



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

May 27, 2005

U-281-05

Subject: Sampling of Water Wells LS-5 and LS-6.

Camp Stanley Storage Activity (CSSA) collected groundwater samples from your wells (LS-5 and LS-6) on 3/23/05 and 3/21/05. These samples were submitted to a Department of Defense (DoD) approved laboratory 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 LS-5, | | | |
| 3/23/05 | Tetrachloroethene (PCE) | <0.06 (non-detect) | 5 |
| | Trichloroethene (TCE) | 0.17F | 5 |
| | <i>cis</i> -1,2-Dichloroethene (DCE) | <0.07 (non-detect) | 70 |
| 3/23/05 Field Duplicate | PCE | <0.06 (non-detect) | 5 |
| | TCE | 0.21F | 5 |
| | DCE | <0.07 (non-detect) | 70 |
| Well LS-6, | | | |
| 3/21/05 | PCE | 4.22 | 5 |
| | TCE | 0.41F | 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 VOC TCE were identified in water samples from your well LS-5, while low levels of PCE and TCE were detected in well LS-6. Additional detections of naphthalene (0.43 ppb) were identified in your well. The U.S. EPA does not have a regulatory MCL for naphthalene. The source of naphthalene is unknown. All VOC levels are below the applicable MCLs (if any) and do not affect usability of your well. Results from the laboratory analysis are provided as an attachment for the above sampling events. Based on past analyses of LS-6 water where the VOCs, PCE and TCE, were above the MCL, a filtration system was installed on the well.



Carbonair Environmental Systems of San Marcos, Texas installed the filtration system on your well. 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 February 2005. 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 3/21/05, 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, no VOCs 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 September 2005.

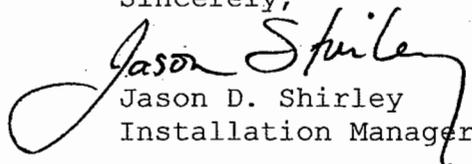
| Date Sampled | VOC compound | Result (ppb) | MCL (ppb) |
|--------------|--------------|--------------------|-----------|
| Well LS-6-A2 | | | |
| 3/21/05 | PCE | <0.06 (non-detect) | 5 |
| | TCE | <0.05 (non-detect) | 5 |
| | DCE | <0.07 (non-detect) | 70 |

*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.

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 me at 295-7416.

Sincerely,


 Jason D. Shirley
 Installation Manager



Attachments

cc: 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 Riley, Parsons



AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 050404AC-85395
 Lab Name: APPL, Inc Contract #: F41624-03-D-8613, TO 08
 Field Sample ID: LS-5 Lab Sample ID: AX16361 Matrix: Water
 % Solids: NA Initial Calibration ID: C050331
 Date Received: 25-Mar-05 Date Prepared: 04-Apr-05 Date Analyzed: 04-Apr-05
 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 | 0.17 | 1 | | F |
| 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) | 111 | 69-139 | |
| 4-Bromofluorobenzene(S) | 95.6 | 75-125 | |
| Dibromofluoromethane(S) | 113 | 75-125 | |
| Toluene-D8(S) | 91.7 | 75-125 | |

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

Comments: ARF: 46940

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 050405AC-85396
 Lab Name: APPL, Inc Contract #: F41624-03-D-8613, TO 08
 Field Sample ID: LS-5 DUP Lab Sample ID: AX16362 Matrix: Water
 % Solids: NA Initial Calibration ID: C050331
 Date Received: 25-Mar-05 Date Prepared: 05-Apr-05 Date Analyzed: 05-Apr-05
 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 | 0.21 | 1 | | F |
| 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) | 103 | 69-139 | |
| 4-Bromofluorobenzene(S) | 97.1 | 75-125 | |
| Dibromofluoromethane(S) | 107 | 75-125 | |
| Toluene-D8(S) | 95.0 | 75-125 | |

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

Comments: ARF: 46940

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 050401AS-85482
 Lab Name: APPL, Inc Contract #: F41624-03-D-8613, TO 08
 Field Sample ID: LS-6 Lab Sample ID: AX16211 Matrix: Water
 % Solids: NA Initial Calibration ID: S050331
 Date Received: 23-Mar-05 Date Prepared: 01-Apr-05 Date Analyzed: 01-Apr-05
 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 | 0.43 | 1 | | U |
| TCE | 0.05 | 1.0 | 0.41 | 1 | | F |
| Tetrachloroethene | 0.06 | 1.4 | 4.22 | 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) | 96.6 | 69-139 | |
| 4-Bromofluorobenzene(S) | 110 | 75-125 | |
| Dibromofluoromethane(S) | 102 | 75-125 | |
| Toluene-D8(S) | 90.5 | 75-125 | |

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

M U
TL 4/15/05

Comments: ARF: 46907

See p. 26

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 050401AS-85482
 Lab Name: APPL, Inc Contract #: F41624-03-D-8613, TO 08
 Field Sample ID: LS-6-A2 Lab Sample ID: AX16212 Matrix: Water
 % Solids: NA Initial Calibration ID: S050331
 Date Received: 23-Mar-05 Date Prepared: 01-Apr-05 Date Analyzed: 01-Apr-05
 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 | 0.06 | 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 |

M *TC 4/15/05*

| Surrogate | Recovery | Control Limits | Qualifier |
|-------------------------|----------|----------------|-----------|
| 1,2-DCA-D4(S) | 95.5 | 69-139 | |
| 4-Bromofluorobenzene(S) | 112 | 75-125 | |
| Dibromofluoromethane(S) | 99.6 | 75-125 | |
| Toluene-D8(S) | 91.2 | 75-125 | |

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

Comments: ARF: 46907

See p. 26