# FINAL

# DATA QUALITY OBJECTIVES GROUNDWATER MONITORING PROGRAM

**Prepared for**

## CAMP STANLEY STORAGE ACTIVITY
**BOERNE, TEXAS**

**Revised November 2010**

THIS PAGE INENTIONALLY LEFT BLANK

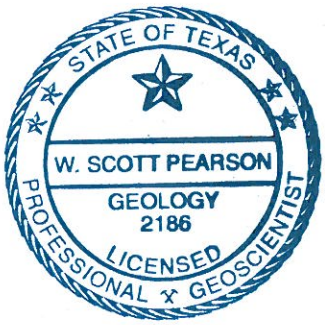
# GEOSCIENTIST CERTIFICATION

## Data Quality Objectives – Groundwater Contamination

**For**

**Department of the Army**
**Camp Stanley Storage Activity**
**Boerne, Texas**

I, W. Scott Pearson, P.G., hereby certify that the Data Quality Objectives for the Groundwater Monitoring Program for the Camp Stanley Storage Activity installation in Boerne, Texas accurately represents the site conditions of the subject area. This certification is limited only to geoscientific products contained in the subject report and is made on the basis of written and verbal information provided by the CSSA Environmental Office, laboratory data provided by APPL and/or DHL, and field data obtained during groundwater monitoring conducted at the site, and is true and accurate to the best of my knowledge and belief.




W. Scott Pearson, P.G.
State of Texas
Geology License No. 2186

11/18/2010

Date

THIS PAGE INENTIONALLY LEFT BLANK

# CONTENTS

## LIST OF FIGURES



## APPENDICES

# INTRODUCTION

In April 2002, data quality objectives (DQOs) for Camp Stanley Storage Activity's (CSSA) groundwater monitoring program were formally developed using U.S. Environmental Protection Agency's (USEPA's) *Guidance for the Data Quality Objectives Process* (EPA/600/R-96/055). The DQO process is a planning tool for data collection activities. It provides a basis for balancing decision uncertainty with available resources. The April 2002 DQOs, and subsequent updates in 2003 and 2006, were approved by the USEPA and the Texas Commission on Environmental Quality (TCEQ). Approval letters are included in **Appendix A**.

These revised DQOs are submitted to incorporate recent changes to the groundwater program. These changes include: revised metals analyte list for on-post wells, addition of an annual 'snapshot' event, implementation of the updated 2010 Long-term Monitoring Optimization (LTMO) recommendations both on- and off-post (pending TCEQ and USEPA approval), and the addition of one drinking water well.

After the March 2008 event it was determined that chromium and mercury would be added back to the on-post metals sampling list and nickel would be dropped. Chromium and mercury were added back due to analytical findings in new monitoring wells installed in early 2007. Nickel was dropped from the list because there is no enforceable regulatory standard set by the USEPA. Off-post wells will be analyzed for the same short list of VOCs as the on-post wells.

The format of these DQOs follows the seven-step process identified in the above-referenced USEPA guidance document.

THIS PAGE INENTIONALLY LEFT BLANK

# STEP 1
# STATE THE PROBLEM

Past operations resulted in contamination at CSSA and previous investigations have documented the presence of volatile organic compounds (VOCs) in soil, groundwater, and rock; and metals in soils. The extents of these contaminants are not fully characterized at CSSA; however, 62% of solid waste management units (SWMUs) and areas of concern (AOCs) have been remediated and closed. This DQO document is focused on CSSA's groundwater monitoring program, well installations, sampling and analyses, recharge studies, and other associated activities.

## 1.1 Background

CSSA has identified three VOC source areas as sites that have contaminated groundwater. They are SWMU B-3 and O-1, and AOC-65. Based on present knowledge, there are two groundwater VOC plumes, known as Plume 1 and 2. Current interpretations suggest Plume 1 is associated with SWMUs B-3 and O-1, and Plume 2's source is AOC-65. CSSA has identified VOCs at detectable levels in on- and off-post drinking water and monitoring wells. These levels are above and below the maximum contaminant levels (MCLs) for the VOCs of concern as discussed in Section 4. **Appendix B**, attached, presents a summary of historical detections presented by well for the short list of VOCs and metals through December 2009.

## 1.2 Planning Team

### 1.2.1 CSSA

Ms. Glaré Sanchez, CSSA Environmental and Safety Program Manager (Former)

### 1.2.2 Army Corps of Engineers

Mr. Wayne Elliott, USACE Contracting Officer's Representative

### 1.2.3 Contractors

Mr. Christopher Beal, P.G., Contract Geologist, Portage Environmental
Ms. Julie Burdey, P.G., Project Manager, Parsons
Ms. Tammy Chang, Project Chemist, Parsons
Ms. Kimberly Vaughn, P.G., Deputy Project Manager, Parsons
Mr. Ken Rice, Task Manager, Parsons
Mr. Scott Pearson, P.G., Task Manager, Parsons
Ms. Samantha Elliott, Task Manager, Parsons

### 1.2.4 Decision Makers

Mr. Jason D. Shirley, Installation Manager, CSSA
Mr. Gabriel Moreno-Fergusson, CSSA Environmental and Safety Program Manager (Current)
Mr. Greg Lyssy, U.S., USEPA, Region 6
Mr. Kirk Coulter, TCEQ, Corrective Action Section

THIS PAGE INENTIONALLY LEFT BLANK

# STEP 2
# IDENTIFY THE DECISIONS

## 2.1 Current Decisions

Below are the current decisions being addressed in these DQOs. A detailed discussion of these current decision items is given in Step 3.

- Determine whether on- and neighboring off-post drinking water meets the VOC standards for safe drinking water as prescribed under USEPA and TCEQ rules.
- Determine if VOC concentrations in on-post and neighboring off-post drinking water wells exceed levels established in these project DQOs and the CSSA Off-Post Monitoring Response Plan and whether the VOC concentration requires an action by CSSA.
- Determine which formation(s) in the Upper and Middle Trinity Aquifer are impacted by the VOC contaminants.
- Determine if there are additional contaminants of concern (COCs) and identify the list of VOCs and metals to be sampled for.
- Determine the necessary sampling frequency for on-post wells by implementing the LTMO.
- Determine the necessary sampling frequencies for off-post wells without considering the findings of the LTMO study, which has not been approved by TCEQ for off-post implementation.
- Identify data gaps in groundwater monitoring program, including, but not limited to plume delineation, analytes, additional well locations, fracture flow/matrix flow/conduit flow determinations, water balance issues (precipitation data, published recharge infiltration rates, discharge from water supply wells and other parameters), and recharge study concepts.

## 2.2 Remediation Decisions

- Determine potential remediation goals based upon the media impacted and COCs. Identify cost-effective and technically appropriate remedial alternatives (i.e., soil vapor extraction, bioreactor, monitored natural attenuation, pump and treat, chemical treatment, etc.) for cleaning up groundwater.
- Continue to determine the effectiveness of the granular activated carbon (GAC) filtration units for the removal of VOCs from public and private off-post wells. Determine if additional GAC units are needed as specified in CSSA's **Off-Post Monitoring Response Plan** (June 2002).
- Determine if the plume is expanding or shrinking for future remediation decisions.

## 2.3 Future Decisions

- Determine if additional off-post drinking water wells need to be sampled, and if so, identify the most appropriate locations to monitor the status of the plumes.
- Select proper placement of future monitoring wells on- and off-post from historical results and statistical analyses.
- Determine whether groundwater sampling should be expanded or reduced for on- and off-post wells based on recent and historical data. The LTMO study will be updated in 2010 with five additional years of monitoring data to determine whether the sampling program should be expanded or reduced.
- Determine when modifications to the CSSA **Off-Post Monitoring Response Plan** (June 2002) are necessary and provide input to the USEPA and TCEQ.

## 2.4 Alternative Decision

- Determine if no further action is necessary (no additional groundwater monitoring or program activities).

# STEP 3
# IDENTIFY THE INPUTS TO THE DECISION

## 3.1 General CSSA Inputs

CSSA owns and operates three groundwater wells as part of TCEQ public water system (PWS) 0150117. Sampling required by the TCEQ related to the operation of the CSSA PWS is not covered under these DQOs. TCEQ collects samples from the PWS drinking water wells at frequencies determined by TCEQ PWS regulations. TCEQ will also collect split samples from other monitoring well locations at their discretion. A fourth groundwater well has recently been drilled and will be added to CSSA's water supply system in late 2010 or early 2011.

Metals and VOCs will be sampled from CSSA on-post wells and VOCs only will be sampled from off-post wells. Frequencies for sampling are discussed in Sections 3.2 to 3.5, below. Only those COCs that have statistically significant detections above the reporting limit (RL) and the MCL based on historical data will be analyzed, and a statistical summary of the occurrence of groundwater COCs as prepared in the LTMO is provided in **Appendix C**. **Appendix B** includes a summary of all detections of VOCs and metals in sampled wells.

Newly installed on-post wells will be sampled the first time for the cadmium, lead, nickel, arsenic, barium, calcium, chromium, copper, iron, magnesium, manganese, mercury, potassium, sodium, and zinc and the full list of VOCs. Bromide, chloride, fluoride, nitrate, nitrite, sulfate, alkalinity, TDS, pH, resistivity, and bicarbonate will also be collected from newly installed wells. Existing on-post wells will be now be analyzed for the metals chromium, cadmium, lead, and mercury as agreed upon by the TCEQ and USEPA during the October 30, 2008 meeting. Nickel will be dropped from the sampling list due to the lack of an MCL, also agreed upon by the TCEQ and USEPA. Metals and VOCs 1,1-dichloroethene, *cis*-1,2-dichloroethene, *trans*-1,2-dichloroethene, tetrachloroethene, trichloroethene and vinyl chloride (VOC Short List) will be collected from on-post wells. Additional analytes may be included in subsequent events due to results from the initial sampling event. A newly installed monitoring well will initially be sampled for four consecutive quarterly events to provide data for temporal and spatial statistical evaluation in future LTMO studies. Off-post wells will be sampled for the VOC Short List for four quarterly events. After one year of sampling, a future LTMO evaluation will be performed to provide a recommended sampling frequency for the well.

An effort will be made to collect a simultaneous round of samples from each on-post well per year, in addition to the LTMO recommendations. This simultaneous event will provide a "snapshot" of groundwater concentrations and elevations across the installation. Ideally, this "snapshot" event will "rotate" through the quarters so that seasonal variations can be captured. However, drought periods will be avoided due to the number of wells/sampling intervals that go dry during droughts. Any proposed modifications for future sampling will be submitted to USEPA and TCEQ for concurrence. **Figure 1** illustrates all on- and off-post well locations included in this DQO evaluation.

### 3.2 Off-Post Sampling

Public and private off-post drinking water wells with historical VOC detections will be sampled in accordance with these project DQOs, the **Off-Post Monitoring Response Plan**, and the 2010 LTMO Update pending approval by the TCEQ and USEPA. Off-post groundwater sampling is conducted quarterly, in March, June, September, and December. The list of wells to be included in each event is determined based on the decisions provided below.

Off-post drinking water wells will be analyzed for the VOC Short List (1,1-dichloroethene, *cis*-1,2-dichloroethene, *trans*-1,2-dichloroethene, tetrachloroethene, trichloroethene and vinyl chloride), upon initial sampling. Metals will not be sampled in off-post wells because construction materials used for the off-post wells are not known. Metals detections above the appropriate action level or MCL have not been frequently detected in groundwater sampled from on-post wells. Metals have been sampled in on-post monitoring, agricultural/livestock, and drinking water wells since 1995. Based on the infrequent and inconsistent on-post detections, metals have not been sampled in off-post monitoring activities. Previous summaries of metals results were presented to TCEQ by correspondence on September 24, 2003, explaining the rationale for sampling VOCs only in off-post wells and the updated summary is attached as **Appendix D**.

Six off-post wells have had historical sampling results exceeding the MCL for tetrachloroethene (PCE) and/or trichloroethene (TCE) and five of these wells have been equipped with granular activated carbon (GAC) water treatment systems. Pre-GAC samples will be collected quarterly to continue plume characterization. Post-GAC samples will be collected semi-annually to confirm GAC filtration is operating properly. These wells with GAC systems include LS-6, LS-7, OFR-3, RFR-10, and RFR-11. Previous analytical results and GAC water treatment systems installed on these wells are available in **Volume 5**, **Groundwater** of the **CSSA Environmental Encyclopedia,** behind the **Off-Post Groundwater Monitoring Reports** Table of Contents. Well I10-4 has also recently had PCE concentrations exceeding the MCL. However, this well does not have a pump, is situated on a vacant lot, and is not used. The landowner has been notified of the concentrations and has been told that CSSA will install a GAC system or provide potable water if the well is ever re-activated for use. CSSA will monitor I10-4 and confirm its status quarterly.

Private drinking water wells (LS-6, LS-7, OFR-3, RFR-10, and RFR-11) with a GAC system or any future wells with GAC systems installed will require semi-annual maintenance. Post-GAC samples will be collected to confirm each system's effectiveness during the next scheduled quarterly sampling event after maintenance has occurred.

Action levels for detection of VOCs and decisions to sample an off-post private well are based on the following (see also **Figure 2**):

- If VOC contaminant levels are ≥ 90% of the MCL based on preliminary data received from the laboratory [≥ 4.5 parts per billion (ppb) for PCE and TCE] and the well is used as a potable water source, bottled water will be supplied within 24 hours of receipt of the data, and a confirmation sample will be collected from the well. The re-sampling will take place within 14 days of the receipt of the final validated analytical report. If the follow-up sampling confirms a COC is above MCLs, the residence or supply well will be evaluated and an appropriate method for wellhead protection,

either installation of GAC or connection to an alternative water source will be selected. Cost related to the installation and maintenance of wellhead treatment equipment or connection to an alternative water source will be borne by CSSA.

- If VOC contaminant levels are ≥ 80% of the MCL during any single monitoring event based on preliminary data from the laboratory (4.0 ppb for PCE and TCE) and the well is used as a potable water source, it shall be monitored monthly. If the follow-up sampling confirms a COC is ≥ 80% of the MCL, it will be re-sampled until the level falls below the 80% value. If the concentration increases to ≥ 90% of the MCL see above.
- If any VOC COC is detected at levels ≥ the MDL (historically around 0.11 ppb for PCE and 0.14 ppb for TCE), and less than 80% of the MCL the well will be re-sampled on a quarterly basis. This sampling will be conducted concurrently with on-post sampling events and will be used to develop historical trends in the area. Quarterly sampling will continue for a minimum of one year, after which the sampling frequency will be reviewed and possibly decreased.
- If VOCs are not detected during the initial sampling event, (i.e. no VOC contaminant levels above the MDL), further sampling of the well would be considered on an as needed basis. A well that has no detectable VOCs can be removed from sampling, unless plume migration could influence the well. The well owner will be apprised of any re-sampling decisions regarding the non-detect wells.

Action levels for detection of VOCs and decisions to sample an off-post public well are based on the following (see also **Figure 2**):

- If an off-post public supply system is ≥ 90% of the MCL, CSSA will coordinate solutions to the maximum extent feasible. The system operator and CSSA will determine the best course of action for providing potable water when data suggests an exceedance of the MCL. Possible options include:
  - Potable water could be brought in by tanker truck.
  - Potable water could be provided by another water system.
  - A wellhead treatment system (i.e., GAC) can be installed by CSSA.

Expansion or reduction of the off-post drinking water wells to be sampled will be dependent on an evaluation of previous results. The original LTMO recommendations for on-post wells were implemented in December 2005. In November 2009 a public meeting was held, and information regarding the LTMO study and possible changes to the off-post sampling program were presented. In 2010 the LTMO study was updated with 5 additional years of groundwater monitoring data. CSSA plans to implement the recommendations of the updated 2010 LTMO study for off-post wells, pending TCEQ and USEPA approval.

New off-post drinking water wells may be added to the program in the future. Locations of new wells to be sampled will be based on the inferred-flow direction of the off-post VOC plume derived from historical data. Concerns of area residential well owners or municipal water purveyors will be dealt with on a case-by-case basis. These decisions will be made based on the action levels given above. Additional information on the inclusion of off-post wells to the

sampling program is available in **Volume 5, Groundwater**, of the **CSSA Environmental Encyclopedia**.

### 3.3 On-Post Sampling

These DQOs set out revised frequencies for sampling for on-post wells. **Appendix E** is a summary presented in the 2005 LTMO illustrating the currently implemented sampling frequencies for on-post wells. Sampling frequencies for the types of wells are discussed in Sections 3.4 and 3.5, below. As described above, the LTMO study will be updated in 2010, and CSSA plans to implement the recommendations of the updated study after receiving TCEQ and USEPA approval.

Prior to October 1999 all on-post wells have been tested for the complete list of VOCs or a selected short list of VOCs (8260B). The VOC Short List is revised in these DQOs to include 1,1-dichloroethene, *cis*-1,2-dichloroethene, *trans*-1,2- dichloroethene, tetrachloroethene, trichloroethene and vinyl chloride. Methylene chloride, toluene, naphthalene, bromodichloromethane, bromoform, chloroform, dichlorodifluoromethane and 1,1-dichloroethene were removed from this list in September 2006 based on statistical analysis of previous results provided from the 2005 LTMO study (see **Appendix C**).

Methylene chloride has been reported periodically in samples from both on- and off-post wells since 1992. Each time methylene chloride was detected in a sample, it was also consistently present in the analysis method blank, indicating the likelihood that this COC 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. Only 1% of the methylene chloride samples analyzed have had an MCL exceedance, and these exceedances may be related to laboratory contamination.

Toluene was detected sporadically in previous sampling events at concentrations ranging from 0.06 µg/L to 8.7 µg/L. These levels are below the applicable MCL for toluene in drinking water (1,000 µg/L). Based on a review of the data and the sample packaging procedures, it was concluded that low-level toluene concentrations detected in the March 2003 event were likely introduced by tape used to label sample bottles. Contaminant-free tape was used in sampling events after March 2003 and subsequently toluene was detected at decreased concentrations and frequency. Toluene is not an expected COC related to activities conducted on-post and the sporadic appearance of toluene in off-post wells is considered to be related to other sources, not a source originating at CSSA. Toluene was detected in 13% of the samples collected through December 2004, and none of these detections exceeded the MCL.

Naphthalene was detected in 2% of the samples collected through December 2004. Other COCs which have been detected, as indicated in the statistical summary included in **Appendix C**, include bromodichloromethane, bromoform, dichlorodifluoromethane and 1,1-dichloroethene. These COCs have been detected in 1% to 3% of the groundwater samples and all except 1,1-dichloroethene are contaminants related to the disinfection of drinking water. Chloroform has been detected in 15% of the samples analyzed, but never above the combined MCL for total trihalomethanes. Based on the occurrences of these COCs as summarized in **Appendix C**, they were removed from the VOCs Short List in 2006.

Compliance sampling for metals required under the Safe Drinking Water Act (SDWA) for CSSA's drinking water wells (CS-1, CS-9, and CS-10) will be continued per TCEQ rules. Sampling required by the TCEQ related to the operation of the CSSA PWS is not covered under these DQOs and is not related to sampling of the water wells for environmental monitoring purposes under these DQOs.

Metals detections above the appropriate action level or MCL have not frequently occurred in groundwater sampled from on-post wells. Metals have been sampled in on-post monitoring, agricultural/livestock, and drinking water wells since 1995. The review of the occurrences of metals detections under previous project DQOs and statistical analysis as part of the 2005 LTMO study showed that the metals lead, cadmium, and nickel only should be analyzed in the future for on-post wells. However, after sampling began on the 6 new monitoring wells (CS-MW20-LGR through CS-MW25-LGR), the metals list was modified again to include mercury, chromium, cadmium and lead. The change in the metals analyte list was approved during the July 10, 2008 TCEQ/EPA meeting (see **Appendix A**). These metals will be sampled at the frequency recommended in the LTMO recommendations. Nickel has been removed from the monitoring list because there is no longer an MCL for that constituent.

### 3.4 On-Post Drinking Water Well Sampling

Under the 2005 LTMO study the drinking water wells (CS-1, CS-9, and CS-10) were to be sampled at a 9-month frequency for the VOC Short List and the updated metals list of chromium, cadmium, lead, and mercury. This frequency has been increased to quarterly due to recent metals results from drinking water well CS-9. Well CS-9 has been isolated from the drinking water system after lead results exceeded the MCL in 2006. Wells CS-10 and CS-1 historical detections have been below the RL or non-detect and the sampling will ensure that on-post drinking water will continue to meet drinking water standards in the future.

If the sampling recommendations in 2010 LTMO Update are approved by the USEPA and TCEQ, those frequencies will be implemented for all on-post drinking water well sampling.

### 3.5 On-Post Monitoring and Agricultural Wells

Existing on-post monitoring wells and open borehole agricultural wells will be sampled for the VOC Short List and chromium, cadmium, lead, and mercury at the frequencies set out in the 2005 LTMO study, as approved by TCEQ and USEPA (see **Appendix F**). A list of all existing wells present at CSSA and the date and rationale for their installation, is included in **Appendix F**.

The Westbay® equipped wells will be sampled at the frequency of semi-annually for wells in the Glen Rose, or biennially for wells in the Bexar Shale and Cow Creek formations, as set out in the2005 LTMO study. The Westbay® equipped wells will be sampled for the VOC Short List at the frequencies recommended in the LTMO (see **Appendix E**).

If the sampling recommendations in 2010 LTMO Update are approved by the USEPA and TCEQ, those frequencies will be implemented for all on-post well sampling.

### 3.6 Water Levels

Water levels will be collected from all available wells at least quarterly. Additional water level data will be collected weekly, monthly and/or after significant rainfall events are measured. Water level gradient/potentiometric maps will be prepared separately for each formation of the Middle Trinity Aquifer.

Westbay® profiling will be conducted quarterly at the 4 southern Westbay® wells WB01 through WB04. Westbay® wells WB05 through WB08 are part of the bioreactor at SWMU B-3 and are not included in these DQOs.

### 3.7 New Monitoring Wells

No new monitoring wells are scheduled for installation at this time. If future site investigations include monitoring well installations the following procedures have been outlined. No coring will be performed for future well installations. Geophysical and video surveying will be conducted for each borehole. Other well construction details will be set out in specific scope of work documents. For cost effectiveness, based on the data obtained during drilling of numerous wells at CSSA, geophysical logging is sufficient for identifying geologic strata.

Each newly installed monitoring well will be sampled at the first event for the full list of VOCs, metals (arsenic, cadmium, lead, mercury, barium, chromium, copper, nickel, and zinc) and selected groundwater quality parameters (bromide, chloride, fluoride, nitrate, nitrite, sulfate, alkalinity [SW9046], TDS, pH, resistivity, alkalinity, bicarbonate [E310.1]). Subsequent monitoring events will utilize the VOC Short List and metals (Cr, Cd, Pb, and Hg). At least four consecutive quarterly sampling events will be conducted for a newly installed monitoring well. Future sampling frequencies will be scheduled depending upon the 2010 LTMO study recommendations (see **Appendix E**).

Dataloggers and transducers will be installed at selected on-post monitoring wells. Additional transducers may be installed in future wells. Each datalogger continuously collects and stores information regarding static water level, water temperature, and/or conductivity.

Upon completion of well development, dedicated low-flow pumps will be purchased and installed in each new monitoring well. The pumps will be pneumatically-operated bladder pumps consistent with the monitoring system already existing at CSSA. Water levels, construction, and survey data for wells will be collected for the Hydrogeologic Conceptual Model (HCSM) Update, for incorporation into the groundwater model and any future risk assessments.

# STEP 4
# DEFINE THE BOUNDARIES OF THE STUDY

The study boundary is not limited to the confines of the installation. The outer limit of the study boundary is based on detections of VOCs in on- and off-post drinking water wells. Plume 1 and Plume 2 are currently used to define the area(s) impacted by past military activities. Our present study boundary is based on past monitoring activities and will be expanded as necessary to determine the lateral and vertical extent of contamination. Plume boundaries for the Lower Glen Rose (LGR) for the COCs PCE, TCE and *cis*-1,2-dichloroethene are shown on **Figures 3** through **5**, as of December 2009.

The areas of interest in the groundwater monitoring program are the Upper Glen Rose formation (Upper Trinity aquifer) and the three formations in the Middle Trinity aquifer (LGR, BS, and CC) via well data for VOC and metal concentrations. At a minimum the following factors will be evaluated:

- Wet and dry seasonal variations;
- Rainfall impacts on plume or potential plume migration and groundwater recharge;
- Remediation alternatives;
- Fault and fracture location and size, and orientation that promote or retard plume migration; and
- CSSA will continue to monitor wells for the foreseeable future to make technically sound judgments to sample additional wells or exclude them from our sampling set.

Quarterly reports will summarize the findings of each monitoring event and an annual report will be prepared to describe trends and factors impacting the data. These reports will address groundwater elevations, contaminant concentrations, data gaps, and other pertinent information.

Constraints to the groundwater project include, but are not limited to:

- Frequency of monitoring.
- Securing access agreements with off-post well owners.
- Frequency of rainfall events.

## 4.1 Project Schedule

The quarterly monitoring timeline shall provide a road map for sampling, analysis, validation, verification, reviews, and reports for monitoring events both on- and off-post. A timeline is given in **Figure 6** for preparation of quarterly reports and planning of sampling events. Explanations for schedules associated with sampling events are given below.

### 4.1.1 Definitive Data Reports (Drinking Water and Monitoring Well)

Drinking water analytical data are to be provided by the laboratory to the prime contractor within 21 calendar days of the last sampling day. Un-validated on- and off-post drinking water analytical data generated by each approved laboratory will be provided in 21 calendar days and distributed to CSSA immediately thereafter. The laboratory will provide the finalized analytical data in 30 calendar days.

Off-post GAC preliminary data are to be provided to the prime contractor within seven days of receipt of the samples by the laboratory.

To the maximum extent practicable, data validation reports, draft quarterly on- and off-post groundwater monitoring reports, and letters to off-post well owners will be provided to CSSA, where applicable, 60 days from the sample date.

On- and off-post analytical groundwater (for up to 40 on-post and 40 off-post samples collected) data packages will be validated in accordance with the CSSA QAPP, 60 days from the sample date. If more than 40 samples are collected, Parsons will contact CSSA and discuss acceptable turn-around times for data validation. The Quarterly On- and Off-Post Groundwater Reports will also be submitted for CSSA review at this time.

CSSA will provide comments to the draft report and letters within 10 days.

Quarterly Groundwater Monitoring Reports and well owner notification letters will be finalized after CSSA approval within 80 days of sampling date.

***Note: These time frames allow for adequate planning for the next quarterly sampling event, which will take place within 90 days from previous sampling date.***

### 4.1.2 Screening Data Reports (Discrete interval, soil/rock, and IDW samples)

Preliminary results for discrete interval analytical data collected during well installations are to be provided by the laboratory to the prime contractor within 24 hours of receipt of the samples by the laboratory.

Prime contractor will review and provide approved preliminary discrete interval data to CSSA within two days of the receipt of the preliminary data from the laboratory.

Investigation derived media (IDM) analytical data are to be provided by the laboratory to the prime contractor within 24 hours, three days, or seven days of receipt of the samples by the laboratory, depending on the purpose of sampling. IDM will be sampled in accordance with the provisions of the **RFI and Interim Measures Waste Management Plan** (Parsons, 2002).

The prime contractor will review and provide approved IDW data to CSSA within 14 days of the receipt of the data package from the laboratory.

Prime contractor will review and provide approved GAC screening sample data to CSSA within 14 days of the receipt of the data package from the laboratory.

### 4.1.3 Westbay® Multi-Level Sampling Device Reports

Discrete interval analytical screening data are to be provided by the laboratory to the prime contractor within 21 days of receipt of the samples by the laboratory.

Prime contractor will review and provide approved discrete interval data to CSSA within 30 days of receipt of the preliminary data from the laboratory. The evaluation of screening data will include a check on sample integrity, method blank, and LCS.

Pressure/transducer data shall be collected from the Westbay® and In-Situ transducer devices and provided to CSSA in the annual report.

THIS PAGE INENTIONALLY LEFT BLANK

# STEP 5
# DEVELOP A DECISION RULE

Refer to Step 2 of these DQOs for decision processes related to the groundwater monitoring.

THIS PAGE INENTIONALLY LEFT BLANK

# STEP 6
# SPECIFY TOLERABLE LIMITS ON DECISION ERRORS

Currently, the CSSA QAPP is being utilized by CSSA. The CSSA QAPP (approved January 16, 2003) is applicable to task orders funded since that date. The QAPP specifies required reporting limits and control limits for all site interested parameters.

Specific variances to the QAPP have been approved by the USEPA and TCEQ and are located in the CSSA Environmental Encyclopedia, **Volume 1.4 Sampling and Analysis Plan, CSSA Quality Assurance Project Plan**. For the CSSA drinking water program, CSSA has developed very stringent rules to protect human health above and beyond the regulatory requirements. The groundwater monitoring presented in this DQO document is a long-term program to delineate the extent of each VOC plume. These DQOs do not require the use of matrix spike, matrix spike duplicates, or field duplicates. However, CSSA elects to include these QA/QC parameters for all definitive data collected. Parsons has periodically audited the subcontract lab used for CSSA. The last audit was conducted in August 2007. The laboratory satisfactorily addressed all audit findings, and audit reports were completed and submitted to CSSA.

THIS PAGE INENTIONALLY LEFT BLANK

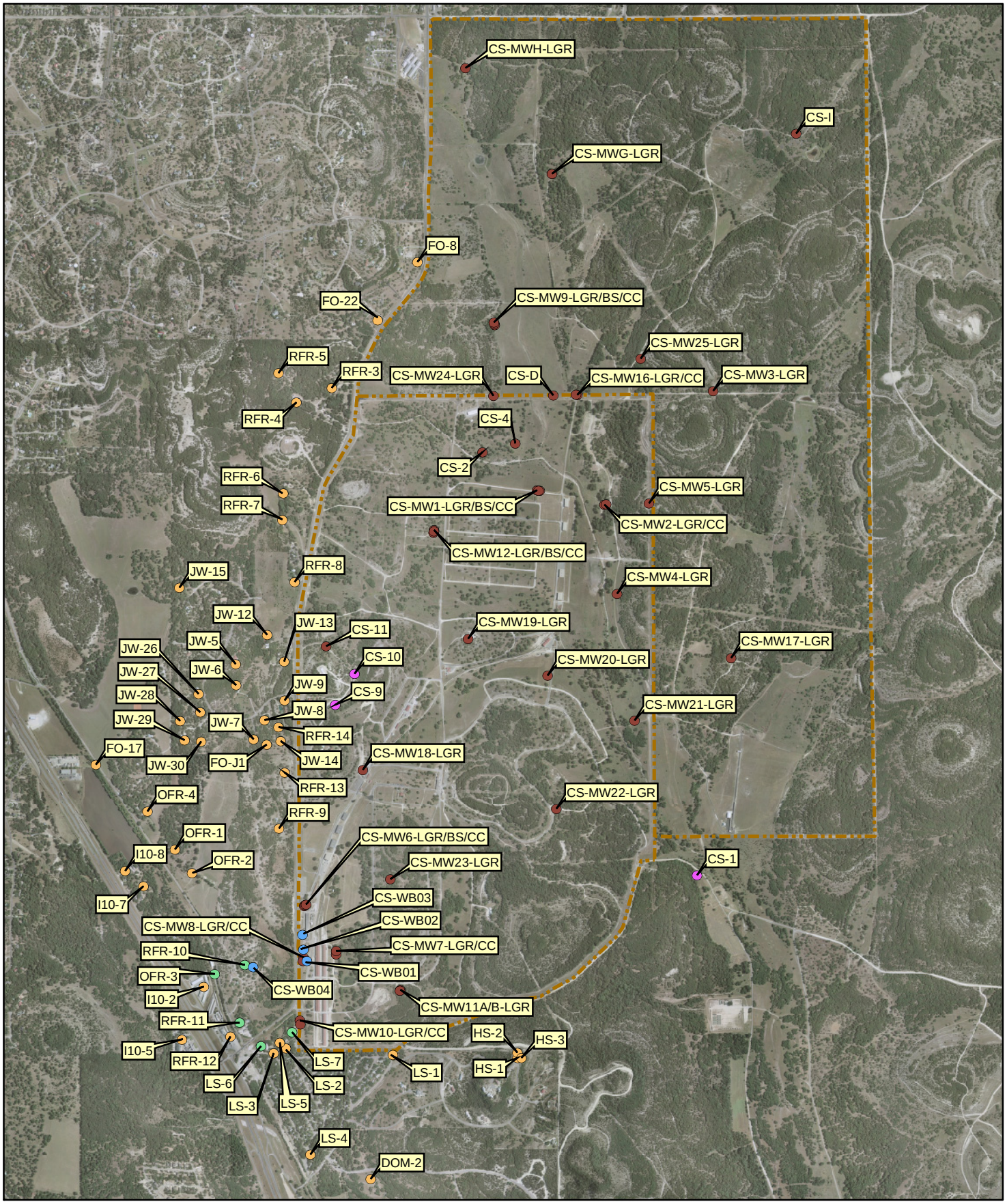
# STEP 7
# OPTIMIZE THE DESIGN FOR OBTAINING DATA

An optimization of the long-term monitoring being conducted under the CSSA groundwater monitoring program was conducted in 2005. The initial LTMO report was submitted May 2005 for review by USEPA and TCEQ. Recently, an updated 2010 LTMO for both on- and off-post well locations has been submitted to the regulators for review and approval. Upon approval, the 2010 LTMO recommendations will be implemented. CSSA elected to perform the 2005 and 2010 LTMO studies because optimizations can assure proper remedial decisions are made and streamline future data collection over the life of a monitoring program.

The CSSA LTMO studies utilized a three-tiered methodology, and included data compilation and site screening, qualitative evaluation decision logic, temporal trend evaluations, and spatial statistical analyses. CSSA will continue to utilize LTMO reviews in the future to continue to optimize the design for obtaining data under these DQOs.

Mr. Greg Lyssy, of the USEPA approved implementing the 2005 LTMO recommendations on November 14, 2005, while TCEQ approved the COC changes and the on-post sampling frequency recommendations on December 19, 2005. However, TCEQ did not approve any sampling frequency changes to the off-post sampling program.

The LTMO study will be updated in 2010 with 5 additional years of monitoring data. Pending TCEQ and USEPA approval, the monitoring recommendations of the updated study will be implemented both on- and off-post.




N
W E
S

0 2,000 4,000 Feet

- Off-post Wells
- Off-Post Wells w/ GAC units
- On-Post Monitoring Wells
- On-Post Drinking Water Wells
- Westbay Wells
- CSSA Fenceline

# Figure 1

Monitoring Well Network
March 2009
Camp Stanley Storage Activity

P a r s o n s

J:\745\745953 CSSA DY02\GIS\Monitoring_Well_Network_March2009.mxd - 3/13/2009 @ 1:29:14 PM

The flowchart below demonstrates the VOC action levels for the decision process for selection of off-post private drinking water wells for each sampling event:

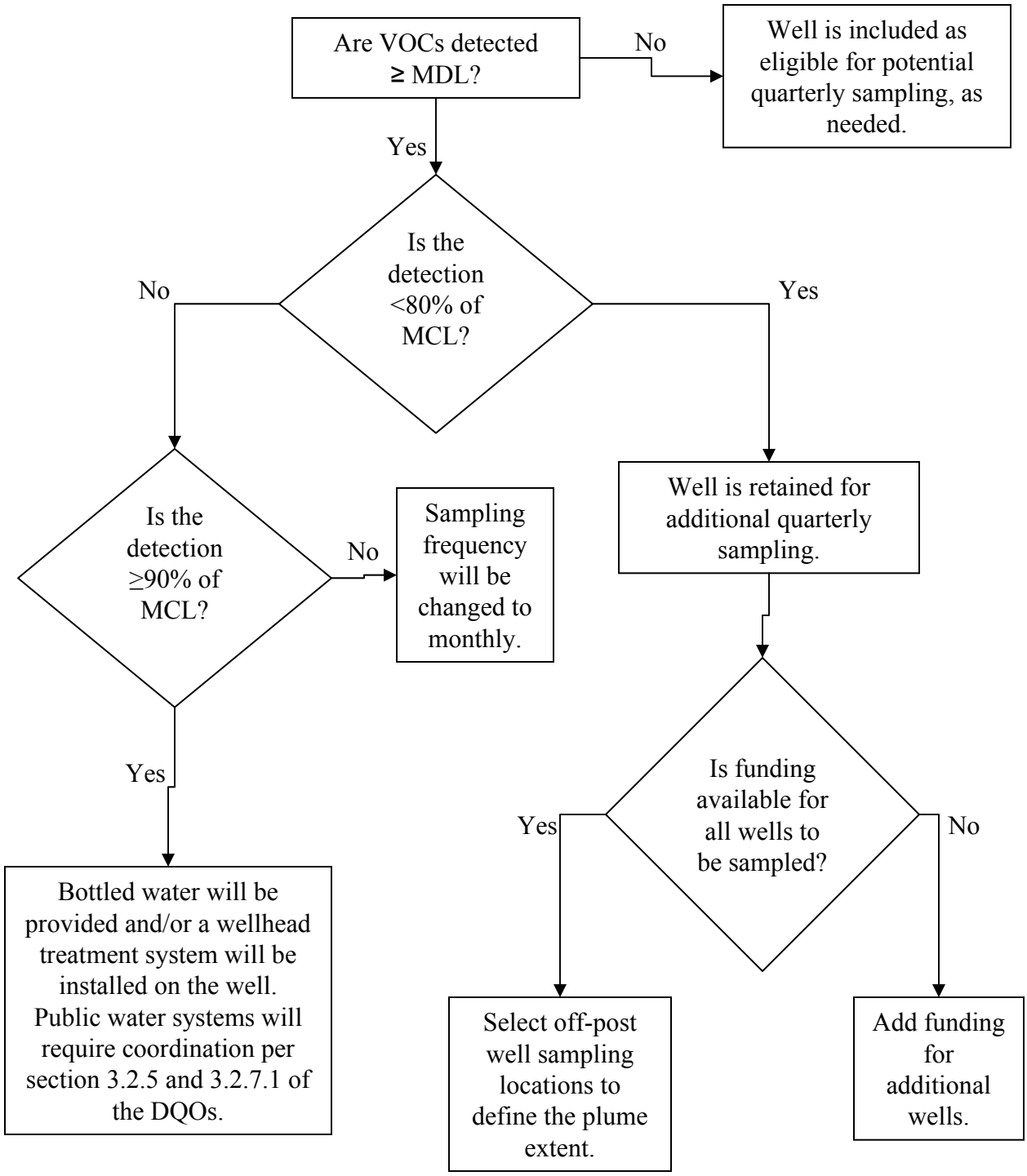
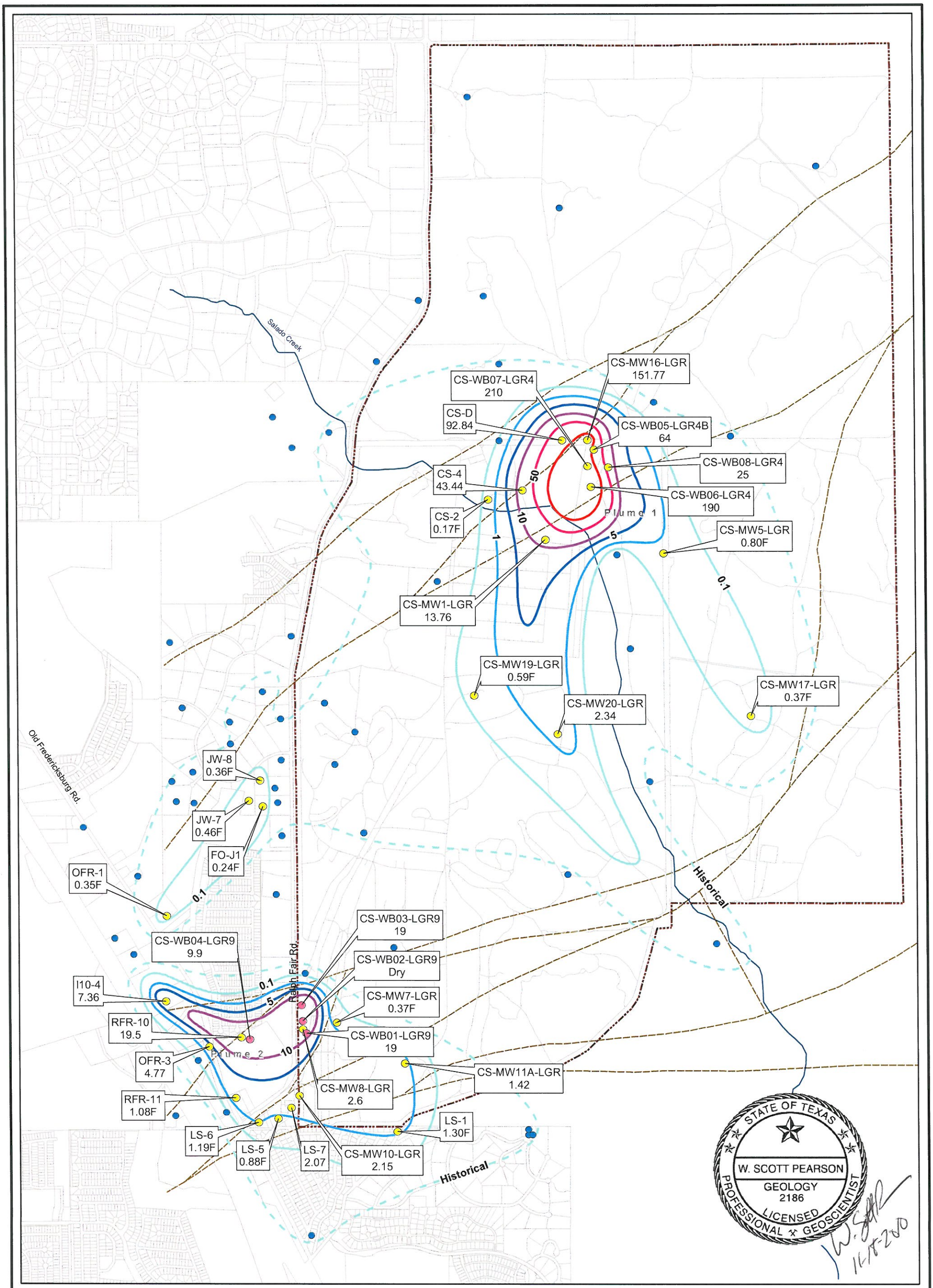



**Figure 2**

THIS PAGE INENTIONALLY LEFT BLANK




# Figure 3

PCE Concentrations for LGR Wells, Sept. - Dec. 2009

PARSONS

J:\745\745953 CSSA DY02\GIS\max_09_concentrations_lgr_pce.mxd - 4/14/2010 @ 2:48:03 PM

THIS PAGE INENTIONALLY LEFT BLANK

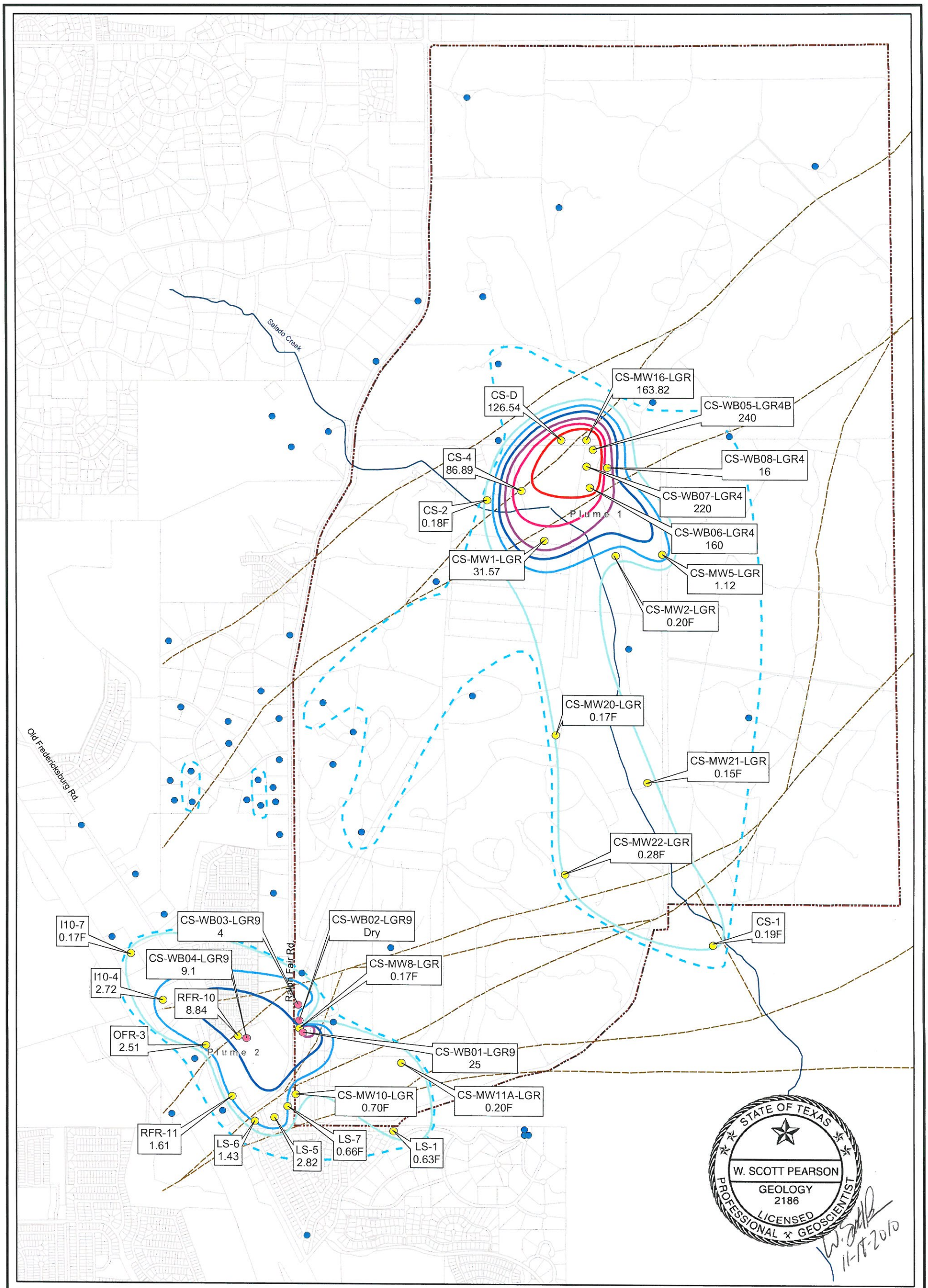



**Figure 4**

TCE Concentrations for
LGR Wells, Sept. - Dec. 2009

**PARSONS**

J:\745\745953 CSSA DY02\GIS\max_09_concentrations_lgr_tce2.mxd - 4/15/2010 @ 4:50:20 PM

THIS PAGE INENTIONALLY LEFT BLANK

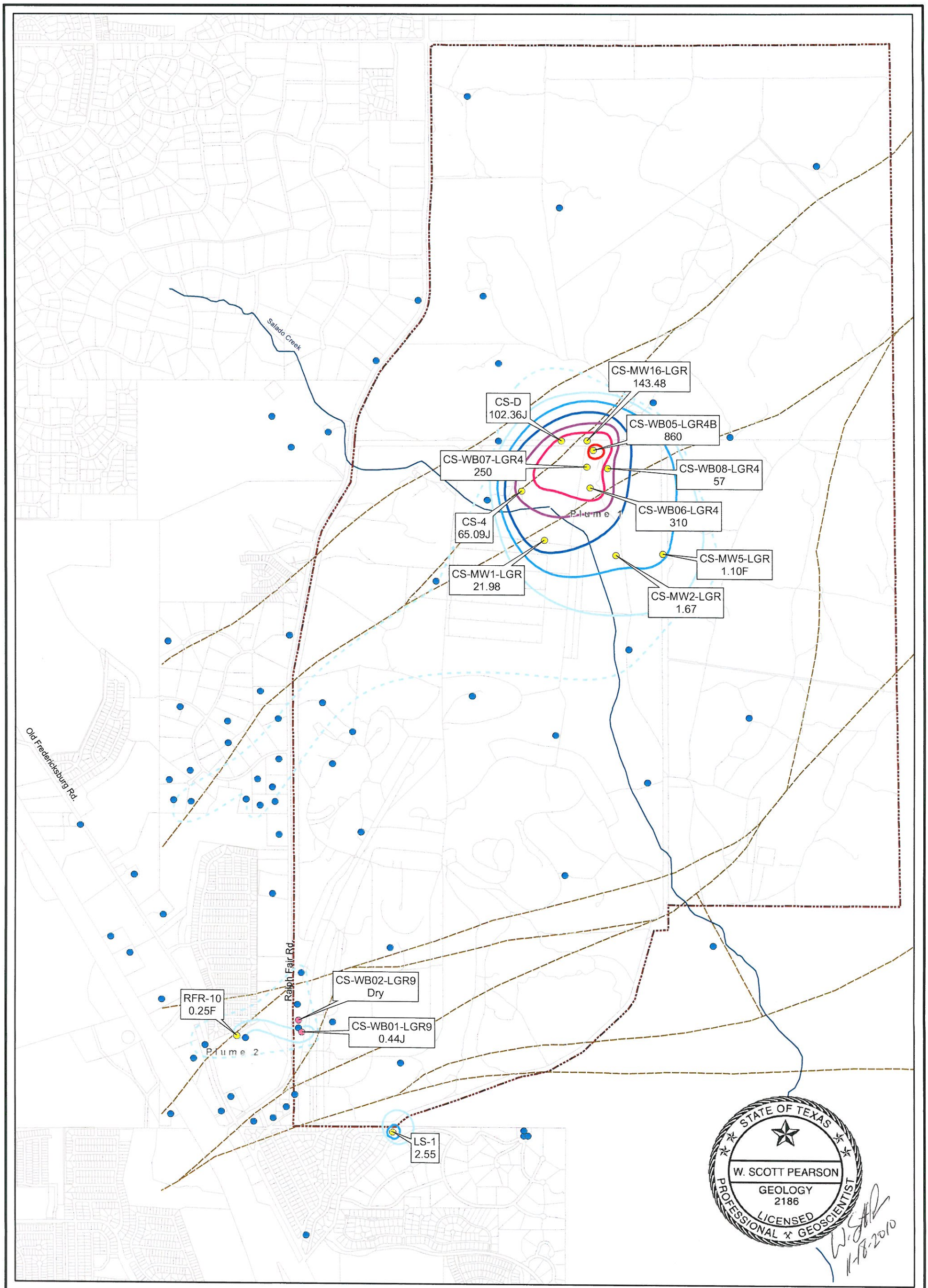



**Figure 5**

cis-1,2-DCE Concentrations for LGR Wells, Sept.- Dec. 2009

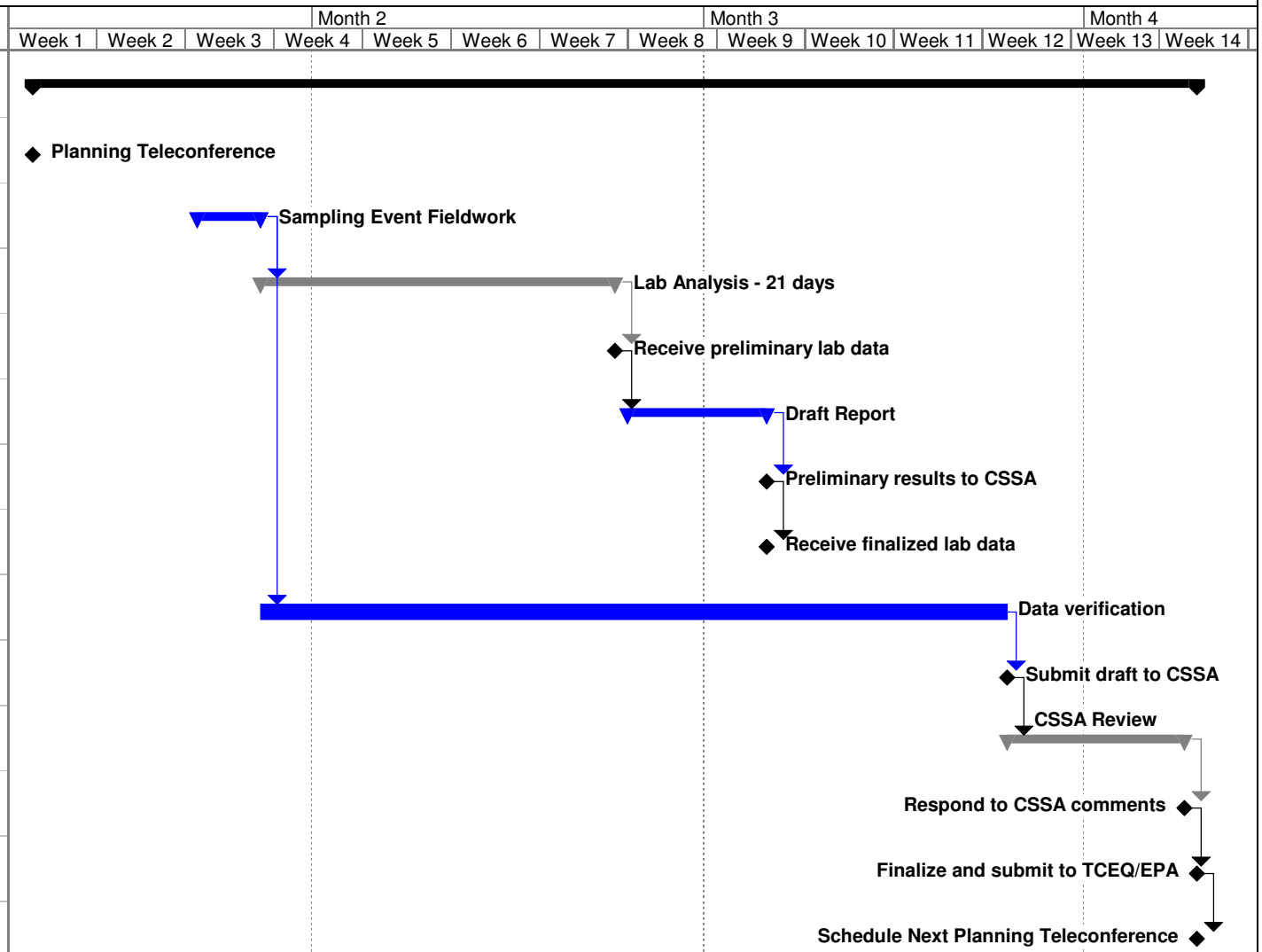
**PARSONS**

J:\745\745953 CSSA DY02\GIS\max_09_concentrations_lgr_cis.mxd - 4/15/2010 @ 5:12:00 PM

THIS PAGE INENTIONALLY LEFT BLANK

Figure 6

| ID | Task Name |
|---|---|
| 1 | **Groundwater Sampling and Report Preparation** |
| 2 | Planning Teleconference |
| 3 | Sampling Event Fieldwork |
| 4 | Lab Analysis - 21 days |
| 5 | Receive preliminary lab data |
| 6 | Draft Report |
| 7 | Preliminary results to CSSA |
| 8 | Receive finalized lab data |
| 9 | Data verification |
| 10 | Submit draft to CSSA |
| 11 | CSSA Review |
| 12 | Respond to CSSA comments |
| 13 | Finalize and submit to TCEQ/EPA |
| 14 | Schedule Next Planning Teleconference |




Project: CSSA Schedule
Date: Fri 10/16/09

| | | | |
|---|---|---|---|
| Task | Milestone | External Tasks | |
| Split | Summary | External Milestone | |
| Progress | Project Summary | Deadline | |

THIS PAGE INENTIONALLY LEFT BLANK

## Appendix A Approval from USEPA and TCEQ for Previous DQOs and Implementation of LTMO Recommendations

| | |
|---|---|
| October 30, 2008 | Environmental Project Status Update |
| December 19, 2006 | TCEQ's approval of August 2006 DQO update |
| December 19, 2005 | TCEQ's conditional approval of LTMO Evaluation |
| November 16, 2005 | USEPA approval of LTMO Evaluation, on-post only |
| April 20, 2004 | TCEQ approval of November 2003 DQOs |
| August 26, 2002 | Letter requesting approval or comment to the April 2002 DQOs |

THIS PAGE INENTIONALLY LEFT BLANK

PARSONS

8000 Centre Park Drive, Suite 200• Austin, Texas 78754• (512) 719-6000 • Fax: (512) 719-6099 • www.parsons.com

October 30, 2008

Subject: *Meeting Minutes: Environmental Project Status Meeting (10-July-08) – SWMU Investigations and Closures, Groundwater Overview, and Pilot Studies Update*
Camp Stanley Storage Activity, Boerne, Texas
Contract DACA87-02-D-0005, Delivery Order DY01

Dear Mr. Rayos:

Enclosed is a copy of the *Meeting Minutes: Environmental Project Status Meeting (10-July-08)* as referenced above. These minutes provide a summary of the main discussion items and main action items from the meeting.

If you have any questions or comments, please feel free to contact me at 512-719-6017.

Sincerely,

Lea Aurelius for

Julie Burdey
Project Manager

**Attachments**
**cc:**
Glaré Sanchez, CSSA
Chris Beal, CSSA
Brenda Shirley, CSSA
Greg Lyssy, USEPA
Jorge Salazar, TCEQ
Wayne Elliott, USACE
Bob Edwards, Noblis
Mike Chapa, Weston
Steve Mitchell, Weston
745953 Project File

THIS PAGE INENTIONALLY LEFT BLANK

# Environmental Project Status Meeting

## SWMU Investigations and Closures, Groundwater Overview, and Pilot Studies Update

## Camp Stanley Storage Activity
## Boerne, TX

## Parsons, DACA87-02-D-0005, Delivery Order DY01
## July 10, 2008

Date: Thursday, July 10, 2008

Time: 9:30 AM – 12:30 PM

Place: Camp Stanley Storage Activity, Boerne, Texas

Subject: SWMU Investigations and Closures, Groundwater Overview, and Pilot Studies Update

Attendees:

| | | |
|---|---|---|
| Glaré Sanchez | CSSA | 321-662-3718 |
| Chris Beal | Portage/CSSA | 210-336-1171 |
| Julie Burdey | Parsons | 512-719-6062 |
| Greg Lyssy | USEPA Region VI | 214-665-8317 |
| Sonny Rayos | TCEQ | 512-239-2371 |
| Jorge Salazar | TCEQ | 210-403-4059 |
| Bob Edwards | Noblis | 210-408-5552 |
| Ken Rice | Parsons | 512-719-6050 |
| Scott Pearson | Parsons | 512-719-6087 |
| Samantha Elliot | Parsons | 210-347-6012 |
| Lea Aurelius | Parsons | 512-719-6017 |
| Steve Mitchell | Weston | 512-651-7104 |
| Mike Chapa | Weston | 210-248-2428 |

## INTRODUCTION

The meeting was held at Camp Stanley Storage Activity. Attendees included representatives from CSSA, TCEQ, USEPA (Region VI), Noblis, Weston Solutions, Inc., and Parsons. The sign-in sheet is provided as **Attachment A**. A copy of the slide presentation was provided as a handout at the meeting and is included as **Attachment B**. A second handout with additional information was also provided at the meeting and is included as **Attachment C**.

These minutes are intended to provide a summary of the main discussion items and action items from the meeting.

**SLIDE PRESENTATION**

Slides 1-4. Introduction and closure status of SWMUs/AOCs. CSSA's goal is to close as many sites as possible with Release Investigation Reports (RIR).

Slides 5-10. AOC-73 overview. RIR distributed to CSSA and USACE for review; RIR submitted to TCEQ and USEPA following CSSA/USACE comments.

Slides 11-13. SWMU I-1 overview. RIR submitted to TCEQ and USEPA.

Slides 14-17. AOC-69 overview. Further removal actions planned, followed by RIR.

Slides 18-19. AOC-67/68 overview. TCEQ and USEPA agreed that an RIR could be submitted for AOC-67/68 following additional removal actions in the immediate area of the Wheelabrator, which can reasonably be achieved between the buildings and the roads. When operations at neighboring Building 90 are discontinued, closure of the wider area around this building will be addressed.

Slides 20-24. Overview of North Pasture sites (SWMUs B-2, B-8, B-20/21, and B-24). Further removal/remedial actions planned, followed by APAR.

Tier 2 calculations for the North Pasture sites will use the following data: (1) the average soil pH and soil type for the North Pasture; (2) the most conservative (shallowest) depth to groundwater in monitoring wells located in the North Pasture; and (3) the most conservative (maximum) thickness of affected soil from the four SWMUs in the North Pasture.

Mr. Rayos requested that Parsons provide TCEQ with (1) all of the data that will be used in the Tier 2 calculations, and (2) the calculated Tier 2 PCLs.

Slides 25-34. Weston's presentation regarding AOC-63, AOC-64, and SWMU B-71. For AOC-63, the draft APAR had been distributed to CSSA and Parsons for review (Weston requested comments by 18 July 08). For AOC-64 and SWMU B-71, further removal actions planned, followed by RIRs.

Slides 35-48. CSSA groundwater monitoring and long-term monitoring optimization (LTMO) was discussed, including on-post and off-post MWs with COC exceedances.

The schedule for the next public meeting for LTMO off-post was discussed; it was decided that the meeting should be planned for the Fall 2009.

Analytical parameters for groundwater monitoring were discussed. It was agreed that nickel could be dropped from the list of analytical parameters. Chromium and mercury will be added to the list of parameters. Lead has been detected in newly installed MWs (CS-MW22-LGR and CS-MW25-LGR) and will continue to be monitored.

TCE and PCE were detected at an off-post VOC monitoring well (I10-4) during the March 2007 sampling event. According to the landowner, the well was plugged following that sampling event. Concentrations of TCE/PCE were above their respective reporting limits (RLs), but below MCLs and Tier 1 residential drinking water PCLs.

Slides 49-58. The hydrogeologic conceptual site model was discussed. Contamination beyond Ralph Fair Road and possible locations of MWs beyond I-10 were discussed.

There is a need to either locate existing private well(s) or to install new MW(s) west of I-10 so that the western extent of the plume can be identified.

Slides 59-90. CSSA pilot studies (SWMU B-3 bioreactor and AOC-65 SVE) were discussed. The proposed monitoring schedules were discussed and agreed to (slides 84 and 90). Future investigation work for AOC-65 was discussed. Possible options discussed included tracer tests (soil gas or groundwater) and additional wells.

Concern was expressed about the potential for vapor intrusion in recently developed areas west of CSSA. USEPA indicated that there is a need to focus on ways to collect/evaluate data related to vapor intrusion, especially related to AOC-65 SVE.

The next meeting was proposed for early November 2008, to be held at the Parsons office, Austin, TX.

**MEETING ADJOURNED**

THIS PAGE INENTIONALLY LEFT BLANK

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

December 19, 2006

Camp Stanley Storage Activity
25800 Ralph Fair Road
Boerne, TX 78015-4800
Attention: LTC Jason D. Shirley, Commander

Re: Camp Stanley Storage Activity (CSSA), Boerne, TX;
TCEQ SWR No. 69026;
Final Data Quality Objectives (DQO) Groundwater Monitoring Program - Approval

Dear LTC Shirley:

The Texas Commission on Environmental Quality (TCEQ) has received the report entitled *Final Data Quality Objectives Groundwater Monitoring Program Revised August 2006.* The report recommends the removal of toluene, methylene chloride and naphthalene from the monitored groundwater Volatile Organic Compounds (VOCs) list. For metals analyses, groundwater samples will be limited to the analyses of cadmium, lead and nickel for on-post wells. The report also recommended that groundwater samples from off-post wells will be analyzed for the same VOCs constituents as the on-post wells.

The TCEQ has reviewed the report. The TCEQ does not have any comment regarding the report and its recommendations. The data quality objectives and procedures specified in the report appear to be adequate in addressing the investigation and characterization of the on-site and off-site groundwater contaminations.

Please call me at 512.239.2371 or email me at srayos@tceq.state.tx.us if you wish to discuss or if you have any questions concerning this letter.

Sincerely,

Sonny Rayos, P.G., Project Manager
Team 3, Environmental Cleanup Section II
Remediation Division

cc: Ms. Glare Sanchez, CSSA, 25800 Ralph Fair Road, Boerne, TX 78015-4800
Mr. Greg Lyssy, U.S. EPA Region 6, 1445 Ross Ave (6SF-LT), Dallas, TX 75202-2733
Ms. Julie Burdey, Parsons, 8000 Centre Park Drive, Suite 200, Austin, TX 78754
Waste Program Manager, TCEQ Region 13 Office, San Antonio, TX

THIS PAGE INENTIONALLY LEFT BLANK

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

December 19, 2005

Camp Stanley Storage Activity
25800 Ralph Fair Road
Boerne, TX 78015-4800
Attention: Lieutenant Colonel Jason Shirley

Re: Three-Tiered Long Term Monitoring Network Optimization Evaluation - Approval with modification
Camp Stanley Storage Activity, Boerne, TX
TCEQ SWR No. 69026
EPA ID No. TX2210020739

Dear LTC Shirley:

The Texas Commission on Environmental Quality (TCEQ) has reviewed the report entitled *Final Three Tiered Long Term Monitoring Network Optimization Evaluation* received by the TCEQ on May 19, 2005. On November 8, 2005, the TCEQ approved your request to implement the Long Term Monitoring Optimization (LTMO) program; however, implementation of the LTMO was approved only for on-site monitor wells and only for the last calendar quarter 2005 groundwater monitoring. As further stated in the November 8, 2005 TCEQ letter, the approval may be modified upon completion of the review of the above-stated report.

The TCEQ Technical Support Section reviewed and provided comments regarding the above-stated report. The recommendations and conclusions of the TCEQ review are provided as an Enclosure to this letter. As stated in the InterOffice Memorandum, the four recommendations are acceptable. The TCEQ Technical Support Section has reservations concerning the fifth recommendation (i.e., reduced off-site monitoring) - this appears to be in agreement with the previous requirement of the TCEQ Environmental Cleanup Section letter dated November 8, 2005. Consequently, the TCEQ requires Camp Stanley to continue monitoring the off-site wells according to standard protocol currently in effect while implementing the four other recommendations. The TCEQ will monitor the LTMO groundwater sampling results at the southwest portion (area near the off-site contaminant release) of the facility; should a need to modify or invalidate the LTMO at this area arise, the TCEQ will inform you in a separate letter.

Please call me at 512.239.2371 or email me at srayos@tceq.state.tx.us if you wish to discuss or if you have questions concerning this letter.

Sincerely,

Sonny Rayos, P.G., Project Manager
Team III, Environmental Cleanup II
Remediation Division
Texas Commission on Environmental Quality

Enclosure: InterOffice Memorandum from Mr. Greg Tipple

cc: Ms. Glare Sanchez, Camp Stanley Storage Activity, 25800 Ralph Fair Road, Boerne, TX 78015-4800
Mr. Greg Lyssy, U.S. EPA Region 6, 1445 Ross Ave (6SF-LT), Dallas, TX 75202-2733
Ms. Julie Burdey, Parsons Engineering, 8000 Centre Park Drive, Suite 200, Austin, TX 78754
Waste Program Manager, TCEQ Region 13 Office, San Antonio, TX

# Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

**To:** Sonny Rayos, Environmental Cleanup Section II, Team 3, Remediation Division **Date:** December 14, 2005

**Thru:** Chet Clarke, Section Manager, Technical Support Section, Remediation Division

**From:** GL 12-14-05 Greg Tipple, Technical Specialist, Technical Support Section, Remediation Division

**Subject:** Three-Tiered Long-Term Monitoring Network Optimization Evaluation, May 2005, Camp Stanley Storage Activity, Bexar County

As requested, I have reviewed the document titled *Three-Tiered Long Term Monitoring Network Optimization Evaluation* that is dated May 2005 and that pertains to Camp Stanley Storage Activity (CSSA). CSSA consists of 4,004 acres and is located approximately 19 miles northwest of downtown San Antonio in the general vicinity of Boerne, Texas. Primary activities at CSSA include the receipt, storage, and issuance of ordnance material as well as quality assurance testing and maintenance of military weapons and ammunition. While 39 solid waste management units (SWMUs) and 40 areas of concern (AOCs) have been identified at the facility, only SWMUs B-3 and O-1 and AOC-65 are considered as potential sources for elevated concentrations of tetrachloroethene, trichloroethene, dichloroethene, and other chemicals of concern within the Lower Glen Rose limestone member of the middle Trinity Aquifer. The reviewed document describes qualitative, temporal statistical, and spatial statistical evaluations that were performed in order to identify potential opportunities for streamlining while still maintaining an effective groundwater monitoring program at the CSSA facility.

This groundwater monitoring optimization study for the CSSA facility recommends the following:

1. that the sampling frequency for the 40 on-post monitoring wells be reduced from quarterly to a biennial, annual, and semi-annual schedule for 13, 11, and 16 on-post wells, respectively;

2. that the AOC-65 piezometers be removed from the monitoring program while the sampling frequency for the 2 AOC-65 monitoring wells be reduced from quarterly to after significant rainfall events;

3. that the sampling frequency for the 4 Westbay monitoring wells, with a total of 64 sampling points, be reduced from monthly and after significant rainfall events to semi-annual;

4. that 11 additional on-post monitoring wells be constructed to better determine groundwater levels and/or to further delineate groundwater PCLE zone boundaries; and

5. that the monitoring frequency for the 44 off-post monitoring wells be reduced from annual for 18 wells and quarterly for 26 wells to biennial for 20 wells, annual for 17 wells, and quarterly for 7 wells.

In my evaluation, the groundwater monitoring optimization report provides adequate documentation and rationale to support the first four recommendations stated above. However, I do have concern regarding the fifth recommendation. The document indicates that the distance to potential receptor exposure points and the groundwater seepage velocity are primary factors that should be considered when designing a groundwater monitoring network. The report indicates that the land use surrounding the CSSA facility is primarily residential or is used for ranching. In my view, the report does not adequately discuss how the proximity of potential receptors and the groundwater transport velocity were actually taken into account when designing the proposed revision to the sampling frequencies for the off-post monitoring wells. The TCEQ, of course, has a heightened concern to make sure that the groundwater monitoring program will adequately protect off-site receptors. Therefore, I recommend that you carefully consider whether the final recommendation listed above should be approved.

**Vaughn, Kimberly**

**From:** Burdey, Julie
**Sent:** Wednesday, November 16, 2005 12:48 PM
**To:** Vaughn, Kimberly
**Subject:** FW: Approval of the LTMO Changes On-Post

-----Original Message-----
From: Glare Sanchez [mailto:environmentaldept@campstanley.net]
Sent: Wednesday, November 16, 2005 11:55 AM
To: Lyssy.Gregory@epamail.epa.gov
Cc: Burdey, Julie
Subject: RE: Approval of the LTMO Changes On-Post

Thanks!!

-----Original Message-----
From: Lyssy.Gregory@epamail.epa.gov [mailto:Lyssy.Gregory@epamail.epa.gov]
Sent: Monday, November 14, 2005 12:59 PM
To: Glare Sanchez
Cc: Jeff Aston
Subject: Approval of the LTMO Changes On-Post

Hey Glare:

I received a voice-mail message from Julie at Parsons concerning the LTMO recommendations for the December sampling. I hereby approve the optimization recommendations for the on-post portion of the CSSA monitoring network, starting with the December sampling event.

Please feel free to call me with any questions.

Greg J. Lyssy
U.S. EPA
Senior Project Manager
New Mexico - Federal Facilities Section (6PD-F) Phone - 214.665.8317 Cell Phone - 214.543.4415 Fax - 214.665.7263 lyssy.gregory@epa.gov

THIS PAGE INENTIONALLY LEFT BLANK

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

April 20, 2004

LTC Jason D. Shirley, Commander
Camp Stanley Storage Activity
25800 Ralph Fair Road
Boerne, TX 78015-4800

Re: Camp Stanley Storage Activity (CSSA), Boerne, TX;
TCEQ SWR No. 69026;
Data Quality Objectives Groundwater Contamination Investigation - Approval

Dear Mr. Shirley:

The Texas Commission on Environmental Quality (TCEQ) has received the report entitled *Data Quality Objectives Groundwater Contamination Investigation - Revised November 2003*. The TCEQ has reviewed the report. The TCEQ does not have any comment regarding the report. The data quality objectives specified in the report appears to be adequate in addressing the investigation and characterization of the on-site and off-site groundwater contamination.

Please call me at 512.239.2371 or email me at srayos@tceq.state.tx.us if you wish to discuss or if you have any questions concerning this letter.

Sincerely,

Sonny Rayos, P.G., Project Manager
Team I, Corrective Action Section
Remediation Division
Texas Commission on Environmental Quality

cc: Mr. Brian Murphy, Camp Stanley Storage Activity, 25800 Ralph Fair Road, Boerne, TX 78015-4800
Mr. Greg Lyssy, U.S. EPA Region 6, 1445 Ross Ave (6SF-LT), Dallas, TX 75202-2733
Ms. Julie Burdey, Parsons Engineering, 8000 Centre Park Drive, Suite 200, Austin, TX 78754
Waste Program Manager, TCEQ Region 13 Office, San Antonio, TX

THIS PAGE INENTIONALLY LEFT BLANK

PARSONS

8000 Centre Park Drive, Suite 200 • Austin, Texas 78754 • (512) 719-6000 • Fax: (512) 719-6099 • www.parsons.com

August 26, 2002

*Via facsimile*

Mr. Greg J. Lyssy
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue
Dallas, TX 75202-2733

Subject: Camp Stanley Storage Activity (CSSA) Groundwater Monitoring Program
TNRCC Number: Solid Waste Registration Number 69026
EPA Identification Number: TXD2210020739

Dear Mr. Lyssy:

This letter concerns the CSSA Data Quality Objectives (DQOs) for the Groundwater Contamination Investigation submitted April 22, 2002. The DQOs were also submitted to Mr. Kirk Coulter of the Texas Natural Resource Conservation Commission (TNRCC) requesting his review and comments. At this time, CSSA has not received suggestions or revisions to the proposed DQOs.

CSSA is currently planning the September 9, 2002, quarterly groundwater monitoring event for both on- and off-post drinking water and monitoring wells. CSSA proposes to reduce the frequency of sampling of groundwater for metals, as set out in the DQOs. Cumulative analysis for metals in groundwater since 1995 indicate exceedance of the maximum contaminant level (MCL) / action level (AL) for lead, cadmium and nickel only. Results during the last two years of quarterly groundwater monitoring indicate exceedance of the MCL for lead only, occurring in agricultural/livestock wells. Therefore, beginning in September 2002, on-post monitoring wells sampling for metals will be conducted annually. On-post drinking water supply wells will continue to be sampled for metals on a quarterly basis.

Additionally, CSSA requests confirmation of the list of VOCs to be sampled in the future for off-post drinking water wells. Quarterly off-post groundwater monitoring conducted since September 2001 included full list VOCs analyzed under SW 846 Method 8260B. In accordance with the proposed DQOs, CSSA proposes reducing the analyte list for off-post monitoring to the following short list:

1,2-dichloroethane
Acetone
Bromodichloromethane
Bromoform

Chloroform
*cis*-1,2-Dichloroethene
Dibromochloromethane
Dichlorodifluoromethane
Naphthalene
Tetrachloroethene
Toluene
*trans*-1,2-Dichloroethene
Trichloroethene
Vinyl chloride

CSSA prepared the proposed short list of analytes following review of cumulative historical detections of VOCs from off-post groundwater monitoring conducted since 1999. All analytes with detections over the last year of monitoring, even though detections were below MCLs, are included in the proposed short list.

If you have any questions or comments regarding CSSA's plan for metals analysis, a reduced list of analytes, or on the previously submitted DQOs, please call me at (512) 719-6051 or Mr. Brian Murphy, CSSA, at (210) 698-5208.

Sincerely,

Karuna Mirchandani
Deputy Task Manager

xc: Kirk Coulter, TNRCC Remediation Division *Via telefacsimile or hand delivery*
Teri DuPriest, AFCEE
Brian Murphy, CSSA
Susan Roberts, Parsons
Tammy Chang, Parsons

# Appendix B Summary of Historical Detections by Well, 1999 through June 2009

THIS PAGE INENTIONALLY LEFT BLANK

# Summary of Historical Detections by Well
## September 1999 through December 2009

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-1** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | 9/15/2004 | 0.053 F | 9/15/2004 | 0.053 F | 1/38 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | 3/19/2003 | 2.6 | 3/19/2003 | 2.6 | 1/29 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | 3/19/2003 | 3.4 | 3/19/2003 | 3.4 | 1/22 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 3/19/2003 | 1.8 | 9/16/2003 | 0.053 F | 11/19 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/39 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | 3/19/2003 | 3.7 | 3/19/2003 | 3.7 | 1/29 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/23 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/19/2003 | 1.2 F | 9/9/1999 | 0.21 F | 8/22 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/23 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 12/14/1999 | 0.17 F | 9/15/2004 | 0.066 F | 18/21 | 5 |
| | Toluene | SW8260 | 1.1 | 3/19/2003 | 3.7 B | 12/16/2003 | 0.088 F | 6/17 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/39 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 12/12/2000 | 1.2 | 9/15/2004 | 0.093 F | 31/8 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/39 | 2 |
| | Arsenic | SW6010/SW6020 | 30/20 | 9/18/2008 | 2.2 F | 6/15/2006 | 0.40 F | 23/12 | 10 |
| | Barium | SW6010 | 5 | 12/14/2009 | 39 | 3/20/2000 | 28 | 35/0 | 2000 |
| | Cadmium | SW7131/SW6020 | 1.0/2.0 | 12/12/2000 | 15 J | 6/17/2002 | 0.027 F | 3/33 | 5 |
| | Chromium | SW6010 | 10 | 9/13/2000 | 6.0 F | 9/9/1999 | 2.0 F | 8/27 | 100 |
| | Copper | SW6010 | 10 | 3/11/2004 | 42 J | 12/16/2003 | 2.0 F | 28/7 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/26/2008 | 0.40 F | 12/2/2004 | 0.039 F | 6/29 | 2 |
| | Nickel | SW6010 | 10 | 12/11/2001 | 3.0 F | 3/19/2001 | 1.4 F | 7/24 | -- [6] |
| | Lead | SW7421/SW6020 | 5.0/2.0 | 9/13/2000 | 85 J | 6/15/2006 | 0.98 F | 32/4 | 15 |
| | Zinc | SW6010 | 50 | 12/12/2000 | 1,800 | 9/18/2008 | 67 | 34/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-2** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/40 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/35 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/18 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 3/20/2003 | 0.12 F | 12/16/2002 | 0.11 F | 2/33 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/40 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/35 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/18 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/19/2003 | 0.73 F | 9/16/2004 | 0.28 F | 5/30 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/18 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 9/7/1999 | 1.1 F | 9/10/2002 | 0.073 F | 20/20 | 5 |
| | Toluene | SW8260 | 1.1 | 3/20/2003 | 8.7 J | 3/20/2003 | 8.7 J | 1/17 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/40 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 12/9/2009 | 0.18 F | 12/10/2003 | 0.071 F | 3/37 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/40 | 2 |
| | Arsenic | SW6010/SW6020 | 30/20 | 1/30/2006 | 5.6 F | 6/16/2004 | 0.54 F | 10/15 | 10 |
| | Barium | SW6010 | 5.0 | 6/13/2006 | 40 | 6/14/2005 | 32 | 25/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 6/19/2003 | 0.11 F | 6/18/2002 | 0.029 F | 3/26 | 5 |
| | Chromium | SW6010 | 10 | 6/18/2002 | 39 J | 6/14/2005 | 1.9 F | 20/8 | 100 |
| | Copper | SW6010 | 10 | 6/13/2001 | 4.0 F | 12/13/2000 | 0.50 F | 9/16 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/14/2005 | 0.055 F | 6/14/2005 | 0.055 F | 1/27 | 2 |
| | Nickel | SW6010 | 10 | 12/13/2000 | 23 J | 6/14/2005 | 1.2 F | 18/8 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 9/11/2008 | 3.0 F | 12/13/2007 | 0.20 F | 13/16 | 15 |
| | Zinc | SW6010 | 50 | 1/30/2006 | 18 F | 12/13/2000 | 2.9 F | 22/3 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-3** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/1 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/1 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/1 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/1 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/1 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/1 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/1 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | | | | | 0/1 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/1 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 12/16/1999 | 0.99 F | 12/16/1999 | 0.99 F | 1/0 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/1 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/1 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/1 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/1 | 2 |
| | Arsenic | SW7060 | 5.0 | | | | | 0/1 | 10 |
| | Barium | SW6010 | 5.0 | 12/16/1999 | 26 | 12/16/1999 | 26 | 1/0 | 2000 |
| | Cadmium | SW7131 | 1.0 | | | | | 0/1 | 5 |
| | Chromium | SW6010 | 10 | 12/16/1999 | 5.0 F | 12/16/1999 | 5.0 F | 1/0 | 100 |
| | Copper | SW6010 | 10 | 12/16/1999 | 4.0 F | 12/16/1999 | 4.0 F | 1/0 | 1300 |
| | Mercury | SW7470 | 1.0 | | | | | 0/1 | 2 |
| | Nickel | SW6010 | 10 | 12/16/1999 | 2.0 F | 12/16/1999 | 2.0 F | 1/0 | -- [6] |
| | Lead | SW7421 | 5.0 | | | | | 0/1 | 15 |
| | Zinc | SW6010 | 50 | 12/16/1999 | 13 | 12/16/1999 | 13 | 1/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-4** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/17 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/12 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/12 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 6/16/2004 | 0.057 F | 6/16/2004 | 0.057 F | 1/11 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 12/9/2009 | 65 J | 9/25/2003 | 0.11 F | 13/4 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/12 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/12 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/25/2003 | 0.43 F | 3/11/2004 | 0.28 M | 4/8 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/12 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 12/9/2009 | 43 | 12/16/2003 | 0.70 F | 17/0 | 5 |
| | Toluene | SW8260 | 1.1 | 12/16/2003 | 0.076 F | 12/16/2003 | 0.076 F | 1/11 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | 12/9/2009 | 0.73 J | 9/15/2004 | 0.058 F | 4/13 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 12/9/2009 | 87 | 12/16/2003 | 0.43 F | 17/0 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/17 | 2 |
| | Arsenic | SW6020 | 20 | 6/23/2003 | 0.57 F | 6/16/2004 | 0.42 F | 3/0 | 10 |
| | Barium | SW6010 | 5.0 | 6/23/2003 | 31 | 6/14/2005 | 29 | 3/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 9/25/2007 | 0.50 F | 6/16/2004 | 0.034 F | 4/3 | 5 |
| | Chromium | SW6010 | 10 | | | | | 0/5 | 100 |
| | Copper | SW6010 | 10 | 6/23/2003 | 2.0 F | 6/23/2003 | 2.0 F | 1/2 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/14/2005 | 0.056 F | 6/14/2005 | 0.056 F | 1/4 | 2 |
| | Nickel | SW6010 | 10 | | | | | 0/5 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 3/12/2008 | 2.8 F | 6/23/2003 | 0.19 F | 6/1 | 15 |
| | Zinc | SW6010 | 50 | 6/23/2003 | 72 | 6/16/2004 | 9.3 F | 3/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-9** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/38 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/28 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/22 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 6/13/2006 | 1.1 | 6/13/2006 | 1.1 | 1/27 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/38 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/28 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/22 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 6/13/2006 | 1.1 F | 9/8/1999 | 0.17 F | 7/21 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/22 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 3/19/2001 | 0.11 F | 9/16/2003 | 0.05 F | 6/32 | 5 |
| | Toluene | SW8260 | 1.1 | 3/19/2003 | 3.0 B | 12/15/2003 | 0.10 F | 6/16 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/38 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/38 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/38 | 2 |
| | Arsenic | SW6010/SW6020 | 30/20 | 9/16/2008 | 1.2 F | 12/10/2002 | 0.34 F | 20/15 | 10 |
| | Barium | SW6010 | 5.0 | 6/11/2009 | 46 | 12/3/2004 | 29 | 35/0 | 2000 |
| | Cadmium | SW7131/SW6020 | 1.0/2.0 | 9/17/2001 | 0.30 F | 9/10/2002 | 0.032 F | 7/30 | 5 |
| | Chromium | SW6010 | 10 | 6/13/2006 | 8.8 F | 12/14/2009 | 2.0 F | 10/26 | 100 |
| | Copper | SW6010 | 10 | 6/26/2008 | 47 | 12/3/2004 | 1.9 F | 31/4 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/11/2009 | 10 | 12/3/2004 | 0.031 F | 21/18 | 2 |
| | Nickel | SW6010 | 10 | 12/13/2007 | 22 | 9/8/1999 | 1.0 F | 8/23 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 6/26/2008 | 54 | 6/15/2005 | 0.56 F | 40/0 | 15 |
| | Zinc | SW6010 | 50 | 6/13/2006 | 3,400 | 6/22/2004 | 49 F | 38/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-10** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | 9/15/2004 | 0.071 F | 9/15/2004 | 0.071 F | 1/37 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | 6/22/2006 | 1.5 | 6/22/2006 | 1.5 | 1/27 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | 6/22/2006 | 0.30 F | 6/22/2006 | 0.30 F | 1/21 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 6/22/2006 | 9.4 | 6/17/2002 | 0.053 F | 23/5 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/38 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | 6/22/2006 | 0.75 | 6/22/2006 | 0.75 | 1/27 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/22 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/11/2004 | 0.61 F | 9/10/1999 | 0.12 F | 8/20 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/22 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 3/19/2001 | 0.11 F | 6/22/2004 | 0.055 F | 9/29 | 5 |
| | Toluene | SW8260 | 1.1 | 6/22/2006 | 16 | 12/16/2003 | 0.089 F | 4/18 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/38 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/38 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/38 | 2 |
| | Arsenic | SW6010 | 30 | 9/16/2008 | 3.4 F | 12/14/2009 | 0.40 F | 20/15 | 10 |
| | Barium | SW6010 | 5.0 | 6/22/2006 | 46 | 6/17/2002 | 35 | 35/0 | 2000 |
| | Cadmium | SW7131/SW6020 | 1.0/2.0 | 9/17/2001 | 0.20 F | 12/10/2002 | 0.026 F | 5/31 | 5 |
| | Chromium | SW6010 | 10 | 9/13/2000 | 6.0 F | 3/19/2003 | 0.74 F | 9/26 | 100 |
| | Copper | SW6010 | 10 | 3/11/2004 | 13 J | 9/10/2002 | 1.4 F | 25/10 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/22/2006 | 0.58 F | 9/15/2004 | 0.029 F | 8/27 | 2 |
| | Nickel | SW6010 | 10 | 9/17/2001 | 9.0 F | 9/8/2005 | 1.2 F | 14/15 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 9/16/2008 | 5.4 F | 6/22/2004 | 0.48 F | 24/12 | 15 |
| | Zinc | SW6010 | 5 | 12/14/2009 | 1,300 | 9/15/2004 | 13 F | 35/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-11** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | 9/10/2002 | 0.032 F | 9/10/2002 | 0.032 F | 1/28 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | 9/10/1999 | 0.23 F | 9/10/1999 | 0.23 F | 1/24 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/16 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 9/10/1999 | 49 | 12/16/2003 | 0.11 F | 7/18 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 3/19/2001 | 0.38 F | 12/11/2001 | 0.30 F | 2/27 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/25 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/16 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/10/1999 | 0.68 F | 3/11/2004 | 0.21 M | 5/20 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/16 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 6/14/2000 | 0.41 F | 3/14/2002 | 0.062 F | 3/26 | 5 |
| | Toluene | SW8260 | 1.1 | 3/19/2003 | 2.3 | 12/16/2003 | 0.098 F | 2/14 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/29 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 3/19/2001 | 0.20 F | 3/19/2001 | 0.20 F | 1/28 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/29 | 2 |
| | Arsenic | SW7060/SW6020 | 5.0/20 | 3/20/2000 | 0.80 F | 6/14/2006 | 0.26 F | 8/7 | 10 |
| | Barium | SW6010 | 5.0 | 9/10/1999 | 64 | 6/14/2006 | 21 | 15/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 6/14/2006 | 0.087 F | 3/14/2002 | 0.062 F | 2/16 | 5 |
| | Chromium | SW6010 | 10 | 9/15/2008 | 20 | 3/19/2001 | 2.0 F | 8/9 | 100 |
| | Copper | SW6010 | 10 | 6/22/2004 | 13 | 12/15/1999 | 2.0 F | 12/3 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/9/2009 | 0.20 F | 6/17/2003 | 0.04 F | 3/14 | 2 |
| | Nickel | SW6010 | 10 | 9/10/1999 | 4.0 F | 12/12/2000 | 1.6 F | 4/12 | -- [6] |
| | Lead | SW6010/SW7421 | 25/5.0 | 9/15/2008 | 200 | 6/14/2000 | 2.6 F | 15/3 | 15 |
| | Zinc | SW6010 | 50 | 6/17/2002 | 5,800 | 6/14/2000 | 420 | 15/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-12** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/5 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/2 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/2 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 3/25/2009 | 1.5 | 3/25/2009 | 1.4 | 2/0 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/5 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/2 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/2 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | | | | | 0/2 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/4 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/5 | 5 |
| | Toluene | SW8260 | 1.1 | 3/25/2009 | 0.55 F | 3/25/2009 | 0.54 F | 2/0 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/5 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/5 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/5 | 2 |
| | Arsenic | SW6010 | 30 | 12/14/2009 | 1.3 F | 12/14/2009 | 1.2 F | 2/3 | 10 |
| | Barium | SW6010 | 5.0 | 3/25/2009 | 34 | 9/14/2009 | 29 | 5/0 | 2000 |
| | Cadmium | SW6010 | 7.0 | | | | | 0/5 | 5 |
| | Chromium | SW6010 | 10 | 3/25/2009 | 2.0 F | 3/25/2009 | 2.0 F | 2/3 | 100 |
| | Copper | SW6010 | 10 | 12/14/2009 | 14 J | 12/14/2009 | 11 J | 3/2 | 1300 |
| | Mercury | SW7470 | 1.0 | | | | | 0/5 | 2 |
| | Nickel | SW6010 | 10 | 3/25/2009 | 3.0 F | 3/25/2009 | 3.0 F | 2/0 | -- [6] |
| | Lead | SW6010 | 25 | 9/14/2009 | 4.5 F | 9/14/2009 | 4.5 F | 1/4 | 15 |
| | Zinc | SW6010 | 50 | 3/25/2009 | 310 | 12/14/2009 | 220 | 5/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-D** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | 9/18/2003 | 0.15 F | 3/20/2003 | 0.061 F | 12/27 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/32 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/21 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 6/19/2003 | 0.24 F | 6/18/2002 | 0.10 F | 27/5 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 12/10/2003 | 270 | 10/28/2008 | 34 | 39/0 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/32 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/21 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/14/2002 | 4.9 R | 3/16/2006 | 0.19 F | 8/23 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/21 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 12/10/2003 | 230 | 3/16/2006 | 53 | 39/0 | 5 |
| | Toluene | SW8260 | 1.1 | 3/20/2003 | 2.7 J | 3/20/2003 | 1.3 J | 2/19 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | 3/20/2003 | 12 J | 12/14/2001 | 0.43 F | 39/0 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 9/18/2003 | 300 | 10/28/2008 | 39 | 39/0 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | 9/18/2003 | 0.062 F | 3/20/2003 | 0.03 F | 3/36 | 2 |
| | Arsenic | SW6010/SW6020 | 30/20 | 4/21/2008 | 10 | 6/16/2004 | 0.16 F | 7/11 | 10 |
| | Barium | SW6010 | 5.0 | 10/28/2008 | 32 | 6/18/2002 | 27 | 18/0 | 2000 |
| | Cadmium | SW7131/SW6020 | 1.0/2.0 | 6/13/2001 | 0.70 F | 6/16/2004 | 0.053 F | 8/16 | 5 |
| | Chromium | SW6010 | 10 | 3/20/2001 | 4.0 F | 6/8/2005 | 0.92 F | 4/18 | 100 |
| | Copper | SW6010 | 10 | 6/13/2001 | 6.0 F | 3/20/2001 | 1.0 F | 6/12 | 1300 |
| | Mercury | SW7470 | 1.0 | 7/21/2008 | 0.12 F | 1/21/2008 | 0.089 F | 2/20 | 2 |
| | Nickel | SW6010 | 10 | 12/14/2001 | 9.0 F | 10/15/2007 | 0.66 F | 10/10 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 9/15/2009 | 5.6 F | 6/19/2003 | 0.33 F | 15/9 | 15 |
| | Zinc | SW6010 | 50 | 10/15/2007 | 280 | 7/21/2008 | 9.0 F | 17/1 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-I** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/22 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/21 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/13 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/21 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/22 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/21 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/13 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 6/12/2006 | 0.60 F | 3/13/2002 | 0.23 F | 5/16 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/13 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 9/7/2004 | 0.054 F | 9/7/2004 | 0.054 F | 1/21 | 5 |
| | Toluene | SW8260 | 1.1 | 9/24/2003 | 23 | 12/9/2003 | 0.22 F | 2/11 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/22 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 9/7/2004 | 0.041 F | 9/7/2004 | 0.041 F | 1/21 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/22 | 2 |
| | Arsenic | SW6020 | 20 | 3/13/2002 | 1.9 F | 6/15/2004 | 0.25 F | 5/9 | 10 |
| | Barium | SW6010 | 5.0 | 3/13/2002 | 160 J | 9/12/2001 | 100 J | 14/0 | 2000 |
| | Cadmium | SW7131/SW6020 | 1.0/2.0 | 12/17/2001 | 0.30 F | 6/6/2005 | 0.089 F | 3/12 | 5 |
| | Chromium | SW6010 | 10 | 3/13/2002 | 9.1 F | 6/12/2001 | 2.0 F | 9/6 | 100 |
| | Copper | SW6010 | 10 | 3/13/2002 | 57 | 3/20/2001 | 1.0 F | 11/3 | 1300 |
| | Mercury | SW7470 | 1.0 | 3/13/2002 | 0.66 F | 12/17/2001 | 0.20 F | 3/12 | 2 |
| | Nickel | SW6010 | 10 | 3/13/2002 | 6.9 F | 12/12/2000 | 1.5 F | 10/4 | -- [6] |
| | Lead | SW6020 | 2.0 | 3/13/2002 | 87 | 6/15/2004 | 0.30 F | 8/7 | 15 |
| | Zinc | SW6010 | 50 | 6/12/2001 | 3,500,000 | 6/15/2004 | 18 F | 14/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW1-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | 9/10/2002 | 0.045 F | 9/10/2002 | 0.045 F | 1/46 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/38 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/27 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 4/20/2009 | 0.14 F | 12/12/2001 | 0.07 F | 15/23 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 7/27/2007 | 82 | 3/21/2000 | 2.3 | 47/0 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/38 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/27 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/9/2004 | 0.64 F | 3/14/2006 | 0.19 F | 6/32 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/27 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 7/27/2007 | 50 | 1/20/2009 | 2.5 | 47/0 | 5 |
| | Toluene | SW8260 | 1.1 | 3/20/2003 | 5.2 J | 3/20/2003 | 5.2 J | 1/26 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | 7/27/2007 | 2.9 | 12/10/2003 | 0.13 F | 41/6 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 7/27/2007 | 68 | 3/21/2000 | 3.0 | 47/0 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | 3/20/2003 | 0.032 F | 3/20/2003 | 0.032 F | 1/46 | 2 |
| | Arsenic | SW6010/SW6020 | 30/20 | 4/21/2008 | 16 | 6/17/2004 | 0.26 F | 13/12 | 10 |
| | Barium | SW6010 | 5.0 | 4/20/2009 | 36 | 6/12/2000 | 25 | 25/0 | 2000 |
| | Cadmium | SW7131/SW6020 | 1.0/2.0 | 9/12/2000 | 0.60 F | 9/10/2002 | 0.027 F | 3/29 | 5 |
| | Chromium | SW6010 | 10 | 3/17/2009 | 100 | 9/10/2002 | 1.3 F | 21/8 | 100 |
| | Copper | SW6010 | 10 | 6/13/2001 | 5.0 F | 9/12/2000 | 1.0 F | 10/15 | 1300 |
| | Mercury | SW7470 | 1.0 | 1/25/2006 | 0.24 | 4/20/2009 | 0.077 F | 5/24 | 2 |
| | Nickel | SW6010 | 10 | 9/25/2007 | 66 | 9/13/2001 | 2.0 F | 25/3 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 1/20/2009 | 2.8 F | 6/17/2004 | 0.091 F | 7/25 | 15 |
| | Zinc | SW6010 | 50 | 9/10/2002 | 81 | 1/25/2006 | 3.2 F | 20/5 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW1-BS** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/17 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/14 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/14 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/14 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 11/21/2002 | 2.2 | 3/9/2004 | 0.12 F | 16/2 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/14 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/14 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/9/2004 | 0.62 F | 9/15/2003 | 0.33 F | 3/11 | 5 |
| | Naphthalene | SW8260 | 1.0 | 9/15/2003 | 0.11 F | 9/15/2003 | 0.11 F | 1/13 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 3/25/2003 | 0.19 F | 3/25/2003 | 0.19 F | 1/17 | 5 |
| | Toluene | SW8260 | 1.1 | 6/16/2003 | 26 | 9/14/2005 | 0.34 F | 14/1 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/18 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 3/25/2003 | 0.24 F | 7/26/2004 | 0.044 F | 9/9 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | 6/16/2003 | 0.069 F | 6/16/2003 | 0.069 F | 1/16 | 2 |
| | Arsenic | SW6020 | 20 | 6/13/2005 | 2.6 F | 3/25/2003 | 1.6 F | 5/0 | 10 |
| | Barium | SW6010 | 5.0 | 6/16/2003 | 51 | 3/25/2003 | 30 | 5/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 6/17/2004 | 0.036 F | 3/25/2003 | 0.025 F | 3/5 | 5 |
| | Chromium | SW6010 | 10 | 12/10/2009 | 12 | 3/25/2003 | 1.0 F | 3/4 | 100 |
| | Copper | SW6010 | 10 | 3/25/2003 | 1.8 F | 6/16/2003 | 1.7 F | 2/3 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/13/2005 | 0.071 F | 6/16/2003 | 0.038 F | 2/5 | 2 |
| | Nickel | SW6010 | 10 | 6/16/2003 | 9.8 F | 6/13/2005 | 3.3 F | 2/4 | -- [6] |
| | Lead | SW6020 | 2.0 | 6/13/2005 | 0.33 F | 6/16/2003 | 0.20 F | 2/6 | 15 |
| | Zinc | SW6010 | 50 | 6/16/2003 | 78 | 3/25/2003 | 34 | 2/3 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW1-CC** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/17 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/13 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/13 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/13 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 11/10/2002 | 3.2 | 6/17/2004 | 0.17 R | 2/19 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/13 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/13 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/8/2004 | 0.52 F | 3/11/2004 | 0.27 M | 4/9 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/13 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 11/10/2002 | 1.3 F | 11/10/2002 | 1.3 F | 1/20 | 5 |
| | Toluene | SW8260 | 1.1 | 11/10/2002 | 40 | 9/8/2004 | 0.086 F | 9/8 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/21 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 11/10/2002 | 1.2 F | 11/10/2002 | 1.2 F | 1/20 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | 6/16/2003 | 0.052 F | 6/16/2003 | 0.052 F | 1/16 | 2 |
| | Arsenic | SW6020 | 20 | 3/25/2003 | 1.5 F | 6/13/2005 | 0.38 F | 4/0 | 10 |
| | Barium | SW6010 | 5.0 | 6/16/2003 | 30 | 6/13/2005 | 17 | 4/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 9/25/2007 | 1.8 F | 9/25/2007 | 0.20 F | 2/6 | 5 |
| | Chromium | SW6010 | 10 | 6/13/2005 | 1.4 F | 6/13/2005 | 1.4 F | 1/5 | 100 |
| | Copper | SW6010 | 10 | 3/25/2003 | 1.8 F | 6/16/2003 | 1.7 F | 2/2 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/13/2005 | 0.054 F | 6/16/2003 | 0.038 F | 2/4 | 2 |
| | Nickel | SW6010 | 10 | | | | | 0/6 | -- [6] |
| | Lead | SW6020 | 2.0 | 6/13/2005 | 0.32 F | 6/17/2004 | 0.14 F | 3/5 | 15 |
| | Zinc | SW6010 | 50 | 6/16/2003 | 5.0 F | 6/13/2005 | 4.7 F | 2/2 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW2-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/43 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/34 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/19 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/34 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 9/13/2001 | 4.6 | 3/17/2009 | 0.51 F | 43/0 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/34 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/19 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/9/2004 | 0.78 F | 9/9/1999 | 0.12 F | 6/28 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/19 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 9/18/2000 | 14 | 9/25/2007 | 0.11 F | 33/10 | 5 |
| | Toluene | SW8260 | 1.1 | 3/9/2004 | 8.1 | 9/10/2002 | 0.071 F | 15/4 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | 3/20/2001 | 0.27 F | 6/17/2003 | 0.04 F | 18/25 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 3/20/2001 | 9.8 | 3/11/2008 | 0.06 F | 34/9 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | 3/20/2003 | 0.032 F | 3/20/2003 | 0.032 F | 1/42 | 2 |
| | Arsenic | SW6020/SW7060 | 20/5.0 | 6/17/2003 | 4.0 F | 9/12/2000 | 0.50 F | 10/13 | 10 |
| | Barium | SW6010 | 5.0 | 1/25/2006 | 220 | 3/20/2001 | 30 | 23/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 9/25/2007 | 1.0 F | 6/8/2005 | 0.05 F | 7/22 | 5 |
| | Chromium | SW6010 | 10 | 3/21/2000 | 9.0 F | 6/8/2005 | 1.8 F | 15/12 | 100 |
| | Copper | SW6010 | 10 | 6/13/2001 | 5.0 F | 3/20/2001 | 1.0 F | 8/15 | 1300 |
| | Mercury | SW7470 | 1.0 | 1/25/2006 | 0.25 | 6/17/2003 | 0.038 F | 2/25 | 2 |
| | Nickel | SW6010 | 10 | 9/12/2000 | 38 | 3/11/2008 | 3.0 F | 24/1 | -- [6] |
| | Lead | SW6020 | 2.0 | 9/25/2007 | 3.6 | 6/17/2004 | 0.18 F | 7/22 | 15 |
| | Zinc | SW6010 | 50 | 6/8/2005 | 110 | 9/12/2000 | 3.0 F | 22/1 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW2-CC** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/14 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/11 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/11 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/11 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/18 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/11 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/11 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/9/2004 | 0.75 F | 9/15/2003 | 0.36 F | 4/7 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/11 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/18 | 5 |
| | Toluene | SW8260 | 1.1 | 9/7/2005 | 2.7 | 6/17/2004 | 0.11 F | 10/5 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/18 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/18 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/14 | 2 |
| | Arsenic | SW6020 | 20 | 6/8/2005 | 0.46 F | 6/17/2004 | 0.30 F | 3/0 | 10 |
| | Barium | SW6010 | 5.0 | 6/17/2003 | 37 | 6/8/2005 | 17 | 3/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 9/25/2007 | 0.50 F | 9/25/2007 | 0.50 F | 1/5 | 5 |
| | Chromium | SW6010 | 10 | | | | | 0/5 | 100 |
| | Copper | SW6010 | 10 | 6/17/2003 | 1.1 F | 6/17/2003 | 1.1 F | 1/2 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/17/2003 | 0.037 F | 6/17/2003 | 0.037 F | 1/4 | 2 |
| | Nickel | SW6010 | 10 | 9/25/2007 | 11 | 6/8/2005 | 2.6 F | 2/2 | -- [6] |
| | Lead | SW6020 | 2.0 | 9/25/2007 | 2.5 | 6/8/2005 | 0.20 F | 2/4 | 15 |
| | Zinc | SW6010 | 50 | 6/17/2003 | 27 | 6/8/2005 | 11 F | 2/1 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW3-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/29 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/20 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/14 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/20 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/29 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/20 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/14 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 12/17/2001 | 0.49 F | 3/13/2002 | 0.20 F | 8/12 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/14 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 9/7/2004 | 0.062 F | 9/7/2004 | 0.062 F | 1/28 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/14 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/29 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 11/29/2004 | 0.21 F | 9/7/2004 | 0.056 F | 2/27 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/29 | 2 |
| | Arsenic | SW7060/SW6020 | 5.0/20 | 9/12/2001 | 2.1 F | 6/7/2005 | 0.44 F | 5/3 | 10 |
| | Barium | SW6010 | 5.0 | 9/12/2001 | 29 J | 6/20/2003 | 27 | 8/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 10/1/2007 | 0.30 F | 6/20/2003 | 0.081 F | 3/12 | 5 |
| | Chromium | SW6010 | 10 | 12/16/2009 | 2.0 F | 12/16/2009 | 2.0 F | 3/10 | 100 |
| | Copper | SW6010 | 10 | | | | | 0/8 | 1300 |
| | Mercury | SW7470 | 1.0 | | | | | 0/13 | 2 |
| | Nickel | SW6010 | 10 | 10/1/2007 | 6.0 F | 6/7/2005 | 1.4 F | 5/5 | -- [6] |
| | Lead | SW7421/SW6020 | 5.0/2.0 | 6/14/2001 | 32 | 6/15/2004 | 0.13 F | 8/7 | 15 |
| | Zinc | SW6010 | 50 | 6/14/2001 | 62 | 6/15/2004 | 20 F | 8/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW4-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/26 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/20 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/14 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/20 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 3/21/2003 | 0.22 F | 6/18/2002 | 0.11 F | 12/14 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/20 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/14 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/9/2004 | 0.57 F | 12/10/2003 | 0.33 M | 4/16 | 5 |
| | Naphthalene | SW8260 | 1.0 | 3/21/2003 | 0.86 | 6/14/2001 | 0.25 F | 2/12 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 3/21/2003 | 0.12 F | 6/23/2003 | 0.061 F | 6/20 | 5 |
| | Toluene | SW8260 | 1.1 | 3/21/2003 | 2.5 J | 3/21/2003 | 2.5 J | 1/13 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/26 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 12/9/2009 | 0.17 F | 6/23/2003 | 0.044 F | 8/18 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | 3/21/2003 | 0.051 F | 3/21/2003 | 0.051 F | 1/25 | 2 |
| | Arsenic | SW7060 | 5.0 | 6/14/2001 | 3.0 F | 12/12/2001 | 0.90 F | 9/0 | 10 |
| | Barium | SW6010 | 5.0 | 6/8/2005 | 54 | 9/13/2001 | 42 J | 9/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 9/27/2007 | 0.70 F | 3/14/2002 | 0.032 F | 2/11 | 5 |
| | Chromium | SW6010 | 10 | 3/17/2009 | 3.0 F | 6/14/2001 | 2.0 F | 2/9 | 100 |
| | Copper | SW6010 | 10 | 6/14/2001 | 4.0 F | 6/14/2001 | 4.0 F | 1/8 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/8/2005 | 0.045 F | 6/8/2005 | 0.045 F | 1/10 | 2 |
| | Nickel | SW6010 | 10 | 6/14/2001 | 29 | 6/8/2005 | 2.7 F | 9/2 | -- [6] |
| | Lead | SW6020 | 2.0 | 9/27/2007 | 1.0 F | 3/14/2002 | 0.15 F | 3/10 | 15 |
| | Zinc | SW6010 | 50 | 6/14/2001 | 19 F | 6/18/2002 | 5.5 F | 6/3 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW5-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/28 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/20 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/14 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/20 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 3/17/2003 | 2.8 | 9/11/2002 | 0.46 F | 28/0 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/20 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/14 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/9/2004 | 0.55 F | 3/21/2002 | 0.22 F | 5/15 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/14 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 3/17/2003 | 1.7 | 9/11/2002 | 0.32 F | 27/1 | 5 |
| | Toluene | SW8260 | 1.1 | 3/17/2003 | 0.077 F | 12/11/2003 | 0.068 F | 2/12 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | 3/17/2003 | 0.08 F | 6/18/2002 | 0.041 F | 7/21 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 6/23/2003 | 2.6 | 9/11/2002 | 0.40 F | 28/0 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/28 | 2 |
| | Arsenic | SW7060/SW6020 | 5.0/20 | 6/14/2001 | 5.2 | 6/16/2004 | 1.7 F | 9/0 | 10 |
| | Barium | SW6010 | 5.0 | 6/14/2001 | 37 | 3/21/2002 | 6.1 | 9/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 9/27/2007 | 0.40 F | 3/21/2002 | 0.022 F | 3/12 | 5 |
| | Chromium | SW6010 | 10 | 12/9/2009 | 3.0 F | 9/11/2008 | 2.0 F | 3/10 | 100 |
| | Copper | SW6010 | 10 | | | | | 0/9 | 1300 |
| | Mercury | SW7470 | 1.0 | | | | | 0/13 | 2 |
| | Nickel | SW6010 | 10 | 6/14/2001 | 32 | 3/11/2008 | 7.0 F | 11/0 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 9/11/2008 | 5.0 F | 6/16/2004 | 0.094 F | 8/7 | 15 |
| | Zinc | SW6010 | 50 | 6/14/2001 | 140 | 6/16/2004 | 9.5 F | 9/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW6-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/27 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/19 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/13 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/19 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 6/13/2001 | 0.26 F | 6/13/2001 | 0.26 F | 1/26 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/19 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/13 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/8/2004 | 0.84 F | 6/20/2002 | 0.25 F | 5/14 | 5 |
| | Naphthalene | SW8260 | 1.0 | 3/18/2003 | 0.25 F | 3/18/2003 | 0.25 F | 1/12 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 6/13/2001 | 0.50 F | 6/13/2001 | 0.50 F | 1/26 | 5 |
| | Toluene | SW8260 | 1.1 | 3/18/2003 | 2.2 B | 12/11/2003 | 0.061 F | 3/10 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/27 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 6/13/2001 | 0.42 F | 6/13/2001 | 0.42 F | 1/26 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/27 | 2 |
| | Arsenic | SW6020 | 20 | 6/20/2002 | 1.0 F | 6/21/2004 | 0.68 F | 5/3 | 10 |
| | Barium | SW6010 | 5.0 | 6/20/2002 | 40 | 6/18/2003 | 31 | 8/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 10/2/2007 | 0.20 F | 10/2/2007 | 0.20 F | 1/14 | 5 |
| | Chromium | SW6010 | 10 | 6/13/2001 | 11 | 3/18/2009 | 2.0 F | 6/6 | 100 |
| | Copper | SW6010 | 10 | 9/13/2001 | 6.0 F | 6/13/2001 | 5.0 F | 2/6 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/9/2005 | 0.082 F | 6/9/2005 | 0.082 F | 1/11 | 2 |
| | Nickel | SW6010 | 10 | 12/13/2001 | 65 | 6/13/2001 | 3.0 F | 11/0 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 9/10/2008 | 4.3 F | 6/9/2005 | 0.22 F | 6/9 | 15 |
| | Zinc | SW6010 | 50 | 6/13/2001 | 35 F | 6/9/2005 | 8.0 F | 8/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW6-BS** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/23 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/20 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/13 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/20 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 3/18/2003 | 0.14 F | 3/18/2003 | 0.14 F | 1/22 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/20 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/13 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/8/2004 | 0.82 F | 6/20/2002 | 0.25 F | 5/15 | 5 |
| | Naphthalene | SW8260 | 1.0 | 3/18/2003 | 0.23 F | 9/16/2003 | 0.12 F | 2/11 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/23 | 5 |
| | Toluene | SW8260 | 1.1 | 3/18/2003 | 1.9 B | 6/18/2003 | 0.076 F | 6/7 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/23 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/23 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/23 | 2 |
| | Arsenic | SW6020/SW7060 | 20/5.0 | 6/21/2004 | 5.6 F | 6/13/2001 | 1.3 F | 8/0 | 10 |
| | Barium | SW6010 | 5.0 | 6/9/2005 | 39 | 6/13/2001 | 9.5 | 8/0 | 2000 |
| | Cadmium | SW7131 | 1.0 | | | | | 0/11 | 5 |
| | Chromium | SW6010 | 10 | 6/13/2001 | 5.0 F | 9/10/2009 | 3.0 F | 2/8 | 100 |
| | Copper | SW6010 | 10 | 6/13/2001 | 9.0 F | 9/13/2001 | 4.0 F | 2/6 | 1300 |
| | Mercury | SW7470 | 1.0 | 12/13/2001 | 0.20 F | 12/13/2001 | 0.20 F | 1/9 | 2 |
| | Nickel | SW6010 | 10 | 6/13/2001 | 3.0 F | 6/13/2001 | 3.0 F | 1/8 | -- [6] |
| | Lead | SW6020 | 2.0 | 6/9/2005 | 0.11 F | 6/9/2005 | 0.11 F | 1/10 | 15 |
| | Zinc | SW6010 | 50 | 6/13/2001 | 85 | 6/20/2002 | 3.7 F | 4/4 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW6-CC** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/23 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/21 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/14 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/21 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 3/18/2003 | 0.23 F | 3/18/2003 | 0.23 F | 1/22 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/21 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/14 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/8/2004 | 0.85 F | 6/20/2002 | 0.26 F | 6/15 | 5 |
| | Naphthalene | SW8260 | 1.0 | 3/18/2003 | 0.23 F | 3/18/2003 | 0.23 F | 1/13 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/23 | 5 |
| | Toluene | SW8260 | 1.1 | 3/18/2003 | 2.6 B | 9/10/2004 | 0.11 F | 4/10 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/23 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 3/18/2003 | 0.09 F | 3/18/2003 | 0.09 F | 1/22 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/23 | 2 |
| | Arsenic | SW7060/SW6020 | 5.0/20 | 9/13/2001 | 2.8 F | 6/9/2005 | 0.97 F | 9/1 | 10 |
| | Barium | SW6010 | 5.0 | 6/9/2005 | 38 | 6/13/2001 | 12 | 10/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 10/2/2007 | 0.40 F | 6/18/2003 | 0.083 F | 2/10 | 5 |
| | Chromium | SW6010 | 10 | 6/13/2001 | 17 | 6/13/2001 | 17 | 1/10 | 100 |
| | Copper | SW6010 | 10 | 9/13/2001 | 6.0 F | 6/13/2001 | 5.0 F | 2/8 | 1300 |
| | Mercury | SW7470 | 1.0 | 12/13/2001 | 0.20 F | 12/13/2001 | 0.20 F | 1/10 | 2 |
| | Nickel | SW6010 | 10 | 6/13/2001 | 8.0 F | 6/9/2005 | 1.4 F | 4/7 | -- [6] |
| | Lead | SW7421/SW6020 | 5.0/2.0 | 12/13/2001 | 1.6 F | 3/12/2002 | 0.18 F | 4/8 | 15 |
| | Zinc | SW6010 | 50 | 9/13/2001 | 120 | 6/9/2005 | 6.8 F | 9/1 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW7-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/27 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/19 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/12 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/19 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/27 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/19 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/12 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 12/14/2001 | 0.85 F | 3/11/2004 | 0.20 M | 6/13 | 5 |
| | Naphthalene | SW8260 | 1.0 | 3/18/2003 | 0.32 F | 3/18/2003 | 0.32 F | 1/11 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 9/11/2009 | 0.49 F | 6/23/2003 | 0.053 F | 8/19 | 5 |
| | Toluene | SW8260 | 1.1 | 3/18/2003 | 2.5 B | 9/13/2004 | 0.094 F | 3/9 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/27 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 12/15/2003 | 0.038 F | 3/11/2004 | 0.037 F | 2/25 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/27 | 2 |
| | Arsenic | SW6020 | 20 | 6/13/2005 | 0.77 F | 3/12/2002 | 0.50 F | 5/4 | 10 |
| | Barium | SW6010 | 5.0 | 6/23/2004 | 47 | 3/12/2002 | 20 J | 10/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 10/2/2007 | 0.30 F | 6/23/2003 | 0.078 F | 2/14 | 5 |
| | Chromium | SW6010 | 10 | 3/12/2009 | 5.0 F | 6/13/2005 | 1.3 F | 7/8 | 100 |
| | Copper | SW6010 | 10 | 9/13/2001 | 9.0 F | 9/17/2001 | 4.0 F | 3/7 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/13/2005 | 0.067 F | 6/13/2005 | 0.067 F | 1/13 | 2 |
| | Nickel | SW6010 | 10 | 9/17/2001 | 10.0 | 6/13/2005 | 1.4 F | 5/7 | -- [6] |
| | Lead | SW7421/SW6020 | 5.0/2.0 | 7/31/2001 | 0.90 F | 6/23/2004 | 0.13 F | 6/10 | 15 |
| | Zinc | SW6010 | 50 | 9/13/2001 | 54 | 6/23/2004 | 4.4 F | 10/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW7-CC** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | 6/24/2002 | 0.33 F | 9/13/2004 | 0.034 F | 2/19 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/19 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/12 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/19 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/21 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/19 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/12 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 6/24/2002 | 1.8 F | 12/14/2001 | 0.21 F | 6/13 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/12 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 9/13/2002 | 0.13 F | 9/13/2002 | 0.13 F | 1/20 | 5 |
| | Toluene | SW8260 | 1.1 | 3/18/2003 | 2.8 B | 12/15/2003 | 0.084 F | 3/9 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/21 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/21 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/21 | 2 |
| | Arsenic | SW7060/SW6020 | 5.0/20 | 7/18/2001 | 6.1 | 6/23/2003 | 1.0 F | 9/1 | 10 |
| | Barium | SW6010 | 5.0 | 7/18/2001 | 42 | 6/23/2003 | 25 | 11/0 | 2000 |
| | Cadmium | SW7131 | 1.0 | | | | | 0/12 | 5 |
| | Chromium | SW6010 | 10 | 6/24/2002 | 5.6 F | 9/13/2001 | 2.0 F | 2/10 | 100 |
| | Copper | SW6010 | 10 | | | | | 0/11 | 1300 |
| | Mercury | SW7470 | 1.0 | 12/14/2001 | 0.20 F | 6/13/2005 | 0.052 F | 4/7 | 2 |
| | Nickel | SW6010 | 10 | 7/18/2001 | 15 | 12/14/2001 | 2.0 F | 6/6 | -- [6] |
| | Lead | SW7421/SW6020 | 5.0/2.0 | 12/14/2001 | 1.2 F | 6/23/2004 | 0.11 F | 5/7 | 15 |
| | Zinc | SW6010 | 50 | 6/24/2002 | 57 | 6/23/2003 | 13 | 7/4 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW8-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/26 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/21 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/13 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/21 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 3/18/2003 | 0.21 F | 3/18/2003 | 0.21 F | 1/25 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/21 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/13 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/12/2002 | 0.53 F | 3/12/2004 | 0.31 M | 4/17 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/13 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 12/8/2009 | 2.6 | 6/19/2002 | 0.057 F | 25/1 | 5 |
| | Toluene | SW8260 | 1.1 | 3/18/2003 | 2.9 B | 9/13/2004 | 0.10 F | 3/10 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/26 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 6/12/2001 | 0.18 F | 3/18/2003 | 0.032 F | 4/22 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/26 | 2 |
| | Arsenic | SW7060/SW6020 | 5.0/20 | 9/13/2001 | 1.1 F | 3/12/2002 | 0.50 F | 7/3 | 10 |
| | Barium | SW6010 | 5.0 | 6/12/2001 | 42 | 6/21/2004 | 35 | 10/0 | 2000 |
| | Cadmium | SW6010/SW6020 | 7.0/2.0 | 9/10/2008 | 0.70 F | 6/19/2002 | 0.12 F | 2/12 | 5 |
| | Chromium | SW6010 | 10 | 6/9/2005 | 2.1 F | 9/10/2008 | 2.0 F | 2/11 | 100 |
| | Copper | SW6010 | 10 | 6/19/2002 | 11 | 6/12/2001 | 4.0 F | 2/8 | 1300 |
| | Mercury | SW7470 | 1.0 | 9/13/2001 | 0.20 F | 9/13/2001 | 0.20 F | 1/12 | 2 |
| | Nickel | SW6010 | 10 | 3/12/2002 | 10 | 6/9/2005 | 1.7 F | 6/5 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 9/10/2008 | 2.7 F | 6/21/2004 | 0.16 F | 9/5 | 15 |
| | Zinc | SW6010 | 50 | 9/13/2001 | 88 | 6/21/2004 | 17 F | 10/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW8-CC** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/21 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/19 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/13 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 12/12/2003 | 0.12 R | 12/12/2003 | 0.12 R | 1/18 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/21 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/19 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/13 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/12/2002 | 0.52 F | 12/12/2003 | 0.23 R | 6/13 | 5 |
| | Naphthalene | SW8260 | 1.0 | 9/16/2003 | 0.34 F | 9/16/2003 | 0.34 F | 1/12 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 12/12/2003 | 2.5 R | 9/13/2004 | 0.19 F | 8/13 | 5 |
| | Toluene | SW8260 | 1.1 | 3/19/2003 | 3.5 | 9/13/2004 | 0.082 F | 4/9 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/21 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 12/12/2003 | 0.45 R | 10/2/2007 | 0.08 F | 3/18 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/21 | 2 |
| | Arsenic | SW7060/SW6020 | 5.0/20 | 9/13/2001 | 7.2 J | 6/9/2005 | 2.4 F | 8/0 | 10 |
| | Barium | SW6010 | 5.0 | 12/13/2001 | 42 | 6/19/2002 | 8.8 | 8/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 10/2/2007 | 0.20 F | 6/19/2002 | 0.058 F | 2/8 | 5 |
| | Chromium | SW6010 | 10 | 6/14/2001 | 2.0 F | 6/14/2001 | 2.0 F | 1/8 | 100 |
| | Copper | SW6010 | 10 | 6/14/2001 | 19 | 6/19/2003 | 1.5 F | 3/5 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/19/2003 | 0.023 F | 6/19/2003 | 0.023 F | 1/8 | 2 |
| | Nickel | SW6010 | 10 | 6/14/2001 | 23 | 10/2/2007 | 3.0 F | 3/6 | -- [6] |
| | Lead | SW7421/SW6020 | 5.0/2.0 | 6/14/2001 | 2.6 F | 6/23/2004 | 0.12 F | 5/5 | 15 |
| | Zinc | SW6010 | 50 | 6/14/2001 | 69 | 6/19/2003 | 5.0 F | 3/5 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW9-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/34 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/23 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/15 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/23 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/34 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/23 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/15 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/7/2004 | 0.49 F | 3/13/2002 | 0.22 F | 4/19 | 5 |
| | Naphthalene | SW8260 | 1.0 | 3/17/2003 | 0.49 | 3/17/2003 | 0.49 | 1/14 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 6/10/2008 | 0.26 F | 3/13/2002 | 0.041 F | 8/26 | 5 |
| | Toluene | SW8260 | 1.1 | 3/17/2003 | 0.26 F | 3/17/2003 | 0.26 F | 1/14 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/34 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 3/17/2003 | 0.26 F | 3/17/2003 | 0.26 F | 1/33 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/34 | 2 |
| | Arsenic | SW6010/SW6020 | 30/20 | 6/10/2008 | 5.8 F | 6/15/2004 | 0.35 F | 11/4 | 10 |
| | Barium | SW6010 | 5.0 | 6/14/2001 | 68 | 3/17/2008 | 29 | 15/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 9/25/2007 | 0.40 F | 6/19/2002 | 0.044 F | 3/18 | 5 |
| | Chromium | SW6010 | 10 | 2/18/2001 | 54 | 9/16/2008 | 2.0 F | 11/9 | 100 |
| | Copper | SW6010 | 10 | 2/18/2001 | 11 | 2/18/2001 | 11 | 1/14 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/10/2008 | 0.40 F | 3/17/2008 | 0.058 F | 4/16 | 2 |
| | Nickel | SW6010 | 10 | 6/10/2005 | 52 | 6/10/2008 | 6.0 F | 16/0 | -- [6] |
| | Lead | SW7421/SW6020 | 5.0/2.0 | 2/18/2001 | 8.6 | 6/15/2004 | 0.082 F | 11/10 | 15 |
| | Zinc | SW6010 | 50 | 2/18/2001 | 120 | 6/15/2004 | 4.6 F | 13/2 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW9-BS** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/21 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/18 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/12 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/18 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/21 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/18 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/12 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/7/2004 | 0.52 F | 3/13/2002 | 0.23 F | 5/13 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/12 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/21 | 5 |
| | Toluene | SW8260 | 1.1 | 3/17/2003 | 0.60 F | 6/20/2003 | 0.072 F | 3/9 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/21 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/21 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | 3/17/2003 | 0.059 F | 12/12/2002 | 0.055 F | 2/19 | 2 |
| | Arsenic | SW6020 | 20 | 6/15/2004 | 2.8 F | 6/20/2003 | 0.94 F | 7/1 | 10 |
| | Barium | SW6010 | 5.0 | 6/10/2005 | 79 | 6/14/2001 | 13 | 8/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 9/25/2007 | 2.6 | 6/15/2004 | 0.033 F | 2/9 | 5 |
| | Chromium | SW6010 | 10 | 9/14/2009 | 3.0 F | 9/14/2009 | 3.0 F | 2/8 | 100 |
| | Copper | SW6010 | 10 | | | | | 0/8 | 1300 |
| | Mercury | SW7470 | 1.0 | 12/14/2001 | 0.20 F | 12/14/2001 | 0.20 F | 2/8 | 2 |
| | Nickel | SW6010 | 10 | 9/25/2007 | 19 | 6/14/2001 | 3.0 F | 2/7 | -- [6] |
| | Lead | SW6020 | 2.0 | 9/25/2007 | 110 | 6/15/2004 | 0.20 F | 8/3 | 15 |
| | Zinc | SW6010 | 50 | 6/10/2005 | 36 F | 6/19/2002 | 3.3 F | 7/1 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW9-CC** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/24 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/22 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/16 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/22 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 3/17/2003 | 0.40 F | 3/17/2003 | 0.40 F | 1/23 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/22 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/16 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 12/14/2001 | 0.70 F | 3/13/2002 | 0.24 F | 5/17 | 5 |
| | Naphthalene | SW8260 | 1.0 | 11/20/2000 | 3.8 | 11/19/2000 | 1.0 | 2/14 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/24 | 5 |
| | Toluene | SW8260 | 1.1 | 3/17/2003 | 0.69 F | 11/19/2000 | 0.11 F | 5/11 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/24 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/24 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/24 | 2 |
| | Arsenic | SW6020 | 20 | 6/19/2002 | 1.3 F | 6/15/2004 | 0.23 F | 8/1 | 10 |
| | Barium | SW6010 | 5.0 | 6/14/2001 | 27 | 6/19/2002 | 18 | 9/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 9/25/2007 | 0.20 F | 9/25/2007 | 0.20 F | 1/10 | 5 |
| | Chromium | SW6010 | 10 | 12/14/2001 | 13 | 6/14/2001 | 2.0 F | 2/8 | 100 |
| | Copper | SW6010 | 10 | | | | | 0/9 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/10/2005 | 0.08 F | 6/10/2005 | 0.08 F | 1/9 | 2 |
| | Nickel | SW6010 | 10 | 6/14/2001 | 5.0 F | 9/12/2001 | 3.0 F | 2/8 | -- [6] |
| | Lead | SW6020 | 2.0 | 9/25/2007 | 0.20 F | 6/10/2005 | 0.19 F | 2/9 | 15 |
| | Zinc | SW6010 | 50 | 6/14/2001 | 54 | 6/20/2003 | 5.6 F | 7/2 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW10-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | 3/20/2003 | 0.052 F | 3/20/2003 | 0.052 F | 1/25 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/21 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/16 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 6/18/2003 | 0.13 F | 6/23/2004 | 0.095 F | 16/5 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/26 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/21 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/16 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/12/2004 | 0.72 M | 12/12/2003 | 0.22 R | 5/16 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/16 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 9/26/2001 | 2.8 | 3/7/2007 | 1.3 F | 25/1 | 5 |
| | Toluene | SW8260 | 1.1 | 3/20/2003 | 2.6 J | 12/12/2003 | 0.20 R | 2/14 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/26 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 3/12/2002 | 0.72 F | 3/7/2007 | 0.37 F | 25/1 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/26 | 2 |
| | Arsenic | SW7060/SW6020 | 5.0/20 | 9/26/2001 | 1.7 F | 3/12/2002 | 0.62 F | 7/1 | 10 |
| | Barium | SW6010 | 5.0 | 9/26/2001 | 58 J | 3/12/2002 | 26 J | 8/0 | 2000 |
| | Cadmium | SW7131 | 1.0 | | | | | 0/12 | 5 |
| | Chromium | SW6010 | 10 | 9/15/2008 | 16 | 12/8/2009 | 3.0 F | 4/7 | 100 |
| | Copper | SW6010 | 10 | 12/13/2001 | 14 | 9/26/2001 | 9.0 F | 2/6 | 1300 |
| | Mercury | SW7470 | 1.0 | | | | | 0/11 | 2 |
| | Nickel | SW6010 | 10 | 9/26/2001 | 13 | 6/9/2005 | 1.4 F | 3/6 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 9/15/2008 | 2.5 F | 6/23/2004 | 0.19 F | 7/5 | 15 |
| | Zinc | SW6010 | 50 | 9/26/2001 | 79 | 6/18/2002 | 5.0 F | 7/1 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW10-CC** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/21 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/19 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/15 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/19 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/21 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/19 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/15 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/12/2004 | 0.68 M | 9/16/2004 | 0.28 F | 6/13 | 5 |
| | Naphthalene | SW8260 | 1.0 | 3/20/2003 | 0.23 F | 3/20/2003 | 0.23 F | 1/14 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 9/13/2002 | 0.058 F | 9/13/2002 | 0.058 F | 1/20 | 5 |
| | Toluene | SW8260 | 1.1 | 3/20/2003 | 2.1 J | 9/16/2004 | 0.062 F | 3/12 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/21 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 12/8/2009 | 0.18 F | 12/8/2009 | 0.18 F | 1/20 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/21 | 2 |
| | Arsenic | SW7060/SW6020 | 5.0/20 | 12/13/2001 | 5.8 | 6/23/2004 | 2.1 F | 6/1 | 10 |
| | Barium | SW6010 | 5.0 | 9/26/2001 | 77 J | 6/18/2002 | 24 | 7/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 10/2/2007 | 0.40 F | 6/18/2002 | 0.034 F | 2/7 | 5 |
| | Chromium | SW6010 | 10 | 9/26/2001 | 7.0 F | 6/18/2003 | 3.5 F | 2/6 | 100 |
| | Copper | SW6010 | 10 | 9/26/2001 | 10.0 | 9/26/2001 | 10.0 | 1/6 | 1300 |
| | Mercury | SW7470 | 1.0 | | | | | 0/8 | 2 |
| | Nickel | SW6010 | 10 | 9/26/2001 | 26 | 10/2/2007 | 3.0 F | 6/2 | -- [6] |
| | Lead | SW7421/SW6020 | 5.0/2.0 | 9/26/2001 | 4.8 F | 6/9/2005 | 0.096 F | 5/4 | 15 |
| | Zinc | SW6010 | 50 | 12/13/2001 | 60 | 6/18/2003 | 5.9 F | 5/2 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW11A-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/21 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/12 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/12 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/12 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/26 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/12 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/12 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/13/2004 | 0.41 F | 3/17/2006 | 0.22 F | 4/8 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/12 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 9/15/2009 | 1.6 | 12/15/2003 | 0.17 F | 21/5 | 5 |
| | Toluene | SW8260 | 1.1 | 3/31/2003 | 3.9 | 9/13/2004 | 0.09 F | 6/11 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/26 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 12/8/2009 | 0.20 F | 12/8/2009 | 0.20 F | 1/25 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/21 | 2 |
| | Arsenic | SW6020 | 20 | 6/17/2003 | 0.67 F | 6/23/2004 | 0.55 F | 3/0 | 10 |
| | Barium | SW6010 | 5.0 | 6/23/2004 | 35 | 6/16/2005 | 30 | 3/0 | 2000 |
| | Cadmium | SW6010/SW6020 | 7.0/2.0 | 9/15/2008 | 0.80 F | 9/27/2007 | 0.40 F | 3/7 | 5 |
| | Chromium | SW6010 | 10 | 3/12/2009 | 6.0 F | 12/8/2009 | 4.0 F | 2/5 | 100 |
| | Copper | SW6010 | 10 | 6/17/2003 | 1.7 F | 6/17/2003 | 1.7 F | 1/2 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/17/2003 | 0.031 F | 6/17/2003 | 0.031 F | 1/6 | 2 |
| | Nickel | SW6010 | 10 | 9/27/2007 | 5.0 F | 3/12/2008 | 2.0 F | 5/1 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 9/15/2008 | 2.3 F | 6/23/2004 | 0.12 F | 4/6 | 15 |
| | Zinc | SW6010 | 50 | 6/17/2003 | 44 | 6/23/2004 | 5.3 F | 3/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW11B-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/10 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/8 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/8 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/8 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/14 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/8 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/8 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/13/2004 | 0.39 F | 9/15/2003 | 0.35 F | 2/6 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/8 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 9/15/2005 | 1.5 | 5/26/2004 | 0.83 F | 10/4 | 5 |
| | Toluene | SW8260 | 1.1 | 4/8/2003 | 300 | 6/17/2003 | 0.10 F | 2/10 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/14 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/14 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/10 | 2 |
| | Arsenic | SW6020 | 20 | 6/14/2005 | 0.48 F | 6/17/2003 | 0.34 F | 3/0 | 10 |
| | Barium | SW6010 | 5.0 | 5/26/2004 | 36 | 6/14/2005 | 32 | 3/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 9/27/2007 | 1.0 F | 9/27/2007 | 1.0 F | 1/4 | 5 |
| | Chromium | SW6010 | 10 | 5/26/2004 | 3.0 F | 6/14/2005 | 2.1 F | 2/1 | 100 |
| | Copper | SW6010 | 10 | 6/17/2003 | 1.8 F | 6/17/2003 | 1.8 F | 1/2 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/14/2005 | 0.06 F | 5/26/2004 | 0.026 F | 3/0 | 2 |
| | Nickel | SW6010 | 10 | 3/12/2008 | 13 | 9/27/2007 | 7.0 F | 4/1 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 3/12/2008 | 2.1 F | 5/26/2004 | 0.15 F | 5/0 | 15 |
| | Zinc | SW6010 | 50 | 5/26/2004 | 21 F | 6/14/2005 | 6.7 F | 3/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW12-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/19 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/12 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/12 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/12 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/23 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/12 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/12 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/9/2004 | 0.70 F | 9/18/2003 | 0.36 F | 3/9 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/12 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/23 | 5 |
| | Toluene | SW8260 | 1.1 | 3/21/2003 | 1.4 J | 9/9/2004 | 0.12 F | 2/14 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/23 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/23 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/19 | 2 |
| | Arsenic | SW6020 | 20 | 12/16/2002 | 0.71 F | 6/16/2003 | 0.46 F | 4/0 | 10 |
| | Barium | SW6010 | 5.0 | 6/21/2004 | 37 | 12/16/2002 | 32 | 4/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | | | | | 0/10 | 5 |
| | Chromium | SW6010 | 10 | 6/11/2009 | 2.0 F | 12/16/2002 | 1.3 F | 3/5 | 100 |
| | Copper | SW6010 | 10 | 6/16/2003 | 2.2 F | 6/16/2003 | 2.2 F | 1/3 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/14/2005 | 0.049 F | 6/16/2003 | 0.035 F | 2/6 | 2 |
| | Nickel | SW6010 | 10 | 12/13/2007 | 35 | 6/14/2005 | 2.5 F | 5/1 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 9/11/2008 | 2.6 F | 6/14/2005 | 0.09 F | 5/5 | 15 |
| | Zinc | SW6010 | 50 | 12/16/2002 | 96 | 6/14/2005 | 8.2 F | 4/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW12-BS** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | 3/21/2003 | 0.032 F | 3/21/2003 | 0.032 F | 1/14 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/12 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/12 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/12 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/15 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/12 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/12 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/9/2004 | 0.68 F | 6/21/2004 | 0.23 F | 4/8 | 5 |
| | Naphthalene | SW8260 | 1.0 | 6/16/2003 | 0.36 F | 3/9/2004 | 0.23 F | 8/4 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/15 | 5 |
| | Toluene | SW8260 | 1.1 | 3/21/2003 | 2.8 J | 6/21/2004 | 0.16 F | 8/4 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/15 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/15 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | 12/7/2004 | 0.32 F | 3/21/2003 | 0.096 F | 11/4 | 2 |
| | Arsenic | SW6020 | 20 | 6/16/2003 | 3.0 F | 6/14/2005 | 1.1 F | 4/0 | 10 |
| | Barium | SW6010 | 5.0 | 6/21/2004 | 17 | 12/16/2002 | 6.9 | 4/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 9/27/2007 | 0.20 F | 12/16/2002 | 0.045 F | 2/5 | 5 |
| | Chromium | SW6010 | 10 | | | | | 0/6 | 100 |
| | Copper | SW6010 | 10 | 6/16/2003 | 1.3 F | 6/16/2003 | 1.3 F | 1/3 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/14/2005 | 0.049 F | 6/16/2003 | 0.032 F | 2/4 | 2 |
| | Nickel | SW6010 | 10 | 6/16/2003 | 11 | 9/27/2007 | 3.0 F | 5/0 | -- [6] |
| | Lead | SW6020 | 2.0 | 6/14/2005 | 0.28 F | 6/14/2005 | 0.28 F | 1/6 | 15 |
| | Zinc | SW6010 | 50 | 6/16/2003 | 18 | 6/14/2005 | 8.8 F | 3/1 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW12-CC** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/15 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/13 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/13 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/13 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/19 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/13 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/13 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/9/2004 | 0.66 F | 9/18/2003 | 0.42 F | 3/10 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/13 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/19 | 5 |
| | Toluene | SW8260 | 1.1 | 12/8/2003 | 6.6 | 9/7/2005 | 0.19 F | 13/4 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/19 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/19 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | 12/8/2003 | 0.14 F | 12/8/2003 | 0.14 F | 1/14 | 2 |
| | Arsenic | SW6020 | 20 | 12/16/2002 | 11 | 6/16/2005 | 1.4 F | 5/0 | 10 |
| | Barium | SW6010 | 5.0 | 12/16/2002 | 97 | 6/21/2004 | 35 | 5/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 12/16/2002 | 0.079 F | 12/16/2002 | 0.076 F | 2/5 | 5 |
| | Chromium | SW6010 | 10 | 6/16/2005 | 2.0 F | 12/16/2002 | 1.0 F | 3/3 | 100 |
| | Copper | SW6010 | 10 | 6/16/2003 | 1.8 F | 6/16/2003 | 1.8 F | 1/4 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/16/2003 | 0.04 F | 6/16/2003 | 0.04 F | 1/5 | 2 |
| | Nickel | SW6010 | 10 | 12/16/2002 | 23 | 6/16/2005 | 2.9 F | 3/3 | -- [6] |
| | Lead | SW6020 | 2.0 | 6/16/2005 | 0.55 F | 12/16/2002 | 0.35 F | 3/4 | 15 |
| | Zinc | SW6010 | 50 | 6/16/2005 | 72 | 12/16/2002 | 17 | 4/1 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW16-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | 9/15/2000 | 0.12 F | 3/21/2003 | 0.038 F | 5/45 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/41 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/29 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 12/14/1999 | 0.19 F | 6/16/2004 | 0.054 F | 22/19 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 9/9/2008 | 180 | 9/8/2005 | 5.1 | 50/0 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/41 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/29 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/8/2004 | 0.54 F | 3/14/2006 | 0.21 F | 8/33 | 5 |
| | Naphthalene | SW8260 | 1.0 | 10/11/2006 | 3.8 F | 10/11/2006 | 3.8 F | 1/28 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 3/12/2009 | 190 | 9/8/2005 | 7.5 | 50/0 | 5 |
| | Toluene | SW8260 | 1.1 | 3/21/2003 | 5.6 J | 9/9/2002 | 0.45 F | 3/26 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | 12/14/1999 | 9.6 | 3/11/2004 | 0.047 M | 40/10 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 9/9/2008 | 200 | 9/8/2005 | 7.0 | 50/0 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/50 | 2 |
| | Arsenic | SW6010/SW6020 | 30/20 | 4/21/2008 | 15 | 6/16/2004 | 0.27 F | 9/18 | 10 |
| | Barium | SW6010 | 5.0 | 10/15/2007 | 41 | 6/13/2000 | 30 | 27/0 | 2000 |
| | Cadmium | SW6010/SW6020 | 7.0/2.0 | 1/21/2008 | 1.9 F | 6/18/2002 | 0.028 F | 6/28 | 5 |
| | Chromium | SW6010 | 10 | 12/14/1999 | 6.0 F | 9/9/2002 | 0.85 F | 11/21 | 100 |
| | Copper | SW6010 | 10 | 4/21/2008 | 120 | 12/13/2000 | 1.0 F | 12/15 | 1300 |
| | Mercury | SW7470 | 1.0 | 9/12/2000 | 0.20 F | 10/15/2007 | 0.063 F | 6/25 | 2 |
| | Nickel | SW6010 | 10 | 9/14/1999 | 220 | 10/15/2007 | 0.84 F | 7/22 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 4/21/2008 | 13 | 6/16/2004 | 0.24 F | 14/20 | 15 |
| | Zinc | SW6010 | 50 | 10/11/2006 | 1,000 | 9/12/2000 | 5.0 F | 27/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW16-CC** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | 7/27/2007 | 1.0 F | 10/27/2008 | 0.31 F | 24/5 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/19 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | 8/10/2006 | 0.37 F | 8/10/2006 | 0.37 F | 1/18 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 8/10/2006 | 0.52 | 8/10/2006 | 0.52 | 1/18 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 6/4/2003 | 140 | 4/21/2003 | 23 | 50/0 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/19 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/19 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/16/2003 | 8.3 F | 9/8/2004 | 0.55 F | 4/15 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/19 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 3/5/2004 | 64 | 3/14/2006 | 0.86 F | 47/3 | 5 |
| | Toluene | SW8260 | 1.1 | 3/14/2006 | 160 | 1/21/2008 | 0.35 F | 9/31 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | 9/12/2006 | 36 R | 4/21/2003 | 0.29 F | 49/1 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 7/23/2003 | 130 | 9/12/2006 | 7.8 | 50/0 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | 9/16/2003 | 1.3 F | 9/8/2004 | 0.19 F | 15/14 | 2 |
| | Arsenic | SW6010/SW6020 | 30/20 | 4/21/2008 | 13 | 6/16/2004 | 0.31 F | 5/9 | 10 |
| | Barium | SW6010 | 5.0 | 8/10/2006 | 29 | 1/26/2006 | 9.5 | 14/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | | | | | 0/20 | 5 |
| | Chromium | SW6010 | 10 | 8/10/2006 | 5.3 F | 4/20/2009 | 1.6 F | 2/16 | 100 |
| | Copper | SW6010 | 10 | 10/15/2007 | 53 | 9/16/2003 | 1.5 F | 9/5 | 1300 |
| | Mercury | SW7470 | 1.0 | 1/26/2006 | 0.17 F | 1/20/2009 | 0.10 F | 6/11 | 2 |
| | Nickel | SW6010 | 10 | 4/20/2009 | 15 | 1/26/2006 | 0.98 F | 13/3 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 4/20/2009 | 38 | 9/16/2003 | 0.32 F | 13/7 | 15 |
| | Zinc | SW6010 | 50 | 8/10/2006 | 4,600 | 7/21/2008 | 21 F | 13/1 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW17-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | 9/12/2002 | 0.055 F | 9/12/2002 | 0.055 F | 1/17 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/15 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/14 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/15 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/18 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/15 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/14 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/19/2003 | 0.82 F | 3/21/2003 | 0.25 F | 5/10 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/14 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 12/16/2009 | 0.37 F | 9/12/2002 | 0.083 F | 18/0 | 5 |
| | Toluene | SW8260 | 1.1 | 3/21/2003 | 3.6 J | 9/19/2003 | 0.071 F | 5/9 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/18 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 9/7/2004 | 0.067 F | 9/7/2004 | 0.067 F | 1/17 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/18 | 2 |
| | Arsenic | SW6020 | 20 | 6/23/2003 | 0.81 F | 6/15/2004 | 0.41 F | 5/0 | 10 |
| | Barium | SW6010 | 5.0 | 9/12/2002 | 37 | 6/23/2003 | 30 | 5/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 6/23/2003 | 0.066 F | 9/12/2002 | 0.023 F | 3/4 | 5 |
| | Chromium | SW6010 | 10 | 12/16/2009 | 6.0 F | 6/7/2005 | 1.0 F | 4/2 | 100 |
| | Copper | SW6010 | 10 | 9/12/2002 | 2.9 F | 9/12/2002 | 2.9 F | 1/4 | 1300 |
| | Mercury | SW7470 | 1.0 | | | | | 0/6 | 2 |
| | Nickel | SW6010 | 10 | 9/12/2002 | 150 | 12/11/2007 | 4.0 F | 6/0 | -- [6] |
| | Lead | SW6020 | 2.0 | 9/12/2002 | 0.96 F | 6/7/2005 | 0.092 F | 2/5 | 15 |
| | Zinc | SW6010 | 50 | 9/12/2002 | 270 | 6/7/2005 | 10 F | 4/1 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW18-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/21 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/16 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/15 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/16 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/24 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/16 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/15 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 6/23/2003 | 1.7 F | 9/24/2003 | 0.37 F | 5/11 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/15 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 9/10/2004 | 0.052 F | 9/10/2004 | 0.051 F | 2/22 | 5 |
| | Toluene | SW8260 | 1.1 | 3/18/2003 | 3.6 B | 9/10/2004 | 0.065 F | 9/9 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/24 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 3/18/2003 | 0.097 F | 3/18/2003 | 0.097 F | 1/23 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/21 | 2 |
| | Arsenic | SW6020 | 20 | 6/14/2005 | 0.78 F | 6/17/2004 | 0.41 F | 4/0 | 10 |
| | Barium | SW6010 | 5.0 | 6/23/2003 | 230 | 9/12/2002 | 39 | 4/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 10/2/2007 | 0.90 F | 10/2/2007 | 0.30 F | 2/6 | 5 |
| | Chromium | SW6010 | 10 | 6/23/2003 | 14 | 6/23/2003 | 14 | 1/4 | 100 |
| | Copper | SW6010 | 10 | 9/12/2002 | 4.5 F | 9/12/2002 | 4.5 F | 1/3 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/14/2005 | 0.056 F | 6/14/2005 | 0.056 F | 1/4 | 2 |
| | Nickel | SW6010 | 10 | 9/12/2002 | 15 | 6/23/2003 | 6.6 F | 7/0 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 3/12/2008 | 2.2 F | 6/14/2005 | 0.18 F | 4/4 | 15 |
| | Zinc | SW6010 | 50 | 9/12/2002 | 44 | 6/14/2005 | 6.9 F | 2/2 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW19-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | 3/20/2003 | 0.032 F | 3/20/2003 | 0.032 F | 1/23 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/16 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/15 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/16 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/27 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/16 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/15 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 12/16/2002 | 3.3 | 3/16/2006 | 0.19 F | 8/8 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/15 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 9/11/2009 | 0.69 F | 12/16/2002 | 0.14 F | 24/3 | 5 |
| | Toluene | SW8260 | 1.1 | 8/6/2002 | 33 | 9/16/2004 | 0.066 F | 6/12 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/27 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/27 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | 3/20/2003 | 0.053 F | 3/20/2003 | 0.053 F | 1/23 | 2 |
| | Arsenic | SW6020 | 20 | 6/16/2005 | 0.68 F | 9/12/2002 | 0.51 F | 5/0 | 10 |
| | Barium | SW6010 | 5.0 | 6/16/2005 | 39 | 6/23/2003 | 34 | 5/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 9/27/2007 | 0.60 F | 9/12/2002 | 0.028 F | 2/9 | 5 |
| | Chromium | SW6010 | 10 | 6/23/2003 | 2.6 F | 3/16/2009 | 2.0 F | 5/4 | 100 |
| | Copper | SW6010 | 10 | 9/12/2002 | 8.6 F | 9/12/2002 | 8.6 F | 1/4 | 1300 |
| | Mercury | SW7470 | 1.0 | | | | | 0/9 | 2 |
| | Nickel | SW6010 | 10 | 9/27/2007 | 130 | 9/12/2002 | 11 | 7/0 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 9/11/2008 | 3.7 F | 6/16/2005 | 0.10 F | 4/7 | 15 |
| | Zinc | SW6010 | 50 | 9/12/2002 | 390 | 6/16/2004 | 15 F | 5/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW20-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/13 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/1 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/1 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/1 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/13 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/1 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/1 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | | | | | 0/1 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/1 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 12/10/2009 | 2.3 | 3/18/2009 | 0.97 F | 12/1 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/1 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/13 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 12/10/2009 | 0.17 F | 12/10/2009 | 0.17 F | 1/12 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/13 | 2 |
| | Arsenic | SW6020 | 20 | 6/6/2007 | 0.92 F | 12/12/2007 | 0.35 F | 4/1 | 10 |
| | Barium | SW6010 | 5.0 | 10/1/2007 | 150 | 6/6/2007 | 130 | 5/0 | 2000 |
| | Cadmium | SW6010/SW6020 | 7.0/2.0 | 9/15/2008 | 0.80 F | 3/13/2008 | 0.21 F | 2/10 | 5 |
| | Chromium | SW6010 | 10 | 6/6/2007 | 2.7 F | 9/15/2008 | 2.0 F | 2/10 | 100 |
| | Copper | SW6010 | 10 | | | | | 0/5 | 1300 |
| | Mercury | SW7470 | 1.0 | | | | | 0/12 | 2 |
| | Nickel | SW6010 | 10 | 6/6/2007 | 20 | 6/6/2007 | 20 | 1/4 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 9/15/2008 | 2.9 F | 3/13/2008 | 0.19 F | 6/6 | 15 |
| | Zinc | SW6010 | 50 | 6/6/2007 | 65 | 3/13/2008 | 8.0 F | 5/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW21-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/12 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/1 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/1 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/1 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/12 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/1 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/1 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | | | | | 0/1 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/1 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/12 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/1 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/12 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 12/10/2009 | 0.15 F | 12/10/2009 | 0.15 F | 1/11 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/12 | 2 |
| | Arsenic | SW6020 | 20 | 6/7/2007 | 3.8 F | 12/12/2007 | 0.54 F | 4/1 | 10 |
| | Barium | SW6010 | 5.0 | 6/24/2008 | 91 | 6/7/2007 | 81 | 5/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | | | | | 0/12 | 5 |
| | Chromium | SW6010 | 10 | | | | | 0/12 | 100 |
| | Copper | SW6010 | 10 | | | | | 0/5 | 1300 |
| | Mercury | SW7470 | 1.0 | | | | | 0/12 | 2 |
| | Nickel | SW6010 | 10 | 6/24/2008 | 2.0 F | 6/24/2008 | 2.0 F | 1/4 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 9/15/2008 | 3.2 F | 12/12/2007 | 0.21 F | 5/7 | 15 |
| | Zinc | SW6010 | 50 | 6/7/2007 | 470 | 6/24/2008 | 140 | 5/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW22-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/15 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/2 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/2 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/2 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/15 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/2 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/2 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | | | | | 0/2 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/2 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/15 | 5 |
| | Toluene | SW8260 | 1.1 | 11/9/2006 | 18 | 11/9/2006 | 18 | 1/1 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/15 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 12/10/2009 | 0.28 F | 12/10/2009 | 0.28 F | 1/14 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/15 | 2 |
| | Arsenic | SW6020 | 20 | 10/1/2007 | 5.6 F | 12/13/2007 | 2.3 F | 6/2 | 10 |
| | Barium | SW6010 | 5.0 | 10/1/2007 | 93 | 12/13/2007 | 60 | 8/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 10/1/2007 | 0.13 F | 12/13/2007 | 0.047 F | 6/8 | 5 |
| | Chromium | SW6010 | 10 | 10/1/2007 | 23 | 12/13/2007 | 2.7 F | 8/6 | 100 |
| | Copper | SW6010 | 10 | 6/7/2007 | 29 | 3/13/2008 | 12 | 4/4 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/10/2009 | 0.20 F | 6/7/2007 | 0.079 F | 5/9 | 2 |
| | Nickel | SW6010 | 10 | 10/1/2007 | 37 | 6/24/2008 | 6.0 F | 8/0 | -- [6] |
| | Lead | SW6020/SW6010 | 2.0/25 | 6/7/2007 | 91 | 9/15/2009 | 3.0 F | 10/4 | 15 |
| | Zinc | SW6010 | 50 | 6/7/2007 | 8,000 | 6/24/2008 | 1700 | 8/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW23-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/11 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/1 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/1 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/1 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/11 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/1 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/1 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | | | | | 0/1 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/1 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/11 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/1 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/11 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/11 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/11 | 2 |
| | Arsenic | SW6020 | 20 | 6/5/2007 | 1.5 F | 12/12/2007 | 0.69 F | 4/1 | 10 |
| | Barium | SW6010 | 5.0 | 10/1/2007 | 54 | 3/13/2008 | 46 | 5/0 | 2000 |
| | Cadmium | SW6010/SW6020 | 7.0/2.0 | 9/15/2008 | 0.60 F | 10/1/2007 | 0.046 F | 3/8 | 5 |
| | Chromium | SW6010 | 10 | 9/15/2008 | 4.0 F | 6/10/2009 | 2.0 F | 2/9 | 100 |
| | Copper | SW6010 | 10 | 6/5/2007 | 6.1 F | 10/1/2007 | 4.6 F | 2/3 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/5/2007 | 7.8 | 6/10/2009 | 0.20 F | 2/9 | 2 |
| | Nickel | SW6010 | 10 | 6/24/2008 | 35 | 6/24/2008 | 35 | 1/4 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 9/15/2008 | 7.9 F | 3/13/2008 | 0.23 F | 5/6 | 15 |
| | Zinc | SW6010 | 50 | 6/5/2007 | 590 | 3/13/2008 | 100 | 5/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW24-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/16 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/2 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/2 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/2 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/16 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/2 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/2 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 6/6/2007 | 0.30 F | 6/6/2007 | 0.30 F | 1/1 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/2 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/16 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/2 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/16 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/16 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/16 | 2 |
| | Arsenic | SW6020 | 20 | 6/6/2007 | 0.88 F | 3/17/2008 | 0.39 F | 5/1 | 10 |
| | Barium | SW6010 | 5.0 | 6/24/2008 | 33 | 3/17/2008 | 30 | 6/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | | | | | 0/13 | 5 |
| | Chromium | SW6010 | 10 | 9/10/2008 | 2.0 F | 9/10/2008 | 2.0 F | 1/12 | 100 |
| | Copper | SW6010 | 10 | | | | | 0/6 | 1300 |
| | Mercury | SW7470 | 1.0 | 3/17/2008 | 0.06 F | 3/17/2008 | 0.06 F | 1/12 | 2 |
| | Nickel | SW6010 | 10 | 6/6/2007 | 11 | 6/6/2007 | 8.8 F | 2/4 | -- [6] |
| | Lead | SW6010/SW6020 | 25/2.0 | 9/10/2008 | 3.5 F | 12/12/2007 | 0.18 F | 5/8 | 15 |
| | Zinc | SW6010 | 50 | 6/6/2007 | 220 | 3/17/2008 | 74 | 6/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MW25-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/11 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/1 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/1 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/1 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/11 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/1 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/1 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 6/5/2007 | 0.33 F | 6/5/2007 | 0.33 F | 1/0 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/1 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/11 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/1 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/11 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/11 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/11 | 2 |
| | Arsenic | SW6020 | 20 | 10/1/2007 | 4.4 F | 3/17/2008 | 1.0 F | 5/0 | 10 |
| | Barium | SW6010 | 5.0 | 10/1/2007 | 63 | 3/17/2008 | 32 | 5/0 | 2000 |
| | Cadmium | SW6020 | 2.0 | 10/1/2007 | 0.16 F | 3/17/2008 | 0.043 F | 4/7 | 5 |
| | Chromium | SW6010 | 10 | 10/1/2007 | 240 | 12/16/2009 | 2.0 F | 10/1 | 100 |
| | Copper | SW6010 | 10 | 10/1/2007 | 65 | 6/10/2008 | 4.0 F | 4/1 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/10/2008 | 0.50 F | 3/17/2008 | 0.06 F | 2/9 | 2 |
| | Nickel | SW6010 | 10 | 10/1/2007 | 140 | 6/10/2008 | 9.0 F | 5/0 | -- [6] |
| | Lead | SW6020/SW6010 | 2.0/25 | 10/1/2007 | 32 | 3/16/2009 | 2.0 F | 7/4 | 15 |
| | Zinc | SW6010 | 50 | 10/1/2007 | 2,200 | 6/10/2008 | 210 | 5/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MWG-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/26 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/21 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/16 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/21 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/26 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/21 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/16 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/7/2004 | 0.47 F | 12/9/2003 | 0.24 F | 6/15 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/16 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/26 | 5 |
| | Toluene | SW8260 | 1.1 | 3/17/2003 | 0.33 R | 9/11/2002 | 0.06 F | 3/13 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/26 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/26 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/26 | 2 |
| | Arsenic | SW7060/SW6020 | 5.0/20 | 9/12/2001 | 0.90 F | 12/11/2007 | 0.23 F | 8/3 | 10 |
| | Barium | SW6010 | 5.0 | 9/8/1999 | 32 | 6/16/2003 | 19 | 11/0 | 2000 |
| | Cadmium | SW7131/SW6020 | 1.0/2.0 | 9/8/1999 | 1.7 | 6/19/2002 | 0.038 F | 5/9 | 5 |
| | Chromium | SW6010 | 10 | 9/8/1999 | 3.0 F | 6/7/2005 | 1.2 F | 4/10 | 100 |
| | Copper | SW6010 | 10 | 9/12/2001 | 20 | 6/16/2003 | 2.4 F | 4/7 | 1300 |
| | Mercury | SW7470 | 1.0 | 6/16/2003 | 0.032 F | 6/16/2003 | 0.032 F | 1/13 | 2 |
| | Nickel | SW6010 | 10 | 6/7/2005 | 35 | 9/8/1999 | 2.0 F | 4/7 | -- [6] |
| | Lead | SW7421/SW6020 | 5.0/2.0 | 9/12/2001 | 37 | 6/7/2005 | 0.41 F | 9/5 | 15 |
| | Zinc | SW6010 | 50 | 9/8/1999 | 4,800 | 6/15/2004 | 8.4 F | 11/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **CS-MWH-LGR** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/18 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/15 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | 3/17/2003 | 0.10 F | 3/17/2003 | 0.10 F | 1/10 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/15 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/19 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | 3/17/2003 | 0.03 F | 3/17/2003 | 0.03 F | 1/14 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/11 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/7/2004 | 0.51 F | 3/13/2002 | 0.20 F | 5/10 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/11 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/19 | 5 |
| | Toluene | SW8260 | 1.1 | 9/16/2003 | 9.2 | 6/12/2001 | 0.31 F | 5/7 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/19 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/19 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/18 | 2 |
| | Arsenic | SW6020 | 20 | 6/19/2002 | 1.2 F | 3/17/2003 | 0.37 F | 6/2 | 10 |
| | Barium | SW6010 | 5.0 | 6/12/2001 | 34 | 12/18/2001 | 19 | 8/0 | 2000 |
| | Cadmium | SW7131/SW6020 | 1.0/2.0 | 9/12/2001 | 1.0 | 3/17/2003 | 0.03 F | 5/6 | 5 |
| | Chromium | SW6010 | 10 | 3/17/2003 | 8.1 F | 9/12/2001 | 2.0 F | 5/5 | 100 |
| | Copper | SW6010 | 10 | 9/12/2001 | 28 | 6/19/2002 | 9.2 F | 3/5 | 1300 |
| | Mercury | SW7470 | 1.0 | | | | | 0/10 | 2 |
| | Nickel | SW6010 | 10 | 3/17/2003 | 17 | 6/12/2001 | 2.0 F | 5/4 | -- [6] |
| | Lead | SW7421/SW6020 | 5.0/2.0 | 9/12/2001 | 47 J | 6/15/2004 | 2.3 | 11/0 | 15 |
| | Zinc | SW6010 | 50 | 6/6/2005 | 2,000 | 3/13/2002 | 84 J | 8/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **DOM-2** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/8 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/6 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/6 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/6 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/8 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/6 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/6 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/20/2002 | 0.43 F | 3/20/2002 | 0.43 F | 1/5 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/6 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/8 | 5 |
| | Toluene | SW8260 | 1.1 | 3/24/2005 | 0.15 F | 3/24/2005 | 0.15 F | 1/5 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/8 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/8 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/8 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **FO-8** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/8 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/5 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/5 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/5 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/8 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/5 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/5 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/19/2002 | 0.20 F | 3/19/2002 | 0.20 F | 1/4 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/5 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/8 | 5 |
| | Toluene | SW8260 | 1.1 | 3/10/2003 | 0.40 F | 3/10/2003 | 0.40 F | 1/4 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/8 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/8 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/8 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **FO-17** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/9 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/6 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/6 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/6 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/9 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/6 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/6 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/19/2002 | 0.31 F | 3/19/2002 | 0.31 F | 1/5 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/6 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/9 | 5 |
| | Toluene | SW8260 | 1.1 | 3/10/2003 | 0.25 F | 3/10/2003 | 0.25 F | 1/5 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/9 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/9 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/9 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **FO-22** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/7 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/5 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/5 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/5 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/8 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/5 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/5 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | | | | | 0/4 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/5 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/8 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/5 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/8 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/8 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/8 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **FO-J1** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/35 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/20 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/20 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/20 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 6/12/2007 | 0.60 F | 3/10/2003 | 0.20 F | 5/31 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/20 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/20 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/10/2003 | 2.6 B | 3/19/2002 | 0.27 F | 4/15 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/20 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 6/3/2009 | 0.57 F | 6/20/2006 | 0.08 F | 22/14 | 5 |
| | Toluene | SW8260 | 1.1 | 3/10/2003 | 0.74 F | 3/10/2003 | 0.74 F | 1/19 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/36 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 3/22/2005 | 0.25 F | 12/14/2004 | 0.22 F | 2/34 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/36 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **HS-1** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/15 | 7 |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/15 | 70 |
| | Tetrachloroethene | SW8260 | 1.4 | 9/10/2008 | 0.21 F | 12/12/2006 | 0.13 F | 7/8 | 5 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/15 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/15 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/15 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **HS-2** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/34 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/20 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/20 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 3/12/2003 | 0.16 F | 3/12/2003 | 0.16 F | 1/19 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/35 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/20 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/20 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/23/2006 | 1.1 F | 3/21/2002 | 0.31 F | 3/16 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/20 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 6/3/2009 | 0.23 F | 6/21/2006 | 0.07 F | 22/13 | 5 |
| | Toluene | SW8260 | 1.1 | 3/3/2004 | 1.0 F | 3/21/2002 | 0.12 F | 2/18 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/35 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/35 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/35 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **HS-3** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/9 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/6 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/6 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/6 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/9 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/6 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/6 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 12/19/2001 | 0.38 F | 12/19/2001 | 0.38 F | 1/5 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/6 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/9 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/6 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/9 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/9 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/9 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **I10-2** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/22 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/20 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/20 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/20 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/23 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/20 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/20 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/18/2002 | 0.83 F | 12/18/2001 | 0.21 F | 3/16 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/20 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 12/18/2001 | 0.16 F | 12/5/2002 | 0.08 F | 9/14 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/20 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/23 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 9/19/2001 | 0.23 F | 3/13/2003 | 0.06 F | 7/16 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/23 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **I10-4** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/30 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/23 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/23 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/23 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/32 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/23 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/23 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/22/2006 | 1.2 F | 3/21/2002 | 0.20 F | 3/18 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/23 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 12/2/2009 | 7.4 | 12/15/2004 | 0.12 F | 16/16 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/23 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/32 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 12/2/2009 | 2.7 | 4/14/2004 | 0.25 F | 12/20 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/32 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **I10-5** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/8 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/5 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/5 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/5 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/8 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/5 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/5 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | | | | | 0/5 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/5 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/8 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/5 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/8 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/8 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/8 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **I10-7** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/34 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/14 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/14 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/14 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/34 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/14 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/14 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/20/2006 | 1.1 M | 3/21/2002 | 0.44 F | 2/12 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/14 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/34 | 5 |
| | Toluene | SW8260 | 1.1 | 3/21/2002 | 0.36 F | 3/21/2002 | 0.36 F | 1/13 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/34 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 12/3/2009 | 0.17 F | 12/3/2009 | 0.17 F | 1/33 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/34 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **I10-8** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/6 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/1 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/1 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/1 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/6 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/1 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/1 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | | | | | 0/1 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/1 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/6 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/1 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/6 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/6 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/6 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **JW-5** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/15 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/4 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/4 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/4 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/15 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/4 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/4 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/22/2006 | 1.1 F | 3/22/2006 | 1.1 F | 1/3 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/4 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 3/5/2008 | 0.11 F | 3/20/2007 | 0.07 F | 2/13 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/4 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/15 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/15 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/15 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **JW-6** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/9 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/6 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/6 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/6 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/9 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/6 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/6 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | | | | | 0/6 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/6 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/9 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/6 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/9 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/9 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/9 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **JW-7** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/27 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/13 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/13 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/13 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/27 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/13 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | 3/22/2005 | 0.33 F | 9/23/2004 | 0.13 R | 6/7 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/23/2004 | 19 R | 3/21/2006 | 1.2 M | 2/11 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/13 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 12/11/2006 | 0.77 F | 9/20/2005 | 0.22 F | 24/3 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/13 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/27 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/27 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/27 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **JW-8** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/31 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/15 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/15 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 3/24/2005 | 0.10 F | 3/24/2005 | 0.10 F | 1/14 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 6/13/2007 | 0.40 F | 3/21/2007 | 0.12 F | 4/27 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/15 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/15 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/23/2006 | 1.2 F | 3/23/2006 | 1.1 F | 2/13 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/15 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 9/4/2009 | 0.48 F | 3/24/2005 | 0.12 F | 23/8 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/15 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/31 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 12/16/2004 | 0.22 F | 3/24/2005 | 0.21 F | 2/29 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/31 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **JW-9** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/21 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/17 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/17 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/17 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 12/19/2001 | 0.33 F | 12/19/2001 | 0.33 F | 1/20 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/17 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/17 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/21/2006 | 1.1 M | 3/20/2002 | 0.37 F | 2/15 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/17 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 3/4/2004 | 0.15 F | 3/4/2004 | 0.15 F | 1/20 | 5 |
| | Toluene | SW8260 | 1.1 | 3/11/2003 | 0.23 F | 3/11/2003 | 0.23 F | 1/16 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/21 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/21 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/21 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **JW-12** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/10 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/4 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/4 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/4 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/11 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/4 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/4 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | | | | | 0/3 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/4 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 9/20/2007 | 0.21 F | 9/20/2007 | 0.21 F | 1/10 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/4 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/11 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/11 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/11 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **JW-13** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/9 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/7 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/7 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/7 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/10 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/7 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/7 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | | | | | 0/6 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/7 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/10 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/7 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/10 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/10 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/10 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **JW-14** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/38 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | 12/1/2003 | 5.9 | 3/2/2004 | 0.11 F | 5/20 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | 12/1/2003 | 1.1 F | 12/1/2003 | 1.1 F | 1/24 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 12/1/2003 | 53 | 9/22/2004 | 0.11 F | 20/5 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/39 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | 12/1/2003 | 2.7 | 9/18/2001 | 0.10 F | 3/22 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/25 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/10/2003 | 3.4 B | 3/19/2002 | 0.39 F | 5/19 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/25 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 6/3/2009 | 0.19 F | 12/14/2006 | 0.07 F | 12/27 | 5 |
| | Toluene | SW8260 | 1.1 | 3/10/2003 | 2.4 | 3/21/2006 | 0.14 F | 3/22 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/39 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/39 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/39 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **JW-15** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/7 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/4 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/4 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/4 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/7 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/4 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/4 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/21/2006 | 1.1 M | 3/21/2006 | 1.1 M | 1/3 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/4 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/7 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/4 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/7 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/7 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/7 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **JW-26** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/17 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/17 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/17 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 9/10/2003 | 0.18 F | 3/21/2002 | 0.11 F | 3/14 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/18 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/17 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/17 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/21/2002 | 0.21 F | 3/21/2002 | 0.21 F | 1/15 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/17 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 6/18/2003 | 0.14 F | 3/13/2003 | 0.11 F | 3/15 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/17 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/18 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/18 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/18 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **JW-27** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/19 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/6 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/6 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/6 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/19 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/6 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/6 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/21/2006 | 1.1 M | 3/21/2006 | 1.1 M | 1/5 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/6 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 3/6/2008 | 0.12 F | 3/6/2008 | 0.07 F | 4/15 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/6 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/19 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 6/21/2005 | 0.10 F | 6/21/2005 | 0.10 F | 1/18 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/19 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **JW-28** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/27 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/15 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/15 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/15 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/27 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/15 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/15 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/22/2006 | 1.1 F | 3/22/2006 | 1.1 F | 1/14 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/15 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/27 | 5 |
| | Toluene | SW8260 | 1.1 | 9/22/2004 | 0.24 F | 6/21/2006 | 0.12 F | 11/4 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/27 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/27 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/27 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **JW-29** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/34 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/16 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/16 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/16 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/34 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/16 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/16 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/21/2006 | 1.1 M | 3/21/2006 | 1.1 M | 1/15 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/16 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 9/20/2007 | 0.16 F | 3/4/2008 | 0.10 F | 8/26 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/16 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/34 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/34 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/34 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **JW-30** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/33 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/16 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/16 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 3/23/2005 | 0.11 F | 3/23/2005 | 0.11 F | 1/15 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 6/12/2007 | 0.65 F | 3/13/2003 | 0.30 F | 5/28 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/16 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/16 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/22/2006 | 1.1 F | 9/8/1999 | 0.15 F | 2/14 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/16 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 6/22/2006 | 0.22 F | 12/21/2005 | 0.09 F | 13/20 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/16 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/33 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 12/15/2004 | 0.27 F | 3/13/2003 | 0.08 F | 3/30 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/33 | 2 |
| | Arsenic | SW7060 | 5.0 | | | | | 0/1 | 10 |
| | Barium | SW6010 | 5.0 | 9/8/1999 | 30 | 9/8/1999 | 30 | 1/0 | 2000 |
| | Cadmium | SW7131 | 1.0 | | | | | 0/1 | 5 |
| | Chromium | SW6010 | 10 | 9/8/1999 | 2.0 F | 9/8/1999 | 2.0 F | 1/0 | 100 |
| | Copper | SW6010 | 10 | 9/8/1999 | 13 | 9/8/1999 | 13 | 1/0 | 1300 |
| | Mercury | SW7470 | 1.0 | | | | | 0/1 | 2 |
| | Nickel | SW6010 | 10 | | | | | 0/1 | -- [6] |
| | Lead | SW7421 | 5.0 | | | | | 0/1 | 15 |
| | Zinc | SW6010 | 50 | 9/8/1999 | 200 | 9/8/1999 | 200 | 1/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **JW-31** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/2 | 7 |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/2 | 70 |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/2 | 5 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/2 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/2 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/2 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **LS-1** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/21 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | 3/12/2003 | 0.46 F | 3/12/2003 | 0.46 F | 1/13 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | 3/12/2003 | 0.58 F | 3/12/2003 | 0.58 F | 1/13 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 3/12/2003 | 0.42 | 9/17/2002 | 0.07 F | 10/4 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 12/2/2009 | 2.5 | 12/2/2009 | 2.5 | 1/21 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | 3/12/2003 | 0.51 | 3/12/2003 | 0.51 | 1/13 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/14 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 12/19/2001 | 0.22 F | 12/19/2001 | 0.22 F | 1/12 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/14 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 12/2/2009 | 1.3 F | 9/9/2003 | 0.24 F | 18/4 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/14 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/22 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 12/2/2009 | 0.63 F | 3/12/2003 | 0.12 F | 15/7 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/22 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **LS-4** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/32 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | 9/20/2005 | 0.23 F | 9/20/2005 | 0.23 F | 1/21 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/22 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 9/20/2005 | 0.40 | 3/3/2004 | 0.16 F | 3/19 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/33 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/22 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/22 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/23/2006 | 1.2 F | 12/19/2001 | 0.20 F | 2/19 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/22 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 3/12/2003 | 0.25 F | 12/12/2006 | 0.09 F | 18/15 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/22 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/33 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/33 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/33 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **LS-5** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/37 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/23 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/23 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/23 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/38 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/23 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/23 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/20/2006 | 1.1 M | 3/20/2002 | 0.25 F | 3/19 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/23 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 8/31/2009 | 0.96 F | 3/12/2003 | 0.08 F | 11/27 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/23 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/38 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 11/30/2009 | 2.8 | 6/19/2006 | 0.09 F | 32/6 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/38 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **LS-6** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/41 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | 6/20/2005 | 0.60 F | 9/19/2005 | 0.11 F | 3/24 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/27 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 6/20/2005 | 0.60 | 12/21/2005 | 0.07 F | 5/22 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/42 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | 6/20/2005 | 0.43 F | 9/20/2004 | 0.14 F | 2/25 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/27 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/20/2006 | 1.1 M | 12/18/2001 | 0.33 F | 3/23 | 5 |
| | Naphthalene | SW8260 | 1.0 | 3/21/2005 | 0.43 | 3/21/2005 | 0.43 | 1/26 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 9/27/2001 | 10 | 12/11/2006 | 0.69 F | 41/1 | 5 |
| | Toluene | SW8260 | 1.1 | 3/12/2003 | 0.17 F | 3/12/2003 | 0.17 F | 1/26 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/42 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 9/18/2006 | 1.8 | 9/16/2002 | 0.10 F | 37/5 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/42 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **LS-6-A2** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/19 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/12 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/12 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/12 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/19 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/12 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/12 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/20/2006 | 1.1 M | 8/30/2001 | 0.28 F | 5/7 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/12 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/19 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/12 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/19 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/19 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/19 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **LS-7** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/46 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | 9/16/2002 | 0.17 F | 9/16/2002 | 0.17 F | 1/32 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/29 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 9/16/2002 | 0.83 | 12/2/2002 | 0.08 F | 16/17 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/47 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/33 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/29 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/20/2006 | 1.1 M | 12/18/2001 | 0.39 F | 3/29 | 5 |
| | Naphthalene | SW8260 | 1.0 | 7/31/2001 | 0.22 F | 3/18/2002 | 0.12 R | 2/27 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 12/2/2002 | 7.2 | 8/30/2001 | 1.1 F | 46/1 | 5 |
| | Toluene | SW8260 | 1.1 | 3/10/2003 | 0.78 F | 6/20/2005 | 0.12 F | 2/27 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/47 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 12/13/2000 | 1.2 | 3/2/2009 | 0.10 F | 41/6 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/47 | 2 |
| | Arsenic | SW7060 | 5.0 | | | | | 0/1 | 10 |
| | Barium | SW6010 | 5.0 | 12/13/1999 | 36 | 12/13/1999 | 36 | 1/0 | 2000 |
| | Cadmium | SW7131 | 1.0 | | | | | 0/1 | 5 |
| | Chromium | SW6010 | 10 | 12/13/1999 | 4.0 F | 12/13/1999 | 4.0 F | 1/0 | 100 |
| | Copper | SW6010 | 10 | 12/13/1999 | 5.0 F | 12/13/1999 | 5.0 F | 1/0 | 1300 |
| | Mercury | SW7470 | 1.0 | | | | | 0/1 | 2 |
| | Nickel | SW6010 | 10 | | | | | 0/1 | -- [6] |
| | Lead | SW7421 | 5.0 | | | | | 0/1 | 15 |
| | Zinc | SW6010 | 50 | 12/13/1999 | 22 | 12/13/1999 | 22 | 1/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **LS-7-A2** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/20 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/13 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/13 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/13 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/20 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/13 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/13 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/16/2002 | 3.0 R | 12/18/2001 | 0.30 F | 3/10 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/13 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/20 | 5 |
| | Toluene | SW8260 | 1.1 | 3/12/2003 | 0.52 F | 3/12/2003 | 0.52 F | 1/12 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/20 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/20 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/20 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **OFR-1** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/39 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/24 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/24 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/24 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/40 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/24 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/24 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/18/2002 | 1.4 B | 3/21/2002 | 0.32 F | 3/20 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/24 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 9/9/2003 | 0.49 F | 3/24/2005 | 0.19 F | 34/6 | 5 |
| | Toluene | SW8260 | 1.1 | 3/21/2002 | 0.12 F | 3/21/2002 | 0.12 F | 1/23 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/40 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/40 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/40 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **OFR-3** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/38 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/25 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/25 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/25 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 12/4/2003 | 0.21 F | 9/2/2008 | 0.11 F | 6/33 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/25 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | 6/11/2002 | 1.9 | 3/21/2005 | 0.16 F | 24/1 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/22/2006 | 1.1 F | 12/18/2001 | 0.26 F | 6/18 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/25 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 12/4/2003 | 13 | 3/22/2006 | 0.35 F | 39/0 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/25 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/39 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 12/4/2003 | 7.9 | 3/22/2006 | 0.46 F | 39/0 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/39 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **OFR-3-A2** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/16 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/9 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/8 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/9 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/16 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/9 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/9 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 4/30/2002 | 0.21 F | 4/30/2002 | 0.21 F | 1/8 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/8 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/16 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/8 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/16 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/16 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/16 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **OFR-4** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/9 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/6 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/6 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/6 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/9 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/6 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/6 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/21/2006 | 1.1 M | 3/21/2006 | 1.1 M | 1/5 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/6 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/9 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/6 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/9 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/9 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/9 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **RFR-3** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/11 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/8 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/8 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/8 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/12 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/8 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/8 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/8/1999 | 0.17 F | 9/8/1999 | 0.17 F | 1/6 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/8 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 12/2/2003 | 0.12 F | 12/2/2003 | 0.12 F | 1/11 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/8 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/12 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/12 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/12 | 2 |
| | Arsenic | SW7060 | 5.0 | | | | | 0/1 | 10 |
| | Barium | SW6010 | 5.0 | 9/8/1999 | 34 | 9/8/1999 | 34 | 1/0 | 2000 |
| | Cadmium | SW7131 | 1.0 | | | | | 0/1 | 5 |
| | Chromium | SW6010 | 10 | 9/8/1999 | 3.0 F | 9/8/1999 | 3.0 F | 1/0 | 100 |
| | Copper | SW6010 | 10 | 9/8/1999 | 5.0 F | 9/8/1999 | 5.0 F | 1/0 | 1300 |
| | Mercury | SW7470 | 1.0 | | | | | 0/1 | 2 |
| | Nickel | SW6010 | 10 | 9/8/1999 | 2.0 F | 9/8/1999 | 2.0 F | 1/0 | -- [6] |
| | Lead | SW7421 | 5.0 | 9/8/1999 | 4.1 F | 9/8/1999 | 4.1 F | 1/0 | 15 |
| | Zinc | SW6010 | 50 | 9/8/1999 | 130 | 9/8/1999 | 130 | 1/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **RFR-4** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/9 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/3 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/3 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 3/23/2005 | 0.22 F | 3/23/2005 | 0.22 F | 1/2 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/9 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/3 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/3 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/21/2006 | 1.3 M | 3/21/2006 | 1.3 M | 1/2 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/3 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/9 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/3 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/9 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/9 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/9 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **RFR-5** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/7 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/3 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/3 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/3 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/7 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/3 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/3 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/21/2006 | 1.3 M | 3/21/2006 | 1.3 M | 1/2 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/3 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/7 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/3 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/7 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/7 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/7 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **RFR-8** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/10 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/7 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/7 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/7 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/10 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/7 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/7 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 9/8/1999 | 0.15 F | 9/8/1999 | 0.15 F | 1/6 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/7 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/10 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/7 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/10 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/10 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/10 | 2 |
| | Arsenic | SW7060 | 5.0 | | | | | 0/1 | 10 |
| | Barium | SW6010 | 5.0 | 9/8/1999 | 31 | 9/8/1999 | 31 | 1/0 | 2000 |
| | Cadmium | SW7131 | 1.0 | | | | | 0/1 | 5 |
| | Chromium | SW6010 | 10 | 9/8/1999 | 4.0 F | 9/8/1999 | 4.0 F | 1/0 | 100 |
| | Copper | SW6010 | 10 | 9/8/1999 | 4.0 F | 9/8/1999 | 4.0 F | 1/0 | 1300 |
| | Mercury | SW7470 | 1.0 | | | | | 0/1 | 2 |
| | Nickel | SW6010 | 10 | | | | | 0/1 | -- [6] |
| | Lead | SW7421 | 5.0 | | | | | 0/1 | 15 |
| | Zinc | SW6010 | 50 | 9/8/1999 | 140 | 9/8/1999 | 140 | 1/0 | 5000 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **RFR-9** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/15 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/8 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/8 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/8 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/15 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/8 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/8 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 12/20/2001 | 0.52 F | 12/20/2001 | 0.52 F | 1/7 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/8 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 9/4/2009 | 0.20 F | 9/4/2009 | 0.20 F | 1/14 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/8 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/15 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/15 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/15 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **RFR-10** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/41 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/26 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/26 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 9/11/2003 | 0.21 F | 10/3/2001 | 0.07 F | 6/20 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 12/2/2003 | 0.96 F | 3/19/2007 | 0.13 F | 38/10 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/26 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/26 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/20/2006 | 1.1 M | 12/17/2001 | 0.30 F | 2/23 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/26 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 7/17/2003 | 92 | 12/11/2006 | 2.4 | 48/0 | 5 |
| | Toluene | SW8260 | 1.1 | 7/16/2003 | 28 | 6/20/2005 | 0.17 F | 7/25 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/48 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 7/16/2003 | 20 | 8/31/2009 | 1.2 | 46/2 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/42 | 2 |
| | Lead | SW6020 | 2.0 | 8/24/2004 | 0.80 F | 8/24/2004 | 0.80 F | 1/0 | 15 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **RFR-10-A2/B2** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/33 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/19 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/19 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/19 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/33 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/19 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/19 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/20/2006 | 1.1 M | 12/17/2001 | 0.96 F | 3/16 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/19 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/33 | 5 |
| | Toluene | SW8260 | 1.1 | 3/12/2003 | 0.12 F | 3/12/2003 | 0.12 F | 1/18 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/33 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/33 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/33 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **RFR-11** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/35 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/22 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/22 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 10/4/2001 | 0.14 F | 10/4/2001 | 0.14 F | 1/21 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/36 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/22 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/22 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/20/2006 | 1.1 M | 3/19/2002 | 0.24 F | 3/18 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/22 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 10/12/2001 | 17 | 6/19/2006 | 0.33 F | 32/4 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/22 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/36 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 12/1/2008 | 2.1 | 3/3/2008 | 0.08 F | 33/3 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/36 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **RFR-11-A2** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/19 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/12 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/12 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/12 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/19 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/12 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/12 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/20/2006 | 1.1 M | 12/17/2001 | 0.22 F | 4/8 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/12 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 3/12/2003 | 0.07 F | 3/12/2003 | 0.07 F | 1/18 | 5 |
| | Toluene | SW8260 | 1.1 | 3/19/2002 | 0.39 F | 3/12/2003 | 0.07 F | 2/10 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/19 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/19 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/19 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **RFR-12** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/23 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/21 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/21 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/21 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/24 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/21 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/21 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/23/2006 | 1.2 F | 12/18/2001 | 0.38 F | 2/18 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/21 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 12/2/2003 | 0.23 F | 12/5/2002 | 0.08 F | 3/21 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/21 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/24 | 100 |
| | Trichloroethene | SW8260 | 1.0 | 6/10/2003 | 0.24 F | 9/22/2004 | 0.11 F | 15/9 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/24 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **RFR-13** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/13 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | 1/11/2005 | 8.7 | 3/24/2005 | 1.4 | 4/5 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | 3/24/2005 | 1.2 | 3/24/2005 | 1.1 F | 2/7 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | 1/11/2005 | 65 | 6/22/2005 | 0.39 | 5/4 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | | | | | 0/13 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | 1/11/2005 | 2.9 | 3/24/2005 | 1.5 | 4/5 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/9 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/22/2006 | 1.1 F | 3/22/2006 | 1.1 F | 1/8 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/9 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | | | | | 0/13 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/9 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/13 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/13 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/13 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

| Well Location ID | Analytes of Concern in Groundwater Monitoring | Analytical Method [1] | CSSA RL [2] | Max Det Date [3] | Maximum Detected Conc | Min Det Date [3] | Minimum Detected Conc | Number of Detections/ NDs | Action Level/ MCL [4] |
|---|---|---|---|---|---|---|---|---|---|
| **RFR-14** | | | | | | | | | |
| | Dichloroethene, 1,1- | SW8260 | 1.2 | | | | | 0/17 | 7 |
| | Bromodichloromethane | SW8260 | 0.8 | | | | | 0/2 | 80 [5] |
| | Bromoform | SW8260 | 1.2 | | | | | 0/2 | 80 [5] |
| | Chloroform | SW8260 | 0.3 | | | | | 0/2 | 80 [5] |
| | cis-1,2-Dichloroethene | SW8260 | 1.2 | 6/14/2007 | 0.27 F | 6/14/2007 | 0.27 F | 1/16 | 70 |
| | Dibromochloromethane | SW8260 | 0.5 | | | | | 0/2 | 80 [5] |
| | Dichlorodifluoromethane | SW8260 | 1.0 | | | | | 0/2 | -- [6] |
| | Methylene chloride | SW8260 | 2.0 | 3/23/2006 | 1.2 F | 3/23/2006 | 1.2 F | 1/1 | 5 |
| | Naphthalene | SW8260 | 1.0 | | | | | 0/2 | -- [6] |
| | Tetrachloroethene | SW8260 | 1.4 | 9/2/2009 | 0.28 F | 3/22/2007 | 0.10 F | 12/5 | 5 |
| | Toluene | SW8260 | 1.1 | | | | | 0/2 | 1000 |
| | trans-1,2-Dichloroethene | SW8260 | 0.6 | | | | | 0/17 | 100 |
| | Trichloroethene | SW8260 | 1.0 | | | | | 0/17 | 5 |
| | Vinyl chloride | SW8260 | 1.1 | | | | | 0/17 | 2 |

*Units are micrograms per liter (µ/L). No results listed indicates that the analyte was analyzed for, but not detected above the Method Detection Limit (MDL).*

[1] Analytical method listed without the revision designation. For metals analylzed by differing methods, both methods are listed: Max Method/Min Method.

[2] Reporting Limit (RL) established by CSSA Base-Wide Quality Assurance Project Plan, January, 2003.

[3] Where the minimum and/or maximum detected results were the same for multiple dates, the most recent date is listed.

[4] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Lead and copper are Action Levels. Taken from the US EPA National Primary Drinking Water Standards.

[5] MCL for THMs combined cannot exceed 80 µg/L (as of January 1, 2002).

[6] No MCL or Action Level has been established for this analyte.

THIS PAGE INENTIONALLY LEFT BLANK

# Appendix C Statistical Summary of Occurrence of Groundwater COCs

THIS PAGE INENTIONALLY LEFT BLANK

# Appendix C
## Statistical Summary of Occurrence of Groundwater Contaminants of Concern for All Active Wells
## Long Term Monitoring Optimization
## Camp Stanley Storage Activity, Texas

| Parameter | Total Samples [a/] | Range of Detections (µg/L) [b/] | Percentage of Detections | Percentage of Samples with MCL Exceedances | MCL (µg/L) [b/] | Number of Wells with Results [c/] | Number of Wells with Detections | Number of Wells with MCL Exceedances |
|---|---|---|---|---|---|---|---|---|
| Tetrachloroethene | 2412 | 0 - 230 | 42% | 13% | 5 | 99 | 61 | 12 |
| Trichloroethene | 2412 | 0 - 510 | 28% | 11% | 5 | 99 | 44 | 8 |
| Lead | 744 | 0 - 250 | 54% | 5.6% | 15 | 53 | 50 | 14 |
| Dichloroethene, cis-1,2- | 2375 | 0 - 290 | 16% | 4.8% | 70 | 99 | 24 | 4 |
| Zinc | 548 | 0 - 3,500,000 | 91% | 1.5% | 5000 | 52 | 52 | 3 |
| Arsenic | 544 | 0 - 30 | 63% | 1.5% | 10 | 52 | 47 | 7 |
| Mercury | 682 | 0 - 10 | 16% | 1.0% | 2 | 52 | 37 | 2 |
| Methylene chloride | 1577 | 0 - 19 | 20% | 0.44% | 5 | 97 | 86 | 6 |
| Cadmium | 740 | 0 - 15 | 17% | 0.41% | 5 | 52 | 39 | 3 |
| Chromium | 683 | 0 - 240 | 34% | 0.29% | 100 | 52 | 48 | 1 |
| Alkalinity, Total (as CaCO3) | 159 | 210,000 - 380,000 | 100% | | | 42 | 42 | |
| Calcium | 76 | 1,600 - 120,000 | 100% | | | 46 | 46 | |
| Chloride | 117 | 7,300 - 32,000 | 100% | | | 54 | 54 | |
| Dichloroethene, 1,2- (total) | 4 | 43 - 130 | 100% | | | 2 | 2 | |
| Magnesium | 76 | 7.0 - 52,000 | 100% | | | 46 | 46 | |
| Potassium | 78 | 750 - 460,000 | 100% | | | 46 | 46 | |
| Sodium | 76 | 6,100 - 200,000 | 100% | | | 46 | 46 | |
| Sulfate | 93 | 2,300 - 130,000 | 100% | | | 41 | 41 | |
| Total Dissolved Solids | 125 | 130,000 - 500,000 | 100% | | | 20 | 20 | |
| Alkalinity, Bicarbonate | 47 | 0 - 350,000 | 98% | | | 39 | 39 | |

**a/** Analytical data includes sampling results from August 1991 through December 2009.
**b/** µg/L = micrograms per liter.
**c/** Data includes 99 active wells shown in Appendix B.

| Parameter | Total Samples [a/] | Range of Detections (µg/L) [b/] | Percentage of Detections | Percentage of Samples with MCL Exceedances | MCL (µg/L) [b/] | Number of Wells with Results [c/] | Number of Wells with Detections | Number of Wells with MCL Exceedances |
|---|---|---|---|---|---|---|---|---|
| Barium | 546 | 0 - 300 | 98% | | 2000 | 52 | 52 | |
| Fluoride | 51 | 0 - 2,300 | 96% | | | 39 | 38 | |
| Manganese | 114 | 0 - 81 | 81% | | | 46 | 45 | |
| Iron | 76 | 0 - 28,000 | 74% | | | 46 | 41 | |
| Nitrate | 90 | 0 - 11,000 | 73% | | | 41 | 32 | |
| Methane | 73 | 0 - 7,900 | 71% | | | 32 | 32 | |
| Nickel | 585 | 0 - 220 | 53% | | | 52 | 47 | |
| Copper | 546 | 0 - 180 | 44% | | 1300 | 52 | 44 | |
| Bromide | 60 | 0 - 1,100 | 33% | | | 40 | 17 | |
| Selenium | 37 | 0 - 6.0 | 22% | | | 17 | 4 | |
| Acetone | 81 | 0 - 3,600 | 17% | | | 21 | 8 | |
| Toluene | 1353 | 0 - 300 | 17% | | 1000 | 97 | 57 | |
| Chloroform | 1606 | 0 - 65 | 13% | | 80 | 97 | 26 | |
| Isopropanol | 16 | 0 - 15 | 13% | | | 2 | 1 | |
| Alkalinity, Carbonate | 47 | 0 - 140,000 | 8.5% | | | 39 | 4 | |
| Dichloroethene, trans-1,2- | 2408 | 0 - 36 | 8.4% | | 100 | 99 | 9 | |
| Phosphorus, Total Orthophosphate | 29 | 0 - 790 | 6.9% | | 1000 | 26 | 2 | |
| Nitrite | 90 | 0 - 1,700 | 6.7% | | | 41 | 6 | |
| Dichloroethane, 1,2- | 354 | 0 - 0.58 | 4.5% | | | 81 | 14 | |
| Benzene | 333 | 0 - 0.56 | 4.2% | | 100 | 81 | 10 | |
| Chloromethane | 412 | 0 - 5.0 | 3.9% | | | 82 | 7 | |
| 1,2,4-Trimethylbenzene | 333 | 0 - 0.37 | 2.4% | | | 81 | 8 | |
| Dichlorodifluoromethane | 1264 | 0 - 1.9 | 2.4% | | | 97 | 2 | |
| Dichloroethene, 1,1- | 2324 | 0 - 1.0 | 2.2% | | 7 | 99 | 13 | |

**a/** Analytical data includes sampling results from August 1991 through December 2009.
**b/** µg/L = micrograms per liter.
**c/** Data includes 99 active wells shown in Appendix B.

| Parameter | Total Samples [a/] | Range of Detections (µg/L) [b/] | Percentage of Detections | Percentage of Samples with MCL Exceedances | MCL (µg/L) [b/] | Number of Wells with Results [c/] | Number of Wells with Detections | Number of Wells with MCL Exceedances |
|---|---|---|---|---|---|---|---|---|
| Naphthalene | 1265 | 0 - 3.8 | 2.0% | | | 97 | 14 | |
| Vinyl chloride | 2298 | 0 - 1.3 | 1.7% | | 2 | 99 | 11 | |
| Bromodichloromethane | 1599 | 0 - 8.7 | 1.5% | | 80 | 97 | 10 | |
| 1,2,3-Trichlorobenzene | 333 | 0 - 0.96 | 1.2% | | | 81 | 4 | |
| 1,3,5-Trimethylbenzene | 333 | 0 - 0.38 | 1.2% | | | 81 | 4 | |
| Dibromochloromethane | 1599 | 0 - 4.5 | 1.1% | | 80 | 97 | 8 | |
| 1,2,4-Trichlorobenzene | 335 | 0 - 0.85 | 0.90% | | | 81 | 3 | |
| Bromochloromethane | 333 | 0 - 0.25 | 0.90% | | | 81 | 3 | |
| Ethylbenzene | 333 | 0 - 0.46 | 0.90% | | | 81 | 3 | |
| Xylene, o- | 333 | 0 - 0.45 | 0.90% | | | 81 | 3 | |
| Bromoform | 1263 | 0 - 3.4 | 0.63% | | 80 | 97 | 7 | |
| Isopropyltoluene, 4- (Cymene, p-) | 324 | 0 - 0.090 | 0.62% | | | 81 | 2 | |
| Butylbenzene, n- | 333 | 0 - 0.49 | 0.60% | | | 81 | 2 | |
| Butylbenzene, sec- | 333 | 0 - 0.40 | 0.60% | | | 81 | 2 | |
| Butylbenzene, tert- | 333 | 0 - 0.42 | 0.60% | | | 81 | 2 | |
| Chlorotoluene, 2- | 333 | 0 - 0.41 | 0.60% | | | 81 | 2 | |
| Chlorotoluene, 4- | 333 | 0 - 0.40 | 0.60% | | | 81 | 2 | |
| Hexachlorobutadiene | 335 | 0 - 1.4 | 0.60% | | | 81 | 2 | |
| Styrene | 333 | 0 - 0.29 | 0.60% | | | 81 | 2 | |
| Xylene, m,p- | 333 | 0 - 0.97 | 0.60% | | | 81 | 2 | |
| Dibromomethane | 333 | 0 - 0.19 | 0.30% | | | 81 | 1 | |
| Dichloroethane, 1,1- | 412 | 0 - 0.14 | 0.24% | | | 82 | 1 | |

**a/** Analytical data includes sampling results from August 1991 through December 2009.
**b/** µg/L = micrograms per liter.
**c/** Data includes 99 active wells shown in Appendix B.

THIS PAGE INENTIONALLY LEFT BLANK

## Appendix D Groundwater Metals Detections above the MCL, 1995-2009

THIS PAGE INENTIONALLY LEFT BLANK

**Appendix D**
**Groundwater Metals Detections Above MCL, 1995-2005**

| Well ID | Laboratory | Sample | Date | Arsenic (mg/L) | Barium (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Copper (mg/L) | Lead (mg/L) | Mercury (mg/L) | Zinc (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Maximum Contaminant Level (MCL)** | | | | **0.01** | **2** | **0.005** | **0.1** | **AL=1.3** | **AL=0.015** | **0.002** | **SS=5.0** |
| **CS-1** | Chemron | | 12/11/1995 | 0.005U | 0.05U | 0.005U | 0.01U | **0.06** | **0.023** | 0.0004U | **4** |
| | Chemron | | 1/19/1996 | 0.01U | **0.03** | 0.005U | 0.01U | **0.02** | **0.015** | 0.0004U | **0.39** |
| | Chemron | | 3/1/1996 | 0.005U | **0.03** | 0.001U | 0.01U | **0.07** | **0.015** | 0.0004U | **0.48** |
| | ITS | | 01/07/97[1] | 0.001U | 0.04 | 0.00028F | 0.00227F | 0.01867F | 0.030 | 0.0001U | 0.69 |
| | ITS | | 10/23/97[1] | 0.0009U | 0.034 | 0.0002U | 0.002U | 0.0072F | 0.007 | 0.0001U | 0.85 |
| | O'B&G | | 9/9/1999 | 0.00044U | **0.0300** | 0.00019U | **0.002F** | **0.008F** | **0.0017F** | 0.00016U | **0.293** |
| | O'B&G | | 12/14/1999 | 0.00045U | **0.0293** | 0.00019U | **0.003F** | **0.002F** | **0.0026F** | 0.00016U | **0.472** |
| | O'B&G | | 3/20/2000 | **0.0006F** | **0.0278** | 0.00019U | **0.003F** | **0.003F** | **0.0172** | 0.00016U | **0.387** |
| | O'B&G | | 6/14/2000 | **0.00045J** | **0.032** | 0.00019U | **0.004F** | **0.002F** | **0.0043F** | 0.00008U | **0.3** |
| *Duplicate* | O'B&G | | 6/14/2000 | **0.00045J** | **0.0323** | 0.00019U | **0.004F** | **0.003F** | **0.0041F** | 0.00008U | **0.303** |
| | O'B&G | | 9/13/2000 | **0.002F** | **0.0347** | 0.00019U | **0.006F** | **0.016** | **0.0851J** | 0.00012U | **0.959** |
| | O'B&G | | 12/12/2000 | **0.0005F** | **0.0302** | **0.0114R** | **0.003F** | **0.004F** | **0.0314J** | 0.00012U | **1.7813** |
| | O'B&G | | 3/19/2001 | **0.0013F** | **0.0372** | 0.0002U | **0.004F** | **0.003F** | **0.0131** | 0.0001U | **0.290** |
| | AP18430 | | 6/12/2001 | 0.0008U | **0.0377** | 0.0001U | 0.001U | **0.009F** | **0.0063** | 0.0001U | **0.265** |
| | AP22229 | | 9/17/2001 | **0.0009F** | **0.0352J** | 0.0001U | 0.001U | **0.006F** | **0.0082** | **0.0002F** | **0.521** |
| | AP26254/AP26259 | | 12/11/2001 | 0.0008U | **0.0356** | 0.0001U | 0.001U | 0.003U | **0.0037F** | 0.0001U | **0.327** |
| | AP30837 | | 3/19/2002 | 0.0008U | **0.0343** | 0.0001U | 0.001U | **0.009F** | **0.005** | 0.0001U | **0.431J** |
| | STL | | 6/17/2002 | **0.0006F** | **0.0308** | **0.000027F** | 0.0026U | **0.012** | **0.0028** | 0.000028U | **.381J** |
| | STL | | 9/10/2002 | **0.00059F** | **0.036** | 0.000022U | 0.00074U | **0.0042F** | **0.0031** | 0.000028U | **0.270** |
| | STL | | 12/10/2002 | **0.00059F** | **0.037** | **0.000036F** | 0.00074U | **0.022** | **0.0053** | 0.000015U | **.290J** |
| | STLD3C250256 | | 3/19/2003 | **0.00043F** | **0.035** | 0.000022U | 0.00074U | **0.0022F** | **0.003** | 0.000015U | **0.3** |
| | STLD3F200339 | | 6/19/2003 | **0.00057F** | **0.034** | 0.000051U | 0.0021U | **0.0033F** | **0.0021** | 0.000015U | **0.3** |
| | STLD3I170355 | | 9/16/2003 | **0.57F** | **0.037** | 0.000051U | 0.0021U | **0.0052F** | **0.004** | 0.000054U | **0.63** |
| | STLD3L180116 | | 12/16/2003 | **0.00066F** | **0.035** | 0.000051U | 0.0021U | **0.0062F** | **0.0066** | 0.000054U | **0.36** |
| *Duplicate* | STLD3L180116 | | 12/16/2003 | **0.00066F** | **0.036** | 0.000051U | 0.0021U | **0.002F** | **0.0062** | 0.000054U | **0.34** |
| | STLD4C120341 | | 3/11/2004 | **0.00045F** | **0.039** | 0.000051R | 0.0021U | **0.011J** | **0.0032J** | 0.000054U | **0.25** |
| *Duplicate* | STLD4C120341 | | 3/11/2004 | **0.00051F** | **0.039** | 0.000051R | 0.0021U | **0.042J** | **0.0051J** | 0.000054U | **0.26** |
| | STLD4F240326 | | 6/22/2004 | **0.00045F** | **0.036** | 0.000028U | 0.0021U | **0.024** | **0.0029** | 0.000025U | **0.25** |
| | STLD4I160208 | | 9/15/2004 | **0.00051F** | **0.036** | 0.000028U | 0.0012U | 0.0016U | **0.0021** | **0.000047F** | **0.23** |
| | STLD4L040200 | | 12/2/2004 | **0.00059F** | **0.036** | 0.000028U | 0.0012U | **0.0024F** | **0.0011F** | **0.000039F** | **0.17** |
| | STLD5C170383 | | 3/16/2005 | **0.0007F** | **0.035** | 0.000028U | 0.0012U | **0.041** | **0.0015F** | **0.000049F** | **0.22** |
| | STLD5F170398 | | 6/15/2005 | **0.00067F** | **0.036** | 0.00004U | 0.00082U | 0.0045U | **0.0052** | 0.000044U | **0.3** |
| | STL | | 9/8/2005 | **0.00069F** | **0.039** | 0.00004U | 0.0026U | **0.01** | **0.0091** | 0.000044U | **0.42** |
| | STL | | 6/15/2006 | **0.0004F** | **0.032** | 0.00004U | 0.0026U | 0.0045U | **0.00098F** | 0.000027U | **0.22** |
| | APPL | | 12/13/2007 | NA | NA | 0.00004U | NA | NA | **0.0017F** | NA | NA |
| | APPL | | 6/27/2008 | 0.00022U | **0.0371** | 0.0005U | 0.001U | **0.005F** | 0.0019U | **0.0004F** | **0.159** |
| | APPL | | 9/18/2008 | **0.00222F** | **0.0376** | 0.0005U | 0.001U | 0.003U | 0.0019U | 0.0001U | **0.067** |
| | APPL | | 12/10/2008 | 0.00022U | **0.0374** | 0.0005U | 0.001U | **0.006F** | 0.0019U | 0.0001U | **0.072** |
| | APPL | | 6/11/2009 | 0.0002U | **0.0356** | 0.0005U | 0.001U | 0.003U | **0.0143F** | **0.0002F** | **0.423** |
| | APPL | | 9/16/2009 | 0.0002U | **0.0297** | 0.0005U | 0.001U | **0.009F** | **0.0028F** | 0.0001U | **0.274** |
| | APPL | | 12/14/2009 | 0.0002U | **0.0387** | 0.0005U | 0.001U | 0.003U | 0.0019U | 0.0001U | **0.187** |
| **CS-2** | Chemron | | 12/12/1995 | **0.013** | **0.3** | **0.008** | **0.01** | **0.05** | **0.25** | 0.0004U | **0.33** |
| *Duplicate* | Chemron | | 12/12/1995 | 0.005U | 0.05U | 0.005U | 0.01U | 0.02U | 0.015U | 0.0004U | **0.04** |
| | Chemron | | 1/19/1996 | **0.01** | **0.03** | 0.005U | 0.01U | **0.02** | **0.01** | 0.0004U | **0.03** |
| *Duplicate* | Chemron | | 1/19/1996 | 0.015U | **0.04** | 0.005U | 0.01U | 0.03U | **0.011** | 0.0004U | **0.04** |
| | Chemron | | 2/29/1996 | **0.006** | **0.04** | 0.001U | 0.01U | **0.02** | **0.005** | 0.0004U | 0.02U |
| | ITS | | 01/15/97[1] | 0.001U | 0.04 | 0.0002U | 0.002U | **0.00889F** | **0.00205F** | 0.0001U | 0.016U |
| | ITS | | 10/23/97[1] | 0.0009U | 0.03 | 0.0002U | 0.002U | 0.004U | 0.0015U | 0.0001U | 0.016U |
| | O'B&G | | 9/7/1999 | 0.00044U | **0.04** | 0.00019U | **0.005F** | **0.002F** | 0.00142U | 0.00016U | **0.005F** |
| *Duplicate* | O'B&G | | 9/7/1999 | 0.00044U | **0.0386** | 0.00019U | **0.003F** | **0.003F** | 0.00142U | 0.00016U | **0.006F** |
| | O'B&G | | 12/14/1999 | 0.00045U | **0.0327** | 0.00019U | **0.004F** | 0.0009U | 0.00142U | 0.00016U | 0.0021U |
| *Duplicate* | O'B&G | | 12/14/1999 | 0.00045U | **0.0332** | 0.00019U | **0.004F** | 0.0009U | 0.00142U | 0.00016U | **0.004F** |
| | O'B&G | | 3/20/2000 | 0.00045U | **0.0340** | 0.00019U | **0.003F** | 0.0009U | 0.00053U | 0.00016U | **0.007F** |
| *Duplicate* | O'B&G | | 3/20/2000 | **0.0007F** | **0.0342** | 0.00019U | **0.003F** | 0.0009U | 0.00053U | 0.00016U | **0.004F** |
| | O'B&G | | 6/12/2000 | **0.00045J** | **0.0338** | 0.00019U | **0.004F** | 0.0009U | 0.00053U | 0.00008U | **0.005F** |
| | O'B&G | | 9/12/2000 | **0.00045M** | **0.0364** | 0.00019U | **0.006F** | **0.001F** | **0.00053J** | **0.00012M** | **0.006F** |
| *Duplicate* | O'B&G | | 9/12/2000 | **0.00045M** | **0.0370** | 0.00019U | **0.004F** | **0.001F** | **0.00053J** | **0.00012M** | **0.006F** |
| | O'B&G | | 12/13/2000 | 0.00045U | **0.0359** | **0.00019J** | **0.004F** | 0.0005U | **0.00053J** | 0.00012U | **0.0029F** |
| *Duplicate* | O'B&G | | 12/13/2000 | 0.00045U | **0.0373** | **0.00019J** | **0.006F** | 0.0005U | **0.00053J** | 0.00012U | **0.0036F** |
| | O'B&G | | 3/20/2001 | 0.00028U | **0.0338** | **0.00021M** | **0.003F** | **0.001F** | 0.00026U | 0.00012U | **0.0034F** |
| *Duplicate* | O'B&G | | 3/20/2001 | 0.00028U | **0.0332** | **0.00021M** | **0.002F** | **0.001F** | 0.00026U | 0.00012U | **0.0037F** |
| | AP18323 | | 6/13/2001 | 0.0008U | **0.0349** | 0.0001U | **0.002F** | **0.004F** | 0.0008U | 0.0001U | **0.018F** |
| | AP22213 | | 9/13/2001 | 0.0008U | **0.0352J** | 0.0001U | **0.004F** | 0.003U | **0.0012F** | 0.0001U | **0.013F** |
| | AP26534/AP26520 | | 12/14/2001 | 0.0008U | **0.0318** | **0.0001** | 0.001U | 0.003U | **0.0014F** | 0.0001U | 0.008U |
| | STL D2C150260009 | | 3/14/2002 | **0.00059F** | **0.035** | 0.000022U | **0.0058F** | .0042U | **0.00073F** | 0.000028U | **.006F** |
| | STL | | 6/18/2002 | **0.00097F** | **0.0358** | **0.000029F** | **0.039J** | .0042U | **0.0014F** | 0.000028U | **.0077F** |
| *Duplicate* | STL | | 6/18/2002 | **0.00086F** | **0.0346** | **0.000032F** | **0.0173J** | .0042U | **0.0013F** | 0.000028U | **.009F** |
| | STLD3F200337 | | 6/19/2003 | **0.00056F** | **0.034** | **0.00011F** | .0021U | **.0016F** | **0.00021F** | 0.000015U | **.0053F** |
| | STLD4F170404 | | 6/16/2004 | **0.00054F** | **0.036** | 0.000028U | 0.0021U | 0.00097U | **0.00031F** | 0.000025U | 0.0036U |
| | STLD5F170398 | | 6/14/2005 | **0.00069F** | **0.032** | 0.00004U | **0.0019F** | 0.0045U | **0.00041F** | **0.000055F** | **0.0052F** |
| *Duplicate* | STLD5F170398 | | 6/14/2005 | **0.00075F** | **0.032** | 0.00004U | 0.00082U | 0.0045U | **0.00042F** | 0.000044U | **0.0097F** |
| | APPL | | 12/13/2007 | NA | NA | 0.00004U | NA | NA | **0.0002F** | NA | NA |
| | APPL | | 9/11/2008 | NA | NA | 0.0005U | 0.001U | NA | **0.003F** | 0.0001U | NA |
| | APPL | | 6/9/2009 | NA | NA | 0.0005U | **0.015** | NA | **0.0027F** | 0.0001U | NA |

**Appendix D**
**Groundwater Metals Detections Above MCL, 1995-2005**

| Well ID | Laboratory | Sample | Date | Arsenic (mg/L) | Barium (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Copper (mg/L) | Lead (mg/L) | Mercury (mg/L) | Zinc (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | APPL | | 12/9/2009 | NA | NA | 0.0005U | 0.001U | NA | 0.0019U | 0.0001U | NA |
| **CS-3** | Chemron | | 12/12/1995 | 0.005U | 0.05U | 0.005U | 0.01U | 0.02U | **0.029** | 0.0004U | **0.04** |
| | Chemron | | 1/19/1996 | 0.01U | **0.03** | 0.005U | 0.01U | **0.05** | **0.002** | 0.0004U | **0.05** |
| | Chemron | | 2/27/1996 | 0.005U | **0.04** | 0.001U | 0.01U | **0.03** | **0.028** | 0.0004U | **0.04** |
| | ITS | | 01/10/97[1] | 0.001U | 0.03 | 0.0002U | 0.002U | **0.01048F** | 0.0015U | 0.0001U | 0.01935F |
| | O'B&G | | 12/16/1999 | 0.00045U | **0.0265** | 0.00019U | **0.005F** | **0.004F** | 0.00142U | 0.00016U | **0.013** |
| **CS-9** | Chemron | | 12/12/1995 | 0.005U | 0.05U | 0.005U | 0.01U | **0.02** | 0.015U | 0.0004U | **0.84** |
| | Chemron | | 2/28/1996 | **0.02** | **0.03** | 0.001U | 0.01U | **0.02** | **0.005** | 0.0004U | **0.2** |
| | ITS | | 01/06/97[1] | 0.001U | 0.03 | 0.00026F | 0.002U | 0.05578F | 0.013 | 0.00038F | 0.45 |
| | ITS | | 10/23/97[1] | 0.0018F | 0.04 | 0.00045F | 0.0023F | 0.0103F | 0.013 | 0.000247F | 0.56 |
| | O'B&G | | 9/8/1999 | 0.00044U | **0.0331** | 0.00019U | **0.004F** | **0.007F** | **0.0034F** | 0.00016U | **0.624** |
| | O'B&G | | 12/13/1999 | 0.00045U | **0.0331** | 0.00019U | **0.006F** | **0.004F** | **0.0018F** | 0.00016U | **0.421** |
| | O'B&G | | 3/20/2000 | 0.00045U | **0.0347** | 0.00019U | **0.005F** | **0.003F** | **0.0025F** | 0.00016U | **0.717** |
| | O'B&G | | 6/13/2000 | **0.00045M** | **0.0356** | 0.00019U | **0.004F** | **0.004F** | **0.0046F** | 0.00008U | **0.590** |
| | O'B&G | | 9/13/2000 | **0.00045J** | **0.0364** | 0.00019U | **0.005F** | **0.003F** | **0.0142J** | 0.00012U | **1.319** |
| | O'B&G | | 12/12/2000 | 0.00045U | **0.0363** | **0.00019J** | **0.003F** | **0.006F** | **0.0019F** | 0.00012U | **0.4585** |
| | O'B&G | | 3/19/2001 | 0.00028U | **0.0339** | 0.00021U | **0.003F** | **0.005F** | **0.0018F** | 0.00012U | **0.3331** |
| | AP18428 | | 6/12/2001 | 0.0008U | **0.0383** | 0.0001U | 0.001U | **0.007F** | **0.002F** | 0.0001U | **0.28** |
| | AP22230 | | 9/17/2001 | 0.0008U | **0.0356J** | **0.0003F** | 0.001U | **0.009F** | **0.005** | **0.0002F** | **0.138** |
| | AP26251/AP26256 | | 12/11/2001 | 0.0008U | **0.0349** | 0.0001U | 0.001U | **0.008F** | **0.0028F** | 0.0001U | **0.256** |
| | AP30835 | | 3/19/2002 | 0.0008U | **0.0348** | 0.0001U | 0.001U | **0.007F** | **0.0025F** | 0.0001U | **0.087J** |
| | STL | | 6/17/2002 | **0.0011F** | **0.0381** | **0.00011F** | .0026U | **0.0138** | **0.0109** | **0.0013** | **0.693J** |
| | STL | | 9/10/2002 | **0.00044F** | **0.035** | **0.000032F** | 0.00074U | **0.0026F** | **0.00065F** | 0.000028U | **0.160J** |
| | STL | | 12/10/2002 | **0.00034F** | **0.039** | 0.000022U | 0.00074U | 0.00076U | **0.0013F** | 0.000015U | **0.170J** |
| | STLD3C250256 | | 3/19/2003 | **0.00039F** | **0.035** | **0.00004F** | 0.00074U | **0.0046F** | **0.0014F** | 0.000015U | **0.1** |
| | STLD3F180197 | | 6/17/2003 | **0.0004F** | **0.036** | 0.000051U | .0021U | **0.008F** | **0.00078F** | **0.000037F** | **0.17** |
| *Duplicate* | STLD3F180197 | | 6/17/2003 | **0.00042F** | **0.036** | 0.000051U | .0021U | **0.0084F** | **0.00086F** | **0.000039F** | **0.16** |
| | STLD3I170355 | | 9/16/2003 | **0.00035F** | **0.036** | 0.000051U | .0021U | **0.007F** | **0.0015F** | 0.000054U | **0.17** |
| | STLD3L180116 | | 12/15/2003 | **0.00049F** | **0.039** | 0.000051U | .0021U | **0.0023F** | **0.00091F** | **0.00091F** | **0.13** |
| | STLD4F240326 | | 6/22/2004 | **0.00042F** | **0.037** | 0.000028U | 0.0021U | **0.0056F** | **0.00091F** | 0.000025U | **0.049F** |
| | STLD4I160208 | | 9/15/2004 | **0.00056F** | **0.035** | 0.000028U | 0.0012U | **0.003F** | **0.00062F** | **0.000042F** | **0.068** |
| | STLD4L040200 | | 12/3/2004 | **0.00037F** | **0.029** | 0.000028U | 0.0012U | **0.013** | **0.005** | 0.000025U | **0.18** |
| *Duplicate* | STLD4L040200 | | 12/3/2004 | **0.00037F** | **0.03** | 0.000028U | 0.0012U | **0.0019F** | **0.00094F** | **0.000031F** | **0.18** |
| | STLD5C170383 | | 3/15/2005 | **0.00058F** | **0.032** | **0.000047F** | 0.0012U | **0.0052F** | **0.0038** | **0.00015F** | **0.64** |
| | STLD5F170398 | | 6/15/2005 | **0.00041F** | **0.036** | 0.00004U | 0.00082U | 0.0045U | **0.00056F** | 0.000044U | **0.099** |
| | STL | | 9/8/2005 | **0.00042F** | **0.039** | 0.00004U | 0.0026U | **0.012** | **0.0011F** | 0.000044U | **0.062** |
| | STL | | 6/13/2006 | **0.0011F** | **0.034** | **0.000072F** | **0.0088F** | **0.028** | **0.018** | **0.0059** | **3.4** |
| | STL | | 9/13/2006 | **0.00036F** | **0.036** | **0.00011F** | 0.0026U | **0.0079F** | **0.028** | **0.00036F** | **1.7** |
| | APPL | | 12/13/2007 | NA | NA | 0.00004U | NA | NA | **0.0362** | NA | NA |
| sample time 1317 | APPL | | 6/27/2008 | **0.00058F** | **0.0383** | 0.0005U | 0.001U | **0.012** | **0.0067F** | **0.0012** | **0.983** |
| sample time 1356 | APPL | | 6/27/2008 | 0.00022U | **0.038** | 0.0005U | 0.001U | **0.047** | **0.0541** | **0.0015** | **0.519** |
| | APPL | | 9/16/2008 | **0.00197F** | **0.0394** | 0.0005U | 0.001U | 0.003U | **0.0088F** | **0.0082J** | **2.42** |
| *Duplicate* | APPL | | 9/16/2008 | **0.00196F** | **0.0384** | 0.0005U | 0.001U | 0.003U | **0.0083F** | **0.0066J** | **2.242** |
| | APPL | | 12/10/2008 | NA | NA | 0.0005U | 0.001U | NA | **0.0066F** | **0.0047** | NA |
| | APPL | | 6/11/2009 | 0.0002U | **0.0455** | 0.0005U | **0.002F** | **0.012** | **0.0215F** | **0.0105** | **2.54** |
| | APPL | | 9/16/2009 | 0.0002U | **0.0391** | 0.0005U | 0.001U | **0.013** | **0.0296** | **0.0082** | **2.718** |
| | APPL | | 12/14/2009 | 0.0002U | **0.0376** | 0.0005U | **0.002F** | **0.004F** | **0.0106F** | **0.0008F** | **2.535** |
| **CS-10** | Chemron | | 12/12/1995 | 0.005U | 0.05U | 0.005U | 0.01U | **0.1** | **0.06** | 0.0004U | **0.180** |
| | Chemron | | 1/19/1996 | 0.01U | **0.03** | 0.005U | 0.01U | 0.02U | **0.004** | 0.0004U | **0.080** |
| | Chemron | | 2/28/1996 | **0.006** | **0.04** | 0.001U | 0.01U | **0.02** | 0.002U | 0.0004U | **0.040** |
| | ITS | | 01/07/97[1] | 0.001U | 0.04 | 0.0002U | 0.002U | **0.015F** | 0.0015U | 0.0001U | 0.041 |
| | ITS | | 10/23/97[1] | 0.0009U | 0.04 | 0.0002U | 0.002U | 0.004U | 0.0015U | 0.0001U | 0.022 |
| | O'B&G | | 9/10/1999 | 0.00444U | **0.0354** | 0.00019U | **0.004F** | **0.006F** | 0.00142U | 0.00016U | **0.079** |
| | O'B&G | | 12/13/1999 | 0.00045U | **0.0355** | 0.00019U | **0.005F** | **0.002F** | 0.00142U | 0.00016U | **0.015** |
| | O'B&G | | 3/20/2000 | **0.0019F** | **0.0375** | 0.00019U | **0.005F** | **0.004F** | **0.0031F** | 0.00016U | **0.057** |
| | O'B&G | | 6/13/2000 | **0.00045J** | **0.0357** | 0.00019U | **0.005F** | **0.002F** | 0.00053U | 0.00008U | **0.014** |
| | O'B&G | | 9/13/2000 | **0.00045J** | **0.0378** | 0.00019U | **0.006F** | **0.005F** | **0.00053J** | 0.00012U | **0.016** |
| | O'B&G | | 12/12/2000 | 0.00045U | **0.0372** | **0.00019J** | **0.004F** | **0.002F** | **0.00053J** | 0.00012U | **0.022** |
| | O'B&G | | 3/19/2001 | 0.0003U | **0.0375** | 0.00021U | **0.005F** | **0.004F** | 0.0003U | 0.00012U | **0.032** |
| | AP18429 | | 6/12/2001 | 0.0008U | **0.0406** | **0.0002F** | **0.002F** | **0.009F** | **0.0026F** | 0.0001U | **0.042F** |
| | AP22231 | | 9/17/2001 | 0.0008U | **0.0373J** | **0.0002F** | 0.001U | **0.006F** | **0.0032F** | **0.0002F** | **0.048F** |
| | AP26252/AP26257 | | 12/11/2001 | 0.0008U | **0.0405** | 0.0001U | 0.001U | **0.006F** | **0.0014F** | 0.0001U | **0.069** |
| | AP30836 | | 3/19/2002 | 0.0008U | **0.0372** | 0.0001U | 0.001U | **0.006F** | **0.0026F** | 0.0001U | **0.037F** |
| | STL | | 6/17/2002 | **0.00095F** | **0.0349** | **0.000061F** | .0026U | .0042U | **0.0023** | 0.000028U | **0.125J** |
| | STL | | 9/10/2002 | **0.00061F** | **0.0390** | 0.000022U | 0.00074U | **0.0014F** | **0.00048F** | 0.000028U | **0.016** |
| | STL | | 12/10/2002 | **0.00053F** | **0.039** | **0.000026F** | 0.00074U | 0.00076U | **0.00064F** | 0.000015U | **0.026J** |
| | STLD3C250256 | | 3/19/2003 | **0.00059F** | **0.04** | **0.000035F** | **0.00074** | **0.0065F** | **0.0013F** | 0.000015U | **0.049** |
| | STLD3F180197 | | 6/17/2003 | **0.00054F** | **0.039** | 0.000051U | .0021U | **0.0058F** | **0.00085F** | **0.000039F** | **0.063** |
| | STLD3I170355 | | 9/16/2003 | **0.00058F** | **0.039** | 0.000051U | .0021U | **0.0058F** | **0.0011F** | 0.000054U | **0.031F** |
| *Duplicate* | STLD3I170355 | | 9/16/2003 | **0.00053F** | **0.038** | 0.000051U | .0021U | **0.0043F** | **0.0008F** | 0.000054U | **0.024F** |
| | STLD3L180116 | | 12/16/2003 | **0.00066F** | **0.039** | 0.000051U | .0021U | **0.0017F** | **0.00059F** | 0.000054U | **0.024F** |
| | STLD4C120341 | | 3/11/2004 | **0.00068F** | **0.04** | 0.000051R | .0021U | **0.013J** | **0.00066F** | 0.000054U | **0.021F** |
| | STLD4F240326 | | 6/22/2004 | **0.00054F** | **0.041** | 0.000028U | 0.0021U | **0.006F** | **0.00048F** | 0.000025U | **0.017F** |
| | STLD4I160208 | | 9/15/2004 | **0.00058F** | **0.037** | 0.000028U | 0.0012U | 0.0016U | **0.00053F** | **0.000029F** | **0.013F** |

**Appendix D**
**Groundwater Metals Detections Above MCL, 1995-2005**

| Well ID | Laboratory | Sample | Date | Arsenic (mg/L) | Barium (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Copper (mg/L) | Lead (mg/L) | Mercury (mg/L) | Zinc (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | STLD4L040200 | | 12/3/2004 | **0.00066F** | **0.039** | 0.000028U | 0.0012U | **0.0027F** | **0.0012F** | **0.000071F** | **0.028F** |
| | STLD5C170383 | | 3/15/2005 | **0.00074F** | **0.038** | 0.000028U | 0.0012U | **0.007F** | **0.00078F** | **0.000051F** | **0.027F** |
| | STLD5F170398 | | 6/15/2005 | **0.00068F** | **0.037** | 0.00004U | 0.00082U | **0.0083F** | **0.0015F** | 0.000044U | **0.023F** |
| | STL | | 9/8/2005 | **0.00057F** | **0.04** | 0.00004U | 0.0026U | **0.0064F** | **0.0011F** | 0.000044U | **0.038F** |
| | STL | | 6/22/2006 | **0.00063F** | **0.046** | 0.00004U | 0.0026U | 0.0045U | **0.00071F** | **0.00058F** | **0.43** |
| | APPL | | 12/13/2007 | NA | NA | 0.00004U | NA | NA | **0.0049** | NA | NA |
| | APPL | | 6/27/2008 | **0.00085F** | **0.0418** | 0.0005U | 0.001U | **0.006F** | 0.0019U | **0.0003F** | **0.261** |
| | APPL | | 9/16/2008 | **0.00338F** | **0.0393** | 0.0005U | 0.001U | 0.003U | **0.0054F** | 0.0001U | **0.184** |
| | APPL | | 12/10/2008 | 0.00022U | **0.0375** | 0.0005U | 0.001U | 0.003U | 0.0019U | 0.0001U | **0.103** |
| *Duplicate* | APPL | | 12/10/2008 | 0.00022U | **0.0378** | 0.0005U | 0.001U | 0.003U | 0.0019U | 0.0001U | **0.101** |
| | APPL | | 6/11/2009 | 0.0002U | **0.0452** | 0.0005U | 0.001U | 0.003U | **0.0032F** | **0.0002F** | **0.288** |
| | APPL | | 9/14/2009 | 0.0002U | **0.037** | 0.0005U | 0.001U | **0.004F** | 0.0019U | 0.0001U | **0.169** |
| *Duplicate* | APPL | | 9/14/2009 | 0.0002U | **0.039** | 0.0005U | 0.001U | 0.003U | 0.0019U | 0.0001U | **0.167** |
| | APPL | | 12/14/2009 | **0.0004F** | **0.0419** | 0.0005U | 0.001U | 0.003U | 0.0019U | 0.0001U | **1.325** |
| **CS-11** | Chemron | | 12/15/1995 | **0.01** | 0.05U | 0.005U | 0.01U | 0.02U | 0.015U | 0.0004U | **0.04** |
| | Chemron | | 2/29/1996 | 0.005U | **0.03** | 0.001U | 0.01U | 0.02U | 0.002U | 0.0004U | **0.09** |
| | ITS | | 01/20/97[1] | 0.001U | 0.04 | 0.0002U | 0.002U | 0.00797F | 0.00177F | 0.0001U | 0.13 |
| | ITS | | 10/23/97[1] | 0.0009U | 0.04 | 0.00021F | 0.002U | 0.0079F | 0.00803 | 0.0001U | 1.91 |
| | O'B&G | | 9/10/1999 | 0.00044U | **0.0640** | 0.00019U | **0.002F** | **0.009F** | 0.00142U | 0.00016U | **2.934** |
| | O'B&G | | 12/15/1999 | 0.00045U | **0.0354** | 0.00019U | **0.003F** | **0.002F** | 0.00142U | 0.00016U | **0.810** |
| | O'B&G | | 3/20/2000 | **0.0008F** | **0.0366** | 0.00019U | **0.004F** | **0.007F** | **0.0108** | 0.00016U | **1.122** |
| | O'B&G | | 6/14/2000 | **0.00045J** | **0.0454** | 0.00019U | **0.003F** | **0.01F** | **0.0026F** | 0.00008U | **0.422** |
| | O'B&G | | 9/13/2000 | **0.00045J** | **0.0379** | 0.00019U | **0.005F** | **0.004F** | **0.0098J** | 0.00012U | **1.218** |
| | O'B&G | | 12/12/2000 | 0.00045U | **0.0383** | **0.00019J** | **0.003F** | **0.006F** | **0.0165R** | 0.00012U | **2.150** |
| | O'B&G | | 3/19/2001 | 0.0003U | **0.0334** | 0.0002U | **0.002F** | **0.005F** | **0.0072** | 0.0001U | **0.954** |
| | AP26253/AP26258 | | 12/11/2001 | 0.0008U | **0.0335** | 0.0001U | 0.001U | **0.005F** | **0.0063** | 0.0001U | **0.739** |
| | STL D2C150260005 | | 3/14/2002 | **0.0005F** | **0.0367** | **0.000062F** | 0.0026U | **.008F** | **0.0145** | 0.000028U | **1.12** |
| | STL | | 6/17/2002 | **0.00066F** | **0.037** | 0.000022U | 0.0026U | .0042U | **0.0154** | 0.000028U | **5.800** |
| | STLD3F180197 | | 6/17/2003 | **0.00062F** | **0.037** | 0.000051U | 0.0021U | **0.0092F** | **0.004** | **0.00004F** | **0.69** |
| | STLD4F240332 | | 6/22/2004 | **0.00048F** | **0.037** | 0.000028U | 0.0021U | **0.013** | **0.0048** | 0.000025U | **0.74** |
| | STLD5F170398 | | 6/16/2005 | **0.00047F** | **0.038** | 0.00004U | 0.00082U | **0.0092F** | **0.0068** | 0.000044U | **1.8** |
| | STL | | 6/14/2006 | **0.00026F** | **0.021** | 0.00004U | 0.0026U | 0.0045U | **0.014** | 0.000027U | **0.83** |
| *Duplicate* | STL | | 6/14/2006 | **0.00028F** | **0.022** | **0.000087F** | 0.0026U | 0.0045U | **0.013** | 0.000027U | **0.92** |
| | APPL | | 12/13/2007 | NA | NA | 0.00004U | NA | NA | **0.0359** | NA | NA |
| | APPL | | 9/15/2008 | NA | NA | 0.0005U | **0.02** | NA | **0.1972** | 0.0001U | NA |
| | APPL | | 6/9/2009 | NA | NA | 0.0005U | 0.001U | NA | 0.0019U | **0.0002F** | NA |
| **CS-MWG-LGR** | Chemron | | 12/12/1995 | 0.005U | 0.05U | 0.001U | 0.01U | **0.04** | 0.002U | 0.0004U | **0.36** |
| | Chemron | | 1/19/1996 | 0.01U | **0.02** | 0.005U | 0.01U | **0.12** | **0.048** | 0.0004U | **2.8** |
| | Chemron | | 2/28/1996 | 0.005U | **0.02** | **0.002** | 0.01U | **0.18** | **0.094** | 0.0004U | **2.8** |
| | ITS | | 01/17/97[1] | 0.001U | 0.03 | 0.003 | 0.002U | **0.09** | 0.039 | 0.0001U | 2.9 |
| | ITS | | 10/24/97[1] | 0.001F | 0.03 | 0.001 | 0.002U | **0.0434F** | 0.020 | 0.0001U | 4.2 |
| | O'B&G | | 9/8/1999 | 0.00044U | **0.032** | **0.0017** | **0.003F** | **0.013** | 0.00142U | 0.00016U | **4.8** |
| | AP18432 | | 6/12/2001 | 0.0008U | **0.0239** | 0.0001U | 0.001U | 0.003U | **0.002F** | 0.0001U | **0.044F** |
| | AP22201 | | 9/12/2001 | **0.0009F** | **0.0252J** | **0.0003F** | **0.002F** | **0.02** | **0.0369** | 0.0001U | **0.261** |
| | AP26733 | | 12/18/2001 | 0.0008U | **0.0219** | 0.0001U | 0.001U | 0.003U | **0.0015F** | 0.0001U | **0.053** |
| | STL D2C140338008 | | 3/13/2002 | **0.00066F** | **0.0209** | **0.000041F** | .0026U | **0.0056F** | **0.0041** | 0.000028U | **0.0294** |
| | STL | | 6/19/2002 | **0.0005F** | **0.0206** | **0.000038F** | .0026U | .0042U | **0.0021** | 0.000028U | **0.0339** |
| **Well Upgraded** | STL | | 9/11/2002 | **0.00032F** | **0.021** | 0.000022U | 0.00074U | 0.00076U | 0.00015U | 0.000028U | **0.0095F** |
| | STLD3F180197 | | 6/16/2003 | **0.00047F** | **0.019** | 0.000051U | **0.0026F** | **0.0024F** | 0.00019U | **0.000032F** | **0.024** |
| | STLD4F170404 | | 6/15/2004 | **0.00025F** | **0.020** | 0.000028U | 0.0021U | 0.00097U | **0.00041F** | 0.000025U | **0.0084F** |
| | STLD5F170398 | | 6/7/2005 | **0.00038F** | **0.022** | 0.00004U | **0.0012F** | 0.0045U | **0.00041F** | 0.000044U | **0.022F** |
| | TestAmerica | | 12/11/2007 | **0.00023F** | **0.022** | 0.00004U | 0.00026U | 0.0045U | 0.00018U | NA | **0.018F** |
| | APPL | | 9/16/2008 | NA | NA | **0.0006F** | 0.001U | NA | **0.0102F** | 0.0001U | NA |
| | APPL | | 6/9/2009 | NA | NA | 0.0005U | 0.001U | NA | **0.0025F** | 0.0001U | NA |
| | APPL | | 12/16/2009 | NA | NA | 0.0005U | 0.001U | NA | 0.0019U | 0.0001U | NA |
| **CS-MWH-LGR** | Chemron | | 12/12/1996 | **0.005** | 0.05U | **0.007** | 0.01U | **0.11** | **0.045** | 0.0004U | **2.2** |
| | Chemron | | 2/28/1996 | 0.005U | **0.04** | 0.001U | 0.01U | **0.05** | **0.013** | 0.0004U | **0.28** |
| | ITS | | 01/07/97[1] | 0.001U | 0.03 | 0.00083F | 0.002U | 0.02643F | 0.007 | 0.0001U | 0.73 |
| | ITS | | 10/23/97[1] | 0.0022F | 0.03 | 0.00145F | 0.002U | 0.0242F | 0.011 | 0.0001U | 0.78 |
| | AP18433 | | 6/12/2001 | 0.0008U | **0.0343** | **0.0001** | **0.003F** | **0.025** | **0.0459** | 0.0001U | **0.618** |
| | AP22202 | | 9/12/2001 | **0.0012F** | **0.0317J** | **0.001** | **0.002F** | **0.028** | **0.047** | 0.0001U | **0.813** |
| | AP26732 | | 12/18/2001 | 0.0008U | **0.0191** | **0.0002F** | **0.004F** | 0.003U | **0.005** | 0.0001U | **0.09** |
| | STL D2C140338007 | | 3/13/2002 | **0.0012F** | **0.0292** | **0.000097F** | 0.0026U | 0.0042U | **0.0033** | 0.000028U | **0.0839** |
| | STL | | 6/19/2002 | **0.0012F** | **0.0267** | **0.00023F** | 0.0026U | **0.0092F** | **0.0089** | 0.000028U | **0.160** |
| **Well Upgraded** | STLD3C240193 | | 3/17/2003 | **0.00037F** | **0.029** | **0.00003F** | **0.0081F** | 0.00076U | **0.003** | 0.000015U | **0.56** |
| | STLD4F170404 | | 6/15/2004 | **0.00038F** | **0.029** | 0.000028U | 0.0021U | 0.00097U | **0.0023** | 0.000025U | **0.68** |
| | STLD5F170398 | | 6/6/2005 | **0.00074F** | **0.028** | 0.00004U | **0.0066F** | 0.0045U | **0.0027** | 0.000044U | **2** |
| | APPL | | 9/24/2007 | NA | NA | **0.0014F** | NA | NA | **0.009** | NA | NA |
| | APPL | | 9/14/2009 | NA | NA | 0.0005U | 0.001U | NA | **0.0038F** | 0.0001U | NA |
| | APPL | | 12/7/2009 | NA | NA | 0.0005U | 0.001U | NA | **0.0082F** | 0.0001U | NA |
| **CS-I** | Chemron | | 12/12/1995 | 0.005U | **0.06** | 0.005U | 0.01U | **0.05** | **0.019** | 0.0004U | **9.9** |
| | Chemron | | 1/19/1996 | 0.01U | **0.05** | 0.005U | 0.01U | **0.1** | **0.022** | 0.0004U | **8.2** |
| | Chemron | | 2/28/1996 | 0.005U | **0.05** | 0.001U | 0.01U | **0.07** | **0.018** | 0.0004U | **8.4** |
| | ITS | | 10/23/97[1] | 0.0009U | 0.11 | 0.0002U | 0.002U | 0.004U | 0.00225F | 0.0001U | **1.94** |

**Appendix D**
**Groundwater Metals Detections Above MCL, 1995-2005**

| Well ID | Laboratory | Sample Date | Arsenic (mg/L) | Barium (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Copper (mg/L) | Lead (mg/L) | Mercury (mg/L) | Zinc (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| | O'B&G | 9/7/1999 | 0.00044U | **0.1169** | 0.00019U | **0.004F** | **0.004F** | 0.00142U | 0.00016U | **1.77** |
| | O'B&G | 12/14/1999 | 0.00045U | **0.1155** | 0.00019U | **0.005F** | **0.006F** | 0.00142U | 0.00016U | **1.77** |
| | O'B&G | 3/21/2000 | **0.0006F** | **0.1242** | 0.00019U | **0.004F** | 0.0009U | 0.00053U | 0.00016U | **1.51** |
| | O'B&G | 6/13/2000 | **0.00045J** | **0.1231** | 0.00019U | **0.005F** | **0.002F** | 0.00053U | 0.00008U | **1.58** |
| | O'B&G | 9/12/2000 | **0.00045J** | **0.1252** | 0.00019U | **0.005F** | **0.003F** | **0.00053J** | 0.00012U | **1.718** |
| | O'B&G | 12/12/2000 | 0.00045U | **0.1359** | **0.00019J** | **0.004F** | **0.001F** | **0.002F** | 0.00012U | **2.576** |
| | O'B&G | 3/20/2001 | 0.00028U | **0.1322** | 0.00021U | **0.004F** | **0.001F** | 0.00026U | 0.00012U | **2.950** |
| | AP18434 | 6/12/2001 | 0.0008U | **0.1413** | 0.0001U | **0.002F** | **0.014** | **0.0349** | 0.0001U | **3.47** |
| | AP22206 | 9/12/2001 | 0.0008U | **0.1028J** | 0.0001U | 0.001U | **0.008F** | **0.0193** | **0.0002F** | **2.921** |
| | AP26642/AP26639 | 12/17/2001 | 0.0008U | **0.1256** | **0.0003F** | 0.001U | **0.039** | **0.0827** | **0.0002F** | **3.08** |
| | STL D2C140338009 | 3/13/2002 | **0.0019F** | **0.2** | **0.00022F** | **0.0091F** | **0.0572** | **0.087** | **0.00066F** | **8.62** |
| | STLD4F170404 | 6/15/2004 | **0.00025F** | **0.130** | 0.000028U | 0.0021U | 0.00097U | **0.0003F** | 0.000025U | **0.018F** |
| | STLD5F170398 | 6/6/2005 | **0.00031F** | **0.12** | **0.000089F** | 0.00082U | 0.0045U | **0.0028** | 0.000044U | **0.035F** |
| | STL | 6/12/2006 | **0.00041F** | **0.14** | 0.00004U | 0.0026U | **0.012** | **0.002** | 0.000027U | **0.040F** |
| | APPL | 3/16/2009 | NA | NA | 0.0005U | 0.001U | NA | 0.0019U | 0.0001U | NA |
| **CS-MW1-LGR** | ITS | 01/09/97[1] | 0.001U | 0.03 | 0.0002U | 0.002U | 0.01033F | 0.0015U | 0.0001U | 0.016U |
| | ITS | 10/23/97[1] | 0.009U | 0.03 | 0.0002U | 0.002U | 0.004U | 0.0015U | 0.0001U | 0.016U |
| | O'B&G | 9/8/1999 | 0.00044U | **0.0294** | 0.00019U | **0.004F** | **0.001F** | 0.00142U | 0.00016U | **0.009F** |
| | O'B&G | 12/13/1999 | **0.0006F** | **0.0258** | 0.00019U | **0.006F** | **0.001F** | 0.00142U | 0.00016U | **0.005F** |
| | O'B&G | 3/21/2000 | **0.0014F** | **0.0260** | 0.00019U | **0.006F** | 0.0009U | 0.00053U | 0.00016U | **0.008F** |
| | O'B&G | 6/12/2000 | **0.001F** | **0.0255** | 0.00019U | **0.006F** | 0.0009U | 0.00053U | 0.00008U | **0.006F** |
| | O'B&G | 9/12/2000 | **0.0007F** | **0.0285** | **0.0006F** | **0.005F** | **0.001F** | **0.00053J** | 0.00012U | **0.004F** |
| | O'B&G | 12/13/2000 | **0.0006F** | **0.0310** | **0.00019J** | **0.004F** | 0.0005U | **0.00053J** | 0.00012U | **0.0039F** |
| | O'B&G | 3/20/2001 | 0.00026U | **0.0299** | 0.00021U | **0.004F** | 0.0005U | 0.00026U | 0.00012U | **0.0033F** |
| | AP18324 | 6/13/2001 | 0.0008U | **0.0333** | 0.0001U | **0.003F** | **0.005F** | 0.0008U | 0.0001U | **0.017F** |
| | AP22212 | 9/13/2001 | **0.0015F** | **0.033J** | 0.0001U | 0.001U | 0.003U | 0.0008U | 0.0001U | **0.012F** |
| | AP26362/AP26368 | 12/12/2001 | 0.0008U | **0.0327** | 0.0001U | 0.001U | 0.003U | 0.0008U | 0.0001U | **0.013F** |
| | STL D2C150260006 | 3/14/2002 | **0.00074F** | **0.0335** | 0.000022U | 0.0026U | 0.0042U | 0.00015U | 0.000028U | **0.0124** |
| *Duplicate* | STL D2C150260007 | 3/14/2002 | **0.00064F** | **0.0336** | 0.000022U | 0.0026U | 0.0042U | 0.00015U | 0.000028U | **0.0037F** |
| **Well Upgraded** | STL | 9/10/2002 | **0.0007F** | **0.04** | **0.000027F** | **0.0013F** | **0.0023F** | **0.0004F** | 0.000028U | **0.081** |
| | STLD3F200337 | 6/19/2003 | **0.00036F** | **0.032** | 0.000051U | 0.0021U | **0.0014F** | **0.00047F** | 0.000015U | **0.0069F** |
| | STLD4F180203 | 6/17/2004 | **0.00026F** | **0.032** | 0.000028U | 0.0021U | 0.00097U | **0.000091F** | 0.000025U | 0.0036U |
| | STLD5F170398 | 6/13/2005 | **0.00056F** | **0.029** | 0.00004U | **0.0048F** | 0.0045U | **0.0001F** | 0.000044U | 0.0044U |
| | APPL | 9/25/2007 | NA | NA | **0.0036F** | NA | NA | **0.0063** | NA | NA |
| | TestAmerica | 3/11/2008 | NA | NA | 0.0005U | NA | NA | 0.0019U | NA | NA |
| *Duplicate* | TestAmerica | 3/11/2008 | NA | NA | 0.0005U | NA | NA | 0.0019U | NA | NA |
| | APPL | 9/9/2008 | NA | NA | 0.0005U | **0.023** | NA | **0.0027F** | 0.0001U | NA |
| | APPL | 3/17/2009 | NA | NA | 0.0005U | **0.102** | NA | 0.0019U | 0.0001U | NA |
| | APPL | 9/9/2009 | NA | NA | 0.0005U | **0.003F** | NA | 0.0019U | 0.0001U | NA |
| | APPL | 12/10/2009 | NA | NA | 0.0005U | 0.001U | NA | 0.0019U | 0.0001U | NA |
| **CS-MW2-CC** | STLD3F180197 | 6/17/2003 | **0.00046F** | **0.037** | 0.000051U | 0.0021U | **0.0011F** | 0.00019U | **0.000037F** | **0.027** |
| | STLD4F180203 | 6/17/2004 | **0.0003F** | **0.021** | 0.000028U | 0.0021U | 0.00097U | 0.000077U | 0.000025U | 0.0036U |
| | STLD5F170398 | 6/8/2005 | **0.00046F** | **0.017** | 0.00004U | 0.00082U | 0.0045U | **0.0002F** | 0.000044U | **0.011F** |
| | APPL | 9/25/2007 | NA | NA | **0.0073** | NA | NA | **0.0051** | NA | NA |
| | APPL | 12/10/2009 | NA | NA | 0.0005U | 0.001U | NA | 0.0019U | 0.0001U | NA |
| *Duplicate* | APPL | 12/10/2009 | NA | NA | 0.0005U | 0.001U | NA | 0.0019U | 0.0001U | NA |
| **CS-MW3-LGR** | AP18445 | 6/14/2001 | 0.0008U | **0.0279** | **0.0002F** | **0.002F** | 0.003U | **0.0316** | 0.0001U | **0.062** |
| | AP22207 | 9/12/2001 | **0.0021F** | **0.0286J** | 0.0001U | 0.001U | 0.003U | **0.002F** | 0.0001U | **0.055** |
| | AP26643/AP26640 | 12/17/2001 | 0.0008U | **0.0281** | 0.0001U | 0.001U | 0.003U | **0.0009F** | 0.0001U | **0.036F** |
| *Duplicate* | AP26644/AP26641 | 12/17/2001 | 0.0008U | **0.0277** | 0.0001U | 0.001U | 0.003U | 0.0008U | 0.0001U | **0.045F** |
| | STL D2C140338006 | 3/13/2002 | **0.00064F** | **0.0268** | 0.000022U | 0.0026U | 0.0042U | **0.00023F** | 0.000028U | **0.0216** |
| | STLD3F210180 | 6/20/2003 | **0.00048F** | **0.027** | **0.000081F** | 0.0021U | 0.00097U | 0.00019U | 0.000015U | **0.02** |
| | STLD4F170404 | 6/15/2004 | **0.00069F** | **0.028** | 0.000028U | 0.0021U | 0.00097U | **0.00013F** | 0.000025U | **0.020F** |
| | STLD5F170398 | 6/7/2005 | **0.00044F** | **0.028** | 0.00004U | 0.00082U | 0.0045U | **0.00014F** | 0.000044U | **0.021F** |
| | APPL | 10/1/2007 | NA | NA | **0.0003F** | NA | NA | **0.0004F** | NA | NA |
| | TestAmerica | 3/11/2008 | NA | NA | 0.0005U | NA | NA | 0.0019U | NA | NA |
| | APPL | 9/16/2008 | NA | NA | 0.0005U | 0.001U | NA | **0.0024F** | 0.0001U | NA |
| | APPL | 3/16/2009 | NA | NA | 0.0005U | 0.001U | NA | 0.0019U | 0.0001U | NA |
| *Duplicate* | APPL | 3/16/2009 | NA | NA | 0.0005U | 0.001U | NA | 0.0019U | 0.0001U | NA |
| | APPL | 9/14/2009 | NA | NA | 0.0005U | **0.002F** | NA | 0.0019U | 0.0001U | NA |
| | APPL | 12/16/2009 | NA | NA | 0.0005U | **0.002F** | NA | 0.0019U | 0.0001U | NA |
| **CS-MW9-BS** | AP18441 | 6/14/2001 | **0.0015F** | **0.0134** | 0.0001U | **0.003F** | 0.003U | **0.0009F** | 0.0001U | **0.021F** |
| | AP22204 | 9/12/2001 | **0.001F** | **0.025J** | 0.0001U | 0.001U | 0.003U | **0.0024F** | **0.0002F** | **0.016F** |
| | AP26536/AP26522 | 12/14/2001 | 0.0008U | **0.0204** | 0.0001U | 0.001U | 0.003U | 0.0008U | **0.0002F** | 0.008U |
| | STL D2C140338004 | 3/13/2002 | **0.0016F** | **0.0176** | 0.000022U | 0.0026U | 0.0042U | 0.00015U | 0.000028U | **0.0033F** |
| | STL | 6/19/2002 | **0.0018F** | **0.022** | 0.000022U | 0.0026U | 0.0042U | **0.00054F** | 0.000028U | **0.0033** |
| | STLD3F210180 | 6/20/2003 | **0.00094F** | **0.048** | 0.000051U | 0.0021U | 0.00097U | 0.00019U | 0.000015U | **0.0074F** |
| | STLD4F170404 | 6/15/2004 | **0.0028F** | **0.059** | **0.000033F** | 0.0021U | 0.00097U | **0.0002F** | 0.000025U | **0.0044F** |
| | STLD5F170398 | 6/10/2005 | **0.0024F** | **0.079** | 0.00004U | 0.00082U | 0.0045U | **0.0041** | 0.000044U | **0.036F** |
| | APPL | 9/25/2007 | NA | NA | **0.0019F** | NA | NA | **0.1065** | NA | NA |
| | APPL | 9/14/2009 | NA | NA | 0.0005U | **0.003F** | NA | **0.0302** | 0.0001U | NA |
| | APPL | 12/16/2009 | NA | NA | 0.0005U | 0.001U | NA | **0.0130F** | 0.0001U | NA |
| **CS-MW12-CC** | STL | 12/16/2002 | **0.011** | **0.095** | **0.000079F** | **0.001F** | 0.00076U | **0.00035F** | 0.000015U | **0.017** |
| *Duplicate* | STL | 12/16/2002 | **0.011** | **0.097** | **0.000076F** | **0.0011F** | 0.00076U | **0.00037F** | 0.000015U | **0.018** |
| | STLD3F180197 | 6/16/2003 | **0.0019F** | **0.037** | 0.000051U | 0.0021U | **0.0018F** | 0.00019U | **0.00004F** | **0.02** |

## Appendix D
## Groundwater Metals Detections Above MCL, 1995-2005

| Well ID | Laboratory | Sample | Date | Arsenic (mg/L) | Barium (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Copper (mg/L) | Lead (mg/L) | Mercury (mg/L) | Zinc (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | STLD4F220238 | | 6/21/2004 | **0.0031F** | **0.035** | 0.000028U | 0.0021U | 0.00097U | 0.000077U | 0.000025U | 0.0036U |
| | STLD5F170398 | | 6/16/2005 | **0.0014F** | **0.069** | 0.00004U | **0.002F** | 0.0045U | **0.00055F** | 0.000044U | **0.072** |
| | APPL | | 9/27/2007 | NA | NA | 0.00004U | NA | NA | 0.00018U | NA | NA |
| | APPL | | 12/11/2009 | NA | NA | 0.0005U | 0.001U | NA | 0.0019U | 0.0001U | NA |
| **CS-MW22-LGR** | TestAmerica | | 6/7/2007 | **0.0045F** | **0.073** | **0.00012F** | **0.017** | **0.029** | **0.091** | **0.000079F** | **8.0** |
| | TestAmerica | | 10/1/2007 | **0.0056F** | **0.093** | **0.00013F** | **0.023** | **0.026** | **0.086** | **0.00012F** | **6.7** |
| | TestAmerica | | 12/13/2007 | **0.0024F** | **0.06** | **0.000056F** | **0.0027F** | 0.0045U | **0.011** | 0.000027U | **2** |
| *Duplicate* | TestAmerica | | 12/13/2007 | **0.0023F** | **0.063** | **0.000047F** | **0.0028F** | 0.0045U | **0.011** | 0.000027U | **2.1** |
| | TestAmerica | | 3/13/2008 | **0.0038F** | **0.079** | **0.000067F** | **0.017** | **0.013** | **0.04** | **0.00013F** | **4.9** |
| *Duplicate* | TestAmerica | | 3/13/2008 | **0.0036F** | **0.077** | **0.00008F** | **0.016** | **0.012** | **0.038** | **0.00012F** | **4.7** |
| | APPL | | 6/24/2008 | 0.00022U | **0.0651** | 0.0005U | 0.001U | 0.003U | 0.0019U | 0.0001U | **1.701** |
| *Duplicate* | APPL | | 6/24/2008 | 0.00022U | **0.0658** | 0.0005U | 0.001U | 0.003U | 0.0019U | 0.0001U | **1.732** |
| | APPL | | 9/15/2008 | NA | NA | 0.0005U | 0.001U | NA | **0.0037F** | 0.0001U | NA |
| | APPL | | 12/10/2008 | NA | NA | 0.0005U | 0.001U | NA | 0.0019U | 0.0001U | NA |
| | APPL | | 3/18/2009 | NA | NA | 0.0005U | **0.005F** | NA | **0.0077F** | 0.0001U | NA |
| | APPL | | 6/10/2009 | NA | NA | 0.0005U | **0.005F** | NA | **0.0088F** | **0.0002F** | NA |
| | APPL | | 9/15/2009 | NA | NA | 0.0005U | 0.001U | NA | **0.0030F** | 0.0001U | NA |
| | APPL | | 12/10/2009 | NA | NA | 0.0005U | 0.001U | NA | 0.0019U | 0.0001U | NA |
| **CS-MW23-LGR** | TestAmerica | | 6/5/2007 | **0.0015F** | **0.051** | **0.000058F** | 0.0026U | **0.0061F** | **0.0032** | **0.0078** | **0.59** |
| | TestAmerica | | 10/1/2007 | **0.0011F** | **0.054** | **0.000046F** | 0.0026U | **0.0046F** | **0.0018F** | 0.000027U | **0.28** |
| | TestAmerica | | 12/12/2007 | **0.00069F** | **0.047** | 0.00004U | 0.00026U | 0.0045U | 0.00018U | 0.000027U | **0.16** |
| | TestAmerica | | 3/13/2008 | **0.0008F** | **0.046** | 0.00004U | 0.0026U | 0.0045U | **0.00023F** | 0.000027U | **0.1** |
| | APPL | | 6/24/2008 | 0.00022U | **0.0528** | 0.0005U | 0.001U | 0.003U | 0.0019U | 0.0001U | **0.133** |
| | APPL | | 9/15/2008 | NA | NA | **0.0006F** | **0.004F** | NA | **0.0079F** | 0.0001U | NA |
| | APPL | | 12/10/2008 | NA | NA | 0.0005U | 0.001U | NA | 0.0019U | 0.0001U | NA |
| | APPL | | 3/12/2009 | NA | NA | 0.0005U | 0.001U | NA | 0.0019U | 0.0001U | NA |
| | APPL | | 6/10/2009 | NA | NA | 0.0005U | **0.002F** | NA | **0.0023F** | **0.0002F** | NA |
| | APPL | | 9/15/2009 | NA | NA | 0.0005U | 0.001U | NA | 0.0019U | 0.0001U | NA |
| | APPL | | 12/8/2009 | NA | NA | 0.0005U | 0.001U | NA | 0.0019U | 0.0001U | NA |
| **CS-MW25-LGR** | TestAmerica | | 6/5/2007 | **0.0031F** | **0.044** | **0.000087F** | **0.065** | **0.032** | **0.017** | 0.000027U | **1.8** |
| | TestAmerica | | 10/1/2007 | **0.0044F** | **0.063** | **0.00016F** | **0.24** | **0.065** | **0.032** | 0.000027U | **2.2** |
| | TestAmerica | | 12/11/2007 | **0.0039F** | **0.045** | **0.00015F** | **0.22** | **0.03** | **0.023** | 0.000027U | **1.5** |
| | TestAmerica | | 3/17/2008 | **0.0010F** | **0.032** | **0.000043F** | **0.038** | 0.0045U | **0.0026** | **0.00006F** | **0.24** |
| | APPL | | 6/10/2008 | **0.00274F** | **0.0333** | 0.0005U | **0.012** | **0.004F** | 0.0019U | **0.0005F** | **0.297** |
| | APPL | | 9/16/2008 | NA | NA | 0.0005U | **0.002F** | NA | **0.0035F** | 0.0001U | NA |
| | APPL | | 12/9/2008 | NA | NA | 0.0005U | **0.026** | NA | 0.0019U | 0.0001U | NA |
| | APPL | | 3/16/2009 | NA | NA | 0.0005U | **0.002F** | NA | **0.0020F** | 0.0001U | NA |
| | APPL | | 6/9/2009 | NA | NA | 0.0005U | **0.004F** | NA | **0.0023F** | 0.0001U | NA |
| | APPL | | 9/14/2009 | NA | NA | 0.0005U | 0.001U | NA | 0.0019U | 0.0001U | NA |
| | APPL | | 12/16/2009 | NA | NA | 0.0005U | **0.002F** | NA | 0.0019U | 0.0001U | NA |
| **Comparison** | | MCL | | 0.01 | 2.0 | 0.005 | 0.1 | 1.3 | 0.015 | 0.002 | 5.0 (SS) |
| **Criteria** | | GW-Ind | | 0.05 | 2.0 | 0.005 | 0.1 | 1.3 | 0.015 | 0.002 | 31 |
| | Chemron | PQL | | 0.005 | 0.02 | 0.005 | 0.1 | 1.3 | 0.015 | 0.002 | 3.1 |
| | Chemron | MDL | | MDLs not provided by the laboratory. | | | -- | -- | -- | -- | -- |
| | ITS | PQL | | 0.005 | 0.020 | 0.001 | 0.07 | 0.06 | 0.005 | 0.001 | 0.02 |
| | ITS | MDL | | 0.0009 | 0.001 | 0.0002 | 0.002 | 0.004 | 0.0015 | 0.0001 | 0.016 |
| | O'B&G | RL | | 0.005 | 0.005 | 0.001 | 0.01 | 0.01 | 0.005 | 0.001 | 0.05 |
| | O'B&G | MDL | | 0.00028 | 0.0003 | 0.00021 | 0.0012 | 0.0009 | 0.00142 | 0.00016 | 0.0014 |
| | APPL | RL | | 0.005 | 0.005 | 0.001 | 0.01 | 0.01 | 0.005 | 0.001 | 0.05 |
| | APPL | MDL | | 0.0008 | 0.0003 | 0.0001 | 0.001 | 0.003 | 0.0008 | 0.0001 | 0.008 |
| | STL | RL | | 0.005 | 0.005 | 0.001 | 0.010 | 0.010 | 0.002 | 0.001 | 0.010 |
| | STL | Mdl | | 0.00006 | 0.0018 | 0.00002 | 0.00074 | 0.00076 | 0.00015 | 0.00003 | 0.0068 |
| | TestAmerica | RL | | 0.02 | 0.005 | 0.002 | 0.01 | 0.01 | 0.002 | 0.001 | 0.05 |
| | TestAmerica | MDL | | 0.00021 | 0.001 | 0.00004 | 0.00026 | 0.0045 | 0.00018 | 0.000027 | 0.0045 |

Shaded areas indicate analytical data analyzed by ITS Laboratories.

**Bold** Value > or = MCL

**Bold** MCL > Value > or = RL

**Bold** RL > Value > MDL

[1] Indicates that data is screening analytical data only.

Notes:

- *Due to potential improper practices, the ITS data cannot be used to draw any conclusions about groundwater quality at CSSA.*
- January 1996 data represents re-test data.
- Samples were not analyzed for Alkalinity, TDL, pH, and Resistivity prior to 1997.
- F = The analyte was positively identified but the associated numerical value is below the RL.
- J = The analyte was positively identified below quantitation limits; the quantitation is an estimate.
- R = The data are unusable with deficiencies in the ability to analyze the sample and meet QC criteria.
- U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection.

THIS PAGE INENTIONALLY LEFT BLANK

# Appendix E Summary of Three-Tiered Long Term Monitoring Network Optimization

THIS PAGE INENTIONALLY LEFT BLANK

**2005 LTMO Summary**
**(Currently Implemented: On-Post Only)**

THIS PAGE INENTIONALLY LEFT BLANK

# APPENDIX E.1
# 2005 SUMMARY OF LONG TERM MONITORING OPTIMIZATION EVALUATION OF CURRENT GROUNDWATER MONITORING PROGRAM
## LONG TERM MONITORING OPTIMIZATION
## CAMP STANLEY STORAGE ACTIVITY, TEXAS

| Well ID | Current Sampling Frequency | Qualitative Evaluation | | | Temporal Evaluation | | Spatial Evaluation | | Summary | | | Rationale |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Exclude | Retain | Recommended Monitoring Frequency | Exclude/ Reduce | Retain | Exclude | Retain | Exclude | Retain | Recommended Monitoring Frequency | |
| **On Post Monitoring Wells** | | | | | | | | | | | | |
| AOC65-MW1-LGR | Quarterly | ✓ | | Sample after major rain event | Not Analyzed | | | ↓[a/] | | ✓ | Sample after major rain event | Statistics confirm qualitative evaluation |
| AOC65-MW2A | Quarterly | ✓ | | Sample after major rain event | | ✓ | --[b/] | -- | | ✓ | Sample after major rain event | Statistics confirm qualitative evaluation |
| AOC65-PZ01-LGR | Quarterly | ✓ | | Sample after major rain event | ✓ | | Not Included | | ✓ | | Exclude | Exclude well based on statistics |
| AOC65-PZ02-LGR | Quarterly | ✓ | | Sample after major rain event | ✓ | | Not Included | | ✓ | | Exclude | Exclude well based on statistics |
| AOC65-PZ03-LGR | Quarterly | ✓ | | Sample after major rain event | ✓ | | Not Included | | ✓ | | Exclude | Exclude well based on statistics |
| AOC65-PZ04-LGR | Quarterly | ✓ | | Sample after major rain event | ✓ | | Not Included | | ✓ | | Exclude | Exclude well based on statistics |
| AOC65-PZ05-LGR | Quarterly | ✓ | | Sample after major rain event | ✓ | | Not Included | | ✓ | | Exclude | Exclude well based on statistics |
| AOC65-PZ06-LGR | Quarterly | ✓ | | Sample after major rain event | ✓ | | Not Included | | ✓ | | Exclude | Exclude well based on statistics |
| CS-1 | Quarterly | | ✓ | Annual | | ✓ | | ✓ | | ✓ | Annual | Statistics confirm qualitative evaluation |
| CS-10 | Quarterly | | ✓ | Annual | ✓ | | -- | -- | | ✓ | Annual | Qualitative factor (drinking water well) overrides statistic recommendations |
| CS-11 | Quarterly | ✓ | | Biennial | | ✓ | ✓ | | | ✓ | Annual | Increase sampling frequency due to temporal trend |
| CS-2 | Quarterly | | ✓ | Semi-annual | ✓ | | ✓ | | ✓ | | Annual | Decrease sampling frequency due to statistics results |
| CS-3 | Not Sampled | ✓ | | Remove | ✓ | | Not Included | | ✓ | | Exclude | Statistics confirm qualitative evaluation |
| CS-4 | Quarterly | | ✓ | Semi-annual | | ✓ | ✓ | | | ✓ | Semi-Annual | Temporal statistics confirm qualitative evaluation |
| CS-9 | Quarterly | | ✓ | Annual | ✓ | | -- | -- | | ✓ | Annual | Qualitative factor (drinking water well) overrides statistic recommendations |
| CS-D | Quarterly | | ✓ | Semi-annual | | ✓ | | ✓ | | ✓ | Semi-Annual | Statistics confirm qualitative evaluation |
| CS-I | Quarterly | | ✓ | Biennial | | ✓ | ✓ | | | ✓ | Annual | Increase sampling frequency due to temporal trend |
| CS-MW10-CC | Quarterly | | ✓ | Biennial | ✓ | | Not Included | | | ✓ | Biennial | Statistics confirm qualitative evaluation |
| CS-MW10-LGR | Quarterly | | ✓ | Semi-annual | ✓ | | ✓ | | | ✓ | Annual | Decrease sampling frequency due to statistics results |
| CS-MW11A-LGR | Quarterly | | ✓ | Semi-annual | ✓ | | | ✓ | | ✓ | Semi-Annual | Spatial statistics confirm qualitative evaluation |
| CS-MW11B-LGR | Quarterly | | ✓ | Semi-annual | ✓ | | | ✓ | | ✓ | Semi-Annual | Spatial statistics confirm qualitative evaluation |
| CS-MW12-BS | Quarterly | | ✓ | Biennial | ✓ | | Not Included | | | ✓ | Biennial | Statistics confirm qualitative evaluation |
| CS-MW12-CC | Quarterly | | ✓ | Biennial | ✓ | | Not Included | | | ✓ | Biennial | Statistics confirm qualitative evaluation |
| CS-MW12-LGR | Quarterly | | ✓ | Semi-annual | | ✓ | ✓ | | | ✓ | Annual | Decrease sampling frequency due to statistics results (ND sentry well) |
| CS-MW16-CC | Quarterly | | ✓ | Semi-annual | | ✓ | Not Included | | | ✓ | Semi-Annual | Statistics confirm qualitative evaluation |
| CS-16-LGR | Quarterly | | ✓ | Semi-annual | | ✓ | | ✓ | | ✓ | Semi-Annual | Statistics confirm qualitative evaluation |
| CS-MW17-LGR | Quarterly | | ✓ | Biennial | ✓ | | | ✓ | | ✓ | Annual | Increase sampling frequency due to spatial result |
| CS-MW18-LGR | Quarterly | | ✓ | Semi-annual | | ✓ | | ✓ | | ✓ | Semi-Annual | Statistics confirm qualitative evaluation |
| CS-MW19-LGR | Quarterly | | ✓ | Semi-annual | ✓ | | | ✓ | | ✓ | Semi-Annual | Spatial statistics confirm qualitative evaluation |
| CS-MW1-BS | Quarterly | | ✓ | Biennial | ✓ | | Not Included | | | ✓ | Biennial | Statistics confirm qualitative evaluation |
| CS-MW1-CC | Quarterly | | ✓ | Biennial | ✓ | | Not Included | | | ✓ | Biennial | Statistics confirm qualitative evaluation |
| CS-MW1-LGR | Quarterly | | ✓ | Semi-annual | | ✓ | ✓ | | | ✓ | Semi-Annual | Temporal statistics confirm qualitative evaluation |
| CS-MW2-CC | Quarterly | | ✓ | Biennial | ✓ | | | | | ✓ | Biennial | Statistics confirm qualitative evaluation |
| CS-MW2-LGR | Quarterly | | ✓ | Semi-annual | ✓ | | -- | -- | | ✓ | Semi-Annual | Qualitative factor (recompleted well) overrides statistic recommendations |
| CS-MW3-LGR | Quarterly | | ✓ | Semi-annual | ✓ | | | ✓ | | ✓ | Semi-Annual | Spatial statistics confirm qualitative evaluation |
| CS-MW4-LGR | Quarterly | | ✓ | Semi-annual | ✓ | | | ✓ | | ✓ | Semi-Annual | Spatial statistics confirm qualitative evaluation |
| CS-MW5-LGR | Quarterly | | ✓ | Semi-annual | ✓ | | | ✓ | | ✓ | Semi-Annual | Spatial statistics confirm qualitative evaluation |
| CS-MW6-BS | Quarterly | | ✓ | Biennial | ✓ | | | ↓ | | ✓ | Biennial | Temporal statistics confirm qualitative evaluation |
| CS-MW6-CC | Quarterly | | ✓ | Biennial | ✓ | | | ↓ | | ✓ | Biennial | Temporal statistics confirm qualitative evaluation |
| CS-MW6-LGR | Quarterly | | ✓ | Semi-annual | ✓ | | | ✓↓ | | ✓ | Semi-Annual | Spatial statistics confirm qualitative evaluation |
| CS-MW7-CC | Quarterly | | ✓ | Biennial | ✓ | | | →[c/] | | ✓ | Biennial | Temporal statistics confirm qualitative evaluation |
| CS-MW7-LGR | Quarterly | | ✓ | Semi-annual | | ✓ | | ✓→ | | ✓ | Semi-Annual | Statistics confirm qualitative evaluation |
| CS-MW8-CC | Quarterly | | ✓ | Biennial | ✓ | | | ↓ | | ✓ | Biennial | Temporal statistics confirm qualitative evaluation |
| CS-MW8-LGR | Quarterly | | ✓ | Semi-annual | ✓ | | -- | --↓ | | ✓ | Annual | Decrease sampling frequency due to statistics results |
| CS-MW9-BS | Quarterly | | ✓ | Biennial | ✓ | | Not Included | | | ✓ | Biennial | Temporal statistics confirm qualitative evaluation |
| CS-MW9-CC | Quarterly | | ✓ | Biennial | ✓ | | Not Included | | | ✓ | Biennial | Temporal statistics confirm qualitative evaluation |
| CS-MW9-LGR | Quarterly | | ✓ | Semi-annual | ✓ | | | ✓ | | | Semi-annual | Spatial statistics confirm qualitative evaluation |
| CS-G-LGR | Quarterly | | ✓ | Biennial | ✓ | | | ✓ | | ✓ | Annual | Increase sampling frequency due to spatial result |
| CS-MWH-LGR | Quarterly | | ✓ | Biennial | ✓ | | ✓ | | | ✓ | Biennial | Statistics confirm qualitative evaluation |

THIS PAGE INENTIONALLY LEFT BLANK

# APPENDIX E.1
# 2005 SUMMARY OF LONG TERM MONITORING OPTIMIZATION EVALUATION OF CURRENT GROUNDWATER MONITORING PROGRAM
## LONG TERM MONITORING OPTIMIZATION
## CAMP STANLEY STORAGE ACTIVITY, TEXAS

| Well ID | Current Sampling Frequency | Qualitative Evaluation | | | Temporal Evaluation | | Spatial Evaluation | | Summary | | | Rationale |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Exclude | Retain | Recommended Monitoring Frequency | Exclude/ Reduce | Retain | Exclude | Retain | Exclude | Retain | Recommended Monitoring Frequency | |
| **Off Post Monitoring Wells** | | | | | | | | | | | | |
| DOM-2 | Annually | | ✓ | Annual | ✓ | | ✓ | | | ✓ | Biennial | Decrease sampling frequency due to statistics results |
| FO-17 | Annually | | ✓ | Annual | Not Analyzed | | ✓ | | | ✓ | Biennial | Decrease sampling frequency due to statistics results |
| FO-22 | Annually | | ✓ | Annual | | ✓ | | ✓ | | ✓ | Annual | Statistics confirm qualitative evaluation |
| FO-8 | Annually | | ✓ | Annual | Not Analyzed | | | ✓ | | ✓ | Annual | Spatial statistics confirm qualitative evaluation |
| FO-J1 | Qtrly, 1 year thru Mar 05 | | ✓ | Annual | ✓ | | ✓ | | | ✓ | Annual | Decrease sampling frequency due to statistics results |
| HS-2 | Qtrly, 1 year thru Mar 05 | | ✓ | Annual | | ✓ | | ✓ | | ✓ | Annual | Statistics confirm qualitative evaluation |
| HS-3 | Annually | | ✓ | Annual | ✓ | | | ✓ | | ✓ | Annual | Spatial statistics confirm qualitative evaluation |
| I10-2 | Qtrly, 1 year thru Jun 05 | | ✓ | Annual | | ✓ | -- | -- | | ✓ | Annual | Temporal statistics confirm qualitative evaluation |
| I10-4 | Qtrly, 1 year thru Mar 05 | | ✓ | Annual | | ✓ | | ✓ | | ✓ | Annual | Statistics confirm qualitative evaluation |
| I10-5 | Annually | | ✓ | Annual | Not Analyzed | | | ✓ | | ✓ | Annual | Spatial statistics confirm qualitative evaluation |
| I10-7 | Annually | | ✓ | Annual | ✓ | | -- | -- | | ✓ | Biennial | Decrease sampling frequency due to statistics results |
| JW-12 | Annually | | ✓ | Annual | Not Analyzed | | -- | -- | | ✓ | Biennial | Decrease sampling frequency due to statistics results |
| JW-13 | Annually | | ✓ | Annual | ✓ | | ✓ | | | ✓ | Biennial | Decrease sampling frequency due to statistics results |
| JW-14 | Qtrly, 1 year thru Jun 05 | | ✓ | Annual | | ✓ | ✓ | | | ✓ | Biennial | Temporal statistics confirm qualitative evaluation |
| JW-26 | Qtrly, 1 year thru Dec 04 | | ✓ | Annual | | ✓ | -- | -- | | ✓ | Annual | Temporal statistics confirm qualitative evaluation |
| JW-27 | Annually | | ✓ | Annual | Not Analyzed | | ✓ | | | ✓ | Biennial | Decrease sampling frequency due to statistics results |
| JW-28 | Qtrly, 1 year thru Jun 05 | | ✓ | Annual | ✓ | | -- | -- | | ✓ | Biennial | Decrease sampling frequency due to statistics results |
| JW-29 | Qtrly, due to location | | ✓ | Annual | ✓ | | ✓ | | | ✓ | Biennial | Decrease sampling frequency due to statistics results |
| JW-30 | Qtrly, 1 year thru Mar 05 | | ✓ | Annual | | ✓ | ✓ | | | ✓ | Annual | Temporal statistics confirm qualitative evaluation |
| JW-6 | Annually | | ✓ | Annual | ✓ | | ✓ | | | ✓ | Biennial | Decrease sampling frequency due to statistics results |
| JW-7 | Qtrly, 1 year thru Jun 05 | | ✓ | Annual | ✓ | | ✓ | | | ✓ | Annual | Qualitative factor overrides statistic recommendations |
| JW-8 | Qtrly, 1 year thru Mar 05 | | ✓ | Annual | ✓ | | ✓ | | | ✓ | Biennial | Decrease sampling frequency due to statistics results |
| JW-9 | Qtrly, 1 year thru Mar 05 | | ✓ | Annual | ✓ | | ✓ | | | ✓ | Biennial | Decrease sampling frequency due to statistics results |
| LS-1 | Qtrly, 1 year thru Mar 05 | | ✓ | Annual | ✓ | | | ✓ | | ✓ | Annual | Spatial statistics confirm qualitative evaluation |
| LS-2 | Qtrly, 1 year thru Jun 05 | | ✓ | Quarterly | ✓ | | -- | -- | | ✓ | Quarterly | Qualitative factor (GAC well)overrides statistic recommendations |
| LS-3 | Qtrly, 1 year thru Jun 05 | | ✓ | Quarterly | | ✓ | -- | -- | | ✓ | Quarterly | Temporal statistics confirm qualitative evaluation |
| LS-4 | Qtrly, 1 year thru Jun 05 | | ✓ | Annual | | ✓ | | ✓ | | ✓ | Annual | Statistics confirm qualitative evaluation |
| LS-5 | Qtrly, 1 year thru Mar 05 | | ✓ | Annual | ✓ | | ✓ | | | ✓ | Biennial | Decrease sampling frequency due to statistics results |
| LS-6 | Qtrly, 1 year thru Jun 05 | | ✓ | Quarterly | | ✓ | -- | -- | | ✓ | Quarterly | Temporal statistics confirm qualitative evaluation |
| LS-7 | Qtrly, 1 year thru Jun 05 | | ✓ | Quarterly | | ✓ | ✓ | | | ✓ | Quarterly | Temporal statistics confirm qualitative evaluation |
| OFR-1 | Qtrly, 1 year thru Jun 05 | | ✓ | Annual | | ✓ | ✓ | | | ✓ | Annual | Temporal statistics confirm qualitative evaluation |
| OFR-2 | Qtrly, 1 year thru Jun 05 | | ✓ | Annual | ✓ | | ✓ | | | ✓ | Biennial | Decrease sampling frequency due to statistics results |
| OFR-3 | Qtrly, 1 year thru Jun 05 | | ✓ | Quarterly | | ✓ | -- | -- | | ✓ | Quarterly | Temporal statistics confirm qualitative evaluation |
| OFR-4 | Annually | | ✓ | Annual | Not Analyzed | | ✓ | | | ✓ | Biennial | Decrease sampling frequency due to statistics results |
| RFR-10 | Qtrly, 1 year thru Jun 05 | | ✓ | Quarterly | | ✓ | ✓ | | | ✓ | Quarterly | Temporal statistics confirm qualitative evaluation |
| RFR-11 | Qtrly, 1 year thru Jun 05 | | ✓ | Quarterly | | ✓ | --[d/] | -- | | ✓ | Quarterly | Temporal statistics confirm qualitative evaluation |
| RFR-12 | Qtrly, 1 year thru Jun 05 | | ✓ | Annual | | ✓ | -- | -- | | ✓ | Annual | Temporal statistics confirm qualitative evaluation |
| RFR-3 | Qtrly, 1 year thru Dec 04 | | ✓ | Annual | ✓ | | -- | -- | | ✓ | Biennial | Decrease sampling frequency due to statistics results |
| RFR-4 | Annually | | ✓ | Annual | Not Analyzed | | | ✓ | | ✓ | Annual | Spatial statistics confirm qualitative evaluation |
| RFR-5 | Annually | | ✓ | Annual | Not Analyzed | | | ✓ | | ✓ | Annual | Spatial statistics confirm qualitative evaluation |
| RFR-6 | Annually | | ✓ | Annual | ✓ | | | ✓ | | ✓ | Biennial | Decrease sampling frequency due to temporal statistics results |
| RFR-7 | Annually | | ✓ | Annual | ✓ | | | ✓ | | ✓ | Biennial | Decrease sampling frequency due to temporal statistics results |
| RFR-8 | Annually | | ✓ | Annual | ✓ | | -- | -- | | ✓ | Biennial | Decrease sampling frequency due to statistics results |
| RFR-9 | Annually | | ✓ | Annual | ✓ | | -- | -- | | ✓ | Biennial | Decrease sampling frequency due to statistics results |
| **WestBay Wells** | | | | | | | | | | | | |
| CS-WB01-LGR-01 | Monthly & after rain events | | ✓ | Semi-annual | ✓ | | 🡻 | | | ✓ | Semi-Annual | Qualitative factor overrides statistic recommendations |
| CS-WB01-LGR-02 | Monthly & after rain events | | ✓ | Semi-annual | ✓ | | 🡻 | | | ✓ | Semi-Annual | Qualitative factor overrides statistic recommendations |
| CS-WB01-LGR-03 | Monthly & after rain events | | ✓ | Semi-annual | | ✓ | 🡻 | | | ✓ | Semi-Annual | Temporal statistics confirm qualitative evaluation |
| CS-WB01-LGR-04 | Monthly & after rain events | | ✓ | Semi-annual | ✓ | | 🡻 | | | ✓ | Semi-Annual | Qualitative factor overrides statistic recommendations |
| CS-WB01-LGR-05 | Monthly & after rain events | | ✓ | Semi-annual | ✓ | | 🡻 | | | ✓ | Semi-Annual | Qualitative factor overrides statistic recommendations |
| CS-WB01-LGR-06 | Monthly & after rain events | | ✓ | Semi-annual | ✓ | | 🡻 | | | ✓ | Semi-Annual | Qualitative factor overrides statistic recommendations |

THIS PAGE INENTIONALLY LEFT BLANK

# APENDIX E.1
# 2005 SUMMARY OF LONG TERM MONITORING OPTIMIZATION EVALUATION OF CURRENT GROUNDWATER MONITORING PROGRAM
## LONG TERM MONITORING OPTIMIZATION
## CAMP STANLEY STORAGE ACTIVITY, TEXAS

| Well ID | | Qualitative Evaluation | | | Temporal Evaluation | | Spatial Evaluation | | Summary | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Current Sampling Frequency | Exclude | Retain | Recommended Monitoring Frequency | Exclude/ Reduce | Retain | Exclude | Retain | Exclude | Retain | Recommended Monitoring Frequency | Rationale |
| CS-WB01-LGR-07 | Monthly & after rain events | | ✓ | Semi-annual | | ✓ | ↓ | | | ✓ | Semi-Annual | Temporal statistics confirm qualitative evaluation |
| CS-WB01-LGR-08 | Monthly & after rain events | | ✓ | Semi-annual | ✓ | | ↓ | | | ✓ | Semi-Annual | Qualitative factor overrides statistic recommendations |
| CS-WB01-LGR-09 | Monthly & after rain events | | ✓ | Semi-annual | | ✓ | -- | -- | | ✓ | Semi-Annual | Temporal statistics confirm qualitative evaluation |
| CS-WB01-UGR-01 | Monthly & after rain events | | ✓ | Semi-annual | Not Analyzed | | | ↓ | | ✓ | Semi-Annual | Spatial statistics confirm qualitative evaluation |
| CS-WB02-LGR-01 | Monthly & after rain events | | ✓ | Semi-annual | | ✓ | -- | --→ | | ✓ | Semi-Annual | Statistics confirm qualitative evaluation |
| CS-WB02-LGR-02 | Monthly & after rain events | | ✓ | Semi-annual | | ✓ | -- | -- | | ✓ | Semi-Annual | Temporal statistics confirm qualitative evaluation |
| CS-WB02-LGR-03 | Monthly & after rain events | | ✓ | Semi-annual | | ✓ | -- | -- | | ✓ | Semi-Annual | Temporal statistics confirm qualitative evaluation |
| CS-WB02-LGR-04 | Monthly & after rain events | | ✓ | Semi-annual | ✓ | | ↓-- | -- | | ✓ | Semi-Annual | Qualitative factor overrides statistic recommendations |
| CS-WB02-LGR-05 | Monthly & after rain events | | ✓ | Semi-annual | ✓ | | ↓-- | -- | | ✓ | Semi-Annual | Qualitative factor overrides statistic recommendations |
| CS-WB02-LGR-06 | Monthly & after rain events | | ✓ | Semi-annual | ✓ | | ↓ | → | | ✓ | Semi-Annual | Qualitative factor overrides statistic recommendations |
| CS-WB02-LGR-07 | Monthly & after rain events | | ✓ | Semi-annual | ✓ | | ↓ | → | | ✓ | Semi-Annual | Qualitative factor overrides statistic recommendations |
| CS-WB02-LGR-08 | Monthly & after rain events | | ✓ | Semi-annual | ✓ | | ↓ | → | | ✓ | Semi-Annual | Qualitative factor overrides statistic recommendations |
| CS-WB02-LGR-09 | Monthly & after rain events | | ✓ | Semi-annual | ✓ | | | ↓→ | | ✓ | Semi-Annual | Spatial statistics confirm qualitative evaluation |
| CS-WB02-UGR-01 | Monthly & after rain events | | ✓ | Semi-annual | Not Analyzed | | | ↓→ | | ✓ | Semi-Annual | Spatial statistics confirm qualitative evaluation |
| CS-WB03-LGR-01 | Monthly & after rain events | | ✓ | Semi-annual | Not Analyzed | | -- | -- | | ✓ | Semi-Annual | Qualitative factor overrides statistic recommendations |
| CS-WB03-LGR-02 | Monthly & after rain events | | ✓ | Semi-annual | Not Analyzed | | -- | -- | | ✓ | Semi-Annual | Qualitative factor overrides statistic recommendations |
| CS-WB03-LGR-03 | Monthly & after rain events | | ✓ | Semi-annual | | ✓ | -- | -- | | ✓ | Semi-Annual | Temporal statistics confirm qualitative evaluation |
| CS-WB03-LGR-04 | Monthly & after rain events | | ✓ | Semi-annual | | ✓ | -- | -- | | ✓ | Semi-Annual | Temporal statistics confirm qualitative evaluation |
| CS-WB03-LGR-05 | Monthly & after rain events | | ✓ | Semi-annual | | ✓ | | ↓ | | ✓ | Semi-Annual | Statistics confirm qualitative evaluation |
| CS-WB03-LGR-06 | Monthly & after rain events | | ✓ | Semi-annual | | ✓ | | ↓ | | ✓ | Semi-Annual | Statistics confirm qualitative evaluation |
| CS-WB03-LGR-07 | Monthly & after rain events | | ✓ | Semi-annual | | ✓ | | ↓ | | ✓ | Semi-Annual | Statistics confirm qualitative evaluation |
| CS-WB03-LGR-08 | Monthly & after rain events | | ✓ | Semi-annual | | ✓ | -- | -- | | ✓ | Semi-Annual | Statistics confirm qualitative evaluation |
| CS-WB03-LGR-09 | Monthly & after rain events | | ✓ | Semi-annual | | ✓ | | ↓ | | ✓ | Semi-Annual | Statistics confirm qualitative evaluation |
| CS-WB03-UGR-01 | Monthly & after rain events | | ✓ | Semi-annual | | ✓ | ↓ | | | ✓ | Semi-Annual | Temporal statistics confirm qualitative evaluation |
| CS-WB04-BS-01 | Monthly & after rain events | | ✓ | Biennial | ✓ | | → | | | ✓ | Biennial | Statistics confirm qualitative evaluation |
| CS-WB04-BS-02 | Monthly & after rain events | | ✓ | Biennial | ✓ | | → | | | ✓ | Biennial | Statistics confirm qualitative evaluation |
| CS-WB04-CC-01 | Monthly & after rain events | | ✓ | Biennial | ✓ | | → | | | ✓ | Biennial | Statistics confirm qualitative evaluation |
| CS-WB04-CC-02 | Monthly & after rain events | | ✓ | Biennial | ✓ | | → | | | ✓ | Biennial | Statistics confirm qualitative evaluation |
| CS-WB04-CC-03 | Monthly & after rain events | | ✓ | Biennial | ✓ | | -- | -- | | ✓ | Biennial | Statistics confirm qualitative evaluation |
| CS-WB04-LGR-01 | Monthly & after rain events | | ✓ | Semi-annual | ✓ | | -- | -- | | ✓ | Semi-Annual | Qualitative factor overrides statistic recommendations |
| CS-WB04-LGR-02 | Monthly & after rain events | | ✓ | Semi-annual | ✓ | | → | | | ✓ | Semi-Annual | Qualitative factor overrides statistic recommendations |
| CS-WB04-LGR-03 | Monthly & after rain events | | ✓ | Semi-annual | ✓ | | -- | -- | | ✓ | Semi-Annual | Qualitative factor overrides statistic recommendations |
| CS-WB04-LGR-04 | Monthly & after rain events | | ✓ | Semi-annual | ✓ | | | → | | ✓ | Semi-Annual | Spatial statistics confirm qualitative evaluation |
| CS-WB04-LGR-06 | Monthly & after rain events | | ✓ | Semi-annual | ✓ | | -- | -- | | ✓ | Semi-Annual | Qualitative factor overrides statistic recommendations |
| CS-WB04-LGR-07 | Monthly & after rain events | | ✓ | Semi-annual | ✓ | | -- | -- | | ✓ | Semi-Annual | Qualitative factor overrides statistic recommendations |
| CS-WB04-LGR-08 | Monthly & after rain events | | ✓ | Semi-annual | ✓ | | → | | | ✓ | Semi-Annual | Qualitative factor overrides statistic recommendations |
| CS-WB04-LGR-09 | Monthly & after rain events | | ✓ | Semi-annual | | ✓ | → | | | ✓ | Semi-Annual | Temporal statistics confirm qualitative evaluation |
| CS-WB04-LGR-10 | Monthly & after rain events | | ✓ | Semi-annual | | ✓ | → | | | ✓ | Semi-Annual | Temporal statistics confirm qualitative evaluation |
| CS-WB04-LGR-11 | Monthly & after rain events | | ✓ | Semi-annual | ✓ | | → | | | ✓ | Semi-Annual | Qualitative factor overrides statistic recommendations |
| CS-WB04-UGR-01 | Monthly & after rain events | | ✓ | Semi-annual | Not Analyzed | | | → | | ✓ | Semi-Annual | Spatial statistics confirm qualitative evaluation |

[a/] Spatial recommendation result from North to South vertical cross section analysis that do not impact LGR zone well summary evaluation results
[b/] Well in the "intermediate" range; received no recommendation for removal/exclusion or retention/addition in spatial evaluation
[c/] Spatial recommendation result from West to East vertical cross section analysis that do not impact LGR zone well summary evaluation results

THIS PAGE INENTIONALLY LEFT BLANK

**2010 Summary of LTMO**
**(Proposed/Under Review: On- an Off-Post)**

THIS PAGE INENTIONALLY LEFT BLANK

## APPENDIX E.2

## 2010 SUMMARY OF LONG TERM MONITORING OPTIMIZATION EVALUATION OF CURRENT GROUNDWATER MONITORING PROGRAM

**LONG TERM MONITORING OPTIMIZATION**

**CAMP STANLEY STORAGE ACTIVITY, TEXAS**

| Well ID | Current Sampling Frequency | Qualitative Evaluation | | | Temporal Evaluation | | Spatial Evaluation | | Summary | | | Rationale |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Exclude | Retain | Recommended Monitoring Frequency | Exclude/ Reduce | Retain | Exclude | Retain | Exclude | Retain | Recommended Monitoring Frequency | |
| **On Post Monitoring Wells** | | | | | | | | | | | | |
| AOC65-MW1 | Sample after major rain event | ✔ | | Exclude | Not Analyzed | | Not Included | | ✔ | | Exclude | Well is part of AOC-65 program and only sampled on an as-needed basis. |
| AOC65-MW2A | Sample after major rain event | ✔ | | Exclude | | ✔ | Not Included | | ✔ | | Exclude | Well is part of AOC-65 program and only sampled on an as-needed basis. |
| AOC65-PZ01-LGR | Exclude | ✔ | | Exclude | ✔ | | Not Included | | ✔ | | Exclude | Well is part of AOC-65 program and only sampled on an as-needed basis. |
| AOC65-PZ02-LGR | Exclude | ✔ | | Exclude | ✔ | | Not Included | | ✔ | | Exclude | Well is part of AOC-65 program and only sampled on an as-needed basis. |
| AOC65-PZ03-LGR | Exclude | ✔ | | Exclude | ✔ | | Not Included | | ✔ | | Exclude | Well is part of AOC-65 program and only sampled on an as-needed basis. |
| AOC65-PZ04-LGR | Exclude | ✔ | | Exclude | ✔ | | Not Included | | ✔ | | Exclude | Well is part of AOC-65 program and only sampled on an as-needed basis. |
| AOC65-PZ05-LGR | Exclude | ✔ | | Exclude | ✔ | | Not Included | | ✔ | | Exclude | Well is part of AOC-65 program and only sampled on an as-needed basis. |
| AOC65-PZ06-LGR | Exclude | ✔ | | Exclude | ✔ | | Not Included | | ✔ | | Exclude | Well is part of AOC-65 program and only sampled on an as-needed basis. |
| CS-1 | Quarterly | | ✔ | Quarterly | | ✔ | | ✔ | | ✔ | Quarterly | Temporal and Spatial analysis confirm qualitative evaluation |
| CS-10 | Quarterly | | ✔ | Quarterly | ✔ | | ✔ | | | ✔ | Quarterly | Qualitative factor (drinking water well) overrides temporal recommendations |
| CS-11 | Exclude (No pump) | ✔ | | Exclude (No pump) | | ✔ | --[a/] | -- | ✔ | | Exclude (No pump) | Exclude due to well being inactive (no pump) |
| CS-12 | Quarterly | | ✔ | Quarterly | | ✔ | | ✔ | | ✔ | Quarterly | Temporal/Spatial analysis confirm qualitative evaluation. Quarterly based on drinking water well. |
| CS-2 | Every 9 months | | ✔ | Every 9 months | ✔ | | -- | -- | | ✔ | Every 9 months | Qualitative factor (delineation well) overrides temporal recommendations |
| CS-3 | Exclude | ✔ | | Exclude | ✔ | | Not Included | | ✔ | | Exclude | Spatially redundant well to CS-2 with no pump. |
| CS-4 | Semi-annually | | ✔ | Semi-annual | | ✔ | ✔ | | | ✔ | Semi-annual + 9-month snapshot event | Temporal analysis confirms qualitative evaluation. Frequency based upon importance to plume delineation. |
| CS-9 | Quarterly | | ✔ | Quarterly | ✔ | | ✔ | | | ✔ | Quarterly | Qualitative factor (drinking water well) overrides temporal/spatial recommendations |
| CS-D | Semi-annually | | ✔ | Semi-annual | | ✔ | -- | -- | | ✔ | Semi-annual + 9-month snapshot event | Temporal analysis confirms qualitative evaluation. Frequency based upon importance to plume delineation. |
| CS-I | Every 9 months | | ✔ | Every 18 months | | ✔ | ✔ | | | ✔ | Every 18 months | Temporal statistics confirm qualitative evaluation. Decrease sampling frequency. |
| CS-MW10-CC | Biennially | | ✔ | Every 18 months | ✔ | | Not Included | | | ✔ | Every 18 months | Qualitative factor overrides temporal recommendations because of type of well (CC aquifer). |
| CS-MW10-LGR | Every 9 months | | ✔ | Semi-annual | | ✔ | ✔ | | | ✔ | Semi-annual + 9-month snapshot event | Qualitative and temporal evaluation override spatial evaluation. Increased sampling frequency. |
| CS-MW11A-LGR | Semi-annually | | ✔ | Semi-annual | | ✔ | -- | -- | | ✔ | Semi-annual + 9-month snapshot event | Qualitative and temporal evaluation override spatial evaluation. Increased sampling frequency. |
| CS-MW11B-LGR | Semi-annually | | ✔ | Every 9 months | | ✔ | -- | -- | | ✔ | Every 9 months | Qualitative and temporal evaluation override spatial evaluation. |
| CS-MW12-BS | Biennially | | ✔ | Every 18 months | ✔ | | Not Included | | | ✔ | Every 18 months | Qualitative factor overrides temporal recommendations because of type of well (BS confining unit). |
| CS-MW12-CC | Biennially | | ✔ | Every 18 months | ✔ | | Not Included | | | ✔ | Every 18 months | Qualitative factor overrides temporal recommendations because of type of well (CC aquifer). |
| CS-MW12-LGR | Every 9 months | | ✔ | Every 9 months | | ✔ | | ✔ | | ✔ | Every 9 months | Temporal and Spatial analysis confirm qualitative evaluation |
| CS-MW16-CC | Semi-annually | | ✔ | Every 9 months | | ✔ | Not Included | | | ✔ | Every 9 months | Temporal evaluation confirms qualitative analysis, retain as remediation well. |
| CS-MW16-LGR | Semi-annually | | ✔ | Every 9 months | | ✔ | -- | -- | | ✔ | Every 9 months | Temporal evaluation confirms qualitative analysis, retain as remediation well. |
| CS-MW17-LGR | Every 9 months | | ✔ | Every 9 months | ✔ | | | ✔ | | ✔ | Every 9 months | Qualitative and spatial evaluations override temporal analysis. |
| CS-MW18-LGR | Semi-annually | | ✔ | Every 9 months | | ✔ | | ✔ | | ✔ | Every 9 months | Temporal and Spatial analysis confirm qualitative evaluation |
| CS-MW19-LGR | Semi-annually | | ✔ | Every 9 months | ✔ | | | ✔ | | ✔ | Every 9 months | Qualitative and spatial evaluations override temporal analysis. |
| CS-MW1-BS | Biennially | | ✔ | Every 18 months | ✔ | | Not Included | | | ✔ | Every 18 months | Qualitative factor overrides temporal recommendations because of type of well (BS confining unit). |
| CS-MW1-CC | Biennially | | ✔ | Every 18 months | ✔ | | Not Included | | | ✔ | Every 18 months | Qualitative factor overrides temporal recommendations because of type of well (CC aquifer). |
| CS-MW1-LGR | Semi-annually | | ✔ | Semi-annual | | ✔ | ✔ | | | ✔ | Semi-annual + 9-month snapshot event | Qualitative and temporal evaluation override spatial evaluation. Increased sampling frequency. |
| CS-MW20-LGR | Quarterly until new LTMO | | ✔ | Every 9 months | | ✔ | | ✔ | | ✔ | Every 9 months | Temporal and Spatial analysis confirm qualitative evaluation |
| CS-MW21-LGR | Quarterly until new LTMO | | ✔ | Every 9 months | ✔ | | | ✔ | | ✔ | Every 9 months | Qualitative and spatial evaluation override temporal evaluation. |
| CS-MW22-LGR | Quarterly until new LTMO | | ✔ | Every 9 months | ✔ | | | ✔ | | ✔ | Every 9 months | Qualitative and spatial evaluation override temporal evaluation. |
| CS-MW23-LGR | Quarterly until new LTMO | | ✔ | Every 9 months | ✔ | | | ✔ | | ✔ | Every 9 months | Qualitative and spatial evaluation override temporal evaluation. |
| CS-MW24-LGR | Quarterly until new LTMO | | ✔ | Semi-annual | | ✔ | | ✔ | | ✔ | Semi-annual + 9-month snapshot event | Temporal and Spatial analysis confirm qualitative evaluation. Increased sampling frequency. |
| CS-MW25-LGR | Quarterly until new LTMO | | ✔ | Every 9 months | ✔ | | | ✔ | | ✔ | Every 9 months | Qualitative and spatial evaluation override temporal evaluation. |
| CS-MW2-CC | Biennially | | ✔ | Every 18 months | ✔ | | Not Included | | | ✔ | Every 18 months | Qualitative factor overrides temporal recommendations because of type of well (CC aquifer). |
| CS-MW2-LGR | Semi-annually | | ✔ | Semi-annual | ✔ | | -- | -- | | ✔ | Semi-annual + 9-month snapshot event | Qualitative factor overrides temporal recommendations. Increased sampling frequency. |
| CS-MW3-LGR | Semi-annually | | ✔ | Every 9 months | ✔ | | | ✔ | | ✔ | Every 9 months | Qualitative and spatial evaluation override temporal evaluation. |
| CS-MW4-LGR | Semi-annually | | ✔ | Every 9 months | ✔ | | | ✔ | | ✔ | Every 9 months | Qualitative and spatial evaluation override temporal evaluation. |
| CS-MW5-LGR | Semi-annually | | ✔ | Every 9 months | ✔ | | | ✔ | | ✔ | Every 9 months | Qualitative and spatial evaluation override temporal evaluation. |
| CS-MW6-BS | Biennially | | ✔ | Every 18 months | ✔ | | | ↓[a/] | | ✔ | Every 18 months | Qualitative factor overrides temporal recommendations because of type of well (BS confining unit). |
| CS-MW6-CC | Biennially | | ✔ | Every 18 months | ✔ | | | ↓ | | ✔ | Every 18 months | Qualitative factor overrides temporal recommendations because of type of well (CC aquifer). |
| CS-MW6-LGR | Semi-annually | | ✔ | Every 9 months | ✔ | | -- | ↓-- | | ✔ | Every 9 months | Qualitative and spatial evaluation override temporal evaluation. |
| CS-MW7-CC | Biennially | | ✔ | Every 18 months | ✔ | | -- | →[a/] | | ✔ | Every 18 months | Qualitative factor overrides temporal recommendations because of type of well (CC aquifer). |
| CS-MW7-LGR | Semi-annually | | ✔ | Every 9 months | | ✔ | -- | → | | ✔ | Every 9 months | Temporal and Spatial analysis confirm qualitative evaluation. |
| CS-MW8-CC | Biennially | | ✔ | Every 18 months | ✔ | | | ↓ | | ✔ | Every 18 months | Qualitative factor overrides temporal recommendations because of type of well (CC aquifer). |
| CS-MW8-LGR | Every 9 months | | ✔ | Semi-annual | | ✔ | ✔ | ↓ | | ✔ | Semi-annual + 9-month snapshot event | Temporal and Spatial analysis confirm qualitative evaluation. Increased sampling frequency. |
| CS-MW9-BS | Biennially | | ✔ | Every 9 months | | ✔ | Not Included | | | ✔ | Every 9 months | Qualitative factor overrides temporal recommendations because of type of well (BS confining unit). |
| CS-MW9-CC | Biennially | | ✔ | Every 9 months | ✔ | | Not Included | | | ✔ | Every 9 months | Qualitative factor overrides temporal recommendations because of type of well (CC aquifer). |
| CS-MW9-LGR | Semi-annually | | ✔ | Every 18 months | ✔ | | | ✔ | | ✔ | Every 18 months | Qualitative and spatial evaluation override temporal evaluation. |
| CS-MWG-LGR | Every 9 months | | ✔ | Every 18 months | ✔ | | | ✔ | | ✔ | Every 18 months | Qualitative and spatial evaluation override temporal evaluation. Decrease sampling frequency. |
| CS-MWH-LGR | Biennially | | ✔ | Every 18 months | ✔ | | ✔ | | | ✔ | Every 18 months | Qualitative factor overrides temporal/spatial evaluations. Increase sampling frequency. |

## APPENDIX E.2

## 2010 SUMMARY OF LONG TERM MONITORING OPTIMIZATION EVALUATION OF CURRENT GROUNDWATER MONITORING PROGRAM

**LONG TERM MONITORING OPTIMIZATION**

**CAMP STANLEY STORAGE ACTIVITY, TEXAS**

| Well ID | Current Sampling Frequency | Qualitative Evaluation | | | Temporal Evaluation | | Spatial Evaluation | | Summary | | | Rationale |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Exclude | Retain | Recommended Monitoring Frequency | Exclude/ Reduce | Retain | Exclude | Retain | Exclude | Retain | Recommended Monitoring Frequency | |
| **Off Post Monitoring Wells** | | | | | | | | | | | | |
| DOM-2 | Exclude (No Power at Well) | ✔ | | Exclude (No Power at Well) | ✔ | | Not Included | | ✔ | | Exclude (No Power at Well) | Exclude due to well being inactive (no power). Re-evaluate if conditions change. |
| FO-17 | Annually | | ✔ | Every 9 months | ✔ | | ✔ | | | ✔ | Every 9 months | Qualitative factors override temporal/spatial evaluation. Increase sampling frequency. |
| FO-22 | Annually | | ✔ | Every 9 months | ✔ | | -- | -- | | ✔ | Every 9 months | Qualitative/spatial factors override temporal evaluation. Increase sampling frequency. |
| FO-8 | Annually | | ✔ | Every 9 months | ✔ | | | ✔ | | ✔ | Every 9 months | Qualitative/spatial factors override temporal evaluation. Increase sampling frequency. |
| FO-J1 | Qtrly, 1 year thru Dec. 10 | | ✔ | Every 9 months | ✔ | | ✔ | | | ✔ | Quarterly/9-months | Qualitative factors override temporal/spatial evaluation. Re-evaluate frequency if DQO achieved. |
| HS-1 | Quarterly | | ✔ | Every 9 months | | ✔ | -- | -- | | ✔ | Every 9 months | All evaluations in agreement. Decrease sampling frequency due to statistics results |
| HS-2 | Qtrly, 1 year thru June 10 | | ✔ | Every 9 months | | ✔ | | ✔ | | ✔ | Every 9 months | All evaluations in agreement. Decrease sampling frequency due to statistics results |
| HS-3 | Annually | | ✔ | Every 9 months | | ✔ | | ✔ | | ✔ | Every 9 months | Temporal statistics confirm qualitative evaluation. Increase sampling frequency. |
| I10-2 | Annually | | ✔ | Every 9 months | | ✔ | -- | -- | | ✔ | Every 9 months | Temporal statistics confirm qualitative evaluation. Increase sampling frequency. |
| I10-4 | Quarterly | | ✔ | Quarterly | | ✔ | -- | -- | | ✔ | Quarterly | Qualitative and temporal evaluations in agreement. Retain quarterly frequency as sentry well. |
| I10-5 | Annually | | ✔ | Every 9 months | | ✔ | | ✔ | | ✔ | Every 9 months | All evaluations in agreement. Increase sampling frequency. |
| I10-7 | Qtrly, 1 year thru Dec. 10 | | ✔ | Every 9 months | | ✔ | -- | -- | | ✔ | Quarterly/9-months | Temporal statistics confirm qualitative evaluation. Re-evaluate frequency if DQO achieved. |
| I10-8 | Annually | | ✔ | Every 9 months | | ✔ | -- | -- | | ✔ | Every 9 months | Temporal statistics confirm qualitative evaluation. Increase sampling frequency. |
| JW-12 | Access agreement expired | ✔ | | Access agreement expired | ✔ | | -- | -- | ✔ | | Access agreement expired | Exclude due to well being inaccessible. Re-evaluate if conditions change. |
| JW-13 | Annually | | ✔ | Every 9 months | | ✔ | ✔ | | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial evaluation. Increase sampling frequency. |
| JW-14 | Qtrly, due to location | | ✔ | Every 9 months | ✔ | | ✔ | | | ✔ | Every 9 months | Qualitative factors override temporal/spatial evaluations. Decrease sampling frequency. |
| JW-15 | Annually | | ✔ | Every 9 months | ✔ | | | ✔ | | ✔ | Every 9 months | Qualitative and spatial analysis in agreement. Retain as delineation well and increase frequency. |
| JW-26 | Declined Access | ✔ | | Declined Access | ✔ | | Not Included | | ✔ | | Declined Access | Exclude due to well being inaccessible. Re-evaluate if conditions change. |
| JW-27 | Annually | | ✔ | Every 9 months | ✔ | | ✔ | | | ✔ | Every 9 months | Qualitative factors override temporal/spatial evaluations. Decrease sampling frequency. |
| JW-28 | Qtrly, due to location | | ✔ | Every 9 months | | ✔ | -- | -- | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial evaluation. Decrease sampling frequency. |
| JW-29 | Qtrly, due to location | | ✔ | Every 9 months | ✔ | | ✔ | | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial evaluation. Decrease sampling frequency. |
| JW-30 | Qtrly, due to location | | ✔ | Every 9 months | ✔ | | ✔ | | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial evaluation. Decrease sampling frequency. |
| JW-31 | Qtrly, 1 year thru Dec. 10 | | ✔ | Every 9 months | | ✔ | ✔ | | | ✔ | Quarterly/9-months | Temporal statistics confirm qualitative evaluation. Re-evaluate frequency if DQO achieved. |
| JW-5 | Annually | | ✔ | Every 9 months | | ✔ | -- | -- | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial evaluation. Increase sampling frequency. |
| JW-6 | Annually | | ✔ | Every 9 months | | ✔ | ✔ | | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial evaluation. Increase sampling frequency. |
| JW-7 | Qtrly, 1 year thru Dec. 10 | | ✔ | Every 9 months | ✔ | | ✔ | | | ✔ | Quarterly/9-months | Qualitative factors override temporal/spatial evaluation.. Re-evaluate frequency if DQO achieved. |
| JW-8 | Qtrly, 1 year thru Dec. 10 | | ✔ | Every 9 months | ✔ | | ✔ | | | ✔ | Quarterly/9-months | Qualitative factors override temporal/spatial evaluation.. Re-evaluate frequency if DQO achieved. |
| JW-9 | Annually | | ✔ | Every 9 months | ✔ | | ✔ | | | ✔ | Every 9 months | Qualitative factors override temporal/spatial evaluation.. Increase sampling frequency. |
| LS-1 | Quarterly | | ✔ | Every 9 months | | ✔ | | ✔ | | ✔ | Every 9 months | Temporal/Spatial analysis confirm qualitative evaluation. No longer water supply, decrease frequency. |
| LS-2 | Well is offline, to be plugged soon | ✔ | | Well is offline, to be plugged soon | ✔ | | Not Included | | ✔ | | Well is offline, to be plugged soon | If well is not plugged, give consideration incorporating back into monitoring network. |
| LS-3 | Well is offline, to be plugged soon | ✔ | | Well is offline, to be plugged soon | ✔ | | Not Included | | ✔ | | Well is offline, to be plugged soon | If well is not plugged, give consideration incorporating back into monitoring network. |
| LS-4 | Annually | | ✔ | Every 9 months | | ✔ | ✔ | | | ✔ | Every 9 months | Temporal analysis confirm qualitative evaluation. No longer water supply, increase sampling frequency. |
| LS-5 | Qtrly, 1 year thru Dec. 10 | | ✔ | Quarterly | | ✔ | -- | -- | | ✔ | Quarterly | Qualitative factor (GAC well)overrides spatial recommendations |
| LS-6 | Qtrly, 1 year thru Dec. 10 | | ✔ | Quarterly | | ✔ | -- | -- | | ✔ | Quarterly | Qualitative factor (GAC well) overrides spatial recommendations |
| LS-7 | Qtrly, 1 year thru Dec. 10 | | ✔ | Quarterly | | ✔ | -- | -- | | ✔ | Quarterly | Qualitative factor (GAC well) overrides spatial recommendations |
| OFR-1 | Qtrly, 1 year thru Dec. 10 | | ✔ | Every 9 months | ✔ | | ✔ | | | ✔ | Quarterly/9-months | Qualitative factors override temporal/spatial evaluation.. Re-evaluate frequency if DQO achieved. |
| OFR-2 | Exclude (Plugged.) | ✔ | | Exclude (Plugged.) | ✔ | | Not Included | | ✔ | | Exclude (Plugged.) | Excluded. |
| OFR-3 | Qtrly, 1 year thru Dec. 10 | | ✔ | Every 9 months | | ✔ | -- | -- | | ✔ | Quarterly | Qualitative factor (GAC well) overrides spatial recommendations |
| OFR-4 | Annually | | ✔ | Every 9 months | | ✔ | ✔ | | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial evaluation. Increase sampling frequency. |
| RFR-10 | Qtrly, 1 year thru Dec. 10 | | ✔ | Quarterly | | ✔ | ✔ | | | ✔ | Quarterly | Qualitative factor (GAC well) overrides spatial recommendations |
| RFR-11 | Qtrly, 1 year thru Dec. 10 | | ✔ | Quarterly | | ✔ | -- | -- | | ✔ | Quarterly | Qualitative factor (GAC well) overrides spatial recommendations |
| RFR-12 | Annually | | ✔ | Every 9 months | | ✔ | -- | -- | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial evaluation. Increase sampling frequency. |
| RFR-13 | Annually | | ✔ | Every 9 months | | ✔ | ✔ | | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial evaluation. Increase sampling frequency. |
| RFR-14 | Qtrly, 1 year thru Sept. 10 | | ✔ | Every 9 months | ✔ | | ✔ | | | ✔ | Quarterly/9-months | Qualitative factors override temporal/spatial evaluation.. Re-evaluate frequency if DQO achieved. |
| RFR-3 | Annually | | ✔ | Every 9 months | ✔ | | | ✔ | | ✔ | Every 9 months | Qualitative and spatial evaluations override temporal evaluation. Increase sampling frequency. |
| RFR-4 | Annually | | ✔ | Every 9 months | ✔ | | -- | -- | | ✔ | Every 9 months | Qualitative evaluation overrides temporal/spatial evaluation. Increase sampling frequency. |
| RFR-5 | Annually | | ✔ | Every 9 months | ✔ | | | ✔ | | ✔ | Every 9 months | Qualitative and spatial evaluations override temporal evaluation. Increase sampling frequency. |
| RFR-6 | Exclude (Plugged.) | ✔ | | Exclude (Plugged.) | ✔ | | Not Included | | ✔ | | Exclude (Plugged.) | Excluded. |
| RFR-7 | Exclude (Plugged.) | ✔ | | Exclude (Plugged.) | ✔ | | Not Included | | ✔ | | Exclude (Plugged.) | Excluded. |
| RFR-8 | Annually | | ✔ | Every 9 months | ✔ | | | ✔ | | ✔ | Every 9 months | Temporal/Spatial analysis confirm qualitative evaluation. Increase sampling frequency. |
| RFR-9 | Qtrly, 1 year thru Sept. 10 | | ✔ | Every 9 months | ✔ | | -- | -- | | ✔ | Quarterly/9-months | Qualitative factors override temporal/spatial evaluation.. Re-evaluate frequency if DQO achieved. |

## APPENDIX E.2

## 2010 SUMMARY OF LONG TERM MONITORING OPTIMIZATION EVALUATION OF CURRENT GROUNDWATER MONITORING PROGRAM

### LONG TERM MONITORING OPTIMIZATION

### CAMP STANLEY STORAGE ACTIVITY, TEXAS

| Well ID | Current Sampling Frequency | Qualitative Evaluation | | | Temporal Evaluation | | Spatial Evaluation | | Summary | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Exclude | Retain | Recommended Monitoring Frequency | Exclude/ Reduce | Retain | Exclude | Retain | Exclude | Retain | Recommended Monitoring Frequency | Rationale |
| **Westbay Wells** | | | | | | | | | | | | |
| CS-WB01-LGR-01 | Semi-annually | | ✔ | Every 9 months | | ✔ | -- | -- | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial recommendations. Decrease sampling frequency. |
| CS-WB01-LGR-02 | Semi-annually | | ✔ | Every 9 months | | ✔ | -- | -- | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial recommendations. Decrease sampling frequency. |
| CS-WB01-LGR-03 | Semi-annually | | ✔ | Every 9 months | | ✔ | -- | -- | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial recommendations. Decrease sampling frequency. |
| CS-WB01-LGR-04 | Semi-annually | | ✔ | Every 9 months | ✔ | | -- | -- | | ✔ | Every 9 months | Qualitative factors override temporal/spatial evaluations. Decrease sampling frequency. |
| CS-WB01-LGR-05 | Semi-annually | | ✔ | Every 9 months | ✔ | | -- | -- | | ✔ | Every 9 months | Qualitative factors override temporal/spatial evaluations. Decrease sampling frequency. |
| CS-WB01-LGR-06 | Semi-annually | | ✔ | Every 9 months | ✔ | | -- | -- | | ✔ | Every 9 months | Qualitative factors override temporal/spatial evaluations. Decrease sampling frequency. |
| CS-WB01-LGR-07 | Semi-annually | | ✔ | Every 9 months | | ✔ | 🡻 | | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial recommendations. Decrease sampling frequency. |
| CS-WB01-LGR-08 | Semi-annually | | ✔ | Every 9 months | ✔ | | 🡻 | | | ✔ | Every 9 months | Qualitative factors override temporal/spatial evaluations. Decrease sampling frequency. |
| CS-WB01-LGR-09 | Semi-annually | | ✔ | Every 9 months | | ✔ | -- | -- | | ✔ | Every 9 months+On-Post Sched. | Include this LGR zone with 9-month areawide "snapshot" events as well as Westbay schedule. |
| CS-WB01-UGR-01 | Semi-annually | | ✔ | Every 9 months | Not Analyzed | | -- | -- | | ✔ | Every 9 months/Major Precip. Event | Typically dry. Decrease sampling frequency or after major rainfall events. |
| CS-WB02-LGR-01 | Semi-annually | | ✔ | Every 9 months | | ✔ | -- | 🡺 | | ✔ | Every 9 months | Temporal/spatial evaluations confirm qualitative evaluation. Decrease sampling frequency. |
| CS-WB02-LGR-02 | Semi-annually | | ✔ | Every 9 months | | ✔ | -- | -- | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial recommendations. Decrease sampling frequency. |
| CS-WB02-LGR-03 | Semi-annually | | ✔ | Every 9 months | | ✔ | 🡺 | -- | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial analysis. Decrease sampling frequency. |
| CS-WB02-LGR-04 | Semi-annually | | ✔ | Every 9 months | | ✔ | 🡺 | -- | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial analysis. Decrease sampling frequency. |
| CS-WB02-LGR-05 | Semi-annually | | ✔ | Every 9 months | | ✔ | 🡻🡺 | | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial analysis. Decrease sampling frequency. |
| CS-WB02-LGR-06 | Semi-annually | | ✔ | Every 9 months | | ✔ | 🡻🡺 | | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial analysis. Decrease sampling frequency. |
| CS-WB02-LGR-07 | Semi-annually | | ✔ | Every 9 months | ✔ | | 🡻 | 🡺 | | ✔ | Every 9 months | Qualitative and spatial evaluations override temporal analysis. Decrease sampling frequency. |
| CS-WB02-LGR-08 | Semi-annually | | ✔ | Every 9 months | | ✔ | 🡻 | 🡺 | | ✔ | Every 9 months | Temporal/spatial evaluations confirm qualitative evaluation. Decrease sampling frequency. |
| CS-WB02-LGR-09 | Semi-annually | | ✔ | Every 9 months | | ✔ | | 🡻🡺 | | ✔ | Every 9 months+On-Post Sched. | Include this LGR zone with 9-month areawide "snapshot" events as well as Westbay schedule. |
| CS-WB02-UGR-01 | Semi-annually | | ✔ | Every 9 months | Not Analyzed | | -- | 🡺 | | ✔ | Every 9 months/Major Precip. Event | Typically dry. Decrease sampling frequency or after major rainfall events. |
| CS-WB03-LGR-01 | Semi-annually | | ✔ | Every 9 months | | ✔ | | 🡻 | | ✔ | Every 9 months | Temporal/spatial evaluations confirm qualitative evaluation. Decrease sampling frequency. |
| CS-WB03-LGR-02 | Semi-annually | | ✔ | Every 9 months | | ✔ | 🡻 | | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial recommendations. Decrease sampling frequency. |
| CS-WB03-LGR-03 | Semi-annually | | ✔ | Every 9 months | | ✔ | 🡻 | | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial recommendations. Decrease sampling frequency. |
| CS-WB03-LGR-04 | Semi-annually | | ✔ | Every 9 months | | ✔ | 🡻 | | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial recommendations. Decrease sampling frequency. |
| CS-WB03-LGR-05 | Semi-annually | | ✔ | Every 9 months | | ✔ | 🡻 | | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial recommendations. Decrease sampling frequency. |
| CS-WB03-LGR-06 | Semi-annually | | ✔ | Every 9 months | | ✔ | 🡻 | | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial recommendations. Decrease sampling frequency. |
| CS-WB03-LGR-07 | Semi-annually | | ✔ | Every 9 months | | ✔ | 🡻 | | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial recommendations. Decrease sampling frequency. |
| CS-WB03-LGR-08 | Semi-annually | | ✔ | Every 9 months | | ✔ | 🡻 | | | ✔ | Every 9 months | Qualitative and temporal evaluations override spatial recommendations. Decrease sampling frequency. |
| CS-WB03-LGR-09 | Semi-annually | | ✔ | Every 9 months | | ✔ | | 🡻 | | ✔ | Every 9 months+On-Post Sched. | Include this LGR zone with 9-month areawide "snapshot" events as well as Westbay schedule. |
| CS-WB03-UGR-01 | Semi-annually | | ✔ | Every 9 months | | ✔ | | 🡻 | | ✔ | Every 9 months/Major Precip. Event | Temporal/spatial evaluations confirm qualitative evaluation. Decrease sampling frequency. |
| CS-WB04-BS-01 | Biennially | | ✔ | Every 18 months | ✔ | | -- | -- | | ✔ | Every 18 months | Qualitative factors override temporal/spatial evaluations. Increase sampling frequency. |
| CS-WB04-BS-02 | Biennially | | ✔ | Every 18 months | ✔ | | -- | -- | | ✔ | Every 18 months | Qualitative factors override temporal/spatial evaluations. Increase sampling frequency. |
| CS-WB04-CC-01 | Biennially | | ✔ | Every 18 months | ✔ | | -- | -- | | ✔ | Every 18 months | Qualitative factors override temporal/spatial evaluations. Increase sampling frequency. |
| CS-WB04-CC-02 | Biennially | | ✔ | Every 18 months | ✔ | | | 🡺 | | ✔ | Every 18 months | Qualitative/spatial factors override spatial evaluations. Increase sampling frequency. |
| CS-WB04-CC-03 | Biennially | | ✔ | Every 18 months | ✔ | | | 🡺 | | ✔ | Every 18 months | Qualitative/spatial factors override spatial evaluations. Increase sampling frequency. |
| CS-WB04-LGR-01 | Semi-annually | | ✔ | Every 18 months | ✔ | | -- | -- | | ✔ | Every 18 months | Qualitative factors override temporal/spatial evaluations. Decrease sampling frequency. |
| CS-WB04-LGR-02 | Semi-annually | | ✔ | Every 18 months | ✔ | | -- | -- | | ✔ | Every 18 months | Qualitative factors override temporal/spatial evaluations. Decrease sampling frequency. |
| CS-WB04-LGR-03 | Semi-annually | | ✔ | Every 18 months | ✔ | | -- | -- | | ✔ | Every 18 months | Qualitative factors override temporal/spatial evaluations. Decrease sampling frequency. |
| CS-WB04-LGR-04 | Semi-annually | | ✔ | Every 18 months | ✔ | | -- | -- | | ✔ | Every 18 months | Qualitative factors override temporal/spatial evaluations. Decrease sampling frequency. |
| CS-WB04-LGR-06 | Semi-annually | | ✔ | Every 9 months | | ✔ | 🡺 | | | ✔ | Every 9 months+On-Post Sched. | Include this LGR zone with 9-month areawide "snapshot" events as well as Westbay schedule. |
| CS-WB04-LGR-07 | Semi-annually | | ✔ | Every 9 months | | ✔ | 🡺 | | | ✔ | Every 9 months+On-Post Sched. | Include this LGR zone with 9-month areawide "snapshot" events as well as Westbay schedule. |
| CS-WB04-LGR-08 | Semi-annually | | ✔ | Every 9 months | ✔ | | 🡺 | | | ✔ | Every 9 months | Qualitative factors override temporal/spatial evaluations. Decrease sampling frequency. |
| CS-WB04-LGR-09 | Semi-annually | | ✔ | Every 9 months | | ✔ | 🡺 | | | ✔ | Every 9 months+On-Post Sched. | Include this LGR zone with 9-month areawide "snapshot" events as well as Westbay schedule. |
| CS-WB04-LGR-10 | Semi-annually | | ✔ | Every 9 months | | ✔ | 🡺 | | | ✔ | Every 9 months+On-Post Sched. | Include this LGR zone with 9-month areawide "snapshot" events as well as Westbay schedule. |
| CS-WB04-LGR-11 | Semi-annually | | ✔ | Every 9 months | | ✔ | -- | -- | | ✔ | Every 9 months+On-Post Sched. | Include this LGR zone with 9-month areawide "snapshot" events as well as Westbay schedule. |
| CS-WB04-UGR-01 | Semi-annually | | ✔ | Every 9 months | Not Analyzed | | | 🡺 | | ✔ | Every 9 months/Major Precip. Event | Typically dry. Decrease sampling frequency or after major rainfall events. |

[b/] Spatial recommendation result from North to South vertical cross section analysis that do not impact LGR zone well summary evaluation results.

[a/] Well in the "intermediate" range; received no recommendation for removal/exclusion or retention/addition in spatial evaluation

[c/] Spatial recommendation result from West to East vertical cross section analysis that do not impact LGR zone well summary evaluation results.

THIS PAGE INENTIONALLY LEFT BLANK

## Appendix F List of all CSSA Groundwater Monitoring Program On-Post Well Locations and the Rationale for Installation

| *Drilling Location* | *Date Installed* | *Rationale* |
|---|---|---|
| ***Supply Wells*** (CS-1, CS-9, CS-10, CS-11) | March 1940 – September 1958 | ➢ All production wells to supply CSSA with potable water, and are open-hole completions fully penetrating throughout the thickness of the Middle Trinity aquifer.<br>➢ CS-1 is located on Camp Bullis, but is operated and maintained by CSSA. Used as supplemental groundwater production by direct entry into the distribution system.<br>➢ Wells CS-9, CS-10, CS-11 are part of wellfield that are located in conjunction with the storage reservoir. CS-10 is the primary purveyor of groundwater for CSSA. CS-9 is generally inactive. CS-11 is no longer used due to coliform contamination. |
| ***Agricultural Wells*** (CS-1, CS-2, CS-3, CS-4, CS-D, CS-G, CS-H, CS-I | Dates Unknown *(except CS-I in April 1979)* | ➢ Old agricultural and supply wells that generally produce groundwater from the Lower Glen Rose. Most were formerly equipped with windmills or motorized pump jacks.<br>➢ With exception of CS-I, all are inactive except for groundwater monitoring.<br>➢ CS-H was obstructed, and has been replaced by CS-MWH-LGR (see below). |
| ***CS-MW1 Cluster*** (CS-MW1-LGR, CS-MW1-BS, CS-MW1-CC) | July 2002<br>November 2002<br>December 2002 | ➢ Monitors for southward flow components within Plume 1 and the fault zone.<br>➢ Helps evaluate the effects of topographic expression on the water table and local recharge.<br>➢ Determine if contamination detected in LGR groundwater at this location has migrated downward to the Bexar Shale and Cow Creek Limestone.<br>➢ Fills in spatial data gap in central portion of CSSA.<br>➢ CS-MW1 was installed in 1996 as an open borehole completion for preliminary investigation of the well CS-16 and CS-D VOC detections. This well was upgraded to a screen completion (CS-MW1-LGR) in July 2002. |
| ***CS-MW2-Pair*** (CS-MW-2-LGR CS-MW2-CC) | July 2002<br>March 2003 | ➢ Fills data gap regarding Cow Creek in the eastern portion of the Inner Cantonment.<br>➢ Monitors for eastward flow of Plume 1 contaminants beyond the fault zone.<br>➢ Determine if contamination detected in LGR groundwater at this location has migrated downward to the Bexar Shale and Cow Creek Limestone.<br>➢ Helps evaluate effects of topographic expression on the water table and local recharge.<br>➢ CS-MW2 was installed in 1996 for preliminary investigation of the well CS-16 and CS-D VOC detections. This well was upgraded to a screen completion (CS-MW2-LGR) in July 2002. |
| CS-MW3-LGR | February 2001 | ➢ Monitors for eastward flow components within Plume 1 and the fault zone.<br>➢ Helps evaluate the effects of topographic expression on the water table and local recharge.<br>➢ Fills in spatial data gap in eastern portion of CSSA. |
| CS-MW4-LGR | February 2001 | ➢ Serves as a downgradient LGR well to Plume 1 outside the fault zone.<br>➢ Helps measure effects (if any) that Salado Creek may have on localized groundwater system. |
| CS-MW5 LGR | February 2001 | ➢ Fills data gap regarding subsurface in the eastern portion of the inner |

| ***Drilling Location*** | ***Date Installed*** | ***Rationale*** |
|---|---|---|
| | | cantonment area.<br>➢ Monitors for eastward flow of Plume 1 contaminants within the fault zone.<br>➢ Helps evaluate effects of topographic expression on the water table and local recharge.<br>➢ Fills in spatial data gap in eastern portion of CSSA. |
| ***CS-MW6-Cluster***<br>(CS-MW6-LGR,<br>CS-MW6-BS,<br>CS-MW6-CC) | March 2001 -<br>April 2001 | ➢ Provides data for areas upgradient of Building 90 (AOC 65).<br>➢ Provides information regarding BS and CC Limestone in the vicinity of the Plume 2 area. |
| ***CS-MW7-Pair***<br>(CS-MW7-LGR,<br>CS-MW7-CC) | June 2001 -<br>July 2001 | ➢ Monitors groundwater impacts in the most industrialized portion of CSSA (Plume 2).<br>➢ Provides information for area downgradient (based on historical potentiometric maps) of Building 90 during periods of normal groundwater levels. |
| ***CS-MW8-Pair***<br>(CS-MW8-LGR,<br>CS-MW8-CC) | May 2001 -<br>June 2001 | ➢ Monitors groundwater impacts in the most industrialized portion of CSSA (Plume 2).<br>➢ Provides information for area downgradient (based on historical potentiometric maps) of Building 90 during periods of low (drought condition) groundwater levels. |
| ***CS-MW9-Cluster***<br>(CS-MW9-LGR,<br>CS-MW9-BS,<br>CS-MW9-CC) | November 2000 -<br>January 2001 | ➢ Provides background condition data, upgradient of Wells CS-16 and CS-D and fault zone.<br>➢ Provides a sentry well between Plume 1 and nearest Fair Oaks municipal production well.<br>➢ Provides information regarding BS and CC Limestone north of inner cantonment area. |
| ***CS-MW10-Pair***<br>(CS-MW10-LGR,<br>CS-MW10-CC) | September 2001 | ➢ Provides data in vicinity of former well CS-6, which had 1.5 ppb PCE in May 1994. Also within 500 feet of impacted off-post wells at Leon Springs Villa and Curres Creek Road.<br>➢ Monitors groundwater impacts in the most industrialized portion of CSSA.<br>➢ Helps spatially distribute data for future modeling efforts.<br>➢ Provides data for area proximal to mapped fault zone. |
| ***CS-MW11 Cluster***<br>CS-MW11A-LGR<br>CS-MW11B-LGR | April 2003 | ➢ Provides data for area east of Building 90 (AOC-65) and provide detection monitoring for public supply wells along southern post boundary.<br>➢ Investigate hydrologic properties of large, transmissive fault system encountered at this location (MW11B-LGR). |
| ***CS-MW12 Cluster***<br>(CS-MW12-LGR<br>CS-MW12-BS<br>CS-MW12-CC) | September 2002 -<br>October 2002 | ➢ Serves as a monitoring point down-gradient of Plume 1, within the fault zone, and between the source area and CSSA drinking water supply wells. |
| ***CS-16 Cluster***<br>CS-16-LGR<br>CS-MW16-CC | July 2002<br>June 2003 | ➢ CS-16 is a former supply well that was re-fitted as a monitoring well (CS-16-LGR) in July 2002. The BS and CC portions of the former supply well were plugged with cement to eliminate downward cross contamination between the LGR and CC portions of the Middle Trinity aquifer.<br>➢ Monitors Cow Creek major water-bearing zone adjacent to the alleged Plume 1 source area.<br>➢ Determine if contamination detected in LGR groundwater at this location has migrated downward to the Bexar Shale and Cow Creek Limestone. |

| ***Drilling Location*** | ***Date Installed*** | ***Rationale*** |
|---|---|---|
| CS-MW17-LGR<br>CS-MW18-LGR<br>CS-MW19-LGR | July 2002 -<br>August 2002 | ➢ CS-MW17-LGR installed for detection of Plume contaminants between source area and public supply well CS-1.<br>➢ CS-MW18-LGR and MW19-LGR monitors LGR groundwater downgradient of Plume 1 in central sections of CSSA. |
| CS-WB01-LGR<br>CS-WB02-LGR<br>CS-WB03-LGR | July 2003 -<br>August 2003 | ➢ Multi-port wells to provide information on UGR and LGR in AOC-65 area.<br>➢ Monitor subsurface throughout possible Plume 2 migration pathways.<br>➢ Provide continuous detailed profile analysis of hydrologic and contaminant properties near Plume 2 source area. |
| CS-WB04 | July 2003 -<br>August 2003 | ➢ Provides off-post data near impacted off-post private wells and near faults thought to affect the advance of Plume 2.<br>➢ Helps spatially distribute data for future modeling efforts. |
| CS-WB05<br>CS-WB06-LGR<br>CS-WB07-LGR<br>CS-WB08-LGR | July 2005 -<br>November 2005 | ➢ These multi-port wells are used to support ongoing remedial activities at SWMU B-3.<br>➢ Provide information on UGR and LGR in SWMU B-3 area.<br>➢ WB05 is also completed through the BS and CC portions of the Middle Trinity aquifer in support of pumping and tracer testing being conducted as part of the remedial effort.<br>➢ Monitor subsurface throughout possible Plume 1 migration pathways from the source area.<br>➢ Provide continuous detailed profile analysis of hydrologic and contaminant properties near Plume 1 source area. |
| CS-MWG-LGR<br>CS-MWH-LGR | June 2002<br>September 2002 | ➢ Monitor LGR in northern portion of CSSA, up-gradient of affected areas.<br>➢ Monitor LGR for potential contaminants entering CSSA from the north.<br>➢ CS-G is an existing agricultural/livestock well (see above) re-fitted with a new surface completion in June 2002. Re-designated as CS-MWG-LGR, the well is an open borehole completion through most of the LGR.<br>➢ CS-MWH-LGR is a replacement well for former well CS-H (see above). Provides a remote water supply well for livestock, wild game, and fire protection. Also used for groundwater monitoring. |
| CS-MW25-LGR | May 2006 | ➢ Monitor the north-northeast margin of PCE/TCE/DCE concentrations detected around the CS-MW16 well location. This location is proximal to SWMU B-8 and AOC 41<br>➢ Provide additional data for characterization of the plume midpoint between MW4-LGR and CS-1 and to further define the shape of Plume 1. |
| CS-MW24-LGR | May 2006 | ➢ Monitor the westward movement of Plume 1. Historical results indicate that Plume 1 may have a significant westward component. Concentrations in CS-D have increased while concentrations at MW16 have decreased.<br>➢ Provide additional characterization data for the area of the plume which exceeds the MCLs toward Ralph Fair Road. |
| CS-MW20-LGR<br>CS-MW21-LGR | May 2006 | ➢ Provide additional data to characterize the gap between MW19-LGR, MW4-LGR, MW17-LGR, and CS-1.<br>➢ Monitor to understand and delineate the groundwater elevation mounding at MW4-LGR.<br>➢ Monitor to further define the shape of Plume 1.<br>➢ Monitor CS-MW21-LGR to determine the significance of Salado Creek as a conduit and determine if subsurface karst development has occurred in conjunction with Salado Creek. |

| ***Drilling Location*** | ***Date Installed*** | ***Rationale*** |
|---|---|---|
| CS-MW22-LGR | May 2006 | ➢ Monitor to further define the shape of Plume 1.<br>➢ Monitor for additional information for groundwater elevation data.<br>➢ Monitor to study a large throw fault extending across southern CSSA. |
| CS-MW23-LGR | May 2006 | ➢ Monitor to delineate upgradient VOCs near AOC-65, to support that no other VOC contamination source is present. |
| CS-12 | February 2009 | ➢ A production well to supply CSSA with potable water, and is an open-hole completions fully penetrating throughout the thickness of the Middle Trinity aquifer.<br>➢ Well CS-12 will help alleviate the workload of wells CS-10 and CS-1 which provide CSSA with potable drinking water. It will replace the production of CS-9 and CS-11 which have been take offline for various reasons.<br>➢ CS-9 is generally inactive. CS-11 is no longer used due to coliform contamination. |