



Camp Stanley Storage Activity Groundwater Contamination – June 2005 Sampling FACT SHEET

No. 23 – June 2005

The purpose of this Fact Sheet is to provide an overview of the quarterly groundwater sampling conducted in June 2005. Results for all groundwater sampling events are available in the Camp Stanley Storage Activity Environmental Encyclopedia located at the downtown San Antonio Public Library, 600 Soledad Street, on the 2nd floor behind the Reference Desk in the Government Documentation Section, or on the internet at www.stanley.army.mil.

On-post Groundwater Monitoring

On-post groundwater monitoring has been conducted since 1991 as part of the Camp Stanley Storage Activity (CSSA) environmental program. The 40 wells sampled in June 2005 include drinking water, monitoring, and agriculture/livestock wells. The samples were analyzed for metals (arsenic, cadmium, lead, barium, chromium, copper, nickel, zinc, and mercury) and volatile organic compounds (VOCs), (paint thinners, dry cleaning solvents, and some constituents of petroleum fuels). Metals and VOCs are sometimes accidentally released into the environment, where they can contaminate the soil and groundwater.

Laboratory results from June 2005 sampling activities indicate that on-post VOC levels have generally remained the same since the last sampling event. Samples from four wells exceeded U.S. Environmental Protection Agency (EPA) maximum contaminant levels (MCLs) for VOCs. No results for metals were above the appropriate EPA MCL, action level (AL), or secondary standard during the June 2005 sampling event.

CSSA Off-post Groundwater Monitoring Plan

CSSA describes its off-post groundwater monitoring plan in its *Off-Post Monitoring Program and Response Plan*, July 2001 (Plan). The goals of this Plan are to confirm that drinking water meets EPA and Texas Commission on Environmental Quality (TCEQ) safe drinking water standards, to determine where VOC contamination has migrated, monitor off-post water wells near known CSSA VOC source areas, and respond according to the Plan if contaminant levels in those wells exceed standards. As part of the Plan, 32 off-post wells were sampled in June 2005.

Off-post water wells are selected for sampling based on CSSA's plan to ensure protection of drinking water and to provide information for the environmental program. Factors such as where the well is located, how close it is to areas where other VOCs or metals have been detected, whether the well owner grants access for sampling, and results of previous sampling at the well are all considered.

CSSA takes action if VOC contamination is detected in off-post wells at concentrations greater than 90 percent of the MCL, or above 4.5 parts per billion (ppb) for tetrachloroethene (PCE) and trichloroethene (TCE). This action includes supplying bottled water to the affected residents within 24 hours of the detection, and resampling the well for confirmation. If additional sampling

confirms previous test results, CSSA will either install a granular activated carbon (GAC) filter to remove contaminants from the water, or provide the well owner with an alternate water supply for as long as contaminant levels in the well exceed standards. Seven off-post water wells have been fitted with GAC filtration systems: LS-7 (August 2001), LS-6 (August 2001), RFR-10 (two units, October 2001), RFR-11 (October 2001), LS-2/LS-3 (April 2002), and OFR-3 (April 2002).

June 2005 Groundwater Sampling Results

The locations of all off-post wells sampled in June 2005 are shown on Figure 1. According to the EPA drinking water standards, concentrations below 5.0 ppb for PCE and TCE are considered safe. Table 1 (see back) presents groundwater data for PCE and TCE from June 2005. Twenty wells had VOC detections. One well, RFR-10, exceeded the MCL for PCE and TCE. This well was previously equipped with a GAC filtration system. PCE and/or TCE concentrations detected below the MCL of 5.0 ppb were in wells I10-4, LS-2, LS-3, LS-6, LS-7, OFR-3, and RFR-11. All other VOC detections were below the laboratory reporting limit in these wells. In all other wells tested, VOC detections were below the applicable MCLs in drinking water and below the laboratory reporting limit for PCE and TCE.

CSSA will continue to sample both on- and off-post groundwater on a quarterly basis. CSSA will continue to coordinate this groundwater monitoring program with the regulatory agencies and other potentially affected parties, including the EPA, TCEQ, Fort Sam Houston, City of Fair Oaks, Fair Oaks Water Utilities, Bexar Metropolitan Water District, Bexar County Commissioners' office, State Representatives' offices, local, state, and federal elected officials, private well owners, and others.

Post-GAC Sampling Results

Because of the previously detected presence of VOCs, seven off-post wells in the area are equipped with GAC filters. In March 2005, analyses of the water samples taken after the GAC filters were installed confirmed that no VOCs related to the CSSA source areas were present above the applicable MCLs, and that the GAC units were working properly. Samples from wells with GAC filters are collected every six months. The next post-GAC sampling event will be conducted in September 2005, and the results will be presented after that event.

Source Area Cleanup

Groundwater contamination at CSSA is associated with three VOC source areas. Two source areas, Solid Waste Management Unit (SWMU) B-3 and SWMU O-1, are in the central portion of CSSA and affect the area designated as Plume 1. Cleanup activities at SWMU B-3 and O-1 involve removing gases in the soil (soil vapor extraction [SVE]). In late 2003, some VOC-contaminated soil at

SWMU B-3 was removed. In February 2004, a new pilot SVE system was installed at SWMU B-3. Area of Concern (AOC)-65, was identified in the southwest corner of CSSA as the other potential source of VOCs, and affects the area designated as Plume 2. An SVE system was installed during the summer 2002. A significant reduction in soil gas concentrations beneath AOC-65 has been observed since initial operation of the SVE system. The SVE system west of Building 90 will be operated for the foreseeable future.

Public Comment and Future Fact Sheets

CSSA has been issuing fact sheets similar to this Fact Sheet on a quarterly basis since 2000. Future fact sheets will be issued annually to provide information on sampling results, ongoing investigations, and cleanup activities. Each well owner will continue to receive a separate letter concerning laboratory results for their wells sampled by CSSA.

CSSA will continue to inform the public about various aspects of its environmental program. The public is welcome to comment on this Fact Sheet and the environmental activities at CSSA by writing to:

Installation Manager,
Camp Stanley Storage Activity
25800 Ralph Fair Road
Boerne, Texas 78015-4800

Interested parties may also comment by calling:

- CSSA Installation Manager, Mr. Jason D. Shirley, at (210) 295-7416;
- EPA Regional Program Manager, Mr. Greg Lyssy, at (214) 665-8317; or
- Fort Sam Houston, Public Affairs Office, Mr. Phillip Reidinger, at (210) 221-1151 or (210) 336-0449 (mobile)

**Table 1 - Groundwater Sampling Results
Off-post Wells near Plume 1**

Well Number	PCE (ppb)	TCE (ppb)
FO-17	ND	ND
FO-J1	0.21 F	ND
JW-5	ND	ND
JW-6	ND	ND
JW-7	0.35 F	ND
JW-8	0.18 F	ND
JW-8 FD	0.23 F	ND
JW-13	ND	ND
JW-14	ND	ND
JW-15	ND	ND
JW-27	ND	0.10 F
JW-28	ND	ND
JW-29	ND	ND
JW-30	ND	ND

Off-post Wells near Plume 2

Well Number	PCE (ppb)	TCE (ppb)
HS-2	0.16 F	ND
HS-3	ND	ND
I10-2	ND	ND
I10-4	3.47	1.16
I10-7	ND	ND
LS-2	1.81	0.16 F
LS-3	1.44	0.37
LS-4	0.15 F	ND
LS-4 FD	ND	ND
LS-5	ND	0.1
LS-6	1.83	ND
LS-7	2.5	0.26 F
OFR-1	0.35 F	ND
OFR-1 FD	0.34 F	ND
OFR-2	0.30 F	ND
OFR-3	2.54	2.07
RFR-8	ND	ND
RFR-10	17.64	8.14
RFR-11	1.58	1.24
RFR-12	ND	ND
RFR-13	ND	ND

ND= The VOC was not detected above the method detection limit.
F= The VOC was not detected above the RL.
Bold= Concentration > MCL

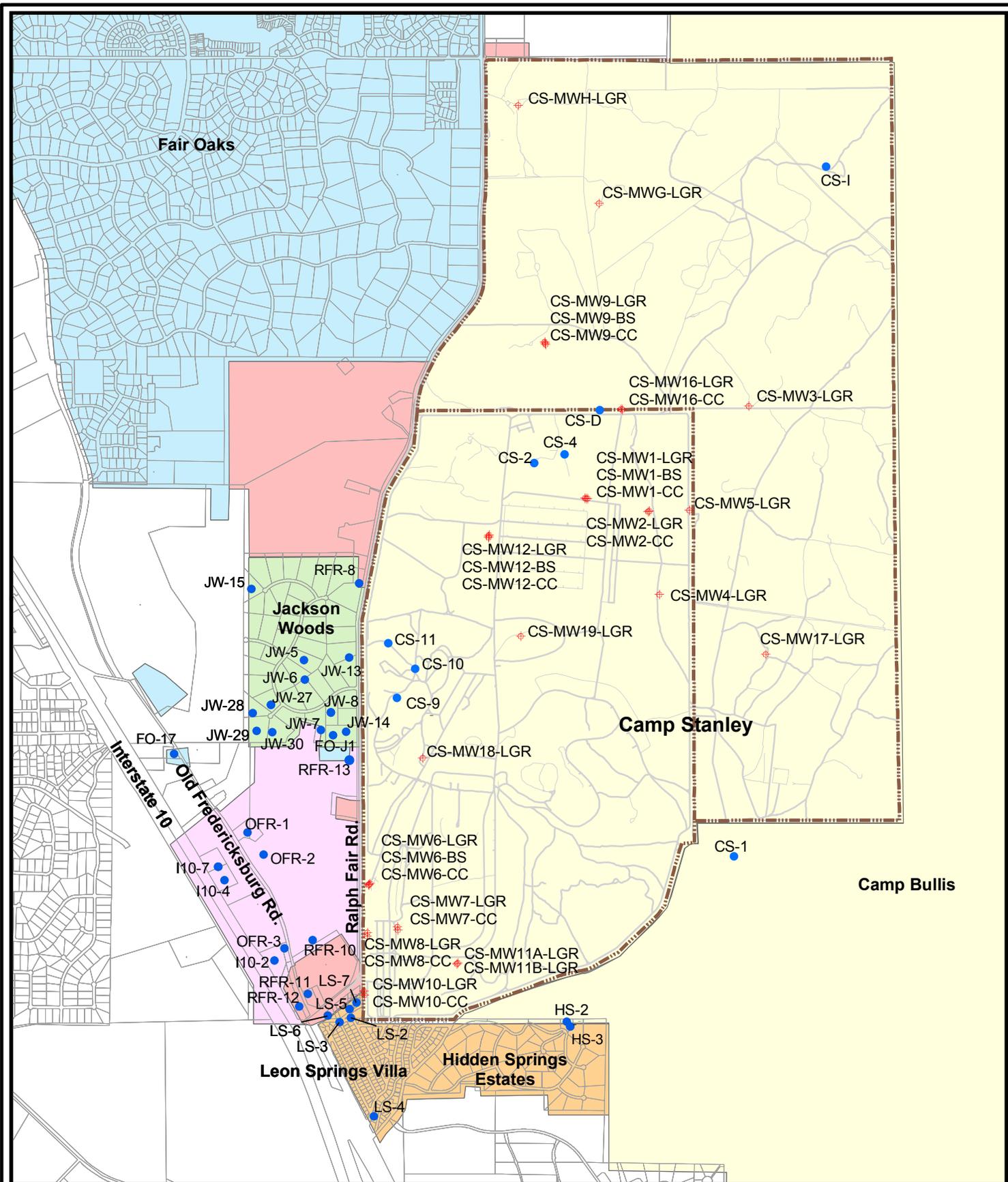


Figure 1

Water Well and Monitoring Well Locations Sampled in June 2005
Camp Stanley Storage Activity

