

FINAL



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**ADDENDUM #26
TO THE
WORK PLAN**

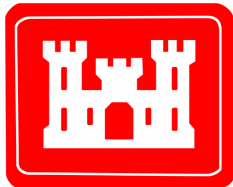
FOR



3d Inf Div (Mech)

**PRELIMINARY GROUNDWATER AND
CORRECTIVE ACTION PLAN–PART A/PART B
INVESTIGATIONS
AT
FORMER UNDERGROUND STORAGE TANK SITES,
HUNTER ARMY AIRFIELD
AND
FORT STEWART, GEORGIA**

Prepared for



**U.S. ARMY CORPS OF ENGINEERS
SAVANNAH DISTRICT**

**Contract No. FA4890-04-D-0004
Delivery Order CV02**

September 2007



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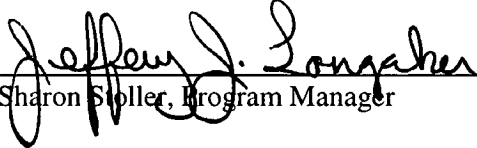
U. S. Army Corps of Engineers
Savannah District
Under Contract Number FA4890-04-D-0004
Delivery Order CV02

Prepared by

Science Applications International Corporation
301 Laboratory Road
Oak Ridge, TN 37830

September 2007

APPROVALS
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 for 9/13/07
Sharon Stoller, Program Manager Date

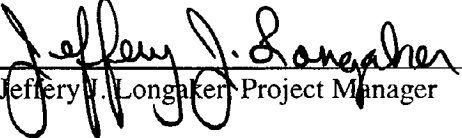
 9/13/07
Jeffery J. Longaker, Project Manager Date

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List of Abbreviations and Acronyms

BGS	below ground surface
DCA	1,1-dichloroethane
DCE	1,1-dichloroethene
DO	dissolved oxygen
DOT	U. S. Department of Transportation
DPT	direct-push technology
HAAF	Hunter Army Airfield
HSRA	Hazardous Site Response Act
MIP	membrane interface probe
PID	photoionization detector
PVC	polyvinyl chloride
Redox	oxidation-reduction potential
SAIC	Science Applications International Corporation
STEP	Solutions to Environmental Problems, Inc.
TCE	trichloroethene
USACE	U. S. Army Corps of Engineers
UST	underground storage tank
VOC	volatile organic compound

1.0 INTRODUCTION

This addendum supplements the following work plans: *Work Plan for Preliminary Groundwater and Corrective Action Plan—Part A/Part B Investigations at Former Underground Storage Tank Sites, Fort Stewart, Georgia* (SAIC 1996) and *Sampling and Analysis Plan for Corrective Action Plan—Part A and B Investigations for Former Underground Storage Tanks at Hunter Army Airfield, Georgia* (SAIC 1998). This addendum presents changes to the work plans and the specific sampling requirements for the investigation of the trichloroethene (TCE) plume at Building 1290 at Hunter Army Airfield (HAAF), Georgia. The changes are associated with the scope of work under Contract Number FA4890-04-D-0004, Delivery Order CV02 for the TCE investigation at Building 1290 at HAAF, Georgia (dated April 19, 2007).

TCE and its degradation products [i.e., 1,2-*cis*-dichloroethene (DCE); 1,2-*trans*-DCE; and vinyl chloride] have been detected during the investigations around petroleum underground storage tank (UST) sites at HAAF. The chlorinated solvent contamination is believed to be originating from Building 1290, an aircraft hanger that had a degreasing system located in the corner of the facility. TCE has been identified at USTs 25 and 26 and the HAAF Purge Facility, which are located side- and downgradient of Building 1290. In addition, a dry cleaning facility, which could be a source of contamination, is located downgradient of Building 1290. The TCE plume at Building 1290 is regulated under the state of Georgia Hazardous Site Response Act (HSRA). Because this is an initial investigation at the suspected site, a hazardous inventory number has not been designated for the TCE plume at Building 1290.

In support of this TCE investigation at Building 1290, 21 1-in.-diameter polyvinyl chloride (PVC) wells were installed in May 2007 around, up-, side-, and downgradient of Building 1290 by Solutions to Environmental Problems, Inc. (STEP) under contract to the U. S. Army Corps of Engineers (USACE), Savannah District to determine the general groundwater characteristics and identify groundwater flow direction in the area. The location of the wells is presented in Figure 1. The 21 wells consisted of 10 shallow/deep well pairs and 1 additional single shallow well. All of the wells were installed with a 10-ft screen, except two shallow wells (1290-MW-03S and 1290-MW-06S), which were installed with 5-ft screens because the groundwater was so near the surface. The shallow wells were screened across the water table resulting in screened intervals for shallow wells ranging at a minimum of 4.3 ft below ground surface (BGS) to a maximum of 17.89 ft BGS. The deep wells were screened beginning at a minimum of 19.91 ft BGS to a maximum screened interval ending at 34.6 ft BGS. The deep wells were not screened to the clay-confining layer that occurs at approximately 40 to 45 ft BGS. A summary of the well construction of these wells and two additional wells (1290-MW-15S and 1290-MW-16S) pertinent to the investigation is presented in Table 1. These 21 monitoring wells and 2 additional existing wells were sampled July 17 through 19, 2007, by Science Applications International Corporation (SAIC) to support the initial selection of potential sampling locations described under this investigation. The groundwater was analyzed for volatile organic compounds (VOCs). In addition, water levels were measured on July 20, 2007. The results of the water level measurements are presented in Table 2. Shallow and deep potentiometric maps based on these groundwater levels are presented in Figures 2 and 3, respectively. The general shallow and deep groundwater flow is to the southeast. A summary of the groundwater analytical results is presented in Table 3.

The following six VOCs were detected in groundwater: 1,1-dichloroethane (1,1-DCA); 1,1-DCE; acetone; chloroform; TCE; and vinyl chloride. Of these six, only acetone is not classified as a chlorinated solvent. As presented in Figure 1, no chlorinated solvents were detected around Building 1290. The closest (approximately 675 ft to the southeast) to Building 1290 that any chlorinated solvents were detected in groundwater was at MW-08S and MW-08D. 1,1-DCE was detected at concentrations of 6.01 and 7.77 µg/L in MW-08S and MW-08D, respectively. TCE was detected at a concentration of 1.08 µg/L in

MW-08D. The highest frequency and concentration of chlorinated solvents were detected in wells located northwest of the USTs 25 and 26 site. As indicated in Figure 1, the highest concentrations of 1,1-DCE (54.7 µg/L); 1,1-DCA (0.906J µg/L); and vinyl chloride (27.3 µg/L) were detected in MW-16S, a well located 750 ft northeast of the USTs 25 and 26 site. The elevated detections of chlorinated solvents around and north and northeast of the USTs 25 and 26 site is consistent with previous concentrations of chlorinated solvents in this area. A summary of the chlorinated solvent constituents detected in monitoring wells and vertical profiles between 1999 and January 2007 is presented in Appendix A, Tables A-1 and A-2, respectively. Figures 4, 5, and 6 present TCE concentrations from vertical profiles and monitoring wells from between 1999 and January 2007 divided by their occurrence at 20 to 30 ft BGS, 30 to 40 ft BGS, and 40 to 50 ft BGS, respectively. Given the data collected to date, Figures 4, 5, and 6 indicate that a potential source of the TCE plume may be located northeast of the USTs 25 and 26 site.

The field activities for the TCE plume at Building 1290 under this addendum include: (1) performing vertical profiles using a membrane interface probe (MIP) followed by confirmation soil and groundwater sampling using direct-push technology (DPT), (2) installing groundwater monitoring wells, (3) sampling new and existing groundwater monitoring wells, and (4) evaluating indoor air quality by the installation of soil gas wells and collecting soil gas samples. Table 4 identifies general site-specific information and presents the activities for the TCE plume at Building 1290.

2.0 PROJECT ORGANIZATION

The organizational chart for the HAAF investigation at Building 1290 is presented in Figure 7.

3.0 FIELD ACTIVITIES

The field activities for the TCE plume at Building 1290 under this addendum include: (1) performing 20 vertical profiles using a MIP followed by confirmation soil and groundwater sampling at 10 locations using DPT, (2) installing 24 groundwater monitoring wells, (3) sampling 24 new and 12 existing groundwater monitoring wells, and (4) evaluating indoor air quality by installing 28 soil gas wells and collecting soil gas samples. These field activities are detailed in the following sections.

Table 5 presents the sample numbering system that will be used for these investigations. Table 6 presents a summary of the field and quality control groundwater samples to be collected during the investigation.

3.1 PERFORM VERTICAL PROFILES WITHIN PLUME

The determination of the vertical profile of contamination in soil and groundwater will be investigated using two techniques: (1) MIP and (2) confirmation soil borings for the collection of soil and groundwater samples. The MIP and installation of soil borings for soil and groundwater sampling will be conducted concurrently under one mobilization. The MIP investigation will be performed initially to determine the potential source(s) and the extent of contamination in soil and groundwater. These two investigative techniques are discussed in the following sections.

3.1.1 Perform Vertical Profiles Using Membrane Interface Probe

Thirty-four potential locations presented in Appendix B, Figure B-1 will be cleared as a potential MIP location; however, only 20 MIP locations will be installed. The following are known locations that MIP will be installed and their justification.

- Two MIPs around Building 1290 (the east and south sides of Building 1290) to confirm the non-detection of chlorinated solvents specifically in the deep zone (35 to 40 ft BGS) around Building 1290.
- Six MIP locations stepping out from known detected concentrations of chlorinated solvents north and northwest of the USTs 25 and 26 site.

The remaining MIP locations will be installed based on the initial results from the eight MIPs. In general, the locations will step out from those locations to determine the extent and/or fill in locations where the subsurface characteristics are unknown.

Concrete coring will be required for locations near Building 1290 (and possibly other locations) because the building is surrounded by concrete. Readings will be taken at 2-ft intervals to approximately 35 to 40 ft BGS. At approximately 35 to 40 ft BGS, a hard silty-clay is encountered at HAAF, which acts as a confining layer. Initially, two MIP locations will be located around Building 1290 and six MIP locations will be located around the USTs 25 and 26 site. These results from the eight initial MIPs, together with the groundwater results from sampling of the 20 STEP wells, will be used to site the remaining MIP locations. The eight initial MIP locations are identified on Figure A-1.

MIP is a down-hole tool installed using DPT that heats the soil and groundwater adjacent to the probe to 120°C, increasing volatility and causing the vapor phase to diffuse across a membrane into a closed, inert gas loop that carries these vapors to a series of detectors housed at the surface. Continuous (2-ft increment) chemical logs or profiles are generated from each hole. The detectors used included a photoionization detector (PID), a flame ionization detector, and an electron capture detector. Soil conductivity is also measured, which indicates the location of low-permeability lenses to which contaminants might be absorbed. Vapor collection measurements and conductivity tests will be performed at 2-ft intervals, starting at approximately 5 ft BGS and culminating at the underlying silty-clay layer at approximately 40 ft BGS. The MIP data will provide real-time data to SAIC to assist in the location of subsequent MIP profile locations and soil borings (Section 3.1.2) and monitoring wells (Section 3.1.3).

3.1.2 Install Soil Borings Using Direct-Push Technology

The data from the MIP evaluation will be used to site ten soil borings for collection of soil and groundwater samples to confirm the location of the source area and/or distinct intervals of potential contamination. At least one soil boring will be installed around Building 1290 to confirm the results of the MIP investigation in this area.

The soil borings will be installed to approximately 35 to 40 ft BGS using DPT. Continuous soil sampling in 4-ft intervals will be performed for lithology and screening with a PID. Two soil samples and two groundwater samples will be selected and sent for off-site analysis for VOCs. The soil and groundwater samples selected will be based on either elevated readings from the PID and/or intervals identified by the MIP.

The soil waste from the installation of soil borings for MIP and soil and groundwater sampling will be collected in U. S. Department of Transportation (DOT)-approved 55-gal open top drums. A soil sample will be collected from each drum for characterization for disposal purposes.

The locations of the soil borings will be surveyed by a land surveyor registered in the state of Georgia.

3.2 INSTALL GROUNDWATER WELLS

SAIC will install 24 2-in.-diameter monitoring wells in the source area and downgradient of the source area to define the nature and extent of contamination in groundwater. Twelve of the monitoring wells will be installed in the shallow surficial groundwater and 12 monitoring wells will be installed in the deep surficial groundwater at approximately 35 to 40 ft BGS.

The wells will be installed using hollow-stem auger techniques. The location of the monitoring wells will be determined from the results of the MIP and soil and groundwater investigations performed in Sections 3.1.1 and 3.1.2. Eight (four shallow and four deep) monitoring wells shall be installed in the source area. Sixteen (eight shallow and eight deep) monitoring wells will be installed in the plume area. In concurrence with USACE, Savannah District, the number of wells installed in the yet-to-be-determined source area versus in the plume area may be adjusted based on the investigation performed in Section 3.1.

Each borehole will be drilled using a minimum of 4.5-in. inside diameter hollow-stem augers. The well casing will be a 2-in. inside diameter PVC. Concrete coring may be required for the installation of some of the monitoring wells.

The wells will be constructed of 2-in.-diameter Schedule 40 PVC. The deep wells will be installed to a maximum depth of 40 ft BGS. Shallow wells installed at the water level shall have a 10-ft screen placed to transect the water table encountered at approximately 15 ft BGS. Deep wells shall have a 5-ft screen and be set to sample a specific interval identified by MIP and PID readings from the soil borings. The screen shall be a non-contaminating, manufactured water well screen. Well screens shall consist of a 2-in. inside diameter, flush threaded, 0.010-in. slotted, with a threaded bottom plug.

Clean, inert, natural, siliceous material shall be used to construct a uniform and continuous filter pack. The filter pack shall be placed by tremmie pipe from the bottom of the borehole to 1 ft above the top of the well screen. Grain size will be applicable to the screen used. A seal measuring 1 ft thick consisting of a bentonite-only grout shall be pumped into the annular space above the filter pack. A high-yield strength bentonite, designed for monitoring well sealing, such as Pure Gold® (registered trade name) or equivalent, will be used for the seal. A cement-bentonite grout will be placed by pumping from the top of the bentonite seal to the ground surface. Cement grout will consist of a mixture of not more than 7 gal of water and 3 lbs of powdered bentonite to each 94-lb sack of Portland cement.

The surface completions will be flush completions because the wells are expected to be located in the tarmac, around buildings, or in military populated areas. The monitoring wells will be surveyed (northing, easting, and elevation) by a land surveyor registered in the state of Georgia.

All soil wastes from installation of monitoring wells will be segregated by borehole and no commingling of borehole wastes will be allowed. The soil waste from the installation of monitoring wells will be collected in DOT-approved 55-gal open-top drums. Soil samples during the installation of monitoring wells will be collected only for the characterization of investigation-derived waste.

The new groundwater wells will be developed down until turbidity is 10 nephelometric turbidity units or less to meet potential future analytical requirements (e.g., semivolatile organic compounds, metals, etc.) under HSRA.

3.3 GROUNDWATER SAMPLING

SAIC will collect groundwater samples from the 24 new wells installed as listed in Chapter 3 and 12 existing wells located at HAAF. The 12 existing wells will be selected based on the results of previous groundwater sampling, the results of the MIP and soil boring investigation (Section 3.1), and will be used to supplement the groundwater network established around Building 1290 (Chapter 1). Low-flow techniques will be used to collect groundwater samples from 2-in. monitoring wells. Field measurements performed during the investigations will include pH, specific conductance, temperature, oxidation-reduction potential (Redox), dissolved oxygen (DO), and turbidity. Procedures and equipment for measurement of pH, specific conductance, temperature, Redox, and DO were presented in the Work Plan (SAIC 1996). The groundwater will be sent to an off-site analytical laboratory for VOCs. Dedicated tubing and fittings will be used for each well.

3.4 OBTAIN DATA FOR INDOOR AIR QUALITY

SAIC will install a total of 28 permanent soil gas wells around buildings in both the source area and downgradient of the source area to evaluate the potential vapor migration into the buildings located above the suspected groundwater plume. The locations of the soil gas probes will be determined after the installation of the MIP investigation and soil borings (Section 3.1).

3.4.1 Install Soil Gas Wells

Twelve soil gas piezometers will be installed in the yet-to-be-determined source area and 16 soil gas piezometers will be installed in the plume area (for a total of 28). This distribution will be adjusted based on the results of the MIP and soil boring data collected (Sections 3.1 and 3.2) and the various foundation types encountered in the source area or downgradient plume. Concrete coring may be required for the installation of the soil gas piezometers. Soil gas piezometers will be installed around buildings where the highest concentrations of groundwater contamination have been encountered and types of foundations where vapors can build up (e.g., crawl space, basements, vented/non-vented, etc.). The soil gas piezometers will be permanent installations to allow future soil gas monitoring. During the installation of the MIP and soil borings, a survey of the foundations of buildings located in the source area and downgradient plume area will be collected.

The following presents the specifications for the soil gas piezometer. The casing, screen, and fitting materials for construction of the piezometer shall be 1.25-in.-diameter, Schedule 40 carbon steel. Screen sections will be commercially fabricated with slotted openings equal to 0.025 cm (0.010 in.). The soil gas piezometer will be installed to a depth of 10 ft BGS. The length of screen for the piezometer will be 2 ft. The top of the casing will be provided with a threaded, airtight cap (carbon or galvanized steel) that is fitted with a sample port (1/8- × 1/8-in. brass hose barb) sized to join to the inlet line of a 6-L Summa canister. After insertion of the piezometer screen and casing in the borehole, granular filter pack material will be placed within the annular space around the screen to a depth of 1 ft above the top of the screen. Granular filter pack material shall be 20/40 grade sand. Bentonite will be used to create an annular seal between the granular filter pack and an upper grout seal. Commercially available bentonite pellets will be added to the annular space above the filter pack. A sufficient quantity of bentonite pellets will be added to create a 2-ft-thick seal. After placement of the bentonite pellets, a small volume of VOC-free potable

water will be added to hydrate the seal material. Hydration time for the bentonite pellets shall be a minimum of 1 hr.

3.4.2 Collect Soil Gas Samples

The collection of soil gas samples will be performed at the same time as the groundwater sampling of the 36 monitoring wells (Section 3.3). Prior to mobilization, SAIC will obtain evacuated 6-L Summa canisters that have been cleaned, conditioned, and certified in accordance with the requirements of Method TO-15 (EPA 1999). Other sampling system components will be cleaned in accordance with Method TO-15 prior to assembly of the sampling system, or SAIC will obtain dedicated or pre-assembled systems that have been cleaned and conditioned in accordance with Method TO-15.

The sampling systems for soil vapor will be 6-L subatmospheric Summa canisters. For collection of the soil vapor samples, flow restriction will be provided by a critical orifice set to charge the canisters to the desired end pressure over a 60-min sample collection period. The sampling systems will be assembled in accordance with Figure 1 of Method TO-15 prior to mobilization to the field.

Sampling will not be conducted for at least 72 hr after initial purging of the soil gas monitoring well. Once the sampling system has been located at the soil gas sampling station, connection to the sample port in the piezometer will be made with Teflon[®] or stainless steel tubing fitted with a stainless steel vacuum valve. Temperature, pressure, and other relevant parameters specified by Method TO-15 will be recorded. The soil gas sample will be collected by opening the system's valving for the specified sample collection period of 60 min. Flow restriction will be provided by a critical orifice set to charge the canister to the desired end pressure over this sample collection period. Upon collection of the samples, the final pressure shall be checked and recorded. The final system pressure should be approximately 88 kPa (90 to 100 mm Hg of vacuum).

Air samples will be analyzed for VOCs using gas chromatography/mass spectrometry analyses as required by the U. S. Environmental Protection Agency (EPA) Method TO-15.

4.0 WATER LEVEL MEASUREMENT

Before the sampling team leaves the Building 1290 site, a complete set of water level measurements will be collected from all wells installed for the investigation of the TCE plume at Building 1290. This will include the following wells: the 21 wells installed in May 2007 by STEP, 1290-MW-15S and 1290-MW-16S, the new 24 monitoring wells installed as part of this field endeavor, a shallow/deep well pair [AF-MW-13 (shallow) and AF-MW-54 (deep)] at USTs 25 and 26, and a shallow/deep well pair at the Hunter Purge Facility [AT-MW-02 (shallow) and AT-MW-01 (deep)]. Procedures and equipment for water level measurements were presented in the Work Plan (SAIC 1996).

5.0 REFERENCES

EPA (U.S. Environmental Protection Agency) 1999.

SAIC (Science Applications International Corporation) 1996. *Work Plan for Preliminary Groundwater and Corrective Action Plan—Part A/Part B Investigations at Former Underground Storage Tank Sites, Fort Stewart, Georgia*, August.

SAIC 1998. *Sampling and Analysis Plan for Corrective Action Plan—Part A and B Investigations for Former Underground Storage Tanks at Hunter Army Airfield, Georgia*, October.

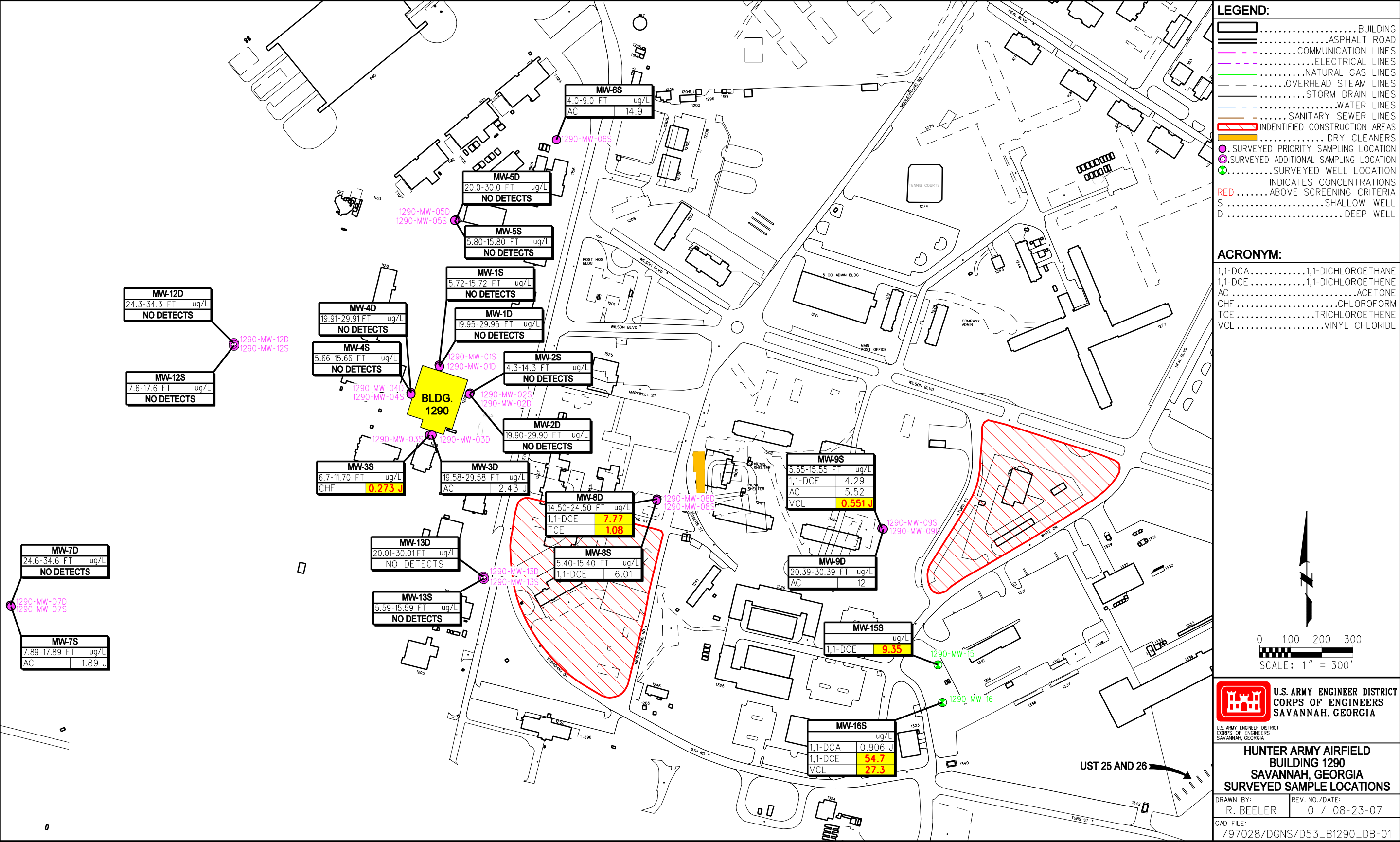


Figure 1. Summary of Analytical Data Detected in Groundwater Samples Collected in July 2007 for the Building 1290 Investigation, Hunter Army Airfield, Georgia.

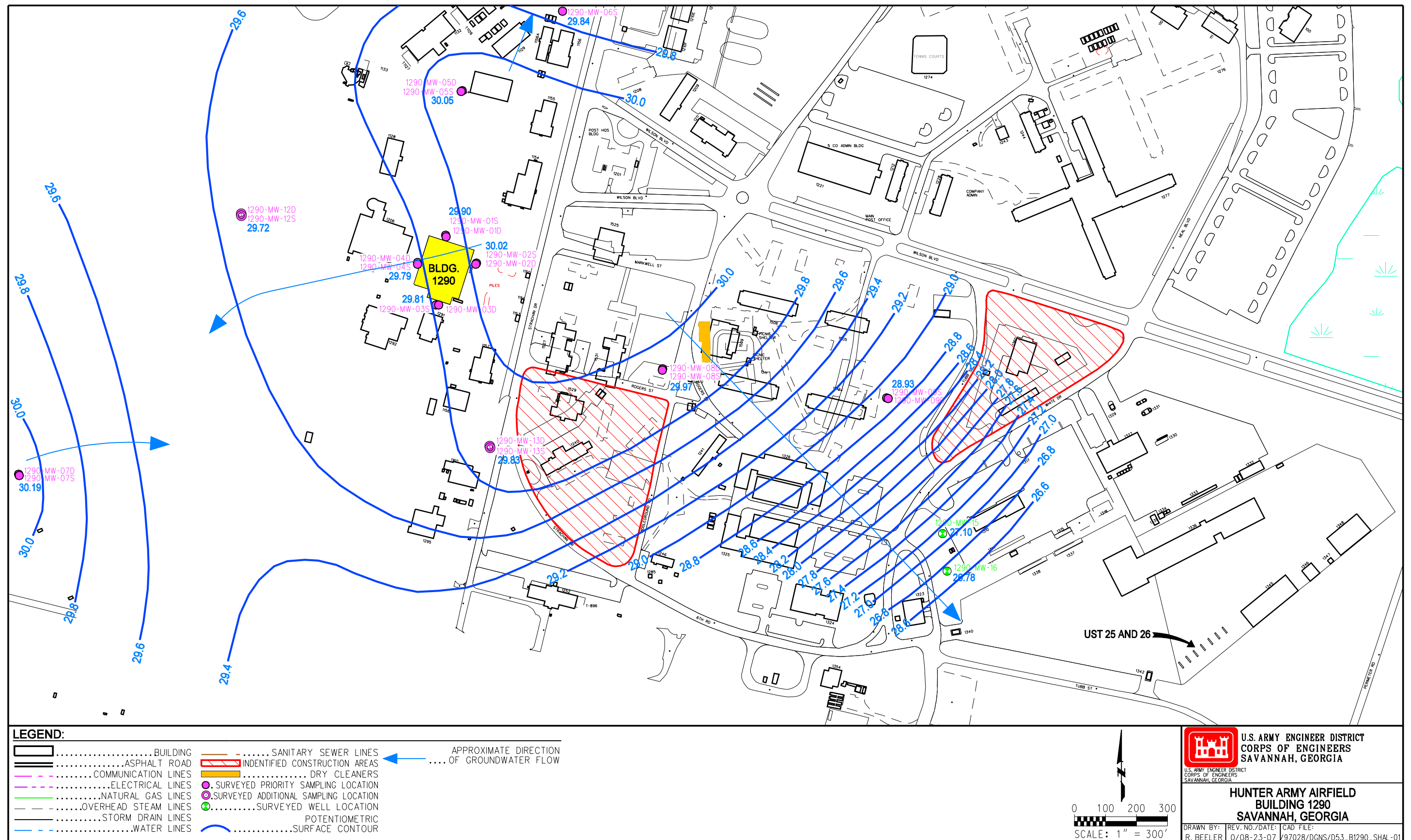


Figure 2. Groundwater Potentiometric Surface Map for Shallow Wells for July 20, 2007, for the Building 1290 Investigation, Hunter Army Airfield, Georgia

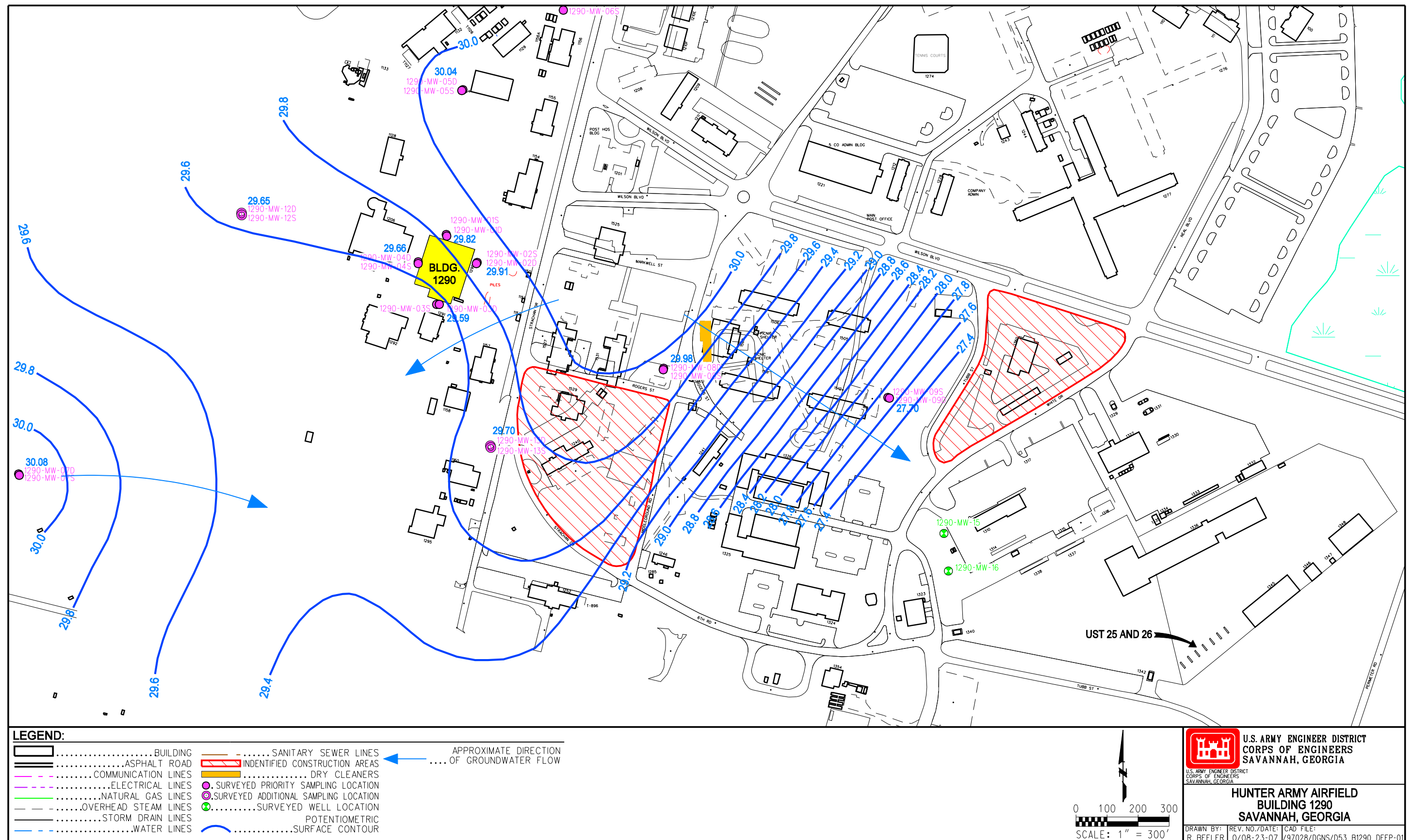


Figure 3. Groundwater Potentiometric Surface Map for Deep Wells for July 20, 2007, for the Building 1290 Investigation, Hunter Army Airfield, Georgia

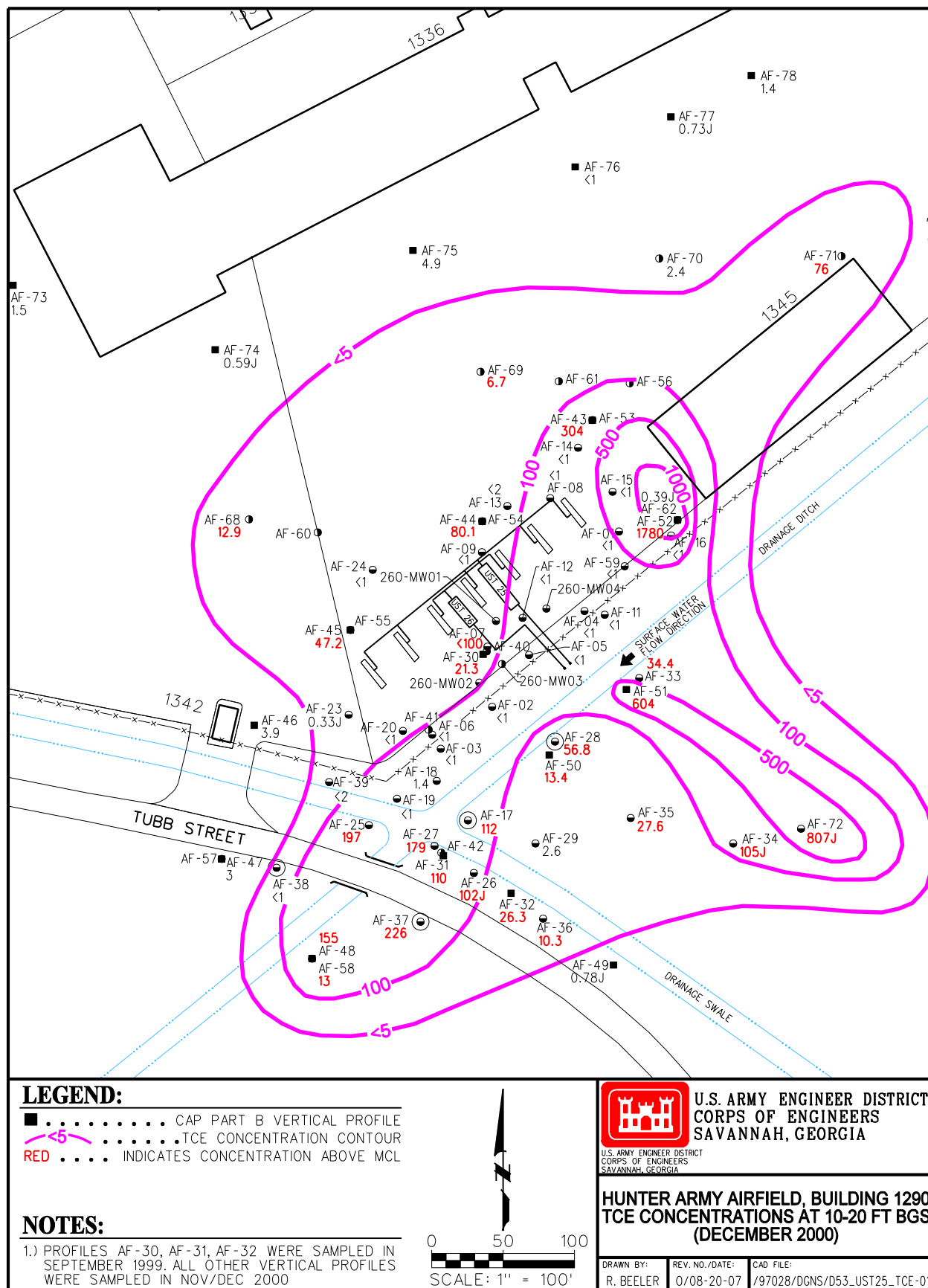


Figure 4. TCE Concentration in Groundwater at 10 to 20 ft BGS at the Building 1290 Investigation, Hunter Army Airfield, Georgia

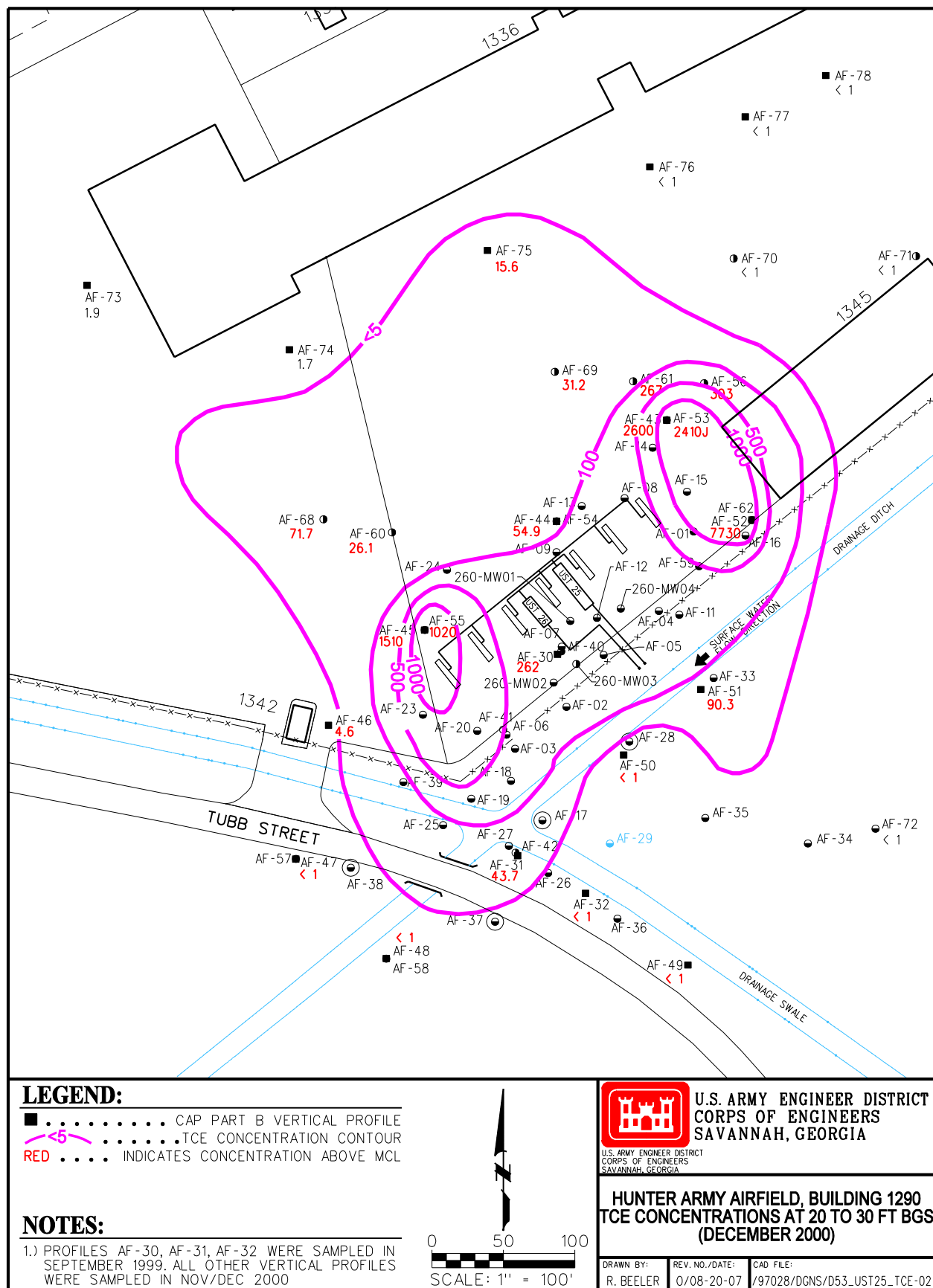


Figure 5. TCE Concentration in Groundwater at 20 to 30 ft BGS for the Building 1290 Investigation, Hunter Army Airfield, Georgia

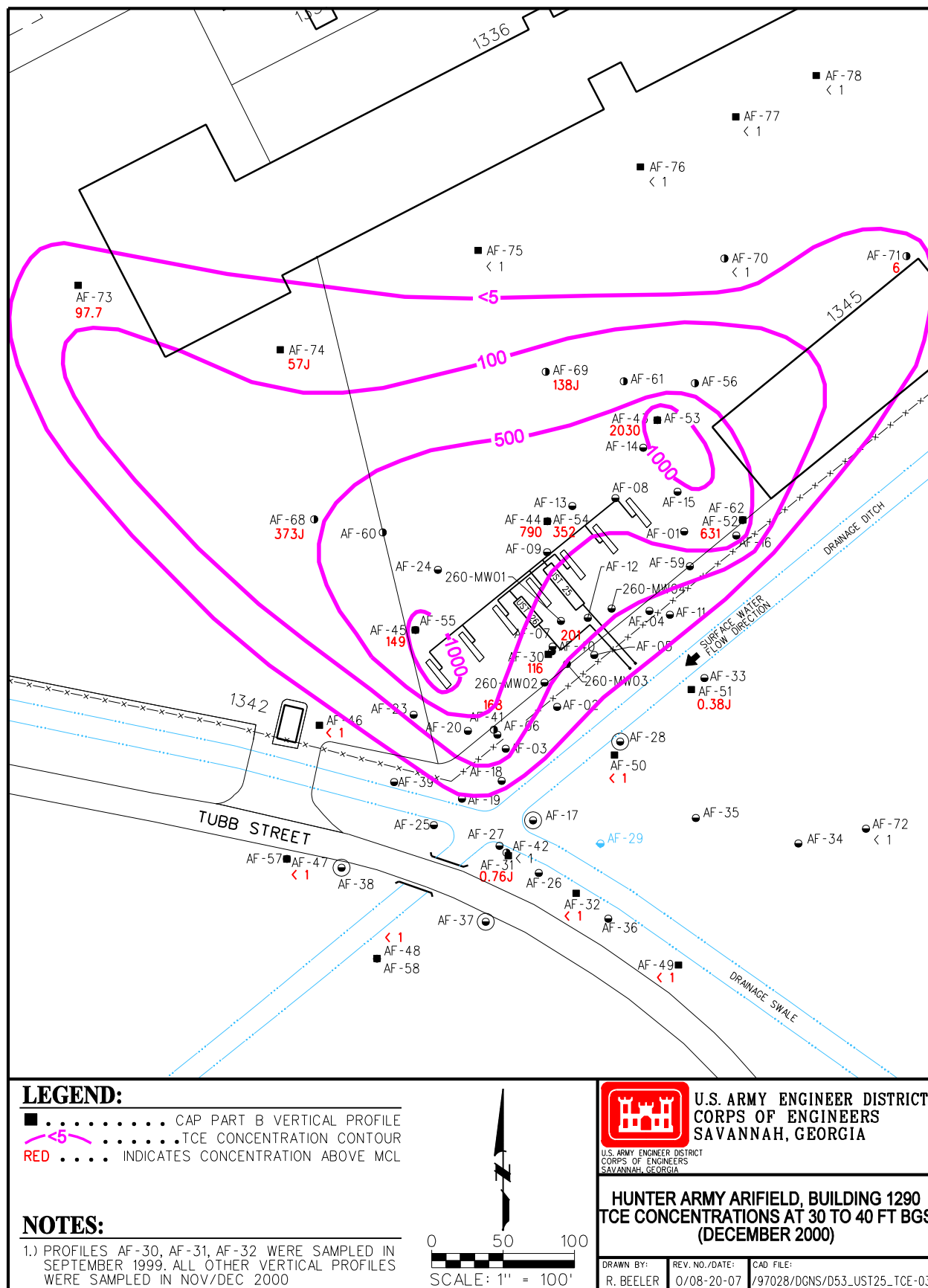


Figure 6. TCE Concentration in Groundwater at 30 to 40 ft BGS for the Building 1290 Investigation, Hunter Army Airfield, Georgia

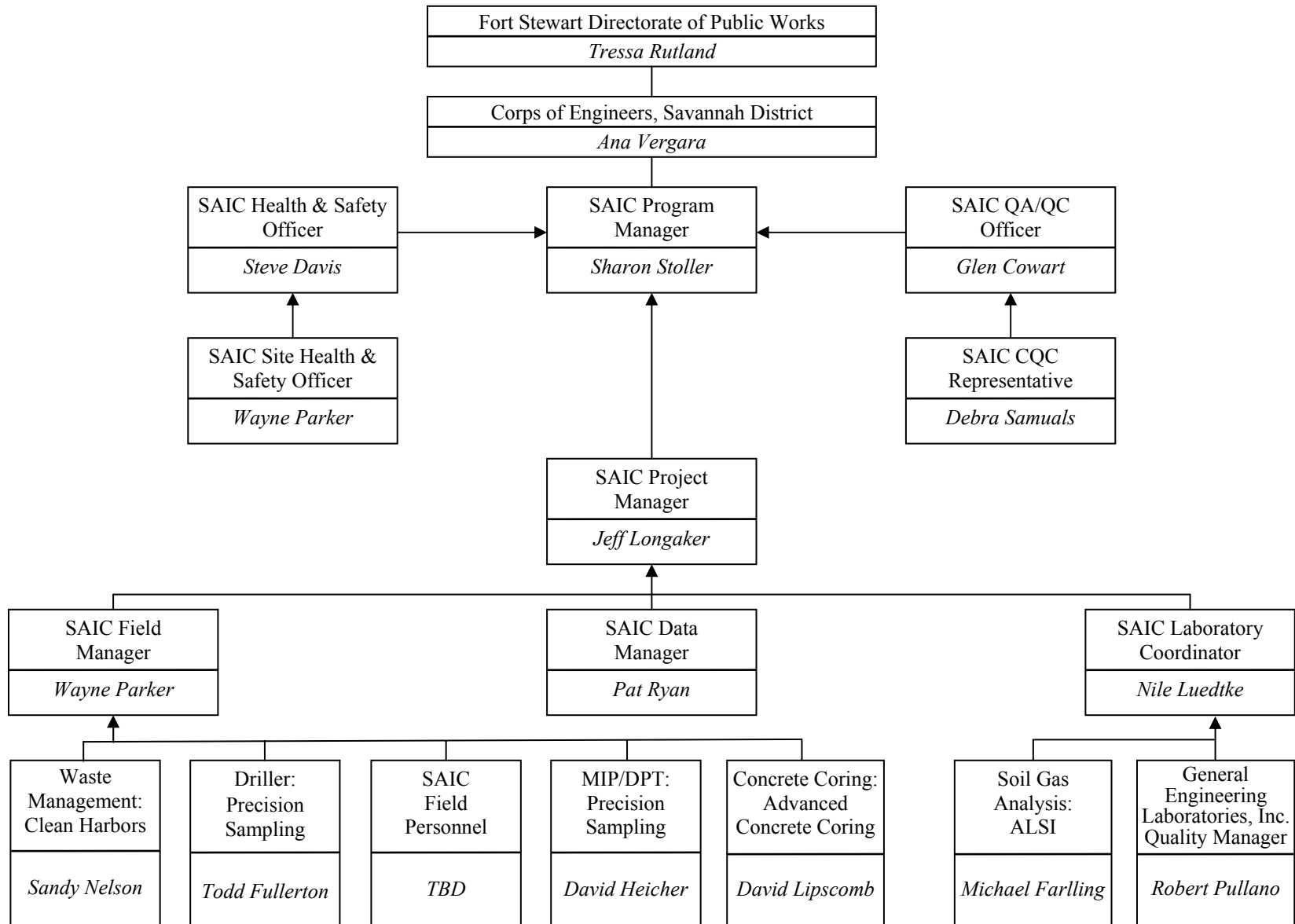


Figure 7. Organizational Chart for TCE Investigation at the Building 1290 Investigation, Hunter Army Airfield, Georgia

Table 1. Summary of Well Construction and Groundwater Level

MW-ID	Installation Date	Installer	Well Material	Screen Length (ft)	Total Depth (ft BGS)	Screen Interval (ft BGS)	Northing	Easting	Top of Casing (AMSL)	Ground Elevation (AMSL)
1290-MW-01D	05/07	STEP	1-in. PVC	10	29.95	19.95 - 29.95	735508.85	977102.38	36.40	36.6
1290-MW-01S		STEP	1-in. PVC	10	15.72	5.72 - 15.72	735513.98	977100.64	36.43	36.7
1290-MW-02D		STEP	1-in. PVC	10	29.90	19.90 - 29.90	735420.23	977197.88	36.05	36.3
1290-MW-02S		STEP	1-in. PVC	10	14.3	4.3 - 14.3	735423.99	977200.20	36.05	36.3
1290-MW-03D		STEP	1-in. PVC	10	29.58	19.59 - 29.58	735289.03	977078.47	^a	36.54
1290-MW-03S		STEP	1-in. PVC	5	11.70	6.70 - 11.70	735288.83	977069.78	^a	36.59
1290-MW-04D		STEP	1-in. PVC	10	29.91	19.91 - 29.91	735425.92	977010.12	36.25	36.5
1290-MW-04S		STEP	1-in. PVC	10	15.66	5.66 - 15.66	735420.53	977010.17	36.23	36.5
1290-MW-05D		STEP	1-in. PVC	10	30.0	20.0 - 30.0	735980.30	977154.14	36.16	36.4
1290-MW-05S		STEP	1-in. PVC	10	15.80	5.80 - 15.80	735978.23	977150.92	36.14	36.4
1290-MW-06S		STEP	1-in. PVC	5	9.0	4.0 - 9.0	736237.28	977477.86	36.03	36.3
1290-MW-07D		STEP	1-in. PVC	10	34.6	24.6 - 34.6	734742.41	975723.20	36.93	37.2
1290-MW-07S		STEP	1-in. PVC	10	17.89	7.89 - 17.89	734738.23	975725.28	36.92	37.3
1290-MW-08D		STEP	1-in. PVC	10	24.50	14.50 - 24.50	735083.08	977800.64	36.72	37.0
1290-MW-08S		STEP	1-in. PVC	10	15.40	5.40 - 15.40	735078.48	977799.65	36.53	36.9
1290-MW-09D		STEP	1-in. PVC	10	30.39	20.39 - 30.39	734986.65	978528.67	37.35	37.7
1290-MW-09S		STEP	1-in. PVC	10	15.55	5.55 - 15.55	734989.07	978523.22	37.39	37.8
1290-MW-12D		STEP	1-in. PVC	10	34.3	24.3 - 34.3	735583.27	976441.49	37.27	37.5
1290-MW-12S		STEP	1-in. PVC	10	17.6	7.6 - 17.6	735576.76	976442.09	37.29	37.5
1290-MW-13D		STEP	1-in. PVC	10	30.01	20.01 - 30.01	734833.43	977242.99	36.81	37.1
1290-MW-13S		STEP	1-in. PVC	10	15.59	5.59 - 15.59	734827.57	977244.61	36.63	36.9
1290-MW-16	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	734429.82	978718.65	30.33	30.4
1290-MW-15	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	734550.89	978703.92	31.30	31.4

^aMonitoring wells 1290-MW-03S and 1290-MW-03D unable to open well plug. Ground shots reported are on rim of protective cover of well.

AMSL = Above mean sea level.

BGS = Below ground surface.

D= Deep well.

PVC = Polyvinyl chloride.

S= Shallow well.

STEP = Solutions to Environmental Problems, Inc.

Table 2. Water Level Measurements on July 20, 2007

Well ID	Top of Casing (AMSL)	Ground Elevation (AMSL)		Water Level, July 20, 2007	Groundwater Elevation (AMSL)
1290-MW-01S	36.43	36.7	^a	6.75	29.90
1290-MW-01D	36.40	36.6	^a	6.79	29.82
1290-MW-02S	36.05	36.3	^a	6.28	30.02
1290-MW-02D	36.05	36.3	^a	6.38	29.91
1290-MW-03S	^b	36.59	^a	6.78	29.81
1290-MW-03D	^b	36.54	^a	6.95	29.59
1290-MW-04S	36.23	36.5	^a	6.69	29.79
1290-MW-04D	36.25	36.5	^a	6.82	29.66
1290-MW-05S	36.14	36.4	^a	6.32	30.05
1290-MW-05D	36.16	36.4	^a	6.35	30.04
1290-MW-06S	36.03	36.3	^a	6.44	29.84
1290-MW-07S	36.92	37.3		6.73	30.19
1290-MW-07D	36.93	37.2		6.85	30.08
1290-MW-08S	36.53	36.9		6.56	29.97
1290-MW-08D	36.72	37.0		6.74	29.98
1290-MW-09S	37.39	37.8		8.46	28.93
1290-MW-09D	37.35	37.7		9.65	27.70
1290-MW-12S	37.29	37.5	^a	7.75	29.72
1290-MW-12D	37.27	37.5	^a	7.80	29.65
1290-MW-13S	36.63	36.9		6.80	29.83
1290-MW-13D	36.81	37.1		7.11	29.70
1290-MW-15S	31.30	31.4		4.20	27.10
1290-MW-16S	30.33	30.4		3.55	26.78

^a Elevations of groundwater measured from top of surface cap threads considered to be equal to ground elevation.

^b Unable to open well cap; therefore, elevation reported to rim of protective cover for well (i.e., well protective casing).
AMSL = Above mean sea level.

Table 3. Summary of Analytical Results Detected in Groundwater Samples Collected in July 2007 for the Building 1290 Investigation

Date	EPA Region III Tap Water RBC	MCL	MW-1S	MW-1D	MW-2S	MW-2D	MW-3S	MW-3D	MW-4S
Sample ID			AU01111	AU01121	AU02111	AU02121	AU03111	AU03121	AU04111
Date			07/17/07	07/17/07	07/18/07	07/17/07	07/18/07	07/18/07	07/17/07
Screened Interval (ft BGS)			5.72 to 15.72	19.95 to 29.95	4.3 to 14.3	19.90 to 29.90	6.7 to 11.70	19.58 to 29.58	5.66 to 15.66
1,1-Dichloroethane	89.65 N		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	35.32 N	7.00	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Acetone	547.5 N		<5 U	<5 U	<5 U	<5 U	<5 U	2.43 J	<5 U
Chloroform	0.1546 C		<1 U	<1 U	<1 U	<1 U	0.273 J	<1 U	<1 U
Trichloroethene	0.02637 C	5.00	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Vinyl Chloride	0.015 C	2.00	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

Station	EPA Region III Tap Water RBC	MCL	MW-4D	MW-5S	MW-5D	MW-6S	MW-7S	MW-7D	MW-8S	MW-8D
Sample ID			AU04121	AU05111	AU05121	AU06111	AU07111	AU07121	AU08111	AU08121
Date			07/17/07	07/18/07	07/18/07	07/18/07	07/16/07	07/17/07	07/18/07	07/18/07
Screened Interval (ft BGS)			19.91 to 29.91	5.80 to 15.8	20.0 to 30.0	4.0 to 9.0	7.89 to 17.89	24.6 to 34.6	5.40 to 15.40	14.50 to 24.5
1,1-Dichloroethane	89.65 N		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	35.32 N	7.00	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	6.01 =	7.77 =
Acetone	547.5 N		<5 U	<5 U	<5 U	14.9 =	1.89 J	<5 U	<5 U	<5 U
Chloroform	0.1546 C		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	0.02637 C	5.00	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	1.08 =
Vinyl Chloride	0.015 C	2.00	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

Table 3. Summary of Analytical Results Detected in Groundwater Samples Collected in July 2007 for Building 1290 Investigation (continued)

Station	EPA Region III Tap Water RBC	MCL	MW-9S	MW-9D	MW-12S	MW-12D	MW-13S	MW-13D	MW-15S	MW-16S
Sample ID			AU09111	AU09121	AU12111	AU12121	AU13111	AU13121	AU15111	AU16111
Date			07/18/07	07/18/07	07/18/07	07/18/07	07/19/07	07/19/07	07/19/07	07/19/07
Screened Interval (ft BGS)			5.55 to 15.55	20.39 to 30.39	7.6 to 17.6	24.3 to 34.3	5.59 to 15.59	20.01 to 30.01	Unknown	Unknown
1,1-Dichloroethane	89.65 N		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	0.906 J
1,1-Dichloroethene	35.32 N	7.00	4.29 =	<1 U	<1 U	<1 U	<1 U	<1 U	9.35 =	54.7 =
Acetone	547.5 N		5.52 =	12 =	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
Chloroform	0.1546 C		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	0.02637 C	5.00	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Vinyl Chloride	0.015 C	2.00	0.551 J	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	27.3 =

BGS = Below ground surface.

C = Carcinogenic.

EPA = U. S. Environmental Protection Agency.

MCL = Maximum contaminant level.

N = Non-carcinogenic.

RBC = Risk-based concentration.

Bold denotes concentrations above screening criteria.

Qualifiers:

J = Indicates that the value for the compound is an estimated value.

U – Indicates that the compound was not detected at the concentration reported.

Table 4. Hunter Army Airfield Field Activities under Delivery Order CV02

Activity	Facility ID	Building	Other Activities	Well Installation	Wells to be Sampled	Laboratory Analyses	Activity Times
MIP at 20 locations	HSRA: TBD	1290	MIP at 20 locations to ~45 ft BGS			VOCs	September 2008
Soil sampling using DPT	HSRA: TBD	1290	Two soil samples to 45 ft BGS			VOCs	September 2008
Groundwater sampling using DPT	HSRA: TBD	1290	Two GW samples to 45 ft BGS			VOCs	September 2008
Install soil gas wells	HSRA: TBD	1290	Install soil gas wells and sample		SG-1 through SG-28	VOCs	TBD
Install 24 monitoring wells	HSRA: TBD	1290	Install 24 monitoring wells	T-MW-1 through T-MW-24	T-MW-1 through T-MW-24		TBD
Sample groundwater at 36 wells (24 new and 12 existing)	HSRA: TBD	1290	Sample 36 monitoring wells		T-MW-1 through T-MW-24 and 12 existing wells to be determined	VOCs	TBD

BGS = Below ground surface.

DPT = Direct-push technology.

GW = Groundwater.

HSRA = Hazardous Site Response Act.

MIP = Membrane interface probe.

TBD = To be determined.

VOC = Volatile organic compound.

Table 5. Sample Numbering System for Hunter Army Airfield Activities

Sample Identification: XX##NT	
XX = Area designator <u>Examples: Hunter Army Airfield</u> AU = (Building 1290)	Area designators used for the project will be the data-cluster identifiers presented in Table 1-1 of the project work plan (SAIC 1996) <u>Examples: Hunter Army Airfield</u> AU = INV – Building 1290
## = Sample location	Sample locations will be consecutive starting from the last sample location <u>Example</u> 05 = Monitoring well 05
N = Sample depth	Sample depth will be represented by a number for each laboratory sample <u>Examples</u> 1 = First interval 2 = Second interval
T = Sample type	<u>Examples</u> 1 = Soil sample 2 = Groundwater sample 3 = Soil duplicate 4 = Groundwater duplicate 5 = Rinsate blank (soil equipment) 6 = Rinsate blank (groundwater equipment) 7 = Soil QA split sample 8 = Groundwater QA split sample 9 = Surface water sample 0 = Sediment sample A = Vertical-profile groundwater sample X = IDW soil

All trip blank samples used during the project will be consecutively identified.

IDW = Investigation-derived waste.

QA = Quality assurance.

Table 6. Summary of Analytical Samples to be Collected during Hunter Army Airfield Investigations (Delivery Order CV02)

Matrix	Analysis	Analytical Procedures	No. Field Samples	QC Dups^a	Field Rnsts^b	QC Trip Blanks	Total Samples	Holding Time	Preservation Requirements	Sample Containers
Soil (2 samples from 10 DPT borings)	VOCs	EPA 5035/8260B	20	2	1	0	23	48 hr	Cool 0°C	Three, EnCore
Groundwater (2 samples from 10 DPT borings)	VOCs	EPA 8260B	20	2	1	6	29	14 days	Cool 4°C HCl pH <2	Two 40-mL GSV ^c
Groundwater (1 sample from 24 new and 12 existing wells)	VOCs	EPA 8260B	36	4	2	6	48	14 days	Cool 4°C HCl pH <2	Two 40-mL GSV ^c
Soil Gas	VOCs	EPA TO-15	28	3		2	33		None	6-L Summa canisters
IDW Soil (from 24 MWs, 4 DPTs, and 2 soil gas DPTs)	VOCs	EPA 5035/8260B	30	0	0	0	30	14 days	Cool 4°C	IDW soil
IDW Water	VOC	EPA 8260B	3	0	0	0	3	14 days	Cool 4°C HCl pH <2	Two 40-mL GSV ^c
	Oil and grease	EPA 413.2	3	0	0	0	3	28 days	Cool 4°C H ₂ SO ₄ pH <2	Two 1-L AG
	Total phenols	EPA 420.1/420.2	3	0	0	0	3	28 days	Cool 4°C H ₂ SO ₄ pH <2	Two 1-L AG
	pH	EPA 150.1	3	0	0	0	3	ASAP	Cool 4°C	One 250-mL HDPE

^aThe number of QC duplicate samples represents a 10% distribution between the different types of investigations to be conducted; however, the actual number of duplicates collected for each investigation type might vary slightly from the distribution presented.

^bThe number of QC rinsate blank samples represents a 5% distribution between the different types of investigations to be conducted; however, the actual number of blanks collected for each investigation type might vary slightly from the distribution presented.

^cSample containers will be filled so that no headspace is present.

(This table is in conformance with EM-200-1-3.)

AG = Amber glass.

ASAP = As soon as possible.

DPT = Direct-push technology.

EPA = U. S. Environmental Protection Agency.

GSV = Glass septa vial.

HDPE = High-density polyethylene.

IDW = Investigation-derived waste.

MW = Monitoring wells.

QC = Quality control.

VOC = Volatile organic compound.

APPENDIX A

**HISTORICAL GROUNDWATER DATA COLLECTED AT
MONITORING WELLS AND VERTICAL PROFILES AT
USTS 25 AND 26**

Table A-1. Summary of Chlorinated Volatile Organic Compounds Detected in Groundwater from Monitoring Wells, USTs 25 and 26, HAAF

Station		AF-01	AF-01	AF-01	AF-01	AF-01	AF-02	AF-02	AF-02	AF-02
Sample ID		AF0112	AF0119	AF0122	AF0142	AF0172	AF0212	AF0219	AF0222	AF0232
Date		05/04/99	05/11/99	09/26/99	09/28/00	01/19/02	05/05/99	05/11/99	09/26/99	06/24/00
Depth (ft) BGS		2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0
VOCs (µg/L)										
Trichloroethene	5	NR	NR	<2 U	<1 U	NR	NR	NR	<2 U	NR
Vinyl chloride	2	NR	NR	<2 U	<1 U	NR	NR	NR	<2 U	NR
1,1-Dichloroethene	7	NR	NR	<2 U	<1 U	NR	NR	NR	<2 U	NR
1,2-Dichloroethene	70	NR	NR	<2 U	<2 U	NR	NR	NR	<2 U	NR
1,1-Dichloroethane		NR	NR	<2 U	<1 U	NR	NR	NR	<2 U	NR
1,2-Dichloroethane	5	NR	NR	<2 U	<1 U	NR	NR	NR	<2 U	NR
Chloroform		NR	NR	<2 U	<1 U	NR	NR	NR	<2 U	NR

Station		AF-02	AF-02	AF-02	AF-02	AF-02	AF-02	AF-02	AF-02	AF-02
Sample ID		AF0242	AF0252	AF0262	AF0272	AF0282	AF0292	AF0202	AF02A2	AF02B2
Date		09/28/00	01/10/01	06/08/01	01/19/02	06/07/02	01/27/03	06/24/03	01/23/04	07/20/04
Depth (ft) BGS		2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0
VOCs (µg/L)										
Trichloroethene	5	<1 U	NR	NR	NR	NR	NR	NR	NR	NR
Vinyl chloride	2	<1 U	NR	NR	NR	NR	NR	NR	NR	NR
1,1-Dichloroethene	7	<1 U	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dichloroethene	70	<2 U	NR	NR	NR	NR	NR	NR	NR	NR
1,1-Dichloroethane		<1 U	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dichloroethane	5	<1 U	NR	NR	NR	NR	NR	NR	NR	NR
Chloroform		<1 U	NR	NR	NR	NR	NR	NR	NR	NR

Station		AF-02	AF-02	AF-02	AF-02	AF-02	AF-03	AF-03	AF-03	AF-03
Sample ID		AF02C2	AF02D2	AF02E2	AF02F2	AF02G2	AF0312	AF0319	AF0322	AF0342
Date		01/13/05	07/19/05	01/11/06	07/25/06	01/23/07	05/05/99	05/12/99	09/26/99	09/28/00
Depth (ft) BGS		2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0
VOCs (µg/L)										
Trichloroethene	5	NR	NR	NR	NR	NR	NR	NR	<2 U	<1 U
Vinyl chloride	2	NR	NR	NR	NR	NR	NR	NR	<2 U	<1 U
1,1-Dichloroethene	7	NR	NR	NR	NR	NR	NR	NR	<2 U	<1 U
1,2-Dichloroethene	70	NR	NR	NR	NR	NR	NR	NR	<2 U	<2 U
1,1-Dichloroethane		NR	NR	NR	NR	NR	NR	NR	<2 U	<1 U
1,2-Dichloroethane	5	NR	NR	NR	NR	NR	NR	NR	<2 U	<1 U
Chloroform		NR	NR	NR	NR	NR	NR	NR	<2 U	<1 U

*Result exceeds RBC or MCL.

Bold = Concentrations above MCL.

NR = Not reported.

Table A-1. Summary of Chlorinated Volatile Organic Compounds Detected in Groundwater from Monitoring Wells, USTs 25 and 26, HAAF

Station		AF-04	AF-04	AF-04	AF-05	AF-05	AF-05	AF-05	AF-05	AF-05
Sample ID		AF0412	AF0422	AF0442	AF0512	AF0522	AF0532	AF0542	AF0552	AF0562
Date		05/05/99	09/26/99	09/28/00	05/05/99	09/26/99	06/24/00	09/28/00	01/10/01	06/08/01
Depth (ft) BGS		2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0
VOCs (µg/L)										
Trichloroethene	5	NR	<2 U	<1 U	NR	<2 U	NR	<1 U	NR	NR
Vinyl chloride	2	NR	<2 U	<1 U	NR	<2 U	NR	<1 U	NR	NR
1,1-Dichloroethene	7	NR	<2 U	<1 U	NR	<2 U	NR	<1 U	NR	NR
1,2-Dichloroethene	70	NR	<2 U	<2 U	NR	<2 U	NR	<2 U	NR	NR
1,1-Dichloroethane		NR	<2 U	<1 U	NR	<2 U	NR	<1 U	NR	NR
1,2-Dichloroethane	5	NR	<2 U	<1 U	NR	<2 U	NR	<1 U	NR	NR
Chloroform		NR	<2 U	<1 U	NR	<2 U	NR	<1 U	NR	NR

Station		AF-05	AF-05	AF-05	AF-05	AF-05	AF-05	AF-05	AF-05	AF-05
Sample ID		AF0582	AF0592	AF0502	AF05A2	AF05B2	AF05C2	AF05D2	AF05E2	AF05F2
Date		06/07/02	01/27/03	06/24/03	01/23/04	07/20/04	01/13/05	07/19/05	01/11/06	07/25/06
Depth (ft) BGS		2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0
VOCs (µg/L)										
Trichloroethene	5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Vinyl chloride	2	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,1-Dichloroethene	7	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dichloroethene	70	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,1-Dichloroethane		NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dichloroethane	5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Chloroform		NR	NR	NR	NR	NR	NR	NR	NR	NR

Station		AF-05	AF-06	AF-07	AF-07	AF-07	AF-07	AF-07	AF-07	AF-07
Sample ID		AF05G2	AF0612	AF0712	AF0722	AF0732	AF0742	AF0752	AF0762	AF0772
Date		01/23/07	05/05/99	05/04/99	09/26/99	06/24/00	09/28/00	01/10/01	06/08/01	01/19/02
Depth (ft) BGS		2.0 - 12.0	2.0 - 12.0	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5
VOCs (µg/L)										
Trichloroethene	5	NR	NR	NR	<10 U	NR	<100 U	NR	NR	NR
Vinyl chloride	2	NR	NR	NR	<10 U	NR	<100 U	NR	NR	NR
1,1-Dichloroethene	7	NR	NR	NR	<10 U	NR	<100 U	NR	NR	NR
1,2-Dichloroethene	70	NR	NR	NR	<10 U	NR	<200 U	NR	NR	NR
1,1-Dichloroethane		NR	NR	NR	<10 U	NR	<100 U	NR	NR	NR
1,2-Dichloroethane	5	NR	NR	NR	<10 U	NR	<100 U	NR	NR	NR
Chloroform		NR	NR	NR	<10 U	NR	<100 U	NR	NR	NR

*Result exceeds RBC or MCL.

Bold = Concentrations above MCL.

NR = Not reported.

Table A-1. Summary of Chlorinated Volatile Organic Compounds Detected in Groundwater from Monitoring Wells, USTs 25 and 26, HAAF

Station		AF-07	AF-07	AF-07	AF-07	AF-07	AF-07	AF-07	AF-07	AF-07
Sample ID		AF0782	AF0792	AF0702	AF07A2	AF07B2	AF07C2	AF07D2	AF07E2	AF07F2
Date		06/07/02	01/27/03	06/24/03	01/23/04	07/20/04	01/13/05	07/19/05	01/11/06	07/25/06
Depth (ft) BGS		2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5
VOCs (µg/L)										
Trichloroethene	5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Vinyl chloride	2	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,1-Dichloroethene	7	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dichloroethene	70	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,1-Dichloroethane		NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dichloroethane	5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Chloroform		NR	NR	NR	NR	NR	NR	NR	NR	NR

Station		AF-07	AF-08	AF-08	AF-08	AF-09	AF-09	AF-09	AF-10	AF-11
Sample ID		AF07G2	AF0812	AF0822	AF0842	AF0912	AF0922	AF0942	AF1012	AF1112
Date		01/23/07	05/04/99	09/26/99	09/28/00	05/04/99	09/26/99	09/28/00	05/04/99	05/05/99
Depth (ft) BGS		2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.5 - 12.5	1.0 - 11.0
VOCs (µg/L)										
Trichloroethene	5	NR	NR	<2 U	<1 U	NR	<2 U	<1 U	NR	NR
Vinyl chloride	2	NR	NR	<2 U	<1 U	NR	<2 U	<1 U	NR	NR
1,1-Dichloroethene	7	NR	NR	<2 U	<1 U	NR	<2 U	<1 U	NR	NR
1,2-Dichloroethene	70	NR	NR	<2 U	<2 U	NR	3.9 =	3.4 =	NR	NR
1,1-Dichloroethane		NR	NR	<2 U	<1 U	NR	<2 U	<1 U	NR	NR
1,2-Dichloroethane	5	NR	NR	<2 U	<1 U	NR	<2 U	<1 U	NR	NR
Chloroform		NR	NR	<2 U	<1 U	NR	<2 U	<1 U	NR	NR

Station		AF-11	AF-11	AF-12	AF-12	AF-12	AF-12	AF-12	AF-12	AF-12
Sample ID		AF1122	AF1142	AF1212	AF1222	AF1232	AF1242	AF1252	AF1262	AF1272
Date		09/26/99	09/28/00	05/04/99	09/26/99	06/24/00	09/28/00	01/10/01	06/08/01	01/19/02
Depth (ft) BGS		1.0 - 11.0	1.0 - 11.0	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5
VOCs (µg/L)										
Trichloroethene	5	<2 U	<1 U	NR	<4 U	NR	<1 U	NR	NR	NR
Vinyl chloride	2	<2 U	<1 U	NR	<4 U	NR	<1 U	NR	NR	NR
1,1-Dichloroethene	7	<2 U	<1 U	NR	<4 U	NR	<1 U	NR	NR	NR
1,2-Dichloroethene	70	<2 U	<2 U	NR	<4 U	NR	<2 U	NR	NR	NR
1,1-Dichloroethane		<2 U	<1 U	NR	<4 U	NR	<1 U	NR	NR	NR
1,2-Dichloroethane	5	<2 U	<1 U	NR	<4 U	NR	<1 U	NR	NR	NR
Chloroform		<2 U	<1 U	NR	<4 U	NR	<1 U	NR	NR	NR

*Result exceeds RBC or MCL.

Bold = Concentrations above MCL.

NR = Not reported.

Table A-1. Summary of Chlorinated Volatile Organic Compounds Detected in Groundwater from Monitoring Wells, USTs 25 and 26, HAAF

Station		AF-12	AF-12	AF-12	AF-12	AF-12	AF-12	AF-12	AF-12	AF-12
Sample ID		AF1282	AF1292	AF1202	AF12A2	AF12B2	AF12C2	AF12D2	AF12E2	AF12F2
Date		06/07/02	01/27/03	06/24/03	01/23/04	07/20/04	01/13/05	07/19/05	01/11/06	07/25/06
Depth (ft) BGS		2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5
VOCs (µg/L)										
Trichloroethene	5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Vinyl chloride	2	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,1-Dichloroethene	7	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dichloroethene	70	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,1-Dichloroethane		NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dichloroethane	5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Chloroform		NR	NR	NR	NR	NR	NR	NR	NR	NR

Station		AF-12	AF-13	AF-13	AF-13	AF-14	AF-14	AF-14	AF-15	AF-15
Sample ID		AF12G2	AF1312	AF1322	AF1342	AF1412	AF1422	AF1442	AF1512	AF1522
Date		01/23/07	05/07/99	09/26/99	09/28/00	05/07/99	09/26/99	09/28/00	05/07/99	09/26/99
Depth (ft) BGS		2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	2.5 - 12.5	1.4 - 11.4	1.4 - 11.4	1.4 - 11.4	1.5 - 11.5	1.5 - 11.5
VOCs (µg/L)										
Trichloroethene	5	NR	NR	<2 U	<1 U	NR	<2 U	<1 U	NR	<2 U
Vinyl chloride	2	NR	NR	<2 U	<1 U	NR	<2 U	<1 U	NR	<2 U
1,1-Dichloroethene	7	NR	NR	<2 U	<1 U	NR	<2 U	<1 U	NR	<2 U
1,2-Dichloroethene	70	NR	NR	1.5 J	1.2 J	NR	<2 U	<2 U	NR	<2 U
1,1-Dichloroethane		NR	NR	<2 U	<1 U	NR	<2 U	<1 U	NR	<2 U
1,2-Dichloroethane	5	NR	NR	<2 U	<1 U	NR	<2 U	<1 U	NR	<2 U
Chloroform		NR	NR	<2 U	<1 U	NR	<2 U	<1 U	NR	<2 U

Station		AF-15	AF-16	AF-16	AF-16	AF-17	AF-17	AF-18	AF-18	AF-18
Sample ID		AF1542	AF1612	AF1622	AF1642	AF1712	AF1722	AF1812	AF1822	AF1842
Date		09/28/00	05/07/99	09/26/99	09/28/00	05/08/99	09/26/99	05/08/99	09/26/99	09/28/00
Depth (ft) BGS		1.5 - 11.5	1.5 - 11.5	1.5 - 11.5	1.5 - 11.5	2.5 - 12.5	2.5 - 12.5	1.5 - 11.5	1.5 - 11.5	1.5 - 11.5
VOCs (µg/L)										
Trichloroethene	5	<1 U	NR	<2 U	<1 U	NR	112 =	NR	1.6 J	1.4 =
Vinyl chloride	2	<1 U	NR	<2 U	<1 U	NR	<2 U	NR	<2 U	<1 U
1,1-Dichloroethene	7	<1 U	NR	<2 U	<1 U	NR	<2 U	NR	<2 U	<1 U
1,2-Dichloroethene	70	<2 U	NR	<2 U	<2 U	NR	19.9 =	NR	13.2 =	5.6 =
1,1-Dichloroethane		<1 U	NR	<2 U	<1 U	NR	<2 U	NR	<2 U	<1 U
1,2-Dichloroethane	5	<1 U	NR	<2 U	<1 U	NR	<2 U	NR	<2 U	<1 U
Chloroform		<1 U	NR	<2 U	<1 U	NR	<2 U	NR	<2 U	<1 U

*Result exceeds RBC or MCL.

Bold = Concentrations above MCL.

NR = Not reported.

Table A-1. Summary of Chlorinated Volatile Organic Compounds Detected in Groundwater from Monitoring Wells, USTs 25 and 26, HAAF

Station		AF-19	AF-19	AF-19	AF-20	AF-20	AF-20	AF-23	AF-23	AF-23
Sample ID		AF1912	AF1922	AF1942	AF2012	AF2022	AF2042	AF2312	AF2322	AF2342
Date		05/08/99	09/26/99	09/28/00	05/08/99	09/26/99	09/27/00	05/08/99	09/26/99	09/27/00
Depth (ft) BGS		1.5 - 11.5	1.5 - 11.5	1.5 - 11.5	3.0 - 13.0	3.0 - 13.0	3.0 - 13.0	3.0 - 13.0	3.0 - 13.0	3.0 - 13.0
VOCs (µg/L)										
Trichloroethene	5	NR	2.6 =	<1 U	NR	<2 U	<1 U	NR	1.6 J	0.33 J
Vinyl chloride	2	NR	<2 U	<1 U	NR	<2 U	<1 U	NR	<2 U	<1 U
1,1-Dichloroethene	7	NR	<2 U	<1 U	NR	<2 U	<1 U	NR	<2 U	<1 U
1,2-Dichloroethene	70	NR	8.3 =	0.36 J	NR	1.7 J	2.3 =	NR	5.3 =	8.5 =
1,1-Dichloroethane		NR	<2 U	<1 U	NR	<2 U	<1 U	NR	<2 U	<1 U
1,2-Dichloroethane	5	NR	<2 U	<1 U	NR	<2 U	<1 U	NR	<2 U	<1 U
Chloroform		NR	<2 U	<1 U	NR	<2 U	<1 U	NR	<2 U	<1 U

Station		AF-24	AF-24	AF-24	AF-25	AF-25	AF-25	AF-26	AF-26	AF-26
Sample ID		AF2412	AF2422	AF2442	AF2512	AF2522	AF2542	AF2612	AF2622	AF2642
Date		05/08/99	09/26/99	09/28/00	05/11/99	09/26/99	09/28/00	05/11/99	09/26/99	09/28/00
Depth (ft) BGS		2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	0.5 - 10.5	0.5 - 10.5	0.5 - 10.5	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0
VOCs (µg/L)										
Trichloroethene	5	NR	<2 U	<1 U	NR	243 =	197 =	NR	116 =	102 J
Vinyl chloride	2	NR	<2 U	<1 U	NR	0.6 J	<1 U	NR	<4 U	<1 U
1,1-Dichloroethene	7	NR	<2 U	<1 U	NR	0.66 J	<1 U	NR	<4 U	<1 U
1,2-Dichloroethene	70	NR	<2 U	<2 U	NR	40.2 =	34 =	NR	27.9 =*	21.8 =
1,1-Dichloroethane		NR	<2 U	<1 U	NR	<2 U	<1 U	NR	<4 U	<1 U
1,2-Dichloroethane	5	NR	<2 U	<1 U	NR	<2 U	<1 U	NR	<4 U	<1 U
Chloroform		NR	<2 U	<1 U	NR	<2 U	<1 U	NR	<4 U	<1 U

Station		AF-27	AF-27	AF-27	AF-28	AF-28	AF-28	AF-29	AF-29	AF-29
Sample ID		AF2712	AF2722	AF2742	AF2812	AF2822	AF2842	AF2912	AF2922	AF2942
Date		05/11/99	09/26/99	09/28/00	05/11/99	09/26/99	09/28/00	05/11/99	09/26/99	09/28/00
Depth (ft) BGS		1.0 - 11.0	1.0 - 11.0	1.0 - 11.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0
VOCs (µg/L)										
Trichloroethene	5	NR	596 =	179 =	NR	60.9 =	56.8 =	NR	11 =	2.6 =
Vinyl chloride	2	NR	<20 U	<1 U	NR	<2 U	<1 U	NR	1.8 J	0.77 J
1,1-Dichloroethene	7	NR	<20 U	<1 U	NR	0.67 J	<1 U	NR	<2 U	<1 U
1,2-Dichloroethene	70	NR	49.3 =	30.7 =	NR	41.9 =	42.6 =	NR	9.5 =	2.4 =
1,1-Dichloroethane		NR	<20 U	<1 U	NR	<2 U	<1 U	NR	<2 U	<1 U
1,2-Dichloroethane	5	NR	<20 U	<1 U	NR	<2 U	<1 U	NR	<2 U	<1 U
Chloroform		NR	<20 U	<1 U	NR	<2 U	<1 U	NR	<2 U	<1 U

*Result exceeds RBC or MCL.

Bold = Concentrations above MCL.

NR = Not reported.

Table A-1. Summary of Chlorinated Volatile Organic Compounds Detected in Groundwater from Monitoring Wells, USTs 25 and 26, HAAF

Station		AF-33	AF-33	AF-34	AF-34	AF-35	AF-35	AF-36	AF-36	AF-37
Sample ID		AF3312	AF3342	AF3412	AF3442	AF3512	AF3542	AF3612	AF3642	AF3712
Date		09/25/99	09/28/00	09/25/99	09/28/00	09/25/99	09/28/00	09/25/99	09/28/00	09/25/99
Depth (ft) BGS		2.3 - 11.8	2.3 - 11.8	1.4 - 10.9	1.4 - 10.9	1.2 - 10.7	1.2 - 10.7	1.4 - 10.9	1.4 - 10.9	4.4 - 14.3
VOCs (µg/L)										
Trichloroethene	5	45.8 =	34.4 =	95.5 =	105 J	23 =	27.6 =	38 =*	10.3 =	346 =
Vinyl chloride	2	<2 U	<1 U	<2 U	<1 U	<2 U	<1 U	<2 U	<1 U	<2 U
1,1-Dichloroethene	7	<2 U	<1 U	4.8 =	3.9 =	<2 U	<1 U	<2 U	<1 U	0.6 J
1,2-Dichloroethene	70	6.4 =	8.1 =	10.8 =	13 =	8.8 =	9.6 =	17.3 =	3.3 =	26.4 =
1,1-Dichloroethane		<2 U	<1 U	3.4 =	2.8 =	<2 U	<1 U	<2 U	<1 U	<2 U
1,2-Dichloroethane	5	<2 U	<1 U	<2 U	<1 U	<2 U	<1 U	<2 U	<1 U	<2 U
Chloroform		<2 U	<1 U	<2 U	<1 U	<2 U	<1 U	<2 U	<1 U	<2 U

Station		AF-37	AF-38	AF-38	AF-39	AF-40	AF-40	AF-40	AF-40	AF-40
Sample ID		AF3742	AF3812	AF3842	AF3912	AF4012	AF4032	AF4042	AF4052	AF4062
Date		09/28/00	09/25/99	09/28/00	09/25/99	02/02/00	06/23/00	09/28/00	01/07/01	06/08/01
Depth (ft) BGS		4.4 - 14.3	4.1 - 14.1	4.1 - 14.1	4.4 - 14.3	28.5 - 33.0	28.5 - 33.0	28.5 - 33.0	28.5 - 33.0	28.5 - 33.0
VOCs (µg/L)										
Trichloroethene	5	226 =	6.8 =	<1 U	<2 U	53.3 =	353 =	42.9 =	108 J	255 J
Vinyl chloride	2	<1 U	<2 U	<1 U	<2 U	<1 U	<1 U	0.76 J	0.67 J	<1 U
1,1-Dichloroethene	7	<1 U	<2 U	<1 U	<2 U	<1 U	1.6 =	<1 U	0.41 J	0.89 J
1,2-Dichloroethene	70	17.2 =	3.8 =	0.39 J	4.3 =	15.4 =	63.3 =	14.6 =	26 =	NR
1,1-Dichloroethane		<1 U	<2 U	<1 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	5	<1 U	<2 U	<1 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloroform		<1 U	<2 U	<1 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U

Station		AF-40	AF-40	AF-40	AF-41	AF-41	AF-41	AF-41	AF-41	AF-41
Sample ID		AF4072	AF40F2	AF40G2	AF4112	AF4132	AF4142	AF4152	AF4162	AF4172
Date		01/19/02	07/25/06	01/23/07	02/02/00	06/23/00	09/28/00	01/07/01	06/08/01	01/19/02
Depth (ft) BGS		28.5 - 33.0	28.5 - 33.0	28.5 - 33.0	28.5 - 33.0	28.5 - 33.0	28.5 - 33.0	28.5 - 33.0	28.5 - 33.0	28.5 - 33.0
VOCs (µg/L)										
Trichloroethene	5	379 =	49.4 =	201 =	158 =	636 =	1.2 =	176 =	195 J	405 =
Vinyl chloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	7	1.6 =	<1 U	1.05 =	0.94 J	3 =	<1 U	0.82 J	0.81 J	2.3 =
1,2-Dichloroethene	70	58.7 =	14.9 =	54.4 =	35.6 =	110 =	1.7 J	32.7 =	NR	76.4 =
1,1-Dichloroethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloroform		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

*Result exceeds RBC or MCL.

Bold = Concentrations above MCL.

NR = Not reported.

Table A-1. Summary of Chlorinated Volatile Organic Compounds Detected in Groundwater from Monitoring Wells, USTs 25 and 26, HAAF

Station		AF-41	AF-41	AF-42	AF-42	AF-42	AF-42	AF-42	AF-42	AF-53
Sample ID		AF41F2	AF41G2	AF4212	AF4232	AF4242	AF4252	AF4262	AF4272	AF5312
Date		07/25/06	01/23/07	02/02/00	06/23/00	09/28/00	01/07/01	06/08/01	01/19/02	03/10/01
Depth (ft) BGS		28.5 - 33.0	28.5 - 33.0	28.5 - 33.0	28.5 - 33.0	28.5 - 33.0	28.5 - 33.0	28.5 - 33.0	28.5 - 33.0	20.0 - 30.0
VOCs (µg/L)										
Trichloroethene	5	252 =	168 =	<1 U	<1 U	<1 U	<1 U	0.36 J	<1 U	2410 J
Vinyl chloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	7	1.32 =	1.2 =	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	4.6 =
1,2-Dichloroethene	70	81 =	61.3 =	<2 U	<2 U	<2 U	<2 U	NR	<2 U	88.8 =
1,1-Dichloroethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloroform		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

Station		AF-54	AF-55	AF-56	AF-57	AF-58	AF-59	AF-60	AF-61	AF-62
Sample ID		AF5412	AF5512	AF5612	AF5712	AF5812	AF5912	AF6012	AF6112	AF6212
Date		03/10/01	03/10/01	03/10/01	03/09/01	03/09/01	03/10/01	03/10/01	03/10/01	03/10/01
Depth (ft) BGS		32.4 - 42.4	24.0 - 34.0	19.9 - 29.9	57.8 - 62.8	2.7 - 12.7	2.3 - 12.3	20.0 - 30.0	20.0 - 30.0	3.0 - 13.0
VOCs (µg/L)										
Trichloroethene	5	352 =	1020 =	303 =	0.72 J	13 =	<1 U	26.1 =	267 =	0.39 J
Vinyl chloride	2	<1 U	<1 U	<5 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	7	<1 U	<1 U	<5 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethene	70	53.2 =	154 =	7.9 J	<2 U	8 =	<2 U	3.4 =	1.3 J	<2 U
1,1-Dichloroethane		<1 U	<1 U	<5 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	5	<1 U	<1 U	<5 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloroform		2.5 =	0.21 J	<5 U	4.7 =	1.1 =	0.66 J	<1 U	0.39 J	1 =

Station		AF-68	AF-68	AF-68	AF-69	AF-70	AF-71	AF-72
Sample ID		AF6812	AF68F2	AF68G2	AF6912	AF7012	AF7112	AF7212
Date		12/18/02	07/25/06	01/23/07	12/18/02	12/18/02	12/18/02	12/18/02
Depth (ft) BGS		34.5 - 39.5	34.5 - 39.5	34.5 - 39.5	40.2 - 45.2	15.0 - 20.0	15.3 - 20.3	2.5 - 12.5
VOCs (µg/L)								
Trichloroethene	5	380 J	540 =	373 J	138 J	2 J	41.4 J	807 J
Vinyl chloride	2	<1 U	<1 U	<1 U	<1 U	<1 UJ	<1 UJ	<1 U
1,1-Dichloroethene	7	1.6 =	1.71 =	1.47 =	<1 U	<1 UJ	0.54 J	4.9 =
1,2-Dichloroethene	70	84.8 =	84.9 =	67.7 =	6.9 =	<1 UJ	36.5 J	57.8 =
1,1-Dichloroethane		<1 U	<1 U	<1 U	<1 U	<1 UJ	<1 UJ	1.8 =
1,2-Dichloroethane	5	<1 U	<1 U	<1 U	<1 U	<1 UJ	<1 UJ	1.2 =
Chloroform		<1 U	<1 U	<1 U	<1 U	<1 UJ	<1 UJ	<1 U

*Result exceeds RBC or MCL.

Bold = Concentrations above MCL.

NR = Not reported.

Table A-2. Summary of Chlorinated Volatile Organic Analytes Detected in Groundwater from Vertical Profiles at USTs 25 and 26, HAAF

Station		AF-21	AF-21	AF-21	AF-21	AF-21	AF-21	AF-21	AF-21	AF-21	AF-22
Sample ID		AF2112	AF2122	AF2132	AF2142	AF2152	AF2162	AF2172	AF2182	AF2192	AF2212
Date		05/07/99	05/07/99	05/07/99	05/07/99	05/07/99	05/07/99	05/07/99	05/07/99	05/07/99	05/08/99
Depth (ft), BGS		11.0 - 15.0	16.0 - 20.0	21.0 - 25.0	26.0 - 30.0	31.0 - 35.0	36.0 - 40.0	41.0 - 45.0	46.0 - 50.0	51.0 - 55.0	11.0 - 15.0
VOCs (µg/L)											
Tetrachloroethene	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Trichloroethene	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Vinyl chloride	2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,1-Dichloroethene	7	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dichloroethene	70	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,1-Dichloroethane		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dichloroethane	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Chloromethane		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

Station		AF-22	AF-22	AF-22	AF-22	AF-22	AF-22	AF-22	AF-30	AF-30	AF-30
Sample ID		AF2222	AF2232	AF2242	AF2252	AF2262	AF2272	AF2282	AF3012	AF3022	AF3032
Date		05/08/99	05/08/99	05/08/99	05/08/99	05/08/99	05/08/99	05/08/99	09/26/99	09/26/99	09/26/99
Depth (ft), BGS		16.0 - 20.0	21.0 - 25.0	26.0 - 30.0	31.0 - 35.0	36.0 - 40.0	41.0 - 45.0	46.0 - 50.0	11.0 - 15.0	16.0 - 20.0	21.0 - 25.0
VOCs (µg/L)											
Tetrachloroethene	5	NR	NR	NR	NR	NR	NR	NR	<2 U	<2 U	<2 U
Trichloroethene	5	NR	NR	NR	NR	NR	NR	NR	1.7 J	21.3 =	75.9 =
Vinyl chloride	2	NR	NR	NR	NR	NR	NR	NR	<2 U	0.88 J	<2 U
1,1-Dichloroethene	7	NR	NR	NR	NR	NR	NR	NR	<2 U	<2 U	0.74 J
1,2-Dichloroethene	70	NR	NR	NR	NR	NR	NR	NR	3.3 =	24 =	33 =
1,1-Dichloroethane		NR	NR	NR	NR	NR	NR	NR	<2 U	<2 U	<2 U
1,2-Dichloroethane	5	NR	NR	NR	NR	NR	NR	NR	<2 U	<2 U	<2 U
Chloromethane		NR	NR	NR	NR	NR	NR	NR	<2 U	<2 U	<2 U

Station		AF-30	AF-30	AF-30	AF-30	AF-30	AF-31	AF-31	AF-31	AF-31	AF-31
Sample ID		AF3042	AF3052	AF3062	AF3072	AF3082	AF3112	AF3122	AF3132	AF3142	AF3152
Date		09/26/99	09/26/99	09/26/99	09/26/99	09/26/99	09/25/99	09/25/99	09/25/99	09/25/99	09/25/99
Depth (ft), BGS		26.0 - 30.0	31.0 - 35.0	36.0 - 40.0	41.0 - 45.0	46.0 - 50.0	6.0 - 10.0	11.0 - 15.0	16.0 - 20.0	21.0 - 25.0	26.0 - 30.0
VOCs (µg/L)											
Tetrachloroethene	5	<2 U	<2 U	<2 U	<2 U	<2 U	<10 U	<2 U	<2 U	<2 U	<2 U
Trichloroethene	5	262 =	116 =	66.5 =	66.2 =	0.91 J	168 =	110 =	2.6 =	43.7 =	1.3 J
Vinyl chloride	2	<2 U	<2 U	<2 U	<2 U	<2 U	<10 U	<2 U	<2 U	<2 U	<2 U
1,1-Dichloroethene	7	2.2 =	0.62 J	<2 U	<2 U	<2 U	<10 U	<2 U	<2 U	<2 U	<2 U
1,2-Dichloroethene	70	90.3 =	24.3 =	11.3 =	8.7 =	<2 U	17.9 =	10.7 =	<2 U	16.4 =	<2 U
1,1-Dichloroethane		<2 U	<2 U	<2 U	<2 U	<2 U	<10 U	<2 U	<2 U	<2 U	<2 U
1,2-Dichloroethane	5	<2 U	<2 U	<2 U	<2 U	<2 U	<10 U	<2 U	<2 U	<2 U	<2 U
Chloromethane		<2 U	<2 U	<2 U	<2 U	<2 U	<10 U	<2 U	0.68 J	<2 U	0.73 J

*Result exceeds RBC or MCL.

Bold = Concentrations above MCL.

NR = Not reported.

Table A-2. Summary of Chlorinated Volatile Organic Analytes Detected in Groundwater from Vertical Profiles at USTs 25 and 26, HAAF

Station		AF-31	AF-31	AF-31	AF-31	AF-32	AF-32	AF-32	AF-32	AF-32	AF-32
Sample ID		AF3162	AF3172	AF3182	AF3192	AF3212	AF3222	AF3232	AF3242	AF3252	AF3262
Date		09/25/99	09/25/99	09/25/99	09/25/99	09/25/99	09/25/99	09/25/99	09/25/99	09/25/99	09/25/99
Depth (ft), BGS		31.0 - 35.0	36.0 - 40.0	41.0 - 45.0	46.0 - 50.0	11.0 - 15.0	16.0 - 20.0	21.0 - 25.0	26.0 - 30.0	31.0 - 35.0	36.0 - 40.0
VOCs (µg/L)											
Tetrachloroethene	5	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
Trichloroethene	5	1 J	0.76 J	<2 U	0.56 J	26.3 =	<2 U	<2 U	<2 U	<2 U	<2 U
Vinyl chloride	2	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
1,1-Dichloroethene	7	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
1,2-Dichloroethene	70	<2 U	<2 U	<2 U	<2 U	6.4 =	<2 U	<2 U	<2 U	<2 U	<2 U
1,1-Dichloroethane		<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
1,2-Dichloroethane	5	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
Chloromethane		<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U

Station		AF-32	AF-32	AF-43	AF-43	AF-43	AF-43	AF-43	AF-43	AF-43	AF-43
Sample ID		AF3272	AF3282	AF4312	AF4322	AF4332	AF4342	AF4352	AF4362	AF4372	AF4382
Date		09/25/99	09/25/99	11/30/00	11/30/00	11/30/00	11/30/00	11/30/00	11/30/00	11/30/00	11/30/00
Depth (ft), BGS		41.0 - 45.0	46.0 - 50.0	4.0 - 9.0	9.0 - 14.0	14.0 - 19.0	19.0 - 24.0	24.0 - 29.0	29.0 - 34.0	34.0 - 39.0	39.0 - 44.0
VOCs (µg/L)											
Tetrachloroethene	5	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	5	<2 U	<2 U	<1 U	1.2 =	304 =	2600 =	2140 =	2030 =	883 =	213 J
Vinyl chloride	2	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	7	<2 U	<2 U	<1 U	<1 U	0.51 J	2.3 =	5.4 =	12.8 =	7.2 =	0.1 J
1,2-Dichloroethene	70	<2 U	<2 U	<2 U	0.46 J	5.3 =	20.2 =	103 =	116 =	68.2 =	9.8 =
1,1-Dichloroethane		<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	1.3 =	0.9 J	<1 U
1,2-Dichloroethane	5	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloromethane		<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

Station		AF-43	AF-44	AF-44	AF-44	AF-44	AF-44	AF-44	AF-44	AF-44	AF-44
Sample ID		AF4392	AF4412	AF4422	AF4432	AF4442	AF4452	AF4462	AF4472	AF4482	AF4492
Date		11/30/00	12/01/00	12/01/00	12/01/00	12/01/00	12/01/00	12/01/00	12/01/00	12/01/00	12/01/00
Depth (ft), BGS		44.0 - 49.0	4.0 - 9.0	9.0 - 14.0	14.0 - 19.0	19.0 - 24.0	24.0 - 29.0	29.0 - 34.0	34.0 - 39.0	39.0 - 44.0	44.0 - 49.0
VOCs (µg/L)											
Tetrachloroethene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	5	71.2 =	14.3 =	80.1 =	13 =	54.9 =	33.5 =	0.83 J	790 =	346 =	60.8 =
Vinyl chloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	7	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	3.2 =	0.84 J	<1 U
1,2-Dichloroethene	70	5.4 =	7 =	2.8 =	<2 U	5.6 =	7 =	1.1 J	104 =	38.6 =	9.2 =
1,1-Dichloroethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloromethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

*Result exceeds RBC or MCL.

Bold = Concentrations above MCL.

NR = Not reported.

Table A-2. Summary of Chlorinated Volatile Organic Analytes Detected in Groundwater from Vertical Profiles at USTs 25 and 26, HAAF

Station		AF-45	AF-45	AF-45	AF-45	AF-45	AF-45	AF-45	AF-45	AF-45	AF-46
Sample ID		AF4512	AF4522	AF4532	AF4542	AF4552	AF4562	AF4572	AF4582	AF4592	AF4612
Date		12/01/00	12/01/00	12/01/00	12/01/00	12/01/00	12/01/00	12/02/00	12/02/00	12/02/00	12/02/00
Depth (ft), BGS		4.0 - 9.0	9.0 - 14.0	14.0 - 19.0	19.0 - 24.0	24.0 - 29.0	29.0 - 34.0	34.0 - 39.0	39.0 - 44.0	44.0 - 49.0	6.0 - 10.0
VOCs (µg/L)											
Tetrachloroethene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<1 U	<1 U	<1 U
Trichloroethene	5	1.9 =	47.2 =	18.3 =	428 =	1510 =	1490 =	181 =	48.4 =	0.59 J	<1 U
Vinyl chloride	2	<1 U	<1 U	<1 U	<1 U	0.27 J	0.24 J	<2 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	7	<1 U	0.17 J	<1 U	0.63 J	3.8 =	4.7 =	<2 U	<1 U	<1 U	<1 U
1,2-Dichloroethene	70	10.3 =	7.6 =	1.5 J	67.5 =	279 =	206 =	15.2 =	5.9 =	<2 U	0.73 J
1,1-Dichloroethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<1 U	<1 U	<1 U
Chloromethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<1 U	<1 U	<1 U

Station		AF-46	AF-46	AF-46	AF-46	AF-46	AF-46	AF-46	AF-46	AF-47	AF-47
Sample ID		AF4632	AF4622	AF4642	AF4652	AF4662	AF4672	AF4682	AF4692	AF4722	AF4732
Date		12/02/00	12/02/00	12/02/00	12/02/00	12/02/00	12/02/00	12/02/00	12/02/00	12/02/00	12/02/00
Depth (ft), BGS		10.0 - 20.0	11.0 - 15.0	21.0 - 25.0	28.0 - 30.0	31.0 - 35.0	36.0 - 40.0	41.0 - 45.0	46.0 - 50.0	11.0 - 15.0	16.0 - 20.0
VOCs (µg/L)											
Tetrachloroethene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	5	2.6 =	3.9 =	4.6 =	1.2 =	<1 U	<1 U	0.61 J	<1 U	3 =	0.27 J
Vinyl chloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	7	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethene	70	<2 U	1.4 J	1.4 J	2.3 =	0.46 J	<2 U	<2 U	<2 U	0.84 J	<2 U
1,1-Dichloroethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	0.51 J
Chloromethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

Station		AF-47	AF-47	AF-47	AF-47	AF-47	AF-47	AF-48	AF-48	AF-48	AF-48
Sample ID		AF4742	AF4752	AF4762	AF4772	AF4782	AF4792	AF4812	AF4822	AF4832	AF4842
Date		12/02/00	12/02/00	12/03/00	12/03/00	12/03/00	12/03/00	12/04/00	12/04/00	12/04/00	12/04/00
Depth (ft), BGS		21.0 - 25.0	26.0 - 30.0	31.0 - 35.0	36.0 - 40.0	41.0 - 45.0	46.0 - 50.0	5.0 - 10.0	10.0 - 15.0	15.0 - 20.0	20.0 - 25.0
VOCs (µg/L)											
Tetrachloroethene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	5.9 =	155 =	<1 U	<1 U
Vinyl chloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	7	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethene	70	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	6.7 =	9.6 =	<2 U	<2 U
1,1-Dichloroethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloromethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

*Result exceeds RBC or MCL.

Bold = Concentrations above MCL.

NR = Not reported.

Table A-2. Summary of Chlorinated Volatile Organic Analytes Detected in Groundwater from Vertical Profiles at USTs 25 and 26, HAAF

Station		AF-48	AF-48	AF-48	AF-48	AF-48	AF-49	AF-49	AF-49	AF-49	AF-49
Sample ID		AF4852	AF4862	AF4872	AF4882	AF4892	AF4912	AF4922	AF4932	AF4942	AF4952
Date		12/04/00	12/04/00	12/04/00	12/04/00	12/04/00	12/03/00	12/03/00	12/03/00	12/03/00	12/03/00
Depth (ft), BGS		25.0 - 30.0	30.0 - 35.0	35.0 - 40.0	40.0 - 45.0	45.0 - 50.0	6.0 - 10.0	11.0 - 15.0	16.0 - 20.0	21.0 - 25.0	26.0 - 30.0
VOCs (µg/L)											
Tetrachloroethene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	5	<1 U	<1 U	<1 U	<1 U	<1 U	0.48 J	0.78 J	<1 U	<1 U	<1 U
Vinyl chloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	7	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethene	70	<2 U	<2 U	<2 U	<2 U	<2 U	1.4 J	1.9 J	<2 U	<2 U	<2 U
1,1-Dichloroethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloromethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

Station		AF-49	AF-49	AF-49	AF-49	AF-50	AF-50	AF-50	AF-50	AF-50	AF-50
Sample ID		AF4962	AF4972	AF4982	AF4992	AF5012	AF5022	AF5032	AF5042	AF5052	AF5062
Date		12/03/00	12/03/00	12/03/00	12/03/00	12/02/00	12/02/00	12/02/00	12/03/00	12/03/00	12/03/00
Depth (ft), BGS		31.0 - 35.0	36.0 - 40.0	41.0 - 45.0	46.0 - 50.0	4.0 - 9.0	9.0 - 14.0	14.0 - 19.0	19.0 - 24.0	24.0 - 29.0	29.0 - 34.0
VOCs (µg/L)											
Tetrachloroethene	5	<1 U	<1 U	0.58 J	0.69 J	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	5	<1 U	<1 U	<1 U	<1 U	6.5 =	13.4 =	<1 U	<1 U	<1 U	<1 U
Vinyl chloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	7	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethene	70	<2 U	<2 U	<2 U	<2 U	4 =	4.4 =	0.21 J	<2 U	<2 U	<2 U
1,1-Dichloroethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloromethane		<1 U	0.38 J	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

Station		AF-50	AF-50	AF-50	AF-51	AF-51	AF-51	AF-51	AF-51	AF-51	AF-51
Sample ID		AF5072	AF5082	AF5092	AF5112	AF5122	AF5132	AF5142	AF5152	AF5162	AF5172
Date		12/03/00	12/03/00	12/03/00	12/03/00	12/03/00	12/03/00	12/03/00	12/04/00	12/04/00	12/04/00
Depth (ft), BGS		34.0 - 39.0	39.0 - 44.0	44.0 - 49.0	5.0 - 10.0	10.0 - 15.0	15.0 - 20.0	20.0 - 25.0	25.0 - 30.0	30.0 - 35.0	35.0 - 40.0
VOCs (µg/L)											
Tetrachloroethene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	5	<1 U	<1 U	<1 U	25.6 =	37.3 =	604 =	10.9 =	90.3 =	0.38 J	<1 U
Vinyl chloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	0.6 J	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	7	<1 U	<1 U	<1 U	<1 U	0.64 J	22.5 =	1.9 =	2.3 =	<1 U	<1 U
1,2-Dichloroethene	70	<2 U	<2 U	<2 U	3.4 =	5.1 =	65.4 =	4 =	11.9 =*	0.51 J	<2 U
1,1-Dichloroethane		<1 U	<1 U	<1 U	<1 U	<1 U	10.3 =	2.1 =	0.76 J	<1 U	<1 U
1,2-Dichloroethane	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloromethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

*Result exceeds RBC or MCL.

Bold = Concentrations above MCL.

NR = Not reported.

Table A-2. Summary of Chlorinated Volatile Organic Analytes Detected in Groundwater from Vertical Profiles at USTs 25 and 26, HAAF

Station		AF-51	AF-51	AF-52	AF-52	AF-52	AF-52	AF-52	AF-52	AF-52	AF-52
Sample ID		AF5182	AF5192	AF5212	AF5222	AF5232	AF5242	AF5252	AF5262	AF5272	AF5282
Date		12/04/00	12/04/00	12/02/00	12/02/00	12/02/00	12/02/00	12/02/00	12/02/00	12/02/00	12/02/00
Depth (ft), BGS		40.0 - 45.0	45.0 - 50.0	4.0 - 9.0	9.0 - 14.0	14.0 - 19.0	19.0 - 24.0	24.0 - 29.0	29.0 - 34.0	34.0 - 39.0	39.0 - 44.0
VOCs (µg/L)											
Tetrachloroethene	5	<1 U	<1 U	<1 U	<1 U	<20 U	<50 U	<25 U	<1 U	<10 U	<10 U
Trichloroethene	5	2.4 =	<1 U	<1 U	0.33 J	1780 =	7730 =	2120 =	34.1 =	631 =	516 =
Vinyl chloride	2	<1 U	<1 U	<1 U	<1 U	<20 U	<50 U	<25 U	<1 U	<10 U	<10 U
1,1-Dichloroethene	7	<1 U	<1 U	<1 U	<1 U	<20 U	16.3 J	15 J	0.61 J	<10 U	<10 U
1,2-Dichloroethene	70	0.97 J	<2 U	<2 U	<2 U	34.5 J	378 =	174 =	6 =*	65.2 =	42.7 =
1,1-Dichloroethane		<1 U	<1 U	<1 U	<1 U	<20 U	<50 U	<25 U	<1 U	<10 U	<10 U
1,2-Dichloroethane	5	<1 U	<1 U	<1 U	<1 U	<20 U	<50 U	<25 U	<1 U	<10 U	<10 U
Chloromethane		<1 U	<1 U	<1 U	<1 U	<20 U	<50 U	<25 U	<1 U	<10 U	<10 U

Station		AF-52	AF-63	AF-63	AF-63	AF-63	AF-63	AF-63	AF-63	AF-63	AF-63
Sample ID		AF5292	AF6312	AF6322	AF6332	AF6342	AF6352	AF6362	AF6372	AF6382	AF6392
Date		12/02/00	07/16/02	07/16/02	07/16/02	07/16/02	07/16/02	07/16/02	07/16/02	07/16/02	07/16/02
Depth (ft), BGS		44.0 - 49.0	1.0 - 5.0	6.0 - 10.0	11.0 - 15.0	16.0 - 20.0	21.0 - 25.0	26.0 - 30.0	31.0 - 35.0	36.0 - 40.0	41.0 - 45.0
VOCs (µg/L)											
Tetrachloroethene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<25 U	<5 U
Trichloroethene	5	2.8 =	<1 U	<1 U	<1 U	12.9 =	20.9 =	71.7 =	0.88 J	1250 =	344 =
Vinyl chloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<25 U	<5 U
1,1-Dichloroethene	7	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<25 U	<5 U
1,2-Dichloroethene	70	0.31 J	<2 U	<2 U	<2 U	0.71 J	1.2 J	4.5 =	<2 U	116 =	38.7 =
1,1-Dichloroethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<25 U	<5 U
1,2-Dichloroethane	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<25 U	<5 U
Chloromethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<25 U	<5 U

Station		AF-64	AF-64	AF-64	AF-64	AF-64	AF-64	AF-64	AF-64	AF-65	AF-65
Sample ID		AF6422	AF6432	AF6442	AF6452	AF6462	AF6472	AF6482	AF6492	AF6512	AF6522
Date		07/16/02	07/16/02	07/16/02	07/16/02	07/16/02	07/16/02	07/16/02	07/16/02	07/17/02	07/17/02
Depth (ft), BGS		6.0 - 10.0	11.0 - 15.0	16.0 - 20.0	21.0 - 25.0	26.0 - 30.0	31.0 - 35.0	36.0 - 40.0	41.0 - 45.0	1.0 - 5.0	6.0 - 10.0
VOCs (µg/L)											
Tetrachloroethene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	5	<1 U	<1 U	6.7 =	13.8 =	31.2 =	2.8 =	1.1 =	79.1 =	<1 U	<1 U
Vinyl chloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	7	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethene	70	<2 U	<2 U	<2 U	<2 U	2 =	1.4 J	<2 U	4.4 =	<2 U	<2 U
1,1-Dichloroethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloromethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

*Result exceeds RBC or MCL.

Bold = Concentrations above MCL.

NR = Not reported.

Table A-2. Summary of Chlorinated Volatile Organic Analytes Detected in Groundwater from Vertical Profiles at USTs 25 and 26, HAAF

Station		AF-65	AF-65	AF-65	AF-65	AF-65	AF-65	AF-65	AF-66	AF-66	AF-66
Sample ID		AF6532	AF6542	AF6552	AF6562	AF6572	AF6582	AF6592	AF6612	AF6622	AF6632
Date		07/17/02	07/17/02	07/17/02	07/17/02	07/17/02	07/17/02	07/17/02	07/16/02	07/16/02	07/16/02
Depth (ft), BGS		11.0 - 15.0	16.0 - 20.0	21.0 - 25.0	26.0 - 30.0	31.0 - 35.0	36.0 - 40.0	41.0 - 45.0	1.0 - 5.0	6.0 - 10.0	11.0 - 15.0
VOCs (µg/L)											
Tetrachloroethene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 UJ	<1 U	<1 U	<1 U
Trichloroethene	5	<1 U	2.4 =	3 =	<1 U	<1 U	<1 U	<1 UJ	<1 U	<1 U	4.2 =
Vinyl chloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 UJ	<1 U	<1 U	0.74 J
1,1-Dichloroethene	7	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 UJ	<1 U	<1 U	<1 U
1,2-Dichloroethene	70	<2 U	<2 U	0.38 J	<2 U	<2 U	<2 U	<2 UJ	<2 U	15.9 =	90.5 =
1,1-Dichloroethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 UJ	<1 U	<1 U	<1 U
1,2-Dichloroethane	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 UJ	<1 U	<1 U	<1 U
Chloromethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 UJ	<1 U	<1 U	<1 U

Station		AF-66	AF-66	AF-66	AF-66	AF-66	AF-66	AF-67	AF-67	AF-67	AF-67
Sample ID		AF6642	AF6652	AF6662	AF6672	AF6682	AF6692	AF6722	AF6732	AF6742	AF6752
Date		07/16/02	07/17/02	07/17/02	07/17/02	07/17/02	07/17/02	07/17/02	07/17/02	07/17/02	07/17/02
Depth (ft), BGS		16.0 - 20.0	21.0 - 25.0	26.0 - 30.0	31.0 - 35.0	36.0 - 40.0	41.0 - 45.0	6.0 - 10.0	11.0 - 15.0	16.0 - 20.0	21.0 - 25.0
VOCs (µg/L)											
Tetrachloroethene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<1 U	<1 U	<1 U
Trichloroethene	5	76 =	<1 U	<1 U	<1 U	6 =	4.2 =	107 =	746 =	<1 U	<1 U
Vinyl chloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	7	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	1.1 J	2.3 =	<1 U	<1 U
1,2-Dichloroethene	70	15 =	<2 U	<2 U	<2 U	0.45 J	0.37 J	14.2 =	25.6 =	<2 U	<2 U
1,1-Dichloroethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	2.2 =	0.97 J	<1 U	<1 U
1,2-Dichloroethane	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<1 U	<1 U	<1 U
Chloromethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<1 U	<1 U	<1 U

Station		AF-67	AF-67	AF-67	AF-67	AF-73	AF-73	AF-73	AF-73	AF-73	AF-73
Sample ID		AF6762	AF6772	AF6782	AF6792	AF7312	AF7322	AF7332	AF7342	AF7352	AF7362
Date		07/17/02	07/17/02	07/18/02	07/18/02	10/11/03	10/11/03	10/11/03	10/11/03	10/11/03	10/11/03
Depth (ft), BGS		26.0 - 30.0	31.0 - 35.0	36.0 - 40.0	41.0 - 45.0	7.0 - 11.0	12.0 - 15.0	16.0 - 20.0	21.0 - 25.0	26.0 - 30.0	31.0 - 35.0
VOCs (µg/L)											
Tetrachloroethene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	1.5 =	2.2 =	1.9 =	4.4 =
Vinyl chloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	7	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethene	70	<2 U	<2 U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	0.4 J
1,1-Dichloroethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloromethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

*Result exceeds RBC or MCL.

Bold = Concentrations above MCL.

NR = Not reported.

Table A-2. Summary of Chlorinated Volatile Organic Analytes Detected in Groundwater from Vertical Profiles at USTs 25 and 26, HAAF

Station		AF-73	AF-73	AF-74	AF-74	AF-74	AF-74	AF-74	AF-74	AF-74	AF-74
Sample ID		AF7372	AF7382	AF7412	AF7422	AF7432	AF7442	AF7452	AF7462	AF7472	AF7482
Date		10/11/03	10/11/03	10/10/03	10/10/03	10/10/03	10/10/03	10/10/03	10/11/03	10/11/03	10/11/03
Depth (ft), BGS		36.0 - 40.0	41.0 - 45.0	7.0 - 11.0	12.0 - 15.0	16.0 - 20.0	21.0 - 25.0	26.0 - 30.0	31.0 - 35.0	36.0 - 40.0	41.0 - 45.0
VOCs (µg/L)											
Tetrachloroethene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	5	97.7 =	437 =	<1 U	<1 U	0.59 J	2.7 =	1.7 =	53.9 =	57 J	47.4 =
Vinyl chloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	7	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethene	70	34.2 =	27.8 =	<1 U	<1 U	<1 U	<1 U	<1 U	3.2 =	8.7 =	4.7 =
1,1-Dichloroethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloromethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

Station		AF-75	AF-75	AF-75	AF-75	AF-75	AF-75	AF-75	AF-75	AF-76	AF-76
Sample ID		AF7512	AF7522	AF7532	AF7542	AF7552	AF7562	AF7572	AF7582	AF7612	AF7622
Date		10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/10/03	10/10/03	10/09/03	10/09/03
Depth (ft), BGS		7.0 - 11.0	12.0 - 15.0	16.0 - 20.0	21.0 - 25.0	26.0 - 30.0	31.0 - 35.0	36.0 - 40.0	41.0 - 45.0	7.0 - 11.0	12.0 - 15.0
VOCs (µg/L)											
Tetrachloroethene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	5	<1 U	<1 U	4.9 =	4.5 =	15.6 =	9.7 =	<1 U	3.9 =	<1 U	<1 U
Vinyl chloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	7	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethene	70	<1 U	<1 U	<1 U	<1 U	0.62 J	1.2 =	<1 U	0.42 J	<1 U	<1 U
1,1-Dichloroethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloromethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

Station		AF-76	AF-76	AF-76	AF-76	AF-76	AF-76	AF-77	AF-77	AF-77	AF-77
Sample ID		AF7632	AF7642	AF7652	AF7662	AF7672	AF7682	AF7712	AF7722	AF7732	AF7742
Date		10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/08/03	10/08/03	10/08/03	10/08/03
Depth (ft), BGS		16.0 - 20.0	21.0 - 25.0	26.0 - 30.0	31.0 - 35.0	36.0 - 40.0	41.0 - 45.0	11.0 - 15.0	16.0 - 20.0	21.0 - 25.0	26.0 - 30.0
VOCs (µg/L)											
Tetrachloroethene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	5	<1 U	2.3 =	<1 U	<1 U	<1 U	<1 U	<1 U	0.73 J	0.79 J	<1 U
Vinyl chloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	7	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethene	70	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloromethane		<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

*Result exceeds RBC or MCL.

Bold = Concentrations above MCL.

NR = Not reported.

Table A-2. Summary of Chlorinated Volatile Organic Analytes Detected in Groundwater from Vertical Profiles at USTs 25 and 26, HAAF

Station		AF-77	AF-77	AF-77	AF-77	AF-78	AF-78	AF-78	AF-78	AF-78	AF-78
Sample ID		AF7752	AF7762	AF7772	AF7782	AF7812	AF7822	AF7832	AF7842	AF7852	AF7862
Date		10/08/03	10/09/03	10/09/03	10/09/03	10/08/03	10/08/03	10/08/03	10/08/03	10/08/03	10/08/03
Depth (ft), BGS		31.0 - 35.0	36.0 - 40.0	41.0 - 45.0	46.0 - 50.0	12.0 - 15.0	16.0 - 20.0	21.0 - 25.0	26.0 - 30.0	31.0 - 35.0	36.0 - 40.0
VOCs (µg/L)											
Tetrachloroethene	5	<1 U	<1 U	<1 UJ	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	5	<1 U	<1 U	<1 UJ	<1 U	<1 U	1.4 =	<1 U	<1 U	<1 U	<1 U
Vinyl chloride	2	<1 U	<1 U	<1 UJ	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	7	<1 U	<1 U	<1 UJ	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethene	70	<1 U	<1 U	<1 UJ	<1 U	<1 U	0.62 J	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethane		<1 U	<1 U	<1 UJ	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	5	<1 U	<1 U	<1 UJ	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloromethane		<1 U	<1 U	<1 UJ	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

Station		AF-78	AF-78
Sample ID		AF7872	AF7882
Date		10/08/03	10/08/03
Depth (ft), BGS		41.0 - 45.0	46.0 - 50.0
VOCs (µg/L)			
Tetrachloroethene	5	<1 U	<1 U
Trichloroethene	5	<1 U	<1 U
Vinyl chloride	2	<1 U	<1 U
1,1-Dichloroethene	7	<1 U	<1 U
1,2-Dichloroethene	70	<1 U	<1 U
1,1-Dichloroethane		<1 U	<1 U
1,2-Dichloroethane	5	<1 U	<1 U
Chloromethane		<1 U	<1 U

*Result exceeds RBC or MCL.

Bold = Concentrations above MCL.

NR = Not reported.

APPENDIX B

**SAMPLING LOCATIONS FOR BUILDING 1290,
HUNTER ARMY AIRFIELD INVESTIGATION**

