/A	0.05	ND	U	0.0284	ND	U	0.028	0.805	J	1	0.9	J	1	0.342	J	1	ND	U	1	ND	U	1	ND	U	1	0.957	J	1			
	1,2-DICHLOROBENZENE	N/A	N/A	600	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	1,2-DICHLOROETHANE	10	N/A	5	ND	U	1	ND	U	1	ND	U	1	1.19	J	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	1,2-DICHLOROPROPANE	N/A	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	1,3,5-TRIMETHYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	2.1	J	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	0.926	J	1			
	1,3-DICHLOROBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	1,3-DICHLOROPROPANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	1,4-DICHLOROBENZENE	N/A	N/A	75	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	2,2-DICHLOROPROPANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	2-BUTANONE	N/A	N/A	N/A	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10			
	2-CHLOROTOLUENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	2-HEXANONE	N/A	N/A	N/A	ND	U	5	ND	U	5	ND	U	5	ND	U	5	ND	U	5	ND	U	5	ND	U	5	ND	U	5	ND	U	5			
	4-CHLOROTOLUENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	4-METHYL-2-PENTANONE	N/A	N/A	N/A	ND	U	5	ND	UJ	5	ND	U	5	3.23	J	5	ND	U	5	ND	U	5	ND	U	5	ND	U	5	ND	U	5			
	ACETONE	N/A	N/A	N/A	ND	U	10	ND	U	10	ND	U	10	6.93	J+	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10	3.96	J	10	2.74	J	10
	BENZENE	10	N/A	5	ND	U	1	ND	U	1	ND	U	1	8.59	J	1	0.321	J	1	ND	U	1	ND	U	1	ND	U	1	5.68	J	1	6.38	J	
	BROMOBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	BROMOCHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	BROMODICHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	BROMOFORM	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	BROMOMETHANE	N/A	N/A	N/A	ND	U	2	ND	UJ	2	ND	UJ	2	ND	UJ	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2			
	CARBON DISULFIDE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	UJ	1	ND	UJ	1	ND	U	1	ND	U	1			
	CARBON TETRACHLORIDE	10	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	CHLOROBENZENE	N/A	N/A	100	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	CHLOROETHANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	UJ	2	ND	UJ	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2			
	CHLOROFORM	100	N/A	100	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	CHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	UJ	1	ND	UJ	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	CIS-1,2-DICHLOROETHENE	N/A	N/A	70	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	CIS-1,3-DICHLOROPROPENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	DIBROMOCHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	DIBROMOMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1			
	DICHLORODIFLUOROMETHANE	N/A	N/A	N/A	ND	U	2	ND	U	2	0.8	J	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2			
	ETHYLBENZENE	750	N/A	700	ND	U	1	ND	U	1	ND	U	1	0.804	J	1	ND	U																

Table 5-1  
Groundwater Analytical Results  
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Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec 20.6.2.31(3)) <sup>b</sup>	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>c,d</sup>	KAFB-10615		KAFB-10616		KAFB-10617		KAFB-10618		KAFB-10619		KAFB-10620		KAFB-10620		KAFB-10621		KAFB-10622				
					Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL
					Sample No	Sample Date	Sample Purpose	Sample Depth	Sample No	Sample Date	Sample Purpose	Sample Depth	Sample No	Sample Date	Sample Purpose	Sample Depth	Sample No	Sample Date	Sample Purpose	Sample Depth	Sample No	Sample Date	Sample Purpose	Sample Depth	Sample No
SVOCs (µg/L) Method 8270C	1,1-DIBIPHENYL	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	1,2-DIPHENYLHYDRAZINE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	2,4,5-TRICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	UJ	4.9	ND	UJ	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	2,4,6-TRICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	UJ	4.9	ND	UJ	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	2,4-DICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	2,4-DIMETHYLPHENOL	N/A	N/A	N/A	ND	U	19.2	ND	U	18.9	ND	U	19.6	ND	U	18.9	ND	U	18.9	ND	U	19.6	ND	U	18.9
	2,4-DINITROPHENOL	N/A	N/A	N/A	ND	U	48.1	ND	UJ	47.2	ND	U	49	ND	U	47.2	ND	U	47.2	ND	U	49	ND	U	47.2
	2,4-DINITROTOLUENE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	2,6-DINITROTOLUENE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	2-CHLORONAPHTHALENE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	2-CHLOROPHENOL	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	2-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	UJ	4.9	ND	U	4.72
	2-NITROANILINE	N/A	N/A	N/A	ND	U	18.9	ND	U	19.6	ND	U	18.9	ND	U	18.9	ND	U	18.9	ND	U	19.6	ND	U	18.9
	2-NITROPHENOL	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	3,3'-DICHLOROBENZIDINE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	3-METHYLPHENOL AND 4-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	3-NITROANILINE	N/A	N/A	N/A	ND	U	19.2	ND	U	18.9	ND	U	19.6	ND	U	18.9	ND	U	18.9	ND	U	19.6	ND	U	18.9
	4,6-DINITRO-2-METHYLPHENOL	N/A	N/A	N/A	ND	U	19.2	ND	UJ	18.9	ND	UJ	19.6	ND	UJ	18.9	ND	U	18.9	ND	U	19.6	ND	U	18.9
	4-BROMOPHENYL PHENYL ETHER	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	4-CHLORO-3-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	4-CHLOROANILINE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	4-CHLOROPHENYL PHENYL ETHER	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	4-NITROANILINE	N/A	N/A	N/A	ND	U	19.2	ND	U	18.9	ND	UJ	19.6	ND	UJ	18.9	ND	U	18.9	ND	U	19.6	ND	U	18.9
	4-NITROPHENOL	N/A	N/A	N/A	ND	U	19.2	ND	U	18.9	ND	U	19.6	ND	U	18.9	ND	U	18.9	ND	U	19.6	ND	U	18.9
	ACETOPHENONE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	ATRAZINE	N/A	N/A	N/A	ND	UJ	4.81	ND	U	4.72	ND	UJ	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	BENZALDEHYDE	N/A	N/A	N/A	ND	UJ	4.81	ND	U	4.72	ND	UJ	4.9	ND	UJ	4.72	ND	UJ	4.72	ND	UJ	4.9	ND	UJ	4.72
	BENZIDINE	N/A	N/A	N/A	ND	U	48.1	ND	U	47.2	ND	UJ	49	ND	UJ	47.2	ND	U	4.72	ND	U	49	ND	U	4.72
	BENZOIC ACID	N/A	N/A	N/A	ND	U	48.1	ND	U	47.2	ND	U	49	ND	U	47.2	ND	U	4.72	ND	U	49	ND	U	4.72
	BIS(2-CHLOROETHOXY)METHANE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	BIS(2-CHLOROETHYL)ETHER	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	BIS(2-CHLOROISOPROPYL)ETHER	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
BIS(2-ETHYLHEXYL)PHthalate	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72	
BUTYL BENZYL PHTHALATE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72	
CAPROLACTAM	N/A	N/A	N/A	ND	UJ	4.81	ND	UJ	4.72	ND	UJ	4.9	ND	UJ	4.72	ND	UJ	4.72	ND	UJ	4.9	ND	UJ	4.72	
CARBAZOLE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72	
DIBENZOFURAN	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72	
DIETHYL PHTHALATE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72	
DIMETHYL PHTHALATE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72	
DI-N-BUTYL PHTHALATE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72	
DI-N-OCTYL PHTHALATE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72	
HEXACHLOROBENZENE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72	
HEXACHLOROBUTADIENE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	UJ	4.9	ND	UJ	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72	
HEXACHLOROCYCLOPENTADIENE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72	
HEXACHLOROETHANE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	UJ	4.9	ND	UJ	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72	
ISOPHORONE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72	
NITROBENZENE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72	
N-NITROSO-DI-N-PROPYLAMINE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72	
N-NITROSODIPHENYLAMINE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72	
PENTACHLOROPHENOL	N/A	N/A	N/A	ND	U	19.2	ND	U	18.9	ND	UJ	19.6	ND	UJ	18.9	ND	U	18.9	ND	U	19.6	ND	U	18.9	
PHENOL	N/A	N/A	5	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72	
PAHs (µg/L) Method 8270C	1-METHYL NAPHTHALENE	N/A	N/A	30	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	2-METHYL NAPHTHALENE	N/A	N/A	30	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	ACENAPHTHENE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	ACENAPHTHYLENE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.72	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.9	ND	U	4.72
	ANTHRACENE	N/A	N/A	N/A	ND	U	4.81	ND	U	4															

**Table 5-1  
Groundwater Analytical Results  
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Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec. 20.6.2.3103) <sup>b</sup>	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>c,d</sup>	KAFB-10615		KAFB-10616		KAFB-10617		KAFB-10618		KAFB-10619		KAFB-10620		KAFB-10620		KAFB-10621		KAFB-10622														
					Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL										
Metals (mg/L)	CALCIUM	N/A	N/A	N/A	45.5	U	5	39	U	5	45.4	U	5	51.3	U	5	44.5	U	5	49.8	U	5	75.9	U	5	49.6	U	5							
Method 6010B	IRON, DISSOLVED	1	N/A	0.3	ND	U	0.1	ND	U	0.1	ND	U	0.1	0.192	J+	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1							
	LEAD	0.05	0.01	0.015	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003							
	MAGNESIUM	N/A	N/A	N/A	5.66	U	5	5.78	U	5	6.05	U	5	7.41	U	5	5.88	U	5	7.08	U	5	7.14	U	5	10.4	U	5	6.42	U	5				
	MANGANESE, DISSOLVED	0.2	N/A	0.05	0.00704	J	0.015	0.0509	U	0.015	0.0214	U	0.015	0.097	U	0.015	0.108	U	0.015	ND	U	0.015	ND	U	0.015	0.228	J	0.015	0.126	J	0.015	0.126	J	0.015	0.126
	POTASSIUM	N/A	N/A	N/A	2.25	J	5	2.25	J	5	2.42	J	5	2.59	J	5	2.29	J	5	2.41	J	5	3.31	J	5	2.45	J	5	2.45	J	5				
	SODIUM	N/A	N/A	N/A	20.5	U	5	20.9	U	5	25.7	U	5	26.5	U	5	25.6	U	5	25.3	U	5	25.4	U	5	32.5	U	5	26.1	U	5				
Anions (mg/L)	AMMONIA (AS N) (Method 4500NH3BG)	N/A	N/A	N/A	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3				
Method E300.0	CHLORIDE	250	N/A	250	20.2	J+	2.5	9.59	J	10	13.3	U	10	23	U	10	9.96	U	0.5	24.2	U	10	23.5	U	10	81.7	U	0.5	14.4	U	0.5				
Method SM2320B	NITROGEN, NITRATE-NITRITE (Method E353.2)	N/A	4	N/A	0.267	J	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	0.308	J	1.5	0.333	J	1.5	1.06	J	1.5	ND	U	1.5				
	SULFATE	600	N/A	250	29	U	2.5	25	U	20	33.4	J-	20	37	J-	20	29.7	U	2	49.5	U	20	49.4	U	20	63.9	U	2	39	U	2				
	SULFIDE, TOTAL (Method 4500SC2F)	N/A	N/A	N/A	ND	U	3.7	ND	U	3.45	ND	U	3.45	ND	U	3.7	0.8	J	3.45	ND	U	3.7	ND	U	3.7	1.1	J	3.45	ND	U	3.7				
Alkalinity (mg/L)	ALKALINITY, BICARBONATE (AS CaCO3)	N/A	N/A	N/A	105	U	1	127	U	1	120	U	1	126	U	1	117	U	1	94.5	U	1	95.3	U	1	94.9	U	1	117	U	1				
Method SM2320B	ALKALINITY, CARBONATE (AS CaCO3)	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1				
Field Parameters	Temperature (°C)	N/A	N/A	N/A	18.17			19.17			18.94			19.08			17.97			17.86			17.63			17.86			18.20						
	pH (S.U.)	N/A	N/A	N/A	7.85			7.68			7.78			7.65			7.58			7.52			7.37			7.52			7.73						
	Spec Cond (µS/cm2)	N/A	N/A	N/A	335.2			310.3			353.1			414.9			325.8			375.9			608.6			375.9			455.3						
	DO (mg/L)	N/A	N/A	N/A	7.81			3.66			1.35			0.03			1.28			3.34			0.47			3.34			0.39						
	ORP (mV)	N/A	N/A	N/A	94			58			-54			-156			-18			141			-88			141			0						
	Turbidity (NTU)	N/A	N/A	N/A	1.96			1.52			0.60			1.25			0.33			1.33			1.39			1.33			0.57						
	Alkalinity (mg/L as CaCO3)	N/A	N/A	N/A	118			136			128			130			128			142			116			142			132						

The NMWQCC standard and EPA MCL for m,p-xylene and o-xylene is for total xylenes.  
a EPA analytical methods listed are for the most recent sampling event.  
b NMED-HWB Approved Background Concentrations, SNL/Kirtland AFB, Chemical Constituents in Ground Water. Concentrations exceeding background are shown in italics, if applicable.  
c EPA National Primary Drinking Water Standards - Maximum Contaminant Levels (MCLs), or if more stringent, New Mexico Water Quality Control Commission (WQCC) Regulations as denoted by "™". Concentrations exceeding standards are BOLD.  
d The WQCC regulation for PAHs of 30 ug/L is a total of the concentrations of naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene.  
Shading indicates the analyte was detected.  
Bold indicated analyte detected greater than regulatory standard  
J = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL).  
J+ = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased high.  
J- = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased low.  
U = Analyte was not detected. The reported numerical value is at or below the RL.  
UJ = Analyte was tentatively not detected. The reported numerical value is at or below the RL.  
N/A = Not applicable  
ND = Not detected  
NM = Not measured due to equipment malfunction  
NR = Not recorded or reported due to operational error  
NR-EF = Not recorded due to equipment malfunction or failure  
R = sample data rejected due to site contamination

**Table 5-1  
Groundwater Analytical Results  
October - December 2011**

Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec 20.6.2.3103) <sup>b</sup>		NMED Approved Background <sup>b</sup>	EPA MCLs <sup>c,d</sup>	KAFB-10623		KAFB-10624		KAFB-10625		KAFB-10626		KAFB-10627		KAFB-10628		KAFB-10629		KAFB-10630		KAFB-10630												
		Result	VAL QUAL			RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL							
		Sample No	Sample Date			Sample Purpose	Sample Depth	Sample No	Sample Date	Sample Purpose	Sample Depth	Sample No	Sample Date	Sample Purpose	Sample Depth	Sample No	Sample Date	Sample Purpose	Sample Depth	Sample No	Sample Date	Sample Purpose	Sample Depth	Sample No	Sample Date	Sample Purpose	Sample Depth	Sample No	Sample Date	Sample Purpose	Sample Depth			
TPH (µg/L)	DIESEL RANGE ORGANICS	N/A	N/A	N/A	ND	U	98	ND	U	100	ND	UJ	94.3	ND	UJ	94.3	ND	U	96.2	6760	J	490	ND	U	94.3	ND	U	94.3	ND	U	94.3	ND	U	94.3
Method 8015B	GASOLINE RANGE ORGANICS	N/A	N/A	N/A	ND	U	150	ND	U	150	ND	U	150	ND	U	150	ND	U	150	3870	U	150	ND	U	150	ND	U	150	ND	U	150	ND	U	150
Method 8260B	1,1,1,2-TETRACHLOROETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,1,1-TRICHLOROETHANE	60	N/A	60	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,1,2-TETRACHLOROETHANE	10	N/A	10	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,1,2-TRICHLOROETHANE	100	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,1-DICHLOROETHANE	25	N/A	25	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,1-DICHLOROETHENE	5	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,1-DICHLOROPROPENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,2,3-TRICHLOROBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,2,3-TRICHLOROPROPANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	10	ND	U	2	ND	U	2	ND	U	2	ND	U	2
	1,2,4-TRICHLOROBENZENE	N/A	N/A	70	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,2,4-TRIMETHYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	45.2	J	5	ND	U	1	ND	U	1	ND	U	1	
	1,2-DIBROMO-3-CHLOROPROPANE	N/A	N/A	0.2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	10	ND	U	2	ND	U	2	ND	U	2	ND	U	2
	1,2-DIBROMOETHANE	0.1	N/A	0.05	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	7.65	J	5	ND	U	1	ND	U	1	ND	U	1	
	1,2-DIBROMOETHANE (Method 8011)	0.1	N/A	0.05	ND	U	0.0287	ND	U	0.0284	0.183	J	0.0284	ND	U	0.0286	ND	U	0.0286	6.42	J	0.283	ND	U	0.0283	ND	U	0.0284	ND	U	0.0291	ND	U	0.0291
	1,2-DICHLOROBENZENE	N/A	N/A	600	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,2-DICHLOROETHANE	10	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	2.46	J	5	ND	UJ	1	ND	U	1	ND	U	1	
	1,2-DICHLOROPROPANE	N/A	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,3,5-TRIMETHYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	15.4	J	5	ND	U	1	ND	U	1	ND	U	1	
	1,3-DICHLOROBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,3-DICHLOROPROPANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,4-DICHLOROBENZENE	N/A	N/A	75	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	2,2-DICHLOROPROPANE	N/A	N/A	N/A	ND	UJ	1	ND	UJ	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	UJ	1	ND	U	1	ND	U	1	ND	U	1
	2-BUTANONE	N/A	N/A	N/A	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	26.6	J	50	ND	UJ	10	ND	U	10	ND	U	10	
	2-CHLOROTOLUENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	2-HEXANONE	N/A	N/A	N/A	ND	U	5	ND	U	5	ND	U	5	ND	U	5	ND	U	5	ND	U	9.37	J	25	ND	U	5	ND	UJ	5	ND	UJ	5	
	4-CHLOROTOLUENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	4-METHYL-2-PENTANONE	N/A	N/A	N/A	ND	U	5	ND	U	5	ND	U	5	ND	U	5	ND	UJ	5	ND	U	11.2	J	25	ND	UJ	5	ND	U	5	ND	U	5	
	ACETONE	N/A	N/A	N/A	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	81.3	J	50	ND	U	10	ND	U	10	ND	U	10	
	BENZENE	10	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	248	J	5	ND	U	1	ND	U	1	ND	U	1	
	BROMOBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	BROMOCHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	BROMODICHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	BROMOFORM	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	BROMOMETHANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	UJ	2	ND	U	10	ND	UJ	2	ND	U	2	ND	U	2
	CARBON DISULFIDE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	CARBON TETRACHLORIDE	10	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	CHLOROBENZENE	N/A	N/A	100	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	CHLOROETHANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	10	ND	U	2	ND	U	2	ND	U	2	ND	U	2
	CHLOROFORM	100	N/A	100	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	CHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	0.407	J	1	0.337	J	1	ND	U	1	ND	U	5	ND	UJ	1	ND	U	1	ND	U	1	ND	U	1
	CIS-1,2-DICHLOROETHENE	N/A	N/A	70	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	CIS-1,3-DICHLOROPROPENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	DIBROMOCHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U																									



**Table 5-1  
Groundwater Analytical Results  
October - December 2011**

Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec 20 8 2 3103) <sup>b</sup>	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>c,d</sup>	KAFB-10623			KAFB-10624			KAFB-10625			KAFB-10626			KAFB-10627			KAFB-10628			KAFB-10629			KAFB-10630			KAFB-10630		
					Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL
Metals (mg/L)	CALCIUM	N/A	N/A	N/A	36	U	5	74.8	U	5	45.6	U	5	68.9	U	5	38.8	U	5	67.7	U	5	76.7	U	5	61.1	U	5	59.4	U	5
Method 6010B	IRON, DISSOLVED	1	N/A	0.3	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	0.328	U	0.1	0.0413	J	0.1	ND	U	0.1	ND	U	0.1
	LEAD	0.05	0.01	0.015	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003
	MAGNESIUM	N/A	N/A	N/A	4.71	J	5	13.2	U	5	6.57	U	5	9.06	U	5	5.67	U	5	9.62	U	5	10.5	U	5	8.14	U	5	7.99	U	5
	MANGANESE, DISSOLVED	0.2	N/A	0.05	0.00864	J	0.015	0.329	U	0.015	ND	U	0.015	ND	U	0.015	ND	U	0.015	0.872	U	0.015	0.00395	J	0.015	ND	U	0.015	ND	U	0.015
	POTASSIUM	N/A	N/A	N/A	2.07	J	5	3.1	J	5	2.5	J	5	3.29	J	5	2.22	J	5	2.81	J	5	3.33	J	5	2.83	J	5	2.79	J	5
	SODIUM	N/A	N/A	N/A	25.5	U	5	30.5	U	5	26.6	U	5	29.2	U	5	21.9	U	5	30.7	U	5	33.6	U	5	26.5	U	5	25.8	U	5
Anions (mg/L)	AMMONIA (AS N) (Method 4500NH3BG)	N/A	N/A	N/A	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3
Method E300.0	CHLORIDE	250	N/A	250	12.6	U	10	30.5	U	10	26.9	U	10	72	U	10	9.11	J	10	41.4	U	0.5	92.5	U	25	56.1	U	10	66.7	U	10
	NITROGEN, NITRATE-NITRITE (Method E353.2)	N/A	4	N/A	ND	U	1.5	ND	U	1.5	0.48	J	1.5	3.54	U	1.5	ND	U	1.5	ND	U	1.5	2.12	U	1.5	1.68	U	1.5	1.69	U	1.5
	SULFATE	600	N/A	250	27.9	U	20	47.1	U	20	56	U	20	61.6	U	20	24.9	U	20	35.9	U	20	86	U	25	52.2	U	20	52.5	U	20
	SULFIDE, TOTAL (Method 4500SC2F)	N/A	N/A	N/A	ND	U	3.45	ND	U	3.45	0.741	J	3.7	ND	U	3.39	1.35	J	3.39	1.1	J	3.7	ND	U	3.45	ND	U	3.7	ND	U	3.7
Alkalinity (mg/L)	ALKALINITY, BICARBONATE (AS CaCO3)	N/A	N/A	N/A	107	U	1	212	U	1	101	U	1	84.9	U	1	116	U	1	141	U	1	82	U	1	89.4	U	1	89.4	U	1
Method SM2320B	ALKALINITY, CARBONATE (AS CaCO3)	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
Field Parameters	Temperature (°C)	N/A	N/A	N/A	18.82			19.47			18.84			18.84			19.27			17.29			19.09			18.92			18.92		
	pH (S.U.)	N/A	N/A	N/A	7.84			7.26			7.81			7.73			7.84			7.55			7.60			7.67			7.67		
	Spec Cond (µS/cm2)	N/A	N/A	N/A	311.6			595.5			407.0			568.8			330.4			617.5			605.7			502.3			502.3		
	DO (mg/L)	N/A	N/A	N/A	10.66			0.86			7.50			8.56			7.41			0.00			6.23			6.51			6.51		
	ORP (mV)	N/A	N/A	N/A	156			26			109			100			122			0			133			139			139		
	Turbidity (NTU)	N/A	N/A	N/A	0.68			0.77			1.46			0.87			0.96			2.14			1.00			3.00			3.00		
	Alkalinity (mg/L as CaCO3)	N/A	N/A	N/A	124			208			112			99			128			148			92			121			121		

The NMWQCC standard and EPA MCL for m,p-xylene and o-xylene is for total xylenes.  
a EPA analytical methods listed are for the most recent sampling event.  
b NMED-HWB Approved Background Concentrations, SNL/Kirtland AFB, Chemical Constituents in Ground Water.  
Concentrations exceeding background are shown in Italics, if applicable.  
c EPA National Primary Drinking Water Standards - Maximum Contaminant Levels (MCLs), or if more stringent,  
New Mexico Water Quality Control Commission (WQCC) Regulations as denoted by "™".  
Concentrations exceeding standards are **BOLD**.  
d The WQCC regulation for PAHs of 30 ug/L is a total of the concentrations of naphthalene,  
1-methylnaphthalene, and 2-methylnaphthalene.  
Shading indicates the analyte was detected.  
**Bold** indicated analyte detected greater than regulatory standard.  
J = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL).  
J+ = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased high.  
J- = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased low.  
U = Analyte was not detected. The reported numerical value is at or below the RL.  
UU = Analyte was tentatively not detected. The reported numerical value is at or below the RL.  
N/A = Not applicable.  
ND = Not detected.  
NM = Not measured due to equipment malfunction.  
NR = Not recorded or reported due to operational error.  
NR-EF = Not recorded due to equipment malfunction or failure.  
R = sample data rejected due to site contamination.





**Table 5-1  
Groundwater Analytical Results  
October - December 2011**

Chemical Class & Analytical Method	Parameter	NMED Ground Water Protection Standards (Sec. 20.6.2.3103)	NMED Approved Background	EPA MCLs <sup>d</sup>	LOCATION CODE																										
					KAFB-106031			KAFB-106032			KAFB-106033			KAFB-106034			KAFB-106035			KAFB-106036			KAFB-106037			KAFB-106038			KAFB-106039		
					SAMPLE NO	SAMPLE DATE	SAMPLE DEPTH	SAMPLE NO	SAMPLE DATE	SAMPLE DEPTH	SAMPLE NO	SAMPLE DATE	SAMPLE DEPTH	SAMPLE NO	SAMPLE DATE	SAMPLE DEPTH	SAMPLE NO	SAMPLE DATE	SAMPLE DEPTH	SAMPLE NO	SAMPLE DATE	SAMPLE DEPTH	SAMPLE NO	SAMPLE DATE	SAMPLE DEPTH	SAMPLE NO	SAMPLE DATE	SAMPLE DEPTH	SAMPLE NO	SAMPLE DATE	SAMPLE DEPTH
SVOCs (µg/L)	1,1-BIPHENYL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
Method 8270C	1,2-DIPHENYLHYDRAZINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	2,4,5-TRICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	2,4,6-TRICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	2,4-DICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	2,4-DIMETHYLPHENOL	N/A	N/A	N/A	ND	U	18.9	ND	U	19.6	ND	U	19.2	ND	U	19.2	ND	U	19.2	ND	U	19.6	ND	U	18.9	ND	U	19.6			
	2,4-DINITROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	2,4-DINITROTOLUENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	2,6-DINITROTOLUENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	2-CHLORONAPHTHALENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	2-CHLOROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	2-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	2-NITROANILINE	N/A	N/A	N/A	ND	U	18.9	ND	U	19.6	ND	U	19.2	ND	U	19.2	ND	U	19.2	ND	U	19.6	ND	U	18.9	ND	U	19.6			
	2-NITROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	3,3'-DICHLOROBENZIDINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	3-METHYLPHENOL AND 4-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	3-NITROANILINE	N/A	N/A	N/A	ND	U	18.9	ND	U	19.6	ND	U	19.2	ND	U	19.2	ND	U	19.2	ND	U	19.6	ND	U	18.9	ND	U	19.6			
	4,6-DINITRO-2-METHYLPHENOL	N/A	N/A	N/A	ND	U	18.9	ND	U	19.6	ND	U	19.2	ND	U	19.2	ND	U	19.2	ND	U	19.6	ND	U	18.9	ND	U	19.6			
	4-BROMOPHENYL PHENYL ETHER	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	4-CHLORO-3-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	4-CHLOROANILINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	4-CHLOROPHENYL PHENYL ETHER	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	4-NITROANILINE	N/A	N/A	N/A	ND	U	18.9	ND	U	19.6	ND	U	19.2	ND	U	19.2	ND	U	19.2	ND	U	19.6	ND	U	18.9	ND	U	19.6			
	4-NITROPHENOL	N/A	N/A	N/A	ND	U	18.9	ND	U	19.6	ND	U	19.2	ND	U	19.2	ND	U	19.2	ND	U	19.6	ND	U	18.9	ND	U	19.6			
	ACETOPHENONE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	ATRAZINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	BENZALDEHYDE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	BENZIDINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	BENZOIC ACID	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	BIS(2-CHLOROETHOXY)METHANE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	BIS(2-CHLOROETHYL)ETHER	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	BIS(2-CHLOROISOPROPYL)ETHER	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	BIS(2-ETHYLHEXYL)PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	BUTYL BENZYL PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	CAPROLACTAM	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	CARBAZOLE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	DIBENZOFURAN	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	DIETHYL PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	DIMETHYL PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	DI-N-BUTYL PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	DI-N-OCTYL PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	HEXACHLOROBENZENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	HEXACHLOROBUTADIENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	HEXACHLOROCCYCLOPENTADIENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	HEXACHLOROETHANE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	ISOPHORONE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	NITROBENZENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	N-NITROSO-DI-N-PROPYLAMINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	N-NITROSO-DIPHENYLAMINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	PENTACHLOROPHENOL	N/A	N/A	N/A	ND	U	18.9	ND	U	19.6	ND	U	19.2	ND	U	19.2	ND	U	19.2	ND	U	19.6	ND	U	18.9	ND	U	19.6			
	PHENOL	N/A	N/A	5	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
PAHs (µg/L)	1-METHYL NAPHTHALENE	N/A	N/A	30	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	2-METHYLNAPHTHALENE	N/A	N/A	30	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
Method 8270C	ACENAPHTHENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND	U	4.72	ND	U	4.9			
	ACENAPHTHYLENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.81	ND	U	4.81	ND	U	4.9	ND								

**Table 5-1  
Groundwater Analytical Results  
October - December 2011**

Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec. 20.6.2.3103) <sup>d</sup>	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>d</sup>	KAFB-106031		KAFB-106032		KAFB-106033		KAFB-106034		KAFB-106035		KAFB-106036		KAFB-106037		KAFB-106038		KAFB-106039										
					SAMPLE NO	SAMPLE DATE	SAMPLE PURPOSE	SAMPLE DEPTH	SAMPLE NO	SAMPLE DATE	SAMPLE PURPOSE	SAMPLE DEPTH	SAMPLE NO	SAMPLE DATE	SAMPLE PURPOSE	SAMPLE DEPTH	SAMPLE NO	SAMPLE DATE	SAMPLE PURPOSE	SAMPLE DEPTH	SAMPLE NO	SAMPLE DATE	SAMPLE PURPOSE	SAMPLE DEPTH	SAMPLE NO	SAMPLE DATE	SAMPLE PURPOSE	SAMPLE DEPTH			
					Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL			
					Result	QUAL	RL	Result	QUAL	RL	Result	QUAL	RL	Result	QUAL	RL	Result	QUAL	RL	Result	QUAL	RL	Result	QUAL	RL	Result	QUAL	RL			
Metals (mg/L)	CALCIUM	N/A	N/A	N/A	79.2	U	5	48.1	U	5	98.7	U	5	95.6	U	5	66.6	U	5	44.8	U	5	39.4	U	5	39.2	U	5			
Method 6010B	IRON, DISSOLVED	1	N/A	0.3	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1			
	LEAD	0.05	0.01	0.015	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003			
	MAGNESIUM	N/A	N/A	N/A	10.5	U	5	7.12	U	5	14.1	U	5	13.1	U	5	8.99	U	5	6.01	U	5	5.29	U	5	5.12	U	5			
	MANGANESE, DISSOLVED	0.2	N/A	0.05	ND	U	0.015	0.00525	J	0.015	0.00723	J	0.015	0.00739	J	0.015	0.0364	J	0.015	0.00815	J	0.015	ND	U	0.015	0.0413	J	0.015	0.0612	J	0.015
	POTASSIUM	N/A	N/A	N/A	3.29	J	5	2.56	J	5	3.49	J	5	3.48	J	5	2.56	J	5	2.84	J	5	2.38	J	5	2.5	J	5			
	SODIUM	N/A	N/A	N/A	30.3	U	5	22.7	U	5	33.3	U	5	32.2	U	5	29	U	5	25.1	U	5	26.5	U	5	27.2	U	5			
Anions (mg/L)	AMMONIA (AS N) (Method 4500NH3B)	N/A	N/A	N/A	0.234	J	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3			
Method E300.0	CHLORIDE	250	N/A	250	75.1	U	25	22.8	U	1	74.2	U	5	77.1	U	5	31	U	0.5	44.6	U	0.5	18.7	J+	2.5	9.94	J	10			
	NITROGEN, NITRATE-NITRITE (Method E353.2)	N/A	4	N/A	1.91	U	1.5	0.666	J	1.5	2.64	U	1.5	2.56	J	1.5	0.465	J	1.5	0.891	J	1.5	0.322	J	1.5	ND	U	1.5	ND	U	
	SULFATE	600	N/A	250	82	U	25	50.2	U	4	124	U	10	110	U	10	56.1	U	2	74.1	U	2	47.3	U	2	31.1	U	2.5	24.6	U	20
	SULFIDE, TOTAL (Method 4500SC2F)	N/A	N/A	N/A	ND	U	3.64	ND	U	3.7	ND	U	3.39	ND	U	3.39	ND	U	3.45	ND	U	3.7	ND	U	3.39	ND	U	3.7	ND	U	
Alkalinity (mg/L)	ALKALINITY, BICARBONATE (AS CaCO3)	N/A	N/A	N/A	82.8	U	1	94.3	U	1	83.2	U	1	84.5	U	1	103	U	1	107	U	1	98.4	U	1	110	U	1	110	U	1
Method SM2320B	ALKALINITY, CARBONATE (AS CaCO3)	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	4.12	U	1
Field Parameters	Temperature (°C)	N/A	N/A	N/A	18.99			18.61			19.21			19.35			18.68			18.73			18.55			18.45			18.66		
	pH (S.U.)	N/A	N/A	N/A	7.93			7.58			7.51			7.54			7.74			7.72			7.78			7.73			7.63		
	Spec Cond (µS/cm2)	N/A	N/A	N/A	568.5			387.8			708.7			695.0			439.6			526.3			367.6			313.5			308.5		
	DO (mg/L)	N/A	N/A	N/A	7.05			5.80			6.82			7.48			9.26			10.37			11.62			5.40			5.23		
	ORP (mV)	N/A	N/A	N/A	147			139			155			174			214			213			338			166			158		
	Turbidity (NTU)	N/A	N/A	N/A	4.59			1.61			1.40			2.11			0.75			1.61			2.28			1.81			1.15		
	Alkalinity (mg/L as CaCO3)	N/A	N/A	N/A	98			122			112			88			123			124			120			140			118		

The NMWQCC standard and EPA MCL for m,p- xylene and o-xylene is for total xylenes.  
a EPA analytical methods listed are for the most recent sampling event.  
b NMED-HWB Approved Background Concentrations, SNL/Kirtland AFB, Chemical Constituents in Ground Water  
Concentrations exceeding background are shown in *italics*, if applicable.  
c EPA National Primary Drinking Water Standards - Maximum Contaminant Levels (MCLs), or if more stringent, New Mexico Water Quality Control Commission (WQCC) Regulations as denoted by <sup>nm</sup>.  
Concentrations exceeding standards are **BOLD**.  
d The WQCC regulation for PAHs of 30 ug/L is a total of the concentrations of naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene.  
Shading indicates the analyte was detected.  
Bold indicated analyte detected greater than regulatory standard  
J = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL).  
J+ = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased high.  
J- = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased low.  
U = Analyte was not detected. The reported numerical value is at or below the RL.  
UJ = Analyte was tentatively not detected. The reported numerical value is at or below the RL.  
N/A = Not applicable  
ND = Not detected  
NM = Not measured due to equipment malfunction  
NR = Not recorded or reported due to operational error  
NR-EF = Not recorded due to equipment malfunction or failure  
R = sample data rejected due to site contamination



Table 5-1  
Groundwater Analytical Results  
October - December 2011

Chemical Class & Analytical Method	Parameter	NMED Ground Water Protection Standards (Sec. 20.6.2.31(3))	NMED Approved Background	EPA MCLs <sup>d</sup>	KAFB-106039			KAFB-106040			KAFB-106042			KAFB-106043			KAFB-106044			KAFB-106045			KAFB-106046			KAFB-106047			KAFB-106048					
					Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL			
SVOCs (ug/L) Method 8270C	1,1-BIPHENYL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	1,2-DIPHENYLHYDRAZINE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	2,4,5-TRICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	2,4,6-TRICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	2,4-DICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	2,4-DIMETHYLPHENOL	N/A	N/A	N/A	ND	U	19.6	ND	U	19.6	ND	U	19.2	ND	U	18.9	ND	U	18.7	ND	U	18.9	ND	U	18.7	ND	U	18.9	ND	U	18.9	ND	U	18.9
	2,4-DINITROPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	2,4-DINITROTOLUENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	2,6-DINITROTOLUENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	2-CHLORONAPHTHALENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	2-CHLOROPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	2-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	2-NITROANILINE	N/A	N/A	N/A	ND	U	19.6	ND	U	19.6	ND	U	19.2	ND	U	18.9	ND	U	18.7	ND	U	18.9	ND	U	18.7	ND	U	18.9	ND	U	18.9	ND	U	18.9
	2-NITROPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	3,3'-DICHLOROBENZIDINE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	3-METHYLPHENOL AND 4-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	3-NITROANILINE	N/A	N/A	N/A	ND	U	19.6	ND	U	19.6	ND	U	19.2	ND	U	18.9	ND	U	18.7	ND	U	18.9	ND	U	18.7	ND	U	18.9	ND	U	18.9	ND	U	18.9
	4,6-DINITRO-2-METHYLPHENOL	N/A	N/A	N/A	ND	U	19.6	ND	U	19.6	ND	U	19.2	ND	U	18.9	ND	U	18.7	ND	U	18.9	ND	U	18.7	ND	U	18.9	ND	U	18.9	ND	U	18.9
	4-BROMOPHENYL PHENYL ETHER	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	4-CHLORO-3-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	4-CHLOROANILINE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	4-CHLOROPHENYL PHENYL ETHER	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	4-NITROANILINE	N/A	N/A	N/A	ND	U	19.6	ND	U	19.6	ND	U	19.2	ND	U	18.9	ND	U	18.7	ND	U	18.9	ND	U	18.7	ND	U	18.9	ND	U	18.9	ND	U	18.9
	4-NITROPHENOL	N/A	N/A	N/A	ND	U	19.6	ND	U	19.6	ND	U	19.2	ND	U	18.9	ND	U	18.7	ND	U	18.9	ND	U	18.7	ND	U	18.9	ND	U	18.9	ND	U	18.9
	ACETOPHENONE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	ATRAZINE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	BENZALDEHYDE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	BENZIDINE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	BENZOIC ACID	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	BIS(2-CHLOROETHOXY)METHANE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	BIS(2-CHLOROETHYL)ETHER	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	BIS(2-CHLOROISOPROPYL)ETHER	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	BIS(2-ETHYLHEXYL)PHTHALATE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	BUTYL BENZYL PHTHALATE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	CAPROLACTAM	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	CARBAZOLE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	DIBENZOFURAN	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	DIETHYL PHTHALATE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	DIMETHYL PHTHALATE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	DI-N-BUTYL PHTHALATE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	DI-N-OCTYL PHTHALATE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.67	ND	U	4.72	ND	U	4.72	ND	U	4.72
	HEXACHLOROBENZENE	N/A	N/A	N/A	ND	U	4																											

**Table 5-1  
Groundwater Analytical Results  
October - December 2011**

Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec. 20.6.2.3103) <sup>b</sup>	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>c,d</sup>	KAFB-106039		KAFB-106040		KAFB-106042		KAFB-106043		KAFB-106044		KAFB-106045		KAFB-106046		KAFB-106047		KAFB-106048	
					Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL
Metals (mg/L)	CALCIUM	N/A	N/A	N/A	37.9	5	34.4	5	63.6	5	44.5	5	32.2	5	31.3	5	62.1	5	41.8	5	34.3	5
Method 6010B	IRON, DISSOLVED	1	N/A	0.3	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1
	LEAD	0.05	0.01	0.015	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003
	MAGNESIUM	N/A	N/A	N/A	4.9	J	5	4.54	J	5	8.29	J	5	5.71	J	5	4.53	J	5	4.41	J	5
	MANGANESE, DISSOLVED	0.2	N/A	0.05	0.0621	J	0.015	0.0366	J	0.015	ND	U	0.015	0.00624	J	0.015	ND	U	0.015	ND	U	0.015
	POTASSIUM	N/A	N/A	N/A	2.39	J	5	2.2	J	5	3.22	J	5	2.63	J	5	2.02	J	5	2.52	J	5
	SODIUM	N/A	N/A	N/A	25.7	J	5	23.1	J	5	28.4	J	5	24.9	J	5	20.5	J	5	19.6	J	5
Anions (mg/L)	AMMONIA (AS N) (Method 4500NH3BG)	N/A	N/A	N/A	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	0.181	J	0.3	ND	U	0.3
Method E300.0	CHLORIDE	250	N/A	250	9.92	J	10	9.38	J	10	54.2	J	10	15.3	J	25	7.93	J	10	8.2	J	10
	NITROGEN, NITRATE-NITRITE (Method E353.2)	N/A	4	N/A	ND	U	1.5	ND	U	1.5	1.03	J	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5
	SULFATE	600	N/A	250	26.1	J	20	25.8	J	20	46.4	J	20	42.7	J	25	23.6	J	20	24.7	J	25
	SULFIDE, TOTAL (Method 4500SC2F)	N/A	N/A	N/A	ND	U	3.7	ND	U	3.7	ND	U	3.7	ND	U	3.45	ND	U	3.7	ND	U	3.7
Alkalinity (mg/L)	ALKALINITY, BICARBONATE (AS CaCO3)	N/A	N/A	N/A	114	J	1	113	J	1	106	J	1	99.3	J	1	96.8	J	1	171	J	1
Method SM2320B	ALKALINITY, CARBONATE (AS CaCO3)	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
Field Parameters	Temperature (°C)	N/A	N/A	N/A	18.66		18.56		18.68		18.93		19.19		18.73		19.37		19.34		19.01	
	pH (S.U.)	N/A	N/A	N/A	7.63		7.63		7.65		7.83		7.91		7.92		7.59		7.57		7.86	
	Spec Cond (µS/cm2)	N/A	N/A	N/A	308.5		300.7		513.9		330.7		276.7		275.9		401.9		333.6		286.2	
	DO (mg/L)	N/A	N/A	N/A	5.23		7.00		7.51		19.25		7.24		7.44		3.75		3.42		10.22	
	ORP (mV)	N/A	N/A	N/A	158		154		88		151		112		109		189		-12		206	
	Turbidity (NTU)	N/A	N/A	N/A	1.15		1.50		1.13		0.73		1.19		0.80		1.16		15.90		1.65	
	Alkalinity (mg/L as CaCO3)	N/A	N/A	N/A	118		96		118		128		114		104		164		160		147	

The NMWQCC standard and EPA MCL for m,p- xylene and o-xylene is for total xylenes.  
<sup>a</sup> EPA analytical methods listed are for the most recent sampling event.  
<sup>b</sup> NMED-HWB Approved Background Concentrations, SNL/Kirtland AFB, Chemical Constituents in Ground Water.  
 Concentrations exceeding background are shown in italics, if applicable.  
<sup>c</sup> EPA National Primary Drinking Water Standards - Maximum Contaminant Levels (MCLs), or if more stringent.  
<sup>d</sup> New Mexico Water Quality Control Commission (WQCC) Regulations as denoted by "™".  
 Concentrations exceeding standards are BOLD.  
<sup>d</sup> The WQCC regulation for PAHs of 30 µg/L is a total of the concentrations of naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene.  
 Shading indicates the analyte was detected.  
 Bold indicated analyte detected greater than regulatory standard.  
 J = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL).  
 J+ = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased high.  
 J- = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased low.  
 U = Analyte was not detected. The reported numerical value is at or below the RL.  
 UJ = Analyte was tentatively not detected. The reported numerical value is at or below the RL.  
 N/A = Not applicable.  
 ND = Not detected.  
 NM = Not measured due to equipment malfunction.  
 NR = Not recorded or reported due to operational error.  
 NR-EF = Not recorded due to equipment malfunction or failure.  
 R = sample data rejected due to site contamination.



**Table 5-1  
Groundwater Analytical Results  
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Chemical Class & Analytical Method*	Parameter	NMED Ground Water Protection Standards (Sec. 20.6.2.3103)	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>c,d</sup>	KAFB-106049		KAFB-106050		KAFB-106050		KAFB-106051		KAFB-106052		KAFB-106053		KAFB-106054		KAFB-106055		KAFB-106057							
					Result	VAL QUAL	Result	VAL QUAL	Result	VAL QUAL	Result	VAL QUAL	Result	VAL QUAL	Result	VAL QUAL	Result	VAL QUAL	Result	VAL QUAL	Result	VAL QUAL	Result	VAL QUAL	Result	VAL QUAL		
SVOCs (µg/L) Method 8270C	1,1-DIPHENYL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.63	ND	U	4.63
	1,2-DIPHENYLHYDRAZINE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	2,4,5-TRICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	2,4,6-TRICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	2,4-DICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	2,4-DIMETHYLPHENOL	N/A	N/A	N/A	ND	U	19.6	ND	U	18.9	ND	U	18.9	ND	U	19.2	ND	U	19.6	ND	U	19.2	ND	U	18.7	ND	U	18.5
	2,4-DINITROPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	2,4-DINITROTOLUENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	2,6-DINITROTOLUENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	2-CHLORONAPHTHALENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	2-CHLOROPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	2-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	2-NITROANILINE	N/A	N/A	N/A	ND	U	19.6	ND	U	18.9	ND	U	18.9	ND	U	19.2	ND	U	19.6	ND	U	19.2	ND	U	18.7	ND	U	18.5
	2-NITROPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	3,3-DICHLOROENZIDINE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	3-METHYLPHENOL AND 4-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	3-NITROANILINE	N/A	N/A	N/A	ND	U	19.6	ND	U	18.9	ND	U	18.9	ND	U	19.2	ND	U	19.6	ND	U	19.2	ND	U	18.7	ND	U	18.5
	4,6-DINITRO-2-METHYLPHENOL	N/A	N/A	N/A	ND	U	19.6	ND	U	18.9	ND	U	18.9	ND	U	19.2	ND	U	19.6	ND	U	19.2	ND	U	18.7	ND	U	18.5
	4-BROMOPHENYL PHENYL ETHER	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	4-CHLORO-3-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	4-CHLOROANILINE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	4-CHLOROPHENYL PHENYL ETHER	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	4-NITROANILINE	N/A	N/A	N/A	ND	U	19.6	ND	U	18.9	ND	U	18.9	ND	U	19.2	ND	U	19.6	ND	U	19.2	ND	U	18.7	ND	U	18.5
	4-NITROPHENOL	N/A	N/A	N/A	ND	U	19.6	ND	U	18.9	ND	U	18.9	ND	U	19.2	ND	U	19.6	ND	U	19.2	ND	U	18.7	ND	U	18.5
	ACETOPHENONE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	ATRAZINE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	BENZALDEHYDE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	BENZIDINE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	BENZOIC ACID	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
	BIS(2-CHLOROETHOXY)METHANE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63
BIS(2-CHLOROETHYL)ETHER	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63	
BIS(2-CHLOROISOPROPYL)ETHER	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63	
BIS(2-ETHYLHEXYL)PHTHALATE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63	
BUTYL BENZYL PHTHALATE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63	
CAPROLACTAM	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63	
CARBAZOLE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63	
DIBENZOFURAN	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63	
DIETHYL PHTHALATE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63	
DIMETHYL PHTHALATE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63	
DI-N-BUTYL PHTHALATE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63	
DI-N-OCTYL PHTHALATE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63	
HEXACHLOROBENZENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63	
HEXACHLOROBUTADIENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63	
HEXACHLOROCHLOROPENTADIENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63	
HEXACHLOROETHANE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63	
ISOPHORONE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63	
NITROBENZENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63	
N-NITROSO-DI-N-PROPYLAMINE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63	
N-NITROSODIPHENYLAMINE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.63	
PENTACHLOROPHENOL	N/A	N/A	N/A	ND	U	19.6	ND	U	18.9	ND	U	18.9	ND	U	19.2	ND	U	19.6	ND	U	19.2	ND	U	18.7	ND	U	18.5	
PHENOL	N/A	N/A	5	ND	U	4.9	ND	U	4.72	ND	U	4.72	ND	U	4.81	ND	U	4.9										

**Table 5-1  
Groundwater Analytical Results  
October - December 2011**

Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec. 20.6.2.3103) <sup>b</sup>	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>c,d</sup>	KAFB-106049		KAFB-106050		KAFB-106050		KAFB-106051		KAFB-106052		KAFB-106053		KAFB-106054		KAFB-106055		KAFB-106057							
					Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL			
Metals (mg/L)	CALCIUM	N/A	N/A	N/A	174	5	68.4	5	67.7	5	51.4	5	57.8	5	53.6	5	49	5	43.2	5	40.9	5						
Method 6010B	IRON, DISSOLVED	1	N/A	0.3	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1						
	LEAD	0.05	0.01	0.015	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003						
	MAGNESIUM	N/A	N/A	N/A	24	5	8.08	5	8.03	5	6.87	5	7.78	5	7.1	5	6.57	5	5.77	5	6.49	5						
	MANGANESE, DISSOLVED	0.2	N/A	0.05	0.00579	J	0.015	0.00469	J	0.015	0.00443	J	0.015	ND	U	0.015	ND	U	0.015	0.0175	0.015	0.00483	J	0.015	0.0133	J	0.015	
	POTASSIUM	N/A	N/A	N/A	4.18	J	3.17	J	3.15	J	5	2.65	J	3.08	J	5	2.65	J	5	2.36	J	5	2.31	J	5			
	SODIUM	N/A	N/A	N/A	32.9	J	29.1	J	28.9	J	5	25.5	J	27.7	J	5	24.7	J	5	25.1	J	5	23.3	J	5			
Anions (mg/L)	AMMONIA (AS N) (Method 4500NH3B)	N/A	N/A	N/A	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	0.129	J	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3
Method E300.0	CHLORIDE	250	N/A	250	97.6	J	10	50.5	J	10	51.1	J	10	29.9	J	25	31.9	J	25	23.3	J	25	21.2	J	10	13.1	J	10
	NITROGEN, NITRATE-NITRITE (Method E353.2)	N/A	4	N/A	3.61	J	1.5	1.57	J	1.5	1.61	J	1.5	0.866	J	1.5	0.722	J	1.5	0.434	J	1.5	0.862	J	1.5	ND	U	1.5
	SULFATE	600	N/A	250	379	J	20	76.6	J	20	77.6	J	20	50	J	25	59.4	J	25	58.6	J	5	36.2	J	20	34.6	J	20
	SULFIDE, TOTAL (Method 4500SC2F)	N/A	N/A	N/A	ND	U	3.7	ND	U	3.45	ND	U	3.45	ND	U	4	ND	U	4	ND	U	3.39	ND	U	3.45	ND	U	3.45
Alkalinity (mg/L)	ALKALINITY, BICARBONATE (AS CaCO3)	N/A	N/A	N/A	72.9	J	1	81.6	J	1	86.5	J	1	94.3	J	1	89	J	1	94.8	J	1	103	J	1	119	J	1
Method SM2320B	ALKALINITY, CARBONATE (AS CaCO3)	N/A	N/A	N/A	ND	U	1	4.94	J	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
Field Parameters	Temperature (°C)	N/A	N/A	N/A	18.59			19.20			18.85		17.70			18.03			18.53			18.78			19.05			
	pH (S.U.)	N/A	N/A	N/A	7.64			7.74			7.82		7.61			7.60			7.63			7.65			7.63			
	Spec Cond (µS/cm2)	N/A	N/A	N/A	1159.0			510.8			403.2		437.3			401.3			378.0			361.6			339.8			
	DO (mg/L)	N/A	N/A	N/A	8.18			10.23			9.31		5.86			6.54			6.16			5.72			6.33			
	ORP (mV)	N/A	N/A	N/A	100			148			157		148			153			160			152			139			
	Turbidity (NTU)	N/A	N/A	N/A	1.28			2.70			0.72		2.67			1.64			1.40			0.80			0.86			
	Alkalinity (mg/L as CaCO3)	N/A	N/A	N/A	88			96			98		112			112			138			108			122			

The NMWQCC standard and EPA MCL for m,p-xylene and o-xylene is for total xylenes.  
<sup>a</sup> EPA analytical methods listed are for the most recent sampling event.  
<sup>b</sup> NMED-HWB Approved Background Concentrations, SNL/Kirtland AFB, Chemical Constituents in Ground Water. Concentrations exceeding background are shown in italics, if applicable.  
<sup>c</sup> EPA National Primary Drinking Water Standards - Maximum Contaminant Levels (MCLs), or if more stringent, New Mexico Water Quality Control Commission (WQCC) Regulations as denoted by \*\*\*. Concentrations exceeding standards are **BOLD**.  
<sup>d</sup> The WQCC regulation for PAHs of 30 µg/L is a total of the concentrations of naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene.  
 Shading indicates the analyte was detected.  
**Bold** indicated analyte detected greater than regulatory standard.  
 J = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL).  
 J+ = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased high.  
 J- = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased low.  
 U = Analyte was not detected. The reported numerical value is at or below the RL.  
 UJ = Analyte was tentatively not detected. The reported numerical value is at or below the RL.  
 N/A = Not applicable  
 ND = Not detected  
 NM = Not measured due to equipment malfunction.  
 NR = Not recorded or reported due to operational error  
 NR-EF = Not recorded due to equipment malfunction or failure  
 R = sample data rejected due to site contamination





Table 5-1  
Groundwater Analytical Results  
October - December 2011

Chemical Class & Analytical Method	Parameter	NMED Ground Water Protection Standards (Sec 20.6.2.3103)	NMED Approved Background	EPA MCLs	KAFB-106058		KAFB-106059		KAFB-106060		KAFB-106060		KAFB-106061		KAFB-106062		KAFB-106063		KAFB-106064		KAFB-106065		KAFB-106066		KAFB-106067		KAFB-106068		KAFB-106069									
					Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL				
SVOCs (µg/L) Method 8270C	1,1-DIPHENYL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	4.81	ND	U	4.72	ND	U	5	ND	U	4.9				
	1,2-DIPHENYLHYDRAZINE	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	4.72	ND	U	5	ND	U	4.9				
	2,4,5-TRICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	4.72	ND	U	5	ND	U	4.9				
	2,4,6-TRICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	4.72	ND	U	5	ND	U	4.9				
	2,4-DICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	4.9	ND	U	4.72	ND	U	5	ND	U	4.9				
	2,4-DIMETHYLPHENOL	N/A	N/A	N/A	ND	U	18.7	ND	U	18.9	ND	U	20	ND	U	19.6	ND	U	18.9	ND	U	19.6	ND	U	19.6	ND	U	19.2	ND	U	20	ND	U	19.6				
	2,4-DINITROPHENOL	N/A	N/A	N/A	ND	U	46.7	ND	U	47.2	ND	U	50	ND	U	49	ND	U	47.2	ND	U	49	ND	U	490	ND	U	48.1	ND	U	50	ND	U	49				
	2,4-DINITROTOLUENE	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9				
	2,6-DINITROTOLUENE	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9				
	2-CHLORONAPHTHALENE	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9				
	2-CHLOROPHENOL	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9				
	2-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.67	93.7	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9			
	2-NITROANILINE	N/A	N/A	N/A	ND	U	18.7	ND	U	18.9	ND	U	20	ND	U	19.6	ND	U	18.9	ND	U	19.6	ND	U	196	ND	U	19.2	ND	U	20	ND	U	19.6				
	2-NITROPHENOL	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9				
	3,3'-DICHLOROBENZIDINE	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9				
	3-METHYLPHENOL AND 4-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	1.86	J	4.72	ND	U	5	ND	U	4.9	
	3-NITROANILINE	N/A	N/A	N/A	ND	U	18.7	ND	U	18.9	ND	U	20	ND	U	19.6	ND	U	18.9	ND	U	19.6	ND	U	196	ND	U	19.2	ND	U	20	ND	U	19.6				
	4,6-DINITRO-2-METHYLPHENOL	N/A	N/A	N/A	ND	U	18.7	ND	U	18.9	ND	U	20	ND	U	19.6	ND	U	18.9	ND	U	19.6	ND	U	196	ND	U	19.2	ND	U	20	ND	U	19.6				
	4-BROMOPHENYL PHENYL ETHER	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9				
	4-CHLORO-3-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9				
	4-CHLORANILINE	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9				
	4-CHLOROPHENYL PHENYL ETHER	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9				
	4-NITROANILINE	N/A	N/A	N/A	ND	U	18.7	ND	U	18.9	ND	U	20	ND	U	19.6	ND	U	18.9	ND	U	19.6	ND	U	196	ND	U	19.2	ND	U	20	ND	U	19.6				
	4-NITROPHENOL	N/A	N/A	N/A	ND	U	18.7	ND	U	18.9	ND	U	20	ND	U	19.6	ND	U	18.9	ND	U	19.6	ND	U	196	ND	U	19.2	ND	U	20	ND	U	19.6				
	ACETOPHENONE	N/A	N/A	N/A	ND	U	4.67	5630	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	1.76	J	4.72	ND	U	5	ND	U	4.9
	ATRAZINE	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9				
	BENZALDEHYDE	N/A	N/A	N/A	ND	U	4.67	39.8	J	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9				
	BENZIDINE	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9				
	BENZOIC ACID	N/A	N/A	N/A	ND	U	46.7	ND	U	47.2	ND	U	50	ND	U	49	ND	U	47.2	ND	U	49	ND	U	490	ND	U	48.1	ND	U	50	ND	U	4.9				
	BIS(2-CHLOROETHOXY)METHANE	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9				
BIS(2-CHLOROETHYL)ETHER	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9					
BIS(2-CHLOROISOPROPYL)ETHER	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9					
BIS(2-ETHYLHEXYL)PHTHALATE	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9					
BUTYL BENZYL PHTHALATE	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9					
CAPROLACTAM	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9					
CARBAZOLE	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9					
DIBENZOFURAN	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9					
DIETHYL PHTHALATE	N/A	N/A	N/A	ND	U	4.67	17.4	J	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9					
DIMETHYL PHTHALATE	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9					
DI-N-BUTYL PHTHALATE	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9					
DI-N-OCTYL PHTHALATE	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9					
HEXACHLOROBENZENE	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND	U	4.9	ND	U	49	ND	U	4.81	ND	U	5	ND	U	4.9					
HEXACHLOROBUTADIENE	N/A	N/A	N/A	ND	U	4.67	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.72	ND																			

**Table 5-1  
Groundwater Analytical Results  
October - December 2011**

Chemical Class & Analytical Method <sup>1</sup>	Parameter	NMED Ground Water Protection Standards (Sec. 20.6.2.3103) <sup>4</sup>	NMED Approved Background <sup>2</sup>	EPA MCLs <sup>5,6</sup>	KAFB-106058		KAFB-106059		KAFB-106060		KAFB-106060		KAFB-106061		KAFB-106062		KAFB-106063		KAFB-106064		KAFB-106065		KAFB-106066		KAFB-106067		KAFB-106068		KAFB-106069				
					Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL
Metals (mg/L)	CALCIUM	N/A	N/A	N/A	37.2	5	81.3	5	42.9	5	43.3	5	33	5	33.9	5	45.4	5	59	5	107	5	37.4	5	70.3	5	36.5	5	44.9	5			
Method 6010B	IRON, DISSOLVED	1	N/A	0.3	ND	U	0.1	1.12	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	0.112	J+	0.1	3.7	0.1	ND	U	0.1	0.763			
	LEAD	0.05	0.01	0.015	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003		
	MAGNESIUM	N/A	N/A	N/A	5.13	5	12	5	5.81	5	5.85	5	4.43	J	5	4.68	J	5	6.3	5	8.31	5	16.4	5	9.99	J	5	4.78	J	5	5.99		
	MANGANESE, DISSOLVED	0.2	N/A	0.05	0.0043	J	0.015	1.51	0.015	0.00544	J	0.015	ND	U	0.015	ND	U	0.015	ND	U	0.015	0.393	0.015	3.03	0.015	ND	U	0.015	0.924	0.015	ND	U	0.015
	POTASSIUM	N/A	N/A	N/A	2.29	J	5	3.21	J	5	2.41	J	5	2.46	J	5	2.02	J	5	1.92	J	5	2.33	J	5	3.63	J	5	2.24	J	5	2.32	
	SODIUM	N/A	N/A	N/A	23.4	5	32	5	24.9	5	25.2	5	22.1	5	21.2	5	24.9	5	30.6	5	44.1	5	24.1	5	31.2	5	22.5	5	25.6	5	25.6		
Anions (mg/L)	AMMONIA (AS N) (Method 4500NH3BG)	N/A	N/A	N/A	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3		
Method E300.0	CHLORIDE	250	N/A	250	11.4	10	25.1	0.5	12.9	1	12.7	1	6.3	1	7.78	J+	2.5	13.5	J+	2.5	13.2	0.5	81.2	2.5	8.13	2.5	12.4	2.5	9.08	2.5	11.8		
	NITROGEN, NITRATE-NITRITE (Method E353.2)	N/A	4	N/A	ND	U	1.5	ND	U	1.5	0.452	J	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5		
	SULFATE	600	N/A	250	31.5	20	51.7	2	31.8	2	31.3	2	25.1	2	29.3	2	29.3	2	25.1	2	29.3	2	29.9	2	29.7	2	25.1	2	31.7	2	34.2		
	SULFIDE, TOTAL (Method 4500SC2F)	N/A	N/A	N/A	ND	U	3.39	0.768	J-	3.7	ND	U	3.7	ND	U	3.7	ND	U	3.7	ND	U	3.45	ND	U	3.57	ND	U	3.64	0.828	J	3.45		
Alkalinity (mg/L)	ALKALINITY, BICARBONATE (AS CaCO3)	N/A	N/A	N/A	109	1	177	1	98.5	1	98.9	1	96.8	1	106	1	117	1	161	1	216	1	109	1	229	1	103	1	113	1	113		
Method SM2320b	ALKALINITY, CARBONATE (AS CaCO3)	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1		
Field Parameters	Temperature (°C)	N/A	N/A	N/A	18.85		17.91		19.36		19.36		19.18		18.39		18.88		17.73		18.45		18.49		18.48		18.91		17.65		17.65		
	pH (S.U.)	N/A	N/A	N/A	7.67		7.02		7.83		7.83		7.87		7.80		7.73		7.35		7.17		7.77		7.38		7.82		7.57		7.57		
	Spec Cond (µS/cm2)	N/A	N/A	N/A	313.6		571.5		334.5		334.5		277.0		289.7		361.3		441.1		830.3		299.2		512.4		299.8		338.3		338.3		
	DO (mg/L)	N/A	N/A	N/A	7.60		1.02		11.38		11.38		4.23		5.53		8.54		0.89		0.01		11.49		0.64		17.23		2.97		2.97		
	ORP (mV)	N/A	N/A	N/A	154		0		160		160		127		229		635		-129		-149		83		-82		167		186		186		
	Turbidity (NTU)	N/A	N/A	N/A	5.12		1.84		0.77		0.77		1.00		1.00		0.78		0.89		1.29		2.85		1.63		2.35		0.38		0.38		
	Alkalinity (mg/L as CaCO3)	N/A	N/A	N/A	110		206		110		110		102		116		144		173		202		120		248		122		122		122		

The NMWQCC standard and EPA MCL for m,p-xylene and o-xylene is for total xylenes.  
 a EPA analytical methods listed are for the most recent sampling event  
 b NMED-HWB Approved Background Concentrations, SNL/Kirtland AFB, Chemical Constituents in Ground Water.  
 Concentrations exceeding background are shown in italics, if applicable.  
 c EPA National Primary Drinking Water Standards - Maximum Contaminant Levels (MCLs), or if more stringent,  
 New Mexico Water Quality Control Commission (WQCC) Regulations as denoted by "NM".  
 Concentrations exceeding standards are **BOLD**.  
 d The WQCC regulation for PAHs of 30 µg/L is a total of the concentrations of naphthalene,  
 1-methylnaphthalene, and 2-methylnaphthalene.  
 Shading indicates the analyte was detected.  
 Bold indicated analyte detected greater than regulatory standard  
 J = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL).  
 J+ = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased high.  
 J- = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased low.  
 U = Analyte was not detected. The reported numerical value is at or below the RL.  
 UU = Analyte was tentatively not detected. The reported numerical value is at or below the RL.  
 NA = Not applicable  
 ND = Not detected  
 NM = Not measured due to equipment malfunction.  
 NR = Not recorded or reported due to operational error  
 NR-EF = Not recorded due to equipment malfunction or failure  
 R = sample data rejected due to site contamination

**Table 5-1  
Groundwater Analytical Results  
October - December 2011**

Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec. 20.6.2.3103) <sup>b</sup>	NMED Approved Background <sup>c</sup>	EPA MCLs <sup>d</sup>	KAFB-106070			KAFB-106071			KAFB-106071			KAFB-106072			KAFB-106073		
					Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL
TPH (µg/l)	DIESEL RANGE ORGANICS	N/A	N/A	N/A	572		93.5	ND	U	94.3	ND	U	94.3	1690		100	ND	U	94.3
Method 8015B	GASOLINE RANGE ORGANICS	N/A	N/A	N/A	ND	U	150	ND	U	150	ND	U	150	336		150	ND	U	150
VOCs (µg/L)	1,1,1,2-TETRACHLOROETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
Method 8260B	1,1,1-TRICHLOROETHANE	60	N/A	60	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,1,2-TETRACHLOROETHANE	10	N/A	10	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,1,2-TRICHLOROETHANE	100	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,1-DICHLOROETHANE	25	N/A	25	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,1-DICHLOROETHENE	5	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,1-DICHLOROPROPENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,2,3-TRICHLOROBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,2,3-TRICHLOROPROPANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2
	1,2,4-TRICHLOROBENZENE	N/A	N/A	70	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,2,4-TRIMETHYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,2-DIBROMO-3-CHLOROPROPANE	N/A	N/A	0.2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2
	1,2-DIBROMOETHANE	0.1	N/A	0.05	ND	U	1	ND	U	1	ND	U	1	1.36		1	ND	U	1
	1,2-DIBROMOETHANE (Method 8011)	0.1	N/A	0.05	0.0618		0.0284	ND	U	0.0282	ND	U	0.028	1.14		0.0566	0.0531		0.0283
	1,2-DICHLOROBENZENE	N/A	N/A	600	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,2-DICHLOROETHANE	10	N/A	5	1.78		1	ND	U	1	ND	U	1	2.06		1	ND	U	1
	1,2-DICHLOROPROPANE	N/A	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,3,5-TRIMETHYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	1.58		1	ND	U	1
	1,3-DICHLOROBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,3-DICHLOROPROPANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,4-DICHLOROBENZENE	N/A	N/A	75	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	2,2-DICHLOROPROPANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	2-BUTANONE	N/A	N/A	N/A	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10
	2-CHLOROTOLUENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	2-HEXANONE	N/A	N/A	N/A	ND	U	5	ND	U	5	ND	U	5	ND	U	5	ND	U	5
	4-CHLOROTOLUENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	4-METHYL-2-PENTANONE	N/A	N/A	N/A	ND	U	5	ND	U	5	ND	U	5	ND	U	5	ND	U	5
	ACETONE	N/A	N/A	N/A	10.4		10	ND	U	10	ND	U	10	5.9	J	10	ND	U	10
	BENZENE	10	N/A	5	ND	U	1	ND	U	1	ND	U	1	1.58		1	ND	U	1
	BROMOBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	BROMOCHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	BROMODICHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	BROMOFORM	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	BROMOMETHANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2
	CARBON DISULFIDE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	CARBON TETRACHLORIDE	10	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	CHLOROBENZENE	N/A	N/A	100	ND	U	1	ND	U	1	ND	U	1	1.38		1	ND	U	1
	CHLOROETHANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2
	CHLOROFORM	100	N/A	100	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	CHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	CIS-1,2-DICHLOROETHENE	N/A	N/A	70	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	CIS-1,3-DICHLOROPROPENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	DIBROMOCHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	DIBROMOMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	DICHLORODIFLUOROMETHANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2
	ETHYLBENZENE	750	N/A	700	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	HEXACHLOROBUTADIENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	ISOPROPYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	2.54		1	ND	U	1
	METHYL TERT-BUTYL ETHER	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	METHYLENE CHLORIDE	100	N/A	5	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2
	NAPHTHALENE	N/A	N/A	30	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	N-BUTYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	N-PROPYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	0.494	J	1	ND	U	1
	P-ISOPROPYLTOLUENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	0.449	J	1	ND	U	1
	SEC-BUTYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	0.295	J	1	ND	U	1
	STYRENE	N/A	N/A	100	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	TERT-BUTYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	TETRACHLOROETHENE	N/A	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	TOLUENE	750	N/A	750	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	TRANS-1,2-DICHLOROETHENE	N/A	N/A	100	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	TRANS-1,3-DICHLOROPROPENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	TRICHLOROETHENE	N/A	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	TRICHLOROFLUOROMETHANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2
	VINYL CHLORIDE	1	N/A	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	XYLENES	620	N/A	10000	ND	U	3	ND	U	3	ND	U	3	ND	U	3	ND	U	3

**Table 5-1  
Groundwater Analytical Results  
October - December 2011**

Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec. 20.9.2.3103) <sup>c</sup>	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>d</sup>	KAFB-106070			KAFB-106071			KAFB-106071			KAFB-106072			KAFB-106073		
					Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL
SVOCs (µg/L) Method 8270C	1,1-DIPHENYL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	1,2-DIPHENYLHYDRAZINE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	2,4,5-TRICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	2,4,6-TRICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	2,4-DICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	2,4-DIMETHYLPHENOL	N/A	N/A	N/A	ND	U	19.6	ND	U	18.9	ND	U	18.7	ND	U	96.2	ND	U	18.9
Method 8270C	2,4-DINITROPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	2,4-DINITROTOLUENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	2,6-DINITROTOLUENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	2-CHLORONAPHTHALENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	2-CHLOROPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	2-METHYLPHENOL	N/A	N/A	N/A	ND	UJ	4.9	ND	U	4.72	ND	U	4.67	ND	UJ	24	ND	UJ	4.72
Method 8270C	2-NITROANILINE	N/A	N/A	N/A	ND	U	19.6	ND	U	18.9	ND	U	18.7	ND	U	96.2	ND	U	18.9
	2-NITROPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	3,3-DICHLOROBENZIDINE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	3-METHYLPHENOL AND 4-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	3-NITROANILINE	N/A	N/A	N/A	ND	U	19.6	ND	U	18.9	ND	U	18.7	ND	U	96.2	ND	U	18.9
	4,6-DINITRO-2-METHYLPHENOL	N/A	N/A	N/A	ND	U	19.6	ND	U	18.9	ND	U	18.7	ND	U	96.2	ND	U	18.9
Method 8270C	4-BROMOPHENYL PHENYL ETHER	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	4-CHLORO-3-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	4-CHLOROANILINE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	4-CHLOROPHENYL PHENYL ETHER	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	4-NITROANILINE	N/A	N/A	N/A	ND	U	19.6	ND	U	18.9	ND	U	18.7	ND	U	96.2	ND	U	18.9
	4-NITROPHENOL	N/A	N/A	N/A	ND	U	19.6	ND	U	18.9	ND	U	18.7	ND	U	96.2	ND	U	18.9
Method 8270C	ACETOPHENONE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	ATRAZINE	N/A	N/A	N/A	ND	U	4.9	ND	UJ	4.72	ND	UJ	4.67	ND	U	24	ND	U	4.72
Method 8270C	BENZALDEHYDE	N/A	N/A	N/A	ND	UJ	4.9	ND	UJ	4.72	ND	UJ	4.67	ND	UJ	24	ND	UJ	4.72
	BENZIDINE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	BENZOIC ACID	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	BIS(2-CHLOROETHOXY)METHANE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	BIS(2-CHLOROETHYL)ETHER	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	BIS(2-CHLOROISOPROPYL)ETHER	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	BIS(2-ETHYLHEXYL)PHTHALATE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	BUTYL BENZYL PHTHALATE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	CAPROLACTAM	N/A	N/A	N/A	ND	UJ	4.9	ND	UJ	4.72	ND	UJ	4.67	ND	UJ	24	ND	UJ	4.72
	CARBAZOLE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	DIBENZOFURAN	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	DIETHYL PHTHALATE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	DIMETHYL PHTHALATE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	DI-N-BUTYL PHTHALATE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	DI-N-OCTYL PHTHALATE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	HEXACHLORO BENZENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	HEXACHLORO BUTADIENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	HEXACHLOROCYCLOPENTADIENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	HEXACHLOROETHANE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	ISOPHORONE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	NITROBENZENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	N-NITROSO-DI-N-PROPYLAMINE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	N-NITROSODIPHENYLAMINE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	PENTACHLOROPHENOL	N/A	N/A	N/A	ND	U	19.6	ND	U	18.9	ND	U	18.7	ND	U	96.2	ND	U	18.9
Method 8270C	PHENOL	N/A	N/A	5	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	1-METHYL NAPHTHALENE	N/A	N/A	30	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	2-METHYL NAPHTHALENE	N/A	N/A	30	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	ACENAPHTHENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	ACENAPHTHYLENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	ANTHRACENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	BENZO(A)ANTHRACENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	BENZO(A)PYRENE	0.7	N/A	0.2	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	BENZO(B)FLUORANTHENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	BENZO(GH)PERYLENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	BENZO(K)FLUORANTHENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	CHRYSENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	DIBENZO(A,H)ANTHRACENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	FLUORANTHENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	FLUORENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	INDENO(1,2,3-CD)PYRENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	NAPHTHALENE	N/A	N/A	30	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	PHENANTHRENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
Method 8270C	PYRENE	N/A	N/A	N/A	ND	U	4.9	ND	U	4.72	ND	U	4.67	ND	U	24	ND	U	4.72
	1-METHYL NAPHTHALENE	N/A	N/A	30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Method 8270C	2-METHYL NAPHTHALENE	N/A	N/A	30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	ACENAPHTHENE	N/A	N/A	N/A															

**Table 5-1  
Groundwater Analytical Results  
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		LOCATION CODE		KAFB-106070		KAFB-106071		KAFB-106071		KAFB-106072		KAFB-106073							
		SAMPLE NO		GW0327		GW0328		GW0329		GW0330		GW0331							
		SAMPLE DATE		8-Nov-11		8-Nov-11		8-Nov-11		7-Nov-11		14-Nov-11							
		SAMPLE PURPOSE		REG		REG		FD		REG		REG							
		SAMPLE DEPTH		460-480 FT		548-563 FT		548-563 FT		475-495 FT		500-515 FT							
Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec 20.8.2.3103) <sup>c</sup>	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>d</sup>	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL
Metals (mg/L)	CALCIUM	N/A	N/A	N/A	68.5		5	40.9		5	38.9		5	59.3		5	40.9		5
Method 6010B	IRON, DISSOLVED	1	N/A	0.3	ND	U	0.1	ND	U	0.1	ND	U	0.1	0.0429	J	0.1	ND	U	0.1
	LEAD	0.05	0.01	0.015	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003
	MAGNESIUM	N/A	N/A	N/A	9.14		5	5.29		5	5.06		5	7.92		5	5.59		5
	MANGANESE, DISSOLVED	0.2	N/A	0.05	0.0703		0.015	ND	U	0.015	ND	U	0.015	0.0764		0.015	ND	U	0.015
	POTASSIUM	N/A	N/A	N/A	3.26	J	5	2.32	J	5	2.25	J	5	2.98	J	5	2.37	J	5
	SODIUM	N/A	N/A	N/A	29.9		5	22.8		5	22.1		5	28		5	22.1		5
Anions (mg/L)	AMMONIA (AS N) (Method 4500NH3B)	N/A	N/A	N/A	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3
Method E300.0	CHLORIDE	250	N/A	250	35.5	J+	2.5	10.4	J+	2.5	10.3	J+	2.5	23.7	J+	2.5	17.7		0.5
	NITROGEN, NITRATE-NITRITE (Method E353.2)	N/A	4	N/A	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5
	SULFATE	600	N/A	250	55.8		5	33.6		2.5	33.4		2.5	49.2		2.5	30.1		2
	SULFIDE, TOTAL (Method 4500SC2F)	N/A	N/A	N/A	ND	U	3.45	ND	U	3.7	ND	U	3.7	ND	U	3.39	ND	U	3.45
Alkalinity (mg/L)	ALKALINITY, BICARBONATE (AS CaCO3)	N/A	N/A	N/A	150		1	102		1	106		1	140		1	97.3		1
Method SM2320B	ALKALINITY, CARBONATE (AS CaCO3)	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
Field Parameters	Temperature (°C)	N/A	N/A	N/A	18.18			18.33			18.33			18.51			18.31		
	pH (S.U.)	N/A	N/A	N/A	7.36			7.60			7.60			7.49			7.63		
	Spec Cond (µS/cm2)	N/A	N/A	N/A	511.0			304.5			304.5			437.9			324.0		
	DO (mg/L)	N/A	N/A	N/A	1.60			6.07			6.07			20.50			6.74		
	ORP (mV)	N/A	N/A	N/A	26			139			139			20			140		
	Turbidity (NTU)	N/A	N/A	N/A	1.28			1.79			1.79			1.60			1.58		
	Alkalinity (mg/L as CaCO3)	N/A	N/A	N/A	188			104			104			138			119		

The NMWQCC standard and EPA MCL for m,p- xylene and o-xylene is for total xylenes  
<sup>a</sup> EPA analytical methods listed are for the most recent sampling event.  
<sup>b</sup> NMED-HWB Approved Background Concentrations, SNL/Kirtland AFB, Chemical Constituents in Ground Water.  
 Concentrations exceeding background are shown in italics, if applicable.  
<sup>c</sup> EPA National Primary Drinking Water Standards - Maximum Contaminant Levels (MCLs) or if more stringent.  
 New Mexico Water Quality Control Commission (WQCC) Regulations as denoted by ""  
 Concentrations exceeding standards are **BOLD**.  
<sup>d</sup> The WQCC regulation for PAHs of 30 ug/L is a total of the concentrations of naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene.  
 Shading indicates the analyte was detected.  
**Bold** indicated analyte detected greater than regulatory standard  
 J = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL)  
 J+ = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased high  
 J- = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased high  
 U = Analyte was not detected. The reported numerical value is at or below the RL.  
 UJ = Analyte was tentatively not detected. The reported numerical value is at or below the RL.  
 N/A = Not applicable  
 ND = Not detected  
 NM = Not measured due to equipment malfunction  
 NR = Not recorded or reported due to operational error  
 NR-EF = Not recorded due to equipment malfunction or failure  
 R = sample data rejected due to site contamination

**Table 5-1  
Groundwater Analytical Results  
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Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec. 20 8 2 3103) <sup>b</sup>	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>c,d</sup>	KAFB-106074		KAFB-106075		KAFB-106076		KAFB-106077		KAFB-106078		KAFB-106079		KAFB-106080		KAFB-106080		KAFB-106081								
					Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL				
TPH (ug/L)	DIESEL RANGE ORGANICS	N/A	N/A	N/A	ND	U	94.3	612	93.5	40100	1950	ND	UJ	100	R	98600	48100	21700	1890	14900	1890	ND	U	96.2					
Method 8015B	GASOLINE RANGE ORGANICS	N/A	N/A	N/A	ND	U	150	ND	U	150	29500	3750	ND	U	150	R	38600	3000	12700	1500	12500	1500	317	U	150				
VOCs (ug/L)	1,1,1,2-TETRACHLOROETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	1			
Method 8260B	1,1,1-TRICHLOROETHANE	60	N/A	60	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	1			
	1,1,2-TETRACHLOROETHANE	10	N/A	10	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	1			
	1,1,2-TRICHLOROETHANE	100	N/A	5	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	1			
	1,1-DICHLOROETHANE	25	N/A	25	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	1			
	1,1-DICHLOROETHENE	5	N/A	5	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	1			
	1,1-DICHLOROPROPENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	1			
	1,2,3-TRICHLOROBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	1			
	1,2,3-TRICHLOROPROPANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	U	100	ND	U	2	R	ND	U	200	ND	U	100	ND	U	2			
	1,2,4-TRICHLOROBENZENE	N/A	N/A	70	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	1			
	1,2,4-TRIMETHYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	390	50	ND	U	1	R	166	100	38.2	J	50	36.3	J	50	ND	U	1		
	1,2-DIBROMO-3-CHLOROPROPANE	N/A	N/A	0.2	ND	U	2	ND	U	2	ND	U	100	ND	U	2	R	ND	U	200	ND	U	100	ND	U	2			
	1,2-DIBROMOETHANE	0.1	N/A	0.05	ND	U	1	0.262	J	1	111	50	ND	U	1	R	181	100	38.2	J	50	36.3	J	50	ND	U	1		
	1,2-DIBROMOETHANE (Method 8011)	0.1	N/A	0.05	ND	U	0.0275	0.207	J	0.0279	110	D	5.64	0.0208	J	0.0279	R	162	5.65	0.248	J	0.0281	0.208	J	0.0286	ND	U	0.0286	
	1,2-DICHLOROBENZENE	N/A	N/A	600	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	1			
	1,2-DICHLOROETHANE	10	N/A	5	ND	U	1	0.555	J	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	1			
	1,2-DICHLOROPROPANE	N/A	N/A	5	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	1			
	1,3,5-TRIMETHYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	112	50	ND	U	1	R	58.7	J	100	28.2	J	50	28.1	J	50	ND	U	1	
	1,3-DICHLOROBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	1			
	1,3-DICHLOROPROPANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	1			
	1,4-DICHLOROBENZENE	N/A	N/A	75	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	1			
	2,2-DICHLOROPROPANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	1			
	2-BUTANONE	N/A	N/A	N/A	ND	U	10	ND	U	10	420	J	500	ND	U	10	R	737	J	1000	ND	U	500	ND	U	10			
	2-CHLOROTOLUENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	1			
	2-HEXANONE	N/A	N/A	N/A	ND	U	5	ND	U	5	210	J	250	ND	U	5	R	ND	U	500	ND	U	250	ND	U	5			
	4-CHLOROTOLUENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	1			
	4-METHYL-2-PENTANONE	N/A	N/A	N/A	ND	U	5	ND	U	5	118	J	250	ND	U	5	R	230	J	500	140	J	250	146	J	250	ND	UJ	5
	ACETONE	N/A	N/A	N/A	ND	U	10	7.05	J	10	1960	500	ND	U	10	R	3220	J+	1000	222	J+	500	230	J+	500	ND	U	10	
	BENZENE	10	N/A	5	ND	U	1	ND	U	1	4320	50	ND	U	1	R	5800	100	3110	50	3110	50	3110	50	ND	U	1		
	BROMOBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	1			
	BROMOCHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	1			
	BROMODICHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	UJ	100	ND	UJ	50	ND	UJ	50	ND	UJ	1
	BROMOFORM	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	50	ND	U	1
	BROMOMETHANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	U	100	ND	U	2	R	ND	U	200	ND	U	100	ND	U	100	ND	U	2
	CARBON DISULFIDE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	50	ND	U	1
	CARBON TETRACHLORIDE	10	N/A	5	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	50	ND	U	1
	CHLOROBENZENE	N/A	N/A	100	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	50	ND	U	1
	CHLOROETHANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	U	100	ND	U	2	R	ND	U	200	ND	U	100	ND	U	100	ND	U	2
	CHLOROFORM	100	N/A	100	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	50	ND	U	1
	CHLOROMETHANE	N/A	N/A	N/A	0.49	J	1	ND	U	1	ND	UJ	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	50	ND	U	1
	CIS-1,2-DICHLOROETHENE	N/A	N/A	70	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	50	ND	U	1
	CIS-1,3-DICHLOROPROPENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	50	ND	U	1
	DIBROMOCHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	50	ND	U	1
	DIBROMOMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	50	ND	U	1
	DICHLORODIFLUOROMETHANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	U	100	0.792	J	2	R	ND	UJ	200	ND	UJ	100	ND	UJ	100	ND	UJ	2
	ETHYLBENZENE	750	N/A	700	ND	U	1	0.277	J	1	704	50	ND	U	1	R	692	100	733	50	748	50	748	50	ND	U	1		
	HEXACHLOROBUTADIENE	N/A	N/A	N/A	ND	UJ	1	ND	U	1	ND	U	50	ND	U	1	R	ND	U	100	ND	U	50	ND	U	50	ND	U	1
	ISOPROPYLBENZENE	N/A	N/A	N/A	ND	U	1	2.26	J	1	63.5	50	ND	U	1	R	65	J	100	62.6	50	64.6	50	64.6	50	ND	U	1	
	METHYL TERT-BUTYL ETHER	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	50	ND	U	1	R	ND	UJ	100	ND	UJ	50	ND	UJ	50	ND	UJ	1
	METHYLENE CHLORIDE	100	N/A	5	ND	U	2	ND	U	2	ND	U	100	ND	U	2	R	ND	U	200	ND	U	100	ND	U	100	ND	U	2
	NAPHTHALENE	N/A	N/A	30	ND	U	1	ND	U	1	278	50	ND	U	1	R	114	100	94	50	99.7	50	99.7	50	ND	U	1		
	N-BUTYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	23.4	J	50	ND	U	1	R	ND	U	100									

Table 5-1  
Groundwater Analytical Results  
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Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec. 20-2-2.103) <sup>b</sup>	NMED Approved Background <sup>c</sup>	EPA MCLs <sup>d</sup>	KAFB-106074			KAFB-106075			KAFB-106076			KAFB-106077			KAFB-106078			KAFB-106079			KAFB-106080			KAFB-106081						
					Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL				
SVOCs (µg/L) Method 8270C	1,1-DIPHENYL	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72			
	1,2-DIPHENYLHYDRAZINE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72			
	2,4,6-TRICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72			
	2,4,6-TRICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72			
	2,4-DICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72			
	2,4-DIMETHYLPHENOL	N/A	N/A	N/A	ND	U	19.2	ND	U	19.6	ND	U	19.6	ND	U	18.9	R	ND	U	962	ND	U	1000	ND	U	943	ND	U	18.9			
	2,4-DINITROPHENOL	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	2400	ND	U	2500	ND	U	2360	ND	U	47.2			
	2,4-DINITROTOLUENE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72			
	2,6-DINITROTOLUENE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72			
	2-CHLORONAPHTHALENE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72			
	2-CHLOROPHENOL	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72			
	2-METHYLPHENOL	N/A	N/A	N/A	ND	UJ	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	130	J	240	ND	U	250	ND	U	236	ND	U	4.72	
	2-NITROANILINE	N/A	N/A	N/A	ND	U	19.2	ND	U	19.6	ND	U	19.6	ND	U	18.9	R	ND	U	962	ND	U	1000	ND	U	943	ND	U	18.9			
	2-NITROPHENOL	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72			
	3,3-DICHLOROENBZIDINE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72			
	3-METHYLPHENOL AND 4-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72			
	3-NITROANILINE	N/A	N/A	N/A	ND	U	19.2	ND	U	19.6	ND	U	19.6	ND	U	18.9	R	ND	U	962	ND	U	1000	ND	U	943	ND	U	18.9			
	4,6-DINITRO-2-METHYLPHENOL	N/A	N/A	N/A	ND	U	19.2	ND	U	19.6	ND	U	19.6	ND	U	18.9	R	ND	U	962	ND	U	1000	ND	U	943	ND	U	18.9			
	4-BROMOPHENYL PHENYL ETHER	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72			
	4-CHLORO-3-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72			
	4-CHLOROANILINE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72			
	4-CHLOROPHENYL PHENYL ETHER	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72			
	4-NITROANILINE	N/A	N/A	N/A	ND	U	19.2	ND	U	19.6	ND	U	19.6	ND	U	18.9	R	ND	U	962	ND	U	1000	ND	U	943	ND	U	18.9			
	4-NITROPHENOL	N/A	N/A	N/A	ND	U	19.2	ND	U	19.6	ND	U	19.6	ND	U	18.9	R	ND	U	962	ND	U	1000	ND	U	943	ND	U	18.9			
	ACETOPHENONE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	4710	J	240	ND	2373	U	250	2292	U	236	ND	U	4.72
	ATRAZINE	N/A	N/A	N/A	ND	UJ	4.81	ND	UJ	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72			
	BENZALDEHYDE	N/A	N/A	N/A	ND	UJ	4.81	ND	UJ	4.9	ND	UJ	4.9	ND	UJ	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	UJ	4.72			
	BENZIDINE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	2400	ND	U	2500	ND	U	2360	ND	U	4.72			
	BENZOIC ACID	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	2400	ND	U	2500	ND	U	2360	ND	UJ	4.72			
	BIS(2-CHLOROETHOXY)METHANE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	UJ	4.72			
	BIS(2-CHLOROETHYL)ETHER	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	UJ	4.72			
	BIS(2-CHLOROISOPROPYL)ETHER	N/A	N/A	N/A	ND	UJ	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	UJ	4.72			
	BIS(2-ETHYLHEXYL)PHTHALATE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72			
	BUTYL BENZYL PHTHALATE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72			
	CAPROLACTAM	N/A	N/A	N/A	ND	UJ	4.81	ND	UJ	4.9	ND	UJ	4.9	ND	UJ	4.72	R	ND	UJ	240	ND	UJ	250	ND	UJ	236	ND	UJ	4.72			
CARBAZOLE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72				
DIBENZOFURAN	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72				
DIETHYL PHTHALATE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	UJ	4.72				
DIMETHYL PHTHALATE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72				
DI-N-BUTYL PHTHALATE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	UJ	4.72				
DI-N-OCTYL PHTHALATE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72				
HEXACHLOROENBZENE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72				
HEXACHLOROBUTADIENE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72				
HEXACHLOROENBZENE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72				
HEXACHLOROETHANE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72				
ISOPHORONE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72				
NITROBENZENE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72				
N-NITROSO-DI-N-PROPYLAMINE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72				
N-NITROSODIPHENYLAMINE	N/A	N/A	N/A	ND	U	4.81	ND	U	4.9	ND	U	4.9	ND	U	4.72	R	ND	U	240	ND	U	250	ND	U	236	ND	U	4.72				
PENTACHLOROPHENOL	N/A	N/A	N/A	ND	U	19.2	ND	U	19.6	ND	U	19.6	ND	U	18.9	R	ND	U	962													



**Table 5-1  
Groundwater Analytical Results  
October - December 2011**

Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec. 20.6.2.31(b)) <sup>c</sup>	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>d,e</sup>	KAFB-106074		KAFB-106075		KAFB-106076		KAFB-106077		KAFB-106078		KAFB-106079		KAFB-106080		KAFB-106080		KAFB-106081				
					Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL
Metals (mg/L)	CALCIUM	N/A	N/A	N/A	32.6	5	60.4	5	75.9	5	36.6	5	115	R	141	5	145	5	145	5	35.7	5			
Method 6010B	IRON DISSOLVED	1	N/A	0.3	ND	U	0.1	ND	U	0.1	1.58	J+	0.1	ND	U	0.1	1.19	R	0.1	2.65	0.1	ND	U	0.1	
	LEAD	0.05	0.01	0.015	ND	U	0.003	ND	U	0.003	ND	U	0.003	R	ND	U	0.003	R	ND	U	0.003	ND	U	0.003	
	MAGNESIUM	N/A	N/A	N/A	4.47	J	5	8.52	J	5	11.4	J	5	4.94	J	5	17.5	R	5	20.6	5	21.4	U	5	
	MANGANESE DISSOLVED	0.2	N/A	0.05	0.0036	J	0.015	0.104	J	0.015	1.07	J	0.015	ND	U	0.015	2.31	R	0.015	3.23	0.015	3.13	U	0.015	
	POTASSIUM	N/A	N/A	N/A	2.05	J	5	2.94	J	5	3.19	J	5	2	J	5	4	R	4	4.12	J	5	4.24	J	5
	SODIUM	N/A	N/A	N/A	21.1	J	5	26.5	J	5	38.7	J	5	21.1	J	5	40.1	R	5	43.9	5	44.9	U	5	
Anions (mg/L)	AMMONIA (AS N) (Method 4500NH3BG)	N/A	N/A	N/A	ND	U	0.3	ND	U	0.3	ND	U	0.3	R	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U
Method E300.0	CHLORIDE	250	N/A	250	7.6	J+	15.8	18.8	J+	15.8	18.8	J+	15.8	R	59.1	R	2	60.4	R	5	92.6	5	69.2	U	1
	NITROGEN, NITRATE-NITRITE (Method E353.2)	N/A	4	N/A	ND	U	1.5	ND	U	1.5	ND	U	1.5	R	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U
	SULFATE	600	N/A	250	26	J	2	36.8	J	2	27.6	J	2	R	15.5	R	2	15.4	R	2	15.8	2	25.9	U	2
	SULFIDE, TOTAL (Method 4500SC2F)	N/A	N/A	N/A	ND	U	3.7	ND	U	3.7	0.966	J	3.45	1.1	J	3.45	R	ND	U	3.7	ND	U	3.39	ND	U
Alkalinity (mg/L)	ALKALINITY, BICARBONATE (AS CaCO3)	N/A	N/A	N/A	91	J	1	153	J	1	197	J	1	R	292	R	1	331	R	1	332	1	103	U	1
Method SM2320B	ALKALINITY, CARBONATE (AS CaCO3)	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	R	ND	U	1	ND	U	1	ND	U	1	ND	U
Field Parameters	Temperature (°C)	N/A	N/A	N/A	18.25		18.01	18.88		18.35		10.19		18.90		19.23		19.23		19.23		19.21			
	pH (S.U.)	N/A	N/A	N/A	7.68		7.38	7.15		7.38		8.69		7.14		6.93		6.93		6.93		7.83			
	Spec Cond (µS/cm2)	N/A	N/A	N/A	274.8		428.4	604.3		296.5		210.7		794.0		973.5		973.5		973.5		294.7			
	DO (mg/L)	N/A	N/A	N/A	3.51		1.15	0.00		6.05		3.99		0.05		0.08		0.08		0.08		4.09			
	ORP (mV)	N/A	N/A	N/A	142		108	-52		133		105		-149		-155		-155		-155		108			
	Turbidity (NTU)	N/A	N/A	N/A	1.85		2.23	2.94		1.02		88.70		4.29		1.77		1.77		1.77		0.90			
	Alkalinity (mg/L as CaCO3)	N/A	N/A	N/A	119		140	198		128		52		298		332		332		332		116			

The NMWQCC standard and EPA MCL for m,p- xylene and o-xylene is for total xylenes.  
a EPA analytical methods listed are for the most recent sampling event.  
b NMED-HWB Approved Background Concentrations, SNLKirtland AFB, Chemical Constituents in Ground Water.  
Concentrations exceeding background are shown in italics, if applicable.  
c EPA National Primary Drinking Water Standards - Maximum Contaminant Levels (MCLs), or if more stringent.  
New Mexico Water Quality Control Commission (WQCC) Regulations as denoted by "™".  
Concentrations exceeding standards are BOLD.  
d The WQCC regulation for PAHs of 30 ug/L is a total of the concentrations of naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene.  
Shading indicates the analyte was detected.  
Bold indicated analyte detected greater than regulatory standard.  
J = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL).  
J+ = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased high.  
J- = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased low.  
U = Analyte was not detected. The reported numerical value is at or below the RL.  
UJ = Analyte was tentatively not detected. The reported numerical value is at or below the RL.  
N/A = Not applicable.  
ND = Not detected.  
NM = Not measured due to equipment malfunction.  
NR = Not recorded or reported due to operational error.  
NR-EF = Not recorded due to equipment malfunction or failure.  
R = sample data rejected due to site contamination.

**Table 5-1  
Groundwater Analytical Results  
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Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec 20.6.2.3103) <sup>b</sup>	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>c,d</sup>	KAFB-106082		KAFB-106083		KAFB-106084		KAFB-106085		KAFB-106086		KAFB-106087		KAFB-106088		KAFB-106089		KAFB-106089				
					Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL
TPH (ug/L)	DIESEL RANGE ORGANICS	N/A	N/A	7470	192	1640	84.3	ND	U	94.3	1880	98	672	98	ND	U	84.3	ND	U	96.2	ND	U	96.2		
Method 8015B	GASOLINE RANGE ORGANICS	N/A	N/A	1390	150	687	150	ND	U	150	653	150	258	150	ND	U	150	ND	U	150	ND	U	150		
VOCs (ug/L)	1,1,1,2-TETRACHLOROETHANE	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	
Method 8260B	1,1,1-TRICHLOROETHANE	60	N/A	60	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	1,1,2,2-TETRACHLOROETHANE	10	N/A	10	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	1,1,2-TRICHLOROETHANE	100	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	1,1-DICHLOROETHANE	25	N/A	25	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	1,1-DICHLOROETHENE	5	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	1,1-DICHLOROPROPENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	1,2,3-TRICHLOROBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	1,2,3-TRICHLOROPROPANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	
	1,2,4-TRICHLOROBENZENE	N/A	N/A	70	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	1,2,4-TRIMETHYLBENZENE	N/A	N/A	29.5	1	17.7	1	ND	U	1	ND	U	1	3.89	1	ND	U	1	ND	U	1	ND	U	1	
	1,2-DIBROMO-3-CHLOROPROPANE	N/A	N/A	0.2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	
	1,2-DIBROMOETHANE	0.1	N/A	0.05	0.949	J	1	0.689	J	1	ND	U	1	0.764	J	1	ND	U	1	0.307	J	1	0.424	J	
	1,2-DIBROMOETHANE (Method 8011)	0.1	N/A	0.05	1.01	0.0575	0.689	0.0287	ND	U	0.0285	0.0387	0.0278	0.552	0.0277	ND	U	0.0278	0.262	0.0284	0.331	0.0282	0.406	0.0283	
	1,2-DICHLOROBENZENE	N/A	N/A	600	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	1,2-DICHLOROETHANE	10	N/A	5	2.38	1	1.05	1	ND	U	1	1.99	1	0.954	J	1	ND	U	1	ND	U	1	ND	U	
	1,2-DICHLOROPROPANE	N/A	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	1,3,5-TRIMETHYLBENZENE	N/A	N/A	N/A	9.32	1	8.5	1	ND	U	1	1.81	1	2.06	1	ND	U	1	ND	U	1	ND	U	1	
	1,3-DICHLOROBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	1,3-DICHLOROPROPANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	1,4-DICHLOROBENZENE	N/A	N/A	75	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	2,2-DICHLOROPROPANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	2-BUTANONE	N/A	N/A	N/A	3.58	J	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	
	2-CHLOROTOLUENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	2-HEXANONE	N/A	N/A	N/A	ND	U	5	ND	U	5	ND	U	5	ND	U	5	ND	U	5	ND	U	5	ND	U	
	4-CHLOROTOLUENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	4-METHYL-2-PENTANONE	N/A	N/A	N/A	ND	U	5	ND	U	5	ND	U	5	ND	U	5	ND	U	5	ND	U	5	ND	U	
	ACETONE	N/A	N/A	N/A	27.6	10	6.99	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10	2.68	J	10	ND	U
	BENZENE	10	N/A	5	2.97	1	0.498	J	1	ND	U	1	1.06	1	ND	U	1	ND	U	1	ND	U	1	ND	U
	BROMOBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	BROMOCHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	BROMODICHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	BROMOFORM	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	BROMOMETHANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	
	CARBON DISULFIDE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	CARBON TETRACHLORIDE	10	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	CHLOROBENZENE	N/A	N/A	100	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	CHLOROETHANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	
	CHLOROFORM	100	N/A	100	0.295	J	1	0.33	J	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	CHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	CIS-1,2-DICHLOROETHENE	N/A	N/A	70	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	CIS-1,3-DICHLOROPROPENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	DIBROMOCHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	DIBROMOMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	DICHLORODIFLUOROMETHANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	
	ETHYLBENZENE	750	N/A	700	7.71	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	
	HEXACHLOROBUTADIENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	ISOPROPYLBENZENE	N/A	N/A	N/A	7.77	1	5.08	1	ND	U	1	0.557	J	1	4.71	1	ND	U	1	ND	U	1	ND	U	
	METHYL TERT-BUTYL ETHER	N/A	N/A	N/A	0.397	J	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	METHYLENE CHLORIDE	100	N/A	5	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	
	NAPHTHALENE	N/A	N/A	30	0.856	J	1	0.515	J	1	ND	U	1	0.322	J	1	ND	U	1	ND	U	1	ND	U	
	N-BUTYLBENZENE	N/A	N/A	N/A	0.459	J	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	N-PROPYLBENZENE	N/A	N/A	N/A	2.23	1	0.805	J	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	
	P-ISOPROPYLTOLUENE	N/A	N/A	N/A	0.659	J	1	0.735	J	1	ND	U	1	0.736	J	1	ND	U	1	ND	U	1	ND	U	
	SEC-BUTYLBENZENE	N/A	N/A	N/A	0.602	J	1	0.342	J	1	ND	U	1	0.3	J	1	ND	U	1	ND	U	1	ND	U	
	STYRENE	N/A	N/A	100	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	TERT-BUTYLBENZENE	N/A	N/A	N/A	3.94	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	
	TETRACHLOROETHENE	N/A	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
	TOLUENE	750	N/A	750	0.253	J	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	0.659	J	1	0.642	J	
	TRANS-1,2-DICHLOROETHENE	N/A	N/A	100	ND</																				

Table 5-1  
Groundwater Analytical Results  
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Chemical Class & Analytical Method	Parameter	NMED Ground Water Protection Standards (Sec. 20.6.2.3103)	NMED Approved Background	EPA MCLs	KAFB-106082			KAFB-106083			KAFB-106084			KAFB-106085			KAFB-106086			KAFB-106087			KAFB-106088			KAFB-106089		
					Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL
SVOCs (µg/L)	1,1-BIPHENYL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
Method 8270C	1,2-DIPHENYLHYDRAZINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	2,4,5-TRICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	2,4,6-TRICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	2,4-DICHLOROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	2,4-DIMETHYLPHENOL	N/A	N/A	N/A	ND	U	18.9	ND	U	18.9	ND	U	18.9	ND	U	20	ND	U	19.6	ND	U	19.2	ND	U	18.7	ND	U	19.6
	2,4-DINITROPHENOL	N/A	N/A	N/A	ND	U	47.2	ND	U	47.2	ND	U	47.2	ND	U	50	ND	U	49	ND	U	48.1	ND	U	46.7	ND	U	49
	2,4-DINITROTOLUENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	2,6-DINITROTOLUENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	2-CHLORONAPHTHALENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	2-CHLOROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	2-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	2-NITROANILINE	N/A	N/A	N/A	ND	U	18.9	ND	U	18.9	ND	U	18.9	ND	U	20	ND	U	19.6	ND	U	19.2	ND	U	18.7	ND	U	19.6
	2-NITROPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	3,3-DICHLOROBENZIDINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	3-METHYLPHENOL AND 4-METHYLPHENOL	N/A	N/A	N/A	ND	U	1.9	J	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9	
	3-NITROANILINE	N/A	N/A	N/A	ND	U	18.9	ND	U	18.9	ND	U	18.9	ND	U	20	ND	U	19.6	ND	U	19.2	ND	U	18.7	ND	U	19.6
	4,6-DINITRO-2-METHYLPHENOL	N/A	N/A	N/A	ND	U	18.9	ND	U	18.9	ND	U	18.9	ND	U	20	ND	U	19.6	ND	U	19.2	ND	U	18.7	ND	U	19.6
	4-BROMOPHENYL PHENYL ETHER	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	4-CHLORO-3-METHYLPHENOL	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	4-CHLOROANILINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	4-CHLOROPHENYL PHENYL ETHER	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	4-NITROANILINE	N/A	N/A	N/A	ND	U	18.9	ND	U	18.9	ND	U	18.9	ND	U	20	ND	U	19.6	ND	U	19.2	ND	U	18.7	ND	U	19.6
	4-NITROPHENOL	N/A	N/A	N/A	ND	U	18.9	ND	U	18.9	ND	U	18.9	ND	U	20	ND	U	19.6	ND	U	19.2	ND	U	18.7	ND	U	19.6
	ACETOPHENONE	N/A	N/A	N/A	ND	U	4.5	J	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9	
	ATRAZINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	BENZALDEHYDE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	BENZIDINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	50	ND	U	49	ND	U	48.1	ND	U	46.7	ND	U	49
	BENZOIC ACID	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	50	ND	U	49	ND	U	48.1	ND	U	46.7	ND	U	49
	BIS(2-CHLOROETHOXY)METHANE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	BIS(2-CHLOROETHYL)ETHER	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	BIS(2-CHLOROISOPROPYL)ETHER	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	BIS(2-ETHYLHEXYL)PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	BUTYL BENZYL PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	CAPROLACTAM	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	7.17	J	5	ND	U	4.9	ND	U	4.81	ND	U	4.9	
	CARBAZOLE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	DIBENZOFURAN	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	DIETHYL PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	DIMETHYL PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	DI-N-BUTYL PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	DI-N-OCTYL PHTHALATE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	HEXACHLOROBENZENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	HEXACHLOROBUTADIENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	HEXACHLOROCYCLOPENTADIENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	HEXACHLOROETHANE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	ISOPHORONE	N/A	N/A	N/A	ND	U	1.43	J	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9	
	NITROBENZENE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	N-NITROSO-DI-N-PROPYLAMINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	N-NITROSDIPHENYLAMINE	N/A	N/A	N/A	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND	U	5	ND	U	4.9	ND	U	4.81	ND	U	4.67	ND	U	4.9
	PENTACHLOROPHENOL	N/A	N/A	N/A	ND	U	18.9	ND	U	18.9	ND	U	18.9	ND	U	20	ND	U	19.6	ND	U	19.2	ND	U	18.7	ND	U	19.6
	PHENOL	N/A	N/A	5	ND	U	4.72	ND	U	4.72	ND	U	4.72	ND														

**Table 5-1  
Groundwater Analytical Results  
October - December 2011**

Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec 20.6.2.3103) <sup>b</sup>	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>c,d</sup>	KAFB-106082			KAFB-106083			KAFB-106084			KAFB-106085			KAFB-106086			KAFB-106087			KAFB-106088			KAFB-106089		
					Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL
Metals (mg/L)	CALCIUM	N/A	N/A	N/A	66.3	5	60.9	5	35.2	5	73.1	5	52	5	36.9	5	53.4	5	48.5	5	50.2	5	5	5	5			
Method 6010B	IRON, DISSOLVED	1	N/A	0.3	0.625	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U		
	LEAD	0.05	0.01	0.015	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003			
	MAGNESIUM	N/A	N/A	N/A	9.13	5	8	5	4.61	J	5	9.95	5	6.87	5	5.01	5	7.26	5	6.36	5	6.51	5	5	5			
	MANGANESE, DISSOLVED	0.2	N/A	0.05	0.762	0.015	0.0202	0.015	ND	U	0.015	0.247	0.015	0.0394	0.015	ND	U	0.015	ND	U	0.015	ND	U	0.015	ND	U		
	POTASSIUM	N/A	N/A	N/A	3.03	J	5	2.81	J	5	3.33	J	5	2.81	J	5	2.22	J	5	2.42	J	5	2.53	J	5	2.55		
	SODIUM	N/A	N/A	N/A	31.4	5	29.8	5	24	5	29.1	5	25.3	5	23.6	5	25.5	5	28.1	5	28.1	5	28.1	5	5	5		
Anions (mg/L)	AMMONIA (AS N) (Method 4500NH3B)	N/A	N/A	N/A	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	
Method E300.0	CHLORIDE	250	N/A	250	28	10	41.8	10	9.47	J	10	50.2	0.5	35.1	0.5	8.04	J	10	28.1	10	15.6	10	15.8	10	15.8	10		
	NITROGEN, NITRATE-NITRITE (Method E353.2)	N/A	4	N/A	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	
	SULFATE	600	N/A	250	48.9	20	49	20	27.2	20	47.3	2	37.8	2	30	20	39.3	20	30.6	20	30.6	20	30.6	20	30.6	20		
	SULFIDE, TOTAL (Method 4500SC2F)	N/A	N/A	N/A	ND	U	3.39	ND	U	3.7	ND	U	3.45	ND	U	3.39	ND	U	3.45	ND	U	3.39	ND	U	3.45	ND	U	
Alkalinity (mg/L)	ALKALINITY, BICARBONATE (AS CaCO3)	N/A	N/A	N/A	138	1	109	1	103	1	147	1	115	1	95.3	1	122	1	134	1	129	1	129	1	1	1		
Method SM2320B	ALKALINITY, CARBONATE (AS CaCO3)	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	
Field Parameters	Temperature (°C)	N/A	N/A	N/A	18.89		19.26		19.20		18.68		18.81		18.98		18.66		18.73		18.73		18.73		18.73			
	pH (S.U.)	N/A	N/A	N/A	7.60		7.64		7.84		7.43		7.55		7.81		7.71		7.71		7.71		7.71		7.71			
	Spec Cond (µS/cm2)	N/A	N/A	N/A	486.6		467.3		282.7		549.1		414.1		283.2		426.6		368.7		368.7		368.7		368.7			
	DO (mg/L)	N/A	N/A	N/A	0.24		7.13		11.58		0.25		6.92		14.85		4.64		4.95		4.95		4.95		4.95			
	ORP (mV)	N/A	N/A	N/A	-136		155		187		52		137		348		143		170		170		170		170			
	Turbidity (NTU)	N/A	N/A	N/A	2.78		0.93		1.74		1.14		1.10		1.33		1.00		1.31		1.31		1.31		1.31			
	Alkalinity (mg/L as CaCO3)	N/A	N/A	N/A	149		108		112		150		138		128		140		123		123		123		123			

The NMWQCC standard and EPA MCL for m,p- xylene and o-xylene is for total xylenes.  
a EPA analytical methods listed are for the most recent sampling event.  
b NMED-HWB Approved Background Concentrations, SNL/Kirtland AFB, Chemical Constituents in Ground Water.  
Concentrations exceeding background are shown in italics, if applicable.  
c EPA National Primary Drinking Water Standards - Maximum Contaminant Levels (MCLs), or if more stringent, New Mexico Water Quality Control Commission (WQCC) Regulations as denoted by \*\*\*.  
Concentrations exceeding standards are **BOLD**.  
d The WQCC regulation for PAHs of 30 ug/L is a total of the concentrations of naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene.  
Shading indicates the analyte was detected.  
**Bold** indicated analyte detected greater than regulatory standard  
J = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL).  
J+ = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased high.  
J- = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased low.  
U = Analyte was not detected. The reported numerical value is at or below the RL.  
UJ = Analyte was tentatively not detected. The reported numerical value is at or below the RL.  
N/A = Not applicable  
ND = Not detected  
NM = Not measured due to equipment malfunction.  
NR = Not recorded or reported due to operational error  
NR-EF = Not recorded due to equipment malfunction or failure  
R = sample data rejected due to site contamination





**Table 5-1  
Groundwater Analytical Results  
October - December 2011**

Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec. 20-2-3103) <sup>f</sup>	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>c,d</sup>	KAFB-106090		KAFB-106091		KAFB-106092		KAFB-106093		KAFB-106094		KAFB-106095		KAFB-106095		KAFB-106096		KAFB-106097			
					Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL
Metals (mg/L)	CALCIUM	N/A	N/A	N/A	33.3	5	60.6	5	56.3	5	36.8	5	77.9	5	59.1	5	60.5	5	35.8	5	56.1	5	5	
Method 6010B	IRON, DISSOLVED	1	N/A	0.3	ND	U	0.1	0.181	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	
	LEAD	0.05	0.01	0.015	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U
	MAGNESIUM	N/A	N/A	N/A	4.59	J	7.92	5	7.39	5	4.64	J	11	5	8.64	5	8.63	5	4.88	J	5	8	5	
	MANGANESE, DISSOLVED	0.2	N/A	0.05	0.0054	J	0.015	0.0494	0.015	0.0159	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	
	POTASSIUM	N/A	N/A	N/A	1.88	J	5	3.04	J	5	2.75	J	5	3.52	J	5	2.83	J	5	2.12	J	5	2.71	J
	SODIUM	N/A	N/A	N/A	21.3	J	5	28.1	J	5	25.6	J	5	34.5	J	5	28	J+	5	23.7	J+	5	25.9	J
Anions (mg/L)	AMMONIA (AS N) (Method 4500NH3BG)	N/A	N/A	N/A	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U
Method E300.0	CHLORIDE	250	N/A	250	10.2	U	26.9	0.5	33.6	0.5	7.86	J	10	33.8	10	19.1	1	19.3	1	9.56	J	10	24.8	J
	NITROGEN, NITRATE-NITRITE (Method E353.2)	N/A	4	N/A	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	0.334	J	1.5	0.352	J	1.5	ND	U
	SULFATE	600	N/A	250	28.7	U	20	44.2	2	50.3	2	29.9	20	47.7	20	39.9	2	40	2	25.7	20	51.4	J	20
	SULFIDE, TOTAL (Method 4500SC2F)	N/A	N/A	N/A	ND	U	3.7	ND	U	3.7	ND	U	3.45	ND	U	3.45	ND	U	3.39	ND	U	3.45	ND	U
Alkalinity (mg/L)	ALKALINITY, BICARBONATE (AS CaCO3)	N/A	N/A	N/A	108	U	1	133	1	111	1	99.2	1	153	1	153	1	152	1	96.4	1	125	1	
Method SM2320B	ALKALINITY, CARBONATE (AS CaCO3)	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Field Parameters	Temperature (°C)	N/A	N/A	N/A	19.68		18.80		18.75		19.05		18.93		19.00		19.00		19.00		19.16		19.44	
	pH (S.U.)	N/A	N/A	N/A	7.67		7.51		7.55		7.40		7.40		7.31		7.31		7.31		7.68		7.71	
	Spec Cond (µS/cm2)	N/A	N/A	N/A	303.6		435.0		442.7		277.8		536.3		459.0		459.0		459.0		284.5		444.3	
	DO (mg/L)	N/A	N/A	N/A	8.35		4.56		5.56		8.21		0.34		2.23		2.23		2.23		5.16		10.32	
	ORP (mV)	N/A	N/A	N/A	165		154		167		167		-120		70		70		70		150		107	
	Turbidity (NTU)	N/A	N/A	N/A	1.09		0.71		1.25		0.96		3.03		1.36		1.36		1.36		1.35		1.45	
	Alkalinity (mg/L as CaCO3)	N/A	N/A	N/A	114		132		126		121		133		128		128		128		152		136	

The NMWQCC standard and EPA MCL for m,p-xylene and o-xylene is for total xylenes  
<sup>a</sup> EPA analytical methods listed are for the most recent sampling event.  
<sup>b</sup> NMED-HWB Approved Background Concentrations, SNL/Kirtland AFB, Chemical Constituents in Ground Water.  
 Concentrations exceeding background are shown in italics, if applicable.  
<sup>c</sup> EPA National Primary Drinking Water Standards - Maximum Contaminant Levels (MCLs), or if more stringent.  
 New Mexico Water Quality Control Commission (WQCC) Regulations as denoted by "™".  
 Concentrations exceeding standards are **BOLD**.  
<sup>d</sup> The WQCC regulation for PAHs of 30 ug/L is a total of the concentrations of naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene.  
 Shading indicates the analyte was detected.  
**Bold** indicated analyte detected greater than regulatory standard.  
 J = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL).  
 J+ = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased high.  
 J- = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased high.  
 U = Analyte was not detected. The reported numerical value is at or below the RL.  
 UJ = Analyte was tentatively not detected. The reported numerical value is at or below the RL.  
 N/A = Not applicable  
 ND = Not detected  
 NM = Not measured due to equipment malfunction.  
 NR = Not recorded or reported due to operational error  
 NR-EF = Not recorded due to equipment malfunction or failure  
 R = sample data rejected due to site contamination







**Table 5-1  
Groundwater Analytical Results  
October - December 2011**

Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec. 20.2.2.3103) <sup>c</sup>	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>d</sup>	KAFB-106098		KAFB-106099		KAFB-106100		KAFB-106100		KAFB-106101		KAFB-106102		KAFB-106103		KAFB-106104		KAFB-106105										
					Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL						
Metals (mg/L)	CALCIUM	N/A	N/A	N/A	32.4	U	5	51.8	U	5	40.8	U	5	39.9	U	5	114	U	5	35.7	U	5	36.9	U	5	42.1	U	5			
Method 6010B	IRON, DISSOLVED	1	N/A	0.3	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1			
	LEAD	0.05	0.01	0.015	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003			
	MAGNESIUM	N/A	N/A	N/A	4.53	J	5	7.61	J	5	5.82	J	5	5.69	J	5	17.1	J	5	5.31	J	5	4.66	J	5	4.49	J	5	5.53		
	MANGANESE, DISSOLVED	0.2	N/A	0.05	ND	U	0.015	0.012	J	0.015	ND	U	0.015	ND	U	0.015	ND	U	0.015	ND	U	0.015	ND	U	0.015	ND	U	0.015			
	POTASSIUM	N/A	N/A	N/A	2.19	J	5	2.67	J	5	2.43	J	5	2.4	J	5	4.13	J	5	2.34	J	5	2.14	J	5	2.19	J	5	2.52		
	SODIUM	N/A	N/A	N/A	20.3	J	5	24.1	J	5	21.9	J	5	21.8	J	5	50.6	J	5	25.5	J	5	27	J	5	25.3	J	5	22.3		
Anions (mg/L)	AMMONIA (AS N) (Method 4500NH3B)	N/A	N/A	N/A	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3			
Method E300.0	CHLORIDE	250	N/A	250	9.44	J	10	31.6	J+	2.5	15.9	J+	2.5	15.8	J+	2.5	83.2	J	10	14	J	10	12.6	J	10	6.99	J	10	14.9	J	10
	NITROGEN, NITRATE-NITRITE (Method E353.2)	N/A	4	N/A	ND	U	1.5	1.95	J	1.5	0.688	J	1.5	0.742	J	1.5	3.39	J	1.5	0.702	J	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5
	SULFATE	600	N/A	250	26.5	J	20	69.9	J	25	37.7	J	25	37.5	J	20	147	J	20	30.5	J	20	28.1	J	20	28.2	J	20	36.7	J	20
	SULFIDE, TOTAL (Method 4500SC2F)	N/A	N/A	N/A	0.742	J	3.7	ND	U	3.7	ND	U	3.45	ND	U	3.7	ND	U	3.7	ND	U	3.7	ND	U	3.45	ND	U	3.7	0.89	J	3.7
Alkalinity (mg/L)	ALKALINITY, BICARBONATE (AS CaCO3)	N/A	N/A	N/A	102	J	1	83.5	J	1	91	J	1	98.8	J	1	82	J	1	96.8	J	1	110	J	1	106	J	1	107	J	1
Method SM2320B	ALKALINITY, CARBONATE (AS CaCO3)	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
Field Parameters	Temperature (°C)	N/A	N/A	N/A	19.04			17.94			18.75			18.75			19.24			18.96			18.53			18.99			19.29		
	pH (S.U.)	N/A	N/A	N/A	7.88			7.58			7.65			7.65			7.72			7.89			7.77			7.76			7.78		
	Spec Cond (µS/cm2)	N/A	N/A	N/A	280.3			424.2			318.6			318.6			847.2			314.5			305.8			312.4			347.2		
	DO (mg/L)	N/A	N/A	N/A	10.37			6.14			7.57			7.57			9.39			5.71			0.00			6.98			8.77		
	ORP (mV)	N/A	N/A	N/A	148			184			164			164			175			193			137			128			123		
	Turbidity (NTU)	N/A	N/A	N/A	0.95			2.40			2.61			2.61			0.82			0.44			0.65			1.00			1.52		
	Alkalinity (mg/L as CaCO3)	N/A	N/A	N/A	104			88			90			90			82			104			114			110			120		

The NMWQCC standard and EPA MCL for m,p-xylene and o-xylene is for total xylenes.  
<sup>a</sup> EPA analytical methods listed are for the most recent sampling event.  
<sup>b</sup> NMED-HWB Approved Background Concentrations, SNL/Kirtland AFB, Chemical Constituents in Ground Water.  
 Concentrations exceeding background are shown in italics, if applicable.  
<sup>c</sup> EPA National Primary Drinking Water Standards - Maximum Contaminant Levels (MCLs), or if more stringent, New Mexico Water Quality Control Commission (WQCC) Regulations as denoted by "™".  
 Concentrations exceeding standards are **BOLD**.  
<sup>d</sup> The WQCC regulation for PAHs of 30 ug/L is a total of the concentrations of naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene.  
 Shading indicates the analyte was detected.  
**Bold** indicated analyte detected greater than regulatory standard.  
 J = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL).  
 J+ = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased high.  
 J- = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased low.  
 U = Analyte was not detected. The reported numerical value is at or below the RL.  
 UJ = Analyte was tentatively not detected. The reported numerical value is at or below the RL.  
 N/A = Not applicable  
 ND = Not detected  
 NM = Not measured due to equipment malfunction.  
 NR = Not recorded or reported due to operational error  
 NR-EF = Not recorded due to equipment malfunction or failure  
 R = sample data rejected due to site contamination

**Table 5-1  
Groundwater Analytical Results  
October - December 2011**

Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec. 20.6.2.3103) <sup>b</sup>	NMED Approved Background <sup>c</sup>	EPA MCLs <sup>d</sup>	KAFB-106106			KAFB-106106			KAFB-106107			KAFB-3411			ST106-VA2		
					Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL	Result	VAL	RL
TPH (ug/L)	DIESEL RANGE ORGANICS	N/A	N/A	N/A	ND	U	94.3	ND	U	94.3	ND	U	96.2	ND	U	100	ND	UJ	92.6
Method 8015B	GASOLINE RANGE ORGANICS	N/A	N/A	N/A	ND	U	150	ND	U	150	ND	U	150	ND	U	150	ND	U	150
VOCs (ug/L)	1,1,1,2-TETRACHLOROETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
Method 8260B	1,1,1-TRICHLOROETHANE	60	N/A	60	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,1,2,2-TETRACHLOROETHANE	10	N/A	10	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,1,2-TRICHLOROETHANE	100	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,1-DICHLOROETHANE	25	N/A	25	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,1-DICHLOROETHENE	5	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,1-DICHLOROPROPENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,2,3-TRICHLOROBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,2,3-TRICHLOROPROPANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2
	1,2,4-TRICHLOROBENZENE	N/A	N/A	70	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,2,4-TRIMETHYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,2-DIBROMO-3-CHLOROPROPANE	N/A	N/A	0.2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2
	1,2-DIBROMOETHANE	0.1	N/A	0.05	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,2-DIBROMOETHANE (Method 8011)	0.1	N/A	0.05	0.203	J	0.0286	0.211	J	0.0283	ND	U	0.0285	ND	U	0.0281	ND	UJ	0.0284
	1,2-DICHLOROBENZENE	N/A	N/A	600	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,2-DICHLOROETHANE	10	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,2-DICHLOROPROPANE	N/A	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,3,5-TRIMETHYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,3-DICHLOROBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,3-DICHLOROPROPANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	1,4-DICHLOROBENZENE	N/A	N/A	75	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	2,2-DICHLOROPROPANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	2-BUTANONE	N/A	N/A	N/A	ND	U	10	ND	U	10	ND	U	10	ND	U	10	ND	U	10
	2-CHLOROTOLUENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	2-HEXANONE	N/A	N/A	N/A	ND	U	5	ND	U	5	ND	U	5	ND	U	5	ND	U	5
	4-CHLOROTOLUENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	4-METHYL-2-PENTANONE	N/A	N/A	N/A	ND	UJ	5	ND	UJ	5	ND	U	5	ND	U	5	ND	U	5
	ACETONE	N/A	N/A	N/A	3.68	J+	10	3.65	J+	10	ND	U	10	ND	U	10	ND	U	10
	BENZENE	10	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	BROMOBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	BROMOCHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	BROMODICHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	BROMOFORM	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	BROMOMETHANE	N/A	N/A	N/A	ND	UJ	2	ND	UJ	2	ND	U	2	ND	U	2	ND	U	2
	CARBON DISULFIDE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	CARBON TETRACHLORIDE	10	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	CHLOROETHANE	N/A	N/A	100	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	CHLOROBENZENE	N/A	N/A	100	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2
	CHLOROFORM	100	N/A	100	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	CHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	CIS-1,2-DICHLOROETHENE	N/A	N/A	70	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	CIS-1,3-DICHLOROPROPENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	DIBROMOCHLOROMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	DIBROMOMETHANE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	DICHLORODIFLUOROMETHANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2
	ETHYLBENZENE	750	N/A	700	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	HEXACHLOROBUTADIENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	ISOPROPYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	METHYL TERT-BUTYL ETHER	N/A	N/A	N/A	ND	UJ	1	ND	UJ	1	ND	U	1	ND	U	1	ND	U	1
	METHYLENE CHLORIDE	100	N/A	5	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2
	NAPHTHALENE	N/A	N/A	30	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	N-BUTYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	N-PROPYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	P-ISOPROPYLTOLUENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	SEC-BUTYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	STYRENE	N/A	N/A	100	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	TERT-BUTYLBENZENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	TETRACHLOROETHENE	N/A	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	TOLUENE	750	N/A	750	0.708	J	1	0.707	J	1	1.69	J	1	ND	U	1	ND	U	1
	TRANS-1,2-DICHLOROETHENE	N/A	N/A	100	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	TRANS-1,3-DICHLOROPROPENE	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	TRICHLOROETHENE	N/A	N/A	5	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	TRICHLOROFLUOROMETHANE	N/A	N/A	N/A	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2
	VINYL CHLORIDE	1	N/A	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1
	XYLENES	620	N/A	10000	ND	U	3	ND	U	3	ND	U	3	ND	U	3	ND	U	3



**Table 5-1  
Groundwater Analytical Results  
October - December 2011**

		LOCATION CODE		KAFB-106106		KAFB-106106		KAFB-106107		KAFB-3411		ST106-VA2					
		SAMPLE NO		GW0372		GW0373		GW0374		GW0255		GW0254					
		SAMPLE DATE		17-Oct-11		17-Oct-11		18-Oct-11		13-Dec-11		4-Oct-11					
		SAMPLE PURPOSE		REG		FD		REG		REG		REG					
		SAMPLE DEPTH		454-484 FT		454-484 FT		510-525 FT		477-502 FT		0-0 FT					
Chemical Class & Analytical Method <sup>a</sup>	Parameter	NMED Ground Water Protection Standards (Sec. 20.8.2.3103) <sup>b</sup>	NMED Approved Background <sup>b</sup>	EPA MCLs <sup>d</sup>	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	Result	VAL QUAL	RL	
Metals (mg/L)	CALCIUM	N/A	N/A	N/A	42.9	U	5	42.4	U	5	36.1	U	5	55.6	U	5	35.2
Method 6010B	IRON DISSOLVED	1	N/A	0.3	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND	U	0.1	ND
	LEAD	0.05	0.01	0.015	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND	U	0.003	ND
	MAGNESIUM	N/A	N/A	N/A	5.61	U	5	5.57	U	5	4.84	J	5	8.42	U	5	6.72
	MANGANESE DISSOLVED	0.2	N/A	0.05	0.0304	U	0.015	0.0275	U	0.015	0.012	J	0.015	0.0279	U	0.015	ND
	POTASSIUM	N/A	N/A	N/A	2.52	J	5	2.53	J	5	2.35	J	5	2.72	J	5	2.67
	SODIUM	N/A	N/A	N/A	22.9	U	5	22.7	U	5	20.8	U	5	27.2	U	5	21.6
Anions (mg/L)	AMMONIA (AS N) (Method 4500NH3BG)	N/A	N/A	N/A	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND	U	0.3	ND
Method E300.0	CHLORIDE	250	N/A	250	17.8	U	10	18.1	U	10	10.7	J	10	13.3	U	0.5	22.5
	NITROGEN, NITRATE-NITRITE (Method E353.2)	N/A	4	N/A	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND
	SULFATE	600	N/A	250	42.4	U	20	42.5	U	20	30.6	U	20	28.6	U	2	28.5
	SULFIDE, TOTAL (Method 4500SC2F)	N/A	N/A	N/A	ND	U	3.77	ND	U	3.39	ND	U	3.7	0.7	J	3.45	0.987
Alkalinity (mg/L)	ALKALINITY, BICARBONATE (AS CaCO3)	N/A	N/A	N/A	105	U	1	105	U	1	109	U	1	162	U	1	97.6
Method SM2320B	ALKALINITY, CARBONATE (AS CaCO3)	N/A	N/A	N/A	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND
Field Parameters	Temperature (°C)	N/A	N/A	N/A	18.79			18.79			19.03			18.79			20.67
	pH (S.U.)	N/A	N/A	N/A	7.63			7.63			7.62			7.33			8.07
	Spec Cond (µS/cm2)	N/A	N/A	N/A	354.6			354.6			308.1			415.4			330.0
	DO (mg/L)	N/A	N/A	N/A	5.22			5.22			7.29			0.92			3.76
	ORP (mV)	N/A	N/A	N/A	86			86			153			158			206
	Turbidity (NTU)	N/A	N/A	N/A	1.45			1.45			1.71			0.30			0.80
	Alkalinity (mg/L as CaCO3)	N/A	N/A	N/A	91			91			118			146			120

The NMWQCC standard and EPA MCL for m,p- xylene and o-xylene is for total xylenes.  
<sup>a</sup> EPA analytical methods listed are for the most recent sampling event.  
<sup>b</sup> NMED-HWB Approved Background Concentrations, SNL/Kirtland AFB, Chemical Constituents in Ground Water.  
 Concentrations exceeding background are shown in *italics*, if applicable.  
<sup>c</sup> EPA National Primary Drinking Water Standards - Maximum Contaminant Levels (MCLs), or if more stringent, New Mexico Water Quality Control Commission (WQCC) Regulations as denoted by \*\*\*.  
 Concentrations exceeding standards are **BOLD**.  
<sup>d</sup> The WQCC regulation for PAHs of 30 ug/L is a total of the concentrations of naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene.  
 Shading indicates the analyte was detected.  
**Bold** indicated analyte detected greater than regulatory standard.  
 J = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL).  
 J+ = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased high.  
 J- = estimated value, concentration is less than RL but greater than laboratory method detection limit (MDL), biased high.  
 U = Analyte was not detected. The reported numerical value is at or below the RL.  
 UJ = Analyte was tentatively not detected. The reported numerical value is at or below the RL.  
 N/A = Not applicable  
 ND = Not detected  
 NM = Not measured due to equipment malfunction  
 NR = Not recorded or reported due to operational error  
 NR-EF = Not recorded due to equipment malfunction or failure  
 R = sample data rejected due to site contamination