

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

July 12, 2006

U-097-06

Subject: Sampling of Water Well RFR-11

Camp Stanley Storage Activity (CSSA) collected groundwater samples from your well (RFR-11) 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 in the table below. All analyte concentrations were below MCLs, so they do not affect the usability of your well.

Date Sampled	VOC Compound	Result (ppb)	MCL (ppb)
Well RFR-	11		
3/20/06	Tetrachloroethene (PCE)	0.33F	5
	Trichloroethene (TCE)	1.39	5
	cis-1,2-Dichloroethene (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.

Based on the analytical data, low levels of the VOCs PCE and TCE were identified in water samples from your well. These concentrations were below the applicable MCLs. The concentrations reported for these VOCs were above the MCLs in the past. Therefore, a filtration system was installed on your well.

The filtration system 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 two samples from your well after the water was processed through the first and second granular activated carbon (GAC) filter systems. Based on the analytical data, no VOCs related to CSSA's groundwater investigation were identified in the samples collected after the water passed through the second carbon canister (A2). A summary of the post-GAC analytical results is provided below. 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-11	-A2,			,
3/20/06	PCE	<0.06	(non-detect)	5
	TCE	<0.05	(non-detect)	5
	DCE	<0.07	(non-detect)	70
Well RFR-11	-A2, field duplicate			
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 offpost. As part of this effort, we may contact you in the future to schedule another sampling event for the well listed above.

Again, we would like to thank you for your cooperation. We regret that your well has 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 1.08F ppb. This result is also below the applicable MCL. 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 well. 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 QAPP (Quality Assurance Project Plan) requirements. Results from the laboratory analysis are provided as an attachment for the above sampling event. Although these VOCs are not naturally occurring, they are below the MCL and as such, do not prevent usability of your well.

### 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-11

Lab Sample ID: AX37809

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		Ū
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		บ
Cis-1,2-DCE	0.07	1.2	0.07	1		U
Dibromochloromethane	0.06	0.5	0.06	1		- <u>u</u>
Dichlorodifluoromethane	0.11	1.0	0.11	1		Ŭ
Methylene chloride	0.51	2.0	1.08	1		M F
Naphthalene	0.07	0.4	0.07	1.		M
TCE	0.05	1.0	1.39	1		
Tetrachloroethene	0.06	1.4	0.33	1		F
Toluene	0.06	1.1	0.06	1		U
Trans-1,2-DCE	0.08	0.6	0.08	1		υ
Vinyl chloride	0.08	1.1	0.08	1		ט

1/2P 4/17/06

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	100	69-139	
4-Bromofluorobenzene(S)	99.5	75-125	
Dibromofluoromethane(S)	88.4	. 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. Map 4/17/02

## ORGANIC ANALYSES DATA SHEET 2 RESULTS

- Analytical Method: EPA 8260B

Preparatory Method:

AAB #: 060403AM-98422

Lab Name: APPL, Inc

5030B Contract #: F41624-03-D-8613, TO 08

Field Sample ID: RFR-11-A2 DUP

Lab Sample ID: AX37810

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		ַ ט
Bromodichloromethane	0.06	0.8	0.06	1		U
Bromoform	0.13	1.2	0.13	1		ַ
Chloroform	0.06	0.3	0.06	1		ט
Cis-1,2-DCE	0.07	1.2	0.07	1		บ
Dibromochloromethane	0.06	0.5	0.06	1		U
Dichlorodifluoromethane	0.11	1.0	0.11	1		ט
Methylene chloride	0.51	2.0	1.10	1		M P
Naphthalene	0.07	0.4	0.07	1		Mx
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

16004/17/06

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	103	69-139	
4-Bromofluorobenzene(S)	. 101	75-125	
Dibromofluoromethane(S)	89.4	75-12 <b>5</b>	
Toluene-D8(S)	103	75-125	

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

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ARF: 50065

See comment on p. 50. 1689 4/17/06

## ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: EPA 8260B

Preparatory Method:

Lab Name: APPL, Inc

Contráct #: F41624-03-D-8613, TO 08

AAB #: 060403AM-98422

Lab Sample ID: AX37811

5030B

Matrix: Water

Field Sample ID: RFR-11-A2 % 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		Ţ
Bromodichloromethane	0.06	0.8	0.06	1		Ţ
Bromoform	0.13	1.2	0.13	1		Ţ
Chloroform	0.06	0.3	0.06	1		
Cis-1,2-DCE	0.07	1.2	0.07	1		J
Dibromochloromethane	0.06	0.5	0.06	1		Ţ
Dichlorodifluoromethane	0.11	1.0	0.11	1		Ţ
Methylene chloride	0.51	2.0	1.12	1		M
Naphthalene	0.07	0.4	. 0.07	1		MI
TCE	0.05	. 1.0	0.05	1		Ţ
Tetrachloroethene	0.06	1.4	0.06	1		ι
Toluene	0.06	1.1	0.06	1		Į
Trans-1,2-DCE	0.08	0.6	0.08	1		. [
Vinyl chloride	0.08	1.1	0.08	. 1		ζ

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	101	69-139	
4-Bromofluorobenzene(S)	100	75-125	
Dibromofluoromethane(S)	89.6	75-125	
Toluene-D8(S)	106	75-125	

	100	
Internal Std	Qu	alifier
1,4-Dichlorobenzene-D(IS)		
Chlorobenzene-D5(IS)		
Fluorobenzene(IS)		

Comments
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ARF: 50065

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