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GOVERNOR



JARED BLUMENFELD
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

February 11, 2019
System No. 1010042

Mr. James Anderson, General Manager
Malaga County Water District
3580 S. Frank St.
Fresno, CA 93725

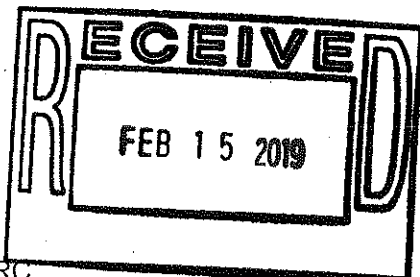
RE: 2018 Sanitary Survey – Malaga County Water District

Dear Mr. Anderson:

On November 19, 2018, Ms. Maria Carlson conducted a sanitary survey of the Malaga County Water District's water system (District) and its operation. The purpose of this letter is to inform you of the following items requiring action which were noted during the inspection and a subsequent file review:

1. By **December 31, 2019**, the District must sample Well Nos. 06, 07, and 08 for general mineral and general physical constituents.
2. By **December 31, 2019**, the District must sample Well Nos. 06, 07, and 08 for nitrates.
3. By **December 31, 2019**, the District must sample Well No. 08 for volatile organic chemicals (VOCs).
4. Between **June 1 and September 30, 2019**, the District must collect 10 lead and copper tap samples from the distribution system.

Please review the enclosed sanitary survey report and provide any comments to our office at (559) 447-3300 or by email at dwpdist12@waterboards.ca.gov.



CJF/MRC
Enclosures

Sincerely,

Chad Fischer, P.E.
Senior Sanitary Engineer, Visalia District
SOUTHERN CALIFORNIA BRANCH
DRINKING WATER FIELD OPERATIONS

cc: Fresno County Environmental Health Department
Mr. Moises Ortiz, Lead Operator (same address)

FELICIA MARCUS, CHAIR | EILEEN SOBECK, EXECUTIVE DIRECTOR

265 West Bullard Avenue, Suite 101, Fresno, CA 93704 | www.waterboards.ca.gov

State Water Resources Control Board

DATE: February 11, 2019

TO: Chad Fischer, P.E.
Senior Sanitary Engineer, Visalia District

FROM: Maria R. Carlson
Senior Environmental Scientist

SUBJECT: Malaga County Water District
Sanitary Survey – 1010042
Fresno County

I. INTRODUCTION

On November 19, 2018, I conducted a sanitary survey of the Malaga County Water District's (District) drinking water supply system with the assistance of Mr. Moises Ortiz, Lead Operator. The District's water supply system was last inspected by Ms. Linda Ramirez on December 21, 2015. The findings of the 2015 inspection are summarized below:

1. By **June 30, 2017**, the District needs to update their Emergency Notification Plan and submit the plan to the Division for review and approval.
2. By **September 30, 2017**, the District should review and update their Emergency Disaster Response Plan and submit a copy of the updated plan to the Division for review.
3. By **September 30, 2017**, the District should review and prepare an Operations and Maintenance Plan for their water system. Please submit a copy of the plan to the Division for reference.
4. DBCP monitoring for Wells No. 06 and 07 needs to be conducted during the **3rd quarter of 2017** and annually thereafter in the 3rd quarter of the respective year. DBCP monitoring for Well No. 08 is once every 3 years with the next sample due in the year 2020.
5. By **October 31, 2017**, monitoring for nitrate should be conducted and analyzed as nitrate (as N) from all active wells.
6. By **September 30, 2018** monitoring for general mineral, general physical and inorganic chemicals needs to be conducted for Wells No. 06, 07 and 08.
7. Between **June 1 and September 30, 2019**, lead and copper monitoring in the distribution system needs to be conducted.
8. By **October 31, 2019**, monitoring for regulated VOCs needs to be conducted for Well No. 08 and in the **year 2022** for Wells No. 06 and 07.
9. The next round of sampling for alachlor, atrazine, simazine and EDB for Wells No. 06, 07 and 08 is due in 2020.

The District has completed item nos. 1, 2, 3, 4, and 5 from the 2015 inspection. Item Nos. 6, 7, 8, and 9 are forthcoming.

PERMIT STATUS

The District currently operates the water system under the authority of a revised Domestic Water Supply Permit No. 03-11-13P-016 issued by the Division on August 20, 2013. The provisions of the 2013 permit are as follows:

1. The District is permitted to use Wells Nos. 6, 7, and 8 as active sources in the water system. No other sources shall be used in the water system without prior written approval from the Division.
2. Well No. 4 is designated as standby. Standby sources may only be used during emergencies for a maximum of five consecutive days and 15 calendar days per year. Prior to the use of Well No. 4, the District must notify the Division. In the event that Well No. 4 is used to provide potable water in an emergency, the GAC filters are to be bypassed.

Since Well No. 4 has an exceedance of DBCP, the Division will instruct the District on Tier 2 notification if this standby well is used for more than 5 consecutive days or 15 days in a calendar year. Following the use of Well No. 4, the District must submit an incident report that details the events leading up to and during the use of the standby source no later than one month following the first day of use Well No. 4 as a standby source.

3. Wells Nos. 1, 3, and 5 are designated as inactive. Inactive sources are not approved sources of supply and must be locked out or physically disconnected or otherwise isolated so that only an intentional act by an operator, and no automatic response, can place the source in service. Inactive wells can be upgraded to standby status if all monitoring is updated to meet standby requirements and the change in status is approved in writing by the Division. Inactive sources can only be used as a last resort in extreme emergencies after all other active sources of supply have been utilized. Any use of an inactive source is subject to the following restrictions:
 - a. Emergency notification to the consumers that the water is unsafe for domestic use must be given immediately preceding, and on a continuing basis, during the duration of the emergency use of the source.
 - b. Initiation of the use of an inactive source must be the result of an intentional manual action by the system operator.
 - c. The use of an inactive source shall not be initiated without the knowledge and approval of the Department.
 - d. All monitoring as deemed appropriate by the Division shall be required during or immediately following an emergency use of an inactive source.
4. The District must notify the Division in writing any time the operating status of a source is changed.
5. The District must comply with the attached water quality monitoring schedule for each active well. All water quality monitoring results in each calendar month must be submitted to the Division via electronic data transfer (EDT) by the tenth day of the following month.
6. Under the operator certification regulation, the District's distribution system is classified as a D2 system. The District must have a chief distribution system operator who is certified as a D2 distribution system operator or higher. The District may have a shift operator who is certified as a D1 distribution system operator.
7. The District shall submit plans and specifications for all proposed sources of supply and/or water treatment projects to the Department for review and approval prior to construction.
8. The District shall conduct an ongoing well production monitoring program for all active wells. Well production shall be recorded from all active wells at least three days per week during the months of

May through September. During the remainder of the year, well production shall be obtained from all active wells at least one day per week. Monthly reports of the well monitoring data shall be submitted to the Department by the 10th day of the following month.

9. The District must test all backflow prevention devices upon installation and on an annual basis at a minimum. The District shall ensure that any such device that fails testing will be repaired or replaced.

The District is in compliance with all of the provisions of the permit. In 2016, the District reclassified Well No. 04 to inactive from standby status.

SERVICE AREA

The District's mailing address is 3580 S. Frank Street, Fresno, CA 93725. The District is a public local agency that maintains the water infrastructure for the community of Malaga and is governed by a local board of directors elected at large.

The Malaga County Water District is classified as a community water system located in Fresno County approximately 5 miles southeast of the City of Fresno. According to the 2017 electronic Annual Report to the Drinking Water Program (EAR), the District's water system provides service to approximately 1,200 customers through 246 residential service connections, 1 commercial service connection and 263 industrial service connections.

The District's source of supply is groundwater and consists of three active wells; Wells No. 06, 07, and 08. In addition to the active wells, there are four inactive wells (Wells No. 01, 03, 04 and 05). These wells have been inactivated due to elevated levels of DBCP (Wells No. 01, 03, 04 and 05) and nitrate (Wells No. 01 and 03).

II. INVESTIGATION AND FINDINGS

ENFORCEMENT HISTORY

Since the last sanitary survey in 2015, the District has received one enforcement action listed below.

Citation No. 03-12-17C-036, issued November 13, 2017

The District failed the total coliform rule (TCR) maximum contaminant level (MCL) for the month of August 2017. The District has returned to compliance.

WATER PRODUCTION AND ADEQUACY OF SUPPLY

The 2017 Electronic Annual Report (EAR) to the Drinking Water Program reported a residential population of approximately 1,200 residential consumers served through 246 unmetered service connections. In addition, the District also supplies water to approximately 263 industrial/commercial service connections within its boundaries. Production data for the District is provided below.

Table 1: Production Data (2013-2017)

Year	Population	Active Service Connections	Annual Production (MG)	Maximum Month (MG)
2017	1,200	510	510.9	57.5 (Aug)
2016	1,200	598	466.5	56.2 (July)
2015	1,200	479	495.7	56.9 (July)
2014	1,500	451	522.4	65.1 (July)
2013	1,500	597	554.7	70.6 (July)

Adequacy of Supply

Table 2 provides the average day (ADD), maximum day (MDD) and peak hour demands (PHD) for years 2013 through 2017. The estimated maximum day demand (MDD) was calculated using the maximum

month and a peaking factor of 1.5. Peak hour demand was calculated using the maximum day demand and a peaking factor of 1.5. Table 3 below displays the current source capacity available to the water system.

Table 2: Water Demand (gpm) 2013-2017

Year	Average Day Demand (gpm)	Maximum Day Demand (gpm)	Peak Hour Demand (gpm)
2017	972	1,931	2,897
2016	888	1,890	2,835
2015	943	1,913	2,869
2014	994	2,186	3,279
2013	1,055	2,373	3,559

The California Waterworks Standards requires community water systems to maintain at all times source capacity greater than or equal to the maximum day demand (MDD) and to have the ability to meet maximum day demand with the largest producing well offline. The combined capacity of the active wells in the District's system is approximately 3,200 gpm, which currently satisfies the estimated maximum day and peak hour demands based on data from 2015 through 2017. This will hold true as long as the Malaga community continues to practice water conservation measures. The District should continue to pursue the addition of a new source or adding a storage tank for future reliability.

Table 3: Well Production Capacity

Source	Capacity (gpm)
Well No. 6	1,000
Well No. 7	1,200
Well No. 8	1,000
Total Source Capacity	3,200

SOURCES OF SUPPLY

Source Water Assessment

A source water assessment is required for all sources. The assessment defines the protective zones around each well and identifies possible contaminating activities within these zones. Our files indicate that a source water assessment was completed in May 2003 for Well No. 06, in June 2013 for Well No. 7 and in March 2013 for Well No. 08. The sources are considered to be most vulnerable to automotive gas stations and repair shops, utility stations, sewer collection systems and agricultural runoff, fleet terminals, salvage yards, septic systems and agricultural/irrigation wells.

Information regarding the source water assessments conducted is to be included in the District's Consumer Confidence Report on an annual basis and updated whenever changes occur. The information should include the date the assessment was completed (or last updated), that it is available, where to get a copy, and provide a brief summary of your source water's vulnerability to contamination based on the assessment findings.

General Source Information

The District has three (3) active groundwater wells and four (4) inactive wells. Each active well discharges water through a hydropneumatic pressure tank before entering the distribution system. All the active wells are each controlled by a pressure switch. System pressure is maintained between 40 and 60 psi. All of the well discharge lines are equipped with flow meters and have diesel generators located at the well sites to provide backup power in the event of a power outage. All well sites are adequately located away from sewers and other sanitary hazards. A description of each well is included below.

Active Sources

Well No. 06 (PS Code 10100426-006) - Active Untreated

Well No. 06 was drilled in 1996 to a depth of 748 feet. A DWR Well Completion Report is on file with the Division. The borehole contains a 16 5/8-inch diameter steel casing to a depth of 740 feet which contains perforations between 342 and 390 feet; and between 410 and 720 feet. A cement annular seal is present to a depth of 330 feet. The well is gravel packed. The well appurtenances include two gravel chutes and a casing vent/sounding tube mounted on a 4-foot-by-4-foot concrete pedestal that is elevated approximately two feet from the surrounding grade.

Well No. 6 is equipped with a 150-hp electric motor and a water-lubricated vertical turbine pump capable of producing 1,800 gpm, though it produces 1,000 gpm consistently when pumping against the system's normal operating pressure. The well discharge piping includes a disinfectant injection point, air release-vacuum breaker vent, flow meter, sample tap, water lubrication source piping, check valve, and pump-to-waste gate valve. There is an empty disinfectant storage tank and an injection pump at the well site. A 250 kW Caterpillar diesel engine is at the well site to provide an auxiliary power source, which is exercised once every three months for an hour. The well and its appurtenances are located within a fenced lot with secured access.

Well No. 07 (PS Code 1010026-007) - Active Untreated

Well No. 07 was drilled in 2004 to a depth of 763 feet. A DWR Well Completion Report is on file with the Division. The borehole contains a 29.5-inch diameter steel conductor casing to a depth of 50 feet, and an internal 15.25-inch diameter steel casing to a depth of 740 feet which contains perforations between 420 and 720 feet. A cement annular seal is present to a depth of 385 feet. A bentonite plug is present between 385 and 390 feet. The well is gravel packed. The well appurtenances include two gravel chutes and a casing vent/sounding tube mounted on a 5-foot-by-5-foot concrete pedestal elevated a few inches above the surrounding grade.

Well No. 07 is equipped with a 200-hp electric motor and a water-lubricated vertical turbine pump capable of producing 1,200 gpm. The well discharge piping includes an air release-vacuum breaker vent, check valve, pump-to-waste gate valve, sample tap, disinfectant injection point, water lubrication source piping, flow meter, post-chlorination sample tap, and gate valve. There is an empty disinfectant storage tank at the well site and injection pump. A 250 kW diesel-powered Cummins engine is at the well site as an auxiliary power source and is exercised once every three months for an hour. The well and its appurtenances are located within a fenced lot with secured access.

Well No. 08 (PS Code 1010026-012) – Active Untreated

Well No. 08 was drilled in 2012 to a depth of 800 feet. A DWR Well Completion Report is on file with the Division. The borehole contains a 30-inch diameter steel conductor casing to a depth of 40 feet and an internal 16-inch diameter steel casing to a depth of 800 feet which contains perforations between 511 and 781 feet. A cement annular seal is present to a depth of 490 feet. The well is gravel packed. The well appurtenances include two gravel chutes and a casing vent/sounding tube mounted on a 5-foot-by-5-foot concrete pedestal elevated approximately one foot above the surrounding grade.

Well No. 8 is equipped with a 200-hp electric motor and a water-lubricated vertical turbine pump capable of producing 1,000 gpm. The well discharge piping includes an air release-vacuum breaker vent, check valve, pump-to-waste gate valve, sample tap, disinfectant injection point, water lubrication source piping, flow meter, post-chlorination sample tap, and gate valve. There is an empty disinfectant storage tank at

the well site, and an injection pump that is kept covered. A 250 kW diesel-powered Cummins engine is at the well site as an auxiliary power source and is exercised once every three months for an hour. The well and its appurtenances are located within a fenced lot with secured access.

Inactive Sources

Wells No. 01, 03, 04 and 5 are all classified as inactive wells. Well No. 02 is classified as abandoned. All of the wells with the exception of Well No. 04 have been physically disconnected from the distribution system. Well No. 04 currently has no power to the well. These wells have been inactivated due to high levels of DBCP (Wells No. 01, 03, 04 and 05) and nitrate (Wells No. 01 and 03).

TREATMENT

Raw water produced from the District's active sources is not currently treated before entering the distribution system. Emergency chlorination equipment is located at each of the well sites and consists of chemical metering pumps and solution tanks. NSF certified sodium hypochlorite is stored at the District shop.

STORAGE

The District has no storage facilities. Each of the District's well pump into a hydropneumatic pressure tank at each well site.

DISTRIBUTION SYSTEM

The distribution system consists primarily of asbestos-cement pipes ranging from 6 to 14 inches in diameter. AWWA Standards are followed for disinfection when repairs to the water system are made and when new distribution mains are installed.

The District has established a flushing program for their five (5) dead end locations and 211 valves. The dead ends are flushed every two to three months as needed and the valves are exercised once every 18 to 24 months. Records of flushing and valve exercising are maintained by the District. The water pressure for the distribution system is maintained between 40 and 60 psi.

III. WATER QUALITY MONITORING

The District has two types of water quality monitoring requirements; source water and distribution system. The source water quality monitoring is collected from the District's active wells and the distribution system monitoring is collected out in the distribution system. The sampling requirements and frequencies for the two types of monitoring are discussed in the following sections.

SOURCE MONITORING

Source Classification and Data Submittal

The District's wells are classified for monitoring purposes based on the type of source, location and population of the community served. The District's groundwater sources are assigned a source class code of CMGA (Community, Medium, Groundwater, Agriculture).

All source water quality monitoring compliance is based on the Division's electronic water quality database. All chemical water quality monitoring from the sources must be submitted to the Division via electronic data transfer (EDT). In order for EDT to work properly, the District must identify the samples with the correct station number (primary station code) for the lab to submit electronically.

Chemical Water Quality

The chemical water quality information for water systems is available at the Division's online Public Drinking Water Watch website at: <https://sdwis.waterboards.ca.gov/PDWWW/>. This site allows the public and water systems to view the Last Sample Date and Monitoring Schedule Report as well as the Monitoring Results for Individual Sampling Points for all active water systems and sources. The Last Sample Date and Next Due Report is included as Appendix B.

General Mineral, General Physical and Inorganic Chemicals

The District is required to sample each active well for general mineral, general physical and inorganic chemicals once every three years, except for asbestos and nitrate which have different monitoring frequencies. Well Nos. 06, 07, and 08 were last sampled for general mineral, general physical and inorganic chemicals in 2016 (general mineral & physical) and 2018 (inorganics). **The next samples are due in 2019 (general mineral & physical) and 2021 (inorganics).** The water produced by the District's wells currently meets all primary and secondary drinking water standards.

Nitrate

The District is required to monitor its active groundwater sources for nitrate (as N) annually if monitoring data indicates nitrate (as N) concentrations of less 5 mg/L, and quarterly if the concentrations found during monitoring are greater than or equal to 5 mg/L. The MCL is 10 mg/L (as N). Well Nos. 06, 07, and 08 were last sampled for nitrate in November 2018 and the results range between 2.5 and 4.0 mg/L. **The next samples are due to be collected in 2019.**

Volatile Organic Chemicals (VOCs) - The District is required to sample all active wells for regulated VOCs every 6 years. Well Nos. 06 and 07 were last sampled for VOCs in 2016 and the results were non-detect (ND). The next samples are due to be collected in 2022. Well No. 08 was last sampled for VOCs in 2013 and the results were ND. **The next samples are due to be collected in 2019.**

Synthetic Organic Chemicals (SOCs)

After initial monitoring, monitoring for most of the regulated SOC's is waived for groundwater sources with the exception of chemicals historically used in the area. Based on this vulnerability, alachlor, atrazine, simazine, ethylene dibromide (EDB), and dibromochloropropane (DBCP) are required to be sampled for once every 3 years. Well Nos. 06, 07, and 08 were last sampled for SOC's in September 2018. With the exception of DBCP, the results were ND. Well Nos. 06 and 07 produce water with detectable levels of DBCP and are on a quarterly monitoring frequency. The results from the samples in September 2018 were 0.034 ug/L and 0.051 ug/L.

1,2,3-Trichloropropane (1,2,3-TCP) Monitoring

On December 14, 2017, California adopted regulations which establish a maximum contaminant level (MCL), monitoring frequencies, and other monitoring requirements for 1,2,3-trichloropropane (1,2,3-TCP). The newly established MCL for 1,2,3-TCP is 0.005 ug/L (5 parts per trillion (ppt)). It is important to note that the detectable limit for the purposes of reporting (DLR) is the same as the MCL. All community and nontransient-noncommunity water systems are required to conduct four quarters of initial 1,2,3-TCP monitoring from each source starting in the first quarter of 2018. For more information regarding the monitoring requirements, analytical methods, and monitoring results for 1,2,3-TCP, please visit https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/123TCP.shtml

The District's wells were last sampled for 1,2,3-TCP in November 2018 and the results were ND. The next samples are due to be collected in 2021.

Radiological Monitoring

Initial radiological monitoring is based on the collection of four consecutive quarterly samples for gross alpha particle activity and radium-228, with future monitoring frequencies (3 year, 6 year and 9 year) based on the results of the last samples collected. Continued monitoring for radium-228 is not required if there is no MCL exceedance. In addition, monitoring for radium-226 is required only when gross alpha radiation exceeds 5 pCi/L, however, an analysis for uranium can be conducted in lieu of radium-226. The District has satisfied the initial monitoring for these constituents and is in compliance with the MCLs in all active sources. Table 4 provides the sampling results, sampling frequency and corresponding date of next sample due for each active source.

Table 4: Radiological Monitoring Frequency and Next Sample Due Date

Well	Last Sample Date, Result (pCi/L), Frequency, Next Due Date					
	Gross Alpha				Radium-226	Uranium
Well No. 06	11/13/2012	2.9	9 years	2021	NA	NA
Well No. 07	1/3/2017	3.0	9 years	2026	NA	NA
Well No. 08	2/23/2016	1.5	9 years	2025	NA	NA

Source Bacteriological Monitoring

The District conducts regular monthly sampling of the source water delivered from its wells even though continuous chlorination of the water delivered to the distribution system does not occur. The bacteriological samples are analyzed for total coliform and *E. coli* bacteria using a method that provides for the density of the results. A review of the data since 2015 has revealed that Well Nos. 07 and 08 are prone to sporadic total coliform contamination. A summary of the District's source monitoring since 2015 is provided in Appendix C.

DISTRIBUTION MONITORING

Distribution Bacteriological Monitoring

The District collects and analyzes two (2) bacteriological samples per month from within the distribution system. The District has an approved Bacteriological Sample Siting Plan (BSSP) on file with the Division from 2013. A review of the data since 2015 has revealed that there have been two total coliform positive samples collected from the distribution system and one total coliform rule (TCR) maximum contaminant level (MCL) exceedance. The two total coliform positive samples were collected in December 2015 and October 2016. All repeat samples were negative for coliform bacteria. The TCR MCL exceedance occurred in August 2017. In response to the exceedance, the District conducted a Level 1 Assessment of the water system on September 12, 2017. The findings of the Assessment were to speak with the site owners and replace hose bibbs, and to submit a revised BSSP to the Division. Public notification of the violation was provided to customers on September 29, 2017. The District has returned to compliance.

Groundwater Rule

The Groundwater Rule became effective December 1, 2009 and requires a water system to collect a raw water bacteriological sample from each source in operation whenever they are informed that a total coliform sample collected under the Total Coliform Rule is positive and not invalidated. These samples must be analyzed for total coliform bacteria and *E. coli* bacteria using a density analytical method with the analytical results reported in MPN/100 mL.

Asbestos Monitoring

Most of the District's distribution system piping consists of asbestos-cement (AC) pipe. The potential for asbestos fibers to be released from AC pipe due to the dissolution of the cement binder is determined from the aggressive index (AI). The AI is an indicator of the corrosivity of the water and correlates reasonably well with asbestos fibers leaching from the pipe material. The Division considers water with an aggressive index between 10 and 12 to be moderately aggressive and below 10 to be very aggressive. The calculated AI for the District's active wells ranges between 11.9 and 12.4. This is considered to be non-aggressive and not vulnerable to asbestos contamination due to leaching of AC pipe. The District is not required to collect an asbestos sample from the distribution system.

Lead and Copper Monitoring

The District has completed the initial lead and copper distribution monitoring requirements and is allowed to collect the reduced number of 10 triennial samples. The District's lead and copper concentrations in the tap water samples are below the 90th percentile for the lead action level of 0.015 mg/L and the copper action level of 1.3 mg/L based on the last sample set collected in 2016. The reported 90th percentile results for lead and copper were ND for lead and 0.037 mg/L for copper. The District may continue with the reduced monitoring and the collection frequency of every three years. **The next round of lead and copper monitoring is due in 2019 to be collected between the months of June through September.**

Lead Service Line Inventory

The District completed the Lead Service Line Inventory on April 4, 2018. The inventory catalogs 509 copper service lines. The methods used to prepare the inventory include Tap Cards or tickets from initial service installation; records indicating when buildings were constructed; and distribution maps, drawings, or GIS. The form was signed by the Lead Water Operator of the District on April 18, 2018.

IV. OPERATION AND MAINTENANCE

Distribution Classification and Personnel

Based on the reported population of 1,200 persons, the water system requires the chief operator to have a minimum of a D2 certification. The designated chief operator of the water system is Mr. Moises Ortiz, who has D3 certification. Mr. Ortiz is assisted by three (3) additional operators who have certification levels ranging from a D1 to a D3 certification. The District meets the requirements for certified distribution system operators. The District is not required to have a certified treatment operator. Mr. Jim Anderson is the General Manager of the Malaga County Water District.

Cross-Connection Control Program

As part of the District's cross-connection control program, surveys are conducted whenever there are new building developments and re-modeling projects. The District may require an on-premise inspection and re-inspection to evaluate cross-connection hazards. When necessary, the District will require installation of appropriate backflow devices. Mr. Joel Fedora, a cross connection control specialist, conducted a cross-connection control survey in 2016. The District has reported in the 2017 EAR a total of 217 backflow prevention assemblies in the system. All of the backflow devices were tested in 2017 with no failures.

Complaints

The District maintains records of customer complaints. According to the 2017 EAR, no complaints were received or reported during the 2017 year.

Emergency/Disaster Response Plan (E/DRP)

The purpose of an E/DRP is to address how a water system will respond to various emergencies, including but not limited to natural disasters which could affect the water system. The District has an E/DRP dated June 21, 2017, on file with the Division.

Consumer Confidence Report (CCR)

The CCR provides a summary of water quality information for detected primary and secondary contaminants and is to be submitted to all consumers of the water system on an annual basis by July 1 of each year. According to Division records, the District delivered the 2017 CCR to customers on June 28, 2018 and certification of the delivery is on file with the Division.

Electronic Annual Report (EAR)

The Division requires all water systems to submit the Electronic Annual Report (EAR) to the Division of Drinking Water on a specified date each year for the previous year, detailing population served and number of service connections, water produced and used status of various monitoring requirements and operator certification, system improvements and other information. The District submitted the 2017 EAR to the Division on April 18, 2018.

Emergency Notification Plan (ENP)

The District's Emergency Notification Plan (ENP) dated June 21, 2017, is on file with the Visalia District office. The ENP lists James Anderson, Moises Ortiz, and Jesse Alvarez as the primary, secondary, and tertiary contacts in the event of a water quality emergency. The methods of notification include mass media bulletin (Television), direct dial, and social media/messemgers/flyers.

Water System Operation & Emergency Disinfection Plans

The District has a Water System Operations Plan, dated June 22, 2017, on file with the Division. The District also has an Emergency Disinfection Plan, dated October 16, 2009, on file with the Division.

V. APPRAISAL OF SANITARY HAZARDS & PUBLIC HEALTH SAFEGUARDS

The Malaga County Water District's water system is in good overall condition. The District has three active wells. The District's wells currently produce water that meets all primary and secondary drinking water standards.

The total source capacity for the District is 3,200 gallons per minute (gpm). The District meets the Division's estimated maximum day demand (MDD) and peak hour demand (PHD) criteria. No storage is provided. The district should consider the addition of storage to offset peak hour demands.

Competent supervision is provided over the operation and maintenance practices of this system. In general, system operations and reporting practices are good and water quality sampling is done.

The District needs to address the following items that was noted during the inspection and subsequent file review:

1. By **December 31, 2019**, the District must sample Well Nos. 06, 07, and 08 for general mineral and general physical constituents.
2. By **December 31, 2019**, the District must sample Well Nos. 06, 07, and 08 for nitrates.
3. By **December 31, 2019**, the District must sample Well 08 for volatile organic chemicals (VOCs).
4. Between **June 1 and September 30, 2019**, the District must collect 10 lead and copper tap samples from the distribution system.

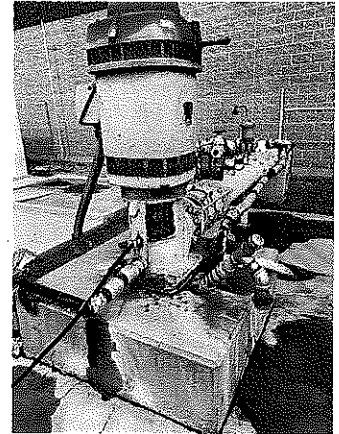
Appendix A	Location Map & Photo Index
Appendix B	Last Sample Next Due Report
Appendix C	Source and Distribution System Bacteriological Sampling Summary

Appendix A
Malaga County Utility District Water System: 1010042
November 19, 2018

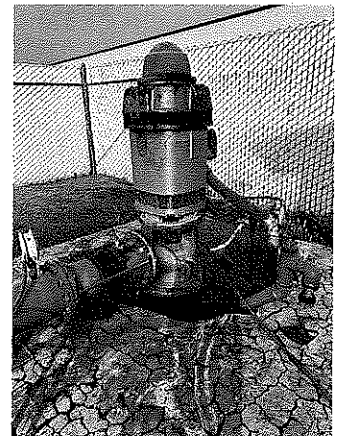


Appendix A
Malaga County Utility District Water System: 1010042
November 19, 2018

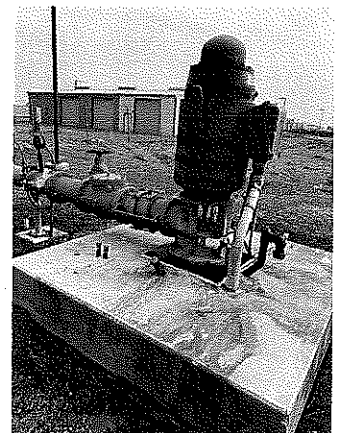
Well No. 06: Well No. 06 was drilled in 1996 to a depth of 748 feet. The well is equipped with a 150-hp DWT which produces approximately 1,000 gpm.



Well No. 07: Well No. 07 was drilled in 2004 to a depth of 763 feet. The well is equipped with a 200-hp water-lubricated DWT which produces approximately 1,200 gpm.

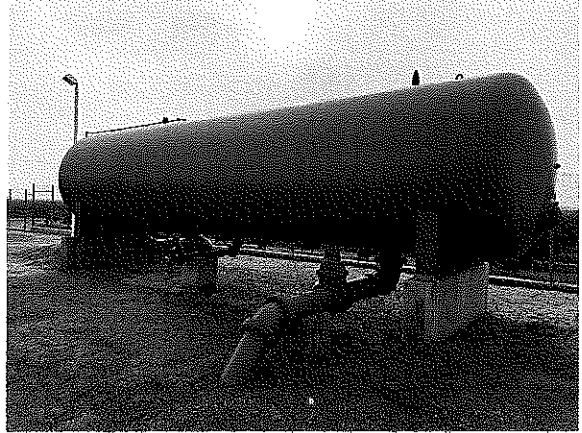


Well No. 08: Well No. 08 was drilled in 2012 to a depth of 800 feet. The well is equipped with a 200-hp water-lubricated DWT which produces approximately 1,000 gpm.



Appendix A
Malaga County Utility District Water System: 1010042
November 19, 2018

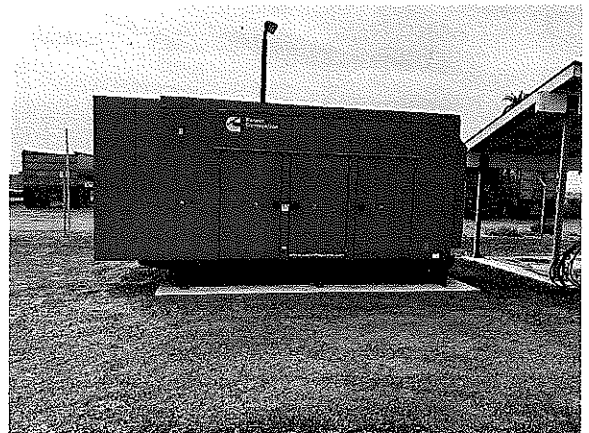
10,000 gallon tank: Each well pumps into a 10,000 gallon hydropneumatic pressure tank at each well site. System pressure is maintained between 40 and 60 psi.



Emergency Chlorination Equipment: Each well site features emergency chlorination equipment which consists of a solution tank and chemical metering pump. NSF certified sodium hypochlorite is kept at the shop location.



250 kW Diesel Generators: Each well site features a 250 kW diesel generator in the event of a power outage. The diesel generators are exercised quarterly to ensure proper working order.



DATE: 12/26/2018

STATE OF CALIFORNIA

PAGE 1

LAST SAMPLE DATE AND MONITORING SCHEDULE

SYSTEM NO: 1010042

NAME: MALAGA COUNTY WATER DISTRICT

COUNTY: FRESNO

SOURCE NO: 006

NAME: WELL 06

CLASS: CMGA

STATUS: Active

PCODE	GROUP/CONSTITUENT IDENTIFICATION	LAST RESULT	UNITS	MCL	DLR	LAST SAMPLE	FREQ MON THS	NEXT SAMPLE DUE	NOTES
1010042 - 006	1010042 MALAGA COUNTY WATER DISTRICT	006	WELL 06						
	GP SECONDARY/GP								
	00440 BICARBONATE ALKALINITY	160	MG/L	-----	-----	2016/10/05	36	2019/10	
	00916 CALCIUM	25	MG/L	-----	-----	2016/10/05	36	2019/10	
	00445 CARBONATE ALKALINITY	ND	MG/L	-----	-----	2016/10/05	36	2019/10	
	00940 CHLORIDE	15	MG/L	500	-----	2016/10/05	36	2019/10	
	00081 COLOR	<	ND UNITS	15	-----	2018/11/16	36	2021/11	
	01042 COPPER	ND	UG/L	1000	50	2016/08/09	36	2019/08	
	38260 FOAMING AGENTS (MBAS)	ND	MG/L	.5	-----	2016/08/09	36	2019/08	
	00900 HARDNESS (TOTAL) AS CaCO3	110	MG/L	-----	-----	2016/10/05	36	2019/10	
	71830 HYDROXIDE ALKALINITY	ND	MG/L	-----	-----	2016/10/05	36	2019/10	
	01045 IRON	88	UG/L	300	100	2016/10/05	36	2019/10	
	00927 MAGNESIUM	12	MG/L	-----	-----	2016/10/05	36	2019/10	
	01055 MANGANESE	ND	UG/L	50	20	2016/10/05	36	2019/10	
	00086 ODOR THRESHOLD @ 60 C	1.0	TON	3	1	2018/11/16	36	2021/11	
	00403 PH, LABORATORY	8.2		-----	-----	2016/08/09	36	2019/08	
	01077 SILVER	<	ND UG/L	100	10	2018/09/17	36	2021/09	
	00929 SODIUM	31	MG/L	-----	-----	2016/10/05	36	2019/10	
	00095 SPECIFIC CONDUCTANCE	380	US	1600	-----	2018/11/06	36	2021/11	
	00945 SULFATE	10	MG/L	500	.5	2016/10/05	36	2019/10	
	70300 TOTAL DISSOLVED SOLIDS	250	MG/L	1000	-----	2016/10/05	36	2019/10	
	82079 TURBIDITY, LABORATORY	0.20	NTU	5	.1	2018/11/16	36	2021/11	
	01092 ZINC	14	UG/L	5000	50	2016/08/09	36	2019/08	
	IO INORGANIC								
	01105 ALUMINUM	<	ND UG/L	1000	50	2018/09/17	36	2021/09	
	01097 ANTIMONY	<	ND UG/L	6	6	2018/09/17	36	2021/09	
	01002 ARSENIC		1.7 UG/L	10	2	2018/09/17	36	2021/09	
	01007 BARIUM		36 UG/L	1000	100	2018/09/17	36	2021/09	
	01012 BERYLLIUM	<	ND UG/L	4	1	2018/09/17	36	2021/09	
	01027 CADMIUM	<	ND UG/L	5	1	2018/09/17	36	2021/09	

LAST SAMPLE DATE AND MONITORING SCHEDULE

SYSTEM NO: 1010042

NAME: MALAGA COUNTY WATER DISTRICT

COUNTY: FRESNO

SOURCE NO:

NAME: WELL 06

CLASS: CMGA

STATUS: Active

PSCODE	GROUP/CONSTITUENT IDENTIFICATION		LAST RESULT	UNITS	MCL	DLR	LAST SAMPLE	FREQ MON THS	NEXT SAMPLE DUE	NOTES
1010042 - IO INORGANIC										
006										
01034	CHROMIUM (TOTAL)		4.9 UG/L	50	10		2018/09/17	36	2021/09	
00951	FLUORIDE (F) (NATURAL-SOURCE)	<	ND MG/L	2	.1		2018/09/17	36	2021/09	
71900	MERCURY	<	ND UG/L	2	1		2018/09/17	36	2021/09	
01067	NICKEL	<	ND UG/L	100	10		2018/09/17	36	2021/09	
A-031	PERCHLORATE	<	4.0 UG/L	6	4		2016/02/23	36	2019/02	
01147	SELENIUM	<	ND UG/L	50	5		2018/09/17	36	2021/09	
01059	THALLIUM	<	ND UG/L	2	1		2018/09/17	36	2021/09	
NI NITRATE/NITRITE										
00618	NITRATE (AS N)		4.0 mg/L	10	.4		2018/11/06	12	2019/11	
00620	NITRITE (AS N)	<	ND UG/L	1000	400		2015/11/09	36	2018/11	DUE NOW
RA RADIOLOGICAL										
01501	GROSS ALPHA		2.9000 PCI/L	15	3		2012/11/13	108	2021/11	
S1 REGULATED VOC										
34506	1,1,1-TRICHLOROETHANE	<	ND UG/L	200	.5		2016/02/23	72	2022/02	
34516	1,1,2,2-TETRACHLOROETHANE	<	ND UG/L	1	.5		2016/02/23	72	2022/02	
34511	1,1,2-TRICHLOROETHANE	<	ND UG/L	5	.5		2016/02/23	72	2022/02	
34496	1,1-DICHLOROETHANE	<	ND UG/L	5	.5		2016/02/23	72	2022/02	
34501	1,1-DICHLOROETHYLENE	<	ND UG/L	6	.5		2016/02/23	72	2022/02	
34551	1,2,4-TRICHLOROBENZENE	<	ND UG/L	5	.5		2016/02/23	72	2022/02	
34536	1,2-DICHLOROBENZENE	<	ND UG/L	600	.5		2016/02/23	72	2022/02	
34531	1,2-DICHLOROETHANE	<	ND UG/L	.5	.5		2016/02/23	72	2022/02	
34541	1,2-DICHLOROPROPANE	<	ND UG/L	5	.5		2016/02/23	72	2022/02	
34561	1,3-DICHLOROPROPENE (TOTAL)	<	ND UG/L	.5	.5		2016/02/23	72	2022/02	
34571	1,4-DICHLOROBENZENE	<	ND UG/L	5	.5		2016/02/23	72	2022/02	
34030	BENZENE	<	ND UG/L	1	.5		2016/02/23	72	2022/02	
32102	CARBON TETRACHLORIDE	<	ND UG/L	.5	.5		2016/02/23	72	2022/02	
77093	CIS-1,2-DICHLOROETHYLENE	<	ND UG/L	6	.5		2016/02/23	72	2022/02	
34423	DICHLOROMETHANE	<	ND UG/L	5	.5		2016/02/23	72	2022/02	
34371	ETHYLBENZENE	<	ND UG/L	300	.5		2016/02/23	72	2022/02	

LAST SAMPLE DATE AND MONITORING SCHEDULE

SYSTEM NO: 1010042

NAME: MALAGA COUNTY WATER DISTRICT

COUNTY: FRESNO

SOURCE NO:

NAME: WELL 06

CLASS: CMGA

STATUS: Active

PSCODE	GROUP/CONSTITUENT IDENTIFICATION	LAST RESULT	UNITS	MCL	DLR	LAST SAMPLE	FREQ MON THS	NEXT SAMPLE DUE	NOTES
1010042 - S1 006	46491 METHYL-TERT-BUTYL-ETHER (MTBE)	<	ND UG/L	13	3	2016/02/23	72	2022/02	
	34301 MONOCHLOROBENZENE	<	ND UG/L	70	.5	2016/02/23	72	2022/02	
	77128 STYRENE	<	ND UG/L	100	.5	2016/02/23	72	2022/02	
	34475 TETRACHLOROETHYLENE	<	ND UG/L	5	.5	2016/02/23	72	2022/02	
	34010 TOLUENE	<	ND UG/L	150	.5	2016/02/23	72	2022/02	
	34546 TRANS-1,2-DICHLOROETHYLENE	<	ND UG/L	10	.5	2016/02/23	72	2022/02	
	39180 TRICHLOROETHYLENE	<	ND UG/L	5	.5	2016/02/23	72	2022/02	
	34488 TRICHLOROFLUOROMETHANE	<	ND UG/L	150	5	2016/02/23	72	2022/02	
	81611 TRICHLOROTRIFLUOROETHANE (FREON 113)	<	ND UG/L	1200	10	2016/02/23	72	2022/02	
	39175 VINYL CHLORIDE	<	ND UG/L	.5	.5	2016/02/23	72	2022/02	
	81551 XYLENES (TOTAL)	<	ND UG/L	1750	0.5	2016/02/23	72	2022/02	
S2 REGULATED SOC									
	77443 1,2,3-TRICHLOROPROPANE (1,2,3-TCP)	<	ND UG/L	0.005	0.005	2018/11/16	3	2019/02	
	77825 ALACHLOR	<	ND UG/L	2	1	2018/09/17	36	2021/09	
	39033 ATRAZINE	<	ND UG/L	1	.5	2018/09/17	36	2021/09	
	38761 DIBROMOCHLOROPROPANE (DBCP)		0.034 UG/L	.2	.01	2018/09/17	12	2019/09	
	77651 ETHYLENE DIBROMIDE (EDB)	<	ND UG/L	.05	.02	2018/09/17	36	2021/09	
	39055 SIMAZINE	<	ND UG/L	4	1	2018/09/17	36	2021/09	

LAST SAMPLE DATE AND MONITORING SCHEDULE

SYSTEM NO: 1010042

NAME: MALAGA COUNTY WATER DISTRICT

COUNTY: FRESNO

SOURCE NO: 007

NAME: WELL 07

CLASS: CMGA

STATUS: Active

PSCODE	GROUP/CONSTITUENT IDENTIFICATION	LAST RESULT	UNITS	MCL	DLR	LAST SAMPLE	FREQ MON THS	NEXT SAMPLE DUE	NOTES
1010042 - 007	1010042 MALAGA COUNTY WATER DISTRICT	007	WELL 07						
GP SECONDARY/GP									
00440	BICARBONATE ALKALINITY		140 MG/L	-----	-----	2016/10/05	36	2019/10	
00916	CALCIUM		14 MG/L	-----	-----	2016/10/05	36	2019/10	
00445	CARBONATE ALKALINITY		ND MG/L	-----	-----	2016/10/05	36	2019/10	
00940	CHLORIDE		6.7 MG/L	500	-----	2016/10/05	36	2019/10	
00081	COLOR	<	ND UNITS	15	-----	2018/11/16	36	2021/11	
01042	COPPER		ND UG/L	1000	50	2016/08/09	36	2019/08	
38260	FOAMING AGENTS (MBAS)		ND MG/L	.5	-----	2016/08/09	36	2019/08	
00900	HARDNESS (TOTAL) AS CaCO3		63 MG/L	-----	-----	2016/10/05	36	2019/10	
71830	HYDROXIDE ALKALINITY		ND MG/L	-----	-----	2016/10/05	36	2019/10	
01045	IRON		51 UG/L	300	100	2016/10/05	36	2019/10	
00927	MAGNESIUM		6.6 MG/L	-----	-----	2016/10/05	36	2019/10	
01055	MANGANESE		ND UG/L	50	20	2016/10/05	36	2019/10	
00086	ODOR THRESHOLD @ 60 C		1.0 TON	3	1	2018/11/16	36	2021/11	
00403	PH, LABORATORY		8.2	-----	-----	2016/08/09	36	2019/08	
01077	SILVER	<	ND UG/L	100	10	2018/09/17	36	2021/09	
00929	SODIUM		36 MG/L	-----	-----	2016/10/05	36	2019/10	
00095	SPECIFIC CONDUCTANCE		280 US	1600	-----	2018/11/06	36	2021/11	
00945	SULFATE		7.6 MG/L	500	.5	2016/10/05	36	2019/10	
70300	TOTAL DISSOLVED SOLIDS		200 MG/L	1000	-----	2016/10/05	36	2019/10	
82079	TURBIDITY, LABORATORY		0.30 NTU	5	.1	2018/11/16	36	2021/11	
01092	ZINC		5.2 UG/L	5000	50	2016/08/09	36	2019/08	
IO INORGANIC									
01105	ALUMINUM	<	ND UG/L	1000	50	2018/09/17	36	2021/09	
01097	ANTIMONY	<	ND UG/L	6	6	2018/09/17	36	2021/09	
01002	ARSENIC		2.9 UG/L	10	2	2018/09/17	36	2021/09	
01007	BARIUM		47 UG/L	1000	100	2018/09/17	36	2021/09	
01012	BERYLLIUM	<	ND UG/L	4	1	2018/09/17	36	2021/09	
01027	CADMIUM	<	ND UG/L	5	1	2018/09/17	36	2021/09	

LAST SAMPLE DATE AND MONITORING SCHEDULE

SYSTEM NO: 1010042

NAME: MALAGA COUNTY WATER DISTRICT

COUNTY: FRESNO

SOURCE NO:

NAME: WELL 07

CLASS: CMGA

STATUS: Active

PCODE	GROUP/CONSTITUENT IDENTIFICATION	LAST RESULT	UNITS	MCL	DLR	LAST SAMPLE	FREQ MON THS	NEXT SAMPLE DUE	NOTES
1010042 - IO INORGANIC									
007	01034 CHROMIUM (TOTAL)	4.9 UG/L	50	10		2018/09/17	36	2021/09	
	00951 FLUORIDE (F) (NATURAL-SOURCE)	<	ND MG/L	2	.1	2018/09/17	36	2021/09	
	71900 MERCURY	<	ND UG/L	2	1	2018/09/17	36	2021/09	
	01067 NICKEL	<	ND UG/L	100	10	2018/09/17	36	2021/09	
	A-031 PERCHLORATE	<	4.0 UG/L	6	4	2015/12/23	36	2018/12	DUE NOW
	01147 SELENIUM	<	ND UG/L	50	5	2018/09/17	36	2021/09	
	01059 THALLIUM	<	ND UG/L	2	1	2018/09/17	36	2021/09	
NI NITRATE/NITRITE									
	00618 NITRATE (AS N)	2.9 mg/L	10	.4		2018/11/06	12	2019/11	
	00620 NITRITE (AS N)	<	ND UG/L	1000	400	2015/11/05	36	2018/11	DUE NOW
RA RADIOLOGICAL									
	01501 GROSS ALPHA	3.0 PCI/L	15	3		2017/01/03	108	2026/01	
S1 REGULATED VOC									
	34506 1,1,1-TRICHLOROETHANE	ND UG/L	200	.5		2016/02/23	72	2022/02	
	34516 1,1,2,2-TETRACHLOROETHANE	ND UG/L	1	.5		2016/02/23	72	2022/02	
	34511 1,1,2-TRICHLOROETHANE	ND UG/L	5	.5		2016/02/23	72	2022/02	
	34496 1,1-DICHLOROETHANE	ND UG/L	5	.5		2016/02/23	72	2022/02	
	34501 1,1-DICHLOROETHYLENE	ND UG/L	6	.5		2016/02/23	72	2022/02	
	34551 1,2,4-TRICHLOROBENZENE	ND UG/L	5	.5		2016/02/23	72	2022/02	
	34536 1,2-DICHLOROBENZENE	ND UG/L	600	.5		2016/02/23	72	2022/02	
	34531 1,2-DICHLOROETHANE	ND UG/L	.5	.5		2016/02/23	72	2022/02	
	34541 1,2-DICHLOROPROPANE	ND UG/L	5	.5		2016/02/23	72	2022/02	
	34561 1,3-DICHLOROPROPENE (TOTAL)	ND UG/L	.5	.5		2016/02/23	72	2022/02	
	34571 1,4-DICHLOROBENZENE	ND UG/L	5	.5		2016/02/23	72	2022/02	
	34030 BENZENE	ND UG/L	1	.5		2016/02/23	72	2022/02	
	32102 CARBON TETRACHLORIDE	ND UG/L	.5	.5		2016/02/23	72	2022/02	
	77093 CIS-1,2-DICHLOROETHYLENE	ND UG/L	6	.5		2016/02/23	72	2022/02	
	34423 DICHLOROMETHANE	ND UG/L	5	.5		2016/02/23	72	2022/02	
	34371 ETHYLBENZENE	ND UG/L	300	.5		2016/02/23	72	2022/02	

LAST SAMPLE DATE AND MONITORING SCHEDULE

SYSTEM NO: 1010042

NAME: MALAGA COUNTY WATER DISTRICT

COUNTY: FRESNO

SOURCE NO:

NAME: WELL 07

CLASS: CMGA

STATUS: Active

PSCODE	GROUP/CONSTITUENT IDENTIFICATION	LAST RESULT	UNITS	MCL	DLR	LAST SAMPLE	FREQ MON THS	NEXT SAMPLE DUE	NOTES
1010042 - S1 007	46491 METHYL-TERT-BUTYL-ETHER (MTBE)	ND	UG/L	13	3	2016/02/23	72	2022/02	
	34301 MONOCHLOROBENZENE	ND	UG/L	70	.5	2016/02/23	72	2022/02	
	77128 STYRENE	ND	UG/L	100	.5	2016/02/23	72	2022/02	
	34475 TETRACHLOROETHYLENE	ND	UG/L	5	.5	2016/02/23	72	2022/02	
	34010 TOLUENE	ND	UG/L	150	.5	2016/02/23	72	2022/02	
	34546 TRANS-1,2-DICHLOROETHYLENE	ND	UG/L	10	.5	2016/02/23	72	2022/02	
	39180 TRICHLOROETHYLENE	ND	UG/L	5	.5	2016/02/23	72	2022/02	
	34488 TRICHLOROFLUOROMETHANE	ND	UG/L	150	5	2016/02/23	72	2022/02	
	81611 TRICHLOROTRIFLUOROETHANE (FREON 113)	ND	UG/L	1200	10	2016/02/23	72	2022/02	
	39175 VINYL CHLORIDE	ND	UG/L	.5	.5	2016/02/23	72	2022/02	
	81551 XYLENES (TOTAL)	ND	UG/L	1750	0.5	2016/02/23	72	2022/02	
S2 REGULATED SOC									
	77443 1,2,3-TRICHLOROPROPANE (1,2,3-TCP)	<	ND UG/L	0.005	0.005	2018/11/16	3	2019/02	
	77825 ALACHLOR	<	ND UG/L	2	1	2018/09/17	36	2021/09	
	39033 ATRAZINE	<	ND UG/L	1	.5	2018/09/17	36	2021/09	
	38761 DIBROMOCHLOROPROPANE (DBCP)	0.051	UG/L	.2	.01	2018/09/17	12	2019/09	
	77651 ETHYLENE DIBROMIDE (EDB)	<	ND UG/L	.05	.02	2018/09/17	36	2021/09	
	39055 SIMAZINE	<	ND UG/L	4	1	2018/09/17	36	2021/09	

LAST SAMPLE DATE AND MONITORING SCHEDULE

SYSTEM NO: 1010042

NAME: MALAGA COUNTY WATER DISTRICT

COUNTY: FRESNO

SOURCE NO: 012

NAME: WELL 08

CLASS: CMGA

STATUS: Active

PSCODE	GROUP/CONSTITUENT IDENTIFICATION	LAST RESULT	UNITS	MCL	DLR	LAST SAMPLE	FREQ MON THS	NEXT SAMPLE DUE	NOTES
1010042 - 012	1010042 MALAGA COUNTY WATER DISTRICT	012	WELL 08						
	GP SECONDARY/GP								
	00440 BICARBONATE ALKALINITY	140	MG/L	-----	-----	2016/10/05	36	2019/10	
	00916 CALCIUM	11	MG/L	-----	-----	2016/10/05	36	2019/10	
	00445 CARBONATE ALKALINITY	ND	MG/L	-----	-----	2016/10/05	36	2019/10	
	00940 CHLORIDE	8.2	MG/L	500	-----	2016/10/05	36	2019/10	
	00081 COLOR	<	ND UNITS	15	-----	2018/11/16	36	2021/11	
	01042 COPPER	ND	UG/L	1000	50	2016/08/08	36	2019/08	
	38260 FOAMING AGENTS (MBAS)	ND	MG/L	.5	-----	2016/08/08	36	2019/08	
	00900 HARDNESS (TOTAL) AS CaCO3	44	MG/L	-----	-----	2016/10/05	36	2019/10	
	71830 HYDROXIDE ALKALINITY	ND	MG/L	-----	-----	2016/10/05	36	2019/10	
	01045 IRON	330	UG/L	300	100	2016/10/05	36	2019/10	
	00927 MAGNESIUM	3.7	MG/L	-----	-----	2016/10/05	36	2019/10	
	01055 MANGANESE	16	UG/L	50	20	2016/10/05	36	2019/10	
	00086 ODOR THRESHOLD @ 60 C	1.0	TON	3	1	2018/11/16	36	2021/11	
	00403 PH, LABORATORY	8.2		-----	-----	2016/08/08	36	2019/08	
	01077 SILVER	<	ND UG/L	100	10	2018/09/17	36	2021/09	
	00929 SODIUM	45	MG/L	-----	-----	2016/10/05	36	2019/10	
	00095 SPECIFIC CONDUCTANCE	280	US	1600	-----	2018/11/06	36	2021/11	
	00945 SULFATE	4.8	MG/L	500	.5	2016/10/05	36	2019/10	
	70300 TOTAL DISSOLVED SOLIDS	220	MG/L	1000	-----	2016/10/05	36	2019/10	
	82079 TURBIDITY, LABORATORY	0.12	NTU	5	.1	2018/11/16	36	2021/11	
	01092 ZINC	5.5	UG/L	5000	50	2016/08/08	36	2019/08	
	IO INORGANIC								
	01105 ALUMINUM	<	ND UG/L	1000	50	2018/09/17	36	2021/09	
	01097 ANTIMONY	<	ND UG/L	6	6	2018/09/17	36	2021/09	
	01002 ARSENIC		2.6 UG/L	10	2	2018/09/17	36	2021/09	
	01007 BARIUM		16 UG/L	1000	100	2018/09/17	36	2021/09	
	01012 BERYLLIUM	<	ND UG/L	4	1	2018/09/17	36	2021/09	
	01027 CADMIUM	<	ND UG/L	5	1	2018/09/17	36	2021/09	

LAST SAMPLE DATE AND MONITORING SCHEDULE

SYSTEM NO: 1010042

NAME: MALAGA COUNTY WATER DISTRICT

COUNTY: FRESNO

SOURCE NO:

NAME: WELL 08

CLASS: CMGA

STATUS: Active

PSCODE	GROUP/CONSTITUENT IDENTIFICATION	LAST RESULT	UNITS	MCL	DLR	LAST SAMPLE	FREQ MON THS	NEXT SAMPLE DUE	NOTES
1010042 - IO INORGANIC									
012									
01034	CHROMIUM (TOTAL)		3.1 UG/L	50	10	2018/09/17	36	2021/09	
00951	FLUORIDE (F) (NATURAL-SOURCE)	<	ND MG/L	2	.1	2018/09/17	36	2021/09	
71900	MERCURY	<	ND UG/L	2	1	2018/09/17	36	2021/09	
01067	NICKEL	<	ND UG/L	100	10	2018/09/17	36	2021/09	
A-031	PERCHLORATE	<	4.0 UG/L	6	4	2015/12/23	36	2018/12	DUE NOW
01147	SELENIUM	<	ND UG/L	50	5	2018/09/17	36	2021/09	
01059	THALLIUM	<	ND UG/L	2	1	2018/09/17	36	2021/09	
NI NITRATE/NITRITE									
00618	NITRATE (AS N)		2.5 mg/L	10	.4	2018/11/06	12	2019/11	
00620	NITRITE (AS N)	<	ND UG/L	1000	400	2015/11/05	36	2018/11	DUE NOW
RA RADIOLOGICAL									
01501	GROSS ALPHA		1.5 PCI/L	15	3	2016/02/23	108	2025/02	
S1 REGULATED VOC									
34506	1,1,1-TRICHLOROETHANE	<	.0000 UG/L	200	.5	2013/09/23	72	2019/09	
34516	1,1,2,2-TETRACHLOROETHANE	<	.0000 UG/L	1	.5	2013/09/23	72	2019/09	
34511	1,1,2-TRICHLOROETHANE	<	.0000 UG/L	5	.5	2013/09/23	72	2019/09	
34496	1,1-DICHLOROETHANE	<	.0000 UG/L	5	.5	2013/09/23	72	2019/09	
34501	1,1-DICHLOROETHYLENE	<	.0000 UG/L	6	.5	2013/09/23	72	2019/09	
34551	1,2,4-TRICHLOROBENZENE	<	.0000 UG/L	5	.5	2013/09/23	72	2019/09	
34536	1,2-DICHLOROBENZENE	<	.0000 UG/L	600	.5	2013/09/23	72	2019/09	
34531	1,2-DICHLOROETHANE	<	.0000 UG/L	.5	.5	2013/09/23	72	2019/09	
34541	1,2-DICHLOROPROPANE	<	.0000 UG/L	5	.5	2013/09/23	72	2019/09	
34561	1,3-DICHLOROPROPENE (TOTAL)	<	.0000 UG/L	.5	.5	2013/09/23	72	2019/09	
34571	1,4-DICHLOROBENZENE	<	.0000 UG/L	5	.5	2013/09/23	72	2019/09	
34030	BENZENE	<	.0000 UG/L	1	.5	2013/09/23	72	2019/09	
32102	CARBON TETRACHLORIDE	<	.0000 UG/L	.5	.5	2013/09/23	72	2019/09	
77093	CIS-1,2-DICHLOROETHYLENE	<	.0000 UG/L	6	.5	2013/09/23	72	2019/09	
34423	DICHLOROMETHANE	<	.0000 UG/L	5	.5	2013/09/23	72	2019/09	
34371	ETHYLBENZENE	<	.0000 UG/L	300	.5	2013/09/23	72	2019/09	

LAST SAMPLE DATE AND MONITORING SCHEDULE

SYSTEM NO: 1010042

NAME: MALAGA COUNTY WATER DISTRICT

COUNTY: FRESNO

SOURCE NO:

NAME: WELL 08

CLASS: CMGA

STATUS: Active

PSCODE	GROUP/CONSTITUENT IDENTIFICATION	LAST RESULT	UNITS	MCL	DLR	LAST SAMPLE	FREQ MON THS	NEXT SAMPLE DUE	NOTES
1010042 - S1 012	46491 METHYL-TERT-BUTYL-ETHER (MTBE)	<	ND UG/L	13	3	2016/02/23	72	2022/02	
	34301 MONOCHLOROBENZENE	<	.0000 UG/L	70	.5	2013/09/23	72	2019/09	
	77128 STYRENE	<	.0000 UG/L	100	.5	2013/09/23	72	2019/09	
	34475 TETRACHLOROETHYLENE	<	.0000 UG/L	5	.5	2013/09/23	72	2019/09	
	34010 TOLUENE	<	.0000 UG/L	150	.5	2013/09/23	72	2019/09	
	34546 TRANS-1,2-DICHLOROETHYLENE	<	.0000 UG/L	10	.5	2013/09/23	72	2019/09	
	39180 TRICHLOROETHYLENE	<	.0000 UG/L	5	.5	2013/09/23	72	2019/09	
	34488 TRICHLOROFLUOROMETHANE	<	.0000 UG/L	150	5	2013/09/23	72	2019/09	
	81611 TRICHLOROTRIFLUOROETHANE (FREON 113)	<	.0000 UG/L	1200	10	2013/09/23	72	2019/09	
	39175 VINYL CHLORIDE	<	.0000 UG/L	.5	.5	2013/09/23	72	2019/09	
	81551 XYLENES (TOTAL)	<	.0000 UG/L	1750	0.5	2013/09/23	72	2019/09	
S2 REGULATED SOC									
	77443 1,2,3-TRICHLOROPROPANE (1,2,3-TCP)	<	ND UG/L	0.005	0.005	2018/11/16	3	2019/02	
	77825 ALACHLOR	<	ND UG/L	2	1	2018/09/17	36	2021/09	
	39033 ATRAZINE	<	ND UG/L	1	.5	2018/09/17	36	2021/09	
	38761 DIBROMOCHLOROPROPANE (DBCP)	<	ND UG/L	.2	.01	2018/09/17	36	2021/09	
	77651 ETHYLENE DIBROMIDE (EDB)	<	ND UG/L	.05	.02	2018/09/17	36	2021/09	
	39055 SIMAZINE	<	ND UG/L	4	1	2018/09/17	36	2021/09	

Source Bacteriological Monitoring Report

1010042 Malaga County WD

Sample Date	Time	Source	Sample Type	Test Method	T Coli	E Coli	F Coli	HPC	Violation	Comments
10/31/2018	13:20	Well 8	Well	MPN	<1.0	<1.0				
10/31/2018	13:30	Well 6	GWR Well	MPN	1.0	<1.0				
10/31/2018	13:37	Well 7	GWR Well	MPN	2.0	<1.0				
10/9/2018		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
9/6/2018	10:40	Well 8	Well	MPN	30	<1.0				
9/1/2018		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
8/8/2018		Wells 6,7,8	Well	MPN	<1.0	<1.0				
7/10/2018		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
6/1/2018		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
5/14/2018		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
4/5/2018		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
3/5/2018		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
2/7/2018		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
1/3/2018		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
12/6/2017		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
11/6/2017		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
10/4/2017		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
9/13/2017		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
9/7/2017		Wells 6,7,8	Well	MPN	<1.0	<1.0				
8/1/2017		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
7/6/2017		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
6/14/2017	12:40	Well 8	Well	MPN	<1.0	<1.0				Repeat
6/8/2017	14:15	Well 8	Well	MPN	2.0	<1.0				Repeat
6/7/2017		Wells 6 & 7	Well	MPN	<1.0	<1.0				
6/7/2017	11:35	Well 8	Well	MPN	12	3.1				Well shutoff and disinfected.
5/3/2017	11:55	Well 6	Well	MPN	3.1	<1.0				
5/3/2017	12:15	Well 8	Well	MPN	2.0	<1.0				
5/1/2017		Wells 6,7,8	Well	MPN	<1.0	<1.0				
4/1/2017		Wells 6,7,8	Well	MPN	<1.0	<1.0				
3/1/2017		Wells 6,7,8	Well	MPN	<1	<1				
2/1/2017		Wells 6,7,8	Well	MPN	<1	<1				
1/1/2017		Wells: 6,7,8	Well	MPN	<1	<1				
12/1/2016		Wells: 6,7,8	Well	MPN	<1	<1				
11/1/2016		Wells: 6 & 7	Well	MPN	<1.0	<1.0				
10/6/2016		Wells: 6,7,8	Well	P/A	A	A				
9/19/2016	11:45	Well 8	Well	MPN	<1.0	<1.0				
9/7/2016	15:50	Well 7	Well	MPN	<1.0	<1.0				

1010042 Malaga County WD

<i>Sample Date</i>	<i>Time</i>	<i>Source</i>	<i>Sample Type</i>	<i>Test Method</i>	<i>T Coli</i>	<i>E Coli</i>	<i>F Coli</i>	<i>HPC</i>	<i>Violation</i>	<i>Comments</i>
9/7/2016	16:15	Well 8 - Offline	Well	P/A	P	P				9/8/16 Per system, Well 8 was sampled to waste. Well has been offline since 9/1/16 for repairs.
9/6/2016	14:45	Well 7	Well	P/A	P	A				
9/6/2016	15:00	Well 6	Well	P/A	A	A				
8/9/2016	14:45	Well 8	Well	P/A	A	A				
8/4/2016	16:00	Well 7	Well	MPN	<1.0	<1.0				
8/3/2016	8:20	Well 7	Well	P/A	P	A				
8/3/2016	9:20	Well 6	Well	P/A	A	A				
7/6/2016		Wells: 6,7,8	Well	P/A	A	A				
6/21/2016	11:50	Well 7	Well	MPN	<1.0	<1.0				
6/13/2016	11:30	Well 7	Well	P/A	P	A				
6/7/2016		Wells 6 & 8	Well	MPN	<1.0	<1.0				
6/7/2016	11:16	Well 7	Well	MPN	2.0	<1.0				
5/4/2016		Wells 6 & 8	Well	MPN	<1.0	<1.0				
4/5/2016		Wells 6 & 8	Well	MPN	<1.0	<1.0				
3/2/2016		Wells: 6 & 8	Well	MPN	<1.0	<1.0				
2/1/2016		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
1/12/2016		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
12/7/2015		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
11/4/2015		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
10/6/2015		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
9/8/2015		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
8/11/2015		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
7/27/2015	13:45	Well 8	Well	MPN	<1.0	<1.0				
7/17/2015	15:10	Well 8	Well	MPN	1.0	<1.0				
7/16/2015		Wells: 6,7	Well	MPN	<1.0	<1.0				
7/16/2015	14:30	Well 8	Well	MPN	1.0	<1.0				
6/10/2015		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
5/19/2015		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
4/15/2015		Wells: 6,7,8	Well	P/A	A	A				
3/18/2015		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
2/11/2015		Wells: 6,7,8	Well	MPN	<1.0	<1.0				
1/13/2015		Wells: 6,7,8	Well	MPN	<1.0	<1.0				Per system, no filters were backwashed & GAC change out did not occur.

Bacteriological Distribution Monitoring Report

1010042 Malaga County WD

Distribution System Freq: 2/M

Sample Date	Location	T Coli	E Coli	F Coli	HPC	Type	CI2	CI2 Avg	Viol. Type	GWR Satisfied?	Comments
10/31/2018	3399 E. Malaga	<1.0	<1.0			Repeat					
10/31/2018	4041 Golden State	<1.0	<1.0			Repeat					
10/31/2018	3395 E. Malaga	<1.0	<1.0			Repeat					
10/30/2018	3399 E. Malaga	P	A			Routine					
10/9/2018	3672 Calvin	<1.0	<1.0			Routine					
9/25/2018	2448 S. Central Ave	<1.0	<1.0			Routine					
9/6/2018	3550 S. Willow Ave	<1.0	<1.0			Routine					
8/1/2018	7 Samples	<1.0	<1.0			Routine					
7/24/2018	2448 E. Central	<1.0	<1.0			Routine					
7/10/2018	3550 S. Willow Ave.	<1.0	<1.0			Routine					
6/25/2018	3399 E. Malaga	<1.0	<1.0			Routine					
6/6/2018	3672 Calvin	<1.0	<1.0			Routine					
5/29/2018	2448 S. Central	<1.0	<1.0			Routine					
5/14/2018	3550 S. Willow	<1.0	<1.0			Routine					
4/24/2018	3399 E. Malaga	<1.0	<1.0			Routine					
4/5/2018	3672 Calvin	<1.0	<1.0			Routine					
3/28/2018	2448 S. Central	<1.0	<1.0			Routine					
3/5/2018	3550 S. Willow	<1.0	<1.0			Routine					
2/26/2018	3399 E. Malaga	<1.0	<1.0			Routine					
2/7/2018	3672 Calvin	<1.0	<1.0			Routine					
2/7/2018	3640 Calvin	<1.0	<1.0			Routine					
2/7/2018	3550 Willow	<1.0	<1.0			Routine					
2/7/2018	3399 E. Malaga	<1.0	<1.0			Routine					
2/7/2018	2448 S. Central	<1.0	<1.0			Routine					
1/5/2018	3550 S. Willow	<1.0	<1.0			Repeat					
1/5/2018	3267 Willow	<1.0	<1.0			Repeat					
1/5/2018	3695 Willow	<1.0	<1.0			Repeat					
1/3/2018	3550 S. Willow	1.0	<1.0			Routine					
1/3/2018	3672 Calvin	<1.0	<1.0			Routine					
1/3/2018	2448 S. Central	<1.0	<1.0			Routine					
1/3/2018	3399 E. Malaga	<1.0	<1.0			Routine					
1/3/2018	3395 E. Malaga	<1.0	<1.0			Routine					
12/27/2017	3399 E. Malaga	<1.0	<1.0			Routine					
12/7/2017	3672 Calvin	<1.0	<1.0			Repeat					
12/7/2017	3640 Calvin	<1.0	<1.0			Repeat					
12/7/2017	3726 Calvin	<1.0	<1.0			Repeat					
12/6/2017	3672 Calvin	1.0	<1.0			Routine					
11/30/2017	3550 Willow Ave	<1.0	<1.0			Routine					
11/6/2017	3399 Malaga Ave	<1.0	<1.0			Routine					
10/23/2017	3672 Calvin St.	<1.0	<1.0			Routine					
10/4/2017	2448 S. Central	<1.0	<1.0			Routine					
9/7/2017	3672 Calvin	<1.0	<1.0			Other					
9/7/2017	3640 Calvin	<1.0	<1.0			Other					
9/7/2017	3726 Calvin	<1.0	<1.0			Other					
9/1/2017	6 samples	<1.0	<1.0			Routine					
8/29/2017	3672 Calvin	1.0	<1.0			Routine					
8/29/2017	3672 Calvin	2.0	<1.0			Repeat					
8/29/2017	3726 Calvin	<1.0	<1.0			Repeat					

Sample Date	Location	T Coli	E Coli	F Coli	HPC	Type	CI2	CI2 Avg	Viol. Type	GWR Satisfied?	Comments
8/29/2017	3640 Calvin	2.0	<1.0			Repeat			MCL		11/7/17 Issued cit 03_12_17C_036.
8/1/2017	Location	<1.0	<1.0			Routine					
	2448 E. Central										
7/25/2017	3550 Willow	<1.0	<1.0			Routine					
7/6/2017	3399 E. Malaga	<1.0	<1.0			Routine					
6/27/2017	3672 Calvin	<1.0	<1.0			Routine					
6/7/2017	2448 E. Central	<1.0	<1.0			Routine					
5/31/2017	3550 S Willow	<1.0	<1.0			Routine					
5/3/2017	3399 E Malaga	<1.0	<1.0			Routine					
4/10/2017	2448 E. Central	<1.0	<1.0			Routine					
4/1/2017	3672 Calvin	<1.0	<1.0			Routine					
3/28/2017	3550 S Willow	<1.0	<1.0			Routine					
3/6/2017	3399 E Malaga	<1.0	<1.0			Routine					
2/27/2017	3672 Calvin St.	<1.0	<1.0			Routine					
2/13/2017	2448 S. Central	<1.0	<1.0			Routine					
1/30/2017	3550 S. Willow	<1.0	<1.0			Routine					
1/9/2017	3399 E Malaga Ave.	<1.0	<1.0			Routine					
12/27/2016	3672 Calvin St.	<1	<1			Routine					
12/6/2016	2448 S. Central	<1	<1			Routine					
11/1/2016	6 samples	<1.0	<1.0			Routine					
10/25/2016	3672 Calvin St.	<1.0	<1.0			Routine					
10/7/2016	2448 S. Central	<1.0	<1.0			Repeat					
10/7/2016	2581 E. Central	<1.0	<1.0			Repeat					
10/7/2016	3633 S. Maple	<1.0	<1.0			Repeat					
10/6/2016	2448 S. Central	1.0	<1.0			Routine					
9/26/2016	3550 S. Willow	<1.1	<1.1	<1.1		Routine					
9/6/2016	3399 E. Malaga Ave.	<1.0	<1.0			Routine					
8/24/2016	3672 Calvin S.	<1.1				Routine					
8/3/2016	248 Central Ave.	<1.1	<1.1			Routine					
7/25/2016	3550 S. Willow Ave	<1.1	<1.1			Routine					
7/6/2016	3399 E. Malaga	<1.0	<1.0			Routine					
6/27/2016	3672 Calvin St.	A	A			Routine					
6/7/2016	2448 E. Central	A	A			Routine					
5/24/2016	3550 S. Willow	A	A			Routine					
5/4/2016	3399 E. Malaga	A	A			Routine					
4/26/2016	3672 Calvin St.	A	A			Routine					
4/5/2016	2448 E. Central Ave.	A	A			Routine					
3/23/2016	3550 S. Willow	A	A			Routine					
3/2/2016	3399 E. Malaga	A	A			Routine					
2/23/2016	3672 Calvin Street	A	A			Routine					
2/3/2016	2448 E. Central Ave.	A	A			Routine					
1/25/2016	3550 S. Willow Ave.	A	A			Routine			MR4		3/16/16 Issued Enf ltr 03_12_16E_031.
1/12/2016	3399 E. Malaga Ave	A	A			Routine					
12/22/2015	3672 Calvin	A	A			Repeat				Yes	
12/22/2015	3640 Calvin	A	A			Repeat					
12/22/2015	3726 Calvin	A	A			Repeat					
12/21/2015	3672 Calvin St.	P	A			Routine					
12/7/2015	2448 E. Central	A	A			Routine					
11/18/2015	3550 S. Willow Ave.	A	A			Routine					
11/4/2015	3399 E. Malaga Ave.	A	A			Routine					
10/26/2015	3672 Calvin St.	A	A			Routine					

Sample Date	Location	T Coli	E Coli	F Coli	HPC	Type	CI2	CI2 Avg	Viol. Type	GWR Satisfied?	Comments
10/6/2015	2448 E. Central Ave	A	A			Routine					
9/23/2015	3550 S. Willow Ave.	A	A			Routine					
9/8/2015	3399 E. Malaga	A	A			Routine					
8/24/2015	3672 Calvin Street	A	A			Routine					
8/11/2015	2448 E. Central Ave.	A	A			Routine					
7/16/2015	3550 S. Willow	A	A			Routine			MR3		9/2/15 Issued EL 03_12_15E_029 for incorrect # of routine samples.
6/29/2015	3399 E. Malaga	A	A			Routine					
6/10/2015	3672 Calvin	A	A			Routine					
5/27/2015	2448 E. Central (Dan Gamel)	A	A			Routine					
5/19/2015	3550 S. Willow	A	A			Routine					
4/28/2015	3399 E. Malaga	A	A			Routine					
4/15/2015	3672 S. Calvin	A	A			Routine					
3/26/2015	2448 E. Central Ave	A	A			Routine					
3/18/2015	3550 S. Willow Ave.	A	A			Routine					
2/25/2015	3399 E. Malaga	A	A			Routine					
2/12/2015	3672 S. Calvin	A	A			Routine					
1/28/2015	2448 E. Central Ave.	A	A			Routine					
1/13/2015	3550 S. Willow Ave.	A	A			Routine					

Violation Key

MCL	Exceeds Maximum Contaminant Level (L1 RTCR)	GWR	Tier 1 or Tier 2 notification req'd
MR1	No monthly sample for the report month	GR1	GWR M&R violation
MR2	No quarterly sample for the report quarter	L1	Level 1 Trigger RTCR (TCRMCL)
MR3	Incorrect number of routine samples for the report month	L2a	Level 2-EC+ Routine w/TC+Repeat
MR4	Did not collect 5 routine samples for previous month's positive sample	L2b	Level 2-TC+ Routine w/EC+ Repeat
MR5	Incorrect number of repeat samples as follow-up to a positive sample	L2c	Level 2-EC+ Routine w/No Repeats
MR6	No source sample	L2d	Level 2-Repeat at GWR source monitoring is EC+
MR7	No summary report submitted	L2e	Level 2-Two (2) Level 1 Triggers in a 12-month period
MR8	Other comments and/or info		