FINAL

JUNE 2006

On-Post
Quarterly Groundwater Monitoring Report

Prepared For

Department of the Army
Camp Stanley Storage Activity
Boerne, Texas

December 2006

GEOSCIENTIST CERTIFICATION

June 2006 On-post Quarterly Groundwater Monitoring Report

For

Department of the Army

Camp Stanley Storage Activity

Boerne, Texas

I, Kimberly S. Vaughn, P.G., hereby certify that the June 2006 On-post Quarterly Groundwater Monitoring Report for the Camp Stanley Storage Activity installation in Boerne, Texas accurately represents the site conditions of the subject area. This certification is limited only to geoscientific products contained in the subject report and is made on the basis of written and verbal information provided by the CSSA Environmental Office, laboratory data provided by APPL, and field data obtained during groundwater monitoring conducted at the site in June 2006, and is true and accurate to the best of my knowledge and belief.

_____

Kimberly S. Vaughn, P.G.
State of Texas
Geology License No. 6068

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Date

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GROUNDWATER MONITORING REPORT
CAMP STANLEY STORAGE ACTIVITY, TEXAS

1.0 INTRODUCTION

This report presents results from the on-post quarterly sampling performed at Camp Stanley Storage Activity (CSSA) in June 2006. Laboratory analytical results are presented along with potentiometric and isoconcentration contour figures. The purpose of this report is to present a summary of the sampling results. Similar reports will summarize the planned September and December 2006 sampling results. The results from all four 2006 quarterly monitoring events (March, June, September, and December) will be described in detail in an Annual Report. The Annual Report will also provide an interpretation of all analytical results and an evaluation of any temporal or spatial trends observed in the groundwater contaminant plume during investigations.

Groundwater monitoring scoped under the Air Force Center for Environmental Excellence (AFCEE) 4P/AE Contract 41624-03-D-8613, Task Order (TO) 0008, was performed June 12, 2006 through June 16, 2006, at CSSA. On-post groundwater monitoring conducted under this TO began with the September 2003 sampling event. Groundwater monitoring conducted prior to September 2003 was conducted under various TOs as shown in **Table 1** of the **Introduction to the Groundwater Monitoring Program, Volume 5** of the **CSSA Environmental Encyclopedia**. AFCEE provides technical oversight of the monitoring program.

Current objectives of the groundwater monitoring program are to determine groundwater flow direction and elevations, determine groundwater contaminant concentrations for characterization purposes, and identify meteorological and seasonal variations in physical and chemical properties. **Appendix A** identifies the data quality objectives (DQO) for CSSA's groundwater monitoring program, along with an evaluation of whether each DQO was attained. The objectives listed in Appendix A also reference appropriate sections of the **3008(h) Administrative Order on Consent** (Order).

The CSSA groundwater monitoring program follows the provisions of the groundwater monitoring program DQOs as well as the recommendations of the **Three-Tiered Long Term Monitoring Network Optimization Evaluation (Parsons, 2005)** which provided recommendations for sampling based on a long-term monitoring optimization (LTMO) study performed for the CSSA groundwater monitoring program. LTMO study sampling frequencies for on-post wells were implemented on-post in December 2005, as approved by the Texas Commission on Environmental Quality (TCEQ) and the United States Environmental Protection Agency (USEPA).

2.0 BASEWIDE FLOW DIRECTION AND GRADIENT

Forty water level measurements were recorded on June 12, 2006, from on-post monitoring wells completed in the Lower Glen Rose (LGR), Bexar Shale (BS), and Cow Creek (CC) formations. The groundwater potentiometric surface map illustrating groundwater elevations from the LGR zones in June 2006 is shown in **Figure 2-1**.

The June 2006 potentiometric surface map for LGR-screened wells exhibited a wide range of groundwater elevations, from a minimum of 882.50 feet MSL at CS-MW10-LGR to a maximum 1034.57 feet MSL at CS-MWG-LGR. Groundwater elevations are generally higher in the northern and central portions of CSSA, and decrease to the southwest and southeast. Groundwater elevations in June 2006 dropped 9.71 feet from the elevations measured in March 2006, reflecting the ongoing drought in the area. June 2006 groundwater elevations were some of the lowest elevations recorded since 1999 in the LGR wells. From March 18, 2006, to June 23, 2006, weather station south (WS-S) recorded 19 rainfall events with 11.18 inches and from March 18, 2006, to June 23, 2006, weather station north (WS-N) recorded 17 rainfall events totaling 5.63 inches of rain.

Well CS-MW4-LGR in the central portion of CSSA had one of the highest groundwater elevations (1004.46 feet MSL) of LGR screened wells measured in June 2006 (**Figure 2-1**). This elevation was 28 to 40 feet higher than the nearest comparable wells (CS-MW2-LGR and CS-MW5-LGR). The CS-MW4-LGR well consistently reports a higher groundwater elevation than other wells screened in the same formation. Unlike the general trend at CSSA, groundwater flow appears to radiate outward to the north, east, and south at CS-MW4-LGR.

An overall groundwater gradient averaged across CSSA is to the south-southwest at 0.0104 ft/ft. The groundwater gradient varies in direction and velocity in different areas of CSSA. Groundwater gradients calculated from different LGR wells ranged from 0.0048 ft/ft to 0.0198 ft/ft.

3.0 JUNE ANALYTICAL RESULTS

3.1 Monitoring Wells

Under the provisions of the groundwater monitoring DQOs and the LTMO study, the June 2006 sampling included eleven on-post wells. **Table 2-1** provides a sampling overview for June 2006 and the schedule under the LTMO recommendations. However, due to the decrease in groundwater elevations, five wells (CS-MW8-LGR, CS-MW10-LGR, CS-MW12-LGR, CS-MW17-LGR, and CS-MWG-LGR) could not be sampled because the water level was below the dedicated low-flow pump depth. Three drinking water wells (CS-1, CS-9, and CS-10); one former drinking water well (CS-11); and one solar powered submersible pump (CS-I) were sampled using high capacity submersible pumps. The remaining well (CS-2) was sampled using a low-flow pump.

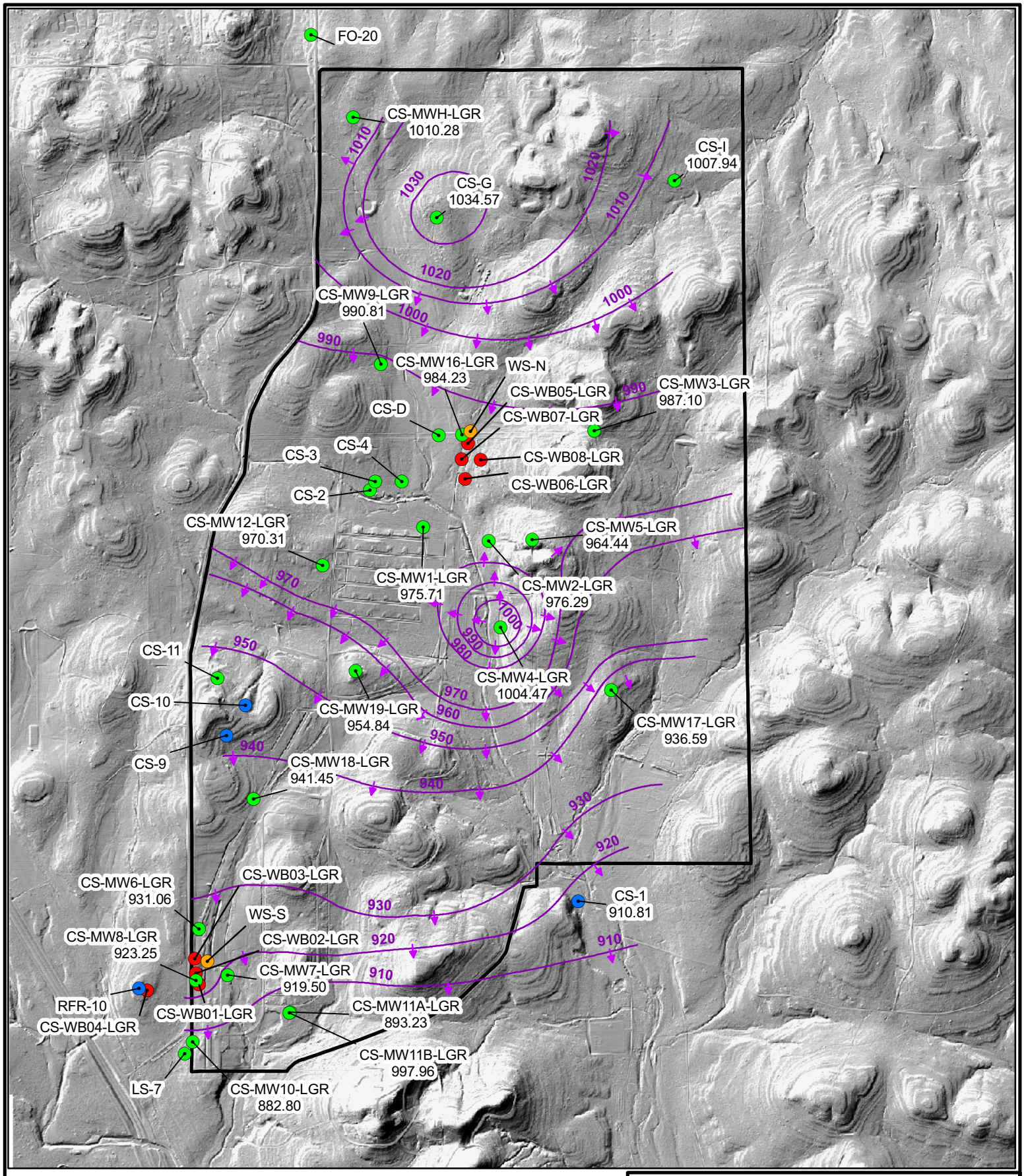

Figure 2.1

June 2006 Potentiometric Surface Map, LGR Wells

Camp Stanley Storage Activity

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Table 2-1
Overview of the On-Post Monitoring Program

Count	Well ID	*Analytes*	*Current Sample Date*	*Next Sample Date*	*LTMO Sampling Frequency*
1	CS-MW1-LGR	(VOC on-post short list)	Sep-06	Mar-07	Semi-annual
2	CS-MW1-BS	(VOC on-post short list)	Sep-07	Sep-09	Biennial
3	CS-MW1-CC	(VOC on-post short list)	Sep-07	Sep-09	Biennial
4	CS-MW2-LGR	(VOC on-post short list)	Sep-06	Mar-07	Semi-annual
5	CS-MW2-CC	(VOC on-post short list)	Sep-07	Sep-09	Biennial
6	CS-MW3-LGR	(VOC on-post short list)	Sep-06	Mar-07	Semi-annual
7	CS-MW4-LGR	(VOC on-post short list)	Sep-06	Mar-07	Semi-annual
8	CS-MW5-LGR	(VOC on-post short list)	Sep-06	Mar-07	Semi-annual
9	CS-MW6-LGR	(VOC on-post short list)	Sep-06	Mar-07	Semi-annual
10	CS-MW6-BS	(VOC on-post short list)	Sep-07	Sep-09	Biennial
11	CS-MW6-CC	(VOC on-post short list)	Sep-07	Sep-09	Biennial
12	CS-MW7-LGR	(VOC on-post short list)	Sep-06	Mar-07	Semi-annual
13	CS-MW7-CC	(VOC on-post short list)	Sep-07	Sep-09	Biennial
14	CS-MW8-LGR	(VOC on-post short list)	Jun-06	Mar-07	Every 9 months*
15	CS-MW8-CC	(VOC on-post short list)	Sep-07	Sep-09	Biennial
16	CS-MW9-LGR	(VOC on-post short list)	Sep-06	Mar-07	Semi-annual
17	CS-MW9-BS	(VOC on-post short list)	Sep-07	Sep-09	Biennial
18	CS-MW9-CC	(VOC on-post short list)	Sep-07	Sep-09	Biennial
19	CS-MW10-LGR	(VOC on-post short list)	Jun-06	Mar-07	Every 9 months*
20	CS-MW10-CC	(VOC on-post short list)	Sep-07	Sep-09	Biennial
21	CS-MW11A-LGR	(VOC on-post short list)	Sep-06	Mar-07	Semi-annual
22	CS-MW11B-LGR	(VOC on-post short list)	Sep-06	Mar-07	Semi-annual
23	CS-MW12-LGR	(VOC on-post short list)	Jun-06	Mar-07	Every 9 months*
24	CS-MW12-BS	(VOC on-post short list)	Sep-07	Sep-09	Biennial
25	CS-MW12-CC	(VOC on-post short list)	Sep-07	Sep-09	Biennial
26	CS-MW16-LGR	(VOC on-post short list)	Sep-06	Mar-07	Semi-annual
27	CS-MW16-CC	(VOC on-post short list)	Sep-06	Mar-07	Semi-annual
28	CW-MW17-LGR	(VOC on-post short list)	Jun-06	Mar-07	Every 9 months*
29	CS-MW18-LGR	(VOC on-post short list)	Sep-06	Mar-07	Semi-annual
30	CS-MW19-LGR	(VOC on-post short list)	Sep-06	Mar-07	Semi-annual
31	**CS-1**	**(VOC full list & metals)**	**Jun-06**	**Mar-07**	**Every 9 months***
32	CS-2	(VOC on-post short list)	Jun-06	Mar-07	Every 9 months*
33	CS-4	(VOC on-post short list)	Sep-06	Mar-07	Semi-annual
34	**CS-9**	**(VOC full list & metals)**	**Jun-06**	**Mar-07**	**Every 9 months***
35	**CS-10**	**(VOC full list & metals)**	**Jun-06**	**Mar-07**	**Every 9 months***
36	CS-11	(VOC on-post short list)	Jun-06	Mar-07	Every 9 months*
37	CS-D	(VOC on-post short list)	Sep-06	Mar-07	Semi-annual
38	CS-MWG-LGR	(VOC on-post short list)	Jun-06	Mar-07	Every 9 months*
39	CS-MWH-LGR	(VOC on-post short list)	Sep-07	Sep-09	Biennial
40	CS-I	(VOC on-post short list)	Jun-06	Mar-07	Every 9 months*

*Wells recommended for annual sampling frequency in the LTMO are scheduled every nine months (every third quarter) to gather seasonal data.

Wells sampled by low-flow pump were purged until the field parameters stabilized. Field parameters including pH, temperature and conductivity were recorded to ensure stabilization during well purging. On-post wells sampled in June 2006 were analyzed for volatile organic compounds (VOCs) bromodichloromethane, bromoform, chloroform, dibromochloromethane, dichlorodifluoromethane, 1,1-dichloroethene, *cis*-1,2-dichloroethene (*cis*-1,2-DCE), *trans*-1,2- dichloroethene (*trans*-1,2-DCE), methylene chloride, naphthalene, tetrachloroethene (PCE), trichloroethene (TCE), toluene, and vinyl chloride. The nine CSSA metals (barium, copper, zinc, cadmium, mercury, chromium, nickel, arsenic, and lead) were also sampled in June 2006. All samples were analyzed by Severn Trent Laboratories in Arvada, Colorado. All detected concentrations of VOCs and metals are presented in **Table 2-2**. Full analytical results are presented in **Appendix B**.

A rehabilitation of drinking water well CS-9 was completed in June 2006. The borehole was reamed, and an attempt was also made to deepen the well; however the drillers encountered refusal at 553 feet below ground surface. The rehabilitation of CS-9 was completed in June 2006 and the well was returned to surface. The water sample collected in June indicated lead above the MCL. Additional sampling will be conducted and the well was taken offline.

Results from on-post monitoring wells are considered definitive data and are subject to data validation and verification under the provisions of the CSSA Quality Assurance Project Plan (QAPP). Parsons data package numbers TO 0008 #196, #197 and #200 containing the analytical results from this sampling event were received by Parsons June 29, 2006 and July 17, 2006. Data validation was conducted and the data validation summary was submitted to AFCEE on August 3, 2006. AFCEE approval for the data packages has not been received. Cumulative historical analytical results can be found in **Tables 6** and **7** of the **Introduction to the Quarterly Groundwater Monitoring Program** (Parsons, 2001) (**Volume 5, Groundwater**).

3.2 Westbay-equipped Wells

Under the provisions of the groundwater monitoring DQOs and the LTMO study, the schedule for on-post sampling in June 2006 did not include the Westbay wells. These wells are sampled on a semi annual basis. The next scheduled sampling event for the Westbay® wells is scheduled for September 2006.

4.0 SUMMARY

- The MCL was not exceeded for any analytes during the June 2006 event.
- PCE was not detected in any wells sampled during the June 2006 event. TCE was detected, below the reporting limit (RL), in well CS-1.
- *Cis*-1,2-DCE and *trans*-1,2-DCE were not detected in any wells sampled this event.
- Well CS-10 had trihalomethane detections, potentially due to recent well disinfection following the well rehabilitation.
- No VOCs were detected in well CS-2.
- Monitoring wells CS-MW8-LGR, CS-MW10-LGR, CS-MW12-LGR, CS-MW17-LGR, and CS-MWG-LGR were not sampled due to extremely low water levels.

- Toluene was identified in two wells sampled in June. CS-10 and CS-9 had concentrations of 16 µg/L and 0.84 µg/L, respectively. Toluene has been detected in well CS-9 previously; however, all previous detections have been below the RL. This was the first detection of toluene in well CS-10.
- Lower Glen Rose wells scheduled for sampling (CS-MW8-LGR, CS-MW10-LGR, CS-MW12-LGR, CS-MW17-LGR, and CS-MWG-LGR) could not be sampled this quarter due to low water levels.
- Water levels decreased an average of 9.71 feet this quarter due to the lack of rainfall related to the current drought conditions.
- Westbay zones are sampled semiannually and were not sampled this event. The next Westbay sampling event is scheduled for September 2006.
- Well CS-9 results indicate lead (18 µg/L) above the MCL of 15 µg/L. Additional sampling will be conducted to verify the metals results.

Table 2-2
June 2006 On-Post Quarterly Groundwater Results, Detected Analytes

Well ID	Date Sampled	Bromo-dichloro-methane	Bromoform	Chloroform	*cis* -1.2-DCE	Dibromo-chloro methane	Methylene chloride	PCE	Toluene	*trans* -1,2-DCE	TCE	Comment
CS-I	6/12/06	--	--	--	--	--	**0.60F**	--	--	--	--	
CS-9	6/13/06	--	--	**1.1**	--	--	**1.1F**	--	**0.84F**	--	--	
CS-2	6/13/06	--	--	--	--	--	--	--	--	--	--	
CS-11	6/14/06	--	--	--	--	--	**0.24F**	--	--	--	--	
CS-11 FD	6/14/06	--	--	--	--	--	**0.23F**	--	--	--	--	
CS-10	6/22/06	**0.30F**	**0.30F**	**9.4**	--	**0.75**	--	--	**16**	--	--	Trihalomethane hits due to disinfection after well rehabilitation.
CS-1	6/15/06	--	--	--	--	--	--	--	--	--	--	
Laboratory Detection Limits												
Method Detection Limit	MDL	0.21	0.22	0.05	0.098	0.05	0.21	0.14	0.07	0.06	0.1	
Reporting Limit	RL	0.8	1.2	0.4	1.2	0.5	2	1.4	1.1	0.6	1	
Maximum Contaminant Level	MCL	80	--	100	70	100	5	5	1000	100	5	

Well ID	Sample Date	Barium	Chromium	Copper	Nickel	Zinc	Arsenic	Cadmium	Lead	Mercury
CS-1	6/15/2006	**32**	--	--	--	**220**	**0.4F**	--	**0.98F**	--
CS-10	6/22/2006	**46**	--	--	--	**430**	**0.63F**	--	**0.71F**	**0.58F**
CS-11	6/14/2006	**21**	--	--	--	**830**	**0.26F**	--	**14**	--
CS-11 FD	6/14/2006	**22**	--	--	--	**920**	**0.28F**	**0.087F**	**13**	--
CS-9	6/13/2006	**34**	**8.8F**	**28**	**8.0F**	**3400**	**1.1F**	**0.072F**	**18**	**5.9**
CS-I	6/12/2006	**140**	--	**12**	--	**40F**	**0.41F**	--	**2**	--
Laboratory Detection Limits										
Method Detection Limit	MDL	1	2.6	4.5	7.8	4.5	0.21	0.04	0.18	0.027
Reporting Limit	RL	5	10	10	10	50	20	2	2	1
Maximum Contaminant Level	MCL	2000	100	1300	--	--	10	5	15	2

Precipitation per Quarter:	Mar-06	Jun-06
WS-S	1.11	11.18
WS-N	2.26	5.63

BOLD	Value > or = MCL
BOLD	MCL > Value > or = RL
BOLD	RL > Value > MDL

Data Qualifiers:
F- The analyte was positively identified but the associated numerical value is below the RL.
J - The analyte was positively identified, the quantitation is an estimation.
U - The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
M- Matrix Effect Present

"--" indicates the result was non-detect
All values are reported in µg/L

APPENDIX A

EVALUATION OF DATA QUALITY OBJECTIVES ATTAINMENT

Appendix A. Evaluation of Data Quality Objectives Attainment

Activity	Objectives	Action	Objective Attained?	Recommendations
Field Sampling	Conduct field sampling in accordance with procedures defined in the project work plan, SAP, QAPP, and HSP.	All sampling was conducted in accordance with the procedures described in the project plans.	Yes.	NA
Characterization of Environmental Setting (Hydrogeology)	Prepare water-level contour and/or potentiometric maps for each formation of the Middle Trinity Aquifer (3.5.3).	Potentiometric surface maps were prepared based on water levels measured in each of CSSA's wells screened in three formations on June 12, 2006.	To the extent possible with data available. Due to the limited data available and the fact that wells are completed across multiple water-bearing units, potentiometric maps should only be used for regional water flow direction, not local. Ongoing pumping in the CSSA area likely affects the natural groundwater flow direction.	As additional wells are installed screened in distinct formations, future evaluations will eliminate reliance on wells screened across multiple formations.
	Describe the flow system, including the vertical and horizontal components of flow (2.1.9).	Potentiometric maps were created using June 12, 2006 water level data, and horizontal flow direction was tentatively identified. Insufficient data are currently available to determine vertical component of flow.	As described above, due to the lack of aquifer-specific water level information, potentiometric surface maps should only be used as an estimate of regional flow direction.	Same as above.
	Define formation(s) in the Middle Trinity Aquifer are impacted by the VOC contaminants (2.1.3).	Quarterly groundwater monitoring provides information on Middle Trinity Aquifer impacts. Monitoring wells equipped with Westbay® - multi-port samplers are sampled semiannually and will be sampled again during the September 2006 event.	Yes.	Continue sampling.

Activity	Objectives	Action	Objective Attained?	Recommendations
	Identify any temporal changes in hydraulic gradients due to seasonal influences (2.1.5).	Downloaded data from continuous-reading transducer in wells: CS-MW16-LGR, CS-MW4-LGR, CS-MW9-LGR, CS-MW9-BS, CS-MW9-CC, CS-MW11A-LGR, CS-MW11B-LGR, CS-MW18-LGR, CS-MW1-LGR, CS-MW1-CC, CS-MW2-LGR, CS-MW2-CC, CS-MW12-LGR, CS-MW12-CC, CS-MW17-LGR, CS-MW19-LGR, and CS-MW16-CC. Data was also downloaded from the northern and southern continuous-reading weather stations WS-N and WS-S. Water levels will be graphed at these wells against precipitation and season through June 2006 and included in the annual groundwater report.	Yes.	Continue collection of transducer data and possibly install transducers in other cluster wells.
Contamination Characterization (Ground Water Contamination)	Characterize the horizontal and vertical extent of any immiscible or dissolved plume(s) originating from the Facility (3.1.2).	Samples for laboratory analysis were collected from 6 of 41 CSSA wells. Of the 11 wells scheduled to be sampled in June 2006 five wells (CS-MW8-LGR, CS-MW10-LGR, CS-MW12-LGR, CS-MW17-LGR, and CS-MWG-LGR) were not sampled due to the water levels falling below the dedicated low-flow pumps.	The horizontal and vertical extent of groundwater contamination is continuously monitored.	Continue groundwater monitoring and construct additional wells as necessary.
	Determine the horizontal and vertical concentration profiles of all constituents of concern (COCs) in the groundwater that are measured by USEPA-approved procedures (3.1.2). COCs are those chemicals that have been detected in groundwater in the past and their daughter (breakdown) products.	Groundwater samples were collected from wells: CS-1, CS-2, CS-9, CS-10, CS-11, and CS-I. Samples were analyzed for the selected VOCs using USEPA method SW8260B and the 9 CSSA metals. Analyses were conducted in accordance with the AFCEE QAPP and approved variances. All RLs were below MCLs, as listed below:	Yes.	Continue sampling.

Activity	Objectives	Action	Objective Attained?	Recommendations
		ANALYTE / **RL (UG/L)** / **MCL (UG/L)** Chloroform 0.4 100 Chloromethane 1.3 -- Dibromochloromethane 0.5 100 1,1-DCE 1.2 7 *cis*-1,2-DCE 1.2 70 *trans*-1,2-DCE 0.6 100 Methylene Chloride 2 5 PCE 1.4 5 TCE 1.0 5		
		ANALYTE / **RL (UG/L)** / **MCL (UG/L)** Barium 5 2000 Chromium 10 100 Copper 10 1300 Nickel 10 100 Zinc 10 11000 Arsenic 5 50 Cadmium 1 3 Lead 2 15 Mercury 1 2		
Contamination Characterization (Ground Water Contamination) (Continued)	Meet AFCEE QAPP quality assurance requirements.	Samples were analyzed in accordance with the CSSA QAPP and approved variances. Parsons chemists verified all data, and AFCEE approval was obtained.	Yes.	NA
		All data flagged with a "U," "J," and "F" are usable for characterizing contamination. All "R" flagged data are considered unusable.	Yes.	NA

Activity	Objectives	Action	Objective Attained?	Recommendations
		Previously, an MDL study for arsenic, cadmium, and lead was not performed within a year of the analyses, as required by the AFCEE QAPP.	The laboratory performed new MDL studies in February 2001 for these metals and the new MDL values were found to be almost identical to the previous MDLs and all met the associated AFCEE QAPP requirements. MDLs for these three metals are well below MCLs. In addition, the laboratory performed daily calibrations and RL verifications for these metals, both of which demonstrate the laboratory's ability to detect and quantitate these metals at RL levels. These daily analyses also indicate that concentrations above the laboratory RL for these compounds were not affected by the expired MDL study.	Use results for groundwater characterization purposes.
Remediation	Determine goals and create cost-effective and technologically appropriate methods for remediation (2.2.1).	Continued data collection will provide analytical results for accomplishing this objective.	Ongoing.	Continue sampling and evaluation, including quarterly groundwater monitoring teleconferences to address remediation.
	Determine placement of new wells for monitoring (2.3.1, 3.6)	Sampling frequency and sample locations to be monitored (including any new wells) will be based on trend data from monitoring event(s) (3.1.5).	Ongoing.	Continue quarterly groundwater teleconferences to discuss sampling frequency and placement of new monitor wells.
Project schedule/ Reporting	Produce a quarterly monitoring project schedule as a road map for sampling, analysis, validation, verification, reviews, and reports.	Prepare schedules and sampling guidelines prior to each quarterly sampling event.	Yes.	Continue sampling schedule preparation each quarter.

APPENDIX B

QUARTERLY ON-POST GROUNDWATER MONITORING ANALYTICAL RESULTS JUNE 2006

Appendix B
June 2006 On-Post Quarterly Groundwater Results

Well ID	Date Sampled	1,1-DCE	Bromo-dichloro-methane	Bromoform	Chloroform	*cis* -1.2-DCE	Dibromo-chloro-methane	Dichloro-difluoro-methane	Methylene chloride	Naph-thalene	PCE	Toluene	*trans* -1,2-DCE	TCE	Vinyl Chloride
CS-I	6/12/06	0.07U	0.21U	0.22U	0.05U	0.098U	0.05U	0.05U	**0.60F**	0.25U	0.14U	0.07U	0.06U	0.10U	0.08U
CS-9	6/13/06	0.07U	0.21U	0.22U	**1.1**	0.098U	0.05U	0.05U	**1.1F**	0.25U	0.14U	**0.84F**	0.06U	0.10U	0.08U
CS-2	6/13/06	0.07U	0.21U	0.22U	0.05U	0.098U	0.05U	0.05U	0.21U	0.25U	0.14U	0.07U	0.06U	0.10U	0.08U
CS-11	6/14/06	0.07U	0.21U	0.22U	0.05U	0.098U	0.05U	0.05U	**0.24F**	0.25U	0.14U	0.07U	0.06U	0.10U	0.08U
CS-11 FD	6/14/06	0.07U	0.21U	0.22U	0.05U	0.098U	0.05U	0.05U	**0.23F**	0.25U	0.14U	0.07U	0.06U	0.10U	0.08U
CS-10	6/22/06	0.07U	**1.5**	**0.30F**	**9.4**	0.098U	**0.75**	0.05U	0.21U	0.25U	0.14U	**16**	0.06U	0.10U	0.08U
CS-1	6/15/06	0.07U	0.21U	0.22U	0.05U	0.098U	0.05U	0.05U	0.21U	0.25U	0.14U	0.07U	0.06U	**0.46F**	0.08U
Trip Blanks:															
TB-1	6/12/06	0.07U	0.21U	0.22U	0.05U	0.098U	0.05U	0.05U	**0.27F**	0.25U	0.14U	0.07U	0.06U	0.10U	0.08U
TB-1	6/22/06	0.07U	0.21U	0.22U	0.05U	0.098U	0.05U	0.05U	0.21U	0.25U	0.14U	0.07U	0.06U	0.10U	0.08U
TB-1	6/15/06	0.07U	0.21U	0.22U	0.05U	0.098U	0.05U	0.05U	0.21U	0.25U	0.14U	0.07U	0.06U	0.10U	0.08U

Well ID	Sample Date	Barium	Chromium	Copper	Nickel	Zinc	Arsenic	Cadmium	Lead	Mercury
CS-1	6/15/2006	**32**	2.6U	4.5U	7.8U	**220**	**0.4F**	0.04U	**0.98F**	0.027U
CS-10	6/22/2006	**46**	2.6U	4.5U	7.8U	**430**	**0.63F**	0.04U	**0.71F**	**0.58F**
CS-11	6/14/2006	**21**	2.6U	4.5U	7.8U	**830**	**0.26F**	0.04U	**14**	0.027U
CS-11 FD	6/14/2006	**22**	2.6U	4.5U	7.8U	**920**	**0.28F**	**0.087F**	**13**	0.027U
CS-9	6/13/2006	**34**	**8.8F**	**28**	**8.0F**	**3400**	**1.1F**	**0.072F**	**18**	**5.9**
CS-I	6/12/2006	**140**	2.6U	**12**	7.8U	**40F**	**0.41F**	0.04U	**2**	0.027U

BOLD	Value > or = MCL
BOLD	MCL > Value > or = RL
BOLD	RL > Value > MDL

This table presents all laboratory results.
All samples were analyzed by Severn Trent Laboratories (STL).

Abbreviations/Notes:
FD Field Duplicate

Data Qualifiers:
F- The analyte was positively identified but the associated numerical value is below the RL.
J - The analyte was positively identified, the quantitation is an estimation.
U - The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.
M- Matrix Effect Present

* = dilution run was performed
All values are reported in µg/L