



DEPARTMENT OF THE ARMY
CAMP STANLEY STORAGE ACTIVITY, MCAAP
25800 RALPH FAIR ROAD, BOERNE, TX 78015-4800

July 12, 2006

U-111-06

Subject: Sampling of Water Wells OFR-2 and RFR-10

Camp Stanley Storage Activity (CSSA) collected groundwater samples from your wells (OFR-2 and RFR-10) on 3/20/06. These samples were submitted to a laboratory contracted by CSSA's environmental contractor for volatile organic compound (VOC) analysis. This letter provides you with the VOC data from the laboratory results and a formal thank you for your assistance in this groundwater monitoring effort.

An abbreviated summary of analytical results compared to maximum contaminant levels (MCLs) allowed in drinking water by the U.S. EPA under the Safe Drinking Water Act is provided below:

Date Sampled	VOC Compound	Result (ppb)	MCL (ppb)
Well OFR-2			
3/20/06	Tetrachloroethene (PCE)	0.28F	5
	Trichloroethene (TCE)	<0.05 (non-detect)	5
	<i>cis</i> -1,2-Dichloroethene (DCE)	<0.07 (non-detect)	70
Well RFR-10:			
3/20/06	Tetrachloroethene (PCE)	6.27	5
	Trichloroethene (TCE)	2.76	5
	<i>cis</i> -1,2-Dichloroethene (DCE)	0.64F	70

*The "F" qualifier indicates the value is above the laboratory method detection limit, but below the laboratory reporting limit for the compound.

Based on the analytical data, low levels of VOC PCE were identified in water samples from your well OFR-2. PCE, TCE, and *cis*-1,2-DCE were detected in the water sample collected (prior to treatment) from RFR-10. PCE concentrations were above the MCL. The concentrations reported for the VOCs PCE and TCE were above the MCL in the past for your well RFR-10. Therefore, a filtration system was installed on well RFR-10.

As reported previously, the filtration system at RFR-10 was installed by Carbonair Environmental Systems of San Marcos, Texas. The system will remain in operation for the foreseeable future or until significant reductions in contamination levels are seen in the water in your well before it enters the filtration system. As we discussed at the time of installation, CSSA will be responsible for all costs associated with operation and maintenance of this system.

CSSA will send a representative on a monthly basis to exchange the five-micron pre-and post-filters in the system.

Carbonair performed maintenance on the system in January 2006. Maintenance will be scheduled approximately every six months. Carbonair will exchange the first carbon canister and perform other routine maintenance operations at each six-month visit. If you experience any problems with the system, please let the installer or CSSA know immediately. Carbonair is very responsive and can make additional maintenance visits if needed.

On 3/20/06, CSSA collected a sample from your well after the water was processed through the granular activated carbon (GAC) filter system. Based on the analytical data, no VOCs related to CSSA's groundwater investigation were identified in the sample after the second carbon canister from the first GAC system (A2) or from the second GAC system (B2). A summary of the post GAC analytical results is provided below. Copies of the laboratory data sheets are attached. CSSA will collect additional confirmation samples periodically to confirm the system remains effective. The next post GAC sampling will be conducted in September 2006.

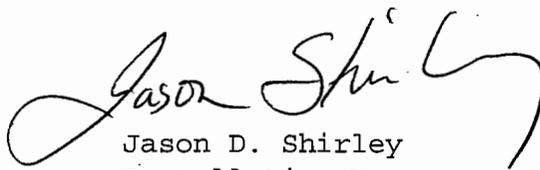
Date Sampled	VOC compound	Result (ppb)	MCL (ppb)
Well RFR-10-A2			
3/20/06	PCE	<0.06 (non-detect)	5
	TCE	<0.05 (non-detect)	5
	DCE	<0.07 (non-detect)	70
Well RFR-10-B2			
3/20/06	PCE	<0.06 (non-detect)	5
	TCE	<0.05 (non-detect)	5
	DCE	<0.07 (non-detect)	70

*The "F" qualifier indicates the value is above the laboratory method detection limit, but below the laboratory reporting limit for the compound.

As part of the ongoing CSSA environmental program, we are continuing to investigate and cleanup VOC source areas on the installation and to track these compounds in groundwater on- and off-post. As part of this effort, we may contact you in the future to schedule another sampling event for the wells listed above.

Again, we would like to thank you for your cooperation. We regret that your wells have been impacted, but remain committed to making sure your water is safe to use and keeping you informed. If you have any questions concerning this letter, please contact Glare Sanchez, CSSA Environmental Program Manager, at (210) 698-5208.

Sincerely,


Jason D. Shirley
Installation Manager

Attachments

cc: Ms. Glare Sanchez, CSSA Environmental Program Manager
Mr. Greg Lyssy, EPA Region 6
Mr. Sonny Rayos, TCEQ Central Office
Mr. Henry Karnei, TCEQ Region 13
Ms. Kyle Cunningham, San Antonio Metropolitan Health Dist.
Ms. Julie Burdey, Parsons
Ms. Kimberly Vaughn, Parsons

Data Anomalies

All sampling conducted by CSSA follows the quality assurance procedures of both AFCEE and CSSA. As part of those quality assurance plans, chemists review all data packages submitted by laboratories after analysis is complete. Whenever conditions of the quality assurance plans require a flag to be added to a result, chemists will refer to other pages within a data package for further information on a data flag. The reviewing chemists will refer to the other page within the data package with a note, such as "see page" on the bottom of the affected results page. CSSA is including an explanation of this data anomaly here for your convenience, instead of the extra pages of the results package.

Methylene chloride was also detected at a concentration of 1.10F ppb in well RFR-10 and 1.15F ppb in well OFR-2. These results are below the MCL for methylene chloride (5 ppb). Methylene chloride has been reported periodically in samples from both on- and off-post wells since 1992. Each time methylene chloride was detected, it was also present in the analysis method blank, indicating the analyte was introduced as a laboratory contaminant and was not present in the groundwater. Methylene chloride is considered a common laboratory contaminant and there are no known historical uses of methylene chloride on-post.

A data qualifier, M, was placed on the analytes methylene chloride and naphthalene for your wells. The laboratory is required to follow certain quality assurance procedures, including a set of matrix spike and matrix spike duplicate analyses for every twenty wells sampled. The matrix spike and/or matrix spike duplicate analysis had methylene chloride and naphthalene recovered below the acceptance criteria in one of the other samples from the same data package. Although the results are still considered usable, all methylene chloride and naphthalene results for samples in this data package were flagged with an "M" in accordance with the CSSA Quality Assurance Project Plan (QAPP) requirements. Results from the laboratory analysis are provided as an attachment for the above sampling event.

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 060403AM-98422
 Lab Name: APPL, Inc Contract #: F41624-03-D-8613, TO 08
 Field Sample ID: OFR-2 Lab Sample ID: AX37805 Matrix: Water
 % Solids: NA Initial Calibration ID: M060330
 Date Received: 22-Mar-06 Date Prepared: 03-Apr-06 Date Analyzed: 03-Apr-06
 Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1-DCE	0.12	1.2	0.12	1		U
Bromodichloromethane	0.06	0.8	0.06	1		U
Bromoform	0.13	1.2	0.13	1		U
Chloroform	0.06	0.3	0.06	1		U
Cis-1,2-DCE	0.07	1.2	0.07	1		U
Dibromochloromethane	0.06	0.5	0.06	1		U
Dichlorodifluoromethane	0.11	1.0	0.11	1		U
Methylene chloride	0.51	2.0	1.15	1		M F
Naphthalene	0.07	0.4	0.07	1		M F
TCE	0.05	1.0	0.05	1		U
Tetrachloroethene	0.06	1.4	0.28	1		F
Toluene	0.06	1.1	0.06	1		U
Trans-1,2-DCE	0.08	0.6	0.08	1		U
Vinyl chloride	0.08	1.1	0.08	1		U

*WSP
4/17/06*

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	102	69-139	
4-Bromofluorobenzene(S)	108	75-125	
Dibromofluoromethane(S)	93.2	75-125	
Toluene-D8(S)	104	75-125	

Internal Std	Qualifier
1,4-Dichlorobenzene-D(IS)	
Chlorobenzene-D5(IS)	
Fluorobenzene(IS)	

Comments: ARF: 50065

See comment on p. 50. WSP 4/17/06

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 060403AM-98422
 Lab Name: APPL, Inc Contract #: F41624-03-D-8613, TO 08
 Field Sample ID: RFR-10 Lab Sample ID: AX37806 Matrix: Water
 % Solids: NA Initial Calibration ID: M060330
 Date Received: 22-Mar-06 Date Prepared: 03-Apr-06 Date Analyzed: 03-Apr-06
 Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1-DCE	0.12	1.2	0.12	1		U
Bromodichloromethane	0.06	0.8	0.06	1		U
Bromoform	0.13	1.2	0.13	1		U
Chloroform	0.06	0.3	0.06	1		U
Cis-1,2-DCE	0.07	1.2	0.64	1		F
Dibromochloromethane	0.06	0.5	0.06	1		U
Dichlorodifluoromethane	0.11	1.0	0.11	1		U
Methylene chloride	0.51	2.0	1.12	1		M
Naphthalene	0.07	0.4	0.07	1		M
TCE	0.05	1.0	2.76	1		
Tetrachloroethene	0.06	1.4	6.27	1		
Toluene	0.06	1.1	0.06	1		U
Trans-1,2-DCE	0.08	0.6	0.08	1		U
Vinyl chloride	0.08	1.1	0.08	1		U

KAP 4/17/06

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	104	69-139	
4-Bromofluorobenzene(S)	103	75-125	
Dibromofluoromethane(S)	91.6	75-125	
Toluene-D8(S)	102	75-125	

Internal Std	Qualifier
1,4-Dichlorobenzene-D(IS)	
Chlorobenzene-D5(IS)	
Fluorobenzene(IS)	

Comments: ARF: 50065

See comment on p. 50. KAP 4/17/06

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 060403AM-98422
 Lab Name: APPL, Inc Contract #: F41624-03-D-8613, TO 08
 Field Sample ID: RFR-10-A2 Lab Sample ID: AX37807 Matrix: Water
 % Solids: NA Initial Calibration ID: M060330
 Date Received: 22-Mar-06 Date Prepared: 03-Apr-06 Date Analyzed: 03-Apr-06
 Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1-DCE	0.12	1.2	0.12	1		U
Bromodichloromethane	0.06	0.8	0.06	1		U
Bromoform	0.13	1.2	0.13	1		U
Chloroform	0.06	0.3	0.06	1		U
Cis-1,2-DCE	0.07	1.2	0.07	1		U
Dibromochloromethane	0.06	0.5	0.06	1		U
Dichlorodifluoromethane	0.11	1.0	0.11	1		U
Methylene chloride	0.51	2.0	1.14	1		M F
Naphthalene	0.07	0.4	0.07	1		M F
TCE	0.05	1.0	0.05	1		U
Tetrachloroethene	0.06	1.4	0.06	1		U
Toluene	0.06	1.1	0.06	1		U
Trans-1,2-DCE	0.08	0.6	0.08	1		U
Vinyl chloride	0.08	1.1	0.08	1		U

KAP 4/17/06

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	104	69-139	
4-Bromofluorobenzene(S)	105	75-125	
Dibromofluoromethane(S)	92.6	75-125	
Toluene-D8(S)	103	75-125	

Internal Std	Qualifier
1,4-Dichlorobenzene-D(IS)	
Chlorobenzene-D5(IS)	
Fluorobenzene(IS)	

Comments: ARF: 50065

See comment on p. 50. KAP 4/17/06

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 060403AM-98422
 Lab Name: APPL, Inc Contract #: F41624-03-D-8613, TO 08
 Field Sample ID: RFR-10-B2 Lab Sample ID: AX37808 Matrix: Water
 % Solids: NA Initial Calibration ID: M060330
 Date Received: 22-Mar-06 Date Prepared: 03-Apr-06 Date Analyzed: 03-Apr-06
 Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1-DCE	0.12	1.2	0.12	1		U
Bromodichloromethane	0.06	0.8	0.06	1		U
Bromoform	0.13	1.2	0.13	1		U
Chloroform	0.06	0.3	0.06	1		U
Cis-1,2-DCE	0.07	1.2	0.07	1		U
Dibromochloromethane	0.06	0.5	0.06	1		U
Dichlorodifluoromethane	0.11	1.0	0.11	1		U
Methylene chloride	0.51	2.0	1.10	1		M X
Naphthalene	0.07	0.4	0.07	1		M X
TCE	0.05	1.0	0.05	1		U
Tetrachloroethene	0.06	1.4	0.06	1		U
Toluene	0.06	1.1	0.06	1		U
Trans-1,2-DCE	0.08	0.6	0.08	1		U
Vinyl chloride	0.08	1.1	0.08	1		U

WLP 4/17/06

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	100	69-139	
4-Bromofluorobenzene(S)	103	75-125	
Dibromofluoromethane(S)	88.6	75-125	
Toluene-D8(S)	105	75-125	

Internal Std	Qualifier
1,4-Dichlorobenzene-D(IS)	
Chlorobenzene-D5(IS)	
Fluorobenzene(IS)	

Comments: ARF: 50065

See comment on p. 50. WLP 4/17/06