



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

November 12, 2004

U-020-05

Subject: Sampling of four water wells:
LS-2,
LS-3,
LS-4,
HS-2,

Camp Stanley Storage Activity (CSSA) collected groundwater samples from the above wells during September 2004. 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 detected VOC compounds 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 LS-2,			
9/21/04 (#106-WP2)	Tetrachloroethene (PCE)	1.41	5
	Trichloroethene (TCE)	0.26F	5
	<i>cis</i> -1,2-dichloroethene (DCE)	<0.07 (non-detect)	70
Well LS-2 FD,			
9/21/04 Field duplicate (#106-WP2)	PCE	1.42	5
	TCE	0.26F	5
	DCE	<0.07 (non-detect)	70
Well LS-3,			
9/21/04 (#106-WP1)	PCE	1.81F	5
	TCE	0.24F	5
	DCE	<0.07 (non-detect)	70
Well LS-4,			
9/21/04	PCE	0.12F	5
	TCE	<0.05 (non-detect)	5
	DCE	<0.07 (non-detect)	70
Well HS-2,			
9/21/04	PCE	0.23F	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.

Based on the analytical data, low levels of the VOCs PCE and TCE were identified in water samples from wells LS-2, LS-3 and LS-4, and HS-2. Results from the laboratory analysis are provided as an attachment for the events included in the summary tables above. Although these VOCs are not naturally occurring, they are below the MCL and as such, do not prevent usability of your well, as you are aware.

A granular activated carbon (GAC) filtration system was installed at wells LS-2 and LS-3 on April 2002 by Carbonair Environmental Systems of San Marcos, Texas. CSSA will be responsible for all costs associated with operation and maintenance of this system.

Carbonair performed maintenance on the system in February 2004. Carbonair will exchange the carbon canister, if needed, and perform other routine maintenance operations at future scheduled visits. 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 9/21/04, CSSA collected a sample from your well after the water was processed through the first and second granular activated carbon (GAC) filter system. Based on the analytical data, low levels of the VOCs PCE and TCE were identified in the sample after the first carbon canister (A1) and no VOCs related to CSSA's groundwater investigation were identified in the sample after the second carbon canister (A2). 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 March 2005.

Date Sampled	VOC compound	Result (ppb)	MCL (ppb)
Well LS-2/LS-3 POST GAC, GAC samples for 106-WP2 and 106-WP1			
09/21/04 A1, First GAC	PCE	0.59F	5
	TCE	0.22F	5
	DCE	<0.07 (non-detect)	70
Well LS-2/LS-3 POST GAC, GAC samples for 106-WP2 and 106-WP1			
09/21/04 A2, Second GAC	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 one or more of the wells listed above. We will schedule a proposed sampling date and time and CSSA will attempt to provide at least 72 hours notice prior to proposed sampling events.

Again, we would like to thank you for your cooperation. If you have any questions concerning this letter, please contact me at 295-7416.

Sincerely,


Jason D. Shirley
Installation Manager

Attachments

cc: Mr. Roger Placencia, Bexar Metropolitan Water District
Mr. Greg Lyssy, EPA Region 6
Mr. Sonny Rayos, TCEQ Central Office
Mr. Tom Haberle, TCEQ Region 13
Ms. Abigail Power, TCEQ Region 13
Ms. Kyle Cunningham, San Antonio Metropolitan Health Dist.
Ms. Kimberly Riley, Parsons
Ms. Julie Burdey, Parsons

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 041002AM-79799
 Lab Name: APPL, Inc Contract #: F41624-03-D-8613, TO 08
 Field Sample ID: LS-2 Lab Sample ID: AP75612 Matrix: Water
 % Solids: NA Initial Calibration ID: M041002
 Date Received: 22-Sep-04 Date Prepared: 02-Oct-04 Date Analyzed: 02-Oct-04
 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	0.51	1		U
Naphthalene	0.07	0.4	0.07	1		U
TCE	0.05	1.0	0.26	1		F
Tetrachloroethene	0.06	1.4	1.41	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

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	102	69-139	
4-Bromofluorobenzene(S)	110	75-125	
Dibromofluoromethane(S)	97.0	75-125	
Toluene-D8(S)	104	75-125	

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

Comments: ARF: 45414

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 041002AM-79799
 Lab Name: APPL, Inc Contract #: F41624-03-D-8613, TO 08
 Field Sample ID: LS-2 DUP Lab Sample ID: AP75611 Matrix: Water
 % Solids: NA Initial Calibration ID: M041002
 Date Received: 22-Sep-04 Date Prepared: 02-Oct-04 Date Analyzed: 02-Oct-04
 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	0.51	1		U
Naphthalene	0.07	0.4	0.07	1		U
TCE	0.05	1.0	0.26	1		F
Tetrachloroethene	0.06	1.4	1.42	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

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	101	69-139	
4-Bromofluorobenzene(S)	112	75-125	
Dibromofluoromethane(S)	98.5	75-125	
Toluene-D8(S)	106	75-125	

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

Comments: ARF: 45414

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 041002BM-79808
 Lab Name: APPL, Inc Contract #: F41624-03-D-8613, TO 08
 Field Sample ID: LS-2/LS-3-A1 Lab Sample ID: AP75613 Matrix: Water
 % Solids: NA Initial Calibration ID: M041002
 Date Received: 22-Sep-04 Date Prepared: 03-Oct-04 Date Analyzed: 03-Oct-04
 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	0.51	1		U
Naphthalene	0.07	0.4	0.07	1		U
TCE	0.05	1.0	0.22	1		F
Tetrachloroethene	0.06	1.4	0.59	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

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	97.2	69-139	
4-Bromofluorobenzene(S)	110	75-125	
Dibromofluoromethane(S)	95.0	75-125	
Toluene-D8(S)	107	75-125	

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

Comments: ARF: 45414

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 041002BM-79808
 Lab Name: APPL, Inc Contract #: F41624-03-D-8613, TO 08
 Field Sample ID: LS-2/LS-3-A2 Lab Sample ID: AP75614 Matrix: Water
 % Solids: NA Initial Calibration ID: M041002
 Date Received: 22-Sep-04 Date Prepared: 03-Oct-04 Date Analyzed: 03-Oct-04
 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	0.12	1		F
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	0.51	1		U
Naphthalene	0.07	0.4	0.07	1		U
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

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	102	69-139	
4-Bromofluorobenzene(S)	113	75-125	
Dibromofluoromethane(S)	96.2	75-125	
Toluene-D8(S)	106	75-125	

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

Comments: ARF: 45414

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 041002BM-79808
 Lab Name: APPL, Inc Contract #: F41624-03-D-8613, TO 08
 Field Sample ID: LS-3 Lab Sample ID: AP75615 Matrix: Water
 % Solids: NA Initial Calibration ID: M041002
 Date Received: 22-Sep-04 Date Prepared: 03-Oct-04 Date Analyzed: 03-Oct-04
 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	0.26	1		F
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	0.51	1		U
Naphthalene	0.07	0.4	0.07	1		U
TCE	0.05	1.0	0.24	1		F
Tetrachloroethene	0.06	1.4	1.81	1		
Toluene	0.06	1.1	4.59	1		
Trans-1,2-DCE	0.08	0.6	0.08	1		U
Vinyl chloride	0.08	1.1	0.08	1		U

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	103	69-139	
4-Bromofluorobenzene(S)	113	75-125	
Dibromofluoromethane(S)	97.9	75-125	
Toluene-D8(S)	106	75-125	

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

Comments: ARF: 45414

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 041003AM-79810
 Lab Name: APPL, Inc Contract #: F41624-03-D-8613, TO 08
 Field Sample ID: LS-4 Lab Sample ID: AP75616 Matrix: Water
 % Solids: NA Initial Calibration ID: M041002
 Date Received: 22-Sep-04 Date Prepared: 03-Oct-04 Date Analyzed: 03-Oct-04
 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	0.51	1		U
Naphthalene	0.07	0.4	0.07	1		U
TCE	0.05	1.0	0.05	1		U
Tetrachloroethene	0.06	1.4	0.12	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

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	98.8	69-139	
4-Bromofluorobenzene(S)	111	75-125	
Dibromofluoromethane(S)	96.1	75-125	
Toluene-D8(S)	107	75-125	

Internal Std	Qualifier
1,4-Dichlorobenzene-D1(S)	
Chlorobenzene-D5(S)	
Fluorobenzene(S)	

Comments: ARF: 45414

AMENDED PAGE

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 041005BM-79878
 Lab Name: APPL, Inc Contract #: F41624-03-D-8613, TO 08
 Field Sample ID: HS-2 Lab Sample ID: AP75610 Matrix: Water
 % Solids: NA Initial Calibration ID: M041002
 Date Received: 22-Sep-04 Date Prepared: 05-Oct-04 Date Analyzed: 05-Oct-04
 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	0.51	1		U
Naphthalene	0.07	0.4	0.07	1		U
TCE	0.05	1.0	0.05	1		U
Tetrachloroethene	0.06	1.4	0.23	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

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	99.5	69-139	
4-Bromofluorobenzene(S)	104	75-125	
Dibromofluoromethane(S)	95.3	75-125	
Toluene-D8(S)	101	75-125	

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

Comments: ARF: 45414