2024 ANNUAL GROUNDWATER MONITORING REPORT WESTSIDE BASIN SAN FRANCISCO AND SAN MATEO COUNTIES, CALIFORNIA

Prepared By:
San Francisco Public Utilities Commission

In Cooperation with the City of Daly City, the City of San Bruno, and the California Water Service Company (South San Francisco District)

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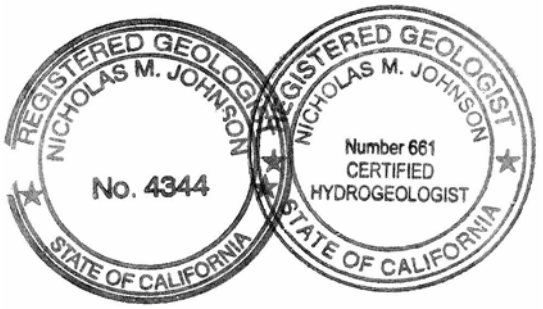
The Westside Basin Annual Groundwater Monitoring Report for 2024 was prepared by the San Francisco Public Utilities Commission in cooperation with the City of Daly City, the City of San Bruno, and the California Water Service Company (South San Francisco District). This report summarizes the results of water level elevation monitoring, general groundwater quality sampling and analysis, and additional groundwater-related field activities conducted within the Westside Basin in 2024.



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EXECUTIVE SUMMARY

This report presents the results of the 2024 groundwater monitoring program for the Westside Groundwater Basin (Westside Basin or Basin) in San Francisco and San Mateo counties, California. The San Francisco Public Utilities Commission (SFPUC) prepared this report in cooperation with its partner agencies the City of Daly City (Daly City), the City of San Bruno (San Bruno), and the California Water Service Company (Cal Water).

The Westside Basin designated by the California Department of Water Resources has an onshore area of approximately 40 square miles extending from Golden Gate Park in San Francisco to the City of Burlingame in San Mateo County. The Basin is an important source of municipal and irrigation water supply for the communities and businesses that overlie it. The North Westside Basin refers to the portion of the Basin in San Francisco and the southern Westside Basin refers to the portion of the Basin in San Mateo County.

As classified by the United States Drought Monitor, the San Francisco Peninsula experienced "abnormally dry" conditions from September through November 2024 (USDA, 2024). The San Francisco Peninsula did not experience dry or drought conditions for the remainder of calendar year (CY) 2024 (USDA, 2024). Precipitation at the San Francisco Downtown gauge was 25.68 inches during water year (WY) 2024 (October 2023 through September 2024) and 29.28 inches for CY 2024 (years cited in the remainder of this report are CYs unless specified as WYs). The average annual precipitation at this station for the preceding 30 years, 1994-2023, is 23.01 inches (NOAA, 2024).

During 2024, SFPUC measured and recorded groundwater levels in 107 monitoring wells throughout the Westside Basin. Measurements were taken quarterly in 37 wells, semi-annually in 5 wells, and continuously in 65 wells using pressure transducers and data loggers. Additionally, SFPUC and the partner agencies conducted water quality sampling in 72 monitoring wells in the spring and fall and at 13 production wells in the spring.

The Regional Groundwater Storage and Recovery (GSR) Project began a second storage period July 1, 2023, following a two-year hold period from July 2021 through June 2023 and the first storage period from May 2016 through June 2021. At the end of 2024 the project's partner agencies had received a total of 38,016 acre-feet of SFPUC surface water in-lieu of groundwater pumping from the Westside Basin.

Based on a combination of metered and estimated pumping, total groundwater pumping from the Westside Basin was approximately 4,864 acre-feet in 2024, a 21 percent decrease compared to 2023, and 82 percent of the annual average of 5,905 acre-feet for the preceding 10 years (2014-2023).

2024 was the seventh year of the San Francisco Groundwater Supply (SFGW) Project, although municipal groundwater pumping in the North Westside Basin remained low at less than 100 acre-feet. Municipal pumping decreased in the South Westside Basin by 53 percent in 2024 compared to 2023 as a result of the second GSR storage period.

Recycled water from the North San Mateo County Sanitation District was largely unavailable for golf course irrigation during 2024 due to system shut down and maintenance. Total recycled water use at the Lake Merced Golf Club, Olympic Club, and San Francisco Golf Club was 278 acre-feet in 2024, significantly lower than an average of 564 acre-feet during 2009-2018 when recycled water was more fully available. Corresponding with the below-average use of recycled water, groundwater use by Lake Merced area golf courses in 2024 was about 450 percent of their average use during 2009-2018.

Groundwater levels in North Westside Basin monitoring wells were generally stable during 2024. In the South Westside Basin, annual high and low groundwater levels in the Primary Production Aquifer generally increased in 2024 compared to 2023.

To manage Lake Merced water levels, SFPUC continues to work with local stakeholders and regulatory agencies to implement a multi-pronged approach. The interim target lake level is 14 to 16 feet North American Vertical Datum of 1988 (NAVD88). During 2024 the seasonal low and high water-level elevations of Lake Merced's South Lake were 17.51 and 18.91 feet NAVD88, a slight increase compared to 2023 and above the range of interim target lake levels.

Groundwater monitoring continues to provide no definitive indication of saltwater intrusion in the Westside Basin other than in proximity to San Francisco Bay. Monitoring wells near the bay at San Francisco Airport and in Burlingame continue to encounter sub-sea level groundwater elevations and elevated and/or increasing chloride concentrations in some zones.

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ACRONYMS AND ABBREVIATIONS

af	acre-feet
afy	acre-feet per year
Bay	San Francisco Bay
bgs	below ground surface
CASGEM	California Statewide Groundwater Elevation Monitoring Program
San Francisco	City and County of San Francisco
Daly City	City of Daly City
DWR	California Department of Water Resources
°F	degrees Fahrenheit
San Bruno	City of San Bruno
Cal Water	California Water Service Company
CY	calendar year
EIR	Environmental Impact Report

feet NAVD88	elevation in feet relative to North American Vertical Datum 1988
GMP	groundwater management plan
GSR	Regional Groundwater Storage and Recovery Project
LSCE	Luhdorff and Scalmanini Consulting Engineers
MCL	maximum contaminant level
mgd	million gallons per day
mg/L	milligrams per liter
NAVD88	North American Vertical Datum, 1988
NSMCSD	North San Mateo County Sanitation District
RGSR	Regional Groundwater Storage and Recovery Project
SFCD	San Francisco City Datum
SFGW	San Francisco Groundwater Supply Project
SFO	San Francisco International Airport
SFPUC	San Francisco Public Utilities Commission
SFRPD	San Francisco Recreation & Parks Department
SFWD	San Francisco Water Department
SGMA	California Sustainable Groundwater Management Act of 2014
SMCEHSA	San Mateo County Environmental Health Services Agency
SMCL	secondary drinking water standard
SWBVCGMA	South Westside Basin Voluntary Cooperative Groundwater Monitoring Association
TDS	total dissolved solids
Westside Basin or Basin	Westside Groundwater Basin
WQD	SFPUC Water Quality Division
WY	water year (e.g., WY 2024 is October 1, 2023 through September 30, 2024)
USDA	United States Department of Agriculture

1.0 INTRODUCTION

This report presents the results of the 2024 annual groundwater monitoring program for the Westside Groundwater Basin (Westside Basin or Basin) in San Francisco and San Mateo counties, California. The San Francisco Public Utilities Commission (SFPUC) prepared this report in cooperation with the City of Daly City (Daly City), the City of San Bruno (San Bruno), and the California Water Service Company (Cal Water).

The Westside Basin extends from Golden Gate Park within the City and County of San Francisco (San Francisco) to the City of Burlingame in San Mateo County. The California Department of Water Resources (DWR) designates it as California basin number 2-35. The Basin provides an important supply of municipal and irrigation water for the communities and businesses that overlie it. The northern and southern portions of the Westside Basin on either side of the San Francisco−San Mateo county line are referred to as the North and South Westside Basins, respectively (Figure 1).

Annual monitoring of the Westside Basin began in 2000 coordinated by the San Mateo County Environmental Health Services Agency (SMCEHSA, 2000). In 2004, SFPUC assumed implementation of the monitoring program in coordination with Daly City, San Bruno, and Cal Water. The monitoring program addresses planning elements in the 2005 *Final Draft North Westside Groundwater Basin Management Plan* (SFPUC, 2005) and the *South Westside Basin Groundwater Management Plan* (San Bruno and others, 2012).

In 2006, SFPUC prepared the report *Hydrogeologic Conditions in the Westside Basin−2005* (Luhdorff and Scalmanini Consulting Engineers [LSCE], 2006) in cooperation with Daly City, San Bruno, and Cal Water. It summarized the basin hydrogeology and provided an overview of historical, current, and planned activities related to groundwater as of 2005. Since 2007, the SFPUC Water Resources Division has prepared the Westside Basin annual groundwater monitoring report.

This annual report summarizes 2024 groundwater levels, pumping, and water quality within the Westside Basin in relation to the historical record. Additionally, it provides the water level record for Lake Merced in relation to groundwater conditions. The report is intended for public education and as a resource for SFPUC and cooperating agencies. The 2024 Westside Basin annual groundwater monitoring report can be accessed at:

https://sfpuc.org/programs/water-supply-planning/groundwater

SFPUC, Daly City, San Bruno, and Cal Water plan to continue coordinating the execution and reporting of this comprehensive monitoring program.

Unless stated otherwise, elevations provided in this document are in reference to the North American Vertical Datum of 1988 (NAVD88), which is locally 3.2 feet above mean sea level. San Francisco City Datum (SFCD) is equivalent to an elevation of 11.37 feet NAVD88. References to “sea level” in this document refer to zero elevation NAVD88.

Annual data presented herein are for calendar years (CYs) unless specified as water years (WYs). WY 2024, for example, was October 1, 2023 to September 30, 2024. Water years are useful for parsing wet and dry seasons whereas calendar years are useful for bracketing the typically spring-to-autumn period of relatively high-water demand and groundwater pumping for irrigation. Drought periods are typically defined in water years.

1.1 Planned and Ongoing Projects

The following projects are in progress or being planned concurrently with the groundwater monitoring program.

San Francisco Groundwater Supply Project

The SFPUC San Francisco Groundwater Supply (SFGW) project provides a new, local source of water for San Francisco that improves water supply reliability during local and regional system maintenance, drought, and emergencies. When fully implemented, the SFGW Project will provide up to 4 million gallons per day (mgd), on average, from wells in the North Westside Basin. Groundwater produced from the SFGW wells is blended with water from SFPUC’s Regional Water System before entering the municipal drinking water system.

Phase I test wells were constructed between 2007 and 2011 at the South and West Sunset Playgrounds, the Lake Merced Pump Station, and the Central Pump Station in Golden Gate Park. The project’s Final Environmental Impact Report (EIR) was certified in December 2013 and SFPUC approved the project for completion and implementation in January 2014. Construction of pump stations for the four Phase I wells began in March 2015. Municipal groundwater production from the Lake Merced Pump Station well began in 2017 and from the South and West Sunset wells in early 2018. Production from the Golden Gate Park Central Pump Station well for park irrigation also began in early 2018. Production from the South and West Sunset wells was suspended following the detection in mid-2018 and mid-2021, respectively, of an industrial solvent in the raw groundwater. SFPUC is evaluating treatment options.

Phase II of the SFGW project began in late 2017 and involved rehabilitating two existing irrigation wells in Golden Gate Park and reconstructing their pump stations. Work on the North Lake well station was completed in March 2019 and work on the South Windmill well was completed in July 2020. The Phase II wells are being used for Golden Gate Park irrigation until

completion of the Westside Recycled Water Project in 2027, at which time they will be connected to the local municipal drinking water system.

Recycled Water Projects

The Harding Park Recycled Water Project was completed in the fall of 2012. The project uses recycled water from the North San Mateo County Sanitation District (NSMCSD), a subsidiary of Daly City, to irrigate Harding Park and Fleming golf courses in San Francisco. SFPUC partnered with NSMCSD to construct a new pump station, distribution piping, and storage tank. The project replaces the use of potable water from SFPUC's Regional Water System for golf course irrigation.

NSMCSD also supplies recycled water to three other golf courses near Lake Merced: Lake Merced Golf Club, Olympic Club, and San Francisco Golf Club.

The Westside Recycled Water Project includes the construction of a new recycled water treatment plant, storage reservoir, pump station, and associated pipelines to replace surface water and groundwater currently used to irrigate Golden Gate Park and Lincoln Park Golf Course in the Lobos basin. The EIR for the project was completed and certified in September 2015. Construction of the recycled water pipeline began in early 2017 and was completed in July 2018. Construction of the treatment facility began in late 2017, and pump station construction began in mid-2019. Recycled water system start-up testing is anticipated for 2026 with fully energized operations anticipated by 2027.

Plans are under way to supply the San Francisco Zoo and the cemeteries in Colma with recycled water for irrigation in place of groundwater. In addition, SFPUC is currently evaluating feasibility of utilizing excess recycled water produced during off-peak irrigation periods to augment Lake Merced levels.

Regional Groundwater Storage and Recovery Project

In cooperation with its partner agencies Daly City, San Bruno, and Cal Water, SFPUC is establishing a dry-year groundwater supply for its Regional Water System through implementation of the Regional Groundwater Storage and Recovery (GSR) Project in the South Westside Basin. The partner agencies currently supply potable water to their retail customers through a combination of groundwater pumped from the South Westside Basin and surface water purchased from SFPUC. The GSR Project will provide supplemental SFPUC surface water to the partner agencies during normal and wet years. During these years, the partner agencies will reduce their groundwater pumping by a comparable amount, increasing the amount of groundwater retained in storage (referred to as "in-lieu recharge").

During a period of normal and wet years, the volume of groundwater in the South Westside Basin will increase due to natural recharge and reduced groundwater pumping by the partner

agencies, increasing storage by up to 61,000 acre-feet (af) (about 20 billion gallons). During a period of dry or drought years, SFPUC's GSR project wells will pump the stored groundwater while partner agency wells will withdraw their agreed-upon portion of the basin yield as needed to supplement other supplies. This new water supply will increase the Regional Water System's available water supply during a multi-year drought.

The 2002-2005 Pilot In-Lieu Recharge Demonstration Program evaluated the feasibility of GSR in the South Westside Basin and indicated that GSR could be a viable dry-year water supply project (LSCE, 2005).

The GSR Project was approved in 2014, began construction in spring 2015, has completed initial startup, testing, and commissioning, with full completion anticipated in 2026. In addition, a new capital improvement project, “The Regional Groundwater Treatment Project,” is evaluating centralized treatment options for some GSR wells. The GSR project delivered in-lieu water to the partner agencies during an initial 5-year storage period from May 2016 through June 2021. The partner agencies resumed pumping groundwater up to their individual designated quantities during a 2-year hold period from July 2021 through June 2023. The project began delivering in-lieu water during a second storage period beginning July 2023 and is anticipated to be ongoing through June 2026. At the end of 2024 the project’s partner agencies had received a total of 38,016 acre-feet of SFPUC surface water in-lieu of groundwater pumping from the Westside Basin. Minor amounts of groundwater pumping from GSR wells have occurred during start-up testing and monthly maintenance.

Westside Basin Groundwater-Flow Model

Development of the Westside Basin Groundwater Flow Model began in 2002 with funding from a California State Assembly Bill 303 grant (Daly City, 2003). Subsequent model updates and improvements have been funded by SFPUC and the partner agencies for the GSR Project (HydroFocus, 2007, 2009, 2011, 2017). SFPUC and the partner agencies have used the model to evaluate potential changes in groundwater conditions as a result of future activities and management practices. Model simulations supported the EIRs for the SFGW and GSR projects (Kennedy-Jenks, 2012). More recently the model was used to evaluate the expected performance of the GSR project (SFPUC, 2021). The model will continue to be updated and refined as new data are collected, analyzed, and incorporated into the Basin’s hydrogeologic conceptual model and computer model calibration data set.

South Westside Basin Groundwater Management Plan

The 2012 *South Westside Basin Groundwater Management Plan* (GMP) provides a framework for regional groundwater management that sustains the beneficial uses of the groundwater resource in the South Westside Basin (San Bruno and others, 2012). Development of the plan was led by San Bruno and funded by a grant from DWR. The plan’s objectives include informing

the public of the importance, challenges, and opportunities of groundwater management in the South Westside Basin and developing consensus among stakeholders on issues and solutions related to groundwater. Additionally, the plan's objectives include building relationships among stakeholders within the South Westside Basin and local and state agencies and supporting programs and actions to ensure the long-term sustainability of the groundwater resource. The plan provides recommendations for managing groundwater levels, protecting groundwater quality, and avoiding land surface subsidence.

North Westside Basin Groundwater Management Plan

SFPUC developed draft groundwater management plans for the North Westside Basin in 2005 and 2016. The recent plan was developed to guide implementation of the SFGW Project and sustainably manage the groundwater resource within the northern portion of the Basin. The plan summarizes the Basin hydrogeology, defines measurable objectives and actions for avoiding saltwater intrusion, land subsidence, and impacts to interconnected surface water, while protecting groundwater yield and quality. The plan also provides for public outreach, stakeholder involvement, and coordination with the management of the South Westside Basin. A draft plan was completed in 2016 and an update will be completed in 2026. Because DWR classified the Westside Basin as very low priority in 2019, submission of a Westside Basin groundwater sustainability plan to DWR is not currently required under the 2014 California Sustainable Groundwater Management Act (SGMA).

1.2 Municipal Water Agencies

Approximately 2.7 million people rely on water supplied by SFPUC to meet their daily water needs. SFPUC is the retail water supplier for domestic, commercial, and institutional customers in San Francisco, which includes the North Westside Basin, and for numerous retail accounts outside the city. In addition, SFPUC provides water to 27 wholesale customers in San Mateo, Alameda, and Santa Clara counties under contractual agreement. Approximately two-thirds of the SFPUC water supply are delivered to the wholesale customers and one-third is delivered to retail customers.

The SFPUC Regional Water System draws approximately 85% of its water from runoff collected in Hetch Hetchy Reservoir in the upper Tuolumne River watershed within Yosemite National Park. This water is conveyed by gravity to Bay Area reservoirs and water users through a 167-mile aqueduct. The remainder of the water supply is derived from local runoff collected in reservoirs in the Alameda Creek and Peninsula watersheds in Alameda and San Mateo counties.

Water supply systems within the South Westside Basin are operated and managed by the Daly City Department of Water and Wastewater Resources, the Water Division of the San Bruno Public Services Department, and Cal Water (an investor-owned water utility) for South San

Francisco District that includes South San Francisco, Colma, and a small portion of Daly City. These systems are supplied by groundwater pumped from the South Westside Basin and contracted water deliveries from the SFPUC Regional Water System. Since the 1990s, SFPUC and its partner agencies in the South Westside Basin have worked cooperatively to monitor and manage groundwater and coordinate projects.

1.3 California Groundwater Elevation Monitoring Program

DWR established the California Statewide Groundwater Elevation Monitoring Program (CASGEM) in 2009 in accordance with Senate Bill X7-6. It requires designated responsible parties to monitor seasonal groundwater elevations in basins within their jurisdiction and submit these data to DWR. SFPUC is the designated CASGEM entity for monitoring and reporting groundwater elevations in the North Westside Basin and six other small groundwater basins within San Francisco: Lobos, Marina, Downtown San Francisco, Islais Valley, South San Francisco, and Visitacion Valley. The potential groundwater supply from the six small basins is relatively minor and currently unused other than springs in Lobos Basin that supply water for the Presidio.

SFPUC measured groundwater levels in CASGEM monitoring wells in the North Westside Basin in winter, spring, summer and fall 2024. SFPUC measures groundwater levels in CASGEM monitoring wells in the Islais Valley Basin and Lobos Basin in spring and fall 2024. Consisting of Daly City, San Bruno, and Cal Water, the South Westside Basin Voluntary Cooperative Groundwater Monitoring Association (SWBVCGMA) monitors CASGEM wells in the South Westside Basin.

2.0 WESTSIDE BASIN CLIMATE, HYDROLOGY, AND HYDROGEOLOGY

2.1 Climate

San Francisco has a Mediterranean climate with cool dry summers and mild wet winters. Based on meteorological data collected between 1914 and 2015, San Francisco's annual average daily high and low air temperatures are approximately 64- and 51-degrees Fahrenheit (°F), respectively. Temperatures range seasonally from a monthly average daily low of about 45°F in December and January to a monthly average daily high of about 70°F in September and October.

Since the early 1900s, San Francisco's mean annual precipitation has been approximately 21 inches, nearly all of which occurs as rainfall. On average, about 85% of annual precipitation occurs between November and March. December, January, and February are the wettest months, with rainfall averaging approximately four inches per month. May through September are the driest months, with average monthly rainfall of less than one-half inch.

Portions of the Westside Basin near the Pacific Ocean have a distinct maritime Mediterranean climate influenced by wind, fog, and precipitation. In summer and fall, locations adjacent to the ocean, such as Lake Merced, are often foggy with cool temperatures in the 50s and 60s °F.

As classified by the United States Drought Monitor, the San Francisco Peninsula experienced "abnormally dry" conditions from September through November 2024 (USDA, 2024). The San Francisco Peninsula did not experience dry or drought conditions for the remainder of the 2024 CY (USDA, 2024). Following three years of below average precipitation during WYs 2020-2022, the San Francisco Downtown gauge recorded 25.68 inches during WY 2024 (October 2023 through September 2024) and 29.28 inches for CY 2024. The average annual precipitation at this station for the preceding 30 years (CYs 1994-2023) is 23.01 inches (NOAA, 2023).

2.2 Hydrogeology

The Westside Basin has a land surface area of approximately 40 square miles in San Francisco and San Mateo counties (Figure 1). DWR designates it as California groundwater basin number 2-35. The Westside Basin borders five other groundwater basins: the Lobos Basin to the north (DWR basin 2-38); the Downtown, Islais Valley, and Visitacion Valley groundwater basins to the east (basins 2-40, 2-33, and 2-32); and the San Mateo Plain subbasin of the Santa Clara Valley basin to the south (basin 2-9.03).

As defined by Phillips and others (1993), the Westside Basin's northern boundary extends approximately four miles inland from Lands End north of Ocean Beach in San Francisco along a mostly buried bedrock ridge north and through Golden Gate Park. Continuing clockwise around

the Basin, its northeastern boundary encompasses the panhandle of Golden Gate Park and extends five miles south through Twin Peaks and Mount Davidson to the San Francisco-San Mateo county line about a mile east of Lake Merced. The eastern Basin boundary continues south into San Mateo County, extending six miles along the southern flank of San Bruno Mountain to San Francisco Bay, and then five miles along the bay shore from South San Francisco to Burlingame. A buried bedrock ridge and a thick accumulation of Bay Mud appears to separate the basin from San Francisco Bay in the San Bruno area.

The 1.6-mile southeastern boundary is defined by a bedrock high separating the Westside Basin from the San Mateo Plain Subbasin. The Basin's southwestern boundary follows the Serra Fault zone from Hillsborough twelve miles northwest to the Pacific Ocean. The Basin's onshore western boundary follows the coast for about six miles from Daly City north along Ocean Beach. The Basin may extend west offshore until reaching low-permeability zones associated with deformation along one or more branches of the San Andreas fault. The 2.2-mile county-line boundary between the North and South Westside basins does not have any hydrogeological significance other than influencing the distribution of municipal groundwater pumping.

The Westside Basin contains two primary water-bearing geologic units, the weakly consolidated upper Merced Formation and the younger unconsolidated Colma Formation. These generally sandy units are underlain and bounded by the structurally deformed middle and lower units of the Merced Formation and low-permeability basement rock consisting primarily of the Franciscan Complex. Surficial units include dune sands, alluvium along existing and former stream channels, hillslope deposits, and both engineered and non-engineered artificial fill. These surficial deposits may directly overlie basement rock in hillslope areas of the Basin. The total thickness of the basin's water-bearing units ranges from about 300 feet near Golden Gate Park to 700 feet or more in portions of the South Westside Basin (Figure 2).

Three aquifer zones are recognized in the Westside Basin, the Shallow, Primary Production, and Deep aquifers (LSCE, 2010). The Shallow Aquifer extends 50 to 120 feet below the water table within surficial deposits and the Colma and upper Merced formations. This shallow water-table zone occurs above the "-100-foot clay" and other clayey aquitards beneath portions of the Sunset District and Lake Merced areas. A shallow water-table zone is less well defined in the South Westside Basin due to predominantly fine-grained deposits at shallow depths and the partial dewatering of shallow zones.

The roughly 300-foot thick Primary Production Aquifer occurs within the upper Merced Formation below the -100-foot clay aquitard (where present) and above the W-clay aquitard, or its equivalent, from the Sunset District through Daly City to Colma. The Primary Production Aquifer is subdivided vertically by discontinuous aquitards, including the X- and Y-clays extending between the Sunset District and Daly City, and an aquitard that separates shallow and deep aquifer zones beneath South San Francisco. The Primary Production Aquifer

becomes overlain by fine-grained Bay Sediments southeast of South San Francisco. The Deep Aquifer is up to 200 feet thick and occurs within the upper Merced Formation beneath the W-clay, or its equivalent, from the Sunset District to Colma.

Groundwater in the vicinity of Lake Merced and north to Golden Gate Park is encountered at relatively shallow depths, ranging from approximately 5 to 60 feet below ground surface (bgs). Lake Merced is incised into the Colma Formation and is in hydraulic continuity with the Shallow Aquifer. Within the pumping depressions of the South Westside Basin, depths to groundwater within the Primary Production and Deep aquifers can exceed 250 feet bgs. Groundwater movement is restricted along the southwestern boundary of the South Westside Basin by a low-permeability boundary formed along the Serra Fault zone.

2.3 Surface Water Hydrology

Lake Merced

Until the early 1900s, Lake Merced was a natural lake fed by local runoff and springflow and drained by a stream discharging from the northwestern end of the lake. The stream flowed to the ocean through the present-day location of the San Francisco Zoo and Sloat Boulevard. The springs were primarily along the eastern side and beneath the southern portion of the lake, resulting in primarily south-to-north flow through the lake.

Today, Lake Merced consists of four lakes (North, East, South, and Impound lakes) and has no channelized inflow or outflow. A narrow channel connects North Lake and East Lake and equalizes their water surface elevations. A conduit between North Lake and South Lake allows water to flow between the lakes when the elevation in either lake is at least approximately 3.35 feet SFCD (14.72 feet NAVD88). When lake levels are below that elevation, these two lakes are separated and typically exhibit different water surface elevations. South Lake and Impound Lake are separated below an elevation of approximately 4.26 feet SFCD (15.63 feet NAVD88) by a levee that contains the Ingleside combined sewer pipeline and serves as the foundation of an elevated pedestrian walkway. Water flows freely beneath the pedestrian walkway and connects both lakes when the level of either lake is above this elevation. Under current and recent conditions, the flow of water through the four lakes is generally north to south.

Beginning with the construction of the Vista Grande Canal and Tunnel by Spring Valley Water Works in 1897, urbanization of the Lake Merced watershed has diverted storm runoff away from the lake to help maintain the lake's water quality. Additionally, urbanization has impeded springflow into the lake as a result of emplaced fill, reduced groundwater recharge to the Shallow Aquifer, and downward hydraulic gradients caused by pumping from the underlying aquifers. As a result, lake levels have become more sensitive to seasonal and climatic variability.

Pine Lake

Pine Lake (also known as Laguna Puerca) is a relatively shallow, 3.4-acre freshwater lake located in the westernmost portion of Stern Grove and Pine Lake Park, about 0.5-mile northeast of Lake Merced. Pine Lake is one of San Francisco's few natural lakes. Similar to Lake Merced, Pine Lake is incised into the upper portion of the Shallow Aquifer.

The San Francisco Recreation & Parks Department (SFRPD) completed an improvement program for Stern Grove and Pine Lake Park in 2007. Since then, lake levels have been maintained at about 31.5 feet SFCD (42.9 feet NAVD88) by augmenting the lake with groundwater pumped from the previously inactive Stern Grove well approximately 1,500 feet east of Pine Lake. According to SFRPD staff, the lake level is maintained by pumping groundwater into the lake for 2 to 3 days in the summer and 1 day in winter. As a result, the recent average lake level is about 4 feet higher than in 2007 and about 7 feet higher than in 2004, with a typical depth of about 11.5 feet.

Golden Gate Park Lakes

Golden Gate Park has 13 small lakes and ponds that were constructed or substantially altered by the park's development. Five of the lakes (Elk Glen, Middle, South, Mallard, and North lakes) are believed to have been natural and fed by groundwater, whereas the other lakes and ponds may or may not have coincided with pre-existing natural surface water features. The lake levels are currently maintained by groundwater pumped from SFGW project wells until deliveries from the Westside Recycled Water Project begin.

3.0 HISTORICAL AND RECENT GROUNDWATER USE

Groundwater pumped from the Westside Basin has been used as a water supply since at least the early 1900s (Bartell, 1913a). Table 1 and Figure 3 summarize the historical record of municipal groundwater pumping from the Westside Basin since 1949. Table 2 and Figure 4 summarize the record of groundwater pumping for park, golf course, and cemetery irrigation. A brief summary of municipal and irrigation water use follows.

San Francisco

By the early 1900s, wells drilled to the north, east, and south of Lake Merced were supplying irrigation and potable water pumped from the Westside Basin. The Spring Valley Water Company operated two wells near the outlet of Lake Merced that pumped about 0.1 mgd, or about 100 acre-feet per year (afy) (Bartell, 1913b). Total groundwater pumping from the Lake Merced area, the Sunset District, and Golden Gate Park averaged about 0.4 mgd (400 to 500 afy). In addition, approximately 3 mgd were diverted from spring-fed Lake Merced for potable and emergency use until 1932.

During the early 1930s the San Francisco Board of Public Works installed production wells with a combined capacity of about 6.5 mgd (7,300 afy) in the Sunset District to serve as a drought emergency water supply (San Francisco Water Department [SFWD], 1994). These wells produced an average of 5 mgd (5,600 afy) between 1930 and 1935. Use of these wells ended once Tuolumne River water from Hetch Hetchy Reservoir became available to San Francisco in the mid-1930s (SFWD, 1961).

As described in Section 1.1, SFPUC installed four new municipal water supply wells from 2007 to 2011 as part of the SFGW Project, and in 2020 completed the retrofit of two Golden Gate Park irrigation wells for either irrigation or municipal potable use. Production from the Lake Merced well began in 2017; production from the South Sunset, West Sunset, and Golden Gate Central wells began in 2018; and production from the South Windmill and North Lake wells began in 2021. The SFGW Project contributed approximately 72 af (0.06 mgd) to the municipal water supply in 2024. The three SFGW wells in Golden Gate Park will continue to provide about 1.2 mgd for park irrigation until a reliable recycled water supply is available.

Daly City Service Area

Local groundwater use by Daly City increased from about 1,500 afy in 1950 to 5,000 afy in 1970 coinciding with post-war development (Kirker, Chapman & Associates, 1972). Between 1970 and 2014, Daly City's groundwater use ranged from approximately 3,000 to 5,000 afy, except during the 2002-2005 Pilot In-Lieu Recharge Demonstration Program (Section 1.1) when pumping was reduced to approximately 700 to 2,700 afy. Daly City pumping declined

substantially during the initial (2016-2021) and current (since July 2023) GSR project storage periods as a result of SFPUC in-lieu surface water deliveries. During the GSR project hold period from July 2021 through June 2023, Daly City resumed pumping up to its designated quantity of 2.2 mgd (reduced provisionally from 3.43 mgd because of treatment limitations). Daly City currently has the following six production wells, although not all operated in 2024: Jefferson, Junipero Serra, Sullivan, Vale, DC-4, and Westlake. Daly City produced 633 af (0.56 mgd) of groundwater for municipal use in 2024.

South San Francisco District

Municipal groundwater pumping by Cal Water for its South San Francisco District declined from about 2,200 afy in the 1950s to approximately 1,100 afy in 2002 (Figure 3). From 2003 to 2008, groundwater pumping in South San Francisco was temporarily discontinued as part of the Pilot In-Lieu Recharge Demonstration Program, during which SFPUC surface water supplies temporarily replaced the use of groundwater. From 2008 to 2015, groundwater pumping by Cal Water for South San Francisco steadily increased from approximately 200 to 1,300 afy. Cal Water groundwater pumping declined substantially during the initial (2016-2021) and current (since July 2023) GSR storage periods as a result of SFPUC in-lieu surface water deliveries. During the GSR project hold period from July 2021 through June 2023, Cal Water had sufficient well capacity to pump up to its designated quantity of 1.37 mgd but was unable to during a treatment plant upgrade. Cal Water currently has six production wells: SS-19 through SS-24. Cal Water produced 195 af (0.17 mgd) of groundwater for municipal use in South San Francisco in 2024.

San Bruno Service Area

Municipal groundwater pumping by San Bruno was approximately 2,000 afy from the 1950s through the mid-1980s, then varied between 1,000 and 3,000 afy through 2002 (Figure 3). From 2002 to 2005, San Bruno reduced its pumping to approximately 550 to 1,200 afy during the Pilot In-Lieu Recharge Demonstration Program, after which its pumping ranged between approximately 1,600 to 2,400 afy through 2015. San Bruno's groundwater pumping declined substantially during the initial (2016-2021) and current (since July 2023) GSR storage periods as a result of SFPUC in-lieu surface water deliveries. During the GSR project hold period from July 2021 through June 2023, San Bruno resumed pumping up to its designated quantity of 2.1 mgd. San Bruno currently has four production wells, SB-16, -17, -18, and -20, all of which operated in 2024. San Bruno produced 460 af (0.41 mgd) of groundwater for municipal use in 2024.

Irrigation and Other Non-Potable Use

Westside Basin groundwater use for irrigation and other non-potable uses at Golden Gate Park, the San Francisco Zoo, Lake Merced area golf courses, and Colma cemeteries is summarized

below and in Tables 1 and 2 and Figure 4. The estimated annual groundwater use by each of these is discussed in Sections 4.6 through 4.9.

- **Golden Gate Park**: Golden Gate Park historically and currently uses groundwater pumped from wells within the park for irrigation and maintaining lake levels. Three wells constructed or refurbished by the SFGW project have supplied the park's water needs since 2019: South Windmill Replacement well, North Lake well, and Golden Gate Central well. These wells will be operated for potable use once recycled water is available for park use. Groundwater pumping for Golden Gate Park was 1,391 af (1.24 mgd) in 2024.

- **San Francisco Zoo**: The San Francisco Zoo historically and currently uses groundwater for irrigation and various zoo exhibits. Its groundwater pumping has been metered since 2005. The San Francisco Zoo well is operated and maintained by SFRPD. SFPUC regularly records the flowmeter readings from the well. The Zoo produced 184 af (0.16 mgd) of groundwater for its use in 2024. The SFPUC is constructing the Westside Recycled Water Treatment Facility at its Oceanside Wastewater Treatment Plant to deliver recycled water to various locations on the Westside of the City including the San Francisco Zoo. The San Francisco Zoo Recycled Water Project will construct a new recycled water pipeline and convert the Zoo's current groundwater supply and distribution system to recycled water. Supplying this demand with recycled water will offset close to 100% of Zoo's annual groundwater use and will conserve high quality groundwater to supplement potable water supplies in San Francisco.

- **Golf Courses:** There are seven golf courses in the Westside Basin that have used groundwater for irrigation: Harding Park Golf Course, Lake Merced Golf Club, Olympic Club Golf Course, San Francisco Golf Club, California Golf Club, Golden Gate Park Golf Course, and Green Hills Country Club. Following its completion in 2004, the NSMCSD Wastewater Treatment Plant began serving recycled water for irrigating three golf courses (Lake Merced Golf Club, Olympic Club Golf Course, and San Francisco Golf Club). In 2012, recycled water was made available to Harding Park from NSMCSD for irrigation. The Golden Gate Park Golf Course will begin receiving recycled water from the Westside Recycled Water Project sometime in 2027.

  Metered groundwater pumping and recycled water use are reported by Lake Merced Golf Club, Olympic Club Golf Course, and San Francisco Golf Club (Table 2). The estimates of annual groundwater use presented in Table 2 and Figure 4 for the California Golf Club are from LSCE (2005) for 1960-2005, Carollo Engineers (2008) for 2006-2010, and HydroFocus (2011) for 2011-present. Groundwater pumping for golf course irrigation was approximately 1,058 af (0.94 mgd) in 2024 (excluding irrigation for the Golden Gate Park Golf Course, which is included with the park's total groundwater use).

- **Cemeteries**: The Westside Basin includes about 600 acres of cemetery property within and near Colma that historically and currently have pumped groundwater for irrigation. Estimates of cemetery annual groundwater use presented in Table 1 and Figure 4 are from LSCE (2005) for 1960-2005, Carollo Engineers (2008) for 2006-2010, and Hydro focus (2011) for 2011-present. Golden Gate National Cemetery has not been irrigated with groundwater since the 1960s (Boone, Cook and Associates, 1987). Total groundwater pumping for cemetery irrigation based on these estimates was approximately 859 af (0.77 mgd) in 2024.

4.0 2024 GROUNDWATER USE

In 2024, groundwater pumping in the Westside Basin supplied municipal water for Daly City, South San Francisco (Cal Water), San Bruno, and San Francisco. Additionally, non-potable groundwater was pumped for irrigation and other uses by Golden Gate Park, Pine Lake, San Francisco Zoo, golf courses, and cemeteries. Westside Basin groundwater pumping is described below and summarized in Tables 1 and 2 and Figures 3 and 4.

4.1 City of Daly City

Groundwater pumping by Daly City for municipal use during CY 2024 totaled 633 af (0.56 mgd).

4.2 California Water Service Company (South San Francisco District)

Groundwater pumping by Cal Water for municipal use during CY 2024 totaled 195 af (0.17 mgd).

4.3 City of San Bruno

Groundwater pumping by San Bruno for municipal use during CY 2024 totaled 460 af (0.41 mgd).

4.4 City and County of San Francisco

Groundwater pumping by SFPUC for municipal use during CY 2024 totaled 72 af (0.06 mgd).

4.5 Regional Groundwater Storage and Recovery Project

Groundwater pumping by the GSR project for testing purposes during CY 2024 totaled 5 af (0.005 mgd).

4.6 Golden Gate Park and Pine Lake

Metered groundwater pumping for irrigation and other non-potable uses in Golden Gate Park during CY 2024 totaled 1,391 af (1.24 mgd).

In addition, SFRPD estimates that approximately 5 afy of groundwater pumping from the Stern Grove well is needed to maintain the level of Pine Lake.

4.7 San Francisco Zoo

Metered groundwater pumping at the San Francisco Zoo during CY 2024 totaled 184 af (0.16 mgd).

4.8 Golf Courses

Metered groundwater pumping by Lake Merced Golf Club, Olympic Club Golf Course, and San Francisco Golf Club during CY 2024 totaled approximately 687 af (0.61 mgd) [Table 1 and 2]. Recycled water from the North San Mateo County Sanitation District was largely unavailable for golf course irrigation during 2024 due to system shut down and maintenance. Because of the limited availability of recycled water, groundwater pumping for Lake Merced area golf course irrigation in 2024 was about 450 percent greater than when a sufficient supply of recycled water existed prior to 2018.

Groundwater pumping by California Golf Club and Green Hills Country Club is unmetered but estimated to average 237 and 134 afy (0.21 and 0.12 mgd), respectively (HydroFocus, 2011; Table 1).

Total groundwater use for irrigating Westside Basin golf courses in 2024 is estimated to be 1,058 af (0.94 mgd).

4.9 Cemeteries

Groundwater pumping for irrigating the Colma cemeteries is unmetered but estimated to average 859 afy (0.77 mgd) [HydroFocus, 2011; Table 1].

4.10 Summary

As summarized in Table 1, groundwater production from the Westside Basin totaled approximately 4,864 af (4.33 mgd) in 2024. Municipal groundwater use by San Francisco, Daly City, San Bruno, and California Water Service Company (South San Francisco) was 1,288 af (1.15 mgd) in 2024. The three metered golf clubs in the Lake Merced area used 687 af (0.61 mgd) of pumped groundwater and 278 af (0.24 mgd) of recycled water during 2024.

The total metered use of Westside Basin groundwater in 2024 was approximately 3,629 af (3.23 mgd). Metered usage includes municipal pumping for potable use by San Francisco, Daly City, San Bruno, and Cal Water (South San Francisco); and pumping for non-potable use by Golden Gate Park, San Francisco Zoo, Lake Merced Golf Club, Olympic Club Golf Course, and San Francisco Golf Club. Average annual non-metered groundwater pumping in the Westside Basin is estimated to be approximately 1,235 afy (1.10 mgd) [HydroFocus, 2011] and includes California Golf Club, Green Hills Country Club, Pine Lake filling, and cemeteries.

This report does not estimate groundwater pumping for domestic use, remediation, or construction dewatering. These uses may be assumed to be relatively small compared to most of the uses inventoried above.

5.0 MONITORING PROGRAM OVERVIEW

The Westside Basin monitoring program consists of quarterly or more frequent groundwater and lake level gauging and annual, semi-annual (spring and fall), or more frequent groundwater sampling for selected water quality parameters. These data support an ongoing evaluation of general groundwater conditions and water quality within the aquifer system, with particular emphasis on lake-aquifer interactions and the potential for saltwater intrusion. Program data extend back as far as 1996 and provide a baseline for evaluating the implementation of SFGW, GSR, and other projects.

The groundwater elevation monitoring network consists of 107 individual wells at 43 locations (Table 3, Figure 5). Five are inactive production wells and the remainder are dedicated monitoring wells. The monitored wells are subdivided into coastal, lake-aquifer, Bay side, and general North and South Westside Basin monitoring networks. Table 4 lists a subset of 43 of these wells used to construct groundwater elevation contour maps for the Shallow and Primary Production aquifers. As shown in Table 5, measurements are collected manually on a quarterly or semi-annual basis for some wells, and continually using electronic pressure transducers and data loggers for other wells. Groundwater elevation hydrographs relative to the NAVD88 datum are provided for selected wells in Figures 11 through 14 and 16 through 21, and for all monitored wells in Appendix A. The monitoring program also includes continuous monitoring of the water surface elevation of Lake Merced's South Lake using a pressure transducer installed in a stilling well.

The groundwater quality monitoring network consists of 85 individual wells at 36 locations (Table 6, Figure 6). All are dedicated monitoring wells except for 13 that are active or occasionally active production wells. These wells are subdivided into separate coastal, Bay side, and general basin monitoring networks. Samples are collected annually and semi-annually as indicated in Table 7. Recent and historical groundwater quality monitoring results are presented and discussed in Section 7. The laboratory analytical reports are provided in Appendix B.

SFPUC’s Water Quality Division (WQD) has led the fieldwork for the groundwater quality monitoring program since fall 2014. WQD's sampling protocols and field procedures for this program are presented in the *Westside Basin Groundwater Monitoring Manual of Procedures* (SFPUC, 2014; Appendix C).

Samples collected to assess general groundwater quality are analyzed for some or all of the following constituents:

- General minerals: total alkalinity, calcium, magnesium, sodium, potassium, chloride, and sulfate.
- Nitrate.

- General parameters: specific conductance, pH, total dissolved solids (TDS), and hardness (as $CaCO_3$).

6.0 GROUNDWATER AND LAKE LEVEL MONITORING

Figures 7 and 8 present 2024 spring and fall estimated groundwater elevation contours for the Shallow Aquifer, and Figures 9 and 10 present 2024 spring and fall estimated groundwater elevation contours for the Primary Production Aquifer. The estimated groundwater elevation contours are based on 2024 groundwater level data for the monitoring wells listed in Table 4.

The following sections discuss the groundwater level monitoring results for the coastal, lake-aquifer, South Westside Basin, and Bay side monitoring networks.

6.1 Coastal Groundwater Level Monitoring

The coastal groundwater level monitoring network consists of 27 individual wells at 12 locations along the coastal zone from Golden Gate Park south to Daly City (Table 3, Figure 5). Monitoring well clusters are located in western Golden Gate Park; along the Old Great Highway near Kirkham, Ortega, and Taraval streets; and at San Francisco Zoo, Fort Funston, and Thornton Beach.

Figures 11, 12, 13, and 14 present groundwater elevation hydrographs for the period of record for the Kirkham, Ortega, Taraval, and Zoo monitoring well clusters, respectively. These plots include chloride concentrations monitored at these same wells as discussed in Section 7.1.

Groundwater elevations in both the Shallow and Primary Production Aquifer coastal monitoring wells were above sea level in 2024.

Table 8 compares 2023 and 2024 annual low groundwater levels for selected coastal monitoring wells. Compared to 2023, annual low groundwater levels in the Shallow Aquifer were higher in 2024 at monitoring wells South Windmill MW57, South Windmill MW140, Kirkham MW130, and Ortega MW125. The annual low groundwater level in the remaining Shallow Aquifer well (monitoring well Taraval MW145) was lower in 2024 compared to 2023. Annual high groundwater levels in the Shallow Aquifer during 2024 were generally the same as in 2023.

Annual low groundwater levels in the Primary Production Aquifer were higher in 2024 compared to 2023 at monitoring wells Kirkham MW255, Kirkham MW385, Kirkham MW435, Ortega MW265, Ortega MW400, Ortega MW475, Zoo MW275, and Zoo MW450. Annual low groundwater levels in the remaining Primary Production Aquifer wells (monitoring wells Taraval MW240 and Taraval MW400) were lower in 2024 compared to 2023. Annual low groundwater levels monitored in the Deep Aquifer by Taraval MW530 (Figure 13d) and Zoo MW565 (Figure 14c) increased slightly from the prior year and levels remain well above their 2013 annual lows. The 2013 annual low is used for comparison purposes because groundwater levels were at a 14-year low that year prior to the recent GSR storage period.

Groundwater elevations in monitoring wells SF-1 and SWM-3 remained above sea level during 2024 and were similar to the prior year (see hydrographs in Appendix A). Groundwater elevations in monitoring well South Windmill MW140 were slightly below sea level during the third quarter of 2023, increased to above sea level as of the fourth quarter of 2023, and have remained above sea level since. Water level declines in these wells from 2020 to 2021 coincided with resumed pumping from the nearby South Windmill SFGW well beginning in June 2020 after 18 months of in-operation during refurbishment.

Groundwater elevations measured in monitoring wells at Fort Funston and Thornton Beach are generally stable and consistently above sea level (Appendix A). Groundwater conditions at these locations appear to be hydraulically separate from the Westside Basin to the east as a result of low permeability, deformed geologic strata along the Serra fault thrust zone (LSCE, 2004).

6.2 Lake Merced and Lake-Aquifer Level Monitoring

The level of Lake Merced is monitored continuously at South Lake using a pressure transducer installed in a stilling well. Groundwater levels surrounding the lake complex are monitored with a network of 20 dedicated monitoring wells at 10 locations using a combination of continuous and periodic monitoring (Table 3, Figure 5).

SFPUC is working with local stakeholders and regulatory agencies to implement a multi-pronged approach to manage lake levels. This includes adding regional system water to stabilize lake levels, last done in 2005, and establishing an interim target lake level elevation range between 14 and 16 feet NAVD88.

Figure 15 presents the 1997-2024 lake level hydrograph for Lake Merced's South Lake. South Lake water surface elevations ranged from approximately 17.51 to 18.91 feet NAVD88 in 2024 and were above the established interim lake level range of 14 to 16 feet NAVD88. Seasonal high and low lake levels were higher in 2024 than 2023. The 2024 seasonal low level was approximately 6 feet above the 2002 seasonal low. The 2002 seasonal low is used for comparison because lake levels were then at a 24-year low prior to the GSR Pilot In-Lieu Recharge Demonstration Program and the availability of recycled water for irrigating Lake Merced Area golf courses. South and Impound lakes were interconnected during 2024 because the level of South Lake did not fall below 15.63 feet NAVD88 (4.26 feet SFCD).

Groundwater elevations in the Shallow Aquifer surrounding Lake Merced ranged from 17.98 feet NAVD88 in monitoring well LMMW-1S to 29.49 feet NAVD88 in LMMW-7SS during spring 2024.During fall 2024, groundwater elevations ranged from 17.44 feet NAVD88 in LMMW-1S to 29.29 feet NAVD88 in LMMW-7SS.

Groundwater elevations in the Primary Production Aquifer in the vicinity of Lake Merced ranged from 5.09 feet NAVD88 in monitoring well LMMW-3D to 17.16 feet NAVD88 in LMMW-2D during spring 2024. During fall 2024, groundwater elevations in the Primary Production Aquifer in the vicinity of Lake Merced ranged from 4.10 feet NAVD88 in LMMW-3D to 16.42 feet NAVD88 in LMMW-2D.

Figure 16 presents groundwater level hydrographs for a pair of monitoring wells near the western shore of South Lake, one screened in the Shallow Aquifer (LMMW-1S) and one in the Primary Production Aquifer (LMMW-1D). Groundwater levels measured in both wells. Groundwater elevations in LMMW-1D began a rising trend in 2016, surpassing high levels observed in 2011, then declined from 2019 through 2021 coinciding with increased local pumping, and then increased with the start of the second GSR project storage period in July 2023. Recycled water was unavailable for irrigating Lake Merced area golf courses for much of 2024, resulting in increased local pumping and a downward influence on water levels. However, water levels in both monitoring wells reached their highest levels since recordkeeping began, with recent recoveries following the start of a second GSR project storage period in July 2023.

Groundwater levels in the Primary Production Aquifer measured in monitoring well LMMW-3D near the southwestern shore of Impound Lake (see hydrograph in Appendix A) had been rising since 2016, coinciding with the start of the 2016-2021 GSR storage period. Seasonal highs at this location have exceeded sea level each year since 2017. A groundwater level decline began in 2019 and continued through 2021, coinciding with (a) increased pumping locally by golf courses while recycled water from NSMCSD was largely unavailable from approximately September 2019 to September 2020 and (b) the resumption of pumping by GSR partner agencies during the July 2021 to June 2023 GSR project hold period. Despite increased groundwater use for golf course irrigation in 2024, groundwater levels rose as a result of the ongoing second GSR storage period which began on July 1, 2023.

6.3 South Westside Basin Groundwater Level Monitoring

The groundwater level monitoring network in the South Westside Basin consists of 58 wells at 20 locations along the Basin axis between Daly City and Burlingame (Table 3, Figure 5). One of these wells (LMMW-6D) also is included in the Lake-Aquifer monitoring network, and seven of these wells at three locations comprise the Bay side monitoring program described in Section 6.4.

Excluding wells in the Bay side program discussed below, this network consists of ten monitoring well clusters and one single monitoring well installed by SFPUC from 2007 to 2012 (Kennedy/Jenks, 2009, 2010a, 2012), one monitoring well cluster installed by San Bruno (SB-21), and five inactive production wells (DC-1, DC-8, SS 1-02, SS 1-20, and SB-12), located within Daly City, Colma, South San Francisco, San Bruno, and Millbrae. Monitoring records for nine of these wells extend back to 2000. Prior to fall 2015, the network included an additional

monitoring well cluster (CUP-3A) that was destroyed to accommodate the construction of a GSR production well.

Figures 17, 18, and 19 present groundwater level hydrographs for monitoring well DC-1 Westlake in Daly City, SS1-02 in South San Francisco, and SB-12 in San Bruno. Appendix A provides hydrographs for all network wells.

Groundwater levels in all South Westside Basin monitoring wells representative of the Primary Production Aquifer were below sea level in 2024, ranging from −2.16 (LMMW-6D) to −150.75 (SB-12 Elm Avenue) feet NAVD88 during the spring monitoring event, and from −2.32 feet to −150.06 feet NAVD88 for these same two wells during the fall monitoring event.

Annual high and low groundwater levels in the Primary Production Aquifer generally increased in 2024 compared to 2023 throughout the South Westside Basin, largely due to an ongoing GSR project storage period which began in July 2023.

Groundwater levels in shallower zones rose or were stable within the South Westside Basin.

6.4 Bay Side Groundwater Level Monitoring

San Bruno has conducted groundwater level monitoring since 2006 at two well clusters along the San Francisco Bay margin (Bay side) of the Westside Basin, one in the City of Burlingame (Burlingame-S, -M, and -D) and the other at San Francisco International Airport (SFO-S and SFO-D; Figure 5; WRIME, 2007a). San Bruno monitors these wells on a semi-annual basis in accordance with the *San Bruno Saltwater Intrusion Monitoring Wells: Sampling Plan* (WRIME, 2007b). Figures 20 and 21 present groundwater level hydrographs for the Burlingame and SFO monitoring well clusters, respectively.

In March 2024, groundwater elevations in the Burlingame-S, -M, and -D monitoring wells were 2.67, -0.70, and -5.33 feet NAVD88, respectively, and groundwater elevations in SFO-S and SFO-D were 2.08 and -23.69 feet NAVD88, respectively. In August 2024, groundwater elevations in Burlingame-S, -M, and -D were 2.62, -0.52, and -10.16 feet NAVD88, respectively, and groundwater elevations in SFO-S and SFO-D were 2.14 and -23.52 feet NAVD88, respectively. Consistent with previous years, 2024 groundwater levels in SFO-S were above sea level and levels in SFO-D were below sea level. Levels in SFO-D increased approximately 8 feet from 2016 to early 2021 and have fluctuated since. Levels in Burlingame-S and -M have fluctuated within 4 feet of sea level since the wells were installed in 2006. Levels in Burlingame-D have consistently been below sea level since installation and exhibit a gradual decline over the entirety of the dataset. In August 2024, the groundwater elevation in Burlingame-D reached an all-time low of -10.16 feet NAVD88.

7.0 GROUNDWATER QUALITY MONITORING

Wells included in the groundwater quality monitoring network are listed in Table 6 and located on the map in Figure 6. The network consists of 72 dedicated monitoring wells clustered at 27 locations and 13 production wells. These wells are subdivided into four separate groups: coastal; Sunset District and Lake Merced area; South Westside Basin; and San Francisco Bay margin (Bay side). Samples are typically collected annually and semi-annually as indicated in Table 7.

Water quality monitoring results for sampled raw (untreated) groundwater are presented in Tables 9 and 10 for the period of record in comparison to the maximum contaminant level (MCL) and secondary maximum contaminant levels (SMCL) of each water quality constituent or parameter, if established. Primary MCLs are regulatory benchmarks for drinking water developed to protect human health. SMCLs are benchmarks developed to protect the aesthetic quality of drinking water (e.g., taste, odor, and appearance). Although the monitoring well water quality results are compared to drinking water standards, many of the monitoring wells are not representative of the locations or depths of existing potable production wells. Furthermore, much of the groundwater produced for potable use is blended with surface water prior to being distributed. Laboratory analytical reports are provided in Appendix B.

7.1 Coastal Groundwater Quality Monitoring

The coastal groundwater quality monitoring network consists of 21 wells at 9 locations along the coastal zone from Golden Gate Park south to San Francisco Zoo (Table 6, Figure 6). Monitoring well clusters are located in western Golden Gate Park; along the Old Great Highway near Kirkham, Ortega, and Taraval streets; and at the San Francisco Zoo. The network is configured to detect indications of potential saltwater intrusion along the Pacific Ocean coast. Groundwater samples from these wells are analyzed for specific conductance, TDS, and chloride. Table 9 presents groundwater quality monitoring results for the coastal network. Measured chloride concentrations are plotted on the groundwater level hydrographs provided in Figures 11 through 16.

In 2024, chloride concentrations in groundwater samples collected from the coastal monitoring wells were below the recommended SMCL of 250 milligrams per liter (mg/L) and ranged from 23.2 mg/L (Ortega MW400, fall) to 189 mg/L (USGS South Windmill MW57, fall). Chloride concentrations tend to be inversely correlated with depth (higher concentrations in wells screened in shallow zones of the aquifer and lower concentrations in wells screened in deep zones of the aquifer). For example, chloride concentrations in the Kirkham, Ortega, and Taraval monitoring well clusters were as follows:

- Coastal monitoring wells screened between 100 and 140 feet bgs (Kirkham MW130, Ortega MW125, and Taraval MW145) had chloride concentrations between 31.4 mg/L and 43.4 mg/L.

- Coastal monitoring wells screened between 180 and 260 feet bgs (Kirkham MW255, Ortega MW265, and Taraval MW240) had chloride concentrations between 24.5 mg/L and 38.3 mg/L.

- Coastal monitoring wells screened between 330 and 390 feet bgs (Kirkham MW385, Ortega MW400, and Taraval MW400) had chloride concentrations between 23.2 mg/L and 35.5 mg/L.

- Coastal monitoring wells screened between 420 and 520 feet bgs (Kirkham MW435, Ortega MW475, and Taraval MW530) had chloride concentrations between 24.6 mg/L and 29 mg/L.

Chloride and TDS concentrations and values of specific conductance for the coastal monitoring wells were generally within historical ranges during 2024.

7.2 Sunset District and Lake Merced Area Groundwater Quality Monitoring

The groundwater quality monitoring network in the Sunset District and Lake Merced area consists of 7 individual wells at 4 separate locations (Table 6, Figure 6). Groundwater samples from these wells are analyzed for total alkalinity, pH, specific conductance, TDS, hardness, calcium, magnesium, sodium, potassium, chloride, sulfate, and nitrate (as nitrate). Table 10 presents historical and recent groundwater quality monitoring results for these wells.

Groundwater chloride concentrations have been elevated in samples from monitoring well LMMW-1S since the well was first sampled in 2009. The spring and fall 2024 samples both had chloride concentrations of 449 mg/L. These results exceeded the recommended SMCL of 250 mg/L, but were below the fall 2023 sampling result of 574 mg/L.

Groundwater sampled from LMMW-1S have fluctuated above and below the MCL of 45 mg/L for nitrate (as nitrate) since monitoring began in 2004. Nitrate (as nitrate) concentrations have increased from 32.1 mg/L in spring 2023 to 163 and 179 mg/L for the spring and fall samples, respectively; the fall result was a new maximum for this well. Groundwater sampled from LMMW-1D has fluctuated above and below the MCL for nitrate (as nitrate) since 2010; 2024 concentrations were 51.5 mg/L and 54.1 mg/L in the spring and fall samples, respectively.

Among the remaining wells in this group, 2024 chloride concentrations ranged between 45.1 mg/L (West Sunset Playground monitoring well, spring) and 254 mg/L (LMMW-2S, spring) with concentrations in the latter well exceeding the recommended SMCL of 250 mg/L. Nitrate (as nitrate) concentrations were below the MCL and ranged from below the laboratory detection

limit (West Sunset Playground monitoring well, LMMW-3S, and LMMW-3D, spring and fall) to 36.2 mg/L (LMMW-2S, spring).

7.3 South Westside Basin Groundwater Quality Monitoring

The groundwater quality monitoring network in the South Westside Basin consists of 52 wells at 21 locations, 12 of which are active or occasionally active production wells (Table 6, Figure 6). Records for the dedicated monitoring wells extend back to the years they were installed, 2003-2012, whereas some production well records extend back to the mid-1970s for Daly City, the late 1950s for Cal Water, and 2000 for San Bruno. Table 10 presents historical and current groundwater quality monitoring results for these wells. Groundwater samples from these wells are analyzed for total alkalinity, pH, specific conductance, TDS, hardness, calcium, magnesium, sodium, potassium, chloride, sulfate, and nitrate (as nitrate).

Five wells at two locations comprise the Bay side monitoring program and are discussed separately in Section 7.3.5. Groundwater samples from these wells are analyzed for total alkalinity, pH, specific conductance, TDS, hardness, calcium, magnesium, sodium, potassium, chloride, sulfate, nitrate (as nitrate), bromide, boron, and orthophosphate.

During 2024, chloride concentrations in groundwater sampled from the South Westside Basin (excluding the Bay side monitoring wells) were below the recommended SMCL and ranged from 36.7 mg/L (CUP-31A MW480, spring) to 244 mg/L (SS 1-20, spring). TDS concentrations ranged from 241 mg/L (CUP-23 MW440, spring) to a maximum of 1,099 mg/L (CUP-44-1 MW580, fall), above the recommended SMCL of 500 mg/L. Nitrate (as nitrate) concentrations in groundwater exceeded the MCL of 45 mg/L in samples collected from monitoring wells Park Plaza MW195 (fall only), CUP-36-1 MW160 (fall only), and CUP-23 MW600 (spring and fall); detected concentrations ranged from 0.36 mg/L (SB-16, spring) to 96.4 mg/L (CUP-23 MW600, fall). Figure 22 is a plot of nitrate concentrations for six production wells monitored in the South Westside Basin.

The following sections discuss the results of groundwater quality monitoring in the Daly City, Colma, South San Francisco, San Bruno, and Millbrae areas.

7.3.1 Daly City

During 2024, detected concentrations of nitrate (as nitrate) in groundwater sampled from wells in the Daly City area ranged from below the laboratory detection limit to 49.2mg/L for well Park Plaza MW195 (fall, Table 10), above the MCL of 45 mg/L.

Figure 23 presents time-series plots of chloride and TDS concentrations and specific conductance in groundwater sampled from the DC-2 Westlake production well. TDS concentrations were generally above the recommended SMCL of 500 mg/L in samples collected from 2001-2014, after which they were below the SMCL through 2021, before recently climbing

above the SMCL from 2022-2023. Chloride concentrations ranged from 51.6 mg/L (DC-Junipero Serra, spring) to 185 mg/L (CUP-10A-MW710, fall), below the recommended SMCL of 250 mg/L. Production wells DC-4 and Vale were out of service in 2024 and could not be sampled.

7.3.2 Colma

Groundwater pumped in the Colma area is used for cemetery irrigation. Currently, groundwater is not pumped for municipal use in Colma. As part of the proposed GSR project, monitoring well clusters CUP-18 and CUP-19 were installed in the Colma area. During 2024, TDS concentrations ranged between 410 mg/L (CUP-19 MW690, fall) and 771 mg/L (CUP-18 MW595, fall), the latter of which is above the recommended SMCL of 500 mg/L. Chloride concentrations ranged from 93.9 mg/L (CUP-19 MW690, spring) to 197 mg/L (CUP-18 MW595, fall), below the recommended SMCL of 250 mg/L. Detected nitrate (as nitrate) concentrations were below the primary MCL of 45 mg/L and ranged from 1.6 mg/L (CUP-18 MW595, fall) to 36.6 mg/L (CUP-19 MW690, spring) (Table 10).

7.3.3 South San Francisco

During 2024, wells sampled in the South San Francisco area had TDS concentrations ranging from 241 mg/L (CUP-23 MW440, spring) to 977 mg/L (CUP-31A MW595, fall), with 14 of 24 wells above the recommended SMCL of 500 mg/L during the spring event, and with 10 of 19 wells above the recommended SMCL during the fall event. Chloride concentrations ranged from 36.7 mg/L (CUP-31A MW480, spring) to 244 mg/L (SS1-20, spring), and were below the recommended SMCL of 250 mg/L (Table 10). Detected nitrate (as nitrate) concentrations ranged from 1.0 mg/L (CUP-36-1 MW585, spring) to 96.4 mg/L (CUP-23 MW600, fall), which exceeds the MCL of 45 mg/L. Groundwater sampled from CUP-23 MW600 first exceeded the MCL for nitrate in 2015 and continued to do so through 2024.

Figure 24 presents time-series plots of chloride, TDS, and specific conductance for groundwater sampled from Cal Water well SS1-21. TDS concentrations and specific conductance have consistently exceeded the recommended SMCLs.

7.3.4 San Bruno and Millbrae

During 2024, groundwater quality in the San Bruno and Millbrae areas was monitored in the CUP-44-1 nested well group, monitoring well MW-M1, and three San Bruno production wells (SB-16, -17, and -18). TDS concentrations ranged from 257 mg/L (MW-M1, spring) to 1,099 mg/L (CUP-44-1 MW580, fall), with each of the four CUP-44-1 nested wells (MW190, MW300, MW460, and MW580) above the recommended SMCL of 500 mg/L (spring and fall). Detected chloride concentrations were below the recommended SMCL of 250 mg/L and ranged from 37 mg/L (MW-M1, spring) to 195 mg/L (CUP-44-1 MW580, fall). Detected nitrate (as nitrate) concentrations were below the primary MCL of 45 mg/L and ranged from 0.36 mg/L (SB-16, spring) to 26.1 mg/L (CUP-44-1 MW190, spring).

Figure 25 presents a time-series plot for San Bruno production well SB-20 (Lions Field Park). Production well SB-20 was out of service in 2024 and could not be sampled. Chloride, TDS, and specific conductance have been consistently below their respective SMCLs in this well since 2004.

7.3.5 Bay Side

As part of the City of San Bruno's Bay side monitoring program, the SFO and Burlingame well clusters were sampled in March and August 2024 (Table 10). Figures 20 and 21 provide plots of 2024 and historical chloride concentrations for the Burlingame and SFO wells superimposed on their respective 2006-2024 groundwater level hydrographs.

During the 2024 sampling events, chloride concentrations exceeded the upper SMCL of 500 mg/L in groundwater samples from Bay side monitoring wells SFO-S (11,000 mg/L spring and 10,000 mg/L fall), SFO-D (1,300 mg/L, fall), and Burlingame-S (1,200 mg/L spring and 1,100 mg/L fall). Chloride concentrations at Burlingame-M (17 mg/L spring and 100 mg/L fall) and Burlingame-D (20 mg/L spring and 74 mg/L fall) were below the recommended SMCL of 250 mg/L. Nitrate (as nitrate) was detected in the spring groundwater sample from monitoring well Burlingame-M at a concentration below the MCL (1.58 mg/L). Nitrate was not detected in the remaining Bay side monitoring wells sampled in either the spring or fall of 2024.

8.0 SUMMARY OF PROPOSED ACTIVITIES FOR 2025

8.1 Groundwater Monitoring Program

In 2025, SFPUC, in cooperation with its partner agencies, will assess general groundwater conditions throughout the Westside Basin through continued implementation of the groundwater monitoring and reporting program documented in this report. This program remains consistent with recommendations made in the report on hydrogeologic conditions in 2005 (LSCE, 2006) and will continue to be updated and evaluated.

8.2 Coastal Groundwater Monitoring

SFPUC will ensure groundwater measurements are recorded daily to quarterly (Table 5) and conduct semi-annual (spring and fall) sampling of coastal groundwater quality (TDS, specific conductance, and chloride; Table 7).

8.3 Lake Merced

SFPUC will continue the Lake Merced groundwater and lake-level monitoring program in accordance with the recommendations of the 2005 annual report. Groundwater measurements will be recorded daily to quarterly, consistent with the current program (Table 5).

8.4 CASGEM

SFPUC and the South Westside Basin Voluntary Cooperative Groundwater Monitoring Association (SWBVCGMA) will continue to participate in the CASGEM Program. SFPUC will continue collecting groundwater elevations for the North Westside Basin and reporting these data to DWR. SWBVCGMA will continue collecting South Westside Basin groundwater elevations and reporting these data to DWR.

8.5 General Basin Conditions and GSR Project

SFPUC will continue to monitor water levels and general water quality of key wells in the Westside Basin (Tables 5 and 7). The general water quality and water level monitoring network will document the Basin's response to initial testing and operation of the GSR project.

8.6 Bay Side Monitoring

The City of San Bruno will continue to monitor its Bay side monitoring wells in the southeastern portion of the Westside Basin on a semi-annual basis, in general accordance with the Westside Basin monitoring program, and transmit these data to SFPUC for inclusion in the annual groundwater monitoring report.

9.0 REFERENCES

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TABLES

Table 1

Westside Basin Annual Groundwater Pumping

Calendar Year	North Westside Basin Municipal and Irrigation			South Westside Basin Municipal				Golf Course Irrigation				
	Golden Gate Park	Zoo	City of San Francisco	Daly City	South San Fran-cisco (Cal Water)	San Bruno	Regional Groundwater Storage and Recovery Project	Lake Merced Area[1]	California Golf Club	Green Hills Country Club	Cemeteries	Approximate Total
	acre-feet per year											
1960s	1,100 [2]	60 [2]	0	5,000 [2]	2,000 [2]	1,900-2,400	-	2,235 [2]	665 [2,4]	- [7]	2,400 [2,4]	15,400-15,900
2005	1,100 [2]	400	0	736	0	1,700	-	45	120-150 [2,4]	- [7]	1,400-2,400 [2,4]	5,500-6,500
2006	1,100 [2]	350	0	862	0	1,955	-	85	206 [2,5]	- [7]	787 [2,5]	5,300
2007	909 [3]	616	0	2,603	0	2,350	-	88	206 [2,5]	- [7]	787 [2,5]	7,560
2008	1,280	260	0	3,564	206	2,097	-	122	206 [2,5]	- [7]	787 [2,5]	8,520
2009	1,072	170	0	1,667	380	2,379	-	113	206 [2,5]	- [7]	787 [2,5]	6,770
2010	1,061	195	0	1,743	453	2,364	-	96	206 [2,5]	- [7]	787 [2,5]	6,900
2011	1,027 [3]	404	0	2,699	515	2,129	-	76	237 [2,6]	134 [2,6]	859 [2,6]	8,080
2012	971	368	0	3,772	606	1,596	-	104	237 [2,6]	134 [2,6]	859 [2,6]	8,650
2013	1,212 [3]	439 [3]	0	3,351	995	2,198	-	102	237 [2,6]	134 [2,6]	859 [2,6]	9,530
2014	1,213 [3]	459	0	3,452	1,028	2,025	-	149	237 [2,6]	134 [2,6]	859 [2,6]	9,560
2015	1,300 [3]	270	0	1,980	1,312	2,164	-	200	237 [2,6]	134 [2,6]	859 [2,6]	8,460
2016	1,188	171	0	941	528	937	-	112	237 [2,6]	134 [2,6]	859 [2,6]	5,107
2017	1,184	234	17	62	0.4	303	-	129	237 [2,6]	134 [2,6]	859 [2,6]	3,160
2018	1,439	238	234	59	35	333	-	174	237 [2,6]	134 [2,6]	859 [2,6]	3,747 [8]
2019	1,420	244	296	56	31	277	-	494	237 [2,6]	134 [2,6]	859 [2,6]	4,053 [8]
2020	1,494	211	581	51	52	311	-	817	237 [2,6]	134 [2,6]	859 [2,6]	4,752 [8]
2021	1,253	209	564	1,167	101	1,076	131 [9]	448 [2]	237 [2,6]	134 [2,6]	859 [2,6]	6,184 [8]
2022	1,362	158	67	2,355	34	2,314	0.07 [9]	382 [2]	237 [2,6]	134 [2,6]	859 [2,6]	7,907 [8]
2023	1,317	166	48	1,478	199	1,053	-	626	237 [2,6]	134 [2,6]	859 [2,6]	6,123 [8]
2024	1,391	184	72	633	195	460	5 [9]	687	237 [2,6]	134 [2,6]	859 [2,6]	4,864 [8]

Groundwater pumping data based on metered readings except where otherwise indicated.

[1] Lake Merced Golf Course, Olympic Club Golf Course, and San Francisco Golf Club.

[2] Estimated.

[3] Due to occasional resetting of flowmeters, some readings are estimated.

[4] Irrigation estimates from LSCE (2005).

[5] Irrigation estimates from Carollo (2008).

[6] Irrigation estimates updated based on the HydroFocus Groundwater Model (2011).

[7] Not available.

[8] This total includes the estimated 5 acre-feet of water pumped to fill Pine Lake.

[9] Pumping from Regional Groundwater and Storage Recovery Project wells for testing purposes.

Table 2
Water Use for Golf Course Irrigation near Lake Merced, 2005-2024

Calendar Year	Actual Water Use (acre-feet per year)[1]											
	Lake Merced Golf Club			Olympic Club Golf Course			San Francisco Golf Club			Total		
	Re-cycled	Ground-water	Total	Re-cycled	Ground-water	Total	Re-cycled	Ground-water	Total	Re-cycled	Ground-water	Total
2005	91	5	95	275	3	278	107	37	144	473	45	518
2006 [2]	--	--	--	--	--	--	--	--	--	457	85	542
2007	100	37	137	370	2	372	150	49	199	620	88	708
2008	78	31	109	352	30	382	164	61	225	594	122	716
2009	102	31	133	354	20	374	147	62	209	603	113	716
2010	96	33	129	316	10	326	123	53	176	535	96	631
2011	43	18	61	284	20	304	132	38	170	459	76	535
2012	88	37	125	262	20	282	141	47	188	491	104	595
2013	78	32	110	384	13	397	179	57	236	641	102	743
2014	52	18	70	323	74	397	211	57	268	586	149	735
2015	85	30	115	299	123	422	187	47	234	571	200	771
2016	102	51	153	329	23	352	174	38	212	605	112	717
2017 [3]	79	54	133	350	28	378	141	47	188	570	129	699
2018	85	56	141	290	71	361	204	47	252	579	174	753
2019	60	89	149	81	320	402	90	85	174	230	494	725
2020	0	172	172	60	409	469	1	237	237	61	817	878
2021 [4,5]	84	88	172	186	248	434	123	112	235	394	448	841
2022 [6]	71	147	218	338	132	470	162	103	265	571	382	953
2023	37	172	210	57	281	338	40	173	213	135	626	761
2024	27	159	186	234	325	559	17	203	220	278	687	965
Average	72	66	138	271	113	384	131	82	213	473	252	725
Minimum	0	5	61	57	2	278	1	37	144	61	45	518
Maximum	102	172	218	384	409	559	211	237	268	641	817	965

Notes:

[1] Water use data provided by golf courses. Metered values except where indicated.

[2] Total recycled and groundwater use for 2006 are estimated.

[3] San Francisco Golf Club groundwater use data adjusted during preparation of this report.

[4] Lake Merced Golf Club estimated its 2021 groundwater use due to equipment replacement.

[5] San Francisco Golf Club revised its reported groundwater production.

[6] Lake Merced Golf Club 2022 groundwater use is estimated.

Table 3
Groundwater Elevation Monitoring Network Wells

Coastal Monitoring Network[a]	GGP NWM-3
	GGP SWM-3
	GGP Soccer Field SF-1
	GGP North Lake Road NL-1
	USGS South Windmill MW57, 140
	Kirkham MW130, 255, 385, 435
	Ortega MW125, 265, 400, 475
	Taraval MW145, 240, 400, 530
	OB-2
	Zoo MW275, 450, 565
	Fort Funston-S, M
	Thornton Beach MW225, 360, 670
Lake-Aquifer Monitoring Network[b]	LMMW-1D, 1S
	LMMW-2D, 2S, 2SS
	LMMW-3D, 3S, 3SS
	LMMW-4S, 4SS
	LMMW-5S, 5SS
	LMMW-7SS
	LMMW-8SS
	LMMW-9S[c]
	Lake Merced Pump Station MW155, 270, 440, 575
North Westside Basin General Monitoring Network	West Sunset Playground
	Central Pump Station MW190, 270
South Westside Basin General Monitoring Network[a]	LMMW-6D
	DC-1 (Westlake 1)
	DC-8
	Park Plaza MW135, 195, 460, 620
	SSFLP MW120, 220, 440, 520
	CUP-10A MW160, 250, 500, 710
	CUP-18 MW230, 425, 490, 595
	CUP-19 MW180, 475, 600, 690
	CUP-22A MW140, 290, 440, 545
	CUP-23 MW230, 440, 515, 600
	CUP-31A MW145, 280, 480, 595
	CUP-36-1 MW160, 270, 455, 585
	CUP-44-1 MW190, 300, 460, 580
	SS 1-02, 1-18, 1-20
	SB-12 Elm Avenue
	SB-21 North, South, Test
	CUP MW-M1
Bay Side Monitoring Network[a]	UAL13C, 13D
	SFO-S, D
	Burlingame-S, M, D

Notes:

[a] Wells are listed approximately from north to south.

[b] Includes LMMW-6D listed with the southern Westside Basin.

[c] LMMW-9SS was destroyed in 2018 and was replaced with LMMW-9S in late 2019.

Table 4
Wells Used to Construct Groundwater Elevation Contours

Shallow Aquifer	Primary Production Aquifer
South Windmill MW57	GGP Soccer Field SF-1
Kirkham MW130	GGP North Lake Road NL-1
Ortega MW125	GGP NWM-3
Taraval MW145	GGP SWM-3
LMMW-1S	Kirkham MW255
LMMW-2S	Ortega MW265
LMMW-3S	West Sunset Playground
LMMW-4S	Taraval MW240
LMMW-5S	Central Pump Station MW270
LMMW-7SS	Zoo MW275
SFO-S	LMMW-1D
Burlingame-S	LMMW-2D
	LMMW-3D
	LMMW-6D
	Lake Merced Pump Station MW270
	DC-1 (Westlake 1)
	DC-8
	Park Plaza MW460
	CUP-10A MW500
	CUP-18 MW425
	CUP-19 MW475
	CUP-22A MW440
	CUP-23 MW440
	CUP-31A MW480
	CUP-36-1 MW455
	SSFLP MW440
	CUP-44-1 MW460
	SB-12 Elm Avenue
	CUP MW-M1
	SFO-D
	Burlingame-D

Notes:
Wells are listed approximately north to south.

Table 5
Groundwater Level Monitoring Frequency

Well Name	Frequency[1]
Coastal Monitoring Network	
USGS South Windmill MW57	C
USGS South Windmill MW140	C
GGP Soccer Field SF-1	C
GGP North Lake Road NL-1	C
GGP SWM-3	C
GGP NWM-3	C
Kirkham MW130	C
Kirkham MW255	C
Kirkham MW385	C
Kirkham MW435	C
Ortega MW125	C
Ortega MW265	C
Ortega MW400	C
Ortega MW475	C
Taraval MW145	C
Taraval MW240	C
Taraval MW400	C
Taraval MW530	C
OB-2	Q
Zoo MW275	C
Zoo MW450	C
Zoo MW565	C
Fort Funston-S	Q
Fort Funston-M	Q
Thornton Beach MW225	Q
Thornton Beach MW360	Q
Thornton Beach MW670	Q
Lake-Aquifer Monitoring Network	
LMMW-1D	C
LMMW-1S	C
LMMW-2D	C
LMMW-2S	Q
LMMW-2SS	Q
LMMW-3D	C
LMMW-3S	Q
LMMW-3SS	C
LMMW-4S	C
LMMW-4SS	Q
LMMW-5S	C
LMMW-5SS	C
LMMW-6D	C
LMMW-7SS	Q
LMMW-8SS	Q
LMMW-9S[2]	C
Lake Merced Pump Station MW155	Q
Lake Merced Pump Station MW270	C
Lake Merced Pump Station MW440	C
Lake Merced Pump Station MW575	Q

Well Name	Frequency[1]
Bay Side Monitoring Network	
SFO-S and D[3]	S
Burlingame-S, M, and D[3]	S
UAL13C	Q
UAL13D	Q
North Westside Basin General Monitoring Network	
West Sunset Playground	C
Central Pump Station MW190	Q
Central Pump Station MW270	Q
South Westside Basin General Monitoring Network	
DC-1 (Westlake 1)	C
Park Plaza MW460, MW620	C
Park Plaza MW135, MW195	Q
South San Francisco Linear Park 120, 440	C
South San Francisco Linear Park 220, 520	Q
DC-8	C
SS 1-02	C
SS 1-18, 1-20	Q
SB-12 Elm Avenue	C
SB-21 North, South, Test	C
CUP-10A MW500, MW710	C
CUP-10A MW160, MW250	Q
CUP-18 MW490	Q
CUP-18 MW230, MW425, MW660	C
CUP-19 MW180	Q
CUP-19 MW475, MW600, MW690	C
CUP-22A MW140, MW290	Q
CUP-22A MW440, MW545	C
CUP-23 MW230	Q
CUP-23 MW440, MW515, MW600	C
CUP-31A MW480, MW595	C
CUP-31A MW145, MW280	Q
CUP-36-1 MW160, MW270	Q
CUP-36-1 MW455, MW585	C
CUP-44-1 MW190, MW580	Q
CUP-44-1 MW300, MW460	C
CUP-MW-M1	C

Notes:
[1]Frequency:
C - Continuous water level monitoring
Q - Quarterly water level monitoring
S - Semi-annual water level monitoring (Spring and Fall)
[2] LMMW-9SS was destroyed in 2018 and was replaced with LMMW-9S in late 2019.
[3] Monitoring conducted by City of San Bruno

Table 6
Groundwater Quality Monitoring Network Wells

Coastal Monitoring[a]	GGP North Lake Road NL-1
	GGP NWM-3
	GGP Soccer Field SF-1
	GGP SWM-3
	USGS South Windmill MW57, 140
	Kirkham MW130, 255, 385, 435
	Ortega MW125, 265, 400, 475
	Taraval MW145, 240, 400, 530
	Zoo MW275, 450, 565
Sunset District and Lake Merced Area Groundwater Quality Monitoring	West Sunset Playground
	LMMW-1S, 1D
	LMMW-2S, 2D
	LMMW-3S, 3D
South Westside Basin Monitoring[a]	LMMW-6D
	Jefferson
	Park Plaza MW195, 460, 620
	DC-2 Westlake
	Junipero Serra
	Sullivan
	CUP-10A MW160, 250, 500, 710
	CUP-18 MW230, 425, 490, 595
	CUP-19 MW475, 600, 690
	CUP-22A MW290, 440, 545
	CUP-23 MW230, 440, 515, 600
	CUP-31A MW145, 280, 480, 595
	SS 1-19,-20,-21,-22,-23
	CUP-36-1 MW160, 270, 455, 585
	SSFLP MW120, 220, 440, 520
	CUP-44-1 MW190, 300, 460, 580
	SB 16 Forest Lane
	SB 17 Corporation Yard
	SB 18 City Park
	SB 20 Lions Field Park
	CUP MW-M1
Bay Side Monitoring	SFO - S, D
	Burlingame - S, M, D

Notes:

[a] Wells are listed approximately from north to south.

Table 7

Groundwater Quality Monitoring Frequency and Analyses

Well Name	Frequency[1]	Analytes
Coastal Monitoring		
GGP North Lake Road NL-1	S	Chloride, total dissolved solids (TDS), specific conductance
GGP NWM-3	S	
GGP Soccer Field SF-1	S	
GGP SWM-3	S	
USGS South Windmill MW57, 140	S	
Kirkham MW130, 255, 385, 435	S	
Ortega MW125, 265, 400, 475	S	
Taraval MW145, 240, 400, 530	S	
Zoo MW275, 450, 565	S	
General Basin Monitoring		
West Sunset Playground	S	General parameters and minerals: total alkalinity, pH, specific conductance, TDS, hardness, calcium, magnesium, sodium, potassium, chloride, sulfate, and nitrate.
LMMW-1S, 1D	S	
LMMW-2S, 2D	S	
LMMW-3S, 3D	S	
LMMW-6D	S	
Park Plaza MW195, 460[4], 620[4]	S	
DC-2 Westlake	A	
Jefferson	A	
Junipero Serra	A	
Sullivan	A	
CUP-10A MW160, 250[2], 500, 710	S	
CUP-18 MW230, 425, 490, 595	S	
CUP-19 MW475, 600, 690	S	
CUP-22A MW290, 440, 545	S	
CUP-23 MW230, 440, 515, 600	S	
CUP-31A MW145, 280, 480, 595	S	
SS 1-19	A	
SS 1-20	A	
SS 1-21	A	
SS 1-22	A	
SS 1-23	A	
SSFLP MW120, 220, 440, 520	S	
CUP-36-1 MW160, 270, 455, 585	S	
CUP-44-1 MW190, 300, 460, 580	S	
SB 16 Forest Ln	A	
SB 17 Corporation Yard	A	
SB 18 City Park	A	
SB-20 Lions Field Park	A	
CUP-MW-M1	S	
Bay Side Monitoring[3]		
SFO-S, D	S	General parameters and minerals: total alkalinity, pH, specific conductance, TDS, hardness, calcium, magnesium, sodium, potassium, chloride, sulfate, nitrate, bromide, boron, and orthophosphate.
Burlingame-S, M, and D	S	

Notes

[1] A - Annual water quality sampling (Spring), S - Semi-annual water quality sampling (Spring and Fall)

[2] Well CUP-10A MW250 has been dry since 2012.

[3] Monitoring conducted by City of San Bruno.

Table 8
Comparison of Annual Low Groundwater Elevations for Selected Coastal Monitoring Wells

Monitoring Well (hydrograph figure number)	**Aquifer** [1]	**2023**	**2024**	**Change in Ground-water Elevation** (feet) [2]
South Windmill MW57	S	6.37 (October)	10.18 (July)	3.81
South Windmill MW140	S	-0.63 (September)	4.98 (July)	5.61
Kirkham MW130 (Figure 11a)	S	7.32 (October)	9.47 (July)	2.15
Kirkham MW255 (Figure 11b)	PP	7.50 (October)	9.82 (July)	2.32
Kirkham MW385 (Figure 11c)	PP	7.24 (October)	9.64 (July)	2.40
Kirkham MW435 (Figure 11d)	PP	4.09 (October)	5.44 (October)	1.35
Ortega MW125 (Figure 12a)	S	8.98 (October)	9.16 (January)	0.18
Ortega MW265 (Figure 12b)	PP	10.71 (September)	10.80 (October)	0.09
Ortega MW400 (Figure 12c)	PP	9.75 (October)	11.94 (January)	2.19
Ortega MW475 (Figure 12d)	PP	2.27 (October)	3.07 (January)	0.80
Taraval MW145 (Figure 13a)	S	8.86 (August)	8.80 (January)	-0.06
Taraval MW240 (Figure 13b)	PP	11.74 (May)	11.56 (January)	-0.18
Taraval MW400 (Figure 13c)	PP	11.35 (September)	11.13 (January)	-0.22
Taraval MW530 (Figure 13d)	D	0.06 (October)	0.89 (January)	0.83
Zoo MW275 (Figure 14a)	PP	6.35 (September)	6.80 (January)	0.45
Zoo MW450 (Figure 14b)	PP	5.65 (June)	6.28 (June)	0.63
Zoo MW565 (Figure 14c)	D	-2.64 (October)	-1.61 (August)	1.03

[1] S = Shallow aquifer; PP = Primary Production aquifer; D = Deep aquifer.

[2] A negative number indicates a decrease in annual low groundwater elevation from the previous year.

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#34 - GRT HWY/KIRKHAM MW130	Apr-04	28.5	23.3	27.4	1.92	--	28	32.0	27.7**	445	308	160	8.04
	Oct-04	30.8	27.5	26.8	1.51	128	33	34.6	28.9	465	233	180	7.90
	Apr-05	26.1	26.6	24.7	1.20	120	35	34.0	31.0	457	284	168	7.99
	Nov-05	--	--	--	--	122	--	--	--	469	218	180	8.01
	May-06	--	--	--	--	--	36	--	--	466	240	--	--
	Oct-06	--	--	--	--	--	34	--	--	468	260	--	--
	May-07	--	--	--	--	--	34	--	--	478	278	--	--
	Oct-07	--	--	--	--	--	34	--	--	413	255	--	--
	Apr-08	--	--	--	--	--	34	--	--	459	278	--	--
	Sep-08	--	--	--	--	--	33	--	--	437	257	--	--
	Apr-09	--	--	--	--	--	36	--	--	444	257	--	--
	Nov-09	--	--	--	--	--	32	--	--	416	260	--	--
	Apr-10	--	--	--	--	--	32	--	--	423	248	--	--
	Nov-10	--	--	--	--	--	33	--	--	420	238	--	--
	May-11	--	--	--	--	--	36	--	--	407	241	--	--
	Nov-11	--	--	--	--	98	32	--	--	386	250	142	8.06
	Apr-12	--	--	--	--	--	34	--	--	390	228	--	--
	Nov-12	--	--	--	--	--	35	--	--	379	237	--	--
	Apr-13	--	--	--	--	--	32	--	--	377	242	--	--
	Oct-13	--	--	--	--	--	29	--	--	349	168*	--	--
	Apr-14	--	--	--	--	--	30	--	--	389	207	--	--
	Oct-14	--	--	--	--	--	30	--	--	347	197	--	--
	Apr-15	--	--	--	--	--	30	--	--	352	201	--	--
	Oct-15	--	--	--	--	--	31	--	--	340	212	--	--
	Apr-16	--	--	--	--	--	30	--	--	342	186	--	--
	Oct-16	--	--	--	--	--	31	--	--	352	268*	--	--
	Apr-17	--	--	--	--	--	30	--	--	359	216	--	--
	Oct-17	--	--	--	--	--	32	--	--	363	236	--	--
	Apr-18	--	--	--	--	--	33	--	--	384	206	--	--
	Oct-18	--	--	--	--	--	33	--	--	384	223	--	--
	Apr-19	--	--	--	--	--	34	--	--	398	202	--	--
	Oct-19	--	--	--	--	--	34	--	--	398	260	--	--
	Oct-20	--	--	--	--	--	33	--	--	397	234	--	--
	Apr-21	--	--	--	--	--	31	--	--	397	247	--	--
	Nov-21	--	--	--	--	--	33	--	--	404	225	--	--
	Apr-22	--	--	--	--	--	33	--	--	410	219	--	--
	Oct-22	--	--	--	--	--	31	--	--	418	225	--	--
	Apr-23	--	--	--	--	--	33	--	--	414	224	--	--

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	NE	NE	NE	NE	NE	NE	NE	45	NE	NE	NE	NE
	Secondary MCL[1,2]	NE	NE	NE	NE	NE	250/500/600	250/500/600	NE	900/1,600/2,200	500/1,000/1,500	NE	NE
SF#34 - GRT HWY/KIRKHAM MW130 (cont.)	Oct-23	--	--	--	--	--	31	--	--	405	224	--	--
	May-24	--	--	--	--	--	32	--	--	413	217	--	--
	Oct-24	--	--	--	--	--	31	--	--	410	216	--	--
SF#35 - GRT HWY/KIRKHAM MW255	Apr-04	26.3	29.2	21.3	1.33	--	33	29.0	26.4**	476	316	200	7.95
	Oct-04	29.4	30.2	23.6	1.43	132	34	29.1	26.1	460	241	184	7.90
	Apr-05	28.5	31.5	22.2	1.37	134	36	32.0	28.0	477	297	192	7.89
	Nov-05	--	--	--	--	132	37	--	--	471	217	206	7.95
	May-06	--	--	--	--	--	37	--	--	462	320	--	--
	Oct-06	--	--	--	--	--	36	--	--	472	270	--	--
	May-07	--	--	--	--	--	--	--	--	473	280	--	--
	Oct-07	--	--	--	--	--	35	--	--	425	249	--	--
	Apr-08	--	--	--	--	--	36	--	--	444	260	--	--
	Sep-08	--	--	--	--	--	38	--	--	441	261	--	--
	Apr-09	--	--	--	--	--	39	--	--	455	284	--	--
	Nov-09	--	--	--	--	--	37	--	--	443	254	--	--
	Apr-10	--	--	--	--	--	36	--	--	462	299	--	--
	Nov-10	--	--	--	--	--	38	--	--	476	287	--	--
	May-11	--	--	--	--	--	40	--	--	482	268	--	--
	Nov-11	--	--	--	--	124	39	--	--	467	260	180	7.86
	Apr-12	--	--	--	--	--	42	--	--	476	271	--	--
	Nov-12	--	--	--	--	--	43	--	--	482	304	--	--
	Apr-13	--	--	--	--	--	40	--	--	494	292	--	--
	Oct-13	--	--	--	--	--	37	--	--	454	228	--	--
	Apr-14	--	--	--	--	--	39	--	--	539	283	--	--
	Oct-14	--	--	--	--	--	38	--	--	457	250	--	--
	Apr-15	--	--	--	--	--	40	--	--	476	263	--	--
	Oct-15	--	--	--	--	--	37	--	--	439	254	--	--
	Apr-16	--	--	--	--	--	39	--	--	466	259	--	--
	Oct-16	--	--	--	--	--	36	--	--	436	254	--	--
	Apr-17	--	--	--	--	--	37	--	--	468	270	--	--
	Oct-17	--	--	--	--	--	36	--	--	433	240	--	--
	Apr-18	--	--	--	--	--	38	--	--	476	288	--	--
	Oct-18	--	--	--	--	--	35	--	--	440	245	--	--
	Apr-19	--	--	--	--	--	40	--	--	496	281	--	--
	Oct-19	--	--	--	--	--	41	--	--	496	299	--	--
	Oct-20	--	--	--	--	--	41	--	--	495	288	--	--
	Apr-21	--	--	--	--	--	39	--	--	496	306	--	--
	Nov-21	--	--	--	--	--	40	--	--	500	262	--	--

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#35 - GRT HWY/KIRKHAM MW255 (cont.)	Apr-22	--	--	--	--	--	39	--	--	497	256	--	--
	Oct-22	--	--	--	--	--	38	--	--	503	270	--	--
	Apr-23	--	--	--	--	--	40	--	--	498	266	--	--
	Oct-23	--	--	--	--	--	38	--	--	475	261	--	--
	May-24	--	--	--	--	--	38	--	--	489	253	--	--
	Oct-24	--	--	--	--	--	38	--	--	486	273	--	--
SF#36 - GRT HWY/KIRKHAM MW385	Apr-04	53.4	7.21	24.7	4.83	--	28	72.0	<1.3**	466	362	175	8.05
	Oct-04	60.4	7.38	28.1	4.94	116	33	63.7	1.3	454	257	168	8.10
	May-05	54.4	7.54	24.8	5.04	124	34	57.0	<0.3	451	303	160	8.16
	Nov-05	--	--	--	--	116	35	--	--	446	229	160	8.16
	May-06	--	--	--	--	--	36	--	--	450	290	--	--
	Oct-06	--	--	--	--	--	34	--	--	451	290	--	--
	May-07	--	--	--	--	--	--	--	--	452	286	--	--
	Oct-07	--	--	--	--	--	35	--	--	437	277	--	--
	Apr-08	--	--	--	--	--	36	--	--	450	288	--	--
	Sep-08	--	--	--	--	--	35	--	--	441	280	--	--
	Apr-09	--	--	--	--	--	38	--	--	464	262	--	--
	Nov-09	--	--	--	--	--	35	--	--	462	284	--	--
	Apr-10	--	--	--	--	--	34	--	--	457	282	--	--
	Nov-10	--	--	--	--	--	38	--	--	482	298	--	--
	May-11	--	--	--	--	--	40	--	--	467	302	--	--
	Nov-11	--	--	--	--	120	37	--	--	458	300	164	8.09
	Apr-12	--	--	--	--	--	39	--	--	457	290	--	--
	Nov-12	--	--	--	--	--	40	--	--	460	290	--	--
	Apr-13	--	--	--	--	--	37	--	--	462	302	--	--
	Oct-13	--	--	--	--	--	35	--	--	462	273	--	--
	Apr-14	--	--	--	--	--	35	--	--	504	288	--	--
	Oct-14	--	--	--	--	--	36	--	--	462	284	--	--
	Apr-15	--	--	--	--	--	36	--	--	465	285	--	--
	Oct-15	--	--	--	--	--	37	--	--	458	288	--	--
	Apr-16	--	--	--	--	--	35	--	--	460	263	--	--
	Oct-16	--	--	--	--	--	35	--	--	463	258	--	--
	Apr-17	--	--	--	--	--	35	--	--	466	303	--	--
	Oct-17	--	--	--	--	--	36	--	--	459	277	--	--
	Apr-18	--	--	--	--	--	37	--	--	463	256	--	--
	Oct-18	--	--	--	--	--	35	--	--	457	284	--	--
	Apr-19	--	--	--	--	--	37	--	--	464	261	--	--
	Oct-19	--	--	--	--	--	37	--	--	460	292	--	--
	Oct-20	--	--	--	--	--	38	--	--	467	271	--	--

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#36 - GRT HWY/KIRKHAM MW385 (cont.)	Apr-21	--	--	--	--	--	35	--	--	464	276	--	--
	Nov-21	--	--	--	--	--	30	--	--	434	255	--	--
	Apr-22	--	--	--	--	--	36	--	--	468	263	--	--
	Oct-22	--	--	--	--	--	35	--	--	476	273	--	--
	Apr-23	--	--	--	--	--	37	--	--	474	275	--	--
	Oct-23	--	--	--	--	--	35	--	--	470	287	--	--
	May-24	--	--	--	--	--	35	--	--	471	275	--	--
	Oct-24	--	--	--	--	--	36	--	--	471	283	--	--
SF#37 - GRT HWY/KIRKHAM MW435	Apr-04	44.7	4.08	32.9	7.20	--	25	60.0	<1.3**	445	322	130	8.12
	Oct-04	49.5	4.03	37.6	7.50	116	29	60.8	<0.2	449	253	131	8.20
	May-05	46.7	3.90	35.0	7.43	112	30	60.0	<0.3	447	294	132	8.18
	Nov-05	--	--	--	--	110	31	--	--	441	229	134	8.21
	May-06	--	--	--	--	--	37	--	--	442	280	--	--
	Oct-06	--	--	--	--	--	31	--	--	446	270	--	--
	May-07	--	--	--	--	--	--	--	--	444	296	--	--
	Oct-07	--	--	--	--	--	32	--	--	425	265	--	--
	Apr-08	--	--	--	--	--	31	--	--	442	280	--	--
	Sep-08	--	--	--	--	--	31	--	--	434	268	--	--
	Apr-09	--	--	--	--	--	34	--	--	452	266	--	--
	Nov-09	--	--	--	--	--	32	--	--	447	277	--	--
	Apr-10	--	--	--	--	--	30	--	--	446	288	--	--
	Nov-10	--	--	--	--	--	32	--	--	466	288	--	--
	May-11	--	--	--	--	--	33	--	--	450	281	--	--
	Nov-11	--	--	--	--	114	31	--	--	442	280	126	8.05
	Apr-12	--	--	--	--	--	33	--	--	437	272	--	--
	Nov-12	--	--	--	--	--	34	--	--	438	268	--	--
	Apr-13	--	--	--	--	--	30	--	--	438	269	--	--
	Oct-13	--	--	--	--	--	29	--	--	439	252	--	--
	Apr-14	--	--	--	--	--	29	--	--	478	261	--	--
	Oct-14	--	--	--	--	--	29	--	--	437	278	--	--
	Apr-15	--	--	--	--	--	30	--	--	438	272	--	--
	Oct-15	--	--	--	--	--	30	--	--	431	260	--	--
	Apr-16	--	--	--	--	--	29	--	--	434	249	--	--
	Oct-16	--	--	--	--	--	28	--	--	435	189*	--	--
	Apr-17	--	--	--	--	--	28	--	--	436	266	--	--
	Oct-17	--	--	--	--	--	29	--	--	430	254	--	--
	Apr-18	--	--	--	--	--	29	--	--	431	252	--	--
	Oct-18	--	--	--	--	--	29	--	--	430	265	--	--

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#37 - GRT HWY/KIRKHAM MW435 (cont.)	Apr-19	--	--	--	--	--	30	--	--	436	243	--	--
	Oct-19	--	--	--	--	--	30	--	--	427	281	--	--
	Oct-20	--	--	--	--	--	30	--	--	433	265	--	--
	Apr-21	--	--	--	--	--	28	--	--	431	260	--	--
	Nov-21	--	--	--	--	--	36	--	--	467	285	--	--
	Apr-22	--	--	--	--	--	29	--	--	434	260	--	--
	Oct-22	--	--	--	--	--	28	--	--	442	256	--	--
	Apr-23	--	--	--	--	--	30	--	--	440	260	--	--
	Oct-23	--	--	--	--	--	28	--	--	434	257	--	--
	May-24	--	--	--	--	--	28	--	--	434	254	--	--
	Oct-24	--	--	--	--	--	28	--	--	436	261	--	--
SF#30 - GRT HWY/ORTEGA MW125	Apr-04	26.5	21.2	28.0	1.45	--	25	38.0	23.8**	426	344	145	7.93
	Oct-04	27.3	22.7	25.8	1.15	108	28	34.6	22.0	405	216	146	7.90
	May-05	26.5	22.5	25.2	1.24	108	29	--	--	412	245	146	7.89
	Nov-05	--	--	--	--	102	31	--	--	416	220	150	7.84
	May-06	--	--	--	--	--	31	--	--	417	250	--	--
	Oct-06	--	--	--	--	--	32	--	--	446	260	--	--
	May-07	--	--	--	--	--	34	--	--	459	269	--	--
	Oct-07	--	--	--	--	--	29	--	--	438	255	--	--
	Apr-08	--	--	--	--	--	35	--	--	447	383*	--	--
	Oct-08	--	--	--	--	--	30	--	--	450	252	--	--
	Apr-09	--	--	--	--	--	32	--	--	458	274	--	--
	Nov-09	--	--	--	--	--	30	--	--	430	251	--	--
	Apr-10	--	--	--	--	--	31	--	--	438	251	--	--
	Nov-10	--	--	--	--	--	35	--	--	463	260	--	--
	May-11	--	--	--	--	--	36	--	--	456	260	--	--
	Oct-11	--	--	--	--	112	33	--	--	464	260	172	7.82
	Apr-12	--	--	--	--	--	35	--	--	464	275	--	--
	Nov-12	--	--	--	--	--	37	--	--	463	273	--	--
	Apr-13	--	--	--	--	--	34	--	--	478	247	--	--
	Oct-13	--	--	--	--	--	32	--	--	466	236	--	--
	Apr-14	--	--	--	--	--	31	--	--	517	254	--	--
	Oct-14	--	--	--	--	--	30	--	--	442	246	--	--
	Apr-15	--	--	--	--	--	30	--	--	437	245	--	--
	Oct-15	--	--	--	--	--	30	--	--	405	243	--	--
	Apr-16	--	--	--	--	--	30	--	--	433	251	--	--
	Oct-16	--	--	--	--	--	26	--	--	349	214	--	--
	Apr-17	--	--	--	--	--	30	--	--	448	256	--	--

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#30 - GRT HWY/ORTEGA MW125 (cont.)	Oct-17	--	--	--	--	--	31	--	--	440	235	--	--
	Apr-18	--	--	--	--	--	33	--	--	478	261	--	--
	Oct-18	--	--	--	--	--	33	--	--	481	261	--	--
	Apr-19	--	--	--	--	--	34	--	--	484	268	--	--
	Oct-19	--	--	--	--	--	32	--	--	455	277	--	--
	Oct-20	--	--	--	--	--	34	--	--	467	280	--	--
	Apr-21	--	--	--	--	--	33	--	--	469	269	--	--
	Nov-21	--	--	--	--	--	33	--	--	473	266	--	--
	Apr-22	--	--	--	--	--	32	--	--	467	264	--	--
	Oct-22	--	--	--	--	--	32	--	--	462	254	--	--
	Apr-23	--	--	--	--	--	33	--	--	449	248	--	--
	Oct-23	--	--	--	--	--	32	--	--	460	254	--	--
	May-24	--	--	--	--	--	33	--	--	446	252	--	--
	Oct-24	--	--	--	--	--	33	--	--	460	254	--	--
SF#31 - GRT HWY/ORTEGA MW265	Apr-04	14.0	12.0	20.0	1.04	--	15	15.0	5.7**	269	216	90	8.13
	Oct-04	15.8	12.8	22.7	1.14	82	21	9.4	5.5	260	131	86	8.10
	May-05	13.5	12.4	19.9	0.89	80	19	--	--	**1,392***	--	82	8.03
	Nov-05	--	--	--	--	--	24	--	--	257	177	--	--
	May-06	--	--	--	--	--	25	--	--	257	160	--	--
	Oct-06	--	--	--	--	--	31	--	--	429	250	--	--
	May-07	--	--	--	--	--	30	--	--	418	240	--	--
	Oct-07	--	--	--	--	--	31	--	--	448	262	--	--
	Apr-08	--	--	--	--	--	31	--	--	439	332*	--	--
	Sep-08	--	--	--	--	--	31	--	--	439	282	--	--
	Apr-09	--	--	--	--	--	30	--	--	388	232	--	--
	Nov-09	--	--	--	--	--	30	--	--	430	243	--	--
	Apr-10	--	--	--	--	--	24	--	--	282	169	--	--
	Nov-10	--	--	--	--	--	24	--	--	270	158	--	--
	May-11	--	--	--	--	--	27	--	--	271	284	--	--
	Oct-11	--	--	--	--	102	30	--	--	410	240	142	7.90
	Apr-12	--	--	--	--	--	25	--	--	259	163	--	--
	Nov-12	--	--	--	--	--	33	--	--	394	256	--	--
	Apr-13	--	--	--	--	--	25	--	--	281	138	--	--
	Oct-13	--	--	--	--	--	29	--	--	395	195	--	--
	Apr-14	--	--	--	--	--	28	--	--	404	194	--	--
	Oct-14	--	--	--	--	--	27	--	--	376	222	--	--
	Apr-15	--	--	--	--	--	27	--	--	374	210	--	--
	Oct-15	--	--	--	--	--	27	--	--	358	222	--	--

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#31 - GRT HWY/ORTEGA MW265 (cont.)	Apr-16	--	--	--	--	--	26	--	--	338	196	--	--
	Oct-16	--	--	--	--	--	29	--	--	417	183	--	--
	Apr-17	--	--	--	--	--	22	--	--	274	149	--	--
	Oct-17	--	--	--	--	--	27	--	--	348	180	--	--
	Apr-18	--	--	--	--	--	23	--	--	267	157	--	--
	Oct-18	--	--	--	--	--	27	--	--	342	189	--	--
	Apr-19	--	--	--	--	--	23	--	--	256	142	--	--
	Oct-19	--	--	--	--	--	24	--	--	258	172	--	--
	Oct-20	--	--	--	--	--	24	--	--	260	152	--	--
	Apr-21	--	--	--	--	--	23	--	--	259	146	--	--
	Nov-21	--	--	--	--	--	24	--	--	262	155	--	--
	Apr-22	--	--	--	--	--	24	--	--	260	154	--	--
	Oct-22	--	--	--	--	--	23	--	--	268	143	--	--
	Apr-23	--	--	--	--	--	25	--	--	264	148	--	--
	Oct-23	--	--	--	--	--	26	--	--	316	176	--	--
	May-24	--	--	--	--	--	25	--	--	269	163	--	--
	Oct-24	--	--	--	--	--	25	--	--	273	155	--	--
SF#32 - GRT HWY/ORTEGA MW400	Apr-04	15.2	11.8	23.1	1.47	--	20	10.0	5.3**	277	230	100	8.11
	Oct-04	17.0	12.7	23.3	1.31	92	22	13.5	5.8	277	146	88	8.20
	Apr-05	16.4	13.5	21.8	1.28	88	24	8.7	6.4	272	156	88	8.22
	Nov-05	--	--	--	--	--	25	--	--	273	176	--	--
	May-06	--	--	--	--	--	24	--	--	272	180	--	--
	Oct-06	--	--	--	--	--	24	--	--	272	160	--	--
	May-07	--	--	--	--	--	24	--	--	276	171	--	--
	Oct-07	--	--	--	--	--	23	--	--	271	170	--	--
	Apr-08	--	--	--	--	--	19	--	--	273	174	--	--
	Sep-08	--	--	--	--	--	24	--	--	268	216	--	--
	Apr-09	--	--	--	--	--	20	--	--	272	168	--	--
	Nov-09	--	--	--	--	--	25	--	--	275	166	--	--
	Apr-10	--	--	--	--	--	24	--	--	274	164	--	--
	Nov-10	--	--	--	--	--	24	--	--	278	208	--	--
	May-11	--	--	--	--	--	27	--	--	279	220	--	--
	Oct-11	--	--	--	--	84	26	--	--	272	160	86	8.04
	Apr-12	--	--	--	--	--	25	--	--	270	163	--	--
	Nov-12	--	--	--	--	--	29	--	--	270	165	--	--
	Apr-13	--	--	--	--	--	25	--	--	272	159	--	--
	Oct-13	--	--	--	--	--	25	--	--	271	129	--	--
	Apr-14	--	--	--	--	--	24	--	--	297	135	--	--

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	NE	NE	NE	NE	NE	NE	NE	45	NE	NE	NE	NE
	Secondary MCL[1,2]	NE	NE	NE	NE	NE	250/500/600	250/500/600	NE	900/1,600/2,200	500/1,000/1,500	NE	NE
SF#32 - GRT HWY/ORTEGA MW400 (cont.)	Oct-14	--	--	--	--	--	24	--	--	270	155	--	--
	May-15	--	--	--	--	--	24	--	--	270	153	--	--
	Oct-15	--	--	--	--	--	25	--	--	266	175	--	--
	Apr-16	--	--	--	--	--	24	--	--	272	130	--	--
	Oct-16	--	--	--	--	--	23	--	--	273	130	--	--
	Apr-17	--	--	--	--	--	23	--	--	273	155	--	--
	Oct-17	--	--	--	--	--	24	--	--	272	155	--	--
	Apr-18	--	--	--	--	--	24	--	--	272	154	--	--
	Oct-18	--	--	--	--	--	25	--	--	273	151[a]	--	--
	Apr-19	--	--	--	--	--	25	--	--	273	162	--	--
	Oct-19	--	--	--	--	--	25	--	--	275	183	--	--
	Oct-20	--	--	--	--	--	25	--	--	271	157	--	--
	Apr-21	--	--	--	--	--	23	--	--	271	144	--	--
	Nov-21	--	--	--	--	--	23	--	--	272	153	--	--
	Apr-22	--	--	--	--	--	23	--	--	270	150	--	--
	Oct-22	--	--	--	--	--	23	--	--	277	152	--	--
	Apr-23	--	--	--	--	--	24	--	--	272	147	--	--
	Oct-23	--	--	--	--	--	23	--	--	266	151	--	--
	May-24	--	--	--	--	--	23	--	--	269	157	--	--
	Oct-24	--	--	--	--	--	23	--	--	272	161	--	--
SF#33 - GRT HWY/ORTEGA MW475	Apr-04	12.7	2.29	40.9	2.89	--	20	15.0	<1.3**	283	240	45	8.33
	Oct-04	13.7	1.75	45.6	3.43	80	27	14.2	<0.2	276	129	37	8.70
	Apr-05	13.5	1.80	43.1	2.87	78	30	13.0	<0.3	280	159	44	8.39
	Nov-05	--	--	--	--	76	30	--	--	280	136	42	7.67
	May-06	--	--	--	--	--	30	--	--	278	180	--	--
	Oct-06	--	--	--	--	--	28	--	--	283	160	--	--
	May-07	--	--	--	--	--	29	--	--	285	172	--	--
	Oct-07	--	--	--	--	--	29	--	--	279	184	--	--
	Apr-08	--	--	--	--	--	30	--	--	286	178	--	--
	Sep-08	--	--	--	--	--	31	--	--	283	168	--	--
	Apr-09	--	--	--	--	--	30	--	--	289	170	--	--
	Nov-09	--	--	--	--	--	30	--	--	292	168	--	--
	Apr-10	--	--	--	--	--	29	--	--	289	181	--	--
	Nov-10	--	--	--	--	--	32	--	--	304	203	--	--
	May-11	--	--	--	--	--	33	--	--	297	172	--	--
	Oct-11	--	--	--	--	82	31	--	--	289	160	42	8.23
	Apr-12	--	--	--	--	--	31	--	--	288	194	--	--
	Nov-12	--	--	--	--	--	33	--	--	290	179	--	--

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#33 - GRT HWY/ORTEGA MW475 (cont.)	Apr-13	--	--	--	--	--	30	--	--	293	166	--	--
	Oct-13	--	--	--	--	--	30	--	--	293	140	--	--
	Apr-14	--	--	--	--	--	28	--	--	320	169	--	--
	Oct-14	--	--	--	--	--	30	--	--	293	152	--	--
	May-15	--	--	--	--	--	29	--	--	293	141	--	--
	Oct-15	--	--	--	--	--	29	--	--	284	176	--	--
	Apr-16	--	--	--	--	--	29	--	--	297	136	--	--
	Oct-16	--	--	--	--	--	28	--	--	293	139	--	--
	Apr-17	--	--	--	--	--	27	--	--	295	146	--	--
	Oct-17	--	--	--	--	--	29	--	--	294	166	--	--
	Apr-18	--	--	--	--	--	29	--	--	295	144	--	--
	Oct-18	--	--	--	--	--	29	--	--	294	162	--	--
	Apr-19	--	--	--	--	--	30	--	--	295	168	--	--
	Oct-19	--	--	--	--	--	30	--	--	297	162	--	--
	Oct-20	--	--	--	--	--	30	--	--	296	165	--	--
	Apr-21	--	--	--	--	--	28	--	--	294	149	--	--
	Nov-21	--	--	--	--	--	29	--	--	296	174	--	--
	Apr-22	--	--	--	--	--	28	--	--	296	162	--	--
	Oct-22	--	--	--	--	--	29	--	--	304	164	--	--
	Apr-23	--	--	--	--	--	30	--	--	299	176	--	--
	Oct-23	--	--	--	--	--	27	--	--	296	169	--	--
	May-24	--	--	--	--	--	29	--	--	294	169	--	--
	Oct-24	--	--	--	--	--	28	--	--	298	169	--	--
SF#26 - GRT HWY/TARAVAL MW145	Apr-04	28.0	25.2	29.5	2.02	--	30	23.0	37.0**	473	360	170	7.96
	Oct-04	30.6	25.9	30.3	1.78	132	35	25.2	35.8	478	277	171	7.90
	Apr-05	29.6	26.1	29.0	1.62	132	35	25.0	36.0	478	295	172	7.88
	Nov-05	--	--	--	--	--	36	--	--	486	317	--	--
	May-06	--	--	--	--	--	38	--	--	502	320	--	--
	Oct-06	--	--	--	--	--	36	--	--	489	300	--	--
	May-07	--	--	--	--	--	**26***	--	--	507	302	--	--
	Oct-07	--	--	--	--	--	37	--	--	497	305	--	--
	Apr-08	--	--	--	--	--	37	--	--	495	306	--	--
	Sep-08	--	--	--	--	--	37	--	--	481	281	--	--
	Apr-09	--	--	--	--	--	41	--	--	477	271	--	--
	Nov-09	--	--	--	--	--	38	--	--	464	274	--	--
	Apr-10	--	--	--	--	--	38	--	--	460	277	--	--
	Nov-10	--	--	--	--	--	38	--	--	471	263	--	--
	Jun-11	--	--	--	--	--	38	--	--	483	310	--	--

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	NE	NE	NE	NE	NE	NE	NE	45	NE	NE	NE	NE
	Secondary MCL[1,2]	NE	NE	NE	NE	NE	250/500/600	250/500/600	NE	900/1,600/2,200	500/1,000/1,500	NE	NE
SF#26 - GRT HWY/TARAVAL MW145 (cont.)	Nov-11	--	--	--	--	116	40	--	--	470	280	162	7.38
	May-12	--	--	--	--	--	43	--	--	457	273	--	--
	Nov-12	--	--	--	--	--	46	--	--	449	260	--	--
	Apr-13	--	--	--	--	--	41	--	--	454	263	--	--
	Oct-13	--	--	--	--	--	40	--	--	444	238	--	--
	May-14	--	--	--	--	--	39	--	--	454	238	--	--
	Nov-14	--	--	--	--	--	34	--	--	383	236	--	--
	Apr-15	--	--	--	--	--	42	--	--	454	219	--	--
	Nov-15	--	--	--	--	--	41	--	--	452	139*	--	--
	May-16	--	--	--	--	--	41	--	--	457	267	--	--
	Oct-16	--	--	--	--	--	39	--	--	457	265	--	--
	Apr-17	--	--	--	--	--	39	--	--	460	272	--	--
	Oct-17	--	--	--	--	--	43	--	--	468	275	--	--
	Apr-18	--	--	--	--	--	41	--	--	466	272	--	--
	Nov-18	--	--	--	--	--	42	--	--	440	260	--	--
	Apr-19	--	--	--	--	--	42	--	--	465	253	--	--
	Oct-19	--	--	--	--	--	43	--	--	460	269	--	--
	Oct-20	--	--	--	--	--	42	--	--	475	279	--	--
	Apr-21	--	--	--	--	--	42	--	--	475	277	--	--
	Nov-21	--	--	--	--	--	34	--	--	382	204	--	--
	Apr-22	--	--	--	--	--	42	--	--	475	251	--	--
	Oct-22	--	--	--	--	--	42	--	--	477	242	--	--
	Apr-23	--	--	--	--	--	43	--	--	489	263	--	--
	Oct-23	--	--	--	--	--	41	--	--	498	259	--	--
	Apr-24	--	--	--	--	--	43	--	--	490	254	--	--
	Oct-24	--	--	--	--	--	42	--	--	464	264	--	--
SF#27 - GRT HWY/TARAVAL MW240	Apr-04	21.6	19.5	22.2	1.88	--	25	17.0	11.0**	371	276	150	7.95
	Oct-04	21.6	19.8	23.9	1.67	104	32	19.6	11.3	367	196	130	7.70
	Apr-05	22.1	21.0	23.1	1.68	104	36	20.0	13.0	369	243	132	7.80
	Nov-05	--	--	--	--	--	34	--	--	380	230	--	--
	May-06	--	--	--	--	--	36	--	--	368	240	--	--
	Oct-06	--	--	--	--	--	33	--	--	366	230	--	--
	May-07	--	--	--	--	--	35	--	--	373	214	--	--
	Oct-07	--	--	--	--	--	36	--	--	370	229	--	--
	Apr-08	--	--	--	--	--	36	--	--	374	226	--	--
	Sep-08	--	--	--	--	--	34	--	--	375	207	--	--
	Apr-09	--	--	--	--	--	39	--	--	388	229	--	--
	Nov-09	--	--	--	--	--	35	--	--	386	217	--	--

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	NE	NE	NE	NE	NE	NE	NE	45	NE	NE	NE	NE
	Secondary MCL[1,2]	NE	NE	NE	NE	NE	250/500/600	250/500/600	NE	900/1,600/2,200	500/1,000/1,500	NE	NE
SF#27 - GRT HWY/TARAVAL MW240 (cont.)	Apr-10	--	--	--	--	--	35	--	--	386	235	--	--
	Nov-10	--	--	--	--	--	33	--	--	389	225	--	--
	Jun-11	--	--	--	--	--	34	--	--	385	249	--	--
	Nov-11	--	--	--	--	108	35	--	--	379	200	138	7.45
	May-12	--	--	--	--	--	37	--	--	377	256	--	--
	Nov-12	--	--	--	--	--	39	--	--	380	221	--	--
	Apr-13	--	--	--	--	--	35	--	--	380	230	--	--
	Oct-13	--	--	--	--	--	34	--	--	383	214	--	--
	May-14	--	--	--	--	--	34	--	--	385	196	--	--
	Nov-14	--	--	--	--	--	42	--	--	446	266	--	--
	Apr-15	--	--	--	--	--	34	--	--	383	169	--	--
	Nov-15	--	--	--	--	--	34	--	--	379	177	--	--
	May-16	--	--	--	--	--	33	--	--	378	217	--	--
	Oct-16	--	--	--	--	--	33	--	--	383	206	--	--
	Apr-17	--	--	--	--	--	33	--	--	381	221	--	--
	Oct-17	--	--	--	--	--	34	--	--	381	212	--	--
	Apr-18	--	--	--	--	--	34	--	--	384	225	--	--
	Nov-18	--	--	--	--	--	33	--	--	374	207	--	--
	Apr-19	--	--	--	--	--	34	--	--	379	209	--	--
	Oct-19	--	--	--	--	--	34	--	--	381	219	--	--
	Oct-20	--	--	--	--	--	34	--	--	380	233	--	--
	Apr-21	--	--	--	--	--	33	--	--	380	204	--	--
	Nov-21	--	--	--	--	--	42	--	--	493	257	--	--
	Apr-22	--	--	--	--	--	32	--	--	378	204	--	--
	Oct-22	--	--	--	--	--	32	--	--	391	206	--	--
	Apr-23	--	--	--	--	--	34	--	--	384	211	--	--
	Oct-23	--	--	--	--	--	32	--	--	393	208	--	--
	Apr-24	--	--	--	--	--	34	--	--	387	210	--	--
	Oct-24	--	--	--	--	--	32	--	--	384	218	--	--
SF#28 - GRT HWY/TARAVAL MW400	Apr-04	17.6	14.7	20.4	1.72	--	20	28.0	<1.3**	313	248	140	8.16
	Oct-04	18.6	15.1	23.1	1.62	88	26	24.6	<0.2	310	162	104	8.10
	May-05	18.9	16.3	22.3	1.47	92	28	--	--	308	--	104	8.28
	Nov-05	--	--	--	--	--	28	--	--	311	193	--	--
	May-06	--	--	--	--	--	28	--	--	304	200	--	--
	Oct-06	--	--	--	--	--	27	--	--	309	180	--	--
	May-07	--	--	--	--	--	28	--	--	311	376*	--	--
	Oct-07	--	--	--	--	--	28	--	--	306	172	--	--
	Apr-08	--	--	--	--	--	28	--	--	306	213	--	--

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	NE	NE	NE	NE	NE	NE	NE	45	NE	NE	NE	NE
	Secondary MCL[1,2]	NE	NE	NE	NE	NE	250/500/600	250/500/600	NE	900/1,600/2,200	500/1,000/1,500	NE	NE
SF#28 - GRT HWY/TARAVAL MW400 (cont.)	Sep-08	--	--	--	--	--	27	--	--	297	173	--	--
	Apr-09	--	--	--	--	--	29	--	--	311	183	--	--
	Nov-09	--	--	--	--	--	28	--	--	309	172	--	--
	Apr-10	--	--	--	--	--	28	--	--	309	188	--	--
	Nov-10	--	--	--	--	--	28	--	--	310	179	--	--
	Jun-11	--	--	--	--	--	28	--	--	319	206	--	--
	Nov-11	--	--	--	--	88	28	--	--	311	190	104	7.49
	May-12	--	--	--	--	--	29	--	--	312	215	--	--
	Nov-12	--	--	--	--	--	31	--	--	309	185	--	--
	Apr-13	--	--	--	--	--	29	--	--	324	195	--	--
	Oct-13	--	--	--	--	--	28	--	--	327	471*	--	--
	May-14	--	--	--	--	--	30	--	--	328	162	--	--
	Nov-14	--	--	--	--	--	29	--	--	327	195	--	--
	Apr-15	--	--	--	--	--	27	--	--	322	86*	--	--
	Nov-15	--	--	--	--	--	29	--	--	312	142	--	--
	May-16	--	--	--	--	--	28	--	--	319	169	--	--
	Oct-16	--	--	--	--	--	28	--	--	317	162	--	--
	Apr-17	--	--	--	--	--	28	--	--	320	179	--	--
	Oct-17	--	--	--	--	--	29	--	--	322	172	--	--
	Apr-18	--	--	--	--	--	30	--	--	320	172	--	--
	Nov-18	--	--	--	--	--	29	--	--	318	172[a]	--	--
	Apr-19	--	--	--	--	--	30	--	--	342	187	--	--
	Oct-19	--	--	--	--	--	31	--	--	329	176	--	--
	Oct-20	--	--	--	--	--	29	--	--	316	168	--	--
	Apr-21	--	--	--	--	--	28	--	--	319	166	--	--
	Nov-21	--	--	--	--	--	29	--	--	313	159	--	--
	Apr-22	--	--	--	--	--	28	--	--	319	171	--	--
	Oct-22	--	--	--	--	--	28	--	--	322	165	--	--
	Apr-23	--	--	--	--	--	29	--	--	323	175	--	--
	Oct-23	--	--	--	--	--	27	--	--	328	177	--	--
	Apr-24	--	--	--	--	--	28	--	--	320	167	--	--
	Oct-24	--	--	--	--	--	28	--	--	319	180	--	--
SF#29 - GRT HWY/TARAVAL MW530	Apr-04	11.1	5.33	48.8	2.45	--	15	9.0	<1.3**	321	254	60	8.35
	Oct-04	0.08*	<0.02*	<0.01*	<0.35*	119	23	8.5	<0.2	323	188	48	8.30
	May-05	12.3	5.54	53.5	2.29	120	20	--	--	322	208	60	8.43
	Nov-05	--	--	--	--	--	26	--	--	322	207	--	--
	May-06	--	--	--	--	--	26	--	--	324	190	--	--
	Oct-06	--	--	--	--	--	25	--	--	321	200	--	--

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#29 - GRT HWY/TARAVAL MW530 (cont.)	May-07	--	--	--	--	--	26	--	--	330	197	--	--
	Oct-07	--	--	--	--	--	26	--	--	324	192	--	--
	Apr-08	--	--	--	--	--	27	--	--	329	205	--	--
	Sep-08	--	--	--	--	--	26	--	--	319	186	--	--
	Apr-09	--	--	--	--	--	28	--	--	330	192	--	--
	Nov-09	--	--	--	--	--	26	--	--	331	178	--	--
	Apr-10	--	--	--	--	--	26	--	--	330	209	--	--
	Nov-10	--	--	--	--	--	24	--	--	332	185	--	--
	Jun-11	--	--	--	--	--	24	--	--	336	192	--	--
	Nov-11	--	--	--	--	132	26	--	--	340	220	56	7.62
	May-12	--	--	--	--	--	27	--	--	337	185	--	--
	Nov-12	--	--	--	--	--	30	--	--	343	202	--	--
	Apr-13	--	--	--	--	--	26	--	--	349	210	--	--
	Oct-13	--	--	--	--	--	25	--	--	345	195	--	--
	May-14	--	--	--	--	--	25	--	--	347	170	--	--
	Nov-14	--	--	--	--	--	25	--	--	342	196	--	--
	Apr-15	--	--	--	--	--	25	--	--	346	181	--	--
	Nov-15	--	--	--	--	--	26	--	--	365	162	--	--
	May-16	--	--	--	--	--	25	--	--	353	183	--	--
	Oct-16	--	--	--	--	--	25	--	--	352	141	--	--
	Apr-17	--	--	--	--	--	24	--	--	369	181	--	--
	Oct-17	--	--	--	--	--	25	--	--	366	197	--	--
	Apr-18	--	--	--	--	--	25	--	--	348	186	--	--
	Nov-18	--	--	--	--	--	25	--	--	356	192	--	--
	Apr-19	--	--	--	--	--	26	--	--	357	186	--	--
	Oct-19	--	--	--	--	--	27	--	--	353	192	--	--
	Oct-20	--	--	--	--	--	25	--	--	358	192	--	--
	Apr-21	--	--	--	--	--	24	--	--	357	187	--	--
	Nov-21	--	--	--	--	--	25	--	--	367	186	--	--
	Apr-22	--	--	--	--	--	24	--	--	374	209	--	--
	Oct-22	--	--	--	--	--	25	--	--	368	193	--	--
	Apr-23	--	--	--	--	--	25	--	--	380	227	--	--
	Oct-23	--	--	--	--	--	24	--	--	378	206	--	--
	Apr-24	--	--	--	--	--	25	--	--	377	208	--	--
	Oct-24	--	--	--	--	--	25	--	--	366	209	--	--
SF#42 - ZOO MW275	Apr-04	17.9	0.77*	97.6*	3.06	--	60	45.0*	3.6**	530	360	44	10.20
	Nov-04	24.1	15.0	45.5	5.07	110	60	12.2	<0.2	431	250	114	8.90
	May-05	21.1	18.8	35.9	4.89	118	68	7.0	<0.3	446	**526***	158	8.32

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#42 - ZOO MW275 (cont.)	Nov-05	--	--	--	--	--	71	--	--	463	309	--	--
	May-06	--	--	--	--	--	70	--	--	459	260	--	--
	Nov-06	20.2	20.9	34.1	4.5	116	66	5.3	<0.3	453	240	132	7.95
	May-07	--	--	--	--	--	75	--	--	455	242	--	--
	Oct-07	18.8	20.3	33.9	4.5	116	65	4.6	<0.3	453	246	130	7.86
	May-08	--	--	--	--	--	64	--	--	456	245	--	--
	Sep-08	--	--	--	--	--	69	--	--	467	248	--	--
	Apr-09	--	--	--	--	--	68	--	--	461	246	--	--
	Nov-09	--	--	--	--	--	68	--	--	475	260	--	--
	Apr-10	--	--	--	--	--	**42***	--	--	486	237	--	--
	Nov-10	--	--	--	--	--	**41***	--	--	493	290	--	--
	May-11	--	--	--	--	--	**44***	--	--	486	314	--	--
	Oct-11	--	--	--	--	120	69	--	--	458	240	140	7.46
	May-12	--	--	--	--	--	**122***	--	--	468	265	--	--
	Nov-12	--	--	--	--	--	74	--	--	468	269	--	--
	Apr-13	--	--	--	--	--	71	--	--	475	254	--	--
	Oct-13	--	--	--	--	--	69	--	--	474	247	--	--
	May-14	--	--	--	--	--	68	--	--	476	248	--	--
	Nov-14	--	--	--	--	--	70	--	--	484	267	--	--
	Apr-15	--	--	--	--	--	72	--	--	484	232	--	--
	Nov-15	--	--	--	--	--	75	--	--	491	249	--	--
	May-16	--	--	--	--	--	72	--	--	495	246	--	--
	Nov-16	--	--	--	--	--	71	--	--	499	256	--	--
	Apr-17	--	--	--	--	--	70	--	--	497	269	--	--
	Oct-17	--	--	--	--	--	74	--	--	500	252	--	--
	Apr-18	--	--	--	--	--	74	--	--	495	235	--	--
	Nov-18	--	--	--	--	--	73	--	--	501	241	--	--
	Apr-19	--	--	--	--	--	76	--	--	498	267	--	--
	Oct-19	--	--	--	--	--	75	--	--	519	269	--	--
	Oct-20	--	--	--	--	--	73	--	--	518	298	--	--
	Apr-21	--	--	--	--	--	75	--	--	520	286	--	--
	Nov-21	--	--	--	--	--	76	--	--	526	289	--	--
	May-22	--	--	--	--	--	73	--	--	525	262	--	--
	Oct-22	--	--	--	--	--	73	--	--	536	257	--	--
	Apr-23	--	--	--	--	--	78	--	--	531	267	--	--
	Nov-23	--	--	--	--	--	72	--	--	535	287	--	--
	Jul-24	--	--	--	--	--	76	--	--	526	275	--	--
	Oct-24	--	--	--	--	--	74	--	--	525	245	--	--

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#43 - ZOO MW450	Apr-04	23.9	24.8	43.1	2.75	--	47	19.0	32.6**	469	360	138	8.63
	Nov-04	24.6	24.9	45.0	2.82	132	43	18.6	39.5	495	298	164	8.40
	May-05	23.2	26.1	41.7	2.86	122	44	19.0	41.0	491	295	138	8.44
	Nov-05	--	--	--	--	--	44	--	--	504	293	--	--
	May-06	--	--	--	--	--	45	--	--	488	300	--	--
	Nov-06	21.9	27.0	41.6	2.7	154	44	19.6	37.8	488	280	128	8.32
	May-07	--	--	--	--	--	45	--	--	483	280	--	--
	Oct-07	18.9	24.1	37.2	2.1	126	42	17.8	30.0	472	290	140	8.22
	May-08	--	--	--	--	--	42	--	--	474	301	--	--
	Sep-08	--	--	--	--	--	43	--	--	478	283	--	--
	Apr-09	--	--	--	--	--	43	--	--	479	274	--	--
	Nov-09	--	--	--	--	--	43	--	--	486	293	--	--
	Apr-10	--	--	--	--	--	**34***	--	--	474	211*	--	--
	Nov-10	--	--	--	--	--	**67***	--	--	478	261	--	--
	May-11	--	--	--	--	--	**72***	--	--	478	277	--	--
	Oct-11	--	--	--	--	132	44	--	--	479	270	154	7.01
	May-12	--	--	--	--	--	**128***	--	--	473	468	--	--
	Nov-12	--	--	--	--	--	47	--	--	478	302	--	--
	Apr-13	--	--	--	--	--	43	--	--	482	293	--	--
	Oct-13	--	--	--	--	--	41	--	--	478	274	--	--
	May-14	--	--	--	--	--	42	--	--	481	274	--	--
	Nov-14	--	--	--	--	--	43	--	--	494	291	--	--
	Apr-15	--	--	--	--	--	44	--	--	501	265	--	--
	Nov-15	--	--	--	--	--	46	--	--	499	278	--	--
	May-16	--	--	--	--	--	43	--	--	501	292	--	--
	Nov-16	--	--	--	--	--	43	--	--	504	286	--	--
	Apr-17	--	--	--	--	--	42	--	--	507	293	--	--
	Oct-17	--	--	--	--	--	44	--	--	505	282	--	--
	Apr-18	--	--	--	--	--	45	--	--	511	297	--	--
	Nov-18	--	--	--	--	--	45	--	--	507	267	--	--
	Apr-19	--	--	--	--	--	47	--	--	517	300	--	--
	Oct-19	--	--	--	--	--	47	--	--	531	282	--	--
	Oct-20	--	--	--	--	--	47	--	--	522	309	--	--
	Apr-21	--	--	--	--	--	47	--	--	530	307	--	--
	Nov-21	--	--	--	--	--	49	--	--	539	298	--	--
	May-22	--	--	--	--	--	48	--	--	555	307	--	--
	Oct-22	--	--	--	--	--	49	--	--	571	316	--	--
	Apr-23	--	--	--	--	--	52	--	--	574	309	--	--

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	NE	NE	NE	NE	NE	NE	NE	45	NE	NE	NE	NE
	Secondary MCL[1,2]	NE	NE	NE	NE	NE	250/500/600	250/500/600	NE	900/1,600/2,200	500/1,000/1,500	NE	NE
SF#43 - ZOO MW450 (cont.)	Nov-23	--	--	--	--	--	51	--	--	590	343	--	--
	Jul-24	--	--	--	--	--	54	--	--	587	327	--	--
	Oct-24	--	--	--	--	--	51	--	--	586	324	--	--
SF#45 - ZOO MW565	Apr-04	30.5	10.3	71.6	4.09	--	53	82*	<1.3**	510	380	100	8.31
	May-05	27.6	10.0	63.3	3.56	170	52	7.6	<0.3	505	313	104	8.25
	Nov-05	--	--	--	--	--	53	--	--	507	323	--	--
	May-06	--	--	--	--	--	53	--	--	498	300	--	--
	Nov-06	27.3	10.4	69.7	3.3	162	53	7.4	<0.3	503	280	104	8.21
	May-07	--	--	--	--	--	60	--	--	503	281	--	--
	Oct-07	25.1	9.9	65.6	2.6	170	52	6.9	<0.3	502	295	102	8.25
	May-08	--	--	--	--	--	52	--	--	494	272	--	--
	Oct-08	--	--	--	--	--	51	--	--	494	262	--	--
	Apr-09	--	--	--	--	--	53	--	--	504	282	--	--
	Nov-09	--	--	--	--	--	53	--	--	506	304	--	--
	Apr-10	--	--	--	--	--	54	--	--	503	232	--	--
	Nov-10	--	--	--	--	--	52	--	--	510	283	--	--
	May-11	--	--	--	--	--	54	--	--	517	330	--	--
	Oct-11	--	--	--	--	150	52	--	--	449	240	76	8.04
	May-12	--	--	--	--	--	57	--	--	443	246	--	--
	Nov-12	--	--	--	--	--	57	--	--	433	244	--	--
	Apr-13	--	--	--	--	--	52	--	--	438	241	--	--
	Oct-13	--	--	--	--	--	50	--	--	436	218	--	--
	May-14	--	--	--	--	--	50	--	--	434	223	--	--
	Nov-14	--	--	--	--	--	51	--	--	431	230	--	--
	Apr-15	--	--	--	--	--	52	--	--	430	199	--	--
	Nov-15	--	--	--	--	--	51	--	--	423	199	--	--
	May-16	--	--	--	--	--	50	--	--	429	206	--	--
	Nov-16	--	--	--	--	--	50	--	--	427	187	--	--
	Apr-17	--	--	--	--	--	48	--	--	424	186	--	--
	Oct-17	--	--	--	--	--	48	--	--	426	224	--	--
	Apr-18	--	--	--	--	--	50	--	--	421	209	--	--
	Nov-18	--	--	--	--	--	50	--	--	423	195	--	--
	Apr-19	--	--	--	--	--	50	--	--	422	214	--	--
	Oct-19	--	--	--	--	--	50	--	--	427	194	--	--
	Oct-20	--	--	--	--	--	48	--	--	417	222	--	--
	Apr-21	--	--	--	--	--	48	--	--	420	216	--	--
	Nov-21	--	--	--	--	--	48	--	--	423	211	--	--
	May-22	--	--	--	--	--	46	--	--	419	208	--	--

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#45 - ZOO MW565 (cont.)	Oct-22	--	--	--	--	--	46	--	--	428	205	--	--
	Apr-23	--	--	--	--	--	48	--	--	422	215	--	--
	Nov-23	--	--	--	--	--	46	--	--	426	228	--	--
	Jul-24	--	--	--	--	--	48	--	--	418	207	--	--
	Oct-24	--	--	--	--	--	46	--	--	420	214	--	--
SF#57 - USGS South Windmill MW57	May-06	--	--	--	--	--	115	--	--	**963**	--	--	--
	Oct-07	--	--	--	--	--	140	53	41	**1,104**	**600**	--	--
	May-08	--	--	--	--	--	150	--	--	**1,183**	**653**	--	--
	Sep-08	--	--	--	--	--	178	--	--	**1,228**	**701**	--	--
	Apr-09	--	--	--	--	--	178	--	--	**1,253**	**684**	--	--
	Nov-09	--	--	--	--	--	193	--	--	**1,277**	**666**	--	--
	Apr-10	--	--	--	--	--	176	--	--	**1,281**	**705**	--	--
	Nov-10	--	--	--	--	--	151	--	--	**1,240**	**663**	--	--
	May-11	--	--	--	--	--	157	--	--	**1,201**	**667**	--	
	Nov-11	--	--	--	--	284	154	--	--	**1,217**	**690**	408	7.0
	Apr-12	--	--	--	--	--	168	--	--	**1,206**	**662**	--	--
	Nov-12	--	--	--	--	--	180	--	--	**1,237**	**686**	--	--
	Apr-13	--	--	--	--	--	170	--	--	**1,287**	**718**	--	--
	Oct-13	--	--	--	--	--	173	--	--	**1,288**	**713**	--	--
	Apr-14	--	--	--	--	--	218	--	--	**1,580**	**765**	--	--
	Oct-14	--	--	--	--	--	182	--	--	**1,310**	**746**	--	--
	Apr-15	--	--	--	--	--	188	--	--	**1,310**	**669**	--	--
	Oct-15	--	--	--	--	--	196	--	--	**1,360**	**750**	--	--
	Apr-16	--	--	--	--	--	204	--	--	**1,420**	**773**	--	--
	Oct-16	--	--	--	--	--	191	--	--	**1,380**	**725**	--	--
	Apr-17	--	--	--	--	--	215	--	--	**1,450**	**826**	--	--
	Oct-17	--	--	--	--	--	190	--	--	**1,280**	**707**	--	--
	Apr-18	--	--	--	--	--	182	--	--	**1,300**	**718**	--	--
	Oct-18	--	--	--	--	--	168	--	--	**1,230**	**680**	--	--
	Apr-19	--	--	--	--	--	159	--	--	**1,230**	**658**	--	--
	Oct-19	--	--	--	--	--	140	--	--	**1,110**	**665**	--	--
	Oct-20	--	--	--	--	--	163	--	--	**1,090**	**593**	--	--
	Apr-21	--	--	--	--	--	155	--	--	**1,160**	**645**	--	--
	Oct-21	--	--	--	--	--	175	--	--	**1,240**	**644**	--	--
	Mar-22	--	--	--	--	--	185	--	--	**1,250**	**637**	--	--
	Oct-22	--	--	--	--	--	191	--	--	**1,290**	**686**	--	--
	Apr-23	--	--	--	--	--	204	--	--	**1,320**	**689**	--	--
	Oct-23	--	--	--	--	--	220	--	--	**1,430**	**749**	--	--
	May-24	--	--	--	--	--	186	--	43	**1,290**	**673**	--	--

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#57 - USGS South Windmill MW57 (cont.)	Oct-24	--	--	--	--	--	189	--	--	**1,320**	**702**	--	--
SF#58 - USGS South Windmill MW140	May-06	--	--	--	--	--	57	--	--	605	--	--	--
	Oct-07	--	--	--	--	--	48	39	31	596	330	--	--
	May-08	--	--	--	--	--	57	--	--	636	350	--	--
	Sep-08	--	--	--	--	--	61	--	--	658	359	--	--
	Apr-09	--	--	--	--	--	67	--	--	703	382	--	--
	Nov-09	--	--	--	--	--	70	--	--	744	431	--	--
	Apr-10	--	--	--	--	--	65	--	--	720	400	--	--
	Nov-10	--	--	--	--	--	61	--	--	739	412	--	--
	May-11	--	--	--	--	--	60	--	--	693	490*	--	--
	Nov-11	--	--	--	--	202	59	--	--	704	410	176	7.72
	Apr-12	--	--	--	--	--	54	--	--	637	361	--	--
	Nov-12	--	--	--	--	--	66	--	--	715	399	--	--
	Apr-13	--	--	--	--	--	57	--	--	689	371	--	--
	Oct-13	--	--	--	--	--	60	--	--	736	393	--	--
	Apr-14	--	--	--	--	--	60	--	--	790	382	--	--
	Oct-14	--	--	--	--	--	58	--	--	735	418	--	--
	Apr-15	--	--	--	--	--	67	--	--	773	414	--	--
	Oct-15	--	--	--	--	--	55	--	--	720	394	--	--
	Apr-16	--	--	--	--	--	59	--	--	753	401	--	--
	Apr-16	--	--	--	--	--	59	--	--	753	401	--	--
	Apr-17	--	--	--	--	--	55	--	--	741	391	--	--
	Oct-17	--	--	--	--	--	51	--	--	725	367	--	--
	Apr-18	--	--	--	--	--	46	--	--	665	361	--	--
	Oct-18	--	--	--	--	--	54	--	--	737	412	--	--
	Apr-19	--	--	--	--	--	46	--	--	638	325	--	--
	Oct-19	--	--	--	--	--	46	--	--	610	394	--	--
	Oct-20	--	--	--	--	--	71	--	--	707	377	--	--
	Apr-21	--	--	--	--	--	64	--	--	740	414	--	--
	Oct-21	--	--	--	--	--	63	--	--	733	381	--	--
	Mar-22	--	--	--	--	--	61	--	--	715	370	--	--
	Oct-22	--	--	--	--	--	63	--	--	749	388	--	--
	Apr-23	--	--	--	--	--	60	--	--	688	376	--	--
	Oct-23	--	--	--	--	--	63	--	--	768	410	--	--
	Jul-24	--	--	--	--	--	67	--	45	768	401	--	--
	Oct-24	--	--	--	--	--	62	--	--	752	393	--	--
SF#69 - GGP NWM-3	Mar-13	26.2	32.0	26.0	3.10	147	52	34.2	20.3	537	295	210	7.31
	Oct-13	31.0	37.0	30.0	4.09	165	52	49.0	4.8**	598	309	225	7.11
	May-14	30.6	34.1	26.1	4.15	160	52	39.1	10.7	573	294	214	7.11

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#69 - GGP NWM-3 (cont.)	Nov-14	31.0	34.8	25.7	4.19	158	54	39.4	0.9*	562	286	216	7.14
	Apr-15	30.8	35.3	28.1	4.28	171	55	39.3	<0.3	576	303	221	7.08
	Nov-15	31.4	34.0	28.8	3.91	175	50	37.3	<0.3	554	292	211	7.14
	May-16	--	--	--	--	--	50	--	<0.3	553	296	--	--
	Jul-16	--	--	--	--	--	52	--	--	564	296	--	--
	Oct-16	--	--	--	--	--	50	--	--	564	267	--	--
	Jan-17	--	--	--	--	--	44	--	--	490	243	--	--
	Apr-17	--	--	--	--	--	45	--	--	562	304	--	--
	Oct-17	--	--	--	--	--	41	--	--	448	249	--	--
	May-18	--	--	--	--	--	42	--	--	442	211	--	--
	Nov-18	--	--	--	--	--	42	--	--	442	237	--	--
	Apr-19	--	--	--	--	--	42	--	--	417	234	--	--
	Oct-19	--	--	--	--	--	40	--	--	417	231	--	--
	Oct-20	--	--	--	--	--	39	--	--	413	232	--	--
	Apr-21	--	--	--	--	--	39	--	--	437	243	--	--
	Nov-21	--	--	--	--	--	41	--	--	446	236	--	--
	Apr-22	--	--	--	--	--	38	--	--	409	216	--	--
	Oct-22	--	--	--	--	--	39	--	--	434	232	--	--
	Jun-23	--	--	--	--	--	38	--	--	436	237	--	--
	Dec-23	--	--	--	--	--	38	--	--	410	222	--	--
	Jul-24	--	--	--	--	--	42	--	--	455	246	--	--
	Oct-24	--	--	--	--	--	39	--	--	441	251	--	--
SF#70 - GGP SWM-3	Mar-13	26.9	32.7	25.5	0.96	152	42	41.8	32.4	552	336	221	7.67
	Oct-13	33.2	40.5	29.9	1.77	175	52	42.0	29.9	636	345	252	7.50
	May-14	30.3	34.6	25.1	1.48	150	43	39.2	31.1	569	300	220	7.49
	Nov-14	33.1	40.1	25.9	1.65	163	47	43.2	30.8	601	317	243	7.51
	Apr-15	33.1	40.1	26.5	1.60	177	52	41.5	28.9	621	349	252	7.46
	Nov-15	35.2	41.3	29.1	1.67	175	52	41.8	29.0	623	349	248	7.47
	Apr-16	--	--	--	--	--	42	--	31.4	544	299	--	--
	Jul-16	--	--	--	--	--	54	--	--	632	333	--	--
	Oct-16	--	--	--	--	--	52	--	--	638	339	--	--
	Jan-17	--	--	--	--	--	43	--	--	563	326	--	--
	Apr-17	--	--	--	--	--	42	--	--	552	307	--	--
	Oct-17	--	--	--	--	--	46	--	--	578	320	--	--
	May-18	--	--	--	--	--	41	--	--	536	324	--	--
	Oct-18	--	--	--	--	--	43	--	--	549	285	--	--
	Apr-19	--	--	--	--	--	40	--	--	487	255	--	--
	Oct-19	--	--	--	--	--	40	--	--	482	283	--	--
	Oct-20	--	--	--	--	--	48	--	--	470	296	--	--
	Apr-21	--	--	--	--	--	39	--	--	477	271	--	--
	Oct-21	--	--	--	--	--	39	--	--	487	270	--	--

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	NE	NE	NE	NE	NE	NE	NE	45	NE	NE	NE	NE
	Secondary MCL[1,2]	NE	NE	NE	NE	NE	250/500/600	250/500/600	NE	900/1,600/2,200	500/1,000/1,500	NE	NE
SF#70 - GGP SWM-3 (cont.)	Mar-22	--	--	--	--	--	39	--	--	466	253	--	--
	Oct-22	--	--	--	--	--	39	--	--	491	265	--	--
	Apr-23	--	--	--	--	--	39	--	--	470	253	--	--
	Oct-23	--	--	--	--	--	52	--	--	578	308	--	--
	Jul-24	--	--	--	--	--	39	--	--	471	256	--	--
	Oct-24	--	--	--	--	--	37	--	--	464	239	--	--
SF#67 - GGP Soccer Field SF-1	Oct-12	23.5	33.5	28.1	3.21	185	46	38.7	10.9	530	305	202	7.32
	May-13	23.1	35.0	30.0	3.19	174	40	36.0	9.7**	528	280	194	7.47
	Oct-13	22.3	31.6	29.5	3.06	175	41	27.0	2.5**	528	260	191	7.39
	May-14	24.6	33.0	28.1	3.16	176	41	27.8	2.7	531	252	195	7.42
	Nov-14	26.4	34.9	26.0	2.23	166	39	43.2	11.9	535	283	207	7.40
	Apr-15	24.9	35.3	28.9	3.20	190	42	26.3	1.4	534	278	201	7.34
	Nov-15	25.5	34.3	27.8	2.38	169	41	35.7	7.6	530	292	201	7.35
	Apr-16	--	--	--	--	--	39	--	4.1	530	286	--	--
	Jul-16	--	--	--	--	--	41	--	--	533	277	--	--
	Oct-16	--	--	--	--	--	40	--	--	540	261	--	--
	Jan-17	--	--	--	--	--	39	--	--	531	283	--	--
	Apr-17	--	--	--	--	--	38	--	--	539	286	--	--
	Oct-17	--	--	--	--	--	42	--	--	540	284	--	--
	May-18	--	--	--	--	--	40	--	--	524	283	--	--
	Nov-18	--	--	--	--	--	41	--	--	532	236	--	--
	Apr-19	--	--	--	--	--	44	--	--	541	290	--	--
	Oct-19	--	--	--	--	--	43	--	--	559	292	--	--
	Oct-20	--	--	--	--	--	41	--	--	555	291	--	--
	Apr-21	--	--	--	--	--	40	--	--	550	288	--	--
	Nov-21	--	--	--	--	--	41	--	--	550	287	--	--
	Apr-22	--	--	--	--	--	39	--	--	549	278	--	--
	Oct-22	--	--	--	--	--	41	--	--	562	284	--	--
	Apr-24	--	--	--	--	--	41	--	--	554	283	--	--
	Oct-24	--	--	--	--	--	40	--	--	551	297	--	--
SF#68 - GGP North Lake Road NL-1	Oct-12	27.9	35.0	26.9	3.43	159	47	33.4	42.3	565	328	218	7.21
	May-13	27.0	37.9	29.6	2.90	150	43	40.0	21.1**	549	296	205	7.18
	Oct-13	33.0	41.8	28.9	2.87	165	52	44.0	31.7**	636	326	246	7.19
	May-14	35.2	35.7	24.8	2.54	154	46	36.4	23.1	563	300	42*	7.21
	Nov-14	27.3	31.4	22.6	2.36	136	31	27.2	42.6	493	273	183	7.22
	Apr-15	35.4	32.4	23.1	2.46	143	36	28.8	29.2	499	270	190	7.22
	Oct-15	43.6	32.3	24.6	2.33	143	37	30.0	33.4	505	293	198	7.18
	Apr-16	--	--	--	--	--	33	--	41.4	485	262	--	--
	Jul-16	--	--	--	--	--	33	--	--	480	264	--	--
	Oct-16	--	--	--	--	--	39	--	--	519	291	--	--
	Jan-17	--	--	--	--	--	48	--	--	598	320	--	--

Table 9
Coastal Monitoring Network Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as CaCO3) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#68 - GGP North Lake Road NL-1 (cont.)	Apr-17	--	--	--	--	--	38	--	--	506	292	--	--
	Oct-17	--	--	--	--	--	28	--	--	459	254	--	--
	May-18	--	--	--	--	--	29	--	--	444	224	--	--
	Nov-18	--	--	--	--	--	26	--	--	425	243	--	--
	Apr-19	--	--	--	--	--	34	--	--	426	253	--	--
	Oct-19	--	--	--	--	--	27	--	--	409	234	--	--
	Oct-20	--	--	--	--	--	26	--	--	411	242	--	--
	Apr-21	--	--	--	--	--	27	--	--	431	266	--	--
	Nov-21	--	--	--	--	--	31	--	--	451	264	--	--
	Apr-22	--	--	--	--	--	30	--	--	443	242	--	--
	Oct-22	--	--	--	--	--	42	--	--	502	272	--	--
	Apr-23	--	--	--	--	--	41	--	--	539	299	--	--
	Dec-23	--	--	--	--	--	26	--	--	445	236	--	--
	May-24	--	--	--	--	--	38	--	--	478	261	--	--
	Oct-24	--	--	--	--	--	30	--	--	468	278	--	--

Table 9
Coastal Monitoring Network Groundwater Quality

Notes

[a] = Anomalous primary sample results in 2018 were replaced with the corresponding duplicate result where available, as these results more closely resembled the historical concentrations.

= Shaded cell indicates data collected in 2024

* = Anomalous or questionable result

** = Nitrate as NO3 is a calculated value: [NO3] = 4.4 x [Nitrate as N]; for these results, Laboratory reported Nitrate as Nitrogen rather than Nitrate as Nitrate concentration. Beginning in the Spring of 2016, the lab began reporting all Nitrate results as Nitrate as Nitrogen, and therefore from this point forward all results have been corrected and are no longer being marked by an **.

-- = Not analyzed

mg/L = Milligrams per liter

µmhos/cm = Micromhos per centimeter

= **Bold** font indicates a result that exceeds an MCL

NE = Not established

MCL[1] =Maximum Contaminant Level; values for MCLs are provided where they have been established for particular constituents. MCLs are drinking water standards that public water systems must achieve. They are not intended to regulate groundwater from monitoring wells or untreated water from production wells, because after withdrawal groundwater may be disinfected, filtered, blended, exposed to the atmosphere, and/or otherwise treated before being delivered to consumers. However, MCLs are used for comparison in this report to provide context for evaluating the quality of untreated groundwater. Primary MCLs are regulatory benchmarks for protecting human health. Secondary MCLs are benchmarks to protect the aesthetic quality of drinking water and are based on effects such as taste, odor, or appearance.

Secondary MCL[2] = 250/500/600: Recommended/Upper/Short Term

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#02 - EDGEWOOD SCHOOL	May-02	--	--	--	--	103	30	36.0	**46.0**	445	--	169	7.50
	Nov-02	--	--	--	--	144	30	36.0	**49.0**	452	227	164	7.30
	Jul-03	24.8	25.6	24.5	1.35	110	33	37.0	**51.0**	450	235	180	7.20
	Apr-04	24.5	25.0	24.5	1.37	--	--	**--**	--	--	--	--	--
	Nov-04	11.1*	0.254*	26.5	0.28*	108	29	34.5	**47.9**	446	312	166	7.50
SF#03 - ELK GLEN 2	Apr-00	30.4	32.8	24.2	ND	138	38	48.8	**49.2**	526	364	211	7.65
	Apr-01	--	--	--	--	140	41	52.0	**55.0**	580	330	236	7.62
	Dec-01	34.9	37.3	27.6	1.08	140	40	50.8	**48.9**	580	360	230	7.74
	Apr-04	34.4	38.5	26.9	1.11	--	43	52.0	**52.8**	583	412	240	7.61
	Nov-04	38.9	39.5	30.9	1.18	143	40	56.0	**51.2**	590	374	235	7.80
	May-05	34.4	37.2	26.1	0.77	150	39	55.0	**51.0**	590	362	210	7.63
	Nov-05	--	--	--	--	--	--	**--**	--	--	--	--	--
SF#07 - LMMW-1S	Apr-09	58.4	89.7	90.6	2.67	340	235	114	10.7	**1,488**	**859**	590	7.09
	Nov-09	73.0	110	130	2.80	310	**393**	122	41.0	**1,936**	**1,035**	700	6.74
	Apr-10	52.9	78.4	76.1	2.31	342	129	77.0	<0.3*	**1,170**	**657**	454	6.88
	Nov-10	57.2	83.6	111	3.20	276	**253**	120	39.0	**1,584**	**860**	528	6.61
	May-11	51.9	81.5	84.2	3.10	296	172	82.5	19.1	**1,274**	**696**	464	6.92
	Oct-11	51.5	80.5	146	2.63	264	**260**	73.1	**56.4**	**1,558**	**870**	448	6.68
	Apr-12	40.7	66.1	70.7	1.91	268	144	61.9	13.7	**1,068**	461	394	6.81
	Nov-12	67.0	107	159	3.82	368	**386**	108	29.9	**1,936**	**1,046**	616	--
	Apr-13	60.1	90.5	124	3.84	355	**295**	72.2	17.8	**1,658**	**820**	576	--
	Oct-13	64.3	110	188	3.03	280	**374**	97.0	38.0	**2,059**	**1,054**	582	--
	Apr-14	58.5	88.9	131	2.86	324	**258**	69.8	16.2	**1,740**	**841**	530	--
	Oct-14	59.0	85.8	136	2.73	337	**262**	66.0	11.4	**1,600**	**848**	503	--
	Apr-15	49.3	75.3	93.4	2.52	361	161	42.7	6.24	**1,240**	**632**	414	--
	Oct-15	51.4	75.5	110	2.56	384	209	47.1	6.78	**1,350**	**756**	461	--
	Apr-16	43.4	65.5	72.5	2.38	372	110	24.4	**<0.3***	**1,060**	**541**	389	--
	Oct-16	56.6	88.3	141	2.63	316	**273**	63.0	21.6	**1,629**	**828**	518	6.78
	Apr-17	43.3	66.7	107	3.07	288	192	48.2	36.1	**1,280**	**714**	420	6.78
	Oct-17	39.4	68.8	130	2.43	194	211	54.6	**88.8**	**1,290**	**686**	395	6.59
	Apr-18	26.4	40.4	66	1.72	106	111	30.5	**99.0**	818	459	239	6.55
	Oct-18	56.0	81.7	163	2.64	266	**275**	69.1	**80.1**	**1,720**	**939**	490	6.61
	Apr-19	27.1	39.1	55	1.55	180	102	28.8	26.8	762	416	242	7.89*
	Oct-19	62.5	93.3	185	3.02	310	**372**	81.4	**93.3**	**1,950**	**1,030**	526	6.75
	Oct-20	71.8	105.0	182	2.84	271	**367**	95.0	**48.4**	**2,120**	**1,160**	646	6.70
	Apr-21	65.1	93.1	133	3.16	340	**314**	71.1	24.8	**1,810**	**1,020**	559	6.77
	Oct-21	63.4	95.5	141	3.20	364	**311**	64.0	23.4	**1,750**	**911**	585	6.75
	Mar-22	45.0	65.9	82	2.87	372	126	20.5	2.13	**1,090**	**565**	390	6.84

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	NE	NE	NE	NE	NE	NE	NE	45	NE	NE	NE	NE
	Secondary MCL[1,2]	NE	NE	NE	NE	NE	250/500/600	250/500/600	NE	900/1,600/2,200	500/1,000/1,500	NE	NE
SF#07 - LMMW-1S (continued)	Oct-22	70.0	105.0	181	3.23	306	**398**	84.9	48.8	**2,080**	**1,074**	621	6.57
	Apr-23	43.7	65.3	100	2.61	296	175	38.4	32.1	**1,220**	**638**	381	6.63
	Oct-23	111	165	199	3.7	245	**574**	118.0	**150**	**2,760**	**1,440**	923	6.42
	May-24	84	121	171	3.57	201	449	125	**163**	**2,280**	**1,200**	678	6.75
	Oct-24	78.4	118	227	3.65	267	**449**	127	**179**	**2,410**	**1,240**	672	6.71
SF#63 - LMMW-1D	Apr-10	32.3	47.7	50.8	3.33	160	104	28.0	**48.7**	780	438	266	7.93
	Nov-10	27.6	42.2	44.1	3.10	162	106	27.0	**48.0**	781	431	264	7.85
	May-11	30.0	47.4	48.2	3.20	158	109	28.9	**48.3**	778	**512**	272	7.94
	Oct-11	33.8	46.8	48.7	3.22	160	105	28.1	**45.5**	771	440	270	7.88
	Apr-12	29.6	46.7	49.1	2.91	161	110	29.3	**49.8**	787	**589**	271	7.91
	Nov-12	36.2	58.0	58.9	3.40	170	110	28.8	**48.0**	775	444	263	--
	Apr-13	29.4	46.0	47.2	3.76	164	108	25.4	43.3	781	435	276	--
	Oct-13	33.8	52.6	52.0	3.10	129	76	29.0	**50.0**	832	423	245	--
	Apr-14	31.0	46.1	45.2	2.98	154	102	27.6	**46.6**	851	410	265	--
	Oct-14	29.9	43.5	45.0	2.82	154	104	28.0	44.4	775	405	266	--
	Apr-15	29.5	47.3	45.9	2.74	160	104	27.8	**46.1**	790	440	268	--
	Oct-15	32.8	48.5	48.4	2.96	178	116	28.5	**48.2**	794	482	284	--
	Apr-16	31.4	47.7	46.8	2.77	148	94	28.9	**49.3**	807	458	284	--
	Oct-16	30.7	49.4	45.8	2.65	165	104	28.0	**48.4**	831	410	277	7.92
	Apr-17	28.8	46.9	44.5	3.07	175	101	27.2	**46.6**	774	426	270	7.93
	Oct-17	39.1	70.4	68.3	3.90	166	108	27.7	**48.0**	794	423	280	7.95
	Apr-18	30.7	46.6	51.8	2.83	157	104	28.5	**47.1**	779	397	274	7.88
	Oct-18	32.8	46.6	50.9	2.76	154	103	31.1	**45.8**	781	448	282	7.82
	Apr-19	30.5	43.9	50.9	2.68	157	104	26.8	44.9	775	396	266	7.97
	Oct-19	31.7	47.6	52.4	3.02	169	109	28.6	**47.5**	809	427	279	7.92
	Oct-20	31.3	45.6	48.0	2.91	137	92	29.0	44.4	791	465	238	7.91
	Apr-21	32.2	44.3	47.2	2.95	160	102	27.6	**45.8**	795	445	257	7.84
	Oct-21	30.6	45.3	46.6	3.22	167	109	28.2	**46.2**	786	431	269	7.80
	Mar-22	32.3	47.4	46.1	3.37	167	107	28.4	43.7	796	423	277	7.84
	Oct-22	32.4	46.1	49.3	3.10	161	102	28.7	**46.2**	809	426	283	7.84
	Apr-23	31.3	47.0	51.3	3.16	163	108	34.6	42.9	784	417	264	7.79
	Oct-23	33.4	50.8	50.7	2.95	170	104	24.9	41.6	800	425	277	7.85
	May-24	33.0	48.5	52.4	3.12	177	103	28.0	**51.5**	826	**457**	279	7.80
	Oct-24	35.1	52.8	53.2	3.18	193	108	30.6	**54.1**	842	**421**	293	7.94
SF#09 - LMMW-2S	Apr-09	38.3	33.7	45.2	2.94	170	105	26.0	7.5	710	377	250	7.38
	Nov-09	36.0	36.0	44.0	2.50	170	111	34.0	7.6	756	375	258	7.45
	Apr-10	42.8	29.7	77.3	2.82	252	75	30.0	5.3	806	446	260	7.43
	Nov-10	42.9	31.4	71.5	3.20	262	89	33.0	6.9	836	468	272	7.57

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#09 - LMMW-2S (continued)	May-11	44.0	35.0	78.1	3.30	248	93	33.6	5.1	834	**507**	262	7.54
	Oct-11	45.6	35.8	76.9	2.90	262	90	31.9	4.0	839	460	262	7.47
	Apr-12	39.9	31.7	74.1	2.64	248	93	33.9	5.0	817	464	253	7.43
	Nov-12	41.6	33.4	73.4	2.96	269	101	29.4	3.0	800	441	241	--
	Apr-13	41.8	34.3	71.5	3.18	275	81	28.3	5.2	807	470	257	--
	Oct-13	42.5	35.4	72.1	2.63	209	60	26.0	<0.44*	818	396	245	--
	Apr-14	43.6	34.5	77.3	2.61	260	81	30.4	4.9	890	464	241	--
	Oct-14	44.2	34.2	71.6	2.37	247	84	32.0	4.4	831	465	259	--
	May-15	42.7	35.8	70.2	2.26	252	91	34.0	4.8	845	439	240	--
	Oct-15	44.3	38.1	75.7	2.45	252	96	33.3	4.6	840	478	258	--
	Apr-16	41.5	36.6	69.0	2.17	250	96	34.0	6.6	852	447	258	--
	Oct-16	38.9	37.4	69.3	1.98	248	100	35.0	8.4	862	450	265	7.63
	Apr-17	40.8	39.5	72.7	2.59	264	99	32.8	5.6	869	455	276	7.51
	Oct-17	49.4	52.3	102.0	2.82	252	120	36.5	9.9	**940**	492	291	7.55
	Apr-18	48.3	45.8	95.5	2.65	246	141	42.0	12.5	**1,010**	**539**	314	7.55
	Oct-18	54.5	49.0	96.8	2.62	206	143	44.5	17.4	**1,120**	**592**	341	7.55
	Apr-19	57.0	51.3	99.5	2.55	251	204	49.2	24.6	**1,220**	**632**	357	7.87
	Oct-19	59.3	55.1	105	2.95	266	218	51.5	24.7	**1,240**	**689**	405	7.51
	Oct-20	63.5	62.2	116	2.92	229	203	62.0	29.5	**1,350**	**752**	447	7.53
	Apr-21	67.8	63.8	98.8	3.03	249	233	65.8	32.6	**1,390**	**770**	423	7.50
	Oct-21	68.6	66.7	110	3.32	264	248	70.1	32.4	**1,410**	**772**	458	7.38
	Mar-22	70.4	69.8	120	3.33	254	248	68.8	30.0	**1,440**	**767**	464	7.43
	Oct-22	68.5	67.7	115	2.91	250	245	69.0	32.5	**1,440**	**769**	458	7.39
	Apr-23	70.5	69.6	112	2.83	251	266	73.1	31.9	**1,500**	**778**	471	7.47
	Oct-23	72.8	74.3	116	2.73	249	242	61.9	29.5	**1,410**	**767**	456	7.40
	Jul-24	67.6	67.9	109	2.57	--	**254**	70.3	36.2	**1,440**	**777**	458	7.40
	Oct-24	66.4	68.4	109	2.62	255	235	69.4	34.4	**1,430**	**736**	426	7.59
SF#08 - LMMW-2D	Apr-09	46.3	30.1	72.2	3.38	280	78	26.0	4.9	811	433	258	7.50
	Nov-09	45.0	31.0	70.0	3.00	262	80	32.0	5.1	814	456	250	7.50
	Apr-10	37.3	36.4	49.0	3.03	162	109	31.5	6.9	760	397	260	7.43
	Nov-10	35.8	36.9	44.3	3.50	182	114	32.0	2.1	773	440	262	7.45
	May-11	39.4	43.0	51.0	3.50	178	112	33.2	7.5	784	460	266	7.57
	Oct-11	42.8	46.6	52.7	3.60	190	116	32.8	6.9	791	430	270	7.57
	Apr-12	37.5	41.6	52.5	2.70	181	119	36.5	6.0	808	434	281	7.49
	Nov-12	39.2	46.8	52.9	3.38	204	133	34.4	7.5	804	421	278	--
	Apr-13	41.7	45.0	52.3	3.73	198	124	32.4	7.9	829	441	296	--
	Oct-13	43.2	47.4	55.4	2.88	139	85	36.0	6.0	850	396	242	--
	Apr-14	43.3	45.5	56.5	2.69	184	124	38.9	8.3	**946**	448	290	--

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#08 - LMMW-2D (continued)	Oct-14	44.0	46.1	53.1	2.54	199	132	41.0	8.8	884	474	300	--
	May-15	47.0	49.2	53.1	2.55	170	107	40.0	10.5	884	453	287	--
	Oct-15	48.5	50.7	58.5	2.63	204	136	42.5	10.5	**904**	**512**	323	--
	Apr-16	43.6	48.2	53.9	2.60	201	136	44.0	11.4	**912**	472	322	--
	Oct-16	44.1	50.6	56.6	2.38	201	133	44.0	11.4	**922**	433	319	7.65
	Apr-17	44.0	49.5	54.8	2.91	208	135	44.5	11.6	**938**	473	337	7.65
	Oct-17	45.5	56.0	65.6	2.77	203	139	44.2	11.7	**934**	466	336	7.62
	Apr-18	48.5	54.0	62.3	2.62	199	138	45.3	12.9	**932**	485	337	7.68
	Oct-18	50.0	51.6	59.9	2.68	237	175	45.0	12.5	**946**	472	341	7.71
	Apr-19	48.1	50.1	58.7	2.46	211	145	48.0	12.0	**962**	**506**	331	8.00
	Oct-19	49.0	50.8	62.6	2.83	213	150	49.8	13.2	**966**	**530**	374	7.67
	Oct-20	47.9	50.7	61.0	2.64	180	127	49.0	14.1	**940**	**537**	327	7.62
	Apr-21	48.9	48.2	54.5	2.78	201	131	45.9	13.9	**937**	**524**	322	7.54
	Oct-21	46.1	50.7	63.7	2.87	216	138	48.4	15.0	**951**	492	356	7.49
	Mar-22	46.6	51.5	57.3	2.98	211	135	46.7	14.3	**938**	476	332	7.57
	Oct-22	47.8	49.1	60.4	2.72	209	133	47.2	14.7	**941**	477	333	7.55
	Apr-23	47.3	51.2	63.4	2.78	216	136	52.4	14.7	**957**	**508**	331	7.57
	Oct-23	48.8	53.4	61.8	2.56	213	128	43.2	14.0	**931**	485	326	7.57
	Jul-24	47.7	51.3	61.6	2.63	--	134	56.3	16.3	**948**	**511**	327	7.52
	Oct-24	46.7	50.7	61.0	2.57	222	125	47.2	15.2	**932**	468	314	7.73
SF#65 - LMMW-2SS	Apr-12	28.2	48.9	77.5	0.59	166	154	61.1	25.3	**958**	**553**	285	6.70
SF#11 - LMMW-3S	Apr-04	45.5	53.3	59.1	1.87	--	--	**--**	--	--	--	--	--
	Nov-04	42.8	45.4	61.2	2.09	264	66	55.7	<0.2	769	403	276	7.20
	Apr-05	41.1	46.0	54.2	1.47	282	51	61.0	0.3	773	469	294	7.23
	Nov-05	48.8	2.16*	45.2	60.5*	243	52	90.0	0.3	770	499	294	7.27
	May-06	28.7	34.2	46.2	1.53	192	44	57.0	<0.3	622	380	222	7.34
	May-07	31.3	36.0	52.4	1.79	270	30	12.9	<0.3	612	342	270	7.20
	May-08	49.5	57.2	49.5	2.27	368	54	3.8	<0.3	850	494	186	7.13
	Apr-09	57.3	63.6	38.3	1.83	434	56	0.8	<0.3	**917**	**518**	232	7.27
	Nov-09	48.0	55.0	33.0	1.90	340	55	1.2	<0.3	798	444	400*	7.13
	Apr-10	53.5	57.6	35.8	1.20	300	45	0.8	<0.3	847	465	400	7.07
	Nov-10	54.4	57.3	32.0	1.80	402	66	1.2	<0.88	899	**518**	406	7.10
	May-11	56.8	65.2	32.0	2.40	372	64	3.5	<0.3	892	479	428	7.20
	Oct-11	51.2	56.2	32.1	2.06	332	50	8.5	<0.3	761	420	340	7.15
	Apr-12	47.3	44.6	47.6	2.84	355	83	1.1	<0.3	897	480	284	6.66
	Nov-12	44.5	52.9	26.1	2.14	260	59	35.2	<0.3	703	443	311	--
	Apr-13	52.4	58.0	25.7	2.68	325	54	32.0	<0.3	786	465	380	--
	Oct-13	27.0*	31.1*	44.8*	--	183*	67*	10*	<0.44	592*	291*	184*	7.61*

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#11 - LMMW-3S (continued)	Apr-14	51.6	56.5	33.2	4.00	323	48	20.2	<0.3	857	433	345	--
	Oct-14	55.3	59.2	30.4	1.99	386	50	10.0	<0.88	852	462	406	--
	Apr-15	51.0	60.2	38.2	2.00	375	50	13.5	<0.3	855	463	381	--
	Oct-15	70.3	72.5	38.0	2.23	472	60	3.7	<0.3	**985**	**538**	474	--
	Apr-16	62.7	70.5	30.3	2.32	432	56	2.5	<0.88	**951**	**506**	450	--
	Oct-16	48.5	56.6	45.3	2.02	321	60	27.0	<0.88	794	424	348	--
	Apr-17	55.2	62.9	41.7	2.85	390	63	14.4	<0.308	**933**	486	387	--
	Oct-17	53.6	66.3	49.5	2.63	431	58	4.5	<0.308	**950**	486	425	--
	Apr-18	57.6	62.1	52.1	2.40	400	56	3.5	<0.308	884	485	393	7.19[a]
	Oct-18	59.8	61.4	44.0	2.41	403	63	4.2	<0.308	886	466	411	7.05
	Apr-19	57.3	58.5	39.8	2.50	400	63	4.7	<0.308	886	482	401	--
	Oct-19	56.4	60.8	37.8	2.68	372	62	8.1	<0.308	867	464	391	7.22
	Oct-20	56.4	60.5	37.4	2.60	376	58	7.4	<0.308	871	481	391	7.14
	Apr-21	64.5	64.8	37.6	2.88	445	66	5.2	<0.176	**950**	**526**	435	7.09
	Oct-21	72.9	76.5	36.8	3.46	484	80	0.7	<0.176	**1,080**	**586**	507	6.98
	Mar-22	78.1	82.1	40.0	3.70	507	82	<0.5	<0.176	**1,130**	**605**	542	6.84
	Oct-22	72.4	77.4	40.0	3.62	472	79	0.6	<0.176	**1,080**	**573**	504	6.89
	Apr-23	68.7	72.1	38.7	3.30	446	73	2.5	<0.176	**1,030**	**537**	461	6.96
	Oct-23	63.3	68.4	39.0	2.84	397	70	6.8	<0.176	**951**	**505**	423	7.06
	May-24	67.6	70.7	43.6	3.23	465	85.2	2.61	<0.176	**1,040**	**563**	477	6.98
	Sep-24	69.7	74.1	44.9	3.22	457	85.8	2.03	<0.176	**1,070**	**579**	472	7.07
SF#10 - LMMW-3D	Apr-04	32.9	36.2	43.5	1.96	--	70	14.0	<0.3	591	340	210	7.58
	Oct-04	31.2	32.9	44.5	2.06	176	76	14.0	<0.2	601	287	200	7.60
	Apr-05	29.6	32.9	43.2	1.86	184	82	15.0	<0.3	605	355	206	7.63
	Nov-05	35.9	35.9	31.5	47.2*	182	82	14.4	<0.3	612	383	--	7.62
	May-06	29.4	30.6	43.2	1.99	178	75	14.0	<0.3	598	340	208	7.62
	May-07	30.3	33.7	45.7	2.00	190	80	13.3	<0.3	608	333	220	7.55
	May-08	29.5	32.0	42.9	2.21	180	76	11.9	<0.3	597	331	210	7.60
	Apr-09	27.7	30.6	44.3	1.74	162	75	11.8	<0.3	594	355	190	7.69
	Nov-09	28.0	31.0	42.0	1.90	180	80	13.0	<0.3	589	353	210	7.67
	Apr-10	27.8	29.1	42.3	0.72	180	70	12.3	<0.3	598	332	180	7.52
	Nov-10	25.7	28.5	39.4	2.20	186	75	13.0	<0.88	602	319	202	7.70
	May-11	27.6	31.4	43.8	2.00	180	73	12.8	<0.3	595	343	224	7.60
	Oct-11	31.7	31.9	44.9	1.96	178	71	12.4	<0.3	592	310	196	7.52
	Apr-12	25.9	29.8	44.1	1.95	182	74	12.5	<0.3	585	292	198	7.62
	Nov-12	26.6	30.2	43.0	2.04	201	75	11.6	<0.3	589	322	193	--
	Apr-13	26.7	30.2	41.9	2.19	188	71	12.5	<0.3	592	333	204	--
	Oct-13	42.9*	54.0*	30.0*	1.98	259*	50*	48*	<0.44	740*	391*	318*	7.28

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#10 - LMMW-3D (continued)	Apr-14	28.4	30.0	43.7	1.97	175	68	10.5	<0.3	640	313	193	--
	Oct-14	27.8	29.1	40.2	1.82	184	70	9.8	<0.88	588	313	197	--
	Apr-15	26.3	31.2	41.6	1.77	180	68	9.9	<0.3	581	314	192	--
	Oct-15	29.7	30.8	43.3	1.96	181	70	10.0	<0.3	576	318	195	--
	Apr-16	27.4	29.8	38.3	1.80	180	68	10.0	<0.88	590	304	195	--
	Oct-16	28.0	32.4	42.4	1.89	185	68	9.5	<0.88	588	287	196	7.63
	Apr-17	25.9	31.0	42.0	2.19	179	64	9.7	<0.308	590	296	191	7.62
	Oct-17	24.8	31.0	45.2	1.86	184	70	9.2	<0.308	584	289	191	7.54
	Apr-18	29.4	32.0	51.6	1.92	183	67	9.9	<0.308	587	309	198	7.59
	Oct-18	27.8	29.8	46.4	1.91	189	74	9.7	<0.308	584	297	205	7.52
	Apr-19	28.5	29.5	47.3	1.77	188	69	10.0	<0.308	593	313	196	7.93*
	Oct-19	27.9	30.6	47.9	2.05	193	70	9.9	<0.308	585	317	199	7.62
	Oct-20	28.3	31.1	45.7	2.00	188	70	10.0	<0.44	595	314	199	7.58
	Apr-21	29.0	29.5	43.2	2.04	184	65	9.1	<0.176	583	311	185	7.51
	Oct-21	27.5	29.8	43.1	2.10	190	68	8.2	<0.176	593	305	198	7.51
	Mar-22	28.2	30.3	43.7	2.16	189	67	8.4	<0.176	590	301	195	7.36
	Oct-22	28.8	30.3	45.3	2.10	188	66	8.3	<0.176	604	297	194	7.45
	Apr-23	29.3	31.6	46.5	2.04	193	68	8.6	<0.176	606	312	197	7.49
	Oct-23	29.9	32.8	45.7	1.93	193	66	7.4	<0.176	595	315	200	7.51
	May-24	28.8	30.6	46.1	2.00	207	68.5	8.63	<0.176	594	297	200	7.43
	Sep-24	29.8	32.2	45.9	2.03	203	66.7	8.63	<0.176	610	316	200	7.62
SF#12 - LMMW-4S	May-14	36.3	41.3	48.7	1.55	204	54	50.5	**52.8**	763	440	266	--
SF#13 - LMMW-4SS	Apr-04	36.1	42.8	30.9	1.57	--	--	**--**	--	--	--	--	--
	Oct-04	38.1	40.2	35.1	1.77	194	55	44.5	<0.2	624	464	244	7.30
	May-14	70.8	71.3	53.8	2.23	480	61	43.7	16.9	**1,150**	**610**	510	--
SF#15 - LMMW-6D	Apr-04	31.8	34.1	42.9	1.64	--	50	31.0	34.8	564	380	200	7.89
	Nov-04	26.5	27.6	28.3	1.41	130	45	35.5	43.0	521	321	160	8.10
	Apr-05	30.2	30.4	40.4	1.58	140	55	30.0	32.0	560	350	194	7.95
	Nov-05	32.1	2.02*	29.2	42.5*	126	56	36.0	44.0	561	384	--	8.03
	May-06	27.8	27.8	38.7	1.67	130	54	37.0	45.0	560	350	212	8.06
	May-07	26.4	26.9	39.0	1.17	112	50	32.0	**55.0**	535	312	176	8.12
	May-08	27.7	28.4	39.1	1.70	118	55	33.0	**49.0**	549	310	178	7.95
	Apr-09	24.9	26.8	39.2	1.54	134	57	29.9	36.0	562	323	192	8.06
	Nov-09	27.0	27.0	37.0	1.70	120	53	34.0	43.8	558	301	180	7.95
	Apr-10	28.3	29.4	40.5	0.09	134	53	31.7	41.9	572	317	186	7.96
	Nov-10	23.6	25.2	31.2	1.60	122	52	28.0	**47.0**	578	331	182	8.10
	May-11	26.3	29.1	38.5	1.73	104	54	29.5	**45.0**	569	303	182	7.98
	Oct-11	29.9	30.4	40.8	1.68	136	55	29.3	40.8	572	320	192	--

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#15 - LMMW-6D (continued)	Apr-12	26.4	30.3	40.1	1.56	148	58	31.1	40.0	595	315	201	7.89
	Nov-12	28.6	31.7	41.0	1.87	155	63	28.0	33.6	608	349	197	--
	Apr-13	28.4	31.7	40.2	2.20	156	55	28.4	40.1	606	346	212	--
	Oct-13	28.3	29.3	39.7	1.61	154	59	28.0	34.3	592	351	199	7.90
	Apr-14	29.9	31.0	40.2	1.76	148	54	29.3	34.7	645	334	199	--
	Oct-14	28.5	28.7	37.5	1.61	144	52	31.0	42.2	580	338	197	--
	Apr-15	28.8	34.0	39.7	1.60	163	54	27.4	34.1	610	331	205	--
	Oct-15	28.5	28.9	39.6	1.73	137	53	31.7	38.8	564	333	187	--
	Apr-16	27.6	29.9	36.5	1.63	146	52	32.0	37.8	584	328	193	--
	Oct-16	26.1	29.5	39.2	1.52	131	49	34.0	41.8	557	295	188	7.95
	Apr-17	26.4	29.7	37.7	1.88	138	47	31.2	36.5	580	307	183	7.90
	Oct-17	27.9	29.6	38.2	1.68	144	51	29.5	38.3	579	326	198	7.89
	Apr-18	27.0	28.6	42.1	1.57	132	50	34.6	41.8	556	308	189	7.96
	Oct-18	27.6	28.1	42.1	1.61	142	48	27.2	33.0	563	321	192	7.88
	Apr-19	27.8	28.2	41.2	1.63	140	51	31.8	38.9	567	312	188	8.04
	Oct-19	30.8	31.3	43.4	1.82	174	58	26.1	21.9	599	328	211	7.90
	Oct-20	37.4	39.5	48.0	2.04	227	62	29.0	23.3	705	397	258	7.80
	Apr-21	30.5	30.6	42.8	1.85	166	51	30.5	35.3	606	342	195	7.77
	Oct-21	28.3	28.9	39.6	1.86	146	48	34.4	**46.2**	582	328	193	7.80
	Mar-22	38.0	39.6	45.5	2.16	228	64	28.7	16.7	718	376	260	7.70
	Oct-22	31.2	32.3	41.7	1.85	165	54	31.4	27.9	624	318	209	7.74
	Apr-23	32.3	34.0	44.2	1.89	187	56	3.6	2.4	631	334	217	7.74
	Oct-23	32.6	34.7	42.4	1.75	178	54	27.0	27.8	625	333	214	7.77
	May-24	29.7	30.6	42.5	1.79	170	52.7	30.9	32.5	600	342	101	7.65
	Sep-24	31.5	32.9	43.3	1.85	172	54.7	30.8	32.6	612	342	205	7.86
SF#16 - LMMW-7SS	Apr-04	44.0	48.5	54.9	1.18	--	--	**--**	--	--	--	--	--
	Oct-04	43.7	42.6	59.1	1.50	240	46	45.7	**50.9**	737	456	260	7.70
	Nov-09	42.0	42.0	53.0	1.50	240	43	47.0	**52.0**	769	496	282	7.58
	Apr-12	38.9	42.9	52.5	1.09	246	44	45.3	44.4	750	444	278	7.54
SF#17 - (NE) WINDMILL	Nov-02	--	--	--	--	168	48	39.0	28.0	574	265	212	7.50
	Jul-03	28.6	36.2	30.6	1.65	180	48	33.0	28.0	575	273	230	7.40
SF#18 - NEW GG PARK (N) LAKE	Nov-04	28.6	35.1	35.1	1.44	158	42	31.1	21.4	530	337	198	7.50
	May-05	24.9	30.4	26.6	0.70	146	41	27.0	25.0	500	289	178	7.69
	Nov-07	27.4	32.2	24.7	1.10	128	44	28.0	31.0	496	290	200	7.52
	Apr-09	23.1	28.6	24.8	1.07	140	44	24.0	28.0	494	298	194	7.79
	Mar-13	24.5	29.8	25.6	0.96	138	42	25.3	29.9	507	297	196	7.55
SF#19 - NEW GG PARK (S) WINDMILL	Nov-04	35.2	40.3	31.8	1.74	162	42	49.0	37.4	598	373	240	7.80
	May-05	25.5	34.5	25.5	1.16	146	42	42.0	20.0	525	311	230	8.04

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#19 - NEW GG PARK (S) WINDMILL	Nov-05	--	--	--	--	140	41	**--**	--	565	358	240	7.76
(continued)	Dec-05	28.9	35.8	27.0	1.50	--	--	**--**	--	--	--	--	--
	Jun-07	--	--	--	--	148	--	**--**	--	--	--	--	--
	Apr-09	28.4	32.5	27.6	1.41	150	46	40.0	31.0	558	316	224	7.87
	Aug-13	30.5	36.2	27.7	1.40	152	44	40.0	31.0	573	332	216	7.65
SF#20 - (NW) WINDMILL	May-02	--	--	--	--	171	44	37.0	28.0	573	--	219	7.50
	Nov-02	--	--	--	--	120	41	12.0	20.0	415	181	144	8.00
	Jul-03	20.0	24.3	24.6	1.34	130	43	11.0	18.0	414	164	160	7.90
SF#22 - OLYMPIC CLUB #8	May-02	--	--	--	--	189	84	30.5	16.1	685	--	--	8.10
	Apr-04	38.5	39.7	46.0	1.95	--	--	**--**	--	--	--	--	--
SF#23 - PINE LAKE PROD WELL	Oct-04	32.7	33.4	36.4	1.09	144	35	37.0	**65.0**	565	336	244	7.20
SF#25 - (S) WINDMILL	May-02	--	--	--	--	133	41	28.0	36.0	476	--	185	7.70
	Nov-02	--	--	--	--	120	40	28.0	38.0	474	202	184	7.70
	Jul-03	25.5	28.6	24.5	1.49	150	43	22.0	36.0	486	202	190	7.80
	Apr-04	24.4	27.7	23.9	1.11	--	40	24.0	37.8	455	330	180	7.70
	Nov-04	29.6	31.0	29.9	1.69	128	37	31.4	36.7	489	312	185	7.70
SF#41 - WEST SUNSET PLAYGROUND	May-04	15.2	16.4	21.7	0.85	--	20	24.0	14.1	317	266	130	8.70
	May-05	16.3	17.0	22.9	1.01	80	26	27.0	16.0	326	205	112	8.59
	May-06	15.0	16.6	21.2	0.73	76	29	28.0	17.0	322	210	110	8.57
	May-07	17.3	16.5	22.2	0.88	75	30	26.7	17.5	317	185	107	8.52
	May-08	18.9	20.2	24.8	1.07	88	29	29.3	22.4	355	210	122	8.37
	Apr-09	18.5	19.3	24.9	1.09	96	32	29.7	22.4	382	241	140	8.50
	Nov-09	19.0	19.0	23.0	1.00	94	31	31.6	21.1	380	230	128	8.30
	Apr-10	20.6	20.2	24.5	1.13	96	26	31.3	23.5	397	226	136	8.27
	Nov-10	17.2	18.1	21.5	1.10	100	30	31.0	20.0	382	228	134	8.54
	Jun-11	16.6	18.3	22.2	1.10	92	28	30.7	19.6	385	213	128	--
	Oct-11	14.4	12.7	21.6	1.02	66	26	22.4	0.60	264	150	84	7.90
	May-12	13.2	12.9	21.6	1.05	68	68*	22.0	0.72	264	186	79	--
	Oct-12	12.2	12.4	20.4	0.89	69	31	22.7	0.87	268	166	80	--
	Apr-13	13.0	12.1	21.3	1.34	70	26	22.4	0.66	265	125	82	8.50
	Oct-13	12.5	12.0	20.6	0.95	69	25	22.0	0.90	273	137	81	8.56
	May-14	12.9	12.0	18.8	0.92	71	25	21.4	0.58	270	122	390*	8.73
	Nov-14	13.2	12.6	18.4	0.97	71	26	21.6	0.45	268	140	81	8.85
	Apr-15	13.1	13.3	19.2	0.97	74	25	21.5	0.51	270	123	81	8.79
	Oct-15	13.7	12.9	20.2	0.98	77	26	23.0	0.16	269	142	82	8.67
	May-16	11.9	12.3	20.8	0.95	72	25	21.6	0.55	270	143	81	8.84
	Nov-16	11.3	11.7	17.5	1.14	70	24	22.0	<0.44	263	132	79	8.52
	May-17	12.3	11.7	19.6	0.94	71	24	22.4	<0.308	271	138	84	8.75

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#41 - WEST SUNSET PLAYGROUND	Oct-17	11.1	11.9	21.8	0.83	66	24	22.2	0.40	263	143	80	8.85
(continued)	May-18	14.1	19.8	30.2	1.74	99	38	19.0	<0.308	351	170	112	8.28
	Nov-18	18.4	26.7	43.7	1.97	126	59	35.1	<0.308	515	245	152	7.12
	Apr-19	17.9	30.4	36.2	1.26	142	41	43.8	<0.308	496	228	176	8.44
	Oct-19	23.1	37.5	35.2	1.20	162	42	51.5	10.91	562	305	214	8.13
	Oct-20	31.0	40.0	34.4	1.23	183	42	50.2	26.05	620	350	245	7.97
	Apr-21	24.4	34.7	32.4	1.21	158	40	83.3	33.09	548	297	197	8.26
	Nov-21	25.3	37.8	33.3	1.26	168	41	47.5	18.57	572	289	193	8.06
	May-22	11.7	25.0	33.0	1.28	113	39	31.2	<0.176	415	192	135	8.18
	Oct-22	10.8	25.0	31.7	1.16	113	39	32.2	<0.176	426	190	130	8.31
	Apr-23	9.8	31.2	33.4	1.18	133	42	40.1	<0.176	462	211	152	8.47
	Oct-23	11.2	40.7	37.2	1.16	163	43	41.1	<0.176	540	245	193	8.47
	May-24	11.0	39.2	37.9	1.20	160	45.1	48.1	<0.176	531	237	185	8.38
	Oct-24	9.87	44.3	38.4	1.24	174	46.1	49.7	<0.176	556	288	202	8.63
SF#24 - (S) SUNSET PLAYGROUND	Apr-04	31.1	33.1	36.9	1.31	--	50	27.0	12.8	576	394	200	7.34
	May-05	30.8	33.0	37.8	1.35	164	21	34.0	21.0	560	343	204	7.41
	May-06	28.8	31.6	35.6	1.18	154	54	38.0	30.0	584	360	212	7.39
SF#52 - CENTRAL PUMP ST MW190	May-05	44.2	43.2	46.9	1.81	270	47	47.0	19.0	750	433	300	7.59
	Oct-07	42.9	45.1	43.2	1.27	270	40	40.0	19.4	719	425	290	7.57
	Sep-08	45.4	45.9	43.2	1.40	260	40	45.0	22.0	707	382	294	7.56
SF#53 - CENTRAL PUMP ST MW270	May-05	29.0	21.9	48.2	1.52	168	72	8.7	<0.3	548	296	160	7.96
	Oct-07	28.5	23.1	44.0	1.32	170	70	8.6	<0.3	555	282	170	7.85
	Sep-08	32.2	24.0	45.9	1.60	174	69	10.7	<0.3	554	314	174	7.89
SF#46 - LK MERCED PUMP ST MW155	May-05	26.9	24.1	36.2	1.79	108	--	**--**	--	480	297	164	7.84
	Nov-05	26.4	25.0	35.9	1.80	102	39	47.0	**49.0**	--	353	7.83	7.51
	May-06	26.1	24.8	69.7*	3.26	100	39	47.0	**48.0**	503	310	182	7.81
	May-07	27.6	26.0	37.3	1.78	113	38	43.4	**49.0**	--	309	180	7.70
SF#47 - LK MERCED PUMP ST MW270	May-05	22.1	15.7	74.6	1.92	140	--	**--**	--	550	353	114	7.58
	Dec-05	22.6	16.2	55.6	0.69	114	41	35.0	27.0	510	335	132	--
	May-06	25.0	18.0	51.3	1.35	134	50	35.0	24.0	505	310	140	7.54
	May-07	27.2	20.3	42.1	1.87	118	40	34.1	37.0	--	293	150	7.60
SF#48 - LK MERCED PUMP ST MW440	May-05	19.5	20.8	32.6	1.90	112	--	**--**	--	400	242	132	8.14
	Dec-05	18.3	20.2	28.7	0.51	100	50	7.5	18.0	416	264	130	8.23
	May-06	19.4	21.8	30.7	1.17	110	52	7.6	19.9	421	250	138	8.18
	May-07	20.1	22.1	31.3	1.67	115	49	8.0	21.0	--	232	140	8.10
SF#49 - LK MERCED PUMP ST MW575	May-05	48.2	29.2	88.6	3.90	214	102	102	<0.3	860	**531**	240	7.75
	Nov-05	48.5	30.1	88.6	4.01	208	104	83.0	<0.3	--	**1,120***	NS	7.80
	May-06	49.2	29.9	87.0	3.50	200	106	85.0	<0.3	861	490	238	7.80

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#49 - LK MERCED PUMP ST MW575 (cont)	May-07	50.7	28.5	90.4	3.97	211	105	81.5	<0.3	--	**517**	250	7.80
SF #71 - PARK PLAZA MW195	Apr-13	104	83.7	84.2	6.03	417	142	195	36.1	**1,519**	**915**	656	7.16
	Nov-13	98.8	73.5	84.0	4.61	388	145	160	31.2	**1,479**	215*	594	7.14
	May-14	111	86.5	73.4	4.45	367	151	179	31.6	**1,500**	**859**	614	7.16
	Oct-14	110	85.6	112	5.53	441	146	190	24.5	**1,610**	**961**	633	7.03
	May-15	112	86.3	78.8	4.11	328	150	190	36.5	**1,560**	**865**	689	7.15
	Dec-15	101	89.6	78.9	4.14	370	166	177	39.3	**1,530**	**958**	646	7.15
	May-16	112	88.1	80.9	4.22	389	160	195	41.6	**1,580**	**959**	680	7.09
	Nov-16	110	92.7	79.1	4.13	389	144	**256***	**48.4**	**1,660**	**1,010**	709	7.07
	May-17	127	92.9	107.0	4.69	446	146	236	**47.1**	**1,690**	**1,060**	715	7.02
	Nov-17	106	84.5	128.0	4.40	462	145	225	**45.8**	**1,730**	**1,060**	640	7.04
	May-18	104	83.7	171.0	4.64	491	107	228	**45.3**	**1,670**	**988**	549	7.13
	Nov-18	106	72.6	138.0	4.32	495	101	213	42.0	**1,630**	**965**	598	7.04
	May-19	103	77.4	131.0	3.94	514	97	209	41.9	**1,590**	**941**	578	7.34
	Nov-19	103	82.0	87.8	4.08	443	99	194	37.6	**1,530**	**907**	627	7.13
	Nov-20	104	80.3	86.8	3.98	449	118	145	34.8	**1,460**	**827**	638	7.92
	May-21	99	79.7	85.8	4.09	448	118	129	32.6	**1,420**	**828**	579	6.98
	Dec-21	90	76.5	83.7	4.54	409	131	118	34.1	**1,380**	**760**	561	7.29
	May-22	93	76.4	82.7	4.41	371	132	118	40.5	**1,360**	**761[c]**	545	7.05
	Nov-22	96	73.4	79.4	4.27	331	159	130	**48.8**	**1,400**	**784**	545	7.08
	May-23	102	79.8	81.5	4.09	331	163	152	**52.7**	**1,460**	**840**	572	7.10
	Jan-24	103	82.2	78.1	3.88	329	152	191	**54.9**	**1,480**	**846**	582	7.24
	Apr-24	103	83.5	78.4	3.89	425	123	147	**39.2**	**1,440**	**824**	597	7.07
	Nov-24	106	85.9	79.8	3.91	412	136	167	**49.2**	**1,460**	**862**	594	7.16
SF#50 - PARK PLAZA MW460	Apr-05	51.0	52.9	50.0	2.25	274	66	49.0	41.0	847	**557**	338	7.47
	Nov-05	52.6	1.78*	47.6	49.5*	248	72	41.0	37.0	--	**526**	--	7.65
	May-06	39.5	43.6	39.5	2.14	218	65	36.0	33.0	733	430	282	7.71
	May-07	48.9	47.5	47.7	1.87	260	60	39.5	34.0	794	453	312	7.67
	May-08	42.0	43.8	45.3	1.73	230	70	39.9	26.5	730	420	290	7.47
	Apr-09	56.3	57.2	54.1	2.06	316	74	70.0	28.0	**965**	**555**	356	7.50
	Nov-09	49.0	51.0	48.0	1.90	270	67	63.0	28.0	862	**500**	344	7.50
	Apr-10	47.0	51.6	47.6	2.74	270	62	66.6	28.3	865	464	338	7.41
	Dec-10	32.9	34.9	40.8	1.50	198	61	41.0	27.0	712	442	242	7.50
	May-11	37.7	41.4	40.3	2.00	256	65	55.0	26.8	842	**501**	332	--
	Nov-11	53.4	56.6	55.0	2.00	286	64	91.5	28.3	**933**	**560**	372	7.06
	May-12	49.6	51.8	56.0	1.85	263	70	85.4	33.5	898	**538**	353	--
	Nov-12	49.6	53.6	54.5	2.34	278	71	63.5	32.9	887	**512**	334	7.32
	Apr-13	64.5*	69.6*	55.2	2.77	396*	33*	68.5	34.8	**1,078**	**618**	468*	7.33

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#50 - PARK PLAZA MW460 (continued)	Nov-13	49.6	54.5	51.7	2.01	293	65	62.0	32.1	**912**	162*	347	7.28
	May-14	59.8	59.5	50.8	1.94	323	65	62.5	33.3	**969**	**519**	383	7.30
	Oct-14	48.6	49.2	44.9	1.85	248	66	60.3	32.4	838	425	310	7.25
	May-15	49.5	50.1	48.6	1.82	236	60	64.0	33.4	859	445	298	7.29
	Dec-15	38.0	45.6	46.3	1.77	217	66	58.9	31.0	771	483	288	7.25
	May-16	41.7	44.5	45.0	1.83	223	65	61.5	29.7	794	443	309	7.22
	Nov-16	28.7	33.4	36.6	1.76	165	68	39.3	26.0	656	341	232	7.35
	May-17	36.9	39.3	44.4	1.71	201	59	49.7	22.8	712	414	256	7.33
	Nov-17	28.9	33.7	39.1	1.48	185	63	35.7	24.6	662	363	234	7.31
	May-18	36.0	39.9	53.2	1.62	194	62	42.9	25.0	684	346	252	7.33
	Nov-18	38.3	36.4	45.1	1.61	187	59	48.4	24.4	702	395	248	7.30
	May-19	37.4	38.5	49.3	1.57	197	62	55.2	25.7	695	389	255	7.52
	Nov-19	40.3	41.8	46.7	1.84	213	62	57.5	25.8	736	404	278	7.42
	Nov-20	44.8	45.5	50.8	1.91	230	68	63.1	24.3	794	449	301	7.26
	May-21	41.5	42.1	47.0	1.99	223	62	55.3	24.0	757	434	271	7.26
	Dec-21	48.7	49.3	51.7	2.17	277	65	70.3	27.4	865	472	338	7.36
	May-22	50.7	53.1	55.3	2.28	288	61	65.0	26.0	878	484	330	7.13
	Nov-22	55.0	54.3	57.7	2.27	307	65	68.2	30.2	**926**	**502**	356	7.10
	May-23	53.0	54.1	56.4	2.24	313	64	56.7	29.3	**916**	**511**	358	7.19
	Jan-24	49.5	51.2	54.1	2.02	281	62	49.7	29.7	872	473	323	7.21
	Apr-24	43.7	45.9	49.8	1.89	249	64.3	49.8	26.9	791	439	300	7.35
	Nov-24	40.3	42.2	47.8	1.75	229	63.6	50.2	27.6	756	427	612	7.42
SF#51 - PARK PLAZA MW620	May-05	44.0	41.3	62.1	2.95	208	125	44.0	<0.3	853	250*	176	7.70
	Nov-05	52.0	2.18*	52.6	69.4*	236	142	44.0	<0.3	--	**579**	--	7.88
	May-06	42.4	44.2	54.3	3.28	218	119	43.0	<0.3	819	490	282	7.89
	May-07	53.1	47.3	63.3	3.02	242	130	41.7	0.3	**919**	**509**	329	7.81
	Jun-08	63.2	53.4	68.4	3.08	290	155	43.0	0.6	**1,042**	**592**	410	7.79
	Apr-09	58.7	52.6	70.1	3.08	284	143	42.0	0.6	**1,044**	**615**	356	7.86
	Nov-09	56.0	51.0	66.0	3.00	274	138	45.0	0.5	**1,018**	**585**	360	7.85
	Apr-10	60.2	56.4	73.5	3.07	280	143	42.0	0.4	**1,061**	**585**	350	7.73
	Dec-10	55.1	48.8	63.7	3.10	274	139	42.0	<0.88	**1,043**	**568**	358	7.90
	May-11	49.6	47.0	58.1	3.30	280	148	38.3	0.47	**1,078**	**603**	400	--
	Nov-11	58.6	55.1	68.8	3.19	294	145	38.2	0.9	**1,062**	**610**	388	7.40
	May-12	60.6	55.7	70.4	3.37	300	156	39.2	0.57	**1,079**	**618**	396	--
	Nov-12	35.7	33.0	52.8	3.17	188	88	42.5	0.30	704	418	223	6.64
	Apr-13	30.1	28.3	46.3	2.84	160	75	38.8	0.39	620	368	201	7.26
	Nov-13	31.4	28.7	47.2	2.32	164	75	45.0	<0.44	632	357	207	7.39
	May-14	35.3	30.0	43.5	2.23	157	71	47.7	0.306	644	343	207	7.30

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SF#51 - PARK PLAZA MW620	Oct-14	36.8	32.0	42.2	2.23	164	74	54.8	0.346	656	376	216	7.62
(continued)	May-15	36.9	33.0	44.9	2.16	172	71	63.0	<0.2	679	365	216	7.76
	Dec-15	32.4	33.7	44.6	2.25	166	76	61.4	<0.3	671	405	225	7.82
	May-16	35.1	31.4	42.6	2.34	164	76	63.3	<0.308	679	369	231	7.79
	Nov-16	31.9	30.7	40.7	2.17	164	77	62.1	<0.308	682	358	237	7.90
	May-17	37.1	32.9	45.5	2.18	163	78	56.3	<0.308	677	396	229	7.83
	Nov-17	35.6	35.4	49.1	2.17	164	84	58.2	<0.308	698	397	235	7.84
	May-18	37.9	35.4	56.3	2.10	163	85	58.5	<0.308	700	348	241	7.81
	Nov-18	39.3	32.9	47.5	2.11	157	81	56.8	<0.308	700	377	235	7.79
	May-19	38.3	32.6	53.4	1.94	162	84	59.3	<0.308	686	375	229	7.89
	Nov-19	36.5	32.0	47.8	2.44	160	82	62.1	<0.308	688	372	231	7.93
	Nov-20	38.2	33.6	50.1	2.31	165	86	59.4	<0.308	693	380	242	7.65
	May-21	38.3	32.9	47.9	2.42	163	80	59.2	<0.176	699	381	229	7.66
	Dec-21	38.7	33.4	48.1	2.59	171	83	59.8	<0.176	706	369	245	7.89
	May-22	38.4	34.4	49.8	2.55	195	90	62.5	<0.176	702	373	224	7.69
	Nov-22	38.6	32.9	48.3	2.39	172	82	62.8	<0.176	704	377	233	7.78
	May-23	38.8	33.8	48.4	2.32	177	78	58.2	<0.176	705	395	235	7.74
	Jan-24	39.5	34.5	50.2	2.25	177	75	62.4	0.198	708	230	382	7.79
	Apr-24	38.7	34.1	49.3	2.25	180	77.0	58.2	<0.176	692	387	237	7.81
	Nov-24	38.9	34.3	50.3	2.26	183	76.4	57	<0.176	697	399	234	7.83
Elk Glen Monitoring Well	May-14	55.9	65.4	57.4	1.30	217	81	58.0	37.9	846	456	331	--
CUP-10A MW160	May-10	58.8	60.6	69.7	1.95	252	128	99.0	35.0	**1,149**	**691**	428	6.87
	Oct-10	57.0	56.4	68.5	1.10	256	133	99.0	23.0	**1,158**	**679**	412	6.86
	Jun-11	60.4	65.1	72.7	1.54	250	137	99.1	37.1	**1,149**	**688**	424	6.92
	Nov-11	60.2	62.3	73.2	1.44	260	129	84.4	38.5	**1,108**	**640**	408	6.83
	May-12	61.7	59.7	73.7	1.80	273	136	56.5	41.4	**1,080**	**621**	393	6.85
	Nov-12	60.1	62.3	75.9	1.59	278	147	64.2	42.4	**1,100**	**632**	377	6.89
	Apr-13	65.3	59.9	45.6	1.61	283	130	72.1	**45.7**	**1,123**	**640**	416	6.90
	Nov-13	61.2	59.2	74.0	1.26	274	130	62.0	41.4	**1,112**	**628**	392	6.88
	May-14	56.7	59.8	69.0	1.32	271	125	62.8	44.7	**1,110**	**606**	396	6.87
	Oct-14	61.0	58.5	72.1	1.31	275	125	63.0	**47.2**	**1,110**	**618**	391	6.84
	May-15	60.0	59.7	70.1	1.23	258	115	63.4	**49.1**	**1,110**	**538**	397	6.87
	Dec-15	55.4	59.2	71.3	1.31	368*	195*	59.4	**50.5**	**1,080**	**621**	390	6.88
	May-16	55.2	56.0	63.9	1.15	263	120	58.5	**51.9**	**1,090**	**628**	818	6.83
	Nov-16	52.5	58.0	64.5	1.08	270	124	63.7	**51.5**	**1,090**	**630**	396	6.85
	May-17	58.7	55.3	67.2	1.14	236	99	51.5	**54.6**	**1,080**	**628**	315	6.80
	Nov-17	51.8	52.8	63.6	1.05	264	129	49.4	**52.8**	**1,080**	**608**	391	6.86
	May-18	59.2	61.1	75.0	1.17	270	133	49.9	**53.7**	**1,080**	**627**	399	6.87

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
CUP-10A MW160 (continued)	Nov-18	61.2	57.0	70.3	1.21	305	148	49.6	**52.4**	**1,100**	**603**	451	6.83
	May-19	58.7	61.7	72.9	1.28	268	131	49.8	**52.4**	**1,100**	**557**	384	7.30
	Nov-19	59.4	60.0	73.6	1.35	262	128	49.6	**51.9**	**1,110**	**632**	379	6.92
	Nov-20	60.7	61.4	75.5	1.32	279	131	53.6	**51.0**	**1,110**	**622**	406	6.79
	May-21	61.5	58.0	72.3	1.40	285	127	52.0	**47.1**	**1,090**	**650**	398	6.78
	Nov-21	61.2	60.1	69.1	1.42	292	129	54.3	**48.8**	**1,110**	**614**	417	6.74
	May-22	64.0	63.1	75.1	1.50	296	126	54.6	**45.3**	**1,110**	**637**	414	6.79
	Nov-22	63.8	62.1	72.1	1.51	301	129	55.7	44.0	**1,110**	**628**	406	6.72
	May-23	63.4	63.3	76.4	1.36	303	127	56.3	40.4	**1,140**	**631**	415	6.76
	Dec-23	64.8	63.6	74.0	1.34	322	126	62.0	39.0	**1,140**	**620**	417	6.74
	Apr-24	64.7	63.0	73.6	1.31	316	121	56.7	34.9	**1,140**	**642**	416	6.86
	Nov-24	64.8	63.9	73.7	1.40	334	122	63.7	37.2	**1,120**	**633**	420	6.92
CUP-10A MW250	May-10	44.7	48.3	54.5	2.83	252	128	81.0	**48.0**	**1,102**	**647**	436	6.89
	Oct-10	57.1	58.1	71.7	1.45	264	132	76.0	36.0	**1,119**	**654**	398	6.90
	Jun-11	56.4	60.6	69.6	2.13	274	136	78.1	38.2	**1,117**	**697**	406	6.96
	Nov-11	59.7	60.8	72.6	1.43	262	130	75.7	38.9	**1,096**	**640**	396	6.90
CUP-10A MW500	May-10	41.3	34.5	108	2.42	212	110	68.0	36.0	**1,012**	**598**	132	7.48
	Oct-10	51.0	48.2	79.7	0.74	250	122	77.0	38.0	**1,079**	**637**	332	7.25
	Jun-11	56.5	57.6	73.0	1.93	242	131	76.2	38.1	**1,116**	**649**	382	7.01
	Nov-11	58.7	60.8	70.1	1.54	264	130	76.5	39.2	**1,098**	**630**	398	6.88
	May-12	61.7	62.6	72.7	1.42	249	136	126*	39.4	**1,158**	**694**	439	6.66
	Nov-12	62.9	66.7	73.1	1.50	255	143	122*	39.4	**1,149**	**707**	407	6.69
	Apr-13	63.4	65.4	76.1	1.81	263	130	130	42.6	**1,141**	**681**	444	6.78
	Nov-13	63.1	62.6	74.7	1.46	253	123	110	37.8	**1,134**	**669**	404	6.77
	May-14	63.6	58.9	65.7	1.31	244	117	105	39.6	**1,110**	**642**	404	6.74
	Oct-14	61.8	62.5	63.9	1.29	252	119	104	40.5	**1,100**	**661**	403	6.70
	May-15	59.3	59.7	64.6	1.25	220	104	96.3	41.2	**1,100**	**658**	381	6.69
	Nov-16	51.5	58.4	65.8	1.16	247	124	113	43.5	**1,090**	**650**	415	6.69
	May-17	56.5	56.2	63.8	1.21	204	98	87.9	43.9	**1,090**	**602**	325	6.67
	Nov-17	58.0	60.9	66.2	1.23	247	127	81.8	42.9	**1,090**	**635**	406	6.72
	May-18	60.4	62.7	72.5	1.30	248	127	83.2	44.4	**1,090**	**625**	401	6.73
	Nov-18	61.2	56.6	68.3	1.21	284	144	81.0	43.9	**1,090**	**607**	451	6.68
	May-19	61.8	58.3	65.8	1.17	246	125	81.2	43.5	**1,080**	**664**	398	6.74
	Nov-19	60.6	59.9	70.1	1.38	240	123	80.4	42.7	**1,100**	**665**	393	6.76
	Nov-20	61.8	62.9	73.5	1.33	251	134	82.5	44.0	**1,100**	**630**	409	6.70
	May-21	61.6	60.2	72.0	1.50	249	132	76.8	41.6	**1,090**	**663**	392	6.64
	Nov-21	61.1	60.5	68.0	1.47	263	141	77.4	41.5	**1,120**	**625**	422	6.63
	May-22	61.1	64.0	73.5	1.49	268	138	74.7	38.5	**1,120**	**640**	408	6.61

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
CUP-10A MW500 (continued)	Nov-22	61.6	62.8	70.7	1.39	279	139	75.4	38.5	**1,120**	**653**	404	6.61
	May-23	62.2	63.4	74.3	1.39	261	135	74.9	35.0	**1,130**	**640**	406	6.62
	Dec-23	62.5	63.3	71.6	1.36	267	129	81.0	33.7	**1,120**	**630**	407	6.74
	Apr-24	62.8	63.1	72.0	1.35	266	128	82.8	32.7	**1,110**	**643**	405	6.71
	Nov-24	61.9	63.4	71.3	1.35	283	128	88.8	31.7	**1,110**	**612**	406	6.79
CUP-10A MW710	May-12	69.8	46.0	91.5	4.05	210	189	120	<0.3	**1,192**	**689**	389	6.92
	Nov-12	72.3	50.6	88.4	4.31	198	189	139	<0.3	**1,183**	**694**	370	7.09
	Apr-13	72.3	50.6	86.8	5.61	211	188	137	<0.3	**1,205**	**665**	417	7.10
	Nov-13	60.9	52.8	59.2*	1.93*	209	184	110	<0.22	**1,208**	**654**	393	7.18
	May-14	77.3	46.9	81.5	3.97	199	179	116	<0.3	**1,200**	**680**	390	7.03
	Oct-14	78.0	49.8	85.8	3.89	211	185	115	<0.3	**1,210**	**623**	386	6.78
	May-15	74.4	49.7	82.2	3.74	224	189	117	<0.3	**1,200**	**642**	332	7.13
	Dec-15	69.6	48.9	91.7	3.62	220	128*	97.8	<0.3	**1,210**	**672**	388	7.27
	May-16	72.8	50.0	87.8	3.99	226	190	93.9	<0.308	**1,220**	**625**	415	7.20
	Nov-16	67.0	50.3	91.5	3.84	230	193	99.4	<0.308	**1,220**	**649**	392	7.09
	May-17	70.7	47.1	87.9	3.50	191	151	93.4	<0.308	**1,210**	**658**	318	7.12
	Nov-17	70.2	49.5	89.8	3.72	226	193	87.5	<0.308	**1,210**	**662**	395	7.20
	May-18	72.3	50.3	98.7	3.67	227	192	91.2	<0.308	**1,220**	**633**	391	7.05
	Nov-18	77.0	48.4	89.6	3.68	249	209	89.8	<0.308	**1,210**	**648**	441	7.20
	May-19	77.7	46.4	89.6	3.52	220	185	89.4	<0.308	**1,210**	**628**	385	7.27
	Nov-19	72.1	47.3	83.2	3.96	220	187	88.9	<0.308	**1,210**	**653**	373	7.26
	Nov-20	72.2	48.9	95.3	4.09	228	192	88.8	<0.308	**1,190**	**662**	384	7.10
	May-21	72.6	46.6	94.7	4.15	230	183	86.5	<0.176	**1,190**	**681**	368	7.11
	Nov-21	70.1	47.2	91.9	4.36	236	188	93.9	<0.176	**1,180**	**651**	385	7.12
	May-22	72.1	49.1	97.1	4.51	238	185	86.3	<0.176	**1,180**	**650**	383	7.04
	Nov-22	71.5	47.1	92.5	3.95	275	187	85.9	<0.176	**1,180**	**657**	366	7.15
	May-23	72.3	48.1	98.4	4.00	232	188	84.6	<0.176	**1,200**	**670**	379	7.10
	Dec-23	71.9	47.6	92.2	3.87	235	183	87.0	<1.11	**1,200**	**625**	383	7.20
	Apr-24	71.7	46.9	91.4	3.84	228	182	95.4	<0.176	**1,190**	**656**	368	7.15
	Nov-24	72.2	48.1	93.4	3.88	246	185	89.3	<0.176	**1,180**	**635**	371	7.26
CUP-18 MW230	May-10	33.7	32.1	59.9	1.62	178	90	38.0	7.4	726	419	210	6.70
	Oct-10	32.6	30.3	61.9	2.21	166	91	37.0	7.3	719	411	202	6.71
	Jun-11	30.3	30.2	59.3	2.18	166	92	38.0	8.8	722	412	208	6.72
	Oct-11	36.4	32.3	63.2	1.89	174	95	37.2	10.2	725	410	214	6.46
	May-12	31.6	31.0	61.2	1.68	176	100	38.3	10.6	731	428	222	6.61
	Nov-12	32.5	32.1	63.0	1.82	172	101	37.3	10.7	733	432	212	6.49
	Apr-13	32.2	30.9	59.2	1.97	181	98	40.7	11.1	740	423	228	6.67
	Nov-13	36.5	32.2	65.0	1.78	173	96	36.0	10.1	743	426	214	6.56

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
CUP-18 MW230 (continued)	May-14	35.2	31.2	58.1	1.64	168	95	35.1	10.3	735	401	218	6.47
	Oct-14	35.7	32.7	56.6	1.62	170	99	36.1	11.0	740	399	297	6.27
	May-15	35.9	32.2	60.3	1.61	174	100	35.0	10.7	748	408	226	6.21
	Dec-15	32.2	32.9	61.5	1.72	166	100	36.9	11.6	735	412	219	6.25
	May-16	36.4	32.1	56.8	1.66	165	99	36.9	10.4	744	414	226	6.07
	Nov-16	32.2	30.9	53.3	1.54	163	105	36.0	11.4	747	399	222	6.13
	May-17	38.1	30.4	56.3	1.77	168	100	37.0	11.8	758	425	228	6.02
	Nov-17	30.9	31.9	60.7	1.50	163	106	35.6	11.1	747	423	226	6.05
	May-18	35.5	32.6	64.3	1.64	157	103	36.1	11.6	758	412	224	5.89
	Nov-18	37.4	31.5	62.3	1.64	166	111	35.7	11.2	757	386	236	5.87
	May-19	36.4	31.2	62.0	1.50	159	108	37.0	11.8	765	365	216	6.04
	Nov-19	35.8	31.4	62.1	1.76	151	108	36.7	12.0	775	436	222	5.94
	Nov-20	36.6	32.9	64.2	1.81	164	113	36.5	11.3	769	433	233	5.95
	May-21	36.4	32.3	65.1	1.83	152	106	36.6	11.1	768	444	213	5.97
	Nov-21	37.1	32.7	66.0	1.96	167	116	36.9	10.9	778	421	237	5.94
	Apr-22	37.4	34.6	68.7	2.04	170	108	36.7	10.5	775	413	231	6.70
	Nov-22	37.4	33.8	63.4	1.76	174	115	36.8	10.6	788	449	232	6.62
	May-23	37.9	34.4	67.4	1.89	178	117	36.2	8.8	801	449	240	6.58
	Dec-23	38.9	35.6	68.4	1.83	170	115	40.6	13.1	810	443	234	6.67
	Apr-24	37.6	34.3	67.1	1.79	167	120	35.7	11.8	810	442	233	6.61
	Nov-24	39.0	36.3	66.8	1.77	181	116	40.5	13.0	811	442	246	6.75
CUP-18 MW425	May-10	31.1	32.0	49.4	1.17	180	91	37.7	7.9	726	418	234	6.64
	Oct-10	32.7	30.6	60.7	1.53	184	96	37.8	8.4	737	421	220	6.74
	Jun-11	30.5	30.1	57.4	2.00	174	96	37.8	10.4	733	358	212	6.70
	Oct-11	35.9	32.0	62.4	1.91	170	95	37.2	10.5	726	410	216	6.58
	May-12	31.9	30.5	60.7	1.62	173	100	38.2	10.9	732	421	222	6.53
	Nov-12	33.3	32.2	63.7	1.83	172	103	38.0	11.3	733	418	212	6.62
	Apr-13	33.7	31.6	61.7	2.15	180	100	40.7	11.5	739	413	227	6.68
	Nov-13	36.1	32.0	63.4	1.82	172	96	36.0	10.6	742	422	221	6.64
	May-14	34.4	30.6	57.8	1.65	169	95	35.6	10.7	735	398	216	6.68
	Oct-14	36.6	32.8	55.6	1.64	169	98	36.7	11.2	739	396	266	6.74
	May-15	34.4	32.4	57.0	1.60	175	100	35.8	10.8	745	**640***	223	6.65
	Dec-15	32.3	32.5	61.7	1.72	168	102	36.9	11.7	734	400	221	6.71
	May-16	36.1	32.4	58.9	1.69	170	99	37.4	10.6	745	406	224	6.58
	Nov-16	31.9	31.7	55.9	1.61	164	102	36.0	11.4	749	416	222	6.61
	May-17	36.1	29.6	54.3	1.71	159	97	35.6	11.8	753	416	221	6.51
	Nov-17	33.1	32.0	61.2	1.60	166	107	35.1	11.4	754	417	223	6.62
	May-18	35.8	32.9	65.5	1.66	165	105	35.8	11.6	756	410	229	6.58

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
CUP-18 MW425 (continued)	Nov-18	36.7	30.1	63.2	1.66	172	108	37.9	11.8	760	423	230	6.60
	May-19	36.0	31.1	61.2	1.50	165	105	36.7	11.6	764	356	225	6.54
	Nov-19	35.4	32.5	62.9	1.81	162	104	36.2	11.4	772	425	227	6.65
	Nov-20	36.6	32.4	63.4	1.72	171	112	36.6	11.2	771	438	227	6.58
	May-21	36.7	32.5	65.9	1.91	159	105	36.8	11.3	765	400	215	6.61
	Nov-21	36.2	32.3	65.2	2.01	174	116	37.5	11.0	777	407	234	6.59
	Apr-22	37.1	33.8	68.0	1.98	171	108	36.7	10.3	776	419	231	6.75
	Nov-22	36.7	33.7	63.6	1.74	177	116	36.8	10.4	781	427	232	6.64
	May-23	38.9	34.9	67.9	1.88	176	116	36.7	8.9	804	443	239	6.54
	Dec-23	38.8	35.6	68.2	1.81	168	115	40.9	13.4	801	442	233	6.60
	Apr-24	37.7	34.2	67.6	1.83	166	121	40.0	13.5	811	449	230	6.57
	Nov-24	38.7	35.8	66.8	1.76	181	117	40.8	13.3	812	449	243	6.70
CUP-18 MW490	May-10	26.7	26.0	49.7	1.43	142	90	31.0	2.3	639	363	176	6.76
	Oct-10	28.2	24.5	54.3	1.87	135	89	27.0	6.3	633	353	172	7.12
	Jun-11	26.9	24.6	52.7	1.99	132	90	28.7	9.4	635	369	184	6.87
	Nov-11	33.5	31.4	63.1	1.91	172	96	39.1	9.6	722	410	214	6.78
	May-12	31.1	29.2	60.5	1.63	172	100	39.6	9.9	728	420	218	6.63
	Nov-12	32.8	31.5	64.3	1.95	172	103	38.8	10.6	731	424	212	6.67
	Apr-13	33.3	31.8	63.7	2.24	177	99	41.3	11.4	734	428	224	6.73
	Nov-13	35.2	30.8	62.1	1.75	170	95	37.0	10.1	740	412	220	6.75
	May-14	34.2	32.0	57.5	1.71	168	95	36.1	10.4	737	400	217	6.75
	Oct-14	36.5	32.0	61.4	1.76	172	98	37.5	10.6	744	404	224	6.68
	May-15	35.3	31.9	58.4	1.60	176	100	34.6	10.4	745	389	224	6.74
	Dec-15	32.8	33.0	57.8	1.77	170	103	37.2	11.4	739	412	220	6.69
	May-16	35.6	31.8	55.0	1.70	167	98	38.0	10.6	746	416	226	6.67
	Nov-16	30.6	31.4	58.6	1.74	170	104	40.0	10.7	752	422	225	6.71
	May-17	38.1	32.0	58.1	1.78	163	99	36.7	11.3	750	428	221	6.58
	Nov-17	30.0	30.0	57.9	1.46	163	107	34.9	10.9	747	411	223	6.66
	May-18	36.3	33.2	66.2	1.74	159	103	37.8	12.1	748	421	225	6.65
	Nov-18	37.3	32.5	62.1	1.69	175	110	36.7	11.1	755	380	235	6.67
	May-19	35.0	31.8	61.6	1.79	165	108	37.7	11.5	760	359	228	6.80
	Nov-19	35.7	32.6	64.0	1.89	164	107	35.5	11.5	764	412	224	6.78
	Nov-20	36.6	33.2	65.5	1.73	173	112	37.5	11.1	772	440	224	6.69
	May-21	36.1	32.0	64.9	1.94	157	105	36.9	11.0	767	440	213	6.66
	Nov-21	36.7	32.5	65.1	2.02	173	114	38.0	10.9	775	422	235	6.64
	Apr-22	37.8	34.3	68.2	2.06	169	107	36.7	10.1	777	424	230	6.76
	Nov-22	38.4	33.8	66.2	1.93	175	112	37.5	9.9	782	444	231	6.68
	May-23	38.0	34.1	68.1	1.89	178	117	37.7	8.8	797	427	234	6.61

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	NE	NE	NE	NE	NE	NE	NE	45	NE	NE	NE	NE
	Secondary MCL[1,2]	NE	NE	NE	NE	NE	250/500/600	250/500/600	NE	900/1,600/2,200	500/1,000/1,500	NE	NE
CUP-18 MW490 (continued)	Dec-23	39.0	35.7	67.3	1.85	170	113	41.4	13.6	807	443	234	6.63
	Apr-24	38.5	34.9	67.6	1.89	167	119	40.2	13.8	806	437	235	6.63
	Nov-24	39.8	36.8	67.4	1.85	181	115	41.2	13.6	805	442	240	6.74
CUP-18 MW595	Apr-13	69.5	57.0	77.0	4.57	271	172	97.9	<0.3	**1,176**	**643**	437	7.21
	Nov-13	78.9	59.7	75.0	3.59	265	172	98.0	<0.22	**1,233**	**674**	448	7.21
	May-14	74.2	56.5	72.8	3.56	252	166	101	<0.3	**1,210**	**699**	428	7.23
	Oct-14	84.7	70.3	73.0	3.59	269	182	116	<0.3	**1,290**	**735**	482	7.04
	May-15	80.3	61.4	72.4	3.44	269	178	106	<0.3	**1,260**	**642**	482	7.17
	Dec-15	53.7	43.7	59.7	2.98	209	121	67.4	<0.3	**908**	486	331	7.02
	May-16	47.6	34.8	51.3	2.87	208	95	51.6	<0.308	802	433	281	7.12
	Nov-16	49.1	42.1	51.6	2.91	218	112	66.9	<3.08	894	495	331	7.19
	May-17	42.7	28.4	41.7	2.56	176	80	33.6	<0.308	676	334	221	6.90
	Nov-17	56.1	45.6	58.6	2.58	217	126	75.1	<0.308	**943**	**509**	344	7.03
	May-18	44.6	35.0	54.9	2.50	195	80	39.7	0.33	723	380	251	7.23
	Nov-18	60.8	47.8	59.2	2.98	226	124	76.3	<0.308	**930**	478	349	6.98
	May-19	42.2	34.9	54.7	2.91	190	85	41.5	1.1	729	395	249	7.10
	Nov-19	55.8	47.9	58.2	3.17	211	124	73.8	8.8	**972**	**525**	337	7.29
	Nov-20	57.1	47.5	60.0	2.78	207	118	71.3	18.0	**916**	490	341	7.08
	May-21	48.3	40.5	66.2	2.39	183	123	58.2	9.9	**907**	**517**	276	6.72
	Nov-21	41.4	37.2	64.9	2.31	187	119	46.8	15.4	828	456	262	6.57
	Apr-22	41.3	36.9	70.1	2.14	176	116	44.0	10.1	828	447	255	6.64
	Nov-22	44.1	37.2	66.8	2.06	184	123	48.7	9.5	853	491	261	6.60
	May-23	45.4	40.4	70.7	2.16	186	126	51.8	8.1	881	488	277	6.55
	Dec-23	65.4	55.4	74.7	2.64	213	152	131.0	7.5	**1,100**	**605**	375	6.73
	Apr-24	47.3	40.0	64.6	2.33	203	110	59.4	6.0	860	474	275	6.79
	Nov-24	88.2	72.7	80.0	3.36	286	197	150	1.6	**1,380**	**771**	521	7.13
CUP-19 MW475	May-10	32.4	35.2	46.8	1.87	154	99	36.8	0.5	691	367	248	7.88
	Oct-10	31.8	31.3	47.8	2.20	152	99	35.6	1.2	680	383	212	7.97
	May-11	30.5	30.0	47.8	2.68	136	100	32.9	2.1	665	397	214	7.99
	Oct-11	36.0	32.0	45.8	2.59	138	96	33.4	4.2	648	370	208	7.30
	May-12	35.3	34.0	47.3	2.46	133	109	49.5	6.4	703	373	233	7.25
	Nov-12	39.0	38.1	47.0	2.70	142	110	64.0	9.0	752	434	249	7.35
	Apr-13	39.9	38.6	48.9	3.26	145	110	64.5	7.8	771	435	268	7.30
	Nov-13	39.6	37.0	48.6	2.53	160	105	58.0	1.8	759	418	257	7.38
	May-14	36.9	33.9	44.1	2.36	151	97	42.6	0.6	709	406	236	7.41
	Nov-14	37.4	35.1	43.3	2.32	149	97	39.1	0.7	685	389	301	7.41
	May-15	35.8	34.7	43.9	2.15	172	106	33.8	0.3	690	281	210	7.19
	Nov-15	34.2	35.2	46.1	2.32	143	100	44.3	2.4	695	382	88.6*	7.36

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	NE	NE	NE	NE	NE	NE	NE	45	NE	NE	NE	NE
	Secondary MCL[1,2]	NE	NE	NE	NE	NE	250/500/600	250/500/600	NE	900/1,600/2,200	500/1,000/1,500	NE	NE
CUP-19 MW475 (continued)	May-16	34.5	33.5	41.9	2.40	148	99	38.7	0.8	688	364	233	7.33
	Nov-16	30.6	32.1	40.2	2.21	154	101	42.0	1.1	885*	391	237	7.33
	May-17	37.9	32.1	38.3	2.15	150	98	41.5	2.1	703	359	234	7.18
	Nov-17	30.7	31.0	38.1	1.98	121	84	37.0	1.8	699	399	190	7.38
	May-18	38.0	36.3	50.3	2.27	148	102	38.1	1.4	699	389	239	7.33
	Nov-18	38.8	35.6	48.3	2.30	153	107	46.2	4.1	730	402	253	7.22
	Apr-19	39.3	33.6	47.1	2.21	148	103	40.4	2.4	701	375	235	7.86*
	Nov-19	38.8	34.6	47.5	2.51	147	106	40.0	3.2	714	404	242	7.59
	Oct-20	40.4	38.2	48.1	2.48	137	110	46.6	6.2	746	431	259	7.23
	May-21	41.3	38.6	46.6	2.58	141	109	55.5	10.4	788	475	240	7.15
	Nov-21	42.5	40.5	50.2	2.72	154	116	62.1	10.6	800	430	268	7.26
	May-22	45.3	41.1	53.7	2.85	158	112	58.8	8.9	790	440	273	6.99
	Oct-22	42.6	37.8	52.5	2.61	153	115	61.6	8.5	801	430	261	7.28
	May-23	40.2	37.4	53.3	2.51	154	109	49.8	5.2	768	403	247	7.16
	Nov-23	42.0	39.1	53.2	2.43	157	108	51.1	6.6	790	430	260	7.24
	Apr-24	41.4	38.8	52.8	2.35	161	109	58.1	10.1	802	427	253	7.36
	Nov-24	41.3	38.4	50.8	2.41	168	110	50.5	7.4	767	434	125	7.51
CUP-19 MW600	May-10	46.8	41.7	56.8	2.15	256	95	18.5	<0.3	802	436	284	7.86
	Oct-10	44.3	37.7	57.0	2.61	260	95	15.5	<0.3	812	444	274	7.94
	May-11	44.6	39.4	55.5	3.03	256	95	11.7	<0.3	817	470	288	8.04
	Oct-11	51.3	39.8	57.5	2.80	276	92	11.0	<0.3	803	460	286	7.48
	May-12	49.7	39.2	58.1	2.57	292	94	4.1	<0.3	816	427	295	7.40
	Nov-12	48.0	39.7	57.8	2.56	273	108	16.3	<0.3	822	459	274	7.47
	Apr-13	52.6	40.8	59.6	3.55	298	94	7.4	<0.3	830	440	305	7.52
	Nov-13	52.2	39.8	57.3	2.56	297	91	3.1	<0.44	832	432	299	7.51
	May-14	51.1	39.9	54.0	2.47	290	87	3.5	<0.3	826	440	294	7.45
	Nov-14	51.0	40.3	54.3	2.35	260	95	15.0	<0.3	827	430	279	7.51
	May-15	50.5	42.0	51.7	2.23	294	94	7.5	<0.3	829	434	288	7.27
	Nov-15	46.1	39.4	54.4	2.35	238	100	26.6	<0.3	800	450	283	7.48
	May-16	47.5	38.5	52.7	2.30	261	97	19.3	<0.308	827	457	300	7.48
	Nov-16	42.4	41.4	51.1	2.21	244	103	33.4	<0.308	822	455	301	7.36
	May-17	46.3	35.4	46.8	2.29	159	101	64.1	<0.308	784	444	263	7.13
	Nov-17	37.9	33.4	46.5	1.87	162	86	43.3	<0.308	811	430	222	7.39
	May-18	45.7	37.8	58.3	2.27	158	106	62.1	<0.308	783	426	270	7.31
	Nov-18	44.4	35.6	52.8	2.18	165	109	57.0	<0.308	778	379	263	7.17
	Apr-19	44.1	34.8	56.2	2.23	159	108	59.2	<0.308	772	395	257	7.30
	Nov-19	46.9	39.5	57.4	2.85	191	108	46.5	0.52	804	436	272	7.45
	Oct-20	48.6	41.2	57.2	2.49	239	99	18.5	<0.308	824	434	297	7.36

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
CUP-19 MW600 (continued)	May-21	45.5	39.0	55.6	2.60	213	99	34.6	2.62	812	438	252	7.40
	Nov-21	46.8	39.7	55.4	2.60	226	104	34.3	0.74	827	426	283	7.23
	May-22	50.9	42.0	58.0	2.74	273	97	17.1	<0.176	834	444	303	7.39
	Oct-22	49.4	38.9	57.5	2.51	267	100	16.2	<0.176	842	433	291	7.40
	May-23	49.9	41.0	58.3	2.53	266	96	14.0	<0.176	836	441	289	7.37
	Nov-23	50.4	41.4	57.9	2.41	264	97	18.7	<0.176	835	448	286	7.38
	Apr-24	48.1	40.1	56.3	2.28	254	98.7	19.5	11.7	829	440	279	7.43
	Nov-24	51.0	41.8	58.5	2.39	286	104	15.2	<0.176	824	439	305	7.58
CUP-19 MW690	May-10	81.5	57.4	63.8	3.00	232	160	155	<0.3	**1,229**	**715**	448	7.35
	Oct-10	82.4	56.8	74.3	3.58	232	154	150	<1.1	**1,233**	**738**	440	7.48
	May-11	82.6	58.9	73.3	3.71	226	165	153	<0.3	**1,229**	**752**	448	7.52
	Oct-11	79.8	59.8	74.0	3.63	242	160	151	<0.3	**1,223**	**720**	456	7.17
	May-12	83.6	55.3	71.2	2.76	240	167	150	<0.3	**1,224**	**724**	442	7.10
	Nov-12	80.5	57.7	73.0	3.37	235	167	150	<0.3	**1,175**	**691**	415	7.27
	Apr-13	84.9	58.2	74.7	3.84	245	158	127	<0.3	**1,206**	**--**	453	7.23
	Nov-13	77.7	53.0	71.9	2.95	277	144	140	<0.22	**1,145**	**658**	422	7.26
	May-14	73.3	50.3	64.8	2.73	221	130	132	<0.3	**1,100**	**647**	396	7.22
	Nov-14	64.9	43.4	58.5	2.41	192	110	110	<0.3	**950**	**568**	329	7.29
	May-15	58.4	40.4	53.8	2.16	202	115	102.0	<0.3	891	**540**	289	7.14
	Nov-15	49.6	36.5	48.2	1.99	148	103	87.1	6.1	800	454	280	7.23
	May-16	53.5	37.5	47.5	1.91	148	101	99.3	7.7	825	437	298	7.17
	Nov-16	51.0	39.7	48.8	1.92	160	105	111	3.3	848	455	314	7.31
	May-17	63.6	39.0	47.2	2.07	156	100	100	8.5	845	469	297	7.21
	Nov-17	49.7	36.6	47.0	1.79	119	84	91	12.7	826	468	233	7.27
	May-18	55.7	37.7	56.2	1.99	146	100	89.4	21.6	820	426	293	7.26
	Nov-18	54.9	35.2	50.9	1.91	152	102	83.3	18.3	804	453	288	7.09
	Apr-19	56.8	34.4	52.5	1.84	148	100	81.3	19.3	791	429	283	7.47
	Nov-19	56.4	35.2	53.2	2.16	149	101	80.2	17.5	793	438	272	7.32
	Oct-20	53.2	36.2	52.1	1.93	142	99	71.9	20.2	793	434	268	7.28
	May-21	50.1	33.5	47.1	2.01	145	93	68.2	22.1	791	457	247	7.17
	Nov-21	50.4	35.6	48.9	2.25	158	100	65.0	24.7	784	415	274	7.24
	May-22	51.0	36.9	50.3	2.50	158	96	60.6	27.5	779	430	274	7.18
	Oct-22	46.4	34.9	48.9	2.28	153	101	61.1	27.1	790	425	269	7.18
	May-23	46.4	38.1	51.4	2.39	149	97	59.1	28.8	783	418	259	7.09
	Nov-23	43.9	38.8	49.7	2.24	152	95	48.4	28.8	780	429	259	7.28
	Apr-24	41.8	38.1	48.9	2.22	147	93.9	53.1	36.6	771	412	255	7.30
	Nov-24	41.5	38.7	49.6	2.24	164	96.2	49.9	33.7	750	410	256	7.36
CUP-22A MW290	May-10	54.0	43.3	56.3	2.52	196	106	63.8	32.7	**903**	**537**	318	7.08

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
CUP-22A MW290 (continued)	Oct-10	49.4	37.6	55.1	2.12	201	99	45.0	**45.0**	862	465	288	7.38
	May-11	49.3	40.4	54.1	2.76	190	100	47.0	40.5	859	**501**	300	7.56
	Oct-11	53.5	40.7	55.5	2.69	206	99	50.7	38.0	871	**530**	316	7.19
	May-12	51.7	39.5	56.4	2.14	208	106	51.5	38.1	880	492	312	7.13
	Nov-12	52.9	43.9	57.5	2.57	219	110	55.2	39.1	880	**513**	292	7.15
	Apr-13	54.0	42.4	57.8	2.54	218	102	51.0	33.9	887	465	320	7.19
	Nov-13	53.7	42.4	59.1	2.52	211	100	56.0	35.2	900	492	314	7.18
	May-14	52.6	41.3	52.9	2.23	210	99	57.6	35.6	**904**	499	317	7.23
	Oct-14	59.2	44.6	53.1	2.30	216	103	60.0	37.0	**922**	**502**	334	7.13
	May-15	59.9	45.4	54.2	2.29	219	100	58.1	35.6	**934**	**522**	328	7.18
	Nov-15	54.7	46.8	59.8	2.46	221	103	61.9	36.8	**922**	**543**	324	7.19
	May-16	56.7	45.2	57.4	2.44	222	101	66.2	36.2	**943**	**523**	346	7.11
	Nov-16	50.9	45.9	58.1	2.25	234	104	65.3	36.7	**941**	**517**	356	6.89
	May-17	65.4	44.2	55.6	2.64	242	98	58.7	39.4	**924**	**528**	337	7.24
	Nov-17	53.1	42.9	54.4	2.18	185	81	55.2	37.3	**923**	**520**	266	7.19
	May-18	61.6	48.6	64.8	2.53	225	95	52.1	38.5	**911**	**527**	347	7.20
	Oct-18	57.3	43.1	56.9	2.24	233	97	53.5	38.5	**914**	482	332	7.18
	Apr-19	58.9	41.8	61.4	2.17	223	92	48.7	40.7	**903**	494	312	7.38
	Nov-19	60.0	45.5	63.7	2.54	232	98	61.8	**46.6**	**918**	**534**	327	7.40
	Oct-20	57.6	45.1	62.1	2.52	236	98	49.2	37.8	**908**	496	327	7.30
	May-21	56.8	44.3	61.9	2.62	230	90	45.8	38.0	897	496	304	7.21
	Nov-21	57.0	43.5	58.9	2.77	250	98	49.1	38.7	**916**	489	334	7.12
	May-22	58.8	46.0	62.2	2.88	251	93	48.8	37.4	**915**	**502**	334	7.24
	Oct-22	59.1	45.2	61.6	2.67	245	196	52.8	37.2	**929**	**517**	326	7.14
	May-23	58.3	46.4	62.1	2.60	312	104	52.3	36.1	**934**	**519**	329	7.18
	Nov-23	59.6	46.1	63.1	2.56	203	70	44.5	31.9	**937**	**501**	253	7.22
	Apr-24	58.5	45.4	61.6	2.48	251	93.3	49.9	36.9	**931**	**514**	326	7.26
	Nov-24	59.6	46.0	62.4	2.53	273	96.6	52.7	35.8	**928**	**541**	334	7.32
CUP-22A MW440	May-10	29.6	9.73	43.7	1.67	102	71	6.8	1.4	441	270	114	8.49
	Oct-10	24.0	12.3	39.8	1.70	103	67	6.4	1.6	456	252	114	8.47
	May-11	25.9	11.7	39.3	2.40	100	73	5.7	1.5	454	288	120	8.54
	Nov-11	24.6	14.7	40.2	2.00	100	73	7.9	0.8	458	290	126	7.51
	May-12	29.1	10.8	39.8	1.75	117	73	6.3	1.5	468	269	129	7.54
	Nov-12	62.3	38.2	57.2	3.09	233	110	59.1	31.1	892	**504**	306	7.58
	Apr-13	65.0	40.1	59.3	3.07	228	98	55.4	29.0	**909**	**544**	324	7.57
	Nov-13	59.5	41.7	58.1	2.77	228	100	59.0	29.9	**911**	**507**	322	7.44
	May-14	58.7	40.8	53.3	2.47	224	97	61.2	29.5	**908**	**504**	322	7.49
	Oct-14	62.3	44.5	53.8	2.52	222	99	62.9	30.6	**914**	**515**	327	9.43*

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
CUP-22A MW440 (continued)	May-15	60.8	45.0	53.9	2.51	226	98	58.5	29.2	**921**	**503**	332	7.30
	Nov-15	56.8	46.5	58.9	2.54	229	101	65.1	33.1	**927**	**525**	331	7.41
	May-16	59.4	45.1	53.8	2.66	229	99	67.2	33.0	**942**	**534**	347	7.34
	Nov-16	49.6	43.0	53.7	2.28	233	100	67.5	28.3	**917**	**634***	341	7.33
	May-17	27.4	18.0	35.3	1.62	129	63	12.4	2.6	498	228	149	7.41
	Nov-17	48.4	39.6	52.2	2.07	175	76	52.4	26.8	857	482	244	7.39
	May-18	43.2	34.2	59.9	2.12	174	80	33.4	16.5	692	403	235	7.33
	Oct-18	57.5	42.1	57.4	2.29	237	97	52.8	32.0	**905**	458	330	7.33
	Apr-19	32.9	23.7	48.1	1.82	141	71	17.8	7.4	550	304	181	7.34
	Nov-19	53.5	40.2	60.4	2.58	216	93	57.1	35.6	850	431	301	7.41
	Oct-20	54.1	42.9	59.2	2.56	231	95	50.3	32.3	886	**506**	315	7.32
	May-21	31.2	26.9	46.8	2.12	148	73	20.4	10.5	591	306	185	7.38
	Nov-21	54.6	43.2	58.7	2.83	245	98	52.0	31.5	895	484	317	7.30
	May-22	56.4	45.4	60.2	2.91	247	94	50.5	32.1	**900**	499	328	7.36
	Oct-22	56.1	42.9	59.0	2.54	235	96	51.4	30.6	**906**	**517**	313	7.02
	May-23	56.8	46.0	63.0	2.66	244	98	52.7	31.1	**913**	**508**	315	7.27
	Nov-23	57.6	45.0	61.7	2.58	203	71	48.3	30.0	**918**	**503**	258	7.26
	Apr-24	54.1	43.3	59.7	2.42	238	93.6	50.4	28.3	**898**	488	308	7.30
	Nov-24	57.4	45.3	61.8	2.59	266	95.6	52.2	30.4	**903**	**521**	320	7.40
CUP-22A MW545	May-10	65.4	54.6	72.2	2.18	246	106	76.0	24.0	**994**	**575**	332	6.89
	Oct-10	58.4	43.7	70.8	2.60	254	108	76.0	24.0	**1,011**	**586**	342	6.93
	May-11	59.7	47.7	70.1	3.44	238	116	86.6	22.0	**1,035**	**639**	372	7.06
	Nov-11	62.4	47.7	75.3	3.03	254	110	87.2	21.9	**1,032**	**620**	356	6.80
	May-12	63.2	48.4	73.6	2.94	254	123	91.5	21.4	**1,051**	**617**	369	6.76
	Nov-12	63.5	50.7	78.0	3.09	261	130	100	20.9	**1,063**	**635**	348	6.75
	Apr-13	68.0	49.8	78.5	3.17	267	116	87.3	18.3	**1,058**	**654**	370	6.81
	Nov-13	61.1	47.1	79.9	2.88	271	113	90.0	19.4	**1,067**	**602**	356	6.76
	May-14	62.6	47.0	72.3	2.72	261	110	94.7	20.4	**1,060**	**605**	366	6.80
	Oct-14	68.0	50.0	76.8	2.76	259	112	93.1	20.3	**1,070**	**612**	367	6.77
	May-15	66.2	49.4	74.2	2.68	279	110	3.56*	0.82*	**1,090**	**654**	340	6.69
	Nov-15	62.9	51.2	80.2	3.03	268	117	96.0	19.5	**1,080**	**626**	379	6.78
	May-16	63.3	51.0	79.3	2.87	282	107	94.4	21.2	**1,080**	**620**	383	6.70
	Nov-16	60.0	51.8	81.6	2.63	292	116	106	16.7	**1,120**	**635**	400	6.71
	May-17	72.6	47.7	73.0	3.05	302	111	102	18.9	**1,120**	**654**	398	6.75
	Nov-17	64.8	48.9	79.6	2.63	236	95	105	18.0	**1,120**	**649**	318	6.72
	May-18	69.0	52.1	86.2	2.91	299	110	95.2	20.1	**1,120**	**668**	404	6.73
	Oct-18	71.6	50.7	81.5	2.91	309	110	91.2	19.6	**1,120**	**659**	405	6.67
	Apr-19	72.4	49.1	80.8	2.74	304	108	97.7	22.3	**1,110**	**656**	386	6.81

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
CUP-22A MW545 (continued)	Nov-19	74.7	52.8	81.7	3.25	305	110	116	27.3	**1,120**	**656**	394	6.81
	Oct-20	68.8	51.7	82.1	3.16	299	107	92.5	24.1	**1,100**	**646**	388	6.70
	May-21	67.0	49.8	83.7	3.20	307	102	87.1	23.5	**1,080**	**628**	384	6.65
	Nov-21	70.6	53.3	84.3	3.55	322	103	92.4	22.6	**1,110**	**614**	388	6.56
	May-22	67.3	51.6	81.1	3.30	310	103	87.7	24.7	**1,080**	**607**	386	6.70
	Oct-22	69.9	51.9	86.2	3.12	306	104	90.4	23.1	**1,100**	**635**	377	6.60
	May-23	68.0	52.5	86.8	3.09	249	97	83.3	24.4	**1,100**	**613**	380	6.66
	Nov-23	71.5	53.6	88.4	3.09	258	72	79.6	19.4	**1,110**	**637**	327	6.74
	Apr-24	69.9	52.6	86.8	3.05	317	96.0	84.6	21.7	**1,100**	**627**	375	6.76
	Nov-24	69.4	52.1	86.0	3.04	350	98.2	86.3	21.7	**1,090**	**638**	383	6.84
CUP-23 MW230	Oct-10	52.7	48.4	55.9	1.97	258	84	45.8	**59.1**	**933**	**539**	334	7.18
	May-11	51.7	49.1	55.4	2.23	258	88	40.5	**61.7**	**935**	**538**	344	7.17
	Oct-11	55.4	51.5	56.4	1.98	264	87	41.3	**61.9**	**936**	**560**	348	7.12
	May-12	55.9	51.3	56.5	1.82	272	93	41.1	**61.5**	**957**	498	363	7.04
	Nov-12	57.0	52.8	57.5	2.57	284	104	38.6	**55.7**	**965**	**574**	350	7.07
	Apr-13	60.6	53.2	59.7	2.07	286	86	38.6	**53.1**	**979**	**532**	368	7.10
	Nov-13	76.0*	48.4	97.6*	4.33*	290	85	41.0	**52.8**	**984**	**526**	371	7.16
	May-14	58.7	51.8	54.7	1.80	290	85	40.7	**55.6**	**977**	**549**	379	7.12
	Oct-14	61.5	53.6	55.5	1.85	282	83	41.0	**55.7**	**982**	**557**	383	7.28
	May-15	58.7	56.1	53.7	1.86	291	82	39.3	**51.9**	**982**	**546**	370	7.10
	Nov-15	58.0	55.6	57.2	1.77	294	83	41.8	**51.9**	**973**	**532**	378	7.16
	May-16	61.0	55.7	56.2	1.89	294	82	42.8	**52.4**	**988**	**508**	392	7.08
	Nov-16	56.5	54.6	58.1	1.73	300	82	43.7	**51.5**	**996**	**557**	384	7.13
	Apr-17	67.3	54.6	54.9	1.96	320	84	43.1	**51.5**	**1,000**	**587**	427	7.14
	Nov-17	58.7	53.2	56.0	1.81	258	69	43.9	**49.7**	**1,000**	**544**	323	7.14
	May-18	69.0	62.3	64.0	1.87	314	83	47.2	**49.3**	**1,020**	**597**	405	7.06
	Oct-18	64.2	55.7	58.9	1.84	326	87	43.2	**48.8**	**1,010**	**574**	408	7.07
	May-19	66.2	57.1	59.7	1.61	326	86	46.3	**48.4**	**1,010**	**564**	395	7.23
	Nov-19	62.4	57.4	59.1	2.11	310	85	44.6	**48.0**	**1,030**	**568**	403	6.18
	Oct-20	65.2	58.0	61.0	2.06	309	86	43.1	**46.2**	**1,010**	**563**	391	7.16
	May-21	64.1	56.7	62.0	2.14	321	85	42.4	43.8	**1,010**	**565**	386	7.18
	Nov-21	62.9	56.1	59.2	2.21	321	86	42.8	44.9	**1,010**	**541**	398	7.08
	May-22	65.9	57.2	61.4	2.18	329	87	41.0	41.8	**1,010**	**551**	403	7.09
	Oct-22	62.1	54.2	60.8	1.99	311	91	39.9	41.2	**1,010**	**531**	380	7.11
	May-23	64.1	59.7	62.5	2.05	323	90	39.3	39.1	**1,020**	**566**	380	7.06
	Nov-23	63.3	56.8	61.2	1.86	314	87	36.0	36.6	**1,000**	**548**	384	7.07
	Apr-24	64.4	58.0	61.5	2.00	335	89.7	40.3	39.3	**1,030**	**555**	393	7.13
	Nov-24	63.3	56.7	61.4	1.92	324	91.5	40.9	40.0	**995**	**539**	366	7.26

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
CUP-23 MW440	Oct-10	29.5	30.2	39.2	2.64	156	63	26.6	19.3	611	321	201	7.96
	May-11	31.2	33.8	40.3	2.54	168	70	35.3	25.4	647	378	228	7.85
	Oct-11	37.6	34.9	41.3	2.29	166	68	38.4	26.0	653	400	236	7.42
	May-12	39.0	39.5	43.9	2.04	182	78	45.2	37.9	734	413	267	7.04
	Nov-12	40.2	44.2	46.5	2.38	186	79	47.4	40.1	757	428	268	7.38
	Apr-13	43.3	43.7	46.6	2.52	201	78	44.5	35.7	783	427	288	7.48
	Nov-13	42.4	41.7	46.3	2.31	190	76	45.0	44.0	781	418	281	7.53
	May-14	42.4	41.7	43.9	2.16	192	76	44.5	**46.7**	790	425	286	7.43
	Oct-14	42.9	41.9	43.0	2.16	192	77	43.5	**47.4**	796	434	287	7.57
	May-15	43.2	45.1	42.6	2.06	204	80	46.2	40.0	797	410	297	7.41
	Nov-15	54.9*	63.9*	54.3*	2.32	240*	84	58.6*	**132***	**1040***	**605***	404*	7.36
	May-16	39.4	44.6	44.0	2.06	214	69	40.5	**51.9**	797	443	305	7.61
	Nov-16	32.0	37.3	41.0	1.72	188	66	34.9	33.7	701	372	254	7.54
	Apr-17	35.6	34.6	39.4	1.84	170	60	24.2	19.8	617	311	213	7.38
	Nov-17	34.6	38.4	40.4	1.65	201	69	34.8	31.0	749	384	270	7.56
	May-18	28.0	30.4	43.4	1.57	145	59	18.3	16.9	543	306	185	7.46
	Oct-18	34.9	34.8	44.9	1.84	182	69	29.1	24.8	668	361	242	7.56
	May-19	27.4	27.4	40.5	1.55	149	60	16.6	13.9	547	281	185	7.67
	Nov-19	25.1	25.8	39.0	1.72	137	59	16.6	15.1	516	286	170	7.61
	Oct-20	21.5	22.8	35.1	1.71	121	57	10.3	5.0	457	261	149	7.96
	May-21	19.2	20.2	32.1	1.68	114	54	8.5	1.9	425	224	128	7.90
	Nov-21	28.2	29.8	39.5	2.02	156	63	20.4	16.9	568	299	195	7.82
	May-22	19.6	19.9	32.6	1.70	114	54	7.3	1.5	426	226	132	7.86
	Oct-22	19.3	19.2	32.9	1.63	115	56	6.6	0.8	434	214	126	7.97
	May-23	20.1	21.0	34.2	1.61	122	59	7.1	0.7	451	230	132	7.71
	Nov-23	26.5	26.9	40.3	1.80	156	60	14.9	3.9	532	272	173	7.93
	Apr-24	23.0	22.8	37.5	1.74	139	60	4.6	<0.176	480	241	148	7.80
	Nov-24	29.6	29.1	42.5	1.91	176	65	18.9	2.6	568	303	187	8.00
CUP-23 MW515	Oct-10	41.0	28.9	66.9	2.62	310	64	2.4	<0.88	773	430	235	7.57
	May-11	40.6	29.2	67.0	4.20	300	68	<0.5	<0.3	765	446	230	7.55
	Oct-11	44.3	30.5	70.1	3.79	292	67	0.7	<0.3	750	430	290	7.23
	May-12	42.7	31.9	65.2	3.17	304	68	1.0	<0.3	759	421	246	7.20
	Nov-12	38.6	28.1	68.2	3.56	272	71	1.5	<0.3	717	406	208	7.37
	Apr-13	42.9	30.5	64.1	3.87	302	64	1.5	<0.3	748	414	241	7.30
	Nov-13	41.2	27.6	67.1	3.49	275	63	2.6	<0.44	716	397	217	7.39
	May-14	39.9	29.8	60.0	3.41	282	61	2.8	<0.3	724	380	229	7.30
	Oct-14	39.4	26.9	58.9	3.13	258	62	4.3	<0.3	699	373	212	7.31
	May-15	37.9	28.1	55.8	3.07	258	62	5.9	<0.3	693	380	209	7.18

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
CUP-23 MW515 (continued)	Nov-15	32.0	23.8	56.2	2.98	220	64	9.2	<0.3	641	328	181	7.42
	May-16	31.0	22.0	51.7	3.06	171	64	24.6*	<0.308	598	308	195	7.24
	Nov-16	33.3	26.4	43.7	2.66	166	71	4.7	<0.308	649	328	207	7.25
	Apr-17	54.0	33.8	54.5	3.73	169	72	57.5	<0.308	696	364	225	7.25
	Nov-17	39.4	28.7	48.1	3.14	183	70	44.5	<0.308	667	371	220	7.35
	May-18	42.2	29.8	57.7	3.17	167	70	51.1	<0.308	659	356	213	7.31
	Oct-18	47.3	33.7	50.4	2.76	200	72	68.2	<0.308	758	429	274	7.25
	May-19	38.9	27.0	51.9	2.51	184	71	37.8	<0.308	653	335	208	7.44
	Nov-19	40.4	27.2	49.8	2.97	171	71	43.2	<0.308	654	338	212	7.37
	Oct-20	40.5	28.3	47.1	2.97	166	70	46.9	<0.308	652	360	218	7.22
	May-21	40.6	27.6	46.5	3.08	171	69	45.3	<0.176	651	346	201	7.05
	Nov-21	43.0	29.2	47.5	3.27	195	69	41.0	<0.176	675	348	236	7.08
	May-22	46.6	31.7	51.4	3.36	225	68	29.3	<0.176	695	374	242	7.18
	Oct-22	42.6	27.4	47.0	2.94	179	71	45.7	<0.176	679	333	217	7.16
	May-23	46.5	33.9	55.1	3.37	281	63	5.6	<0.176	736	381	241	7.21
	Nov-23	48.7	38.2	56.6	3.45	272	62	28.4	<0.176	771	431	274	7.18
	Apr-24	40.6	30.2	48.9	3.05	208	69.4	33.0	<0.176	676	354	218	7.16
	Nov-24	46.6	36.5	55.7	3.42	285	63.7	18.9	<0.176	749	406	261	7.23
CUP-23 MW600	Oct-10	25.3	18.5	40.4	2.00	122	63	23.0	41.0	577	322	164	7.74
	May-11	30.8	23.6	40.2	2.84	124	65	23.7	44.9	585	332	184	7.66
	Oct-11	34.2	24.2	42.3	2.86	128	64	31.9	31.3	573	340	190	7.16
	May-12	33.6	25.1	41.6	2.38	133	68	29.6	27.7	575	321	167	7.01
	Nov-12	31.6	24.6	39.2	2.42	130	67	29.1	36.1	578	324	182	7.13
	Apr-13	34.6	26.1	--	2.39	136	65	28.0	28.7	588	311	197	7.16
	Nov-13	35.8	25.9	38.4	2.41	131	62	28.0	37.0	594	316	196	7.16
	May-14	36.9	27.0	35.5	2.28	137	64	30.1	33.6	601	332	202	7.16
	Oct-14	37.9	27.6	35.5	2.22	136	64	29.1	40.3	608	343	203	7.24
	May-15	38.8	29.5	35.2	2.21	139	64	29.7	44.9	620	357	211	7.15
	Nov-15	57.6*	46.5*	60.1*	2.50	135	66	28.3	**48.8**	617	342	206	6.94
	May-16	56.0	43.2	45.6	2.74	175	78	48.3	**122**	892	**528**	339	7.13
	Nov-16	53.2	44.8	47.1	2.63	184	78	57.3	**114**	**919**	**537**	338	7.16
	Apr-17	61.9	41.5	45.2	2.76	182	76	53.0	**108**	891	476	328	7.22
	Nov-17	44.4	47.0	45.6	1.97	190	79	47.3	**106**	**900**	**508**	326	7.38
	May-18	50.7	52.0	59.3	2.22	180	76	46.1	**106**	873	**510**	320	7.30
	Oct-18	49.6	49.9	49.8	2.22	193	77	48.5	**101**	887	**501**	336	7.33
	May-19	44.8	45.1	51.7	1.85	176	76	43.7	**99**	824	476	292	7.20
	Nov-19	44.5	45.7	51.2	2.15	181	76	43.1	**88**	839	446	303	7.45
	Oct-20	43.8	46.1	48.9	2.17	174	75	41.4	**88**	827	**503**	299	7.46

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
CUP-23 MW600 (continued)	May-21	42.5	44.4	45.9	2.18	179	71	39.0	**84**	807	450	279	6.94
	Nov-21	44.8	46.1	47.2	2.45	193	76	48.7	**87**	832	447	320	7.22
	May-22	45.3	46.3	48.2	2.35	189	72	41.4	**87**	822	460	304	6.90
	Oct-22	44.3	44.5	49.1	2.18	185	75	41.6	**87**	835	457	295	6.81
	May-23	44.1	47.1	48.6	2.21	190	76	39.7	**83**	836	446	288	6.84
	Nov-23	46.6	49.1	50.4	2.15	198	74	43.2	**93**	870	481	315	7.09
	Apr-24	43.9	46.1	48.6	2.07	188	74.9	40.1	**86.2**	836	442	294	7.21
	Nov-24	48.8	51.7	52.6	2.22	208	76.2	46.8	**96.4**	878	470	321	7.28
CUP-31A MW145	Apr-12	61.8	60.5	84.8	3.43	458	61	71.1	2.9	**1,096**	**637**	426	6.85
	Oct-12	74.5	70.2	93.2	4.07	418	66	74.6	3.3	**1,074**	**657**	383	6.76
	Apr-13	68.6	60.9	83.3	3.56	470	53	67.0	1.5	**1,093**	**603**	440	6.79
	Nov-13	<1*	60.8	86.7	3.24	462	53	65.0	4.4	**1,095**	**614**	409	6.80
	May-14	61.6	61.5	76.4	3.14	455	51	60.6	6.9	**1,080**	**601**	423	6.82
	May-15	68.7	47.6	72.7	3.07	436	52	56.4	5.4	**1,070**	**648**	412	6.80
	Nov-15	63.5	62.4	82.1	3.18	457	53	65.2	6.6	**1,070**	**623**	381	6.79
	May-16	66.0	62.5	74.8	2.85	275*	48	84.8*	9.4*	816*	484*	287*	7.01*
	Nov-16	60.0	62.1	74.6	3.22	447	45	58.3	5.9	**1,060**	**605**	421	6.83
	Apr-17	71.3	60.3	73.3	3.42	448	48	61.8	4.0	**1,050**	**600**	427	6.77
	Nov-17	59.9	56.6	74.6	2.78	453	49	70.5	3.9	**1,060**	**607**	431	6.82
	May-18	69.8	65.8	86.5	3.05	439	46	70.0	6.6	**1,080**	**602**	429	6.84
	Nov-18	71.7	61.1	79.1	3.38	332	50	78.8*	19.14*	**937**	**530**	356	6.98
	May-19	66.3	57.9	76.0	3.45	460	49	56.7	8.5	**1,040**	**582**	415	8.03*
	Nov-19	67.2	57.0	70.5	3.60	432	46	55.3	7.5	**1,030**	**578**	412	6.87
	Nov-20	66.3	56.8	73.7	3.41	440	46	48.1	9.2	**1,020**	**560**	402	6.79
	May-21	66.3	55.6	74.8	3.48	442	47	47.3	6.8	**1,050**	**605**	392	6.79
	Dec-21	65.0	56.0	73.1	3.66	452	46	48.7	6.2	**1,030**	**570**	404	6.77
	May-22	67.9	59.1	79.1	3.84	478	46	52.5	4.4	**1,020**	**576**	408	6.68
	Nov-22	69.8	59.8	79.4	4.03	452	46	53.6	4.7	**1,030**	**584**	402	6.68
	May-23	70.1	59.7	80.9	3.57	462	47	54.0	3.9	**1,050**	**597**	408	6.72
	Jan-24	69.7	60.4	77.1	3.80	459	46	58.4	3.2	**1,060**	**599**	414	6.78
	May-24	70.5	61.7	76.4	3.54	457	44.4	58.3	4.7	**1,060**	**602**	824	6.69
	Nov-24	71.3	62.9	76.7	3.87	483	47.3	51.4	4.0	**1,060**	**593**	418	6.81
CUP-31A MW280	May-12	56.3	45.4	85.1	3.40	320	76	95.2	9.5	**1,007**	**584**	339	7.03
	Oct-12	51.1	47.6	71.9	3.47	321	67	89.8	8.9	**960**	**594**	342	6.92
	Apr-13	52.7	47.0	74.8	3.14	327	55	83.1	6.9	**933**	**523**	337	7.09
	Nov-13	49.4	44.8	76.8	2.83	300	51	87.0	7.0	890	499	304	7.03
	May-14	47.7	42.3	67.1	2.60	300	47	86.1	8.8	874	**507**	309	7.06
	May-15	46.9	43.6	66.1	2.49	285	47	78.8	8.3	852	**520**	283	7.00

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
CUP-31A MW280 (continued)	Nov-15	42.4	41.3	69.7	2.43	291	51	79.7	8.9	820	483	292	7.11
	May-16	43.1	40.0	69.8	2.37	458*	50	84.1	9.3	**1,070***	**610***	439*	6.77*
	Nov-16	47.9	49.4	79.4	3.08	307	47	91.0	12.8	**902**	**540**	331	7.06
	Apr-17	60.6	50.2	71.1	3.20	345	51	85.2	18.6	**945**	**527**	357	6.98
	Nov-17	48.1	47.1	68.5	2.30	343	51	79.9	16.8	**948**	**538**	364	6.99
	May-18	56.8	55.2	79.5	2.77	329	50	84.0	21.1	**949**	**549**	355	6.97
	Nov-18	59.7	49.6	68.8	2.62	463	47	54.2*	6.16*	**1,070**	**599**	421	6.84
	May-19	56.0	48.7	69.2	2.37	342	52	83.1	21	895	**537**	347	7.80*
	Nov-19	52.8	48.5	67.7	2.80	309	46	77.8	19	**917**	**546**	340	7.02
	Nov-20	53.6	47.3	70.3	2.67	336	51	159.0	40	**905**	**531**	336	6.98
	May-21	52.3	46.4	71.5	2.90	312	46	73.3	22	899	**528**	317	6.96
	Dec-21	50.7	46.0	69.8	3.09	315	48	78.5	20	895	**505**	325	6.94
	May-22	50.4	48.2	74.0	3.17	328	47	76.5	20	883	**517**	333	6.87
	Nov-22	51.3	44.2	69.9	2.90	311	47	75.4	18	881	**505**	310	6.90
	May-23	51.0	45.6	72.1	2.85	327	47	71.4	16	**905**	**509**	320	6.97
	Jan-24	51.9	47.5	73.7	2.70	328	46	76.6	16	**917**	**531**	318	6.97
	May-24	51.6	46.8	74.3	2.80	325	43.4	81.4	17.7	**913**	**527**	323	7.07
	Nov-24	54.7	50.5	76.3	2.86	334	45.1	79.5	13.8	**914**	**525**	317	7.03
CUP-31A MW480	May-12	39.3	52.4	69.5	12.4	460	36	2.6	<0.3	**940**	**542**	319	7.21
	Oct-12	36.3	50.4	66.5	14.1	407	45	2.8	<0.3	885	**513**	280	6.64
	Apr-13	34.6	46.1	62.0	12.3	424	34	3.1	<0.3	867	450	293	7.27
	Nov-13	36.3	48.6	62.5	12.3	444	31	1.5	<0.44	898	470	295	7.27
	May-14	33.9	46.1	56.4	11.4	398	34	3.7	<0.3	846	456	283	7.34
	May-15	36.5	48.3	56.5	8.86	408	35	2.0	<0.3	860	485	277	7.33
	Nov-15	33.9	49.0	62.2	11.8	441	30	<0.5	<0.3	865	488	299	7.30
	May-16	31.5	42.5	55.5	10.1	371	36	2.6	<0.308	790	433	266	7.35
	Nov-16	31.1	41.4	53.0	10.3	328	38	4.0	<0.308	762	419	252	7.46
	Apr-17	35.1	41.1	52.3	9.7	361	40	2.0	<0.308	768	390	256	7.36
	Nov-17	29.5	41.6	54.1	9.6	371	40	<0.5	<0.308	752	414	257	7.42
	May-18	32.0	44.9	60.9	10.0	348	37	<0.5	<0.88	769	416	261	7.40
	Nov-18	33.4	41.4	56.9	9.9	347	39	<0.5	<0.308	763	391	257	7.37
	May-19	32.4	40.4	57.2	9.4	373	39	<0.5	<0.308	758	399	247	7.48
	Nov-19	30.1	39.7	52.9	10.4	337	39	<0.5	<0.308	753	400	243	7.45
	Nov-20	31.4	39.3	53.6	10.4	349	42	<0.5	<0.308	749	391	247	7.39
	May-21	30.7	39.6	54.2	11.1	329	37	<0.5	<0.176	758	409	232	7.37
	Dec-21	32.8	41.1	55.4	12.5	362	37	<0.5	<0.176	775	402	254	7.36
	May-22	30.4	40.0	53.9	10.8	321	45	2.5	<0.176	737	377	241	7.34
	Nov-22	32.5	39.8	54.9	11.1	348	39	<0.5	<0.176	762	403	244	7.29

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	NE	NE	NE	NE	NE	NE	NE	45	NE	NE	NE	NE
	Secondary MCL[1,2]	NE	NE	NE	NE	NE	250/500/600	250/500/600	NE	900/1,600/2,200	500/1,000/1,500	NE	NE
CUP-31A MW480 (continued)	May-23	32.2	41.3	55.9	11.9	372	38	<0.5	<0.176	779	398	249	7.32
	Jan-24	31.8	41.6	56.5	11.6	354	37	<0.5	<0.176	773	409	245	7.40
	May-24	30.9	40.0	55.8	11.30	350	36.7	<0.5	<0.176	769	389	243	7.28
	Nov-24	31.7	41.8	56.2	11.40	356	38.2	<0.5	<0.176	764	396	239	7.47
CUP-31A MW595	May-12	112	73.6	127	4.60	207	246	**324**	<0.3	**1,713**	**1,112**	556	7.07
	Oct-12	94.5	67.5	111	7.51	283	163	**263**	<0.3	**1,410**	**946**	442	6.86
	Apr-13	114	71.7	124	3.19	217	232	**291**	<0.3	**1,708**	**1,048**	595	7.22
	Nov-13	108	70.0	151	5.03	210	233	**330**	<0.22	**1,742**	**1,110**	590	7.25
	May-14	113	71.7	132	4.46	208	230	**353**	<0.3	**1,720**	**1,060**	574	7.22
	May-15	113	74.6	127	4.30	203	224	**305**	<0.3	**1,710**	**1,090**	596	7.24
	Nov-15	104	76.0	133	4.37	232	248	**328**	<0.3	**1,690**	**1,080**	651	7.25
	May-16	101	75.1	144	4.59	207	228	**344**	<0.308	**1,680**	**1,090**	599	7.21
	Nov-16	99	70.3	119	4.82	225	195	**259**	<0.308	**1,500**	**932**	532	7.17
	Apr-17	109.0	71.0	109	5.48	242	187	228	<0.308	**1,430**	**891**	539	7.25
	Nov-17	95.9	61.8	101	3.95	234	183	209	<0.308	**1,400**	**861**	507	7.23
	May-18	97	56.7	102	3.92	256	161	180	<1.1	**1,280**	**792**	459	7.24
	Nov-18	98.8	50.1	92	3.95	243	158	170	<0.308	**1,280**	**761**	450	7.25
	May-19	96.8	47.9	88	3.61	264	160	170	<0.308	**1,210**	**748**	441	7.40
	Nov-19	94.9	48.8	82	4.34	243	155	175	<0.308	**1,260**	**760**	447	7.30
	Nov-20	103.0	50.5	93	4.21	257	183	187	<0.308	**1,300**	**792**	511	7.13
	May-21	90.3	45.8	89	4.59	257	134	143	<0.176	**1,190**	**718**	404	7.22
	Dec-21	90.8	51.3	86	4.67	235	170	192	<0.176	**1,310**	**783**	465	7.10
	May-22	104.0	55.3	98	5.34	240	170	212	<0.176	**1,350**	**829**	470	7.10
	Nov-22	106.0	50.2	97	4.58	235	177	202	<0.176	**1,370**	**825**	466	7.11
	May-23	101.0	65.9	108	5.09	219	214	**268**	<0.176	**1,550**	**945**	519	6.89
	Jan-24	109.0	70.4	117	4.60	206	209	**292**	<0.176	**1,590**	**959**	546	7.04
	May-24	101	67.4	115	5.05	230	196	**293**	<0.176	**1,530**	**926**	525	6.95
	Nov-24	107	73.5	120	4.68	226	217	**299**	<0.176	**1,610**	**977**	559	7.14
CUP-36-1 MW160	May-10	64.0	38.7	95.6	1.74	212	110	127	26.3	**1,063**	**652**	336	6.95
	Oct-10	66.0	34.0	94.2	2.94	216	112	119	25.4	**1,044**	**650**	314	7.07
	May-11	64.5	34.2	91.0	2.85	206	118	128	29.4	**1,060**	**645**	314	7.11
	Nov-11	64.3	33.8	90.6	2.69	216	107	125	24.0	**1,020**	**660**	312	6.99
	May-12	62.2	33.0	91.3	2.41	206	114	128	26.4	**1,026**	**636**	297	5.94*
	Nov-12	63.7	34.1	92.1	2.72	230	122	126	23.2	**1,029**	**609**	303	7.04
	Apr-13	67.5	35.6	92.0	2.88	221	106	115	22.8	**1,036**	**606**	309	7.00
	Oct-13	53.9	28.9	90.0	2.26	218	103	120	23.8	**1,035**	**622**	304	6.98
	May-14	66.7	32.9	89.8	2.37	212	97	120	24.2	**1,030**	**598**	295	7.02
	Oct-14	62.9	31.8	90.2	2.34	223	102	121	24.6	**1,030**	**621**	315	7.06

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
CUP-36-1 MW160 (continued)	May-15	68.7	35.4	87.6	2.28	223	98	119	23.4	**1,020**	**584**	305	7.06
	Nov-15	62.1	33.7	87.0	2.30	224	99	125	23.4	**1,010**	**595**	307	7.04
	May-16	63.7	33.3	92.4	2.34	225	96	124	22.0	**1,000**	**581**	302	6.97
	Nov-16	58.0	33.9	93.2	2.47	223	95	131	22.1	**1,000**	**613**	285	7.01
	Apr-17	72.0	33.5	87.5	2.58	240	95	125	24.2	**1,010**	**609**	313	6.93
	Oct-17	65.6	34.2	92.6	2.46	180	79	112	26.4	**1,000**	**609**	257	6.97
	May-18	69.6	35.9	101.0	2.41	224	94	117	31.5	**1,000**	**590**	307	6.89
	Oct-18	69.8	34.7	95.8	2.42	219	92	114	34.6	**1,000**	**614**	289	6.97
	Apr-19	64.3	31.1	86.9	2.30	234	105	114	37.0	**999**	**620**	301	7.07
	Oct-19	67.3	33.0	93.3	2.56	232	100	115	41.7	**1,010**	**603**	327	7.03
	Oct-20	65.6	34.4	95.8	2.52	239	108	105	41.6	**1,010**	**629**	292	6.97
	Apr-21	66.4	32.4	94.8	2.62	224	93	104	41.1	**997**	**613**	293	6.97
	Nov-21	65.6	32.6	90.6	2.79	230	96	108	40.7	**1,000**	**595**	312	6.87
	May-22	65.3	33.6	95.2	2.80	234	93	108	37.0	**989**	**602**	304	6.97
	Oct-22	64.4	31.4	92.8	2.56	232	93	110	35.4	**1,000**	**594**	302	6.93
	Apr-23	66.0	32.9	96.6	2.53	236	94	105	35.0	**996**	**590**	292	6.86
	Jan-24	65.6	33.0	92.2	2.39	459	179	104	43.5	**1,010**	**608**	285	6.99
	May-24	67.7	34.3	92.3	2.50	238	92.9	100	43.5	**1,000**	**609**	294	7.00
	Oct-24	67.4	33.9	94.7	2.51	235	89.4	97.9	**46.6**	**997**	**604**	295	7.00
CUP-36-1 MW270	May-10	31.6	30.7	48.2	1.58	138	118	21.8	7.6	726	408	214	7.63
	Oct-10	34.1	31.2	56.9	2.57	148	119	21.4	7.9	743	434	214	7.70
	May-11	34.2	31.5	55.9	2.70	144	133	23.6	9.0	756	422	230	7.75
	Nov-11	37.2	32.7	64.8	2.44	124	147	25.2	20.5	803	**520**	226	7.23
	May-12	34.8	31.3	64.8	2.07	106	151	25.8	24.9	817	488	210	5.66*
	Nov-12	35.0	31.9	60.6	2.39	142	138	24.4	12.3	768	430	222	7.33
	Apr-13	37.7	34.2	60.3	2.47	142	131	24.3	12.2	775	435	227	7.33
	Oct-13	36.2	31.6	62.9	2.27	139	126	23.0	11.4	765	440	216	7.24
	May-14	36.7	30.7	55.4	2.19	137	124	23.4	11.2	760	382	220	7.36
	Oct-14	34.7	30.0	55.7	2.08	135	128	24.4	13.0	770	427	221	7.32
	May-15	38.8	34.1	55.9	2.17	141	127	23.7	12.3	770	452	219	7.34
	Nov-15	35.6	33.1	63.4	2.08	145	131	26.1	12.5	763	434	232	7.41
	May-16	36.2	32.7	61.6	1.95	140	132	27.8	14.6	788	412	236	7.29
	Nov-16	33.6	32.8	60.3	2.36	140	124	27.9	11.7	760	496	229	7.31
	Apr-17	38.5	30.3	54.1	2.34	145	115	24.5	9.2	743	456	218	7.26
	Oct-17	34.3	30.7	57.0	2.13	142	116	23.9	7.4	726	435	210	7.33
	May-18	37.0	33.3	62.3	2.16	144	117	24.9	7.6	729	411	220	7.32
	Oct-18	35.1	30.3	55.6	2.08	140	114	24.8	7.3	726	419	219	7.38
	Apr-19	34.2	28.9	53.7	2.08	142	119	23.8	8.1	726	420	222	7.40

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	NE	NE	NE	NE	NE	NE	NE	45	NE	NE	NE	NE
	Secondary MCL[1,2]	NE	NE	NE	NE	NE	250/500/600	250/500/600	NE	900/1,600/2,200	500/1,000/1,500	NE	NE
CUP-36-1 MW270 (continued)	Oct-19	34.9	30.3	60.9	2.20	141	124	24.3	7.8	708	432	220	7.35
	Oct-20	35.4	32.0	58.5	2.29	142	127	24.0	7.0	717	459	230	7.41
	Apr-21	34.9	29.7	57.1	2.34	135	117	22.9	7.1	710	438	199	7.28
	Nov-21	34.3	30.3	56.7	2.57	138	123	22.3	7.2	711	377	210	7.27
	May-22	34.9	29.9	57.6	2.52	136	116	22.2	7.7	708	394	211	7.41
	Oct-22	34.7	29.1	56.1	2.32	136	119	21.7	7.4	719	389	212	7.34
	Apr-23	34.7	30.0	58.0	2.33	134	121	21.8	7.9	715	381	204	7.19
	Jan-24	34.1	30.2	56.6	2.24	135	118	21.4	8.5	721	396	199	7.41
	May-24	33.6	29.6	56.3	2.19	135	119	22.3	8.1	713	385	204	7.42
	Oct-24	36.0	31.9	59.5	2.32	139	118	21.7	7.6	709	370	207	7.39
CUP-36-1 MW455	May-10	38.1	25.0	62.3	4.43	220	81	0.6	<0.3	691	361	192	7.51
	Oct-10	36.5	22.6	58.8	4.90	224	86	<0.5	<0.3	687	373	198	7.74
	May-11	38.0	23.3	60.2	5.47	212	89	<0.5	<0.3	696	355	200	7.75
	Nov-11	38.1	24.0	59.6	4.95	222	84	<0.5	<0.3	672	360	194	7.42
	May-12	37.5	22.6	59.0	4.29	216	91	<0.5	<0.3	693	363	194	7.18
	Nov-12	37.5	23.2	59.0	4.80	229	89	<0.5	<0.3	681	349	191	7.28
	Apr-13	39.3	24.0	59.0	5.10	221	84	0.5	<0.3	693	344	194	7.37
	Oct-13	36.1	21.6	59.6	4.56	221	88	<0.25	<0.44	709	356	193	7.34
	May-14	40.9	22.8	56.9	4.59	214	84	0.7	<0.3	700	334	193	7.37
	Oct-14	37.8	22.5	54.8	4.50	219	83	<0.5	<0.3	691	353	199	7.34
	May-15	41.2	25.2	55.8	4.48	220	81	<0.5	<0.3	677	342	193	6.98
	Nov-15	37.7	24.7	61.6	4.57	224	90	<0.5	<0.3	705	333	205	7.30
	May-16	37.3	23.5	58.4	4.34	218	88	<0.5	<0.308	716	326	204	7.23
	Nov-16	35.1	23.9	58.8	4.85	222	83	<0.5	<0.308	683	354	199	7.41
	Apr-17	42.4	23.2	55.1	4.59	219	78	<0.5	<0.308	692	392	200	7.27
	Oct-17	39.0	23.6	56.7	4.52	216	79	<0.5	<0.308	684	366	165	7.31
	May-18	40.8	24.4	61.3	4.63	223	84	<0.5	<0.308	689	333	203	7.26
	Oct-18	40.6	22.7	57.2	4.36	217	82	<0.5	<0.308	691	344	199	7.06
	Apr-19	39.4	22.7	56.0	4.53	230	88	<0.5	<0.308	698	351	200	7.76
	Oct-19	41.2	24.0	63.6	4.73	232	89	<0.5	<0.308	694	335	202	7.37
	Oct-20	39.8	24.9	62.5	4.73	220	88	<0.5	<0.308	685	362	198	7.22
	Apr-21	40.5	23.7	60.1	4.73	214	79	<0.5	<0.176	692	337	188	7.30
	Nov-21	40.9	23.3	58.5	5.30	227	88	<0.5	<0.176	705	345	202	7.05
	May-22	40.8	24.6	60.6	5.46	225	83	<0.5	<0.176	691	341	202	7.32
	Oct-22	40.1	23.1	60.2	4.86	228	86	<0.5	<0.176	708	325	202	7.10
	Apr-23	40.2	24.1	62.8	4.95	226	90	<0.5	<0.176	711	344	199	7.16
	Jan-24	41.0	24.5	62.3	4.88	224	85	<0.5	<0.176	718	356	193	7.20
	May-24	41.5	24.9	61.2	4.73	233	89.6	<0.5	<0.176	712	349	197	7.26

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
CUP-36-1 MW455 (continued)	Oct-24	42.2	24.9	64.2	4.94	231	86.2	<0.5	<0.176	708	326	197	7.25
CUP-36-1 MW585	May-10	121	56.1	77.1	3.30	216	186	206	<0.3	**1,363**	**814**	512	7.20
	Oct-10	121	53.6	79.0	4.28	216	197	210	<0.3	**1,387**	**826**	524	7.27
	May-11	95.0	43.8	75.9	4.17	204	157	167	0.66	**1,184**	**752**	444	7.40
	Nov-11	102	49.7	82.2	4.29	218	168	184	<0.3	**1,257**	**780**	456	7.22
	May-12	90.3	51.9	83.3	3.53	200	154	200	0.9	**1,246**	**792**	436	7.04
	Nov-12	102	61.1	83.5	3.99	225	205	213	<0.3	**1,379**	**861**	501	7.10
	Apr-13	96.7	66.3	91.3	4.52	230	174	187	0.57	**1,354**	**779**	501	7.13
	Oct-13	101	68.8	104	4.34	232	191	**260**	<0.22	**1,509**	**914**	553	7.09
	May-14	111	68.0	92.3	4.09	229	190	**267**	<0.3	**1,530**	**944**	580	7.17
	Oct-14	114	71.9	93.8	4.15	242	206	**284**	<0.3	**1,590**	**994**	611	7.08
	May-15	99.9	63.7	96.5	4.11	241	207	**285**	<0.3	**1,610**	**993**	633	7.09
	Nov-15	117	79.6	98.7	4.19	254	226	**313**	<0.3	**1,630**	**1,040**	708	7.13
	May-16	109	73.9	98.4	3.84	235	203	**298**	<0.308	**1,600**	**979**	629	7.13
	Nov-16	92.3	67.3	78.2	4.02	224	183	217	<0.308	**1,370**	**842**	527	7.07
	Apr-17	56.7*	32.0*	54.2*	3.11*	202	93.3*	36.8*	<0.308	778*	345*	253*	7.12
	Oct-17	49.0*	30.3*	54.9*	2.72*	191	93.4*	29.8*	<0.308	751*	417*	243*	7.13
	May-18	52.6	30.2	65.5	2.79	194	97	31.3	<0.308	735	406	247	7.10
	Oct-18	78.4	39.9	65.7	3.05	192	131	106	<0.308	**1,020**	**605**	365	7.03
	Apr-19	76.4	39.9	64.8	3.13	216	139	122	<0.308	**1,030**	**637**	382	7.25
	Oct-19	99.2	49.3	74.0	3.49	226	168	180	<0.308	**1,180**	**702**	485	7.14
	Oct-20	63.8	31.9	61.8	3.02	195	110	72	<3.08	848	**508**	295	7.15
	Apr-21	62.7	29.3	58.2	3.00	195	104	55	<0.176	818	473	266	7.10
	Nov-21	56.6	27.1	55.4	3.09	194	102	44	<0.176	772	417	262	6.98
	May-22	61.5	29.5	59.0	3.21	199	95	53	<0.176	787	434	271	7.02
	Oct-22	42.7	18.9	45.0	2.44	152	74	31	0.4	620	328	195	7.03
	Apr-23	62.3	31.7	53.1	2.95	168	104	77	<0.176	803	451	272	6.91
	Jan-24	86.1	51.0	64.4	4.01	203	142	171	<0.176	**1,150**	**661**	411	6.94
	May-24	87.2	52.0	68.7	4.0	210	141	156	1.0	**1,140**	**641**	413	7.04
	Oct-24	110	66.7	84.8	4.98	232	176	236	<0.176	**1,410**	**853**	533	7.00
CUP-44-1 MW190	May-10	51.9	33.6	57.7	1.75	238	69	60.6	34.8	842	485	292	6.66
	Oct-10	48.9	29.9	55.2	1.26	232	70	59.0	33.0	849	493	290	6.77
	Jun-11	47.8	36.3	112	1.63	226	98	90.8	**53.2**	**1,042**	**617**	266	6.61
	Oct-11	57.6	36.8	86.2	1.62	256	85	76.1	37.5	**937**	**560**	290	6.55
	May-12	49.4	32.6	94.2	1.11	237	90	82.0	40.5	**956**	**533**	263	6.49
	Nov-12	51.3	36.5	95.3	1.55	270	106	82.8	37.9	**992**	**582**	276	6.58
	May-13	53.2	38.7	102	1.57	261	92	78.5	36.9	**1,000**	**562**	287	6.51
	Oct-13	52.9	35.8	108	1.47	252	86	83.0	37.8	**979**	**566**	278	6.56

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
CUP-44-1 MW190 (continued)	May-14	51.6	33.0	97.7	1.37	246	93	91.2	40.0	**1,030**	**565**	266	6.56
	Oct-14	45.4	32.2	112	1.29	255	96	95.8	43.3	**1,030**	**607**	273	6.58
	May-15	50.1	34.9	--	1.24	258	95	92.7	41.3	**1,030**	**619**	256	6.52
	Nov-15	47.7	34.0	109	1.23	251	90	96.0	42.2	**1,010**	**611**	260	6.50
	May-16	47.6	33.1	97.8	1.29	241	87	96.0	39.2	**984**	**577**	267	6.53
	Nov-16	45.2	33.7	110	1.34	248	87	98.4	37.4	**965**	**612**	265	6.52
	Apr-17	46.8	34.1	119	1.56	264	91	96.5	38.7	**1,020**	**613**	265	6.58
	Oct-17	46.0	34.2	123	1.25	276	101	98.7	35.2	**1,040**	**594**	256	6.46
	Apr-18	47.9	34.1	121	1.30	257	95	103.0	33.7	**1,040**	**614**	271	6.51
	Oct-18	49.8	33.1	120	1.26	259	96	96.2	30.6	**1,040**	**599**	267	6.48
	Apr-19	47.8	32.1	114	1.27	263	98	98.7	30.2	**1,040**	**604**	260	6.62
	Oct-19	50.7	34.5	125	1.46	258	98	103.0	30.2	**1,050**	**599**	265	6.62
	Oct-20	48.3	34.5	112	1.39	248	102	98.9	30.1	**1,050**	**614**	266	6.51
	Apr-21	49.2	33.6	124	1.53	254	100	97.3	29.0	**1,040**	**627**	257	6.51
	Nov-21	49.4	34.2	113	1.61	251	98	99.1	29.3	**1,040**	**595**	259	6.47
	Apr-22	48.0	34.1	117	1.55	273	96	99.0	27.7	**1,040**	**598**	263	6.40
	Oct-22	48.2	33.2	120	1.46	261	92	101	27.1	**1,050**	**617**	258	6.46
	Apr-23	49.2	35.3	128	1.46	273	95	104	25.5	**1,070**	**624**	256	6.42
	Oct-23	48.2	34.6	129	1.39	275	91	95	22.9	**1,070**	**623**	259	6.46
	Apr-24	49.2	35.3	129	1.36	278	97.3	108	26.1	**1,080**	**620**	253	6.54
	Oct-24	50.3	36.2	133	1.41	289	94.2	112	25.5	**1,080**	**620**	262	6.59
CUP-44-1 MW300	May-10	52.5	35.2	91.4	2.03	258	84	80.6	36.8	**978**	**564**	290	6.57
	Oct-10	46.5	29.9	84.2	1.18	250	86	82.0	38.0	**978**	**538**	278	6.67
	Jun-11	50.1	35.2	101	1.81	236	96	88.8	39.9	**1,026**	**617**	278	6.74
	Oct-11	53.4	37.0	112	1.73	258	100	92.1	40.4	**1,045**	**620**	282	6.50
	May-12	34.7*	22.1*	72.9*	1.51	163*	64*	68.5*	29.6*	687*	372*	177*	6.43
	Nov-12	47.1	34.7	109	1.72	265	113	95.0	40.1	**1,031**	**597**	266	6.55
	May-13	52.6	36.9	114	1.70	263	100	88.9	38.1	**1,060**	**599**	279	6.45
	Oct-13	48.4	34.3	131	1.59	261	98	94.0	40.0	**1,066**	**598**	268	6.48
	May-14	51.3	33.1	107	1.48	252	96	97.4	39.9	**1,060**	**590**	272	6.57
	Oct-14	47.5	31.9	112	1.41	245	92	96.0	40.6	**1,040**	**601**	263	9.46*
	May-15	49.5	34.2	82.6	1.28	262	95	92.2	38.8	**1,040**	**607**	267	6.62
	Nov-15	47.6	34.1	109	1.35	259	92	100	40.0	**1,030**	**630**	263	6.50
	May-16	45.5	31.5	105	1.24	242	87	97.0	38.3	**998**	**581**	262	6.49
	Nov-16	22.9*	15.9*	53.3*	1.62	120*	40.8*	45.7*	15.0*	481*	442	124*	6.19
	Apr-17	45.3	32.8	116	1.78	254	88	94.4	36.3	**987**	**577**	256	6.56
	Oct-17	42.6	30.6	109	1.18	261	94	96.9	35.1	**1,030**	**600**	265	6.48
	Apr-18	49.5	35.0	123	1.35	262	98	102.0	32.6	**1,060**	**610**	277	6.49

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
CUP-44-1 MW300 (continued)	Oct-18	49.7	33.7	119	1.29	259	96	98.5	31.3	**1,040**	**594**	269	6.50
	Apr-19	49.2	32.3	113	1.41	267	99	103.0	30.7	**1,040**	**611**	265	6.60
	Oct-19	49.9	34.3	121	1.47	252	96	102.0	29.5	**1,020**	**584**	259	6.58
	Oct-20	50.1	34.5	112	1.42	253	102	100.0	29.6	**1,050**	**605**	267	6.51
	Apr-21	50.2	33.8	127	1.59	261	100	101.0	29.7	**1,060**	**636**	270	6.47
	Nov-21	51.0	34.0	112	1.69	272	98	102.0	29.5	**1,060**	**561**	268	6.46
	Apr-22	51.0	35.9	122	1.71	271	95	102.0	28.1	**1,050**	**603**	272	6.41
	Oct-22	49.7	33.2	124	1.50	268	93	104.0	27.3	**1,060**	**617**	263	6.43
	Apr-23	46.3	32.1	118	1.47	276	94	97.1	25.3	**1,070**	**607**	244	6.47
	Oct-23	49.1	34.7	126	1.47	279	91	92.9	23.2	**1,070**	**589**	260	6.49
	Apr-24	49.1	34.5	125	1.44	281	94.4	108	25.7	**1,080**	**609**	1300	6.54
	Oct-24	50.0	35.1	127	1.57	293	94.5	104	23.5	**1,060**	**630**	263	6.58
CUP-44-1 MW460	May-10	55.4	46.6	62.9	3.39	168	134	118	2.1	**1,026**	**618**	336	6.98
	Oct-10	49.5	40.4	57.6	2.57	172	131	110	2.0	**990**	**569**	336	7.06
	Jun-11	53.1	47.2	62.0	3.62	164	136	119	1.9	**988**	**599**	338	7.04
	Oct-11	59.0	50.0	65.6	3.49	180	135	117	2.6	**988**	**650**	342	6.85
	May-12	55.8	44.8	60.3	2.50	169	135	116	2.1	**974**	**561**	339	6.79
	Nov-12	53.6	47.4	64.1	3.23	178	146	113	2.4	**968**	**560**	319	6.89
	May-13	57.2	50.7	64.1	3.28	177	136	103	2.3	**968**	**527**	345	6.79
	Oct-13	58.2	48.0	66.7	4.03	231	117	86	12.3	**1,006**	**590**	352	6.89
	May-14	58.0	46.6	59.9	3.10	180	127	106	5.7	**982**	**536**	348	6.91
	Oct-14	54.9	46.3	60.2	3.03	220	117	86	11.5	**1,000**	**577**	363	6.89
	May-15	57.4	49.4	58.8	2.85	225	120	83.6	12.6	**993**	**549**	352	6.91
	Nov-15	54.4	48.2	60.3	2.96	226	124	84.7	12.8	**977**	**569**	385	6.90
	May-16	58.6	48.8	60.5	2.97	215	119	96.0	11.9	**978**	**567**	365	6.87
	Nov-16	49.0	46.5	59.6	3.07	176	127	109	5.0	**942**	**562**	333	6.85
	Apr-17	48.7	44.2	61.0	3.47	185	119	98	6.9	**909**	**521**	310	6.95
	Oct-17	48.9	44.2	62.2	2.71	166	127	98	5.6	**917**	**507**	325	6.86
	Apr-18	52.6	45.1	65.5	2.93	165	121	96.5	8.7	891	**505**	306	6.91
	Oct-18	48.7	38.3	58.9	2.66	162	118	81	11.1	847	466	286	6.91
	Apr-19	46.3	37.6	57.4	2.65	157	115	82	12.8	844	484	281	7.59*
	Oct-19	49.0	40.5	66.2	2.97	155	113	82	13.4	832	472	277	7.03
	Oct-20	49.1	41.8	63.6	3.05	157	116	90	10.9	867	**509**	289	6.92
	Apr-21	47.1	39.6	61.0	2.94	160	110	87	11.9	843	**516**	273	6.89
	Nov-21	60.4	38.3	62.7	5.66	174	132	100	5.2	**932**	**514**	308	6.76
	Apr-22	54.2	45.8	66.2	3.49	176	128	103	5.5	**946**	**522**	327	6.88
	Oct-22	53.9	43.7	64.5	3.29	166	128	104	3.5	**954**	**528**	319	6.63
	Apr-23	55.5	46.7	67.4	3.28	172	134	109	0.8	**973**	**548**	324	6.79

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
CUP-44-1 MW460 (continued)	Oct-23	54.8	46.0	65.6	3.08	170	127	96.1	0.6	**955**	**533**	315	6.48
	Apr-24	53.1	44.2	63.6	3.03	166	129	95.9	3.4	**937**	**502**	300	6.34
	Oct-24	52.4	44.0	63.9	3.06	175	129	96.9	4.0	**913**	**519**	305	6.58
CUP-44-1 MW580	May-10	94.9	80.2	89.3	4.86	252	85	**293**	<0.3	**1,576**	**992**	608	7.53
	Oct-10	89.7	72.5	90.0	4.06	252	174	**300**	<2.2	**1,582**	**1,074**	610	7.55
	Jun-11	102	90.3	96.8	6.02	244	183	**336**	<0.3	**1,618**	**1,054**	624	7.53
	Oct-11	98.8	94.2	101	6.07	264	182	**340**	<0.3	**1,629**	**1,100**	644	7.11
	May-12	25.1*	15.4*	19.2*	2.25*	83*	33*	47.6*	0.5*	375*	207*	132*	6.97*
	Nov-12	97.6	84.9	92.3	5.77	264	192	**320**	<0.3	**1,565**	**996**	603	7.24
	May-13	104	99.1	102	6.47	263	184	**299**	<0.3	**1,621**	**1,012**	635	7.19
	Oct-13	102	79.3	109	5.33	254	180	**350**	<0.22	**1,654**	**1,086**	640	7.19
	May-14	110	93.6	94.3	5.31	250	180	**354**	<0.3	**1,670**	**1,070**	670	7.31
	Oct-14	98.6	80.9	98.7	5.00	259	186	**360**	<0.3	**1,660**	**1,090**	662	7.29
	May-15	--	94.9	96.6	5.03	262	184	**357**	<0.3	**1,700**	**1,080**	666	7.33
	Nov-15	104	91.5	101	5.38	276	194	**362**	<0.3	**1,680**	**1,130**	664	7.26
	May-16	101	93.3	95.3	4.99	257	180	**380**	<1.1	**1,680**	**1,130**	681	7.34
	Nov-16	97.8	93.4	108	5.47	265	184	**386**	<0.308	**1,660**	**1,120**	679	7.26
	Apr-17	105	95.7	106	6.82	264	177	**362**	<0.308	**1,660**	**1,110**	672	7.25
	Oct-17	97.9	84.6	99	4.44	265	190	**347**	<0.308	**1,660**	**1,090**	687	7.25
	Apr-18	116	100.0	113	5.42	253	184	**366**	<0.308	**1,660**	**1,070**	692	7.26
	Oct-18	111	90.4	100	5.04	258	189	**366**	<0.308	**1,670**	**1,090**	684	7.22
	Apr-19	111	90.9	103	5.20	276	204	**397**	<0.308	**1,710**	**1,130**	716	7.40
	Oct-19	113	97.5	108	5.48	258	194	**391**	<0.308	**1,680**	**1,090**	737	7.35
	Oct-20	113	94.7	103	5.65	256	192	**342**	<0.308	**1,670**	**1,100**	672	7.00
	Apr-21	114	90.7	111	5.72	258	188	**373**	<0.176	**1,660**	**1,120**	647	7.19
	Nov-21	112	91.6	101	6.41	265	189	**384**	<0.176	**1,700**	**1,060**	673	7.41
	Apr-22	111	97.7	108	6.11	288	207	**379**	<0.176	**1,700**	**1,070**	715	7.38
	Oct-22	112	92.1	118	5.83	259	192	**306**	<0.176	**1,740**	**1,090**	674	7.37
	May-23	114	96.7	103	5.44	265	197	**376**	<0.176	**1,730**	**1,060**	742	7.44
	Oct-23	116	98.3	110	5.52	263	189	**350**	<0.176	**1,720**	**1,090**	673	7.48
	Apr-24	113	94.3	105	5.22	263	194	470	<0.176	**1,750**	**1,050**	651	7.50
	Oct-24	118	99.6	110	5.54	283	195	369	<3.52	**1,710**	**1,099**	690	7.57
MW-M1	May-10	25.5	18.9	30.1	2.20	110	51	21.0	11.8	465	260	140	6.73
	Oct-10	23.1	16.4	28.1	1.64	110	56	22.0	12.0	475	272	152	6.87
	Jun-11	25.5	19.4	31.8	2.19	110	55	22.3	12.6	475	291	148	6.91
	Oct-11	29.7	19.0	31.4	1.93	112	53	20.7	13.1	456	290	148	6.77
	May-12	25.6	19.4	32.1	1.71	115	59	23.7	13.0	477	477*	156	6.76
	Nov-12	26.9	20.1	32.7	2.11	134	59	25.2	13.7	478	278	150	6.85

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	NE	NE	NE	NE	NE	NE	NE	45	NE	NE	NE	NE
	Secondary MCL[1,2]	NE	NE	NE	NE	NE	250/500/600	250/500/600	NE	900/1,600/2,200	500/1,000/1,500	NE	NE
MW-M1 (continued)	May-13	29.1	21.4	32.2	2.14	119	57	22.2	12.0	484	258	160	6.71
	Oct-13	26.0	19.0	30.7	1.94	115	55	25.0	13.6	487	258	154	6.77
	May-14	28.8	20.0	29.3	1.97	111	54	24.2	13.2	480	236	152	6.76
	Nov-14	29.8	21.5	29.6	1.83	114	55	25.2	14.0	489	294	156	6.80
	Apr-15	29.8	22.0	31.5	1.90	42.8*	40	23.6	14.4	485	253	160	6.70
	Oct-15	27.8	20.2	31.5	1.88	114	54	25.0	15.0	474	292	153	6.79
	May-16	24.6	18.1	26.3	1.36	108	46	16.4	18.9	437	206	147	6.78
	Nov-16	25.2	19.4	27.3	1.53	114	36	22.5	22.6	435	238	146	6.79
	Apr-17	26.6	18.0	24.6	1.50	114	38	17.8	23.5	434	251	145	6.68
	Oct-17	23.0	17.5	27.9	1.30	118	38	19.4	22.5	433	234	148	6.83
	May-18	27.0	20.8	33.8	1.49	118	37	20.5	22.0	437	247	152	6.78
	Nov-18	29.2	18.6	30.6	1.48	115	36	20.2	21.6	437	232	149	6.82
	Apr-19	27.0	19.4	31.2	1.54	120	38	21.1	22.8	442	254	150	7.61*
	Oct-19	27.4	19.5	31.1	1.65	122	40	21.3	20.7	446	261	150	7.04
	Oct-20	28.0	19.8	32.1	1.70	116	37	21.1	22.5	442	265	149	6.92
	Apr-21	27.4	19.2	36.6	2.02	133	45	31.1	16.0	466	257	141	6.89
	Nov-21	27.5	18.7	28.8	1.76	118	38	19.3	25.6	439	228	152	6.77
	May-22	27.5	19.2	30.2	1.84	115	38	18.4	25.1	438	236	148	6.78
	Oct-22	29.0	19.2	31.5	1.84	111	51	22.9	16.6	480	258	145	6.69
	Apr-23	28.4	19.5	31.4	1.79	113	51	23.3	27.6	469	257	148	6.67
	Oct-23	28.5	20.3	31.0	1.64	123	36	20.4	23.7	452	248	150	6.81
	May-24	29.2	21.1	30.2	1.61	127	37.0	23.7	23.3	455	257	151	6.89
	Oct-24	28.4	19.5	31.0	1.59	117	46.9	20.5	18.4	456	270	147	6.77
DC#01 - A ST	Apr-00	24.8	27.6	37.8	2.19	113	72	20.6	**53.5**	540	280	176	8.10
	Apr-01	--	--	--	--	110	73	17.0	**57.0**	500	300	170	8.20
	Oct-01	28.4	27.4	40.7	1.85	110	72	17.0	**63.0**	560	340	190	8.13
	Apr-03	33.0	32.0	44.0	1.60	111	84	22.0	25.0	609	370	--	7.70
	Nov-04	37.6	34.2	47.1	2.22	96	77	22.4	**85.5**	675	402	216	8.10
	May-05	40.0	40.1	46.1	2.18	92	70	31.0	33.0	775	--	254	8.03
	May-06	42.0	44.6	39.5	3.16	92	91	30.0	**137**	748	--	252	7.96
	Jun-07	37.7	41.0	43.1	2.23	100	85	33.0	**140**	779	466	250	7.91
	Apr-08	42.2	38.9	49.0	2.06	92	92	29.7	**131**	765	445	260	7.97
DC#03 - DC-4	Feb-81	22.0	23.0	42.0	--	107	60	11.0	--	--	170	--	9.10
	Jan-83	26.0	24.0	48.0	1.50	72	62	10.0	--	--	360	--	7.10
	Apr-85	25.0	23.0	38.0	--	116	64	14.0	40.0	--	234	--	7.80
	Jul-88	26.0	23.0	--	38.0	128	66	16.0	**45.0**	--	--	--	--
	Apr-00	27.1	32.5	42.2	1.8	126	65	32.3	**42.2**	474	324	202	8.12
	Nov-04	30.4	30.6	45.7	1.52	126	53	30.5	**49.7**	566	386	186	8.00

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	NE	NE	NE	NE	NE	NE	NE	45	NE	NE	NE	NE
	Secondary MCL[1,2]	NE	NE	NE	NE	NE	250/500/600	250/500/600	NE	900/1,600/2,200	500/1,000/1,500	NE	NE
DC#03 - DC-4 (continued)	May-05	28.1	29.1	39.1	1.59	150	59	31.0	**49.0**	570	--	188	8.03
	May-06	29.6	33.9	36.5	2.21	122	57	34.0	**54.0**	569	--	194	8.05
	Jun-07	27.7	31.1	37.6	1.85	130	80*	36.0	**59.0**	596	358	220	7.98
	Apr-09	26.6	27.5	37.6	1.50	130	57	32.4	**56.0**	602	327	198	7.98
	Apr-10	30.3	30.6	41.1	1.57	126	60	36.5	**66.7**	641	365	212	7.90
	May-11	30.4	32.7	41.6	2.26	124	59	36.5	**65.6**	634	378	208	7.98
	Apr-12	28.7	30.8	41.8	1.71	128	64	38.6	**69.6**	642	361	213	8.00
	May-13	29.4	30.7	38.5	1.60	131	55	34.0	**61.6**	612	369	202	8.04
	Jun-14	32.6	32.7	39.2	1.64	131	58	38.3	**63.6**	642	378	215	7.99
	Oct-14	37.0	34.0	40.2	1.53	146	58	42.0	**74.8**	684	404	241	7.80
	Apr-15	31.3	29.1	37.6	1.46	136	57	32.1	**57.1**	609	326	208	7.93
DC#06 - JEFFERSON	Apr-00	21.1	21.5	32.4	1.71	114	56	10.9	11.6	427	240	141	8.10
	Apr-01	--	--	--	--	110	56	11.0	11.0	390	230	150	8.10
	Oct-01	20.9	21.5	36.3	1.84	110	55	11.3	10.6	430	250	140	8.14
	Apr-03	20.0	20.0	35.0	1.60	138	60	9.7	1.8	393	230	--	7.52
	Nov-04	21.3	20.1	39.7	2.20	114	51	8.7	4.9	422	294	144	8.20
	May-05	20.3	20.9	34.2	1.82	110	56	9.2	7.9	420	--	128	8.12
	May-06	20.1	23.0	20.2	3.00	112	57	10.1	9.2	424	--	158	8.14
	Jun-07	18.4	20.7	31.7	1.90	110	80	10.3	9.4	427	253	140	8.09
	Apr-08	20.1	21.4	35.3	1.74	106	56	10.0	10.0	430	258	156	8.12
	Apr-09	17.9	19.6	31.5	1.79	112	58	11.0	10.0	442	252	134	8.04
	Apr-10	18.6	19.3	32.7	1.30	134	55	10.8	9.3	442	268	156	7.93
	May-11	18.9	20.4	33.7	1.90	108	58	11.3	10.2	445	128*	136	8.14
	Apr-12	18.8	20.8	34.0	1.71	109	59	12.3	10.9	446	266	136	8.11
	May-13	20.3	22.0	33.7	1.89	111	57	14.0	12.3	459	257	139	8.17
	Jun-14	20.7	22.1	31.4	1.63	111	58	15.0	12.6	468	258	145	8.14
	Oct-14	22.2	21.2	31.0	1.65	114	61	15.0	12.3	473	260	150	8.14
	Jun-16	21.9	23.5	31.5	1.62	113	59	17.3	14.0	486	249	153	8.16
	Apr-17	18.7	21.7	31.8	1.83	110	58	12.6	11.0	466	265	141	8.02
	Apr-18	21.8	22.4	39.9	1.81	107	61	12.2	10.2	461	240	142	8.17
	Apr-19	20.9	20.8	36.7	1.62	108	62	11.6	10.5	455	256	139	8.17
	May-20	20.4	20.7	33.4	1.93	110	63	11.8	10.9	456	265	146	8.08
	Apr-22	21.3	21.7	34.4	2.04	112	59	13.4	11.6	461	243	142	8.02
	Apr-23	22.6	23.6	37.3	1.94	118	62	17.9	13.7	488	259	150	8.01
	Apr-24	22.4	22.8	35.9	1.88	116	60.2	--	--	482	251	145	8.02
DC#10 - VALE	Apr-00	24.5	27.0	37.8	2.68	122	66	25.8	33.4	619	286	172	8.14
	Apr-01	--	--	--	--	120	70	23.0	33.0	490	270	170	8.00
	Oct-01	28.1	26.5	41.1	2.01	120	75	24.8	35.9	540	330	180	8.14

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
DC#10 - VALE (continued)	Oct-02	29.0	26.0	40.0	2.70	120	69	34.0	41.0	510	330	--	8.20
	Nov-04	31.4	30.1	46.6	2.16	128	63	28.8	30.7	567	364	190	8.20
	May-05	28.2	29.3	38.6	1.83	126	97*	29.0	--	570	--	186	8.11
	May-06	26.5	30.6	34.1	2.33	124	64	37.0	39.0	573	--	194	8.20
	Jun-07	26.1	28.5	37.8	2.14	130	65	29.0	33.0	567	339	210	8.10
	Apr-08	29.3	29.3	41.6	2.07	128	69	27.4	32.2	570	341	192	8.11
	Apr-09	25.8	25.9	37.3	1.92	120	67	26.0	34.8	577	310	182	8.06
	Apr-10	26.4	25.3	38.3	0.79	122	67	27.7	35.7	580	338	184	7.95
	May-11	26.8	27.7	39.5	2.36	118	66	28.5	36.3	580	346	186	8.15
	Apr-12	26.2	26.3	40.3	1.86	120	68	28.8	38.7	581	329	186	8.07
	May-13	28.5	29.7	41.0	2.16	125	67	30.0	39.6	592	322	184	8.12
	Jun-14	29.2	28.7	38.3	2.00	121	66	29.7	39.6	595	**774***	191	8.11
	Oct-14	30.5	27.9	39.6	1.95	126	70	31.0	38.7	603	348	198	8.08
	Apr-15	30.9	28.9	37.8	1.86	129	70	29.8	39.5	602	340	195	8.12
	Jun-16	30.3	29.9	37.3	1.92	126	66	33.1	39.9	605	332	202	8.13
DC#11 - DC-2 (WESTLAKE)	Nov-74	33.0	35.0	55.0	2.00	194	73	38.0	**71.0**	--	412	--	7.60
	Sep-81	36.0	35.0	47.0	--	158	75	35.0	--	--	260	--	7.90
	Jan-83	36.0	34.0	36.0	1.60	119	70	36.0	--	--	260	--	7.20
	Apr-85	39.0	39.0	51.0	--	173	81	44.0	**73.0**	--	344	--	7.60
	Apr-01	--	--	--	--	170	180	92.0	28.0	820	**530**	320	7.80
	Oct-01	49.0	48.9	71.1	2.81	170	120	96.7	27.3	**910**	**570**	--	7.70
	Apr-03	37.0	43.0	58.0	1.80	224	100	69.0	23.0	725	460	--	7.20
	May-05	23.2	26.2	38.1	1.58	114	48	26.0	41.0	490	--	160	8.22
	May-06	40.5	44.6	56.9	1.77	186	96	72.0	30.0	830	--	302	7.59
	Jun-07	37.7	46.6	55.0	2.43	190	105	78.0	29.0	855	--	330	7.55
	Apr-08	50.7	47.6	68.5	2.87	176	122	107	24.1	**950**	**577**	320	7.64
	Apr-09	47.8	42.2	65.5	2.87	174	120	113	19.9	**976**	**572**	320	7.58
	Apr-10	49.3	46.7	74.3	2.97	196	121	110	20.5	**978**	**600**	318	7.53
	May-11	48.9	47.2	69.9	3.24	174	122	112	21.6	**968**	**582**	318	7.67
	Apr-12	49.0	45.5	72.2	3.05	172	126	116	20.5	**984**	**584**	322	7.68
	May-13	50.8	47.0	69.7	3.51	176	124	120	19.4	**979**	**551**	312	7.69
	Jun-14	49.1	43.7	67.7	3.09	165	121	114	18.6	**974**	**741***	317	7.70
	Oct-14	55.0	42.8	71.0	3.29	168	128	120	16.7	**990**	**574**	324	7.65
	Jun-16	41.0	43.7	55.2	2.16	177	99	89.0	17.8	864	470	293	7.59
	Apr-17	38.1	46.2	57.1	2.28	188	92	68.9	31.1	861	487	287	7.49
	Apr-21	44.0	45.6	56.5	2.18	205	88	68.1	36.5	869	494	290	7.55
	Apr-22	57.0	46.8	76.7	4.11	175	122	130	15.4	**998**	**563**	328	7.53
	Apr-23	58.8	45.7	81.0	3.99	175	134	142	11.3	**1,040**	**611**	332	7.53

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
DC#11 - DC-2 (WESTLAKE) (continued)	Apr-24	60.6	46.8	80.1	3.81	175	129	127	10.9	**1,040**	**589**	331	7.60
DC-JUNIPERO SERRA	Jun-14	21.0	23.8	32.5	1.44	110	49	25.9	37.2	504	273	157	8.21
	Apr-19	22.1	23.1	36.8	1.37	111	50	25.6	37.4	488	281	158	8.30
	Apr-21	24.2	24.8	35.7	1.67	117	48	28.1	37.3	514	284	160	8.07
	Apr-22	24.0	24.8	36.4	1.81	113	50	26.9	36.2	506	269	160	8.11
	Apr-23	23.8	25.3	37.9	1.67	115	52	32.8	36.2	520	285	163	8.10
	Apr-24	24.5	26	38	1.64	119	52	28.9	38.6	528	278	162	8.11
DC#13 - SULLIVAN	May-20	29.7	30.0	41.1	1.89	140	60	34.6	**47.5**	606	364	210	8.06
	Apr-21	29.5	29.2	39.8	1.79	136	57	32.1	**45.8**	594	341	192	8.02
	Apr-24	34.5	35.4	42.9	1.73	142	58	144	11.6	674	367	226	8.06
SSFLP 120	Oct-07	70.0	50.0	110	3.70	192	180	57.0	--	**1,160**	**690**	380	8.20
	May-08	67.3	47.4	92.0	3.53	284	176	54.0	<0.3	**1,133**	**665**	372	7.22
	Sep-08	65.7	47.8	90.5	2.84	306	168	57.0	<0.3	**1,117**	**662**	362	7.11
	Apr-09	60.5	44.8	85.6	2.89	272	170	51.5	<0.3	**1,124**	**626**	288	7.19
	Nov-09	64.0	48.0	90.0	2.90	250	173	53.0	<0.3	**1,154**	**665**	360	7.25
	Dec-10	66.0	45.7	91.5	3.50	292	173	49.0	<1.1	**1,211**	**626**	386	7.30
	May-11	60.0	46.1	87.8	3.00	294	173	51.6	0.37	**1,202**	**668**	390	7.20
	Nov-11	59.6	44.9	89.7	3.79	244	156	62.1	<0.3	**1,056**	**630**	322	7.14
	May-12	59.7	44.3	91.6	2.71	268	163	61.9	<0.3	**1,097**	**623**	354	7.13
	Nov-12	58.0	43.9	87.0	3.31	271	161	64.7	<0.3	**1,092**	**622**	321	7.15
	Apr-13	63.5	43.9	--	3.24	274	152	57.1	<0.3	**1,097**	**629**	352	7.13
	Nov-13	61.1	45.3	97.2	3.14	272	149	58.0	<0.22	**1,101**	**616**	345	7.01
	May-14	62.1	42.7	85.8	2.85	262	142	61.1	<0.3	**1,100**	**598**	338	7.05
	Oct-14	61.9	42.9	86.2	2.87	269	144	71.8	<0.3	**1,090**	**622**	357	7.13
	May-15	60.9	45.8	83.0	2.99	268	139	64.3	<0.3	**1,090**	**615**	354	7.17
	Nov-15	58.7	45.6	86.0	3.14	273	146	61.7	<0.3	**1,090**	**644**	355	7.17
	May-16	60.8	44.7	89.1	2.87	271	138	65.9	<0.3	**1,090**	**588**	383	7.13
	Nov-16	54.8	46.5	92.2	3.08	271	135	69.0	<0.308	**1,080**	**626**	345	7.11
	Apr-17	68.3	44.0	85.0	3.19	292	145	64.7	<0.308	**1,070**	**590**	348	6.97
	Nov-17	61.8	45.9	97.8	2.86	226	116	61.2	<0.308	**1,090**	**630**	280	7.18
	May-18	66.7	47.7	96.5	3.08	290	144	63.7	<0.308	**1,080**	**605**	362	7.06
	Oct-18	64.5	42.5	88.4	2.83	279	138	63.5	<0.308	**1,070**	**603**	347	7.16
	Apr-19	63.4	42.9	88.4	2.80	282	137	66.7	<0.308	768*	**617**	343	8.14
	Nov-19	65.1	45.2	94.3	3.07	284	139	68.3	<0.308	**1,100**	**607**	346	7.20
	Oct-20	61.5	44.5	92.1	3.21	265	131	66.4	<0.308	**1,070**	**608**	338	7.05
	Apr-21	63.3	43.7	90.8	3.33	274	132	62.5	<0.176	**1,050**	**611**	322	7.09
	Nov-21	63.5	44.1	89.7	3.56	290	135	66.0	<0.176	**1,060**	**599**	89.9	7.15
	May-22	64.4	45.3	94.1	3.53	293	131	65.7	<0.176	**1,070**	**601**	346	7.06

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SSFLP 120 (continued)	Oct-22	61.2	43.6	95.4	3.23	277	136	65.5	<0.176	**1,070**	**594**	333	7.06
	May-23	62.6	45.1	98.0	3.20	300	140	59.6	<0.176	**1,110**	**614**	349	7.03
	Jan-24	63.1	44.9	92.5	3.07	290	131	61.6	5.5	**1,090**	**611**	332	7.15
	May-24	63.3	46.1	90.7	2.96	293	132	60.0	<0.88	**1,080**	**595**	331	7.13
	Nov-24	63.3	45.8	93.6	3.10	295	133	59.5	<0.176	**1,070**	**587**	336	7.15
SSFLP 220	Oct-07	35.0	29.0	54.0	2.40	150	100	20.0	--	643	366	210	8.20
	May-08	34.0	29.0	48.8	2.28	156	102	20.0	0.4	640	416	206	7.59
	Sep-08	34.6	30.6	49.6	2.40	146	104	20.0	0.5	639	395	220	7.51
	Apr-09	31.1	27.5	46.0	2.09	146	101	19.9	0.5	655	357	200	7.56
	Nov-09	32.0	28.0	47.0	2.10	146	100	20.0	0.6	658	350	200	7.56
	Dec-10	32.1	26.9	47.0	1.70	146	100	18.0	<0.88	681	376	208	7.60
	May-11	27.9	25.7	43.9	2.20	142	104	20.2	0.8	661	369	204	7.50
	Nov-11	33.3	27.2	51.6	2.02	140	106	19.2	2.2	642	390	192	7.13
	May-12	29.0	25.7	52.7	2.02	136	111	19.1	2.6	647	368	198	7.18
	Nov-12	29.9	27.2	53.4	2.26	135	108	20.1	2.6	645	358	184	7.19
	Apr-13	31.9	28.8	52.2	2.33	136	104	18.1	2.6	651	393	191	7.22
	Nov-13	31.2	26.9	52.4	2.19	134	103	18.0	2.5	648	366	172	7.17
	May-14	30.3	25.6	47.7	1.96	131	101	19.5	2.8	651	389	184	7.29
	Oct-14	31.6	26.1	47.5	2.00	132	102	19.6	2.8	647	310	190	7.20
	May-15	31.9	27.8	47.7	1.99	131	100	18.3	3.1	649	372	186	7.14
	Nov-15	29.2	26.6	49.5	1.96	136	107	19.8	2.9	645	371	191	7.33
	May-16	29.3	27.1	48.8	1.90	141	103	19.9	3.1	644	386	203	7.17
	Nov-16	27.7	28.4	52.0	2.21	131	100	22.7	3.1	647	381	184	7.15
	Apr-17	40.7*	31.8*	58.1*	2.60*	133	99	19.2	3.1	643	366	258*	7.16
	Nov-17	29.2	27.1	52.5	1.95	108	85	18.4	3.0	645	353	149*	7.18
	May-18	32.9	28.4	60.8	2.12	133	104	19.2	3.3	647	395	192	7.17
	Oct-18	31.8	25.9	51.2	1.92	130	101	18.8	3.3	645	355	187	7.16
	Apr-19	30.6	25.2	50.1	1.92	128	101	21.5	3.4	**1060***	376	191	7.98
	Nov-19	31.2	26.5	54.5	2.22	128	102	20.2	3.3	650	268	182	7.21
	Oct-20	30.6	28.1	54.8	2.24	128	103	19.6	3.4	649	370	188	7.12
	Apr-21	31.0	26.4	53.5	2.22	131	101	19.4	3.4	644	360	178	7.10
	Nov-21	30.9	25.8	50.2	2.36	138	107	20.1	3.7	647	350	193	7.17
	May-22	31.6	27.0	53.7	2.45	131	98	19.0	3.6	649	361	190	7.12
	Oct-22	30.9	25.9	54.0	2.27	130	103	20.2	3.7	659	334	180	7.07
	May-23	30.4	27.0	54.7	2.20	134	105	18.9	3.6	654	360	188	7.09
	Jan-24	31.1	27.3	53.9	2.14	134	102	21.0	4.1	662	365	181	7.14
	May-24	31.6	27.7	54.8	2.16	136	101	20.4	4.1	655	366	179	7.20
	Nov-24	31.7	27.8	55.1	2.18	137	102	19.9	4.0	651	345	187	7.18

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	NE	NE	NE	NE	NE	NE	NE	45	NE	NE	NE	NE
	Secondary MCL[1,2]	NE	NE	NE	NE	NE	250/500/600	250/500/600	NE	900/1,600/2,200	500/1,000/1,500	NE	NE
SSFLP 440	Oct-07	28.0	19.0	66.0	4.80	192	65	<1.0	--	571	310	150	8.30
	Jun-08	26.3	18.5	60.3	4.59	206	63	<0.5	<0.3	583	295	150	7.89
	Sep-08	27.7	19.8	64.9	5.13	206	62	<0.5	<0.3	577	317	148	7.82
	Apr-09	24.4	17.0	59.6	4.63	200	61	<0.5	<0.3	590	299	142	7.91
	Nov-09	26.0	18.0	60.0	4.40	206	61	<0.5	<0.3	594	304	140	7.92
	Dec-10	24.7	16.5	57.6	4.90	210	63	<0.5	<0.88	614	296	142	8.00
	May-11	21.1	15.1	51.2	5.00	194	65	<0.5	<0.3	600	301	150	7.90
	Nov-11	30.0	18.7	62.4	4.97	204	64	<0.5	<0.3	586	310	146	7.42
	May-12	26.1	20.4	60.3	4.97	210	72	<0.5	<0.3	608	305	160	7.38
	Nov-12	25.6	18.8	61.5	5.25	207	67	<0.5	<0.3	594	245	143	7.49
	Apr-13	26.9	20.3	59.2	5.62	211	63	<0.5	<0.3	597	303	150	7.47
	Nov-13	27.6	23.4	58.5	5.38	212	68	<0.25	<0.44	618	290	184	7.44
	May-14	28.1	24.0	51.0	4.91	212	70	<0.5	<0.3	635	328	174	7.49
	Oct-14	28.1	22.0	52.0	5.00	207	65	<0.5	<0.3	602	297	162	7.34
	May-15	29.0	24.4	53.2	5.05	209	67	<0.5	<0.3	620	260	168	7.45
	Nov-15	26.9	24.0	54.1	5.09	210	71	<0.5	<0.3	623	298	174	7.21
	May-16	26.7	24.0	55.3	4.86	234	77	<0.5	<0.308	629	320	177	7.35
	Nov-16	22.5	21.2	58.1	5.54	202	60	<0.5	<0.308	594	296	151	7.32
	Apr-17	32.2	23.0	61.6	6.22	201	58	<0.5	<0.308	586	277	197	7.20
	Nov-17	25.1	22.2	57.8	4.95	166	53	<0.5	<0.308	596	285	123	7.49
	May-18	23.5	18.9	60.7	4.54	209	62	<0.5	<0.308	589	276	154	7.50
	Oct-18	27.9	20.8	55.9	5.06	207	63	<0.5	<0.308	599	299	157	7.53
	Apr-19	26.0	19.5	55.6	4.90	209	63	0.51	<0.308	629	303	151	8.12
	Nov-19	27.7	21.9	59.6	5.18	208	64	<0.5	<0.308	612	356	163	7.53
	Oct-20	28.2	25.6	59.0	5.66	205	67	<0.5	<0.308	624	306	174	7.44
	Apr-21	28.0	23.6	57.1	5.49	204	61	<0.5	<0.176	604	304	154	7.44
	Nov-21	27.3	22.0	55.5	5.79	220	66	<0.5	<0.176	604	299	165	7.49
	May-22	28.1	23.5	58.8	6.18	211	61	<0.5	<0.176	613	313	172	7.48
	Oct-22	27.8	22.6	56.0	5.66	210	63	<0.5	<0.176	623	306	160	7.50
	May-23	30.2	26.3	59.1	5.70	220	68	<0.5	<0.176	635	297	188	7.33
	Jan-24	30.4	26.3	57.0	5.54	220	66	<0.5	<0.176	643	311	177	7.35
	May-24	30.1	26.0	56.7	5.33	222	66.3	<0.5	<0.176	634	307	174	7.50
	Nov-24	30.4	26.4	56.8	5.43	229	68.2	<0.5	<0.176	632	313	179	7.47
SSFLP 520	Oct-07	47.0	18.0	110	3.90	<2.0	110	66.0	--	822	490	190	8.30
	Jun-08	44.5	18.3	102	4.00	198	107	66.0	<0.3	842	486	182	7.61
	Sep-08	47.0	18.4	105	4.18	208	103	65.0	<0.3	833	483	186	7.57
	Apr-09	41.1	16.4	90.3	3.66	194	106	62.0	<0.3	848	450	186	7.62
	Nov-09	44.0	17.0	93.0	3.50	200	107	67.0	<0.3	853	462	190	7.67

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SSFLP 520 (continued)	Dec-10	44.5	16.2	93.7	3.60	196	106	59.0	<0.88	881	473	192	7.70
	May-11	36.8	14.7	79.5	4.00	186	107	62.7	<0.3	855	483	194	7.80
	Nov-11	44.3	17.1	93.4	3.93	202	99	51.8	<0.3	799	440	182	7.35
	May-12	41.9	17.1	93.7	3.87	207	106	52.5	<0.3	816	461	187	7.21
	Nov-12	40.9	17.6	93.5	4.26	210	96	52.0	<0.3	795	447	174	7.36
	Apr-13	43.2	18.1	91.7	4.20	214	93	40.4	<0.3	789	427	177	7.32
	Nov-13	43.3	17.4	96.5	3.84	219	92	45.0	<0.44	801	417	182	7.24
	May-14	42.7	16.9	85.9	3.56	208	86	47.0	<0.3	634*	438	179	7.32
	Oct-14	43.6	17.5	90.4	3.62	214	89	53.6	<0.3	794	440	182	7.27
	May-15	43.9	17.8	86.2	3.49	215	87	45.4	<0.3	783	425	175	7.25
	Nov-15	41.4	17.6	88.1	3.64	216	95	44.3	<0.3	793	368*	187	7.22
	May-16	40.1	16.8	90.1	3.30	205	92	48.7	<0.308	796	446	175	7.05
	Nov-16	39.6	17.2	94.6	3.70	198	94	52.6	<0.308	801	435	174	7.25
	Apr-17	45.1	16.2	88.8	3.90	199	90	44.2	<0.308	772	431	152	7.08
	Nov-17	36.4	14.7	82.2	3.11	160	76	40.6	<0.308	758	415	135	6.95
	May-18	43.8	16.7	98.1	3.64	202	95	40.6	<0.308	772	398	177	7.26
	Oct-18	43.3	15.1	87.1	3.25	194	89	40.6	<0.308	765	419	171	7.32
	Apr-19	41.2	14.8	87.9	3.29	197	92	43.0	<0.308	583	421	167	7.47
	Nov-19	42.8	15.2	95.4	3.44	192	91	44.4	<0.308	773	384	164	7.29
	Oct-20	41.7	15.8	95.2	3.86	197	94	42.0	<0.308	763	408	168	7.24
	Apr-21	41.3	15.1	88.9	3.70	191	85	40.5	<0.176	753	412	155	7.35
	Nov-21	42.7	14.8	88.7	3.98	200	92	45.0	<0.176	770	409	169	7.25
	May-22	42.9	15.5	96.2	4.14	195	88	45.8	<0.176	772	426	171	7.24
	Oct-22	41.7	14.2	93.2	3.72	195	90	44.5	<0.176	780	418	161	7.25
	May-23	38.9	14.3	93.2	3.63	206	83	31.5	<0.176	729	383	154	7.24
	Jan-24	37.8	13.7	87.8	3.35	205	76	28.6	<0.176	718	391	147	7.31
	May-24	37.5	13.8	86.4	3.34	207	77	29.0	<0.176	711	390	145	7.27
	Nov-24	38.2	14.0	88.5	3.38	212	77	26.6	<0.176	631	368	148	7.43
SS#05 - SS 1-14	Feb-58	57.0	54.0	69.0	3.60	280	128	89.0	13.0	--	--	--	7.75
	Feb-60	55.0	46.0	69.0	3.60	261	120	82.0	16.0	--	--	--	7.65
	Feb-62	52.0	52.0	72.0	5.40	271	126	89.0	16.0	--	--	--	8.50
	Feb-64	58.0	44.0	78.0	2.10	273	125	79.0	14.0	--	--	--	7.83
	Feb-66	54.0	46.0	77.0	4.20	268	122	86.0	16.0	--	--	--	7.90
	Feb-68	60.0	52.0	81.0	3.90	327	131	87.0	12.0	--	--	--	7.75
	Aug-70	42.0	59.0	70.0	4.00	283	124	77.0	14.0	--	--	--	7.78
	Jun-72	58.0	53.0	76.0	3.20	298	127	87.0	28.0	**1,028**	**624**	--	7.70
	Sep-74	55.0	55.0	66.0	2.40	299	125	74.0	30.0	--	--	--	7.60
	Apr-76	54.0	52.0	70.0	3.90	277	125	69.0	30.0	--	--	--	7.40

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SS#05 - SS 1-14 (continued)	Apr-78	48.0	54.0	66.0	2.60	274	122	63.0	37.0	--	--	--	7.51
	Aug-80	57.0	48.0	66.0	2.50	276	111	65.0	31.0	--	--	--	7.66
	Dec-82	45.0	50.0	72.0	2.50	260	112	68.0	30.0	--	--	--	7.59
	Nov-84	--	--	--	--	--	--	**--**	37.0	--	--	--	--
	Nov-86	48.0	52.0	72.0	2.60	280	122	72	33.0	**980**	**581**	--	--
	Sep-87	47.0	50.0	70.0	3.00	274	112	71	30.0	--	--	--	7.77
	Aug-90	46.0	52.0	69.0	2.70	256	117	59	35.0	**950**	**549**	--	7.60
	Apr-00	12.0	69.0	83.0	3.00	360	120	98	**53.0**	**1,181**	**694**	448	7.55
	Apr-01	--	--	--	--	310	120	83	**120**	**930**	**600**	370	7.60
	Oct-01	65.8	78.0	88.8	2.51	310	130	130	**60.0**	**1,200**	**770**	470	7.43
	Oct-02	58.1	60.6	80.9	2.90	260	120	86.0	38.0	**1,100**	**590**	--	7.70
	May-04	1.34*	1.68*	1.09*	6.83	--	120	140	**70.4**	**1,339**	**800**	540	7.47
	Oct-04	78.8	87.5	80.4	2.45	360	117	142	**77.0**	**1,367**	**919**	495	7.40
	Apr-05	82.5	92.8	92.8	2.67	380	128	149	**81.0**	**1,259**	--	550	7.40
	May-06	82.7	91.0	86.3	2.92	386	126	145	**82.0**	**1,436**	--	560	7.50
	Jun-07	86.6	100	95.3	3.02	420	125	157	**80.0**	**1,473**	**894**	600	7.35
	May-11	57.0	70.1	74.1	2.60	276	129	91.1	36.4	**1,149**	**635**	414	7.70
SS#06 - SS 1-15	May-13	63.8	62.8	74.6	3.29	287	114	100	23.3	**1,099**	**642**	400	7.46
	Oct-14	74.9	64.4	76.7	2.98	183*	110	120	11.0	**1,210**	**732**	479	7.33
	Apr-15	62.5	58.2	72.2	2.68	315	124	91	21.0	**1,080**	**595**	348	7.44
	May-16	59.1	55.2	68.9	2.67	278	111	97	21.9	**1,060**	**622**	397	7.38
SS#08 - SS 1-19	May-08	49.4	60.4	72.3	2.12	252	93	82	**47.0**	**993**	**587**	342	7.31
	Apr-09	51.8	60.6	66.2	2.43	276	131	87	27.0	**1,138**	**643**	420	7.58
	Apr-10	53.7	68.9	76.1	2.76	324	128	86	31.6	**1,143**	**651**	266	7.54
	May-13	57.1	68.5	71.8	2.72	299	130	88	33.4	**1,138**	**638**	424	7.65
	Oct-14	59.0	63.5	67.3	2.43	146*	128	88	31.7	**1,120**	**648**	427	7.72
	Apr-15	58.5	65.8	67.9	2.42	245	108	83.8	32.2	**1,110**	**618**	462	7.68
	May-16	56.5	62.4	64.8	2.27	270	120	82.7	29.1	**1,080**	**618**	412	7.63
	Apr-18	53.0	59.8	69.6	2.26	280	94	85.6	32.4	**1,010**	**574**	390	7.12
	Apr-19	53.2	60.4	67.1	2.19	270	130	74.1	14.7	**1,050**	**586**	394	7.50
	Jun-20	53.7	62.4	64.1	2.30	287	104	79.7	21.0	**1,030**	**602**	387	7.35
	May-21	52.3	58.6	71.1	2.38	272	106	77.6	18.2	**1,010**	**578**	363	7.27
	Apr-22	52.9	62.0	69.7	2.63	273	116	73.1	14.8	**1,020**	**550**	380	7.46
	May-23	52.6	62.3	74.5	2.47	278	127	71.2	15.5	**1,060**	**599**	374	7.51
	May-24	54.3	64.7	72.0	2.40	276	125	77.5	20.5	**1,080**	**583**	388	7.60
SS#09 - SS 1-20	May-08	44.8	49.3	73.6	3.18	210	82	93	35.0	863	**517**	296	7.30
	May-13	89.4	49.6	79.0	5.73	225	157	190	6.2	**1,232**	**730**	421	7.48
	Jun-14	87.4	48.7	87.1	4.90	209	151	197	9.9	**1,280**	**756**	438	7.45

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SS#09 - SS 1-20 (continued)	Oct-14	89.5	46.8	87.4	5.08	107*	150	190	7.0	**1,240**	**758**	428	7.56
	Apr-15	86.5	50.6	86.8	4.54	228	160	185	9.6	**1,230**	**724**	401	7.46
	Apr-19	41.6	41.8	61.6	1.62	225	70	89	29.5	826	480	289	7.39
	Jun-20	40.7	43.5	58.3	1.95	226	63	88	29.5	829	493	291	7.17
	May-21	41.2	42.1	64.4	1.99	219	62	87	29.6	816	488	273	7.09
	Apr-22	43.5	44.7	64.9	2.46	217	62	91	32.3	829	467	283	7.10
	May-23	83.1	56.7	91.6	3.85	215	141	201	4.9	**1,240**	772	436	7.24
	May-24	79.4	49.5	83.2	3.75	442	244	177	10.3	**1,160**	**700**	400	7.31
SS#10 - SS 1-21	May-89	102	38.0	113	5.00	291	156	184	--	**1,242**	**771**	--	7.40
	Oct-02	122	40.7	101	5.80	230	160	200	1.8	**1,300**	**780**	--	7.50
	May-04	1.52	1.41	1.28	1.66	--	165	220	<0.3	**1,363**	**980**	470	7.43
	Oct-04	36.2	33.1	88.0	8.74	306	71	6.5	<0.2	**943**	**548**	266	7.70
	Apr-05	129	47.2	105	4.88	250	186	241	<0.3	**1,408**	--	500	7.41
	May-06	125	49.6	91.3	5.92	228	182	248	<0.3	**1,429**	--	510	7.57
	Jun-07	118	44.7	92.3	5.14	220	190	246	<0.3	**1,437**	**929**	530	7.30
	Apr-09	97.3	35.7	89.8	4.35	218	147	168	<0.3	**1,208**	**747**	396	7.40
	Apr-10	102	33.9	88.0	4.51	226	143	163	<0.3	**1,195**	**724**	388	7.35
	May-11	97.4	36.8	90.1	5.40	198	148	176	<0.3	**1,234**	**759**	410	7.50
	Apr-12	103	38.7	90.3	4.47	214	156	181	<0.3	**1,246**	**763**	398	7.33
	May-13	111	41.4	87.6	5.04	233	162	200	<0.22	**1,295**	**753**	432	7.44
	Jun-14	103	38.7	94.5	4.48	218	153	190	<0.3	**1,280**	**778**	433	7.49
	Apr-15	109	41.8	91.1	4.31	195	136	196	<0.3	**1,290**	**798**	489	7.46
	Apr-18	123	46.2	98.8	4.98	222	180	238	<0.308	**1,390**	**854**	502	7.43
	Apr-19	112	39.2	88.2	4.46	241	172	202	<0.308	**1,290**	**805**	454	7.38
	May-21	105	37.9	90.4	4.97	223	143	186	<0.176	**1,220**	**772**	409	7.35
	Apr-22	91	33.3	84.0	4.57	226	117	143	<0.176	**1,070**	**632**	356	7.42
	May-23	82	30.1	84.9	4.33	220	109	116	<0.176	**1,010**	**603**	314	7.41
	May-24	75.0	27.8	80.0	3.91	226	103	106	<0.176	**1,060**	**556**	292	7.49
SS#15 - SS 1-22	Jun-14	95.1	39.5	87.9	4.65	228	146	185	2.0	**1,260**	**563**	420	7.49
	Apr-15	98.0	40.6	85.9	4.40	240	151	162	1.4	**1,200**	**732**	191*	7.46
	May-16	113.0	42.9	87.9	4.90	226	160	209	1.2	**1,310**	**823**	461	7.42
	Apr-18	100	42.7	90.6	5.34	240	150	185	2.2	**1,240**	**744**	438	7.47
	Apr-19	105	41.0	87.4	4.75	248	171	197	2.4	**1,300**	**783**	460	7.63
	Jun-20	102	40.3	85.2	5.18	234	150	177	2.7	**1,240**	**769**	434	7.47
	May-21	104	39.8	94.1	5.38	236	146	171	2.8	**1,220**	**746**	408	7.40
	Apr-22	104	40.1	93.0	5.20	243	138	165	3.2	**1,200**	**707**	410	7.40
	May-23	100	39.2	100.0	5.12	239	140	162	3.3	**1,200**	**719**	404	7.45
	May-24	96.7	38.0	91.7	4.80	248	131	158	3.7	**1,180**	**699**	384	7.46

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SS#16 - SS 1-23	Jun-14	75.4	34.5	72.9	4.68	214	118	111	0.9	**1,020**	**575**	330	7.52
	May-16	91.2	36.3	69.3	4.59	214	132	142	0.9	**1,080**	**628**	379	7.44
	Apr-18	90.3	45.6	83.2	5.65	240	141	167	1.4	**1,200**	**727**	436	7.53
	Apr-19	91.8	37.3	77.0	4.49	238	134	146	2.6	**1,130**	**668**	395	7.83
	Jun-20	86.0	38.2	72.5	5.03	235	123	135	3.0	**1,110**	**664**	381	7.51
	May-21	85.2	40.3	87.7	5.89	253	124	142	3.2	**1,120**	**666**	371	7.48
	Apr-22	82.1	35.3	78.3	4.90	246	103	110	3.7	**1,010**	**564**	338	7.46
	May-23	82.1	35.8	82.1	4.91	249	112	118	4.1	**1,050**	**607**	345	7.46
	May-24	82.3	35.4	77.8	4.57	252	111	119	4.1	**1,050**	**612**	344	7.51
SS#17 - SS 1-24	May-21	65.9	54.6	78.3	6.44	293	107	127	<0.176	**1,120**	**635**	387	7.36
	Apr-22	95.3	52.7	83.5	5.58	270	132	164	<0.176	**1,210**	**707**	448	7.38
	May-23	110	49.6	91.8	5.26	242	157	199	<0.176	**1,310**	**801**	466	7.41
Burlingame-S[3]	Nov-06	64	37	530	7.0	190	220	**600**	<0.44	--	**1,400**	--	--
	Apr-07	30	18	97	2.5	170	110	160	1.8	**1,100**	**610***	--	7.20
	Aug-07	49	32	480	4.5	260	**270**	**520**	1.5	**2,600**	**1,500**	--	7.40
	Feb-08	53	37	590	5.1	230	**280**	**490**	1.1	**2,200**	**1,400**	--	7.20
	Aug-08	38.3	26	309	3.68	236	**327**	**511**	<0.44	**2,420**	**1,540**	--	7.16
	Feb-09	53.8	37.6	469	4.94	314	**518**	**601**	<0.44	**2,840**	**1,760**	--	7.45
	Oct-09	42.4	28.3	309	3.76	277	**425**	**480**	<0.44	**2,550**	**1,630**	--	7.09
	Mar-10	56	42	540	8.1	330	**500**	**350**	<0.88	**2,900**	**1,400**	--	7.39
	Aug-10	59	42	480	5.6	150	**430**	**320**	<0.88	**2,600**	**1,300**	--	7.42
	Mar-11	58	38	490	5.1	320	**580**	**290**	<1.76	**2,900**	**1,500**	--	7.50
	Aug-11	61	44	420	5.5	320	**580**	**270**	<0.88	**2,800**	**1,500**	--	7.30
	Mar-12	66	47	460	6.1	300	**670**	220	<0.88	**2,900**	**1,600**	--	7.60
	Aug-12	35*	20*	130*	2.9*	170*	130*	77*	1.6	570*	**510***	--	7.55
	Mar-13	71	50	550	6.4	340	**700**	230	<0.88	**2,800**	**2,800**	--	7.53
	Aug-13	73	55	530	6.6	360	**810**	170	<1.76	**3,400**	**2,000**	--	7.26
	Mar-14	72	52	490	6.4	150*	**780**	210	<0.88	**2,800**	**1,900**	--	7.34
	Aug-14	100	82	520	12	230	**1,000**	91	<1.76	**3,900**	**2,100**	--	7.47
	Mar-15	87	64	560	7.4	360	**880**	150	<0.88	**3,400**	**2,100**	--	7.56
	Aug-15	57	40	380	5	300	**600**	190	<0.88	**2,500**	**1,500**	--	7.33
	Mar-16	82	68	520	7.2	370	**940**	100	<1.76	**3,700**	**2,200**	--	7.33
	Aug-16	99	76	590	8.9	430	**1,100**	66	<1.76	**4,400**	**2,500**	--	7.29
	Mar-17	100	80	680	8.4	420	**1,200**	60	<4.4	**4,400**	**2,400**	--	7.36
	Aug-17	100	84	660	8.5	440	**1,200**	52	<0.88	**4,100**	**2,300**	--	7.29
	Mar-18	110	88	660	8.9	440	**1,300**	51	<4.4	**4,500**	**2,500**	--	7.19
	Aug-18	94	79	560	7.0	440	**1,100**	21*	<1.76	**4,200**	**2,500**	--	7.27
	Mar-19	110	91	690	9.2	420	**1,200**	43	<1.76	**4,300**	**2,400**	--	7.39

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General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
Burlingame-S[3] (continued)	Aug-19	110	81	610	8.2	440	**1,200**	47	<4.4	**4,100**	**2,300**	--	7.53
	May-20	100	79	600	8.7	430	**1,200**	44	<4.4	**4,300**	**2,400**	--	7.60
	Aug-20	100	85	640	9.0	430	**1,200**	43	<4.4	**4,300**	**2,300**	--	7.41
	Apr-21	110	88	700	9.5	430	**1,200**	35	<4.4	**4,300**	**2,400**	--	7.24
	Aug-21	110	96	730	8.3	430	**1,300**	35	<1.76	**4,100**	**2,400**	--	7.30
	Mar-22	110	97	710	8.6	440	**1,300**	31	<4.4	**4,400**	**2,400**	--	7.33
	Aug-22	97	84	670	7.8	420	**1,100**	35	<4.4	**4,000**	**2,300**	--	7.48
	Mar-23	100	92	720	8.7	440	**1,200**	37	<4.4	**3,900**	**2,400**	--	7.37
	Aug-23	100	92	650	8.0	410	**1,100**	33	<4.4	**4,100**	**4,200**	--	7.23
	Mar-24	100	83	650	8.20	460	**1,200**	28	<4.4	**4,300**	**2,300**	--	7.35
	Aug-24	98	83	600	7.4	400	**1,100**	28	<4.4	**4,100**	**2,300**	--	7.31
Burlingame-M[3]	Nov-06	37	24	77	4.5	220	140	220	<0.44	--	**1,200**	--	--
	Apr-07	34	23	84	3.3	200	110	68	<0.44	870	480	--	7.20
	Aug-07	27	16	96	3.1	200	74	47	<0.44	760	420	--	7.40
	Feb-08	28	16	76	3.0	170	67	46	<0.44	660	400	--	7.20
	Aug-08	29.6	17.0	65	2.59	163	67	41	<0.44	614	363	--	6.96
	Feb-09	33.5	19.1	62	2.59	172	79	38.5	<0.44	611	350	--	7.03
	Oct-09	32.3	18.9	58	2.53	160	74	36.3	<0.44	570	337	--	7.22
	Mar-10	28	18	58	3.4	160	67	31	<0.44	590	310	--	7.33
	Aug-10	33	19	51	2.5	180	63	29	<0.88	570	320	--	7.39
	Mar-11	28	16	42	2.0	180	66	27	<0.88	550	310	--	7.37
	Aug-11	28	19	45	2.1	330	66	25	<0.88	540	310	--	7.12
	Mar-12	31	21	54	2.4	150	68	--	<0.88	540	310	--	7.34
	Aug-12	31	20	53	2.4	150	71	25	<0.88	350	310	--	7.53
	Mar-13	33	20	55	2.4	150	79	24	<0.88	510	340	--	7.62
	Aug-13	30	17	47	2.2	140	73	25	<0.88	560	370	--	7.20
	Mar-14	31	20	70	2.4	64*	72	24	<0.88	480	330	--	7.23
	Aug-14	33	20	56	2.4	140	67	24	<0.88	570	330	--	7.29
	Mar-15	33	21	58	2.4	140	92	23	<0.88	580	400	--	7.51
	Aug-15	20	11	32	1.8	110	49	18	1.5	390	230	--	7.19
	Mar-16	35	23	61	2.3	160	120*	22	<0.88	710	400	--	7.24
	Aug-16	38	24	68	2.6	140	130*	20	<0.88	740	428	--	7.18
	Mar-17	30	19	58	2.4	140	90	20	<0.88	600	320	--	7.24
	Aug-17	30	20	52	2.5	160	78	23	<0.88	530	330	--	7.31
	Mar-18	34	21	57	2.5	140	100	20	<0.88	610	330	--	7.06
	Aug-18	40	27	77	2.3	160	130	6.4*	<1.76	780	480	--	7.28
	Mar-19	20	8.6	30	2.7	66	48	7.5	<0.88	310	90	--	6.97
	Aug-19	17	5.7	19	2.6	54	32	5.9	<0.88	230	86	--	6.96

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
Burlingame-M[3] (continued)	May-20	24	12.0	41	2.8	84	70	9.0	<0.88	410	220	--	7.10
	Aug-20	19	7.3	24	2.5	59	45	7.1	<0.88	280	160	--	6.96
	Apr-21	29	16.0	52	2.8	95	89	9.2	<0.88	510	330	--	7.01
	Aug-21	30	17.0	54	2.8	98	94	10.0	<0.88	490	310	--	7.02
	Mar-22	18	6.0	23	2.9	54	35	6.0	<0.88	250	130	--	6.88
	Aug-22	41	26	81	2.9	140	150	14.0	<0.88	770	410	--	7.38
	Mar-23	34	21	69	2.4	140	30	6.4	2.3	570	340	--	7.19
	Aug-23	16	5	19	2.1	49	34	6.0	2.2	240	120	--	6.75
	Mar-24	21	10	37	2.4	60	17	3.4	1.58	370	230	--	6.97
	Aug-24	12	3.9	16	1.6	80	100	10	<0.88	550	340	--	7.14
Burlingame-D[3]	Nov-06	61	42	230	12	190	140	140	<0.44	--	**820**	--	--
	Apr-07	24	17	120	5	220	94	69	<0.44	860	**520**	--	7.20
	Aug-07	26	17	83	4	230	78	36	<0.44	680	400	--	7.30
	Feb-08	32	18	61	3	200	45	26	<0.44	580	350	--	7.20
	Aug-08	30.3	17.2	53.1	2.53	195	42	22.7	<0.44	525	332	--	6.96
	Feb-09	37.0	19.0	54.6	2.57	193	47	25	<0.44	531	303	--	6.99
	Oct-09	34.5	16.7	49.0	2.22	189	44	23.3	<0.44	519	310	--	7.16
	Mar-10	38	23	51	6.9	180	46	24	<0.88	530	280	--	7.57
	Aug-10	38	18	47	2.3	260	41	24	3.5	540	300	--	7.64
	Mar-11	32	14	47	1.7	180	44	24	<0.88	550	310	--	7.37
	Aug-11	34	16	44	1.8	180	43	24	<0.88	540	310	--	7.12
	Mar-12	37	18	51	--	180	41	24	<0.88	510	290	--	7.61
	Aug-12	37	18	49	2.0	180	40	23	<0.88	330	300	--	7.74
	Mar-13	35	15	51	1.9	180	47	25	<0.88	470	310	--	7.68
	Aug-13	35	16	49	1.8	180	42	24	<0.88	510	320	--	7.50
	Mar-14	36	16	67	1.9	76*	43	23	<0.88	440	310	--	7.52
	Aug-14	35	16	47	1.8	170	38	22	<0.88	530	300	--	7.64
	Mar-15	36	16	52	1.8	170	43	23	<0.88	470	320	--	7.75
	Aug-15	32	14	43	1.6	180	42	24	<0.88	500	280	--	7.49
	Mar-16	34	16	45	1.7	180	45	23	<0.88	500	290	--	7.54
	Aug-16	33	14	50	1.9	160	32	23	<0.88	500	300	--	7.47
	Mar-17	33	15	49	1.9	160	43	21	<0.88	500	280	--	7.56
	Aug-17	33	15	44	1.8	180	50	22	<0.88	470	300	--	7.58
	Mar-18	36	16	47	1.7	170	48	22	<0.88	500	270	--	7.39
	Aug-18	34	15	48	1.9	160	18*	7.7*	<1.76	490	280	--	7.57
	Mar-19	33	14	43	2.1	140	41	17	<0.88	430	260	--	7.52
	Aug-19	37	16	46	1.9	160	43	20	<0.88	450	270	--	7.68
	May-20	35	15	51	1.8	160	42	20	<0.88	480	**16,000***	--	7.64

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	NE	NE	NE	NE	NE	NE	NE	45	NE	NE	NE	NE
	Secondary MCL[1,2]	NE	NE	NE	NE	NE	250/500/600	250/500/600	NE	900/1,600/2,200	500/1,000/1,500	NE	NE
Burlingame-D[3] (continued)	Aug-20	38	16	44	1.8	160	43	22	<0.88	490	260	--	7.56
	Apr-21	33	13	42	1.9	140	34	16	<0.88	430	250	--	7.51
	Aug-21	37	16	48	1.8	160	41	21	<0.88	430	300	--	7.57
	Mar-22	40	17	50	1.8	180	43	21	<0.88	530	300	--	7.51
	Aug-22	38	17	49	1.9	160	41	21	<0.88	500	300	--	7.79
	Mar-23	40	18	51	1.9	160	180	29	<0.88	450	290	--	7.65
	Aug-23	36	15	46	2.0	160	46	19	<0.88	560	240	--	7.50
	Mar-24	34	13	43	1.9	160	20	7.5	<0.88	490	270	--	7.46
	Aug-24	24	12	39	1.6	130	74	17	<0.88	580	260	--	7.34
SFO-D[3]	Nov-06	26	19	140	6.6	210	**440**	88	<0.44	--	**1,100**	--	--
	Apr-07	40	29	180	9.5	260	**270**	50	<0.44	**1,400**	**720**	--	7.50
	Aug-07	57	38	190	8.9	260	**540**	120	<0.44	**2,700**	**1,400**	--	7.70
	Feb-08	110	84	530*	13	210	**260**	39	<0.44	**1,300**	**730**	--	7.50
	Aug-08	40.3	29.6	121	7.39	195	**473**	50.8	<0.44	**1,970**	**1,040**	--	7.43
	Feb-09	54.9	40.8	196	9.00	297	**2,210***	179*	<0.44	**5,310***	**3,000**	--	7.47
	Oct-09	45.5	31.9	131	7.70	230	**498**	61	<0.44	**2,040**	**1,150**	--	7.35
	Mar-10	49	36	150	9.5	220	240	40	<0.88	**1,300**	**580**	--	7.37
	Aug-10	72	55	320	11	220	**550**	60	<0.88	**2,300**	**1,100**	--	7.43
	Mar-11	57	42	260	7.8	220	**520**	59	<1.8	**2,200**	**1,200**	--	7.45
	Aug-11	51	40	170	8.2	200	**350**	45	<22	**1,600**	**960**	--	7.26
	Mar-12	67	52	250	9.4	240	**440**	54	<0.88	**1,800**	**980**	--	7.39
	Aug-12	72	58	300	9.6	230	**580**	61	<0.88	**2,200**	**1,200**	--	7.67
	Mar-13	100	86	540	11	240	**1,100**	96	<0.88	**3,600**	**2,200**	--	7.75
	Aug-13	69	54	290	9.9	240	**720**	80	<0.88	**2,300**	**1,300**	--	7.32
	Mar-14	100	87	520	10	220	**1,100**	93	<0.88	**3,200**	**2,100**	--	7.55
	Aug-14	92	68	640	8.0	420*	**1,100**	110	<1.76	**4,300**	**2,400**	--	7.42
	Mar-15	85	70	390	12.0	220	**760**	66	<0.88	**2,500**	**1,600**	--	7.76
	Aug-15	110	96	560	11.0	240	**1,200**	130	<1.76	**4,100**	**2,300**	--	7.53
	Mar-16	60	47	230	9	570	**470**	49	<0.88	**2,000**	**1,200**	--	7.35
	Aug-16	88	76	440	10	230	**880**	83	<1.76	**3,300**	**1,800**	--	7.73
	Mar-17	120	110	830	13	260	**1,500**	140	<0.88	**5,500**	**3,200**	--	7.53
	Aug-17	80	66	360	12	230	**710**	57	<0.88	**2,600**	**1,500**	--	7.59
	Mar-18	130	120	660	13	260	**1,500**	140	<4.4	**5,100**	**2,800**	--	7.51
	Aug-18	100	90	490	10	240	**1,200**	46	<1.76	**4,200**	**2,400**	--	7.45
	Mar-19	120	110	630	12	250	**1,300**	110	<1.76	**4,600**	**2,500**	--	7.47
	Aug-19	120	100	570	12	240	**1,200**	110	<4.4	**4,100**	**2,300**	--	7.63
	May-20	110	98	550	13	250	**1,300**	110	<4.4	**4,500**	**2,500**	--	7.64
	Aug-20	140	120	630	13	260	**1,400**	130	<4.4	**4,800**	**2,700**	--	7.59
	Apr-21	110	97	580	12	240	**1,100**	97	<4.4	**4,100**	**2,300**	--	7.37

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SFO-D[3] (continued)	Aug-21	89	75	410	11	230	**770**	75	<1.76	**2,700**	**1,700**	--	7.34
	Mar-22	140	130	770	14	260	**1,600**	140	<4.4	**5,200**	**2,900**	--	7.53
	Aug-22	61	44	210	10	230	**360**	37	<0.88	**1,600**	**970**	--	7.47
	Mar-23	140	140	810	13	280	**1,200**	110	<88.6	**5,000**	**3,000**	--	7.54
	Aug-23	130	110	650	12	240	**1,300**	120	<17.7	**4,500**	**2,400**	--	7.45
	Mar-24	110	89	520	11	250	**480**	44	<1.76	**3,900**	**640***	--	7.36
	Aug-24	100	86	480	11	260	**1,300**	120	<4.4	**4,500**	**2,700**	--	7.42
SFO-S[3]	Nov-06	330	390	3,600	64	620	**8,400**	**1,100**	33.4	--	**16,000**	--	7.00
	Apr-07	320	370	4,200	57	73	**9,300**	**1,200**	<2.2	**28,000**	**17,000**	--	7.00
	Aug-07	350	470	5,100	62	740	**9,200**	**740**	<2.2	**38,000**	**16,000**	--	8.20
	Feb-08	370	490	5,300	64	660	**9,600**	**670**	<2.2	**34,000**	**16,000**	--	7.00
	Aug-08	439	439	4,770	59	620	**10,500**	**716**	<4.4	**29,400**	**21,200**	--	7.15
	Feb-09	497	630	4,980	77.3	673	**12,400**	**830**	<2.2	**31,400**	**17,800**	--	7.51
	Oct-09	487	618	4,850	62.8	744	**9,990**	**663**	<0.88	**27,500**	**15,400**	--	7.11
	Mar-10	530	630	4,900	93	680	**9,800**	**640**	<4.4	**2,900***	**1,200***	--	7.08
	Aug-10	490	640	4,500	63	680	**10,000**	**660**	<0.88	**27,000**	**11,000**	--	7.16
	Mar-11	500	600	5,000	76	690	**14,000**	**680**	<4.4	**27,000**	**15,000**	--	7.17
	Aug-11	390	510	4,300	61	680	**9,600**	**700**	<0.88	**26,000**	**15,000**	--	7.02
	Mar-12	530	400	5,200	67	680	**9,900**	**670**	<4.4	**26,000**	**15,000**	--	7.16
	Aug-12	550	700	5,000	79	680	**9,800**	**650**	<0.88	**27,000**	**18,000**	--	7.36
	Mar-13	460	580	4,800	75	680	**10,000**	**720**	<8.8	**25,000**	**17,000**	--	7.32
	Aug-13	450	550	5,100	69	600	**9,700**	**740**	<4.4	**26,000**	**17,000**	--	6.98
	Mar-14	520	650	5,500	72	640	**9,300**	**680**	<1.76	**18,000**	**17,000**	--	7.15
	Aug-14	450	550	5,400	72	660	**9,900**	**730**	<1.76	**27,000**	**18,000**	--	7.23
	Mar-15	550	680	5,200	77	660	**9,300**	**680**	<0.88	**27,000**	**17,000**	--	7.82
	Aug-15	450	560	4,500	64	660	**9,700**	**710**	<4.4	**26,000**	**19,000**	--	7.09
	Mar-16	490	590	4,500	76	660	**10,000**	**730**	<17.6	**28,000**	**16,000**	--	7.16
	Aug-16	500	640	4,600	79	650	**9,400**	**630**	<8.8	**38,000**	**4,200***	--	7.15
	Mar-17	460	580	5,300	77	650	**10,000**	**700**	<4.4	**28,000**	**15,000**	--	7.10
	Aug-17	480	590	2,000*	83	620	**10,000**	**660**	<8.8	**27,000**	**14,000**	--	7.40
	Mar-18	490	590	4,600	97	670	**9,600**	**720**	<17.6	**27,000**	**19,000**	--	7.14
	Aug-18	530	700	4,600	100	660	**10,000**	**690**	<1.76	**38,000**	**18,000**	--	7.14
	Mar-19	510	610	4,200	91	660	**10,000**	**700**	<88.0	850*	**18,000**	--	7.17
	Aug-19	540	640	4,800	81	660	**10,000**	**730**	<17.6	**26,000**	**18,000**	--	7.21
	May-20	530	630	4,400	76	600	**11,000**	**750**	<44.4	**28,000**	280*	--	7.25
	Aug-20	520	620	4,700	98	650	**11,000**	**730**	<176	**28,000**	**20,000**	--	7.23
	Apr-21	540	640	5,100	76	610	**9,800**	**720**	<17.6	**28,000**	**23,000**	--	7.10
	Aug-21	560	680	5,500	92	640	**10,000**	**780**	<13.2	**26,000**	**19,000**	--	7.19

Table 10
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Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SFO-S[3] (continued)	Mar-22	580	720	5,400	74	660	**11,000**	**750**	<1.76	**28,000**	**18,000**	--	7.22
	Aug-22	530	620	5,300	77	540	**11,000**	**780**	<8.8	**28,000**	**20,000**	--	7.29
	Mar-23	560	640	5,300	71	660	**11,000**	**760**	<4.4	**26,000**	**15,000**	--	7.27
	Aug-23	550	650	5,200	66	700	**10,000**	**730**	<4.4	**27,000**	**17,000**	--	7.11
	Mar-24	420	480	4500	60	680	**11,000**	**700**	<8.8	**28,000**	**840***	--	7.10
	Aug-24	490	550	4500	65	680	**10,000**	**780**	<17.6	**27,000**	**18,000**	--	7.11
SB#05 - SB 16 FOREST LN	Apr-09	50.3	34.8	51.0	2.92	180	110	77.0	0.3	856	484	302	7.38
	May-10	60.3	45.8	58.6	2.60	186	105	80.0	0.3	866	**519**	290	7.27
	May-11	38.5	27.5	39.7	3.54	178	114	83.8	0.4	876	**536**	290	7.40
	May-13	59.9	42.2	57.4	3.57	191	115	82.1	<0.3	899	477	322	7.34
	Apr-14	59.5	39.6	57.6	3.12	186	112	88.4	0.3	**964**	478	308	7.34
	Oct-14	57.8	40.1	54.1	3.07	189	114	86.9	0.3	888	**513**	318	7.34
	Apr-15	59.9	41.5	56.7	2.98	183	111	85.3	0.4	**903**	294*	332	7.39
	Apr-16	52.6	38.6	53.3	2.92	185	113	88.4	0.4	**904**	**513**	325	7.39
	Apr-18	60.2	42.1	58.9	3.09	187	115	92.2	<0.308	886	493	329	7.33
	Apr-19	58.1	38.8	56.2	2.72	185	114	61.4*	<0.308	888	**503**	312	7.39
	Jul-20	62.4	41.3	57.6	3.33	187	114	92.8	<0.308	891	**510**	321	7.31
	May-21	60.8	41.6	56.8	3.26	187	112	90.4	<0.176	**911**	494	62	7.30
	Apr-22	62.4	42.1	58.8	3.74	189	115	92.3	0.28	896	**504**	324	7.31
	Apr-23	62.2	41.0	62.4	3.25	382	122	91.6	0.40	**926**	**540**	317	7.27
	May-24	63.6	42.9	59.2	3.11	198	117	92.9	0.4	**913**	**510**	322	7.31
SB#06 - SB 17 CORPORATION YARD	Apr-00	34.0	21.0	46.0	4.00	152	66	29.0	3.5	510	290	172	7.60
	Apr-01	--	--	--	--	160	59	27.0	3.9	480	300	170	7.77
	Oct-01	34.1	21.0	48.8	3.35	160	58	27.3	3.8	530	280	170	7.67
	Oct-02	33.4	22.1	48.5	3.30	160	61	28.0	4.0	540	270	--	7.60
	May-04	0.62*	0.36*	0.76*	2.89	--	58	23.0	1.4	518	340	136	7.57
	Nov-04	33.1	21.8	48.4	2.25	140	57	30.8	3.5	514	304	158	7.50
	May-05	32.8	20.4	45.5	3.37	150	56	25.0	5.4	521	319	158	7.58
	May-06	31.9	19.7	40.1	3.42	152	55	26.0	5.0	523	--	162	7.60
	Jun-07	30.3	19.1	43.1	3.47	150	55	25.0	5.5	525	295	160	7.50
	Apr-08	31.5	20.2	43.5	3.25	152	57	23.7	5.5	520	300	160	7.57
	May-10	29.6	19.9	43.3	2.55	140	55	24.0	5.6	524	292	158	7.39
	May-11	29.5	18.9	44.1	3.69	144	56	24.2	5.9	526	305	166	7.54
	Apr-12	29.2	19.2	44.1	3.22	148	58	23.4	6.1	518	281	154	7.48
	May-13	29.4	19.5	42.8	3.52	150	55	22.2	5.6	527	269	159	7.55
	Apr-14	32.1	18.9	45.0	3.45	145	53	23.1	5.9	571	278	151	7.64
	Oct-14	29.1	20.8	37.9	2.53	143	58	23.5	5.7	520	293	158	7.59
	Apr-15	32.3	19.3	44.7	3.16	152	58	23.4	6.5	741*	**506***	159	7.84

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	NE	NE	NE	NE	NE	NE	NE	45	NE	NE	NE	NE
	Secondary MCL[1,2]	NE	NE	NE	NE	NE	250/500/600	250/500/600	NE	900/1,600/2,200	500/1,000/1,500	NE	NE
SB#06 - SB 17 CORPORATION YARD	May-16	27.6	19.0	37.1	2.22	127	55	24.2	3.8	499	282	146	7.17
(continued)	Apr-17	32.7	17.8	38.3	3.33	149	51	21.0	8.6	518	295	126	7.50
	Apr-18	31.6	19.3	50.0	3.42	152	54	22.0	8.2	516	281	158	7.54
	Apr-19	31.2	18.1	48.8	3.24	150	55	21.3	7.4	527	292	151	7.69
	Aug-20	30.2	19.6	42.3	2.96	145	54	22.6	7.7	515	264	154	7.45
	May-21	31.2	18.5	43.9	3.54	145	51	24.6	8.2	516	276	145	7.48
	Apr-22	32.1	19.3	44.7	3.94	150	54	22.9	7.2	521	288	158	7.51
	Apr-23	32.2	18.8	47.5	3.70	151	57	24.3	7.3	538	294	155	7.49
	May-24	31.6	19.1	44.5	3.36	152	53.7	23.3	7.0	527	290	156	7.53
SB#07 - SB 18 CITY PARK	May-13	29.7	23.8	42.9	3.62	138	71	24.4	7.0	560	290	173	7.46
	Apr-14	31.2	22.8	43.2	3.24	133	69	27.9	7.2	613	288	170	7.45
	Oct-14	31.1	23.0	39.3	3.17	138	71	28.0	7.5	564	313	175	7.42
	Apr-15	32.7	24.7	43.4	3.12	137	74	28.6	7.5	580	304	181	7.45
	Apr-16	30.6	22.8	40.7	3.19	136	70	31.4	7.5	583	315	175	7.47
	Apr-17	32.6	23.3	40.3	3.50	144	56	29.8	5.8	547	294	170	7.41
	Apr-18	29.8	23.3	48.8	3.43	143	59	29.7	6.2	537	297	170	7.43
	May-19	30.4	20.5	47.0	2.74	140	62	28.3	7.4	549	295	161	7.65
	May-20	29.6	21.0	42.2	3.26	143	58	30.7	7.4	523	289	164	7.35
	May-21	29.5	20.2	40.1	3.13	132	54	26.9	7.3	519	274	148	7.29
	Apr-22	32.3	22.6	43.1	3.61	137	64	30.4	7.0	545	287	167	7.33
	May-24	30.8	22.1	43.0	2.97	139	65.2	29.6	7.3	549	296	165	7.33
SB#08 - SB 20 LIONS FIELD PARK	Nov-04	51.0	36.8	81.5	3.52	232	84	70.1	1.6	829	488	260	7.80
	May-05	47.0	36.1	72.8	3.93	220	89	62.0	1.4	786	464	256	7.74
	May-06	41.5	32.7	67.3	3.73	210	86	58.0	1.3	777	--	244	7.66
	Jun-07	43.2	30.3	70.8	3.90	220	95	60.0	1.4	769	432	240	7.55
	Apr-08	40.2	32.2	63.9	4.67	202	84	53.6	1.4	750	432	94*	7.68
	Apr-09	37.2	27.8	60.5	3.69	200	83	51.0	1.4	750	419	226	7.58
	May-10	38.7	32.7	55.8	3.06	200	80	50.6	1.5	743	427	220	7.84
	May-11	41.3	31.9	66.9	3.82	188	83	54.4	1.5	740	438	220	7.69
	Apr-12	38.6	29.9	63.6	3.39	196	87	52.4	1.4	732	405	219	7.62
	May-13	39.0	30.8	59.8	4.13	198	83	46.8	1.4	737	381	227	7.65
	Apr-14	41.1	29.0	62.9	3.74	189	80	49.5	1.4	790	381	212	7.66
	Oct-14	39.1	29.0	57.2	3.52	193	81	49.4	1.5	721	389	222	7.66
	Apr-15	40.4	29.8	61.2	3.40	197	84	48.6	1.5	734	403	224	7.65
	Apr-16	38.8	28.1	58.0	3.36	187	80	49.3	1.5	730	376	215	7.69
	Apr-17	50.0	27.4	43.5	3.06	182	80	52.9	0.8	737	418	247	7.46
	Apr-18	39.9	29.3	63.8	3.58	190	80	47.6	1.3	710	376	222	7.61
	May-19	41.2	28.1	63.1	3.20	194	85	49.3	1.2	728	376	216	7.69

Table 10
General Basin Groundwater Quality

Well	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Total Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (as NO_3) (mg/L)[b]	Specific Conductance (µmhos/cm)	Total Dissolved Solids (mg/L)	Hardness (as $CaCO_3$) (mg/L)	pH
	Primary MCL[1]	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**45**	**NE**	**NE**	**NE**	**NE**
	Secondary MCL[1,2]	**NE**	**NE**	**NE**	**NE**	**NE**	**250/500/600**	**250/500/600**	**NE**	**900/1,600/2,200**	**500/1,000/1,500**	**NE**	**NE**
SB#08 - SB 20 LIONS FIELD PARK	May-20	40.9	27.2	56.1	3.69	195	82	51.4	1.2	719	408	224	7.65
(continued)	May-21	40.6	29.3	62.2	3.94	187	77	48.8	1.3	721	374	210	7.60
	Apr-22	41.5	30.0	63.3	4.24	194	82	50.5	1.2	722	390	225	7.68
	Apr-23	40.6	29.3	67.3	3.9	192	84	52.4	1.5	743	398	217	7.60

Table 10
General Basin Groundwater Quality

Notes

[a] = Duplicate result used as the primary sample was inadvertently not analyzed for the indicated parameter.

[b] = Beginning in the Spring of 2016, the lab began reporting all Nitrate results as Nitrate as Nitrogen. All data presented herein are presented as Nitrate as NO3. Where Nitrate as NO3 is a calculated value: [NO3] = 4.4 x [Nitrate as N].

= Shaded cell indicates data collected in 2024

mg/L = milligrams per liter

µmhos/cm = Micromhos per centimeter

-- = Not analyzed

ND = Non-detectable concentration. Detection limit not known.

* = Anomalous or questionable result

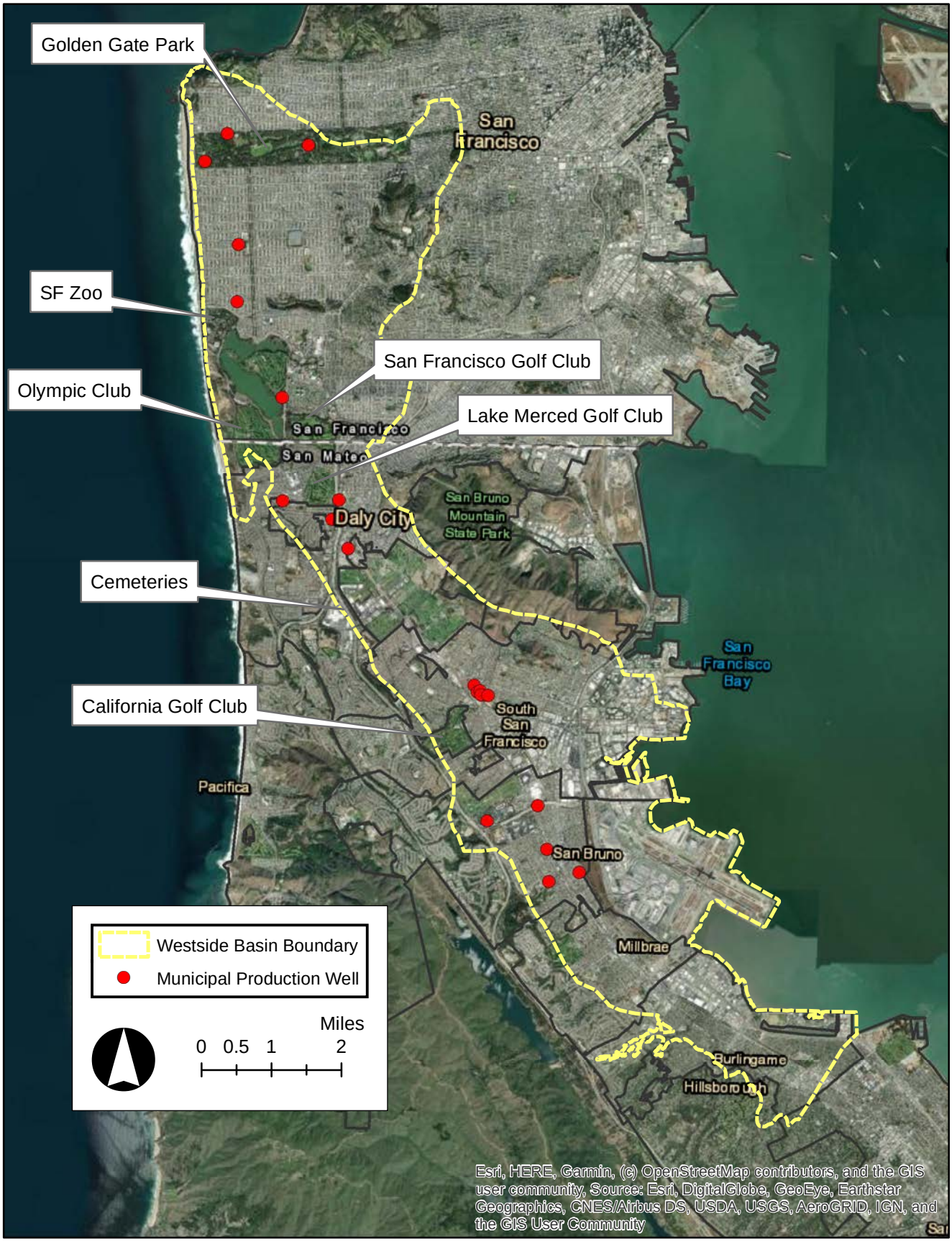
= **Bold** font indicates a result that exceeds the maximum contaminant level (MCL) and/or the secondary maximum contaminant level (SMCL)

NE = Not established

MCL[1] = Maximum Contaminant Level; values for MCLs are provided where they have been established for particular constituents. MCLs are drinking water standards that public water systems must achieve. They are not intended to regulate groundwater from monitoring wells or untreated water from production wells, because after withdrawal groundwater may be disinfected, filtered, blended, exposed to the atmosphere, and/or otherwise treated before being delivered to consumers. However, MCLs are used for comparison in this report to provide context for evaluating the quality of untreated groundwater. Primary MCLs are regulatory benchmarks for protecting human health. Secondary MCLs are benchmarks to protect the aesthetic quality of drinking water and are based on effects such as taste, odor, or appearance.

Secondary MCL[2] = 250/500/600: Recommended/Upper/Short Term

FIGURES



San Francisco Water Power Sewer
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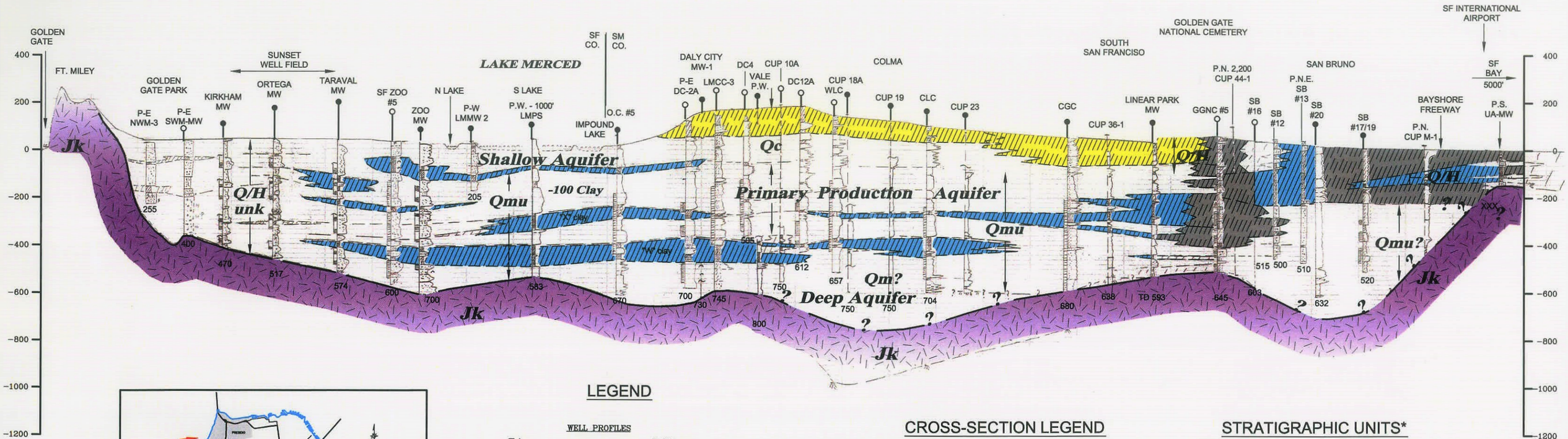
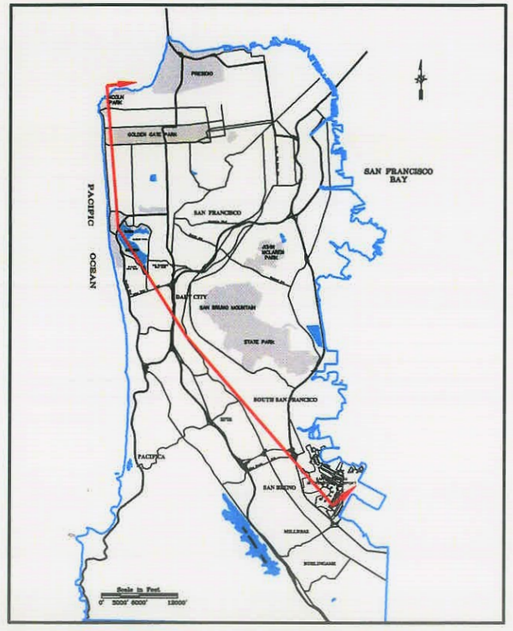
Figure 1
Westside Basin Major Groundwater Production Areas

June 2025

NORTH

SOUTH





Cross Section Location Map

LEGEND

WELL PROFILES

E-Log #13 — Well Identification — Drill Log #21

PW - Production Well
TH - Test Hole
MW - Monitoring Well
TW - Test Well

Seal
Clay w/Sand
Sand/Gravel Screen/Intake
Clay
Bedrock at Borehole or From:
Philips; 1993
Bonilla; 1964

647 Total Depth 647

P.N. - Projected North
P.W. - Projected West
P.E. - Projected East
P.NE. - Projected Northeast

-Elog Reviewed
-Elog Not Reviewed

CROSS-SECTION LEGEND

- "Blue" Clay
- Blue & Gray Clays with Sand & Clay, and Sand Beds
- Clay & Sand Red & Brown Soil Zone
- Sand, Sand & Gravel or Sandy Gravel
- Bedrock

STRATIGRAPHIC UNITS*

Q/H	Bay Clays
Q/H unk	Unknown Correlation
Qc	Colma Formation
Qmu	Upper Merced Formation
Qm?	Older Merced Formation - Middle, Lower
Jk	Franciscan Bedrock

* SURFICIAL UNITS NOT SHOWN

Scale in Feet
0' 1250' 2500' 5000'
Vertical Exag. 12.5X

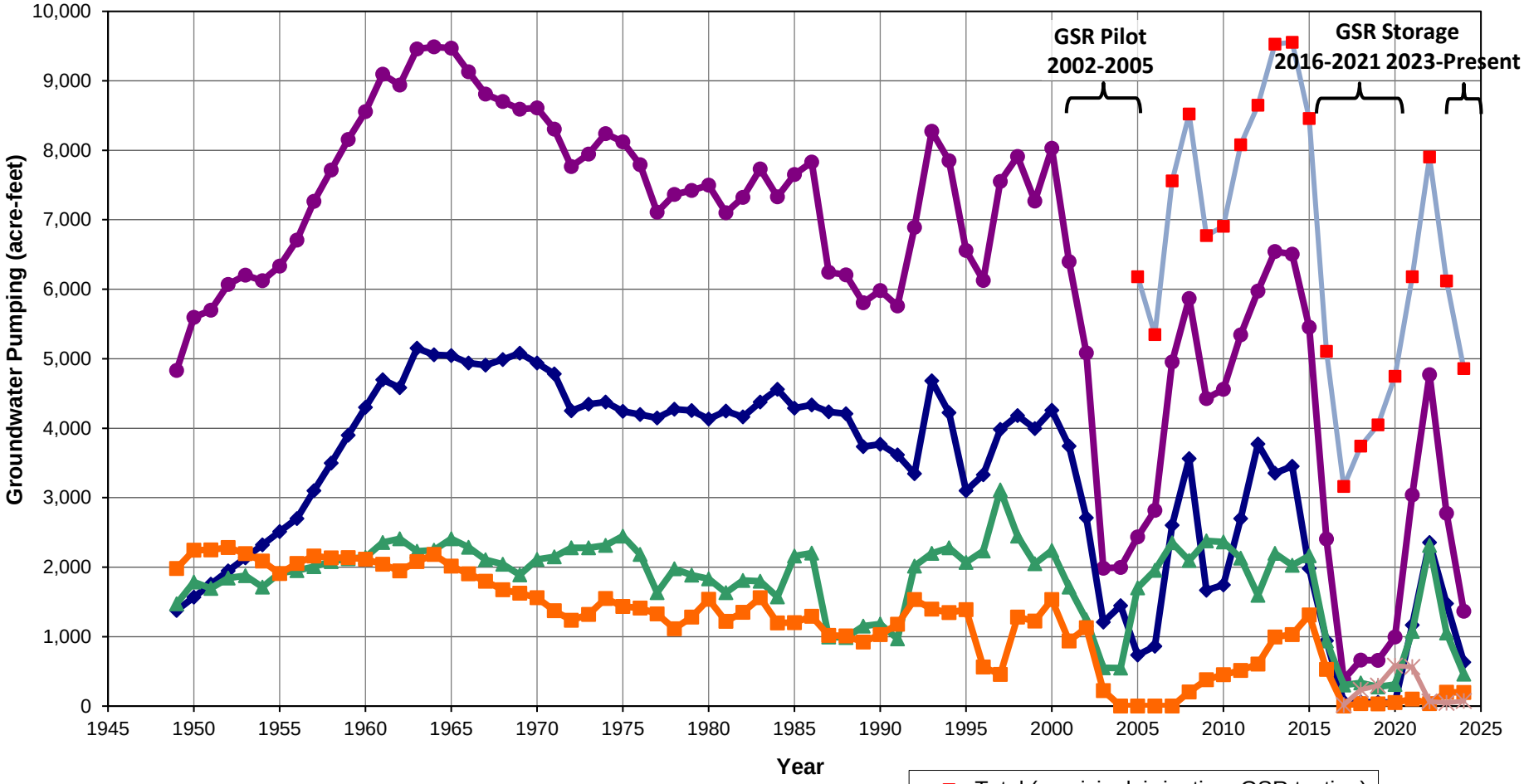
Figure 2

CAD FILE: G:/Projects/Ellison & Schneider/09-1-082/031910/Cross-Section Composite(R).dwg CFG FILE: LSCE2500.PCP_MRG DATE: 04-16-10 2:48pm

LUHDORFF & SCALMANINI
CONSULTING ENGINEERS

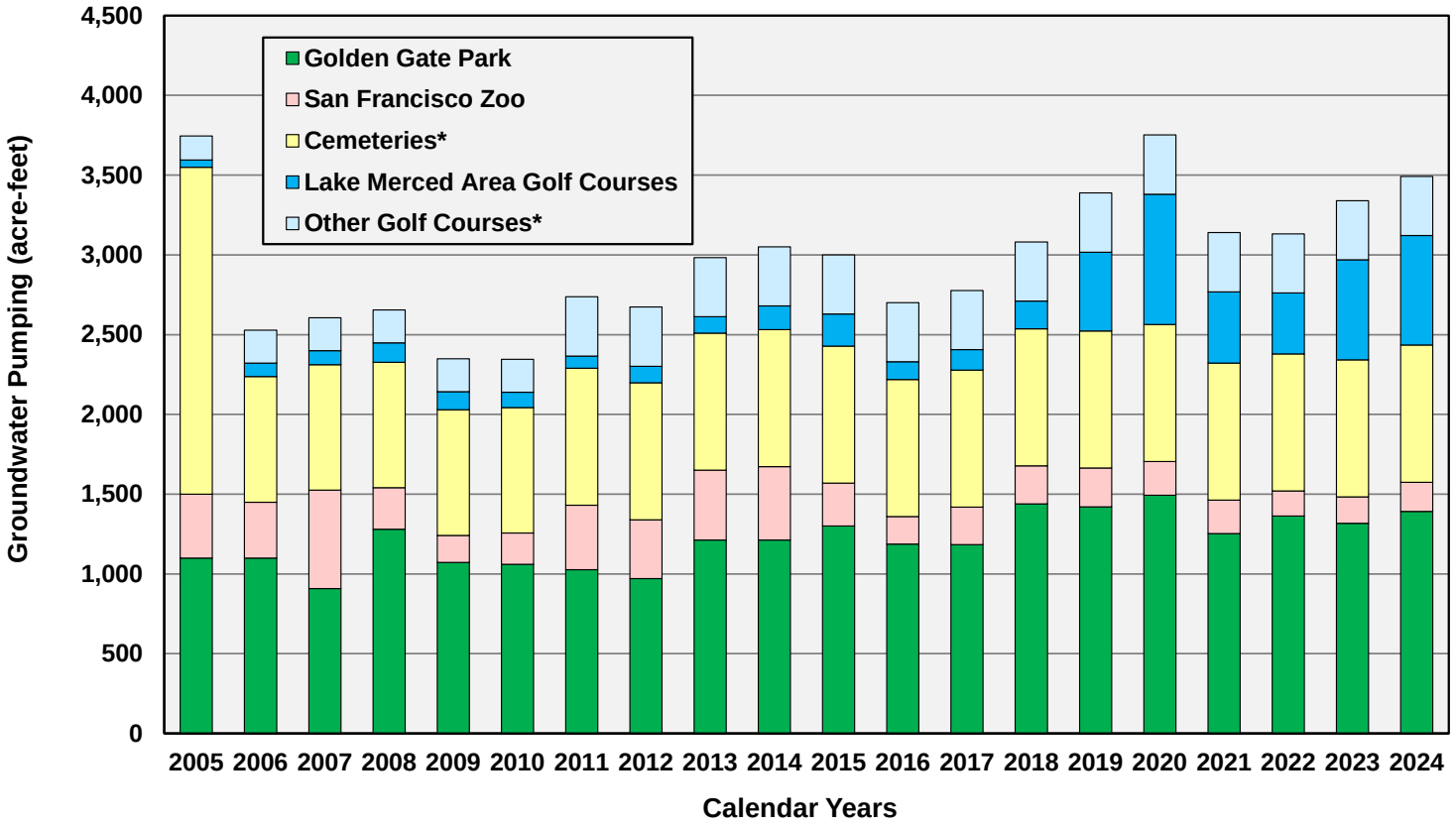
North South Geologic Cross Section
Westside Basin

Figure 3
Westside Basin Groundwater Pumping
1949-2024

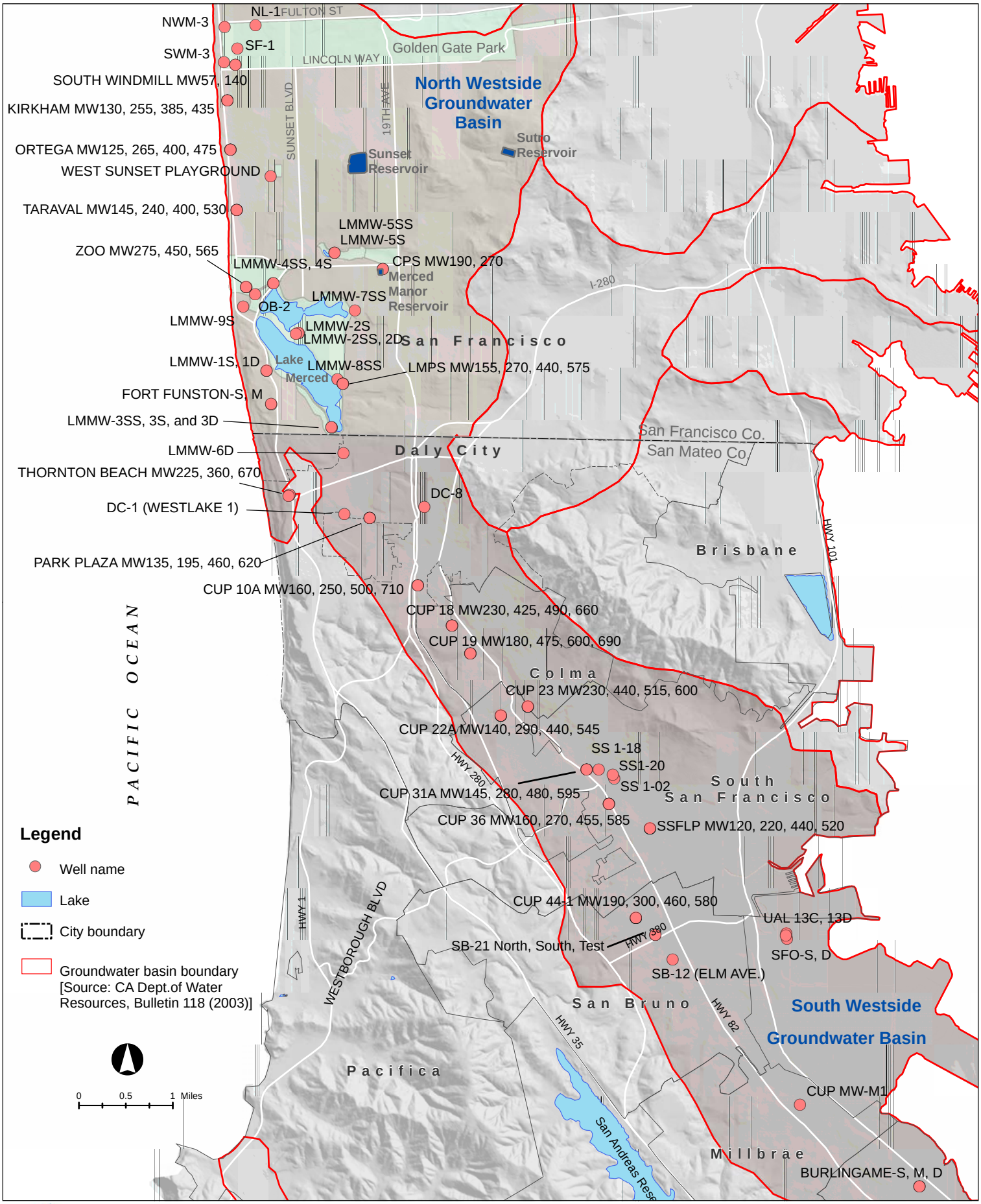


The 2002-2005 Pilot In-Lieu Recharge Demonstration Program evaluated the feasibility of GSR in the South Westside Basin (LSCE, 2005). The GSR project began in-lieu water deliveries to the Partner Agencies during an initial storage phase from May 2016 through June 2021. Partner agency pumping resumed during a project hold period from July 2021 through June 2023. The project's second storage period began July 2023 and is ongoing.

Figure 4
Westside Basin Groundwater Pumping for Irrigation 2005-2024



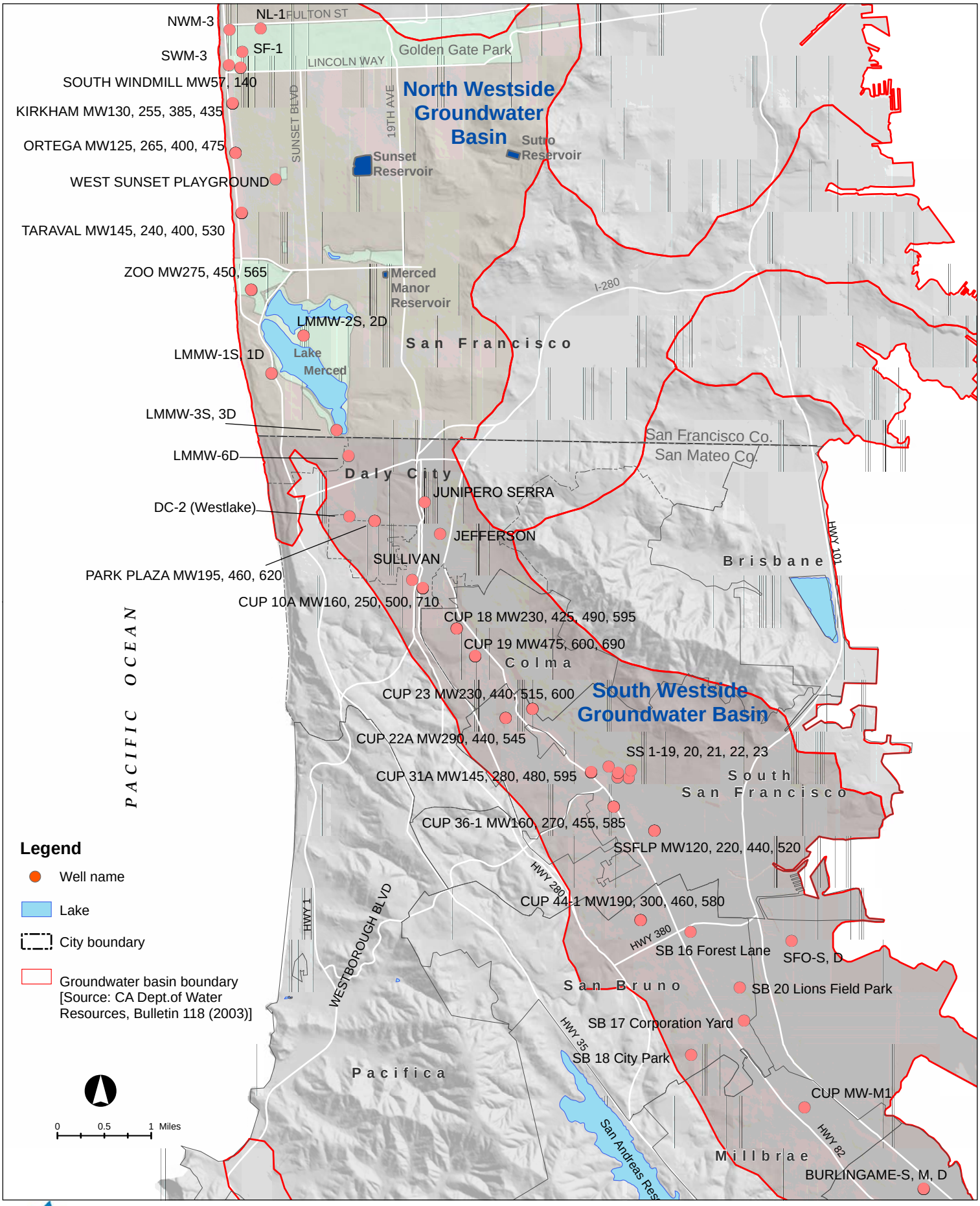
*Estimates based on: LSCE (2005) for 2005; Carollo (2008) for 2006-2010; and HydroFocus (2017) for 2011-2024. Other golf courses include California Golf Club and Green Hills Country Club.



San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission

June 2025

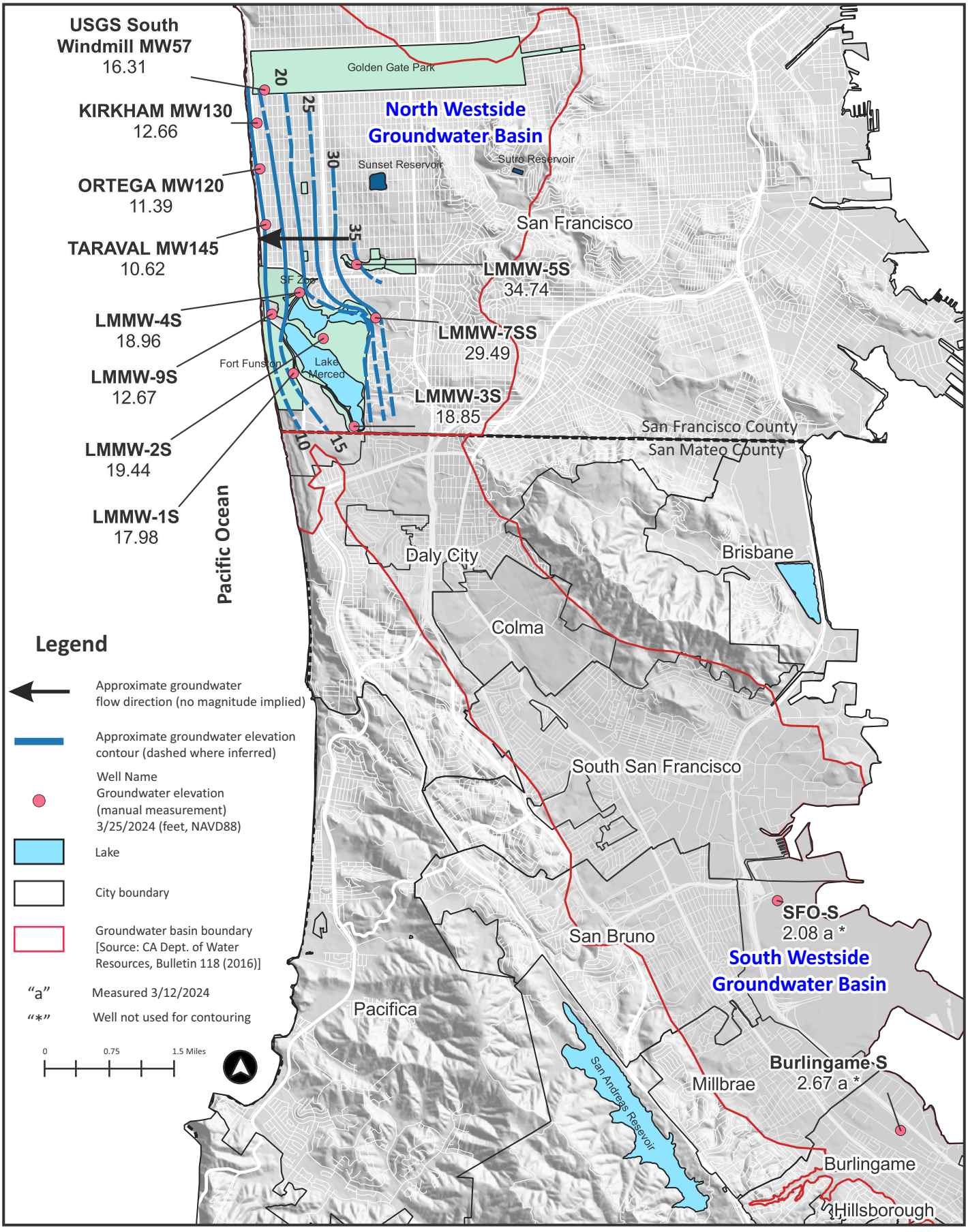
Figure 5
Well Location Map
Groundwater Elevation Monitoring Network



San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission

June 2025

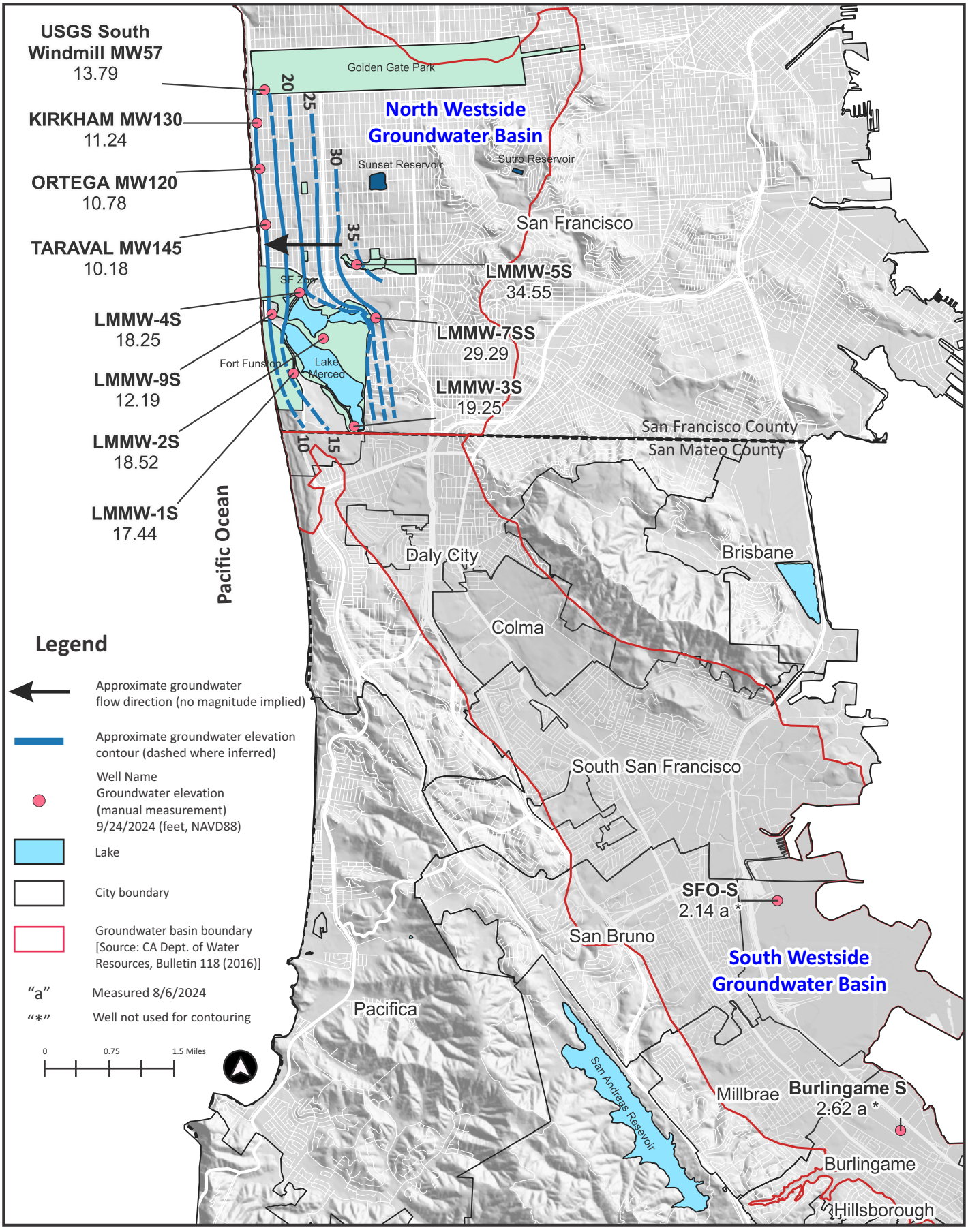
Figure 6
Well Location Map
Groundwater Quality Monitoring Network



San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission

Figure 7
Groundwater Elevation Contours
Shallow Aquifer, Spring 2024

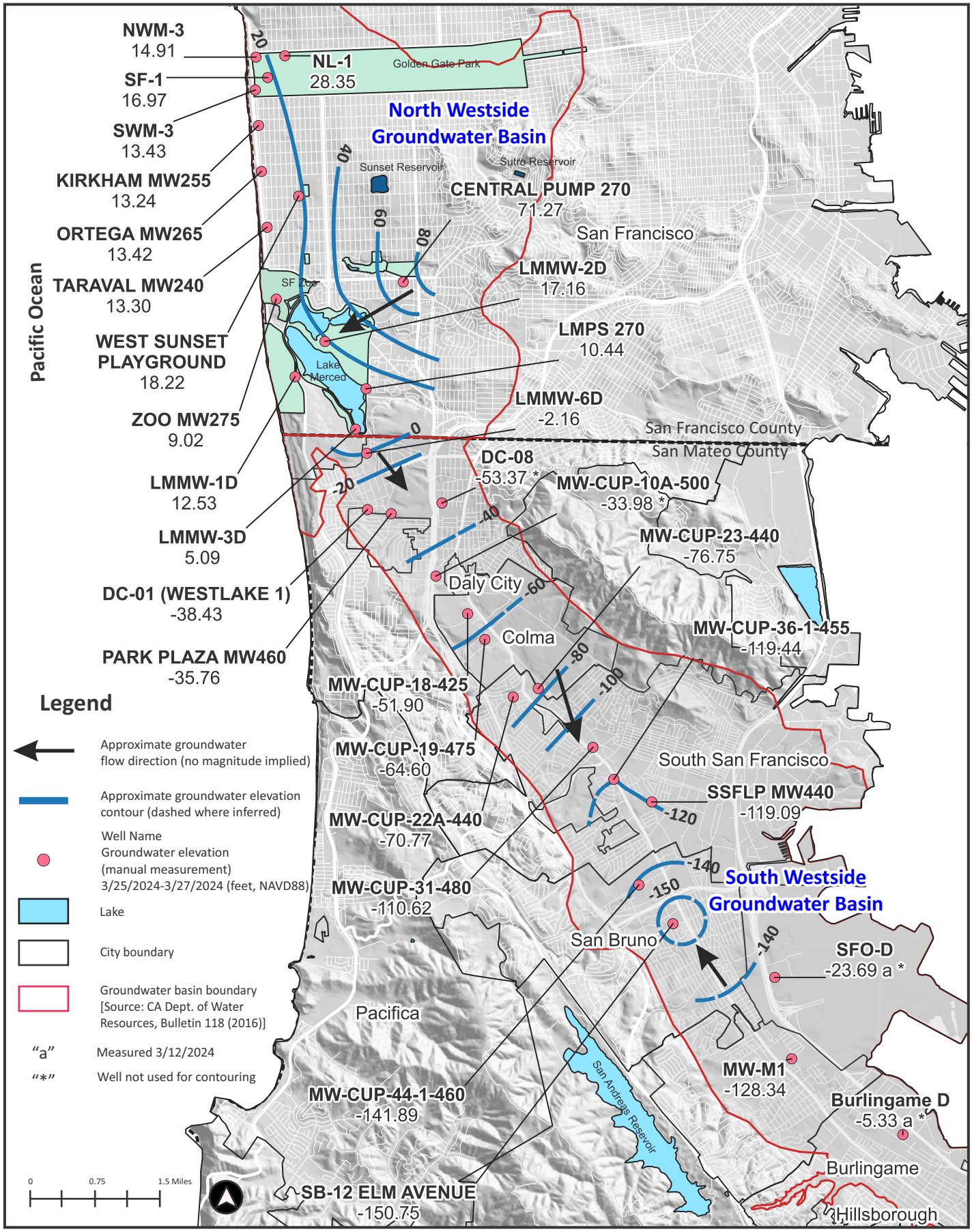
June 2025



San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission

Figure 8
Groundwater Elevation Contours
Shallow Aquifer, Fall 2024

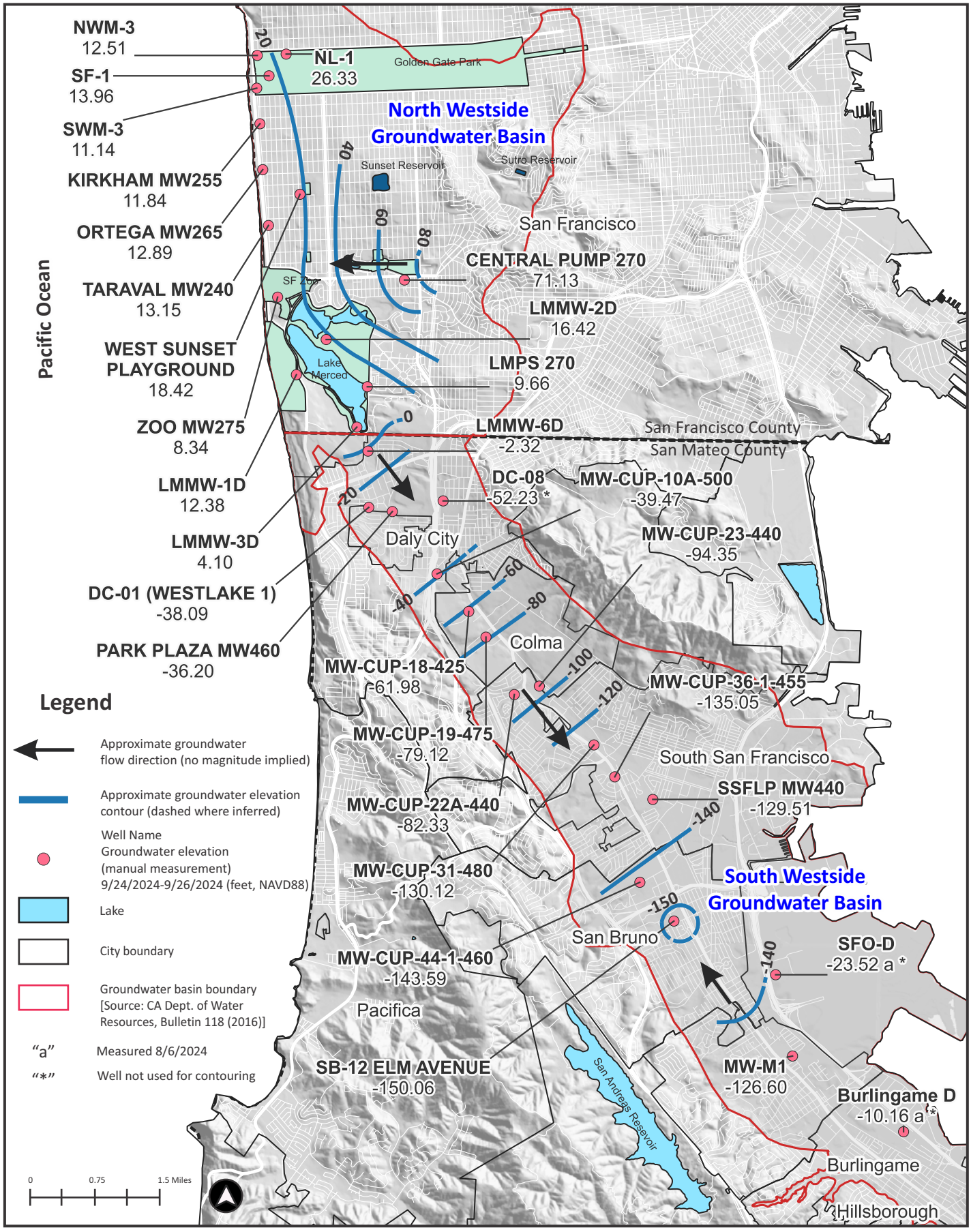
June 2025



San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission

Figure 9
Groundwater Elevation Contours
Primary Production Aquifer, Spring 2024

June 2025



San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission

Figure 10
Groundwater Elevation Contours
Primary Production Aquifer, Fall 2024

June 2025

Figure 11a Kirkham 130

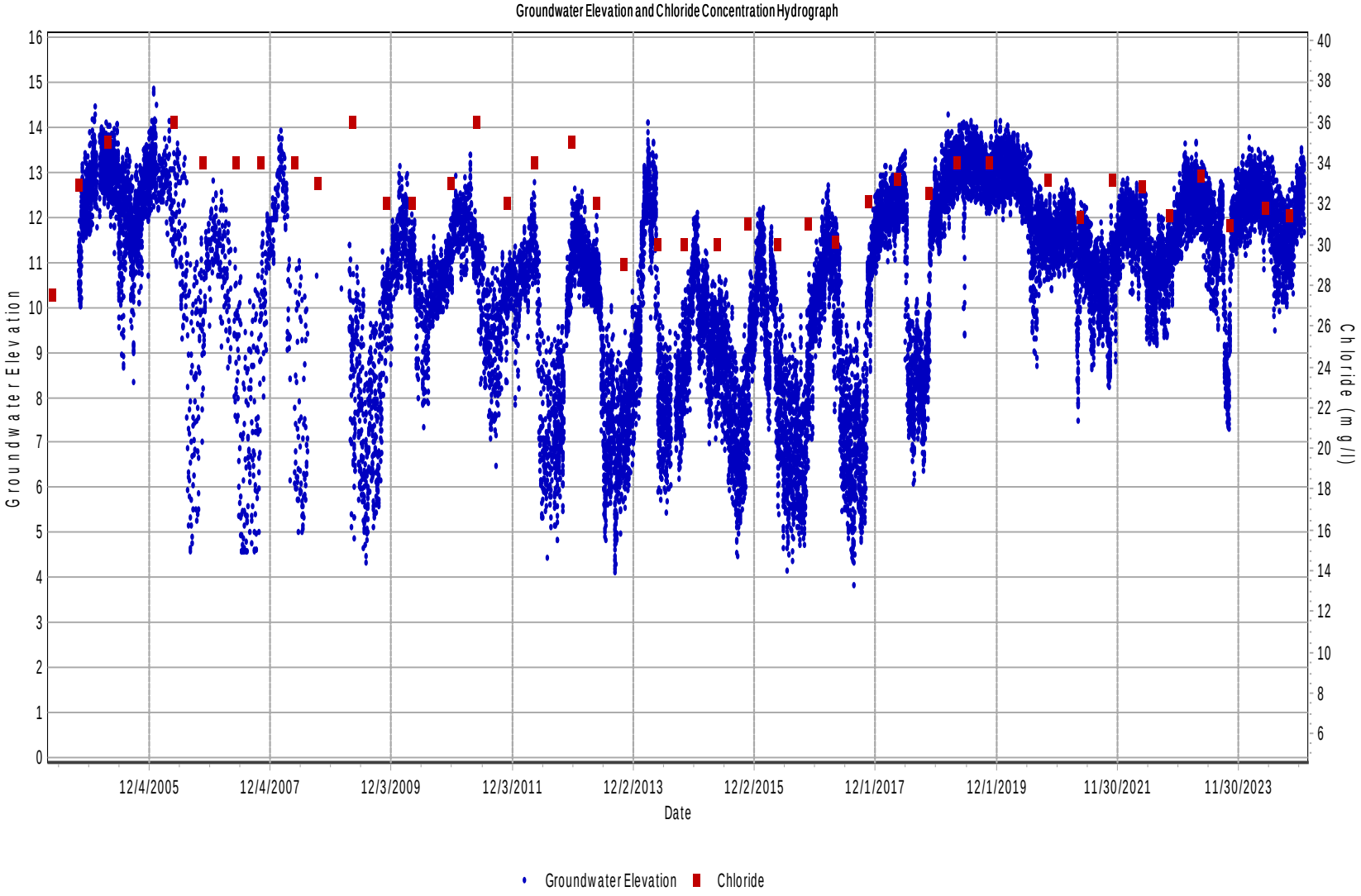


Figure 11b Kirkham 255

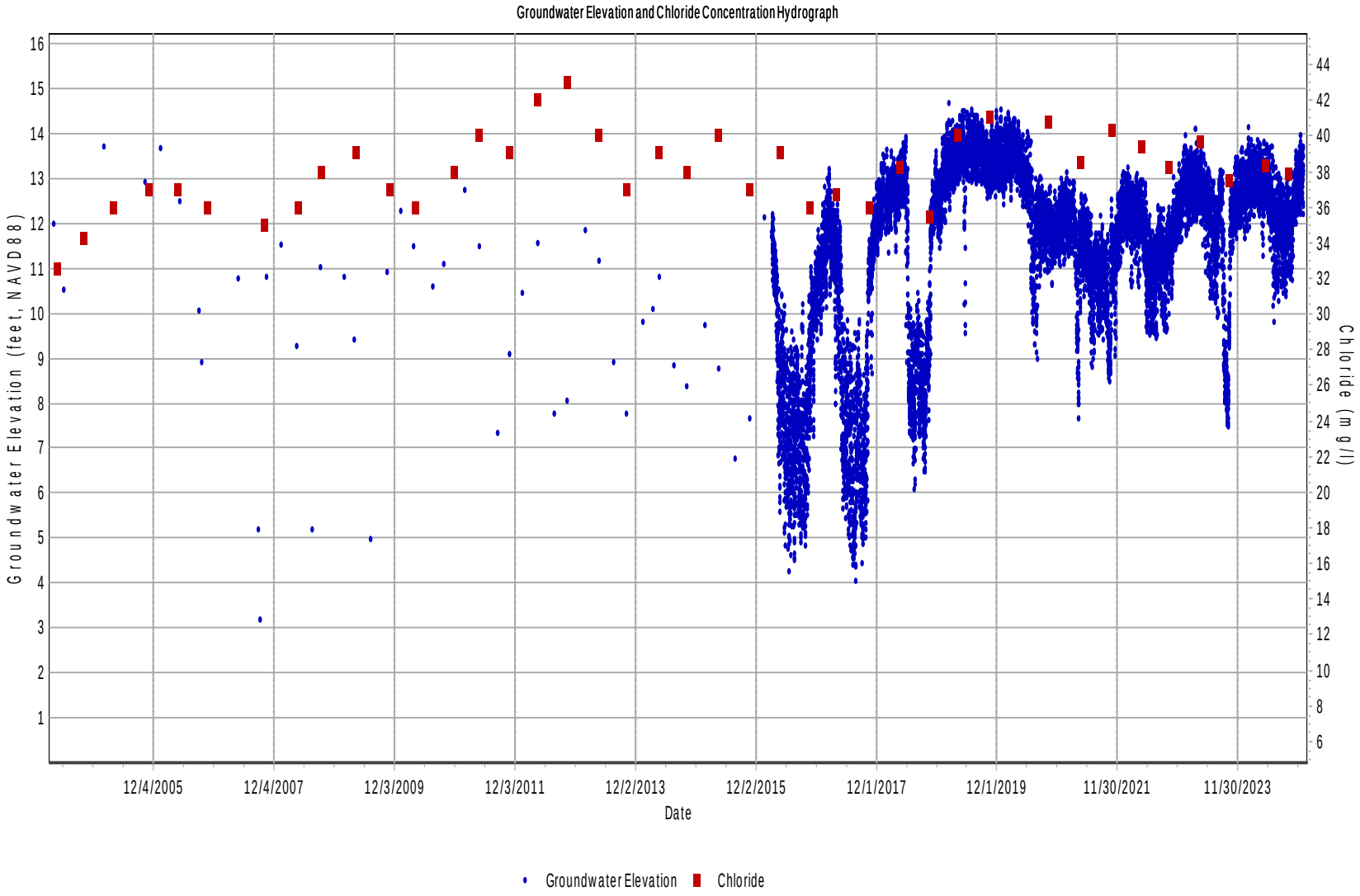


Figure 11c Kirkham 385

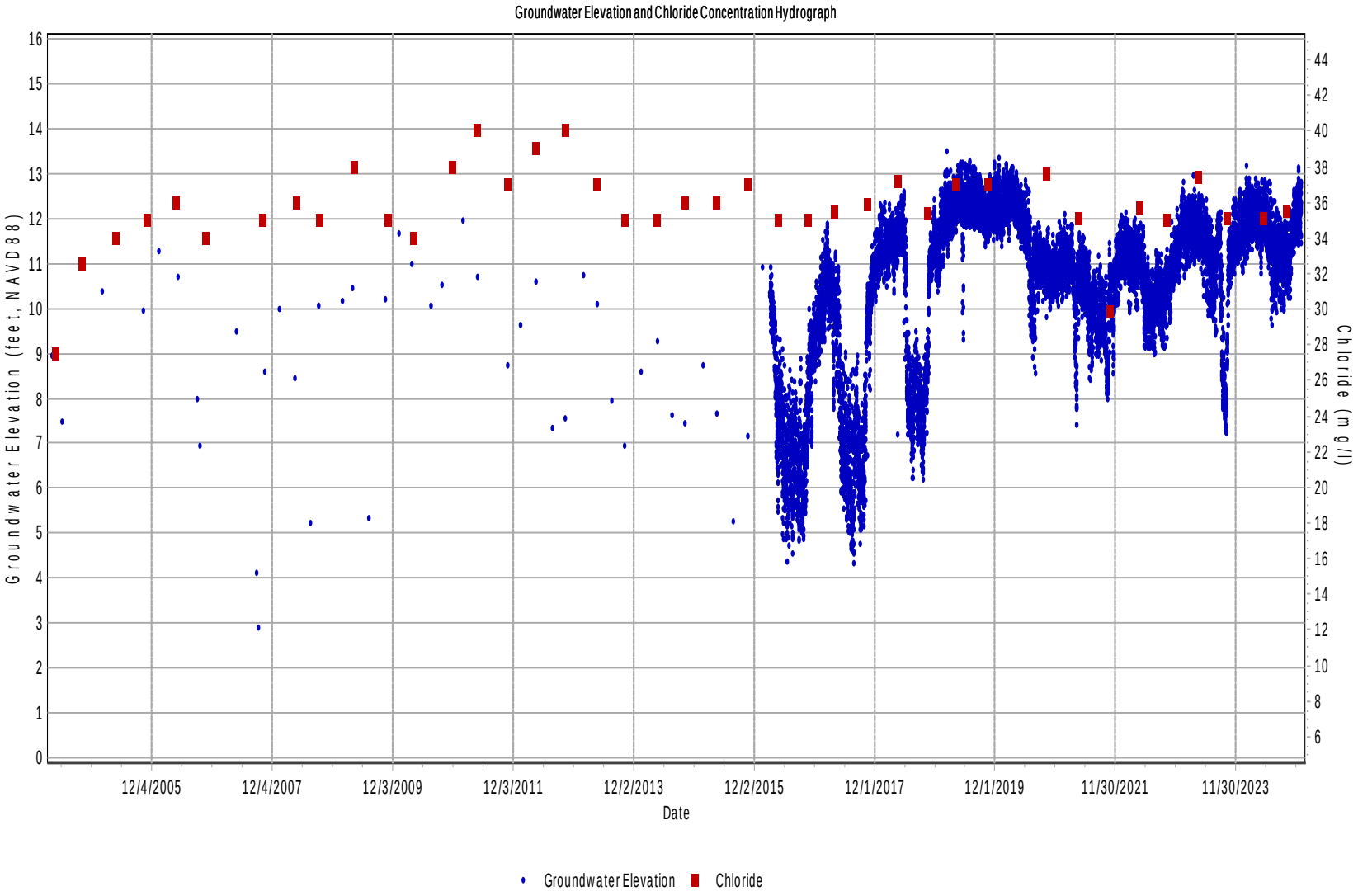


Figure 11d Kirkham 435

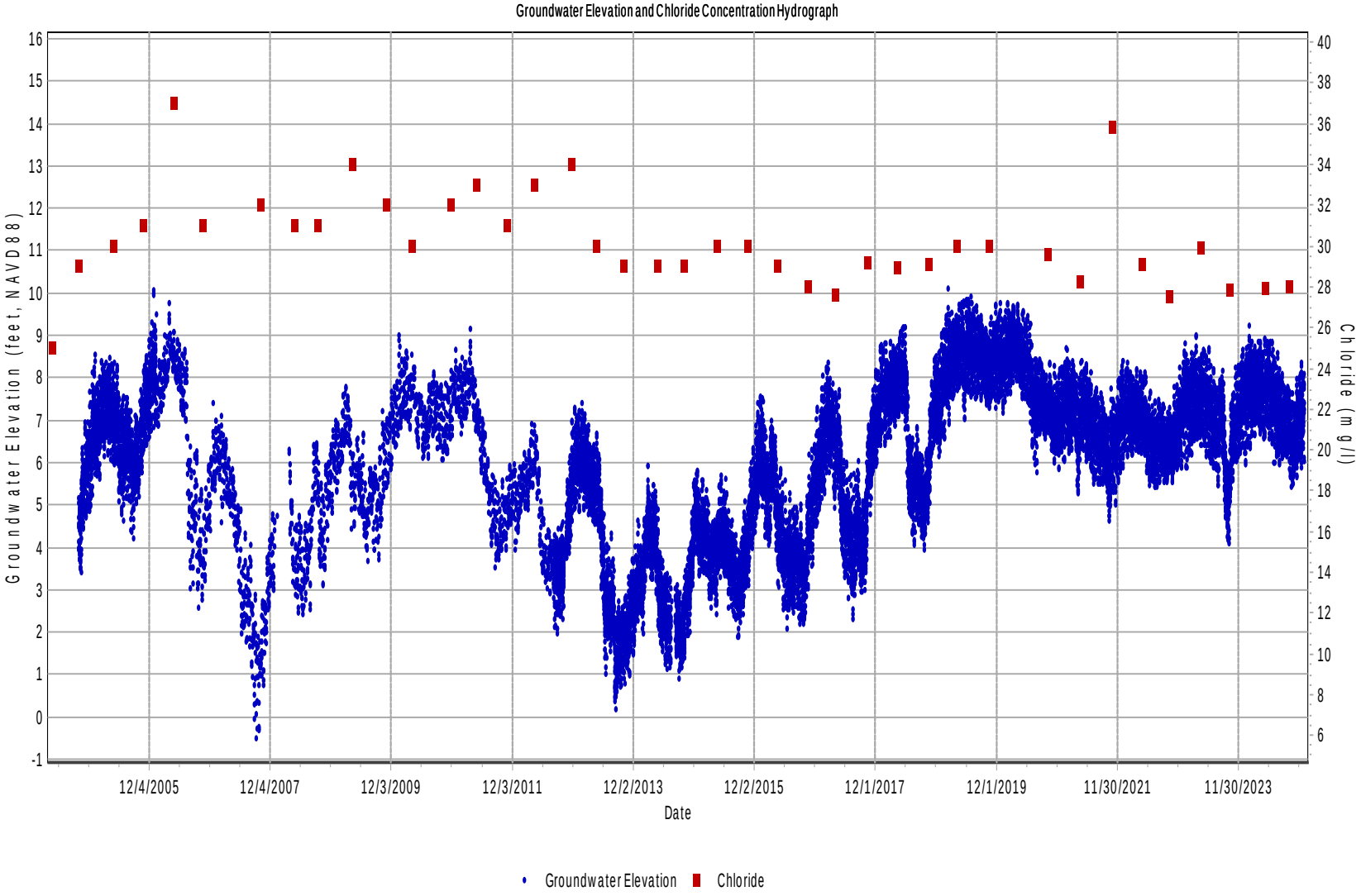


Figure 12a Ortega 125

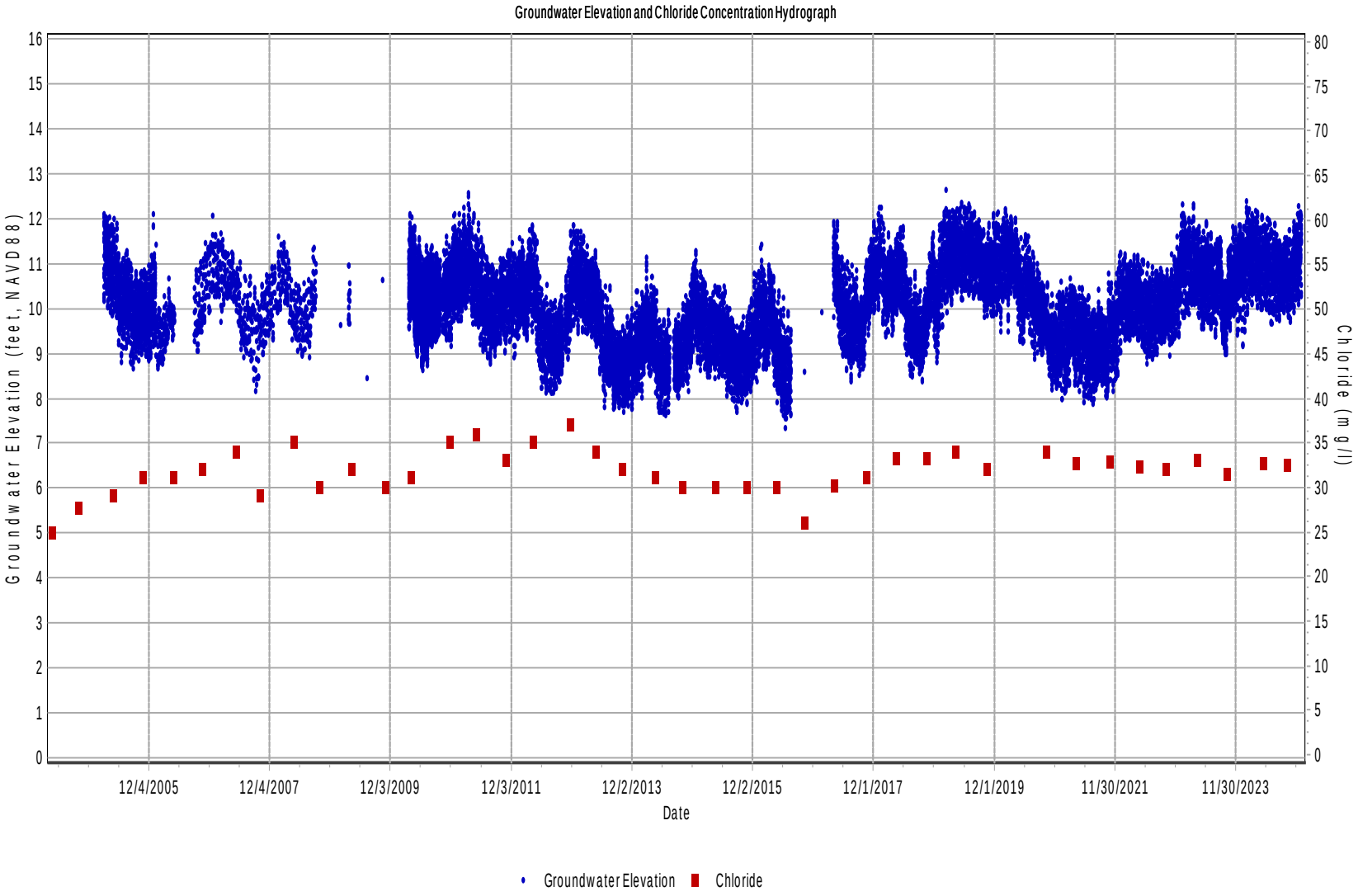


Figure 12b Ortega 265

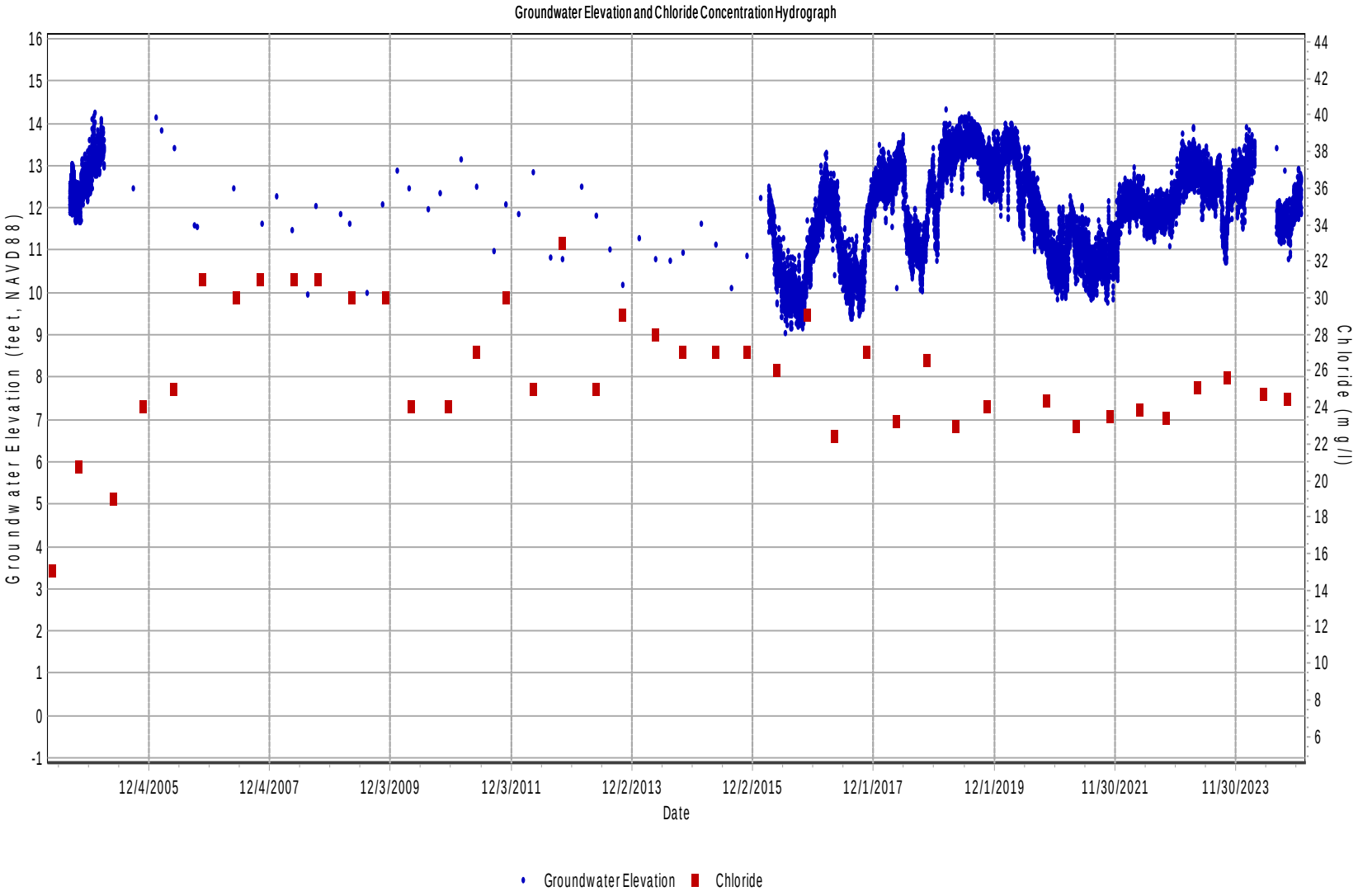


Figure 12c Ortega 400

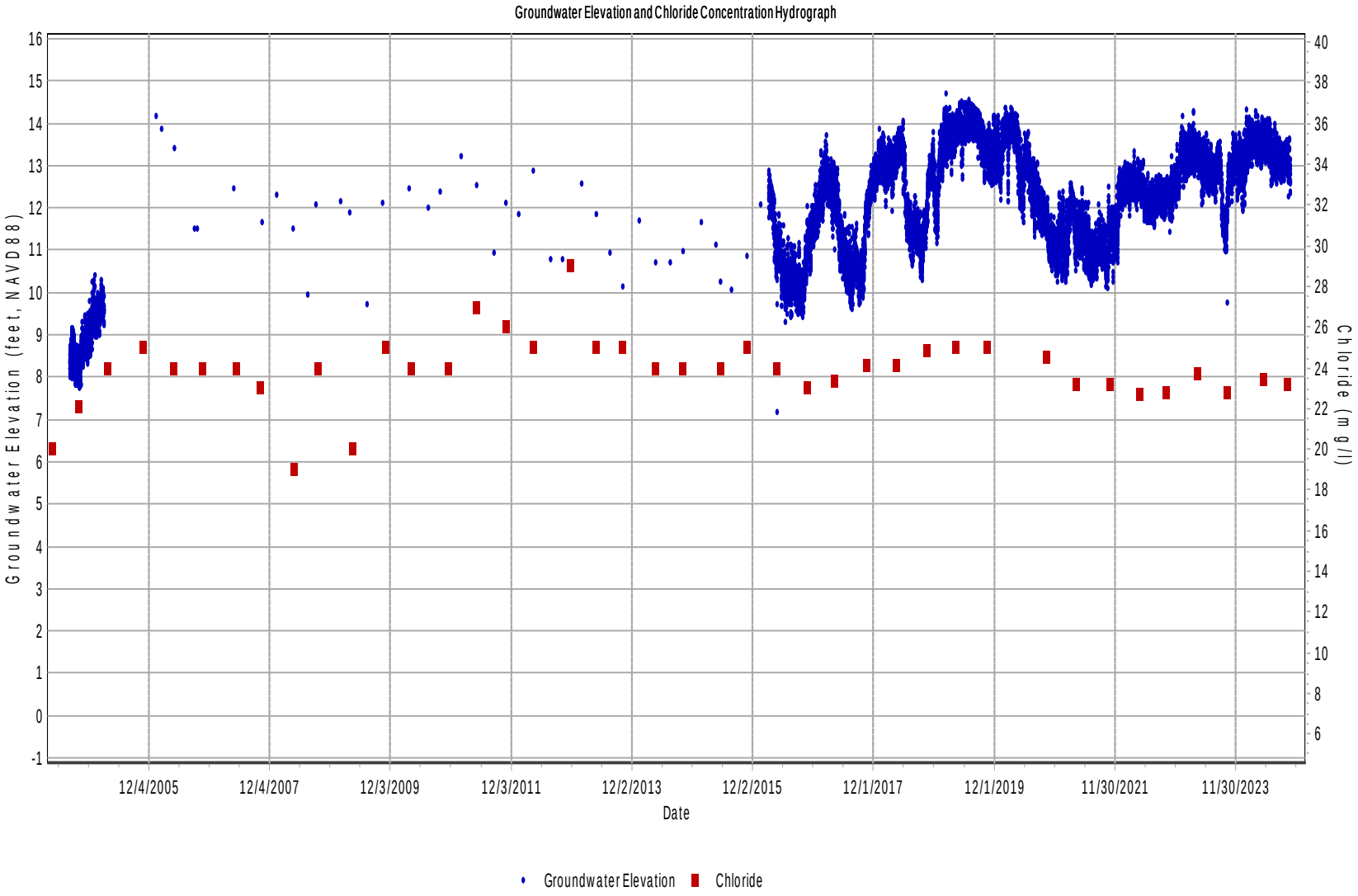


Figure 12d Ortega 475

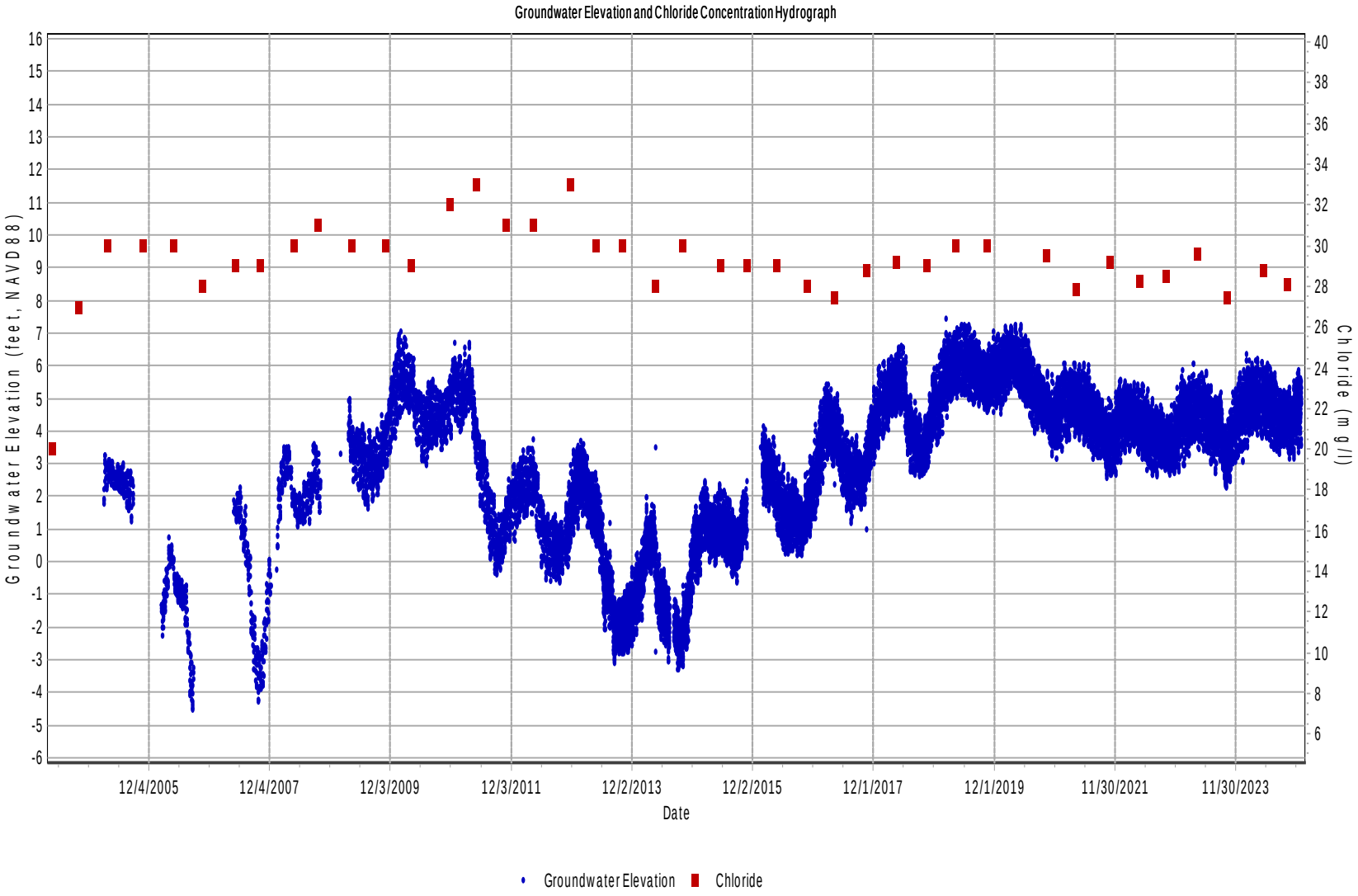


Figure 13a Taraval 145

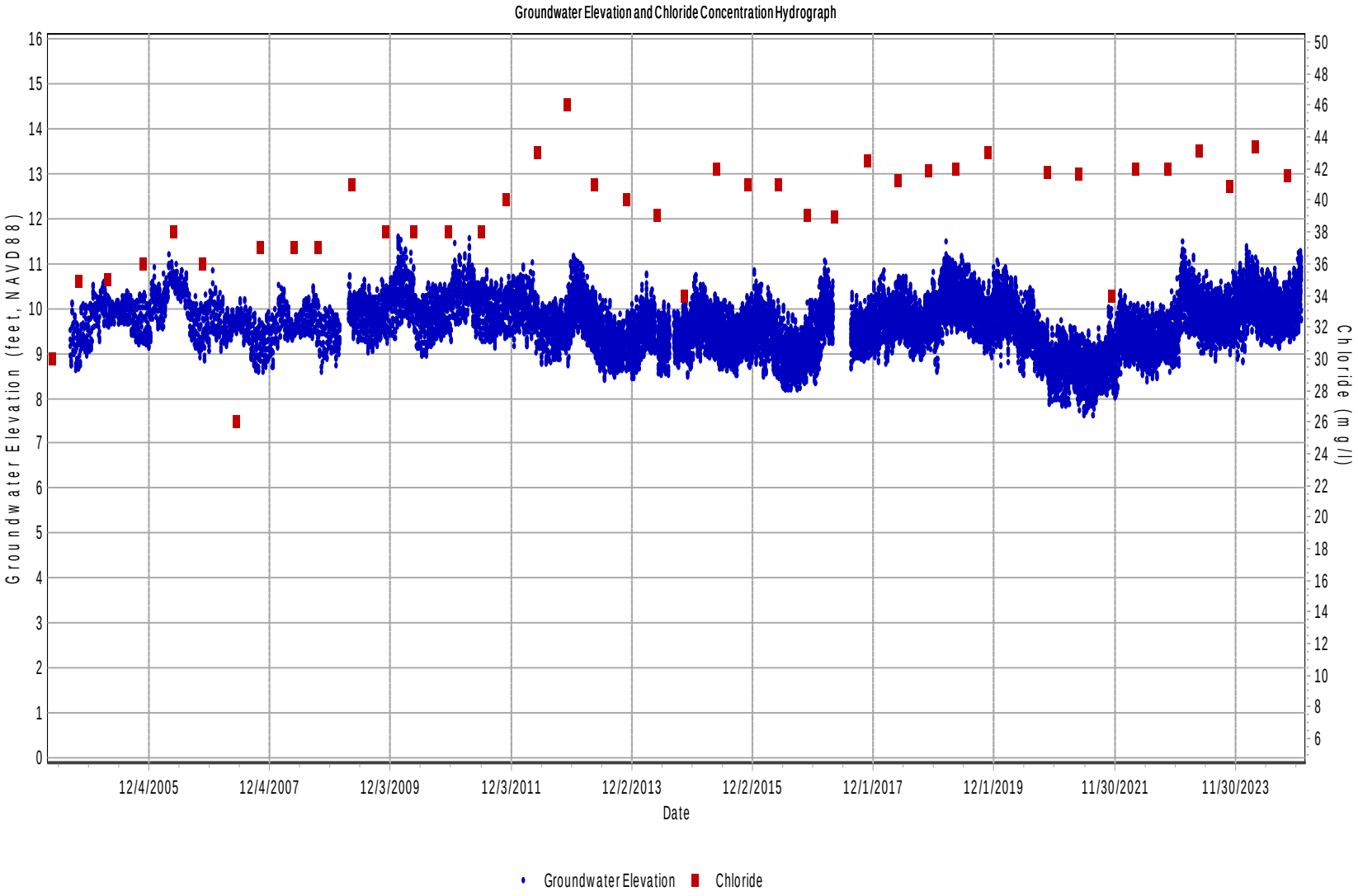


Figure 13b Taraval 240

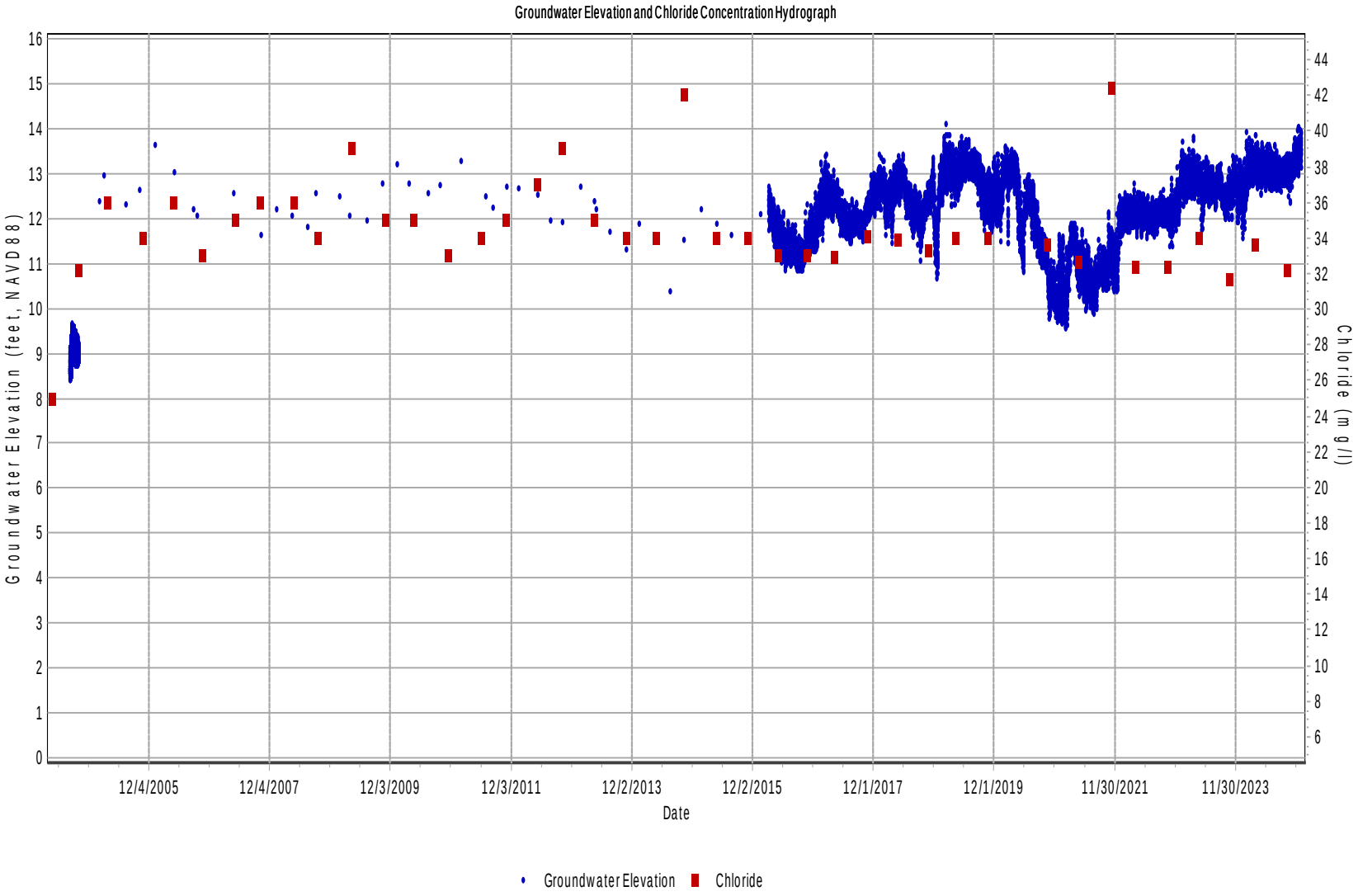


Figure 13c Taraval 400

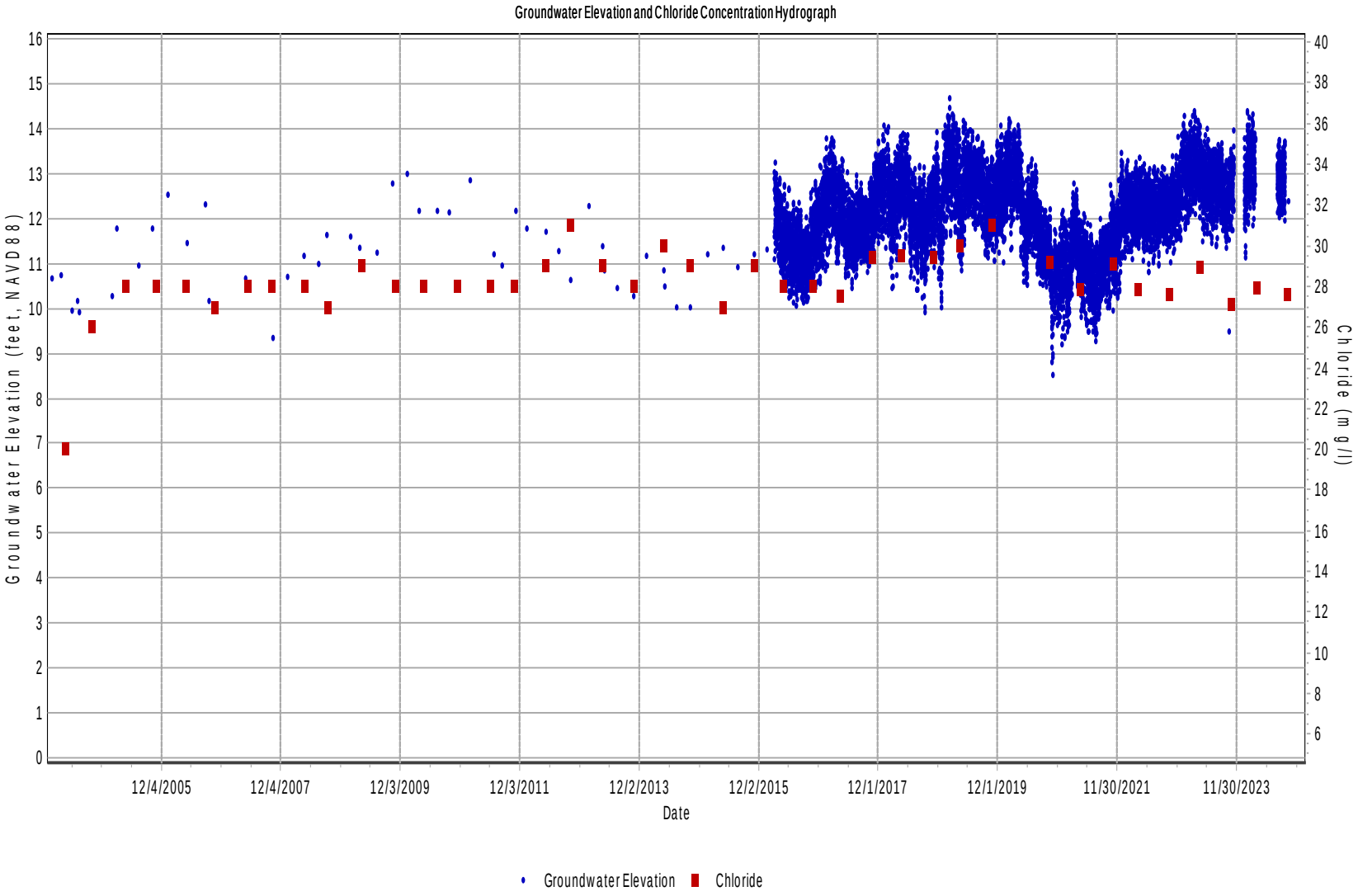


Figure 13d Taraval 530

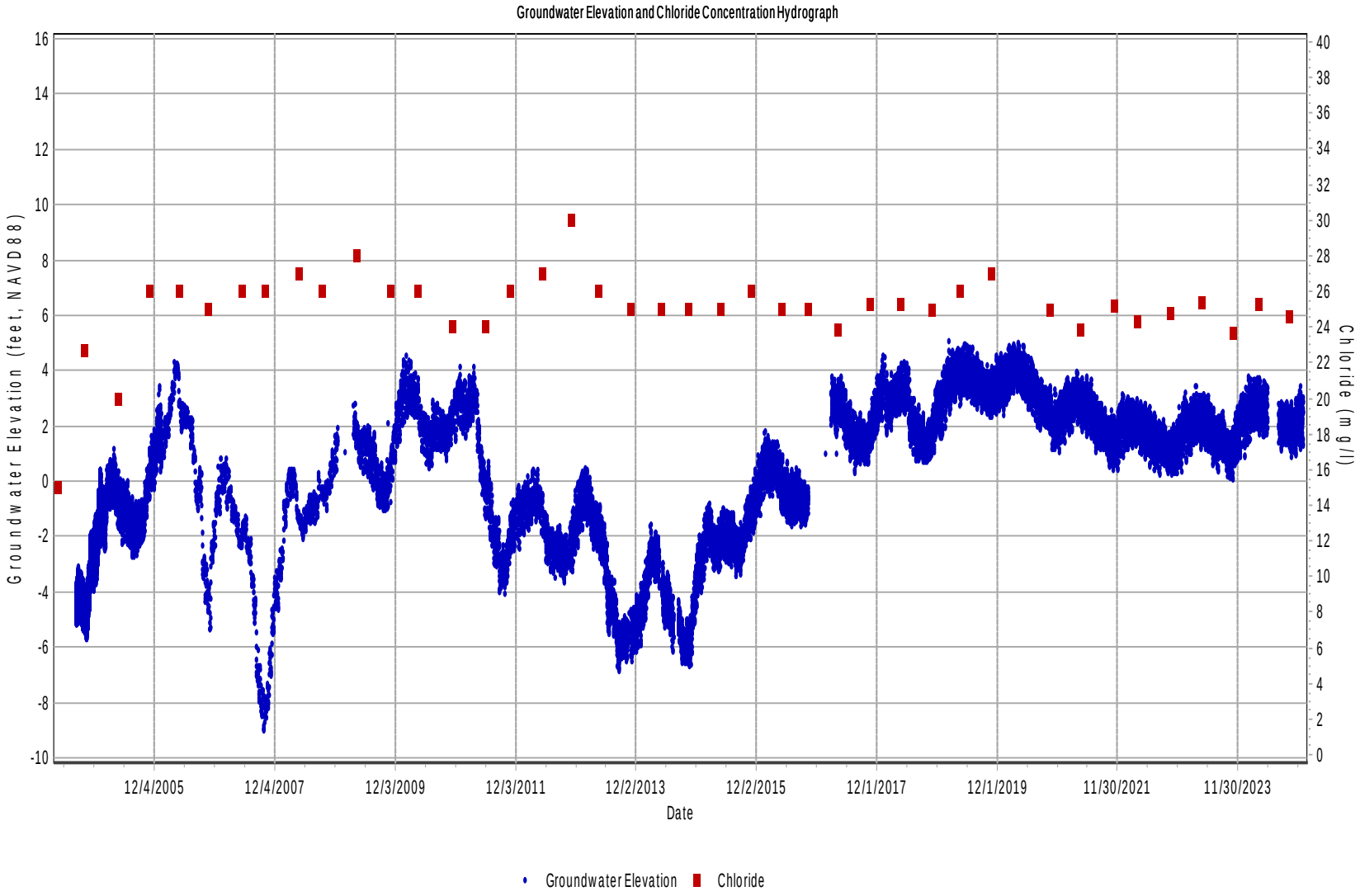


Figure 14a Zoo 275

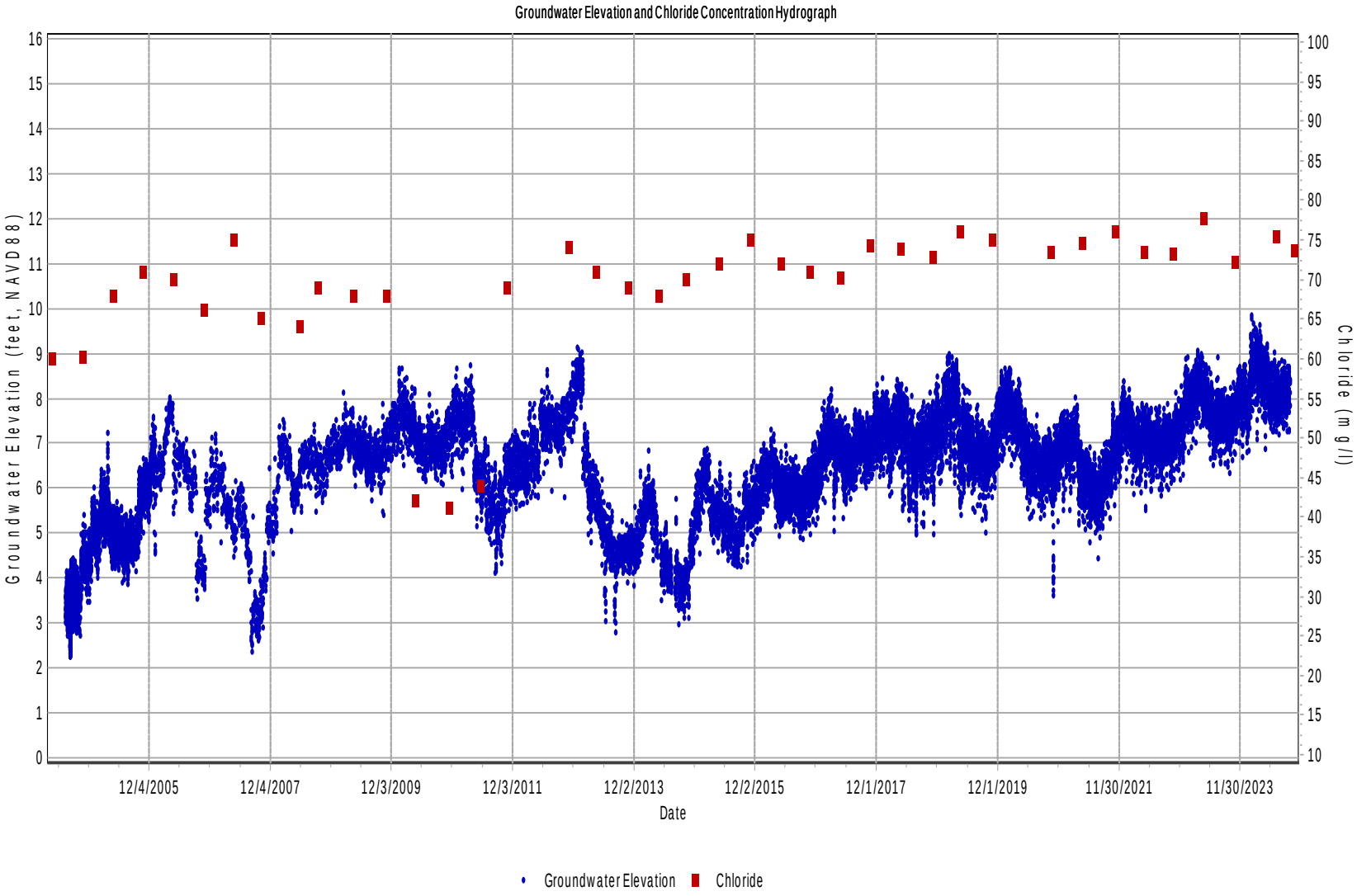


Figure 14b Zoo 450

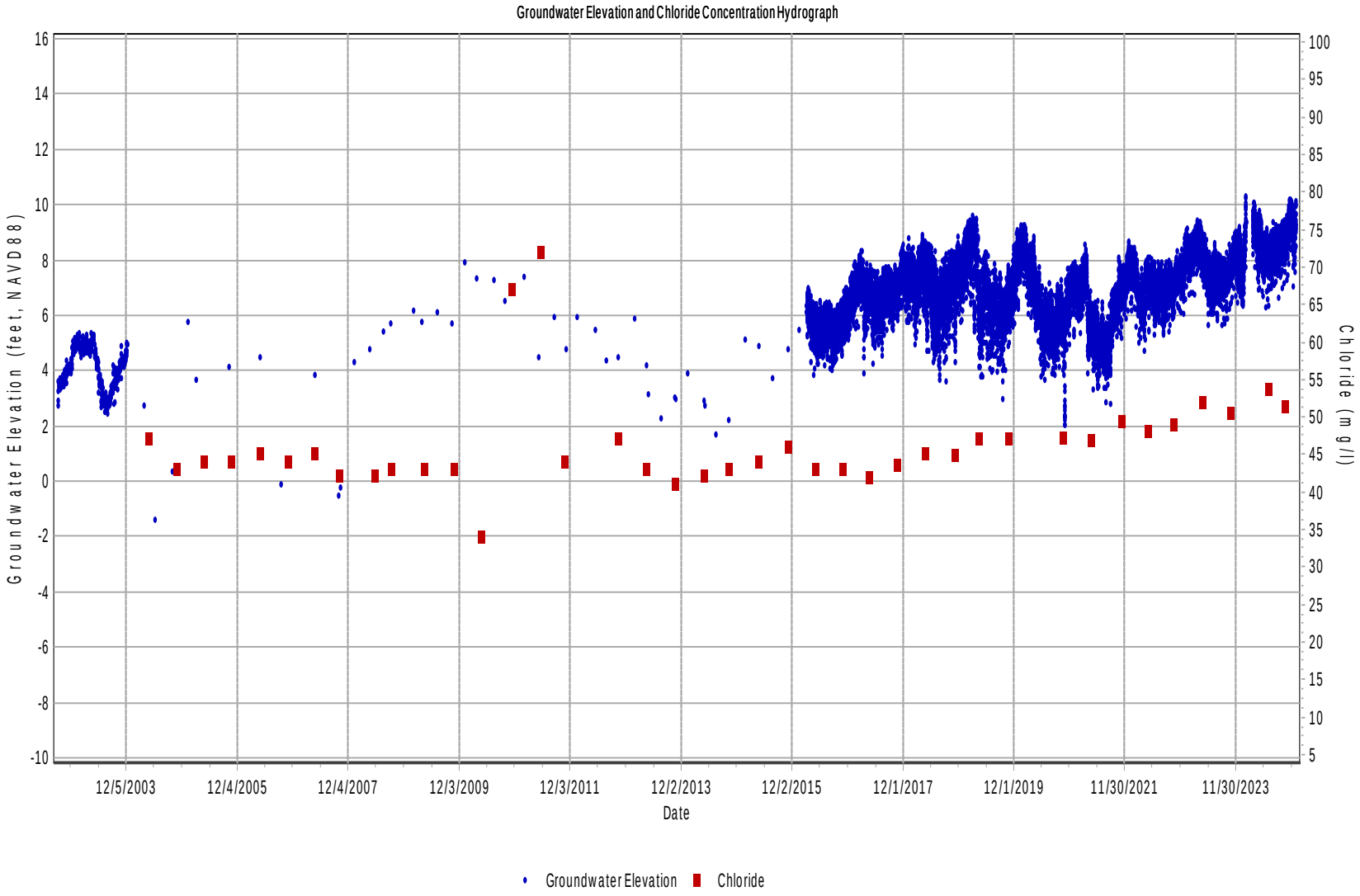


Figure 14c Zoo 565

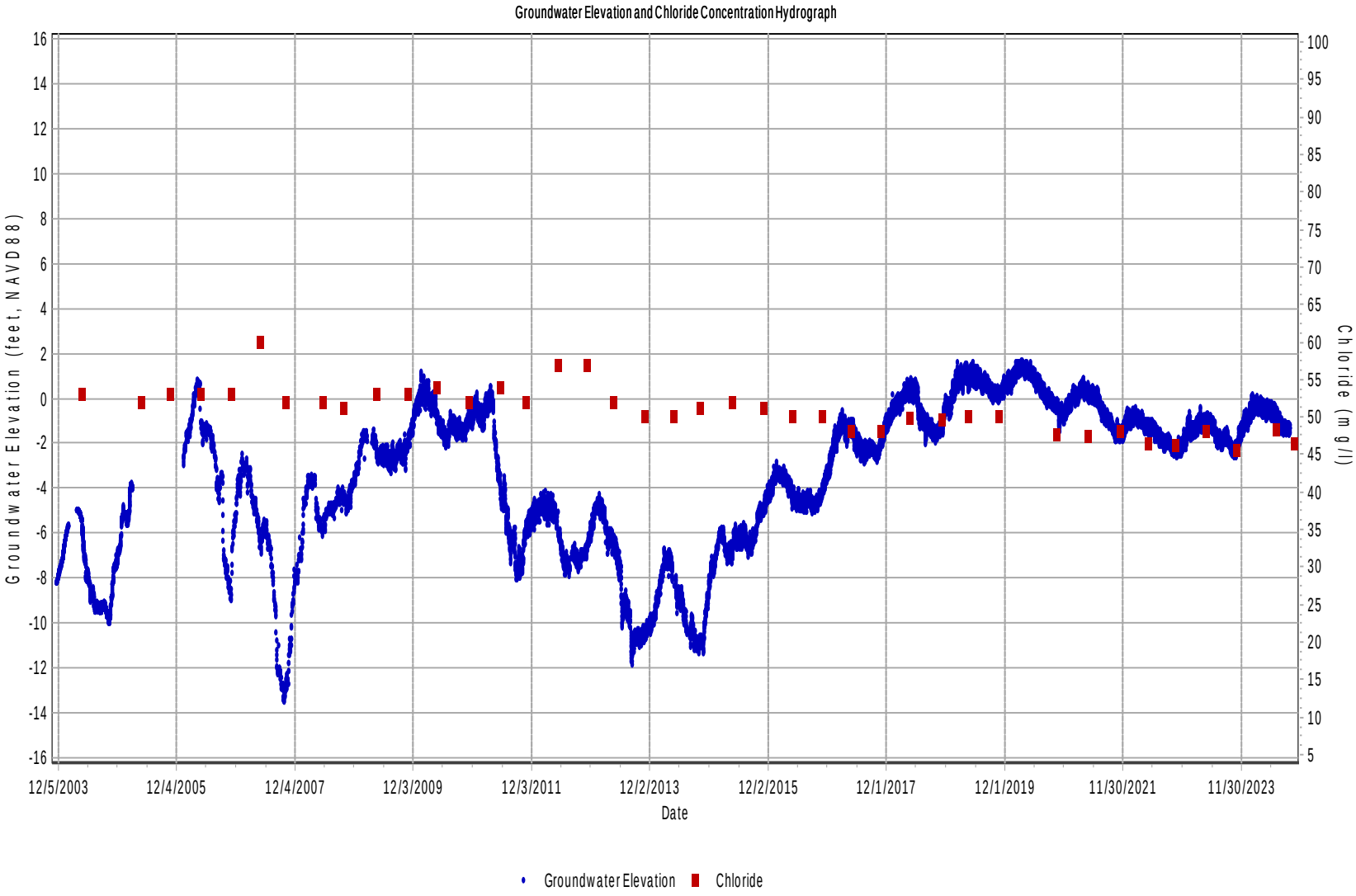


Figure 15 Lake Merced Surface Elevation

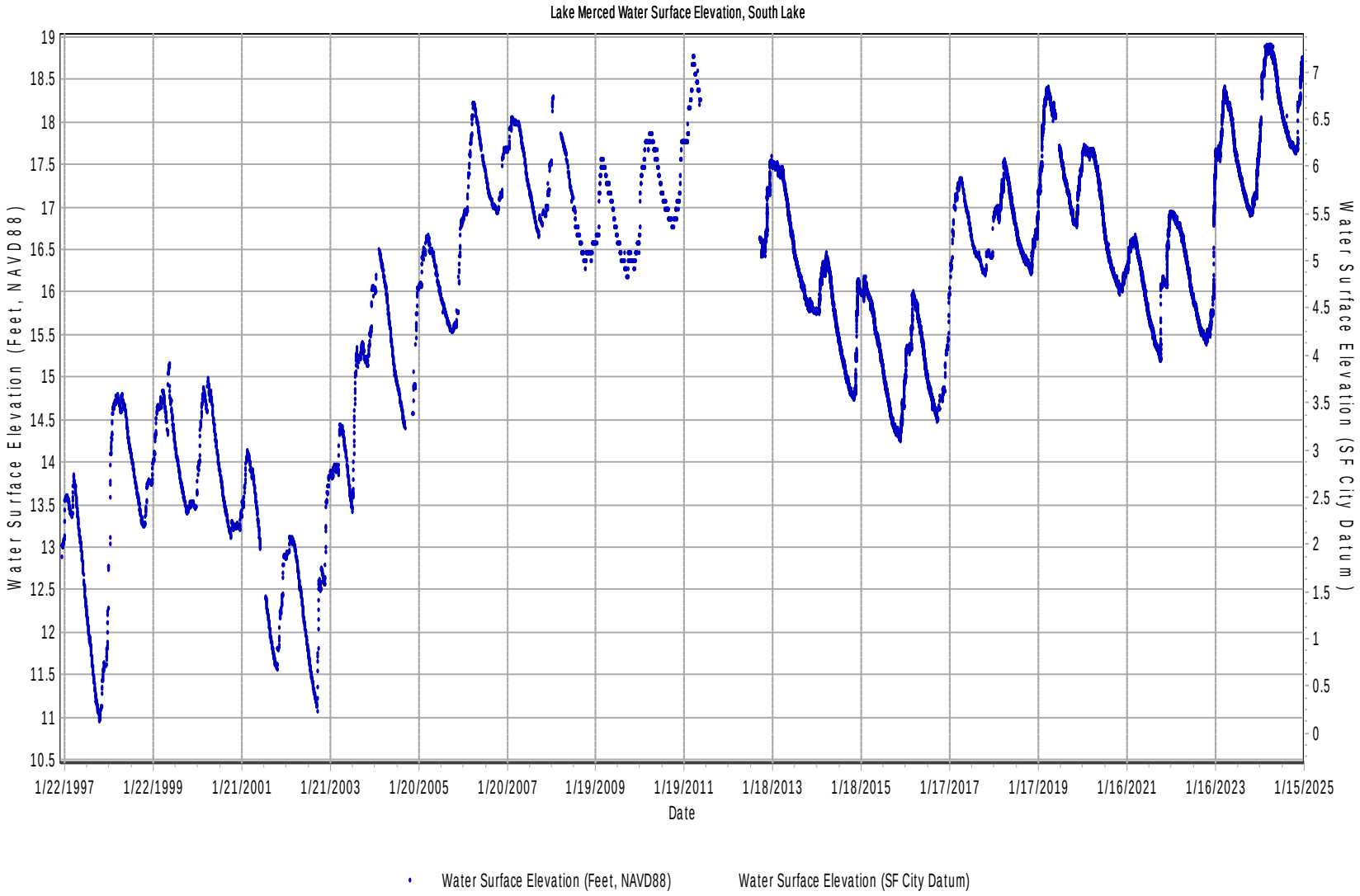


Figure 16

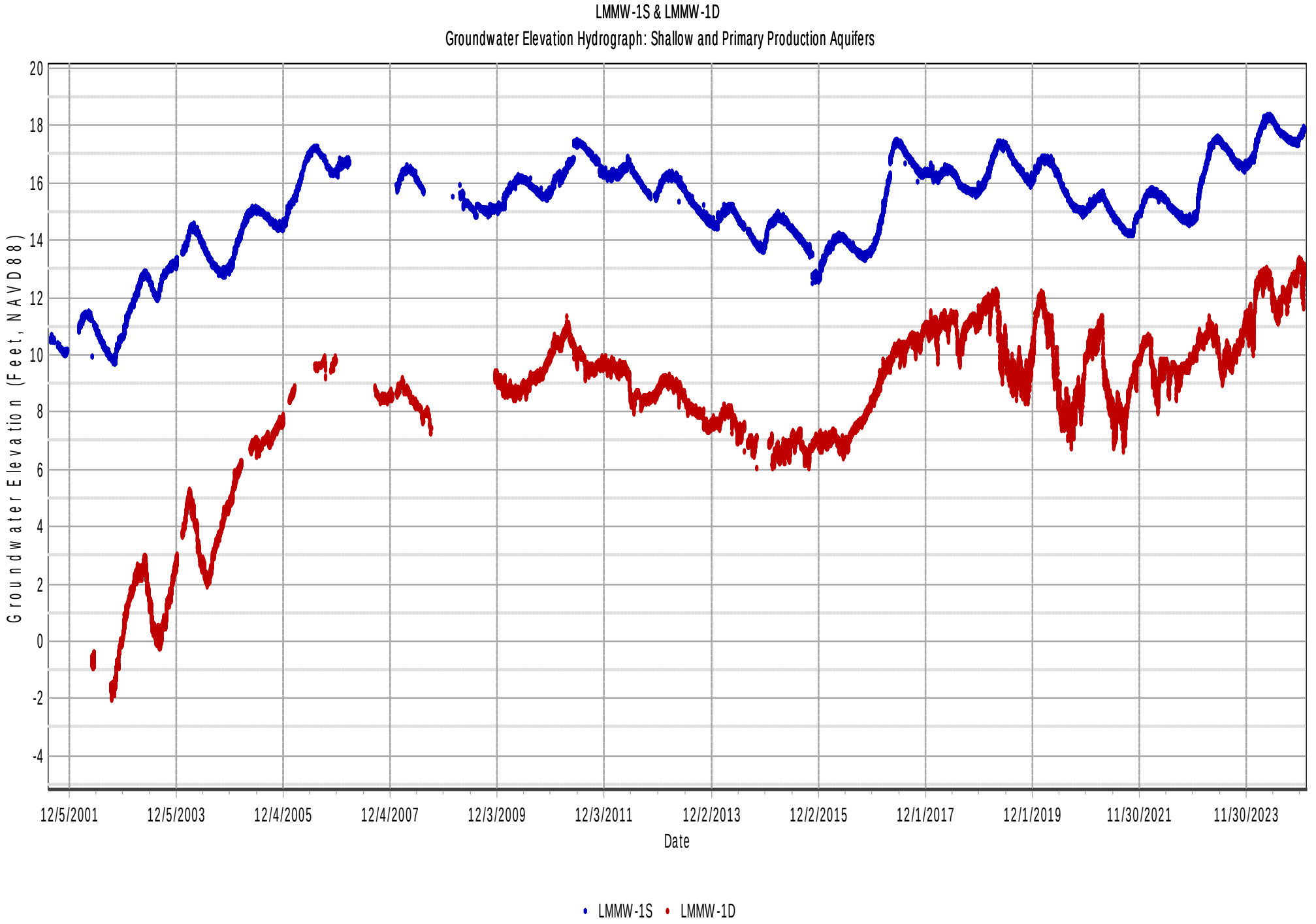

LMMW-1S & LMMW-1D
Groundwater Elevation Hydrograph: Shallow and Primary Production Aquifers
Groundwater Elevation (Feet, NAVD88)
20
18
16
14
12
10
8
6
4
2
0
-2
-4
12/5/2001
12/5/2003
12/4/2005
12/4/2007
12/3/2009
12/3/2011
12/2/2013
12/2/2015
12/1/2017
12/1/2019
11/30/2021
11/30/2023
Date
LMMW-1S
LMMW-1D

Figure 17 DC-01 (WESTLAKE 1)

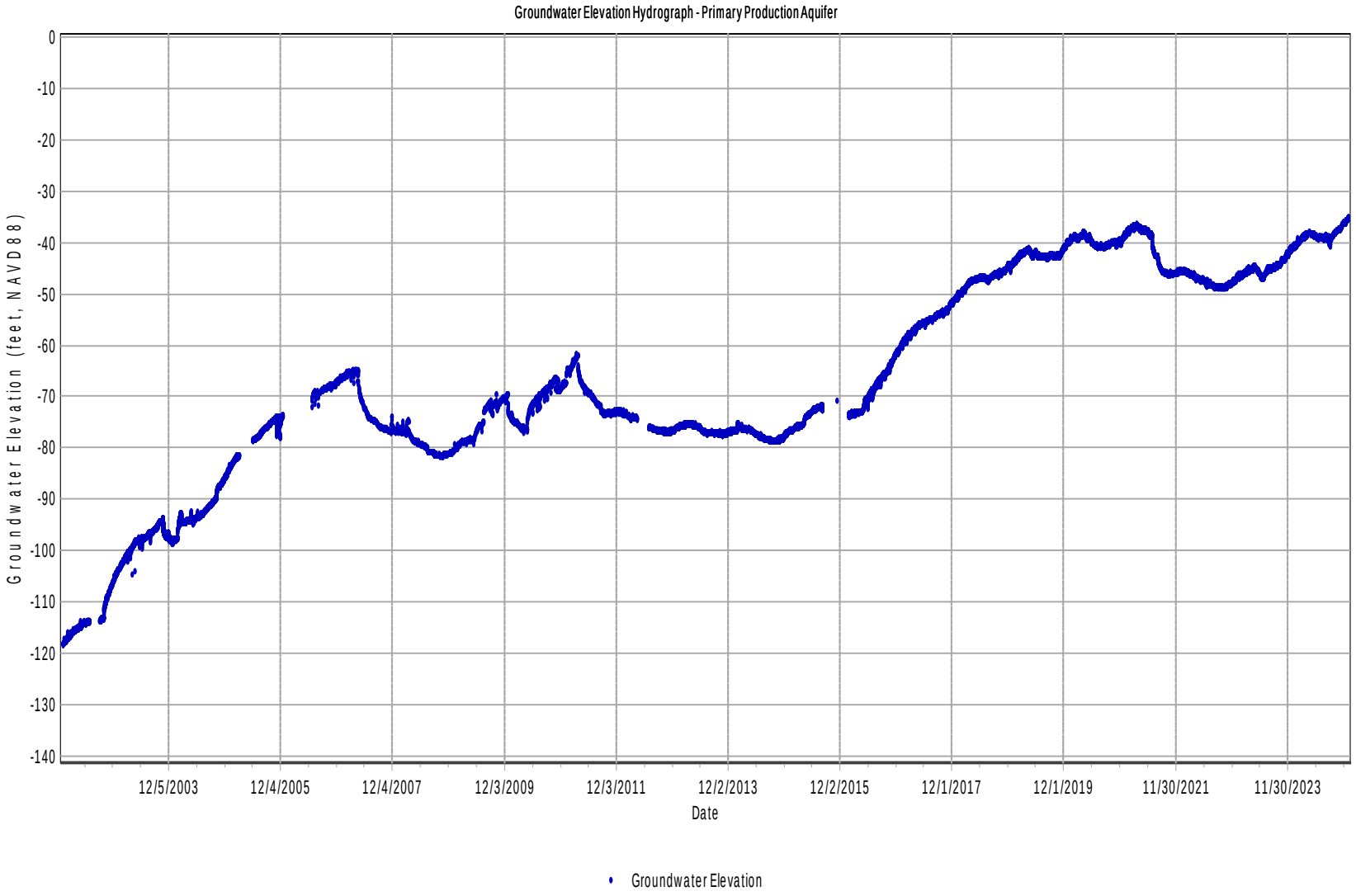


Figure 18 CAL. WATER SERV. SS1-02

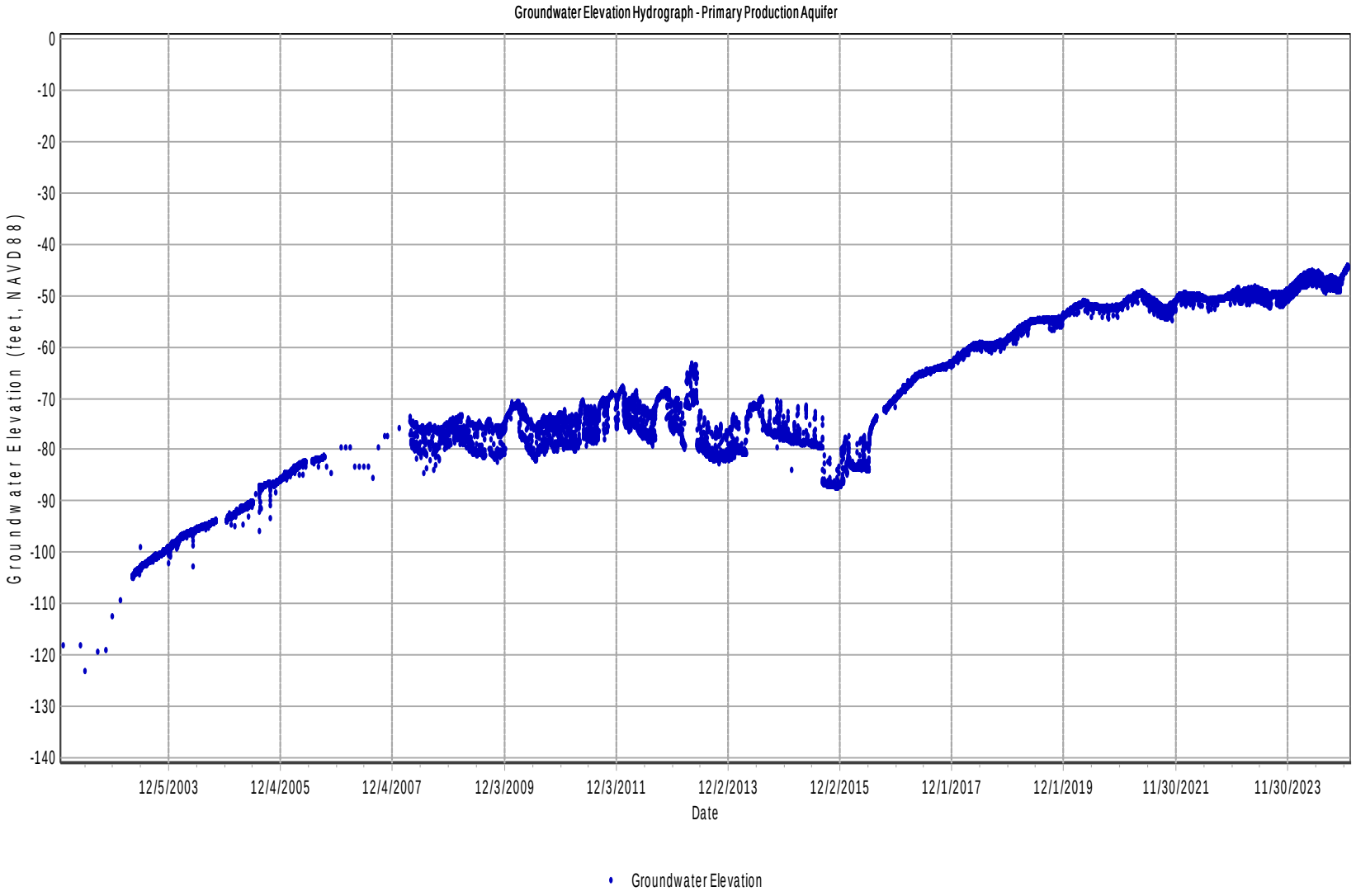


Figure 19 SB-12 ELM AVENUE

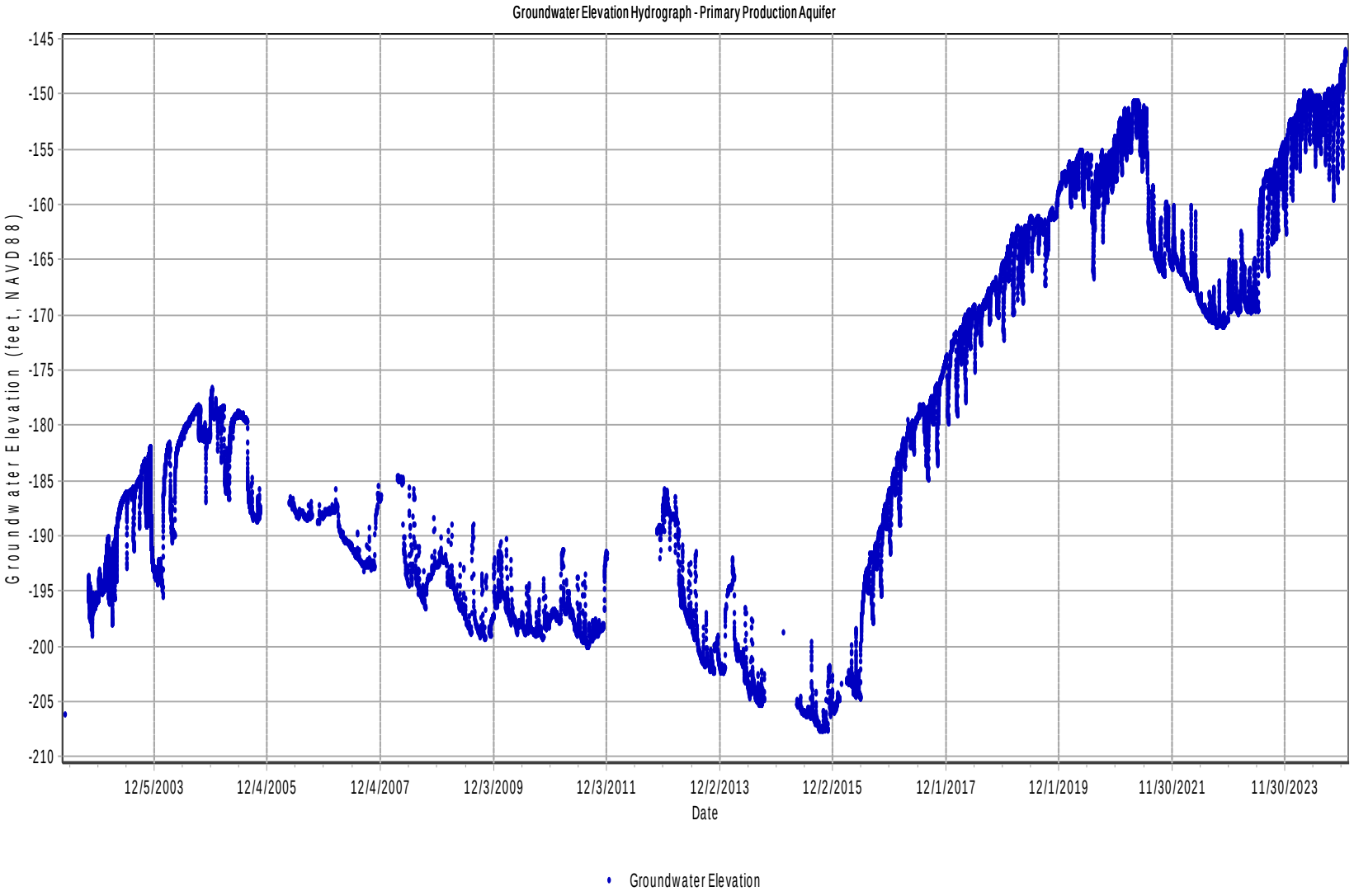


Figure 20a Burlingame S

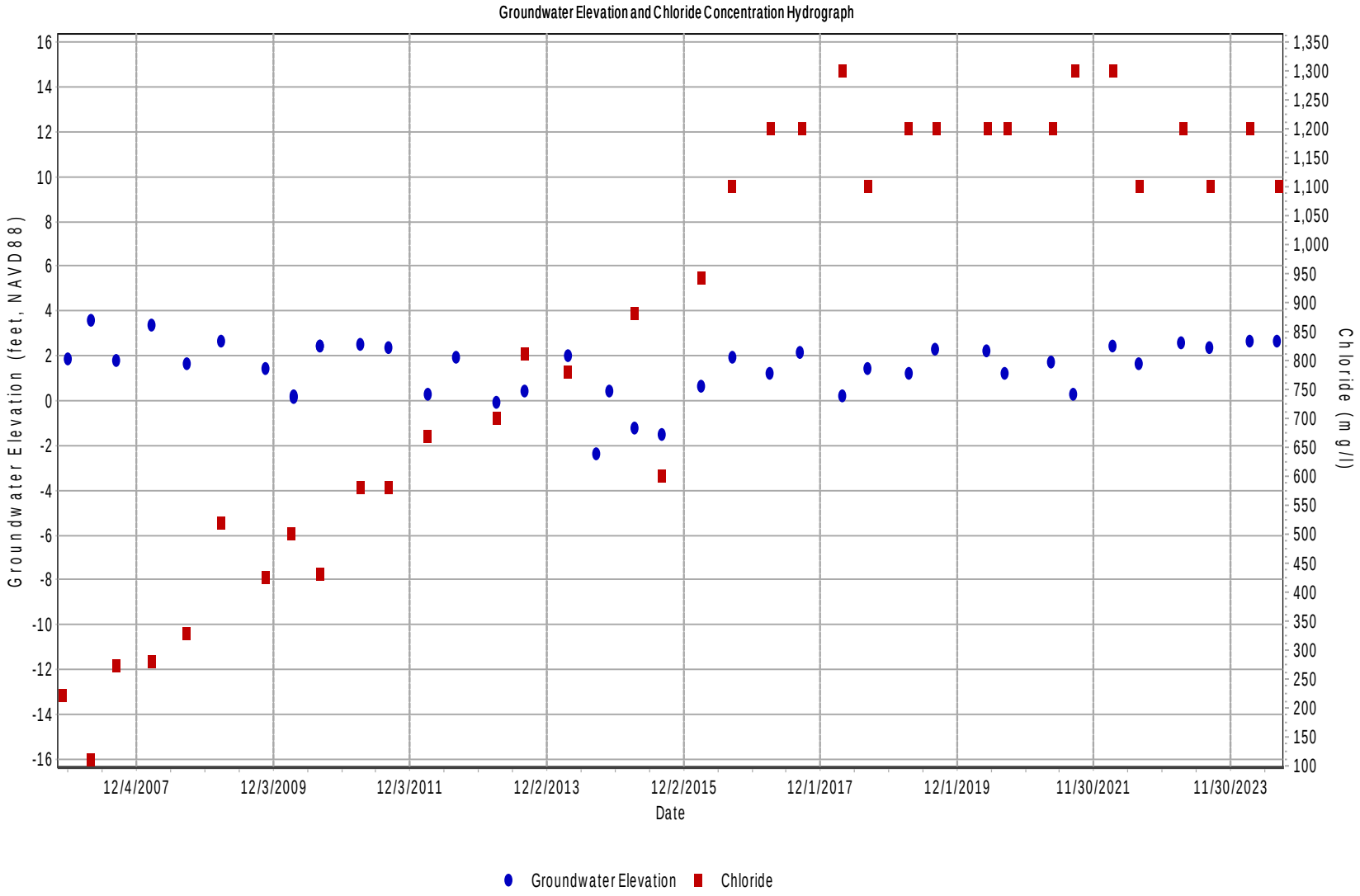


Figure 20b Burlingame M

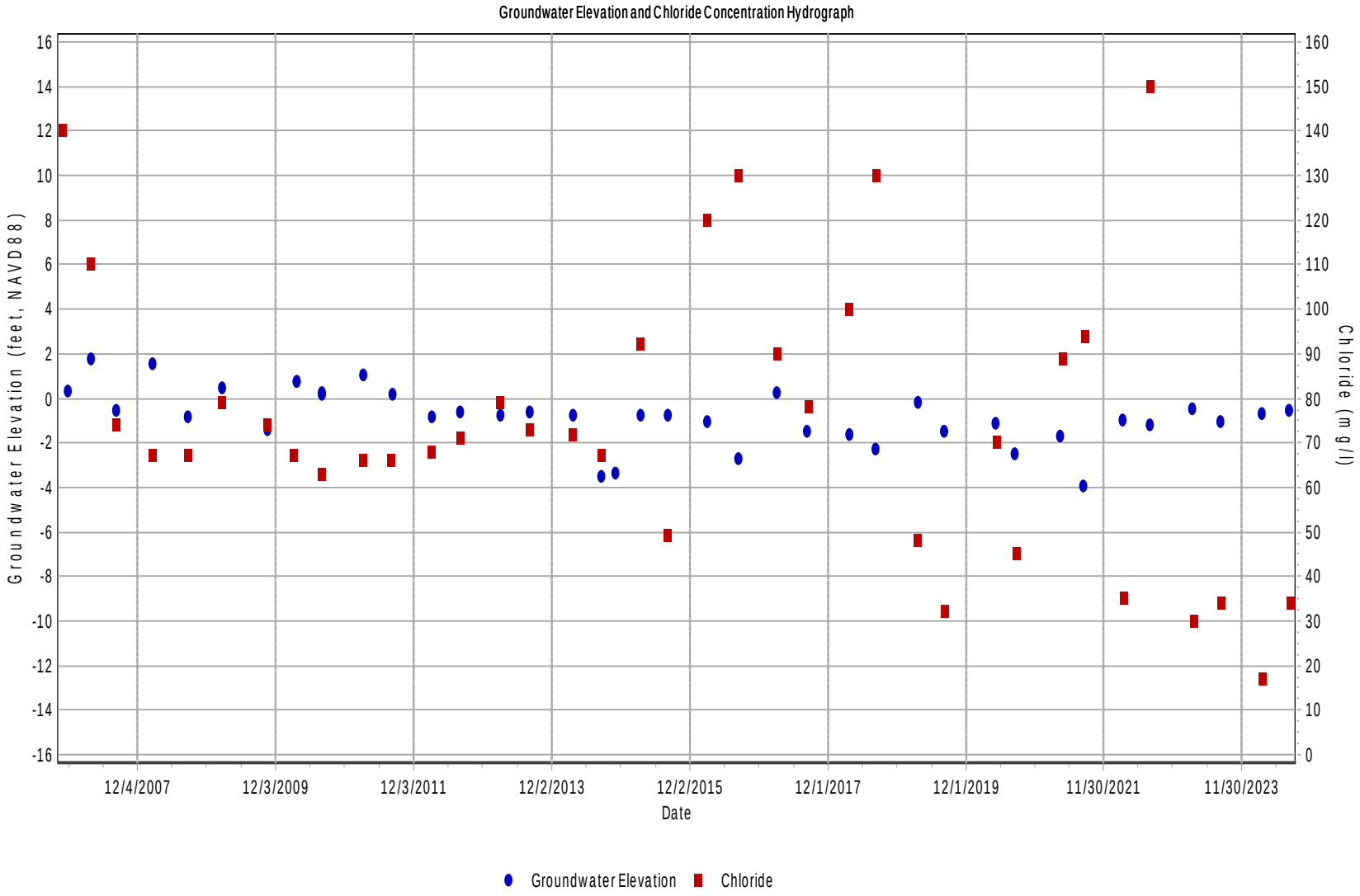


Figure 20c Burlingame D

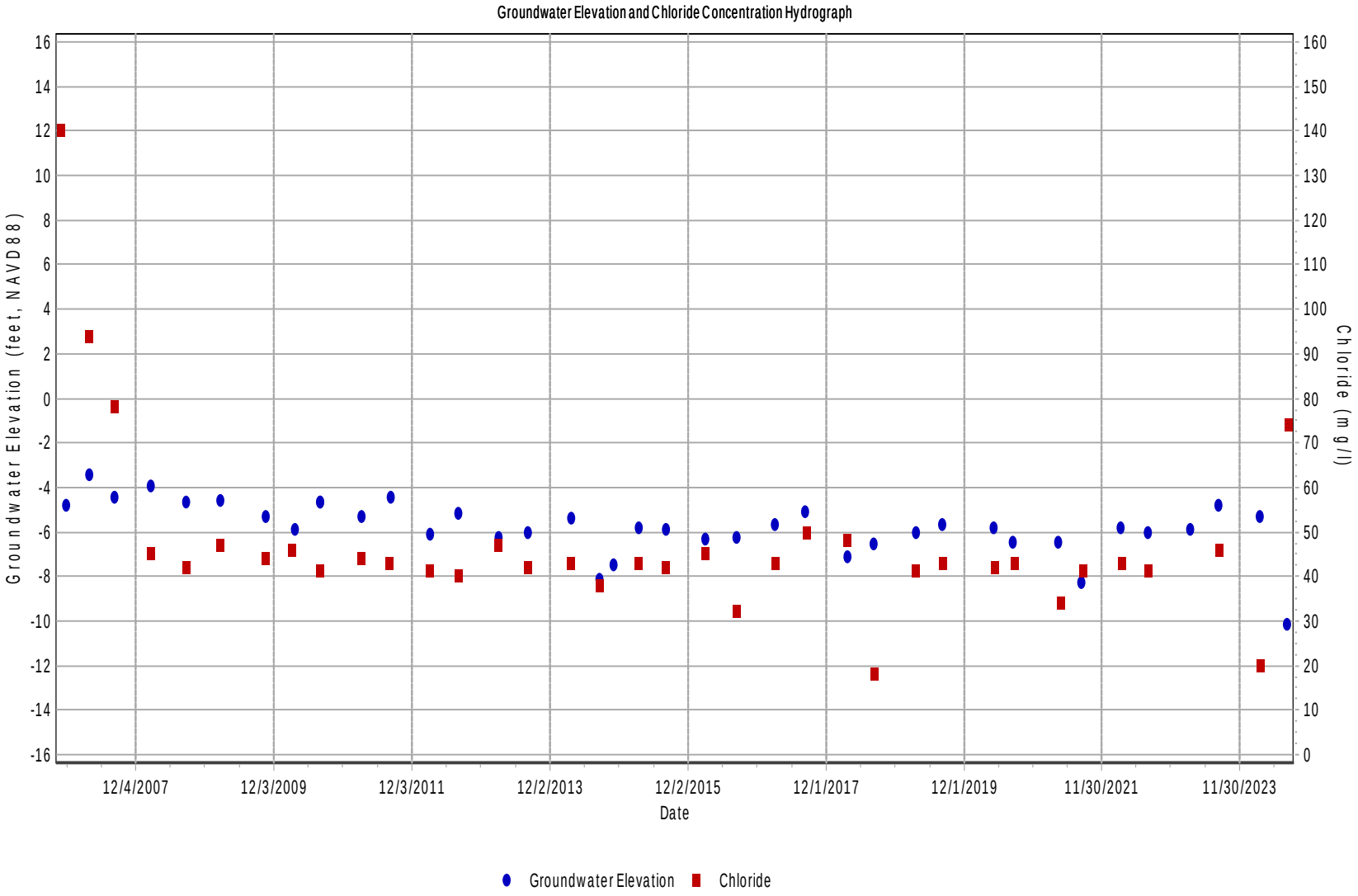


Figure 21a SFO S

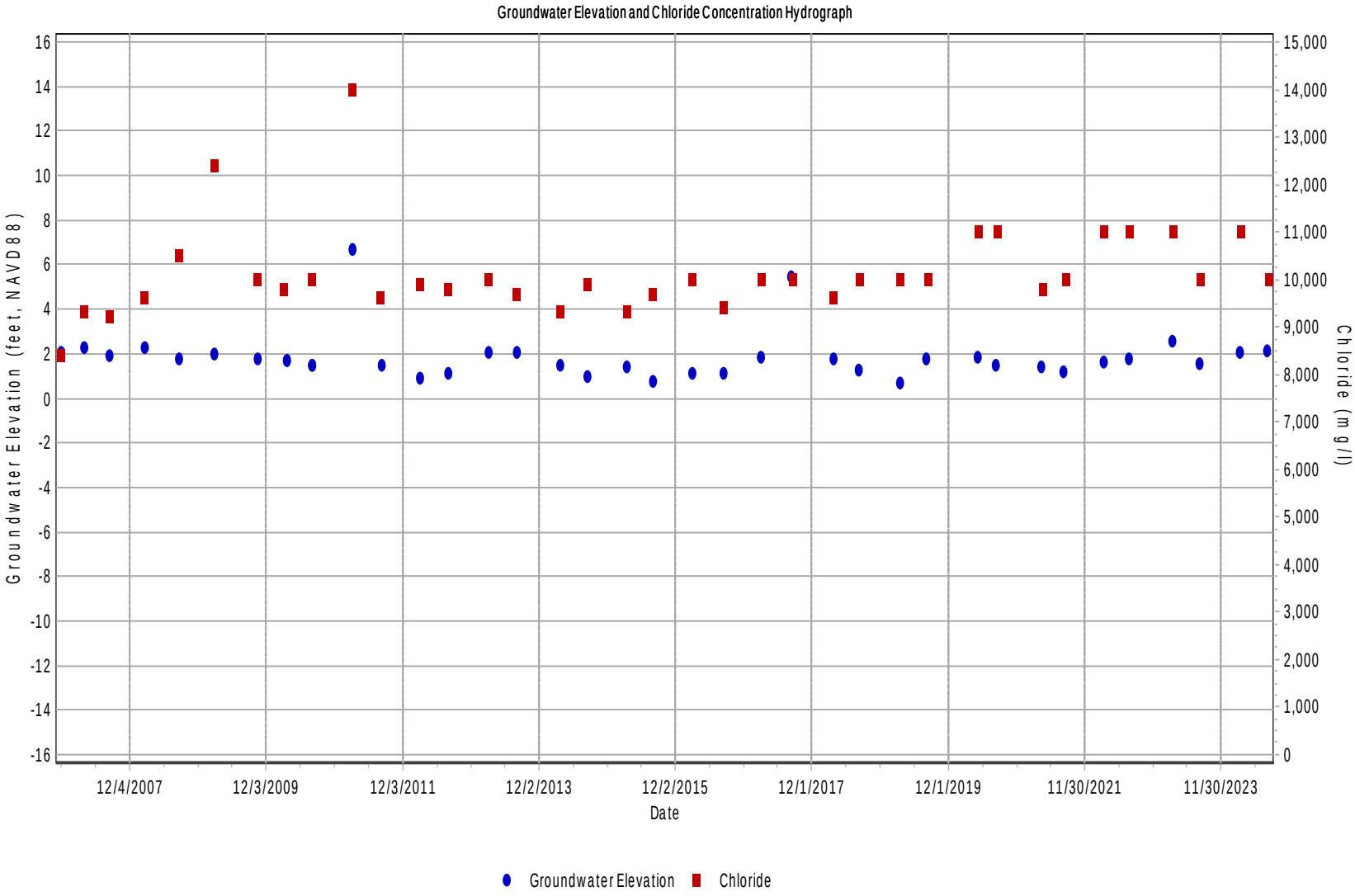


Figure 21b SFO D

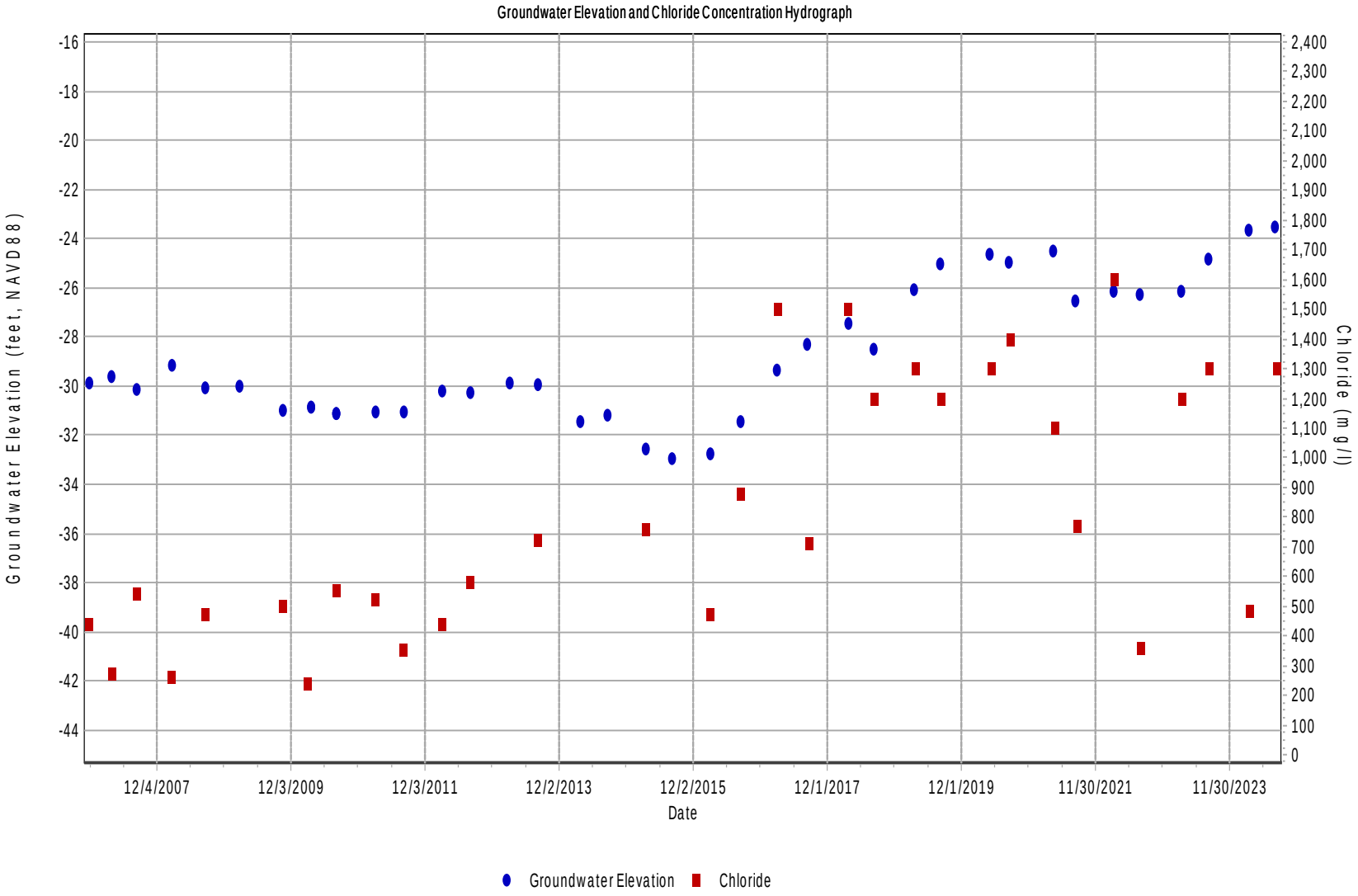
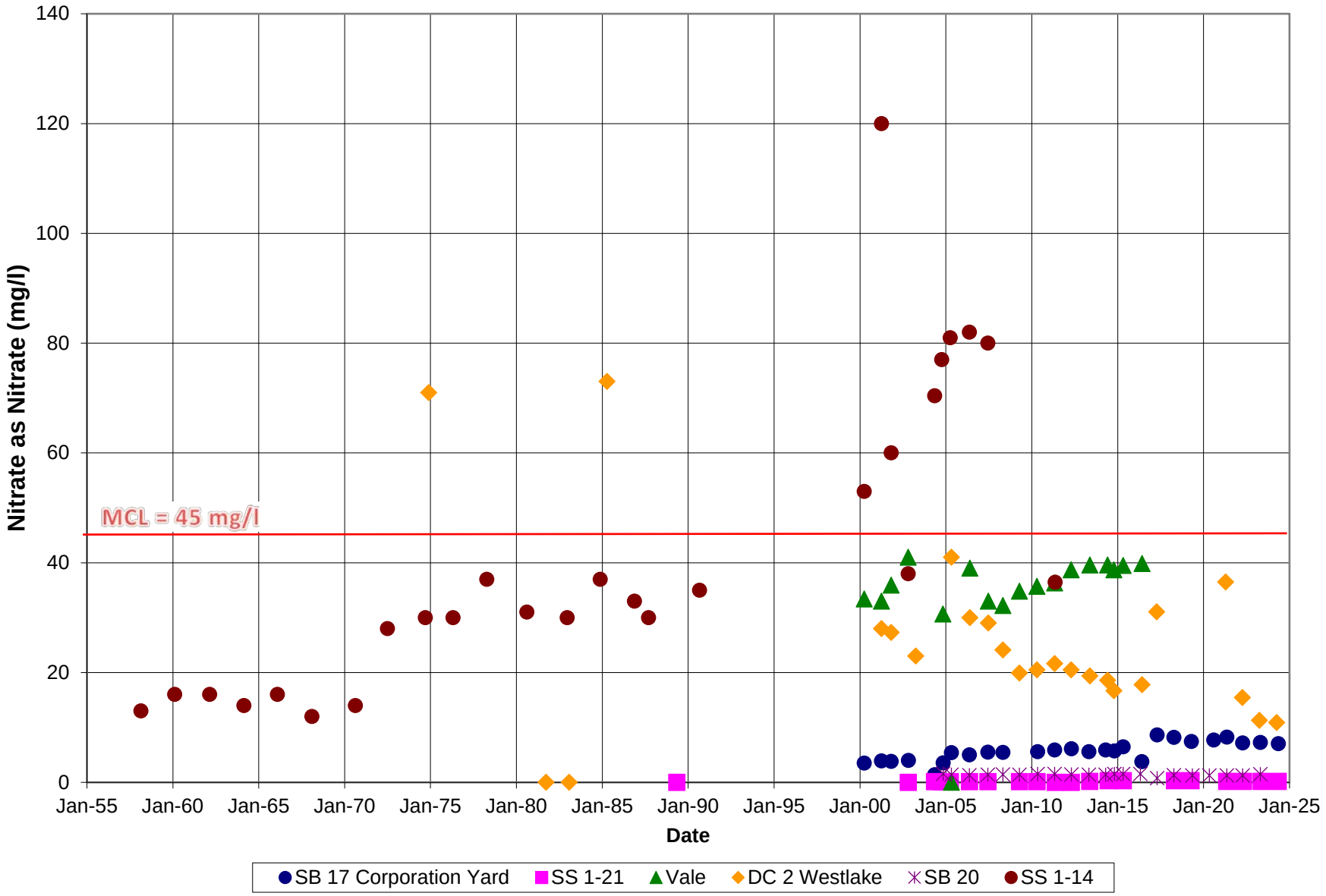


Figure 22
Nitrate Concentrations in Southern Westside Basin Groundwater, 1957-2024



SS 1-14 was offline from 2007-2011 and permanently taken out of service in 2015. Vale has been offline since 2018. SB-20 was out of service during the Spring 2024 sampling event.

Figure 23
Long-Term Water Quality, Daly City Westlake DC-2

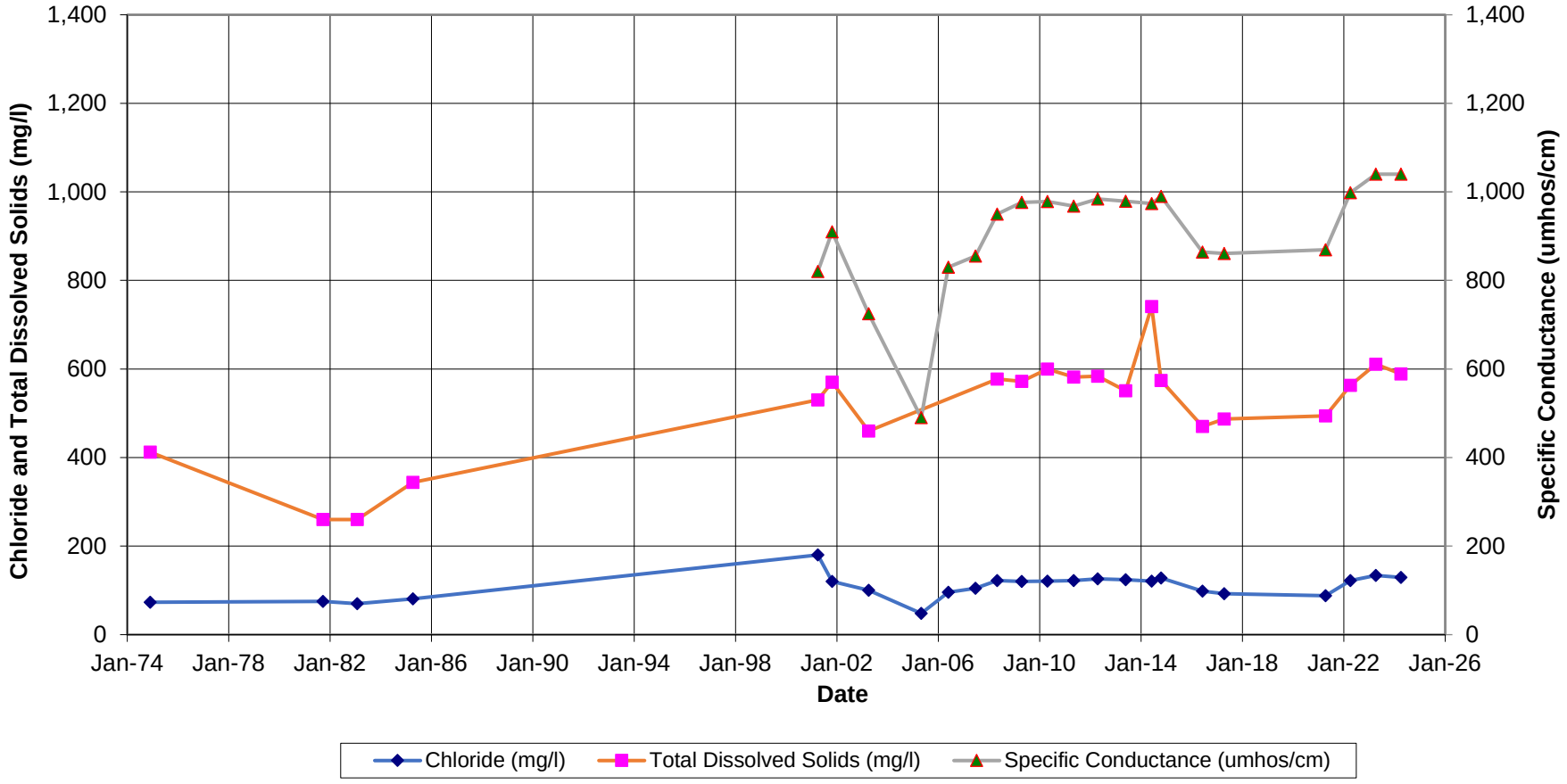


Figure 24
Long-Term Water Quality, Cal Water SS 1-21

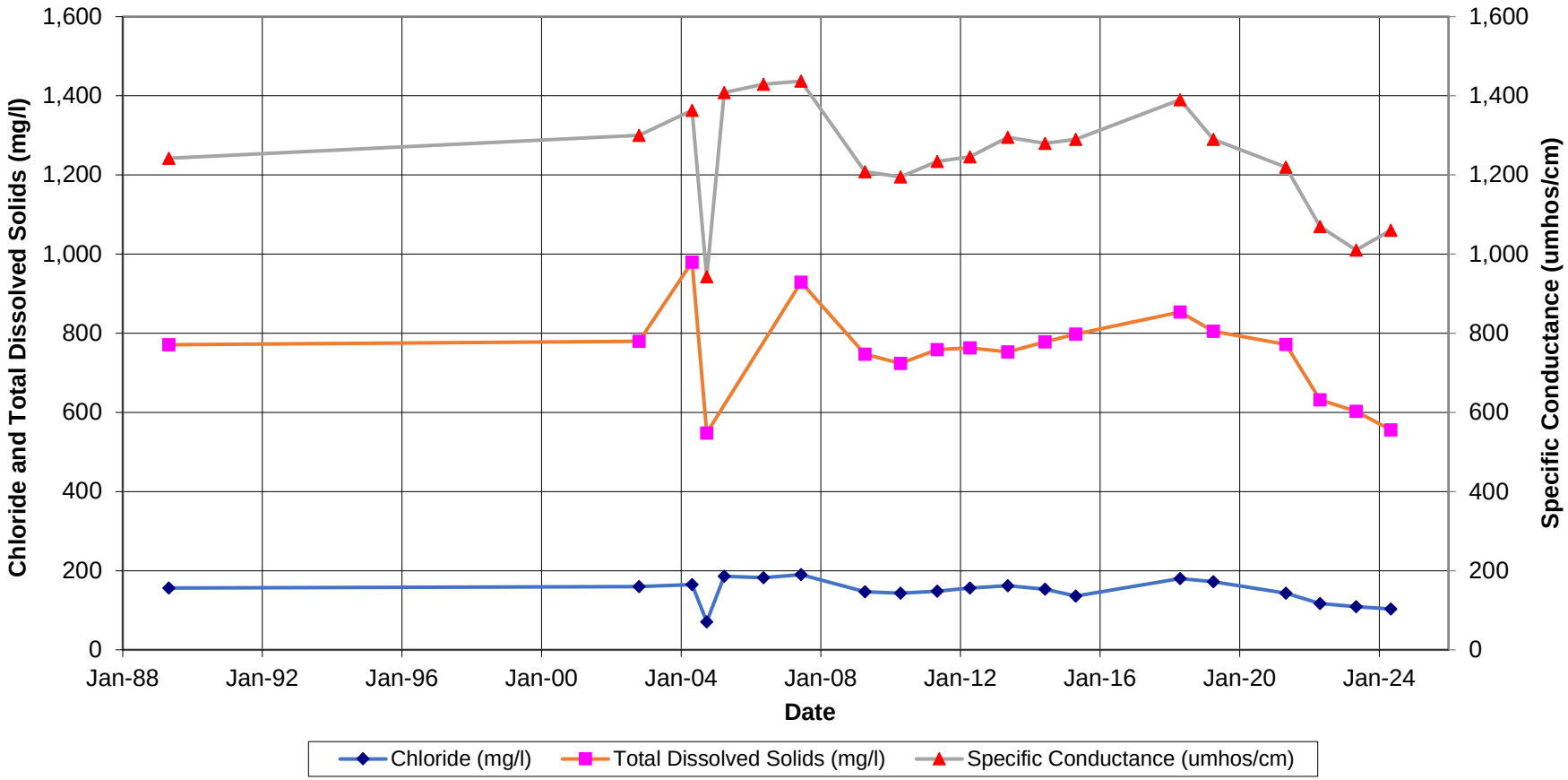
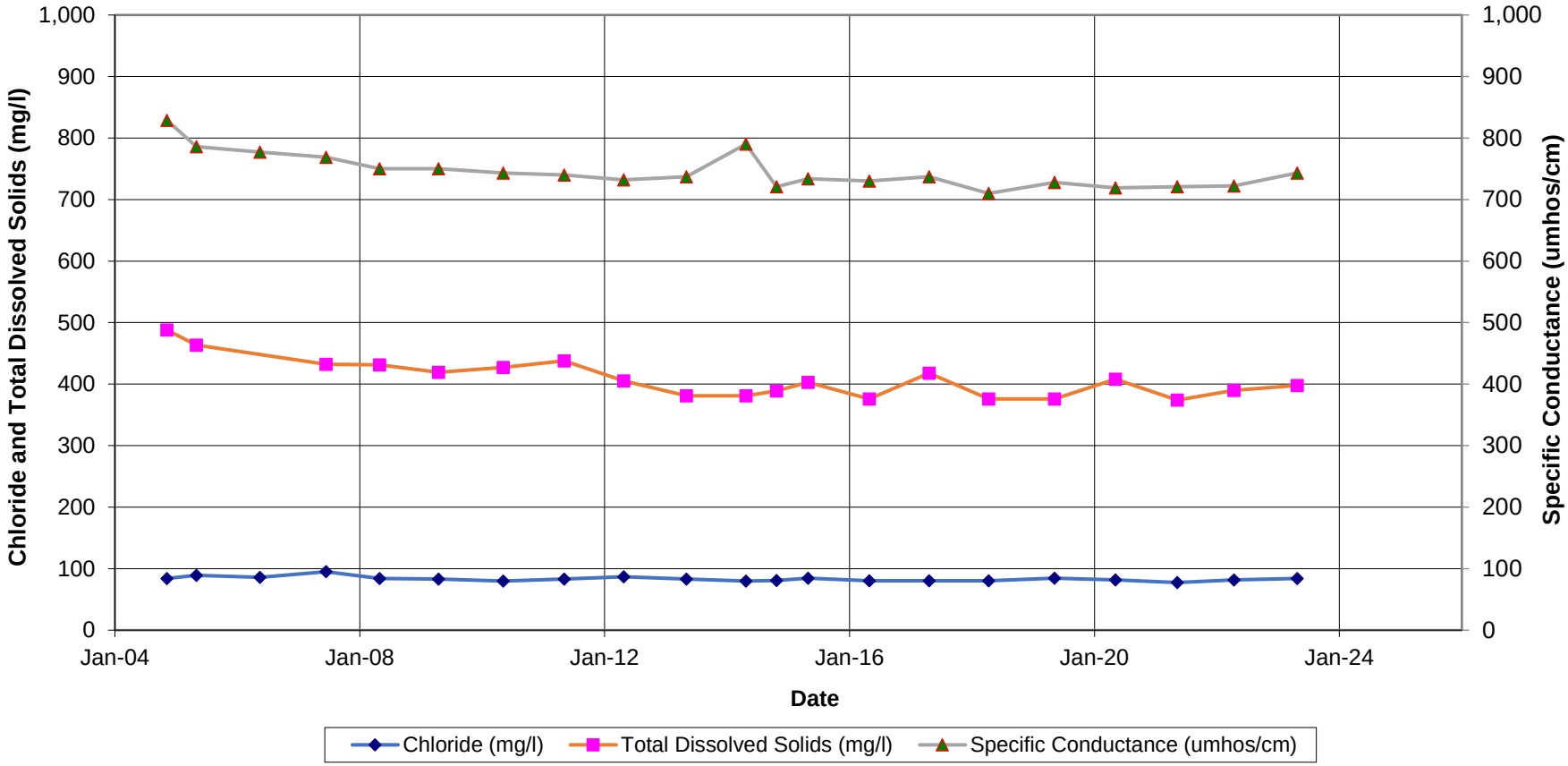
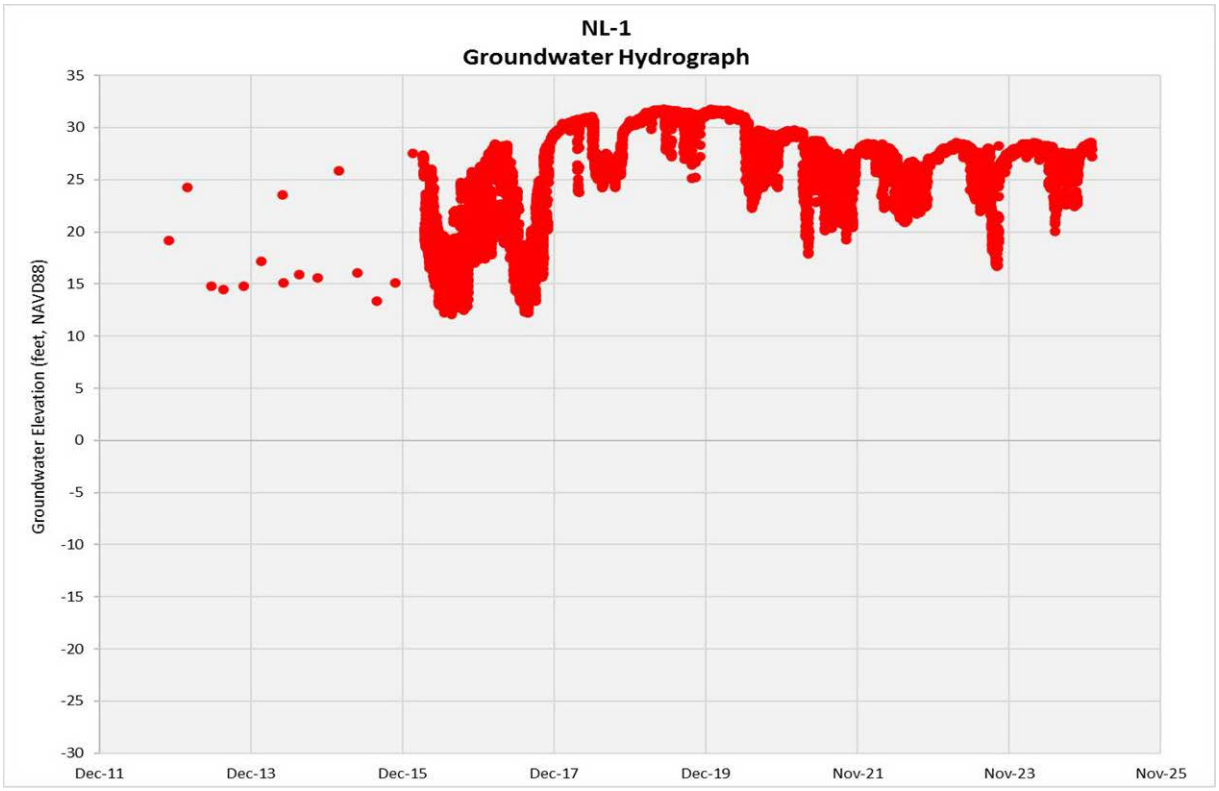


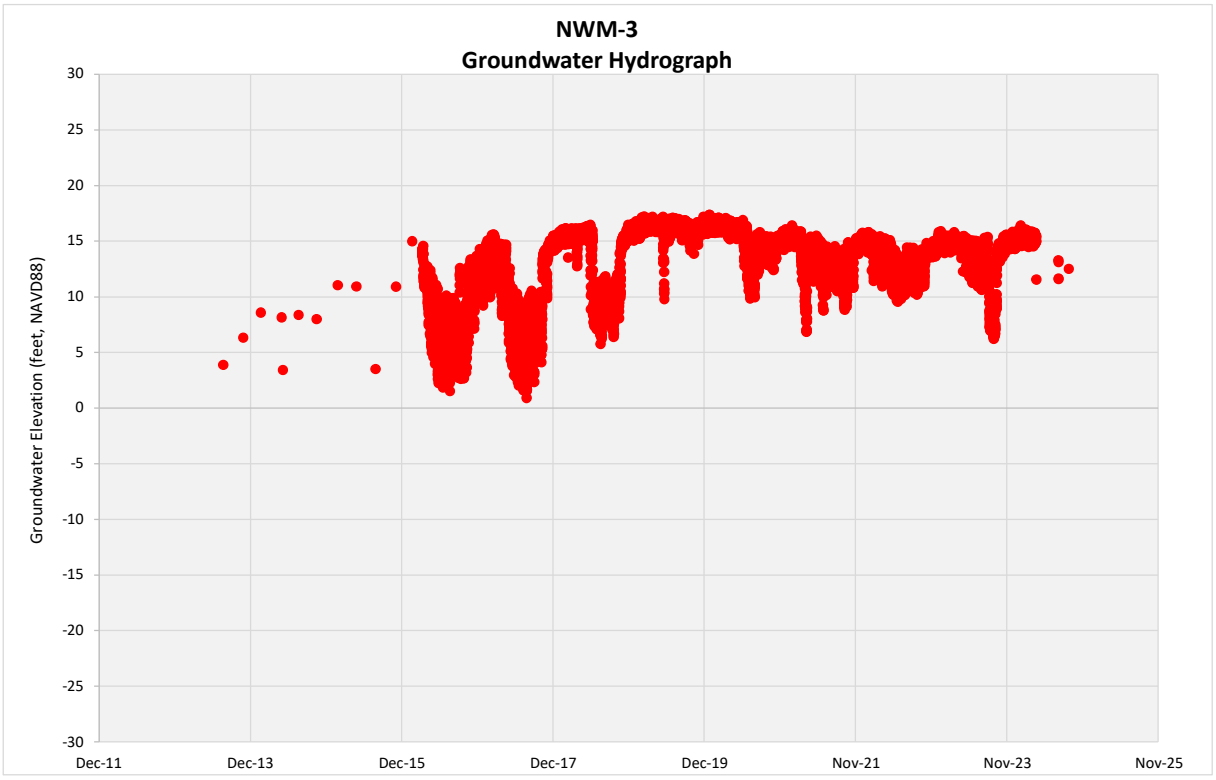
Figure 25
Long-Term Water Quality, San Bruno SB-20 Lions Field Park

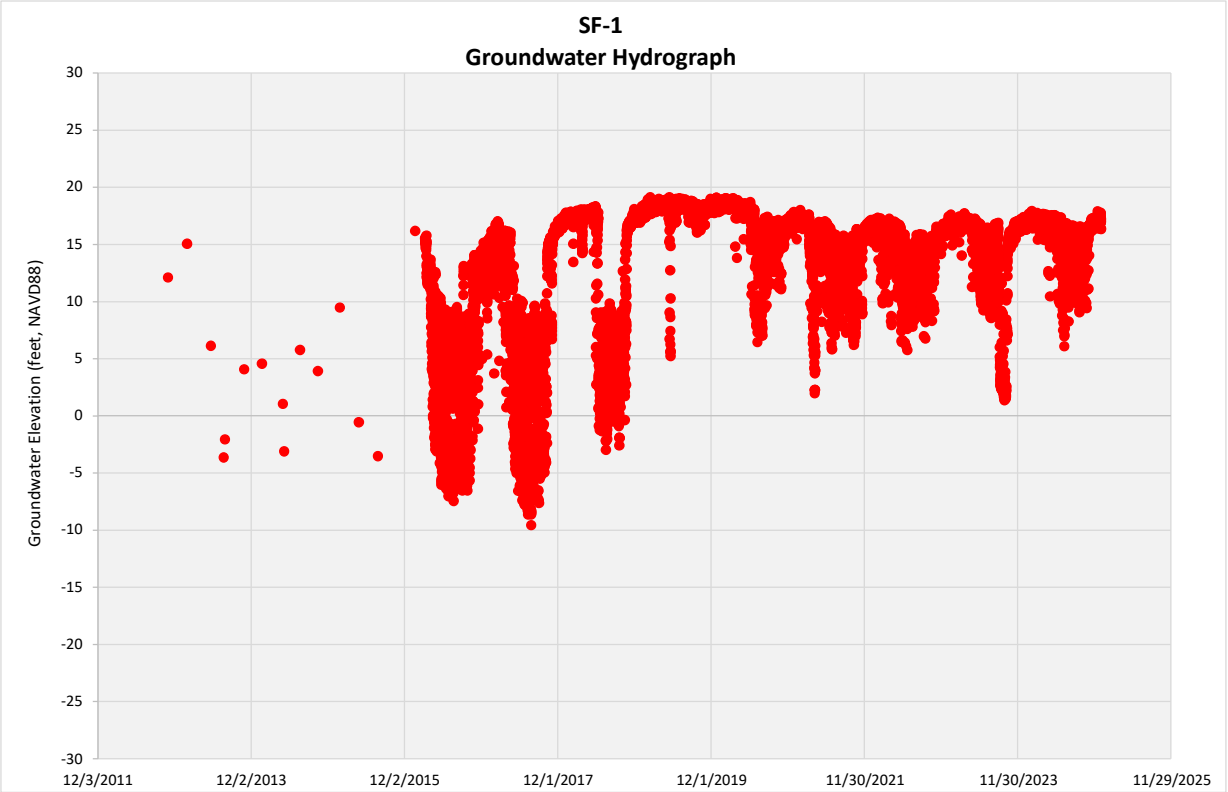


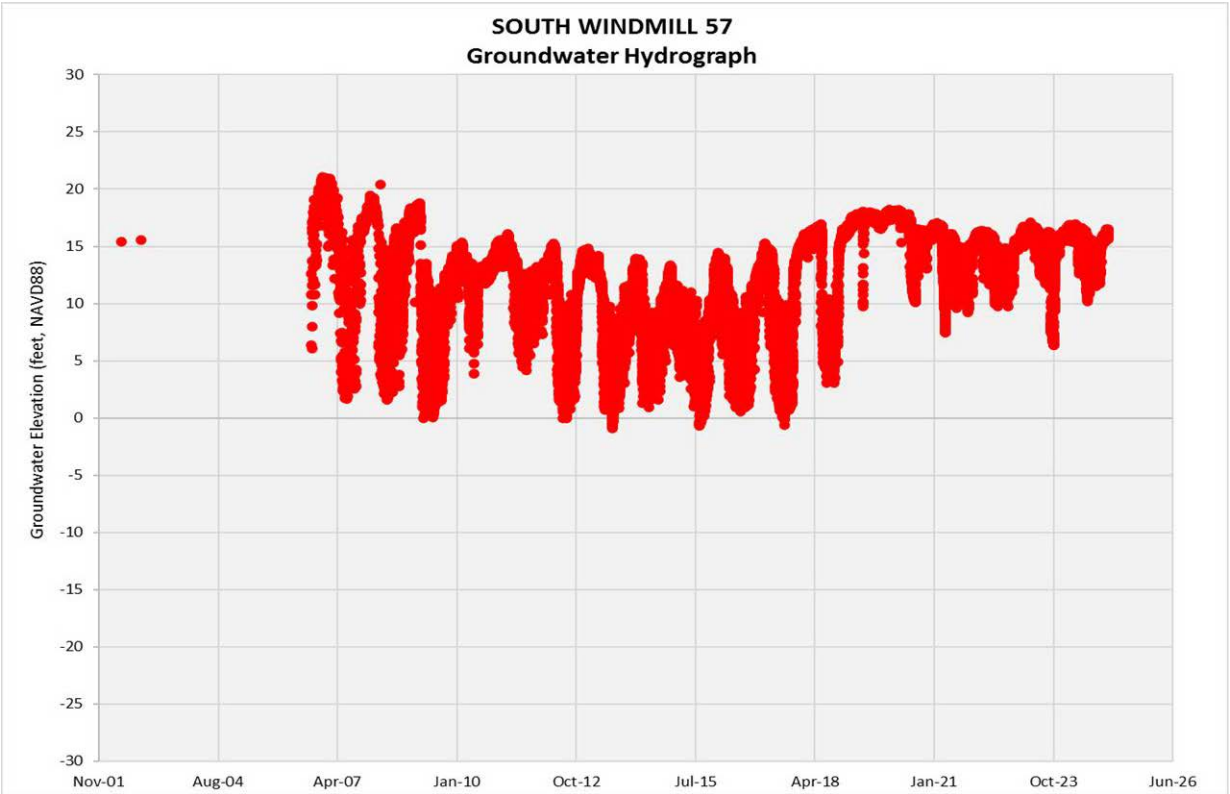
SB-20 was out of service during the Spring 2024 sampling event, therefore no samples were taken in 2024.

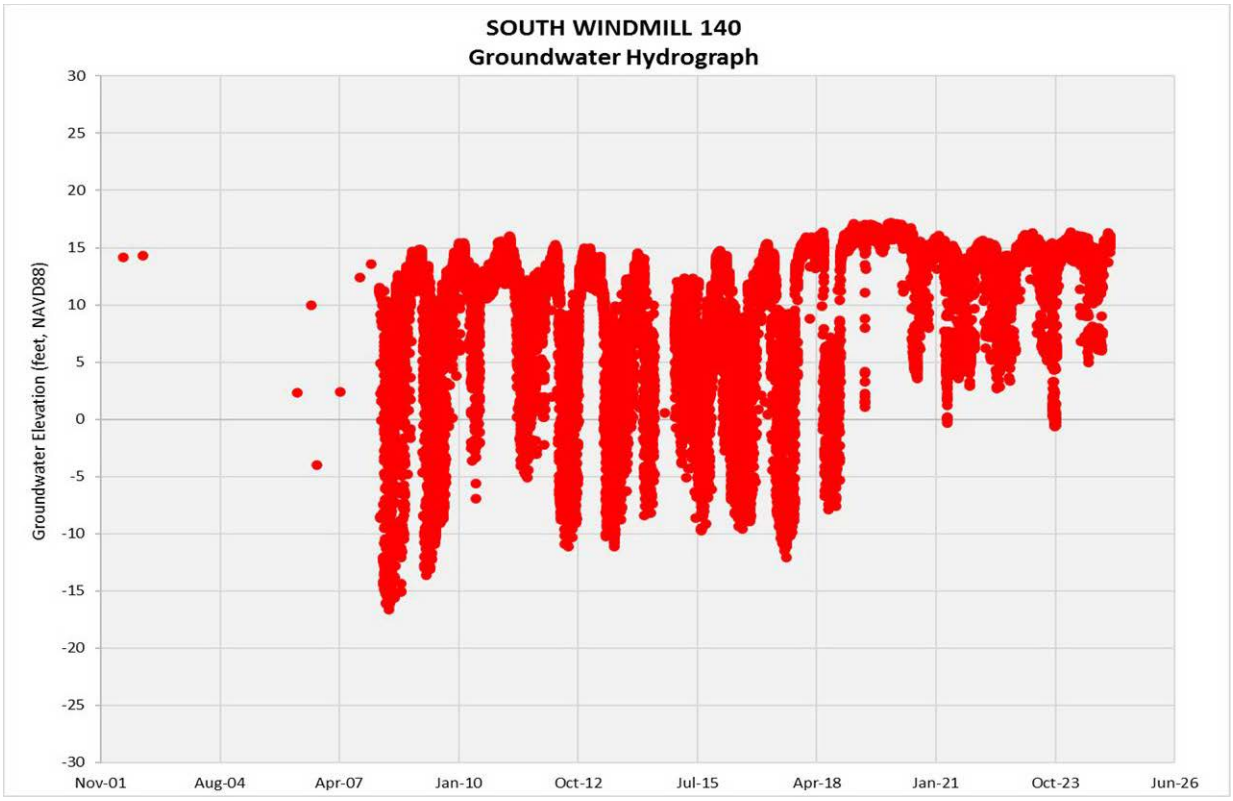
APPENDIX A
Groundwater Elevation Hydrographs

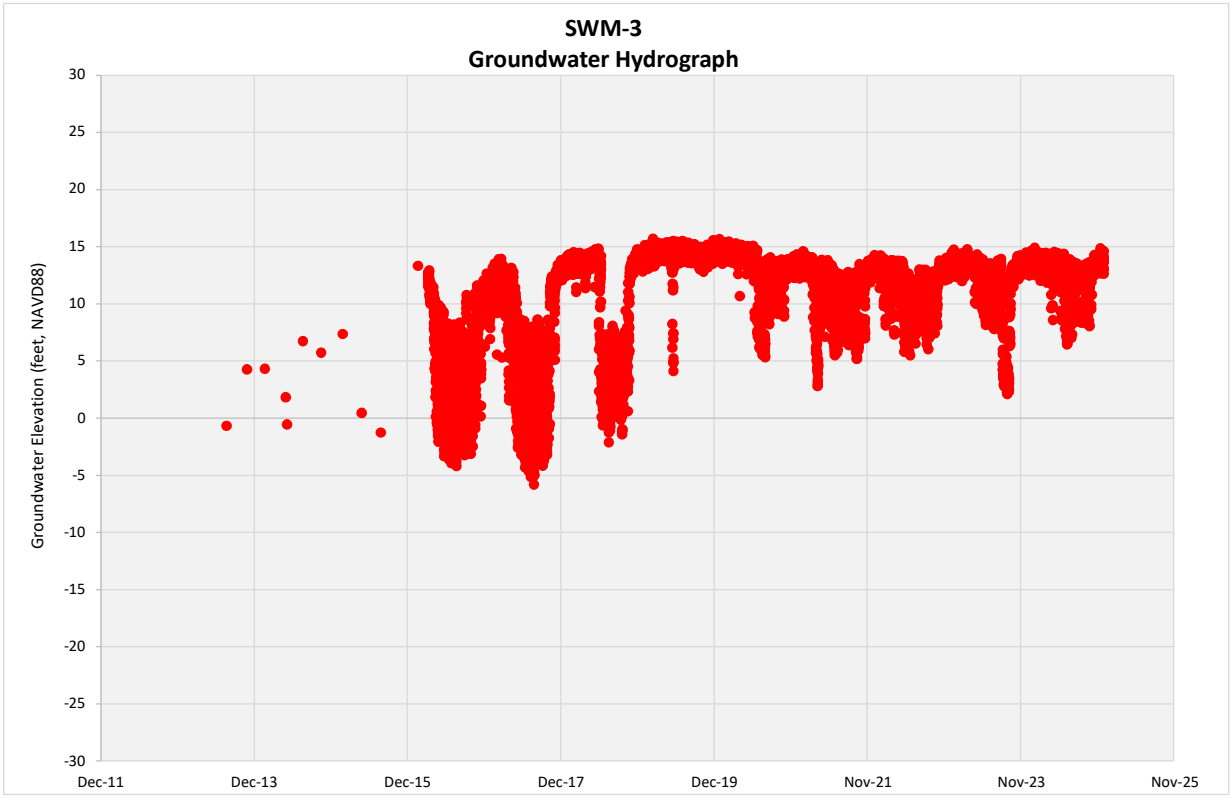

NL-1
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
35
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Nov-21
Nov-23
Nov-25

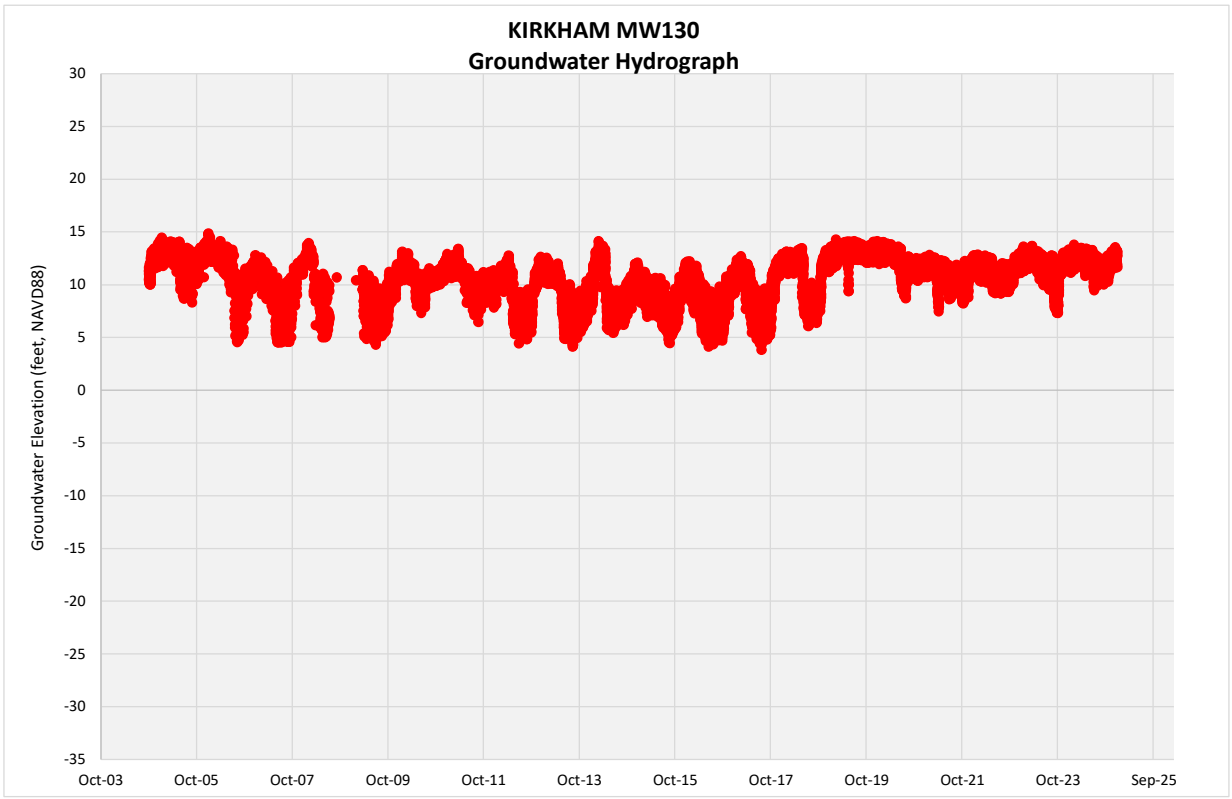

NWM-3
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Nov-21
Nov-23
Nov-25

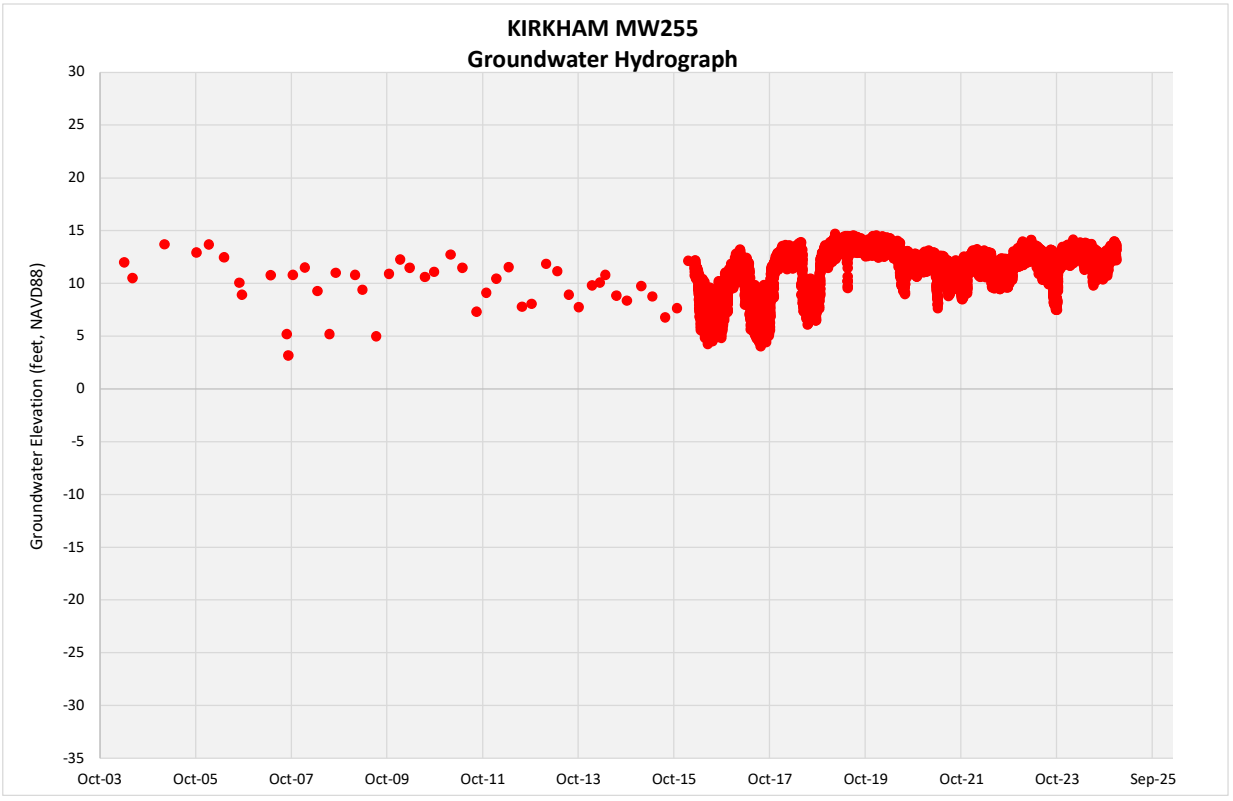

SF-1
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
12/3/2011
12/2/2013
12/2/2015
12/1/2017
12/1/2019
11/30/2021
11/30/2023
11/29/2025

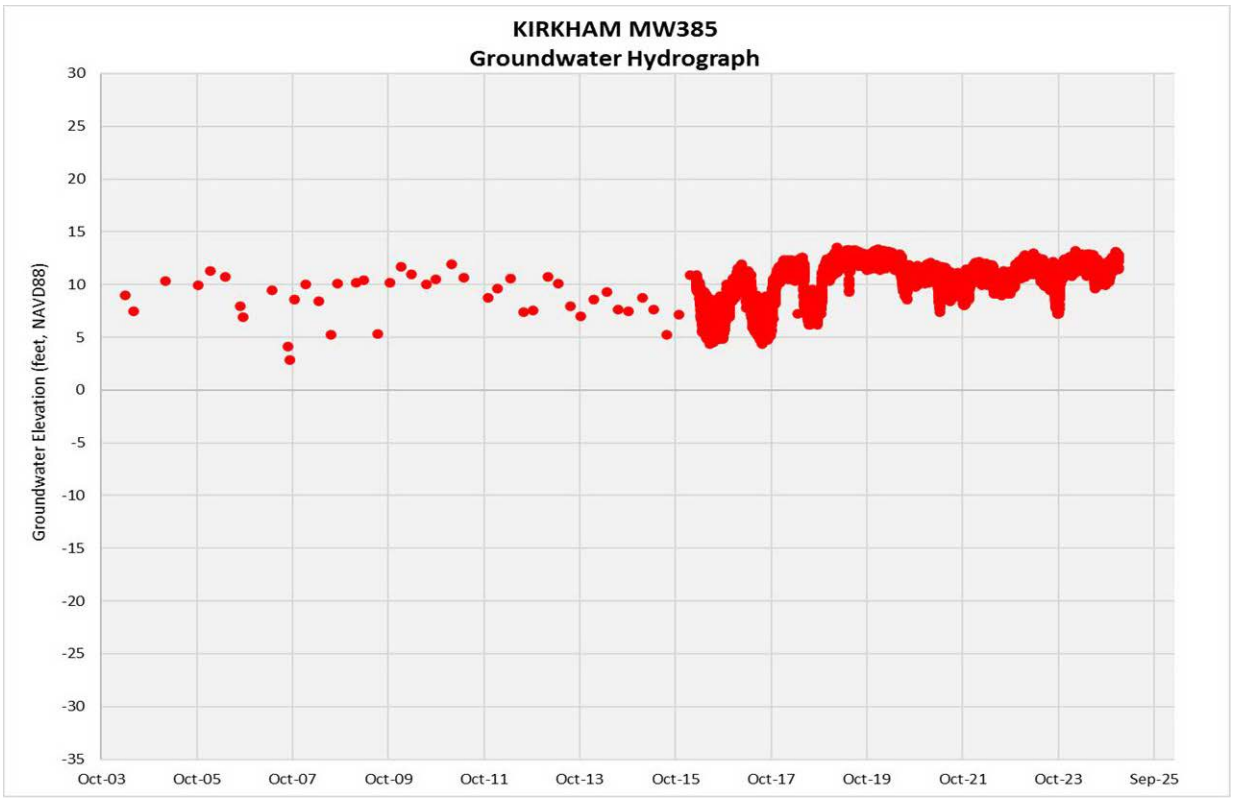

SOUTH WINDMILL 57
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
Nov-01
Aug-04
Apr-07
Jan-10
Oct-12
Jul-15
Apr-18
Jan-21
Oct-23
Jun-26

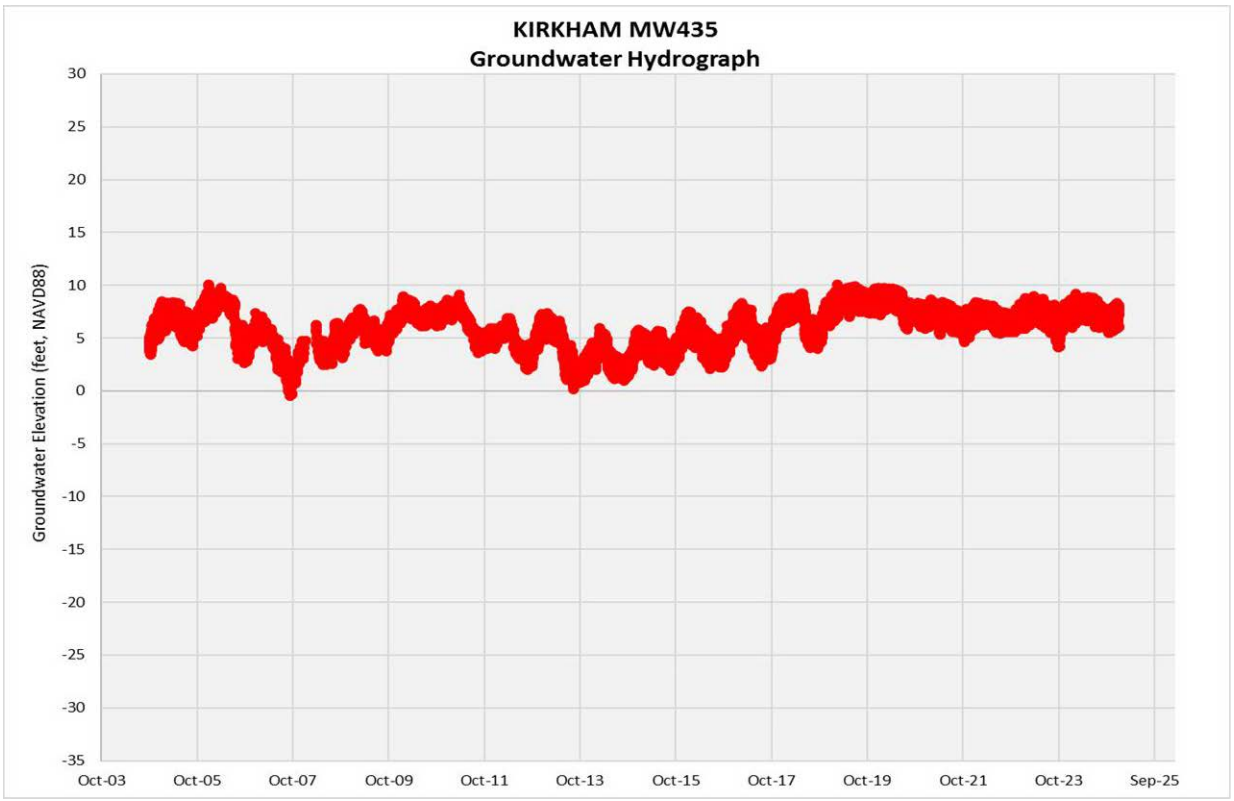

SOUTH WINDMILL 140
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
Nov-01
Aug-04
Apr-07
Jan-10
Oct-12
Jul-15
Apr-18
Jan-21
Oct-23
Jun-26

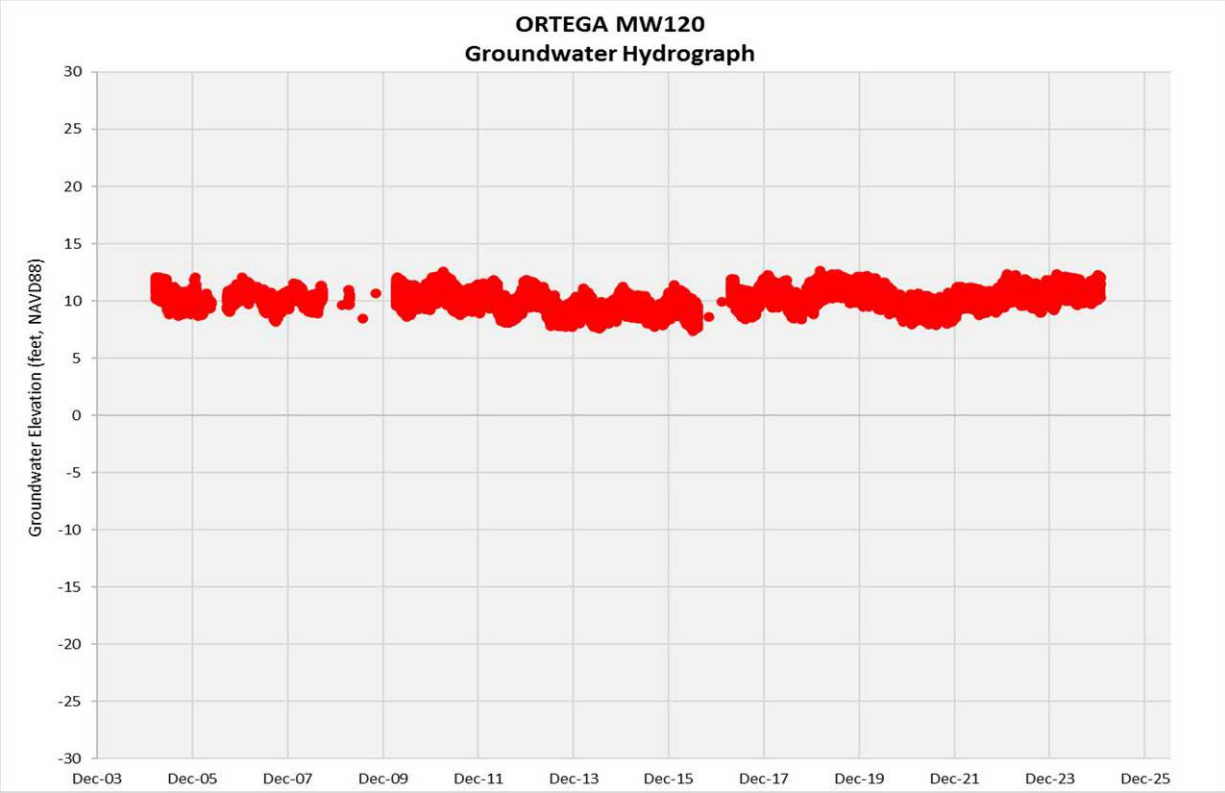

SWM-3
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Nov-21
Nov-23
Nov-25

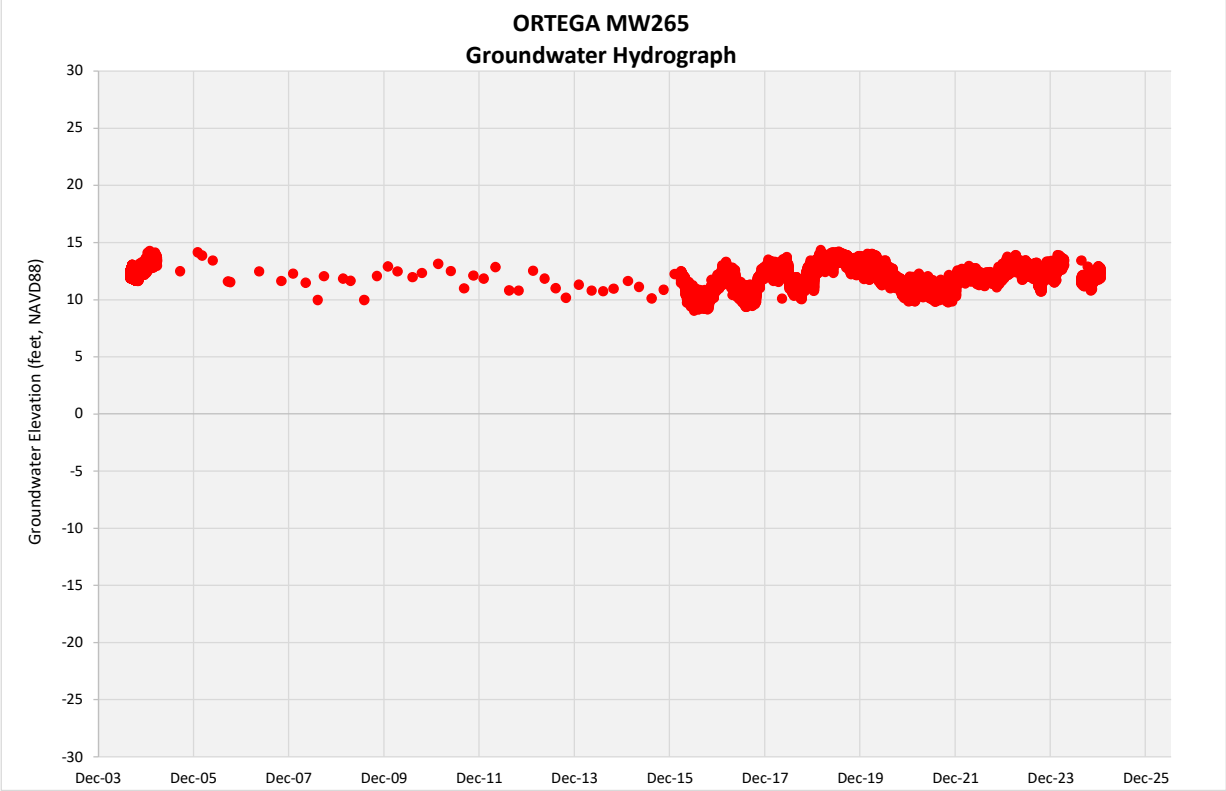

KIRKHAM MW130
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
Oct-03
Oct-05
Oct-07
Oct-09
Oct-11
Oct-13
Oct-15
Oct-17
Oct-19
Oct-21
Oct-23
Sep-25

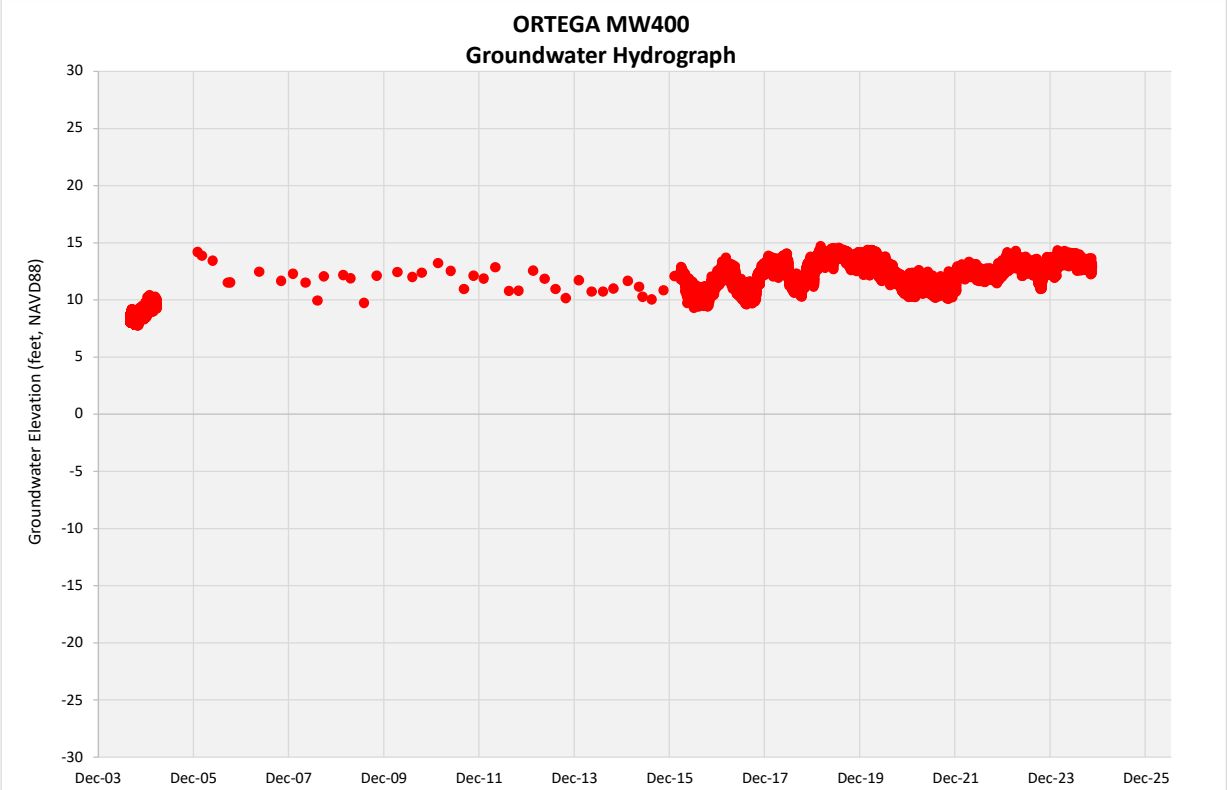

KIRKHAM MW255
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
Oct-03
Oct-05
Oct-07
Oct-09
Oct-11
Oct-13
Oct-15
Oct-17
Oct-19
Oct-21
Oct-23
Sep-25

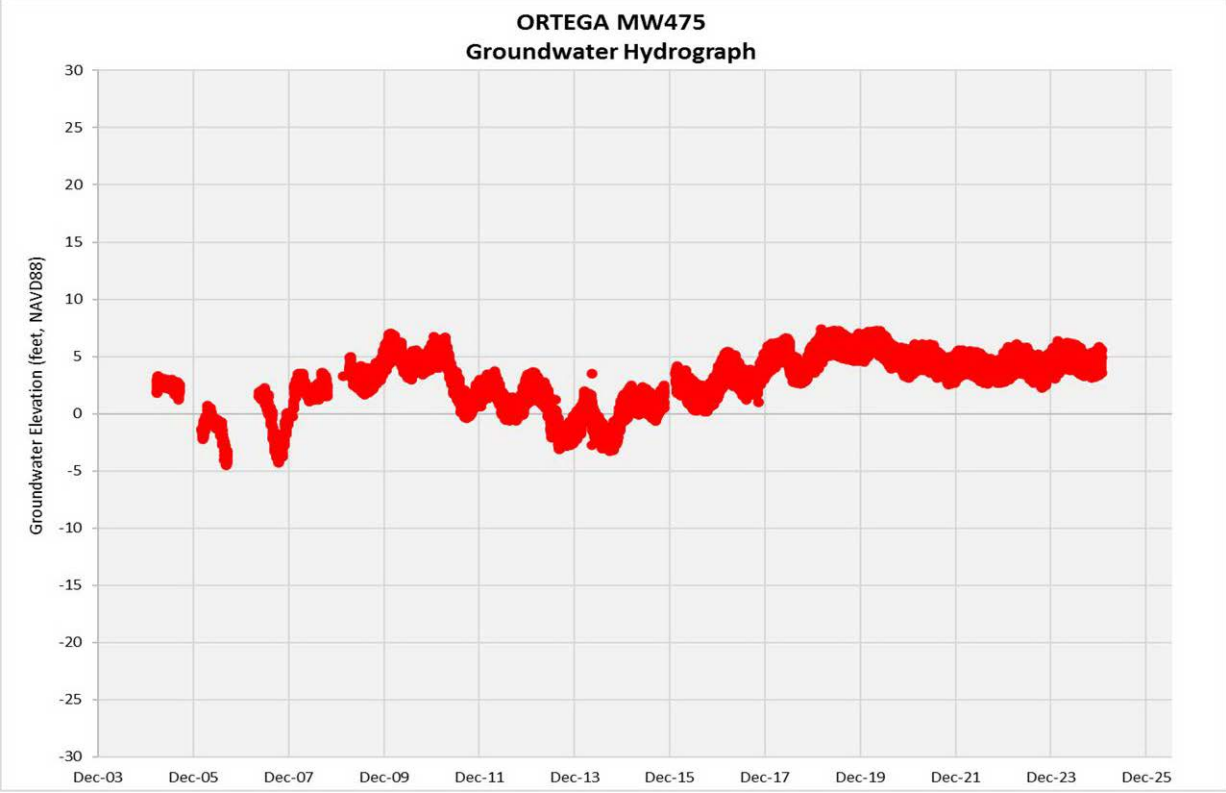

KIRKHAM MW385
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
Oct-03
Oct-05
Oct-07
Oct-09
Oct-11
Oct-13
Oct-15
Oct-17
Oct-19
Oct-21
Oct-23
Sep-25

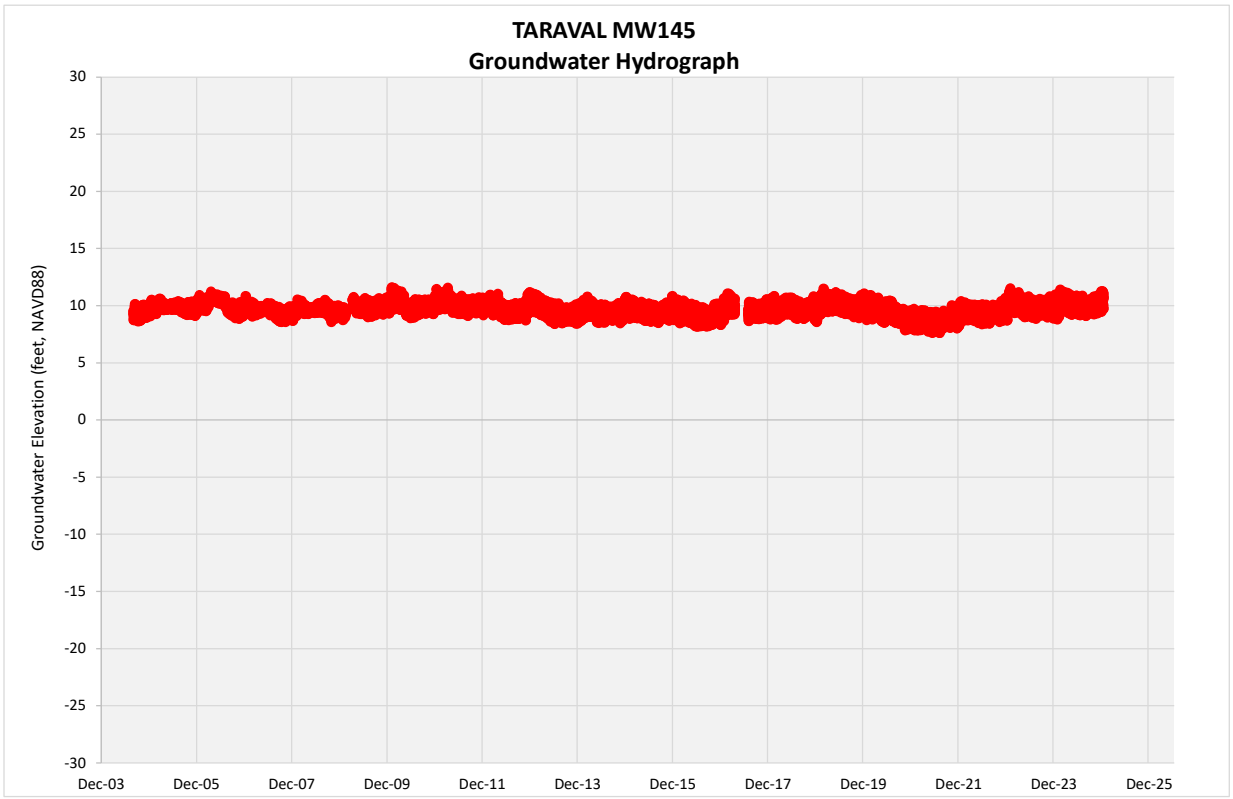

KIRKHAM MW435
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
Oct-03
Oct-05
Oct-07
Oct-09
Oct-11
Oct-13
Oct-15
Oct-17
Oct-19
Oct-21
Oct-23
Sep-25

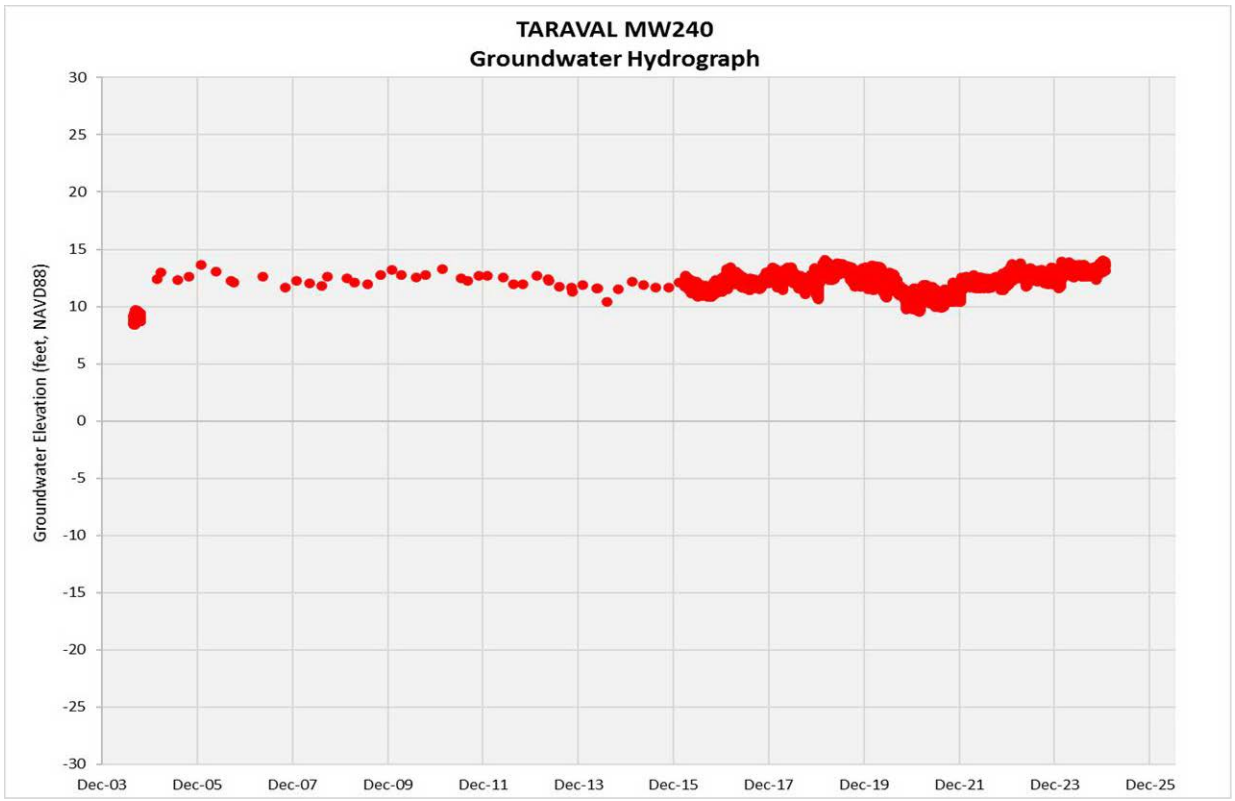

ORTEGA MW120
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
Dec-03
Dec-05
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25

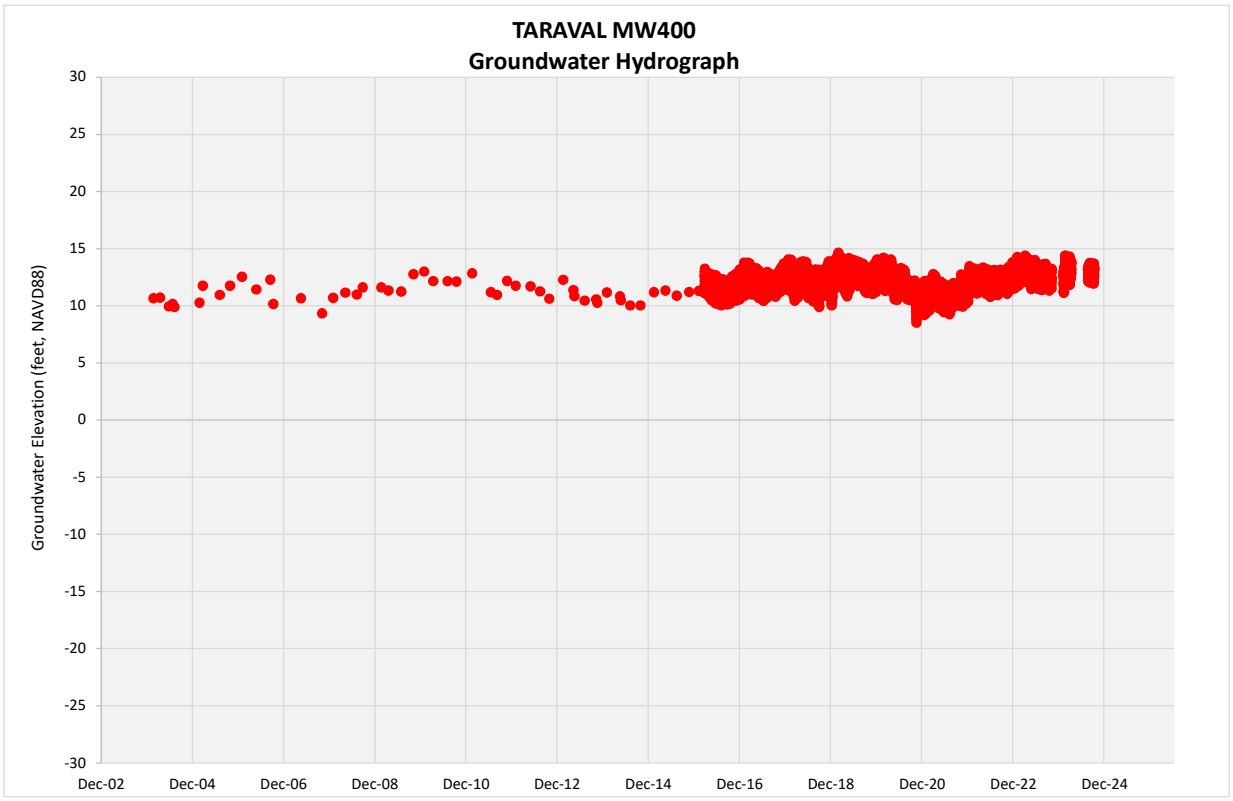

ORTEGA MW265
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
Dec-03
Dec-05
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25

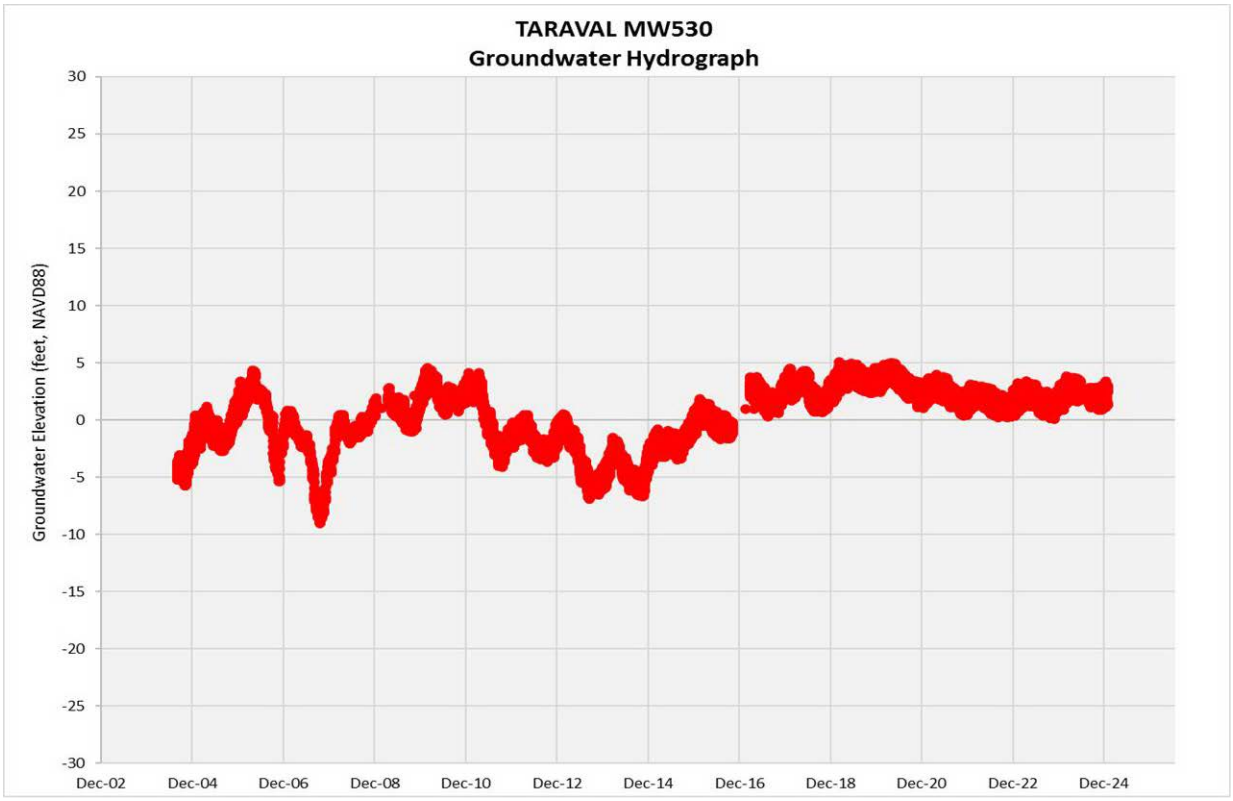

ORTEGA MW400
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
Dec-03
Dec-05
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25


ORTEGA MW475
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
Dec-03
Dec-05
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25


TARAVAL MW145
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
Dec-03
Dec-05
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25


TARAVAL MW240
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
Dec-03
Dec-05
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25


TARAVAL MW400
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
Dec-02
Dec-04
Dec-06
Dec-08
Dec-10
Dec-12
Dec-14
Dec-16
Dec-18
Dec-20
Dec-22
Dec-24


TARAVAL MW530
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
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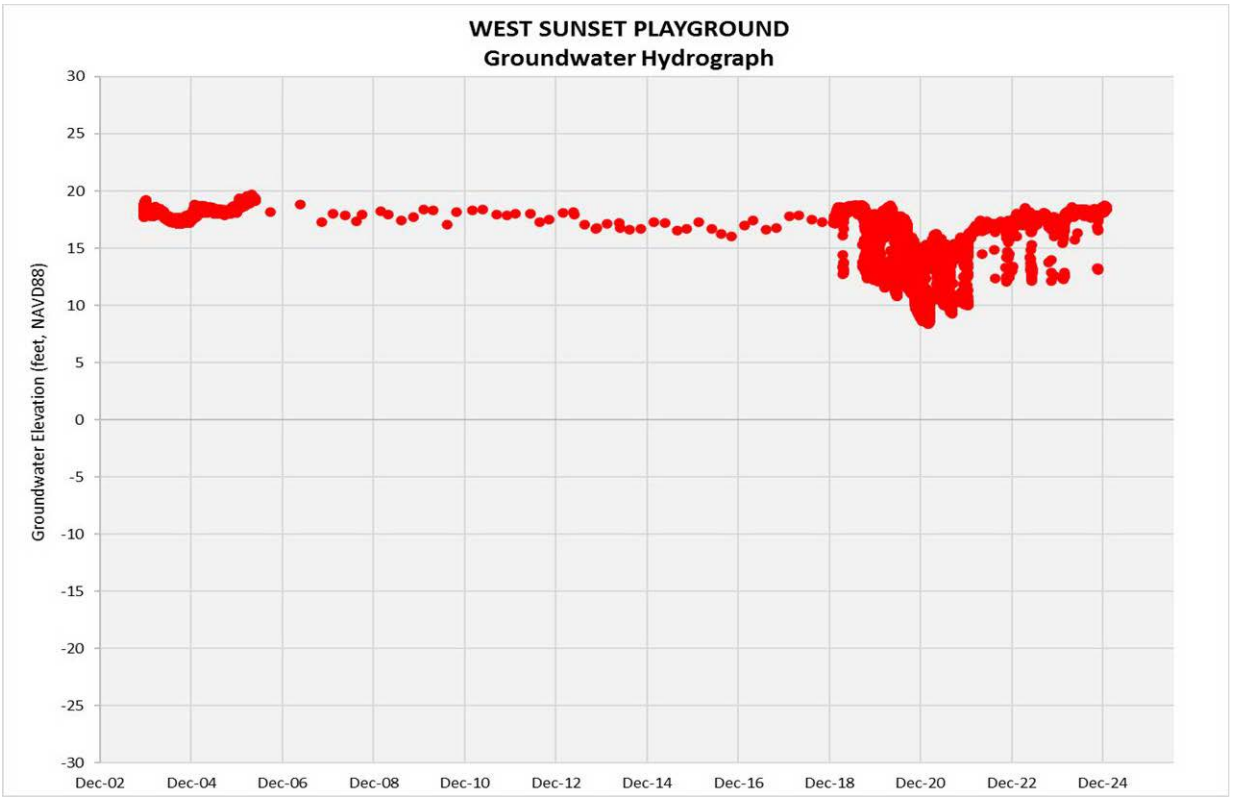
WEST SUNSET PLAYGROUND
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
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5
0
-5
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-20
-25
-30
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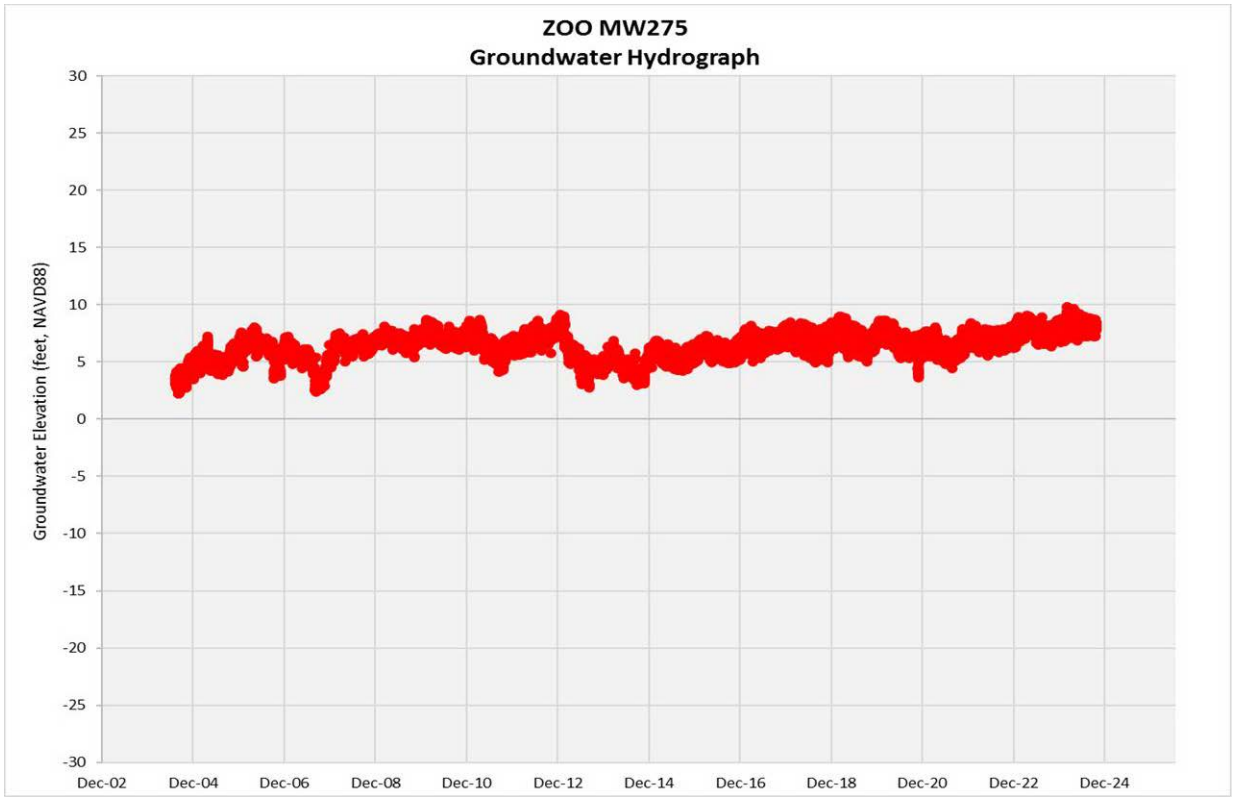
Dec-24


ZOO MW275
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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25
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15
10
5
0
-5
-10
-15
-20
-25
-30
Dec-02
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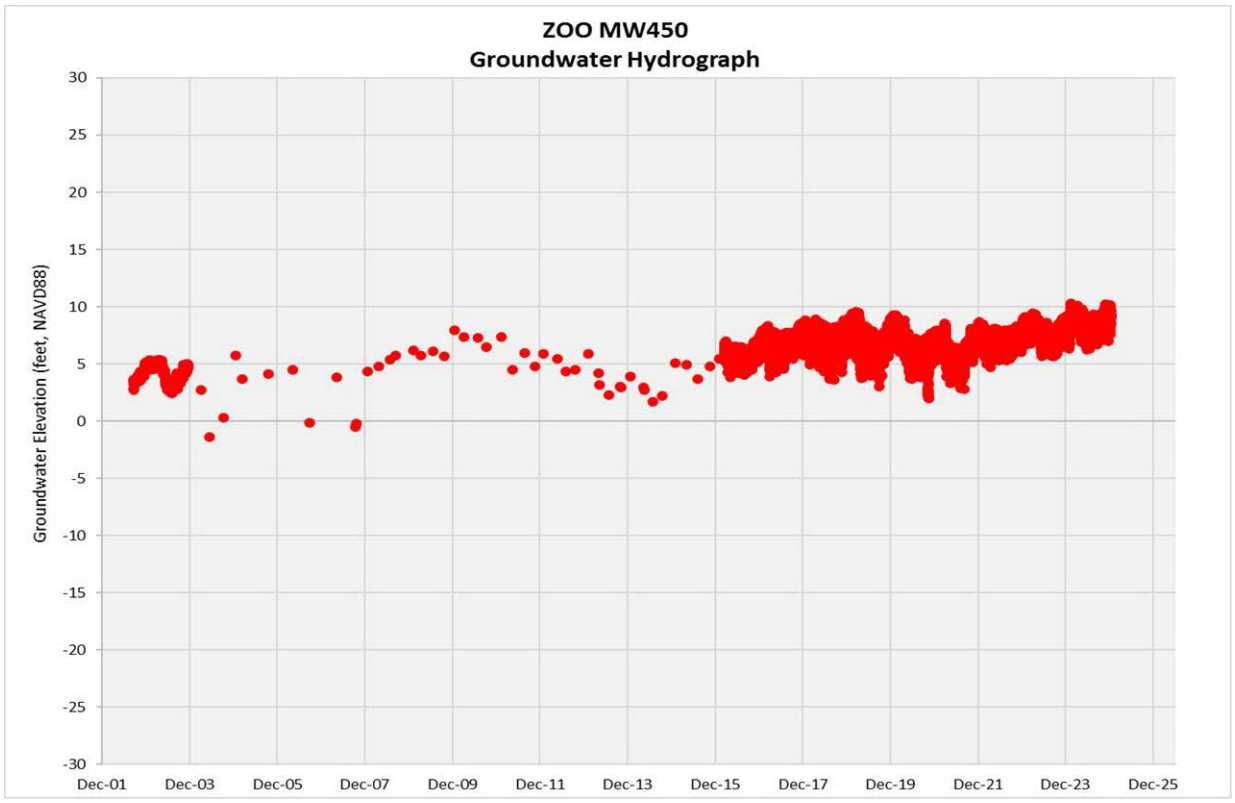
Dec-24


ZOO MW450
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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25
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15
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5
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-5
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-20
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-30
Dec-01
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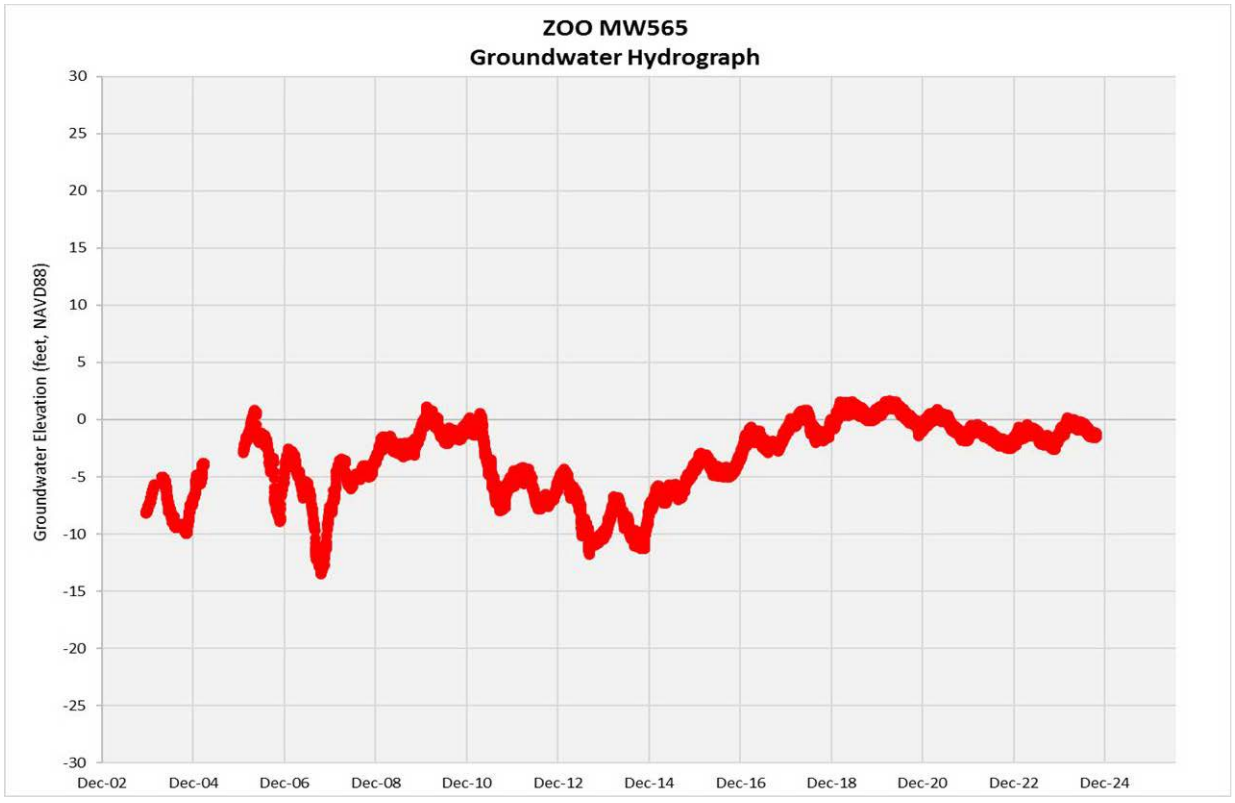
Dec-25


ZOO MW565
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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25
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15
10
5
0
-5
-10
-15
-20
-25
-30
Dec-02
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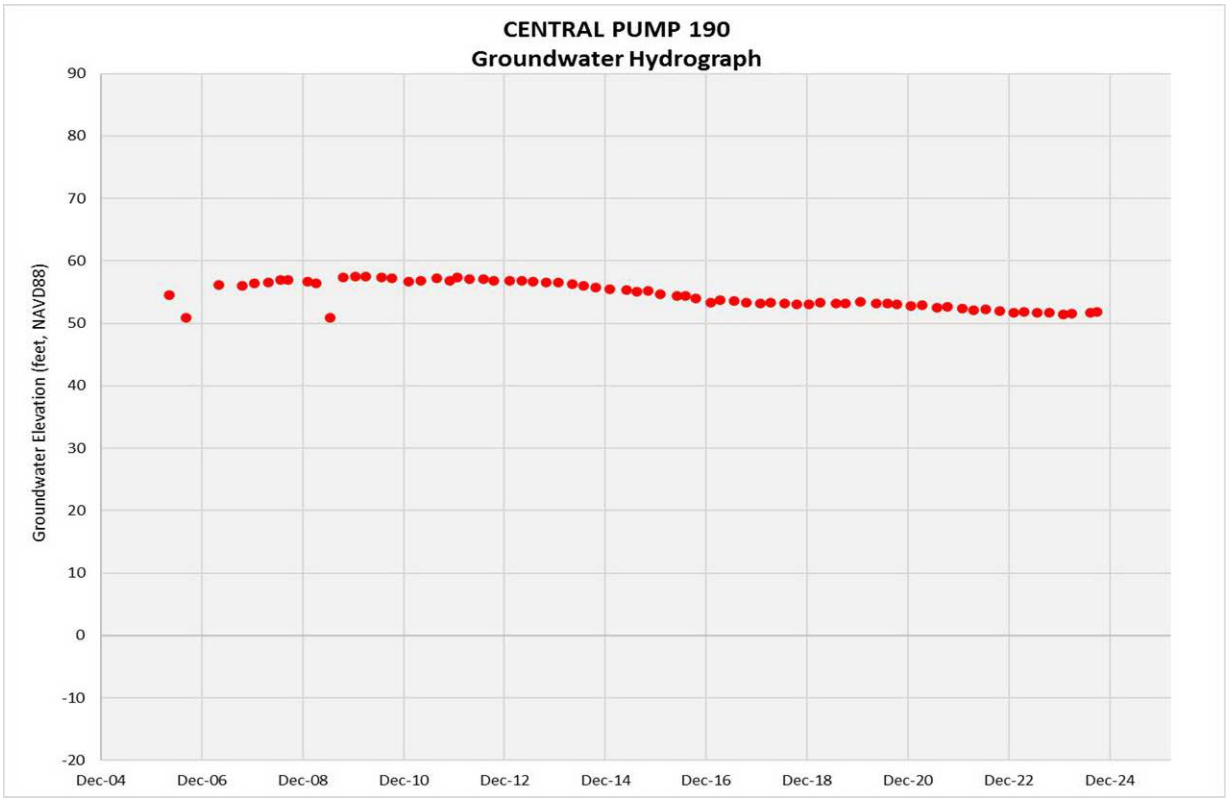
Dec-24


CENTRAL PUMP 190
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
90
80
70
60
50
40
30
20
10
0
-10
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Dec-08
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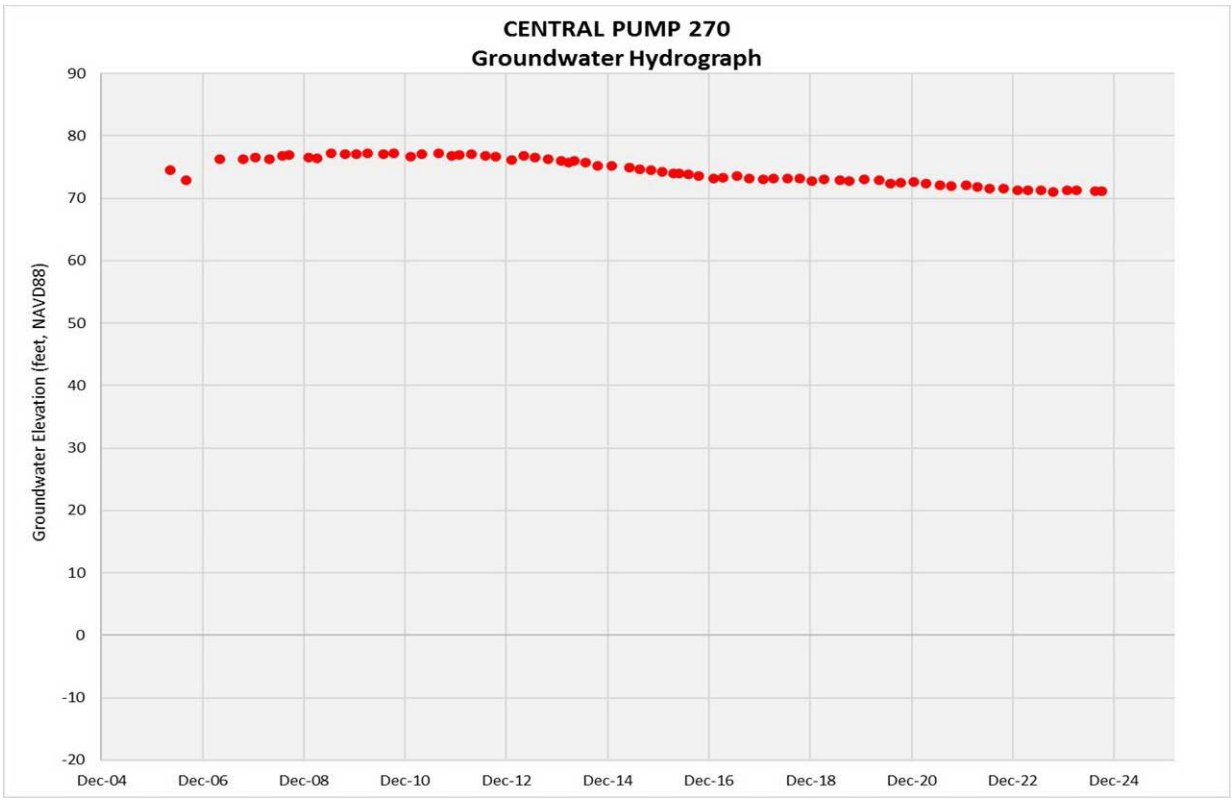
Dec-24


CENTRAL PUMP 270
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
90
80
70
60
50
40
30
20
10
0
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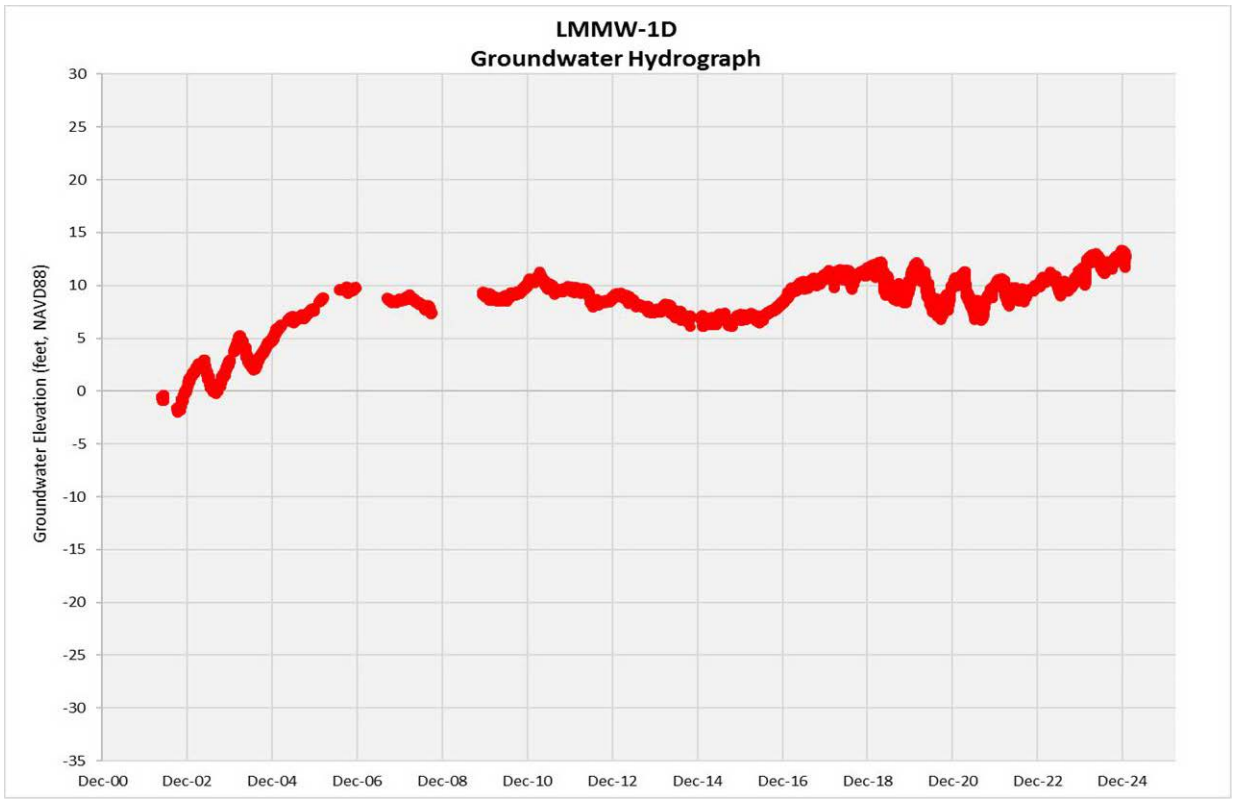
LMMW-1D
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
Dec-00
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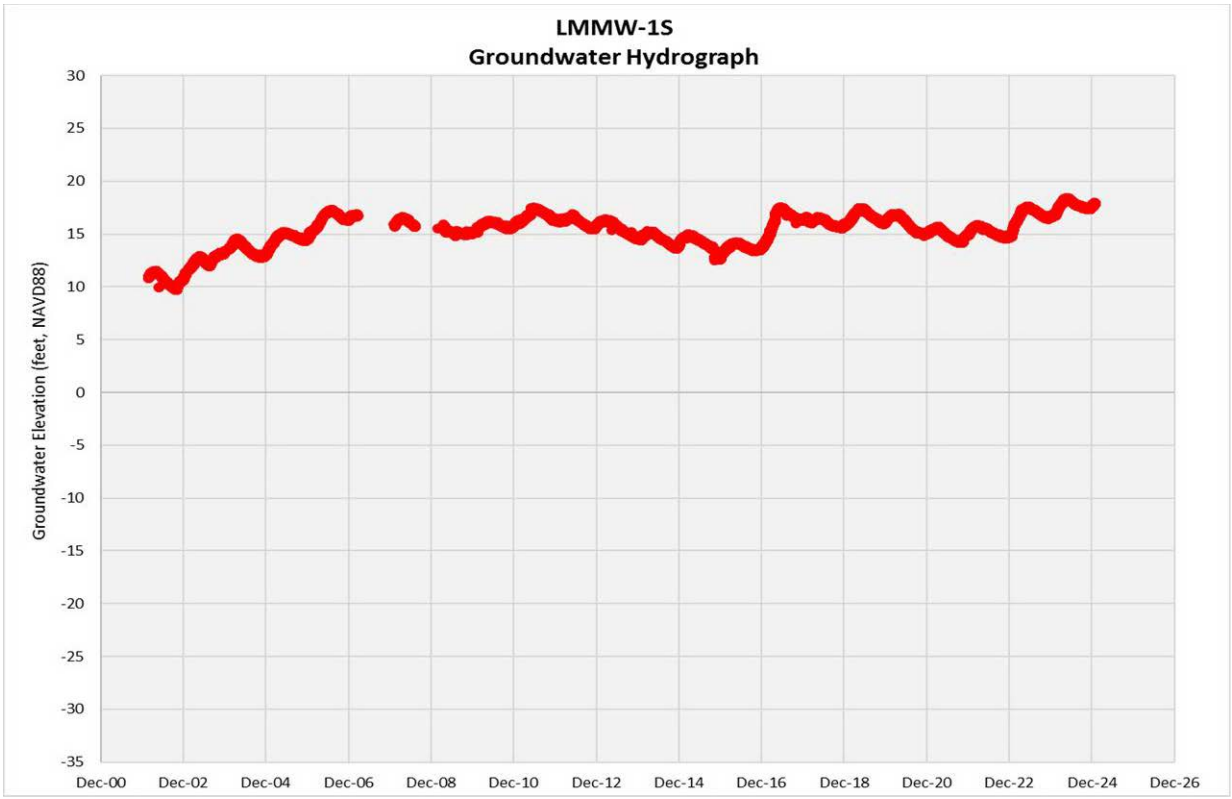
Dec-24


LMMW-1S
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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20
15
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5
0
-5
-10
-15
-20
-25
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-35
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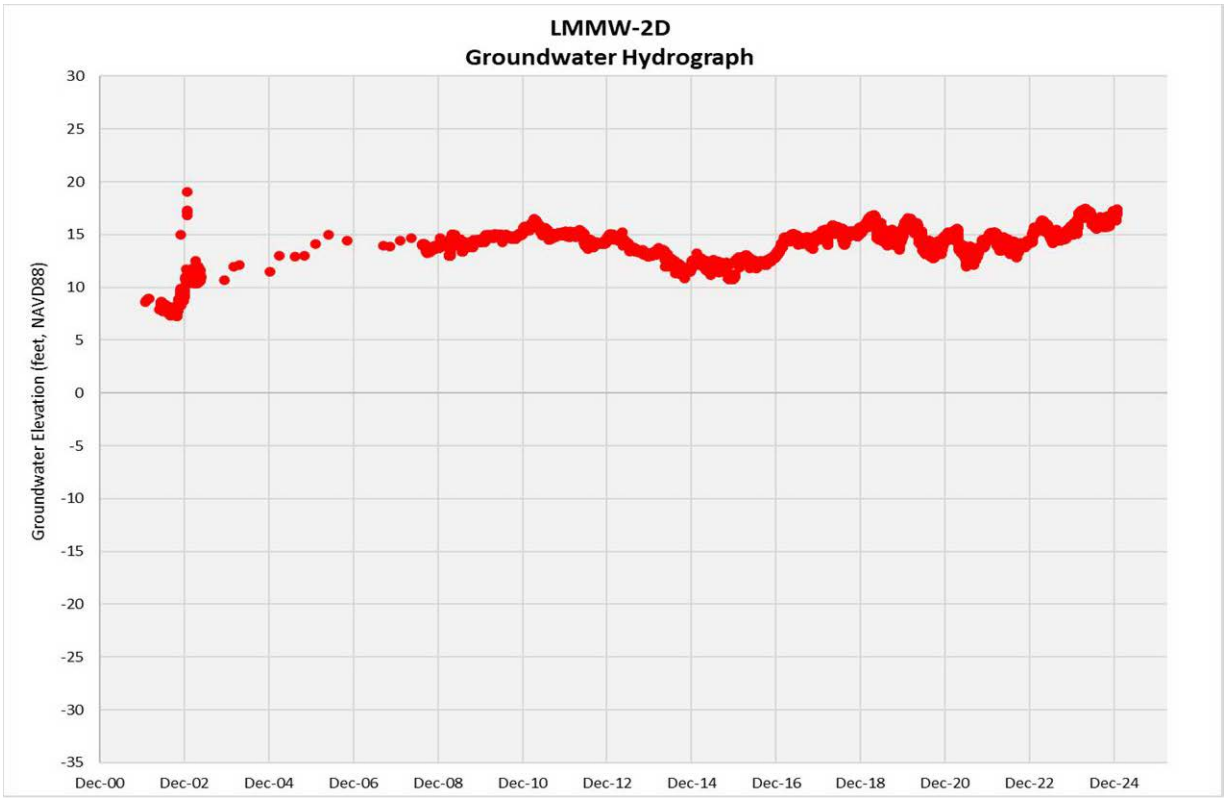
Dec-26


LMMW-2D
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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25
20
15
10
5
0
-5
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-15
-20
-25
-30
-35
Dec-00
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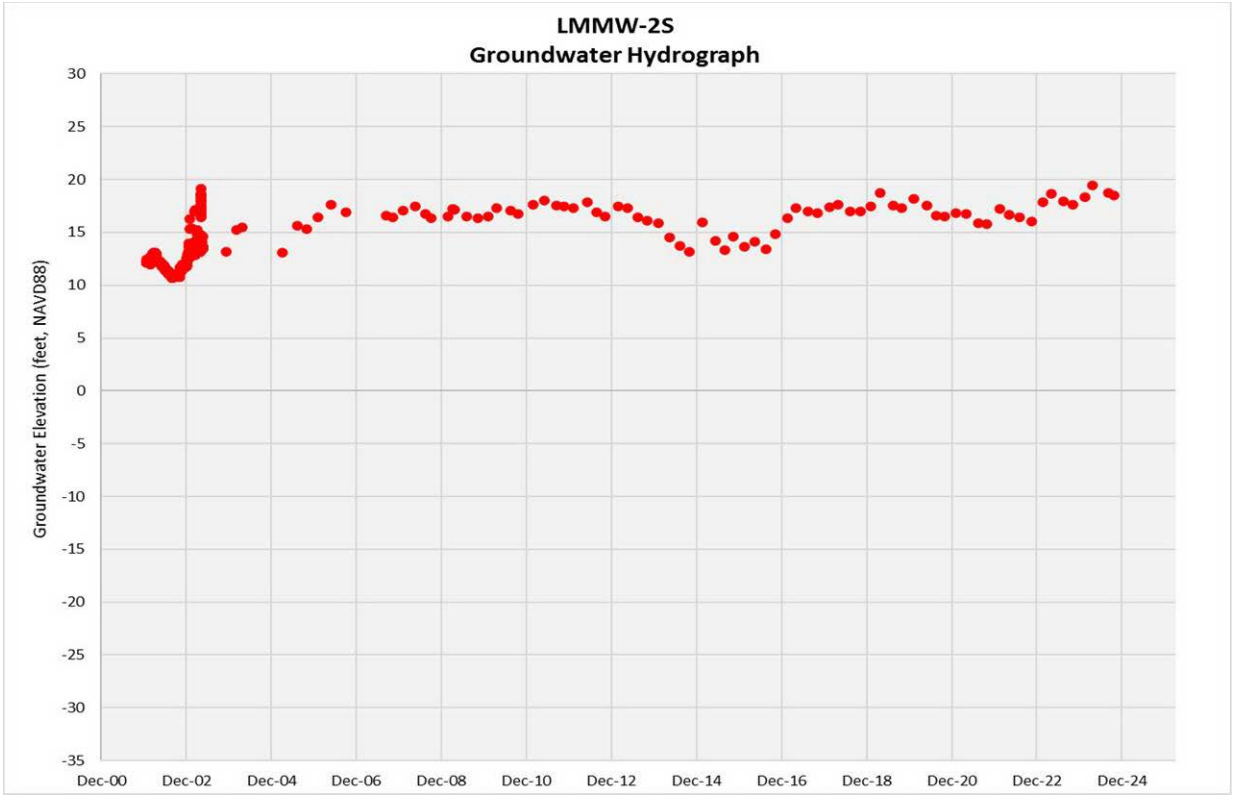
LMMW-2S
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
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-15
-20
-25
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-35
Dec-00
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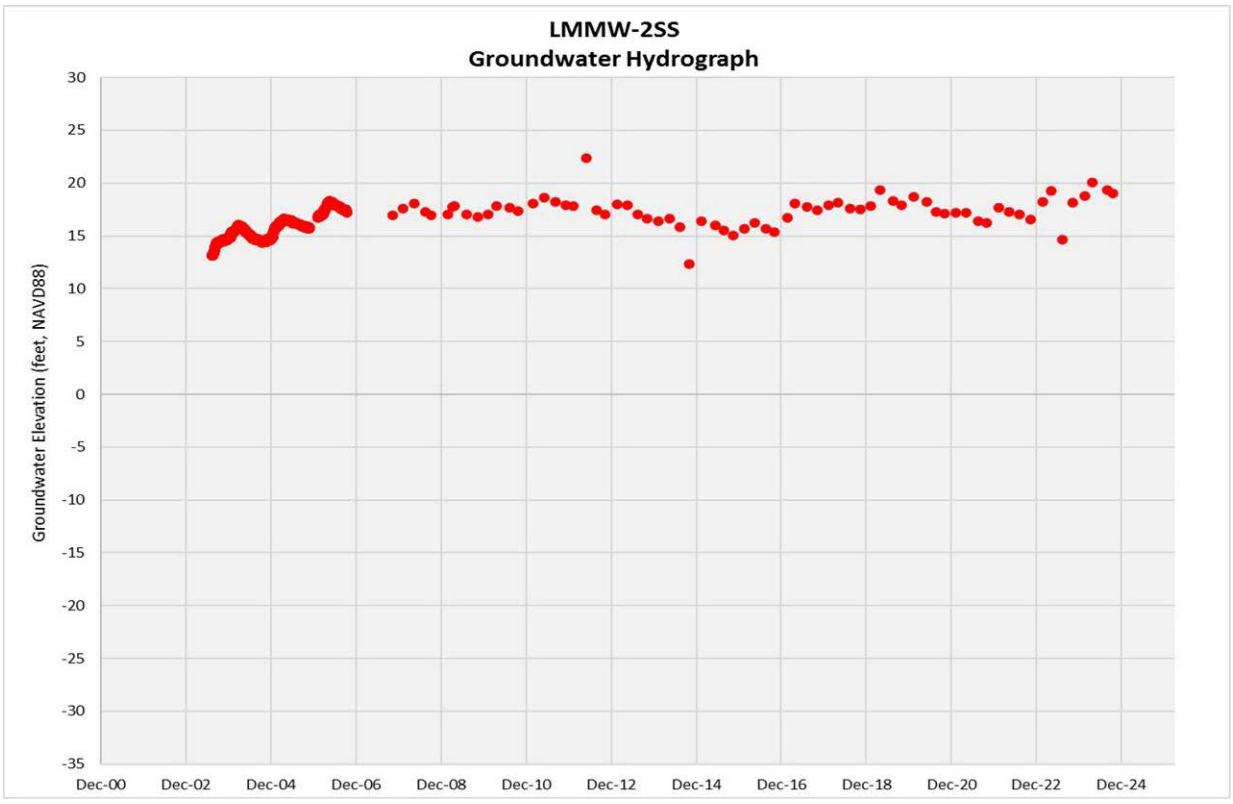
Dec-24


LMMW-2SS
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
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-15
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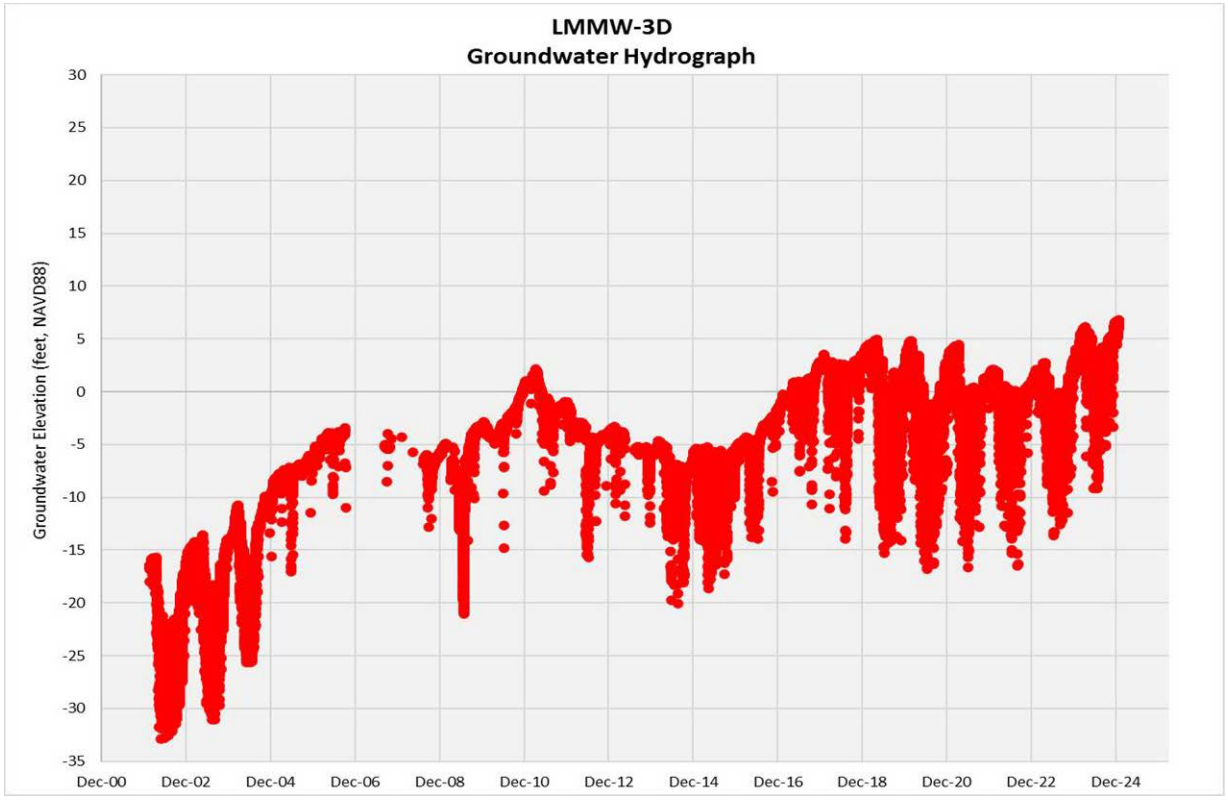
LMMW-3D
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
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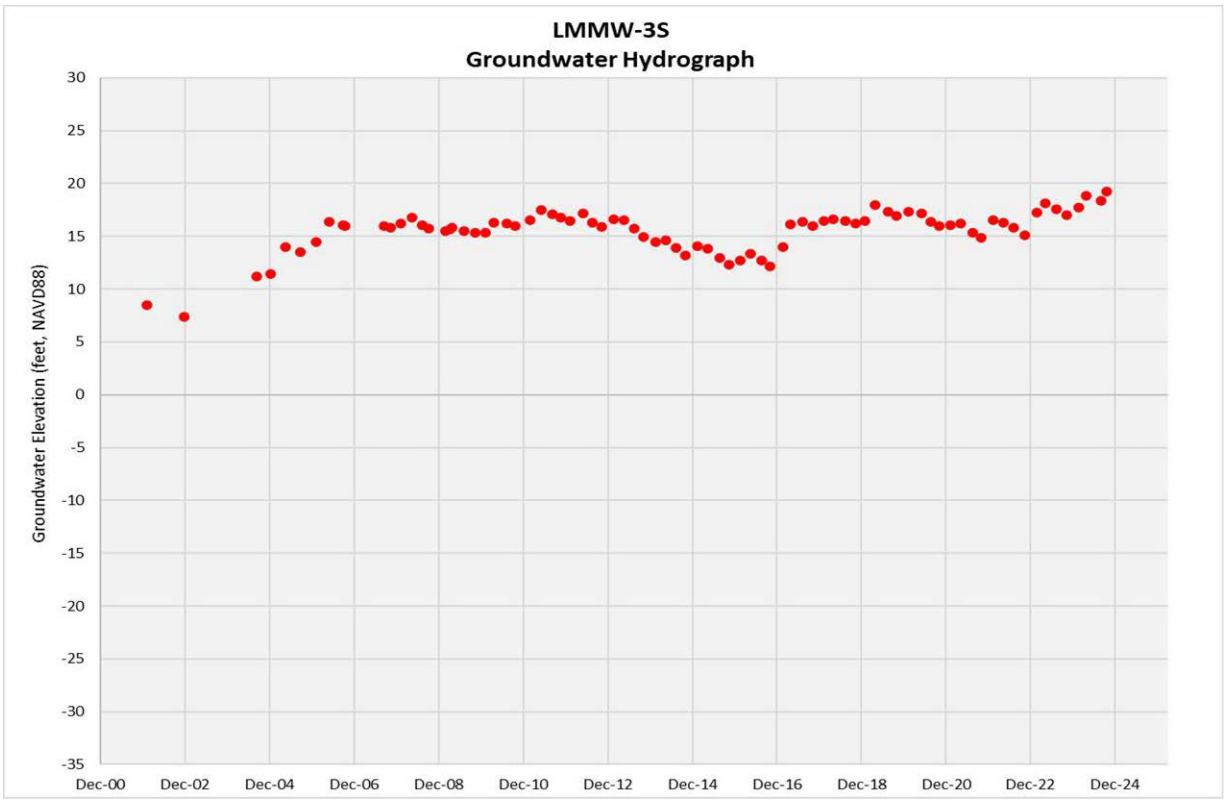
LMMW-3S
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
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-15
-20
-25
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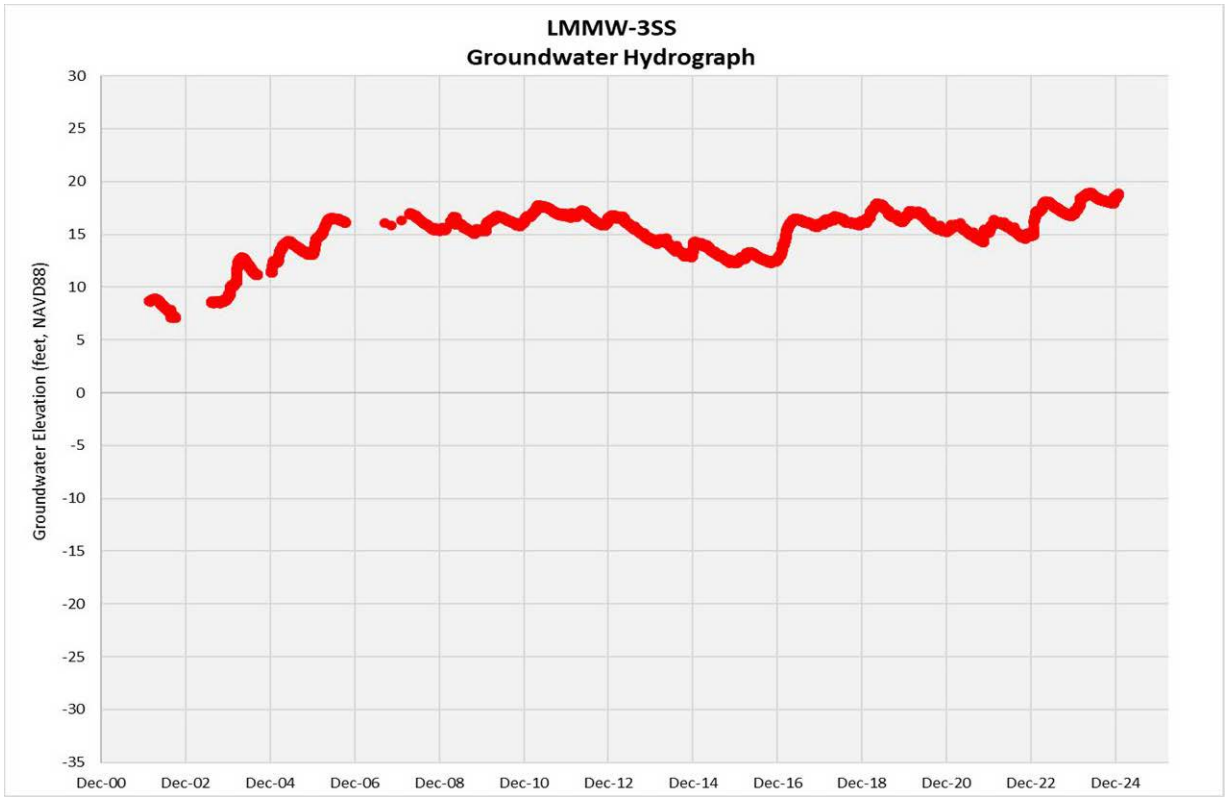
Dec-24


LMMW-3SS
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
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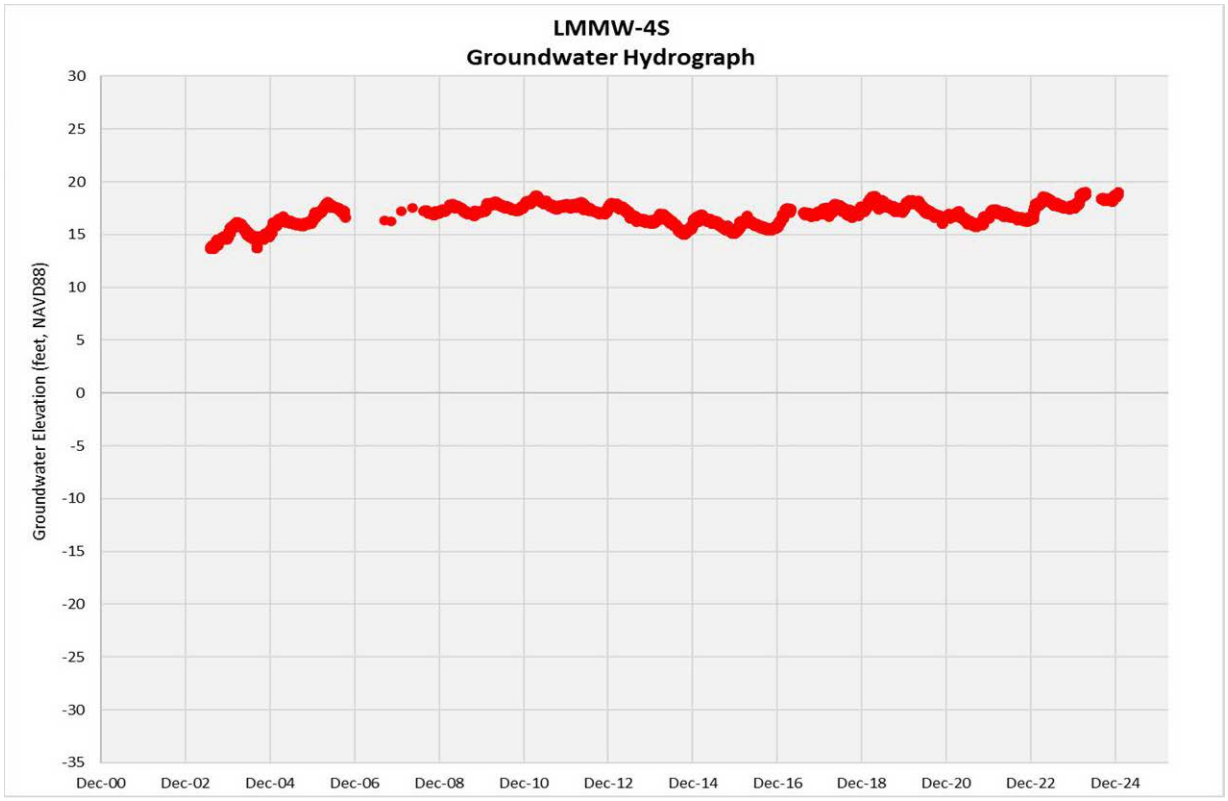
Dec-24


LMMW-4S
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
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10
5
0
-5
-10
-15
-20
-25
-30
-35
Dec-00
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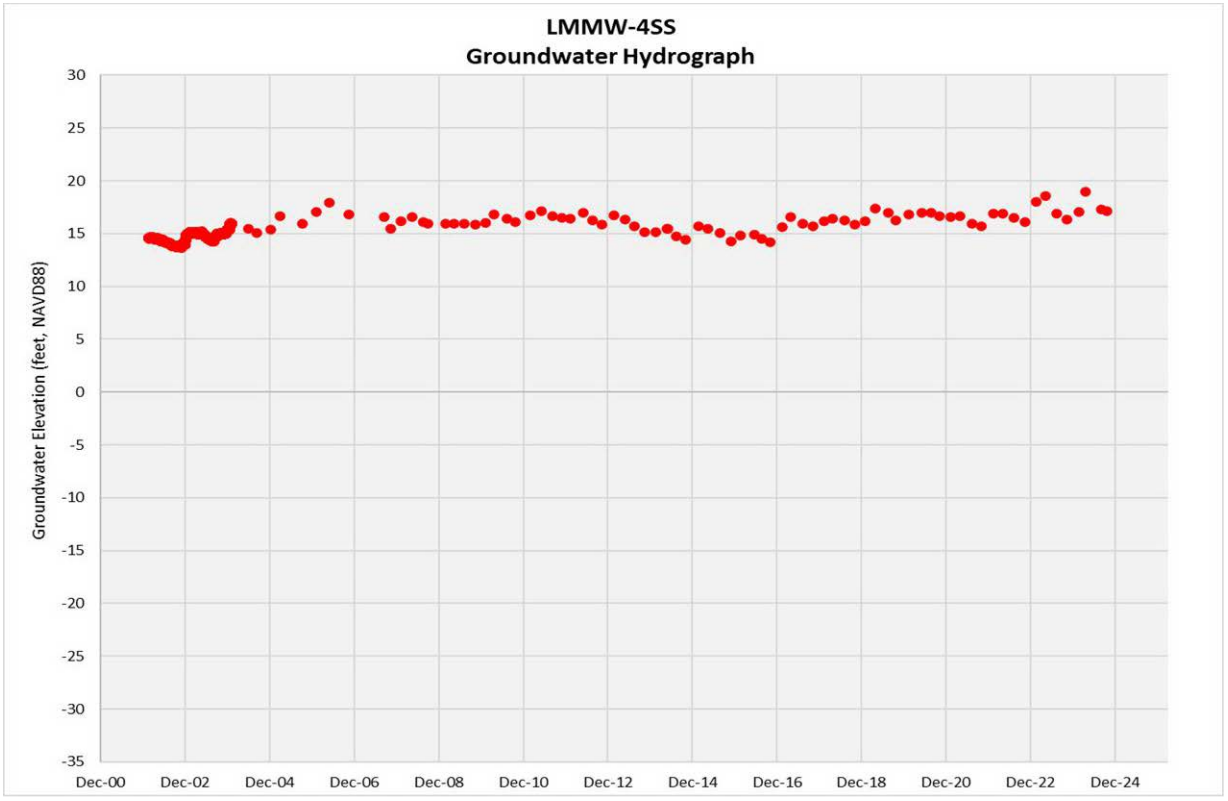
Dec-24


LMMW-4SS
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
Dec-00
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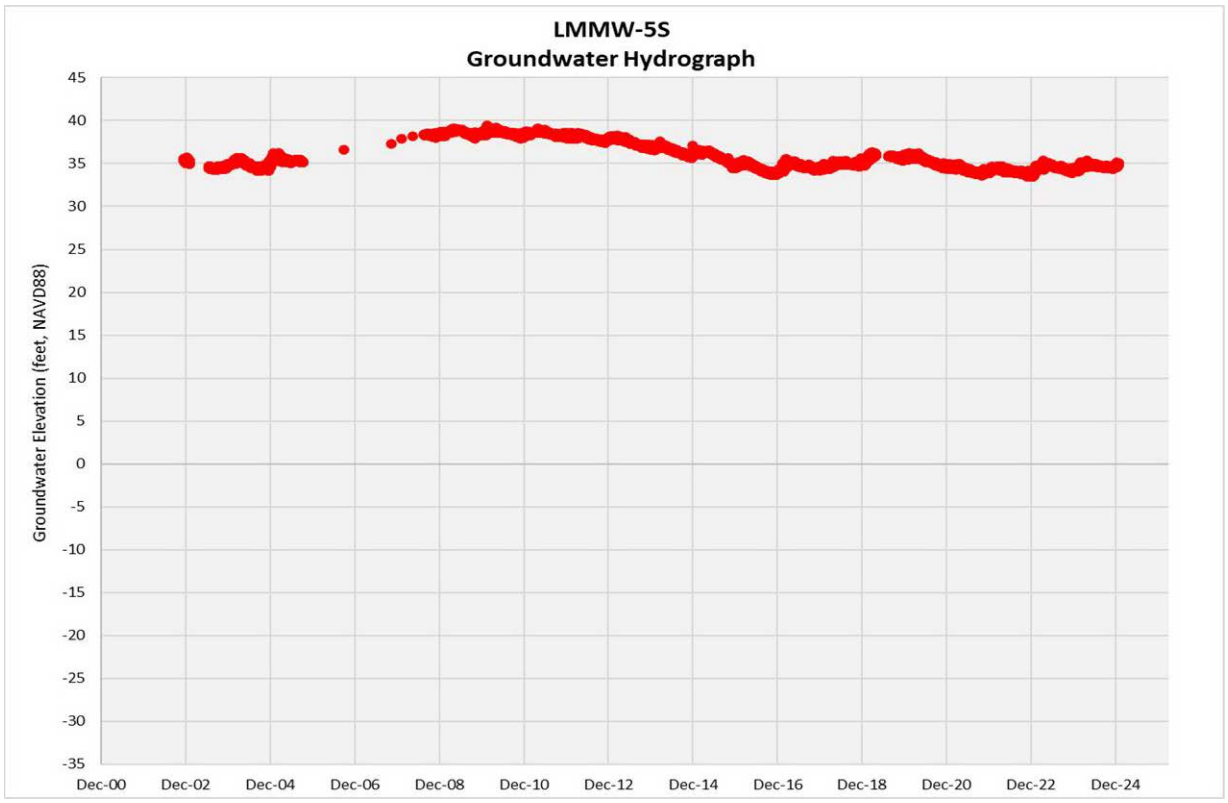
LMMW-5S
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
45
40
35
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
Dec-00
Dec-02
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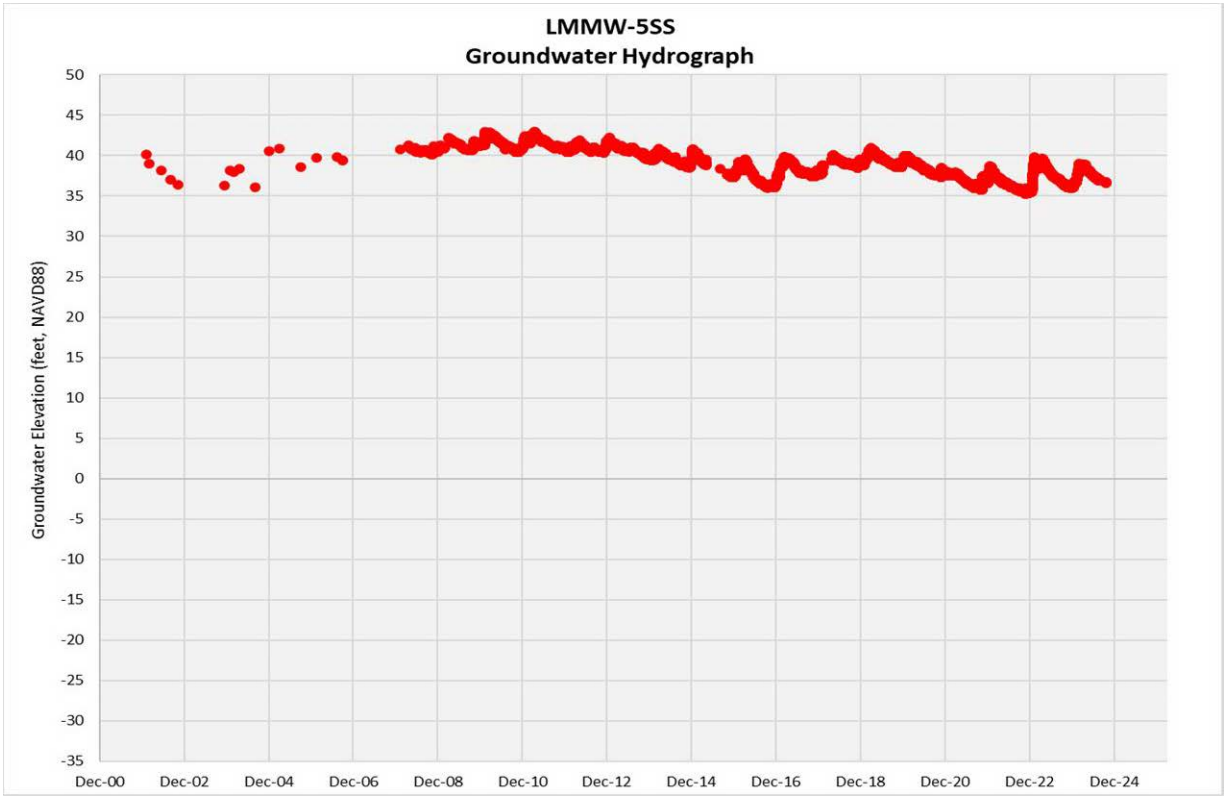
Dec-24


LMMW-5SS
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
50
45
40
35
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
Dec-00
Dec-02
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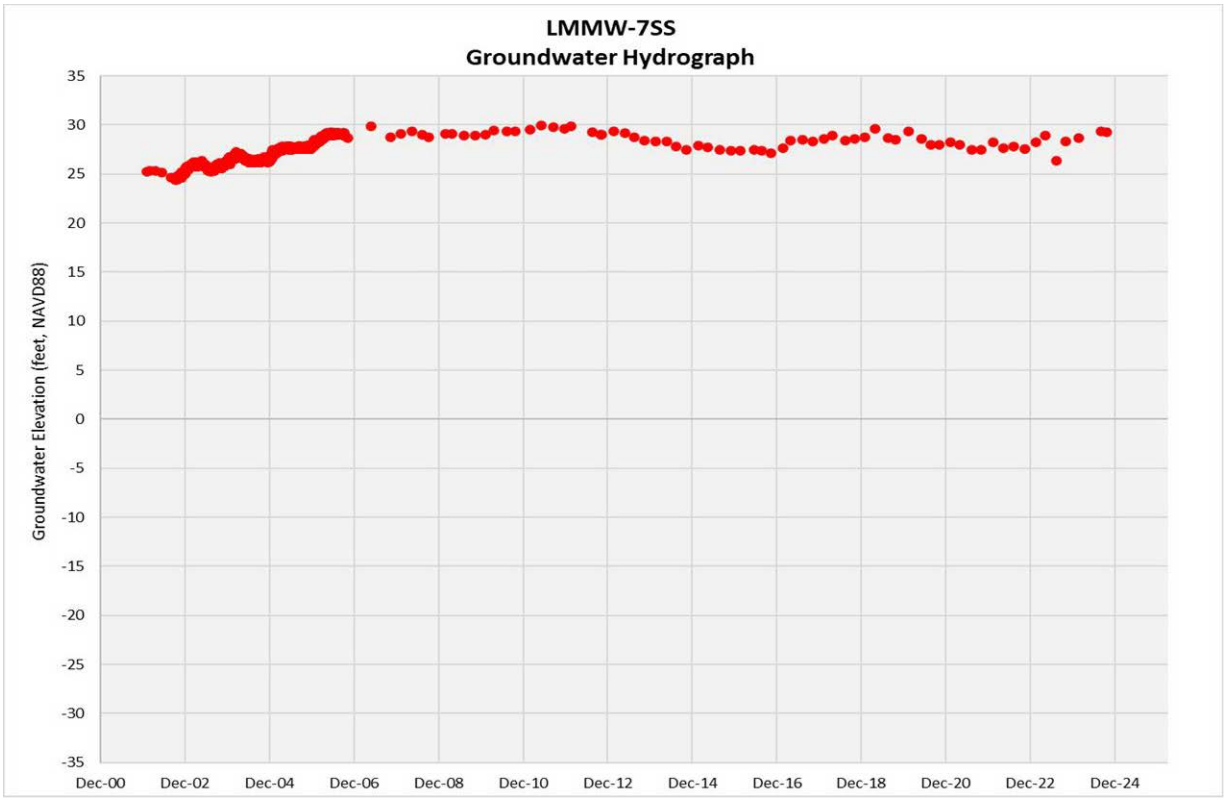
Dec-24


LMMW-7SS
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
35
30
25
20
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10
5
0
-5
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-15
-20
-25
-30
-35
Dec-00
Dec-02
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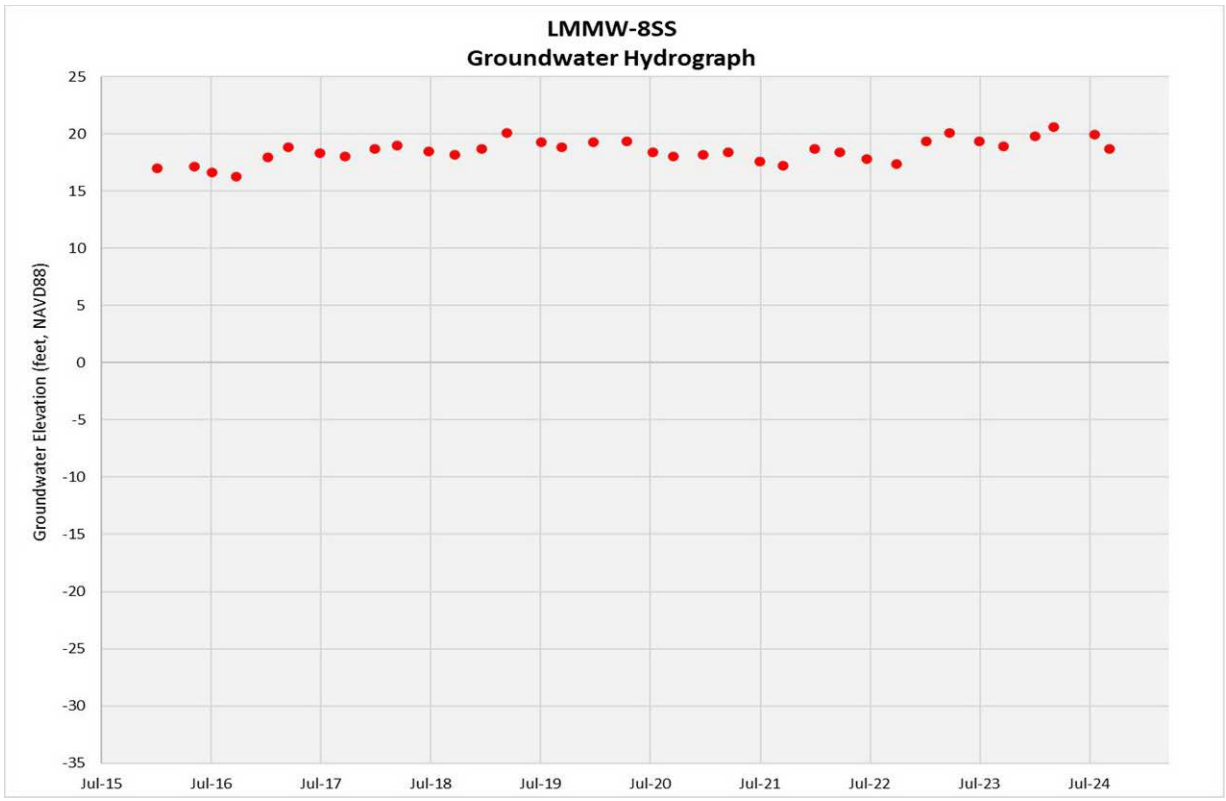
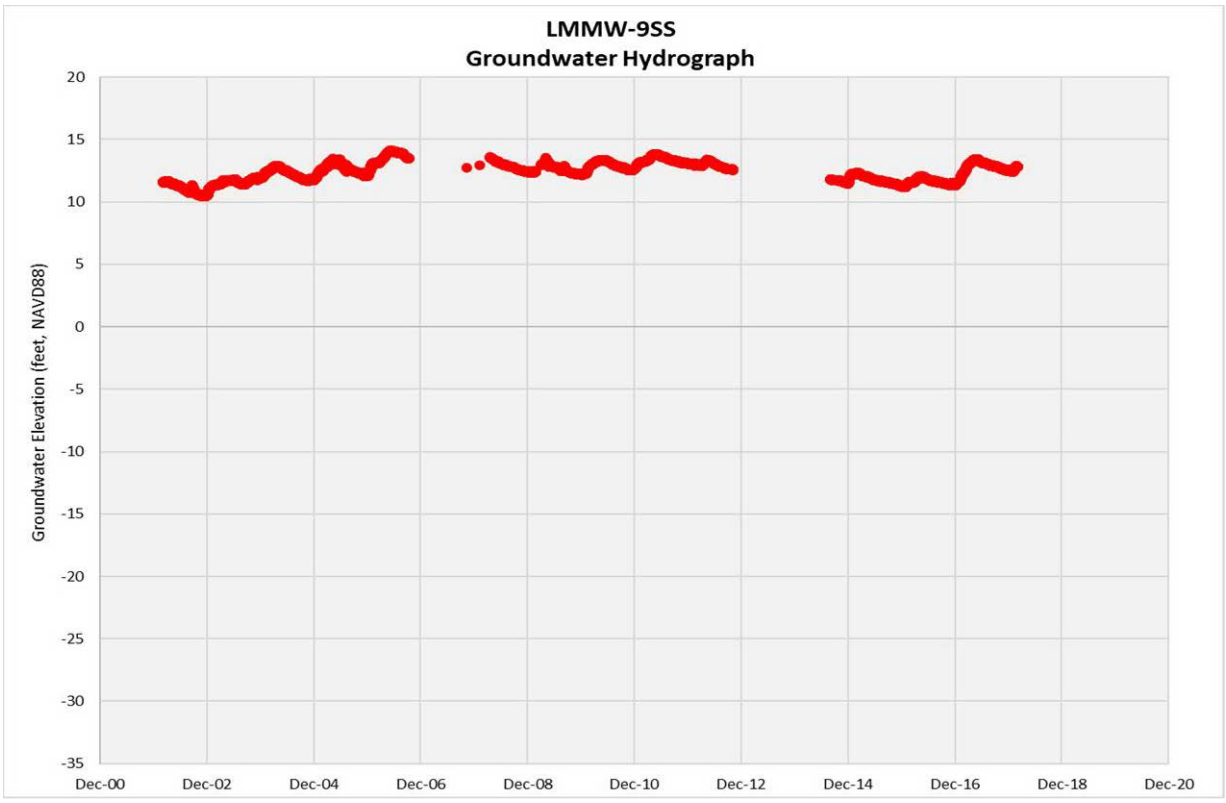
Dec-24


LMMW-8SS
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
Jul-15
Jul-16
Jul-17
Jul-18
Jul-19
Jul-20
Jul-21
Jul-22
Jul-23
Jul-24


LMMW-9SS
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
Dec-00
Dec-02
Dec-04
Dec-06
Dec-08
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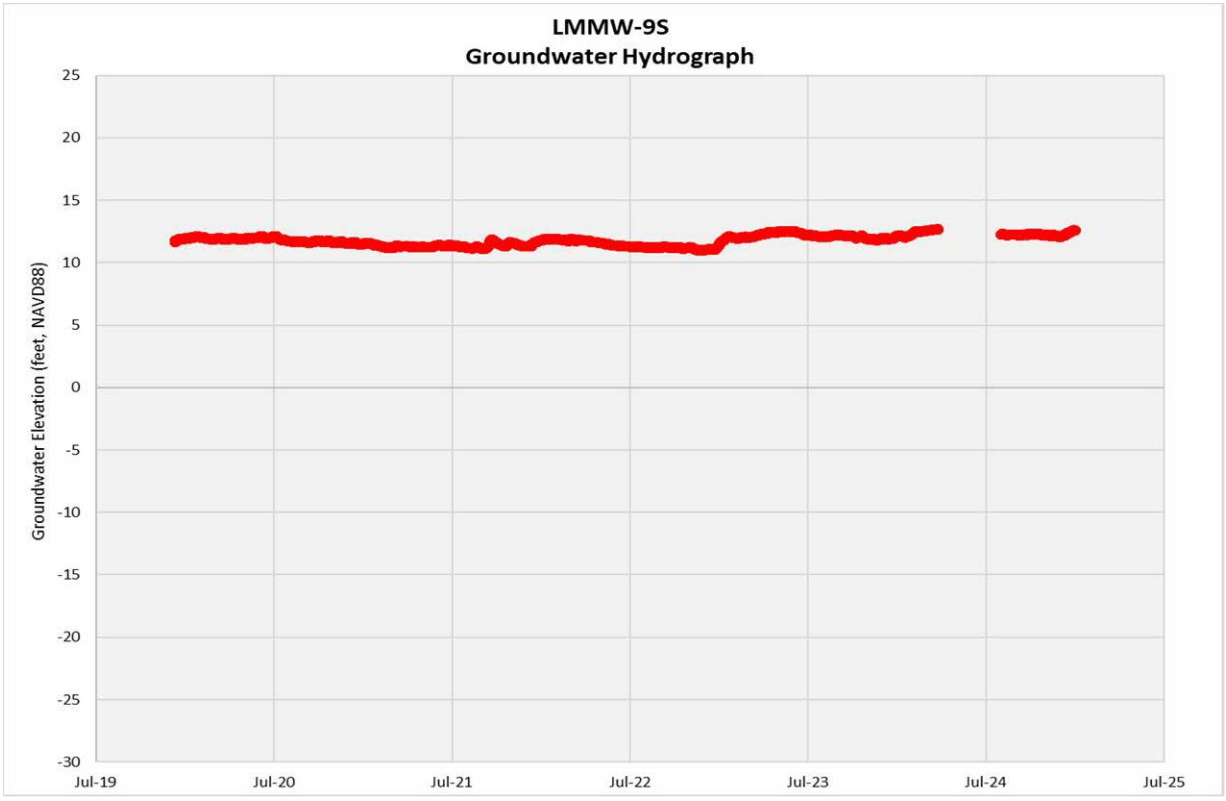
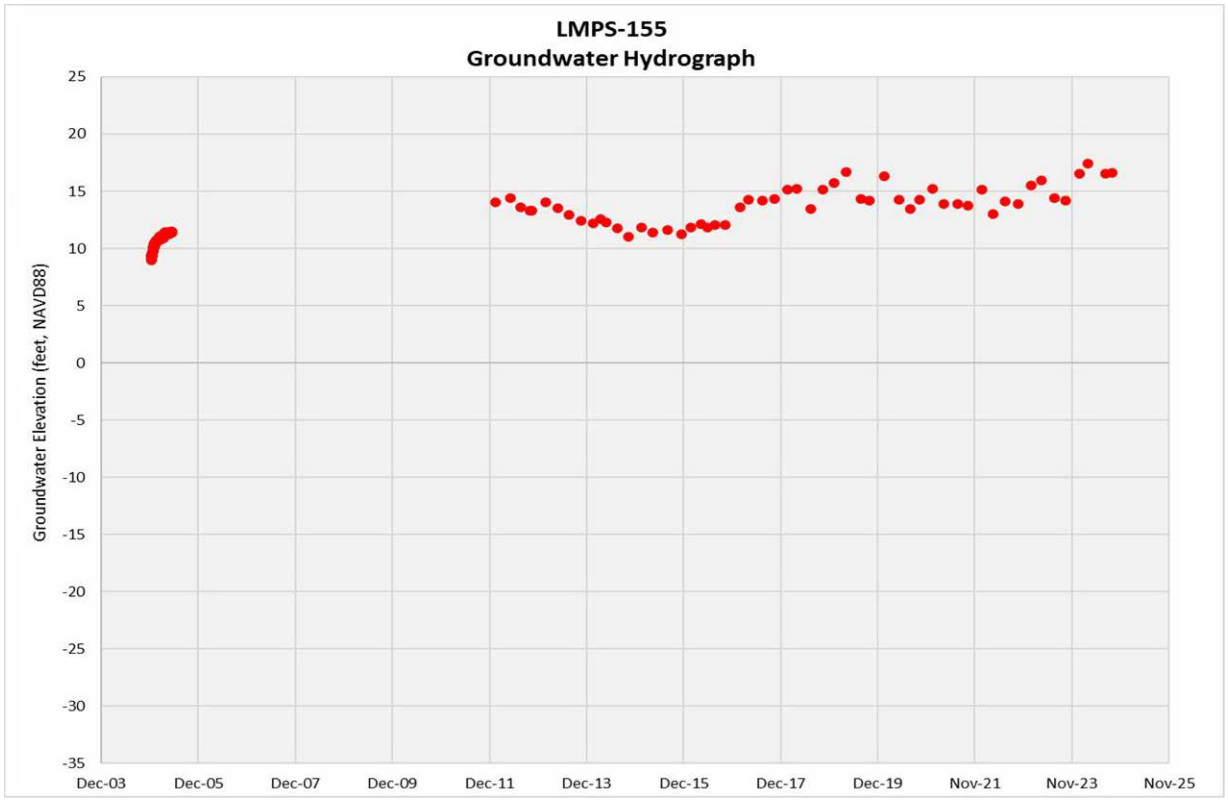
Dec-18
Dec-20


LMMW-9S
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
Jul-19
Jul-20
Jul-21
Jul-22
Jul-23
Jul-24
Jul-25


LMPS-155
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
Dec-03
Dec-05
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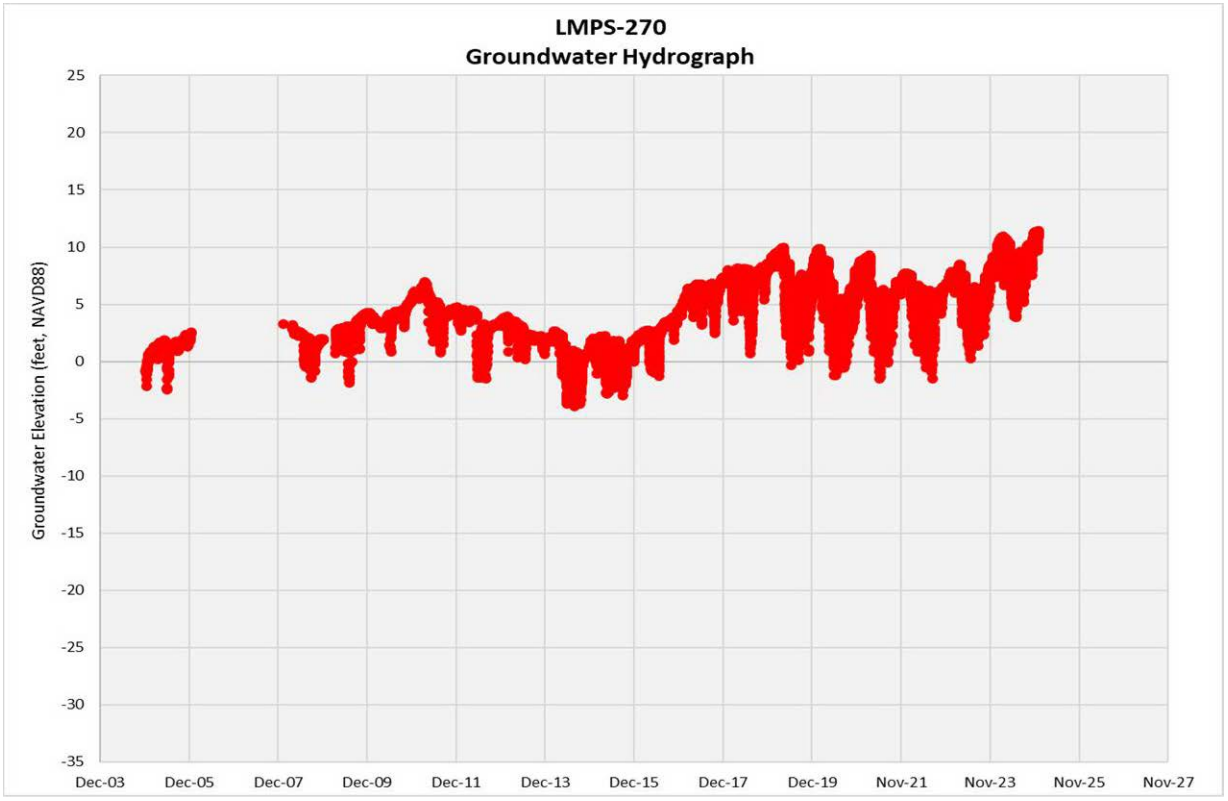
Dec-17
Dec-19
Nov-21
Nov-23
Nov-25


LMPS-270
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
25
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10
5
0
-5
-10
-15
-20
-25
-30
-35
Dec-03
Dec-05
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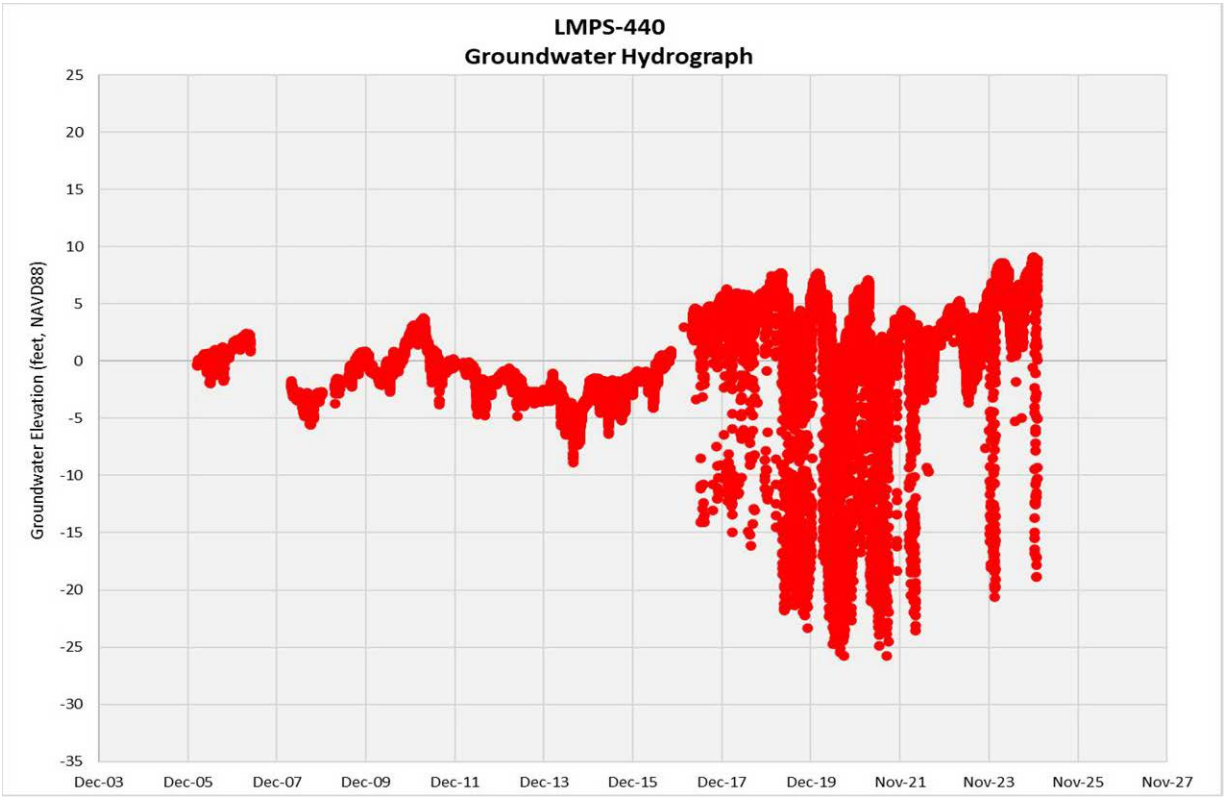
Nov-23
Nov-25
Nov-27


LMPS-440
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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20
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5
0
-5
-10
-15
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-25
-30
-35
Dec-03
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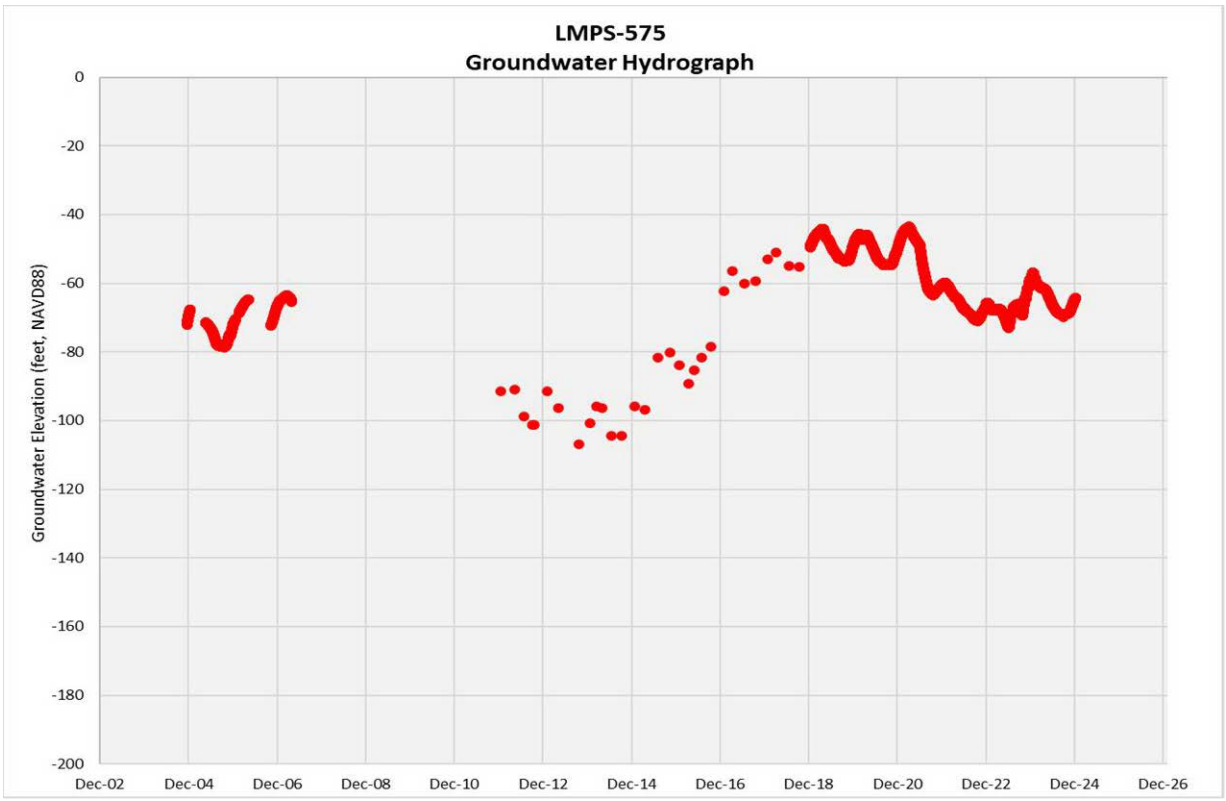
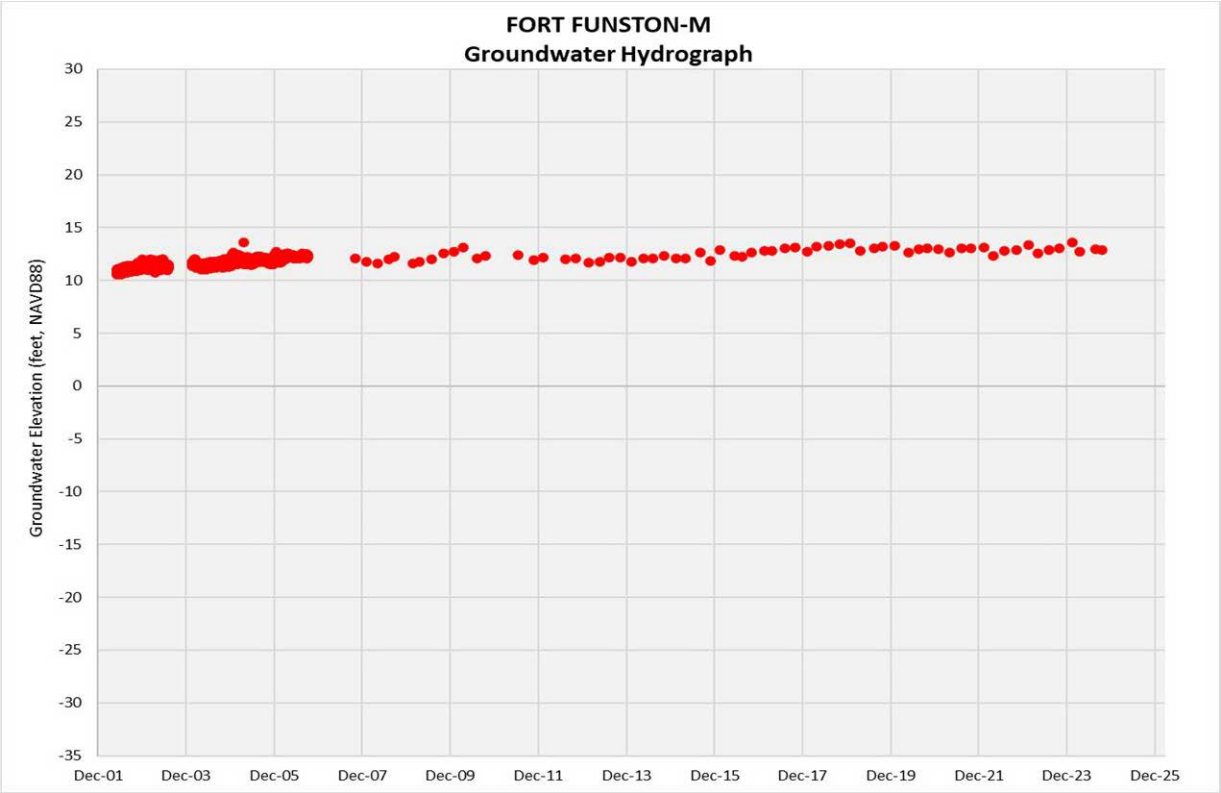
Nov-23
Nov-25
Nov-27


LMPS-575
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
Dec-02
Dec-04
Dec-06
Dec-08
Dec-10
Dec-12
Dec-14
Dec-16
Dec-18
Dec-20
Dec-22
Dec-24
Dec-26


FORT FUNSTON-M
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
Dec-01
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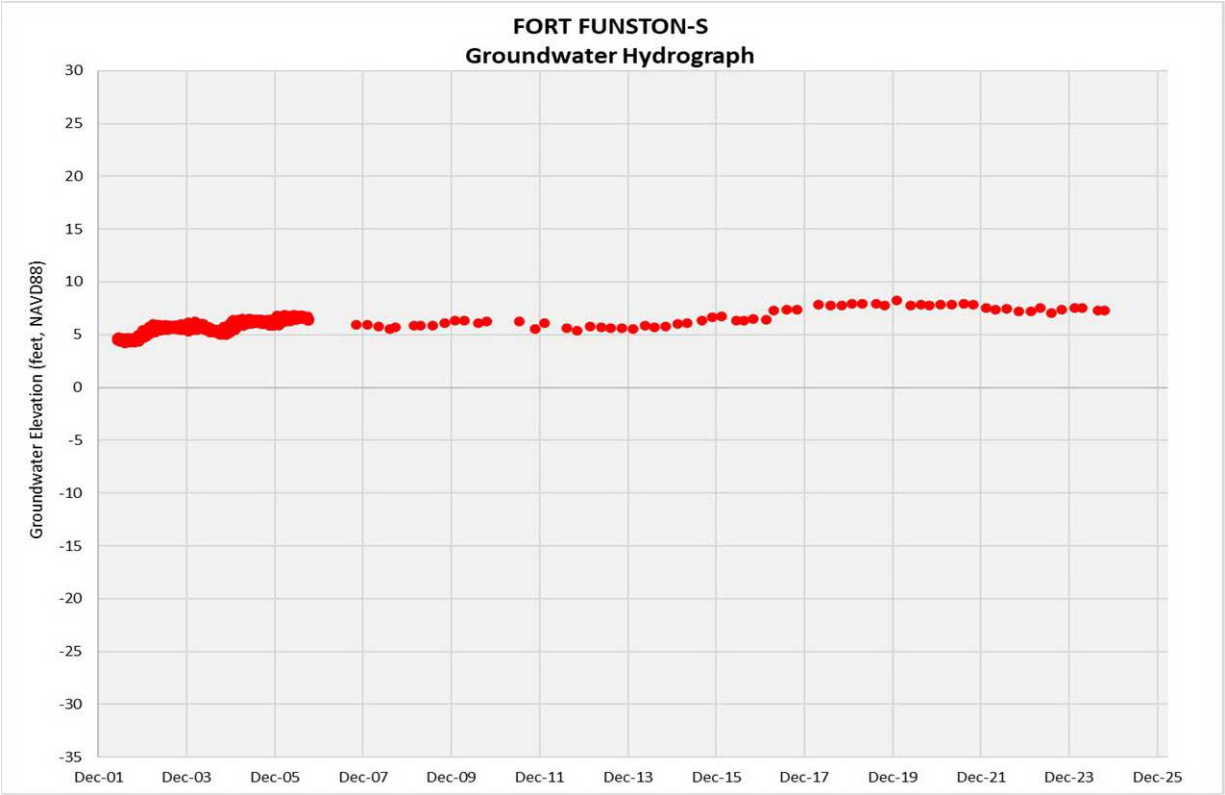
Dec-25


FORT FUNSTON-S
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
Dec-01
Dec-03
Dec-05
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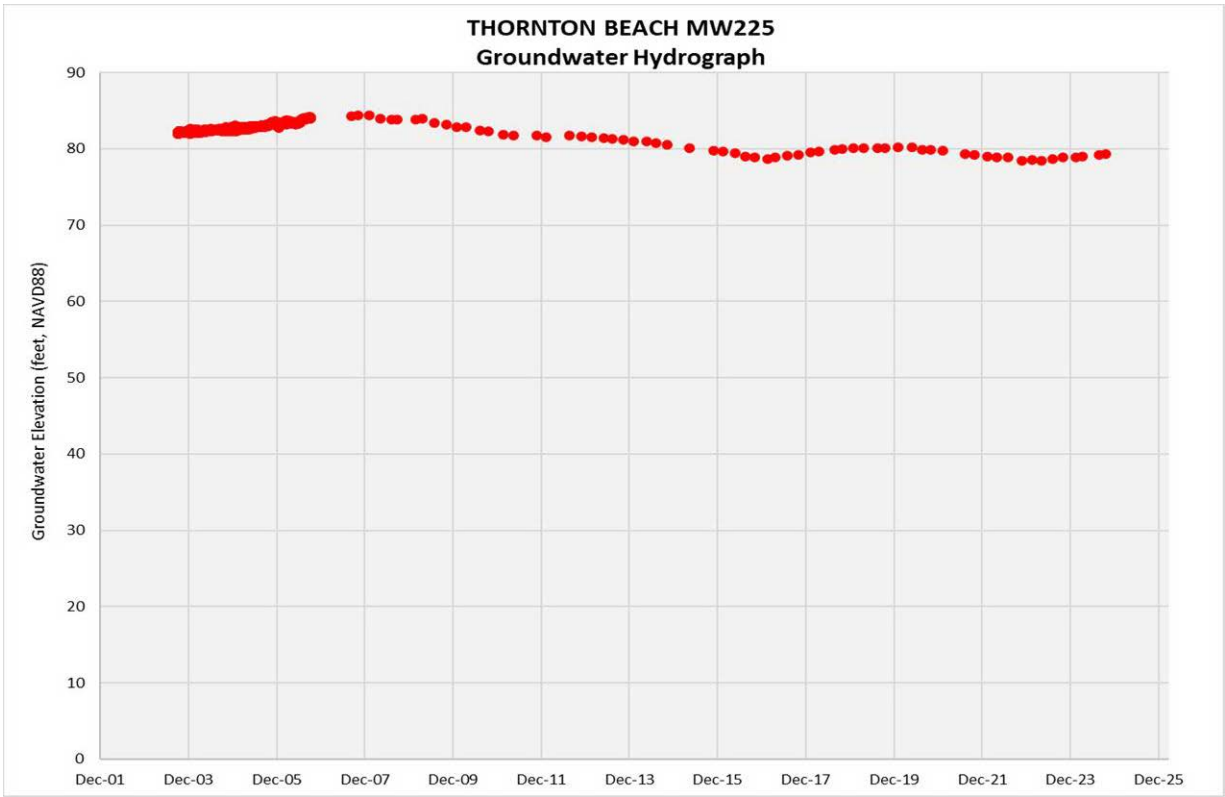
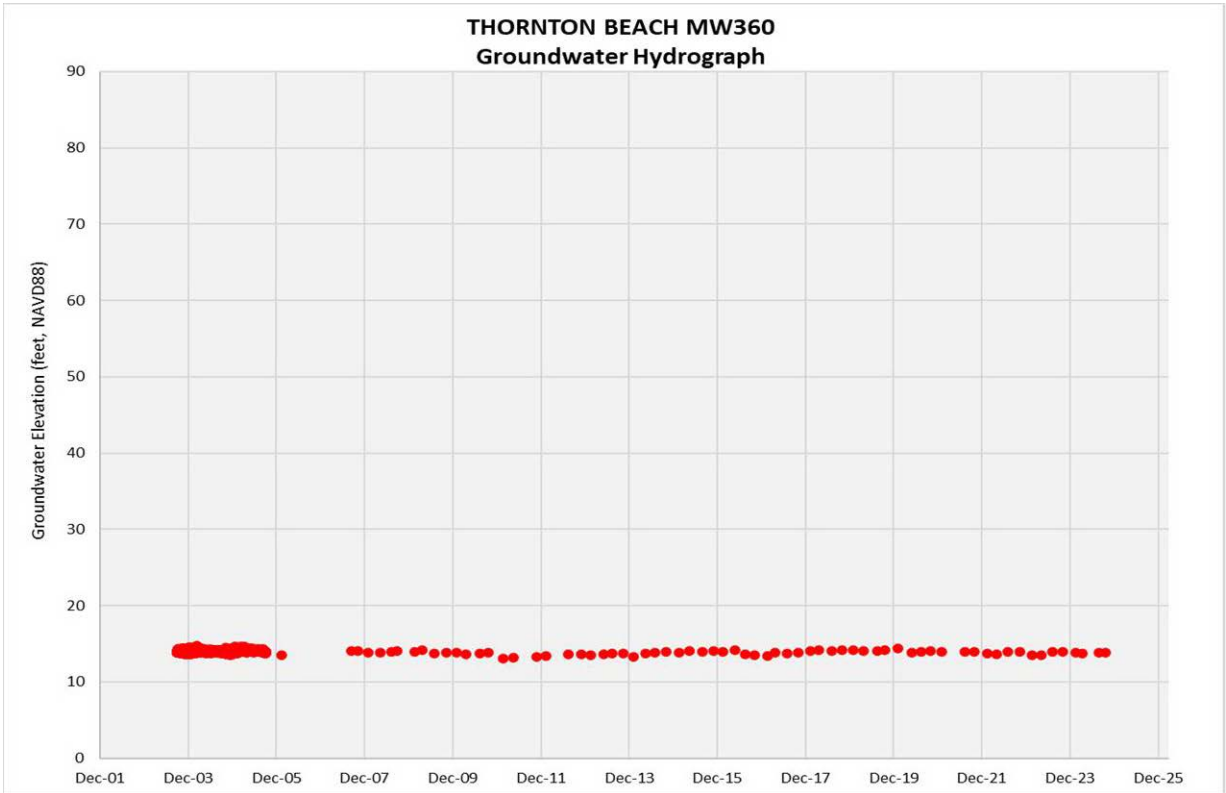
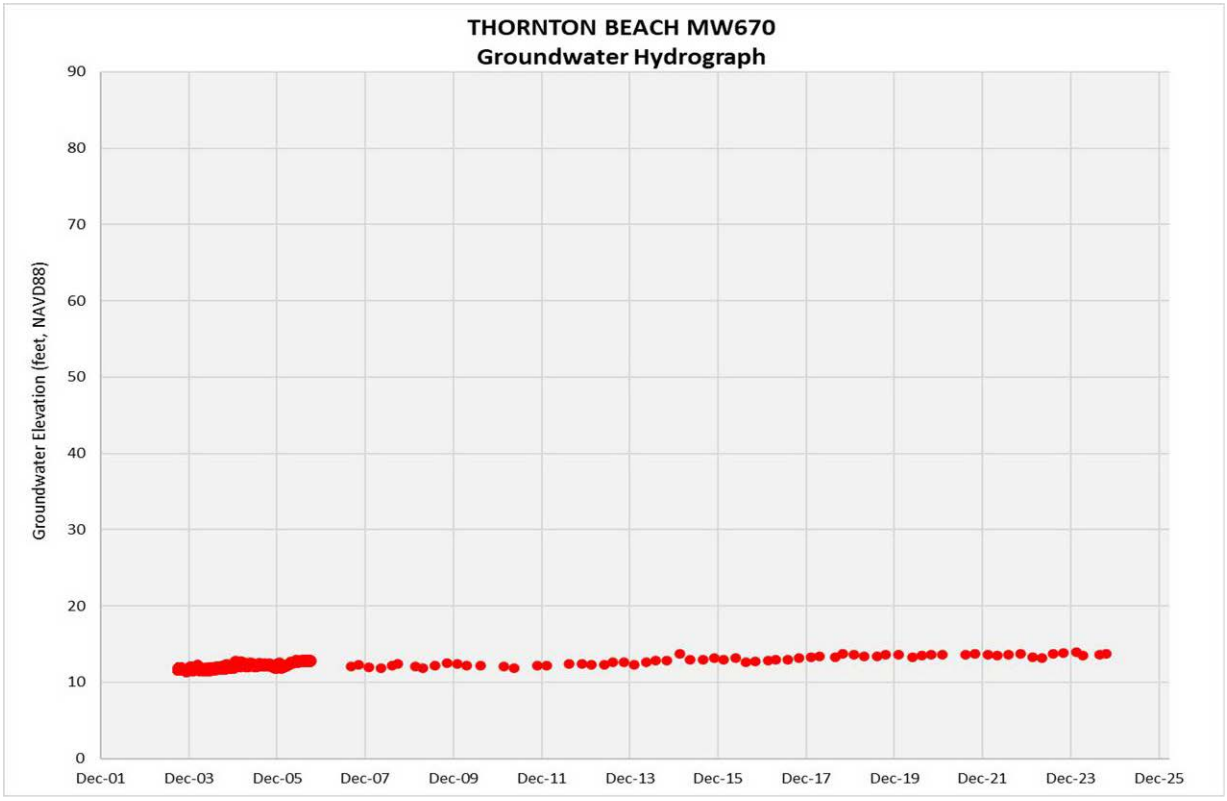
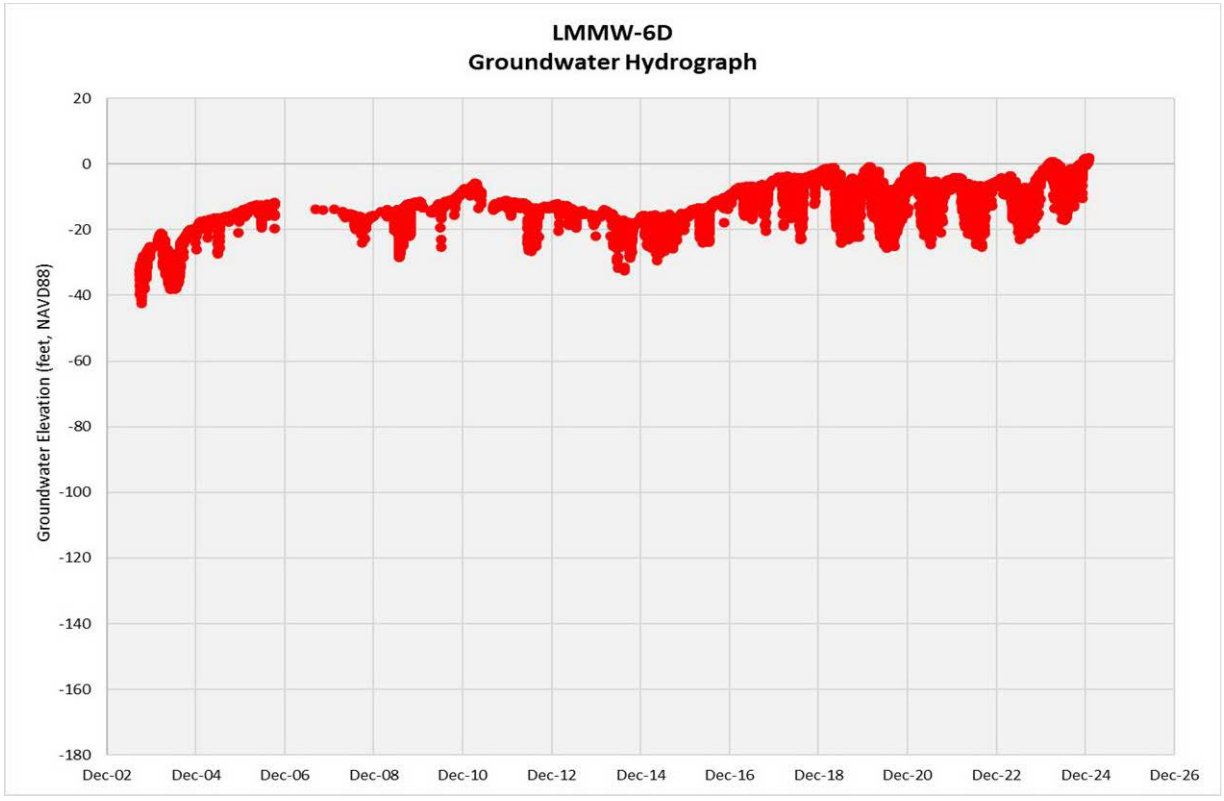
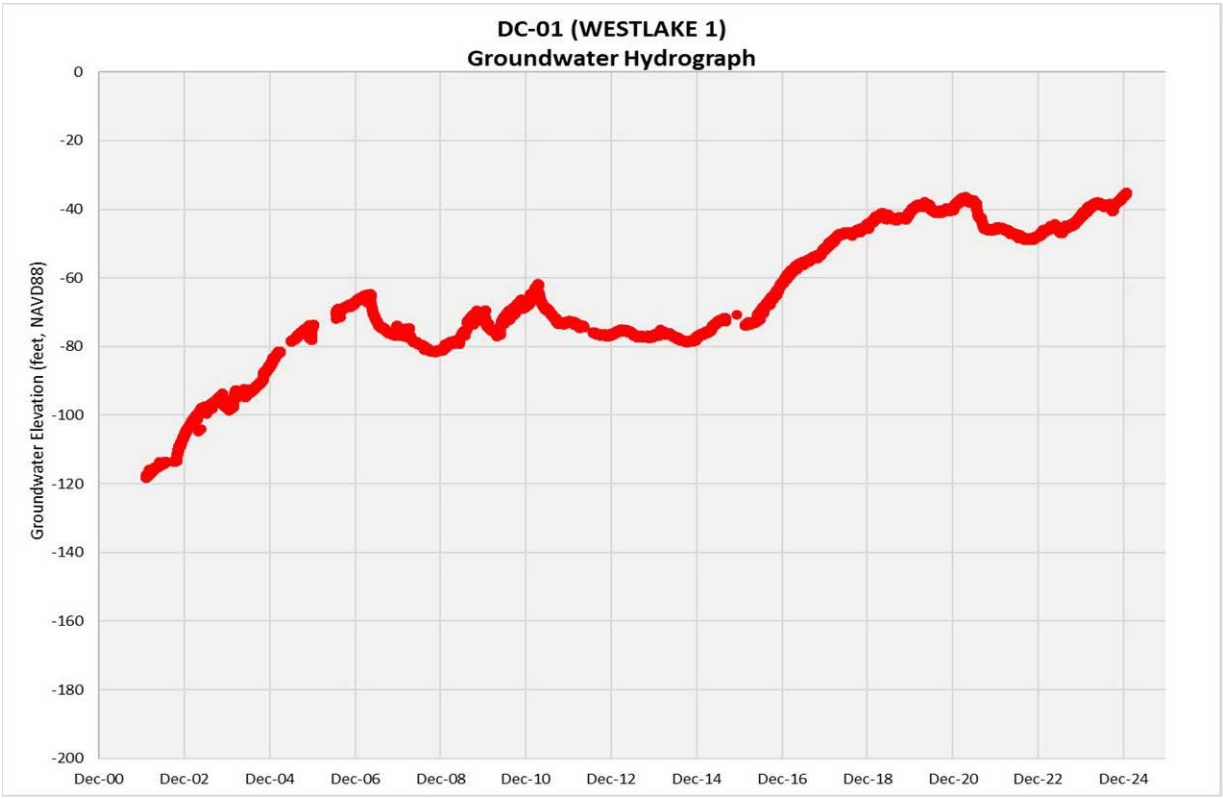
Dec-23
Dec-25

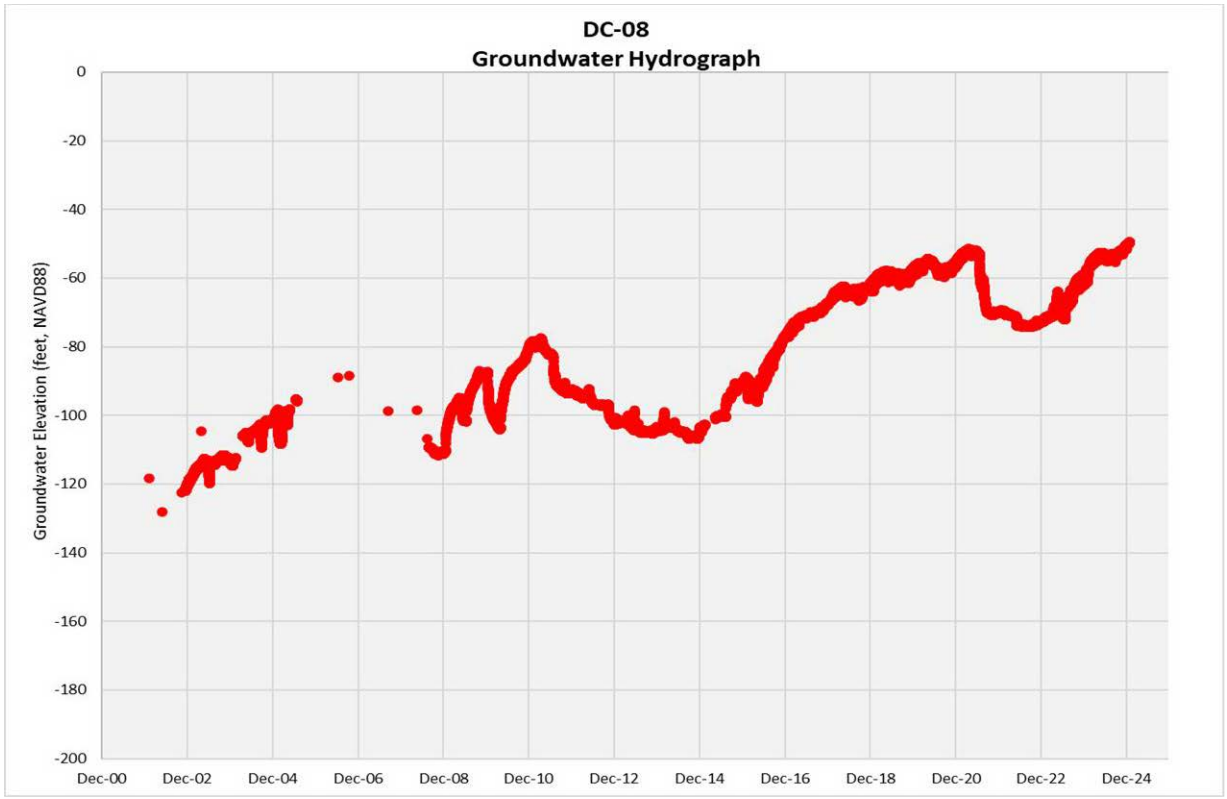

THORNTON BEACH MW225
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
90
80
70
60
50
40
30
20
10
0
Dec-01
Dec-03
Dec-05
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25

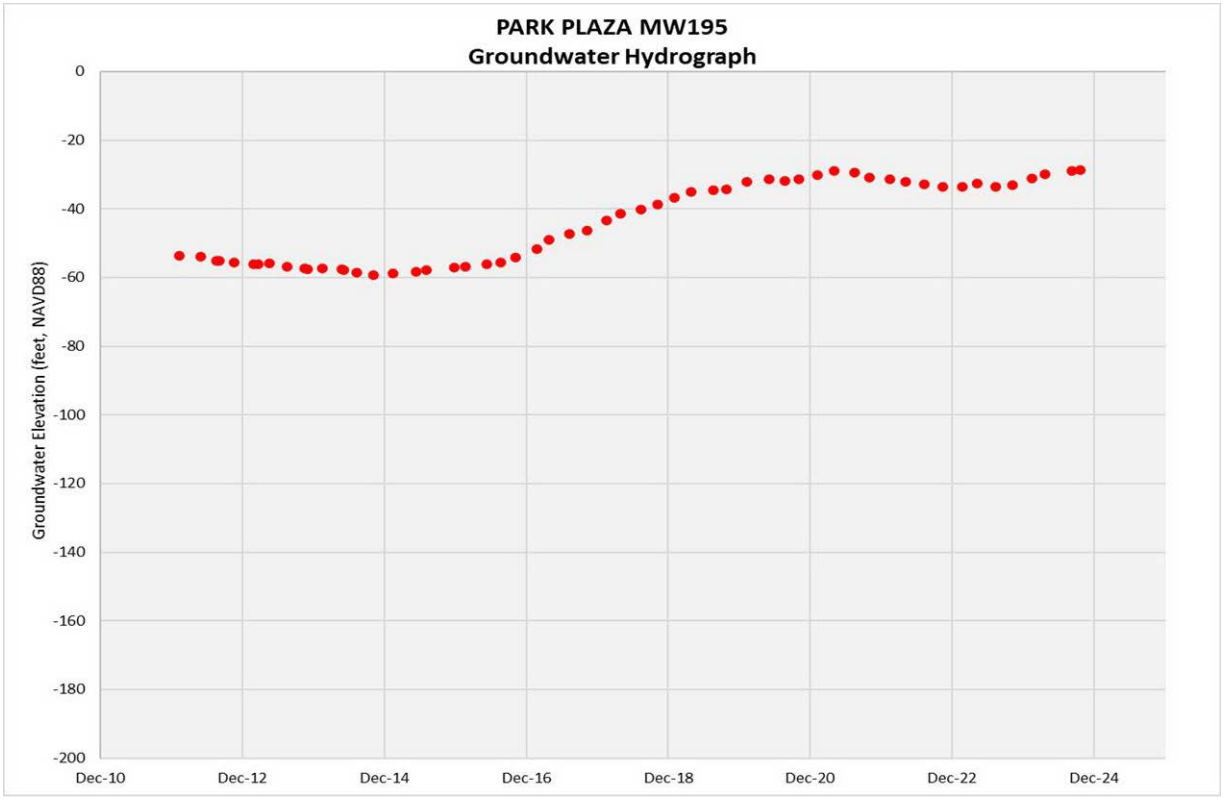

THORNTON BEACH MW360
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
90
80
70
60
50
40
30
20
10
0
Dec-01
Dec-03
Dec-05
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25

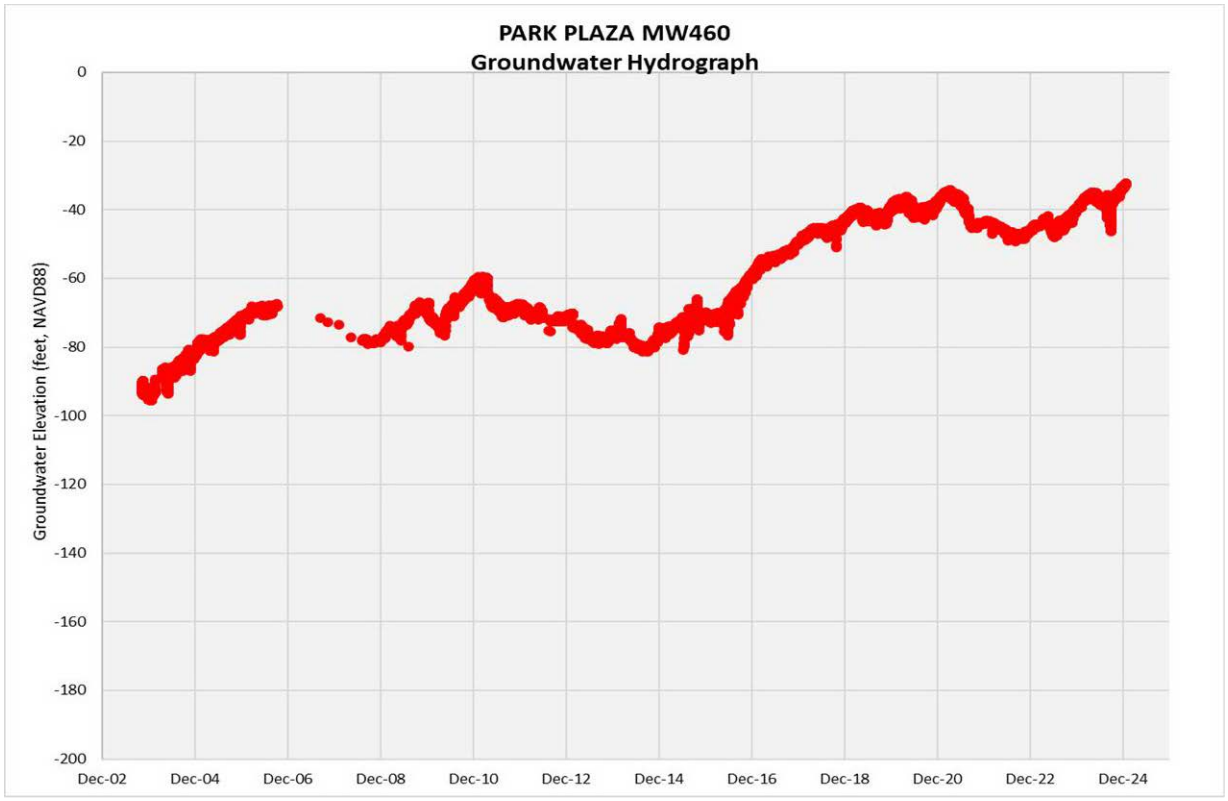

THORNTON BEACH MW670
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
90
80
70
60
50
40
30
20
10
0
Dec-01
Dec-03
Dec-05
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25


LMMW-6D
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
20
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
Dec-02
Dec-04
Dec-06
Dec-08
Dec-10
Dec-12
Dec-14
Dec-16
Dec-18
Dec-20
Dec-22
Dec-24
Dec-26


DC-01 (WESTLAKE 1)
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
Dec-00
Dec-02
Dec-04
Dec-06
Dec-08
Dec-10
Dec-12
Dec-14
Dec-16
Dec-18
Dec-20
Dec-22
Dec-24


DC-08
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
Dec-00
Dec-02
Dec-04
Dec-06
Dec-08
Dec-10
Dec-12
Dec-14
Dec-16
Dec-18
Dec-20
Dec-22
Dec-24


PARK PLAZA MW195
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
Dec-10
Dec-12
Dec-14
Dec-16
Dec-18
Dec-20
Dec-22
Dec-24


PARK PLAZA MW460
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
Dec-02
Dec-04
Dec-06
Dec-08
Dec-10
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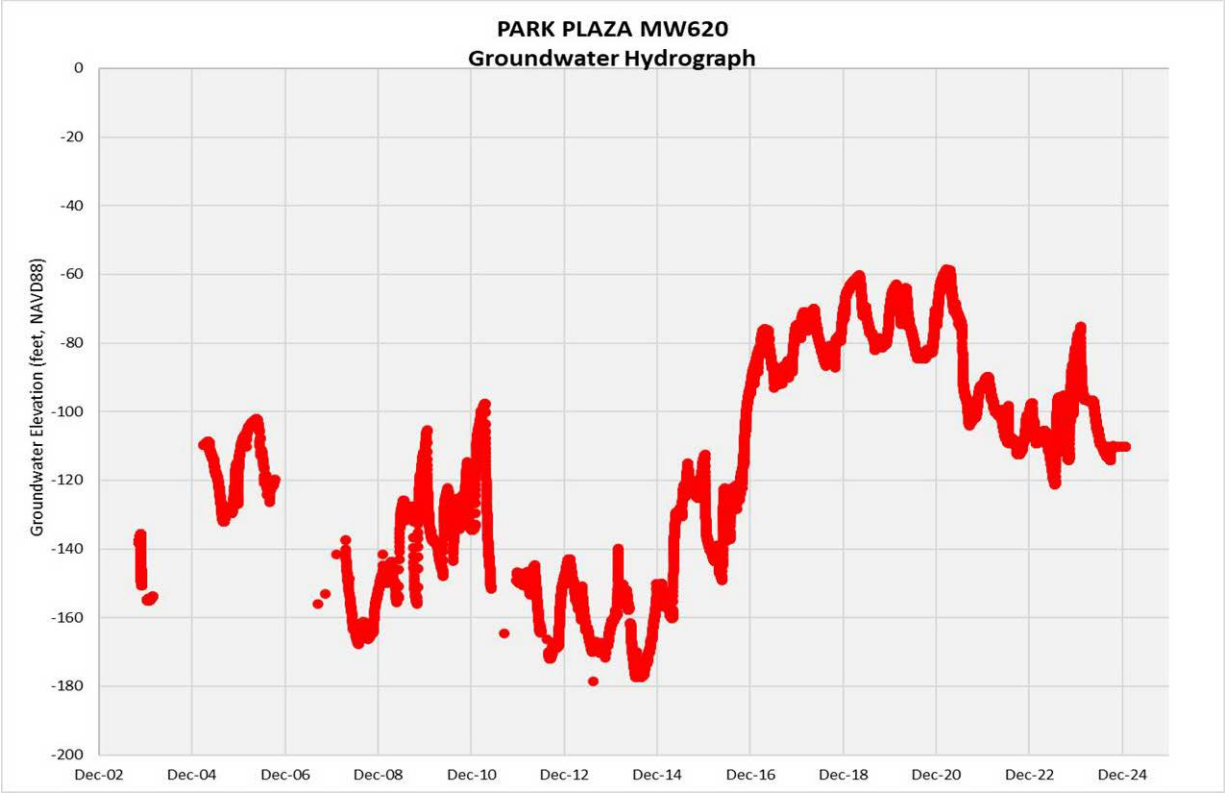
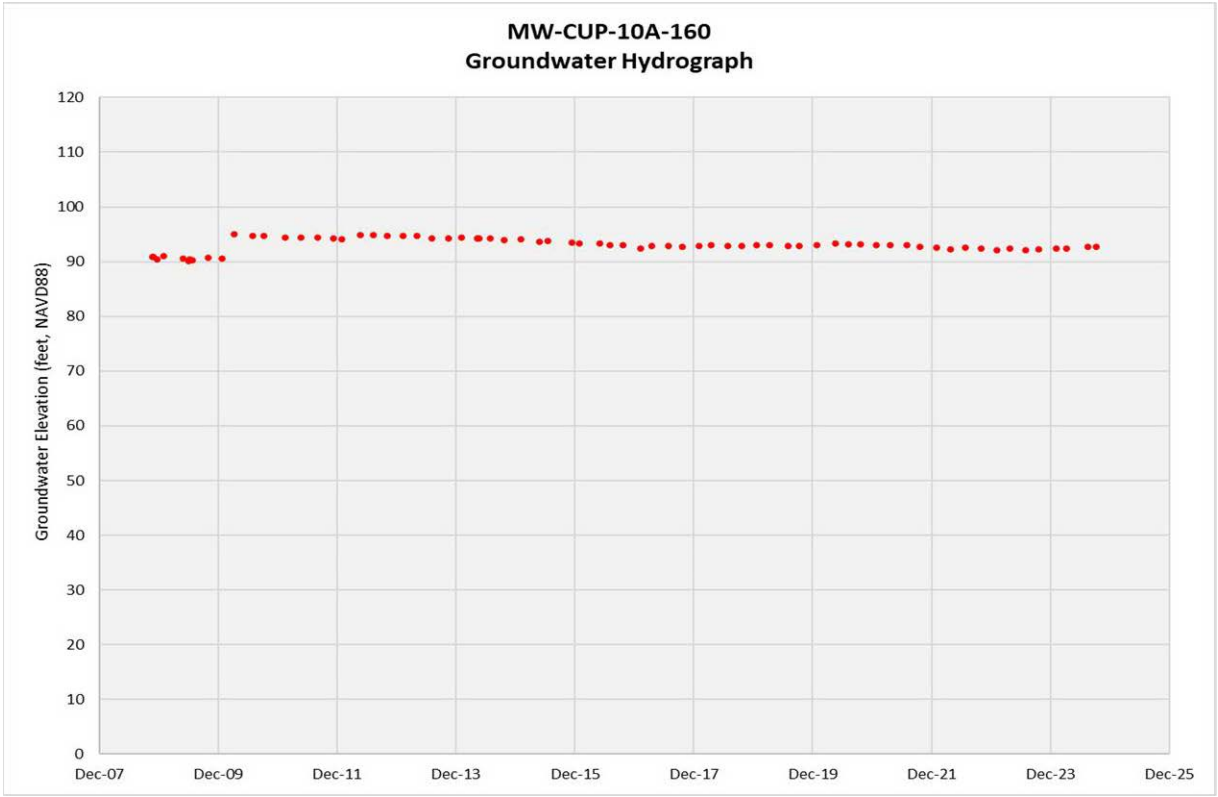
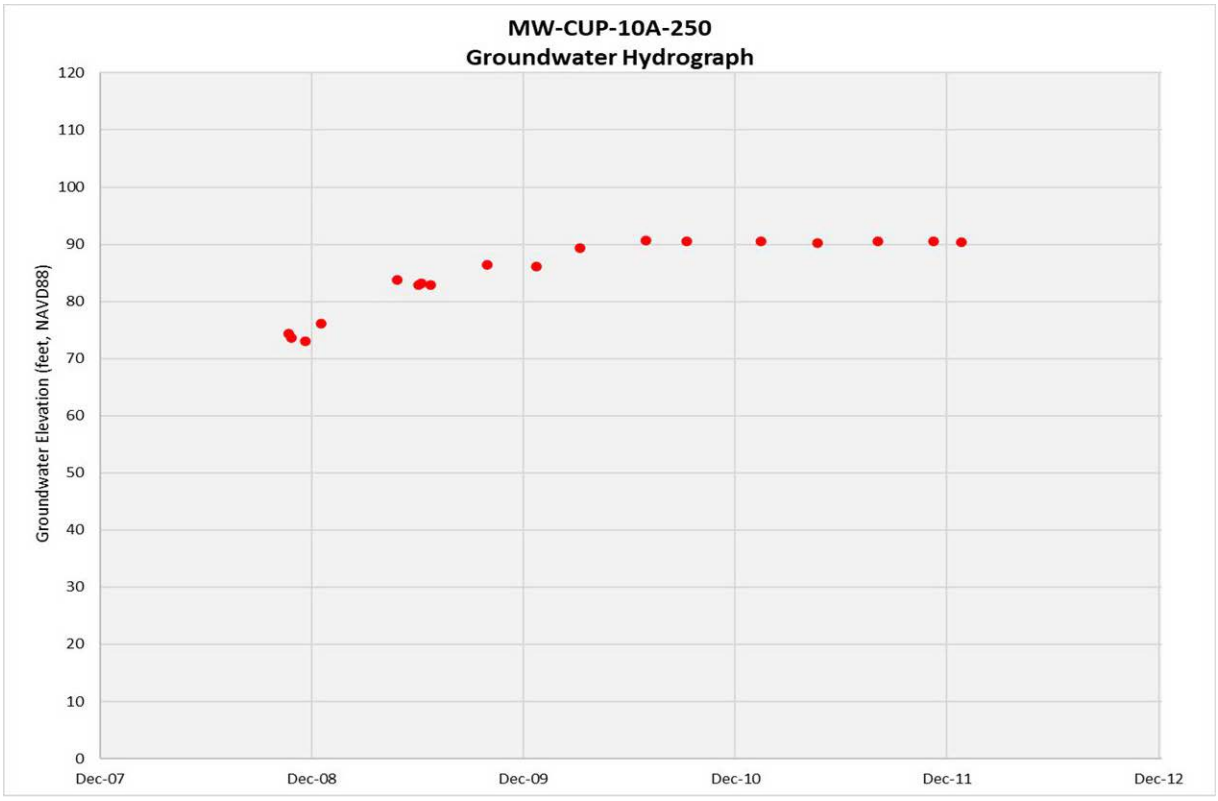
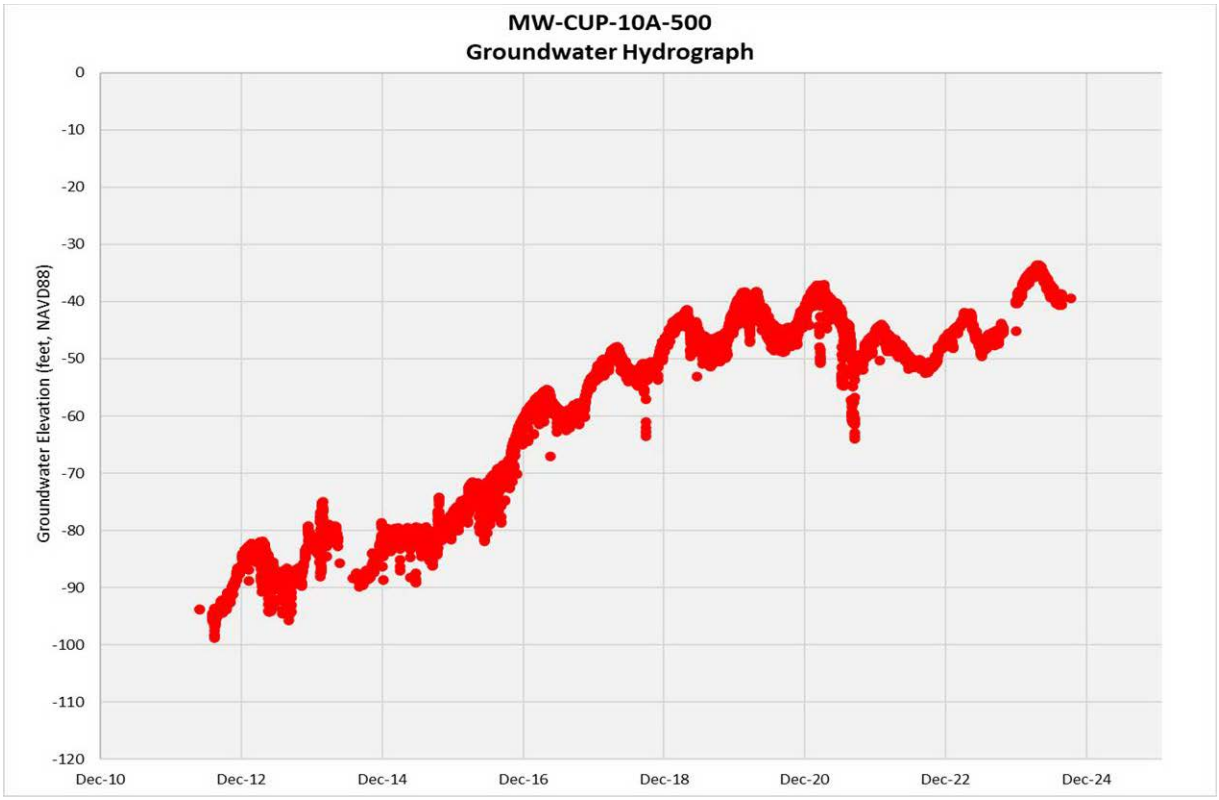
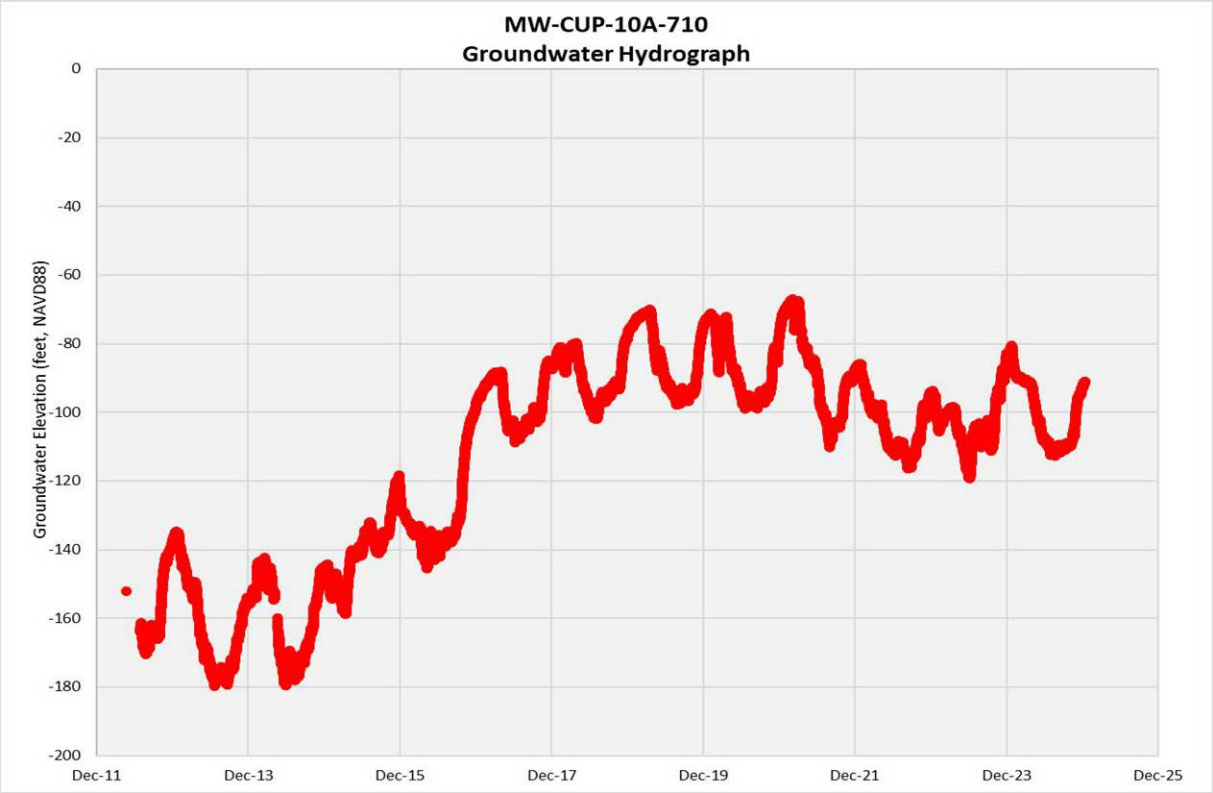
Dec-14
Dec-16
Dec-18
Dec-20
Dec-22
Dec-24

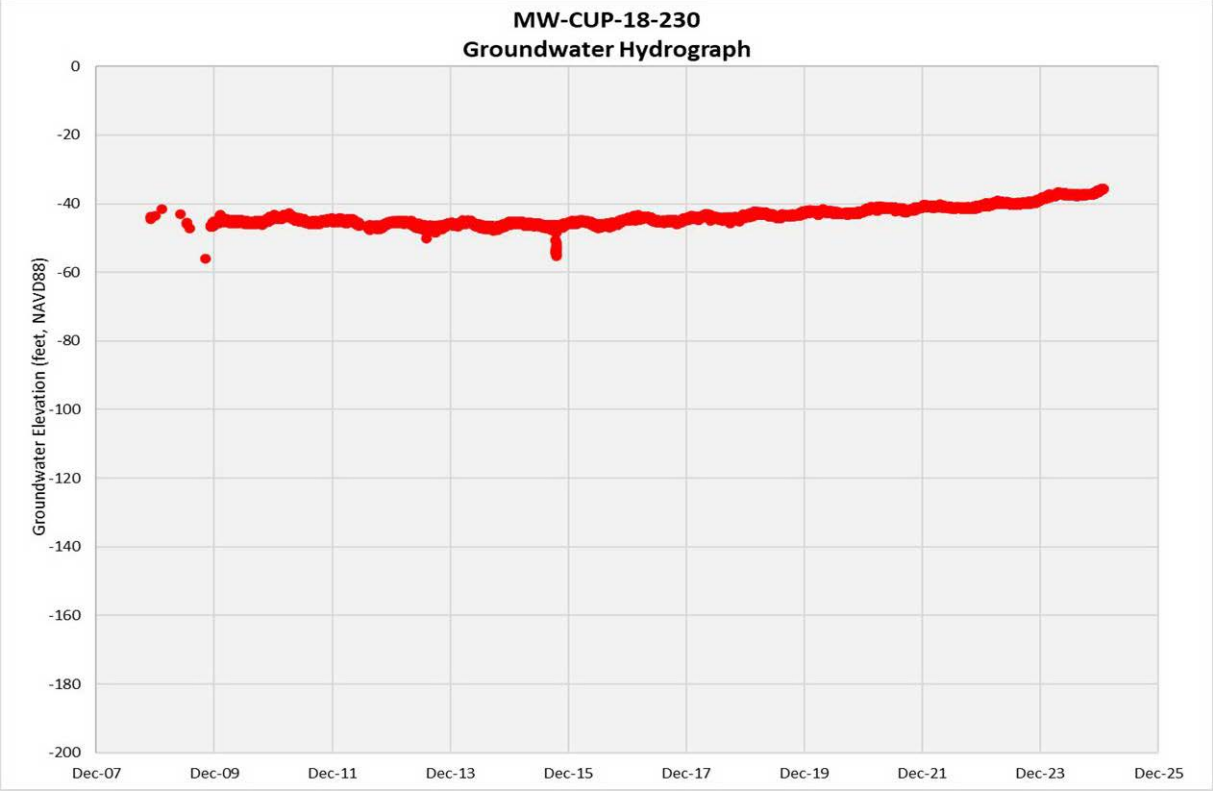

PARK PLAZA MW620
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
Dec-02
Dec-04
Dec-06
Dec-08
Dec-10
Dec-12
Dec-14
Dec-16
Dec-18
Dec-20
Dec-22
Dec-24

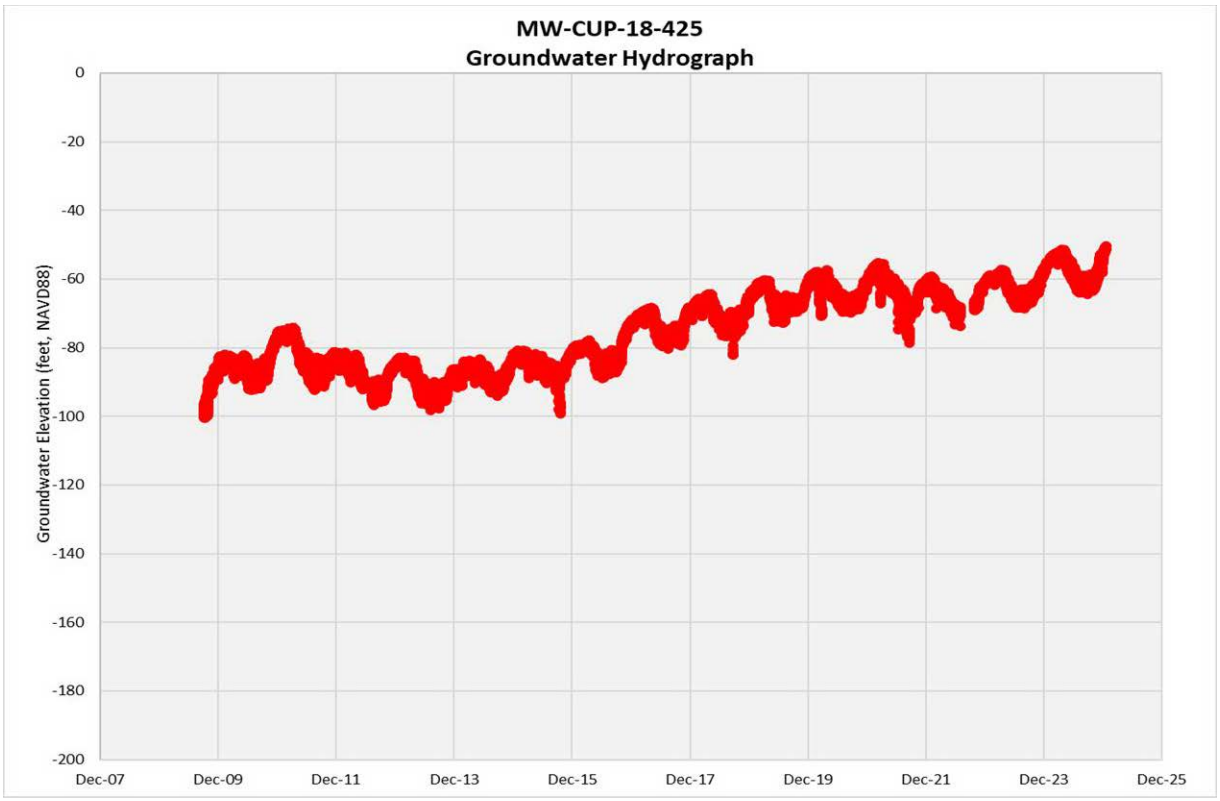

MW-CUP-10A-160
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
120
110
100
90
80
70
60
50
40
30
20
10
0
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25

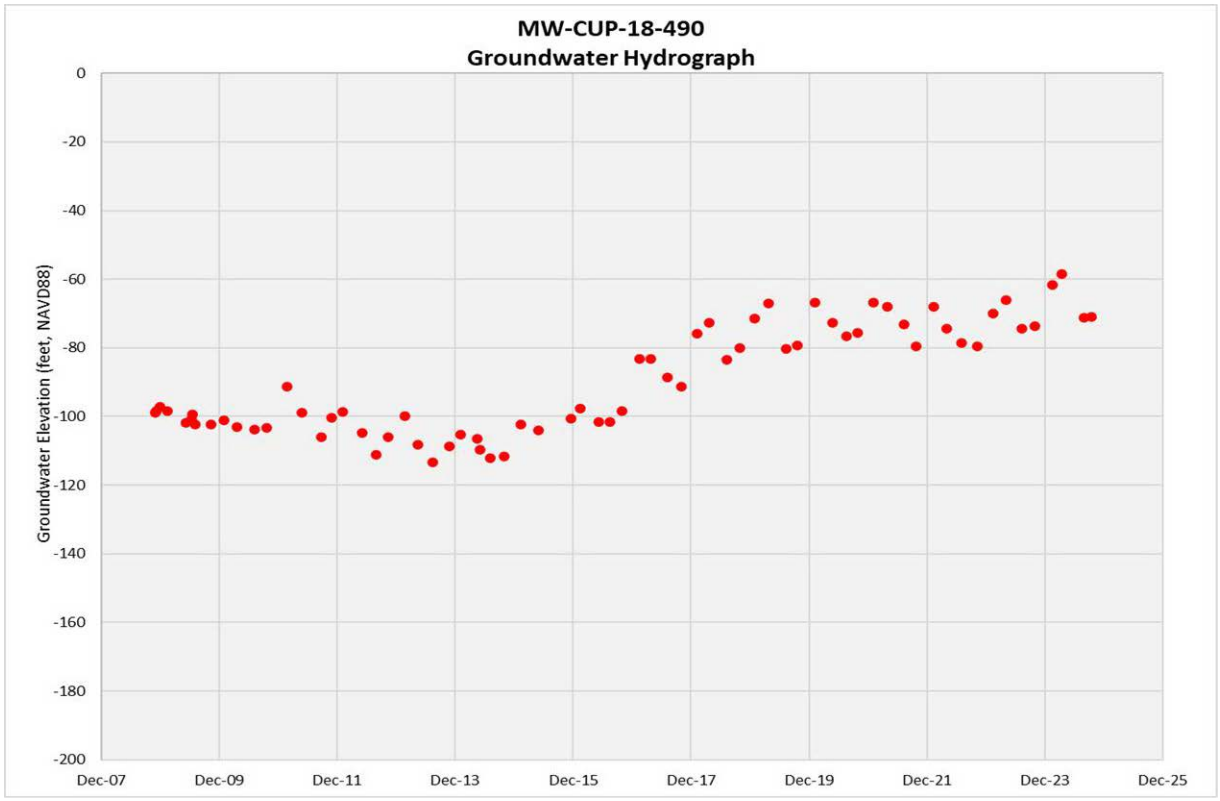

MW-CUP-10A-250
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
120
110
100
90
80
70
60
50
40
30
20
10
0
Dec-07
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12

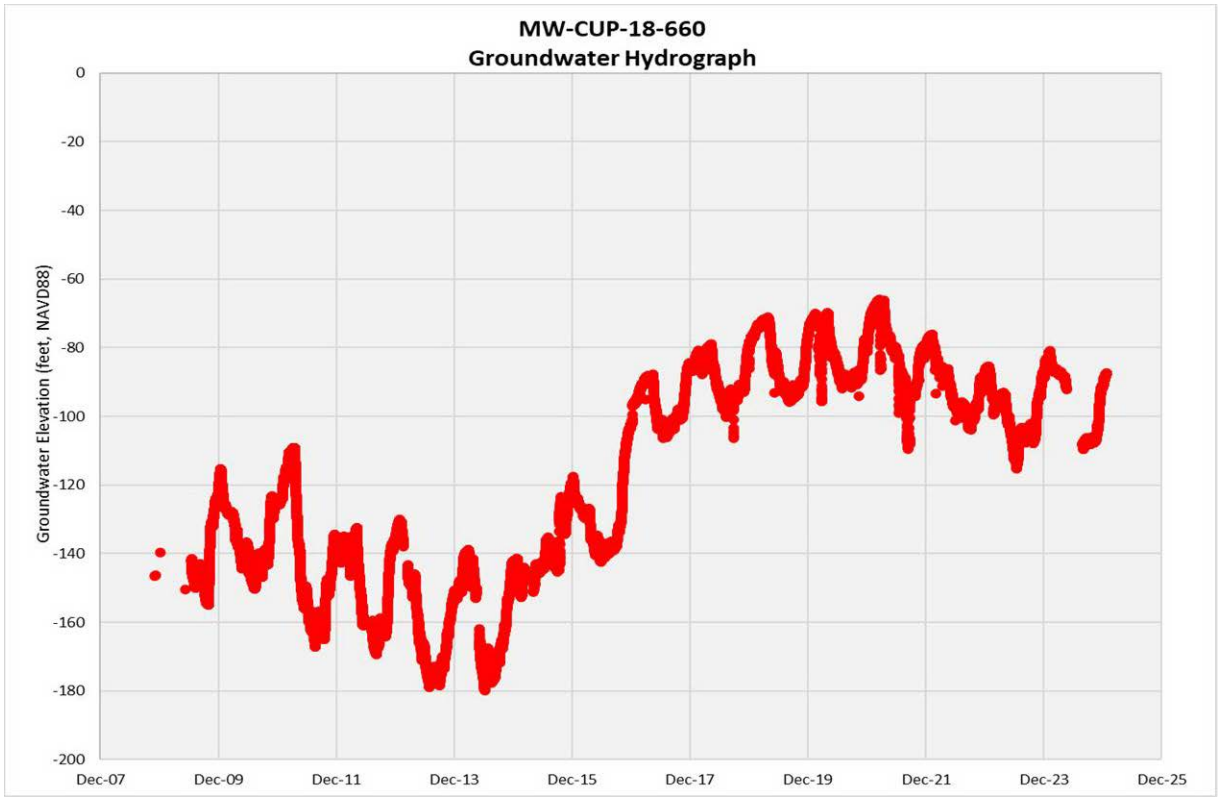

MW-CUP-10A-500
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
-110
-120
Dec-10
Dec-12
Dec-14
Dec-16
Dec-18
Dec-20
Dec-22
Dec-24


MW-CUP-10A-710
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25


MW-CUP-18-230
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25


MW-CUP-18-425
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25


MW-CUP-18-490
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25


MW-CUP-18-660
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
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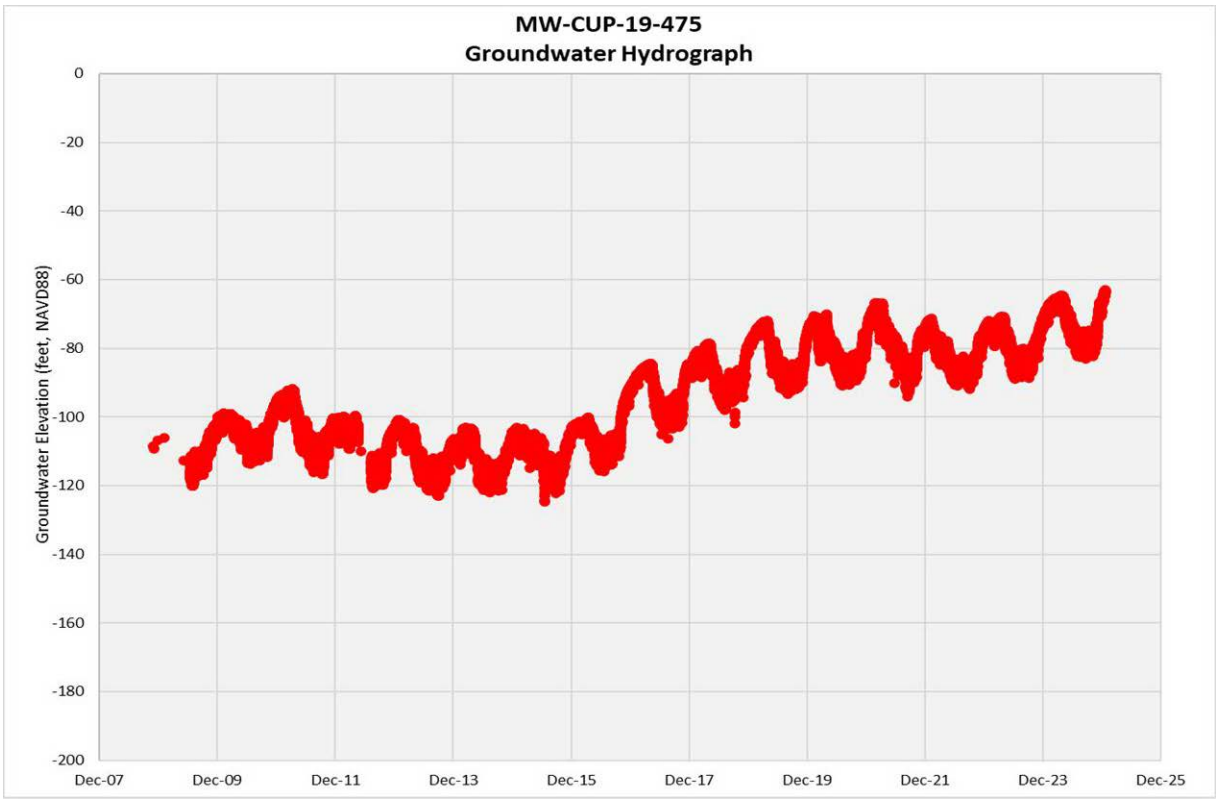
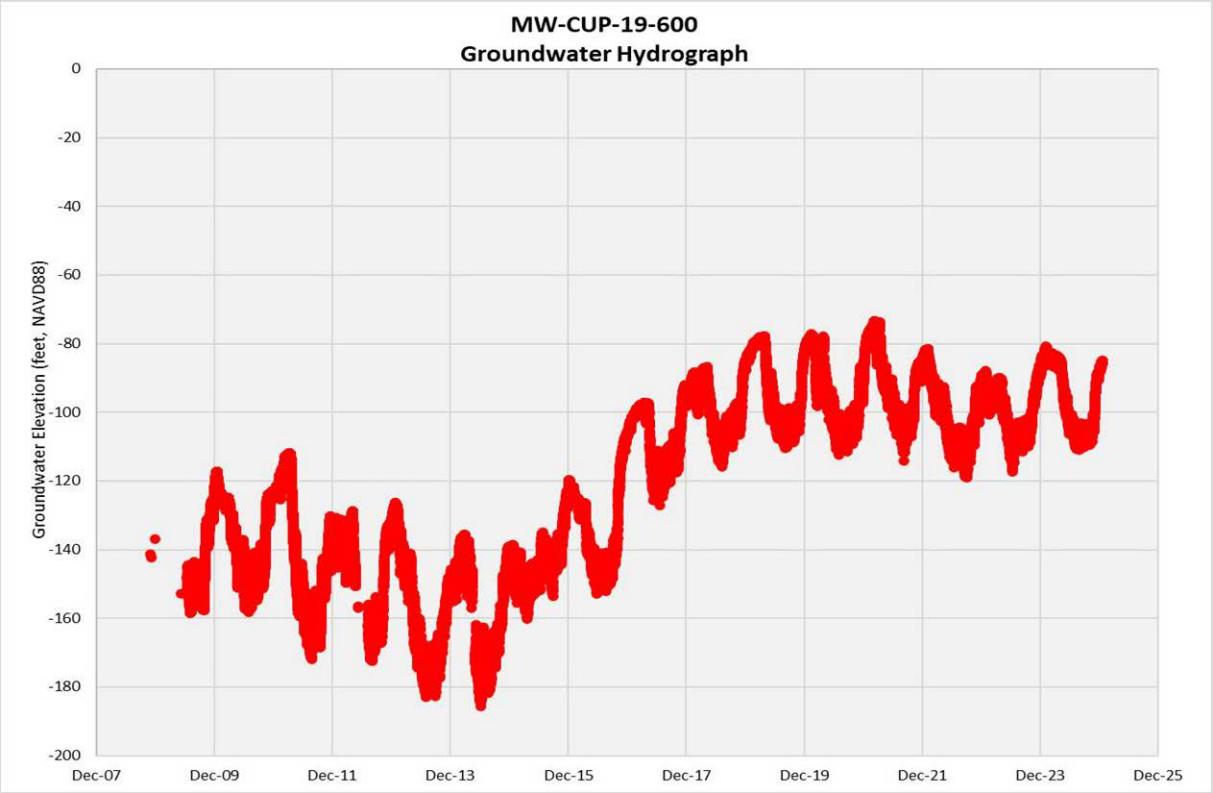
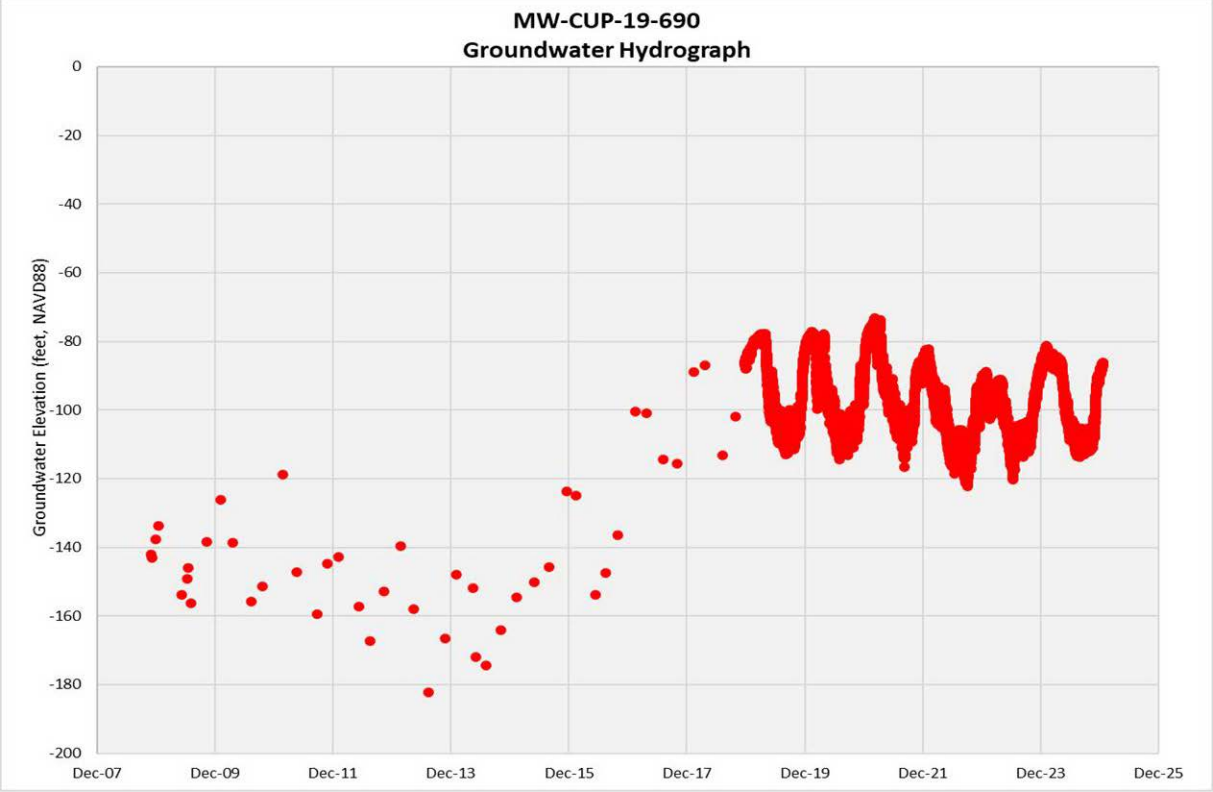
Dec-19
Dec-21
Dec-23
Dec-25


MW-CUP-19-475
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25


MW-CUP-19-600
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25


MW-CUP-19-690
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
Dec-07
Dec-09
Dec-11
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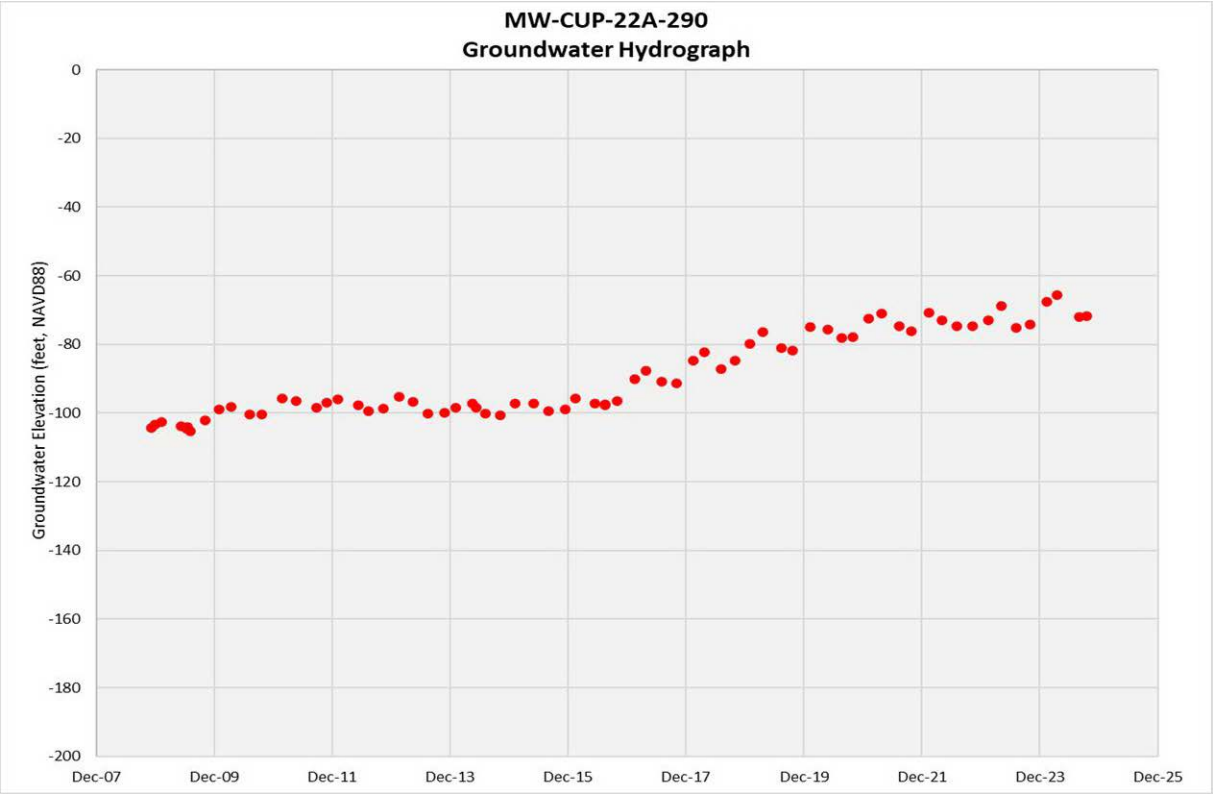
Dec-21
Dec-23
Dec-25


MW-CUP-22A-290
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
Dec-07
Dec-09
Dec-11
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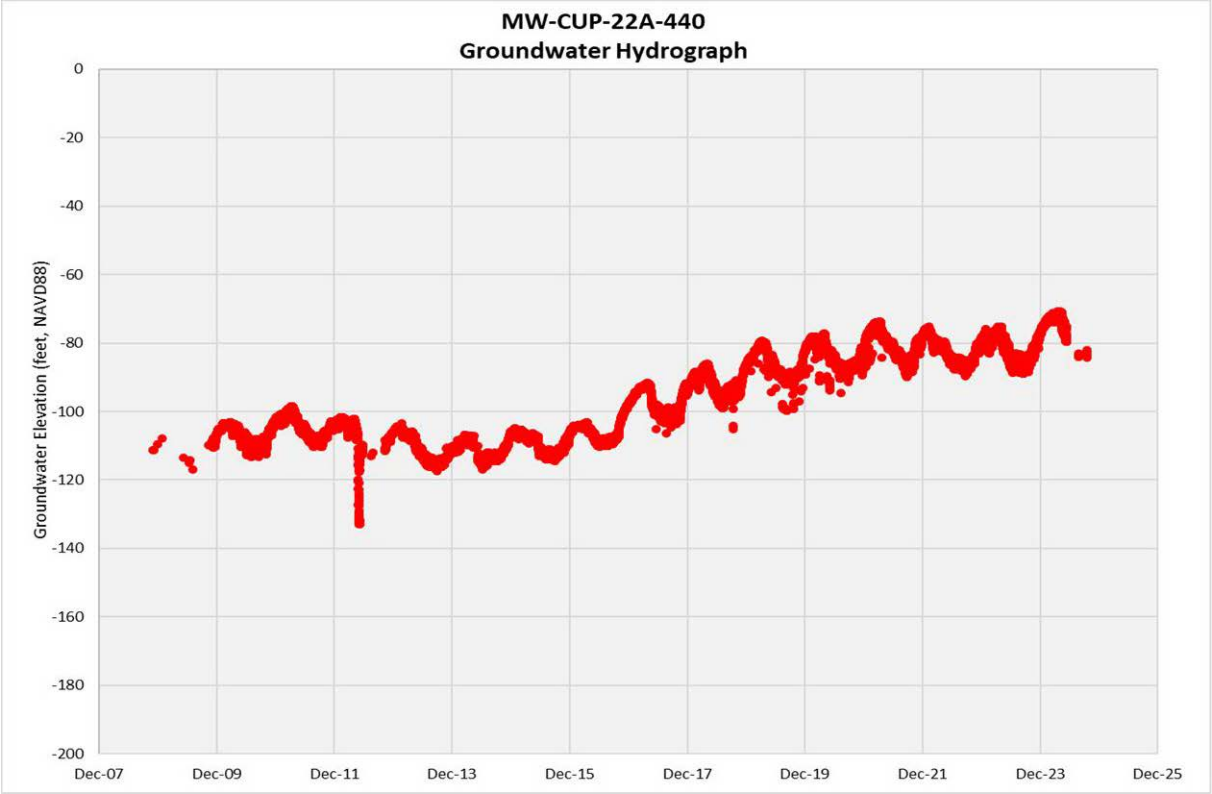
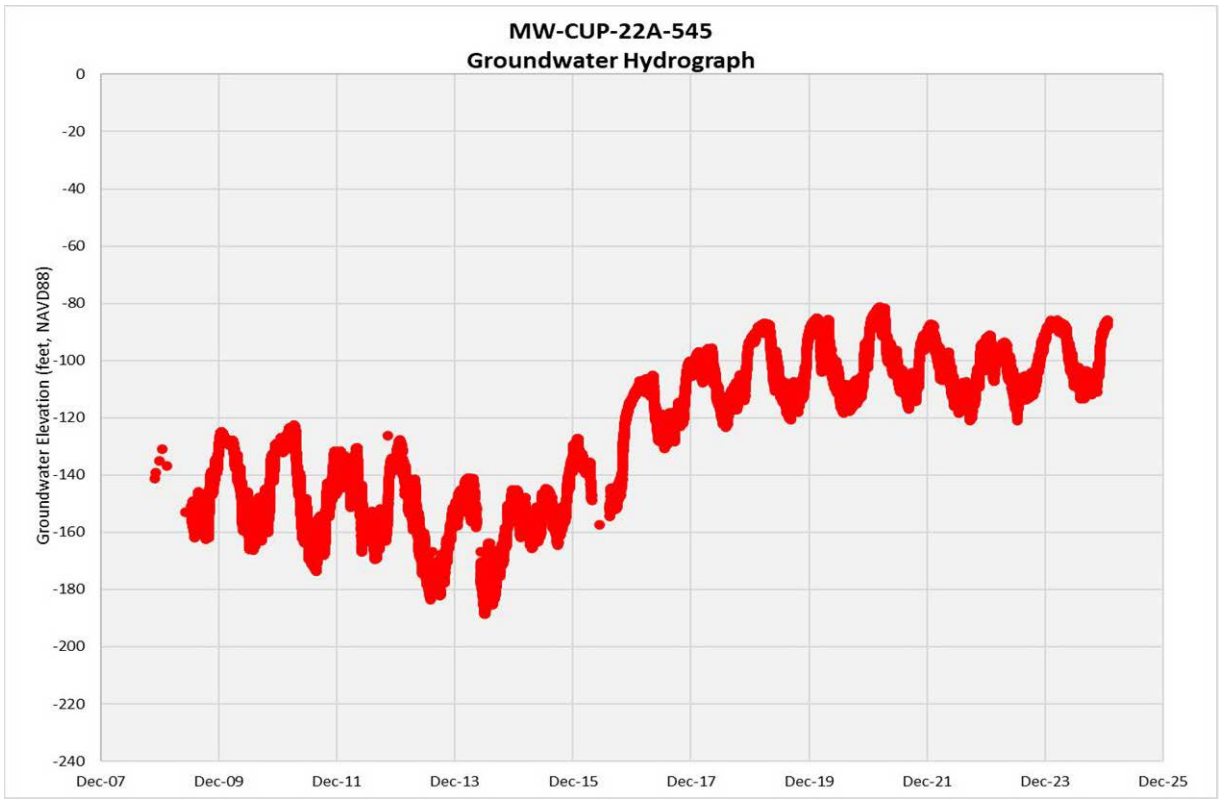
Dec-21
Dec-23
Dec-25


MW-CUP-22A-440
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25


MW-CUP-22A-545
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
-220
-240
Dec-07
Dec-09
Dec-11
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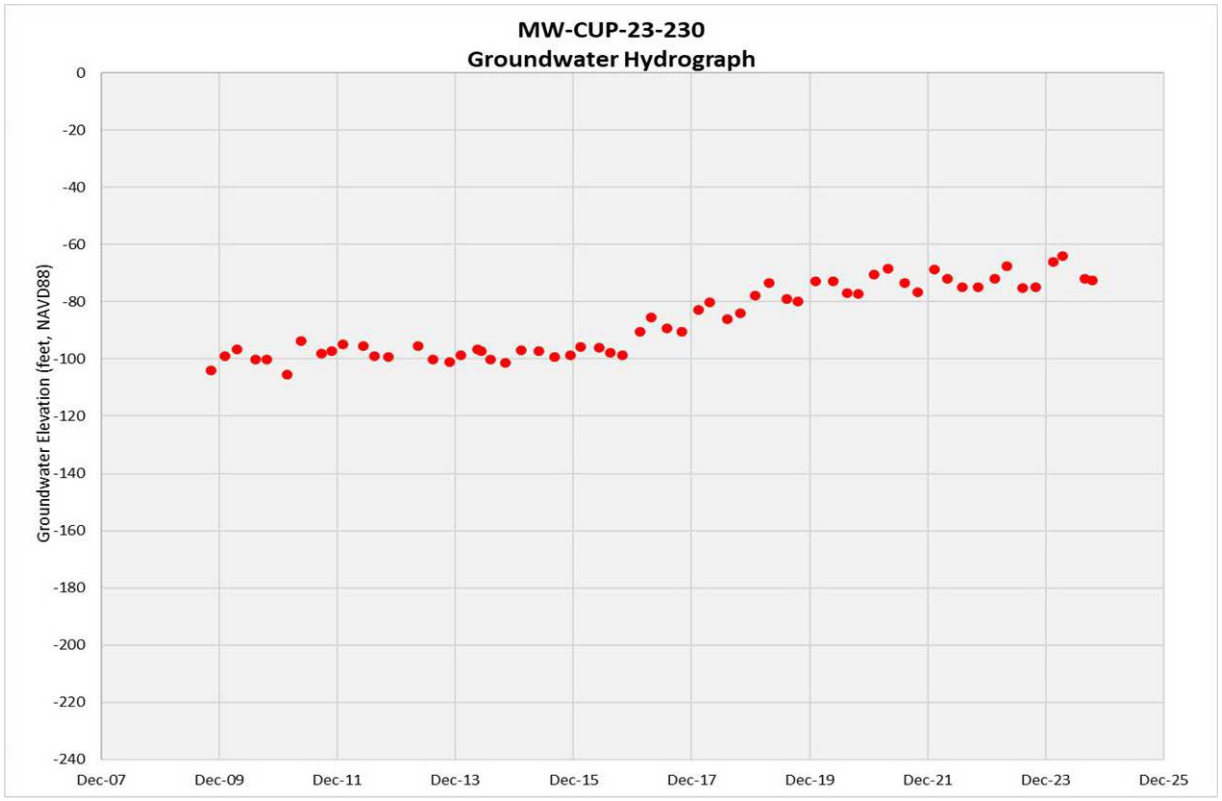
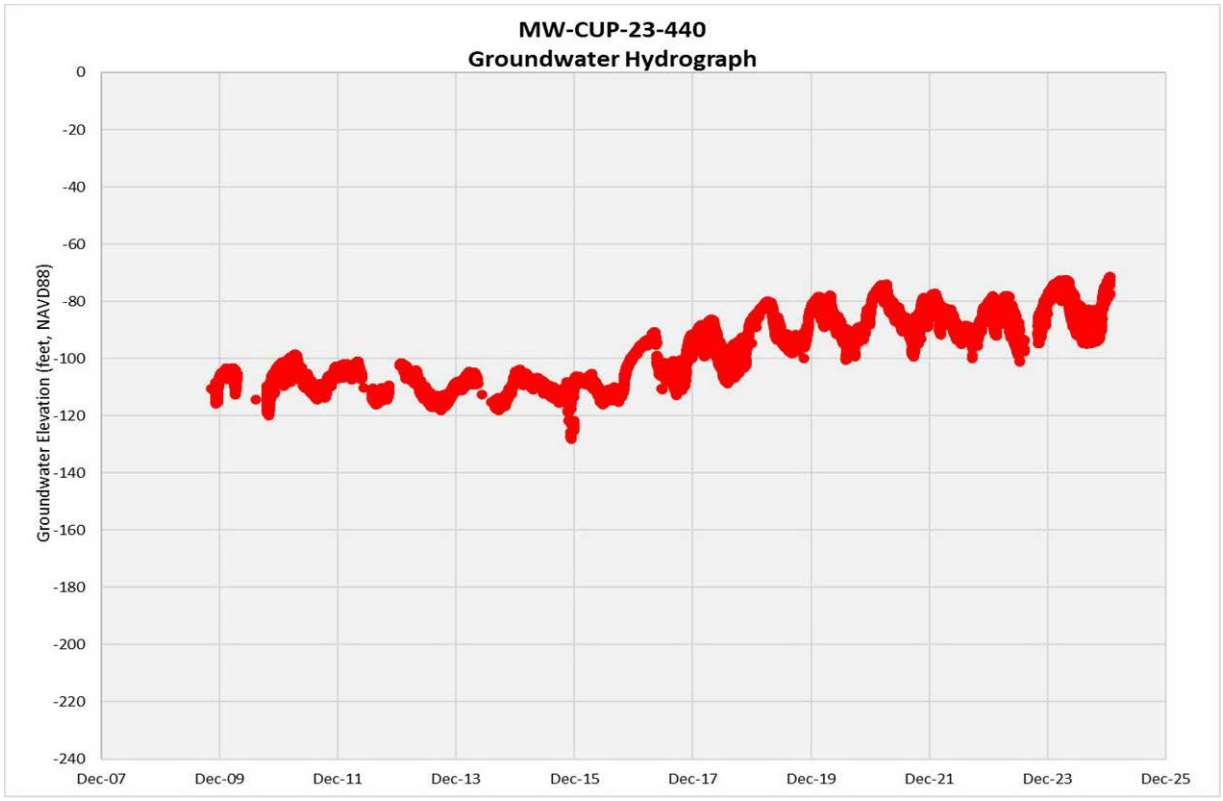
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25


MW-CUP-23-230
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
-220
-240
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25


MW-CUP-23-440
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
-220
-240
Dec-07
Dec-09
Dec-11
Dec-13
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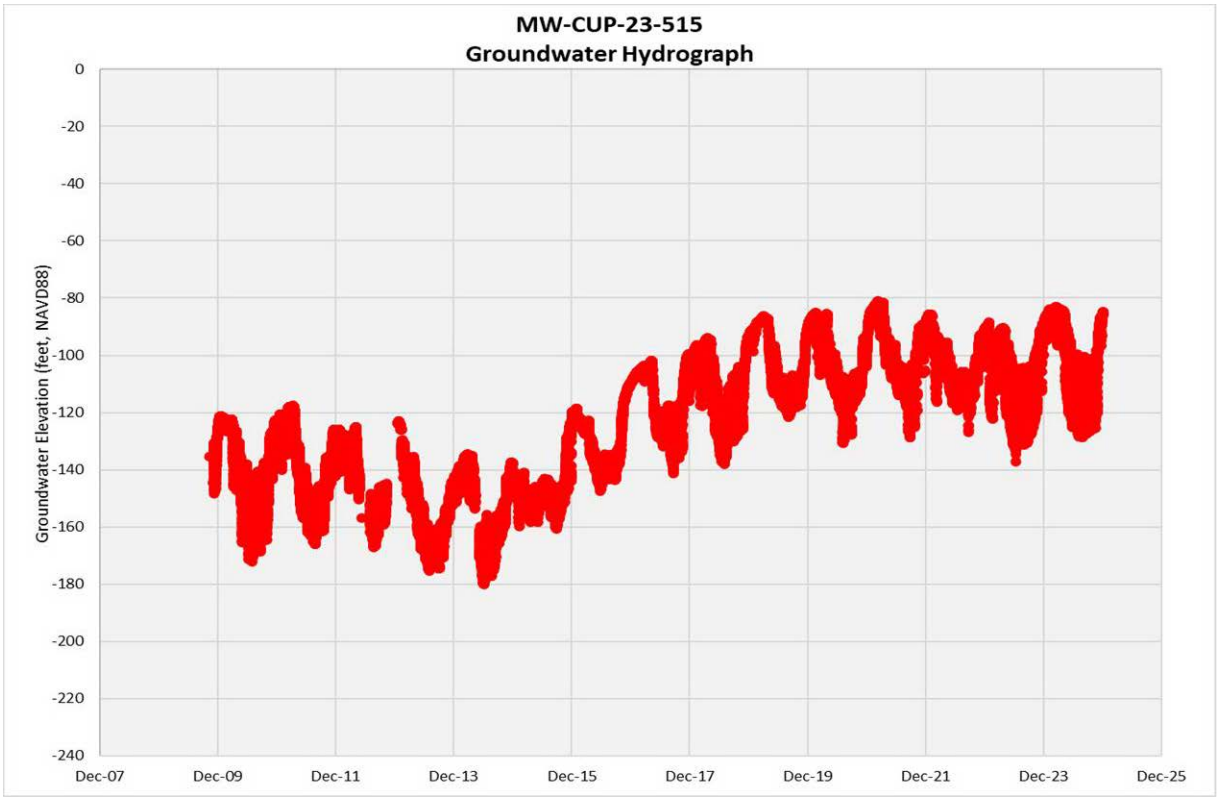
Dec-21
Dec-23
Dec-25


MW-CUP-23-515
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
-220
-240
Dec-07
Dec-09
Dec-11
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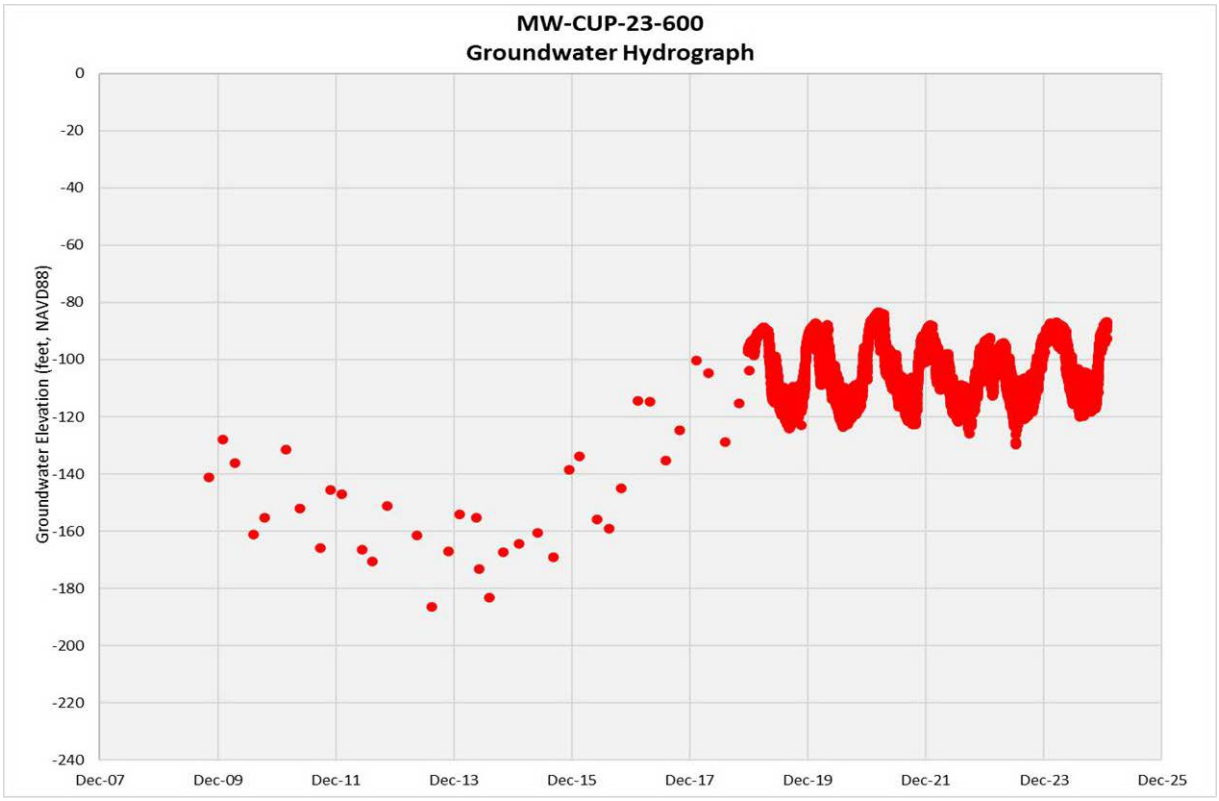
Dec-23
Dec-25


MW-CUP-23-600
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
-220
-240
Dec-07
Dec-09
Dec-11
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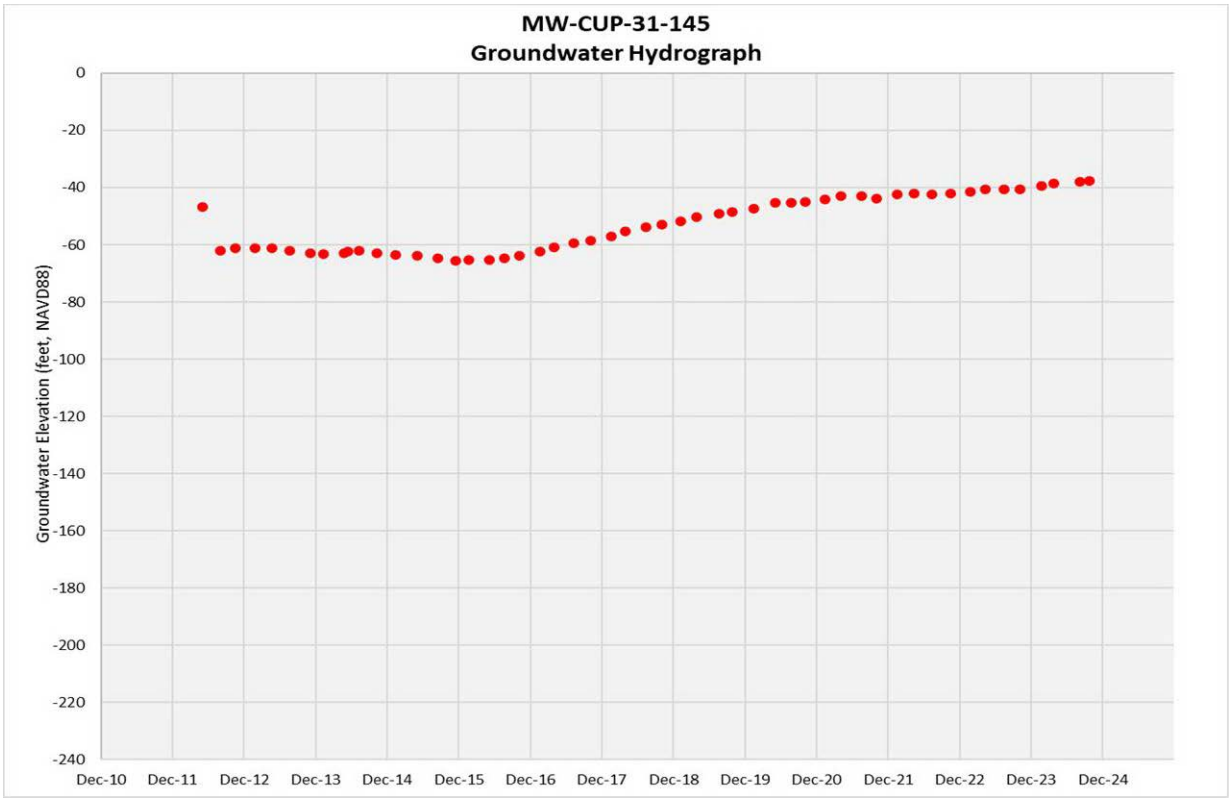
Dec-23
Dec-25


MW-CUP-31-145
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
-220
-240
Dec-10
Dec-11
Dec-12
Dec-13
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Dec-20
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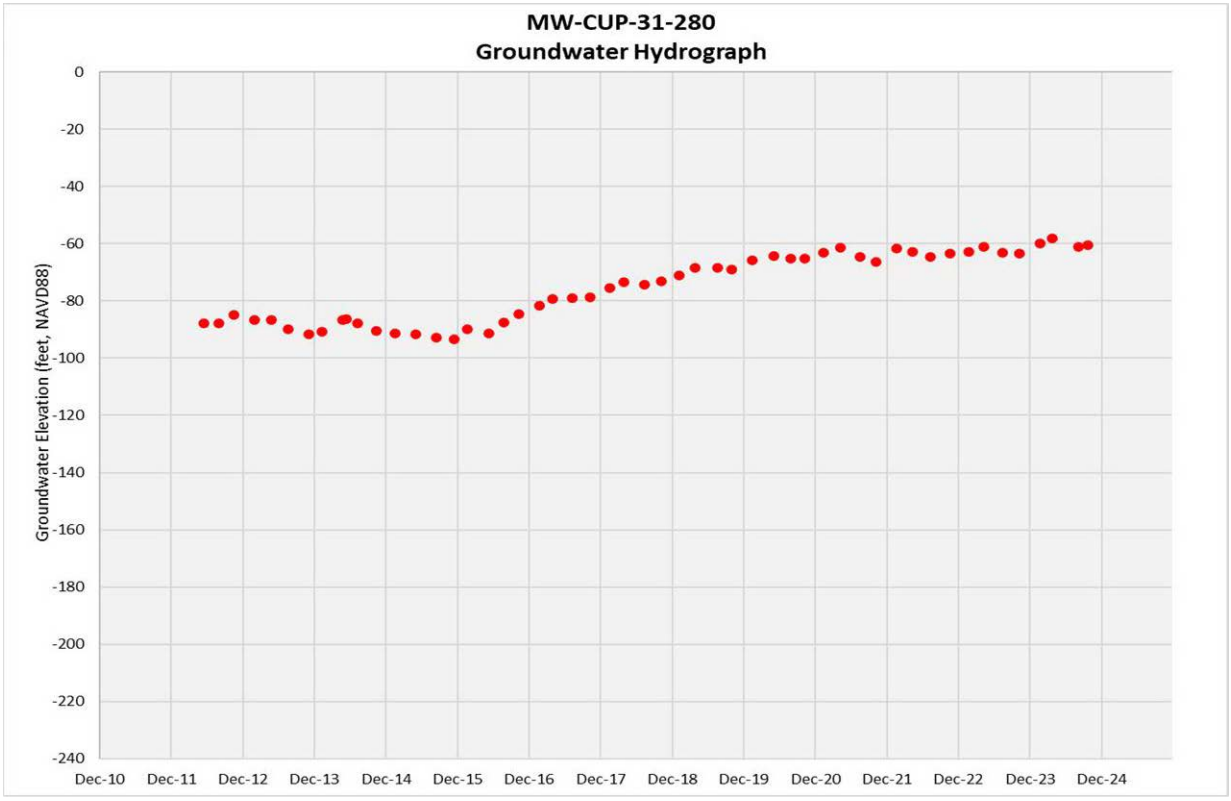
Dec-22
Dec-23
Dec-24


MW-CUP-31-280
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
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-80
-100
-120
-140
-160
-180
-200
-220
-240
Dec-10
Dec-11
Dec-12
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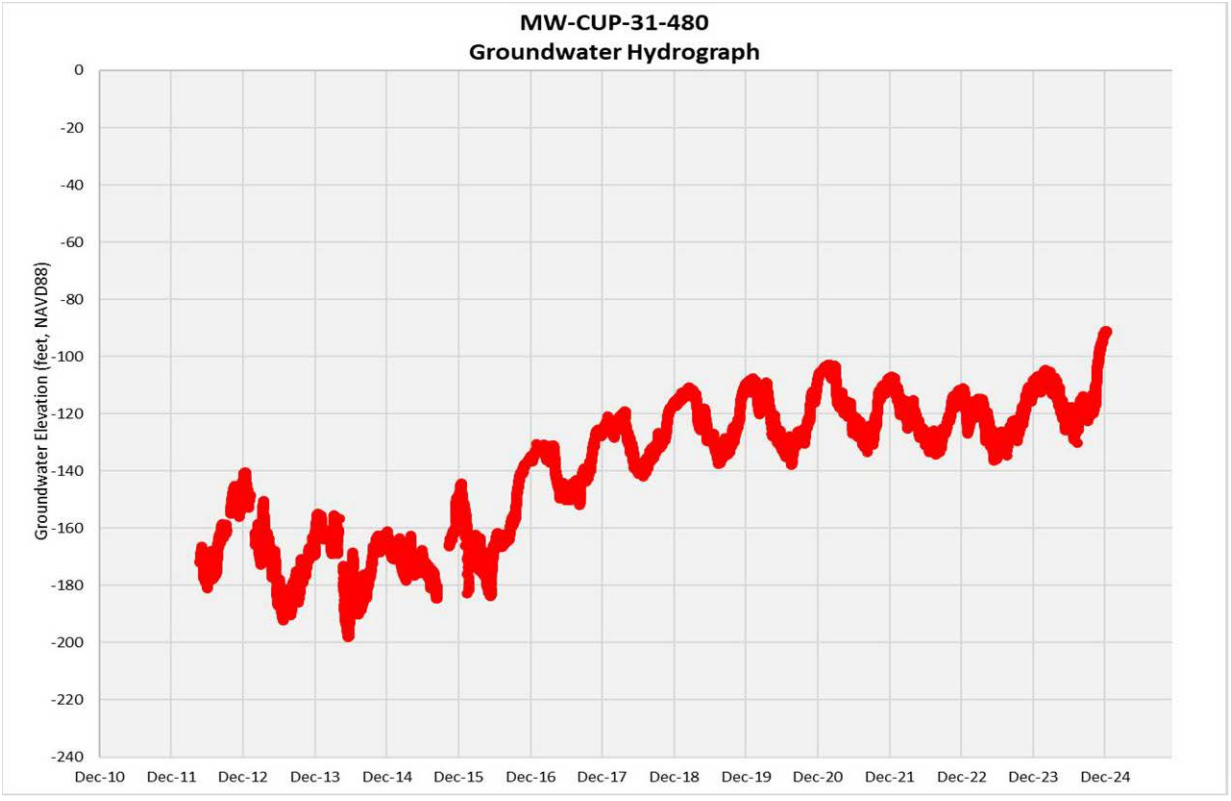
MW-CUP-31-480
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
-220
-240
Dec-10
Dec-11
Dec-12
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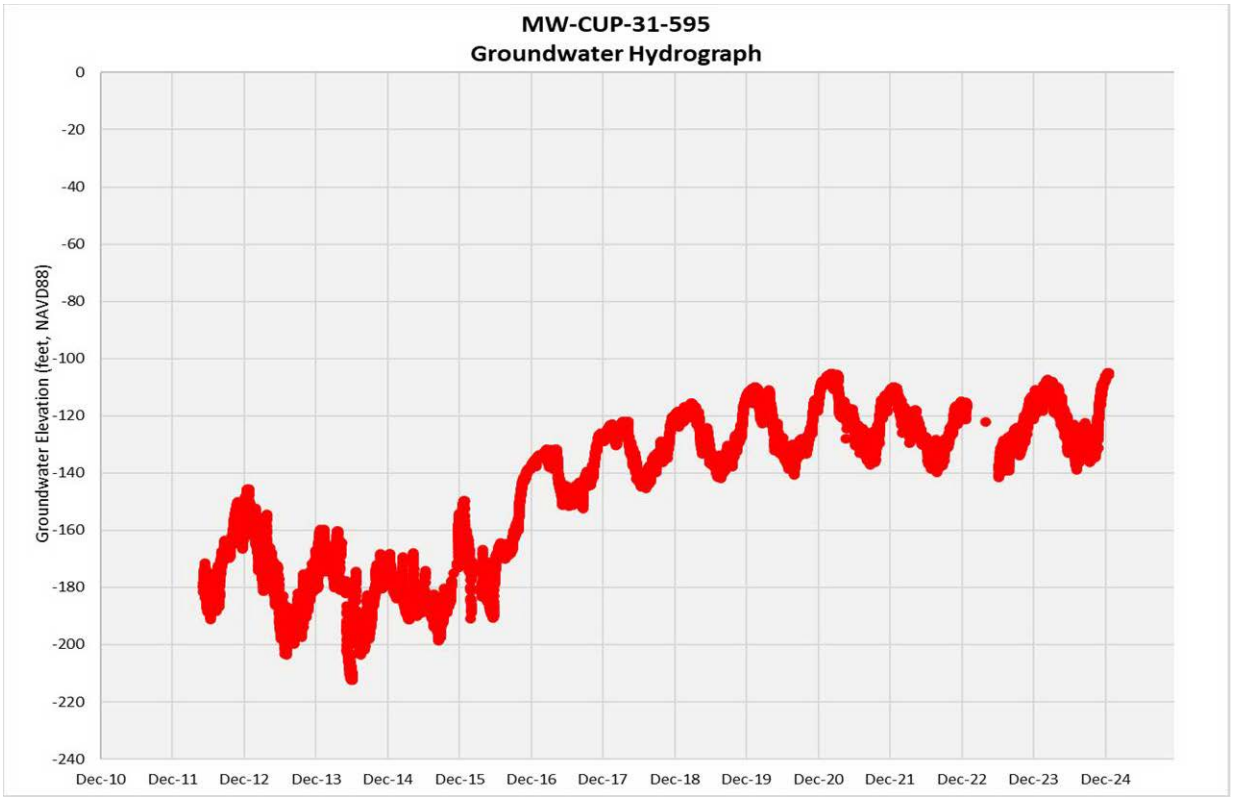
Dec-24


MW-CUP-31-595
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
-220
-240
Dec-10
Dec-11
Dec-12
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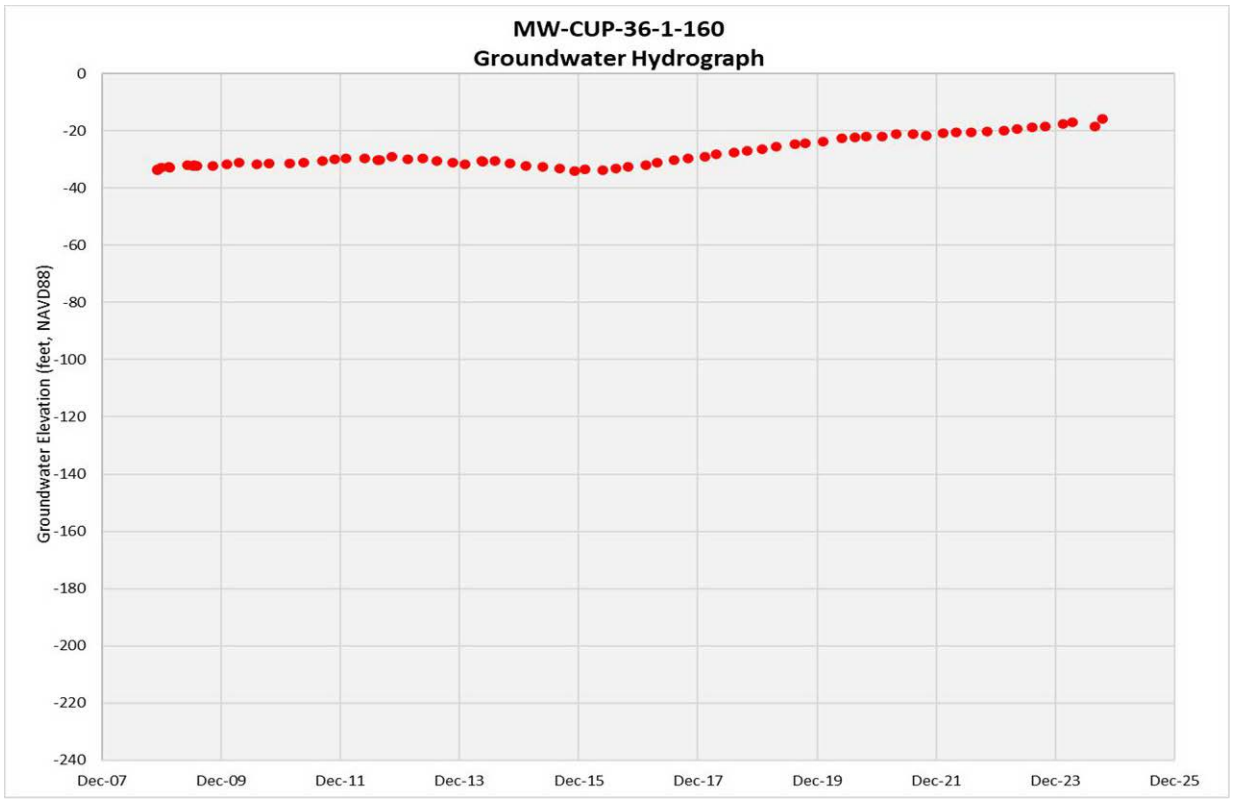
Dec-21
Dec-22
Dec-23
Dec-24


MW-CUP-36-1-160
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
-220
-240
Dec-07
Dec-09
Dec-11
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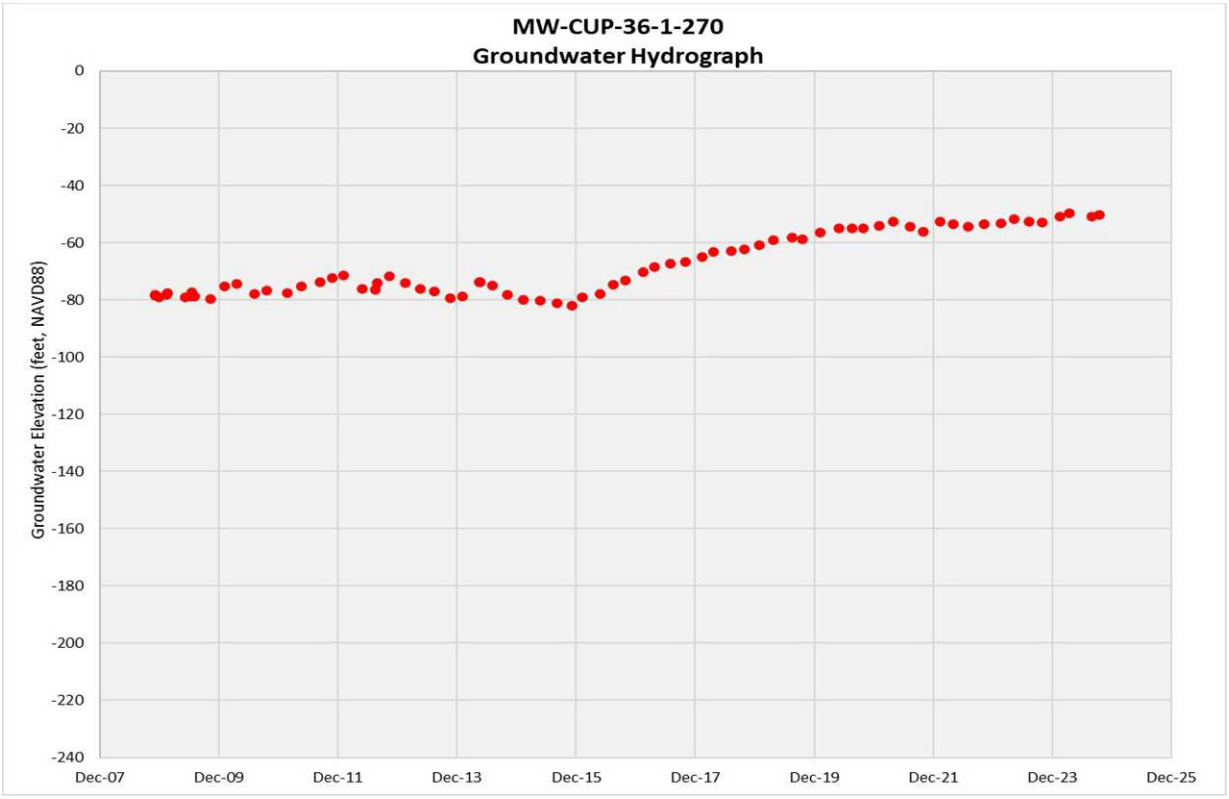
Dec-21
Dec-23
Dec-25


MW-CUP-36-1-270
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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-20
-40
-60
-80
-100
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-140
-160
-180
-200
-220
-240
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Dec-09
Dec-11
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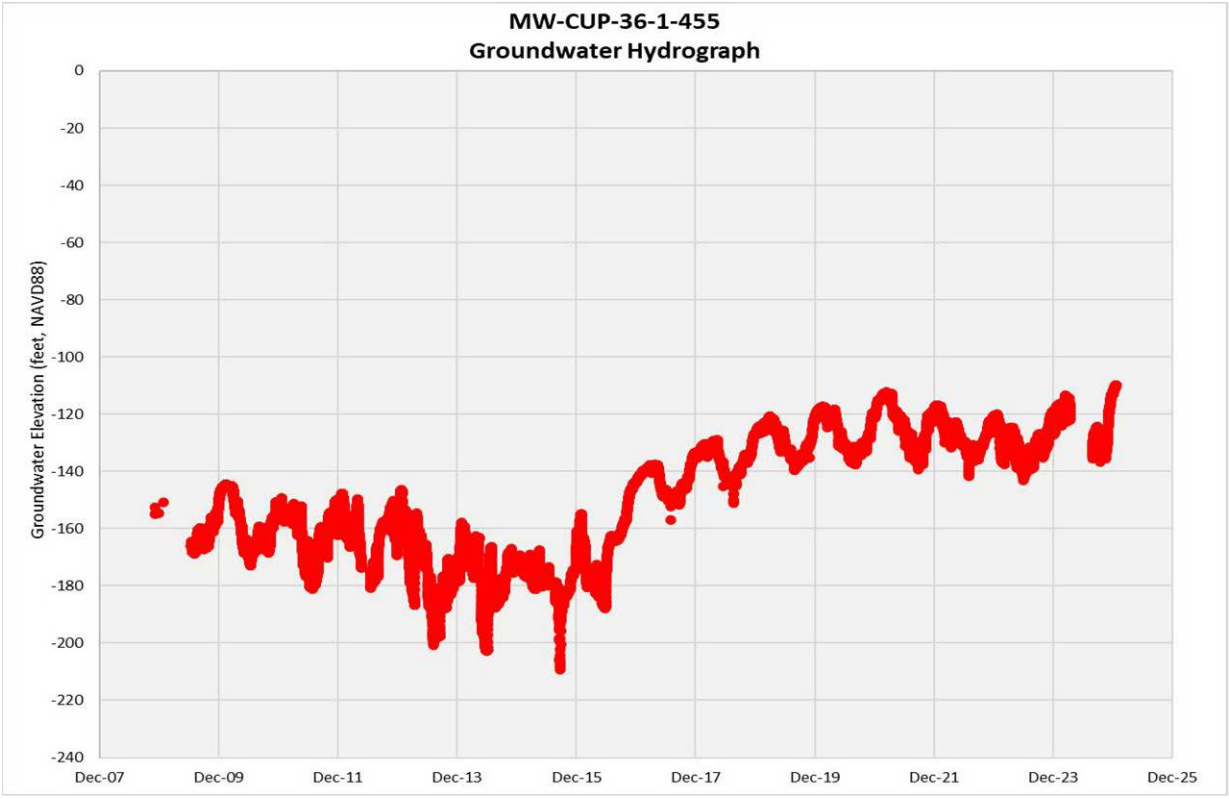
Dec-21
Dec-23
Dec-25


MW-CUP-36-1-455
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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-80
-100
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-160
-180
-200
-220
-240
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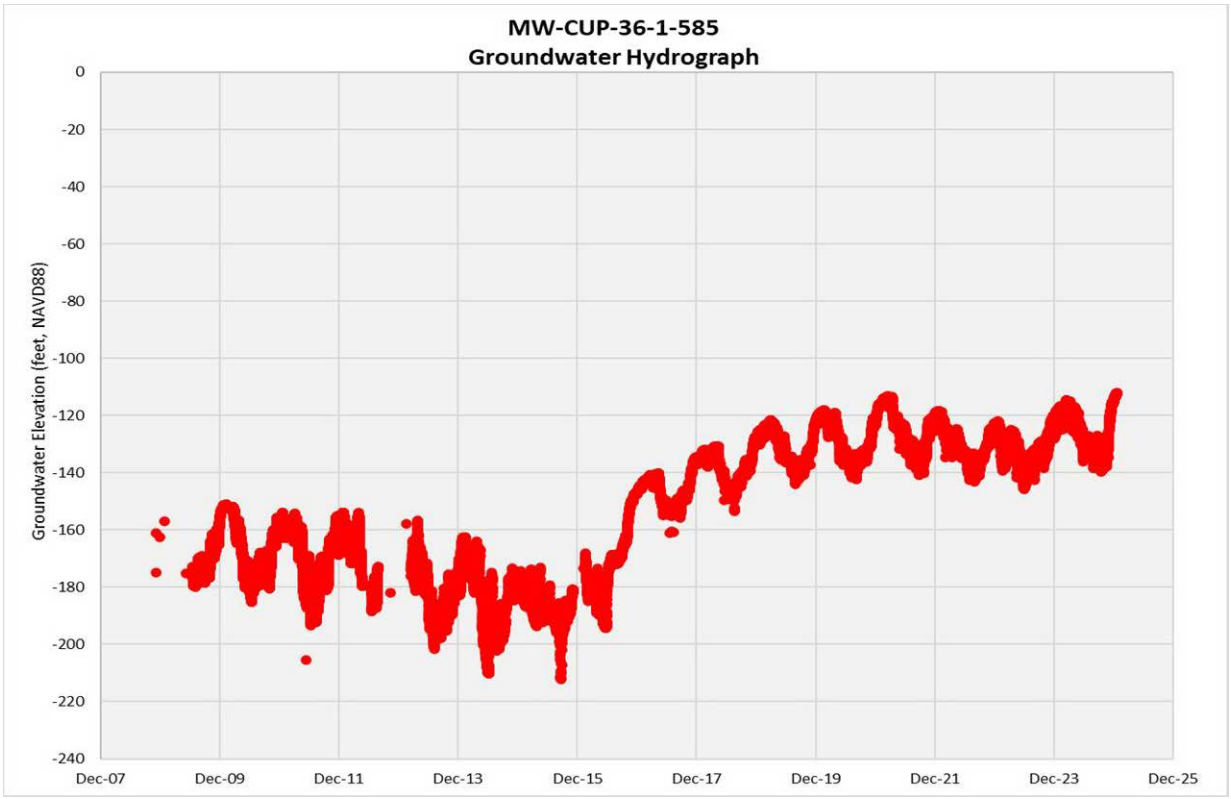
Dec-25


MW-CUP-36-1-585
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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-60
-80
-100
-120
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-160
-180
-200
-220
-240
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Dec-09
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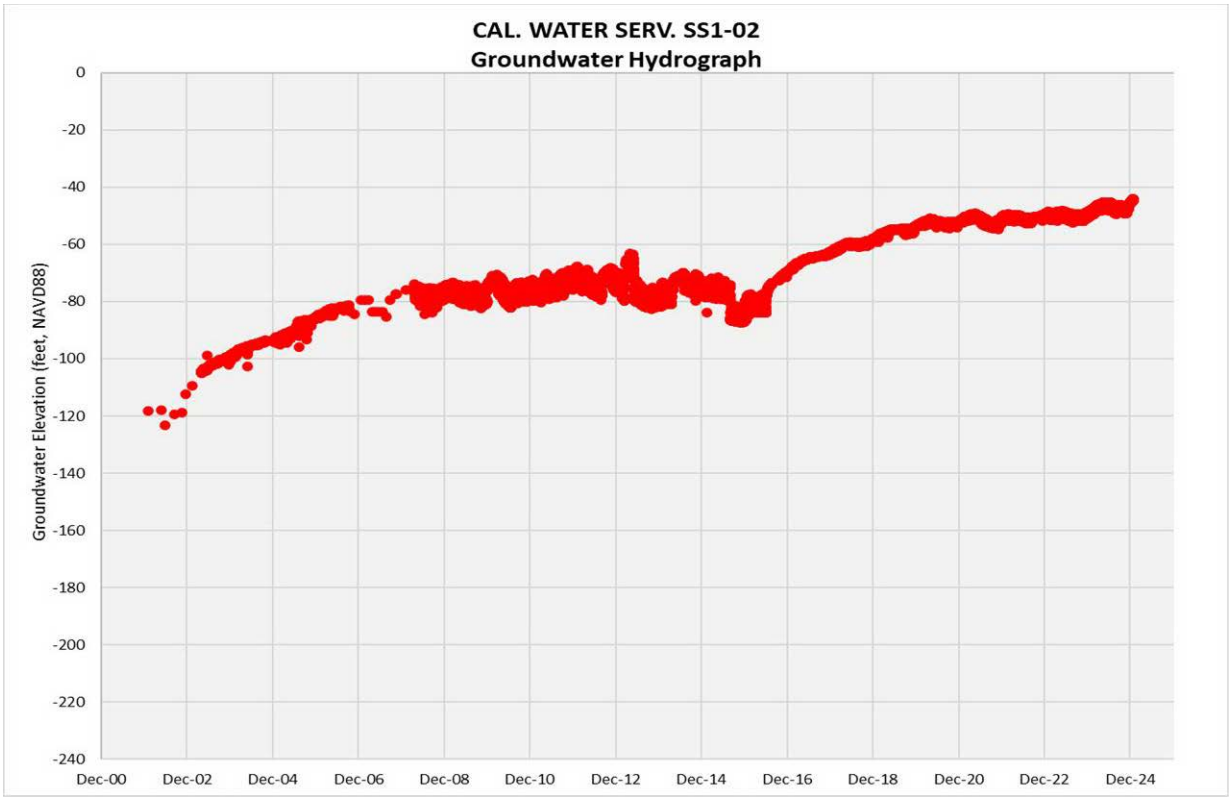
Dec-25


CAL. WATER SERV. SS1-02
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
-220
-240
Dec-00
Dec-02
Dec-04
Dec-06
Dec-08
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Dec-16
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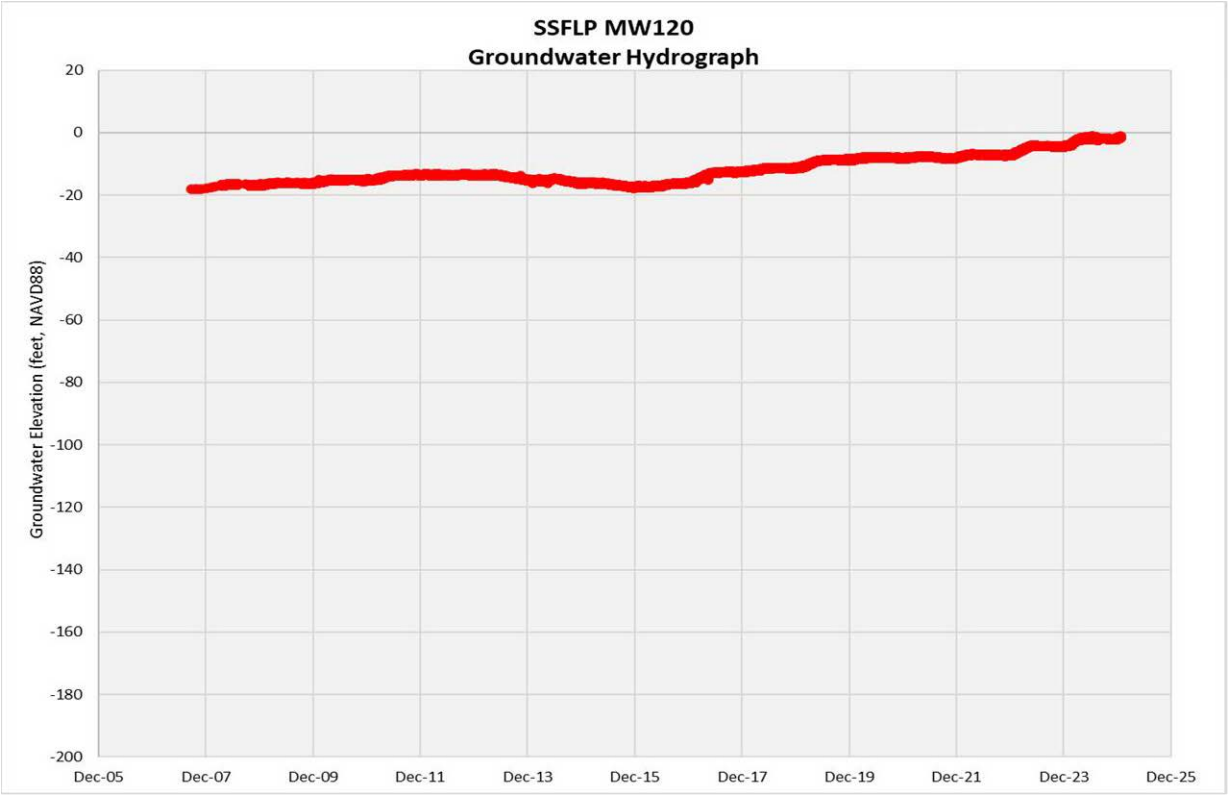
Dec-24


SSFLP MW120
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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-20
-40
-60
-80
-100
-120
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-160
-180
-200
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Dec-09
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Dec-17
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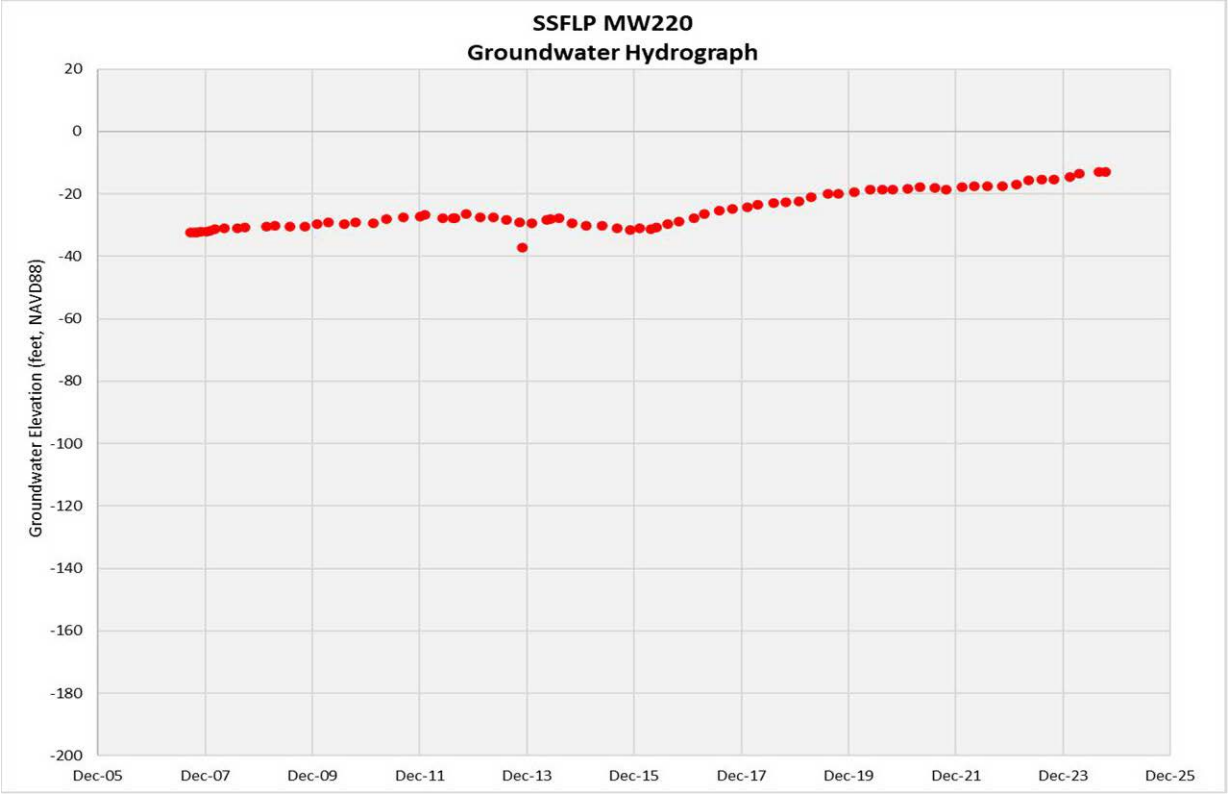
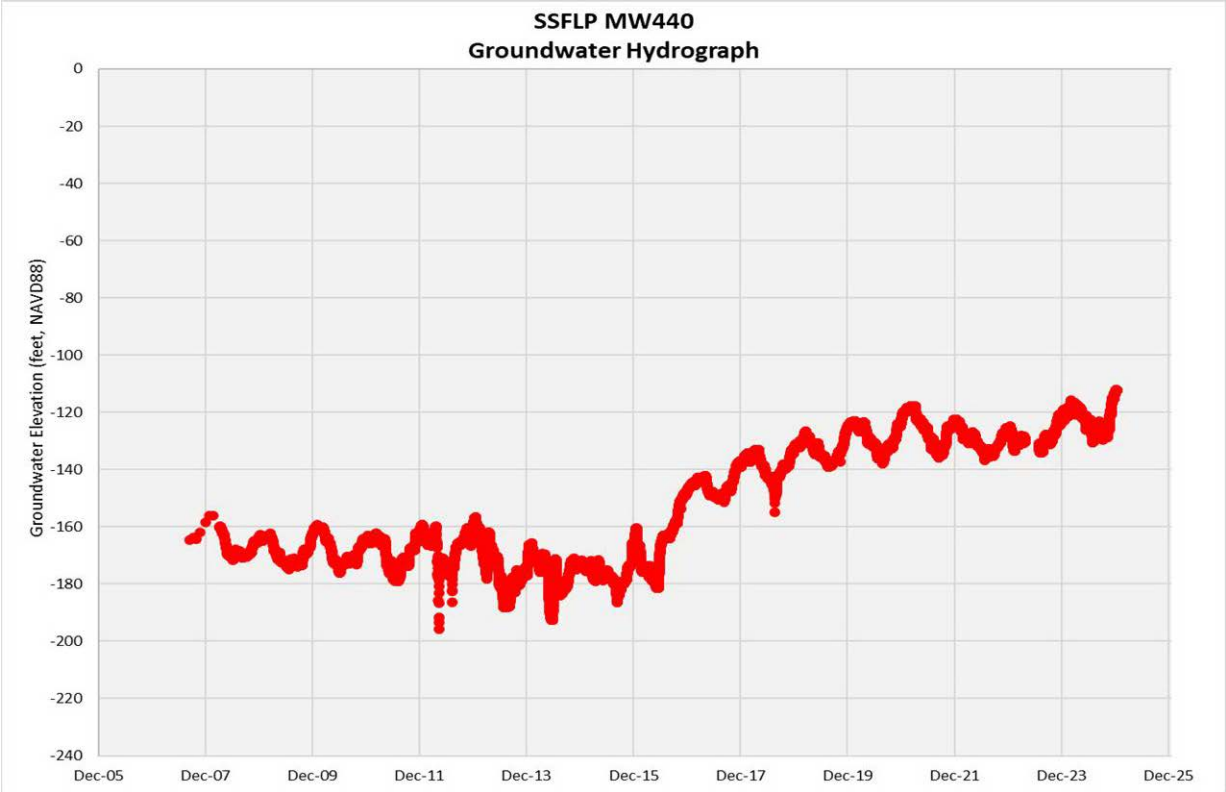
Dec-21
Dec-23
Dec-25


SSFLP MW220
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
20
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
Dec-05
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25


SSFLP MW440
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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-80
-100
-120
-140
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-180
-200
-220
-240
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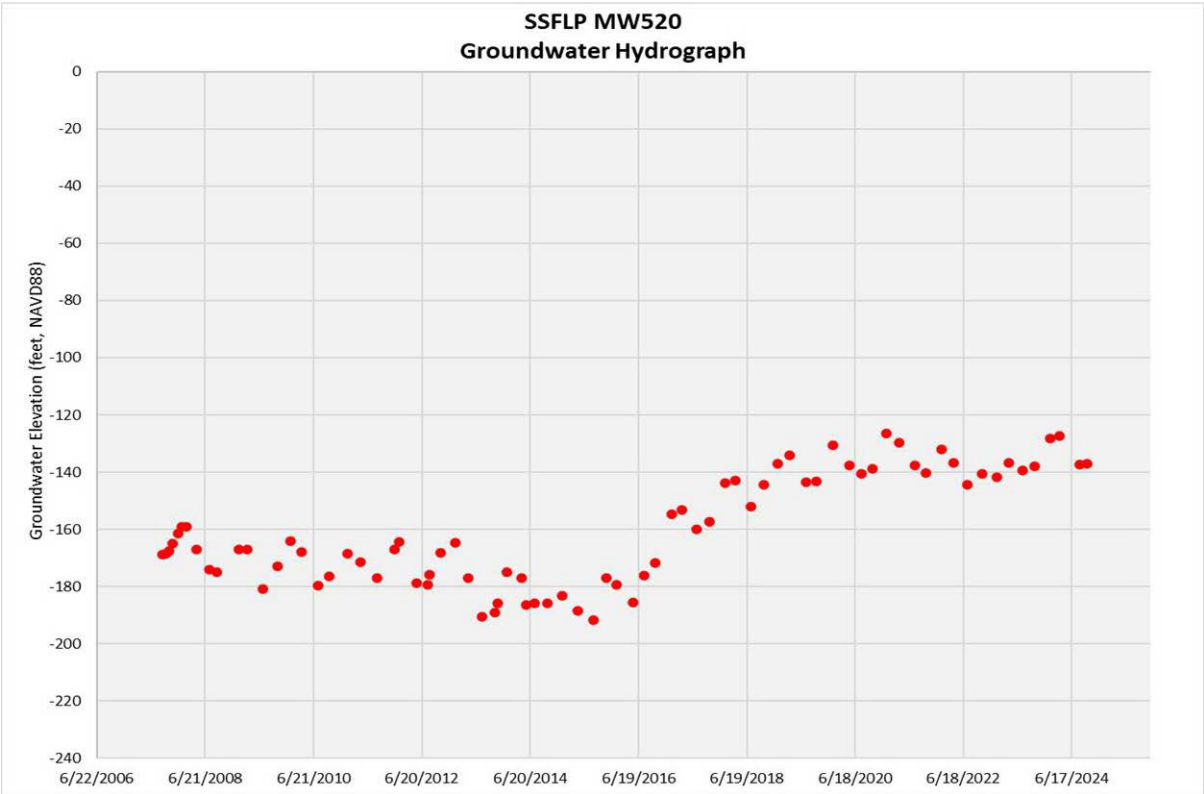
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25


SSFLP MW520
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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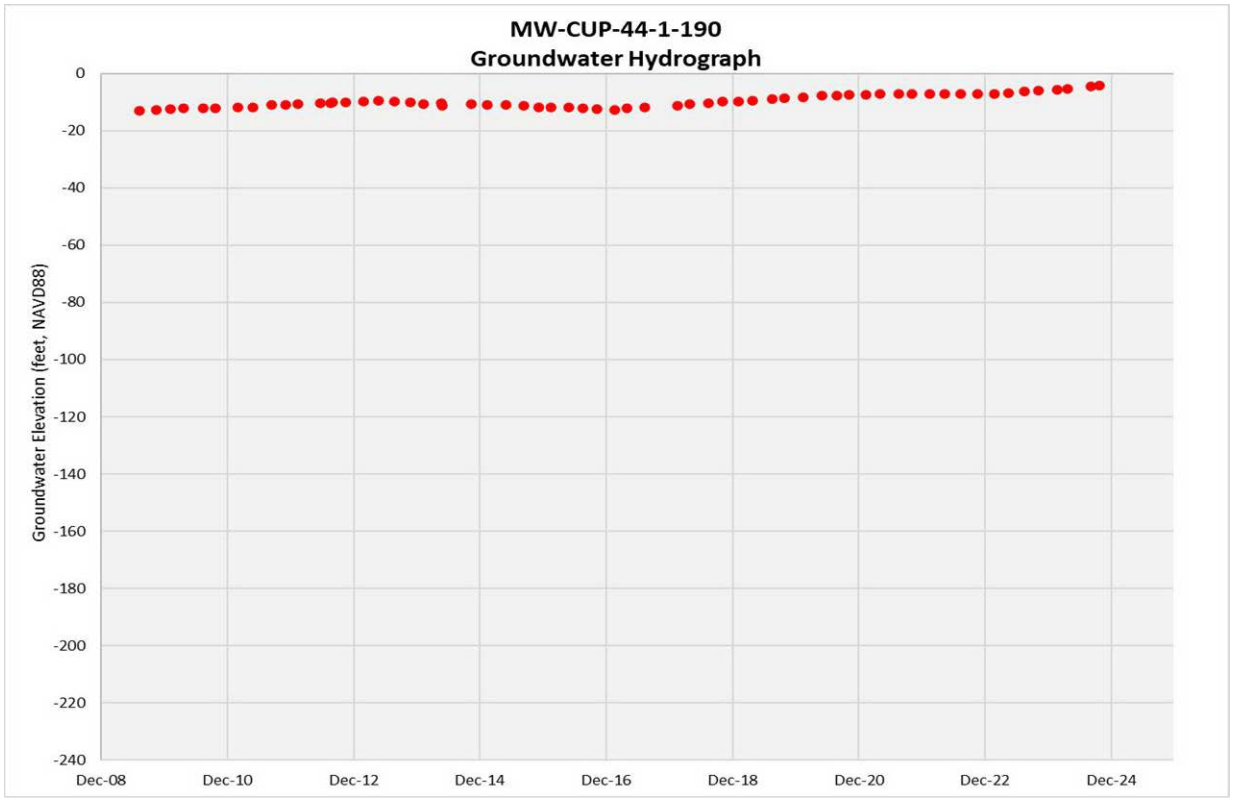
-40
-60
-80
-100
-120
-140
-160
-180
-200
-220
-240
6/22/2006
6/21/2008
6/21/2010
6/20/2012
6/20/2014
6/19/2016
6/19/2018
6/18/2020
6/18/2022
6/17/2024


MW-CUP-44-1-190
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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-20
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-60
-80
-100
-120
-140
-160
-180
-200
-220
-240
Dec-08
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Dec-12
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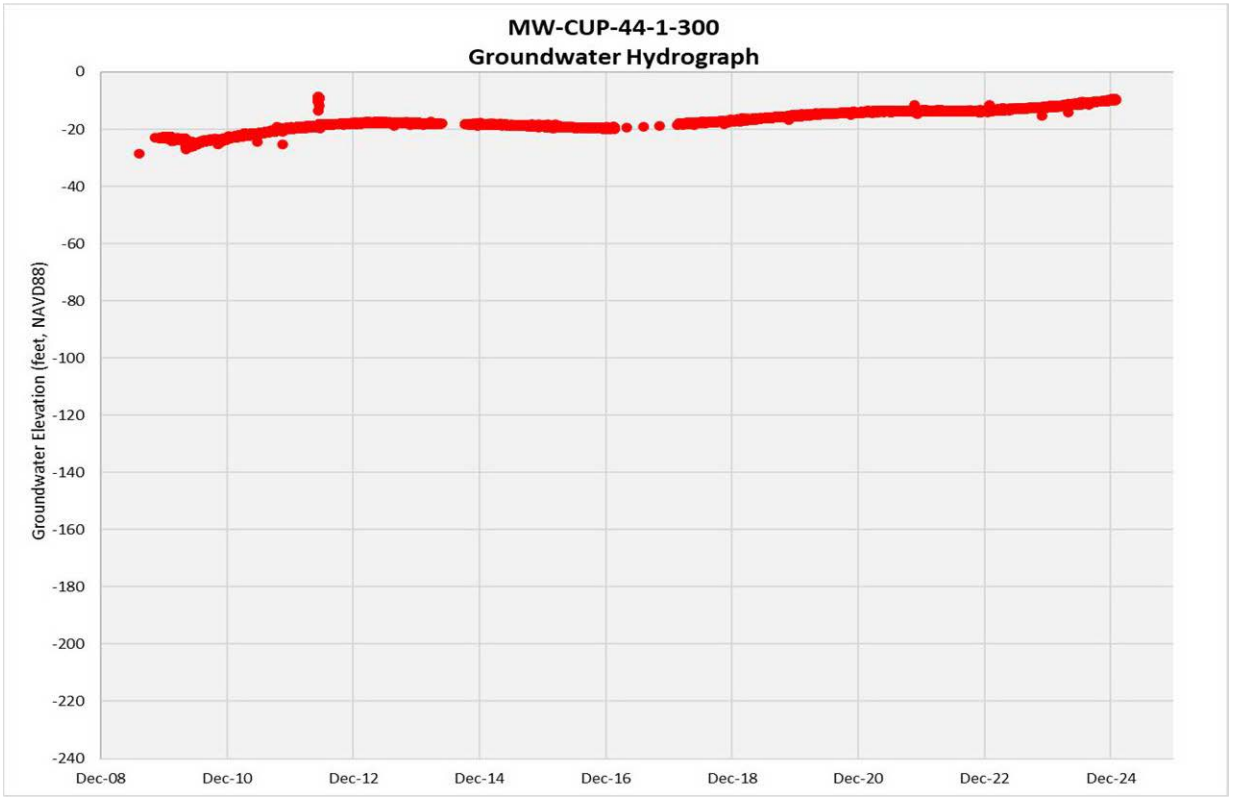
Dec-16
Dec-18
Dec-20
Dec-22
Dec-24


MW-CUP-44-1-300
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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-20
-40
-60
-80
-100
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-140
-160
-180
-200
-220
-240
Dec-08
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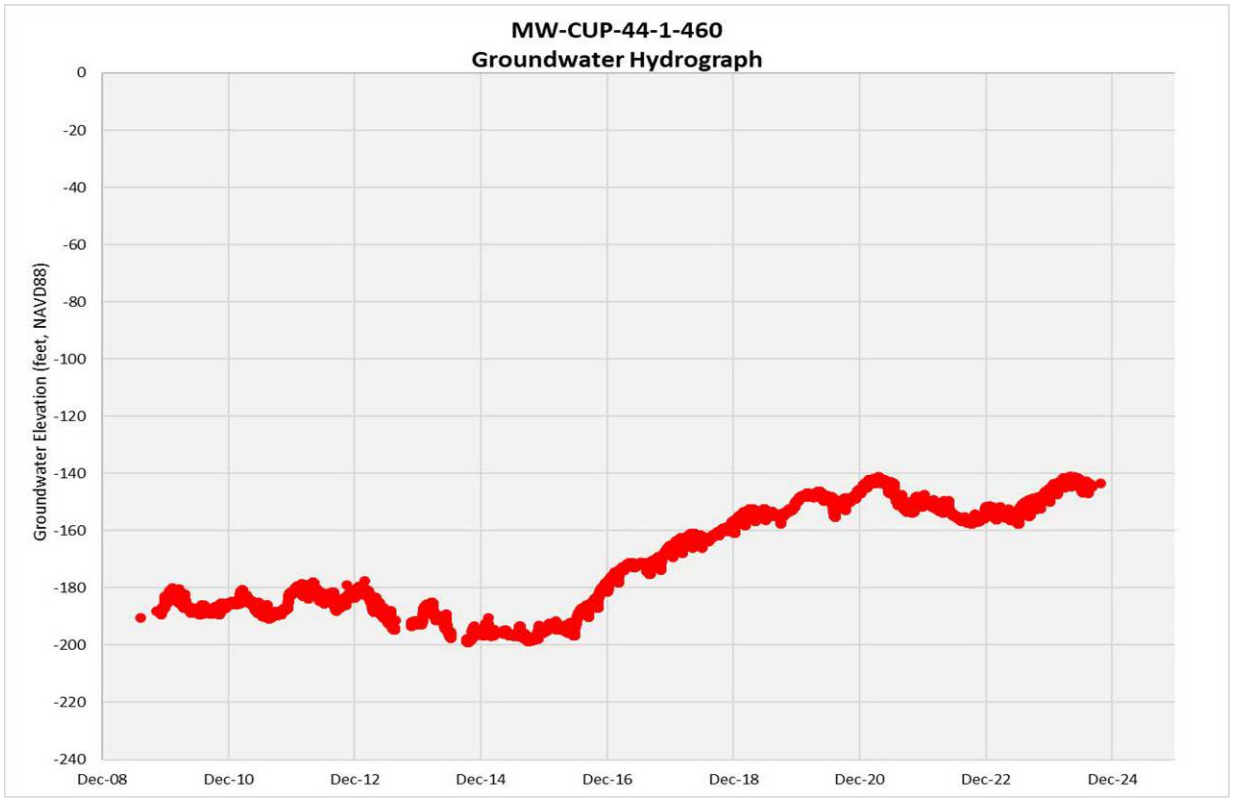
Dec-12
Dec-14
Dec-16
Dec-18
Dec-20
Dec-22
Dec-24


MW-CUP-44-1-460
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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-80
-100
-120
-140
-160
-180
-200
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-240
Dec-08
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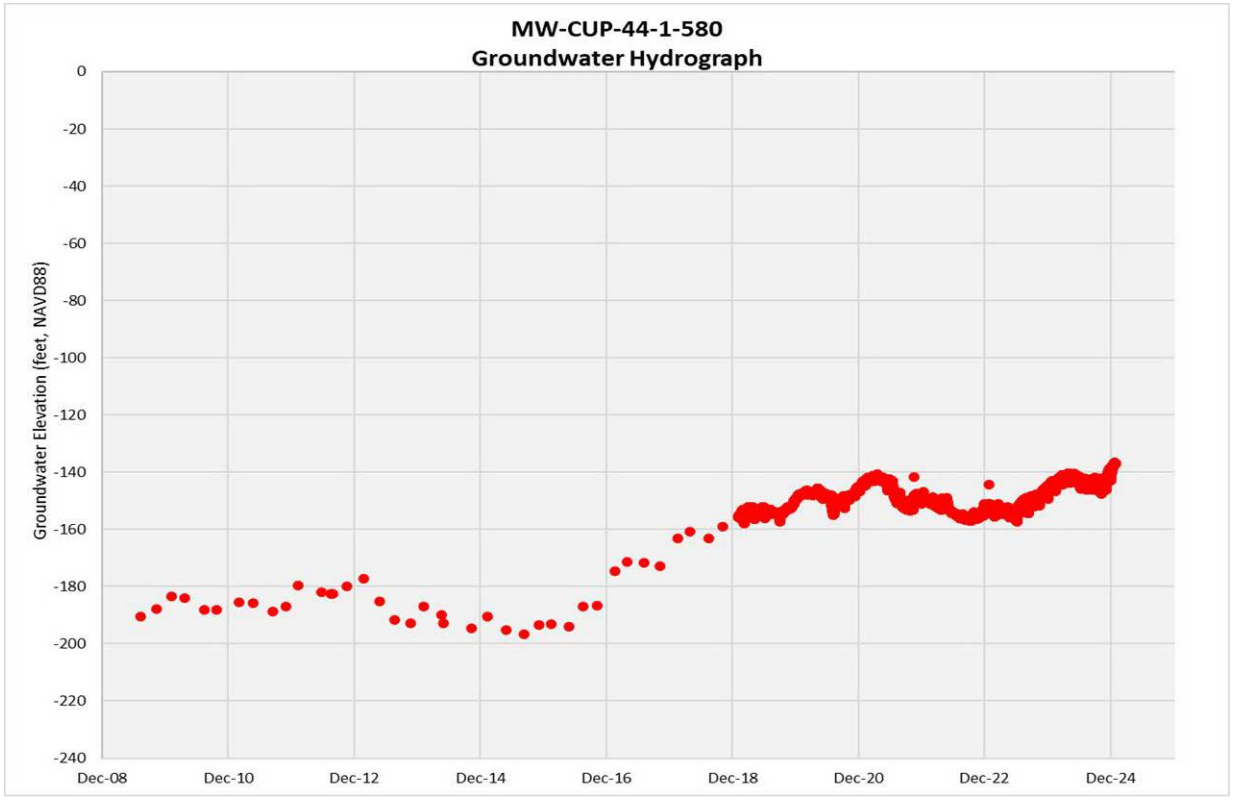
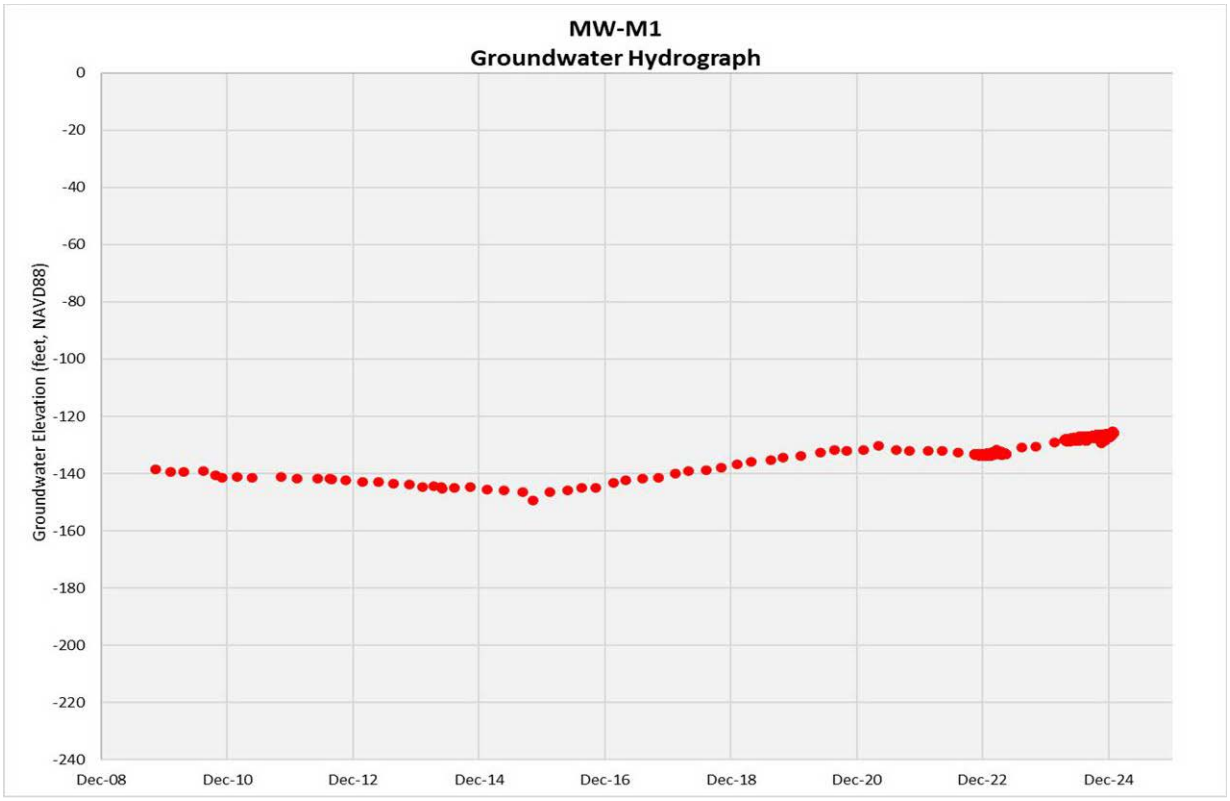
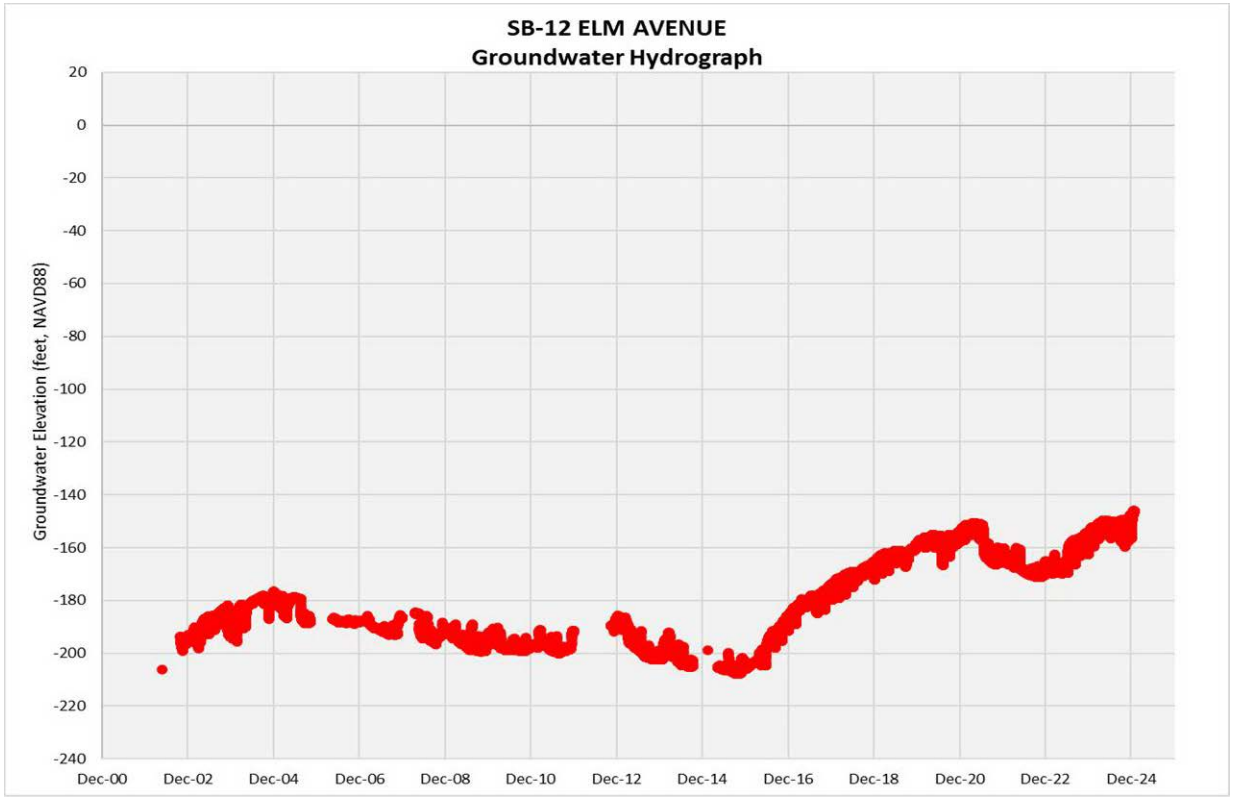
Dec-12
Dec-14
Dec-16
Dec-18
Dec-20
Dec-22
Dec-24


MW-CUP-44-1-580
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
-220
-240
Dec-08
Dec-10
Dec-12
Dec-14
Dec-16
Dec-18
Dec-20
Dec-22
Dec-24


MW-M1
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
-220
-240
Dec-08
Dec-10
Dec-12
Dec-14
Dec-16
Dec-18
Dec-20
Dec-22
Dec-24


SB-12 ELM AVENUE
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
-220
-240
Dec-00
Dec-02
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Dec-06
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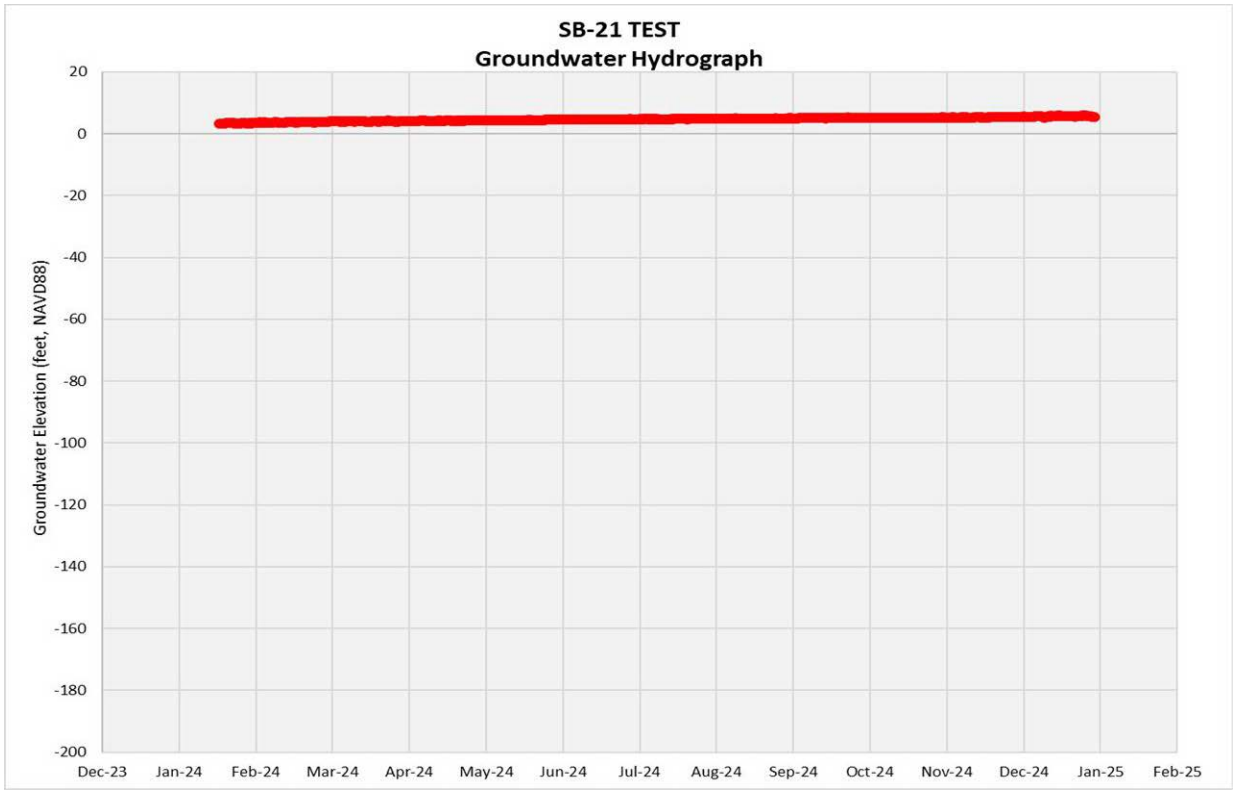
Dec-16
Dec-18
Dec-20
Dec-22
Dec-24


SB-21 TEST
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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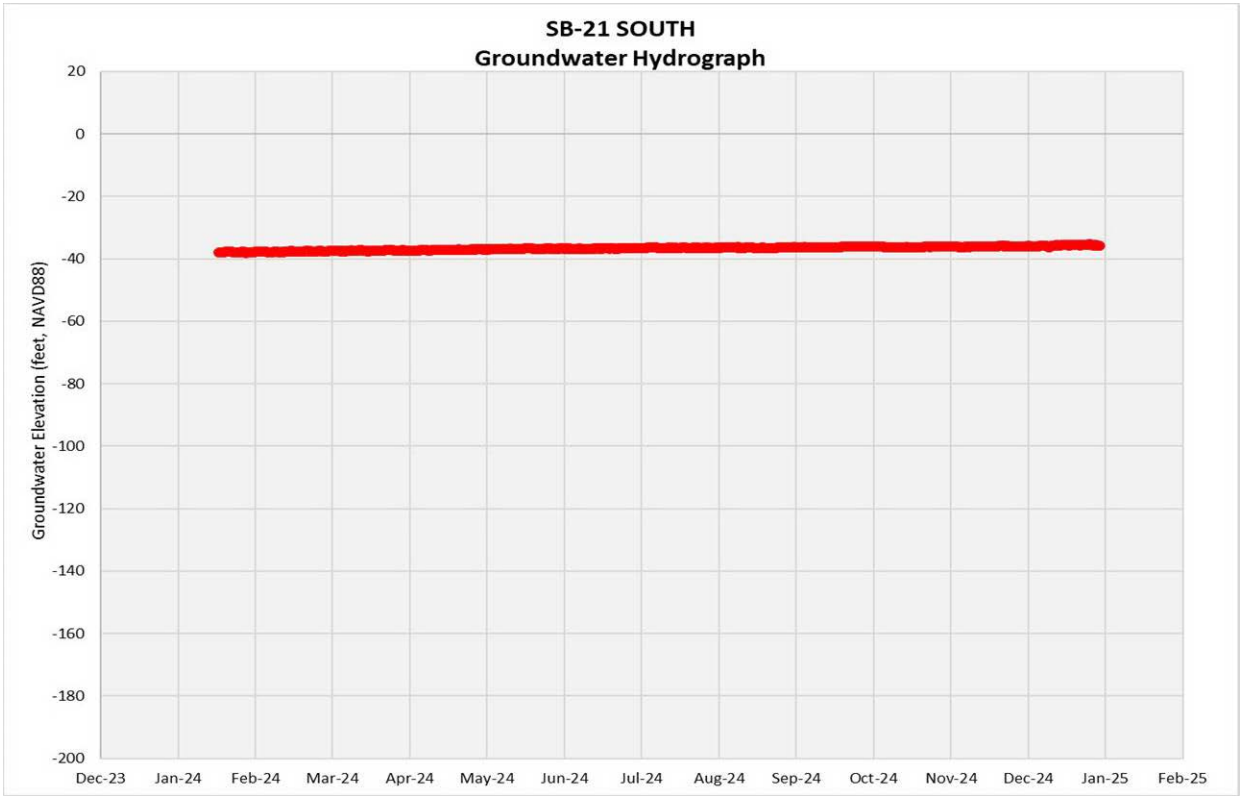
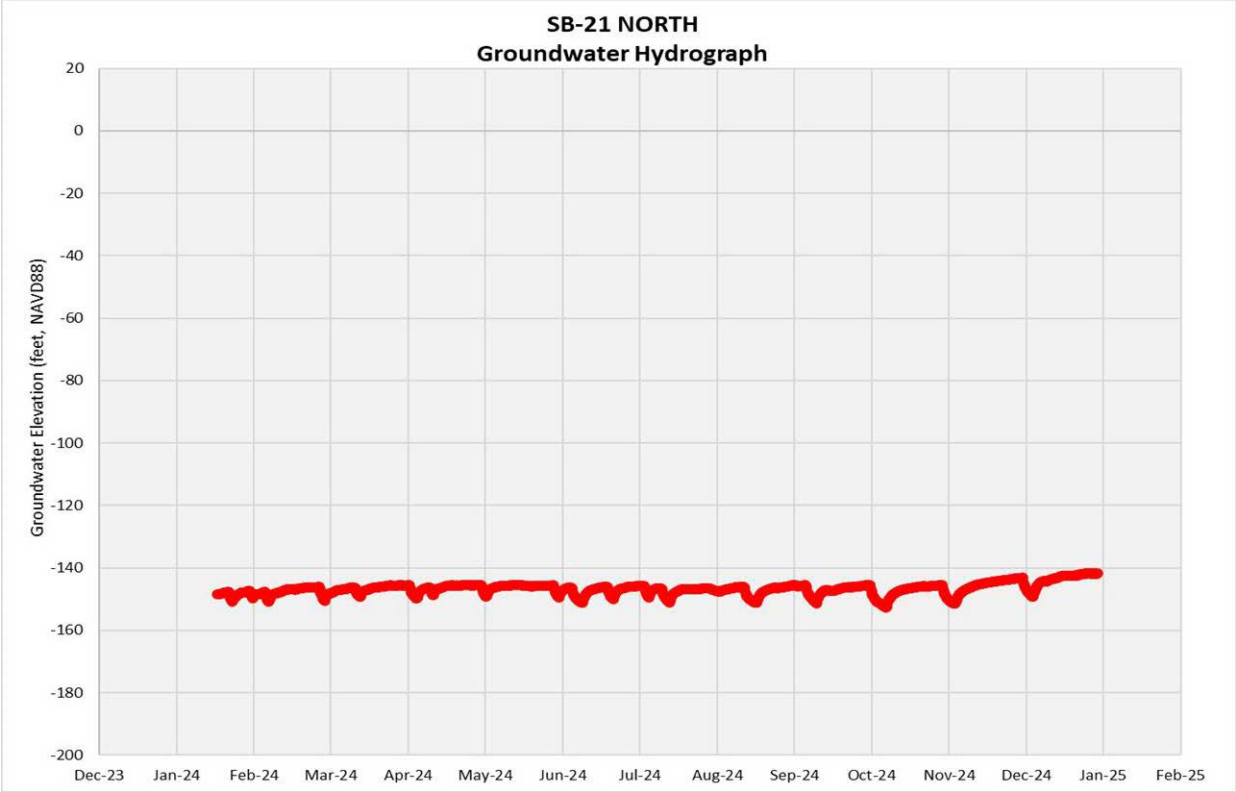
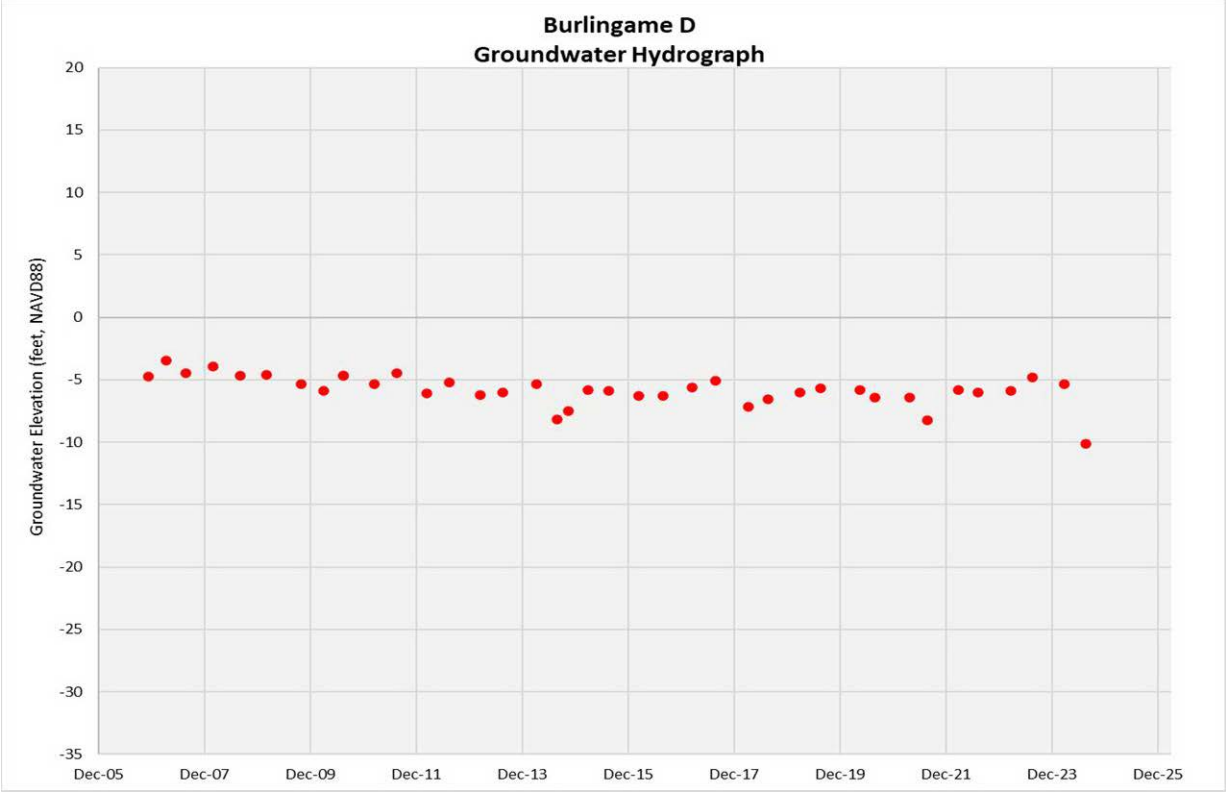
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
Dec-23
Jan-24
Feb-24
Mar-24
Apr-24
May-24
Jun-24
Jul-24
Aug-24
Sep-24
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25


SB-21 SOUTH
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
20
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
Dec-23
Jan-24
Feb-24
Mar-24
Apr-24
May-24
Jun-24
Jul-24
Aug-24
Sep-24
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25


SB-21 NORTH
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
20
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
Dec-23
Jan-24
Feb-24
Mar-24
Apr-24
May-24
Jun-24
Jul-24
Aug-24
Sep-24
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25


Burlingame D
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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15
10
5
0
-5
-10
-15
-20
-25
-30
-35
Dec-05
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Dec-09
Dec-11
Dec-13
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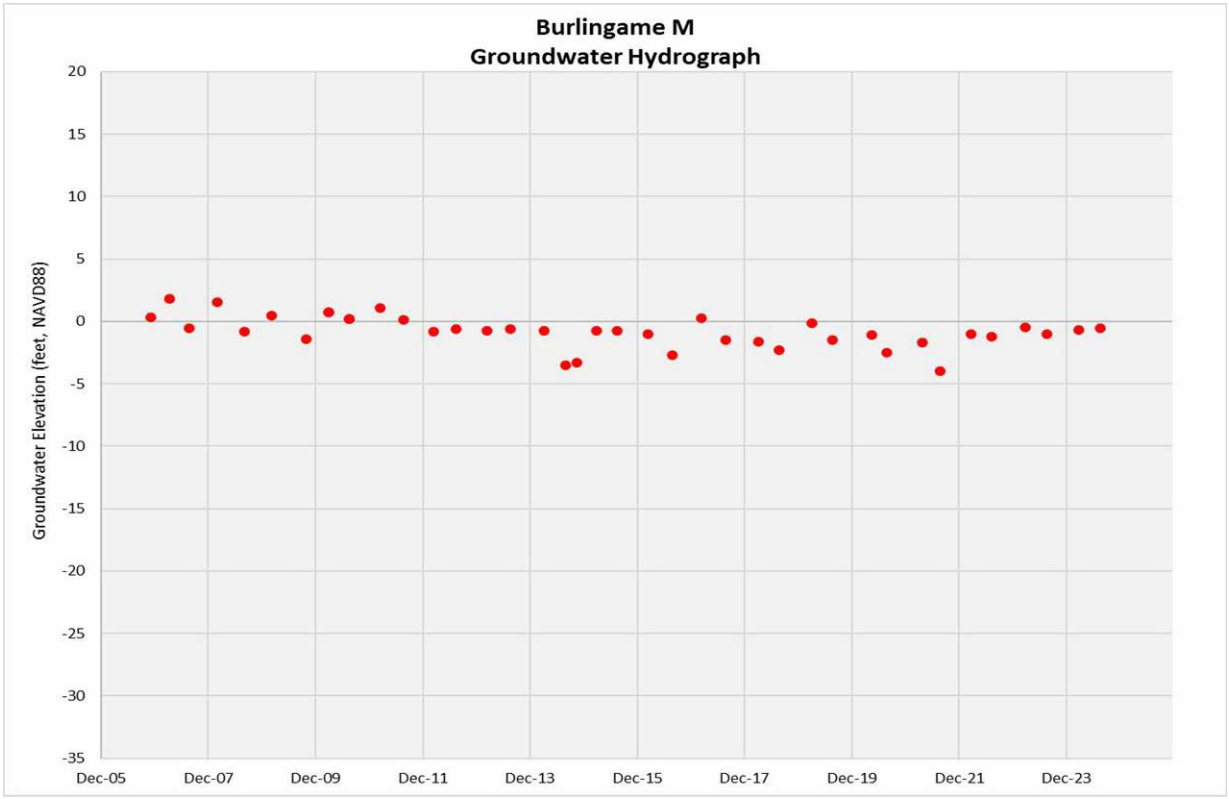
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25


Burlingame M
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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15
10
5
0
-5
-10
-15
-20
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-30
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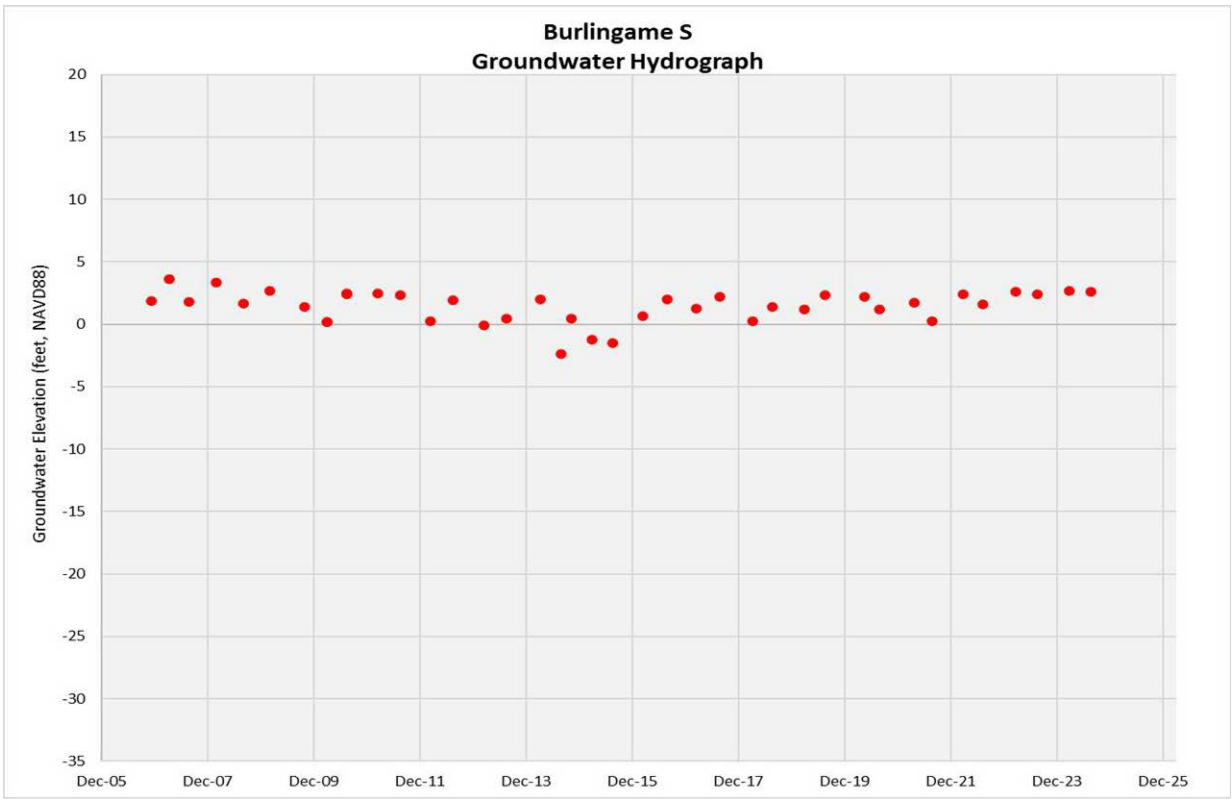
Dec-05
Dec-07
Dec-09
Dec-11
Dec-13
Dec-15
Dec-17
Dec-19
Dec-21
Dec-23


Burlingame S
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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15
10
5
0
-5
-10
-15
-20
-25
-30
-35
Dec-05
Dec-07
Dec-09
Dec-11
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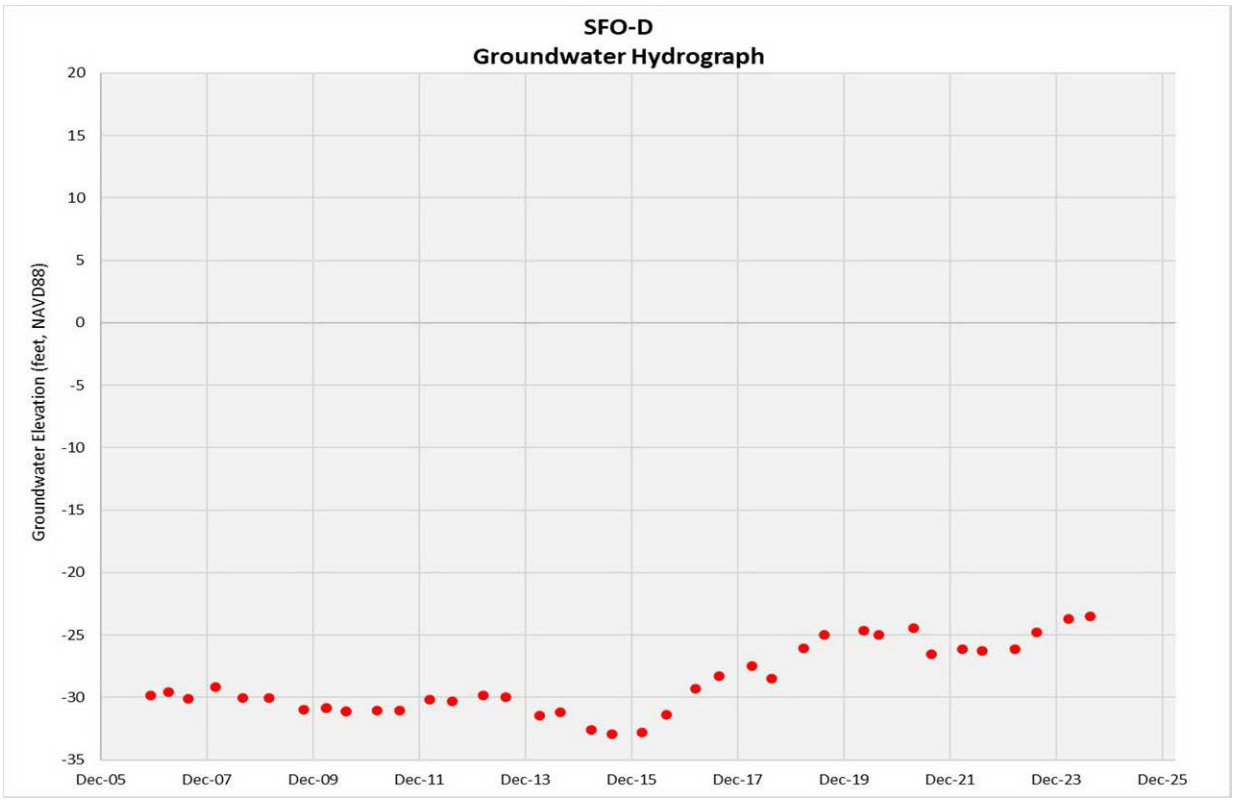
Dec-17
Dec-19
Dec-21
Dec-23
Dec-25


SFO-D
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
Dec-05
Dec-07
Dec-09
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Dec-17
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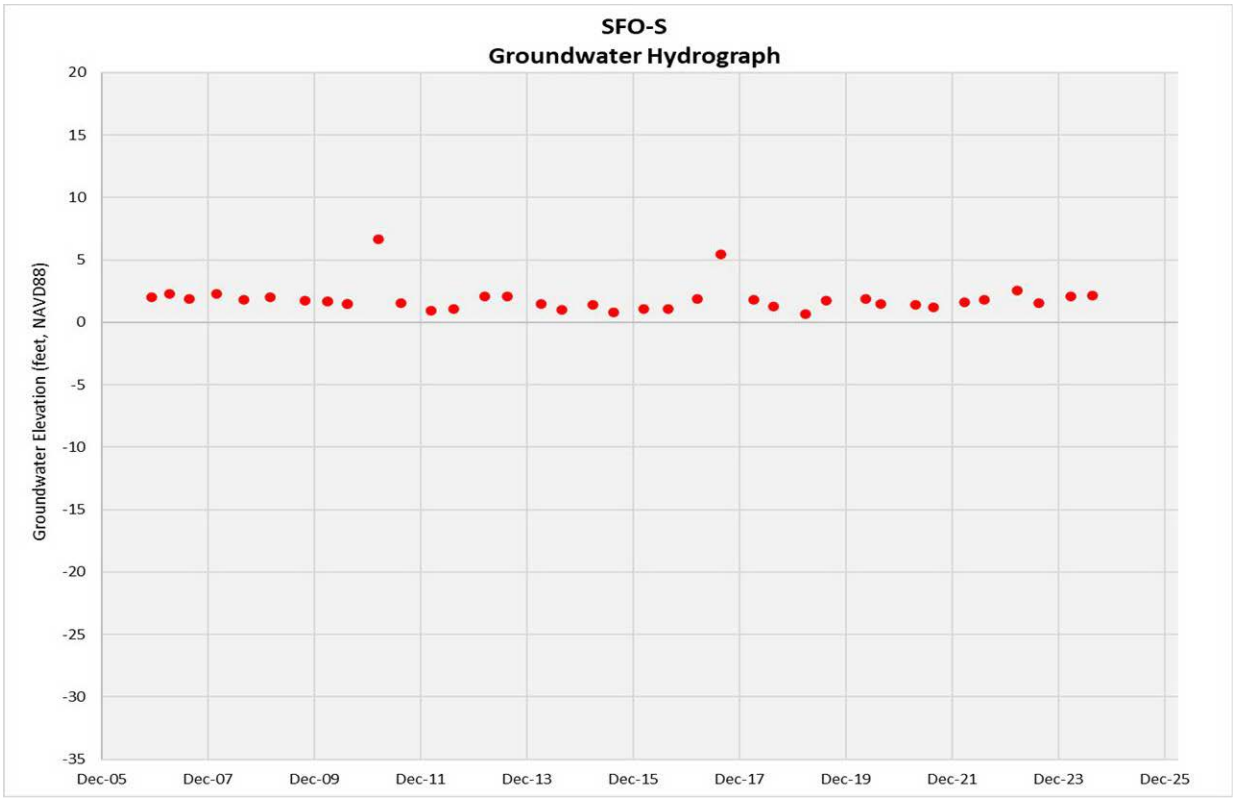
Dec-23
Dec-25


SFO-S
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
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15
10
5
0
-5
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-20
-25
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-35
Dec-05
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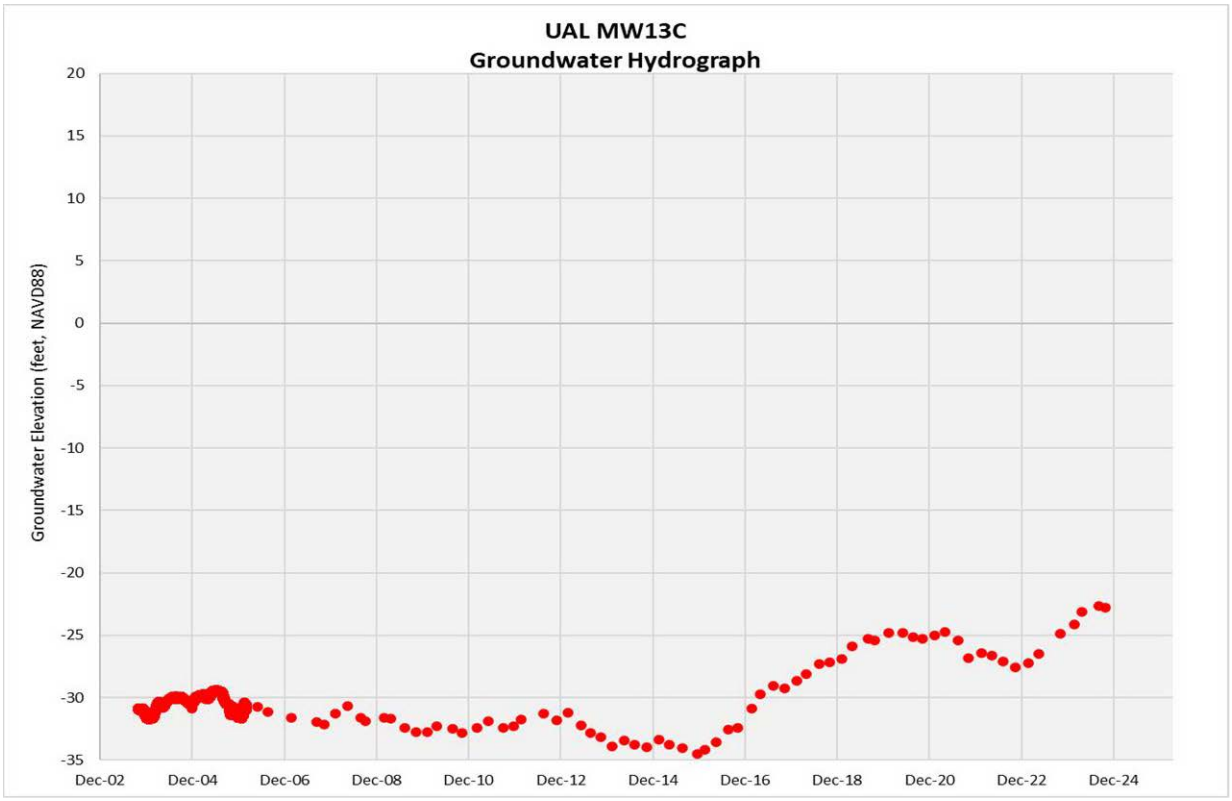
Dec-23
Dec-25


UAL MW13C
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
Dec-02
Dec-04
Dec-06
Dec-08
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Dec-12
Dec-14
Dec-16
Dec-18
Dec-20
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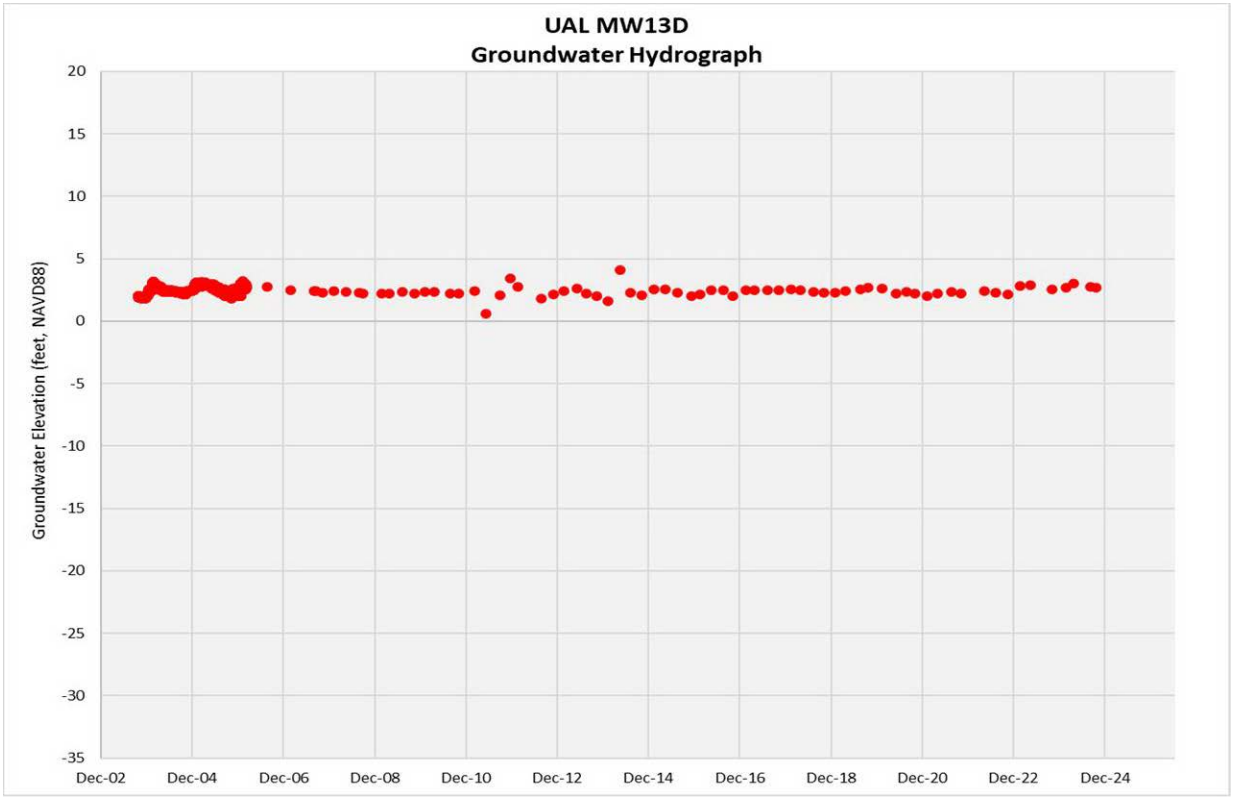
Dec-24


UAL MW13D
Groundwater Hydrograph
Groundwater Elevation (feet, NAVD88)
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-35
Dec-02
Dec-04
Dec-06
Dec-08
Dec-10
Dec-12
Dec-14
Dec-16
Dec-18
Dec-20
Dec-22
Dec-24

APPENDIX B
Laboratory Analytical Results

SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

Analytical Report

PREPARED FOR:

Stefani Harrison
525 Golden Gate Avenue
Project Management Bureau
SAN FRANCISCO, CA 94102

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San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission
1000 El Camino Real
Millbrae, CA 94030
Tel: (650) 872-5945 Fax: (650) 952-3407

SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2412325

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_Daly City

Scheduled Sample Date: 04/03/2024
Sampling Team: Field

Lab Sample#: 2412325-01 **Sample Source:** WSB_DC06_JEFF **External ID:**

Date Collected: 04/03/2024 08:20AM **Date Received:** 04/03/2024 12:54PM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
SEM_200.7_DW(EPA 200.7)								
Calcium, Ca	22.4	mg/L	1	0.005	1	04/12/2024	2078479 BTRINH	
Magnesium, Mg	22.8	mg/L	1	0.021	0.2	04/12/2024	2078479 BTRINH	
Potassium, K	1.88	mg/L	1	0.06	0.2	04/12/2024	2078479 BTRINH	
Sodium, Na	35.9	mg/L	1	0.2	1	04/12/2024	2078479 BTRINH	
MBP_ALK(SM 2320 B)								
Alkalinity	116	mg/L	1	0.593	3	04/03/2024	2078048 ALEE	
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	60.2	mg/L	1		3	04/03/2024	2078051 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	482	µmhos/cm	1		1	04/03/2024	2078036 MSWONG	
MBP_HARDNESS_T(SM 2340 C)								
Hardness, Total, as CaCO3	145	mg/L	1	0.474	3	04/03/2024	2078052 ALEE	
MBP_PH(SM 4500-H+ B)								
pH	8.02	pH	1			04/03/2024	2078044 MSWONG	H1,H3
Temperature (°C)	21.1	°C	1			04/03/2024	2078044 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	251	mg/L	1	13.2	20	04/06/2024	2078109 ABALALIO	

Lab Sample#: 2412325-02 **Sample Source:** WSB_DC11_DC2 **External ID:**

Date Collected: 04/03/2024 07:10AM **Date Received:** 04/03/2024 12:54PM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
SEM_200.7_DW(EPA 200.7)								
Calcium, Ca	60.6	mg/L	1	0.005	1	04/12/2024	2078479 BTRINH	
Magnesium, Mg	46.8	mg/L	1	0.021	0.2	04/12/2024	2078479 BTRINH	
Potassium, K	3.81	mg/L	1	0.06	0.2	04/12/2024	2078479 BTRINH	
Sodium, Na	80.1	mg/L	1	0.2	1	04/12/2024	2078479 BTRINH	
MBP_ALK(SM 2320 B)								
Alkalinity	175	mg/L	1	1.19	6	04/03/2024	2078048 ALEE	
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	129	mg/L	1		6	04/03/2024	2078051 ALEE	

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SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2412325

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_Daly City
Scheduled Sample Date: 04/03/2024
Sampling Team: Field

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1040	µmhos/cm	1		1	04/03/2024	2078036	MSWONG	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	331	mg/L	1	0.948	6	04/03/2024	2078052	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.6	pH	1			04/03/2024	2078044	MSWONG	H1,H3
Temperature (°C)	21.5	°C	1			04/03/2024	2078044	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	589	mg/L	1	13.2	20	04/06/2024	2078109	ABALALIO	>MCL

Lab Sample#: 2412325-02A **Sample Source:** WSB_DC11_DC2 **External ID:**
Date Collected: 04/03/2024 07:10AM **Date Received:** 04/03/2024 12:54PM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	127	mg/L	20	2	10	04/04/2024	2078072	PWARNER	
Nitrate as N	2.47	mg/L	20	0.68	0.8	04/04/2024	2078072	PWARNER	

Lab Sample#: 2412325-03 **Sample Source:** WSB_DC12_JS **External ID:**
Date Collected: 04/03/2024 08:00AM **Date Received:** 04/03/2024 12:54PM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	28.9	mg/L	10	1	5	04/03/2024	2078017	PWARNER	
Nitrate as N	8.77	mg/L	10	0.34	0.4	04/03/2024	2078017	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	24.5	mg/L	1	0.005	1	04/12/2024	2078479	BTRINH	
Magnesium, Mg	26	mg/L	1	0.021	0.2	04/12/2024	2078479	BTRINH	
Potassium, K	1.64	mg/L	1	0.06	0.2	04/12/2024	2078479	BTRINH	
Sodium, Na	38	mg/L	1	0.2	1	04/12/2024	2078479	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	119	mg/L	1	0.593	3	04/03/2024	2078048	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	51.6	mg/L	1		3	04/03/2024	2078051	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	528	µmhos/cm	1		1	04/03/2024	2078036	MSWONG	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2412325

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_Daly City
Scheduled Sample Date: 04/03/2024
Sampling Team: Field

Hardness, Total, as CaCO3	162	mg/L	1	0.474	3	04/03/2024	2078052	ALEE

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	8.11	pH	1			04/03/2024	2078044	MSWONG	H1,H3
Temperature (°C)	21.2	°C	1			04/03/2024	2078044	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	278	mg/L	1	13.2	20	04/06/2024	2078109	ABALALIO	

Lab Sample#: 2412325-04 **Sample Source:** WSB_DC13_SULL **External ID:**
Date Collected: 04/03/2024 08:45AM **Date Received:** 04/03/2024 12:54PM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	144	mg/L	10	1	5	04/03/2024	2078017	PWARNER	
Nitrate as N	2.63	mg/L	10	0.34	0.4	04/03/2024	2078017	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	34.5	mg/L	1	0.005	1	04/12/2024	2078479	BTRINH	
Magnesium, Mg	35.4	mg/L	1	0.021	0.2	04/12/2024	2078479	BTRINH	
Potassium, K	1.73	mg/L	1	0.06	0.2	04/12/2024	2078479	BTRINH	
Sodium, Na	42.9	mg/L	1	0.2	1	04/12/2024	2078479	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	142	mg/L	1	1.19	6	04/03/2024	2078048	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	58.3	mg/L	1		6	04/03/2024	2078051	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	674	µmhos/cm	1		1	04/03/2024	2078036	MSWONG	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	226	mg/L	1	0.948	6	04/03/2024	2078052	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	8.06	pH	1			04/03/2024	2078044	MSWONG	H1,H3
Temperature (°C)	20.8	°C	1			04/03/2024	2078044	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	367	mg/L	1	13.2	20	04/06/2024	2078109	ABALALIO	

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Water Quality Laboratory

ELAP Cert #:
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MILLBRAE 1449

FOLDER ID: 2412325

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_Daly City

Scheduled Sample Date: 04/03/2024
Sampling Team: Field

Lab Sample#: 2412325-05 **Sample Source:** WSB_DC_DUP **External ID:**

Date Collected: 04/03/2024 07:10AM **Date Received:** 04/03/2024 12:54PM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
SEM_200.7_DW(EPA 200.7)									
Calcium, Ca	**58.8**	mg/L	1	0.005	1	04/12/2024	2078479	BTRINH	
Magnesium, Mg	**45.6**	mg/L	1	0.021	0.2	04/12/2024	2078479	BTRINH	
Potassium, K	**3.67**	mg/L	1	0.06	0.2	04/12/2024	2078479	BTRINH	
Sodium, Na	**77.3**	mg/L	1	0.2	1	04/12/2024	2078479	BTRINH	
MBP_ALK(SM 2320 B)									
Alkalinity	**176**	mg/L	1	1.19	6	04/03/2024	2078048	ALEE	
MBP_CHLORIDE(SM 4500-CL- D)									
Chloride	**131**	mg/L	1		6	04/03/2024	2078051	ALEE	
MBP_COND(SM 2510 B)									
Specific Conductance @25°C	**1040**	µmhos/cm	1		1	04/03/2024	2078036	MSWONG	>MCL
MBP_HARDNESS_T(SM 2340 C)									
Hardness, Total, as CaCO3	**330**	mg/L	1	0.948	6	04/03/2024	2078052	ALEE	
MBP_PH(SM 4500-H+ B)									
pH	**7.6**	pH	1			04/03/2024	2078044	MSWONG	H1,H3
Temperature (°C)	**21.3**	°C	1			04/03/2024	2078044	MSWONG	
MBP_TDS(SM 2540 C)									
Total Dissolved Solids	**579**	mg/L	1	13.2	20	04/06/2024	2078109	ABALALIO	>MCL

Lab Sample#: 2412325-05A **Sample Source:** WSB_DC_DUP **External ID:**

Date Collected: 04/03/2024 07:10AM **Date Received:** 04/03/2024 12:54PM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))									
Sulfate	**133**	mg/L	20	2	10	04/04/2024	2078072	PWARNER	
Nitrate as N	**2.56**	mg/L	20	0.68	0.8	04/04/2024	2078072	PWARNER	

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FOLDER ID: 2412325

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_Daly City

Scheduled Sample Date: 04/03/2024
Sampling Team: Field

QC list for Run#: *2078017* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425668-01										
	MRL_CK	Chloride		0.492	mg/L	98				
	MRL_CK	Sulfate		0.502	mg/L	100				
	MRL_CK	Nitrate as N		0.0395	mg/L	99				
QC2425668-02										
	CCV	Chloride		2.42	mg/L	97				
	CCV	Sulfate		2.36	mg/L	94				
	CCV	Nitrate as N		0.194	mg/L	97				
QC2425668-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2425668-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2425668-05										
	LCS	Chloride		0.602	mg/L	120				
	LCS	Sulfate		1.56	mg/L	104				
	LCS	Nitrate as N		0.254	mg/L	102				
QC2425668-06										
	LCSD of QC2425668-05	Chloride	0.602	0.587	mg/L	117	2			Splt# QC2425668-05 (0.602mg/L)
	LCSD of QC2425668-05	Sulfate	1.56	1.54	mg/L	102	1			Splt# QC2425668-05 (1.56mg/L)
	LCSD of QC2425668-05	Nitrate as N	0.254	0.254	mg/L	101	0			Splt# QC2425668-05 (0.254mg/L)
QC2425668-07										
	CCV	Chloride		19.7	mg/L	98				
	CCV	Sulfate		21.2	mg/L	106				
	CCV	Nitrate as N		1.67	mg/L	105				
QC2425668-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2425668-09										
	SPK of 2413215-02	Sulfate	15.5	17.2	mg/L	112				Splt# 2413215-02 (15.5mg/L)
	SPK of 2413215-02	Nitrate as N	0.118	0.381	mg/L	105				Splt# 2413215-02 (0.118mg/L)
QC2425668-10										
	SPKD of 2413215-02	Sulfate	15.5	16.9	mg/L	97	1			Splt# 2413215-02 (15.5mg/L)
	SPKD of 2413215-02	Nitrate as N	0.118	0.366	mg/L	99	3			Splt# 2413215-02 (0.118mg/L)

QC list for Run#: *2078036* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments

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FOLDER ID: 2412325

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_Daly City
Scheduled Sample Date: 04/03/2024
Sampling Team: Field

QC list for Run#: *2078036* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425686-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2425686-04										
	MRL_CK	Specific Conductance @25°C		9.67	µmhos/cm	96				
QC2425686-05										
	DUP of 2412325-05	Specific Conductance @25°C	1040	1040	µmhos/cm		0		1	Splt# 2412325-05 (1040µmhos/cm)
QC2425686-06										
	CCV	Specific Conductance @25°C		103	µmhos/cm	103				

QC list for Run#: *2078044* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425684-04										
	ICV	pH		9.01	pH	99				
	ICV	Temperature (°C)		20.2	°C					
QC2425684-05										
	DUP of 2412325-05	pH	7.6	7.62	pH		0			Splt# 2412325-05 (7.6pH) H1,H3
	DUP of 2412325-05	Temperature (°C)	21.3	21.3	°C					Splt# 2412325-05 (21.3°C)
QC2425684-06										
	CCV	pH		9.01	pH	99				
	CCV	Temperature (°C)		20.3	°C					

QC list for Run#: *2078048* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425683-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2425683-02										
	MRL_CK	Alkalinity		3.06	mg/L	102				
QC2425683-03										
	SPK of 2412325-01	Alkalinity	116	157	mg/L	102			3	Splt# 2412325-01 (116mg/L)
QC2425683-04										
	SPKD of 2412325-01	Alkalinity	116	157	mg/L	103	0		3	Splt# 2412325-01 (116mg/L)
QC2425683-06										
	LCS	Alkalinity		40.7	mg/L	102			3	

QC list for Run#: *2078051* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425688-01										
	BLK	Chloride		<3	mg/L			1.16	3	
QC2425688-02										
	MRL_CK	Chloride		3.42	mg/L	114				
QC2425688-03										
	SPK of 2412325-01	Chloride	60.2	100	mg/L	99			3	Splt# 2412325-01 (60.2mg/L)
QC2425688-04										
	SPKD of 2412325-01	Chloride	60.2	100	mg/L	100	0		3	Splt# 2412325-01 (60.2mg/L)

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MILLBRAE 1449

FOLDER ID: 2412325

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_Daly City
Scheduled Sample Date: 04/03/2024
Sampling Team: Field

QC list for Run#: *2078051* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425688-06										
	LCS	Chloride		39.6	mg/L	99			3	

QC list for Run#: *2078052* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425689-01										
	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2425689-02										
	MRL_CK	Hardness, Total, as CaCO3		2.42	mg/L	80				
QC2425689-03										
	DUP of 2412325-01	Hardness, Total, as CaCO3	145	145	mg/L		0	0.474	3	Splt# 2412325-01 (145mg/L)
QC2425689-04										
	LCS	Hardness, Total, as CaCO3		38.5	mg/L	96			3	

QC list for Run#: *2078072* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425703-01										
	MRL_CK	Chloride		0.495	mg/L	99				
	MRL_CK	Sulfate		0.508	mg/L	102				
	MRL_CK	Nitrate as N		0.0393	mg/L	98				
QC2425703-02										
	CCV	Chloride		2.46	mg/L	98				
	CCV	Sulfate		2.39	mg/L	95				
	CCV	Nitrate as N		0.196	mg/L	98				
QC2425703-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2425703-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2425703-05										
	LCS	Chloride		0.593	mg/L	119				
	LCS	Sulfate		1.54	mg/L	103				
	LCS	Nitrate as N		0.251	mg/L	100				
QC2425703-06										
	LCSD of QC2425703-05	Chloride	0.593	0.589	mg/L	118	0			Splt# QC2425703-05 (0.593mg/L)
	LCSD of QC2425703-05	Sulfate	1.54	1.55	mg/L	103	0			Splt# QC2425703-05 (1.54mg/L)
	LCSD of QC2425703-05	Nitrate as N	0.251	0.255	mg/L	102	1			Splt# QC2425703-05 (0.251mg/L)
QC2425703-07										
	CCV	Chloride		19.4	mg/L	96				
	CCV	Sulfate		20.7	mg/L	104				

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FOLDER ID: 2412325

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_Daly City

Scheduled Sample Date: 04/03/2024
Sampling Team: Field

QC list for Run#: *2078072* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	CCV	Nitrate as N		1.62	mg/L	102				
QC2425703-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2425703-09										
	SPK of 2413328-01	Sulfate	4.04	4.65	mg/L	40				Splt# 2413328-01 (4.04mg/L) M1
	SPK of 2413328-01	Nitrate as N	0.0696	0.295	mg/L	90				Splt# 2413328-01 (0.0696mg/L)
QC2425703-10										
	SPKD of 2413328-01	Sulfate	4.04	4.68	mg/L	42	0			Splt# 2413328-01 (4.04mg/L) M1
	SPKD of 2413328-01	Nitrate as N	0.0696	0.29	mg/L	88	1			Splt# 2413328-01 (0.0696mg/L)
QC2425703-11										
	CCV	Chloride		19	mg/L	94				
	CCV	Sulfate		20.2	mg/L	101				
	CCV	Nitrate as N		1.59	mg/L	99				
QC2425703-12										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	

QC list for Run#: *2078109* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425730-01										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2425730-02										
	DUP of 2413215-01	Total Dissolved Solids	77	75	mg/L		2	13.2	20	Splt# 2413215-01 (77mg/L)
QC2425730-03										
	DUP of 2412701-03	Total Dissolved Solids	167	163	mg/L		2	13.2	20	Splt# 2412701-03 (167mg/L)
QC2425730-04										
	LCS	Total Dissolved Solids		87	mg/L	91		13.2	20	

QC list for Run#: *2078479* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425950-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2425950-02										
	LCS	Calcium, Ca		2.04	mg/L	102		0.04	1	
	LCS	Magnesium, Mg		2.07	mg/L	104		0.007	0.2	

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Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2412325

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_Daly City

Scheduled Sample Date: 04/03/2024
Sampling Team: Field

QC list for Run#: *2078479* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	LCS	Potassium, K		2.05	mg/L	102		0.04	0.2	
	LCS	Sodium, Na		2.1	mg/L	105		0.02	1	
QC2425950-03										
	DUP of 2412700-01	Calcium, Ca	49.2	48.3	mg/L		1	0.005	1	Splt# 2412700-01 (49.2mg/L)
	DUP of 2412700-01	Magnesium, Mg	35.3	34.6	mg/L		1	0.021	0.2	Splt# 2412700-01 (35.3mg/L)
	DUP of 2412700-01	Potassium, K	1.36	1.39	mg/L		2	0.06	0.2	Splt# 2412700-01 (1.36mg/L)
	DUP of 2412700-01	Sodium, Na	129	126	mg/L		1	0.2	1	Splt# 2412700-01 (129mg/L)
QC2425950-04										
	SPK of 2412700-01	Calcium, Ca	49.2	49.8	mg/L	32		0.04	1	Splt# 2412700-01 (49.2mg/L) Spike too low
	SPK of 2412700-01	Magnesium, Mg	35.3	36.2	mg/L	47		0.007	0.2	Splt# 2412700-01 (35.3mg/L) Spike too low
	SPK of 2412700-01	Potassium, K	1.36	3.33	mg/L	98		0.04	0.2	Splt# 2412700-01 (1.36mg/L) Spike too low
	SPK of 2412700-01	Sodium, Na	129	127	mg/L	0		0.02	1	Splt# 2412700-01 (129mg/L) Spike too low
QC2425950-05										
	SPKD of 2412700-01	Calcium, Ca	49.2	50.6	mg/L	70	1	0.04	1	Splt# 2412700-01 (49.2mg/L) Spike too low
	SPKD of 2412700-01	Magnesium, Mg	35.3	36.7	mg/L	72	1	0.007	0.2	Splt# 2412700-01 (35.3mg/L) Spike too low
	SPKD of 2412700-01	Potassium, K	1.36	3.41	mg/L	102	2	0.04	0.2	Splt# 2412700-01 (1.36mg/L) Spike too low
	SPKD of 2412700-01	Sodium, Na	129	129	mg/L	34	1	0.02	1	Splt# 2412700-01 (129mg/L) Spike too low
QC2425950-06										
	MRL_CK	Calcium, Ca		0.0301	mg/L	75		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0486	mg/L	97		0.021	0.021	
	MRL_CK	Potassium, K		0.31	mg/L	155		0.06	0.06	
	MRL_CK	Sodium, Na		<0.2	mg/L	N/A		0.2	0.2	
QC2425992-01										
	ICV	Calcium, Ca		10.2	mg/L	104		0.05	1	
	ICV	Magnesium, Mg		9.96	mg/L	100		0.01	0.2	
	ICV	Potassium, K		97.9	mg/L	99		0.03	0.2	
	ICV	Sodium, Na		10.1	mg/L	101		0.002	1	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2412700

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/01/2024
Sampling Team: Field

Lab Sample#: 2412700-01 **Sample Source:** WSB_SB-44-1-190 **External ID:**
Date Collected: 04/01/2024 12:07PM **Date Received:** 04/01/2024 02:07PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SB_CUP-44-1-190, GG NATIONAL CEMETE

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))									
Sulfate	108	mg/L	10	1	5	04/02/2024	2077917	PWARNER	M1
Nitrate as N	5.94	mg/L	10	0.34	0.4	04/02/2024	2077917	PWARNER	
SEM_200.7_DW(EPA 200.7)									
Calcium, Ca	49.2	mg/L	1	0.005	1	04/12/2024	2078479	BTRINH	
Magnesium, Mg	35.3	mg/L	1	0.021	0.2	04/12/2024	2078479	BTRINH	
Potassium, K	1.36	mg/L	1	0.06	0.2	04/12/2024	2078479	BTRINH	
Sodium, Na	129	mg/L	1	0.2	1	04/12/2024	2078479	BTRINH	
MBP_ALK(SM 2320 B)									
Alkalinity	278	mg/L	1	2.96	15	04/01/2024	2077913	ALEE	
MBP_CHLORIDE(SM 4500-CL- D)									
Chloride	97.3	mg/L	1		15	04/01/2024	2077915	ALEE	
MBP_COND(SM 2510 B)									
Specific Conductance @25°C	1080	µmhos/cm	1		1	04/01/2024	2077903	MSWONG	>MCL
MBP_HARDNESS_T(SM 2340 C)									
Hardness, Total, as CaCO3	253	mg/L	1	2.37	15	04/01/2024	2077916	ALEE	
MBP_PH(SM 4500-H+ B)									
pH	6.54	pH	1			04/01/2024	2077905	MSWONG	H1,H3
Temperature (°C)	17.8	°C	1			04/01/2024	2077905	MSWONG	
MBP_TDS(SM 2540 C)									
Total Dissolved Solids	620	mg/L	1	13.2	20	04/06/2024	2078109	ABALALIO	>MCL

Lab Sample#: 2412700-02 **Sample Source:** WSB_SB-44-1-300 **External ID:**
Date Collected: 04/01/2024 11:17AM **Date Received:** 04/01/2024 02:07PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SB_CUP-44-1-300, GG NATIONAL CEMETE

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))									
Sulfate	108	mg/L	10	1	5	04/02/2024	2077917	PWARNER	
Nitrate as N	5.83	mg/L	10	0.34	0.4	04/02/2024	2077917	PWARNER	
SEM_200.7_DW(EPA 200.7)									
Calcium, Ca	49.1	mg/L	1	0.005	1	04/12/2024	2078479	BTRINH	
Magnesium, Mg	34.5	mg/L	1	0.021	0.2	04/12/2024	2078479	BTRINH	
Potassium, K	1.44	mg/L	1	0.06	0.2	04/12/2024	2078479	BTRINH	

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Water Quality Laboratory

ELAP Cert #:
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MILLBRAE 1449

FOLDER ID: 2412700

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/01/2024
Sampling Team: Field

Sodium, Na	125	mg/L	1	0.2	1	04/12/2024	2078479	BTRINH

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	281	mg/L	1	2.96	15	04/01/2024	2077913 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	94.4	mg/L	1		15	04/01/2024	2077915 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	1080	µmhos/cm	1		1	04/01/2024	2077903 MSWONG	>MCL

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	6.54	pH	1			04/01/2024	2077905 MSWONG	H1,H3
Temperature (°C)	17.1	°C	1			04/01/2024	2077905 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	609	mg/L	1	13.2	20	04/06/2024	2078109 ABALALIO	>MCL

Lab Sample#: 2412700-02A **Sample Source:** WSB_SB-44-1-300 **External ID:**
Date Collected: 04/01/2024 11:17AM **Date Received:** 04/01/2024 02:07PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SB_CUP-44-1-300, GG NATIONAL CEMETE

Test/Analyte

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	1300	mg/L	1	2.37	15	04/02/2024	2077988 ALEE	

Lab Sample#: 2412700-03 **Sample Source:** WSB_SB-44-1-460 **External ID:**
Date Collected: 04/01/2024 11:18AM **Date Received:** 04/01/2024 02:07PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SB_CUP-44-1-460, GG NATIONAL CEMETE

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	95.9	mg/L	10	1	5	04/02/2024	2077917 PWARNER	
Nitrate as N	0.768	mg/L	10	0.34	0.4	04/02/2024	2077917 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	53.1	mg/L	1	0.005	1	04/12/2024	2078479 BTRINH	
Magnesium, Mg	44.2	mg/L	1	0.021	0.2	04/12/2024	2078479 BTRINH	
Potassium, K	3.03	mg/L	1	0.06	0.2	04/12/2024	2078479 BTRINH	
Sodium, Na	63.6	mg/L	1	0.2	1	04/12/2024	2078479 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	166	mg/L	1	2.96	15	04/01/2024	2077913 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	129	mg/L	1		15	04/01/2024	2077915 ALEE	

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Water Quality Laboratory

FOLDER ID: 2412700

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/01/2024
Sampling Team: Field

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	937	µmhos/cm	1		1	04/01/2024	2077903	MSWONG	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	300	mg/L	1	2.37	15	04/01/2024	2077916	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	6.34	pH	1			04/01/2024	2077905	MSWONG	H1,H3
Temperature (°C)	17.9	°C	1			04/01/2024	2077905	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	502	mg/L	1	13.2	20	04/06/2024	2078109	ABALALIO	>MCL

Lab Sample#: 2412700-04 **Sample Source:** WSB_SB-44-1-580 **External ID:**

Date Collected: 04/01/2024 10:20AM **Date Received:** 04/01/2024 02:07PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SB_CUP-44-1-580, GG NATIONAL CEMETE

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	470	mg/L	25	2.5	12.5	04/02/2024	2077917	PWARNER	>MCL

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	113	mg/L	1	0.005	1	04/12/2024	2078479	BTRINH	
Magnesium, Mg	94.3	mg/L	1	0.021	0.2	04/12/2024	2078479	BTRINH	
Potassium, K	5.22	mg/L	1	0.06	0.2	04/12/2024	2078479	BTRINH	
Sodium, Na	105	mg/L	1	0.2	1	04/12/2024	2078479	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	263	mg/L	1	2.96	15	04/01/2024	2077913	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	194	mg/L	1		15	04/01/2024	2077915	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1750	µmhos/cm	1		1	04/01/2024	2077903	MSWONG	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	651	mg/L	1	2.37	15	04/01/2024	2077916	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.5	pH	1			04/01/2024	2077905	MSWONG	H1,H3
Temperature (°C)	16.8	°C	1			04/01/2024	2077905	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	1050	mg/L	1	13.2	20	04/06/2024	2078109	ABALALIO	>MCL

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Water Quality Laboratory

ELAP Cert #:
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MILLBRAE 1449

FOLDER ID: 2412700

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/01/2024
Sampling Team: Field

Lab Sample#: 2412700-04A **Sample Source:** WSB_SB-44-1-580 **External ID:**
Date Collected: 04/01/2024 10:20AM **Date Received:** 04/01/2024 02:07PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SB_CUP-44-1-580, GG NATIONAL CEMETE

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))									
Nitrate as N	<0.04	mg/L	1	0.034	0.04	04/02/2024	2077917	PWARNER	

Lab Sample#: 2412700-05 **Sample Source:** WSB_SB_DUP **External ID:**
Date Collected: 04/01/2024 11:32AM **Date Received:** 04/01/2024 02:07PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SB_CUP-44-1-300, GG NATIONAL CEMETE

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))									
Sulfate	110	mg/L	10	1	5	04/02/2024	2077917	PWARNER	
Nitrate as N	5.92	mg/L	10	0.34	0.4	04/02/2024	2077917	PWARNER	
SEM_200.7_DW(EPA 200.7)									
Calcium, Ca	49.4	mg/L	1	0.005	1	04/12/2024	2078479	BTRINH	
Magnesium, Mg	34.6	mg/L	1	0.021	0.2	04/12/2024	2078479	BTRINH	
Potassium, K	1.5	mg/L	1	0.06	0.2	04/12/2024	2078479	BTRINH	
Sodium, Na	126	mg/L	1	0.2	1	04/12/2024	2078479	BTRINH	
MBP_ALK(SM 2320 B)									
Alkalinity	279	mg/L	1	2.96	15	04/01/2024	2077913	ALEE	
MBP_CHLORIDE(SM 4500-CL- D)									
Chloride	92.8	mg/L	1		15	04/01/2024	2077915	ALEE	
MBP_COND(SM 2510 B)									
Specific Conductance @25°C	1070	µmhos/cm	1		1	04/01/2024	2077903	MSWONG	>MCL
MBP_HARDNESS_T(SM 2340 C)									
Hardness, Total, as CaCO3	256	mg/L	1	2.37	15	04/01/2024	2077916	ALEE	
MBP_PH(SM 4500-H+ B)									
pH	6.53	pH	1			04/01/2024	2077905	MSWONG	H1,H3
Temperature (°C)	17.2	°C	1			04/01/2024	2077905	MSWONG	
MBP_TDS(SM 2540 C)									
Total Dissolved Solids	611	mg/L	1	13.2	20	04/06/2024	2078109	ABALALIO	>MCL

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Water Quality Laboratory

ELAP Cert #:
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MILLBRAE 1449

FOLDER ID: 2412700

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/01/2024
Sampling Team: Field

QC list for Run#: *2077903* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425581-01										
	CAL	Specific Conductance @25°C		1420	µmhos/cm	101				
QC2425581-02										
	ICV	Specific Conductance @25°C		148	µmhos/cm	101				
QC2425581-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2425581-04										
	MRL_CK	Specific Conductance @25°C		9.61	µmhos/cm	96				
QC2425581-05										
	DUP of 2412275-04	Specific Conductance @25°C	1470	1470	µmhos/cm		0		1	Splt# 2412275-04 (1470µmhos/cm)
QC2425581-06										
	CCV	Specific Conductance @25°C		103	µmhos/cm	103				
QC2425581-07										
	CCV	Specific Conductance @25°C		1430	µmhos/cm	101				

QC list for Run#: *2077905* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425582-01										
	CAL	pH		7.15	pH	102				
	CAL	Temperature (°C)		20.2	°C					
QC2425582-02										
	CAL	pH		4.06	pH	102				
	CAL	Temperature (°C)		20.5	°C					
QC2425582-03										
	CAL	pH		10.1	pH	101				
	CAL	Temperature (°C)		20.3	°C					
QC2425582-04										
	ICV	pH		9.01	pH	99				
	ICV	Temperature (°C)		20.3	°C					
QC2425582-05										
	DUP of 2412275-04	pH	7.39	7.4	pH		0			Splt# 2412275-04 (7.39pH) H1,H3
	DUP of 2412275-04	Temperature (°C)	18	18.1	°C					Splt# 2412275-04 (18°C)
QC2425582-06										
	CCV	pH		9.03	pH	99				
	CCV	Temperature (°C)		20.3	°C					
QC2425582-07										
	CCV	pH		9.02	pH	99				
	CCV	Temperature (°C)		20.4	°C					

QC list for Run#: *2077913* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425587-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2412700

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/01/2024
Sampling Team: Field

QC list for Run#: *2077913* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425587-02	MRL_CK	Alkalinity		3.45	mg/L	115				
QC2425587-03	SPK of 2413072-01	Alkalinity	32.9	73.2	mg/L	101			3	Splt# 2413072-01 (32.9mg/L)
QC2425587-04	SPKD of 2413072-01	Alkalinity	32.9	73.1	mg/L	101	0		3	Splt# 2413072-01 (32.9mg/L)
QC2425587-05	DUP of 2412700-05	Alkalinity	279	276	mg/L		1	2.96	15	Splt# 2412700-05 (279mg/L)
QC2425587-06	LCS	Alkalinity		40.8	mg/L	102			3	

QC list for Run#: *2077915* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425588-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2425588-02	MRL_CK	Chloride		2.84	mg/L	94				
QC2425588-03	SPK of 2413072-01	Chloride	5.78	45.7	mg/L	99			3	Splt# 2413072-01 (5.78mg/L)
QC2425588-04	SPKD of 2413072-01	Chloride	5.78	45.9	mg/L	100	0		3	Splt# 2413072-01 (5.78mg/L)
QC2425588-05	DUP of 2412700-05	Chloride	92.8	93.8	mg/L		1		15	Splt# 2412700-05 (92.8mg/L)
QC2425588-06	LCS	Chloride		39.4	mg/L	98			3	

QC list for Run#: *2077916* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425590-01	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2425590-02	MRL_CK	Hardness, Total, as CaCO3		2.4	mg/L	80				
QC2425590-03	DUP of 2412700-05	Hardness, Total, as CaCO3	256	50.9	mg/L		0	0.474	3	Splt# 2412700-05 (256mg/L)
QC2425590-04	LCS	Hardness, Total, as CaCO3		38.2	mg/L	95			3	

QC list for Run#: *2077917* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425589-01	MRL_CK	Chloride		0.484	mg/L	96				
	MRL_CK	Nitrite as N		0.0384	mg/L	96				
	MRL_CK	Sulfate		0.482	mg/L	96				
	MRL_CK	Nitrate as N		0.038	mg/L	95				
QC2425589-02										

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Water Quality Laboratory

FOLDER ID: 2412700

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/01/2024
Sampling Team: Field

QC list for Run#: *2077917* **and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	CCV	Chloride		2.45	mg/L	98				
	CCV	Nitrite as N		0.191	mg/L	95				
	CCV	Sulfate		2.39	mg/L	95				
	CCV	Nitrate as N		0.194	mg/L	97				
QC2425589-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrite as N		<0.04	mg/L			0.02	0.04	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2425589-04										
	BLK	Nitrite as N		<0.04	mg/L			0.02	0.04	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2425589-05										
	LCS	Chloride		0.555	mg/L	111				
	LCS	Nitrite as N		0.23	mg/L	92				
	LCS	Sulfate		1.47	mg/L	97				
	LCS	Nitrate as N		0.25	mg/L	100				
QC2425589-06										
	LCSD of QC2425589-05	Chloride	0.555	0.665	mg/L	133	18			Splt# QC2425589-05 (0.555mg/L)
	LCSD of QC2425589-05	Nitrite as N	0.23	0.242	mg/L	96	4			Splt# QC2425589-05 (0.23mg/L)
	LCSD of QC2425589-05	Sulfate	1.47	1.53	mg/L	102	3			Splt# QC2425589-05 (1.47mg/L)
	LCSD of QC2425589-05	Nitrate as N	0.25	0.269	mg/L	107	7			Splt# QC2425589-05 (0.25mg/L)
QC2425589-07										
	CCV	Chloride		19.8	mg/L	98				
	CCV	Nitrite as N		1.64	mg/L	103				
	CCV	Sulfate		21.3	mg/L	107				
	CCV	Nitrate as N		1.66	mg/L	104				
QC2425589-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrite as N		<0.04	mg/L			0.02	0.04	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2425589-09										
	SPK of 2412700-01	Nitrite as N	<0.4	2.27	mg/L	90				Splt# 2412700-01 (<0.4mg/L)
	SPK of 2412700-01	Sulfate	108	125	mg/L	114				Splt# 2412700-01 (108mg/L) M1
	SPK of 2412700-01	Nitrate as N	5.94	8.49	mg/L	102				Splt# 2412700-01 (5.94mg/L)
QC2425589-10										
	SPKD of 2412700-01	Nitrite as N	<0.4	2.48	mg/L	99	8			Splt# 2412700-01 (<0.4mg/L)

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
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MILLBRAE 1449

FOLDER ID: 2412700

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/01/2024
Sampling Team: Field

QC list for Run#: *2077917* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	SPKD of 2412700-01	Sulfate	108	127	mg/L	124	1			Splt# 2412700-01 (108mg/L) M1
	SPKD of 2412700-01	Nitrate as N	5.94	8.6	mg/L	106	1			Splt# 2412700-01 (5.94mg/L)
QC2425589-13										
	CCV	Chloride		2.43	mg/L	97				
	CCV	Nitrite as N		0.194	mg/L	96				
	CCV	Sulfate		2.37	mg/L	94				
	CCV	Nitrate as N		0.193	mg/L	97				
QC2425589-14										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrite as N		<0.04	mg/L			0.02	0.04	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	

QC list for Run#: *2077988* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425635-01										
	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2425635-02										
	MRL_CK	Hardness, Total, as CaCO3		2.44	mg/L	81				
QC2425635-03										
	DUP of 2412376-08	Hardness, Total, as CaCO3	30.8	30.7	mg/L		0	0.474	3	Splt# 2412376-08 (30.8mg/L)
QC2425635-04										
	LCS	Hardness, Total, as CaCO3		38.7	mg/L	96			3	

QC list for Run#: *2078109* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425730-01										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2425730-02										
	DUP of 2413215-01	Total Dissolved Solids	77	75	mg/L		2	13.2	20	Splt# 2413215-01 (77mg/L)
QC2425730-03										
	DUP of 2412701-03	Total Dissolved Solids	167	163	mg/L		2	13.2	20	Splt# 2412701-03 (167mg/L)
QC2425730-04										
	LCS	Total Dissolved Solids		87	mg/L	91		13.2	20	

QC list for Run#: *2078479* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425950-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2425950-02										

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Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2412700

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/01/2024
Sampling Team: Field

QC list for Run#: *2078479* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	LCS	Calcium, Ca		2.04	mg/L	102		0.04	1	
	LCS	Magnesium, Mg		2.07	mg/L	104		0.007	0.2	
	LCS	Potassium, K		2.05	mg/L	102		0.04	0.2	
	LCS	Sodium, Na		2.1	mg/L	105		0.02	1	
QC2425950-03										
	DUP of 2412700-01	Calcium, Ca	49.2	48.3	mg/L		1	0.005	1	Splt# 2412700-01 (49.2mg/L)
	DUP of 2412700-01	Magnesium, Mg	35.3	34.6	mg/L		1	0.021	0.2	Splt# 2412700-01 (35.3mg/L)
	DUP of 2412700-01	Potassium, K	1.36	1.39	mg/L		2	0.06	0.2	Splt# 2412700-01 (1.36mg/L)
	DUP of 2412700-01	Sodium, Na	129	126	mg/L		1	0.2	1	Splt# 2412700-01 (129mg/L)
QC2425950-04										
	SPK of 2412700-01	Calcium, Ca	49.2	49.8	mg/L	32		0.04	1	Splt# 2412700-01 (49.2mg/L) Spike too low
	SPK of 2412700-01	Magnesium, Mg	35.3	36.2	mg/L	47		0.007	0.2	Splt# 2412700-01 (35.3mg/L) Spike too low
	SPK of 2412700-01	Potassium, K	1.36	3.33	mg/L	98		0.04	0.2	Splt# 2412700-01 (1.36mg/L) Spike too low
	SPK of 2412700-01	Sodium, Na	129	127	mg/L	0		0.02	1	Splt# 2412700-01 (129mg/L) Spike too low
QC2425950-05										
	SPKD of 2412700-01	Calcium, Ca	49.2	50.6	mg/L	70	1	0.04	1	Splt# 2412700-01 (49.2mg/L) Spike too low
	SPKD of 2412700-01	Magnesium, Mg	35.3	36.7	mg/L	72	1	0.007	0.2	Splt# 2412700-01 (35.3mg/L) Spike too low
	SPKD of 2412700-01	Potassium, K	1.36	3.41	mg/L	102	2	0.04	0.2	Splt# 2412700-01 (1.36mg/L) Spike too low
	SPKD of 2412700-01	Sodium, Na	129	129	mg/L	34	1	0.02	1	Splt# 2412700-01 (129mg/L) Spike too low
QC2425950-06										
	MRL_CK	Calcium, Ca		0.0301	mg/L	75		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0486	mg/L	97		0.021	0.021	
	MRL_CK	Potassium, K		0.31	mg/L	155		0.06	0.06	
	MRL_CK	Sodium, Na		<0.2	mg/L	N/A		0.2	0.2	
QC2425992-01										
	ICV	Calcium, Ca		10.2	mg/L	104		0.05	1	
	ICV	Magnesium, Mg		9.96	mg/L	100		0.01	0.2	
	ICV	Potassium, K		97.9	mg/L	99		0.03	0.2	
	ICV	Sodium, Na		10.1	mg/L	101		0.002	1	

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Water Quality Laboratory

FOLDER ID: 2412701

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 04/02/2024
Sampling Team: Field

Lab Sample#: 2412701-01 **Sample Source:** WSB_SF26_TAR145 **External ID:**
Date Collected: 04/02/2024 10:51AM **Date Received:** 04/02/2024 01:32PM **Sample Matrix:** Aqueous **Location Desc:** SF#26 - GRT HWY/TARAVAL MW145

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	43.4	mg/L	1		3	04/02/2024	2077981 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	490	µmhos/cm	1		1	04/02/2024	2077978 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	254	mg/L	1	13.2	20	04/06/2024	2078109 ABALALIO	

Lab Sample#: 2412701-02 **Sample Source:** WSB_SF27_TAR240 **External ID:**
Date Collected: 04/02/2024 10:52AM **Date Received:** 04/02/2024 01:32PM **Sample Matrix:** Aqueous **Location Desc:** SF#27 - GRT HWY/TARAVAL MW240

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	33.6	mg/L	1		3	04/02/2024	2077981 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	387	µmhos/cm	1		1	04/02/2024	2077978 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	210	mg/L	1	13.2	20	04/06/2024	2078109 ABALALIO	

Lab Sample#: 2412701-03 **Sample Source:** WSB_SF28_TAR400 **External ID:**
Date Collected: 04/02/2024 10:15AM **Date Received:** 04/02/2024 01:32PM **Sample Matrix:** Aqueous **Location Desc:** SF#28 - GRT HWY/TARAVAL MW400

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	27.9	mg/L	1		3	04/02/2024	2077981 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	320	µmhos/cm	1		1	04/02/2024	2077978 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	167	mg/L	1	13.2	20	04/06/2024	2078109 ABALALIO	

Lab Sample#: 2412701-04 **Sample Source:** WSB_SF29_TAR530 **External ID:**
Date Collected: 04/02/2024 10:24AM **Date Received:** 04/02/2024 01:32PM **Sample Matrix:** Aqueous **Location Desc:** SF#29 - GRT HWY/TARAVAL MW530

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	25.3	mg/L	1		3	04/02/2024	2077981 ALEE	
MBP_COND(SM 2510 B)								

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FOLDER ID: 2412701

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 04/02/2024
Sampling Team: Field

Specific Conductance @25°C	377	µmhos/cm	1		1	04/02/2024	2077978	MSWONG

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	208	mg/L	1	13.2	20	04/06/2024	2078109 ABALALIO	

Lab Sample#: 2412701-05 **Sample Source:** WSB_SF_DUP **External ID:**

Date Collected: 04/02/2024 11:00AM **Date Received:** 04/02/2024 01:32PM **Sample Matrix:** Aqueous **Location Desc:** SF#26 - GRT HWY/TARAVAL MW145

Test/Analyte

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	43.4	mg/L	1		3	04/02/2024	2077981 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	501	µmhos/cm	1		1	04/02/2024	2077978 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	262	mg/L	1	13.2	20	04/06/2024	2078109 ABALALIO	

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Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 04/02/2024
Sampling Team: Field

QC list for Run#: *2077978* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425636-03	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2425636-04	MRL_CK	Specific Conductance @25°C		9.67	µmhos/cm	96				
QC2425636-05	DUP of 2412376-08	Specific Conductance @25°C	117	117	µmhos/cm		0		1	Splt# 2412376-08 (117µmhos/cm)
QC2425636-06	CCV	Specific Conductance @25°C		103	µmhos/cm	103				
QC2425636-07	CCV	Specific Conductance @25°C		1430	µmhos/cm	101				

QC list for Run#: *2077981* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425629-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2425629-02	MRL_CK	Chloride		3.31	mg/L	110				
QC2425629-03	SPK of 2412377-03	Chloride	14.8	54.8	mg/L	100			3	Splt# 2412377-03 (14.8mg/L)
QC2425629-04	SPKD of 2412377-03	Chloride	14.8	54.6	mg/L	99	0		3	Splt# 2412377-03 (14.8mg/L)
QC2425629-05	DUP of 2412376-08	Chloride	6.13	5.98	mg/L		2		3	Splt# 2412376-08 (6.13mg/L)
QC2425629-06	LCS	Chloride		39.8	mg/L	99			3	

QC list for Run#: *2078109* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425730-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2425730-02	DUP of 2413215-01	Total Dissolved Solids	77	75	mg/L		2	13.2	20	Splt# 2413215-01 (77mg/L)
QC2425730-03	DUP of 2412701-03	Total Dissolved Solids	167	163	mg/L		2	13.2	20	Splt# 2412701-03 (167mg/L)
QC2425730-04	LCS	Total Dissolved Solids		87	mg/L	91		13.2	20	

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Water Quality Laboratory

FOLDER ID: 2412702

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 04/03/2024
Sampling Team: Field

Lab Sample#: 2412702-03 **Sample Source:** WSB_SF67_GGPSF1 **External ID:**
Date Collected: 04/03/2024 10:40AM **Date Received:** 04/03/2024 01:48PM **Sample Matrix:** Aqueous **Location Desc:** WSB_SF67, GGP SOCCER FIELD SF-1

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	41.3	mg/L	1		3	04/03/2024	2078051 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	550	µmhos/cm	1		1	04/03/2024	2078035 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	274	mg/L	1	13.2	20	04/06/2024	2078109 ABALALIO	

Lab Sample#: 2412702-04 **Sample Source:** WSB_SF_DUP **External ID:**
Date Collected: 04/03/2024 10:51AM **Date Received:** 04/03/2024 01:48PM **Sample Matrix:** Aqueous **Location Desc:** WSB_SF67, GGP SOCCER FIELD SF-1

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	41.3	mg/L	1		3	04/03/2024	2078051 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	554	µmhos/cm	1		1	04/03/2024	2078035 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	283	mg/L	1	13.2	20	04/06/2024	2078109 ABALALIO	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2412702

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 04/03/2024
Sampling Team: Field

QC list for Run#: *2078035* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425685-01	CAL	Specific Conductance @25°C		1420	µmhos/cm	101				
QC2425685-02	ICV	Specific Conductance @25°C		149	µmhos/cm	101				
QC2425685-03	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2425685-04	MRL_CK	Specific Conductance @25°C		9.67	µmhos/cm	96				
QC2425685-05	DUP of 2413172-07	Specific Conductance @25°C	97.1	97.3	µmhos/cm		0		1	Splt# 2413172-07 (97.1µmhos/cm)
QC2425685-06	CCV	Specific Conductance @25°C		104	µmhos/cm	104				
QC2425685-07	CCV	Specific Conductance @25°C		1440	µmhos/cm	102				

QC list for Run#: *2078051* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425688-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2425688-02	MRL_CK	Chloride		3.42	mg/L	114				
QC2425688-03	SPK of 2412325-01	Chloride	60.2	100	mg/L	99			3	Splt# 2412325-01 (60.2mg/L)
QC2425688-04	SPKD of 2412325-01	Chloride	60.2	100	mg/L	100	0		3	Splt# 2412325-01 (60.2mg/L)
QC2425688-06	LCS	Chloride		39.6	mg/L	99			3	

QC list for Run#: *2078109* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425730-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2425730-02	DUP of 2413215-01	Total Dissolved Solids	77	75	mg/L		2	13.2	20	Splt# 2413215-01 (77mg/L)
QC2425730-03	DUP of 2412701-03	Total Dissolved Solids	167	163	mg/L		2	13.2	20	Splt# 2412701-03 (167mg/L)
QC2425730-04	LCS	Total Dissolved Solids		87	mg/L	91		13.2	20	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721

FOLDER ID: 2412703

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 05/01/2024
Sampling Team: Field

Lab Sample#: 2412703-01 **Sample Source:** WSB_SF41_WSPLAY **External ID:**
Date Collected: 05/01/2024 11:06AM **Date Received:** 05/01/2024 01:17PM **Sample Matrix:** Aqueous **Location Desc:** SF#41 - WEST SUNSET PLAYGROUND

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	48.1	mg/L	10	1	5	05/01/2024	2079491	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	11	mg/L	1	0.005	1	05/08/2024	2079871	BTRINH	
Magnesium, Mg	39.2	mg/L	1	0.021	0.2	05/08/2024	2079871	BTRINH	
Potassium, K	1.2	mg/L	1	0.06	0.2	05/08/2024	2079871	BTRINH	
Sodium, Na	37.9	mg/L	1	0.2	1	05/08/2024	2079871	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	160	mg/L	1	0.593	3	05/01/2024	2079516	MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	45.1	mg/L	1		3	05/01/2024	2079518	MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	531	µmhos/cm	1		1	05/01/2024	2079510	MSWONG	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	185	mg/L	1	0.474	3	05/01/2024	2079529	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	8.38	pH	1			05/01/2024	2079509	MSWONG	H1,H3
Temperature (°C)	18.8	°C	1			05/01/2024	2079509	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	237	mg/L	1	13.2	20	05/06/2024	2079621	ALEE	

Lab Sample#: 2412703-01A **Sample Source:** WSB_SF41_WSPLAY **External ID:**
Date Collected: 05/01/2024 11:06AM **Date Received:** 05/01/2024 01:17PM **Sample Matrix:** Aqueous **Location Desc:** SF#41 - WEST SUNSET PLAYGROUND

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Nitrate as N	<0.04	mg/L	1	0.034	0.04	05/01/2024	2079491	PWARNER	

Lab Sample#: 2412703-02 **Sample Source:** WSB_SB-M-1 **External ID:**
Date Collected: 05/01/2024 09:28AM **Date Received:** 05/01/2024 01:17PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SB_CUP-M-1, MILLBRAE CORP. YARD, tem

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	23.7	mg/L	10	1	5	05/01/2024	2079491	PWARNER	
Nitrate as N	5.3	mg/L	10	0.34	0.4	05/01/2024	2079491	PWARNER	

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Water Quality Laboratory

FOLDER ID: 2412703

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 05/01/2024
Sampling Team: Field

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	29.2	mg/L	1	0.005	1	05/08/2024	2079871	BTRINH	
Magnesium, Mg	21.1	mg/L	1	0.021	0.2	05/08/2024	2079871	BTRINH	
Potassium, K	1.61	mg/L	1	0.06	0.2	05/08/2024	2079871	BTRINH	
Sodium, Na	30.2	mg/L	1	0.2	1	05/08/2024	2079871	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	127	mg/L	1	0.593	3	05/01/2024	2079516	MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	37	mg/L	1		3	05/01/2024	2079518	MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	455	µmhos/cm	1		1	05/01/2024	2079510	MSWONG	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	151	mg/L	1	0.474	3	05/02/2024	2079529	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	6.89	pH	1			05/01/2024	2079509	MSWONG	H1,H3
Temperature (°C)	18.2	°C	1			05/01/2024	2079509	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	257	mg/L	1	13.2	20	05/06/2024	2079621	ALEE	

Lab Sample#: 2412703-03 **Sample Source:** WSB_SF_DUP **External ID:**

Date Collected: 05/01/2024 11:19AM **Date Received:** 05/01/2024 01:17PM **Sample Matrix:** Aqueous **Location Desc:** SF#41 - WEST SUNSET PLAYGROUND

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	47.2	mg/L	10	1	5	05/01/2024	2079491	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	11.6	mg/L	1	0.005	1	05/08/2024	2079871	BTRINH	
Magnesium, Mg	42.2	mg/L	1	0.021	0.2	05/08/2024	2079871	BTRINH	
Potassium, K	1.23	mg/L	1	0.06	0.2	05/08/2024	2079871	BTRINH	
Sodium, Na	38.8	mg/L	1	0.2	1	05/08/2024	2079871	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	158	mg/L	1	0.593	3	05/01/2024	2079516	MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	44.8	mg/L	1		3	05/01/2024	2079518	MSWONG	

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Water Quality Laboratory

SEWPCP 1721

FOLDER ID: 2412703

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 05/01/2024
Sampling Team: Field

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	533	µmhos/cm	1		1	05/01/2024	2079510 MSWONG	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	185	mg/L	1	0.474	3	05/02/2024	2079529 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	8.35	pH	1			05/01/2024	2079509 MSWONG	H1,H3
Temperature (°C)	18.8	°C	1			05/01/2024	2079509 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	264	mg/L	1	13.2	20	05/06/2024	2079621 ALEE	

Lab Sample#: 2412703-03A **Sample Source:** WSB_SF_DUP **External ID:**

Date Collected: 05/01/2024 11:19AM **Date Received:** 05/01/2024 01:17PM **Sample Matrix:** Aqueous **Location Desc:** SF#41 - WEST SUNSET PLAYGROUND

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	<0.04	mg/L	1	0.034	0.04	05/01/2024	2079491 PWARNER	

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FOLDER ID: 2412703

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 05/01/2024
Sampling Team: Field

QC list for Run#: *2079491* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426706-01										
	MRL_CK	Chloride		0.504	mg/L	101				
	MRL_CK	Sulfate		0.51	mg/L	102				
	MRL_CK	Nitrate as N		0.0423	mg/L	106				
QC2426706-02										
	CCV	Chloride		2.48	mg/L	99				
	CCV	Sulfate		2.51	mg/L	100				
	CCV	Nitrate as N		0.199	mg/L	100				
QC2426706-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426706-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426706-05										
	LCS	Chloride		0.493	mg/L	98				
	LCS	Sulfate		1.59	mg/L	106				
	LCS	Nitrate as N		0.247	mg/L	98				
QC2426706-06										
	LCSD of QC2426706-05	Chloride	0.493	0.494	mg/L	98	0			Splt# QC2426706-05 (0.493mg/L)
	LCSD of QC2426706-05	Sulfate	1.59	1.54	mg/L	103	2			Splt# QC2426706-05 (1.59mg/L)
	LCSD of QC2426706-05	Nitrate as N	0.247	0.248	mg/L	99	0			Splt# QC2426706-05 (0.247mg/L)
QC2426706-07										
	CCV	Chloride		19.8	mg/L	98				
	CCV	Sulfate		20.1	mg/L	100				
	CCV	Nitrate as N		1.59	mg/L	100				
QC2426706-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426706-09										
	SPK of 2412703-01	Sulfate	48.1	63.9	mg/L	106				Splt# 2412703-01 (48.1mg/L)
	SPK of 2412703-01	Nitrate as N	<0.4	2.48	mg/L	99				Splt# 2412703-01 (<0.4mg/L)
QC2426706-10										
	SPKD of 2412703-01	Sulfate	48.1	63.6	mg/L	103	0			Splt# 2412703-01 (48.1mg/L)
	SPKD of 2412703-01	Nitrate as N	<0.4	2.54	mg/L	101	2			Splt# 2412703-01 (<0.4mg/L)

QC list for Run#: *2079509* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426718-04										

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FOLDER ID: 2412703

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 05/01/2024
Sampling Team: Field

QC list for Run#: *2079509* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	ICV	pH		9.01	pH	99				
	ICV	Temperature (°C)		20.7	°C					
QC2426718-05										
	DUP of 2412703-01	pH	8.38	8.38	pH		0			Splt# 2412703-01 (8.38pH) H1,H3
	DUP of 2412703-01	Temperature (°C)	18.8	18.9	°C					Splt# 2412703-01 (18.8°C)
QC2426718-06										
	CCV	pH		9.02	pH	99				
	CCV	Temperature (°C)		20.7	°C					

QC list for Run#: *2079510* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426721-01										
	CAL	Specific Conductance @25°C		1420	µmhos/cm	101				
QC2426721-02										
	ICV	Specific Conductance @25°C		148	µmhos/cm	101				
QC2426721-03										
	BLK	Specific Conductance @25°C		9.76	µmhos/cm				1	
QC2426721-04										
	MRL_CK	Specific Conductance @25°C		9.76	µmhos/cm	97				
QC2426721-05										
	DUP of 2412703-01	Specific Conductance @25°C	531	532	µmhos/cm		0		1	Splt# 2412703-01 (531µmhos/cm)
QC2426721-06										
	CCV	Specific Conductance @25°C		100	µmhos/cm	100				

QC list for Run#: *2079516* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426719-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2426719-02										
	MRL_CK	Alkalinity		2.99	mg/L	99				
QC2426719-03										
	SPK of 2413980-02	Alkalinity	96.8	137	mg/L	100			3	Splt# 2413980-02 (96.8mg/L)
QC2426719-04										
	SPKD of 2413980-02	Alkalinity	96.8	137	mg/L	101	0		3	Splt# 2413980-02 (96.8mg/L)
QC2426719-06										
	LCS	Alkalinity		42.1	mg/L	105			3	

QC list for Run#: *2079518* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426722-01										
	BLK	Chloride		<3	mg/L			1.16	3	
QC2426722-02										
	MRL_CK	Chloride		3.03	mg/L	101				
QC2426722-03										

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SEWPCP 1721

FOLDER ID: 2412703

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 05/01/2024
Sampling Team: Field

QC list for Run#: *2079518* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	SPK of 2413980-02	Chloride	8.97	49.2	mg/L	100			3	Splt# 2413980-02 (8.97mg/L)
QC2426722-04										
	SPKD of 2413980-02	Chloride	8.97	49.5	mg/L	101	0		3	Splt# 2413980-02 (8.97mg/L)
QC2426722-06										
	LCS	Chloride		40.4	mg/L	101			3	

QC list for Run#: *2079529* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426735-01										
	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2426735-02										
	MRL_CK	Hardness, Total, as CaCO3		2.25	mg/L	75				
QC2426735-03										
	DUP of 2412703-03	Hardness, Total, as CaCO3	185	184	mg/L		0	0.474	3	Splt# 2412703-03 (185mg/L)
QC2426735-04										
	LCS	Hardness, Total, as CaCO3		39.5	mg/L	98			3	

QC list for Run#: *2079621* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426802-01										
	DUP of 2412703-03	Total Dissolved Solids	264	259	mg/L		1	13.2	20	Splt# 2412703-03 (264mg/L)
QC2426802-02										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2426802-03										
	LCS	Total Dissolved Solids		80	mg/L	84		13.2	20	L1

QC list for Run#: *2079871* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426957-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2426957-02										
	LCS	Calcium, Ca		2	mg/L	100		0.04	1	
	LCS	Magnesium, Mg		2.04	mg/L	102		0.007	0.2	
	LCS	Potassium, K		1.97	mg/L	98		0.04	0.2	
	LCS	Sodium, Na		2.29	mg/L	115		0.02	1	
QC2426957-03										
	DUP of 2413593-01	Calcium, Ca	103	104	mg/L		1	0.005	1	Splt# 2413593-01 (103mg/L)
	DUP of 2413593-01	Magnesium, Mg	83.5	84.3	mg/L		0	0.021	0.2	Splt# 2413593-01 (83.5mg/L)
	DUP of 2413593-01	Potassium, K	3.89	4	mg/L		2	0.06	0.2	Splt# 2413593-01 (3.89mg/L)
	DUP of 2413593-01	Sodium, Na	78.4	79.1	mg/L		0	0.2	1	Splt# 2413593-01 (78.4mg/L)
QC2426957-04										

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721

FOLDER ID: 2412703

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 05/01/2024
Sampling Team: Field

QC list for Run#: *2079871* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result		Units	% Rec	RPD	MDL	MRL	Flag/Comments
			Parent	Current						
	SPK of 2413593-01	Calcium, Ca	103	105	mg/L	104		0.04	1	Splt# 2413593-01 (103mg/L)
	SPK of 2413593-01	Magnesium, Mg	83.5	85.4	mg/L	95		0.007	0.2	Splt# 2413593-01 (83.5mg/L)
	SPK of 2413593-01	Potassium, K	3.89	5.98	mg/L	104		0.04	0.2	Splt# 2413593-01 (3.89mg/L)
	SPK of 2413593-01	Sodium, Na	78.4	80.3	mg/L	96		0.02	1	Splt# 2413593-01 (78.4mg/L)
QC2426957-05										
	SPKD of 2413593-01	Calcium, Ca	103	105	mg/L	137	0	0.04	1	Splt# 2413593-01 (103mg/L)
	SPKD of 2413593-01	Magnesium, Mg	83.5	86	mg/L	124	0	0.007	0.2	Splt# 2413593-01 (83.5mg/L)
	SPKD of 2413593-01	Potassium, K	3.89	6.1	mg/L	110	1	0.04	0.2	Splt# 2413593-01 (3.89mg/L)
	SPKD of 2413593-01	Sodium, Na	78.4	80.7	mg/L	116	0	0.02	1	Splt# 2413593-01 (78.4mg/L)
QC2426957-06										
	MRL_CK	Calcium, Ca		0.0277	mg/L	69		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0512	mg/L	102		0.021	0.021	
	MRL_CK	Potassium, K		0.18	mg/L	90		0.06	0.06	
	MRL_CK	Sodium, Na		0.305	mg/L	153		0.2	0.2	
QC2426980-01										
	ICV	Calcium, Ca		10.1	mg/L	102		0.05	1	
	ICV	Magnesium, Mg		9.88	mg/L	99		0.01	0.2	
	ICV	Potassium, K		98.2	mg/L	99		0.03	0.2	
	ICV	Sodium, Na		10.1	mg/L	101		0.002	1	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2412706

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 05/06/2024
Sampling Team: Field

Lab Sample#: 2412706-01 **Sample Source:** WSB_SS-36-1-160 **External ID:**
Date Collected: 05/06/2024 11:15AM **Date Received:** 05/06/2024 11:51AM **Sample Matrix:** Aqueous **Location Desc:** GSR_SS_CUP-36-1-160, ROW AT FUNERAL HON

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))									
Sulfate	100	mg/L	10	1	5	05/06/2024	2079739	PWARNER	
Nitrate as N	9.89	mg/L	10	0.34	0.4	05/06/2024	2079739	PWARNER	
SEM_200.7_DW(EPA 200.7)									
Calcium, Ca	67.7	mg/L	1	0.005	1	05/14/2024	2080190	BTRINH	
Magnesium, Mg	34.3	mg/L	1	0.021	0.2	05/14/2024	2080190	BTRINH	
Potassium, K	2.5	mg/L	1	0.06	0.2	05/14/2024	2080190	BTRINH	
Sodium, Na	92.3	mg/L	1	0.2	1	05/14/2024	2080190	BTRINH	
MBP_ALK(SM 2320 B)									
Alkalinity	238	mg/L	1	1.19	6	05/06/2024	2079742	ALEE	
MBP_CHLORIDE(SM 4500-CL- D)									
Chloride	92.9	mg/L	1		6	05/06/2024	2079743	ALEE	
MBP_COND(SM 2510 B)									
Specific Conductance @25°C	1000	µmhos/cm	1		1	05/06/2024	2079750	JWOO	>MCL
MBP_HARDNESS_T(SM 2340 C)									
Hardness, Total, as CaCO3	294	mg/L	1	0.948	6	05/06/2024	2079734	MSWONG	
MBP_PH(SM 4500-H+ B)									
pH	7	pH	1			05/06/2024	2079751	JWOO	H1,H3
Temperature (°C)	19.2	°C	1			05/06/2024	2079751	JWOO	
MBP_TDS(SM 2540 C)									
Total Dissolved Solids	609	mg/L	1	13.2	20	05/10/2024	2079819	ABALALIO	>MCL

Lab Sample#: 2412706-02 **Sample Source:** WSB_SS-36-1-270 **External ID:**
Date Collected: 05/06/2024 10:58AM **Date Received:** 05/06/2024 11:51AM **Sample Matrix:** Aqueous **Location Desc:** GSR_SS_CUP-36-1-270, ROW AT FUNERAL HON

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))									
Sulfate	22.3	mg/L	5	0.5	2.5	05/06/2024	2079739	PWARNER	
Nitrate as N	1.83	mg/L	5	0.17	0.2	05/06/2024	2079739	PWARNER	
SEM_200.7_DW(EPA 200.7)									
Calcium, Ca	33.6	mg/L	1	0.005	1	05/14/2024	2080190	BTRINH	
Magnesium, Mg	29.6	mg/L	1	0.021	0.2	05/14/2024	2080190	BTRINH	
Potassium, K	2.19	mg/L	1	0.06	0.2	05/14/2024	2080190	BTRINH	

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Water Quality Laboratory

ELAP Cert #:
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SEWPCP 1721

FOLDER ID: 2412706

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 05/06/2024
Sampling Team: Field

Sodium, Na	56.3	mg/L	1	0.2	1	05/14/2024	2080190	BTRINH

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	135	mg/L	1	1.19	6	05/06/2024	2079742 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	119	mg/L	1		6	05/06/2024	2079743 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	713	µmhos/cm	1		1	05/06/2024	2079750 JWOO	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	204	mg/L	1	0.948	6	05/06/2024	2079734 MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.42	pH	1			05/06/2024	2079751 JWOO	H1,H3
Temperature (°C)	18.9	°C	1			05/06/2024	2079751 JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	385	mg/L	1	13.2	20	05/10/2024	2079819 ABALALIO	

Lab Sample#: 2412706-03 **Sample Source:** WSB_SS-36-1-455 **External ID:**

Date Collected: 05/06/2024 10:01AM **Date Received:** 05/06/2024 11:51AM **Sample Matrix:** Aqueous **Location Desc:** GSR_SS_CUP-36-1-455, ROW AT FUNERAL HOM

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	<0.5	mg/L	1	0.1	0.5	05/06/2024	2079739 PWARNER	
Nitrate as N	<0.04	mg/L	1	0.034	0.04	05/06/2024	2079739 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	41.5	mg/L	1	0.005	1	05/14/2024	2080190 BTRINH	
Magnesium, Mg	24.9	mg/L	1	0.021	0.2	05/14/2024	2080190 BTRINH	
Potassium, K	4.73	mg/L	1	0.06	0.2	05/14/2024	2080190 BTRINH	
Sodium, Na	61.2	mg/L	1	0.2	1	05/14/2024	2080190 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	233	mg/L	1	1.19	6	05/06/2024	2079742 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	89.6	mg/L	1		6	05/06/2024	2079743 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	712	µmhos/cm	1		1	05/06/2024	2079750 JWOO	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2412706

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 05/06/2024
Sampling Team: Field

Hardness, Total, as CaCO3	197	mg/L	1	0.948	6	05/06/2024	2079734	MSWONG

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.26	pH	1			05/06/2024	2079751	JWOO	H1,H3
Temperature (°C)	18.8	°C	1			05/06/2024	2079751	JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	349	mg/L	1	13.2	20	05/10/2024	2079819	ABALALIO	

Lab Sample#: 2412706-04 **Sample Source:** WSB_SS-36-1-585 **External ID:**
Date Collected: 05/06/2024 10:06AM **Date Received:** 05/06/2024 11:51AM **Sample Matrix:** Aqueous **Location Desc:** GSR_SS_CUP-36-1-585, ROW AT FUNERAL HON

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	156	mg/L	10	1	5	05/06/2024	2079739	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	87.2	mg/L	1	0.005	1	05/14/2024	2080190	BTRINH	
Magnesium, Mg	52	mg/L	1	0.021	0.2	05/14/2024	2080190	BTRINH	
Potassium, K	4	mg/L	1	0.06	0.2	05/14/2024	2080190	BTRINH	
Sodium, Na	68.7	mg/L	1	0.2	1	05/14/2024	2080190	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	210	mg/L	1	1.19	6	05/06/2024	2079742	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	141	mg/L	1		6	05/06/2024	2079743	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1140	µmhos/cm	1		1	05/06/2024	2079750	JWOO	>MCL

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.04	pH	1			05/06/2024	2079751	JWOO	H1,H3
Temperature (°C)	19	°C	1			05/06/2024	2079751	JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	641	mg/L	1	13.2	20	05/10/2024	2079819	ABALALIO	>MCL

Lab Sample#: 2412706-04B **Sample Source:** WSB_SS-36-1-585 **External ID:**
Date Collected: 05/06/2024 10:06AM **Date Received:** 05/06/2024 11:51AM **Sample Matrix:** Aqueous **Location Desc:** GSR_SS_CUP-36-1-585, ROW AT FUNERAL HON

Test/Analyte

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	413	mg/L	1	4.74	30	05/07/2024	2079785	MSWONG	

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MILLBRAE 1449

Water Quality Laboratory

SEWPCP 1721

FOLDER ID: 2412706

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 05/06/2024
Sampling Team: Field

Lab Sample#: 2412706-04C **Sample Source:** WSB_SS-36-1-585 **External ID:**

Date Collected: 05/06/2024 10:06AM **Date Received:** 05/06/2024 11:51AM **Sample Matrix:** Aqueous **Location Desc:** GSR_SS_CUP-36-1-585, ROW AT FUNERAL HON

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Nitrate as N	0.238	mg/L	1	0.034	0.04	05/07/2024	2079799	PWARNER	A1

Lab Sample#: 2412706-05 **Sample Source:** WSB_SS_DUP **External ID:**

Date Collected: 05/06/2024 10:29AM **Date Received:** 05/06/2024 11:51AM **Sample Matrix:** Aqueous **Location Desc:** GSR_SS_CUP-36-1-585, ROW AT FUNERAL HON

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	154	mg/L	10	1	5	05/06/2024	2079739	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	85.9	mg/L	1	0.005	1	05/14/2024	2080190	BTRINH	
Magnesium, Mg	51.3	mg/L	1	0.021	0.2	05/14/2024	2080190	BTRINH	
Potassium, K	3.91	mg/L	1	0.06	0.2	05/14/2024	2080190	BTRINH	
Sodium, Na	67.8	mg/L	1	0.2	1	05/14/2024	2080190	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	213	mg/L	1	1.19	6	05/06/2024	2079742	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	143	mg/L	1		6	05/06/2024	2079743	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1140	µmhos/cm	1		1	05/06/2024	2079750	JWOO	>MCL

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.04	pH	1			05/06/2024	2079751	JWOO	H1,H3
Temperature (°C)	19	°C	1			05/06/2024	2079751	JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	660	mg/L	1	13.2	20	05/10/2024	2079819	ABALALIO	>MCL

Lab Sample#: 2412706-05B **Sample Source:** WSB_SS_DUP **External ID:**

Date Collected: 05/06/2024 10:29AM **Date Received:** 05/06/2024 11:51AM **Sample Matrix:** Aqueous **Location Desc:** GSR_SS_CUP-36-1-585, ROW AT FUNERAL HON

Test/Analyte

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	412	mg/L	1	4.74	30	05/07/2024	2079785	MSWONG	

Lab Sample#: 2412706-05C **Sample Source:** WSB_SS_DUP **External ID:**

Date Collected: 05/06/2024 10:29AM **Date Received:** 05/06/2024 11:51AM **Sample Matrix:** Aqueous **Location Desc:** GSR_SS_CUP-36-1-585, ROW AT FUNERAL HON

Test/Analyte

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SEWPCP 1721

FOLDER ID: 2412706

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 05/06/2024
Sampling Team: Field

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Nitrate as N	**0.236**	**mg/L**	1	0.034	0.04	05/07/2024	2079799	PWARNER	A1

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FOLDER ID: 2412706

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 05/06/2024
Sampling Team: Field

QC list for Run#: *2079734* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426883-01										
	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2426883-02										
	MRL_CK	Hardness, Total, as CaCO3		2.44	mg/L	81				
QC2426883-03										
	DUP of 2413537-03	Hardness, Total, as CaCO3	61.2	55.4	mg/L		10	0.474	3	Splt# 2413537-03 (61.2mg/L)
QC2426883-04										
	LCS	Hardness, Total, as CaCO3		38.9	mg/L	97			3	

QC list for Run#: *2079739* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426884-01										
	MRL_CK	Chloride		0.493	mg/L	98				
	MRL_CK	Sulfate		0.524	mg/L	105				
	MRL_CK	Nitrate as N		0.0423	mg/L	106				
QC2426884-02										
	CCV	Chloride		2.52	mg/L	101				
	CCV	Sulfate		2.54	mg/L	101				
	CCV	Nitrate as N		0.206	mg/L	104				
QC2426884-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426884-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426884-05										
	LCS	Chloride		0.557	mg/L	111				
	LCS	Sulfate		1.64	mg/L	109				
	LCS	Nitrate as N		0.266	mg/L	106				
QC2426884-06										
	LCSD of QC2426884-05	Chloride	0.557	0.493	mg/L	98	12			Splt# QC2426884-05 (0.557mg/L)
	LCSD of QC2426884-05	Sulfate	1.64	1.58	mg/L	105	3			Splt# QC2426884-05 (1.64mg/L)
	LCSD of QC2426884-05	Nitrate as N	0.266	0.256	mg/L	102	3			Splt# QC2426884-05 (0.266mg/L)
QC2426884-07										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426884-08										
	CCV	Chloride		19.8	mg/L	99				
	CCV	Sulfate		20	mg/L	100				

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2412706

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 05/06/2024
Sampling Team: Field

QC list for Run#: *2079739* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	CCV	Nitrate as N		1.63	mg/L	103				
QC2426884-09										
	SPKD of 2412706-03	Sulfate	<0.5	1.6	mg/L	107	2			Splt# 2412706-03 (<0.5mg/L)
	SPKD of 2412706-03	Nitrate as N	<0.04	0.266	mg/L	106	1			Splt# 2412706-03 (<0.04mg/L)
QC2426884-10										
	SPK of 2412706-03	Sulfate	<0.5	1.63	mg/L	109				Splt# 2412706-03 (<0.5mg/L)
	SPK of 2412706-03	Nitrate as N	<0.04	0.27	mg/L	108				Splt# 2412706-03 (<0.04mg/L)
QC2426884-11										
	CCV	Chloride		2.42	mg/L	96				
	CCV	Sulfate		2.46	mg/L	98				
	CCV	Nitrate as N		0.196	mg/L	98				
QC2426884-12										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426884-13										
	MRL_CK	Chloride		0.49	mg/L	97				
	MRL_CK	Sulfate		0.514	mg/L	103				
	MRL_CK	Nitrate as N		0.0419	mg/L	105				
QC2426884-14										
	SPK of 2413978-04	Sulfate	158	165	mg/L	48				Splt# 2413978-04 (158mg/L)
	SPK of 2413978-04	Nitrate as N	0.899	3.31	mg/L	96				Splt# 2413978-04 (0.899mg/L) M2
QC2426884-15										
	SPKD of 2413978-04	Sulfate	158	174	mg/L	108	5			Splt# 2413978-04 (158mg/L)
	SPKD of 2413978-04	Nitrate as N	0.899	3.67	mg/L	111	10			Splt# 2413978-04 (0.899mg/L) M2

QC list for Run#: *2079742* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426889-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2426889-02										
	MRL_CK	Alkalinity		2.79	mg/L	93				
QC2426889-03										
	SPK of 2413537-03	Alkalinity	54.1	94.6	mg/L	101			3	Splt# 2413537-03 (54.1mg/L)
QC2426889-04										
	SPKD of 2413537-03	Alkalinity	54.1	94.9	mg/L	102	0		3	Splt# 2413537-03 (54.1mg/L)
QC2426889-05										
	DUP of 2413978-06	Alkalinity	204	310	mg/L		41	1.19	6	Splt# 2413978-06 (204mg/L)
QC2426889-06										
	LCS	Alkalinity		42	mg/L	105			3	
QC2426889-07										

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2412706

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 05/06/2024
Sampling Team: Field

QC list for Run#: *2079742* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	DUP of 2413978-06B	Alkalinity	257	253	mg/L		1	1.19	6	Splt# 2413978-06B (257mg/L)
QC2426889-08										
	LCS	Alkalinity		42.3	mg/L	106			3	

QC list for Run#: *2079743* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426890-01										
	BLK	Chloride		<3	mg/L			1.16	3	
QC2426890-02										
	MRL_CK	Chloride		2.95	mg/L	98				
QC2426890-03										
	SPK of 2413537-03	Chloride	14.2	54.4	mg/L	101			3	Splt# 2413537-03 (14.2mg/L)
QC2426890-04										
	SPKD of 2413537-03	Chloride	14.2	54.3	mg/L	100	0		3	Splt# 2413537-03 (14.2mg/L)
QC2426890-05										
	DUP of 2413978-06	Chloride	115	137	mg/L		41		6	Splt# 2413978-06 (115mg/L)
QC2426890-06										
	LCS	Chloride		39.5	mg/L	98			3	
QC2426890-07										
	DUP of 2413978-06C	Chloride	115	113	mg/L		1		6	Splt# 2413978-06C (115mg/L)
QC2426890-08										
	LCS	Chloride		40.2	mg/L	101			3	

QC list for Run#: *2079750* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426897-02										
	ICV	Specific Conductance @25°C		148	µmhos/cm	101				
QC2426897-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2426897-04										
	MRL_CK	Specific Conductance @25°C		9.83	µmhos/cm	98				
QC2426897-05										
	DUP of 2412706-01	Specific Conductance @25°C	1000	1000	µmhos/cm		0		1	Splt# 2412706-01 (1000µmhos/cm)
QC2426897-06										
	CCV	Specific Conductance @25°C		101	µmhos/cm	101				
QC2426897-07										
	CCV	Specific Conductance @25°C		1430	µmhos/cm	101				

QC list for Run#: *2079751* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426896-04										
	ICV	pH		9.02	pH	99				
	ICV	Temperature (°C)		24	°C					

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2412706

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 05/06/2024
Sampling Team: Field

QC list for Run#: *2079751* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426896-05										
	DUP of 2412706-01	pH	7	7.03	pH		0			Splt# 2412706-01 (7pH) H1,H3
	DUP of 2412706-01	Temperature (°C)	19.2	19.3	°C					Splt# 2412706-01 (19.2°C)
QC2426896-06										
	CCV	pH		9.02	pH	99				
	CCV	Temperature (°C)		20.1	°C					
QC2426896-07										
	CCV	pH		9.01	pH	99				
	CCV	Temperature (°C)		20.3	°C					

QC list for Run#: *2079785* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426924-01										
	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2426924-02										
	MRL_CK	Hardness, Total, as CaCO3		2.29	mg/L	76				
QC2426924-03										
	DUP of 2414132-01	Hardness, Total, as CaCO3	<15	<15	mg/L		N/A	2.37	15	Splt# 2414132-01 (<15mg/L)
QC2426924-03A										
	DUP of 2414132-01A	Hardness, Total, as CaCO3	247	248	mg/L		N/A	4.74	30	Splt# 2414132-01A (247mg/L)
QC2426924-04										
	LCS	Hardness, Total, as CaCO3		40	mg/L	100			3	

QC list for Run#: *2079799* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426932-01										
	MRL_CK	Chloride		0.508	mg/L	102				
	MRL_CK	Sulfate		0.496	mg/L	99				
	MRL_CK	Nitrate as N		0.0411	mg/L	103				
QC2426932-02										
	CCV	Chloride		2.49	mg/L	99				
	CCV	Sulfate		2.51	mg/L	100				
	CCV	Nitrate as N		0.208	mg/L	105				
QC2426932-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426932-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426932-05										
	LCS	Chloride		0.569	mg/L	114				

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Water Quality Laboratory

FOLDER ID: 2412706

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 05/06/2024
Sampling Team: Field

QC list for Run#: *2079799* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	LCS	Sulfate		1.65	mg/L	110				
	LCS	Nitrate as N		0.264	mg/L	106				
QC2426932-06										
	LCSD of QC2426932-05	Chloride	0.569	0.498	mg/L	99	13			Splt# QC2426932-05 (0.569mg/L)
	LCSD of QC2426932-05	Sulfate	1.65	1.54	mg/L	103	6			Splt# QC2426932-05 (1.65mg/L)
	LCSD of QC2426932-05	Nitrate as N	0.264	0.249	mg/L	99	6			Splt# QC2426932-05 (0.264mg/L)
QC2426932-07										
	CCV	Chloride		19.8	mg/L	98				
	CCV	Sulfate		19.9	mg/L	99				
	CCV	Nitrate as N		1.62	mg/L	102				
QC2426932-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426932-09										
	SPK of 2412707-03	Sulfate	<0.5	1.52	mg/L	101				Splt# 2412707-03 (<0.5mg/L)
	SPK of 2412707-03	Nitrate as N	<0.04	0.264	mg/L	105				Splt# 2412707-03 (<0.04mg/L)
QC2426932-10										
	SPKD of 2412707-03	Sulfate	<0.5	1.55	mg/L	103	2			Splt# 2412707-03 (<0.5mg/L)
	SPKD of 2412707-03	Nitrate as N	<0.04	0.244	mg/L	97	7			Splt# 2412707-03 (<0.04mg/L)
QC2426932-11										
	SPK of 2414182-03	Sulfate	6.08	7.46	mg/L	91				Splt# 2414182-03 (6.08mg/L)
	SPK of 2414182-03	Nitrate as N	0.0599	0.409	mg/L	140				Splt# 2414182-03 (0.0599mg/L) M,M1
QC2426932-12										
	SPKD of 2414182-03	Sulfate	6.08	7.52	mg/L	95	0			Splt# 2414182-03 (6.08mg/L)
	SPKD of 2414182-03	Nitrate as N	0.0599	0.372	mg/L	125	9			Splt# 2414182-03 (0.0599mg/L) M,M1
QC2426932-13										
	CCV	Chloride		2.46	mg/L	98				
	CCV	Sulfate		2.48	mg/L	99				
	CCV	Nitrate as N		0.2	mg/L	100				
QC2426932-14										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	

QC list for Run#: *2079819* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426942-01										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	

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Water Quality Laboratory

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FOLDER ID: 2412706

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 05/06/2024
Sampling Team: Field

QC list for Run#: *2079819* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426942-02										
	DUP of 2414182-01	Total Dissolved Solids	58	54	mg/L		7	13.2	20	Splt# 2414182-01 (58mg/L)
QC2426942-03										
	DUP of 2413978-03	Total Dissolved Solids	556	551	mg/L		0	13.2	20	Splt# 2413978-03 (556mg/L)
QC2426942-04										
	LCS	Total Dissolved Solids		100	mg/L	105		13.2	20	

QC list for Run#: *2080190* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427119-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2427119-02										
	LCS	Calcium, Ca		2.04	mg/L	102		0.04	1	
	LCS	Magnesium, Mg		2.06	mg/L	103		0.007	0.2	
	LCS	Potassium, K		2.11	mg/L	106		0.04	0.2	
	LCS	Sodium, Na		2.25	mg/L	112		0.02	1	
QC2427119-03										
	DUP of 2412706-01	Calcium, Ca	67.7	64.3	mg/L		5	0.005	1	Splt# 2412706-01 (67.7mg/L)
	DUP of 2412706-01	Magnesium, Mg	34.3	32.2	mg/L		6	0.021	0.2	Splt# 2412706-01 (34.3mg/L)
	DUP of 2412706-01	Potassium, K	2.5	2.43	mg/L		2	0.06	0.2	Splt# 2412706-01 (2.5mg/L)
	DUP of 2412706-01	Sodium, Na	92.3	90.3	mg/L		2	0.2	1	Splt# 2412706-01 (92.3mg/L)
QC2427119-04										
	SPK of 2412706-01	Calcium, Ca	67.7	66.9	mg/L	0		0.04	1	Splt# 2412706-01 (67.7mg/L)
	SPK of 2412706-01	Magnesium, Mg	34.3	34.5	mg/L	9		0.007	0.2	Splt# 2412706-01 (34.3mg/L)
	SPK of 2412706-01	Potassium, K	2.5	4.47	mg/L	98		0.04	0.2	Splt# 2412706-01 (2.5mg/L)
	SPK of 2412706-01	Sodium, Na	92.3	93.2	mg/L	45		0.02	1	Splt# 2412706-01 (92.3mg/L)
QC2427119-05										
	SPKD of 2412706-01	Calcium, Ca	67.7	67.2	mg/L	0	0	0.04	1	Splt# 2412706-01 (67.7mg/L)
	SPKD of 2412706-01	Magnesium, Mg	34.3	34.7	mg/L	19	0	0.007	0.2	Splt# 2412706-01 (34.3mg/L)
	SPKD of 2412706-01	Potassium, K	2.5	4.49	mg/L	99	0	0.04	0.2	Splt# 2412706-01 (2.5mg/L)
	SPKD of 2412706-01	Sodium, Na	92.3	93.6	mg/L	64	0	0.02	1	Splt# 2412706-01 (92.3mg/L)
QC2427119-06										
	MRL_CK	Calcium, Ca		0.0212	mg/L	53		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0334	mg/L	66		0.021	0.021	
	MRL_CK	Potassium, K		0.25	mg/L	125		0.06	0.06	
	MRL_CK	Sodium, Na		0.497	mg/L	249		0.2	0.2	
QC2427204-01										
	ICV	Calcium, Ca		10.1	mg/L	103		0.05	1	
	ICV	Magnesium, Mg		9.94	mg/L	100		0.01	0.2	

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Water Quality Laboratory

ELAP Cert #:

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FOLDER ID: 2412706

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 05/06/2024
Sampling Team: Field

QC list for Run#: *2080190* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result		Units	% Rec	RPD	MDL	MRL	Flag/Comments
			Parent	Current						
	ICV	Potassium, K		98.1	mg/L	99		0.03	0.2	
	ICV	Sodium, Na		10.1	mg/L	101		0.002	1	

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Water Quality Laboratory

FOLDER ID: 2412707

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 05/07/2024
Sampling Team: Field

Lab Sample#: 2412707-01 **Sample Source:** WSB_SS11SSLP120 **External ID:**
Date Collected: 05/07/2024 10:06AM **Date Received:** 05/07/2024 11:14AM **Sample Matrix:** Aqueous **Location Desc:** SS#11 - SS LINEAR PARK MW-120

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	60	mg/L	5	0.5	2.5	05/07/2024	2079799	PWARNER	
Nitrate as N	<0.2	mg/L	5	0.17	0.2	05/07/2024	2079799	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	63.3	mg/L	1	0.005	1	05/14/2024	2080190	BTRINH	
Magnesium, Mg	46.1	mg/L	1	0.021	0.2	05/14/2024	2080190	BTRINH	
Potassium, K	2.96	mg/L	1	0.06	0.2	05/14/2024	2080190	BTRINH	
Sodium, Na	90.7	mg/L	1	0.2	1	05/14/2024	2080190	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	293	mg/L	1	1.19	6	05/07/2024	2079822	MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	132	mg/L	1		6	05/07/2024	2079823	MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1080	µmhos/cm	1		1	05/08/2024	2079838	ALEE	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	331	mg/L	1	0.948	6	05/07/2024	2079818	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.13	pH	1			05/07/2024	2079836	ALEE	H1,H3
Temperature (°C)	18.7	°C	1			05/07/2024	2079836	ALEE	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	595	mg/L	1	13.2	20	05/10/2024	2079819	ABALALIO	>MCL

Lab Sample#: 2412707-02 **Sample Source:** WSB_SS12SSLP220 **External ID:**
Date Collected: 05/07/2024 10:23AM **Date Received:** 05/07/2024 11:14AM **Sample Matrix:** Aqueous **Location Desc:** SS#12 - SS LINEAR PARK MW-220

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	20.4	mg/L	2	0.2	1	05/07/2024	2079799	PWARNER	
Nitrate as N	0.919	mg/L	2	0.068	0.08	05/07/2024	2079799	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	31.6	mg/L	1	0.005	1	05/14/2024	2080190	BTRINH	
Magnesium, Mg	27.7	mg/L	1	0.021	0.2	05/14/2024	2080190	BTRINH	
Potassium, K	2.16	mg/L	1	0.06	0.2	05/14/2024	2080190	BTRINH	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721

FOLDER ID: 2412707

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 05/07/2024
Sampling Team: Field

Sodium, Na	54.8	mg/L	1	0.2	1	05/14/2024	2080190	BTRINH

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	136	mg/L	1	1.19	6	05/07/2024	2079822 MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	101	mg/L	1		6	05/07/2024	2079823 MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	655	µmhos/cm	1		1	05/08/2024	2079838 ALEE	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	179	mg/L	1	0.948	6	05/07/2024	2079818 MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.2	pH	1			05/07/2024	2079836 ALEE	H1,H3
Temperature (°C)	18.8	°C	1			05/07/2024	2079836 ALEE	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	366	mg/L	1	13.2	20	05/10/2024	2079819 ABALALIO	

Lab Sample#: 2412707-03 **Sample Source:** WSB_SS13SSLP440 **External ID:**

Date Collected: 05/07/2024 09:23AM **Date Received:** 05/07/2024 11:14AM **Sample Matrix:** Aqueous **Location Desc:** SS#13 - SS LINEAR PARK MW-440

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	<0.5	mg/L	1	0.1	0.5	05/07/2024	2079799 PWARNER	
Nitrate as N	<0.04	mg/L	1	0.034	0.04	05/07/2024	2079799 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	30.1	mg/L	1	0.005	1	05/14/2024	2080190 BTRINH	
Magnesium, Mg	26	mg/L	1	0.021	0.2	05/14/2024	2080190 BTRINH	
Potassium, K	5.33	mg/L	1	0.06	0.2	05/14/2024	2080190 BTRINH	
Sodium, Na	56.7	mg/L	1	0.2	1	05/14/2024	2080190 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	222	mg/L	1	1.19	6	05/07/2024	2079822 MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	66.3	mg/L	1		6	05/07/2024	2079823 MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	634	µmhos/cm	1		1	05/08/2024	2079838 ALEE	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2412707

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 05/07/2024
Sampling Team: Field

Hardness, Total, as CaCO3	174	mg/L	1	0.948	6	05/07/2024	2079818	MSWONG

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.5	pH	1			05/07/2024	2079836 ALEE	H1,H3
Temperature (°C)	18.9	°C	1			05/07/2024	2079836 ALEE	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	307	mg/L	1	13.2	20	05/10/2024	2079819 ABALALIO	

Lab Sample#: 2412707-04 **Sample Source:** WSB_SS14SSLP520 **External ID:**
Date Collected: 05/07/2024 09:32AM **Date Received:** 05/07/2024 11:14AM **Sample Matrix:** Aqueous **Location Desc:** SS#14 - SS LINEAR PARK MW-520

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	29	mg/L	5	0.5	2.5	05/07/2024	2079799 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	37.5	mg/L	1	0.005	1	05/14/2024	2080190 BTRINH	
Magnesium, Mg	13.8	mg/L	1	0.021	0.2	05/14/2024	2080190 BTRINH	
Potassium, K	3.34	mg/L	1	0.06	0.2	05/14/2024	2080190 BTRINH	
Sodium, Na	86.4	mg/L	1	0.2	1	05/14/2024	2080190 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	207	mg/L	1	1.19	6	05/07/2024	2079822 MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	76.5	mg/L	1		6	05/07/2024	2079823 MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	711	µmhos/cm	1		1	05/08/2024	2079838 ALEE	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	145	mg/L	1	0.948	6	05/07/2024	2079818 MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.27	pH	1			05/07/2024	2079836 ALEE	H1,H3
Temperature (°C)	18.9	°C	1			05/07/2024	2079836 ALEE	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	390	mg/L	1	13.2	20	05/10/2024	2079819 ABALALIO	

Lab Sample#: 2412707-04A **Sample Source:** WSB_SS14SSLP520 **External ID:**
Date Collected: 05/07/2024 09:32AM **Date Received:** 05/07/2024 11:14AM **Sample Matrix:** Aqueous **Location Desc:** SS#14 - SS LINEAR PARK MW-520

Test/Analyte

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Water Quality Laboratory

FOLDER ID: 2412707

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 05/07/2024
Sampling Team: Field

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Nitrate as N	<0.04	mg/L	1	0.034	0.04	05/07/2024	2079799	PWARNER	

Lab Sample#: 2412707-05 **Sample Source:** WSB_SS_DUP **External ID:**
Date Collected: 05/07/2024 10:21AM **Date Received:** 05/07/2024 11:14AM **Sample Matrix:** Aqueous **Location Desc:** SS#11 - SS LINEAR PARK MW-120

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	60.1	mg/L	5	0.5	2.5	05/07/2024	2079799	PWARNER	
Nitrate as N	<0.2	mg/L	5	0.17	0.2	05/07/2024	2079799	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	63.6	mg/L	1	0.005	1	05/14/2024	2080190	BTRINH	
Magnesium, Mg	46.6	mg/L	1	0.021	0.2	05/14/2024	2080190	BTRINH	
Potassium, K	3	mg/L	1	0.06	0.2	05/14/2024	2080190	BTRINH	
Sodium, Na	93.7	mg/L	1	0.2	1	05/14/2024	2080190	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	299	mg/L	1	1.19	6	05/07/2024	2079822	MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	133	mg/L	1		6	05/07/2024	2079823	MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1100	µmhos/cm	1		1	05/08/2024	2079838	ALEE	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	344	mg/L	1	0.948	6	05/07/2024	2079818	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.12	pH	1			05/07/2024	2079836	ALEE	H1,H3,
Temperature (°C)	19.1	°C	1			05/07/2024	2079836	ALEE	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	623	mg/L	1	13.2	20	05/10/2024	2079819	ABALALIO	>MCL

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Water Quality Laboratory

FOLDER ID: 2412707

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 05/07/2024
Sampling Team: Field

QC list for Run#: *2079799* **and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426932-01										
	MRL_CK	Chloride		0.508	mg/L	102				
	MRL_CK	Sulfate		0.496	mg/L	99				
	MRL_CK	Nitrate as N		0.0411	mg/L	103				
QC2426932-02										
	CCV	Chloride		2.49	mg/L	99				
	CCV	Sulfate		2.51	mg/L	100				
	CCV	Nitrate as N		0.208	mg/L	105				
QC2426932-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426932-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426932-05										
	LCS	Chloride		0.569	mg/L	114				
	LCS	Sulfate		1.65	mg/L	110				
	LCS	Nitrate as N		0.264	mg/L	106				
QC2426932-06										
	LCSD of QC2426932-05	Chloride	0.569	0.498	mg/L	99	13			Splt# QC2426932-05 (0.569mg/L)
	LCSD of QC2426932-05	Sulfate	1.65	1.54	mg/L	103	6			Splt# QC2426932-05 (1.65mg/L)
	LCSD of QC2426932-05	Nitrate as N	0.264	0.249	mg/L	99	6			Splt# QC2426932-05 (0.264mg/L)
QC2426932-07										
	CCV	Chloride		19.8	mg/L	98				
	CCV	Sulfate		19.9	mg/L	99				
	CCV	Nitrate as N		1.62	mg/L	102				
QC2426932-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426932-09										
	SPK of 2412707-03	Sulfate	<0.5	1.52	mg/L	101				Splt# 2412707-03 (<0.5mg/L)
	SPK of 2412707-03	Nitrate as N	<0.04	0.264	mg/L	105				Splt# 2412707-03 (<0.04mg/L)
QC2426932-10										
	SPKD of 2412707-03	Sulfate	<0.5	1.55	mg/L	103	2			Splt# 2412707-03 (<0.5mg/L)
	SPKD of 2412707-03	Nitrate as N	<0.04	0.244	mg/L	97	7			Splt# 2412707-03 (<0.04mg/L)
QC2426932-11										
	SPK of 2414182-03	Sulfate	6.08	7.46	mg/L	91				Splt# 2414182-03 (6.08mg/L)

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FOLDER ID: 2412707

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 05/07/2024
Sampling Team: Field

QC list for Run#: *2079799* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	SPK of 2414182-03	Nitrate as N	0.0599	0.409	mg/L	140				Splt# 2414182-03 (0.0599mg/L) M,M1
QC2426932-12										
	SPKD of 2414182-03	Sulfate	6.08	7.52	mg/L	95	0			Splt# 2414182-03 (6.08mg/L)
	SPKD of 2414182-03	Nitrate as N	0.0599	0.372	mg/L	125	9			Splt# 2414182-03 (0.0599mg/L) M,M1
QC2426932-13										
	CCV	Chloride		2.46	mg/L	98				
	CCV	Sulfate		2.48	mg/L	99				
	CCV	Nitrate as N		0.2	mg/L	100				
QC2426932-14										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	

QC list for Run#: *2079818* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426941-01										
	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2426941-02										
	MRL_CK	Hardness, Total, as CaCO3		2.39	mg/L	79				
QC2426941-03										
	DUP of 2413948-03	Hardness, Total, as CaCO3	23	23	mg/L		0	0.474	3	Splt# 2413948-03 (23mg/L)
QC2426941-04										
	LCS	Hardness, Total, as CaCO3		39.6	mg/L	98			3	

QC list for Run#: *2079819* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426942-01										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2426942-02										
	DUP of 2414182-01	Total Dissolved Solids	58	54	mg/L		7	13.2	20	Splt# 2414182-01 (58mg/L)
QC2426942-03										
	DUP of 2413978-03	Total Dissolved Solids	556	551	mg/L		0	13.2	20	Splt# 2413978-03 (556mg/L)
QC2426942-04										
	LCS	Total Dissolved Solids		100	mg/L	105		13.2	20	

QC list for Run#: *2079822* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426945-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2426945-02										
	MRL_CK	Alkalinity		2.94	mg/L	98				
QC2426945-03										
	SPK of 2413520-01	Alkalinity	12.5	55.5	mg/L	108			3	Splt# 2413520-01 (12.5mg/L)

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FOLDER ID: 2412707

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 05/07/2024
Sampling Team: Field

QC list for Run#: *2079822* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426945-04										
	SPKD of 2413520-01	Alkalinity	12.5	55.5	mg/L	107	0		3	Splt# 2413520-01 (12.5mg/L)
QC2426945-05										
	DUP of 2413948-03	Alkalinity	27	27.1	mg/L		0	0.593	3	Splt# 2413948-03 (27mg/L)
QC2426945-06										
	LCS	Alkalinity		42.6	mg/L	106			3	

QC list for Run#: *2079823* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426946-01										
	BLK	Chloride		<3	mg/L			1.16	3	
QC2426946-02										
	MRL_CK	Chloride		2.98	mg/L	99				
QC2426946-03										
	SPK of 2413520-01	Chloride	3.56	44.2	mg/L	101			3	Splt# 2413520-01 (3.56mg/L)
QC2426946-04										
	SPKD of 2413520-01	Chloride	3.56	44.3	mg/L	102	0		3	Splt# 2413520-01 (3.56mg/L)
QC2426946-05										
	DUP of 2413948-03	Chloride	5.72	5.75	mg/L		0		3	Splt# 2413948-03 (5.72mg/L)
QC2426946-06										
	LCS	Chloride		41	mg/L	102			3	

QC list for Run#: *2079836* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426951-04										
	ICV	pH		9.02	pH	99				
	ICV	Temperature (°C)		20.6	°C					
QC2426951-05										
	DUP of 2414182-03	pH	9.29	9.28	pH		0			Splt# 2414182-03 (9.29pH)
	DUP of 2414182-03	Temperature (°C)	18.3	18.2	°C					Splt# 2414182-03 (18.3°C)
QC2426951-06										
	CCV	pH		9.01	pH	99				
	CCV	Temperature (°C)		20.5	°C					
QC2426951-07										
	CCV	pH		9.01	pH	99				
	CCV	Temperature (°C)		20.4	°C					

QC list for Run#: *2079838* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426953-02										
	ICV	Specific Conductance @25°C		148	µmhos/cm	100				
QC2426953-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2426953-04										

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721

FOLDER ID: 2412707

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 05/07/2024
Sampling Team: Field

QC list for Run#: *2079838* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	MRL_CK	Specific Conductance @25°C		9.85	µmhos/cm	98				
QC2426953-05										
	DUP of 2413948-01	Specific Conductance @25°C	93	93.4	µmhos/cm		0		1	Splt# 2413948-01 (93µmhos/cm)
QC2426953-06										
	CCV	Specific Conductance @25°C		100	µmhos/cm	100				

QC list for Run#: *2080190* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427119-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2427119-02										
	LCS	Calcium, Ca		2.04	mg/L	102		0.04	1	
	LCS	Magnesium, Mg		2.06	mg/L	103		0.007	0.2	
	LCS	Potassium, K		2.11	mg/L	106		0.04	0.2	
	LCS	Sodium, Na		2.25	mg/L	112		0.02	1	
QC2427119-03										
	DUP of 2412706-01	Calcium, Ca	67.7	64.3	mg/L		5	0.005	1	Splt# 2412706-01 (67.7mg/L)
	DUP of 2412706-01	Magnesium, Mg	34.3	32.2	mg/L		6	0.021	0.2	Splt# 2412706-01 (34.3mg/L)
	DUP of 2412706-01	Potassium, K	2.5	2.43	mg/L		2	0.06	0.2	Splt# 2412706-01 (2.5mg/L)
	DUP of 2412706-01	Sodium, Na	92.3	90.3	mg/L		2	0.2	1	Splt# 2412706-01 (92.3mg/L)
QC2427119-04										
	SPK of 2412706-01	Calcium, Ca	67.7	66.9	mg/L	0		0.04	1	Splt# 2412706-01 (67.7mg/L)
	SPK of 2412706-01	Magnesium, Mg	34.3	34.5	mg/L	9		0.007	0.2	Splt# 2412706-01 (34.3mg/L)
	SPK of 2412706-01	Potassium, K	2.5	4.47	mg/L	98		0.04	0.2	Splt# 2412706-01 (2.5mg/L)
	SPK of 2412706-01	Sodium, Na	92.3	93.2	mg/L	45		0.02	1	Splt# 2412706-01 (92.3mg/L)
QC2427119-05										
	SPKD of 2412706-01	Calcium, Ca	67.7	67.2	mg/L	0	0	0.04	1	Splt# 2412706-01 (67.7mg/L)
	SPKD of 2412706-01	Magnesium, Mg	34.3	34.7	mg/L	19	0	0.007	0.2	Splt# 2412706-01 (34.3mg/L)
	SPKD of 2412706-01	Potassium, K	2.5	4.49	mg/L	99	0	0.04	0.2	Splt# 2412706-01 (2.5mg/L)
	SPKD of 2412706-01	Sodium, Na	92.3	93.6	mg/L	64	0	0.02	1	Splt# 2412706-01 (92.3mg/L)
QC2427119-06										
	MRL_CK	Calcium, Ca		0.0212	mg/L	53		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0334	mg/L	66		0.021	0.021	
	MRL_CK	Potassium, K		0.25	mg/L	125		0.06	0.06	
	MRL_CK	Sodium, Na		0.497	mg/L	249		0.2	0.2	
QC2427204-01										
	ICV	Calcium, Ca		10.1	mg/L	103		0.05	1	
	ICV	Magnesium, Mg		9.94	mg/L	100		0.01	0.2	

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Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721

FOLDER ID: 2412707

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 05/07/2024
Sampling Team: Field

QC list for Run#: *2080190* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	ICV	Potassium, K		98.1	mg/L	99		0.03	0.2	
	ICV	Sodium, Na		10.1	mg/L	101		0.002	1	

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MILLBRAE 1449

FOLDER ID: 2412708

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/10/2024
Sampling Team: Field

Lab Sample#: 2412708-01 **Sample Source:** WSB_CM-23-230 **External ID:**
Date Collected: 04/10/2024 12:20PM **Date Received:** 04/10/2024 02:37PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CM_CUP-23-230, TREASURE ISLAND TRAII

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	40.3	mg/L	10	1	5	04/10/2024	2078400 PWARNER	
Nitrate as N	8.93	mg/L	10	0.34	0.4	04/10/2024	2078400 PWARNER	
SEM_200.7_DW(EPA 200.7)								
Calcium, Ca	64.4	mg/L	1	0.005	1	04/19/2024	2078873 BTRINH	
Magnesium, Mg	58	mg/L	1	0.021	0.2	04/19/2024	2078873 BTRINH	
Potassium, K	2	mg/L	1	0.06	0.2	04/19/2024	2078873 BTRINH	
Sodium, Na	61.5	mg/L	1	0.2	1	04/19/2024	2078873 BTRINH	
MBP_ALK(SM 2320 B)								
Alkalinity	335	mg/L	1	1.19	6	04/10/2024	2078401 ALEE	
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	89.7	mg/L	1		6	04/10/2024	2078402 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	1030	µmhos/cm	1		1	04/10/2024	2078393 MSWONG	>MCL
MBP_PH(SM 4500-H+ B)								
pH	7.13	pH	1			04/10/2024	2078396 MSWONG	H1,H3
Temperature (°C)	20.4	°C	1			04/10/2024	2078396 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	555	mg/L	1	13.2	20	04/13/2024	2078452 ABALALIO	>MCL

Lab Sample#: 2412708-01B **Sample Source:** WSB_CM-23-230 **External ID:**
Date Collected: 04/10/2024 12:20PM **Date Received:** 04/10/2024 02:37PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CM_CUP-23-230, TREASURE ISLAND TRAII

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_HARDNESS_T(SM 2340 C)								
Hardness, Total, as CaCO3	393	mg/L	1	0.948	6	04/11/2024	2078469 ALEE	

Lab Sample#: 2412708-02 **Sample Source:** WSB_CM-23-440 **External ID:**
Date Collected: 04/10/2024 11:16AM **Date Received:** 04/10/2024 02:37PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CM_CUP-23-440, TREASURE ISLAND TRAII

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	4.6	mg/L	1	0.1	0.5	04/10/2024	2078400 PWARNER	M,M1
Nitrate as N	<0.04	mg/L	1	0.034	0.04	04/10/2024	2078400 PWARNER	
SEM_200.7_DW(EPA 200.7)								

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Water Quality Laboratory

ELAP Cert #:
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MILLBRAE 1449

FOLDER ID: 2412708

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/10/2024
Sampling Team: Field

Calcium, Ca	**23**	mg/L	1	0.005	1	04/19/2024	2078873	BTRINH
Magnesium, Mg	**22.8**	mg/L	1	0.021	0.2	04/19/2024	2078873	BTRINH
Potassium, K	**1.74**	mg/L	1	0.06	0.2	04/19/2024	2078873	BTRINH
Sodium, Na	**37.5**	mg/L	1	0.2	1	04/19/2024	2078873	BTRINH

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	**139**	mg/L	1	0.593	3	04/10/2024	2078401 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	**60.4**	mg/L	1		3	04/10/2024	2078402 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	**480**	µmhos/cm	1		1	04/10/2024	2078393 MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	**7.8**	pH	1			04/10/2024	2078396 MSWONG	H1,H3
Temperature (°C)	**17.9**	°C	1			04/10/2024	2078396 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	**241**	mg/L	1	13.2	20	04/13/2024	2078452 ABALALIO	

Lab Sample#: **2412708-02A** **Sample Source:** WSB_CM-23-440 **External ID:**
Date Collected: 04/10/2024 11:16AM **Date Received:** 04/10/2024 02:37PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CM_CUP-23-440, TREASURE ISLAND TRAII

Test/Analyte

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	**148**	mg/L	1	0.474	3	04/11/2024	2078469 ALEE	

Lab Sample#: **2412708-03** **Sample Source:** WSB_CM-23-515 **External ID:**
Date Collected: 04/10/2024 10:16AM **Date Received:** 04/10/2024 02:37PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CM_CUP-23-515, TREASURE ISLAND TRAII

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	**33**	mg/L	5	0.5	2.5	04/10/2024	2078400 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	**40.6**	mg/L	1	0.005	1	04/19/2024	2078873 BTRINH	
Magnesium, Mg	**30.2**	mg/L	1	0.021	0.2	04/19/2024	2078873 BTRINH	
Potassium, K	**3.05**	mg/L	1	0.06	0.2	04/19/2024	2078873 BTRINH	
Sodium, Na	**48.9**	mg/L	1	0.2	1	04/19/2024	2078873 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	**208**	mg/L	1	1.19	6	04/10/2024	2078401 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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FOLDER ID: 2412708

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/10/2024
Sampling Team: Field

Chloride	69.4	mg/L	1		6	04/10/2024	2078402	ALEE

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	676	µmhos/cm	1		1	04/10/2024	2078393 MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.16	pH	1			04/10/2024	2078396 MSWONG	H1,H3
Temperature (°C)	17.2	°C	1			04/10/2024	2078396 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	354	mg/L	1	13.2	20	04/13/2024	2078452 ABALALIO	

Lab Sample#: 2412708-03A **Sample Source:** WSB_CM-23-515 **External ID:**
Date Collected: 04/10/2024 10:16AM **Date Received:** 04/10/2024 02:37PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CM_CUP-23-515, TREASURE ISLAND TRAII

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	<0.04	mg/L	1	0.034	0.04	04/10/2024	2078400 PWARNER	

Lab Sample#: 2412708-03B **Sample Source:** WSB_CM-23-515 **External ID:**
Date Collected: 04/10/2024 10:16AM **Date Received:** 04/10/2024 02:37PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CM_CUP-23-515, TREASURE ISLAND TRAII

Test/Analyte

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	218	mg/L	1	0.474	3	04/11/2024	2078469 ALEE	

Lab Sample#: 2412708-04 **Sample Source:** WSB_CM-23-600 **External ID:**
Date Collected: 04/10/2024 11:20AM **Date Received:** 04/10/2024 02:37PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CM_CUP-23-600, TREASURE ISLAND TRAII

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	40.1	mg/L	20	2	10	04/10/2024	2078400 PWARNER	
Nitrate as N	19.6	mg/L	20	0.68	0.8	04/10/2024	2078400 PWARNER	>MCL

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	43.9	mg/L	1	0.005	1	04/19/2024	2078873 BTRINH	
Magnesium, Mg	46.1	mg/L	1	0.021	0.2	04/19/2024	2078873 BTRINH	
Potassium, K	2.07	mg/L	1	0.06	0.2	04/19/2024	2078873 BTRINH	
Sodium, Na	48.6	mg/L	1	0.2	1	04/19/2024	2078873 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	188	mg/L	1	1.19	6	04/10/2024	2078401 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	74.9	mg/L	1		6	04/10/2024	2078402 ALEE	

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FOLDER ID: 2412708

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/10/2024
Sampling Team: Field

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	836	µmhos/cm	1		1	04/10/2024	2078393	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.21	pH	1			04/10/2024	2078396	MSWONG	H1,H3
Temperature (°C)	20	°C	1			04/10/2024	2078396	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	442	mg/L	1	13.2	20	04/13/2024	2078452	ABALALIO	

Lab Sample#: 2412708-04A **Sample Source:** WSB_CM-23-600 **External ID:**
Date Collected: 04/10/2024 11:20AM **Date Received:** 04/10/2024 02:37PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CM_CUP-23-600, TREASURE ISLAND TRAII

Test/Analyte

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	294	mg/L	1	0.474	3	04/11/2024	2078469	ALEE	

Lab Sample#: 2412708-05 **Sample Source:** WSB_CM_DUP **External ID:**
Date Collected: 04/10/2024 11:35AM **Date Received:** 04/10/2024 02:37PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CM_CUP-23-440, TREASURE ISLAND TRAII

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	4.96	mg/L	1	0.1	0.5	04/10/2024	2078400	PWARNER	
Nitrate as N	<0.04	mg/L	1	0.034	0.04	04/10/2024	2078400	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	22.5	mg/L	1	0.005	1	04/19/2024	2078873	BTRINH	
Magnesium, Mg	22.7	mg/L	1	0.021	0.2	04/19/2024	2078873	BTRINH	
Potassium, K	1.74	mg/L	1	0.06	0.2	04/19/2024	2078873	BTRINH	
Sodium, Na	37.2	mg/L	1	0.2	1	04/19/2024	2078873	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	138	mg/L	1	0.593	3	04/10/2024	2078401	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	60.3	mg/L	1		3	04/10/2024	2078402	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	475	µmhos/cm	1		1	04/10/2024	2078393	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.82	pH	1			04/10/2024	2078396	MSWONG	H1,H3
Temperature (°C)	16.9	°C	1			04/10/2024	2078396	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2412708

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/10/2024
Sampling Team: Field

Total Dissolved Solids	**248**	**mg/L**	1	13.2	20	04/13/2024	2078452	ABALALIO

Lab Sample#: 2412708-05A **Sample Source:** WSB_CM_DUP **External ID:**

Date Collected: 04/10/2024 11:35AM **Date Received:** 04/10/2024 02:37PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CM_CUP-23-440, TREASURE ISLAND TRAII

Test/Analyte

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	**143**	**mg/L**	1	0.474	3	04/11/2024	2078469 ALEE	

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FOLDER ID: 2412708

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/10/2024
Sampling Team: Field

QC list for Run#: *2078393* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425940-02										
	ICV	Specific Conductance @25°C		147	µmhos/cm	100				
QC2425940-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2425940-04										
	MRL_CK	Specific Conductance @25°C		9.66	µmhos/cm	96				
QC2425940-05										
	DUP of 2412708-05	Specific Conductance @25°C	475	480	µmhos/cm		1		1	Splt# 2412708-05 (475µmhos/cm)
QC2425940-06										
	CCV	Specific Conductance @25°C		101	µmhos/cm	101				

QC list for Run#: *2078396* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425939-04										
	ICV	pH		9.01	pH	99				
	ICV	Temperature (°C)		21.2	°C					
QC2425939-05										
	DUP of 2412708-05	pH	7.82	7.85	pH		0			Splt# 2412708-05 (7.82pH) H1,H3
	DUP of 2412708-05	Temperature (°C)	16.9	16.8	°C					Splt# 2412708-05 (16.9°C)
QC2425939-06										
	CCV	pH		9.01	pH	99				
	CCV	Temperature (°C)		21.2	°C					

QC list for Run#: *2078400* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425931-01										
	MRL_CK	Fluoride		0.107	mg/L	107				
	MRL_CK	Chloride		0.506	mg/L	101				
	MRL_CK	Nitrite as N		0.0401	mg/L	100				
	MRL_CK	Phosphate ortho		0.311	mg/L	104				
	MRL_CK	Sulfate		0.514	mg/L	103				
	MRL_CK	Nitrate as N		0.0398	mg/L	100				
QC2425931-02										
	CCV	Fluoride		0.47	mg/L	94				
	CCV	Chloride		2.33	mg/L	93				
	CCV	Nitrite as N		0.192	mg/L	96				
	CCV	Phosphate ortho		1.39	mg/L	92				
	CCV	Sulfate		2.26	mg/L	90				
	CCV	Nitrate as N		0.183	mg/L	91				
QC2425931-03										
	BLK	Fluoride		<0.1	mg/L			0.02	0.1	
	BLK	Chloride		<1	mg/L			0.2	1	

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MILLBRAE 1449

FOLDER ID: 2412708

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/10/2024
Sampling Team: Field

QC list for Run#: *2078400* **and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	BLK	Nitrite as N		<0.04	mg/L			0.02	0.04	
	BLK	Phosphate ortho		<0.3	mg/L			0.1	0.3	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2425931-04										
	BLK	Fluoride		<0.1	mg/L			0.02	0.1	
	BLK	Nitrite as N		<0.04	mg/L			0.02	0.04	
	BLK	Phosphate ortho		<0.3	mg/L			0.1	0.3	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2425931-05										
	LCS	Fluoride		0.202	mg/L	101				
	LCS	Chloride		0.495	mg/L	98				
	LCS	Nitrite as N		0.243	mg/L	97				
	LCS	Phosphate ortho		1.43	mg/L	95				
	LCS	Sulfate		1.47	mg/L	97				
	LCS	Nitrate as N		0.248	mg/L	99				
QC2425931-06										
	LCSD of QC2425931-05	Fluoride	0.202	0.206	mg/L	103	1			Splt# QC2425931-05 (0.202mg/L)
	LCSD of QC2425931-05	Chloride	0.495	0.496	mg/L	99	0			Splt# QC2425931-05 (0.495mg/L)
	LCSD of QC2425931-05	Nitrite as N	0.243	0.248	mg/L	99	2			Splt# QC2425931-05 (0.243mg/L)
	LCSD of QC2425931-05	Phosphate ortho	1.43	1.43	mg/L	95	0			Splt# QC2425931-05 (1.43mg/L)
	LCSD of QC2425931-05	Sulfate	1.47	1.47	mg/L	97	0			Splt# QC2425931-05 (1.47mg/L)
	LCSD of QC2425931-05	Nitrate as N	0.248	0.248	mg/L	99	0			Splt# QC2425931-05 (0.248mg/L)
QC2425931-07										
	CCV	Fluoride		4.06	mg/L	101				
	CCV	Chloride		19.2	mg/L	96				
	CCV	Nitrite as N		1.64	mg/L	103				
	CCV	Phosphate ortho		11.9	mg/L	99				
	CCV	Sulfate		20.7	mg/L	103				
	CCV	Nitrate as N		1.61	mg/L	101				
QC2425931-08										
	BLK	Fluoride		<0.1	mg/L			0.02	0.1	
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrite as N		<0.04	mg/L			0.02	0.04	
	BLK	Phosphate ortho		<0.3	mg/L			0.1	0.3	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	

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Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2412708

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/10/2024
Sampling Team: Field

QC list for Run#: *2078400* **and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425931-09										
	SPK of 2413382-03B	Fluoride	0.577	0.796	mg/L	110				Splt# 2413382-03B (0.577mg/L)
	SPK of 2413382-03B	Nitrite as N	<0.04	0.205	mg/L	81				Splt# 2413382-03B (<0.04mg/L)
	SPK of 2413382-03B	Phosphate ortho	<0.3	1.49	mg/L	99				Splt# 2413382-03B (<0.3mg/L)
	SPK of 2413382-03B	Sulfate	9.12	11.4	mg/L	149				Splt# 2413382-03B (9.12mg/L) M,M1
	SPK of 2413382-03B	Nitrate as N	0.0864	0.395	mg/L	123				Splt# 2413382-03B (0.0864mg/L) M,M1
QC2425931-10										
	SPKD of 2413382-03B	Fluoride	0.577	0.76	mg/L	91	4			Splt# 2413382-03B (0.577mg/L)
	SPKD of 2413382-03B	Nitrite as N	<0.04	0.225	mg/L	90	9			Splt# 2413382-03B (<0.04mg/L)
	SPKD of 2413382-03B	Phosphate ortho	<0.3	1.42	mg/L	94	4			Splt# 2413382-03B (<0.3mg/L)
	SPKD of 2413382-03B	Sulfate	9.12	10.8	mg/L	111	5			Splt# 2413382-03B (9.12mg/L) M,M1
	SPKD of 2413382-03B	Nitrate as N	0.0864	0.344	mg/L	103	13			Splt# 2413382-03B (0.0864mg/L) M,M1
QC2425931-11										
	SPK of 2412708-02	Fluoride	<0.1	0.213	mg/L	106				Splt# 2412708-02 (<0.1mg/L)
	SPK of 2412708-02	Nitrite as N	<0.04	0.249	mg/L	99				Splt# 2412708-02 (<0.04mg/L)
	SPK of 2412708-02	Phosphate ortho	0.401	1.65	mg/L	83				Splt# 2412708-02 (0.401mg/L)
	SPK of 2412708-02	Sulfate	4.6	5.56	mg/L	64				Splt# 2412708-02 (4.6mg/L) M,M1
	SPK of 2412708-02	Nitrate as N	<0.04	0.22	mg/L	88				Splt# 2412708-02 (<0.04mg/L)
QC2425931-12										
	SPKD of 2412708-02	Fluoride	<0.1	0.226	mg/L	113	6			Splt# 2412708-02 (<0.1mg/L)
	SPKD of 2412708-02	Nitrite as N	<0.04	0.271	mg/L	108	8			Splt# 2412708-02 (<0.04mg/L)
	SPKD of 2412708-02	Phosphate ortho	0.401	1.78	mg/L	91	7			Splt# 2412708-02 (0.401mg/L)
	SPKD of 2412708-02	Sulfate	4.6	6	mg/L	93	7			Splt# 2412708-02 (4.6mg/L) M,M1
	SPKD of 2412708-02	Nitrate as N	<0.04	0.243	mg/L	97	9			Splt# 2412708-02 (<0.04mg/L)
QC2425931-13										
	CCV	Fluoride		0.496	mg/L	99				
	CCV	Chloride		2.48	mg/L	99				
	CCV	Nitrite as N		0.199	mg/L	99				
	CCV	Phosphate ortho		1.49	mg/L	99				
	CCV	Sulfate		2.46	mg/L	98				
	CCV	Nitrate as N		0.195	mg/L	97				
QC2425931-14										
	BLK	Fluoride		<0.1	mg/L			0.02	0.1	

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Water Quality Laboratory

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MILLBRAE 1449

FOLDER ID: 2412708

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/10/2024
Sampling Team: Field

QC list for Run#: *2078400* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrite as N		<0.04	mg/L			0.02	0.04	
	BLK	Phosphate ortho		<0.3	mg/L			0.1	0.3	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	

QC list for Run#: *2078401* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425932-01	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2425932-02	MRL_CK	Alkalinity		3.17	mg/L	106				
QC2425932-03	SPK of 2413370-01	Alkalinity	34.2	74.5	mg/L	101			3	Splt# 2413370-01 (34.2mg/L)
QC2425932-04	SPKD of 2413370-01	Alkalinity	34.2	75	mg/L	102	0		3	Splt# 2413370-01 (34.2mg/L)
QC2425932-05	DUP of 2412708-05	Alkalinity	138	139	mg/L		0	0.593	3	Splt# 2412708-05 (138mg/L)
QC2425932-06	LCS	Alkalinity		41	mg/L	103			3	

QC list for Run#: *2078402* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425933-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2425933-02	MRL_CK	Chloride		2.84	mg/L	94				
QC2425933-03	SPK of 2413370-01	Chloride	6.68	46.8	mg/L	100			3	Splt# 2413370-01 (6.68mg/L)
QC2425933-04	SPKD of 2413370-01	Chloride	6.68	46.6	mg/L	99	0		3	Splt# 2413370-01 (6.68mg/L)
QC2425933-05	DUP of 2412708-05	Chloride	60.3	60.8	mg/L		0		3	Splt# 2412708-05 (60.3mg/L)
QC2425933-06	LCS	Chloride		40	mg/L	100			3	

QC list for Run#: *2078403* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425934-01	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2425934-02	MRL_CK	Hardness, Total, as CaCO3		2.22	mg/L	74				
QC2425934-03	DUP of 2412708-05	Hardness, Total, as CaCO3	38.8	146	mg/L		116	0.474	3	Splt# 2412708-05 (38.8mg/L)

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FOLDER ID: 2412708

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/10/2024
Sampling Team: Field

QC list for Run#: *2078403* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425934-04										
	LCS	Hardness, Total, as CaCO3		38.8	mg/L	96			3	

QC list for Run#: *2078452* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425969-01										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2425969-02										
	DUP of 2413382-01	Total Dissolved Solids	62	61	mg/L		1	13.2	20	Splt# 2413382-01 (62mg/L)
QC2425969-03										
	LCS	Total Dissolved Solids		95	mg/L	100		13.2	20	

QC list for Run#: *2078469* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2425983-01										
	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2425983-02										
	MRL_CK	Hardness, Total, as CaCO3		2.52	mg/L	84				
QC2425983-03										
	DUP of 2412673-02	Hardness, Total, as CaCO3	29.4	29.5	mg/L		0	0.474	3	Splt# 2412673-02 (29.4mg/L)
QC2425983-04										
	LCS	Hardness, Total, as CaCO3		38.9	mg/L	97			3	

QC list for Run#: *2078873* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426215-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2426215-02										
	LCS	Calcium, Ca		2.02	mg/L	101		0.04	1	
	LCS	Magnesium, Mg		2.04	mg/L	102		0.007	0.2	
	LCS	Potassium, K		2.03	mg/L	102		0.04	0.2	
	LCS	Sodium, Na		2.13	mg/L	106		0.02	1	
QC2426215-03										
	DUP of 2412708-01	Calcium, Ca	64.4	64.6	mg/L		0	0.005	1	Splt# 2412708-01 (64.4mg/L)
	DUP of 2412708-01	Magnesium, Mg	58	58.2	mg/L		0	0.021	0.2	Splt# 2412708-01 (58mg/L)
	DUP of 2412708-01	Potassium, K	2	2	mg/L		0	0.06	0.2	Splt# 2412708-01 (2mg/L)
	DUP of 2412708-01	Sodium, Na	61.5	61.7	mg/L		0	0.2	1	Splt# 2412708-01 (61.5mg/L)
QC2426215-04										
	SPK of 2412708-01	Calcium, Ca	64.4	65.9	mg/L	73		0.04	1	Splt# 2412708-01 (64.4mg/L)
	SPK of 2412708-01	Magnesium, Mg	58	59.5	mg/L	75		0.007	0.2	Splt# 2412708-01 (58mg/L)

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FOLDER ID: 2412708

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/10/2024
Sampling Team: Field

QC list for Run#: *2078873* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result		Units	% Rec	RPD	MDL	MRL	Flag/Comments
			Parent	Current						
	SPK of 2412708-01	Potassium, K	2	3.96	mg/L	98		0.04	0.2	Splt# 2412708-01 (2mg/L)
	SPK of 2412708-01	Sodium, Na	61.5	63.2	mg/L	84		0.02	1	Splt# 2412708-01 (61.5mg/L)
QC2426215-05										
	SPKD of 2412708-01	Calcium, Ca	64.4	67.6	mg/L	160	2	0.04	1	Splt# 2412708-01 (64.4mg/L)
	SPKD of 2412708-01	Magnesium, Mg	58	61.1	mg/L	154	2	0.007	0.2	Splt# 2412708-01 (58mg/L)
	SPKD of 2412708-01	Potassium, K	2	4.07	mg/L	104	2	0.04	0.2	Splt# 2412708-01 (2mg/L)
	SPKD of 2412708-01	Sodium, Na	61.5	64.9	mg/L	168	2	0.02	1	Splt# 2412708-01 (61.5mg/L)
QC2426215-06										
	MRL_CK	Calcium, Ca		0.0297	mg/L	74		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0528	mg/L	106		0.021	0.021	
	MRL_CK	Potassium, K		0.26	mg/L	130		0.06	0.06	
	MRL_CK	Sodium, Na		0.328	mg/L	164		0.2	0.2	
QC2426262-01										
	ICV	Calcium, Ca		10.2	mg/L	103		0.05	1	
	ICV	Magnesium, Mg		9.94	mg/L	100		0.01	0.2	
	ICV	Potassium, K		98.8	mg/L	99		0.03	0.2	
	ICV	Sodium, Na		10.1	mg/L	101		0.002	1	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2412709

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 07/03/2024
Sampling Team: Field

Lab Sample#: 2412709-01 **Sample Source:** WSB_SF42_ZOO275 **External ID:**
Date Collected: 07/03/2024 09:56AM **Date Received:** 07/03/2024 01:01PM **Sample Matrix:** Aqueous **Location Desc:** SF#42 - ZOO MW275

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	75.5	mg/L	1		3	07/03/2024	2082766 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	526	µmhos/cm	1		1	07/03/2024	2082767 JWOO	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	275	mg/L	1	13.2	20	07/05/2024	2082760 DCARDONA	

Lab Sample#: 2412709-02 **Sample Source:** WSB_SF43_ZOO450 **External ID:**
Date Collected: 07/03/2024 09:44AM **Date Received:** 07/03/2024 01:01PM **Sample Matrix:** Aqueous **Location Desc:** SF#43 - ZOO MW450

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	53.6	mg/L	1		3	07/03/2024	2082766 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	587	µmhos/cm	1		1	07/03/2024	2082767 JWOO	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	327	mg/L	1	13.2	20	07/05/2024	2082760 DCARDONA	

Lab Sample#: 2412709-03 **Sample Source:** WSB_SF45_ZOO565 **External ID:**
Date Collected: 07/03/2024 10:04AM **Date Received:** 07/03/2024 01:01PM **Sample Matrix:** Aqueous **Location Desc:** SF#45 - ZOO MW565

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	48.3	mg/L	1		3	07/03/2024	2082766 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	418	µmhos/cm	1		1	07/03/2024	2082767 JWOO	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	207	mg/L	1	13.2	20	07/05/2024	2082760 DCARDONA	

Lab Sample#: 2412709-04 **Sample Source:** WSB_SF_DUP **External ID:**
Date Collected: 07/03/2024 10:09AM **Date Received:** 07/03/2024 01:01PM **Sample Matrix:** Aqueous **Location Desc:** SF#42 - ZOO MW275

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	76.3	mg/L	1		3	07/03/2024	2082766 ALEE	
MBP_COND(SM 2510 B)								

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Water Quality Laboratory

FOLDER ID: 2412709

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 07/03/2024
Sampling Team: Field

Specific Conductance @25°C	524	µmhos/cm	1		1	07/03/2024	2082775	ALEE

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	271	mg/L	1	13.2	20	07/05/2024	2082760	DCARDONA	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2412709

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 07/03/2024
Sampling Team: Field

QC list for Run#: *2082760* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429017-01	DUP of 2415107-01	Total Dissolved Solids	30	29	mg/L		3	13.2	20	Splt# 2415107-01 (30mg/L)
QC2429017-02	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2429017-03	LCS	Total Dissolved Solids		83	mg/L	87		13.2	20	

QC list for Run#: *2082766* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429021-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2429021-02	MRL_CK	Chloride		3.06	mg/L	102				
QC2429021-03	SPK of 2415756-01	Chloride	4.79	45.9	mg/L	103			3	Splt# 2415756-01 (4.79mg/L)
QC2429021-04	SPKD of 2415756-01	Chloride	4.79	46	mg/L	103	0		3	Splt# 2415756-01 (4.79mg/L)
QC2429021-06	LCS	Chloride		40.7	mg/L	102			3	

QC list for Run#: *2082767* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429024-01	CAL	Specific Conductance @25°C		1420	µmhos/cm	100				
QC2429024-02	ICV	Specific Conductance @25°C		144	µmhos/cm	98				
QC2429024-03	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2429024-04	MRL_CK	Specific Conductance @25°C		10.2	µmhos/cm	102				
QC2429024-05	DUP of 2415069-02	Specific Conductance @25°C	65	64.8	µmhos/cm		0		1	Splt# 2415069-02 (65µmhos/cm)
QC2429024-06	CCV	Specific Conductance @25°C		98.1	µmhos/cm	98				
QC2429024-07	CCV	Specific Conductance @25°C		1420	µmhos/cm	100				

QC list for Run#: *2082775* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429028-02	ICV	Specific Conductance @25°C		144	µmhos/cm	98				
QC2429028-03	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2429028-04	MRL_CK	Specific Conductance @25°C		10.2	µmhos/cm	102				

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Water Quality Laboratory

FOLDER ID: 2412709

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 07/03/2024
Sampling Team: Field

QC list for Run#: *2082775* **and Test: MBP_COND (SM 2510 B)**

Sample #	Name	Analyte	Result		Units	% Rec	RPD	MDL	MRL	Flag/Comments
			Parent	Current						
QC2429028-05										
	DUP of 2412709-04	Specific Conductance @25°C	524	527	µmhos/cm		0		1	Splt# 2412709-04 (524µmhos/cm)
QC2429028-06										
	CCV	Specific Conductance @25°C		97.9	µmhos/cm	97				

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Water Quality Laboratory

FOLDER ID: 2412739

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 04/15/2024
Sampling Team: Field

Lab Sample#: 2412739-01 **Sample Source:** WSB_CAL-18-230 **External ID:**
Date Collected: 04/15/2024 11:33AM **Date Received:** 04/15/2024 02:17PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-18-230, ROW AT COLMA BLVD

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))									
Sulfate	35.7	mg/L	5	0.5	2.5	04/15/2024	2078584	PWARNER	M,M1
Nitrate as N	2.69	mg/L	5	0.17	0.2	04/15/2024	2078584	PWARNER	M,M1
SEM_200.7_DW(EPA 200.7)									
Calcium, Ca	37.6	mg/L	1	0.005	1	04/23/2024	2079045	BTRINH	
Magnesium, Mg	34.3	mg/L	1	0.021	0.2	04/23/2024	2079045	BTRINH	
Potassium, K	1.79	mg/L	1	0.06	0.2	04/23/2024	2079045	BTRINH	
Sodium, Na	67.1	mg/L	1	0.2	1	04/23/2024	2079045	BTRINH	
MBP_ALK(SM 2320 B)									
Alkalinity	167	mg/L	1	1.19	6	04/15/2024	2078616	ALEE	
MBP_CHLORIDE(SM 4500-CL- D)									
Chloride	120	mg/L	1		6	04/15/2024	2078618	ALEE	
MBP_COND(SM 2510 B)									
Specific Conductance @25°C	810	µmhos/cm	1		1	04/15/2024	2078609	PWARNER	
MBP_HARDNESS_T(SM 2340 C)									
Hardness, Total, as CaCO3	233	mg/L	1	0.948	6	04/15/2024	2078622	ALEE	
MBP_PH(SM 4500-H+ B)									
pH	6.61	pH	1			04/15/2024	2078611	PWARNER	H1,H3
Temperature (°C)	16.7	°C	1			04/15/2024	2078611	PWARNER	
MBP_TDS(SM 2540 C)									
Total Dissolved Solids	442	mg/L	1	13.2	20	04/19/2024	2078705	ABALALIO	

Lab Sample#: 2412739-02 **Sample Source:** WSB_CAL-18-425 **External ID:**
Date Collected: 04/15/2024 10:54AM **Date Received:** 04/15/2024 02:17PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-18-425, ROW AT COLMA BLVD

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))									
Sulfate	40	mg/L	5	0.5	2.5	04/15/2024	2078584	PWARNER	
Nitrate as N	3.07	mg/L	5	0.17	0.2	04/15/2024	2078584	PWARNER	
SEM_200.7_DW(EPA 200.7)									
Calcium, Ca	37.7	mg/L	1	0.005	1	04/23/2024	2079045	BTRINH	
Magnesium, Mg	34.2	mg/L	1	0.021	0.2	04/23/2024	2079045	BTRINH	
Potassium, K	1.83	mg/L	1	0.06	0.2	04/23/2024	2079045	BTRINH	

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Water Quality Laboratory

ELAP Cert #:
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SEWPCP 1721

FOLDER ID: 2412739

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 04/15/2024
Sampling Team: Field

Sodium, Na	67.6	mg/L	1	0.2	1	04/23/2024	2079045	BTRINH

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	166	mg/L	1	1.19	6	04/15/2024	2078616 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	121	mg/L	1		6	04/15/2024	2078618 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	811	µmhos/cm	1		1	04/15/2024	2078609 PWARNER	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	230	mg/L	1	0.948	6	04/15/2024	2078622 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	6.57	pH	1			04/15/2024	2078611 PWARNER	H1,H3
Temperature (°C)	15.6	°C	1			04/15/2024	2078611 PWARNER	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	449	mg/L	1	13.2	20	04/19/2024	2078705 ABALALIO	

Lab Sample#: 2412739-03 **Sample Source:** WSB_CAL-18-490 **External ID:**
Date Collected: 04/15/2024 10:07AM **Date Received:** 04/15/2024 02:17PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-18-490, ROW AT COLMA BLVD

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	40.2	mg/L	5	0.5	2.5	04/15/2024	2078584 PWARNER	
Nitrate as N	3.14	mg/L	5	0.17	0.2	04/15/2024	2078584 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	38.5	mg/L	1	0.005	1	04/23/2024	2079045 BTRINH	
Magnesium, Mg	34.9	mg/L	1	0.021	0.2	04/23/2024	2079045 BTRINH	
Potassium, K	1.89	mg/L	1	0.06	0.2	04/23/2024	2079045 BTRINH	
Sodium, Na	67.6	mg/L	1	0.2	1	04/23/2024	2079045 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	167	mg/L	1	1.19	6	04/15/2024	2078616 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	119	mg/L	1		6	04/15/2024	2078618 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	806	µmhos/cm	1		1	04/15/2024	2078609 PWARNER	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2412739

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 04/15/2024
Sampling Team: Field

Hardness, Total, as CaCO3	235	mg/L	1	0.948	6	04/15/2024	2078622	ALEE

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	6.63	pH	1			04/15/2024	2078611	PWARNER	H1,H3
Temperature (°C)	15.2	°C	1			04/15/2024	2078611	PWARNER	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	437	mg/L	1	13.2	20	04/19/2024	2078705	ABALALIO	

Lab Sample#: 2412739-04 **Sample Source:** WSB_CAL-18-595 **External ID:**
Date Collected: 04/15/2024 10:30AM **Date Received:** 04/15/2024 02:17PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-18-595, ROW AT COLMA BLVD

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	59.4	mg/L	5	0.5	2.5	04/15/2024	2078584	PWARNER	
Nitrate as N	1.37	mg/L	5	0.17	0.2	04/15/2024	2078584	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	47.3	mg/L	1	0.005	1	04/23/2024	2079045	BTRINH	
Magnesium, Mg	40	mg/L	1	0.021	0.2	04/23/2024	2079045	BTRINH	
Potassium, K	2.33	mg/L	1	0.06	0.2	04/23/2024	2079045	BTRINH	
Sodium, Na	64.6	mg/L	1	0.2	1	04/23/2024	2079045	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	203	mg/L	1	1.19	6	04/15/2024	2078616	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	110	mg/L	1		6	04/15/2024	2078618	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	860	µmhos/cm	1		1	04/15/2024	2078609	PWARNER	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	275	mg/L	1	0.948	6	04/15/2024	2078622	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	6.79	pH	1			04/15/2024	2078611	PWARNER	H1,H3
Temperature (°C)	16.6	°C	1			04/15/2024	2078611	PWARNER	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	474	mg/L	1	13.2	20	04/19/2024	2078705	ABALALIO	

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MILLBRAE 1449

Water Quality Laboratory

SEWPCP 1721

FOLDER ID: 2412739

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 04/15/2024
Sampling Team: Field

Lab Sample#: 2412739-05 **Sample Source:** WSB_CAL_DUP **External ID:**

Date Collected: 04/15/2024 11:10AM **Date Received:** 04/15/2024 02:17PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-18-595, ROW AT COLMA BLVD

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))									
Sulfate	56.2	mg/L	5	0.5	2.5	04/15/2024	2078584	PWARNER	
Nitrate as N	1.26	mg/L	5	0.17	0.2	04/15/2024	2078584	PWARNER	
SEM_200.7_DW(EPA 200.7)									
Calcium, Ca	47.7	mg/L	1	0.005	1	04/23/2024	2079045	BTRINH	
Magnesium, Mg	40.4	mg/L	1	0.021	0.2	04/23/2024	2079045	BTRINH	
Potassium, K	2.41	mg/L	1	0.06	0.2	04/23/2024	2079045	BTRINH	
Sodium, Na	64.9	mg/L	1	0.2	1	04/23/2024	2079045	BTRINH	
MBP_ALK(SM 2320 B)									
Alkalinity	205	mg/L	1	1.19	6	04/15/2024	2078616	ALEE	
MBP_CHLORIDE(SM 4500-CL- D)									
Chloride	112	mg/L	1		6	04/15/2024	2078618	ALEE	
MBP_COND(SM 2510 B)									
Specific Conductance @25°C	862	µmhos/cm	1		1	04/15/2024	2078609	PWARNER	
MBP_HARDNESS_T(SM 2340 C)									
Hardness, Total, as CaCO3	279	mg/L	1	0.948	6	04/15/2024	2078622	ALEE	
MBP_PH(SM 4500-H+ B)									
pH	6.77	pH	1			04/15/2024	2078611	PWARNER	H1,H3
Temperature (°C)	16.8	°C	1			04/15/2024	2078611	PWARNER	
MBP_TDS(SM 2540 C)									
Total Dissolved Solids	474	mg/L	1	13.2	20	04/19/2024	2078705	ABALALIO	

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Water Quality Laboratory

FOLDER ID: 2412739

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 04/15/2024
Sampling Team: Field

QC list for Run#: *2078584* **and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426062-01										
	MRL_CK	Chloride		0.514	mg/L	103				
	MRL_CK	Sulfate		0.508	mg/L	102				
	MRL_CK	Nitrate as N		0.0393	mg/L	98				
QC2426062-02										
	CCV	Chloride		2.25	mg/L	90				
	CCV	Sulfate		2.19	mg/L	87				
	CCV	Nitrate as N		0.181	mg/L	91				
QC2426062-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426062-04										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426062-05										
	LCS	Chloride		0.581	mg/L	116				
	LCS	Sulfate		1.52	mg/L	101				
	LCS	Nitrate as N		0.246	mg/L	98				
QC2426062-06										
	LCSD of QC2426062-05	Chloride	0.581	0.578	mg/L	116	0			Splt# QC2426062-05 (0.581mg/L)
	LCSD of QC2426062-05	Sulfate	1.52	1.51	mg/L	101	0			Splt# QC2426062-05 (1.52mg/L)
	LCSD of QC2426062-05	Nitrate as N	0.246	0.242	mg/L	96	1			Splt# QC2426062-05 (0.246mg/L)
QC2426062-07										
	CCV	Chloride		19.2	mg/L	95				
	CCV	Sulfate		20.8	mg/L	104				
	CCV	Nitrate as N		1.64	mg/L	103				
QC2426062-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426062-09										
	SPK of 2412739-01	Sulfate	35.7	47	mg/L	150				Splt# 2412739-01 (35.7mg/L) M,M1
	SPK of 2412739-01	Nitrate as N	2.69	4.28	mg/L	127				Splt# 2412739-01 (2.69mg/L) M,M1
QC2426062-10										
	SPKD of 2412739-01	Sulfate	35.7	43.8	mg/L	107	7			Splt# 2412739-01 (35.7mg/L)
	SPKD of 2412739-01	Nitrate as N	2.69	3.99	mg/L	104	6			Splt# 2412739-01 (2.69mg/L)
QC2426062-11										
	CCV	Chloride		2.3	mg/L	92				

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721

FOLDER ID: 2412739

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 04/15/2024
Sampling Team: Field

QC list for Run#: *2078584* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	CCV	Sulfate		2.23	mg/L	89				
	CCV	Nitrate as N		0.179	mg/L	90				
QC2426062-12										
	MRL_CK	Chloride		0.489	mg/L	97				
	MRL_CK	Sulfate		0.498	mg/L	99				
	MRL_CK	Nitrate as N		0.0386	mg/L	96				
QC2426062-13										
	CCV	Chloride		2.39	mg/L	95				
	CCV	Sulfate		2.32	mg/L	92				
	CCV	Nitrate as N		0.191	mg/L	96				
QC2426062-14										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426062-15										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426062-16										
	LCS	Chloride		0.557	mg/L	111				
	LCS	Sulfate		1.46	mg/L	97				
	LCS	Nitrate as N		0.232	mg/L	93				
QC2426062-17										
	LCSD of QC2426062-16	Chloride	0.557	0.579	mg/L	116	3			Splt# QC2426062-16 (0.557mg/L)
	LCSD of QC2426062-16	Sulfate	1.46	1.5	mg/L	100	3			Splt# QC2426062-16 (1.46mg/L)
	LCSD of QC2426062-16	Nitrate as N	0.232	0.242	mg/L	96	4			Splt# QC2426062-16 (0.232mg/L)
QC2426062-18										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	

QC list for Run#: *2078609* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426078-01										
	CAL	Specific Conductance @25°C		1430	µmhos/cm	101				
QC2426078-02										
	ICV	Specific Conductance @25°C		146	µmhos/cm	99				
QC2426078-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2426078-04										
	MRL_CK	Specific Conductance @25°C		9.63	µmhos/cm	96				

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FOLDER ID: 2412739

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 04/15/2024
Sampling Team: Field

QC list for Run#: *2078609* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426078-05										
	DUP of 2412870-06	Specific Conductance @25°C	110	111	µmhos/cm		0		1	Splt# 2412870-06 (110µmhos/cm)
QC2426078-06										
	CCV	Specific Conductance @25°C		100	µmhos/cm	100				
QC2426078-07										
	CCV	Specific Conductance @25°C		1420	µmhos/cm	101				

QC list for Run#: *2078611* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426079-01										
	CAL	pH		7.15	pH	102				
	CAL	Temperature (°C)		19.9	°C					
QC2426079-02										
	CAL	pH		4.03	pH	101				
	CAL	Temperature (°C)		20.1	°C					
QC2426079-03										
	CAL	pH		10.1	pH	112				
	CAL	Temperature (°C)		20.1	°C					
QC2426079-04										
	ICV	pH		9.01	pH	99				
	ICV	Temperature (°C)		20.1	°C					
QC2426079-05										
	DUP of 2412870-06	pH	9.15	9.14	pH		0			Splt# 2412870-06 (9.15pH) H1,H3
	DUP of 2412870-06	Temperature (°C)	16.5	16.7	°C					Splt# 2412870-06 (16.5°C)
QC2426079-06										
	CCV	pH		9.04	pH	99				
	CCV	Temperature (°C)		20	°C					
QC2426079-07										
	CCV	pH		9.03	pH	99				
	CCV	Temperature (°C)		20	°C					

QC list for Run#: *2078616* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426080-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2426080-02										
	MRL_CK	Alkalinity		3.36	mg/L	112				
QC2426080-03										
	SPK of 2412739-01	Alkalinity	167	247	mg/L	100			6	Splt# 2412739-01 (167mg/L)
QC2426080-04										
	SPKD of 2412739-01	Alkalinity	167	248	mg/L	101	0		6	Splt# 2412739-01 (167mg/L)
QC2426080-06										
	LCS	Alkalinity		41	mg/L	103			3	

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Water Quality Laboratory

FOLDER ID: 2412739

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 04/15/2024
Sampling Team: Field

QC list for Run#: *2078618* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426082-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2426082-02	MRL_CK	Chloride		3.21	mg/L	107				
QC2426082-03	SPK of 2412739-01	Chloride	120	201	mg/L	101			6	Splt# 2412739-01 (120mg/L)
QC2426082-04	SPKD of 2412739-01	Chloride	120	200	mg/L	99	0		6	Splt# 2412739-01 (120mg/L)
QC2426082-06	LCS	Chloride		39.7	mg/L	99			3	

QC list for Run#: *2078622* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426086-01	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2426086-02	MRL_CK	Hardness, Total, as CaCO3		2.41	mg/L	80				
QC2426086-03	DUP of 2412739-05	Hardness, Total, as CaCO3	279	278	mg/L		0	0.948	6	Splt# 2412739-05 (279mg/L)
QC2426086-04	LCS	Hardness, Total, as CaCO3		38.8	mg/L	97			3	

QC list for Run#: *2078705* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426144-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2426144-02	DUP of 2413623-01	Total Dissolved Solids	62	58	mg/L		6	13.2	20	Splt# 2413623-01 (62mg/L)
QC2426144-03	DUP of 2412740-04	Total Dissolved Solids	656	660	mg/L		0	13.2	20	Splt# 2412740-04 (656mg/L)
QC2426144-04	LCS	Total Dissolved Solids		88	mg/L	92		13.2	20	

QC list for Run#: *2079045* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426316-01	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2426316-02	LCS	Calcium, Ca		2.02	mg/L	101		0.04	1	
	LCS	Magnesium, Mg		2.05	mg/L	103		0.007	0.2	
	LCS	Potassium, K		2	mg/L	100		0.04	0.2	

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FOLDER ID: 2412739

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 04/15/2024
Sampling Team: Field

QC list for Run#: *2079045* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	LCS	Sodium, Na		2.23	mg/L	111		0.02	1	
QC2426316-03										
	DUP of 2412739-01	Calcium, Ca	37.6	37.9	mg/L		0	0.005	1	Splt# 2412739-01 (37.6mg/L)
	DUP of 2412739-01	Magnesium, Mg	34.3	34.5	mg/L		0	0.021	0.2	Splt# 2412739-01 (34.3mg/L)
	DUP of 2412739-01	Potassium, K	1.79	1.81	mg/L		1	0.06	0.2	Splt# 2412739-01 (1.79mg/L)
	DUP of 2412739-01	Sodium, Na	67.1	67.6	mg/L		0	0.2	1	Splt# 2412739-01 (67.1mg/L)
QC2426316-04										
	SPK of 2412739-01	Calcium, Ca	37.6	39.4	mg/L	89		0.04	1	Splt# 2412739-01 (37.6mg/L)
	SPK of 2412739-01	Magnesium, Mg	34.3	36	mg/L	86		0.007	0.2	Splt# 2412739-01 (34.3mg/L)
	SPK of 2412739-01	Potassium, K	1.79	3.82	mg/L	102		0.04	0.2	Splt# 2412739-01 (1.79mg/L)
	SPK of 2412739-01	Sodium, Na	67.1	68.9	mg/L	85		0.02	1	Splt# 2412739-01 (67.1mg/L)
QC2426316-05										
	SPKD of 2412739-01	Calcium, Ca	37.6	40.2	mg/L	127	1	0.04	1	Splt# 2412739-01 (37.6mg/L)
	SPKD of 2412739-01	Magnesium, Mg	34.3	36.7	mg/L	120	1	0.007	0.2	Splt# 2412739-01 (34.3mg/L)
	SPKD of 2412739-01	Potassium, K	1.79	3.9	mg/L	106	2	0.04	0.2	Splt# 2412739-01 (1.79mg/L)
	SPKD of 2412739-01	Sodium, Na	67.1	70.1	mg/L	146	1	0.02	1	Splt# 2412739-01 (67.1mg/L)
QC2426316-06										
	MRL_CK	Calcium, Ca		0.034	mg/L	85		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0625	mg/L	125		0.021	0.021	
	MRL_CK	Potassium, K		0.2	mg/L	100		0.06	0.06	
	MRL_CK	Sodium, Na		0.396	mg/L	198		0.2	0.2	
QC2426388-01										
	ICV	Calcium, Ca		10.2	mg/L	104		0.05	1	
	ICV	Magnesium, Mg		9.97	mg/L	101		0.01	0.2	
	ICV	Potassium, K		98.8	mg/L	99		0.03	0.2	
	ICV	Sodium, Na		10.2	mg/L	102		0.002	1	

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Water Quality Laboratory

FOLDER ID: 2412740

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/16/2024
Sampling Team: Field

Lab Sample#: 2412740-01 **Sample Source:** WSB_DC-10A-160 **External ID:**

Date Collected: 04/16/2024 09:58AM **Date Received:** 04/16/2024 01:54PM **Sample Matrix:** Aqueous **Location Desc:** GSR_DC_CUP-10A-160, ROW AT SERRA BOWL

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	56.7	mg/L	10	1	5	04/16/2024	2078691 PWARNER	
Nitrate as N	7.94	mg/L	10	0.34	0.4	04/16/2024	2078691 PWARNER	
SEM_200.7_DW(EPA 200.7)								
Calcium, Ca	64.7	mg/L	1	0.005	1	04/23/2024	2079045 BTRINH	
Magnesium, Mg	63	mg/L	1	0.021	0.2	04/23/2024	2079045 BTRINH	
Potassium, K	1.31	mg/L	1	0.06	0.2	04/23/2024	2079045 BTRINH	
Sodium, Na	73.6	mg/L	1	0.2	1	04/23/2024	2079045 BTRINH	
MBP_ALK(SM 2320 B)								
Alkalinity	316	mg/L	1	1.19	6	04/16/2024	2078706 ALEE	
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	121	mg/L	1		6	04/16/2024	2078711 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	1140	µmhos/cm	1		1	04/16/2024	2078679 MSWONG	>MCL
MBP_HARDNESS_T(SM 2340 C)								
Hardness, Total, as CaCO3	416	mg/L	1	0.948	6	04/16/2024	2078714 ALEE	
MBP_PH(SM 4500-H+ B)								
pH	6.86	pH	1			04/16/2024	2078686 MSWONG	H1,H3
Temperature (°C)	18.2	°C	1			04/16/2024	2078686 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	642	mg/L	1	13.2	20	04/19/2024	2078705 ABALALIO	>MCL

Lab Sample#: 2412740-03 **Sample Source:** WSB_DC-10A-500 **External ID:**

Date Collected: 04/16/2024 10:01AM **Date Received:** 04/16/2024 01:54PM **Sample Matrix:** Aqueous **Location Desc:** GSR_DC_CUP-10A-500 ROW AT SERRA BOWL

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	82.8	mg/L	10	1	5	04/16/2024	2078691 PWARNER	
Nitrate as N	7.43	mg/L	10	0.34	0.4	04/16/2024	2078691 PWARNER	
SEM_200.7_DW(EPA 200.7)								
Calcium, Ca	62.8	mg/L	1	0.005	1	04/23/2024	2079045 BTRINH	
Magnesium, Mg	63.1	mg/L	1	0.021	0.2	04/23/2024	2079045 BTRINH	
Potassium, K	1.35	mg/L	1	0.06	0.2	04/23/2024	2079045 BTRINH	

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FOLDER ID: 2412740

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/16/2024
Sampling Team: Field

Sodium, Na	72	mg/L	1	0.2	1	04/23/2024	2079045	BTRINH

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	266	mg/L	1	1.19	6	04/16/2024	2078706	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	128	mg/L	1		6	04/16/2024	2078711	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1110	µmhos/cm	1		1	04/16/2024	2078679	MSWONG	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	405	mg/L	1	0.948	6	04/16/2024	2078714	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	6.71	pH	1			04/16/2024	2078686	MSWONG	H1,H3
Temperature (°C)	17.9	°C	1			04/16/2024	2078686	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	643	mg/L	1	13.2	20	04/19/2024	2078705	ABALALIO	>MCL

Lab Sample#: 2412740-04 **Sample Source:** WSB_DC-10A-710 **External ID:**

Date Collected: 04/16/2024 11:18AM **Date Received:** 04/16/2024 01:54PM **Sample Matrix:** Aqueous **Location Desc:** GSR_DC_CUP-10A-710 ROW AT SERRA BOWL

Test/Analyte

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	71.7	mg/L	1	0.005	1	04/23/2024	2079045	BTRINH	
Magnesium, Mg	46.9	mg/L	1	0.021	0.2	04/23/2024	2079045	BTRINH	
Potassium, K	3.84	mg/L	1	0.06	0.2	04/23/2024	2079045	BTRINH	
Sodium, Na	91.4	mg/L	1	0.2	1	04/23/2024	2079045	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	228	mg/L	1	1.19	6	04/16/2024	2078706	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	182	mg/L	1		6	04/16/2024	2078711	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1190	µmhos/cm	1		1	04/16/2024	2078679	MSWONG	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	368	mg/L	1	0.948	6	04/16/2024	2078714	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.15	pH	1			04/16/2024	2078686	MSWONG	H1,H3

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2412740

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/16/2024
Sampling Team: Field

Temperature (°C)	19.3	°C	1		04/16/2024	2078686	MSWONG

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	656	mg/L	1	13.2	20	04/19/2024	2078705 ABALALIO	>MCL

Lab Sample#: 2412740-04A **Sample Source:** WSB_DC-10A-710 **External ID:**
Date Collected: 04/16/2024 11:18AM **Date Received:** 04/16/2024 01:54PM **Sample Matrix:** Aqueous **Location Desc:** GSR_DC_CUP-10A-710 ROW AT SERRA BOWL

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	<0.04	mg/L	1	0.034	0.04	04/16/2024	2078691 PWARNER	

Lab Sample#: 2412740-04B **Sample Source:** WSB_DC-10A-710 **External ID:**
Date Collected: 04/16/2024 11:18AM **Date Received:** 04/16/2024 01:54PM **Sample Matrix:** Aqueous **Location Desc:** GSR_DC_CUP-10A-710 ROW AT SERRA BOWL

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	95.4	mg/L	10	1	5	04/16/2024	2078691 PWARNER	

Lab Sample#: 2412740-05 **Sample Source:** WSB_DC_DUP **External ID:**
Date Collected: 04/16/2024 10:26AM **Date Received:** 04/16/2024 01:54PM **Sample Matrix:** Aqueous **Location Desc:** GSR_DC_CUP-10A-500 ROW AT SERRA BOWL

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	77.2	mg/L	10	1	5	04/16/2024	2078691 PWARNER	
Nitrate as N	6.96	mg/L	10	0.34	0.4	04/16/2024	2078691 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	61.1	mg/L	1	0.005	1	04/23/2024	2079045 BTRINH	
Magnesium, Mg	61.4	mg/L	1	0.021	0.2	04/23/2024	2079045 BTRINH	
Potassium, K	1.31	mg/L	1	0.06	0.2	04/23/2024	2079045 BTRINH	
Sodium, Na	70.2	mg/L	1	0.2	1	04/23/2024	2079045 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	265	mg/L	1	1.19	6	04/16/2024	2078706 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	128	mg/L	1		6	04/16/2024	2078711 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	1120	µmhos/cm	1		1	04/16/2024	2078679 MSWONG	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	400	mg/L	1	0.948	6	04/16/2024	2078714 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2412740

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/16/2024
Sampling Team: Field

pH	**6.68**	**pH**	1		04/16/2024	2078686	MSWONG	H1,H3
Temperature (°C)	**18.8**	**°C**	1		04/16/2024	2078686	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	**633**	**mg/L**	1	13.2	20	04/19/2024	2078705	ABALALIO	>MCL

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FOLDER ID: 2412740

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/16/2024
Sampling Team: Field

QC list for Run#: *2078679* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426152-02										
	ICV	Specific Conductance @25°C		147	µmhos/cm	100				
QC2426152-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2426152-04										
	MRL_CK	Specific Conductance @25°C		9.7	µmhos/cm	97				
QC2426152-05										
	DUP of 2413623-03	Specific Conductance @25°C	109	109	µmhos/cm		0		1	Splt# 2413623-03 (109µmhos/cm)
QC2426152-06										
	CCV	Specific Conductance @25°C		101	µmhos/cm	101				
QC2426152-07										
	CCV	Specific Conductance @25°C		1430	µmhos/cm	101				

QC list for Run#: *2078686* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426149-04										
	ICV	pH		9	pH	99				
	ICV	Temperature (°C)		20.9	°C					
QC2426149-05										
	DUP of 2413623-03	pH	9.21	9.2	pH		0			Splt# 2413623-03 (9.21pH) H1,H3
	DUP of 2413623-03	Temperature (°C)	16.9	17.1	°C					Splt# 2413623-03 (16.9°C)
QC2426149-06										
	CCV	pH		9	pH	99				
	CCV	Temperature (°C)		20.9	°C					
QC2426149-07										
	CCV	pH		9	pH	99				
	CCV	Temperature (°C)		21	°C					

QC list for Run#: *2078691* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426136-01										
	MRL_CK	Chloride		0.517	mg/L	103				
	MRL_CK	Sulfate		0.52	mg/L	104				
	MRL_CK	Nitrate as N		0.0402	mg/L	101				
QC2426136-02										
	CCV	Chloride		2.36	mg/L	94				
	CCV	Sulfate		2.28	mg/L	91				
	CCV	Nitrate as N		0.186	mg/L	93				
QC2426136-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426136-04										

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Water Quality Laboratory

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MILLBRAE 1449

FOLDER ID: 2412740

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/16/2024
Sampling Team: Field

QC list for Run#: *2078691* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426136-05										
	LCS	Chloride		0.498	mg/L	99				
	LCS	Sulfate		1.49	mg/L	99				
	LCS	Nitrate as N		0.239	mg/L	95				
QC2426136-06										
	LCSD of QC2426136-05	Chloride	0.498	0.484	mg/L	96	2			Splt# QC2426136-05 (0.498mg/L)
	LCSD of QC2426136-05	Sulfate	1.49	1.44	mg/L	96	3			Splt# QC2426136-05 (1.49mg/L)
	LCSD of QC2426136-05	Nitrate as N	0.239	0.231	mg/L	92	3			Splt# QC2426136-05 (0.239mg/L)
QC2426136-07										
	CCV	Chloride		19.3	mg/L	96				
	CCV	Sulfate		20.8	mg/L	104				
	CCV	Nitrate as N		1.62	mg/L	102				
QC2426136-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426136-09										
	SPK of 2413623-01	Sulfate	10.5	11.1	mg/L	36				Splt# 2413623-01 (10.5mg/L) A1,E3,M1
	SPK of 2413623-01	Nitrate as N	0.0972	0.317	mg/L	87				Splt# 2413623-01 (0.0972mg/L)
QC2426136-10										
	SPKD of 2413623-01	Sulfate	10.5	12.1	mg/L	104	8			Splt# 2413623-01 (10.5mg/L) A1,E3,M1
	SPKD of 2413623-01	Nitrate as N	0.0972	0.343	mg/L	98	7			Splt# 2413623-01 (0.0972mg/L)

QC list for Run#: *2078705* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426144-01										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2426144-02										
	DUP of 2413623-01	Total Dissolved Solids	62	58	mg/L		6	13.2	20	Splt# 2413623-01 (62mg/L)
QC2426144-03										
	DUP of 2412740-04	Total Dissolved Solids	656	660	mg/L		0	13.2	20	Splt# 2412740-04 (656mg/L)
QC2426144-04										
	LCS	Total Dissolved Solids		88	mg/L	92		13.2	20	

QC list for Run#: *2078706* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426146-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

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FOLDER ID: 2412740

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/16/2024
Sampling Team: Field

QC list for Run#: *2078706* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426146-02	MRL_CK	Alkalinity		3.38	mg/L	113				
QC2426146-03	SPK of 2412879-01	Alkalinity	24.3	64.8	mg/L	101			3	Splt# 2412879-01 (24.3mg/L)
QC2426146-04	SPKD of 2412879-01	Alkalinity	24.3	64.8	mg/L	101	0		3	Splt# 2412879-01 (24.3mg/L)
QC2426146-05	DUP of 2412869-03	Alkalinity	36.8	37.3	mg/L		1	0.593	3	Splt# 2412869-03 (36.8mg/L)
QC2426146-06	LCS	Alkalinity		40.8	mg/L	102			3	

QC list for Run#: *2078711* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426150-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2426150-02	MRL_CK	Chloride		2.78	mg/L	92				
QC2426150-03	SPK of 2412879-01	Chloride	4.77	44.4	mg/L	99			3	Splt# 2412879-01 (4.77mg/L)
QC2426150-04	SPKD of 2412879-01	Chloride	4.77	43.9	mg/L	97	1		3	Splt# 2412879-01 (4.77mg/L)
QC2426150-05	DUP of 2412869-03	Chloride	10.3	10.4	mg/L		1		3	Splt# 2412869-03 (10.3mg/L)
QC2426150-06	LCS	Chloride		39.5	mg/L	98			3	

QC list for Run#: *2078714* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426151-01	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2426151-02	MRL_CK	Hardness, Total, as CaCO3		2.43	mg/L	81				
QC2426151-03	DUP of 2412869-03	Hardness, Total, as CaCO3	37.8	37.7	mg/L		0	0.474	3	Splt# 2412869-03 (37.8mg/L)
QC2426151-04	LCS	Hardness, Total, as CaCO3		38.8	mg/L	97			3	

QC list for Run#: *2079045* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426316-01	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2426316-02										

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FOLDER ID: 2412740

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/16/2024
Sampling Team: Field

QC list for Run#: *2079045* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	LCS	Calcium, Ca		2.02	mg/L	101		0.04	1	
	LCS	Magnesium, Mg		2.05	mg/L	103		0.007	0.2	
	LCS	Potassium, K		2	mg/L	100		0.04	0.2	
	LCS	Sodium, Na		2.23	mg/L	111		0.02	1	
QC2426316-03										
	DUP of 2412739-01	Calcium, Ca	37.6	37.9	mg/L		0	0.005	1	Splt# 2412739-01 (37.6mg/L)
	DUP of 2412739-01	Magnesium, Mg	34.3	34.5	mg/L		0	0.021	0.2	Splt# 2412739-01 (34.3mg/L)
	DUP of 2412739-01	Potassium, K	1.79	1.81	mg/L		1	0.06	0.2	Splt# 2412739-01 (1.79mg/L)
	DUP of 2412739-01	Sodium, Na	67.1	67.6	mg/L		0	0.2	1	Splt# 2412739-01 (67.1mg/L)
QC2426316-04										
	SPK of 2412739-01	Calcium, Ca	37.6	39.4	mg/L	89		0.04	1	Splt# 2412739-01 (37.6mg/L)
	SPK of 2412739-01	Magnesium, Mg	34.3	36	mg/L	86		0.007	0.2	Splt# 2412739-01 (34.3mg/L)
	SPK of 2412739-01	Potassium, K	1.79	3.82	mg/L	102		0.04	0.2	Splt# 2412739-01 (1.79mg/L)
	SPK of 2412739-01	Sodium, Na	67.1	68.9	mg/L	85		0.02	1	Splt# 2412739-01 (67.1mg/L)
QC2426316-05										
	SPKD of 2412739-01	Calcium, Ca	37.6	40.2	mg/L	127	1	0.04	1	Splt# 2412739-01 (37.6mg/L)
	SPKD of 2412739-01	Magnesium, Mg	34.3	36.7	mg/L	120	1	0.007	0.2	Splt# 2412739-01 (34.3mg/L)
	SPKD of 2412739-01	Potassium, K	1.79	3.9	mg/L	106	2	0.04	0.2	Splt# 2412739-01 (1.79mg/L)
	SPKD of 2412739-01	Sodium, Na	67.1	70.1	mg/L	146	1	0.02	1	Splt# 2412739-01 (67.1mg/L)
QC2426316-06										
	MRL_CK	Calcium, Ca		0.034	mg/L	85		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0625	mg/L	125		0.021	0.021	
	MRL_CK	Potassium, K		0.2	mg/L	100		0.06	0.06	
	MRL_CK	Sodium, Na		0.396	mg/L	198		0.2	0.2	
QC2426388-01										
	ICV	Calcium, Ca		10.2	mg/L	104		0.05	1	
	ICV	Magnesium, Mg		9.97	mg/L	101		0.01	0.2	
	ICV	Potassium, K		98.8	mg/L	99		0.03	0.2	
	ICV	Sodium, Na		10.2	mg/L	102		0.002	1	

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Water Quality Laboratory

FOLDER ID: 2412741

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 04/17/2024
Sampling Team: Field

Lab Sample#: 2412741-01 **Sample Source:** WSB_CAL-19-475 **External ID:**
Date Collected: 04/17/2024 09:55AM **Date Received:** 04/17/2024 01:40PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-19-475, ROW AT SERRAMONTE

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	58.1	mg/L	5	0.5	2.5	04/17/2024	2078772 PWARNER	
Nitrate as N	2.29	mg/L	5	0.17	0.2	04/17/2024	2078772 PWARNER	
SEM_200.7_DW(EPA 200.7)								
Calcium, Ca	41.4	mg/L	1	0.005	1	04/24/2024	2079126 BTRINH	M1
Magnesium, Mg	38.8	mg/L	1	0.021	0.2	04/24/2024	2079126 BTRINH	M1
Potassium, K	2.35	mg/L	1	0.06	0.2	04/24/2024	2079126 BTRINH	
Sodium, Na	52.8	mg/L	1	0.2	1	04/24/2024	2079126 BTRINH	M1
MBP_ALK(SM 2320 B)								
Alkalinity	161	mg/L	1	1.19	6	04/17/2024	2078768 MSWONG	
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	109	mg/L	1		6	04/17/2024	2078769 MSWONG	
MBP_HARDNESS_T(SM 2340 C)								
Hardness, Total, as CaCO3	253	mg/L	1	0.948	6	04/17/2024	2078760 MSWONG	
MBP_PH(SM 4500-H+ B)								
pH	7.36	pH	1			04/17/2024	2078777 MSWONG	H1,H3
Temperature (°C)	19.1	°C	1			04/17/2024	2078777 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	427	mg/L	1	13.2	20	04/22/2024	2078887 DCARDONA	

Lab Sample#: 2412741-01A **Sample Source:** WSB_CAL-19-475 **External ID:**
Date Collected: 04/17/2024 09:55AM **Date Received:** 04/17/2024 01:40PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-19-475, ROW AT SERRAMONTE

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	802	µmhos/cm	1		1	04/18/2024	2078807 MSWONG	

Lab Sample#: 2412741-02 **Sample Source:** WSB_CAL-19-600 **External ID:**
Date Collected: 04/17/2024 10:51AM **Date Received:** 04/17/2024 01:40PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-19-600, ROW AT SERRAMONTE

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
SEM_200.7_DW(EPA 200.7)								
Calcium, Ca	48.1	mg/L	1	0.005	1	04/24/2024	2079126 BTRINH	M1
Magnesium, Mg	40.1	mg/L	1	0.021	0.2	04/24/2024	2079126 BTRINH	M1
Potassium, K	2.28	mg/L	1	0.06	0.2	04/24/2024	2079126 BTRINH	
Sodium, Na	56.3	mg/L	1	0.2	1	04/24/2024	2079126 BTRINH	M1

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Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2412741

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 04/17/2024
Sampling Team: Field

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	254	mg/L	1	1.19	6	04/17/2024	2078768	MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	98.7	mg/L	1		6	04/17/2024	2078769	MSWONG	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	279	mg/L	1	0.948	6	04/17/2024	2078760	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.43	pH	1			04/17/2024	2078777	MSWONG	H1,H3
Temperature (°C)	18.7	°C	1			04/17/2024	2078777	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	440	mg/L	1	13.2	20	04/22/2024	2078887	DCARDONA	

Lab Sample#: 2412741-02A **Sample Source:** WSB_CAL-19-600 **External ID:**
Date Collected: 04/17/2024 10:51AM **Date Received:** 04/17/2024 01:40PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-19-600, ROW AT SERRAMONTE

Test/Analyte

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	829	µmhos/cm	1		1	04/18/2024	2078807	MSWONG	

Lab Sample#: 2412741-02B **Sample Source:** WSB_CAL-19-600 **External ID:**
Date Collected: 04/17/2024 10:51AM **Date Received:** 04/17/2024 01:40PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-19-600, ROW AT SERRAMONTE

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	19.5	mg/L	5	0.5	2.5	04/18/2024	2078794	PWARNER	
Nitrate as N	2.66	mg/L	5	0.17	0.2	04/18/2024	2078794	PWARNER	

Lab Sample#: 2412741-03 **Sample Source:** WSB_CAL-19-690 **External ID:**
Date Collected: 04/17/2024 09:57AM **Date Received:** 04/17/2024 01:40PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-19-690, ROW AT SERRAMONTE

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	53.1	mg/L	10	1	5	04/17/2024	2078772	PWARNER	
Nitrate as N	8.31	mg/L	10	0.34	0.4	04/17/2024	2078772	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	41.8	mg/L	1	0.005	1	04/24/2024	2079126	BTRINH	M1
Magnesium, Mg	38.1	mg/L	1	0.021	0.2	04/24/2024	2079126	BTRINH	M1
Potassium, K	2.22	mg/L	1	0.06	0.2	04/24/2024	2079126	BTRINH	
Sodium, Na	48.9	mg/L	1	0.2	1	04/24/2024	2079126	BTRINH	M1

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Water Quality Laboratory

ELAP Cert #:
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MILLBRAE 1449

FOLDER ID: 2412741

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 04/17/2024
Sampling Team: Field

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	147	mg/L	1	1.19	6	04/17/2024	2078768 MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	93.9	mg/L	1		6	04/17/2024	2078769 MSWONG	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	255	mg/L	1	0.948	6	04/17/2024	2078760 MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.3	pH	1			04/17/2024	2078777 MSWONG	H1,H3
Temperature (°C)	18.9	°C	1			04/17/2024	2078777 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	412	mg/L	1	13.2	20	04/22/2024	2078887 DCARDONA	

Lab Sample#: 2412741-03A **Sample Source:** WSB_CAL-19-690 **External ID:**
Date Collected: 04/17/2024 09:57AM **Date Received:** 04/17/2024 01:40PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-19-690, ROW AT SERRAMONTE

Test/Analyte

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	771	µmhos/cm	1		1	04/18/2024	2078807 MSWONG	

Lab Sample#: 2412741-04 **Sample Source:** WSB_CAL_DUP **External ID:**
Date Collected: 04/17/2024 10:13AM **Date Received:** 04/17/2024 01:40PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-19-475, ROW AT SERRAMONTE

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	56.8	mg/L	5	0.5	2.5	04/17/2024	2078772 PWARNER	
Nitrate as N	2.23	mg/L	5	0.17	0.2	04/17/2024	2078772 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	41.2	mg/L	1	0.005	1	04/24/2024	2079126 BTRINH	M1
Magnesium, Mg	38.6	mg/L	1	0.021	0.2	04/24/2024	2079126 BTRINH	M1
Potassium, K	2.4	mg/L	1	0.06	0.2	04/24/2024	2079126 BTRINH	
Sodium, Na	52.8	mg/L	1	0.2	1	04/24/2024	2079126 BTRINH	M1

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	155	mg/L	1	1.19	6	04/17/2024	2078768 MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	105	mg/L	1		6	04/17/2024	2078769 MSWONG	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	255	mg/L	1	0.948	6	04/17/2024	2078760 MSWONG	

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MILLBRAE 1449

FOLDER ID: 2412741

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 04/17/2024
Sampling Team: Field

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.38	pH	1			04/17/2024	2078777 MSWONG	H1,H3
Temperature (°C)	19.1	°C	1			04/17/2024	2078777 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	429	mg/L	1	13.2	20	04/22/2024	2078887 DCARDONA	

Lab Sample#: 2412741-04A **Sample Source:** WSB_CAL_DUP **External ID:**

Date Collected: 04/17/2024 10:13AM **Date Received:** 04/17/2024 01:40PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-19-475, ROW AT SERRAMONTE

Test/Analyte

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	790	µmhos/cm	1		1	04/18/2024	2078807 MSWONG	

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MILLBRAE 1449

FOLDER ID: 2412741

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 04/17/2024
Sampling Team: Field

QC list for Run#: *2078760* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426178-01	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2426178-02	MRL_CK	Hardness, Total, as CaCO3		2.38	mg/L	79				
QC2426178-03	DUP of 2412741-01	Hardness, Total, as CaCO3	253	255	mg/L		0	0.948	6	Splt# 2412741-01 (253mg/L)
QC2426178-04	LCS	Hardness, Total, as CaCO3		39.2	mg/L	98			3	

QC list for Run#: *2078768* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426182-01	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2426182-02	MRL_CK	Alkalinity		3.1	mg/L	103				
QC2426182-03	SPK of 2413657-01	Alkalinity	32	73	mg/L	102			3	Splt# 2413657-01 (32mg/L)
QC2426182-04	SPKD of 2413657-01	Alkalinity	32	72.9	mg/L	102	0		3	Splt# 2413657-01 (32mg/L)
QC2426182-06	LCS	Alkalinity		41.4	mg/L	103			3	

QC list for Run#: *2078769* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426183-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2426183-02	MRL_CK	Chloride		3.7	mg/L	123				
QC2426183-03	SPK of 2413657-01	Chloride	6.1	46.4	mg/L	101			3	Splt# 2413657-01 (6.1mg/L)
QC2426183-04	SPKD of 2413657-01	Chloride	6.1	46	mg/L	99	0		3	Splt# 2413657-01 (6.1mg/L)
QC2426183-06	LCS	Chloride		40.5	mg/L	101			3	

QC list for Run#: *2078772* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426186-01	MRL_CK	Chloride		0.488	mg/L	97				
	MRL_CK	Sulfate		0.497	mg/L	99				
	MRL_CK	Nitrate as N		0.0381	mg/L	95				
QC2426186-02	CCV	Chloride		2.5	mg/L	100				
	CCV	Sulfate		2.41	mg/L	96				

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FOLDER ID: 2412741

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 04/17/2024
Sampling Team: Field

QC list for Run#: *2078772* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	CCV	Nitrate as N		0.195	mg/L	97				
QC2426186-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426186-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426186-05										
	LCS	Chloride		0.481	mg/L	96				
	LCS	Sulfate		1.43	mg/L	95				
	LCS	Nitrate as N		0.23	mg/L	92				
QC2426186-06										
	LCSD of QC2426186-05	Chloride	0.481	0.502	mg/L	100	4			Splt# QC2426186-05 (0.481mg/L)
	LCSD of QC2426186-05	Sulfate	1.43	1.49	mg/L	99	3			Splt# QC2426186-05 (1.43mg/L)
	LCSD of QC2426186-05	Nitrate as N	0.23	0.239	mg/L	95	3			Splt# QC2426186-05 (0.23mg/L)
QC2426186-07										
	CCV	Chloride		19.7	mg/L	98				
	CCV	Sulfate		21.4	mg/L	107				
	CCV	Nitrate as N		1.64	mg/L	103				
QC2426186-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426186-09										
	SPK of 2412741-02	Sulfate	22.8	24.9	mg/L	140				Splt# 2412741-02 (22.8mg/L) A1,E3,M1
	SPK of 2412741-02	Nitrate as N	3.09	3.42	mg/L	133				Splt# 2412741-02 (3.09mg/L) A1,E3,M1
QC2426186-10										
	SPKD of 2412741-02	Sulfate	22.8	23.4	mg/L	40	6			Splt# 2412741-02 (22.8mg/L) A1,E3,M1
	SPKD of 2412741-02	Nitrate as N	3.09	3.22	mg/L	51	6			Splt# 2412741-02 (3.09mg/L) A1,E3,M1

QC list for Run#: *2078775* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426188-02										
	ICV	Specific Conductance @25°C		147	µmhos/cm	100				
QC2426188-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2426188-04										
	MRL_CK	Specific Conductance @25°C		9.78	µmhos/cm	97				
QC2426188-05										

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FOLDER ID: 2412741

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 04/17/2024
Sampling Team: Field

QC list for Run#: *2078775* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	DUP of 2412741-02	Specific Conductance @25°C	828	823	µmhos/cm		0		1	Splt# 2412741-02 (828µmhos/cm)
QC2426188-06										
	CCV	Specific Conductance @25°C		101	µmhos/cm	101				

QC list for Run#: *2078777* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426190-04										
	ICV	pH		9	pH	99				
	ICV	Temperature (°C)		21.2	°C					
QC2426190-05										
	DUP of 2412741-02	pH	7.43	7.47	pH		0			Splt# 2412741-02 (7.43pH) H1,H3
	DUP of 2412741-02	Temperature (°C)	18.7	18.7	°C					Splt# 2412741-02 (18.7°C)
QC2426190-06										
	CCV	pH		9	pH	99				
	CCV	Temperature (°C)		21.2	°C					

QC list for Run#: *2078794* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426206-01										
	MRL_CK	Chloride		0.48	mg/L	96				
	MRL_CK	Sulfate		0.502	mg/L	100				
	MRL_CK	Nitrate as N		0.0381	mg/L	95				
QC2426206-02										
	CCV	Chloride		2.51	mg/L	100				
	CCV	Sulfate		2.46	mg/L	98				
	CCV	Nitrate as N		0.196	mg/L	98				
QC2426206-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426206-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426206-05										
	LCS	Chloride		0.456	mg/L	91				
	LCS	Sulfate		1.39	mg/L	92				
	LCS	Nitrate as N		0.228	mg/L	91				
QC2426206-06										
	LCSD of QC2426206-05	Chloride	0.456	0.489	mg/L	97	6			Splt# QC2426206-05 (0.456mg/L)
	LCSD of QC2426206-05	Sulfate	1.39	1.51	mg/L	100	8			Splt# QC2426206-05 (1.39mg/L)

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MILLBRAE 1449

FOLDER ID: 2412741

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 04/17/2024
Sampling Team: Field

QC list for Run#: *2078794* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	LCSD of QC2426206-05	Nitrate as N	0.228	0.243	mg/L	97	6			Splt# QC2426206-05 (0.228mg/L)
QC2426206-07										
	CCV	Chloride		19.2	mg/L	95				
	CCV	Sulfate		20.6	mg/L	103				
	CCV	Nitrate as N		1.59	mg/L	99				
QC2426206-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426206-09										
	SPK of 2412742-01	Sulfate	49.9	62.2	mg/L	81				Splt# 2412742-01 (49.9mg/L)
	SPK of 2412742-01	Nitrate as N	8.39	10.5	mg/L	86				Splt# 2412742-01 (8.39mg/L)
QC2426206-10										
	SPKD of 2412742-01	Sulfate	49.9	65.9	mg/L	107	5			Splt# 2412742-01 (49.9mg/L)
	SPKD of 2412742-01	Nitrate as N	8.39	11.1	mg/L	109	5			Splt# 2412742-01 (8.39mg/L)

QC list for Run#: *2078807* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426216-02										
	ICV	Specific Conductance @25°C		147	µmhos/cm	100				
QC2426216-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2426216-04										
	MRL_CK	Specific Conductance @25°C		9.71	µmhos/cm	97				
QC2426216-05										
	DUP of 2412894-05A	Specific Conductance @25°C	103	102	µmhos/cm		0		1	Splt# 2412894-05A (103µmhos/cm)
QC2426216-06										
	CCV	Specific Conductance @25°C		101	µmhos/cm	101				
QC2426216-07										
	CCV	Specific Conductance @25°C		1430	µmhos/cm	101				

QC list for Run#: *2078887* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426271-01										
	DUP of 2412741-01	Total Dissolved Solids	427	440	mg/L		3	13.2	20	Splt# 2412741-01 (427mg/L)
QC2426271-02										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2426271-03										
	LCS	Total Dissolved Solids		92	mg/L	96		13.2	20	

QC list for Run#: *2079126* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426423-01										

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Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2412741

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 04/17/2024
Sampling Team: Field

QC list for Run#: *2079126* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2426423-02										
	LCS	Calcium, Ca		1.98	mg/L	99		0.04	1	
	LCS	Magnesium, Mg		2.02	mg/L	101		0.007	0.2	
	LCS	Potassium, K		1.96	mg/L	98		0.04	0.2	
	LCS	Sodium, Na		2.13	mg/L	107		0.02	1	
QC2426423-03										
	DUP of 2412741-01	Calcium, Ca	41.4	41.7	mg/L		0	0.005	1	Splt# 2412741-01 (41.4mg/L)
	DUP of 2412741-01	Magnesium, Mg	38.8	39.1	mg/L		0	0.021	0.2	Splt# 2412741-01 (38.8mg/L)
	DUP of 2412741-01	Potassium, K	2.35	2.37	mg/L		0	0.06	0.2	Splt# 2412741-01 (2.35mg/L)
	DUP of 2412741-01	Sodium, Na	52.8	53.1	mg/L		0	0.2	1	Splt# 2412741-01 (52.8mg/L)
QC2426423-04										
	SPK of 2412741-01	Calcium, Ca	41.4	43	mg/L	79		0.04	1	Splt# 2412741-01 (41.4mg/L)
	SPK of 2412741-01	Magnesium, Mg	38.8	40.4	mg/L	77		0.007	0.2	Splt# 2412741-01 (38.8mg/L)
	SPK of 2412741-01	Potassium, K	2.35	4.39	mg/L	102		0.04	0.2	Splt# 2412741-01 (2.35mg/L)
	SPK of 2412741-01	Sodium, Na	52.8	54.2	mg/L	71		0.02	1	Splt# 2412741-01 (52.8mg/L)
QC2426423-05										
	SPKD of 2412741-01	Calcium, Ca	41.4	43.9	mg/L	127	2	0.04	1	Splt# 2412741-01 (41.4mg/L)
	SPKD of 2412741-01	Magnesium, Mg	38.8	41.3	mg/L	125	2	0.007	0.2	Splt# 2412741-01 (38.8mg/L)
	SPKD of 2412741-01	Potassium, K	2.35	4.42	mg/L	104	0	0.04	0.2	Splt# 2412741-01 (2.35mg/L)
	SPKD of 2412741-01	Sodium, Na	52.8	55.5	mg/L	136	2	0.02	1	Splt# 2412741-01 (52.8mg/L)
QC2426423-06										
	MRL_CK	Calcium, Ca		0.0254	mg/L	63		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0389	mg/L	77		0.021	0.021	
	MRL_CK	Potassium, K		0.15	mg/L	75		0.06	0.06	
	MRL_CK	Sodium, Na		0.292	mg/L	146		0.2	0.2	
QC2426444-01										
	ICV	Calcium, Ca		10.2	mg/L	103		0.05	1	
	ICV	Magnesium, Mg		9.95	mg/L	100		0.01	0.2	
	ICV	Potassium, K		99.9	mg/L	101		0.03	0.2	
	ICV	Sodium, Na		10.1	mg/L	101		0.002	1	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721

FOLDER ID: 2412742

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/18/2024
Sampling Team: Field

Lab Sample#: 2412742-01 **Sample Source:** WSB_CAL-22A-290 **External ID:**
Date Collected: 04/18/2024 10:43AM **Date Received:** 04/18/2024 11:24AM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-22A-290, ROW AT HICKEY BLVD

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	49.9	mg/L	10	1	5	04/18/2024	2078794 PWARNER	
Nitrate as N	8.39	mg/L	10	0.34	0.4	04/18/2024	2078794 PWARNER	
SEM_200.7_DW(EPA 200.7)								
Calcium, Ca	58.5	mg/L	1	0.005	1	04/24/2024	2079126 BTRINH	M1
Magnesium, Mg	45.4	mg/L	1	0.021	0.2	04/24/2024	2079126 BTRINH	M1
Potassium, K	2.48	mg/L	1	0.06	0.2	04/24/2024	2079126 BTRINH	
Sodium, Na	61.6	mg/L	1	0.2	1	04/24/2024	2079126 BTRINH	M1
MBP_ALK(SM 2320 B)								
Alkalinity	251	mg/L	1	1.19	6	04/18/2024	2078847 MSWONG	
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	93.3	mg/L	1		6	04/18/2024	2078848 MSWONG	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	931	µmhos/cm	1		1	04/18/2024	2078835 MSWONG	>MCL
MBP_HARDNESS_T(SM 2340 C)								
Hardness, Total, as CaCO3	326	mg/L	1	0.948	6	04/18/2024	2078829 MSWONG	
MBP_PH(SM 4500-H+ B)								
pH	7.26	pH	1			04/18/2024	2078836 MSWONG	H1,H3
Temperature (°C)	19.8	°C	1			04/18/2024	2078836 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	514	mg/L	1	13.2	20	04/22/2024	2078887 DCARDONA	>MCL

Lab Sample#: 2412742-02 **Sample Source:** WSB_CAL-22A-440 **External ID:**
Date Collected: 04/18/2024 10:03AM **Date Received:** 04/18/2024 11:24AM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-22A-440, ROW AT HICKEY BLVD

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	50.4	mg/L	10	1	5	04/18/2024	2078794 PWARNER	
Nitrate as N	6.44	mg/L	10	0.34	0.4	04/18/2024	2078794 PWARNER	
SEM_200.7_DW(EPA 200.7)								
Calcium, Ca	54.1	mg/L	1	0.005	1	04/24/2024	2079126 BTRINH	M1
Magnesium, Mg	43.3	mg/L	1	0.021	0.2	04/24/2024	2079126 BTRINH	M1
Potassium, K	2.42	mg/L	1	0.06	0.2	04/24/2024	2079126 BTRINH	

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Water Quality Laboratory

ELAP Cert #:
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FOLDER ID: 2412742

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/18/2024
Sampling Team: Field

Sodium, Na	59.7	mg/L	1	0.2	1	04/24/2024	2079126	BTRINH	M1

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	238	mg/L	1	1.19	6	04/18/2024	2078847	MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	93.6	mg/L	1		6	04/18/2024	2078848	MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	898	µmhos/cm	1		1	04/18/2024	2078835	MSWONG	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	308	mg/L	1	0.948	6	04/18/2024	2078829	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.3	pH	1			04/18/2024	2078836	MSWONG	H1,H3
Temperature (°C)	19.3	°C	1			04/18/2024	2078836	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	488	mg/L	1	13.2	20	04/22/2024	2078887	DCARDONA	

Lab Sample#: 2412742-03 **Sample Source:** WSB_CAL-22A-545 **External ID:**

Date Collected: 04/18/2024 09:52AM **Date Received:** 04/18/2024 11:24AM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-22A-545, ROW AT HICKEY BLVD

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	84.6	mg/L	10	1	5	04/18/2024	2078794	PWARNER	
Nitrate as N	4.93	mg/L	10	0.34	0.4	04/18/2024	2078794	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	69.9	mg/L	1	0.005	1	04/24/2024	2079126	BTRINH	M1
Magnesium, Mg	52.6	mg/L	1	0.021	0.2	04/24/2024	2079126	BTRINH	M1
Potassium, K	3.05	mg/L	1	0.06	0.2	04/24/2024	2079126	BTRINH	
Sodium, Na	86.8	mg/L	1	0.2	1	04/24/2024	2079126	BTRINH	M1

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	317	mg/L	1	1.19	6	04/18/2024	2078847	MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	96	mg/L	1		6	04/18/2024	2078848	MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1100	µmhos/cm	1		1	04/18/2024	2078835	MSWONG	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments

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Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721

FOLDER ID: 2412742

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/18/2024
Sampling Team: Field

Hardness, Total, as CaCO3	375	mg/L	1	0.948	6	04/18/2024	2078829	MSWONG

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	6.76	pH	1			04/18/2024	2078836	MSWONG	H1,H3
Temperature (°C)	19.1	°C	1			04/18/2024	2078836	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	627	mg/L	1	13.2	20	04/22/2024	2078887	DCARDONA	>MCL

Lab Sample#: 2412742-04 **Sample Source:** WSB_CAL_DUP **External ID:**
Date Collected: 04/18/2024 10:14AM **Date Received:** 04/18/2024 11:24AM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-22A-545, ROW AT HICKEY BLVD

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	67.4	mg/L	10	1	5	04/18/2024	2078794	PWARNER	
Nitrate as N	4.11	mg/L	10	0.34	0.4	04/18/2024	2078794	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	67.2	mg/L	1	0.005	1	04/24/2024	2079126	BTRINH	M1
Magnesium, Mg	50.7	mg/L	1	0.021	0.2	04/24/2024	2079126	BTRINH	M1
Potassium, K	2.93	mg/L	1	0.06	0.2	04/24/2024	2079126	BTRINH	
Sodium, Na	83.6	mg/L	1	0.2	1	04/24/2024	2079126	BTRINH	M1

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	317	mg/L	1	1.19	6	04/18/2024	2078847	MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	94.6	mg/L	1		6	04/18/2024	2078848	MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1100	µmhos/cm	1		1	04/18/2024	2078835	MSWONG	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	377	mg/L	1	0.948	6	04/18/2024	2078829	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	6.72	pH	1			04/18/2024	2078836	MSWONG	H1,H3
Temperature (°C)	19.5	°C	1			04/18/2024	2078836	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	640	mg/L	1	13.2	20	04/22/2024	2078887	DCARDONA	>MCL

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SEWPCP 1721

FOLDER ID: 2412742

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/18/2024
Sampling Team: Field

QC list for Run#: *2078794* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426206-01										
	MRL_CK	Chloride		0.48	mg/L	96				
	MRL_CK	Sulfate		0.502	mg/L	100				
	MRL_CK	Nitrate as N		0.0381	mg/L	95				
QC2426206-02										
	CCV	Chloride		2.51	mg/L	100				
	CCV	Sulfate		2.46	mg/L	98				
	CCV	Nitrate as N		0.196	mg/L	98				
QC2426206-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426206-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426206-05										
	LCS	Chloride		0.456	mg/L	91				
	LCS	Sulfate		1.39	mg/L	92				
	LCS	Nitrate as N		0.228	mg/L	91				
QC2426206-06										
	LCSD of QC2426206-05	Chloride	0.456	0.489	mg/L	97	6			Splt# QC2426206-05 (0.456mg/L)
	LCSD of QC2426206-05	Sulfate	1.39	1.51	mg/L	100	8			Splt# QC2426206-05 (1.39mg/L)
	LCSD of QC2426206-05	Nitrate as N	0.228	0.243	mg/L	97	6			Splt# QC2426206-05 (0.228mg/L)
QC2426206-07										
	CCV	Chloride		19.2	mg/L	95				
	CCV	Sulfate		20.6	mg/L	103				
	CCV	Nitrate as N		1.59	mg/L	99				
QC2426206-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426206-09										
	SPK of 2412742-01	Sulfate	49.9	62.2	mg/L	81				Splt# 2412742-01 (49.9mg/L)
	SPK of 2412742-01	Nitrate as N	8.39	10.5	mg/L	86				Splt# 2412742-01 (8.39mg/L)
QC2426206-10										
	SPKD of 2412742-01	Sulfate	49.9	65.9	mg/L	107	5			Splt# 2412742-01 (49.9mg/L)
	SPKD of 2412742-01	Nitrate as N	8.39	11.1	mg/L	109	5			Splt# 2412742-01 (8.39mg/L)

QC list for Run#: *2078829* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426230-01										

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SEWPCP 1721

FOLDER ID: 2412742

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/18/2024
Sampling Team: Field

QC list for Run#: *2078829* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2426230-02										
	MRL_CK	Hardness, Total, as CaCO3		2.33	mg/L	77				
QC2426230-03										
	DUP of 2412875-02	Hardness, Total, as CaCO3	29.5	29.5	mg/L		0	0.474	3	Splt# 2412875-02 (29.5mg/L)
QC2426230-04										
	LCS	Hardness, Total, as CaCO3		38.9	mg/L	97			3	

QC list for Run#: *2078835* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426233-02										
	ICV	Specific Conductance @25°C		146	µmhos/cm	99				
QC2426233-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2426233-04										
	MRL_CK	Specific Conductance @25°C		9.73	µmhos/cm	97				
QC2426233-05										
	DUP of 2413665-01	Specific Conductance @25°C	116	116	µmhos/cm		0		1	Splt# 2413665-01 (116µmhos/cm)
QC2426233-06										
	CCV	Specific Conductance @25°C		101	µmhos/cm	101				
QC2426233-07										
	CCV	Specific Conductance @25°C		1420	µmhos/cm	101				

QC list for Run#: *2078836* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426234-04										
	ICV	pH		9.01	pH	99				
	ICV	Temperature (°C)		20.7	°C					
QC2426234-05										
	DUP of 2413665-01	pH	9.07	9.07	pH		0			Splt# 2413665-01 (9.07pH) H1,H3
	DUP of 2413665-01	Temperature (°C)	17.1	17.2	°C					Splt# 2413665-01 (17.1°C)
QC2426234-06										
	CCV	pH		9.02	pH	99				
	CCV	Temperature (°C)		20.4	°C					
QC2426234-07										
	CCV	pH		9.01	pH	99				
	CCV	Temperature (°C)		20.6	°C					

QC list for Run#: *2078847* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426242-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2426242-02										

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Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721

FOLDER ID: 2412742

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/18/2024
Sampling Team: Field

QC list for Run#: *2078847* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	MRL_CK	Alkalinity		3.81	mg/L	127				
QC2426242-03										
	SPK of 2412875-01	Alkalinity	36.7	77.9	mg/L	103			3	Splt# 2412875-01 (36.7mg/L)
QC2426242-04										
	SPKD of 2412875-01	Alkalinity	36.7	77.6	mg/L	102	0		3	Splt# 2412875-01 (36.7mg/L)
QC2426242-05										
	DUP of 2412742-04	Alkalinity	317	320	mg/L		0	1.19	6	Splt# 2412742-04 (317mg/L)
QC2426242-06										
	LCS	Alkalinity		41.2	mg/L	103			3	

QC list for Run#: *2078848* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426243-01										
	BLK	Chloride		<3	mg/L			1.16	3	
QC2426243-02										
	MRL_CK	Chloride		2.9	mg/L	96				
QC2426243-03										
	SPK of 2412875-01	Chloride	7.86	47.3	mg/L	98			3	Splt# 2412875-01 (7.86mg/L)
QC2426243-04										
	SPKD of 2412875-01	Chloride	7.86	47.9	mg/L	100	1		3	Splt# 2412875-01 (7.86mg/L)
QC2426243-05										
	DUP of 2412742-04	Chloride	94.6	95.9	mg/L		1		6	Splt# 2412742-04 (94.6mg/L)
QC2426243-06										
	LCS	Chloride		40.5	mg/L	101			3	

QC list for Run#: *2078887* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426271-01										
	DUP of 2412741-01	Total Dissolved Solids	427	440	mg/L		3	13.2	20	Splt# 2412741-01 (427mg/L)
QC2426271-02										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2426271-03										
	LCS	Total Dissolved Solids		92	mg/L	96		13.2	20	

QC list for Run#: *2079126* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426423-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2426423-02										
	LCS	Calcium, Ca		1.98	mg/L	99		0.04	1	
	LCS	Magnesium, Mg		2.02	mg/L	101		0.007	0.2	

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Water Quality Laboratory

ELAP Cert #:
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FOLDER ID: 2412742

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/18/2024
Sampling Team: Field

QC list for Run#: *2079126* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	LCS	Potassium, K		1.96	mg/L	98		0.04	0.2	
	LCS	Sodium, Na		2.13	mg/L	107		0.02	1	
QC2426423-03										
	DUP of 2412741-01	Calcium, Ca	41.4	41.7	mg/L		0	0.005	1	Splt# 2412741-01 (41.4mg/L)
	DUP of 2412741-01	Magnesium, Mg	38.8	39.1	mg/L		0	0.021	0.2	Splt# 2412741-01 (38.8mg/L)
	DUP of 2412741-01	Potassium, K	2.35	2.37	mg/L		0	0.06	0.2	Splt# 2412741-01 (2.35mg/L)
	DUP of 2412741-01	Sodium, Na	52.8	53.1	mg/L		0	0.2	1	Splt# 2412741-01 (52.8mg/L)
QC2426423-04										
	SPK of 2412741-01	Calcium, Ca	41.4	43	mg/L	79		0.04	1	Splt# 2412741-01 (41.4mg/L)
	SPK of 2412741-01	Magnesium, Mg	38.8	40.4	mg/L	77		0.007	0.2	Splt# 2412741-01 (38.8mg/L)
	SPK of 2412741-01	Potassium, K	2.35	4.39	mg/L	102		0.04	0.2	Splt# 2412741-01 (2.35mg/L)
	SPK of 2412741-01	Sodium, Na	52.8	54.2	mg/L	71		0.02	1	Splt# 2412741-01 (52.8mg/L)
QC2426423-05										
	SPKD of 2412741-01	Calcium, Ca	41.4	43.9	mg/L	127	2	0.04	1	Splt# 2412741-01 (41.4mg/L)
	SPKD of 2412741-01	Magnesium, Mg	38.8	41.3	mg/L	125	2	0.007	0.2	Splt# 2412741-01 (38.8mg/L)
	SPKD of 2412741-01	Potassium, K	2.35	4.42	mg/L	104	0	0.04	0.2	Splt# 2412741-01 (2.35mg/L)
	SPKD of 2412741-01	Sodium, Na	52.8	55.5	mg/L	136	2	0.02	1	Splt# 2412741-01 (52.8mg/L)
QC2426423-06										
	MRL_CK	Calcium, Ca		0.0254	mg/L	63		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0389	mg/L	77		0.021	0.021	
	MRL_CK	Potassium, K		0.15	mg/L	75		0.06	0.06	
	MRL_CK	Sodium, Na		0.292	mg/L	146		0.2	0.2	
QC2426444-01										
	ICV	Calcium, Ca		10.2	mg/L	103		0.05	1	
	ICV	Magnesium, Mg		9.95	mg/L	100		0.01	0.2	
	ICV	Potassium, K		99.9	mg/L	101		0.03	0.2	
	ICV	Sodium, Na		10.1	mg/L	101		0.002	1	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2413375

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_San Bruno
Scheduled Sample Date: 05/08/2024
Sampling Team: Field

Lab Sample#: 2413375-01 **Sample Source:** WSB_SB05_SB16 **External ID:**
Date Collected: 05/08/2024 07:30AM **Date Received:** 05/08/2024 08:58AM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	92.9	mg/L	10	1	5	05/08/2024	2079877 PWARNER	
SEM_200.7_DW(EPA 200.7)								
Calcium, Ca	63.6	mg/L	1	0.005	1	05/20/2024	2080490 BTRINH	
Magnesium, Mg	42.9	mg/L	1	0.021	0.2	05/20/2024	2080490 BTRINH	
Potassium, K	3.11	mg/L	1	0.06	0.2	05/20/2024	2080490 BTRINH	
Sodium, Na	59.2	mg/L	1	0.2	1	05/20/2024	2080490 BTRINH	
MBP_ALK(SM 2320 B)								
Alkalinity	198	mg/L	1	1.19	6	05/08/2024	2079894 ALEE	
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	117	mg/L	1		6	05/08/2024	2079895 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	913	µmhos/cm	1		1	05/08/2024	2079879 MSWONG	>MCL
MBP_PH(SM 4500-H+ B)								
pH	7.31	pH	1			05/08/2024	2079881 MSWONG	H1,H3
Temperature (°C)	20.2	°C	1			05/08/2024	2079881 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	510	mg/L	1	13.2	20	05/13/2024	2080009 ABALALIO	>MCL

Lab Sample#: 2413375-01A **Sample Source:** WSB_SB05_SB16 **External ID:**
Date Collected: 05/08/2024 07:30AM **Date Received:** 05/08/2024 08:58AM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Nitrate as N	0.0826	mg/L	1	0.034	0.04	05/08/2024	2079877 PWARNER	

Lab Sample#: 2413375-01B **Sample Source:** WSB_SB05_SB16 **External ID:**
Date Collected: 05/08/2024 07:30AM **Date Received:** 05/08/2024 08:58AM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_HARDNESS_T(SM 2340 C)								
Hardness, Total, as CaCO3	322	mg/L	1	0.948	6	05/10/2024	2080021 ALEE	

Lab Sample#: 2413375-02 **Sample Source:** WSB_SB06_SB17 **External ID:**
Date Collected: 05/08/2024 08:15AM **Date Received:** 05/08/2024 08:58AM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte

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Water Quality Laboratory

FOLDER ID: 2413375

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_San Bruno
Scheduled Sample Date: 05/08/2024
Sampling Team: Field

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	23.3	mg/L	5	0.5	2.5	05/08/2024	2079877	PWARNER	
Nitrate as N	1.6	mg/L	5	0.17	0.2	05/08/2024	2079877	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	31.6	mg/L	1	0.005	1	05/20/2024	2080490	BTRINH	
Magnesium, Mg	19.1	mg/L	1	0.021	0.2	05/20/2024	2080490	BTRINH	
Potassium, K	3.36	mg/L	1	0.06	0.2	05/20/2024	2080490	BTRINH	
Sodium, Na	44.5	mg/L	1	0.2	1	05/20/2024	2080490	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	152	mg/L	1	0.593	3	05/08/2024	2079894	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	53.7	mg/L	1		3	05/08/2024	2079895	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	527	µmhos/cm	1		1	05/08/2024	2079879	MSWONG	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	156	mg/L	1	0.474	3	05/08/2024	2079897	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.53	pH	1			05/08/2024	2079881	MSWONG	H1,H3
Temperature (°C)	20.4	°C	1			05/08/2024	2079881	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	290	mg/L	1	13.2	20	05/13/2024	2080009	ABALALIO	

Lab Sample#: 2413375-03 **Sample Source:** WSB_SB07_SB18 **External ID:**

Date Collected: 05/08/2024 07:55AM **Date Received:** 05/08/2024 08:58AM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	29.6	mg/L	5	0.5	2.5	05/08/2024	2079877	PWARNER	
Nitrate as N	1.67	mg/L	5	0.17	0.2	05/08/2024	2079877	PWARNER	M,M1

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	30.8	mg/L	1	0.005	1	05/20/2024	2080490	BTRINH	
Magnesium, Mg	22.1	mg/L	1	0.021	0.2	05/20/2024	2080490	BTRINH	
Potassium, K	2.97	mg/L	1	0.06	0.2	05/20/2024	2080490	BTRINH	
Sodium, Na	43	mg/L	1	0.2	1	05/20/2024	2080490	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	139	mg/L	1	0.593	3	05/08/2024	2079894	ALEE	

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Water Quality Laboratory

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FOLDER ID: 2413375

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_San Bruno

Scheduled Sample Date: 05/08/2024
Sampling Team: Field

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	65.2	mg/L	1		3	05/08/2024	2079895 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	549	µmhos/cm	1		1	05/08/2024	2079879 MSWONG	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	165	mg/L	1	0.474	3	05/08/2024	2079897 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.33	pH	1			05/08/2024	2079881 MSWONG	H1,H3
Temperature (°C)	20.5	°C	1			05/08/2024	2079881 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	296	mg/L	1	13.2	20	05/13/2024	2080009 ABALALIO	

Lab Sample#: 2413375-05 **Sample Source:** WSB_SB_DUP **External ID:**

Date Collected: 05/08/2024 08:25AM **Date Received:** 05/08/2024 08:58AM **Sample Matrix:** Aqueous **Location Desc:** Well #17

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	23.5	mg/L	5	0.5	2.5	05/08/2024	2079877 PWARNER	
Nitrate as N	1.64	mg/L	5	0.17	0.2	05/08/2024	2079877 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	32.3	mg/L	1	0.005	1	05/20/2024	2080490 BTRINH	
Magnesium, Mg	19.8	mg/L	1	0.021	0.2	05/20/2024	2080490 BTRINH	
Potassium, K	3.34	mg/L	1	0.06	0.2	05/20/2024	2080490 BTRINH	
Sodium, Na	44.1	mg/L	1	0.2	1	05/20/2024	2080490 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	153	mg/L	1	0.593	3	05/08/2024	2079894 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	53.8	mg/L	1		3	05/08/2024	2079895 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	528	µmhos/cm	1		1	05/08/2024	2079879 MSWONG	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	157	mg/L	1	0.474	3	05/08/2024	2079897 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.51	pH	1			05/08/2024	2079881 MSWONG	H1,H3

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FOLDER ID: 2413375

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Project: WESTSIDE_BASIN
Routine: WSB_San Bruno

Scheduled Sample Date: 05/08/2024
Sampling Team: Field

Temperature (°C)	**20.4**	**°C**	1		05/08/2024	2079881	MSWONG

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	**281**	**mg/L**	1	13.2	20	05/13/2024	2080009	ABALALIO	

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FOLDER ID: 2413375

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_San Bruno
Scheduled Sample Date: 05/08/2024
Sampling Team: Field

QC list for Run#: *2079877* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426993-01										
	MRL_CK	Chloride		0.494	mg/L	98				
	MRL_CK	Sulfate		0.497	mg/L	99				
	MRL_CK	Nitrate as N		0.0401	mg/L	101				
QC2426993-02										
	CCV	Chloride		2.47	mg/L	98				
	CCV	Sulfate		2.49	mg/L	99				
	CCV	Nitrate as N		0.198	mg/L	99				
QC2426993-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426993-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426993-05										
	LCS	Chloride		0.562	mg/L	112				
	LCS	Sulfate		1.59	mg/L	106				
	LCS	Nitrate as N		0.257	mg/L	103				
QC2426993-06										
	LCSD of QC2426993-05	Chloride	0.562	0.496	mg/L	99	12			Splt# QC2426993-05 (0.562mg/L)
	LCSD of QC2426993-05	Sulfate	1.59	1.55	mg/L	104	2			Splt# QC2426993-05 (1.59mg/L)
	LCSD of QC2426993-05	Nitrate as N	0.257	0.244	mg/L	97	5			Splt# QC2426993-05 (0.257mg/L)
QC2426993-07										
	CCV	Chloride		19	mg/L	95				
	CCV	Sulfate		19.1	mg/L	95				
	CCV	Nitrate as N		1.52	mg/L	95				
QC2426993-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426993-09										
	SPK of 2413375-03	Sulfate	29.6	38.3	mg/L	116				Splt# 2413375-03 (29.6mg/L)
	SPK of 2413375-03	Nitrate as N	1.67	3.39	mg/L	137				Splt# 2413375-03 (1.67mg/L) M,M1
QC2426993-10										
	SPKD of 2413375-03	Sulfate	29.6	37.8	mg/L	109	1			Splt# 2413375-03 (29.6mg/L)
	SPKD of 2413375-03	Nitrate as N	1.67	3.49	mg/L	145	2			Splt# 2413375-03 (1.67mg/L) M,M1

QC list for Run#: *2079879* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2413375

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_San Bruno
Scheduled Sample Date: 05/08/2024
Sampling Team: Field

QC list for Run#: *2079879* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426986-01										
	CAL	Specific Conductance @25°C		1420	µmhos/cm	101				
QC2426986-02										
	ICV	Specific Conductance @25°C		148	µmhos/cm	100				
QC2426986-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2426986-04										
	MRL_CK	Specific Conductance @25°C		9.91	µmhos/cm	99				
QC2426986-05										
	DUP of 2413505-06	Specific Conductance @25°C	91.5	92	µmhos/cm		0		1	Splt# 2413505-06 (91.5µmhos/cm)
QC2426986-06										
	CCV	Specific Conductance @25°C		101	µmhos/cm	101				
QC2426986-07										
	CCV	Specific Conductance @25°C		1430	µmhos/cm	101				

QC list for Run#: *2079881* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426985-04										
	ICV	pH		9.01	pH	99				
	ICV	Temperature (°C)		20.4	°C					
QC2426985-05										
	DUP of 2413505-06	pH	9.25	9.25	pH		0			Splt# 2413505-06 (9.25pH) H1,H3
	DUP of 2413505-06	Temperature (°C)	17.7	17.8	°C					Splt# 2413505-06 (17.7°C)
QC2426985-06										
	CCV	pH		9.03	pH	99				
	CCV	Temperature (°C)		20.3	°C					
QC2426985-07										
	CCV	pH		9.02	pH	99				
	CCV	Temperature (°C)		20.5	°C					

QC list for Run#: *2079894* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426997-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2426997-02										
	MRL_CK	Alkalinity		2.97	mg/L	99				
QC2426997-03										
	SPK of 2413375-01	Alkalinity	198	277	mg/L	99			6	Splt# 2413375-01 (198mg/L)
QC2426997-04										
	SPKD of 2413375-01	Alkalinity	198	279	mg/L	101	0		6	Splt# 2413375-01 (198mg/L)
QC2426997-06										
	LCS	Alkalinity		42.4	mg/L	106			3	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

SEWPCP 1721

Water Quality Laboratory

MILLBRAE 1449

FOLDER ID: 2413375

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_San Bruno

Scheduled Sample Date: 05/08/2024
Sampling Team: Field

QC list for Run#: *2079895* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426996-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2426996-02	MRL_CK	Chloride		2.94	mg/L	98				
QC2426996-03	SPK of 2413375-01	Chloride	117	196	mg/L	98			6	Splt# 2413375-01 (117mg/L)
QC2426996-04	SPKD of 2413375-01	Chloride	117	196	mg/L	99	0		6	Splt# 2413375-01 (117mg/L)
QC2426996-06	LCS	Chloride		39.4	mg/L	98			3	

QC list for Run#: *2079897* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426995-01	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2426995-02	MRL_CK	Hardness, Total, as CaCO3		2.46	mg/L	82				
QC2426995-03	DUP of 2413375-05	Hardness, Total, as CaCO3	157	156	mg/L		0	0.474	3	Splt# 2413375-05 (157mg/L)
QC2426995-04	LCS	Hardness, Total, as CaCO3		40	mg/L	99			3	

QC list for Run#: *2080009* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427076-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2427076-02	DUP of 2413375-01	Total Dissolved Solids	510	501	mg/L		1	13.2	20	Splt# 2413375-01 (510mg/L)
QC2427076-03	DUP of 2413594-01	Total Dissolved Solids	602	595	mg/L		1	13.2	20	Splt# 2413594-01 (602mg/L)
QC2427076-04	LCS	Total Dissolved Solids		89	mg/L	93		13.2	20	

QC list for Run#: *2080021* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427085-01	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2427085-02	MRL_CK	Hardness, Total, as CaCO3		2.48	mg/L	82				
QC2427085-03	DUP of 2413755-06	Hardness, Total, as CaCO3	8.87	8.85	mg/L		0	0.474	3	Splt# 2413755-06 (8.87mg/L)
QC2427085-04	LCS	Hardness, Total, as CaCO3		39.8	mg/L	99			3	

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Water Quality Laboratory

ELAP Cert #:
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MILLBRAE 1449

FOLDER ID: 2413375

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_San Bruno
Scheduled Sample Date: 05/08/2024
Sampling Team: Field

QC list for Run#: *2080490* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427343-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2427343-02										
	LCS	Calcium, Ca		2.01	mg/L	100		0.04	1	
	LCS	Magnesium, Mg		2.06	mg/L	103		0.007	0.2	
	LCS	Potassium, K		1.97	mg/L	98		0.04	0.2	
	LCS	Sodium, Na		2.08	mg/L	104		0.02	1	
QC2427343-03										
	DUP of 2413978-01	Calcium, Ca	54.3	53.5	mg/L		1	0.005	1	Splt# 2413978-01 (54.3mg/L)
	DUP of 2413978-01	Magnesium, Mg	64.7	63.8	mg/L		1	0.021	0.2	Splt# 2413978-01 (64.7mg/L)
	DUP of 2413978-01	Potassium, K	2.4	2.36	mg/L		1	0.06	0.2	Splt# 2413978-01 (2.4mg/L)
	DUP of 2413978-01	Sodium, Na	72	71.1	mg/L		1	0.2	1	Splt# 2413978-01 (72mg/L)
QC2427343-04										
	SPK of 2413978-01	Calcium, Ca	54.3	55.5	mg/L	60		0.04	1	Splt# 2413978-01 (54.3mg/L)
	SPK of 2413978-01	Magnesium, Mg	64.7	65.9	mg/L	59		0.007	0.2	Splt# 2413978-01 (64.7mg/L)
	SPK of 2413978-01	Potassium, K	2.4	4.4	mg/L	100		0.04	0.2	Splt# 2413978-01 (2.4mg/L)
	SPK of 2413978-01	Sodium, Na	72	73.1	mg/L	54		0.02	1	Splt# 2413978-01 (72mg/L)
QC2427343-05										
	SPKD of 2413978-01	Calcium, Ca	54.3	56.2	mg/L	96	1	0.04	1	Splt# 2413978-01 (54.3mg/L)
	SPKD of 2413978-01	Magnesium, Mg	64.7	66.7	mg/L	98	1	0.007	0.2	Splt# 2413978-01 (64.7mg/L)
	SPKD of 2413978-01	Potassium, K	2.4	4.49	mg/L	104	2	0.04	0.2	Splt# 2413978-01 (2.4mg/L)
	SPKD of 2413978-01	Sodium, Na	72	73.9	mg/L	94	1	0.02	1	Splt# 2413978-01 (72mg/L)
QC2427343-06										
	MRL_CK	Calcium, Ca		0.0265	mg/L	66		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0452	mg/L	90		0.021	0.021	
	MRL_CK	Potassium, K		0.13	mg/L	65		0.06	0.06	
	MRL_CK	Sodium, Na		0.241	mg/L	120		0.2	0.2	
QC2427421-01										
	ICV	Calcium, Ca		10.2	mg/L	103		0.05	1	
	ICV	Magnesium, Mg		10	mg/L	101		0.01	0.2	
	ICV	Potassium, K		99.8	mg/L	101		0.03	0.2	
	ICV	Sodium, Na		10	mg/L	100		0.002	1	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2413593

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/29/2024
Sampling Team: Field

Lab Sample#: 2413593-01 **Sample Source:** WSB_SF71_PP195 **External ID:**
Date Collected: 04/29/2024 11:09AM **Date Received:** 04/29/2024 01:17PM **Sample Matrix:** Aqueous **Location Desc:** WSB_SF71, PARK PLAZA MW195

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
SEM_200.7_DW(EPA 200.7)									
Calcium, Ca	103	mg/L	1	0.005	1	05/08/2024	2079871	BTRINH	
Magnesium, Mg	83.5	mg/L	1	0.021	0.2	05/08/2024	2079871	BTRINH	
Potassium, K	3.89	mg/L	1	0.06	0.2	05/08/2024	2079871	BTRINH	
Sodium, Na	78.4	mg/L	1	0.2	1	05/08/2024	2079871	BTRINH	
MBP_ALK(SM 2320 B)									
Alkalinity	425	mg/L	1	2.96	15	04/29/2024	2079349	ALEE	
MBP_CHLORIDE(SM 4500-CL- D)									
Chloride	123	mg/L	1		15	04/29/2024	2079351	ALEE	
MBP_COND(SM 2510 B)									
Specific Conductance @25°C	1440	µmhos/cm	1		1	04/29/2024	2079357	MSWONG	>MCL
MBP_HARDNESS_T(SM 2340 C)									
Hardness, Total, as CaCO3	597	mg/L	1	2.37	15	04/29/2024	2079352	ALEE	
MBP_PH(SM 4500-H+ B)									
pH	7.07	pH	1			04/29/2024	2079358	MSWONG	H1,H3
Temperature (°C)	17.2	°C	1			04/29/2024	2079358	MSWONG	
MBP_TDS(SM 2540 C)									
Total Dissolved Solids	824	mg/L	1	13.2	20	05/06/2024	2079621	ALEE	>MCL

Lab Sample#: 2413593-01A **Sample Source:** WSB_SF71_PP195 **External ID:**
Date Collected: 04/29/2024 11:09AM **Date Received:** 04/29/2024 01:17PM **Sample Matrix:** Aqueous **Location Desc:** WSB_SF71, PARK PLAZA MW195

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))									
Sulfate	147	mg/L	10	1	5	05/01/2024	2079449	PWARNER	
Nitrate as N	8.91	mg/L	10	0.34	0.4	05/01/2024	2079449	PWARNER	

Lab Sample#: 2413593-02 **Sample Source:** WSB_SF50_PP460 **External ID:**
Date Collected: 04/29/2024 10:17AM **Date Received:** 04/29/2024 01:17PM **Sample Matrix:** Aqueous **Location Desc:** SF#50 - PARK PLAZA MW460

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
SEM_200.7_DW(EPA 200.7)									
Calcium, Ca	43.7	mg/L	1	0.005	1	05/08/2024	2079871	BTRINH	
Magnesium, Mg	45.9	mg/L	1	0.021	0.2	05/08/2024	2079871	BTRINH	
Potassium, K	1.89	mg/L	1	0.06	0.2	05/08/2024	2079871	BTRINH	
Sodium, Na	49.8	mg/L	1	0.2	1	05/08/2024	2079871	BTRINH	

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SEWPCP 1721

FOLDER ID: 2413593

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/29/2024
Sampling Team: Field

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	249	mg/L	1	1.19	6	04/29/2024	2079349 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	64.3	mg/L	1		6	04/29/2024	2079351 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	791	µmhos/cm	1		1	04/29/2024	2079357 MSWONG	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	300	mg/L	1	0.948	6	04/29/2024	2079352 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.35	pH	1			04/29/2024	2079358 MSWONG	H1,H3
Temperature (°C)	15.5	°C	1			04/29/2024	2079358 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	439	mg/L	1	13.2	20	05/06/2024	2079621 ALEE	

Lab Sample#: 2413593-02A **Sample Source:** WSB_SF50_PP460 **External ID:**
Date Collected: 04/29/2024 10:17AM **Date Received:** 04/29/2024 01:17PM **Sample Matrix:** Aqueous **Location Desc:** SF#50 - PARK PLAZA MW460

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	49.8	mg/L	10	1	5	05/01/2024	2079449 PWARNER	
Nitrate as N	6.11	mg/L	10	0.34	0.4	05/01/2024	2079449 PWARNER	>MCL

Lab Sample#: 2413593-03 **Sample Source:** WSB_SF51_PP620 **External ID:**
Date Collected: 04/29/2024 10:21AM **Date Received:** 04/29/2024 01:17PM **Sample Matrix:** Aqueous **Location Desc:** SF#51 - PARK PLAZA MW620

Test/Analyte

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	38.7	mg/L	1	0.005	1	05/08/2024	2079871 BTRINH	
Magnesium, Mg	34.1	mg/L	1	0.021	0.2	05/08/2024	2079871 BTRINH	
Potassium, K	2.25	mg/L	1	0.06	0.2	05/08/2024	2079871 BTRINH	
Sodium, Na	49.3	mg/L	1	0.2	1	05/08/2024	2079871 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	180	mg/L	1	1.19	6	04/29/2024	2079349 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	77	mg/L	1		6	04/29/2024	2079351 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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Water Quality Laboratory

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FOLDER ID: 2413593

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/29/2024
Sampling Team: Field

Specific Conductance @25°C	692	µmhos/cm	1		1	04/29/2024	2079357	MSWONG

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	237	mg/L	1	0.948	6	04/29/2024	2079352 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.81	pH	1			04/29/2024	2079358 MSWONG	H1,H3
Temperature (°C)	16.4	°C	1			04/29/2024	2079358 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	387	mg/L	1	13.2	20	05/06/2024	2079621 ALEE	

Lab Sample#: 2413593-03B **Sample Source:** WSB_SF51_PP620 **External ID:**
Date Collected: 04/29/2024 10:21AM **Date Received:** 04/29/2024 01:17PM **Sample Matrix:** Aqueous **Location Desc:** SF#51 - PARK PLAZA MW620

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	58.2	mg/L	5	0.5	2.5	05/01/2024	2079449 PWARNER	

Lab Sample#: 2413593-03C **Sample Source:** WSB_SF51_PP620 **External ID:**
Date Collected: 04/29/2024 10:21AM **Date Received:** 04/29/2024 01:17PM **Sample Matrix:** Aqueous **Location Desc:** SF#51 - PARK PLAZA MW620

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	<0.04	mg/L	1	0.034	0.04	05/01/2024	2079449 PWARNER	

Lab Sample#: 2413593-04 **Sample Source:** WSB_SF_DUP **External ID:**
Date Collected: 04/29/2024 10:34AM **Date Received:** 04/29/2024 01:17PM **Sample Matrix:** Aqueous **Location Desc:** SF#50 - PARK PLAZA MW460

Test/Analyte

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	44.1	mg/L	1	0.005	1	05/08/2024	2079871 BTRINH	
Magnesium, Mg	46.2	mg/L	1	0.021	0.2	05/08/2024	2079871 BTRINH	
Potassium, K	1.85	mg/L	1	0.06	0.2	05/08/2024	2079871 BTRINH	
Sodium, Na	50.2	mg/L	1	0.2	1	05/08/2024	2079871 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	247	mg/L	1	1.19	6	04/29/2024	2079349 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	63.7	mg/L	1		6	04/29/2024	2079351 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	788	µmhos/cm	1		1	04/29/2024	2079357 MSWONG	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

MILLBRAE 1449

Water Quality Laboratory

SEWPCP 1721

FOLDER ID: 2413593

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/29/2024
Sampling Team: Field

Hardness, Total, as CaCO3	294	mg/L	1	0.948	6	04/29/2024	2079352	ALEE

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.33	pH	1			04/29/2024	2079358	MSWONG	H1,H3
Temperature (°C)	16.4	°C	1			04/29/2024	2079358	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	428	mg/L	1	13.2	20	05/06/2024	2079621	ALEE	

Lab Sample#: 2413593-04A **Sample Source:** WSB_SF_DUP **External ID:**

Date Collected: 04/29/2024 10:34AM **Date Received:** 04/29/2024 01:17PM **Sample Matrix:** Aqueous **Location Desc:** SF#50 - PARK PLAZA MW460

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	49.6	mg/L	10	1	5	05/01/2024	2079449	PWARNER	
Nitrate as N	6.15	mg/L	10	0.34	0.4	05/01/2024	2079449	PWARNER	

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FOLDER ID: 2413593

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Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/29/2024
Sampling Team: Field

QC list for Run#: *2079349* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426604-01	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2426604-02	MRL_CK	Alkalinity		2.88	mg/L	96				
QC2426604-03	SPK of 2413593-01	Alkalinity	425	626	mg/L	101			15	Splt# 2413593-01 (425mg/L)
QC2426604-04	SPKD of 2413593-01	Alkalinity	425	623	mg/L	99	0		15	Splt# 2413593-01 (425mg/L)
QC2426604-06	LCS	Alkalinity		41.6	mg/L	104			3	

QC list for Run#: *2079351* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426606-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2426606-02	MRL_CK	Chloride		3.1	mg/L	103				
QC2426606-03	SPK of 2413593-01	Chloride	123	323	mg/L	100			15	Splt# 2413593-01 (123mg/L)
QC2426606-04	SPKD of 2413593-01	Chloride	123	323	mg/L	99	0		15	Splt# 2413593-01 (123mg/L)
QC2426606-06	LCS	Chloride		41.1	mg/L	103			3	

QC list for Run#: *2079352* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426607-01	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2426607-02	MRL_CK	Hardness, Total, as CaCO3		2.5	mg/L	83				
QC2426607-03	DUP of 2413593-01	Hardness, Total, as CaCO3	597	596	mg/L		0	2.37	15	Splt# 2413593-01 (597mg/L)
QC2426607-04	LCS	Hardness, Total, as CaCO3		39.3	mg/L	98			3	

QC list for Run#: *2079357* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426611-01	CAL	Specific Conductance @25°C		1430	µmhos/cm	101				
QC2426611-02	ICV	Specific Conductance @25°C		149	µmhos/cm	101				
QC2426611-03	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2426611-04	MRL_CK	Specific Conductance @25°C		9.81	µmhos/cm	98				

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FOLDER ID: 2413593

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/29/2024
Sampling Team: Field

QC list for Run#: *2079357* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426611-05										
	DUP of 2413198-06	Specific Conductance @25°C	86.4	86.8	µmhos/cm		0		1	Splt# 2413198-06 (86.4µmhos/cm)
QC2426611-06										
	CCV	Specific Conductance @25°C		101	µmhos/cm	101				
QC2426611-07										
	CCV	Specific Conductance @25°C		1440	µmhos/cm	102				

QC list for Run#: *2079358* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426612-01										
	CAL	pH		7.15	pH	102				
	CAL	Temperature (°C)		19.7	°C					
QC2426612-02										
	CAL	pH		4.03	pH	101				
	CAL	Temperature (°C)		19.9	°C					
QC2426612-03										
	CAL	pH		10.1	pH	101				
	CAL	Temperature (°C)		19.9	°C					
QC2426612-04										
	ICV	pH		9	pH	99				
	ICV	Temperature (°C)		19.9	°C					
QC2426612-05										
	DUP of 2413198-06	pH	9.31	9.32	pH		0			Splt# 2413198-06 (9.31pH) H1,H3
	DUP of 2413198-06	Temperature (°C)	16.5	16.6	°C					Splt# 2413198-06 (16.5°C)
QC2426612-06										
	CCV	pH		9.02	pH	99				
	CCV	Temperature (°C)		19.8	°C					
QC2426612-07										
	CCV	pH		9.02	pH	99				
	CCV	Temperature (°C)		19.8	°C					

QC list for Run#: *2079368* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426619-01										
	MRL_CK	Chloride		0.513	mg/L	103				
	MRL_CK	Sulfate		0.564	mg/L	113				
	MRL_CK	Nitrate as N		0.0355	mg/L	89				
QC2426619-02										
	CCV	Chloride		2.54	mg/L	102				
	CCV	Sulfate		2.52	mg/L	101				
	CCV	Nitrate as N		0.196	mg/L	98				
QC2426619-03										

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FOLDER ID: 2413593

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/29/2024
Sampling Team: Field

QC list for Run#: *2079368* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426619-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426619-05										
	LCS	Chloride		0.465	mg/L	93				
	LCS	Sulfate		1.56	mg/L	104				
	LCS	Nitrate as N		0.241	mg/L	96				
QC2426619-06										
	LCSD of QC2426619-05	Chloride	0.465	0.445	mg/L	88	4			Splt# QC2426619-05 (0.465mg/L)
	LCSD of QC2426619-05	Sulfate	1.56	1.46	mg/L	97	6			Splt# QC2426619-05 (1.56mg/L)
	LCSD of QC2426619-05	Nitrate as N	0.241	0.227	mg/L	90	5			Splt# QC2426619-05 (0.241mg/L)
QC2426619-07										
	CCV	Chloride		20.7	mg/L	104				
	CCV	Sulfate		23.1	mg/L	116				
	CCV	Nitrate as N		1.76	mg/L	111				
QC2426619-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426619-09										
	SPK of 2413593-01	Sulfate	156	177	mg/L	136				Splt# 2413593-01 (156mg/L)
	SPK of 2413593-01	Nitrate as N	9.03	11.9	mg/L	116				Splt# 2413593-01 (9.03mg/L)
QC2426619-10										
	SPKD of 2413593-01	Sulfate	156	166	mg/L	67	6			Splt# 2413593-01 (156mg/L)
	SPKD of 2413593-01	Nitrate as N	9.03	11.2	mg/L	85	6			Splt# 2413593-01 (9.03mg/L)

QC list for Run#: *2079449* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426672-01										
	MRL_CK	Chloride		0.5	mg/L	100				
	MRL_CK	Sulfate		0.498	mg/L	99				
	MRL_CK	Nitrate as N		0.0398	mg/L	100				
QC2426672-02										
	CCV	Chloride		2.48	mg/L	99				
	CCV	Sulfate		2.5	mg/L	100				
	CCV	Nitrate as N		0.198	mg/L	99				
QC2426672-03										
	BLK	Chloride		<1	mg/L			0.2	1	

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FOLDER ID: 2413593

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/29/2024
Sampling Team: Field

QC list for Run#: *2079449* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426672-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426672-05										
	LCS	Chloride		0.489	mg/L	97				
	LCS	Sulfate		1.52	mg/L	101				
	LCS	Nitrate as N		0.247	mg/L	98				
QC2426672-06										
	LCSD of QC2426672-05	Chloride	0.489	0.485	mg/L	97	0			Splt# QC2426672-05 (0.489mg/L)
	LCSD of QC2426672-05	Sulfate	1.52	1.54	mg/L	103	1			Splt# QC2426672-05 (1.52mg/L)
	LCSD of QC2426672-05	Nitrate as N	0.247	0.247	mg/L	98	0			Splt# QC2426672-05 (0.247mg/L)
QC2426672-09										
	SPKD of 2413593-01A	Sulfate	147	161	mg/L	91	0			Splt# 2413593-01A (147mg/L)
	SPKD of 2413593-01A	Nitrate as N	8.91	11.1	mg/L	89	2			Splt# 2413593-01A (8.91mg/L)
QC2426672-10										
	SPK of 2413593-01A	Sulfate	147	161	mg/L	90				Splt# 2413593-01A (147mg/L)
	SPK of 2413593-01A	Nitrate as N	8.91	11.4	mg/L	99				Splt# 2413593-01A (8.91mg/L)
QC2426672-11										
	CCV	Chloride		19.7	mg/L	98				
	CCV	Sulfate		19.9	mg/L	99				
	CCV	Nitrate as N		1.58	mg/L	99				
QC2426672-12										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426672-13										
	SPK of 2413990-03	Sulfate	7.12	8.57	mg/L	96				Splt# 2413990-03 (7.12mg/L)
	SPK of 2413990-03	Nitrate as N	0.0807	0.328	mg/L	99				Splt# 2413990-03 (0.0807mg/L)
QC2426672-14										
	SPKD of 2413990-03	Sulfate	7.12	8.5	mg/L	92	0			Splt# 2413990-03 (7.12mg/L)
	SPKD of 2413990-03	Nitrate as N	0.0807	0.324	mg/L	97	1			Splt# 2413990-03 (0.0807mg/L)

QC list for Run#: *2079621* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426802-01										
	DUP of 2412703-03	Total Dissolved Solids	264	259	mg/L		1	13.2	20	Splt# 2412703-03 (264mg/L)

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FOLDER ID: 2413593

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/29/2024
Sampling Team: Field

QC list for Run#: *2079621* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426802-02										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2426802-03										
	LCS	Total Dissolved Solids		80	mg/L	84		13.2	20	L1

QC list for Run#: *2079871* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426957-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2426957-02										
	LCS	Calcium, Ca		2	mg/L	100		0.04	1	
	LCS	Magnesium, Mg		2.04	mg/L	102		0.007	0.2	
	LCS	Potassium, K		1.97	mg/L	98		0.04	0.2	
	LCS	Sodium, Na		2.29	mg/L	115		0.02	1	
QC2426957-03										
	DUP of 2413593-01	Calcium, Ca	103	104	mg/L		1	0.005	1	Splt# 2413593-01 (103mg/L)
	DUP of 2413593-01	Magnesium, Mg	83.5	84.3	mg/L		0	0.021	0.2	Splt# 2413593-01 (83.5mg/L)
	DUP of 2413593-01	Potassium, K	3.89	4	mg/L		2	0.06	0.2	Splt# 2413593-01 (3.89mg/L)
	DUP of 2413593-01	Sodium, Na	78.4	79.1	mg/L		0	0.2	1	Splt# 2413593-01 (78.4mg/L)
QC2426957-04										
	SPK of 2413593-01	Calcium, Ca	103	105	mg/L	104		0.04	1	Splt# 2413593-01 (103mg/L)
	SPK of 2413593-01	Magnesium, Mg	83.5	85.4	mg/L	95		0.007	0.2	Splt# 2413593-01 (83.5mg/L)
	SPK of 2413593-01	Potassium, K	3.89	5.98	mg/L	104		0.04	0.2	Splt# 2413593-01 (3.89mg/L)
	SPK of 2413593-01	Sodium, Na	78.4	80.3	mg/L	96		0.02	1	Splt# 2413593-01 (78.4mg/L)
QC2426957-05										
	SPKD of 2413593-01	Calcium, Ca	103	105	mg/L	137	0	0.04	1	Splt# 2413593-01 (103mg/L)
	SPKD of 2413593-01	Magnesium, Mg	83.5	86	mg/L	124	0	0.007	0.2	Splt# 2413593-01 (83.5mg/L)
	SPKD of 2413593-01	Potassium, K	3.89	6.1	mg/L	110	1	0.04	0.2	Splt# 2413593-01 (3.89mg/L)
	SPKD of 2413593-01	Sodium, Na	78.4	80.7	mg/L	116	0	0.02	1	Splt# 2413593-01 (78.4mg/L)
QC2426957-06										
	MRL_CK	Calcium, Ca		0.0277	mg/L	69		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0512	mg/L	102		0.021	0.021	
	MRL_CK	Potassium, K		0.18	mg/L	90		0.06	0.06	
	MRL_CK	Sodium, Na		0.305	mg/L	153		0.2	0.2	
QC2426980-01										
	ICV	Calcium, Ca		10.1	mg/L	102		0.05	1	
	ICV	Magnesium, Mg		9.88	mg/L	99		0.01	0.2	
	ICV	Potassium, K		98.2	mg/L	99		0.03	0.2	
	ICV	Sodium, Na		10.1	mg/L	101		0.002	1	

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ELAP Cert #:

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FOLDER ID: 2413593

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/29/2024
Sampling Team: Field

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MILLBRAE	1449
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FOLDER ID: 2413594

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/30/2024
Sampling Team: Field

Lab Sample#: 2413594-01 **Sample Source:** WSB_CAL-31A-145 **External ID:**

Date Collected: 05/09/2024 10:42AM **Date Received:** 05/09/2024 12:04PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-31-145

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	58.3	mg/L	5	0.5	2.5	05/09/2024	2079964 PWARNER	
Nitrate as N	1.06	mg/L	5	0.17	0.2	05/09/2024	2079964 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	70.5	mg/L	1	0.005	1	05/22/2024	2080623 BTRINH	
Magnesium, Mg	61.7	mg/L	1	0.021	0.2	05/22/2024	2080623 BTRINH	
Potassium, K	3.54	mg/L	1	0.06	0.2	05/22/2024	2080623 BTRINH	
Sodium, Na	76.4	mg/L	1	0.2	1	05/22/2024	2080623 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	457	mg/L	1	1.19	6	05/09/2024	2079960 MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	44.4	mg/L	1		6	05/09/2024	2079961 MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	1060	µmhos/cm	1		1	05/09/2024	2079955 JWOO	>MCL

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	6.69	pH	1			05/09/2024	2079956 JWOO	H1,H3
Temperature (°C)	18.7	°C	1			05/09/2024	2079956 JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	602	mg/L	1	13.2	20	05/13/2024	2080009 ABALALIO	>MCL

SUB_524_T22(EPA 524.2)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
1,1,1-Trichloroethane	<0.5	µg/L			0.5	05/19/2024	6072888 SUB	
1,1,2,2-Tetrachloroethane	<0.5	µg/L			0.5	05/19/2024	6072888 SUB	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	<0.5	µg/L			0.5	05/19/2024	6072888 SUB	*+
1,1,2-Trichloroethane	<0.5	µg/L			0.5	05/19/2024	6072888 SUB	
1,1-Dichloroethane	<0.5	µg/L			0.5	05/19/2024	6072888 SUB	
1,1-Dichloroethylene	<0.5	µg/L			0.5	05/19/2024	6072888 SUB	
1,2,4-Trichlorobenzene	<0.5	µg/L			0.5	05/19/2024	6072888 SUB	
1,2-Dichlorobenzene	<0.5	µg/L			0.5	05/19/2024	6072888 SUB	
1,2-Dichloroethane	<0.5	µg/L			0.5	05/19/2024	6072888 SUB	
1,2-Dichloropropane	<0.5	µg/L			0.5	05/19/2024	6072888 SUB	
1,3-Dichloropropene Total (cis+ trans)	<0.5	µg/L			0.5	05/19/2024	6072888 SUB	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:

SUB_LAB	2813
MILLBRAE	1449
SEWPCP	1721

FOLDER ID: 2413594

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/30/2024
Sampling Team: Field

1,4-Dichlorobenzene	<0.5	µg/L		0.5	05/19/2024	6072888	SUB	
Benzene	<0.5	µg/L		0.5	05/19/2024	6072888	SUB	
Carbon tetrachloride	<0.5	µg/L		0.5	05/19/2024	6072888	SUB	
Chlorobenzene	<0.5	µg/L		0.5	05/19/2024	6072888	SUB	
cis-1,2-dichloroethylene	<0.5	µg/L		0.5	05/19/2024	6072888	SUB	
Ethylbenzene	<0.5	µg/L		0.5	05/19/2024	6072888	SUB	
Methyl t-butyl ether	<0.5	µg/L		0.5	05/19/2024	6072888	SUB	
Methylene chloride	<0.5	µg/L		0.5	05/19/2024	6072888	SUB	
Styrene	<0.5	µg/L		0.5	05/19/2024	6072888	SUB	
Tetrachloroethylene	<0.5	µg/L		0.5	05/19/2024	6072888	SUB	*+
Toluene	<0.5	µg/L		0.5	05/19/2024	6072888	SUB	
Trichlorofluoromethane (F-11)	<0.5	µg/L		0.5	05/19/2024	6072888	SUB	
Vinyl chloride	<0.3	µg/L		0.3	05/19/2024	6072888	SUB	
Xylene (total: p, m, o)	<0.5	µg/L		0.5	05/19/2024	6072888	SUB	
trans-1,2-Dichloroethylene	<0.5	µg/L		0.5	05/19/2024	6072888	SUB	
Trichloroethylene	<0.5	µg/L		0.5	05/19/2024	6072888	SUB	
cis-1,3-dichloropropene	<0.5	µg/L		0.5	05/19/2024	6072888	SUB	
trans-1,3-Dichloropropene	<0.5	µg/L		0.5	05/19/2024	6072888	SUB	
m,p-Xylene	<0.5	µg/L		0.5	05/19/2024	6072888	SUB	^3+
o-Xylene	<0.5	µg/L		0.5	05/19/2024	6072888	SUB	

Lab Sample#: 2413594-01A **Sample Source:** WSB_CAL-31A-145 **External ID:**
Date Collected: 05/09/2024 10:42AM **Date Received:** 05/09/2024 12:04PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-31-145

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_HARDNESS_T(SM 2340 C)								
Hardness, Total, as CaCO3	403	mg/L	1	2.37	15	05/10/2024	2079952 MSWONG	

Lab Sample#: 2413594-01C **Sample Source:** WSB_CAL-31A-145 **External ID:**
Date Collected: 05/09/2024 10:42AM **Date Received:** 05/09/2024 12:04PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-31-145

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_HARDNESS_T(SM 2340 C)								
Hardness, Total, as CaCO3	421	mg/L	1	2.37	15	05/13/2024	2080134 ALEE	

Lab Sample#: 2413594-02 **Sample Source:** WSB_CAL-31A-280 **External ID:**
Date Collected: 05/09/2024 10:19AM **Date Received:** 05/09/2024 12:04PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-31-280

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	81.4	mg/L	10	1	5	05/09/2024	2079964 PWARNER	
Nitrate as N	4.02	mg/L	10	0.34	0.4	05/09/2024	2079964 PWARNER	

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Water Quality Laboratory

ELAP Cert #:

SUB_LAB	2813
MILLBRAE	1449
SEWPCP	1721

FOLDER ID: 2413594

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/30/2024
Sampling Team: Field

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	51.6	mg/L	1	0.005	1	05/22/2024	2080623	BTRINH	
Magnesium, Mg	46.8	mg/L	1	0.021	0.2	05/22/2024	2080623	BTRINH	
Potassium, K	2.8	mg/L	1	0.06	0.2	05/22/2024	2080623	BTRINH	
Sodium, Na	74.3	mg/L	1	0.2	1	05/22/2024	2080623	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	325	mg/L	1	1.19	6	05/09/2024	2079960	MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	43.4	mg/L	1		6	05/09/2024	2079961	MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	913	µmhos/cm	1		1	05/09/2024	2079955	JWOO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	323	mg/L	1	0.948	6	05/09/2024	2079952	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.07	pH	1			05/09/2024	2079956	JWOO	H1,H3
Temperature (°C)	17.9	°C	1			05/09/2024	2079956	JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	527	mg/L	1	13.2	20	05/13/2024	2080009	ABALALIO	>MCL

SUB_524_T22(EPA 524.2)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
1,1,1-Trichloroethane	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
1,1,2,2-Tetrachloroethane	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2 *+
1,1,2-Trichloroethane	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
1,1-Dichloroethane	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
1,1-Dichloroethylene	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
1,2,4-Trichlorobenzene	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
1,2-Dichlorobenzene	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
1,2-Dichloroethane	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
1,2-Dichloropropane	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
1,3-Dichloropropene Total (cis+ trans)	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
1,4-Dichlorobenzene	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
Benzene	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
Carbon tetrachloride	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
Chlorobenzene	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
cis-1,2-dichloroethylene	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:

SUB_LAB	2813
MILLBRAE	1449
SEWPCP	1721

FOLDER ID: 2413594

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/30/2024
Sampling Team: Field

Ethylbenzene	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	Q2
Methyl t-butyl ether	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	Q2
Methylene chloride	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	Q2
Styrene	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	Q2
Tetrachloroethylene	160	µg/L	5	05/20/2024	6072888	SUB	
Toluene	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	Q2
Trichlorofluoromethane (F-11)	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	Q2
Vinyl chloride	<0.3	µg/L	0.3	05/20/2024	6072888	SUB	Q2
Xylene (total: p, m, o)	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	Q2
trans-1,2-Dichloroethylene	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	Q2
Trichloroethylene	3.1	µg/L	0.5	05/20/2024	6072888	SUB	Q2
cis-1,3-dichloropropene	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	Q2
trans-1,3-Dichloropropene	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	Q2
m,p-Xylene	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	^3+ Q2
o-Xylene	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	Q2

Lab Sample#: 2413594-03 **Sample Source:** WSB_CAL-31A-480 **External ID:**

Date Collected: 05/09/2024 09:22AM **Date Received:** 05/09/2024 12:04PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-31-480

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	<0.5	mg/L	1	0.1	0.5	05/09/2024	2079964	PWARNER	
Nitrate as N	<0.04	mg/L	1	0.034	0.04	05/09/2024	2079964	PWARNER	M

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	30.9	mg/L	1	0.005	1	05/22/2024	2080623	BTRINH	
Magnesium, Mg	40	mg/L	1	0.021	0.2	05/22/2024	2080623	BTRINH	
Potassium, K	11.3	mg/L	1	0.06	0.2	05/22/2024	2080623	BTRINH	
Sodium, Na	55.8	mg/L	1	0.2	1	05/22/2024	2080623	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	350	mg/L	1	1.19	6	05/09/2024	2079960	MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	36.7	mg/L	1		6	05/09/2024	2079961	MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	769	µmhos/cm	1		1	05/09/2024	2079955	JWOO	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	243	mg/L	1	0.948	6	05/09/2024	2079952	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments

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Water Quality Laboratory

ELAP Cert #:

SUB_LAB	2813
MILLBRAE	1449
SEWPCP	1721

FOLDER ID: 2413594

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/30/2024
Sampling Team: Field

pH	7.28	pH	1		05/09/2024	2079956	JWOO	H1,H3
Temperature (°C)	16.8	°C	1		05/09/2024	2079956	JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#	Analyst	Flag/Comments
Total Dissolved Solids	389	mg/L	1	13.2	20	05/13/2024	2080009	ABALALIO	

SUB_524_T22(EPA 524.2)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#	Analyst	Flag/Comments
1,1,1-Trichloroethane	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
1,1,2,2-Tetrachloroethane	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	*+
1,1,2-Trichloroethane	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
1,1-Dichloroethane	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
1,1-Dichloroethylene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
1,2,4-Trichlorobenzene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
1,2-Dichlorobenzene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
1,2-Dichloroethane	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
1,2-Dichloropropane	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
1,3-Dichloropropene Total (cis+ trans)	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
1,4-Dichlorobenzene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
Benzene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
Carbon tetrachloride	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
Chlorobenzene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
cis-1,2-dichloroethylene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
Ethylbenzene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
Methyl t-butyl ether	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
Methylene chloride	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
Styrene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
Tetrachloroethylene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	*+
Toluene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
Trichlorofluoromethane (F-11)	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
Vinyl chloride	<0.3	µg/L			0.3	05/19/2024	6072888	SUB	
Xylene (total: p, m, o)	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
trans-1,2-Dichloroethylene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
Trichloroethylene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
cis-1,3-dichloropropene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
trans-1,3-Dichloropropene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
m,p-Xylene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	^3+
o-Xylene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	

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MILLBRAE	1449
SEWPCP	1721

FOLDER ID: 2413594

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/30/2024
Sampling Team: Field

Lab Sample#: 2413594-04 **Sample Source:** WSB_CAL-31A-595 **External ID:**

Date Collected: 05/09/2024 09:32AM **Date Received:** 05/09/2024 12:04PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-31-595

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	293	mg/L	20	2	10	05/09/2024	2079964	PWARNER	>MCL

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	101	mg/L	1	0.005	1	05/22/2024	2080623	BTRINH	
Magnesium, Mg	67.4	mg/L	1	0.021	0.2	05/22/2024	2080623	BTRINH	
Potassium, K	5.05	mg/L	1	0.06	0.2	05/22/2024	2080623	BTRINH	
Sodium, Na	115	mg/L	1	0.2	1	05/22/2024	2080623	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	230	mg/L	1	2.96	15	05/09/2024	2079960	MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	196	mg/L	1		15	05/09/2024	2079961	MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1530	µmhos/cm	1		1	05/09/2024	2079955	JWOO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	525	mg/L	1	2.37	15	05/09/2024	2079952	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	6.95	pH	1			05/09/2024	2079956	JWOO	H1,H3
Temperature (°C)	17.3	°C	1			05/09/2024	2079956	JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	926	mg/L	1	13.2	20	05/13/2024	2080009	ABALALIO	>MCL

SUB_524_T22(EPA 524.2)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
1,1,1-Trichloroethane	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
1,1,2,2-Tetrachloroethane	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	*+
1,1,2-Trichloroethane	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
1,1-Dichloroethane	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
1,1-Dichloroethylene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
1,2,4-Trichlorobenzene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
1,2-Dichlorobenzene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	
1,2-Dichloroethane	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:

SUB_LAB	2813
MILLBRAE	1449
SEWPCP	1721

FOLDER ID: 2413594

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/30/2024
Sampling Team: Field

1,2-Dichloropropane	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	
1,3-Dichloropropene Total (cis+ trans)	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	
1,4-Dichlorobenzene	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	
Benzene	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	
Carbon tetrachloride	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	
Chlorobenzene	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	
cis-1,2-dichloroethylene	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	
Ethylbenzene	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	
Methyl t-butyl ether	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	
Methylene chloride	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	
Styrene	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	
Tetrachloroethylene	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	*+
Toluene	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	
Trichlorofluoromethane (F-11)	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	
Vinyl chloride	<0.3	µg/L	0.3	05/19/2024	6072888	SUB	
Xylene (total: p, m, o)	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	
trans-1,2-Dichloroethylene	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	
Trichloroethylene	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	
cis-1,3-dichloropropene	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	
trans-1,3-Dichloropropene	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	
m,p-Xylene	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	^3+
o-Xylene	<0.5	µg/L	0.5	05/19/2024	6072888	SUB	

Lab Sample#: 2413594-04A **Sample Source:** WSB_CAL-31A-595 **External ID:**
Date Collected: 05/09/2024 09:32AM **Date Received:** 05/09/2024 12:04PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-31-595

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	<0.04	mg/L	1	0.034	0.04	05/09/2024	2079964 PWARNER	

Lab Sample#: 2413594-05 **Sample Source:** WSB_CAL_DUP **External ID:**
Date Collected: 05/09/2024 10:32AM **Date Received:** 05/09/2024 12:04PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-31-280

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	81.8	mg/L	10	1	5	05/09/2024	2079964 PWARNER	
Nitrate as N	4.02	mg/L	10	0.34	0.4	05/09/2024	2079964 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	51.4	mg/L	1	0.005	1	05/22/2024	2080623 BTRINH	
Magnesium, Mg	46.6	mg/L	1	0.021	0.2	05/22/2024	2080623 BTRINH	
Potassium, K	2.77	mg/L	1	0.06	0.2	05/22/2024	2080623 BTRINH	

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Water Quality Laboratory

ELAP Cert #:

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MILLBRAE	1449
SEWPCP	1721

FOLDER ID: 2413594

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/30/2024
Sampling Team: Field

Sodium, Na	74	mg/L	1	0.2	1	05/22/2024	2080623	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	333	mg/L	1	1.19	6	05/09/2024	2079960	MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	44.7	mg/L	1		6	05/09/2024	2079961	MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	920	µmhos/cm	1		1	05/09/2024	2079955	JWOO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	319	mg/L	1	0.948	6	05/09/2024	2079952	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	6.96	pH	1			05/09/2024	2079956	JWOO	H1,H3
Temperature (°C)	18.2	°C	1			05/09/2024	2079956	JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	516	mg/L	1	13.2	20	05/13/2024	2080009	ABALALIO	>MCL

SUB_524_T22(EPA 524.2)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
1,1,1-Trichloroethane	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
1,1,2,2-Tetrachloroethane	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2 *+
1,1,2-Trichloroethane	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
1,1-Dichloroethane	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
1,1-Dichloroethylene	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
1,2,4-Trichlorobenzene	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
1,2-Dichlorobenzene	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
1,2-Dichloroethane	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
1,2-Dichloropropane	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
1,3-Dichloropropene Total (cis+ trans)	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
1,4-Dichlorobenzene	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
Benzene	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
Carbon tetrachloride	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
Chlorobenzene	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
cis-1,2-dichloroethylene	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
Ethylbenzene	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
Methyl t-butyl ether	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2
Methylene chloride	<0.5	µg/L			0.5	05/20/2024	6072888	SUB	Q2

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:

SUB_LAB	2813
MILLBRAE	1449
SEWPCP	1721

FOLDER ID: 2413594

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 04/30/2024
Sampling Team: Field

Styrene	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	Q2
Tetrachloroethylene	160	µg/L	5	05/20/2024	6072888	SUB	
Toluene	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	Q2
Trichlorofluoromethane (F-11)	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	Q2
Vinyl chloride	<0.3	µg/L	0.3	05/20/2024	6072888	SUB	Q2
Xylene (total: p, m, o)	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	Q2
trans-1,2-Dichloroethylene	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	Q2
Trichloroethylene	3	µg/L	0.5	05/20/2024	6072888	SUB	Q2
cis-1,3-dichloropropene	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	Q2
trans-1,3-Dichloropropene	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	Q2
m,p-Xylene	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	^3+ Q2
o-Xylene	<0.5	µg/L	0.5	05/20/2024	6072888	SUB	Q2

Lab Sample#: 2413594-06 **Sample Source:** QC_TRIP_BLANK **External ID:**

Date Collected: 05/09/2024 09:22AM **Date Received:** 05/09/2024 12:04PM **Sample Matrix:** Aqueous **Location Desc:** TRIP_BLANK_GSR_CAL_CUP-31

Test/Analyte

SUB_524_T22(EPA 524.2)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
1,1,1-Trichloroethane	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2
1,1,2,2-Tetrachloroethane	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2 *+
1,1,2-Trichloroethane	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2
1,1-Dichloroethane	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2
1,1-Dichloroethylene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2
1,2,4-Trichlorobenzene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2
1,2-Dichlorobenzene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2
1,2-Dichloroethane	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2
1,2-Dichloropropane	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2
1,3-Dichloropropene Total (cis+ trans)	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2
1,4-Dichlorobenzene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2
Benzene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2
Carbon tetrachloride	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2
Chlorobenzene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2
cis-1,2-dichloroethylene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2
Ethylbenzene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2
Methyl t-butyl ether	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2
Methylene chloride	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2
Styrene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2
Tetrachloroethylene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2 *+
Toluene	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2
Trichlorofluoromethane (F-11)	<0.5	µg/L			0.5	05/19/2024	6072888	SUB	Q2

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MILLBRAE	1449
SEWPCP	1721

FOLDER ID: 2413594

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/30/2024
Sampling Team: Field

Vinyl chloride	**<0.3**	**µg/L**	0.3	05/19/2024	6072888	SUB	Q2
Xylene (total: p, m, o)	**<0.5**	**µg/L**	0.5	05/19/2024	6072888	SUB	Q2
trans-1,2-Dichloroethylene	**<0.5**	**µg/L**	0.5	05/19/2024	6072888	SUB	Q2
Trichloroethylene	**<0.5**	**µg/L**	0.5	05/19/2024	6072888	SUB	Q2
cis-1,3-dichloropropene	**<0.5**	**µg/L**	0.5	05/19/2024	6072888	SUB	Q2
trans-1,3-Dichloropropene	**<0.5**	**µg/L**	0.5	05/19/2024	6072888	SUB	Q2
m,p-Xylene	**<0.5**	**µg/L**	0.5	05/19/2024	6072888	SUB	^3+ Q2
o-Xylene	**<0.5**	**µg/L**	0.5	05/19/2024	6072888	SUB	Q2

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FOLDER ID: 2413594

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/30/2024
Sampling Team: Field

QC list for Run#: *2079952* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427034-01										
	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2427034-02										
	MRL_CK	Hardness, Total, as CaCO3		2.48	mg/L	82				
QC2427034-03										
	DUP of 2413510-01	Hardness, Total, as CaCO3	22.9	22.8	mg/L		0	0.474	3	Splt# 2413510-01 (22.9mg/L)
QC2427034-04										
	LCS	Hardness, Total, as CaCO3		40.3	mg/L	101			3	

QC list for Run#: *2079955* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427042-01										
	CAL	Specific Conductance @25°C		1420	µmhos/cm	101				
QC2427042-02										
	ICV	Specific Conductance @25°C		147	µmhos/cm	100				
QC2427042-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2427042-04										
	MRL_CK	Specific Conductance @25°C		9.83	µmhos/cm	98				
QC2427042-05										
	DUP of 2413507-01	Specific Conductance @25°C	226	226	µmhos/cm		0		1	Splt# 2413507-01 (226µmhos/cm)
QC2427042-06										
	CCV	Specific Conductance @25°C		100	µmhos/cm	100				
QC2427042-07										
	CCV	Specific Conductance @25°C		1420	µmhos/cm	101				

QC list for Run#: *2079956* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427043-01										
	CAL	pH		7.01	pH	100				
	CAL	Temperature (°C)		21.1	°C					
QC2427043-02										
	CAL	pH		4.01	pH	100				
	CAL	Temperature (°C)		21.2	°C					
QC2427043-03										
	CAL	pH		10	pH	100				
	CAL	Temperature (°C)		21.3	°C					
QC2427043-04										
	ICV	pH		8.97	pH	99				
	ICV	Temperature (°C)		21.3	°C					
QC2427043-05										
	DUP of 2413507-01	pH	9.14	9.12	pH		0			Splt# 2413507-01 (9.14pH) H1,H3

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MILLBRAE	1449
SEWPCP	1721

FOLDER ID: 2413594

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/30/2024
Sampling Team: Field

QC list for Run#: *2079956* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	DUP of 2413507-01	Temperature (°C)	18.2	18.7	°C					Splt# 2413507-01 (18.2°C)
QC2427043-06										
	CCV	pH		8.96	pH	99				
	CCV	Temperature (°C)		21.4	°C					
QC2427043-07										
	CCV	pH		8.95	pH	98				
	CCV	Temperature (°C)		21.6	°C					

QC list for Run#: *2079960* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427039-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2427039-02										
	MRL_CK	Alkalinity		2.73	mg/L	91				
QC2427039-03										
	SPK of 2413510-01	Alkalinity	26.7	67.6	mg/L	102			3	Splt# 2413510-01 (26.7mg/L)
QC2427039-04										
	SPKD of 2413510-01	Alkalinity	26.7	67.9	mg/L	103	0		3	Splt# 2413510-01 (26.7mg/L)
QC2427039-06										
	LCS	Alkalinity		42.5	mg/L	106			3	

QC list for Run#: *2079961* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427040-01										
	BLK	Chloride		<3	mg/L			1.16	3	
QC2427040-02										
	MRL_CK	Chloride		3.04	mg/L	101				
QC2427040-03										
	SPK of 2413510-01	Chloride	5.66	45.7	mg/L	100			3	Splt# 2413510-01 (5.66mg/L)
QC2427040-04										
	SPKD of 2413510-01	Chloride	5.66	45.8	mg/L	100	0		3	Splt# 2413510-01 (5.66mg/L)
QC2427040-06										
	LCS	Chloride		40.4	mg/L	101			3	

QC list for Run#: *2079964* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427045-01										
	MRL_CK	Chloride		0.508	mg/L	102				
	MRL_CK	Sulfate		0.519	mg/L	104				
	MRL_CK	Nitrate as N		0.0392	mg/L	98				
QC2427045-02										
	CCV	Chloride		2.48	mg/L	99				
	CCV	Sulfate		2.5	mg/L	100				

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:

SUB_LAB	2813
MILLBRAE	1449
SEWPCP	1721

FOLDER ID: 2413594

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/30/2024
Sampling Team: Field

QC list for Run#: *2079964* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	CCV	Nitrate as N		0.202	mg/L	101				
QC2427045-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427045-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427045-05										
	LCS	Chloride		0.561	mg/L	112				
	LCS	Sulfate		1.62	mg/L	108				
	LCS	Nitrate as N		0.261	mg/L	104				
QC2427045-06										
	LCSD of QC2427045-05	Chloride	0.561	0.503	mg/L	101	10			Splt# QC2427045-05 (0.561mg/L)
	LCSD of QC2427045-05	Sulfate	1.62	1.58	mg/L	105	2			Splt# QC2427045-05 (1.62mg/L)
	LCSD of QC2427045-05	Nitrate as N	0.261	0.248	mg/L	99	5			Splt# QC2427045-05 (0.261mg/L)
QC2427045-07										
	CCV	Chloride		20	mg/L	100				
	CCV	Sulfate		20.3	mg/L	101				
	CCV	Nitrate as N		1.62	mg/L	102				
QC2427045-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427045-09										
	SPK of 2413594-03	Sulfate	<0.5	1.63	mg/L	109				Splt# 2413594-03 (<0.5mg/L)
	SPK of 2413594-03	Nitrate as N	<0.04	0.368	mg/L	147				Splt# 2413594-03 (<0.04mg/L) M,M1
QC2427045-10										
	SPKD of 2413594-03	Sulfate	<0.5	1.58	mg/L	106	2			Splt# 2413594-03 (<0.5mg/L)
	SPKD of 2413594-03	Nitrate as N	<0.04	0.287	mg/L	115	24			Splt# 2413594-03 (<0.04mg/L) M,M2

QC list for Run#: *2080009* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427076-01										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2427076-02										
	DUP of 2413375-01	Total Dissolved Solids	510	501	mg/L		1	13.2	20	Splt# 2413375-01 (510mg/L)
QC2427076-03										
	DUP of 2413594-01	Total Dissolved Solids	602	595	mg/L		1	13.2	20	Splt# 2413594-01 (602mg/L)

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:

SUB_LAB	2813
MILLBRAE	1449
SEWPCP	1721

FOLDER ID: 2413594

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/30/2024
Sampling Team: Field

QC list for Run#: *2080009* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427076-04										
	LCS	Total Dissolved Solids		89	mg/L	93		13.2	20	

QC list for Run#: *2080021* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427085-01										
	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2427085-02										
	MRL_CK	Hardness, Total, as CaCO3		2.48	mg/L	82				
QC2427085-03										
	DUP of 2413755-06	Hardness, Total, as CaCO3	8.87	8.85	mg/L		0	0.474	3	Splt# 2413755-06 (8.87mg/L)
QC2427085-04										
	LCS	Hardness, Total, as CaCO3		39.8	mg/L	99			3	

QC list for Run#: *2080134* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427163-01										
	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2427163-02										
	MRL_CK	Hardness, Total, as CaCO3		2.6	mg/L	86				
QC2427163-03										
	DUP of 2414026-05	Hardness, Total, as CaCO3	476	472	mg/L		0	2.37	15	Splt# 2414026-05 (476mg/L)
QC2427163-04										
	LCS	Hardness, Total, as CaCO3		40	mg/L	100			3	

QC list for Run#: *2080623* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427493-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2427493-02										
	LCS	Calcium, Ca		2.03	mg/L	101		0.04	1	
	LCS	Magnesium, Mg		2.03	mg/L	102		0.007	0.2	
	LCS	Potassium, K		2.04	mg/L	102		0.04	0.2	
	LCS	Sodium, Na		1.9	mg/L	94		0.02	1	
QC2427493-03										
	DUP of 2413594-01	Calcium, Ca	70.5	68.3	mg/L		3	0.005	1	Splt# 2413594-01 (70.5mg/L)
	DUP of 2413594-01	Magnesium, Mg	61.7	59.2	mg/L		4	0.021	0.2	Splt# 2413594-01 (61.7mg/L)
	DUP of 2413594-01	Potassium, K	3.54	3.51	mg/L		0	0.06	0.2	Splt# 2413594-01 (3.54mg/L)
	DUP of 2413594-01	Sodium, Na	76.4	76.3	mg/L		0	0.2	1	Splt# 2413594-01 (76.4mg/L)

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Water Quality Laboratory

ELAP Cert #:

SUB_LAB	2813
MILLBRAE	1449
SEWPCP	1721

FOLDER ID: 2413594

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 04/30/2024
Sampling Team: Field

QC list for Run#: *2080623* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427493-04										
	SPK of 2413594-01	Calcium, Ca	70.5	70.3	mg/L	0		0.04	1	Splt# 2413594-01 (70.5mg/L)
	SPK of 2413594-01	Magnesium, Mg	61.7	61.2	mg/L	0		0.007	0.2	Splt# 2413594-01 (61.7mg/L)
	SPK of 2413594-01	Potassium, K	3.54	5.57	mg/L	102		0.04	0.2	Splt# 2413594-01 (3.54mg/L)
	SPK of 2413594-01	Sodium, Na	76.4	78.4	mg/L	99		0.02	1	Splt# 2413594-01 (76.4mg/L)
QC2427493-05										
	SPKD of 2413594-01	Calcium, Ca	70.5	69.8	mg/L	0	0	0.04	1	Splt# 2413594-01 (70.5mg/L)
	SPKD of 2413594-01	Magnesium, Mg	61.7	60.6	mg/L	0	0	0.007	0.2	Splt# 2413594-01 (61.7mg/L)
	SPKD of 2413594-01	Potassium, K	3.54	5.5	mg/L	98	1	0.04	0.2	Splt# 2413594-01 (3.54mg/L)
	SPKD of 2413594-01	Sodium, Na	76.4	77.8	mg/L	71	0	0.02	1	Splt# 2413594-01 (76.4mg/L)
QC2427493-06										
	DUP of 2413594-02	Calcium, Ca	51.6	51.1	mg/L		1	0.005	1	Splt# 2413594-02 (51.6mg/L)
	DUP of 2413594-02	Magnesium, Mg	46.8	46.3	mg/L		1	0.021	0.2	Splt# 2413594-02 (46.8mg/L)
	DUP of 2413594-02	Potassium, K	2.8	2.8	mg/L		0	0.06	0.2	Splt# 2413594-02 (2.8mg/L)
	DUP of 2413594-02	Sodium, Na	74.3	73.5	mg/L		1	0.2	1	Splt# 2413594-02 (74.3mg/L)
QC2427493-07										
	SPK of 2413594-02	Calcium, Ca	51.6	53.5	mg/L	91		0.04	1	Splt# 2413594-02 (51.6mg/L)
	SPK of 2413594-02	Magnesium, Mg	46.8	48.6	mg/L	89		0.007	0.2	Splt# 2413594-02 (46.8mg/L)
	SPK of 2413594-02	Potassium, K	2.8	4.81	mg/L	100		0.04	0.2	Splt# 2413594-02 (2.8mg/L)
	SPK of 2413594-02	Sodium, Na	74.3	76	mg/L	84		0.02	1	Splt# 2413594-02 (74.3mg/L)
QC2427493-08										
	SPKD of 2413594-02	Calcium, Ca	51.6	52.8	mg/L	59	1	0.04	1	Splt# 2413594-02 (51.6mg/L)
	SPKD of 2413594-02	Magnesium, Mg	46.8	48	mg/L	58	1	0.007	0.2	Splt# 2413594-02 (46.8mg/L)
	SPKD of 2413594-02	Potassium, K	2.8	4.8	mg/L	100	0	0.04	0.2	Splt# 2413594-02 (2.8mg/L)
	SPKD of 2413594-02	Sodium, Na	74.3	75.1	mg/L	42	1	0.02	1	Splt# 2413594-02 (74.3mg/L)
QC2427493-09										
	MRL_CK	Calcium, Ca		0.0074	mg/L	18		0.005	0.005	
	MRL_CK	Magnesium, Mg		<0.021	mg/L	N/A		0.021	0.021	
	MRL_CK	Potassium, K		0.23	mg/L	115		0.06	0.06	
	MRL_CK	Sodium, Na		0.234	mg/L	117		0.2	0.2	
QC2427515-01										
	ICV	Calcium, Ca		10.2	mg/L	104		0.05	1	
	ICV	Magnesium, Mg		9.97	mg/L	101		0.01	0.2	
	ICV	Potassium, K		99.1	mg/L	100		0.03	0.2	
	ICV	Sodium, Na		9.86	mg/L	98		0.002	1	

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ELAP Cert #: MILLBRAE 1449

SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2413595

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 05/08/2024
Sampling Team: Field

Lab Sample#: 2413595-01 **Sample Source:** WSB_SF68_GGPNL1 **External ID:**
Date Collected: 05/08/2024 10:24AM **Date Received:** 05/08/2024 12:13PM **Sample Matrix:** Aqueous **Location Desc:** WSB_SF68, GGP NORTH LAKE ROAD NL-1

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	38.3	mg/L	1		3	05/08/2024	2079895 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	478	µmhos/cm	1		1	05/08/2024	2079879 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	261	mg/L	1	13.2	20	05/13/2024	2080009 ABALALIO	

Lab Sample#: 2413595-03 **Sample Source:** WSB_SF_DUP **External ID:**
Date Collected: 05/08/2024 10:40AM **Date Received:** 05/08/2024 12:13PM **Sample Matrix:** Aqueous **Location Desc:** WSB_SF68, GGP NORTH LAKE ROAD NL-1

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	38.3	mg/L	1		3	05/08/2024	2079895 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	479	µmhos/cm	1		1	05/08/2024	2079879 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	256	mg/L	1	13.2	20	05/13/2024	2080009 ABALALIO	

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ELAP Cert #: MILLBRAE 1449

SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2413595

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 05/08/2024
Sampling Team: Field

QC list for Run#: *2079879* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426986-01	CAL	Specific Conductance @25°C		1420	µmhos/cm	101				
QC2426986-02	ICV	Specific Conductance @25°C		148	µmhos/cm	100				
QC2426986-03	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2426986-04	MRL_CK	Specific Conductance @25°C		9.91	µmhos/cm	99				
QC2426986-05	DUP of 2413505-06	Specific Conductance @25°C	91.5	92	µmhos/cm		0		1	Splt# 2413505-06 (91.5µmhos/cm)
QC2426986-06	CCV	Specific Conductance @25°C		101	µmhos/cm	101				
QC2426986-07	CCV	Specific Conductance @25°C		1430	µmhos/cm	101				

QC list for Run#: *2079895* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426996-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2426996-02	MRL_CK	Chloride		2.94	mg/L	98				
QC2426996-03	SPK of 2413375-01	Chloride	117	196	mg/L	98			6	Splt# 2413375-01 (117mg/L)
QC2426996-04	SPKD of 2413375-01	Chloride	117	196	mg/L	99	0		6	Splt# 2413375-01 (117mg/L)
QC2426996-06	LCS	Chloride		39.4	mg/L	98			3	

QC list for Run#: *2080009* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427076-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2427076-02	DUP of 2413375-01	Total Dissolved Solids	510	501	mg/L		1	13.2	20	Splt# 2413375-01 (510mg/L)
QC2427076-03	DUP of 2413594-01	Total Dissolved Solids	602	595	mg/L		1	13.2	20	Splt# 2413594-01 (602mg/L)
QC2427076-04	LCS	Total Dissolved Solids		89	mg/L	93		13.2	20	

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MILLBRAE 1449

SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2413599

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 05/14/2024
Sampling Team: Field

Lab Sample#: 2413599-03 **Sample Source:** WSB_SF07_LM1S **External ID:**
Date Collected: 05/14/2024 10:39AM **Date Received:** 05/14/2024 01:17PM **Sample Matrix:** Aqueous **Location Desc:** SF#07 - LMMW1S

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	125	mg/L	10	1	5	05/14/2024	2080203 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	84	mg/L	1	0.005	1	05/22/2024	2080623 BTRINH	
Magnesium, Mg	121	mg/L	1	0.021	0.2	05/22/2024	2080623 BTRINH	
Potassium, K	3.57	mg/L	1	0.06	0.2	05/22/2024	2080623 BTRINH	
Sodium, Na	171	mg/L	1	0.2	1	05/22/2024	2080623 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	201	mg/L	1	2.96	15	05/14/2024	2080227 MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	449	mg/L	1		15	05/14/2024	2080228 MSWONG	>MCL

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	2280	µmhos/cm	1		1	05/14/2024	2080223 JWOO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	678	mg/L	1	2.37	15	05/14/2024	2080230 MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	6.75	pH	1			05/14/2024	2080224 JWOO	H1,H3
Temperature (°C)	19.1	°C	1			05/14/2024	2080224 JWOO	

Lab Sample#: 2413599-03A **Sample Source:** WSB_SF07_LM1S **External ID:**
Date Collected: 05/14/2024 10:39AM **Date Received:** 05/14/2024 01:17PM **Sample Matrix:** Aqueous **Location Desc:** SF#07 - LMMW1S

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	37.1	mg/L	25	0.85	1	05/14/2024	2080203 PWARNER	A1,>MCL

Lab Sample#: 2413599-03B **Sample Source:** WSB_SF07_LM1S **External ID:**
Date Collected: 05/14/2024 10:39AM **Date Received:** 05/14/2024 01:17PM **Sample Matrix:** Aqueous **Location Desc:** SF#07 - LMMW1S

Test/Analyte

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	1200	mg/L	1	13.2	20	05/20/2024	2080406 DCARDONA	>MCL

Lab Sample#: 2413599-04 **Sample Source:** WSB_SF63_LM1D **External ID:**
Date Collected: 05/14/2024 11:40AM **Date Received:** 05/14/2024 01:17PM **Sample Matrix:** Aqueous **Location Desc:** SF#63 - LMMW1D

Test/Analyte

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ELAP Cert #:
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FOLDER ID: 2413599

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 05/14/2024
Sampling Team: Field

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	28	mg/L	10	1	5	05/14/2024	2080203	PWARNER	
Nitrate as N	11.7	mg/L	10	0.34	0.4	05/14/2024	2080203	PWARNER	>MCL

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	33	mg/L	1	0.005	1	05/22/2024	2080623	BTRINH	
Magnesium, Mg	48.5	mg/L	1	0.021	0.2	05/22/2024	2080623	BTRINH	
Potassium, K	3.12	mg/L	1	0.06	0.2	05/22/2024	2080623	BTRINH	
Sodium, Na	52.4	mg/L	1	0.2	1	05/22/2024	2080623	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	177	mg/L	1	1.19	6	05/14/2024	2080227	MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	103	mg/L	1		6	05/14/2024	2080228	MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	826	µmhos/cm	1		1	05/14/2024	2080223	JWOO	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	279	mg/L	1	0.948	6	05/14/2024	2080230	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.8	pH	1			05/14/2024	2080224	JWOO	H1,H3
Temperature (°C)	19.3	°C	1			05/14/2024	2080224	JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	457	mg/L	1	13.2	20	05/16/2024	2080179	ALEE	

Lab Sample#: 2413599-05 **Sample Source:** WSB_SF_DUP **External ID:**

Date Collected: 05/14/2024 11:42AM **Date Received:** 05/14/2024 01:17PM **Sample Matrix:** Aqueous **Location Desc:** SF#63 - LMMW1D

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	28.3	mg/L	10	1	5	05/14/2024	2080203	PWARNER	
Nitrate as N	11.7	mg/L	10	0.34	0.4	05/14/2024	2080203	PWARNER	>MCL

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	32.9	mg/L	1	0.005	1	05/22/2024	2080623	BTRINH	
Magnesium, Mg	48.3	mg/L	1	0.021	0.2	05/22/2024	2080623	BTRINH	
Potassium, K	3.05	mg/L	1	0.06	0.2	05/22/2024	2080623	BTRINH	
Sodium, Na	52.2	mg/L	1	0.2	1	05/22/2024	2080623	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	180	mg/L	1	1.19	6	05/14/2024	2080227	MSWONG	

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MILLBRAE 1449

FOLDER ID: 2413599

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/14/2024
Sampling Team: Field

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	105	mg/L	1		6	05/14/2024	2080228 MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	822	µmhos/cm	1		1	05/14/2024	2080223 JWOO	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	278	mg/L	1	0.948	6	05/14/2024	2080230 MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.79	pH	1			05/14/2024	2080224 JWOO	H1,H3
Temperature (°C)	19.3	°C	1			05/14/2024	2080224 JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	450	mg/L	1	13.2	20	05/16/2024	2080179 ALEE	

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FOLDER ID: 2413599

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/14/2024
Sampling Team: Field

QC list for Run#: *2080179* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427200-01										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2427200-02										
	LCS	Total Dissolved Solids		88	mg/L	92		13.2	20	
QC2427200-03										
	DUP of 2414026-05	Total Dissolved Solids	578	576	mg/L		0	13.2	20	Splt# 2414026-05 (578mg/L)

QC list for Run#: *2080203* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427211-01										
	MRL_CK	Chloride		0.506	mg/L	101				
	MRL_CK	Sulfate		0.51	mg/L	102				
	MRL_CK	Nitrate as N		0.0413	mg/L	104				
QC2427211-02										
	CCV	Chloride		2.52	mg/L	101				
	CCV	Sulfate		2.57	mg/L	103				
	CCV	Nitrate as N		0.203	mg/L	102				
QC2427211-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427211-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427211-05										
	LCS	Chloride		0.467	mg/L	93				
	LCS	Sulfate		1.46	mg/L	97				
	LCS	Nitrate as N		0.232	mg/L	92				
QC2427211-06										
	LCSD of QC2427211-05	Chloride	0.467	0.492	mg/L	98	5			Splt# QC2427211-05 (0.467mg/L)
	LCSD of QC2427211-05	Sulfate	1.46	1.53	mg/L	102	4			Splt# QC2427211-05 (1.46mg/L)
	LCSD of QC2427211-05	Nitrate as N	0.232	0.244	mg/L	97	4			Splt# QC2427211-05 (0.232mg/L)
QC2427211-07										
	CCV	Chloride		20.2	mg/L	101				
	CCV	Sulfate		20.6	mg/L	103				
	CCV	Nitrate as N		1.65	mg/L	103				
QC2427211-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427211-09										

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FOLDER ID: 2413599

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/14/2024
Sampling Team: Field

QC list for Run#: *2080203* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	SPK of 2414370-01	Sulfate	5.42	7.09	mg/L	111				Splt# 2414370-01 (5.42mg/L)
	SPK of 2414370-01	Nitrate as N	0.0628	0.328	mg/L	106				Splt# 2414370-01 (0.0628mg/L)
QC2427211-10										
	SPKD of 2414370-01	Sulfate	5.42	7.02	mg/L	106	1			Splt# 2414370-01 (5.42mg/L)
	SPKD of 2414370-01	Nitrate as N	0.0628	0.308	mg/L	98	6			Splt# 2414370-01 (0.0628mg/L)

QC list for Run#: *2080223* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427225-02										
	ICV	Specific Conductance @25°C		147	µmhos/cm	100				
QC2427225-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2427225-04										
	MRL_CK	Specific Conductance @25°C		9.86	µmhos/cm	98				
QC2427225-05										
	DUP of 2414386-01	Specific Conductance @25°C	57.4	55.4	µmhos/cm		3		1	Splt# 2414386-01 (57.4µmhos/cm)
QC2427225-06										
	CCV	Specific Conductance @25°C		99.6	µmhos/cm	99				
QC2427225-07										
	CCV	Specific Conductance @25°C		1420	µmhos/cm	101				

QC list for Run#: *2080224* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427224-04										
	ICV	pH		8.98	pH	99				
	ICV	Temperature (°C)		20.8	°C					
QC2427224-05										
	DUP of 2414386-01	pH	9.07	9.11	pH		0			Splt# 2414386-01 (9.07pH) H1,H3
	DUP of 2414386-01	Temperature (°C)	18.1	17.9	°C					Splt# 2414386-01 (18.1°C)
QC2427224-06										
	CCV	pH		8.98	pH	99				
	CCV	Temperature (°C)		20.6	°C					
QC2427224-07										
	CCV	pH		8.98	pH	99				
	CCV	Temperature (°C)		20.8	°C					

QC list for Run#: *2080227* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427228-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2427228-02										
	MRL_CK	Alkalinity		2.91	mg/L	97				

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FOLDER ID: 2413599

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/14/2024
Sampling Team: Field

QC list for Run#: *2080227* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427228-03	SPK of 2413786-01	Alkalinity	59.4	100	mg/L	102			3	Splt# 2413786-01 (59.4mg/L)
QC2427228-04	SPKD of 2413786-01	Alkalinity	59.4	100	mg/L	102	0		3	Splt# 2413786-01 (59.4mg/L)
QC2427228-06	LCS	Alkalinity		42.5	mg/L	106			3	

QC list for Run#: *2080228* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427229-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2427229-02	MRL_CK	Chloride		3.05	mg/L	102				
QC2427229-03	SPK of 2413786-01	Chloride	16.2	56.3	mg/L	100			3	Splt# 2413786-01 (16.2mg/L)
QC2427229-04	SPKD of 2413786-01	Chloride	16.2	56.3	mg/L	100	0		3	Splt# 2413786-01 (16.2mg/L)
QC2427229-06	LCS	Chloride		40.4	mg/L	101			3	

QC list for Run#: *2080230* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427233-01	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2427233-02	MRL_CK	Hardness, Total, as CaCO3		2.4	mg/L	80				
QC2427233-03	DUP of 2413786-01	Hardness, Total, as CaCO3	54.2	53.8	mg/L		0	0.474	3	Splt# 2413786-01 (54.2mg/L)
QC2427233-04	LCS	Hardness, Total, as CaCO3		39.8	mg/L	99			3	

QC list for Run#: *2080406* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427356-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2427356-02	LCS	Total Dissolved Solids		84	mg/L	88		13.2	20	
QC2427356-03	DUP of 2413600-02	Total Dissolved Solids	673	680	mg/L		1	13.2	20	Splt# 2413600-02 (673mg/L)

QC list for Run#: *2080623* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427493-01	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	

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FOLDER ID: 2413599

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/14/2024
Sampling Team: Field

QC list for Run#: *2080623* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2427493-02										
	LCS	Calcium, Ca		2.03	mg/L	101		0.04	1	
	LCS	Magnesium, Mg		2.03	mg/L	102		0.007	0.2	
	LCS	Potassium, K		2.04	mg/L	102		0.04	0.2	
	LCS	Sodium, Na		1.9	mg/L	94		0.02	1	
QC2427493-03										
	DUP of 2413594-01	Calcium, Ca	70.5	68.3	mg/L		3	0.005	1	Splt# 2413594-01 (70.5mg/L)
	DUP of 2413594-01	Magnesium, Mg	61.7	59.2	mg/L		4	0.021	0.2	Splt# 2413594-01 (61.7mg/L)
	DUP of 2413594-01	Potassium, K	3.54	3.51	mg/L		0	0.06	0.2	Splt# 2413594-01 (3.54mg/L)
	DUP of 2413594-01	Sodium, Na	76.4	76.3	mg/L		0	0.2	1	Splt# 2413594-01 (76.4mg/L)
QC2427493-04										
	SPK of 2413594-01	Calcium, Ca	70.5	70.3	mg/L	0		0.04	1	Splt# 2413594-01 (70.5mg/L)
	SPK of 2413594-01	Magnesium, Mg	61.7	61.2	mg/L	0		0.007	0.2	Splt# 2413594-01 (61.7mg/L)
	SPK of 2413594-01	Potassium, K	3.54	5.57	mg/L	102		0.04	0.2	Splt# 2413594-01 (3.54mg/L)
	SPK of 2413594-01	Sodium, Na	76.4	78.4	mg/L	99		0.02	1	Splt# 2413594-01 (76.4mg/L)
QC2427493-05										
	SPKD of 2413594-01	Calcium, Ca	70.5	69.8	mg/L	0	0	0.04	1	Splt# 2413594-01 (70.5mg/L)
	SPKD of 2413594-01	Magnesium, Mg	61.7	60.6	mg/L	0	0	0.007	0.2	Splt# 2413594-01 (61.7mg/L)
	SPKD of 2413594-01	Potassium, K	3.54	5.5	mg/L	98	1	0.04	0.2	Splt# 2413594-01 (3.54mg/L)
	SPKD of 2413594-01	Sodium, Na	76.4	77.8	mg/L	71	0	0.02	1	Splt# 2413594-01 (76.4mg/L)
QC2427493-06										
	DUP of 2413594-02	Calcium, Ca	51.6	51.1	mg/L		1	0.005	1	Splt# 2413594-02 (51.6mg/L)
	DUP of 2413594-02	Magnesium, Mg	46.8	46.3	mg/L		1	0.021	0.2	Splt# 2413594-02 (46.8mg/L)
	DUP of 2413594-02	Potassium, K	2.8	2.8	mg/L		0	0.06	0.2	Splt# 2413594-02 (2.8mg/L)
	DUP of 2413594-02	Sodium, Na	74.3	73.5	mg/L		1	0.2	1	Splt# 2413594-02 (74.3mg/L)
QC2427493-07										
	SPK of 2413594-02	Calcium, Ca	51.6	53.5	mg/L	91		0.04	1	Splt# 2413594-02 (51.6mg/L)
	SPK of 2413594-02	Magnesium, Mg	46.8	48.6	mg/L	89		0.007	0.2	Splt# 2413594-02 (46.8mg/L)
	SPK of 2413594-02	Potassium, K	2.8	4.81	mg/L	100		0.04	0.2	Splt# 2413594-02 (2.8mg/L)
	SPK of 2413594-02	Sodium, Na	74.3	76	mg/L	84		0.02	1	Splt# 2413594-02 (74.3mg/L)
QC2427493-08										
	SPKD of 2413594-02	Calcium, Ca	51.6	52.8	mg/L	59	1	0.04	1	Splt# 2413594-02 (51.6mg/L)
	SPKD of 2413594-02	Magnesium, Mg	46.8	48	mg/L	58	1	0.007	0.2	Splt# 2413594-02 (46.8mg/L)
	SPKD of 2413594-02	Potassium, K	2.8	4.8	mg/L	100	0	0.04	0.2	Splt# 2413594-02 (2.8mg/L)
	SPKD of 2413594-02	Sodium, Na	74.3	75.1	mg/L	42	1	0.02	1	Splt# 2413594-02 (74.3mg/L)
QC2427493-09										
	MRL_CK	Calcium, Ca		0.0074	mg/L	18		0.005	0.005	
	MRL_CK	Magnesium, Mg		<0.021	mg/L	N/A		0.021	0.021	
	MRL_CK	Potassium, K		0.23	mg/L	115		0.06	0.06	

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FOLDER ID: 2413599

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/14/2024
Sampling Team: Field

QC list for Run#: *2080623* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	MRL_CK	Sodium, Na		0.234	mg/L	117		0.2	0.2	
QC2427515-01										
	ICV	Calcium, Ca		10.2	mg/L	104		0.05	1	
	ICV	Magnesium, Mg		9.97	mg/L	101		0.01	0.2	
	ICV	Potassium, K		99.1	mg/L	100		0.03	0.2	
	ICV	Sodium, Na		9.86	mg/L	98		0.002	1	

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Water Quality Laboratory

FOLDER ID: 2413600

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 05/15/2024
Sampling Team: Field

Lab Sample#: 2413600-02 **Sample Source:** WSB_SF57_SWD57 **External ID:**
Date Collected: 05/15/2024 10:33AM **Date Received:** 05/15/2024 01:15PM **Sample Matrix:** Aqueous **Location Desc:** SF#57 - USGS SOUTH WINDMILL MW57

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Nitrate as N	**9.72**	**mg/L**	10	0.34	0.4	05/15/2024	2080274 PWARNER	M,M1,M2
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	**186**	**mg/L**	1		15	05/15/2024	2080289 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	**1290**	**µmhos/cm**	1		1	05/15/2024	2080271 MSWONG	>MCL
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	**673**	**mg/L**	1	13.2	20	05/20/2024	2080406 DCARDONA	>MCL

Lab Sample#: 2413600-03 **Sample Source:** WSB_SF_DUP **External ID:**
Date Collected: 05/15/2024 10:35AM **Date Received:** 05/15/2024 01:15PM **Sample Matrix:** Aqueous **Location Desc:** SF#57 - USGS SOUTH WINDMILL MW57

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Nitrate as N	**10.1**	**mg/L**	10	0.34	0.4	05/15/2024	2080274 PWARNER	>MCL
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	**184**	**mg/L**	1		15	05/15/2024	2080289 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	**1290**	**µmhos/cm**	1		1	05/15/2024	2080271 MSWONG	>MCL
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	**684**	**mg/L**	1	13.2	20	05/20/2024	2080406 DCARDONA	>MCL

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2413600

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/15/2024
Sampling Team: Field

QC list for Run#: *2080271* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427260-01										
	CAL	Specific Conductance @25°C		1430	µmhos/cm	101				
QC2427260-02										
	ICV	Specific Conductance @25°C		148	µmhos/cm	101				
QC2427260-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2427260-04										
	MRL_CK	Specific Conductance @25°C		9.76	µmhos/cm	97				
QC2427260-05										
	DUP of 2413791-06	Specific Conductance @25°C	90.9	90.8	µmhos/cm		0		1	Splt# 2413791-06 (90.9µmhos/cm)
QC2427260-06										
	CCV	Specific Conductance @25°C		100	µmhos/cm	100				
QC2427260-07										
	CCV	Specific Conductance @25°C		1440	µmhos/cm	102				

QC list for Run#: *2080274* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427262-01										
	MRL_CK	Chloride		0.502	mg/L	100				
	MRL_CK	Nitrate as N		0.0414	mg/L	104				
QC2427262-02										
	CCV	Chloride		2.49	mg/L	99				
	CCV	Nitrate as N		0.206	mg/L	103				
QC2427262-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427262-04										
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427262-05										
	LCS	Chloride		0.53	mg/L	106				
	LCS	Nitrate as N		0.27	mg/L	108				
QC2427262-06										
	LCSD of QC2427262-09	Chloride	0.453	0.494	mg/L	98	8			Splt# QC2427262-09 (0.453mg/L)
	LCSD of QC2427262-09	Nitrate as N	0.238	0.248	mg/L	99	4			Splt# QC2427262-09 (0.238mg/L)
QC2427262-07										
	CCV	Chloride		20	mg/L	99				
	CCV	Nitrate as N		1.62	mg/L	102				
QC2427262-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427262-09										
	LCS	Chloride		0.453	mg/L	90				

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2413600

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 05/15/2024
Sampling Team: Field

QC list for Run#: *2080274* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	LCS	Nitrate as N		0.238	mg/L	95				
QC2427262-10	SPK of 2413600-02	Nitrate as N	9.72	12.7	mg/L	118				Splt# 2413600-02 (9.72mg/L) M,M1,M2
QC2427262-11	SPKD of 2413600-02	Nitrate as N	9.72	10.2	mg/L	19	21			Splt# 2413600-02 (9.72mg/L) M,M1,M2
QC2427262-12	SPKD of 2413600-02	Nitrate as N	9.72	9.12	mg/L	0	151			Splt# 2413600-02 (9.72mg/L) M,M1,M2
QC2427262-13	SPKD of 2413600-02	Nitrate as N	9.72	14.6	mg/L	196	14			Splt# 2413600-02 (9.72mg/L) M,M1,M2

QC list for Run#: *2080289* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427273-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2427273-02	MRL_CK	Chloride		3	mg/L	100				
QC2427273-03	SPK of 2414430-01	Chloride	4.86	45.2	mg/L	101			3	Splt# 2414430-01 (4.86mg/L)
QC2427273-04	SPKD of 2414430-01	Chloride	4.86	45.2	mg/L	101	0		3	Splt# 2414430-01 (4.86mg/L)
QC2427273-06	LCS	Chloride		40.3	mg/L	101			3	

QC list for Run#: *2080406* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427356-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2427356-02	LCS	Total Dissolved Solids		84	mg/L	88		13.2	20	
QC2427356-03	DUP of 2413600-02	Total Dissolved Solids	673	680	mg/L		1	13.2	20	Splt# 2413600-02 (673mg/L)

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2413602

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/16/2024
Sampling Team: Field

Lab Sample#: 2413602-01 **Sample Source:** WSB_SF34_KIR130 **External ID:**
Date Collected: 05/16/2024 12:24PM **Date Received:** 05/16/2024 02:27PM **Sample Matrix:** Aqueous **Location Desc:** SF#34 - GRT HWY/KIRKHAM MW130

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	31.8	mg/L	1		6	05/16/2024	2080354 MSWONG	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	413	µmhos/cm	1		1	05/16/2024	2080342 JWOO	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	217	mg/L	1	13.2	20	05/20/2024	2080406 DCARDONA	

Lab Sample#: 2413602-02 **Sample Source:** WSB_SF35_KIR255 **External ID:**
Date Collected: 05/16/2024 11:46AM **Date Received:** 05/16/2024 02:27PM **Sample Matrix:** Aqueous **Location Desc:** SF#35 - GRT HWY/KIRKHAM MW255

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	38.3	mg/L	1		6	05/16/2024	2080354 MSWONG	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	489	µmhos/cm	1		1	05/16/2024	2080348 JWOO	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	253	mg/L	1	13.2	20	05/20/2024	2080406 DCARDONA	

Lab Sample#: 2413602-03 **Sample Source:** WSB_SF36_KIR385 **External ID:**
Date Collected: 05/16/2024 12:04PM **Date Received:** 05/16/2024 02:27PM **Sample Matrix:** Aqueous **Location Desc:** SF#36 - GRT HWY/KIRKHAM MW385

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	35.1	mg/L	1		6	05/16/2024	2080354 MSWONG	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	471	µmhos/cm	1		1	05/16/2024	2080348 JWOO	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	275	mg/L	1	13.2	20	05/20/2024	2080406 DCARDONA	

Lab Sample#: 2413602-04 **Sample Source:** WSB_SF37_KIR435 **External ID:**
Date Collected: 05/16/2024 10:49AM **Date Received:** 05/16/2024 02:27PM **Sample Matrix:** Aqueous **Location Desc:** SF#37 - GRT HWY/KIRKHAM MW435

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	27.9	mg/L	1		6	05/16/2024	2080354 MSWONG	
MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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Water Quality Laboratory

FOLDER ID: 2413602

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/16/2024
Sampling Team: Field

Specific Conductance @25°C	434	µmhos/cm	1		1	05/16/2024	2080348	JWOO

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	254	mg/L	1	13.2	20	05/20/2024	2080406	DCARDONA	

Lab Sample#: 2413602-05 **Sample Source:** WSB_SF_DUP **External ID:**

Date Collected: 05/16/2024 10:50AM **Date Received:** 05/16/2024 02:27PM **Sample Matrix:** Aqueous **Location Desc:** SF#37 - GRT HWY/KIRKHAM MW435

Test/Analyte

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	28	mg/L	1		6	05/16/2024	2080354	MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	433	µmhos/cm	1		1	05/16/2024	2080348	JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	256	mg/L	1	13.2	20	05/20/2024	2080406	DCARDONA	

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FOLDER ID: 2413602

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/16/2024
Sampling Team: Field

QC list for Run#: *2080342* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427312-01	CAL	Specific Conductance @25°C		1420	µmhos/cm	101				
QC2427312-02	ICV	Specific Conductance @25°C		148	µmhos/cm	101				
QC2427312-03	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2427312-04	MRL_CK	Specific Conductance @25°C		9.76	µmhos/cm	97				
QC2427312-05	DUP of 2414373-01	Specific Conductance @25°C	81.2	81.2	µmhos/cm		0		1	Splt# 2414373-01 (81.2µmhos/cm)
QC2427312-06	CCV	Specific Conductance @25°C		99.5	µmhos/cm	99				
QC2427312-07	CCV	Specific Conductance @25°C		1420	µmhos/cm	101				

QC list for Run#: *2080348* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427313-02	ICV	Specific Conductance @25°C		148	µmhos/cm	100				
QC2427313-03	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2427313-04	MRL_CK	Specific Conductance @25°C		9.71	µmhos/cm	97				
QC2427313-05	DUP of 2413602-02	Specific Conductance @25°C	489	489	µmhos/cm		0		1	Splt# 2413602-02 (489µmhos/cm)
QC2427313-06	CCV	Specific Conductance @25°C		99.7	µmhos/cm	99				

QC list for Run#: *2080354* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427319-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2427319-02	MRL_CK	Chloride		2.98	mg/L	99				
QC2427319-03	SPK of 2414373-01	Chloride	5.46	45.7	mg/L	101			3	Splt# 2414373-01 (5.46mg/L)
QC2427319-04	SPKD of 2414373-01	Chloride	5.46	45.8	mg/L	101	0		3	Splt# 2414373-01 (5.46mg/L)
QC2427319-05	DUP of 2413602-05	Chloride	28	28.3	mg/L		1		6	Splt# 2413602-05 (28mg/L)
QC2427319-06	LCS	Chloride		40.7	mg/L	102			3	

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Water Quality Laboratory

FOLDER ID: 2413602

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/16/2024
Sampling Team: Field

QC list for Run#: *2080406* **and Test: MBP_TDS (SM 2540 C)**

Sample #	Name	Analyte	Result		Units	% Rec	RPD	MDL	MRL	Flag/Comments
			Parent	Current						
QC2427356-01										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2427356-02										
	LCS	Total Dissolved Solids		84	mg/L	88		13.2	20	
QC2427356-03										
	DUP of 2413600-02	Total Dissolved Solids	673	680	mg/L		1	13.2	20	Splt# 2413600-02 (673mg/L)

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2413603

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/20/2024
Sampling Team: Field

Lab Sample#: 2413603-01 **Sample Source:** WSB_SF30_ORT125 **External ID:**
Date Collected: 05/20/2024 11:10AM **Date Received:** 05/20/2024 01:20PM **Sample Matrix:** Aqueous **Location Desc:** SF#30 - GRT HWY/ORTEGA MW125

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	32.6	mg/L	1		3	05/20/2024	2080499 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	446	µmhos/cm	1		1	05/20/2024	2080505 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	252	mg/L	1	13.2	20	05/25/2024	2080735 DCARDONA	

Lab Sample#: 2413603-02 **Sample Source:** WSB_SF31_ORT265 **External ID:**
Date Collected: 05/20/2024 11:25AM **Date Received:** 05/20/2024 01:20PM **Sample Matrix:** Aqueous **Location Desc:** SF#31 - GRT HWY/ORTEGA MW265

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	24.7	mg/L	1		3	05/20/2024	2080499 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	269	µmhos/cm	1		1	05/20/2024	2080505 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	163	mg/L	1	13.2	20	05/25/2024	2080735 DCARDONA	

Lab Sample#: 2413603-03 **Sample Source:** WSB_SF32_ORT400 **External ID:**
Date Collected: 05/20/2024 10:24AM **Date Received:** 05/20/2024 01:20PM **Sample Matrix:** Aqueous **Location Desc:** SF#32 - GRT HWY/ORTEGA MW400

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	23.4	mg/L	1		3	05/20/2024	2080499 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	269	µmhos/cm	1		1	05/20/2024	2080505 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	157	mg/L	1	13.2	20	05/25/2024	2080735 DCARDONA	

Lab Sample#: 2413603-04 **Sample Source:** WSB_SF33_ORT475 **External ID:**
Date Collected: 05/20/2024 10:22AM **Date Received:** 05/20/2024 01:20PM **Sample Matrix:** Aqueous **Location Desc:** SF#33 - GRT HWY/ORTEGA MW475

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	28.8	mg/L	1		3	05/20/2024	2080499 ALEE	
MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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Water Quality Laboratory

FOLDER ID: 2413603

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 05/20/2024
Sampling Team: Field

Specific Conductance @25°C	294	µmhos/cm	1		1	05/20/2024	2080505	MSWONG

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	169	mg/L	1	13.2	20	05/25/2024	2080735 DCARDONA	

Lab Sample#: 2413603-05 **Sample Source:** WSB_SF_DUP **External ID:**

Date Collected: 05/20/2024 10:23AM **Date Received:** 05/20/2024 01:20PM **Sample Matrix:** Aqueous **Location Desc:** SF#33 - GRT HWY/ORTEGA MW475

Test/Analyte

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	29	mg/L	1		3	05/20/2024	2080499 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	295	µmhos/cm	1		1	05/20/2024	2080505 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	167	mg/L	1	13.2	20	05/25/2024	2080735 DCARDONA	

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FOLDER ID: 2413603

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 05/20/2024
Sampling Team: Field

QC list for Run#: *2080499* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427427-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2427427-02	MRL_CK	Chloride		2.93	mg/L	97				
QC2427427-03	SPK of 2413805-03	Chloride	14.7	54.5	mg/L	99			3	Splt# 2413805-03 (14.7mg/L)
QC2427427-04	SPKD of 2413805-03	Chloride	14.7	54.6	mg/L	99	0		3	Splt# 2413805-03 (14.7mg/L)
QC2427427-06	LCS	Chloride		40.2	mg/L	101			3	

QC list for Run#: *2080505* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427432-01	CAL	Specific Conductance @25°C		1420	µmhos/cm	101				
QC2427432-02	ICV	Specific Conductance @25°C		148	µmhos/cm	100				
QC2427432-03	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2427432-04	MRL_CK	Specific Conductance @25°C		9.72	µmhos/cm	97				
QC2427432-05	DUP of 2413603-02	Specific Conductance @25°C	269	269	µmhos/cm		0		1	Splt# 2413603-02 (269µmhos/cm)
QC2427432-06	CCV	Specific Conductance @25°C		99.7	µmhos/cm	99				

QC list for Run#: *2080735* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427590-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2427590-02	DUP of 2414587-01	Total Dissolved Solids	43	42	mg/L		2	13.2	20	Splt# 2414587-01 (43mg/L)
QC2427590-03	LCS	Total Dissolved Solids		89	mg/L	93		13.2	20	

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Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721

FOLDER ID: 2413978

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SSF-CalWater
Scheduled Sample Date: 05/06/2024
Sampling Team: Field

Lab Sample#: 2413978-01 **Sample Source:** WSB_SS08_1-19 **External ID:**
Date Collected: 05/06/2024 11:29AM **Date Received:** 05/06/2024 02:10PM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	77.5	mg/L	5	0.5	2.5	05/06/2024	2079739 PWARNER	
Nitrate as N	4.66	mg/L	5	0.17	0.2	05/06/2024	2079739 PWARNER	
SEM_200.7_DW(EPA 200.7)								
Calcium, Ca	54.3	mg/L	1	0.005	1	05/20/2024	2080490 BTRINH	
Magnesium, Mg	64.7	mg/L	1	0.021	0.2	05/20/2024	2080490 BTRINH	
Potassium, K	2.4	mg/L	1	0.06	0.2	05/20/2024	2080490 BTRINH	
Sodium, Na	72	mg/L	1	0.2	1	05/20/2024	2080490 BTRINH	
MBP_ALK(SM 2320 B)								
Alkalinity	276	mg/L	1	1.19	6	05/06/2024	2079742 ALEE	
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	125	mg/L	1		6	05/06/2024	2079743 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	1080	µmhos/cm	1		1	05/06/2024	2079750 JWOO	>MCL
MBP_HARDNESS_T(SM 2340 C)								
Hardness, Total, as CaCO3	388	mg/L	1	0.948	6	05/07/2024	2079734 MSWONG	
MBP_PH(SM 4500-H+ B)								
pH	7.6	pH	1			05/06/2024	2079751 JWOO	H1,H3
Temperature (°C)	18.6	°C	1			05/06/2024	2079751 JWOO	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	583	mg/L	1	13.2	20	05/10/2024	2079819 ABALALIO	>MCL

Lab Sample#: 2413978-02 **Sample Source:** WSB_SS09_1-20 **External ID:**
Date Collected: 05/06/2024 11:51AM **Date Received:** 05/06/2024 02:10PM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	177	mg/L	10	1	5	05/06/2024	2079739 PWARNER	
Nitrate as N	2.33	mg/L	10	0.34	0.4	05/06/2024	2079739 PWARNER	
SEM_200.7_DW(EPA 200.7)								
Calcium, Ca	79.4	mg/L	1	0.005	1	05/20/2024	2080490 BTRINH	
Magnesium, Mg	49.5	mg/L	1	0.021	0.2	05/20/2024	2080490 BTRINH	
Potassium, K	3.75	mg/L	1	0.06	0.2	05/20/2024	2080490 BTRINH	

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FOLDER ID: 2413978

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SSF-CalWater

Scheduled Sample Date: 05/06/2024
Sampling Team: Field

Sodium, Na	83.2	mg/L	1	0.2	1	05/20/2024	2080490	BTRINH

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	442	mg/L	1	1.19	6	05/06/2024	2079742 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	244	mg/L	1		6	05/06/2024	2079743 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	1160	µmhos/cm	1		1	05/06/2024	2079750 JWOO	>MCL

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.31	pH	1			05/06/2024	2079751 JWOO	H1,H3
Temperature (°C)	18.6	°C	1			05/06/2024	2079751 JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	700	mg/L	1	13.2	20	05/10/2024	2079819 ABALALIO	>MCL

Lab Sample#: 2413978-02A **Sample Source:** WSB_SS09_1-20 **External ID:**

Date Collected: 05/06/2024 11:51AM **Date Received:** 05/06/2024 02:10PM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_HARDNESS_T(SM 2340 C)								
Hardness, Total, as CaCO3	400	mg/L	1	4.74	30	05/07/2024	2079785 MSWONG	

Lab Sample#: 2413978-03 **Sample Source:** WSB_SS10_1-21 **External ID:**

Date Collected: 05/06/2024 11:12AM **Date Received:** 05/06/2024 02:10PM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	106	mg/L	10	1	5	05/06/2024	2079739 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	75	mg/L	1	0.005	1	05/20/2024	2080490 BTRINH	
Magnesium, Mg	27.8	mg/L	1	0.021	0.2	05/20/2024	2080490 BTRINH	
Potassium, K	3.91	mg/L	1	0.06	0.2	05/20/2024	2080490 BTRINH	
Sodium, Na	80	mg/L	1	0.2	1	05/20/2024	2080490 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	226	mg/L	1	1.19	6	05/06/2024	2079742 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	103	mg/L	1		6	05/06/2024	2079743 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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Water Quality Laboratory

ELAP Cert #:
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SEWPCP 1721

FOLDER ID: 2413978

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SSF-CalWater

Scheduled Sample Date: 05/06/2024
Sampling Team: Field

Specific Conductance @25°C	1060	µmhos/cm	1		1	05/06/2024	2079750	JWOO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	292	mg/L	1	0.948	6	05/07/2024	2079734	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.49	pH	1			05/06/2024	2079751	JWOO	H1,H3
Temperature (°C)	19.9	°C	1			05/06/2024	2079751	JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	556	mg/L	1	13.2	20	05/10/2024	2079819	ABALALIO	>MCL

Lab Sample#: 2413978-03A **Sample Source:** WSB_SS10_1-21 **External ID:**
Date Collected: 05/06/2024 11:12AM **Date Received:** 05/06/2024 02:10PM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Nitrate as N	<0.04	mg/L	1	0.034	0.04	05/06/2024	2079739	PWARNER	

Lab Sample#: 2413978-04 **Sample Source:** WSB_SS15_1-22 **External ID:**
Date Collected: 05/06/2024 10:47AM **Date Received:** 05/06/2024 02:10PM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	158	mg/L	10	1	5	05/06/2024	2079739	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	96.7	mg/L	1	0.005	1	05/20/2024	2080490	BTRINH	
Magnesium, Mg	38	mg/L	1	0.021	0.2	05/20/2024	2080490	BTRINH	
Potassium, K	4.8	mg/L	1	0.06	0.2	05/20/2024	2080490	BTRINH	
Sodium, Na	91.7	mg/L	1	0.2	1	05/20/2024	2080490	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	248	mg/L	1	1.19	6	05/06/2024	2079742	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	131	mg/L	1		6	05/06/2024	2079743	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1180	µmhos/cm	1		1	05/06/2024	2079750	JWOO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	384	mg/L	1	0.948	6	05/07/2024	2079734	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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Water Quality Laboratory

SEWPCP 1721

FOLDER ID: 2413978

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SSF-CalWater

Scheduled Sample Date: 05/06/2024
Sampling Team: Field

pH	7.46	pH	1		05/06/2024	2079751	JWOO	H1,H3
Temperature (°C)	18.2	°C	1		05/06/2024	2079751	JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	699	mg/L	1	13.2	20	05/10/2024	2079819	ABALALIO	>MCL

Lab Sample#: 2413978-04A **Sample Source:** WSB_SS15_1-22 **External ID:**
Date Collected: 05/06/2024 10:47AM **Date Received:** 05/06/2024 02:10PM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Nitrate as N	0.842	mg/L	1	0.034	0.04	05/06/2024	2079739	PWARNER	

Lab Sample#: 2413978-05 **Sample Source:** WSB_SS16_1-23 **External ID:**
Date Collected: 05/06/2024 01:02PM **Date Received:** 05/06/2024 02:10PM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	119	mg/L	10	1	5	05/06/2024	2079739	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	82.3	mg/L	1	0.005	1	05/20/2024	2080490	BTRINH	
Magnesium, Mg	35.4	mg/L	1	0.021	0.2	05/20/2024	2080490	BTRINH	
Potassium, K	4.57	mg/L	1	0.06	0.2	05/20/2024	2080490	BTRINH	
Sodium, Na	77.8	mg/L	1	0.2	1	05/20/2024	2080490	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	252	mg/L	1	1.19	6	05/06/2024	2079742	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	111	mg/L	1		6	05/06/2024	2079743	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1050	µmhos/cm	1		1	05/06/2024	2079750	JWOO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	344	mg/L	1	0.948	6	05/07/2024	2079734	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.51	pH	1			05/06/2024	2079751	JWOO	H1,H3
Temperature (°C)	19.3	°C	1			05/06/2024	2079751	JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	612	mg/L	1	13.2	20	05/10/2024	2079819	ABALALIO	>MCL

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FOLDER ID: 2413978

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SSF-CalWater
Scheduled Sample Date: 05/06/2024
Sampling Team: Field

Lab Sample#: 2413978-05A **Sample Source:** WSB_SS16_1-23 **External ID:**
Date Collected: 05/06/2024 01:02PM **Date Received:** 05/06/2024 02:10PM **Sample Matrix:** Aqueous **Location Desc:**

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Nitrate as N	0.937	mg/L	1	0.034	0.04	05/06/2024	2079739 PWARNER	

Lab Sample#: 2413978-06 **Sample Source:** WSB_SS_DUP **External ID:**
Date Collected: 05/06/2024 01:07PM **Date Received:** 05/06/2024 02:10PM **Sample Matrix:** Aqueous **Location Desc:** WSB_SS16_1-23

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	109	mg/L	10	1	5	05/06/2024	2079739 PWARNER	
SEM_200.7_DW(EPA 200.7)								
Calcium, Ca	84.5	mg/L	1	0.005	1	05/20/2024	2080490 BTRINH	
Magnesium, Mg	36.6	mg/L	1	0.021	0.2	05/20/2024	2080490 BTRINH	
Potassium, K	4.54	mg/L	1	0.06	0.2	05/20/2024	2080490 BTRINH	
Sodium, Na	77	mg/L	1	0.2	1	05/20/2024	2080490 BTRINH	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	1060	µmhos/cm	1		1	05/06/2024	2079750 JWOO	>MCL
MBP_HARDNESS_T(SM 2340 C)								
Hardness, Total, as CaCO3	344	mg/L	1	0.948	6	05/07/2024	2079734 MSWONG	
MBP_PH(SM 4500-H+ B)								
pH	7.5	pH	1			05/06/2024	2079751 JWOO	H1,H3
Temperature (°C)	20	°C	1			05/06/2024	2079751 JWOO	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	603	mg/L	1	13.2	20	05/10/2024	2079819 ABALALIO	>MCL

Lab Sample#: 2413978-06A **Sample Source:** WSB_SS_DUP **External ID:**
Date Collected: 05/06/2024 01:07PM **Date Received:** 05/06/2024 02:10PM **Sample Matrix:** Aqueous **Location Desc:** WSB_SS16_1-23

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Nitrate as N	0.934	mg/L	1	0.034	0.04	05/06/2024	2079739 PWARNER	

Lab Sample#: 2413978-06B **Sample Source:** WSB_SS_DUP **External ID:**
Date Collected: 05/06/2024 01:07PM **Date Received:** 05/06/2024 02:10PM **Sample Matrix:** Aqueous **Location Desc:** WSB_SS16_1-23

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_ALK(SM 2320 B)								
Alkalinity	257	mg/L	1	1.19	6	05/06/2024	2079742 ALEE	

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FOLDER ID: 2413978

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SSF-CalWater

Scheduled Sample Date: 05/06/2024
Sampling Team: Field

QC list for Run#: *2079734* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426883-01										
	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2426883-02										
	MRL_CK	Hardness, Total, as CaCO3		2.44	mg/L	81				
QC2426883-03										
	DUP of 2413537-03	Hardness, Total, as CaCO3	61.2	55.4	mg/L		10	0.474	3	Splt# 2413537-03 (61.2mg/L)
QC2426883-04										
	LCS	Hardness, Total, as CaCO3		38.9	mg/L	97			3	

QC list for Run#: *2079739* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426884-01										
	MRL_CK	Chloride		0.493	mg/L	98				
	MRL_CK	Sulfate		0.524	mg/L	105				
	MRL_CK	Nitrate as N		0.0423	mg/L	106				
QC2426884-02										
	CCV	Chloride		2.52	mg/L	101				
	CCV	Sulfate		2.54	mg/L	101				
	CCV	Nitrate as N		0.206	mg/L	104				
QC2426884-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426884-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426884-05										
	LCS	Chloride		0.557	mg/L	111				
	LCS	Sulfate		1.64	mg/L	109				
	LCS	Nitrate as N		0.266	mg/L	106				
QC2426884-06										
	LCSD of QC2426884-05	Chloride	0.557	0.493	mg/L	98	12			Splt# QC2426884-05 (0.557mg/L)
	LCSD of QC2426884-05	Sulfate	1.64	1.58	mg/L	105	3			Splt# QC2426884-05 (1.64mg/L)
	LCSD of QC2426884-05	Nitrate as N	0.266	0.256	mg/L	102	3			Splt# QC2426884-05 (0.266mg/L)
QC2426884-07										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426884-08										
	CCV	Chloride		19.8	mg/L	99				
	CCV	Sulfate		20	mg/L	100				

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FOLDER ID: 2413978

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SSF-CalWater

Scheduled Sample Date: 05/06/2024
Sampling Team: Field

QC list for Run#: *2079739* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	CCV	Nitrate as N		1.63	mg/L	103				
QC2426884-09										
	SPKD of 2412706-03	Sulfate	<0.5	1.6	mg/L	107	2			Splt# 2412706-03 (<0.5mg/L)
	SPKD of 2412706-03	Nitrate as N	<0.04	0.266	mg/L	106	1			Splt# 2412706-03 (<0.04mg/L)
QC2426884-10										
	SPK of 2412706-03	Sulfate	<0.5	1.63	mg/L	109				Splt# 2412706-03 (<0.5mg/L)
	SPK of 2412706-03	Nitrate as N	<0.04	0.27	mg/L	108				Splt# 2412706-03 (<0.04mg/L)
QC2426884-11										
	CCV	Chloride		2.42	mg/L	96				
	CCV	Sulfate		2.46	mg/L	98				
	CCV	Nitrate as N		0.196	mg/L	98				
QC2426884-12										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2426884-13										
	MRL_CK	Chloride		0.49	mg/L	97				
	MRL_CK	Sulfate		0.514	mg/L	103				
	MRL_CK	Nitrate as N		0.0419	mg/L	105				
QC2426884-14										
	SPK of 2413978-04	Sulfate	158	165	mg/L	48				Splt# 2413978-04 (158mg/L)
	SPK of 2413978-04	Nitrate as N	0.899	3.31	mg/L	96				Splt# 2413978-04 (0.899mg/L) M2
QC2426884-15										
	SPKD of 2413978-04	Sulfate	158	174	mg/L	108	5			Splt# 2413978-04 (158mg/L)
	SPKD of 2413978-04	Nitrate as N	0.899	3.67	mg/L	111	10			Splt# 2413978-04 (0.899mg/L) M2

QC list for Run#: *2079742* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426889-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2426889-02										
	MRL_CK	Alkalinity		2.79	mg/L	93				
QC2426889-03										
	SPK of 2413537-03	Alkalinity	54.1	94.6	mg/L	101			3	Splt# 2413537-03 (54.1mg/L)
QC2426889-04										
	SPKD of 2413537-03	Alkalinity	54.1	94.9	mg/L	102	0		3	Splt# 2413537-03 (54.1mg/L)
QC2426889-05										
	DUP of 2413978-06	Alkalinity	204	310	mg/L		41	1.19	6	Splt# 2413978-06 (204mg/L)
QC2426889-06										
	LCS	Alkalinity		42	mg/L	105			3	
QC2426889-07										

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2413978

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SSF-CalWater

Scheduled Sample Date: 05/06/2024
Sampling Team: Field

QC list for Run#: *2079742* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	DUP of 2413978-06B	Alkalinity	257	253	mg/L		1	1.19	6	Splt# 2413978-06B (257mg/L)
QC2426889-08										
	LCS	Alkalinity		42.3	mg/L	106			3	

QC list for Run#: *2079743* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426890-01										
	BLK	Chloride		<3	mg/L			1.16	3	
QC2426890-02										
	MRL_CK	Chloride		2.95	mg/L	98				
QC2426890-03										
	SPK of 2413537-03	Chloride	14.2	54.4	mg/L	101			3	Splt# 2413537-03 (14.2mg/L)
QC2426890-04										
	SPKD of 2413537-03	Chloride	14.2	54.3	mg/L	100	0		3	Splt# 2413537-03 (14.2mg/L)
QC2426890-05										
	DUP of 2413978-06	Chloride	115	137	mg/L		41		6	Splt# 2413978-06 (115mg/L)
QC2426890-06										
	LCS	Chloride		39.5	mg/L	98			3	
QC2426890-07										
	DUP of 2413978-06C	Chloride	115	113	mg/L		1		6	Splt# 2413978-06C (115mg/L)
QC2426890-08										
	LCS	Chloride		40.2	mg/L	101			3	

QC list for Run#: *2079750* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426897-02										
	ICV	Specific Conductance @25°C		148	µmhos/cm	101				
QC2426897-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2426897-04										
	MRL_CK	Specific Conductance @25°C		9.83	µmhos/cm	98				
QC2426897-05										
	DUP of 2412706-01	Specific Conductance @25°C	1000	1000	µmhos/cm		0		1	Splt# 2412706-01 (1000µmhos/cm)
QC2426897-06										
	CCV	Specific Conductance @25°C		101	µmhos/cm	101				
QC2426897-07										
	CCV	Specific Conductance @25°C		1430	µmhos/cm	101				

QC list for Run#: *2079751* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426896-04										
	ICV	pH		9.02	pH	99				
	ICV	Temperature (°C)		24	°C					

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Water Quality Laboratory

FOLDER ID: 2413978

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SSF-CalWater
Scheduled Sample Date: 05/06/2024
Sampling Team: Field

QC list for Run#: *2079751* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426896-05										
	DUP of 2412706-01	pH	7	7.03	pH		0			Splt# 2412706-01 (7pH) H1,H3
	DUP of 2412706-01	Temperature (°C)	19.2	19.3	°C					Splt# 2412706-01 (19.2°C)
QC2426896-06										
	CCV	pH		9.02	pH	99				
	CCV	Temperature (°C)		20.1	°C					
QC2426896-07										
	CCV	pH		9.01	pH	99				
	CCV	Temperature (°C)		20.3	°C					

QC list for Run#: *2079785* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426924-01										
	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2426924-02										
	MRL_CK	Hardness, Total, as CaCO3		2.29	mg/L	76				
QC2426924-03										
	DUP of 2414132-01	Hardness, Total, as CaCO3	<15	<15	mg/L		N/A	2.37	15	Splt# 2414132-01 (<15mg/L)
QC2426924-03A										
	DUP of 2414132-01A	Hardness, Total, as CaCO3	247	248	mg/L		N/A	4.74	30	Splt# 2414132-01A (247mg/L)
QC2426924-04										
	LCS	Hardness, Total, as CaCO3		40	mg/L	100			3	

QC list for Run#: *2079819* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2426942-01										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2426942-02										
	DUP of 2414182-01	Total Dissolved Solids	58	54	mg/L		7	13.2	20	Splt# 2414182-01 (58mg/L)
QC2426942-03										
	DUP of 2413978-03	Total Dissolved Solids	556	551	mg/L		0	13.2	20	Splt# 2413978-03 (556mg/L)
QC2426942-04										
	LCS	Total Dissolved Solids		100	mg/L	105		13.2	20	

QC list for Run#: *2080490* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427343-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2427343-02										
	LCS	Calcium, Ca		2.01	mg/L	100		0.04	1	

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Water Quality Laboratory

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FOLDER ID: 2413978

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SSF-CalWater

Scheduled Sample Date: 05/06/2024
Sampling Team: Field

QC list for Run#: *2080490* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result		Units	% Rec	RPD	MDL	MRL	Flag/Comments
			Parent	Current						
	LCS	Magnesium, Mg		2.06	mg/L	103		0.007	0.2	
	LCS	Potassium, K		1.97	mg/L	98		0.04	0.2	
	LCS	Sodium, Na		2.08	mg/L	104		0.02	1	
QC2427343-03										
	DUP of 2413978-01	Calcium, Ca	54.3	53.5	mg/L		1	0.005	1	Splt# 2413978-01 (54.3mg/L)
	DUP of 2413978-01	Magnesium, Mg	64.7	63.8	mg/L		1	0.021	0.2	Splt# 2413978-01 (64.7mg/L)
	DUP of 2413978-01	Potassium, K	2.4	2.36	mg/L		1	0.06	0.2	Splt# 2413978-01 (2.4mg/L)
	DUP of 2413978-01	Sodium, Na	72	71.1	mg/L		1	0.2	1	Splt# 2413978-01 (72mg/L)
QC2427343-04										
	SPK of 2413978-01	Calcium, Ca	54.3	55.5	mg/L	60		0.04	1	Splt# 2413978-01 (54.3mg/L)
	SPK of 2413978-01	Magnesium, Mg	64.7	65.9	mg/L	59		0.007	0.2	Splt# 2413978-01 (64.7mg/L)
	SPK of 2413978-01	Potassium, K	2.4	4.4	mg/L	100		0.04	0.2	Splt# 2413978-01 (2.4mg/L)
	SPK of 2413978-01	Sodium, Na	72	73.1	mg/L	54		0.02	1	Splt# 2413978-01 (72mg/L)
QC2427343-05										
	SPKD of 2413978-01	Calcium, Ca	54.3	56.2	mg/L	96	1	0.04	1	Splt# 2413978-01 (54.3mg/L)
	SPKD of 2413978-01	Magnesium, Mg	64.7	66.7	mg/L	98	1	0.007	0.2	Splt# 2413978-01 (64.7mg/L)
	SPKD of 2413978-01	Potassium, K	2.4	4.49	mg/L	104	2	0.04	0.2	Splt# 2413978-01 (2.4mg/L)
	SPKD of 2413978-01	Sodium, Na	72	73.9	mg/L	94	1	0.02	1	Splt# 2413978-01 (72mg/L)
QC2427343-06										
	MRL_CK	Calcium, Ca		0.0265	mg/L	66		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0452	mg/L	90		0.021	0.021	
	MRL_CK	Potassium, K		0.13	mg/L	65		0.06	0.06	
	MRL_CK	Sodium, Na		0.241	mg/L	120		0.2	0.2	
QC2427421-01										
	ICV	Calcium, Ca		10.2	mg/L	103		0.05	1	
	ICV	Magnesium, Mg		10	mg/L	101		0.01	0.2	
	ICV	Potassium, K		99.8	mg/L	101		0.03	0.2	
	ICV	Sodium, Na		10	mg/L	100		0.002	1	

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Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2414026

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/13/2024
Sampling Team: Field

Lab Sample#: 2414026-01 **Sample Source:** WSB_SF11_LM3S **External ID:**

Date Collected: 05/13/2024 10:51AM **Date Received:** 05/13/2024 04:01PM **Sample Matrix:** Aqueous **Location Desc:** SF#11 - LMMW3S

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))									
Sulfate	**2.61**	**mg/L**	1	0.1	0.5	05/13/2024	2080087	PWARNER	
Nitrate as N	**<0.04**	**mg/L**	1	0.034	0.04	05/13/2024	2080087	PWARNER	M,M1,M2
SEM_200.7_DW(EPA 200.7)									
Calcium, Ca	**67.6**	**mg/L**	1	0.005	1	05/22/2024	2080623	BTRINH	
Magnesium, Mg	**70.7**	**mg/L**	1	0.021	0.2	05/22/2024	2080623	BTRINH	
Potassium, K	**3.23**	**mg/L**	1	0.06	0.2	05/22/2024	2080623	BTRINH	
Sodium, Na	**43.6**	**mg/L**	1	0.2	1	05/22/2024	2080623	BTRINH	
MBP_ALK(SM 2320 B)									
Alkalinity	**465**	**mg/L**	1	2.96	15	05/13/2024	2080131	ALEE	
MBP_CHLORIDE(SM 4500-CL- D)									
Chloride	**85.2**	**mg/L**	1		15	05/13/2024	2080132	ALEE	
MBP_COND(SM 2510 B)									
Specific Conductance @25°C	**1040**	**µmhos/cm**	1		1	05/13/2024	2080129	MSWONG	>MCL
MBP_HARDNESS_T(SM 2340 C)									
Hardness, Total, as CaCO3	**477**	**mg/L**	1	2.37	15	05/13/2024	2080134	ALEE	
MBP_PH(SM 4500-H+ B)									
pH	**6.98**	**pH**	1			05/13/2024	2080130	MSWONG	H1,H3
Temperature (°C)	**17**	**°C**	1			05/13/2024	2080130	MSWONG	
MBP_TDS(SM 2540 C)									
Total Dissolved Solids	**563**	**mg/L**	1	13.2	20	05/16/2024	2080179	ALEE	>MCL

Lab Sample#: 2414026-02 **Sample Source:** WSB_SF10_LM3D **External ID:**

Date Collected: 05/13/2024 01:14PM **Date Received:** 05/13/2024 04:01PM **Sample Matrix:** Aqueous **Location Desc:** SF#10 - LMMW3D

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))									
Sulfate	**8.63**	**mg/L**	1	0.1	0.5	05/13/2024	2080087	PWARNER	
Nitrate as N	**<0.04**	**mg/L**	1	0.034	0.04	05/13/2024	2080087	PWARNER	
SEM_200.7_DW(EPA 200.7)									
Calcium, Ca	**28.8**	**mg/L**	1	0.005	1	05/22/2024	2080623	BTRINH	
Magnesium, Mg	**30.6**	**mg/L**	1	0.021	0.2	05/22/2024	2080623	BTRINH	
Potassium, K	**2**	**mg/L**	1	0.06	0.2	05/22/2024	2080623	BTRINH	

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Water Quality Laboratory

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MILLBRAE 1449

FOLDER ID: 2414026

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 05/13/2024
Sampling Team: Field

Sodium, Na	46.1	mg/L	1	0.2	1	05/22/2024	2080623	BTRINH

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	207	mg/L	1	1.19	6	05/13/2024	2080131 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	68.5	mg/L	1		6	05/13/2024	2080132 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	594	µmhos/cm	1		1	05/13/2024	2080129 MSWONG	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	200	mg/L	1	0.948	6	05/13/2024	2080134 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.43	pH	1			05/13/2024	2080130 MSWONG	H1,H3
Temperature (°C)	14.4	°C	1			05/13/2024	2080130 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	297	mg/L	1	13.2	20	05/16/2024	2080179 ALEE	

Lab Sample#: 2414026-03 **Sample Source:** WSB_SF15_LM6D **External ID:**
Date Collected: 05/13/2024 03:25PM **Date Received:** 05/13/2024 04:01PM **Sample Matrix:** Aqueous **Location Desc:** SF#15 - LMMW6D

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	30.9	mg/L	10	1	5	05/13/2024	2080087 PWARNER	
Nitrate as N	7.38	mg/L	10	0.34	0.4	05/13/2024	2080087 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	29.7	mg/L	1	0.005	1	05/22/2024	2080623 BTRINH	
Magnesium, Mg	30.6	mg/L	1	0.021	0.2	05/22/2024	2080623 BTRINH	
Potassium, K	1.79	mg/L	1	0.06	0.2	05/22/2024	2080623 BTRINH	
Sodium, Na	42.5	mg/L	1	0.2	1	05/22/2024	2080623 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	170	mg/L	1	1.19	6	05/13/2024	2080131 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	52.7	mg/L	1		6	05/13/2024	2080132 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	600	µmhos/cm	1		1	05/13/2024	2080129 MSWONG	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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Water Quality Laboratory

ELAP Cert #:
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MILLBRAE 1449

FOLDER ID: 2414026

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 05/13/2024
Sampling Team: Field

Hardness, Total, as CaCO3	101	mg/L	1	0.474	3	05/13/2024	2080134	ALEE

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.65	pH	1			05/13/2024	2080130	MSWONG	H1,H3
Temperature (°C)	17.7	°C	1			05/13/2024	2080130	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	342	mg/L	1	13.2	20	05/16/2024	2080179	ALEE	

Lab Sample#: 2414026-05 **Sample Source:** WSB_SF_DUP_FULL **External ID:**
Date Collected: 05/13/2024 10:53AM **Date Received:** 05/13/2024 04:01PM **Sample Matrix:** Aqueous **Location Desc:** SF#11 - LMMW3S

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	2.58	mg/L	1	0.1	0.5	05/13/2024	2080087	PWARNER	
Nitrate as N	<0.04	mg/L	1	0.034	0.04	05/13/2024	2080087	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	69.1	mg/L	1	0.005	1	05/22/2024	2080623	BTRINH	
Magnesium, Mg	72.1	mg/L	1	0.021	0.2	05/22/2024	2080623	BTRINH	
Potassium, K	3.28	mg/L	1	0.06	0.2	05/22/2024	2080623	BTRINH	
Sodium, Na	44.5	mg/L	1	0.2	1	05/22/2024	2080623	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	456	mg/L	1	2.96	15	05/13/2024	2080131	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	83.6	mg/L	1		15	05/13/2024	2080132	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1060	µmhos/cm	1		1	05/13/2024	2080129	MSWONG	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	476	mg/L	1	2.37	15	05/13/2024	2080134	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	6.91	pH	1			05/13/2024	2080130	MSWONG	H1,H3
Temperature (°C)	13.1	°C	1			05/13/2024	2080130	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	578	mg/L	1	13.2	20	05/16/2024	2080179	ALEE	>MCL

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ELAP Cert #:

SAN FRANCISCO PUBLIC UTILITIES COMMISSION

SEWPCP 1721

Water Quality Laboratory

MILLBRAE 1449

FOLDER ID: 2414026

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/13/2024
Sampling Team: Field

QC list for Run#: *2080087* **and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427131-01										
	MRL_CK	Chloride		0.476	mg/L	95				
	MRL_CK	Sulfate		0.487	mg/L	97				
	MRL_CK	Nitrate as N		0.0387	mg/L	97				
QC2427131-02										
	CCV	Chloride		2.55	mg/L	102				
	CCV	Sulfate		2.59	mg/L	104				
	CCV	Nitrate as N		0.206	mg/L	104				
QC2427131-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427131-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427131-05										
	LCS	Chloride		0.538	mg/L	108				
	LCS	Sulfate		1.57	mg/L	105				
	LCS	Nitrate as N		0.308	mg/L	123				
QC2427131-06										
	LCSD of QC2427131-05	Chloride	0.538	0.546	mg/L	109	1			Splt# QC2427131-05 (0.538mg/L)
	LCSD of QC2427131-05	Sulfate	1.57	1.54	mg/L	103	1			Splt# QC2427131-05 (1.57mg/L)
	LCSD of QC2427131-05	Nitrate as N	0.308	0.292	mg/L	117	5			Splt# QC2427131-05 (0.308mg/L)
QC2427131-07										
	CCV	Chloride		19.8	mg/L	99				
	CCV	Sulfate		20.2	mg/L	101				
	CCV	Nitrate as N		1.61	mg/L	101				
QC2427131-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427131-09										
	LCS	Chloride		0.487	mg/L	97				
	LCS	Sulfate		1.53	mg/L	102				
	LCS	Nitrate as N		0.25	mg/L	99				
QC2427131-10										
	LCSD of QC2427131-09	Chloride	0.487	0.496	mg/L	99	1			Splt# QC2427131-09 (0.487mg/L)
	LCSD of QC2427131-09	Sulfate	1.53	1.55	mg/L	104	1			Splt# QC2427131-09 (1.53mg/L)
	LCSD of QC2427131-09	Nitrate as N	0.25	0.246	mg/L	98	1			Splt# QC2427131-09 (0.25mg/L)

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Water Quality Laboratory

ELAP Cert #:
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MILLBRAE 1449

FOLDER ID: 2414026

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/13/2024
Sampling Team: Field

QC list for Run#: *2080087* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427131-11										
	SPK of 2414026-01	Sulfate	2.61	4.17	mg/L	104				Splt# 2414026-01 (2.61mg/L)
	SPK of 2414026-01	Nitrate as N	<0.04	0.301	mg/L	120				Splt# 2414026-01 (<0.04mg/L) M,M1,M2
QC2427131-12										
	SPKD of 2414026-01	Sulfate	2.61	4.16	mg/L	103	0			Splt# 2414026-01 (2.61mg/L)
	SPKD of 2414026-01	Nitrate as N	<0.04	0.333	mg/L	133	10			Splt# 2414026-01 (<0.04mg/L) M,M1,M2

QC list for Run#: *2080129* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427158-02										
	ICV	Specific Conductance @25°C		147	µmhos/cm	99				
QC2427158-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2427158-04										
	MRL_CK	Specific Conductance @25°C		9.84	µmhos/cm	98				
QC2427158-05										
	DUP of 2414026-01	Specific Conductance @25°C	1040	1040	µmhos/cm		0		1	Splt# 2414026-01 (1040µmhos/cm)
QC2427158-06										
	CCV	Specific Conductance @25°C		101	µmhos/cm	101				

QC list for Run#: *2080130* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427159-04										
	ICV	pH		8.97	pH	99				
	ICV	Temperature (°C)		20.7	°C					
QC2427159-05										
	DUP of 2414026-01	pH	6.98	6.99	pH		0			Splt# 2414026-01 (6.98pH) H1,H3
	DUP of 2414026-01	Temperature (°C)	17	17	°C					Splt# 2414026-01 (17°C)
QC2427159-06										
	CCV	pH		8.97	pH	99				
	CCV	Temperature (°C)		20.4	°C					

QC list for Run#: *2080131* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427160-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2427160-02										
	MRL_CK	Alkalinity		2.64	mg/L	88				
QC2427160-03										
	SPK of 2413804-05	Alkalinity	55.6	96.9	mg/L	103			3	Splt# 2413804-05 (55.6mg/L)
QC2427160-04										
	SPKD of 2413804-05	Alkalinity	55.6	96.7	mg/L	103	0		3	Splt# 2413804-05 (55.6mg/L)

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Water Quality Laboratory

ELAP Cert #:
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MILLBRAE 1449

FOLDER ID: 2414026

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/13/2024
Sampling Team: Field

QC list for Run#: *2080131* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427160-05	DUP of 2414026-05	Alkalinity	456	462	mg/L		1	2.96	15	Splt# 2414026-05 (456mg/L)
QC2427160-06	LCS	Alkalinity		42.5	mg/L	106			3	

QC list for Run#: *2080132* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427161-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2427161-02	MRL_CK	Chloride		2.99	mg/L	99				
QC2427161-03	SPK of 2413804-05	Chloride	14.3	54.6	mg/L	101			3	Splt# 2413804-05 (14.3mg/L)
QC2427161-04	SPKD of 2413804-05	Chloride	14.3	54.4	mg/L	100	0		3	Splt# 2413804-05 (14.3mg/L)
QC2427161-05	DUP of 2414026-05	Chloride	83.6	84.4	mg/L		0		15	Splt# 2414026-05 (83.6mg/L)
QC2427161-06	LCS	Chloride		40.5	mg/L	101			3	

QC list for Run#: *2080134* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427163-01	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2427163-02	MRL_CK	Hardness, Total, as CaCO3		2.6	mg/L	86				
QC2427163-03	DUP of 2414026-05	Hardness, Total, as CaCO3	476	472	mg/L		0	2.37	15	Splt# 2414026-05 (476mg/L)
QC2427163-04	LCS	Hardness, Total, as CaCO3		40	mg/L	100			3	

QC list for Run#: *2080179* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427200-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2427200-02	LCS	Total Dissolved Solids		88	mg/L	92		13.2	20	
QC2427200-03	DUP of 2414026-05	Total Dissolved Solids	578	576	mg/L		0	13.2	20	Splt# 2414026-05 (578mg/L)

QC list for Run#: *2080623* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427493-01	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	

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FOLDER ID: 2414026

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/13/2024
Sampling Team: Field

QC list for Run#: *2080623* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2427493-02										
	LCS	Calcium, Ca		2.03	mg/L	101		0.04	1	
	LCS	Magnesium, Mg		2.03	mg/L	102		0.007	0.2	
	LCS	Potassium, K		2.04	mg/L	102		0.04	0.2	
	LCS	Sodium, Na		1.9	mg/L	94		0.02	1	
QC2427493-03										
	DUP of 2413594-01	Calcium, Ca	70.5	68.3	mg/L		3	0.005	1	Splt# 2413594-01 (70.5mg/L)
	DUP of 2413594-01	Magnesium, Mg	61.7	59.2	mg/L		4	0.021	0.2	Splt# 2413594-01 (61.7mg/L)
	DUP of 2413594-01	Potassium, K	3.54	3.51	mg/L		0	0.06	0.2	Splt# 2413594-01 (3.54mg/L)
	DUP of 2413594-01	Sodium, Na	76.4	76.3	mg/L		0	0.2	1	Splt# 2413594-01 (76.4mg/L)
QC2427493-04										
	SPK of 2413594-01	Calcium, Ca	70.5	70.3	mg/L	0		0.04	1	Splt# 2413594-01 (70.5mg/L)
	SPK of 2413594-01	Magnesium, Mg	61.7	61.2	mg/L	0		0.007	0.2	Splt# 2413594-01 (61.7mg/L)
	SPK of 2413594-01	Potassium, K	3.54	5.57	mg/L	102		0.04	0.2	Splt# 2413594-01 (3.54mg/L)
	SPK of 2413594-01	Sodium, Na	76.4	78.4	mg/L	99		0.02	1	Splt# 2413594-01 (76.4mg/L)
QC2427493-05										
	SPKD of 2413594-01	Calcium, Ca	70.5	69.8	mg/L	0	0	0.04	1	Splt# 2413594-01 (70.5mg/L)
	SPKD of 2413594-01	Magnesium, Mg	61.7	60.6	mg/L	0	0	0.007	0.2	Splt# 2413594-01 (61.7mg/L)
	SPKD of 2413594-01	Potassium, K	3.54	5.5	mg/L	98	1	0.04	0.2	Splt# 2413594-01 (3.54mg/L)
	SPKD of 2413594-01	Sodium, Na	76.4	77.8	mg/L	71	0	0.02	1	Splt# 2413594-01 (76.4mg/L)
QC2427493-06										
	DUP of 2413594-02	Calcium, Ca	51.6	51.1	mg/L		1	0.005	1	Splt# 2413594-02 (51.6mg/L)
	DUP of 2413594-02	Magnesium, Mg	46.8	46.3	mg/L		1	0.021	0.2	Splt# 2413594-02 (46.8mg/L)
	DUP of 2413594-02	Potassium, K	2.8	2.8	mg/L		0	0.06	0.2	Splt# 2413594-02 (2.8mg/L)
	DUP of 2413594-02	Sodium, Na	74.3	73.5	mg/L		1	0.2	1	Splt# 2413594-02 (74.3mg/L)
QC2427493-07										
	SPK of 2413594-02	Calcium, Ca	51.6	53.5	mg/L	91		0.04	1	Splt# 2413594-02 (51.6mg/L)
	SPK of 2413594-02	Magnesium, Mg	46.8	48.6	mg/L	89		0.007	0.2	Splt# 2413594-02 (46.8mg/L)
	SPK of 2413594-02	Potassium, K	2.8	4.81	mg/L	100		0.04	0.2	Splt# 2413594-02 (2.8mg/L)
	SPK of 2413594-02	Sodium, Na	74.3	76	mg/L	84		0.02	1	Splt# 2413594-02 (74.3mg/L)
QC2427493-08										
	SPKD of 2413594-02	Calcium, Ca	51.6	52.8	mg/L	59	1	0.04	1	Splt# 2413594-02 (51.6mg/L)
	SPKD of 2413594-02	Magnesium, Mg	46.8	48	mg/L	58	1	0.007	0.2	Splt# 2413594-02 (46.8mg/L)
	SPKD of 2413594-02	Potassium, K	2.8	4.8	mg/L	100	0	0.04	0.2	Splt# 2413594-02 (2.8mg/L)
	SPKD of 2413594-02	Sodium, Na	74.3	75.1	mg/L	42	1	0.02	1	Splt# 2413594-02 (74.3mg/L)
QC2427493-09										
	MRL_CK	Calcium, Ca		0.0074	mg/L	18		0.005	0.005	
	MRL_CK	Magnesium, Mg		<0.021	mg/L	N/A		0.021	0.021	
	MRL_CK	Potassium, K		0.23	mg/L	115		0.06	0.06	

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FOLDER ID: 2414026

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/13/2024
Sampling Team: Field

QC list for Run#: *2080623* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	MRL_CK	Sodium, Na		0.234	mg/L	117		0.2	0.2	
QC2427515-01										
	ICV	Calcium, Ca		10.2	mg/L	104		0.05	1	
	ICV	Magnesium, Mg		9.97	mg/L	101		0.01	0.2	
	ICV	Potassium, K		99.1	mg/L	100		0.03	0.2	
	ICV	Sodium, Na		9.86	mg/L	98		0.002	1	

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Water Quality Laboratory

FOLDER ID: 2414027

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/16/2024
Sampling Team: Field

Lab Sample#: 2414027-02 **Sample Source:** WSB_SF12_LM4S **External ID:**
Date Collected: 07/16/2024 10:16AM **Date Received:** 07/16/2024 12:58PM **Sample Matrix:** Aqueous **Location Desc:** SF#12 - LMMW4S

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	47.3	mg/L	1		6	07/16/2024	2083363 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	707	µmhos/cm	1		1	07/16/2024	2083338 MSWONG	
MBP_PH(SM 4500-H+ B)								
pH	7.39	pH	1			07/16/2024	2083336 MSWONG	H1,H3
Temperature (°C)	19.6	°C	1			07/16/2024	2083336 MSWONG	

Lab Sample#: 2414027-02A **Sample Source:** WSB_SF12_LM4S **External ID:**
Date Collected: 07/16/2024 10:16AM **Date Received:** 07/16/2024 12:58PM **Sample Matrix:** Aqueous **Location Desc:** SF#12 - LMMW4S

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Nitrate as N	13.9	mg/L	10	0.34	0.4	07/17/2024	2083409 PWARNER	>MCL

Lab Sample#: 2414027-03 **Sample Source:** WSB_SF13_LM4SS **External ID:**
Date Collected: 07/16/2024 10:04AM **Date Received:** 07/16/2024 12:58PM **Sample Matrix:** Aqueous **Location Desc:** SF#13 - LMMW4SS

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	46	mg/L	1		6	07/16/2024	2083363 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	724	µmhos/cm	1		1	07/16/2024	2083338 MSWONG	
MBP_PH(SM 4500-H+ B)								
pH	7.54	pH	1			07/16/2024	2083336 MSWONG	H1,H3
Temperature (°C)	19.6	°C	1			07/16/2024	2083336 MSWONG	

Lab Sample#: 2414027-03A **Sample Source:** WSB_SF13_LM4SS **External ID:**
Date Collected: 07/16/2024 10:04AM **Date Received:** 07/16/2024 12:58PM **Sample Matrix:** Aqueous **Location Desc:** SF#13 - LMMW4SS

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Nitrate as N	6.92	mg/L	10	0.34	0.4	07/17/2024	2083409 PWARNER	

Lab Sample#: 2414027-04 **Sample Source:** WSB_SF_DUP **External ID:**
Date Collected: 07/16/2024 10:05AM **Date Received:** 07/16/2024 12:58PM **Sample Matrix:** Aqueous **Location Desc:** SF#13 - LMMW4SS

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2414027

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 07/16/2024
Sampling Team: Field

Chloride	**46.2**	**mg/L**	1		6	07/16/2024	2083363	ALEE

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	**727**	**µmhos/cm**	1		1	07/16/2024	2083338	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	**7.48**	**pH**	1			07/16/2024	2083336	MSWONG	H1,H3
Temperature (°C)	**19.5**	**°C**	1			07/16/2024	2083336	MSWONG	

Lab Sample#: 2414027-04A **Sample Source:** WSB_SF_DUP **External ID:**

Date Collected: 07/16/2024 10:05AM **Date Received:** 07/16/2024 12:58PM **Sample Matrix:** Aqueous **Location Desc:** SF#13 - LMMW4SS

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Nitrate as N	**7.23**	**mg/L**	10	0.34	0.4	07/17/2024	2083409	PWARNER	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2414027

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 07/16/2024
Sampling Team: Field

QC list for Run#: *2083336* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429446-04										
	ICV	pH		8.96	pH	99				
	ICV	Temperature (°C)		21.5	°C					
QC2429446-05										
	DUP of 2415872-03	pH	8.86	8.86	pH		0			Splt# 2415872-03 (8.86pH) H1,H3
	DUP of 2415872-03	Temperature (°C)	19.5	19.5	°C					Splt# 2415872-03 (19.5°C)
QC2429446-06										
	CCV	pH		8.96	pH	99				
	CCV	Temperature (°C)		21.6	°C					

QC list for Run#: *2083338* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429447-02										
	ICV	Specific Conductance @25°C		146	µmhos/cm	99				
QC2429447-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2429447-04										
	MRL_CK	Specific Conductance @25°C		10	µmhos/cm	100				
QC2429447-05										
	DUP of 2415872-03	Specific Conductance @25°C	68.3	68	µmhos/cm		0		1	Splt# 2415872-03 (68.3µmhos/cm)
QC2429447-06										
	CCV	Specific Conductance @25°C		99.9	µmhos/cm	99				
QC2429447-07										
	CCV	Specific Conductance @25°C		1420	µmhos/cm	100				

QC list for Run#: *2083363* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429452-01										
	BLK	Chloride		<3	mg/L			1.16	3	
QC2429452-02										
	MRL_CK	Chloride		3.38	mg/L	113				
QC2429452-03										
	SPK of 2414027-02	Chloride	47.3	128	mg/L	101			6	Splt# 2414027-02 (47.3mg/L)
QC2429452-04										
	SPKD of 2414027-02	Chloride	47.3	129	mg/L	103	0		6	Splt# 2414027-02 (47.3mg/L)
QC2429452-06										
	LCS	Chloride		40.5	mg/L	101			3	

QC list for Run#: *2083367* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429454-01										
	MRL_CK	Chloride		0.541	mg/L	108				
	MRL_CK	Nitrate as N		0.0406	mg/L	102				
QC2429454-02										

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2414027

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/16/2024
Sampling Team: Field

QC list for Run#: *2083367* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	CCV	Chloride		2.29	mg/L	91				
	CCV	Nitrate as N		0.186	mg/L	93				
QC2429454-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429454-04										
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429454-05										
	LCS	Chloride		0.516	mg/L	103				
	LCS	Nitrate as N		0.248	mg/L	99				
QC2429454-06										
	LCSD of QC2429454-05	Chloride	0.516	0.47	mg/L	94	9			Splt# QC2429454-05 (0.516mg/L)
	LCSD of QC2429454-05	Nitrate as N	0.248	0.221	mg/L	88	11			Splt# QC2429454-05 (0.248mg/L)
QC2429454-07										
	CCV	Chloride		19.9	mg/L	99				
	CCV	Nitrate as N		1.6	mg/L	100				
QC2429454-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429454-09										
	SPK of 2414027-02	Nitrate as N	14	16.1	mg/L	82				Splt# 2414027-02 (14mg/L) A1
QC2429454-10										
	SPKD of 2414027-02	Nitrate as N	14	17	mg/L	119	5			Splt# 2414027-02 (14mg/L) A1

QC list for Run#: *2083409* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429485-01										
	MRL_CK	Chloride		0.527	mg/L	105				
	MRL_CK	Nitrate as N		0.0404	mg/L	101				
QC2429485-02										
	CCV	Chloride		2.49	mg/L	99				
	CCV	Nitrate as N		0.205	mg/L	103				
QC2429485-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429485-04										
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429485-05										
	LCS	Chloride		0.613	mg/L	123				
	LCS	Nitrate as N		0.299	mg/L	120				
QC2429485-06										

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Water Quality Laboratory

FOLDER ID: 2414027

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/16/2024
Sampling Team: Field

QC list for Run#: *2083409* **and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))**

Sample #	Name	Analyte	Result		Units	% Rec	RPD	MDL	MRL	Flag/Comments
			Parent	Current						
	LCSD of QC2429485-09	Chloride	0.528	0.512	mg/L	102	3			Splt# QC2429485-09 (0.528mg/L)
	LCSD of QC2429485-09	Nitrate as N	0.245	0.234	mg/L	93	4			Splt# QC2429485-09 (0.245mg/L)
QC2429485-07										
	CCV	Chloride		20.3	mg/L	101				
	CCV	Nitrate as N		1.63	mg/L	102				
QC2429485-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429485-09										
	LCS	Chloride		0.528	mg/L	106				
	LCS	Nitrate as N		0.245	mg/L	98				
QC2429485-10										
	SPK of 2414027-03A	Nitrate as N	6.92	9.64	mg/L	109				Splt# 2414027-03A (6.92mg/L)
QC2429485-11										
	SPKD of 2414027-03A	Nitrate as N	6.92	9.7	mg/L	111	0			Splt# 2414027-03A (6.92mg/L)

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2414028

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/22/2024
Sampling Team: Field

Lab Sample#: 2414028-02 **Sample Source:** WSB_SF56_LM8SS **External ID:**
Date Collected: 07/22/2024 12:01PM **Date Received:** 07/22/2024 01:35PM **Sample Matrix:** Aqueous **Location Desc:** LMMW8SS

Test/Analyte

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	30.3	mg/L	1		3	07/22/2024	2083616 MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	677	µmhos/cm	1		1	07/22/2024	2083627 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	6.89	pH	1			07/22/2024	2083628 ALEE	H1,H3
Temperature (°C)	19	°C	1			07/22/2024	2083628 ALEE	

Lab Sample#: 2414028-02B **Sample Source:** WSB_SF56_LM8SS **External ID:**
Date Collected: 07/22/2024 12:01PM **Date Received:** 07/22/2024 01:35PM **Sample Matrix:** Aqueous **Location Desc:** LMMW8SS

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	7.31	mg/L	10	0.34	0.4	07/23/2024	2083666 PWARNER	

Lab Sample#: 2414028-03 **Sample Source:** WSB_SF76_LMMW9S **External ID:**
Date Collected: 07/22/2024 10:10AM **Date Received:** 07/22/2024 01:35PM **Sample Matrix:** Aqueous **Location Desc:** SF#76 - LMMW9S

Test/Analyte

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	4540	µmhos/cm	1		1	07/22/2024	2083627 ALEE	>MCL

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.26	pH	1			07/22/2024	2083628 ALEE	H1,H3
Temperature (°C)	18.4	°C	1			07/22/2024	2083628 ALEE	

Lab Sample#: 2414028-03B **Sample Source:** WSB_SF76_LMMW9S **External ID:**
Date Collected: 07/22/2024 10:10AM **Date Received:** 07/22/2024 01:35PM **Sample Matrix:** Aqueous **Location Desc:** SF#76 - LMMW9S

Test/Analyte

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	775	mg/L	1		15	07/22/2024	2083616 MSWONG	>MCL

Lab Sample#: 2414028-03C **Sample Source:** WSB_SF76_LMMW9S **External ID:**
Date Collected: 07/22/2024 10:10AM **Date Received:** 07/22/2024 01:35PM **Sample Matrix:** Aqueous **Location Desc:** SF#76 - LMMW9S

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	<0.2	mg/L	5	0.17	0.2	07/23/2024	2083666 PWARNER	M

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Water Quality Laboratory

FOLDER ID: 2414028

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/22/2024
Sampling Team: Field

Lab Sample#: 2414028-04 **Sample Source:** WSB_SF_DUP **External ID:**

Date Collected: 07/22/2024 10:11AM **Date Received:** 07/22/2024 01:35PM **Sample Matrix:** Aqueous **Location Desc:** SF#76 - LMMW9S

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	4570	µmhos/cm	1		1	07/22/2024	2083627 ALEE	>MCL
MBP_PH(SM 4500-H+ B)								
pH	7.24	pH	1			07/22/2024	2083628 ALEE	H1,H3
Temperature (°C)	18.6	°C	1			07/22/2024	2083628 ALEE	

Lab Sample#: 2414028-04B **Sample Source:** WSB_SF_DUP **External ID:**

Date Collected: 07/22/2024 10:11AM **Date Received:** 07/22/2024 01:35PM **Sample Matrix:** Aqueous **Location Desc:** SF#76 - LMMW9S

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	779	mg/L	1		15	07/22/2024	2083616 MSWONG	>MCL

Lab Sample#: 2414028-04C **Sample Source:** WSB_SF_DUP **External ID:**

Date Collected: 07/22/2024 10:11AM **Date Received:** 07/22/2024 01:35PM **Sample Matrix:** Aqueous **Location Desc:** SF#76 - LMMW9S

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Nitrate as N	<0.2	mg/L	5	0.17	0.2	07/23/2024	2083666 PWARNER	M

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Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/22/2024
Sampling Team: Field

QC list for Run#: *2083616* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429627-01										
	BLK	Chloride		<3	mg/L			1.16	3	
QC2429627-02										
	MRL_CK	Chloride		2.89	mg/L	96				
QC2429627-03										
	SPK of 2414028-02	Chloride	30.3	71.3	mg/L	102			3	Splt# 2414028-02 (30.3mg/L)
QC2429627-04										
	SPKD of 2414028-02	Chloride	30.3	71.2	mg/L	102	0		3	Splt# 2414028-02 (30.3mg/L)
QC2429627-06										
	LCS	Chloride		42.8	mg/L	107			3	
QC2429627-07										
	LCS	Chloride		41.2	mg/L	103			3	

QC list for Run#: *2083618* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429629-01										
	MRL_CK	Chloride		0.545	mg/L	109				
	MRL_CK	Nitrate as N		0.0438	mg/L	110				
QC2429629-02										
	CCV	Chloride		2.42	mg/L	97				
	CCV	Nitrate as N		0.195	mg/L	98				
QC2429629-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429629-04										
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429629-05										
	LCS	Chloride		<0	mg/L					
	LCS	Nitrate as N		<0	mg/L					
QC2429629-06										
	LCSD of QC2429629-05	Chloride	<0	<0	mg/L					Splt# QC2429629-05 (<0mg/L)
	LCSD of QC2429629-05	Nitrate as N	<0	<0	mg/L					Splt# QC2429629-05 (<0mg/L)
QC2429629-07										
	CCV	Chloride		24.5	mg/L	123				
	CCV	Nitrate as N		2.1	mg/L	132				
QC2429629-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429629-09										
	SPK of 2414028-02	Nitrate as N	<0.04	<0	mg/L					Splt# 2414028-02 (<0.04mg/L)
QC2429629-10										
	SPKD of 2414028-02	Nitrate as N	<0.04	<0	mg/L					Splt# 2414028-02 (<0.04mg/L)

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Water Quality Laboratory

FOLDER ID: 2414028

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/22/2024
Sampling Team: Field

QC list for Run#: *2083627* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429636-01										
	CAL	Specific Conductance @25°C		1420	µmhos/cm	101				
QC2429636-02										
	ICV	Specific Conductance @25°C		146	µmhos/cm	99				
QC2429636-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2429636-04										
	MRL_CK	Specific Conductance @25°C		10	µmhos/cm	100				
QC2429636-05										
	DUP of 2415601-01	Specific Conductance @25°C	22.6	22.4	µmhos/cm		0		1	Splt# 2415601-01 (22.6µmhos/cm)
QC2429636-06										
	CCV	Specific Conductance @25°C		98.8	µmhos/cm	98				
QC2429636-07										
	CCV	Specific Conductance @25°C		1410	µmhos/cm	99				

QC list for Run#: *2083628* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429637-04										
	ICV	pH		8.97	pH	99				
	ICV	Temperature (°C)		21.7	°C					
QC2429637-05										
	DUP of 2415458-01	pH	8.94	8.95	pH		0			Splt# 2415458-01 (8.94pH) H1,H3
	DUP of 2415458-01	Temperature (°C)	19.1	19.2	°C					Splt# 2415458-01 (19.1°C)
QC2429637-06										
	CCV	pH		8.97	pH	99				
	CCV	Temperature (°C)		21.5	°C					
QC2429637-07										
	CCV	pH		8.97	pH	99				
	CCV	Temperature (°C)		21.4	°C					

QC list for Run#: *2083666* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429671-01										
	MRL_CK	Chloride		0.548	mg/L	110				
	MRL_CK	Nitrate as N		0.0425	mg/L	107				
QC2429671-02										
	CCV	Chloride		2.33	mg/L	93				
	CCV	Nitrate as N		0.19	mg/L	95				
QC2429671-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429671-04										
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	

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Water Quality Laboratory

FOLDER ID: 2414028

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/22/2024
Sampling Team: Field

QC list for Run#: *2083666* **and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))**

Sample #	Name	Analyte	Result		Units	% Rec	RPD	MDL	MRL	Flag/Comments
			Parent	Current						
QC2429671-05										
	LCS	Chloride		0.554	mg/L	111				
	LCS	Nitrate as N		0.254	mg/L	102				
QC2429671-06										
	LCSD of QC2429671-05	Chloride	0.554	0.463	mg/L	92	18			Splt# QC2429671-05 (0.554mg/L)
	LCSD of QC2429671-05	Nitrate as N	0.254	0.208	mg/L	83	20			Splt# QC2429671-05 (0.254mg/L)
QC2429671-07										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429671-08										
	CCV	Chloride		2.37	mg/L	94				
	CCV	Nitrate as N		0.192	mg/L	96				
QC2429671-09										
	SPKD of 2415873-03	Nitrate as N	0.0463	0.333	mg/L	115	13			Splt# 2415873-03 (0.0463mg/L)
QC2429671-10										
	SPK of 2415873-03	Nitrate as N	0.0463	0.29	mg/L	97				Splt# 2415873-03 (0.0463mg/L)
QC2429671-11										
	CCV	Chloride		22.6	mg/L	113				
	CCV	Nitrate as N		1.89	mg/L	119				
QC2429671-12										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429671-13										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429671-14										
	LCSD of QC2429671-05	Chloride	0.554	0.554	mg/L	111	0			Splt# QC2429671-05 (0.554mg/L)
	LCSD of QC2429671-05	Nitrate as N	0.254	0.258	mg/L	103	1			Splt# QC2429671-05 (0.254mg/L)
QC2429671-15										
	SPKD of 2415873-03	Nitrate as N	0.0463	0.29	mg/L	97	0			Splt# 2415873-03 (0.0463mg/L)

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Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2414029

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/24/2024
Sampling Team: Field

Lab Sample#: 2414029-01 **Sample Source:** WSB_SF65_LM2SS **External ID:**
Date Collected: 07/24/2024 12:17PM **Date Received:** 07/24/2024 02:47PM **Sample Matrix:** Aqueous **Location Desc:** SF#65 - LMMW2SS

Test/Analyte

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	51.3	mg/L	1		3	07/24/2024	2083767 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	556	µmhos/cm	1		1	07/24/2024	2083761 ABALALIO	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	6.71	pH	1			07/24/2024	2083760 ABALALIO	H1,H3
Temperature (°C)	18.3	°C	1			07/24/2024	2083760 ABALALIO	

Lab Sample#: 2414029-01A **Sample Source:** WSB_SF65_LM2SS **External ID:**
Date Collected: 07/24/2024 12:17PM **Date Received:** 07/24/2024 02:47PM **Sample Matrix:** Aqueous **Location Desc:** SF#65 - LMMW2SS

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	6.14	mg/L	10	0.34	0.4	07/24/2024	2083765 PWARNER	

Lab Sample#: 2414029-02 **Sample Source:** WSB_SF_DUP **External ID:**
Date Collected: 07/24/2024 12:18PM **Date Received:** 07/24/2024 02:47PM **Sample Matrix:** Aqueous **Location Desc:** SF#65 - LMMW2SS

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	5.85	mg/L	10	0.34	0.4	07/24/2024	2083765 PWARNER	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	51	mg/L	1		3	07/24/2024	2083767 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	556	µmhos/cm	1		1	07/24/2024	2083761 ABALALIO	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	6.77	pH	1			07/24/2024	2083760 ABALALIO	H1,H3
Temperature (°C)	17.9	°C	1			07/24/2024	2083760 ABALALIO	

Lab Sample#: 2414029-03 **Sample Source:** WSB_SF08_LM2D **External ID:**
Date Collected: 07/24/2024 01:15PM **Date Received:** 07/24/2024 02:47PM **Sample Matrix:** Aqueous **Location Desc:** SF#08_LMMW2D

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	3.71	mg/L	5	0.17	0.2	07/24/2024	2083765 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	47.7	mg/L	1	0.005	1	07/30/2024	2083956 DHU	

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FOLDER ID: 2414029

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Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 07/24/2024
Sampling Team: Field

Magnesium, Mg	**51.3**	mg/L	1	0.021	0.2	07/30/2024	2083956	DHU
Potassium, K	**2.63**	mg/L	1	0.06	0.2	07/30/2024	2083956	DHU
Sodium, Na	**61.6**	mg/L	1	0.2	1	07/30/2024	2083956	DHU

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	**134**	mg/L	1		6	07/24/2024	2083767	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	**948**	µmhos/cm	1		1	07/24/2024	2083761	ABALALIO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	**327**	mg/L	1	0.474	3	07/25/2024	2083807	DCARDONA	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	**7.52**	pH	1			07/24/2024	2083760	ABALALIO	H1,H3
Temperature (°C)	**18.5**	°C	1			07/24/2024	2083760	ABALALIO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	**511**	mg/L	1	13.2	20	07/26/2024	2083764	MSWONG	>MCL

Lab Sample#: **2414029-03B** **Sample Source:** WSB_SF08_LM2D **External ID:**
Date Collected: 07/24/2024 01:15PM **Date Received:** 07/24/2024 02:47PM **Sample Matrix:** Aqueous **Location Desc:** SF#08_LMMW2D

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	**56.3**	mg/L	5	0.5	2.5	07/25/2024	2083797	PWARNER	

Lab Sample#: **2414029-04** **Sample Source:** WSB_SF09_LM2S **External ID:**
Date Collected: 07/24/2024 11:02AM **Date Received:** 07/24/2024 02:47PM **Sample Matrix:** Aqueous **Location Desc:** SF#09_LMMW2S

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Nitrate as N	**8.23**	mg/L	10	0.34	0.4	07/24/2024	2083765	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	**67.6**	mg/L	1	0.005	1	07/30/2024	2083956	DHU	
Magnesium, Mg	**67.9**	mg/L	1	0.021	0.2	07/30/2024	2083956	DHU	
Potassium, K	**2.57**	mg/L	1	0.06	0.2	07/30/2024	2083956	DHU	
Sodium, Na	**109**	mg/L	1	0.2	1	07/30/2024	2083956	DHU	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	**254**	mg/L	1		6	07/24/2024	2083767	ALEE	>MCL

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	**1440**	µmhos/cm	1		1	07/24/2024	2083761	ABALALIO	>MCL

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Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/24/2024
Sampling Team: Field

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.4	pH	1			07/24/2024	2083760	ABALALIO	H1,H3
Temperature (°C)	17.8	°C	1			07/24/2024	2083760	ABALALIO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	777	mg/L	1	13.2	20	07/26/2024	2083764	MSWONG	>MCL

Lab Sample#: 2414029-04B **Sample Source:** WSB_SF09_LM2S **External ID:**
Date Collected: 07/24/2024 11:02AM **Date Received:** 07/24/2024 02:47PM **Sample Matrix:** Aqueous **Location Desc:** SF#09_LMMW2S

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	70.3	mg/L	10	1	5	07/25/2024	2083797	PWARNER	

Lab Sample#: 2414029-04C **Sample Source:** WSB_SF09_LM2S **External ID:**
Date Collected: 07/24/2024 11:02AM **Date Received:** 07/24/2024 02:47PM **Sample Matrix:** Aqueous **Location Desc:** SF#09_LMMW2S

Test/Analyte

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	458	mg/L	1	0.948	6	07/26/2024	2083862	ABALALIO	

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Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/24/2024
Sampling Team: Field

QC list for Run#: *2083760* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429726-04										
	ICV	pH		8.97	pH	99				
	ICV	Temperature (°C)		21.3	°C					
QC2429726-05										
	DUP of 2415953-01	pH	8.4	8.4	pH		0			Splt# 2415953-01 (8.4pH) H1,H3
	DUP of 2415953-01	Temperature (°C)	21.7	21.7	°C					Splt# 2415953-01 (21.7°C)
QC2429726-06										
	CCV	pH		8.97	pH	99				
	CCV	Temperature (°C)		21.4	°C					
QC2429726-07										
	CCV	pH		8.96	pH	99				
	CCV	Temperature (°C)		21.2	°C					

QC list for Run#: *2083761* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429727-02										
	ICV	Specific Conductance @25°C		146	µmhos/cm	99				
QC2429727-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2429727-04										
	MRL_CK	Specific Conductance @25°C		10	µmhos/cm	100				
QC2429727-05										
	DUP of 2415953-01	Specific Conductance @25°C	68.1	68.2	µmhos/cm		0		1	Splt# 2415953-01 (68.1µmhos/cm)
QC2429727-06										
	CCV	Specific Conductance @25°C		99.4	µmhos/cm	99				
QC2429727-13										
	CCV	Specific Conductance @25°C		1420	µmhos/cm	100				

QC list for Run#: *2083764* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429730-01										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2429730-02										
	LCS	Total Dissolved Solids		89	mg/L	93		13.2	20	
QC2429730-03										
	DUP of 2415873-02	Total Dissolved Solids	33	33	mg/L		0	13.2	20	Splt# 2415873-02 (33mg/L)

QC list for Run#: *2083765* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429731-01										
	MRL_CK	Chloride		0.523	mg/L	105				
	MRL_CK	Sulfate		0.548	mg/L	110				
	MRL_CK	Nitrate as N		0.0408	mg/L	102				

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Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/24/2024
Sampling Team: Field

QC list for Run#: *2083765* **and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429731-02										
	CCV	Chloride		2.3	mg/L	91				
	CCV	Sulfate		2.25	mg/L	89				
	CCV	Nitrate as N		0.184	mg/L	92				
QC2429731-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429731-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		0.533	mg/L			0.034	0.04	
QC2429731-05										
	LCS	Chloride		0.599	mg/L	120				
	LCS	Sulfate		1.77	mg/L	118				
	LCS	Nitrate as N		0.278	mg/L	111				
QC2429731-06										
	LCSD of QC2429731-11	Chloride	0.544	0.566	mg/L	113	3			Splt# QC2429731-11 (0.544mg/L)
	LCSD of QC2429731-11	Sulfate	1.48	1.53	mg/L	102	3			Splt# QC2429731-11 (1.48mg/L)
	LCSD of QC2429731-11	Nitrate as N	0.246	0.254	mg/L	102	3			Splt# QC2429731-11 (0.246mg/L)
QC2429731-07										
	CCV	Chloride		2.47	mg/L	98				
	CCV	Sulfate		2.47	mg/L	98				
	CCV	Nitrate as N		0.199	mg/L	99				
QC2429731-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429731-09										
	SPK of 2414029-03	Sulfate	56.2	60	mg/L	51				Splt# 2414029-03 (56.2mg/L) A1
	SPK of 2414029-03	Nitrate as N	3.71	4.8	mg/L	86				Splt# 2414029-03 (3.71mg/L)
QC2429731-10										
	SPKD of 2414029-03	Sulfate	56.2	65.6	mg/L	125	8			Splt# 2414029-03 (56.2mg/L) A1
	SPKD of 2414029-03	Nitrate as N	3.71	5.2	mg/L	119	8			Splt# 2414029-03 (3.71mg/L)
QC2429731-11										
	LCS	Chloride		0.544	mg/L	109				
	LCS	Sulfate		1.48	mg/L	98				
	LCS	Nitrate as N		0.246	mg/L	98				
QC2429731-12										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	

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Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/24/2024
Sampling Team: Field

QC list for Run#: *2083767* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429733-01										
	BLK	Chloride		<3	mg/L			1.16	3	
QC2429733-02										
	MRL_CK	Chloride		2.87	mg/L	95				
QC2429733-03										
	SPK of 2416290-01	Chloride	4.67	45.5	mg/L	102			3	Splt# 2416290-01 (4.67mg/L)
QC2429733-04										
	SPKD of 2416290-01	Chloride	4.67	45.5	mg/L	102	0		3	Splt# 2416290-01 (4.67mg/L)
QC2429733-05										
	DUP of 2414029-04	Chloride	254	251	mg/L		1		6	Splt# 2414029-04 (254mg/L)
QC2429733-06										
	LCS	Chloride		40.9	mg/L	102			3	

QC list for Run#: *2083769* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429736-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2429736-02										
	MRL_CK	Alkalinity		3.1	mg/L	103				
QC2429736-03										
	SPK of 2416290-01A	Alkalinity	19.2	61.1	mg/L	105			3	Splt# 2416290-01A (19.2mg/L)
QC2429736-04										
	SPKD of 2416290-01A	Alkalinity	19.2	62.6	mg/L	109	2		3	Splt# 2416290-01A (19.2mg/L)
QC2429736-05										
	DUP of 2414029-04	Alkalinity	256	253	mg/L		1	1.19	6	Splt# 2414029-04 (256mg/L)
QC2429736-06										
	LCS	Alkalinity		41.6	mg/L	104			3	

QC list for Run#: *2083797* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429758-01										
	MRL_CK	Chloride		0.544	mg/L	109				
	MRL_CK	Sulfate		0.487	mg/L	97				
	MRL_CK	Nitrate as N		0.0405	mg/L	102				
QC2429758-02										
	CCV	Chloride		2.42	mg/L	96				
	CCV	Sulfate		2.42	mg/L	97				
	CCV	Nitrate as N		0.193	mg/L	96				
QC2429758-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429758-04										

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Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/24/2024
Sampling Team: Field

QC list for Run#: *2083797* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429758-05										
	LCS	Chloride		0.91	mg/L	182				
	LCS	Sulfate		1.49	mg/L	99				
	LCS	Nitrate as N		0.256	mg/L	102				
QC2429758-06										
	LCSD of QC2429758-05	Chloride	0.91	0.522	mg/L	104	54			Splt# QC2429758-05 (0.91mg/L)
	LCSD of QC2429758-05	Sulfate	1.49	1.49	mg/L	99	0			Splt# QC2429758-05 (1.49mg/L)
	LCSD of QC2429758-05	Nitrate as N	0.256	0.244	mg/L	97	4			Splt# QC2429758-05 (0.256mg/L)
QC2429758-07										
	CCV	Chloride		2.42	mg/L	96				
	CCV	Sulfate		2.43	mg/L	97				
	CCV	Nitrate as N		0.194	mg/L	97				
QC2429758-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429758-09										
	SPK of 2414029-04B	Sulfate	70.3	97.6	mg/L	182				Splt# 2414029-04B (70.3mg/L) A1
	SPK of 2414029-04B	Nitrate as N	8.18	12.3	mg/L	166				Splt# 2414029-04B (8.18mg/L) A1
QC2429758-10										
	SPKD of 2414029-04B	Sulfate	70.3	87.6	mg/L	115	10			Splt# 2414029-04B (70.3mg/L) A1
	SPKD of 2414029-04B	Nitrate as N	8.18	11.2	mg/L	121	9			Splt# 2414029-04B (8.18mg/L) A1

QC list for Run#: *2083807* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429764-01										
	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2429764-02										
	MRL_CK	Hardness, Total, as CaCO3		2.52	mg/L	84				
QC2429764-03										
	DUP of 2415589-01	Hardness, Total, as CaCO3	16.8	16.8	mg/L		0	0.474	3	Splt# 2415589-01 (16.8mg/L)
QC2429764-04										
	LCS	Hardness, Total, as CaCO3		40.1	mg/L	100			3	

QC list for Run#: *2083862* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429806-01										
	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2414029

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/24/2024
Sampling Team: Field

QC list for Run#: *2083862* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429806-02										
	MRL_CK	Hardness, Total, as CaCO3		2.34	mg/L	78				
QC2429806-03										
	DUP of 2415766-06	Hardness, Total, as CaCO3	16	16	mg/L		0	0.474	3	Splt# 2415766-06 (16mg/L)
QC2429806-04										
	LCS	Hardness, Total, as CaCO3		39.4	mg/L	98			3	

QC list for Run#: *2083956* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429846-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2429846-02										
	LCS	Calcium, Ca		2.07	mg/L	104		0.04	1	
	LCS	Magnesium, Mg		2.08	mg/L	104		0.007	0.2	
	LCS	Potassium, K		2.07	mg/L	104		0.04	0.2	
	LCS	Sodium, Na		2.12	mg/L	106		0.02	1	
QC2429846-03										
	DUP of 2414029-03	Calcium, Ca	47.7	47.9	mg/L		0	0.005	1	Splt# 2414029-03 (47.7mg/L)
	DUP of 2414029-03	Magnesium, Mg	51.3	51.5	mg/L		0	0.021	0.2	Splt# 2414029-03 (51.3mg/L)
	DUP of 2414029-03	Potassium, K	2.63	2.6	mg/L		1	0.06	0.2	Splt# 2414029-03 (2.63mg/L)
	DUP of 2414029-03	Sodium, Na	61.6	61.9	mg/L		0	0.2	1	Splt# 2414029-03 (61.6mg/L)
QC2429846-04										
	SPK of 2414029-03	Calcium, Ca	47.7	49.3	mg/L	78		0.04	1	Splt# 2414029-03 (47.7mg/L) M1
	SPK of 2414029-03	Magnesium, Mg	51.3	52.8	mg/L	75		0.007	0.2	Splt# 2414029-03 (51.3mg/L) M1
	SPK of 2414029-03	Potassium, K	2.63	4.59	mg/L	98		0.04	0.2	Splt# 2414029-03 (2.63mg/L)
	SPK of 2414029-03	Sodium, Na	61.6	63.1	mg/L	74		0.02	1	Splt# 2414029-03 (61.6mg/L) M1
QC2429846-05										
	SPKD of 2414029-03	Calcium, Ca	47.7	49.4	mg/L	85	0	0.04	1	Splt# 2414029-03 (47.7mg/L)
	SPKD of 2414029-03	Magnesium, Mg	51.3	52.8	mg/L	77	0	0.007	0.2	Splt# 2414029-03 (51.3mg/L) M1
	SPKD of 2414029-03	Potassium, K	2.63	4.63	mg/L	100	0	0.04	0.2	Splt# 2414029-03 (2.63mg/L)
	SPKD of 2414029-03	Sodium, Na	61.6	63.1	mg/L	76	0	0.02	1	Splt# 2414029-03 (61.6mg/L) M1
QC2429846-06										
	MRL_CK	Calcium, Ca		0.0415	mg/L	104		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0492	mg/L	98		0.021	0.021	
	MRL_CK	Potassium, K		0.18	mg/L	90		0.06	0.06	
	MRL_CK	Sodium, Na		<0.2	mg/L	N/A		0.2	0.2	
QC2429875-01										

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Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2414029

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/24/2024
Sampling Team: Field

QC list for Run#: *2083956* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	ICV	Calcium, Ca		10.2	mg/L	104		0.05	1	
	ICV	Magnesium, Mg		9.97	mg/L	101		0.01	0.2	
	ICV	Potassium, K		98.4	mg/L	99		0.03	0.2	
	ICV	Sodium, Na		9.99	mg/L	99		0.002	1	

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Water Quality Laboratory

FOLDER ID: 2414030

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/25/2024
Sampling Team: Field

Lab Sample#: 2414030-01 **Sample Source:** WSB_SF46LMPS155 **External ID:**

Date Collected: 07/25/2024 10:01AM **Date Received:** 07/25/2024 10:35AM **Sample Matrix:** Aqueous **Location Desc:** SF#46 -LK MERCED PUMP ST MW155

Test/Analyte

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	32.6	mg/L	1		3	07/25/2024	2083821 DCARDONA	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	447	µmhos/cm	1		1	07/25/2024	2083818 JWOO	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.6	pH	1			07/25/2024	2083813 JWOO	H1,H3
Temperature (°C)	19.8	°C	1			07/25/2024	2083813 JWOO	

Lab Sample#: 2414030-01A **Sample Source:** WSB_SF46LMPS155 **External ID:**

Date Collected: 07/25/2024 10:01AM **Date Received:** 07/25/2024 10:35AM **Sample Matrix:** Aqueous **Location Desc:** SF#46 -LK MERCED PUMP ST MW155

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	7.96	mg/L	10	0.34	0.4	07/25/2024	2083797 PWARNER	

Lab Sample#: 2414030-05 **Sample Source:** WSB_SF_DUP **External ID:**

Date Collected: 07/25/2024 10:02AM **Date Received:** 07/25/2024 10:35AM **Sample Matrix:** Aqueous **Location Desc:** SF#46 -LK MERCED PUMP ST MW155

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	7.53	mg/L	10	0.34	0.4	07/25/2024	2083797 PWARNER	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	32.6	mg/L	1		3	07/25/2024	2083821 DCARDONA	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	447	µmhos/cm	1		1	07/25/2024	2083818 JWOO	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.63	pH	1			07/25/2024	2083813 JWOO	H1,H3
Temperature (°C)	20	°C	1			07/25/2024	2083813 JWOO	

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Water Quality Laboratory

FOLDER ID: 2414030

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/25/2024
Sampling Team: Field

QC list for Run#: *2083797* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429758-01										
	MRL_CK	Chloride		0.544	mg/L	109				
	MRL_CK	Nitrate as N		0.0405	mg/L	102				
QC2429758-02										
	CCV	Chloride		2.42	mg/L	96				
	CCV	Nitrate as N		0.193	mg/L	96				
QC2429758-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429758-04										
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429758-05										
	LCS	Chloride		0.91	mg/L	182				
	LCS	Nitrate as N		0.256	mg/L	102				
QC2429758-06										
	LCSD of QC2429758-05	Chloride	0.91	0.522	mg/L	104	54			Splt# QC2429758-05 (0.91mg/L)
	LCSD of QC2429758-05	Nitrate as N	0.256	0.244	mg/L	97	4			Splt# QC2429758-05 (0.256mg/L)
QC2429758-07										
	CCV	Chloride		2.42	mg/L	96				
	CCV	Nitrate as N		0.194	mg/L	97				
QC2429758-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429758-09										
	SPK of 2414029-04B	Nitrate as N	8.18	12.3	mg/L	166				Splt# 2414029-04B (8.18mg/L) A1
QC2429758-10										
	SPKD of 2414029-04B	Nitrate as N	8.18	11.2	mg/L	121	9			Splt# 2414029-04B (8.18mg/L) A1

QC list for Run#: *2083813* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429774-04										
	ICV	pH		8.97	pH	99				
	ICV	Temperature (°C)		20.9	°C					
QC2429774-05										
	DUP of 2415588-02	pH	9.04	9.02	pH		0			Splt# 2415588-02 (9.04pH) H1,H3
	DUP of 2415588-02	Temperature (°C)	17.2	17.3	°C					Splt# 2415588-02 (17.2°C)
QC2429774-06										
	CCV	pH		8.97	pH	99				
	CCV	Temperature (°C)		21.1	°C					
QC2429774-07										
	CCV	pH		8.97	pH	99				

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Water Quality Laboratory

FOLDER ID: 2414030

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/25/2024
Sampling Team: Field

QC list for Run#: *2083813* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	CCV	Temperature (°C)		21.2	°C					

QC list for Run#: *2083818* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429772-01										
	CAL	Specific Conductance @25°C		1420	µmhos/cm	100				
QC2429772-02										
	ICV	Specific Conductance @25°C		146	µmhos/cm	99				
QC2429772-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2429772-04										
	MRL_CK	Specific Conductance @25°C		10	µmhos/cm	100				
QC2429772-05										
	DUP of 2415588-02	Specific Conductance @25°C	70.6	70.4	µmhos/cm		0		1	Splt# 2415588-02 (70.6µmhos/cm)
QC2429772-06										
	CCV	Specific Conductance @25°C		99	µmhos/cm	99				
QC2429772-07										
	CCV	Specific Conductance @25°C		1410	µmhos/cm	99				

QC list for Run#: *2083821* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429776-01										
	BLK	Chloride		<3	mg/L			1.16	3	
QC2429776-02										
	MRL_CK	Chloride		2.82	mg/L	94				
QC2429776-03										
	SPK of 2415589-01	Chloride	5.85	47.3	mg/L	104			3	Splt# 2415589-01 (5.85mg/L)
QC2429776-04										
	SPKD of 2415589-01	Chloride	5.85	46.7	mg/L	102	1		3	Splt# 2415589-01 (5.85mg/L)
QC2429776-06										
	LCS	Chloride		40.8	mg/L	102			3	

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Water Quality Laboratory

FOLDER ID: 2414031

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/23/2024
Sampling Team: Field

Lab Sample#: 2414031-01 **Sample Source:** WSB_SF77_FUN_S **External ID:**

Date Collected: 05/23/2024 12:39PM **Date Received:** 05/23/2024 02:49PM **Sample Matrix:** Aqueous **Location Desc:** FF-S, Fort Funston-S

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Nitrate as N	**0.602**	**mg/L**	1	0.034	0.04	05/23/2024	2080725 PWARNER	
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	**6.15**	**mg/L**	1		3	05/23/2024	2080737 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	**102**	**µmhos/cm**	1		1	05/23/2024	2080727 JWOO	
MBP_PH(SM 4500-H+ B)								
pH	**5.96**	**pH**	1			05/23/2024	2080731 JWOO	H1,H3
Temperature (°C)	**17.9**	**°C**	1			05/23/2024	2080731 JWOO	

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FOLDER ID: 2414031

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 05/23/2024
Sampling Team: Field

QC list for Run#: *2080725* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427581-01										
	MRL_CK	Chloride		0.487	mg/L	97				
	MRL_CK	Nitrate as N		0.0378	mg/L	94				
QC2427581-02										
	CCV	Chloride		2.48	mg/L	99				
	CCV	Nitrate as N		0.312	mg/L	157				
QC2427581-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427581-04										
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427581-05										
	LCS	Chloride		0.485	mg/L	97				
	LCS	Nitrate as N		0.244	mg/L	97				
QC2427581-06										
	LCSD of QC2427581-05	Chloride	0.485	0.488	mg/L	97	0			Splt# QC2427581-05 (0.485mg/L)
	LCSD of QC2427581-05	Nitrate as N	0.244	0.245	mg/L	98	0			Splt# QC2427581-05 (0.244mg/L)
QC2427581-07										
	CCV	Chloride		20.8	mg/L	104				
	CCV	Nitrate as N		1.69	mg/L	106				
QC2427581-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427581-09										
	CCV	Chloride		2.47	mg/L	98				
	CCV	Nitrate as N		0.2	mg/L	101				
QC2427581-10										
	SPK of 2414032-03C	Nitrate as N	<0.04	0.268	mg/L	107				Splt# 2414032-03C (<0.04mg/L)
QC2427581-11										
	SPKD of 2414032-03C	Nitrate as N	<0.04	0.261	mg/L	104	2			Splt# 2414032-03C (<0.04mg/L)

QC list for Run#: *2080727* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427587-01										
	CAL	Specific Conductance @25°C		1430	µmhos/cm	101				
QC2427587-02										
	ICV	Specific Conductance @25°C		149	µmhos/cm	101				
QC2427587-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2427587-04										
	MRL_CK	Specific Conductance @25°C		9.77	µmhos/cm	97				
QC2427587-05										

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Water Quality Laboratory

FOLDER ID: 2414031

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 05/23/2024
Sampling Team: Field

QC list for Run#: *2080727* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	DUP of 2413936-02	Specific Conductance @25°C	112	112	µmhos/cm		0		1	Splt# 2413936-02 (112µmhos/cm)
QC2427587-06										
	CCV	Specific Conductance @25°C		99.8	µmhos/cm	99				
QC2427587-07										
	CCV	Specific Conductance @25°C		1430	µmhos/cm	101				

QC list for Run#: *2080731* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427585-01										
	CAL	pH		7.01	pH	100				
	CAL	Temperature (°C)		19.7	°C					
QC2427585-02										
	CAL	pH		4	pH	100				
	CAL	Temperature (°C)		19.8	°C					
QC2427585-03										
	CAL	pH		10.1	pH	101				
	CAL	Temperature (°C)		19.8	°C					
QC2427585-04										
	ICV	pH		8.97	pH	99				
	ICV	Temperature (°C)		19.8	°C					
QC2427585-05										
	DUP of 2413936-02	pH	9.24	9.24	pH		0			Splt# 2413936-02 (9.24pH) H1,H3
	DUP of 2413936-02	Temperature (°C)	17.1	17.3	°C					Splt# 2413936-02 (17.1°C)
QC2427585-06										
	CCV	pH		8.99	pH	99				
	CCV	Temperature (°C)		20	°C					
QC2427585-07										
	CCV	pH		8.98	pH	99				
	CCV	Temperature (°C)		19.9	°C					

QC list for Run#: *2080737* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427592-01										
	BLK	Chloride		<3	mg/L			1.16	3	
QC2427592-02										
	MRL_CK	Chloride		2.91	mg/L	97				
QC2427592-03										
	SPK of 2413937-01	Chloride	9.97	49.6	mg/L	99			3	Splt# 2413937-01 (9.97mg/L)
QC2427592-04										
	SPKD of 2413937-01	Chloride	9.97	49.8	mg/L	99	0		3	Splt# 2413937-01 (9.97mg/L)
QC2427592-06										
	LCS	Chloride		40	mg/L	100			3	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2414032

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 05/22/2024
Sampling Team: Field

Lab Sample#: 2414032-01 **Sample Source:** WSB_DC_TB225 **External ID:**
Date Collected: 05/22/2024 12:48PM **Date Received:** 05/22/2024 02:40PM **Sample Matrix:** Aqueous **Location Desc:** TB-225, Thornton Beach-225

Test/Analyte

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	88.5	mg/L	1		6	05/22/2024	2080664	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	773	µmhos/cm	1		1	05/22/2024	2080649	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.46	pH	1			05/22/2024	2080648	MSWONG	H1,H3
Temperature (°C)	16.5	°C	1			05/22/2024	2080648	MSWONG	

Lab Sample#: 2414032-01B **Sample Source:** WSB_DC_TB225 **External ID:**
Date Collected: 05/22/2024 12:48PM **Date Received:** 05/22/2024 02:40PM **Sample Matrix:** Aqueous **Location Desc:** TB-225, Thornton Beach-225

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Nitrate as N	7.24	mg/L	10	0.34	0.4	05/23/2024	2080599	PWARNER	

Lab Sample#: 2414032-03 **Sample Source:** WSB_DC_TB670 **External ID:**
Date Collected: 05/22/2024 10:52AM **Date Received:** 05/22/2024 02:40PM **Sample Matrix:** Aqueous **Location Desc:** TB-670, Thornton beach-670

Test/Analyte

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	293	mg/L	1		15	05/22/2024	2080664	ALEE	>MCL

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1760	µmhos/cm	1		1	05/22/2024	2080649	MSWONG	>MCL

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.45	pH	1			05/22/2024	2080648	MSWONG	H1,H3
Temperature (°C)	16	°C	1			05/22/2024	2080648	MSWONG	

Lab Sample#: 2414032-03C **Sample Source:** WSB_DC_TB670 **External ID:**
Date Collected: 05/22/2024 10:52AM **Date Received:** 05/22/2024 02:40PM **Sample Matrix:** Aqueous **Location Desc:** TB-670, Thornton beach-670

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Nitrate as N	<0.04	mg/L	1	0.034	0.04	05/23/2024	2080725	PWARNER	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2414032

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/22/2024
Sampling Team: Field

QC list for Run#: *2080599* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427496-01										
	MRL_CK	Chloride		0.503	mg/L	101				
	MRL_CK	Nitrate as N		0.0383	mg/L	96				
QC2427496-02										
	CCV	Chloride		2.45	mg/L	98				
	CCV	Nitrate as N		0.196	mg/L	98				
QC2427496-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427496-04										
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427496-05										
	LCS	Chloride		0.477	mg/L	95				
	LCS	Nitrate as N		0.236	mg/L	94				
QC2427496-06										
	LCSD of QC2427496-05	Chloride	0.477	0.471	mg/L	94	1			Splt# QC2427496-05 (0.477mg/L)
	LCSD of QC2427496-05	Nitrate as N	0.236	0.24	mg/L	96	1			Splt# QC2427496-05 (0.236mg/L)
QC2427496-07										
	CCV	Chloride		20.1	mg/L	100				
	CCV	Nitrate as N		1.61	mg/L	101				
QC2427496-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427496-09										
	SPK of 2414587-03	Nitrate as N	<0.04	0.289	mg/L	116				Splt# 2414587-03 (<0.04mg/L)
QC2427496-10										
	SPKD of 2414587-03	Nitrate as N	<0.04	0.277	mg/L	111	4			Splt# 2414587-03 (<0.04mg/L)
QC2427496-11										
	CCV	Chloride		2.45	mg/L	97				
	CCV	Nitrate as N		0.199	mg/L	99				
QC2427496-12										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	

QC list for Run#: *2080648* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427529-04										
	ICV	pH		8.96	pH	99				
	ICV	Temperature (°C)		20.9	°C					
QC2427529-05										
	DUP of 2413941-06	pH	9.07	9.08	pH		0			Splt# 2413941-06 (9.07pH) H1,H3

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2414032

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/22/2024
Sampling Team: Field

QC list for Run#: *2080648* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	DUP of 2413941-06	Temperature (°C)	18.3	18.3	°C					Splt# 2413941-06 (18.3°C)
QC2427529-06										
	CCV	pH		8.95	pH	98				
	CCV	Temperature (°C)		20.8	°C					
QC2427529-07										
	CCV	pH		8.96	pH	99				
	CCV	Temperature (°C)		20.6	°C					

QC list for Run#: *2080649* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427530-01										
	CAL	Specific Conductance @25°C		1420	µmhos/cm	101				
QC2427530-02										
	ICV	Specific Conductance @25°C		148	µmhos/cm	101				
QC2427530-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2427530-04										
	MRL_CK	Specific Conductance @25°C		9.77	µmhos/cm	97				
QC2427530-05										
	DUP of 2413941-06	Specific Conductance @25°C	86.1	86.2	µmhos/cm		0		1	Splt# 2413941-06 (86.1µmhos/cm)
QC2427530-06										
	CCV	Specific Conductance @25°C		99.3	µmhos/cm	99				
QC2427530-07										
	CCV	Specific Conductance @25°C		1420	µmhos/cm	100				

QC list for Run#: *2080664* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427541-01										
	BLK	Chloride		<3	mg/L			1.16	3	
QC2427541-02										
	MRL_CK	Chloride		2.97	mg/L	99				
QC2427541-03										
	SPK of 2414032-01	Chloride	88.5	166	mg/L	96			6	Splt# 2414032-01 (88.5mg/L)
QC2427541-04										
	SPKD of 2414032-01	Chloride	88.5	171	mg/L	103	2		6	Splt# 2414032-01 (88.5mg/L)
QC2427541-06										
	LCS	Chloride		39.8	mg/L	99			3	

QC list for Run#: *2080725* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2427581-01										
	MRL_CK	Chloride		0.487	mg/L	97				
	MRL_CK	Nitrate as N		0.0378	mg/L	94				
QC2427581-02										

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Water Quality Laboratory

FOLDER ID: 2414032

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 05/22/2024
Sampling Team: Field

QC list for Run#: *2080725* **and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))**

Sample #	Name	Analyte	Result		Units	% Rec	RPD	MDL	MRL	Flag/Comments
			Parent	Current						
	CCV	Chloride		2.48	mg/L	99				
	CCV	Nitrate as N		0.312	mg/L	157				
QC2427581-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427581-04										
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427581-05										
	LCS	Chloride		0.485	mg/L	97				
	LCS	Nitrate as N		0.244	mg/L	97				
QC2427581-06										
	LCSD of QC2427581-05	Chloride	0.485	0.488	mg/L	97	0			Splt# QC2427581-05 (0.485mg/L)
	LCSD of QC2427581-05	Nitrate as N	0.244	0.245	mg/L	98	0			Splt# QC2427581-05 (0.244mg/L)
QC2427581-07										
	CCV	Chloride		20.8	mg/L	104				
	CCV	Nitrate as N		1.69	mg/L	106				
QC2427581-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2427581-09										
	CCV	Chloride		2.47	mg/L	98				
	CCV	Nitrate as N		0.2	mg/L	101				
QC2427581-10										
	SPK of 2414032-03C	Nitrate as N	<0.04	0.268	mg/L	107				Splt# 2414032-03C (<0.04mg/L)
QC2427581-11										
	SPKD of 2414032-03C	Nitrate as N	<0.04	0.261	mg/L	104	2			Splt# 2414032-03C (<0.04mg/L)

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2414380

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 07/17/2024
Sampling Team: Field

Lab Sample#: 2414380-01 **Sample Source:** WSB_SF69_NWM3 **External ID:**

Date Collected: 07/17/2024 10:20AM **Date Received:** 07/17/2024 11:40AM **Sample Matrix:** Aqueous **Location Desc:** WSB_SF69, GGP NWM-3

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	41.7	mg/L	1		3	07/17/2024	2083417 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	455	µmhos/cm	1		1	07/17/2024	2083408 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	246	mg/L	1	13.2	20	07/20/2024	2083424 ABALALIO	

Lab Sample#: 2414380-02 **Sample Source:** WSB_SF_DUP **External ID:**

Date Collected: 07/17/2024 10:38AM **Date Received:** 07/17/2024 11:40AM **Sample Matrix:** Aqueous **Location Desc:** WSB_SF69, GGP NWM-3

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	42.1	mg/L	1		3	07/17/2024	2083417 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	466	µmhos/cm	1		1	07/17/2024	2083408 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	251	mg/L	1	13.2	20	07/20/2024	2083424 ABALALIO	

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Water Quality Laboratory

FOLDER ID: 2414380

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 07/17/2024
Sampling Team: Field

QC list for Run#: *2083408* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429482-01	CAL	Specific Conductance @25°C		1420	µmhos/cm	101				
QC2429482-02	ICV	Specific Conductance @25°C		147	µmhos/cm	100				
QC2429482-03	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2429482-04	MRL_CK	Specific Conductance @25°C		10	µmhos/cm	100				
QC2429482-05	DUP of 2415463-06	Specific Conductance @25°C	69.3	69.1	µmhos/cm		0		1	Splt# 2415463-06 (69.3µmhos/cm)
QC2429482-06	CCV	Specific Conductance @25°C		99.9	µmhos/cm	99				
QC2429482-07	CCV	Specific Conductance @25°C		1420	µmhos/cm	101				

QC list for Run#: *2083417* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429491-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2429491-02	MRL_CK	Chloride		2.96	mg/L	98				
QC2429491-03	SPK of 2416068-01	Chloride	4.81	45.2	mg/L	101			3	Splt# 2416068-01 (4.81mg/L)
QC2429491-04	SPKD of 2416068-01	Chloride	4.81	45.5	mg/L	102	0		3	Splt# 2416068-01 (4.81mg/L)
QC2429491-06	LCS	Chloride		40.9	mg/L	102			3	

QC list for Run#: *2083424* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429495-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2429495-02	DUP of 2415872-01	Total Dissolved Solids	34	32	mg/L		6	13.2	20	Splt# 2415872-01 (34mg/L)
QC2429495-03	LCS	Total Dissolved Solids		94	mg/L	98		13.2	20	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2414591

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/08/2024
Sampling Team: Field

Lab Sample#: 2414591-01 **Sample Source:** WSB_SF58_SWD140 **External ID:**
Date Collected: 07/08/2024 11:38AM **Date Received:** 07/08/2024 12:24PM **Sample Matrix:** Aqueous **Location Desc:** SF#58 - USGS SOUTH WINDMILL MW140

Test/Analyte

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	67.1	mg/L	1		6	07/08/2024	2082936 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	768	µmhos/cm	1		1	07/08/2024	2082937 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	401	mg/L	1	13.2	20	07/15/2024	2083142 ABALALIO	

Lab Sample#: 2414591-01A **Sample Source:** WSB_SF58_SWD140 **External ID:**
Date Collected: 07/08/2024 11:38AM **Date Received:** 07/08/2024 12:24PM **Sample Matrix:** Aqueous **Location Desc:** SF#58 - USGS SOUTH WINDMILL MW140

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	10.1	mg/L	10	0.34	0.4	07/08/2024	2082919 PWARNER	>MCL

Lab Sample#: 2414591-02 **Sample Source:** WSB_SF70_SWM3 **External ID:**
Date Collected: 07/08/2024 10:38AM **Date Received:** 07/08/2024 12:24PM **Sample Matrix:** Aqueous **Location Desc:** WSB_SF70, GGP SWM-3

Test/Analyte

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	39.2	mg/L	1		3	07/08/2024	2082936 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	471	µmhos/cm	1		1	07/08/2024	2082937 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	256	mg/L	1	13.2	20	07/15/2024	2083142 ABALALIO	

Lab Sample#: 2414591-03 **Sample Source:** DUP **External ID:**
Date Collected: 07/08/2024 10:39AM **Date Received:** 07/08/2024 12:24PM **Sample Matrix:** Aqueous **Location Desc:** WSB_SF70, GGP SWM-3

Test/Analyte

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	39	mg/L	1		3	07/08/2024	2082936 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	470	µmhos/cm	1		1	07/08/2024	2082937 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	260	mg/L	1	13.2	20	07/15/2024	2083142 ABALALIO	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2414591

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/08/2024
Sampling Team: Field

QC list for Run#: *2082919* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429134-01										
	MRL_CK	Chloride		0.542	mg/L	108				
	MRL_CK	Nitrate as N		0.04	mg/L	100				
QC2429134-02										
	CCV	Chloride		2.47	mg/L	98				
	CCV	Nitrate as N		0.205	mg/L	103				
QC2429134-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429134-04										
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429134-05										
	LCS	Chloride		0.511	mg/L	102				
	LCS	Nitrate as N		0.239	mg/L	95				
QC2429134-06										
	LCSD of 2414591-01	Chloride		0.528	mg/L	106	r: No Parent			Splt# 2414591-01
	LCSD of 2414591-01	Nitrate as N	10.8	0.246	mg/L	98	r: No Parent			Splt# 2414591-01 (10.8mg/L)
QC2429134-07										
	CCV	Chloride		20.2	mg/L	101				
	CCV	Nitrate as N		1.62	mg/L	102				
QC2429134-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429134-09										
	SPK of 2414591-01A	Nitrate as N	10.1	13.6	mg/L	142				Splt# 2414591-01A (10.1mg/L)
QC2429134-10										
	SPKD of 2414591-01A	Nitrate as N	10.1	13.1	mg/L	120	1			Splt# 2414591-01A (10.1mg/L)
QC2429134-11										
	SPK of 2414591-01A	Nitrate as N	10.1	12.9	mg/L	112				Splt# 2414591-01A (10.1mg/L)

QC list for Run#: *2082936* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429144-01										
	BLK	Chloride		<3	mg/L			1.16	3	
QC2429144-02										
	MRL_CK	Chloride		2.91	mg/L	97				
QC2429144-03										
	SPK of 2414591-02	Chloride	39.2	79.3	mg/L	100			3	Splt# 2414591-02 (39.2mg/L)
QC2429144-04										
	SPKD of 2414591-02	Chloride	39.2	79.4	mg/L	100	0		3	Splt# 2414591-02 (39.2mg/L)
QC2429144-06										
	LCS	Chloride		40.9	mg/L	102			3	

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Water Quality Laboratory

FOLDER ID: 2414591

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/08/2024
Sampling Team: Field

QC list for Run#: *2082936* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429144-07	DUP of 2414591-03	Chloride	39	66.5	mg/L		16		6	Splt# 2414591-03 (39mg/L)

QC list for Run#: *2082937* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429147-01	CAL	Specific Conductance @25°C		1430	µmhos/cm	101				
QC2429147-02	ICV	Specific Conductance @25°C		145	µmhos/cm	98				
QC2429147-03	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2429147-04	MRL_CK	Specific Conductance @25°C		10.5	µmhos/cm	105				
QC2429147-05	DUP of 2415459-02	Specific Conductance @25°C	67.6	66.7	µmhos/cm		1		1	Splt# 2415459-02 (67.6µmhos/cm)
QC2429147-06	CCV	Specific Conductance @25°C		98.9	µmhos/cm	98				
QC2429147-07	CCV	Specific Conductance @25°C		1430	µmhos/cm	102				

QC list for Run#: *2083142* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429287-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2429287-02	DUP of 2415871-01	Total Dissolved Solids	32	33	mg/L		3	13.2	20	Splt# 2415871-01 (32mg/L)
QC2429287-03	DUP of 2415394-01	Total Dissolved Solids	292	292	mg/L		0	13.2	20	Splt# 2415394-01 (292mg/L)
QC2429287-04	LCS	Total Dissolved Solids		88	mg/L	92		13.2	20	

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Water Quality Laboratory

FOLDER ID: 2415614

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/11/2024
Sampling Team: Field

Lab Sample#: 2415614-01 **Sample Source:** WSB_SF66_LM3SS **External ID:**

Date Collected: 07/11/2024 09:41AM **Date Received:** 07/11/2024 10:32AM **Sample Matrix:** Aqueous **Location Desc:** LMMW3SS

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Nitrate as N	<0.04	mg/L	1	0.034	0.04	07/11/2024	2083100 PWARNER	
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	102	mg/L	1		6	07/11/2024	2083140 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	1070	µmhos/cm	1		1	07/11/2024	2083120 JWOO	>MCL
MBP_PH(SM 4500-H+ B)								
pH	6.74	pH	1			07/11/2024	2083122 JWOO	H1,H3
Temperature (°C)	20.9	°C	1			07/11/2024	2083122 JWOO	

Lab Sample#: 2415614-02 **Sample Source:** WSB_SF_DUP **External ID:**

Date Collected: 07/11/2024 09:42AM **Date Received:** 07/11/2024 10:32AM **Sample Matrix:** Aqueous **Location Desc:** LMMW3SS

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Nitrate as N	<0.04	mg/L	1	0.034	0.04	07/11/2024	2083100 PWARNER	
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	101	mg/L	1		6	07/11/2024	2083140 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	1080	µmhos/cm	1		1	07/11/2024	2083120 JWOO	>MCL
MBP_PH(SM 4500-H+ B)								
pH	6.72	pH	1			07/11/2024	2083122 JWOO	H1,H3
Temperature (°C)	20.8	°C	1			07/11/2024	2083122 JWOO	

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FOLDER ID: 2415614

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/11/2024
Sampling Team: Field

QC list for Run#: *2083100* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429259-01										
	MRL_CK	Chloride		0.533	mg/L	107				
	MRL_CK	Nitrate as N		0.041	mg/L	103				
QC2429259-02										
	CCV	Chloride		2.4	mg/L	95				
	CCV	Nitrate as N		0.202	mg/L	101				
QC2429259-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429259-04										
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429259-05										
	LCS	Chloride		0.519	mg/L	104				
	LCS	Nitrate as N		0.243	mg/L	97				
QC2429259-06										
	LCSD of QC2429259-05	Chloride	0.519	0.505	mg/L	101	2			Splt# QC2429259-05 (0.519mg/L)
	LCSD of QC2429259-05	Nitrate as N	0.243	0.245	mg/L	98	0			Splt# QC2429259-05 (0.243mg/L)
QC2429259-07										
	CCV	Chloride		20.5	mg/L	103				
	CCV	Nitrate as N		1.65	mg/L	103				
QC2429259-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429259-09										
	SPK of 2415398-01	Nitrate as N	<0.04	0.307	mg/L	107				Splt# 2415398-01 (<0.04mg/L)
QC2429259-10										
	SPKD of 2415398-01	Nitrate as N	<0.04	0.291	mg/L	101	5			Splt# 2415398-01 (<0.04mg/L)

QC list for Run#: *2083120* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429271-01										
	CAL	Specific Conductance @25°C		1420	µmhos/cm	101				
QC2429271-02										
	ICV	Specific Conductance @25°C		143	µmhos/cm	97				
QC2429271-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2429271-04										
	MRL_CK	Specific Conductance @25°C		10.3	µmhos/cm	103				
QC2429271-05										
	DUP of 2415465-02	Specific Conductance @25°C	67.7	67.7	µmhos/cm		0		1	Splt# 2415465-02 (67.7µmhos/cm)
QC2429271-06										
	CCV	Specific Conductance @25°C		97.3	µmhos/cm	97				

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Water Quality Laboratory

FOLDER ID: 2415614

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/11/2024
Sampling Team: Field

QC list for Run#: *2083120* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429271-07										
	CCV	Specific Conductance @25°C		1420	µmhos/cm	101				

QC list for Run#: *2083122* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429272-04										
	ICV	pH		9.05	pH	100				
	ICV	Temperature (°C)		21.1	°C					
QC2429272-05										
	DUP of 2415465-02	pH	9.04	9.05	pH		0			Splt# 2415465-02 (9.04pH) H1,H3
	DUP of 2415465-02	Temperature (°C)	18	17.8	°C					Splt# 2415465-02 (18°C)
QC2429272-06										
	CCV	pH		9.05	pH	100				
	CCV	Temperature (°C)		21.6	°C					
QC2429272-07										
	CCV	pH		9.05	pH	100				
	CCV	Temperature (°C)		21.8	°C					

QC list for Run#: *2083140* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429285-01										
	BLK	Chloride		<3	mg/L			1.16	3	
QC2429285-02										
	MRL_CK	Chloride		3.01	mg/L	100				
QC2429285-03										
	SPK of 2415470-01	Chloride	5.47	45.8	mg/L	101			3	Splt# 2415470-01 (5.47mg/L)
QC2429285-04										
	SPKD of 2415470-01	Chloride	5.47	46	mg/L	101	0		3	Splt# 2415470-01 (5.47mg/L)
QC2429285-06										
	LCS	Chloride		40.9	mg/L	102			3	

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Water Quality Laboratory

FOLDER ID: 2415616

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/15/2024
Sampling Team: Field

Lab Sample#: 2415616-01 **Sample Source:** WSB_SF16_LM7SS **External ID:**
Date Collected: 07/15/2024 11:05AM **Date Received:** 07/15/2024 12:04PM **Sample Matrix:** Aqueous **Location Desc:** SF#16_LMMW7SS

Test/Analyte

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	40.4	mg/L	1		6	07/15/2024	2083284 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	754	µmhos/cm	1		1	07/15/2024	2083282 ABALALIO	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.25	pH	1			07/15/2024	2083281 ABALALIO	H1,H3
Temperature (°C)	19.6	°C	1			07/15/2024	2083281 ABALALIO	

Lab Sample#: 2415616-01A **Sample Source:** WSB_SF16_LM7SS **External ID:**
Date Collected: 07/15/2024 11:05AM **Date Received:** 07/15/2024 12:04PM **Sample Matrix:** Aqueous **Location Desc:** SF#16_LMMW7SS

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	8.87	mg/L	10	0.34	0.4	07/15/2024	2083274 PWARNER	

Lab Sample#: 2415616-02 **Sample Source:** WSB_SF_DUP **External ID:**
Date Collected: 07/15/2024 11:06AM **Date Received:** 07/15/2024 12:04PM **Sample Matrix:** Aqueous **Location Desc:** SF#16_LMMW7SS

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	7.01	mg/L	10	0.34	0.4	07/15/2024	2083274 PWARNER	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	41	mg/L	1		6	07/15/2024	2083284 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	759	µmhos/cm	1		1	07/15/2024	2083282 ABALALIO	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.22	pH	1			07/15/2024	2083281 ABALALIO	H1,H3
Temperature (°C)	19	°C	1			07/15/2024	2083281 ABALALIO	

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Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/15/2024
Sampling Team: Field

QC list for Run#: *2083274* **and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429388-01										
	MRL_CK	Chloride		0.511	mg/L	102				
	MRL_CK	Nitrate as N		0.0377	mg/L	94				
QC2429388-02										
	CCV	Chloride		2.45	mg/L	97				
	CCV	Nitrate as N		0.199	mg/L	100				
QC2429388-03										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429388-04										
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429388-05										
	LCS	Chloride		0.5	mg/L	100				
	LCS	Nitrate as N		0.238	mg/L	95				
QC2429388-06										
	LCSD of QC2429388-05	Chloride	0.5	0.492	mg/L	98	1			Splt# QC2429388-05 (0.5mg/L)
	LCSD of QC2429388-05	Nitrate as N	0.238	0.23	mg/L	92	3			Splt# QC2429388-05 (0.238mg/L)
QC2429388-07										
	CCV	Chloride		20.6	mg/L	103				
	CCV	Nitrate as N		1.67	mg/L	105				
QC2429388-08										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2429388-09										
	SPK of 2415616-01	Nitrate as N	9.36	9.43	mg/L	29				Splt# 2415616-01 (9.36mg/L) A1
QC2429388-10										
	SPKD of 2415616-01	Nitrate as N	9.36	9.5	mg/L	59	0			Splt# 2415616-01 (9.36mg/L) A1

QC list for Run#: *2083281* **and Test: MBP_PH (SM 4500-H+ B)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429395-04										
	ICV	pH		8.96	pH	99				
	ICV	Temperature (°C)		20.7	°C					
QC2429395-05										
	DUP of 2415460-01	pH	8.94	8.96	pH		0			Splt# 2415460-01 (8.94pH) H1,H3
	DUP of 2415460-01	Temperature (°C)	17.2	17.3	°C					Splt# 2415460-01 (17.2°C)
QC2429395-06										
	CCV	pH		8.97	pH	99				
	CCV	Temperature (°C)		20.7	°C					
QC2429395-07										
	CCV	pH		8.97	pH	99				

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Water Quality Laboratory

FOLDER ID: 2415616

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/15/2024
Sampling Team: Field

QC list for Run#: *2083281* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	CCV	Temperature (°C)		20.7	°C					

QC list for Run#: *2083282* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429396-01										
	CAL	Specific Conductance @25°C		1420	µmhos/cm	101				
QC2429396-02										
	ICV	Specific Conductance @25°C		147	µmhos/cm	100				
QC2429396-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2429396-04										
	MRL_CK	Specific Conductance @25°C		10	µmhos/cm	100				
QC2429396-05										
	DUP of 2415600-01	Specific Conductance @25°C	22.1	22.1	µmhos/cm		0		1	Splt# 2415600-01 (22.1µmhos/cm)
QC2429396-06										
	CCV	Specific Conductance @25°C		99.9	µmhos/cm	99				
QC2429396-07										
	CCV	Specific Conductance @25°C		1420	µmhos/cm	101				

QC list for Run#: *2083284* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2429398-01										
	BLK	Chloride		<3	mg/L			1.16	3	
QC2429398-02										
	MRL_CK	Chloride		2.98	mg/L	99				
QC2429398-03										
	SPK of 2415616-01	Chloride	40.4	118	mg/L	97			6	Splt# 2415616-01 (40.4mg/L)
QC2429398-04										
	SPKD of 2415616-01	Chloride	40.4	125	mg/L	106	5		6	Splt# 2415616-01 (40.4mg/L)
QC2429398-06										
	LCS	Chloride		40.9	mg/L	102			3	

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ELAP Cert #:
MILLBRAE 1449

SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2415616

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/15/2024
Sampling Team: Field

Qualifiers Legend:

Flag

Code	Description
A1	See case narrative, notes, or comments.
B1	Target analyte detected in associated Method Blank.
B2	Target analyte detected in Travel/Trip/Equipment Blank.
E1	Estimated value. Exceeds calibration range. Reanalysis not possible due to insufficient sample vol.
E2	Estimated value. Exceeds calibration range. Reanalysis not performed due to hold time requirement.
E3	EMPC (estimated maximum possible concentration)
H1	Sample analysis performed past the method specified hold time per client request.
H2	Initial analysis within hold time. Reanalysis for the required dilution was past hold time.
H3	Sample was received past hold time.
H4	Confirmatory analysis was past hold time.
H5	Confirmatory analysis was past hold time. Original result not confirmed.
H6	Filtration not completed within method specific time; Filtered in Lab. Filtration exceeded hold time.
I1	I.S. recovery or R.T. outside method limits. Interference confirmed by reanalysis/dilution. GC/GCMS
L1	LCS and/or LCSD is outside acceptance limits. Results might be low biased.
L2	LCS and/or LCSD is outside acceptance limits. Results might be high biased.
M	Matrix interference suspected.
M1	MS/MSD % rec. outside acceptable limits. Batch acceptance by LCS.
M2	MS/MSD RPD outside acceptable limits. Batch acceptance by LCS.
M3	Sample diluted due to matrix. MS recovery not useful. Batch acceptance by LCS.
NA	Not Analyzed
NC	Not for Compliance
NC1	Method specification(s) not met
NC2	Test/analyte is not accredited or accreditation is not available.
NP	Not provided
NS	Not sampled (or no sample received)
P1	Sample received and analyzed without chemical preservation.
P2	Sample received without chemical preservation but preserved by the laboratory.
P3	Sample received with inadequate chemical preservation, but preserved by the laboratory
P4	Sample was received outside recommended temperature range.
P5	Sample received in inappropriate sample container.
P6	Insufficient sample received to meet method requirements.
P7	Sample received with head space.
Q	%D (difference) between the 1st and 2nd column/detector is >50%. Lower value reported.
Q1	Minimum Reporting Limit (MRL) verification failed high, but target analyte was not detected.
R	Data rejected
S	Dilution due to sample matrix effects, the surrogate recovery was outside the acceptance limits.
S1	Sample diluted due to matrix. Surrogate spike recovery provides no useful information.
S2	Surrogate recovery below acceptable limits. Results might be low biased.
S3	Surrogate recovery exceeds acceptable limits. Results might be high biased.
TIC	Tentatively Identified Compound
U	Analyzed but not detected

RQualifier

Code	Description
+	Positive
-	Negative
<	Less Than

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2415616

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 07/15/2024
Sampling Team: Field

=	Equals
>	Greater Than
A	Bacti result, absent
DNQ	Detected, but Not Quantified
E	Estimated value
I	Bacti result, Inconclusive value. Analyzed, but result is undetermined
ND	Non-detected
P	Bacti result, present

QC Type

Code	Description
BLK	Method Blank Sample
CAL	Calibration Sample
CCV	Continuing Calibration Verification Sample
DUP	Duplicate Sample
ICV	Initial Calibration Verification Sample
LCS	Laboratory Control Standard Sample
LCSD	Laboratory Control Standard Duplicate Sample
MRL_CK	Method Reporting Level Check Sample
SPK	Matrix Spike Sample
SPKD	Matrix Spike Duplicate Sample

Please email labfeedback@sfwater.org <mailto:labfeedback@sfwater.org> to report any comments, complaints, compliments or suggestions. Please provide detailed descriptions and attach documentation as necessary.

Reported By: Megan Tran
Technical Manager

Reported On: 3-Sep-2024

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

Analytical Report

PREPARED FOR:

Stefani Harrison
525 Golden Gate Avenue
Project Management Bureau
SAN FRANCISCO, CA 94102

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ELAP Cert #:
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SEWPCP 1721

SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2417275

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 09/30/2024
Sampling Team: Field

Lab Sample#: 2417275-01 **Sample Source:** WSB_SF11_LM3S **External ID:**
Date Collected: 09/30/2024 11:42AM **Date Received:** 09/30/2024 02:48PM **Sample Matrix:** Aqueous **Location Desc:** SF#11 - LMMW3S

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	2.03	mg/L	1	0.1	0.5	09/30/2024	2087117 PWARNER	
Nitrate as N	<0.04	mg/L	1	0.034	0.04	09/30/2024	2087117 PWARNER	
SEM_200.7_DW(EPA 200.7)								
Calcium, Ca	69.7	mg/L	1	0.005	1	10/16/2024	2087907 BTRINH	
Magnesium, Mg	74.1	mg/L	1	0.021	0.2	10/16/2024	2087907 BTRINH	
Potassium, K	3.22	mg/L	1	0.06	0.2	10/16/2024	2087907 BTRINH	
Sodium, Na	44.9	mg/L	1	0.2	1	10/16/2024	2087907 BTRINH	
MBP_ALK(SM 2320 B)								
Alkalinity	457	mg/L	1	1.19	6	09/30/2024	2087118 ALEE	
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	85.8	mg/L	1		6	09/30/2024	2087120 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	1070	µmhos/cm	1		1	09/30/2024	2087112 JWOO	>MCL
MBP_PH(SM 4500-H+ B)								
pH	7.07	pH	1			09/30/2024	2087111 JWOO	H1,H3
Temperature (°C)	19.3	°C	1			09/30/2024	2087111 JWOO	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	579	mg/L	1	13.2	20	10/04/2024	2087174 ABALALIO	>MCL

Lab Sample#: 2417275-01A **Sample Source:** WSB_SF11_LM3S **External ID:**
Date Collected: 09/30/2024 11:42AM **Date Received:** 09/30/2024 02:48PM **Sample Matrix:** Aqueous **Location Desc:** SF#11 - LMMW3S

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_HARDNESS_T(SM 2340 C)								
Hardness, Total, as CaCO3	472	mg/L	1	2.37	15	09/30/2024	2087119 MSWONG	

Lab Sample#: 2417275-02 **Sample Source:** WSB_SF10_LM3D **External ID:**
Date Collected: 09/30/2024 11:30AM **Date Received:** 09/30/2024 02:48PM **Sample Matrix:** Aqueous **Location Desc:** SF#10 - LMMW3D

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	8.63	mg/L	1	0.1	0.5	10/01/2024	2087117 PWARNER	
Nitrate as N	<0.04	mg/L	1	0.034	0.04	10/01/2024	2087117 PWARNER	
SEM_200.7_DW(EPA 200.7)								

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721

FOLDER ID: 2417275

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 09/30/2024
Sampling Team: Field

Calcium, Ca	**29.8**	mg/L	1	0.005	1	10/16/2024	2087907	BTRINH
Magnesium, Mg	**32.2**	mg/L	1	0.021	0.2	10/16/2024	2087907	BTRINH
Potassium, K	**2.03**	mg/L	1	0.06	0.2	10/16/2024	2087907	BTRINH
Sodium, Na	**45.9**	mg/L	1	0.2	1	10/16/2024	2087907	BTRINH

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	**203**	mg/L	1	0.593	3	09/30/2024	2087118 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	**66.7**	mg/L	1		3	09/30/2024	2087120 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	**610**	µmhos/cm	1		1	09/30/2024	2087112 JWOO	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	**200**	mg/L	1	0.474	3	09/30/2024	2087119 MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	**7.62**	pH	1			09/30/2024	2087111 JWOO	H1,H3
Temperature (°C)	**19.8**	°C	1			09/30/2024	2087111 JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	**316**	mg/L	1	13.2	20	10/04/2024	2087174 ABALALIO	

Lab Sample#: **2417275-03** **Sample Source:** WSB_SF15_LM6D **External ID:**

Date Collected: 09/30/2024 02:09PM **Date Received:** 09/30/2024 02:48PM **Sample Matrix:** Aqueous **Location Desc:** SF#15 - LMMW6D

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	**30.8**	mg/L	10	1	5	10/01/2024	2087117 PWARNER	
Nitrate as N	**7.36**	mg/L	10	0.34	0.4	10/01/2024	2087117 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	**31.5**	mg/L	1	0.005	1	10/16/2024	2087907 BTRINH	
Magnesium, Mg	**32.9**	mg/L	1	0.021	0.2	10/16/2024	2087907 BTRINH	
Potassium, K	**1.85**	mg/L	1	0.06	0.2	10/16/2024	2087907 BTRINH	
Sodium, Na	**43.3**	mg/L	1	0.2	1	10/16/2024	2087907 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	**172**	mg/L	1	0.593	3	09/30/2024	2087118 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	**54.7**	mg/L	1		3	09/30/2024	2087120 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

MILLBRAE 1449

Water Quality Laboratory

SEWPCP 1721

FOLDER ID: 2417275

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 09/30/2024
Sampling Team: Field

Specific Conductance @25°C	612	µmhos/cm	1		1	09/30/2024	2087112	JWOO

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	205	mg/L	1	0.474	3	09/30/2024	2087119 MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.86	pH	1			09/30/2024	2087111 JWOO	H1,H3
Temperature (°C)	20.3	°C	1			09/30/2024	2087111 JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	342	mg/L	1	13.2	20	10/04/2024	2087174 ABALALIO	

Lab Sample#: 2417275-04 **Sample Source:** WSB_SF_DUP_FULL **External ID:**

Date Collected: 09/30/2024 11:32AM **Date Received:** 09/30/2024 02:48PM **Sample Matrix:** Aqueous **Location Desc:** SF#10 - LMMW3D

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	8.69	mg/L	1	0.1	0.5	10/01/2024	2087117 PWARNER	
Nitrate as N	<0.04	mg/L	1	0.034	0.04	10/01/2024	2087117 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	30	mg/L	1	0.005	1	10/16/2024	2087907 BTRINH	
Magnesium, Mg	32.4	mg/L	1	0.021	0.2	10/16/2024	2087907 BTRINH	
Potassium, K	2.02	mg/L	1	0.06	0.2	10/16/2024	2087907 BTRINH	
Sodium, Na	46.2	mg/L	1	0.2	1	10/16/2024	2087907 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	204	mg/L	1	0.593	3	09/30/2024	2087118 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	67.2	mg/L	1		3	09/30/2024	2087120 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	610	µmhos/cm	1		1	09/30/2024	2087112 JWOO	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	201	mg/L	1	0.474	3	09/30/2024	2087119 MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.62	pH	1			09/30/2024	2087111 JWOO	H1,H3
Temperature (°C)	20.4	°C	1			09/30/2024	2087111 JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	323	mg/L	1	13.2	20	10/04/2024	2087174 ABALALIO	

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Water Quality Laboratory

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SEWPCP 1721

FOLDER ID: 2417275

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 09/30/2024
Sampling Team: Field

QC list for Run#: *2087111* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432134-04										
	ICV	pH		9.02	pH	99				
	ICV	Temperature (°C)		22.5	°C					
QC2432134-05										
	DUP of 2417335-02	pH	9.3	9.29	pH		0			Splt# 2417335-02 (9.3pH) H1,H3
	DUP of 2417335-02	Temperature (°C)	15	15	°C					Splt# 2417335-02 (15°C)
QC2432134-06										
	CCV	pH		9.02	pH	99				
	CCV	Temperature (°C)		22.6	°C					
QC2432134-07										
	CCV	pH		9.01	pH	99				
	CCV	Temperature (°C)		22.5	°C					

QC list for Run#: *2087112* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432135-01										
	CAL	Specific Conductance @25°C		1420	µmhos/cm	100				
QC2432135-02										
	ICV	Specific Conductance @25°C		145	µmhos/cm	98				
QC2432135-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2432135-04										
	MRL_CK	Specific Conductance @25°C		10.2	µmhos/cm	102				
QC2432135-05										
	DUP of 2417335-02	Specific Conductance @25°C	87.4	87.5	µmhos/cm		0		1	Splt# 2417335-02 (87.4µmhos/cm)
QC2432135-06										
	CCV	Specific Conductance @25°C		99.3	µmhos/cm	99				
QC2432135-07										
	CCV	Specific Conductance @25°C		1410	µmhos/cm	99				

QC list for Run#: *2087117* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432129-01										
	MRL_CK	Chloride		0.506	mg/L	101				
	MRL_CK	Sulfate		0.509	mg/L	102				
	MRL_CK	Nitrate as N		0.0407	mg/L	102				
QC2432129-02										
	CCV	Chloride		2.54	mg/L	102				
	CCV	Sulfate		2.53	mg/L	101				
	CCV	Nitrate as N		0.196	mg/L	98				
QC2432129-03										
	CCV	Chloride		20.4	mg/L	102				

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Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721

FOLDER ID: 2417275

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 09/30/2024
Sampling Team: Field

QC list for Run#: *2087117* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	CCV	Sulfate		20.4	mg/L	102				
	CCV	Nitrate as N		1.66	mg/L	105				
QC2432129-04										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2432129-05										
	BLK	Chloride		<1	mg/L			0.2	1	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2432129-06										
	LCS	Chloride		0.518	mg/L	104				
	LCS	Sulfate		1.48	mg/L	98				
	LCS	Nitrate as N		0.241	mg/L	96				
QC2432129-07										
	LCSD of QC2432129-06	Chloride	0.518	0.517	mg/L	103	0			Splt# QC2432129-06 (0.518mg/L)
	LCSD of QC2432129-06	Sulfate	1.48	1.49	mg/L	99	0			Splt# QC2432129-06 (1.48mg/L)
	LCSD of QC2432129-06	Nitrate as N	0.241	0.243	mg/L	97	0			Splt# QC2432129-06 (0.241mg/L)
QC2432129-08										
	SPK of 2417275-01	Sulfate	2.03	3.43	mg/L	93				Splt# 2417275-01 (2.03mg/L)
	SPK of 2417275-01	Nitrate as N	<0.04	0.201	mg/L	80				Splt# 2417275-01 (<0.04mg/L)
QC2432129-09										
	SPKD of 2417275-01	Sulfate	2.03	3.46	mg/L	95	0			Splt# 2417275-01 (2.03mg/L)
	SPKD of 2417275-01	Nitrate as N	<0.04	0.209	mg/L	83	3			Splt# 2417275-01 (<0.04mg/L)
QC2432129-10										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	

QC list for Run#: *2087118* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432130-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2432130-02										
	MRL_CK	Alkalinity		3.12	mg/L	104				
QC2432130-03										
	SPK of 2417370-05	Alkalinity	65	106	mg/L	102			3	Splt# 2417370-05 (65mg/L)
QC2432130-04										
	SPKD of 2417370-05	Alkalinity	65	106	mg/L	102	0		3	Splt# 2417370-05 (65mg/L)
QC2432130-06										
	LCS	Alkalinity		43.3	mg/L	108			3	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721

FOLDER ID: 2417275

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 09/30/2024
Sampling Team: Field

QC list for Run#: *2087119* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432131-01										
	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2432131-02										
	MRL_CK	Hardness, Total, as CaCO3		2.48	mg/L	82				
QC2432131-03										
	DUP of 2417370-05	Hardness, Total, as CaCO3	70.8	70.5	mg/L		0	0.474	3	Splt# 2417370-05 (70.8mg/L)
QC2432131-04										
	LCS	Hardness, Total, as CaCO3		40.5	mg/L	101			3	

QC list for Run#: *2087120* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432132-01										
	BLK	Chloride		<3	mg/L			1.16	3	
QC2432132-02										
	MRL_CK	Chloride		3.06	mg/L	102				
QC2432132-03										
	SPK of 2417370-05	Chloride	15.1	54	mg/L	97			3	Splt# 2417370-05 (15.1mg/L)
QC2432132-04										
	SPKD of 2417370-05	Chloride	15.1	54.1	mg/L	97	0		3	Splt# 2417370-05 (15.1mg/L)
QC2432132-06										
	LCS	Chloride		38.7	mg/L	96			3	

QC list for Run#: *2087174* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432174-01										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2432174-02										
	DUP of 2417276-02	Total Dissolved Solids	500	519	mg/L		3	13.2	20	Splt# 2417276-02 (500mg/L)
QC2432174-03										
	LCS	Total Dissolved Solids		93	mg/L	97		13.2	20	

QC list for Run#: *2087907* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432676-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2432676-02										
	LCS	Calcium, Ca		2	mg/L	99		0.04	1	
	LCS	Magnesium, Mg		2.03	mg/L	102		0.007	0.2	
	LCS	Potassium, K		2	mg/L	100		0.04	0.2	
	LCS	Sodium, Na		2.15	mg/L	107		0.02	1	
QC2432676-03										

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Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721

FOLDER ID: 2417275

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 09/30/2024
Sampling Team: Field

QC list for Run#: *2087907* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	DUP of 2417275-01	Calcium, Ca	69.7	70.2	mg/L		0	0.005	1	Splt# 2417275-01 (69.7mg/L)
	DUP of 2417275-01	Magnesium, Mg	74.1	74.6	mg/L		0	0.021	0.2	Splt# 2417275-01 (74.1mg/L)
	DUP of 2417275-01	Potassium, K	3.22	3.32	mg/L		3	0.06	0.2	Splt# 2417275-01 (3.22mg/L)
	DUP of 2417275-01	Sodium, Na	44.9	45.1	mg/L		0	0.2	1	Splt# 2417275-01 (44.9mg/L)
QC2432676-04										
	SPK of 2417275-01	Calcium, Ca	69.7	71.1	mg/L	67		0.04	1	Splt# 2417275-01 (69.7mg/L)
	SPK of 2417275-01	Magnesium, Mg	74.1	75.4	mg/L	64		0.007	0.2	Splt# 2417275-01 (74.1mg/L)
	SPK of 2417275-01	Potassium, K	3.22	5.3	mg/L	104		0.04	0.2	Splt# 2417275-01 (3.22mg/L)
	SPK of 2417275-01	Sodium, Na	44.9	46.3	mg/L	73		0.02	1	Splt# 2417275-01 (44.9mg/L)
QC2432676-05										
	SPKD of 2417275-01	Calcium, Ca	69.7	71.8	mg/L	105	1	0.04	1	Splt# 2417275-01 (69.7mg/L)
	SPKD of 2417275-01	Magnesium, Mg	74.1	76.2	mg/L	104	1	0.007	0.2	Splt# 2417275-01 (74.1mg/L)
	SPKD of 2417275-01	Potassium, K	3.22	5.38	mg/L	108	1	0.04	0.2	Splt# 2417275-01 (3.22mg/L)
	SPKD of 2417275-01	Sodium, Na	44.9	46.6	mg/L	86	0	0.02	1	Splt# 2417275-01 (44.9mg/L)
QC2432676-06										
	MRL_CK	Calcium, Ca		0.0301	mg/L	75		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0473	mg/L	94		0.021	0.021	
	MRL_CK	Potassium, K		0.21	mg/L	105		0.06	0.06	
	MRL_CK	Sodium, Na		0.376	mg/L	188		0.2	0.2	
QC2432700-01										
	ICV	Calcium, Ca		10.2	mg/L	103		0.05	1	
	ICV	Magnesium, Mg		9.95	mg/L	100		0.01	0.2	
	ICV	Potassium, K		98.4	mg/L	99		0.03	0.2	
	ICV	Sodium, Na		10.1	mg/L	101		0.002	1	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2417277

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 10/02/2024
Sampling Team: Field

Lab Sample#: 2417277-01 **Sample Source:** WSB_SF58_SWD140 **External ID:**
Date Collected: 10/02/2024 11:15AM **Date Received:** 10/02/2024 01:41PM **Sample Matrix:** Aqueous **Location Desc:** SF#58 - USGS SOUTH WINDMILL MW140

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	62.4	mg/L	1		6	10/02/2024	2087263 MSWONG	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	752	µmhos/cm	1		1	10/02/2024	2087271 ABALALIO	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	393	mg/L	1	13.2	20	10/06/2024	2087365 DCARDONA	

Lab Sample#: 2417277-02 **Sample Source:** WSB_SF57_SWD57 **External ID:**
Date Collected: 10/02/2024 10:40AM **Date Received:** 10/02/2024 01:41PM **Sample Matrix:** Aqueous **Location Desc:** SF#57 - USGS SOUTH WINDMILL MW57

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	189	mg/L	1		15	10/02/2024	2087263 MSWONG	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	1320	µmhos/cm	1		1	10/02/2024	2087271 ABALALIO	>MCL
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	702	mg/L	1	13.2	20	10/06/2024	2087365 DCARDONA	>MCL

Lab Sample#: 2417277-03 **Sample Source:** WSB_SF_DUP **External ID:**
Date Collected: 10/02/2024 10:41AM **Date Received:** 10/02/2024 01:41PM **Sample Matrix:** Aqueous **Location Desc:** SF#57 - USGS SOUTH WINDMILL MW57

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	188	mg/L	1		15	10/02/2024	2087263 MSWONG	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	1330	µmhos/cm	1		1	10/02/2024	2087271 ABALALIO	>MCL
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	705	mg/L	1	13.2	20	10/06/2024	2087365 DCARDONA	>MCL

Lab Sample#: 2417277-04 **Sample Source:** WSB_SF70_SWM3 **External ID:**
Date Collected: 10/02/2024 09:55AM **Date Received:** 10/02/2024 01:41PM **Sample Matrix:** Aqueous **Location Desc:** WSB_SF70, GGP SWM-3

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	37.1	mg/L	1		6	10/02/2024	2087263 MSWONG	
MBP_COND(SM 2510 B)								

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FOLDER ID: 2417277

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 10/02/2024
Sampling Team: Field

Specific Conductance @25°C	464	µmhos/cm	1		1	10/02/2024	2087271	ABALALIO

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	239	mg/L	1	13.2	20	10/06/2024	2087365 DCARDONA	

Lab Sample#: 2417277-05 **Sample Source:** WSB_SF_DUP **External ID:**

Date Collected: 10/02/2024 09:56AM **Date Received:** 10/02/2024 01:41PM **Sample Matrix:** Aqueous **Location Desc:** WSB_SF70, GGP SWM-3

Test/Analyte

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	37.2	mg/L	1		6	10/02/2024	2087263 MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	464	µmhos/cm	1		1	10/02/2024	2087271 ABALALIO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	247	mg/L	1	13.2	20	10/06/2024	2087365 DCARDONA	

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FOLDER ID: 2417277

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 10/02/2024
Sampling Team: Field

QC list for Run#: *2087263* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432237-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2432237-02	MRL_CK	Chloride		3.06	mg/L	102				
QC2432237-03	SPK of 2418164-01	Chloride	5.76	44.6	mg/L	97			3	Splt# 2418164-01 (5.76mg/L)
QC2432237-04	SPKD of 2418164-01	Chloride	5.76	44.1	mg/L	95	1		3	Splt# 2418164-01 (5.76mg/L)
QC2432237-06	LCS	Chloride		38.9	mg/L	97			3	

QC list for Run#: *2087271* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432242-02	ICV	Specific Conductance @25°C		145	µmhos/cm	98				
QC2432242-03	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2432242-04	MRL_CK	Specific Conductance @25°C		10.2	µmhos/cm	102				
QC2432242-05	DUP of 2417277-01	Specific Conductance @25°C	752	753	µmhos/cm		0		1	Splt# 2417277-01 (752µmhos/cm)
QC2432242-06	CCV	Specific Conductance @25°C		99.4	µmhos/cm	99				

QC list for Run#: *2087365* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432316-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2432316-02	LCS	Total Dissolved Solids		88	mg/L	92		13.2	20	
QC2432316-03	DUP of 2417277-01	Total Dissolved Solids	393	383	mg/L		2	13.2	20	Splt# 2417277-01 (393mg/L)

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Water Quality Laboratory

FOLDER ID: 2417278

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 10/03/2024
Sampling Team: Field

Lab Sample#: 2417278-01 **Sample Source:** WSB_SF34_KIR130 **External ID:**
Date Collected: 10/03/2024 11:46AM **Date Received:** 10/03/2024 12:31PM **Sample Matrix:** Aqueous **Location Desc:** SF#34 - GRT HWY/KIRKHAM MW130

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	31.4	mg/L	1		3	10/03/2024	2087321 MSWONG	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	410	µmhos/cm	1		1	10/03/2024	2087309 ABALALIO	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	216	mg/L	1	13.2	20	10/06/2024	2087365 DCARDONA	

Lab Sample#: 2417278-02 **Sample Source:** WSB_SF35_KIR255 **External ID:**
Date Collected: 10/03/2024 11:12AM **Date Received:** 10/03/2024 12:31PM **Sample Matrix:** Aqueous **Location Desc:** SF#35 - GRT HWY/KIRKHAM MW255

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	37.9	mg/L	1		3	10/03/2024	2087321 MSWONG	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	486	µmhos/cm	1		1	10/03/2024	2087309 ABALALIO	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	273	mg/L	1	13.2	20	10/06/2024	2087365 DCARDONA	

Lab Sample#: 2417278-03 **Sample Source:** WSB_SF36_KIR385 **External ID:**
Date Collected: 10/03/2024 11:30AM **Date Received:** 10/03/2024 12:31PM **Sample Matrix:** Aqueous **Location Desc:** SF#36 - GRT HWY/KIRKHAM MW385

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	35.5	mg/L	1		3	10/03/2024	2087321 MSWONG	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	471	µmhos/cm	1		1	10/03/2024	2087309 ABALALIO	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	283	mg/L	1	13.2	20	10/06/2024	2087365 DCARDONA	

Lab Sample#: 2417278-04 **Sample Source:** WSB_SF37_KIR435 **External ID:**
Date Collected: 10/03/2024 10:24AM **Date Received:** 10/03/2024 12:31PM **Sample Matrix:** Aqueous **Location Desc:** SF#37 - GRT HWY/KIRKHAM MW435

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	28	mg/L	1		3	10/03/2024	2087321 MSWONG	
MBP_COND(SM 2510 B)								

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Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 10/03/2024
Sampling Team: Field

Specific Conductance @25°C	436	µmhos/cm	1		1	10/03/2024	2087309	ABALALIO

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	261	mg/L	1	13.2	20	10/06/2024	2087365 DCARDONA	

Lab Sample#: 2417278-05 **Sample Source:** WSB_SF_DUP **External ID:**

Date Collected: 10/03/2024 11:13AM **Date Received:** 10/03/2024 12:31PM **Sample Matrix:** Aqueous **Location Desc:** SF#35 - GRT HWY/KIRKHAM MW255

Test/Analyte

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	37.9	mg/L	1		3	10/03/2024	2087321 MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	490	µmhos/cm	1		1	10/03/2024	2087309 ABALALIO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	258	mg/L	1	13.2	20	10/06/2024	2087365 DCARDONA	

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FOLDER ID: 2417278

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 10/03/2024
Sampling Team: Field

QC list for Run#: *2087309* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432273-01	CAL	Specific Conductance @25°C		1420	µmhos/cm	100				
QC2432273-02	ICV	Specific Conductance @25°C		144	µmhos/cm	98				
QC2432273-03	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2432273-04	MRL_CK	Specific Conductance @25°C		10.3	µmhos/cm	103				
QC2432273-05	DUP of 2417278-01	Specific Conductance @25°C	410	411	µmhos/cm		0		1	Splt# 2417278-01 (410µmhos/cm)
QC2432273-06	CCV	Specific Conductance @25°C		98.8	µmhos/cm	98				

QC list for Run#: *2087321* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432284-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2432284-02	MRL_CK	Chloride		2.94	mg/L	98				
QC2432284-03	SPK of 2417617-02	Chloride	7.3	45.7	mg/L	96			3	Splt# 2417617-02 (7.3mg/L)
QC2432284-04	SPKD of 2417617-02	Chloride	7.3	46	mg/L	96	0		3	Splt# 2417617-02 (7.3mg/L)
QC2432284-06	LCS	Chloride		39	mg/L	97			3	

QC list for Run#: *2087365* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432316-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2432316-02	LCS	Total Dissolved Solids		88	mg/L	92		13.2	20	
QC2432316-03	DUP of 2417277-01	Total Dissolved Solids	393	383	mg/L		2	13.2	20	Splt# 2417277-01 (393mg/L)

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Water Quality Laboratory

FOLDER ID: 2417279

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 10/07/2024
Sampling Team: Field

Lab Sample#: 2417279-01 **Sample Source:** WSB_SF30_ORT125 **External ID:**
Date Collected: 10/07/2024 11:51AM **Date Received:** 10/07/2024 01:07PM **Sample Matrix:** Aqueous **Location Desc:** SF#30 - GRT HWY/ORTEGA MW125

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	32.5	mg/L	1		3	10/07/2024	2087478 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	460	µmhos/cm	1		1	10/07/2024	2087490 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	254	mg/L	1	13.2	20	10/15/2024	2087673 MSWONG	

Lab Sample#: 2417279-02 **Sample Source:** WSB_SF31_ORT265 **External ID:**
Date Collected: 10/07/2024 11:50AM **Date Received:** 10/07/2024 01:07PM **Sample Matrix:** Aqueous **Location Desc:** SF#31 - GRT HWY/ORTEGA MW265

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	24.5	mg/L	1		3	10/07/2024	2087478 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	273	µmhos/cm	1		1	10/07/2024	2087490 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	155	mg/L	1	13.2	20	10/15/2024	2087673 MSWONG	

Lab Sample#: 2417279-03 **Sample Source:** WSB_SF32_ORT400 **External ID:**
Date Collected: 10/07/2024 10:48AM **Date Received:** 10/07/2024 01:07PM **Sample Matrix:** Aqueous **Location Desc:** SF#32 - GRT HWY/ORTEGA MW400

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	23.2	mg/L	1		3	10/07/2024	2087478 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	272	µmhos/cm	1		1	10/07/2024	2087490 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	161	mg/L	1	13.2	20	10/15/2024	2087673 MSWONG	

Lab Sample#: 2417279-04 **Sample Source:** WSB_SF33_ORT475 **External ID:**
Date Collected: 10/07/2024 10:45AM **Date Received:** 10/07/2024 01:07PM **Sample Matrix:** Aqueous **Location Desc:** SF#33 - GRT HWY/ORTEGA MW475

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	28.1	mg/L	1		3	10/07/2024	2087478 ALEE	
MBP_COND(SM 2510 B)								

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2417279

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 10/07/2024
Sampling Team: Field

Specific Conductance @25°C	298	µmhos/cm	1		1	10/07/2024	2087490	MSWONG

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	169	mg/L	1	13.2	20	10/15/2024	2087673 MSWONG	

Lab Sample#: 2417279-05 **Sample Source:** WSB_SF_DUP **External ID:**

Date Collected: 10/07/2024 11:51AM **Date Received:** 10/07/2024 01:07PM **Sample Matrix:** Aqueous **Location Desc:** SF#31 - GRT HWY/ORTEGA MW265

Test/Analyte

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	24.8	mg/L	1		3	10/07/2024	2087478 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	273	µmhos/cm	1		1	10/07/2024	2087490 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	168	mg/L	1	13.2	20	10/15/2024	2087673 MSWONG	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2417279

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 10/07/2024
Sampling Team: Field

QC list for Run#: *2087478* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432393-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2432393-02	MRL_CK	Chloride		3.21	mg/L	107				
QC2432393-03	SPK of 2417642-06	Chloride	6.43	45.1	mg/L	96			3	Splt# 2417642-06 (6.43mg/L)
QC2432393-04	SPKD of 2417642-06	Chloride	6.43	46.5	mg/L	100	3		3	Splt# 2417642-06 (6.43mg/L)
QC2432393-06	LCS	Chloride		39.2	mg/L	98			3	

QC list for Run#: *2087490* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432402-02	ICV	Specific Conductance @25°C		145	µmhos/cm	98				
QC2432402-03	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2432402-04	MRL_CK	Specific Conductance @25°C		10.5	µmhos/cm	105				
QC2432402-05	DUP of 2417279-05	Specific Conductance @25°C	273	272	µmhos/cm		0		1	Splt# 2417279-05 (273µmhos/cm)
QC2432402-06	CCV	Specific Conductance @25°C		99.2	µmhos/cm	99				

QC list for Run#: *2087673* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432532-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2432532-02	LCS	Total Dissolved Solids		95	mg/L	100		13.2	20	
QC2432532-03	DUP of 2418353-03	Total Dissolved Solids	41	40	mg/L		2	13.2	20	Splt# 2418353-03 (41mg/L)
QC2432532-04	DUP of 2417295-03	Total Dissolved Solids	180	181	mg/L		0	13.2	20	Splt# 2417295-03 (180mg/L)

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2417280

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 10/08/2024
Sampling Team: Field

Lab Sample#: 2417280-01 **Sample Source:** WSB_SF68_GGPNL1 **External ID:**
Date Collected: 10/08/2024 01:29PM **Date Received:** 10/08/2024 02:58PM **Sample Matrix:** Aqueous **Location Desc:** WSB_SF68, GGP NORTH LAKE ROAD NL-1

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	29.5	mg/L	1		3	10/08/2024	2087586 ABALALIO	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	468	µmhos/cm	1		1	10/08/2024	2087548 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	278	mg/L	1	13.2	20	10/15/2024	2087673 MSWONG	

Lab Sample#: 2417280-02 **Sample Source:** WSB_SF69_NWM3 **External ID:**
Date Collected: 10/08/2024 11:14AM **Date Received:** 10/08/2024 02:58PM **Sample Matrix:** Aqueous **Location Desc:** WSB_SF69, GGP NWM-3

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	39	mg/L	1		3	10/08/2024	2087586 ABALALIO	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	441	µmhos/cm	1		1	10/08/2024	2087548 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	251	mg/L	1	13.2	20	10/15/2024	2087673 MSWONG	

Lab Sample#: 2417280-03 **Sample Source:** WSB_SF67_GGPSF1 **External ID:**
Date Collected: 10/08/2024 10:29AM **Date Received:** 10/08/2024 02:58PM **Sample Matrix:** Aqueous **Location Desc:** WSB_SF67, GGP SOCCER FIELD SF-1

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	40.1	mg/L	1		3	10/08/2024	2087586 ABALALIO	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	551	µmhos/cm	1		1	10/08/2024	2087548 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	297	mg/L	1	13.2	20	10/15/2024	2087673 MSWONG	

Lab Sample#: 2417280-04 **Sample Source:** WSB_SF_DUP **External ID:**
Date Collected: 10/08/2024 01:38PM **Date Received:** 10/08/2024 02:58PM **Sample Matrix:** Aqueous **Location Desc:** WSB_SF68, GGP NORTH LAKE ROAD NL-1

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	29.8	mg/L	1		3	10/08/2024	2087586 ABALALIO	
MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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Water Quality Laboratory

FOLDER ID: 2417280

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 10/08/2024
Sampling Team: Field

Specific Conductance @25°C	468	µmhos/cm	1	1	10/08/2024	2087548	MSWONG

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	266	mg/L	1	13.2	20	10/15/2024	2087673	MSWONG	

QC list for Run#: *2087548* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432459-02	ICV	Specific Conductance @25°C		145	µmhos/cm	98				
QC2432459-03	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2432459-04	MRL_CK	Specific Conductance @25°C		10.5	µmhos/cm	105				
QC2432459-05	DUP of 2418353-02	Specific Conductance @25°C	81.7	81.8	µmhos/cm		0		1	Splt# 2418353-02 (81.7µmhos/cm)
QC2432459-06	CCV	Specific Conductance @25°C		99.3	µmhos/cm	99				
QC2432459-07	CCV	Specific Conductance @25°C		1420	µmhos/cm	101				

QC list for Run#: *2087586* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432467-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2432467-02	MRL_CK	Chloride		3	mg/L	100				
QC2432467-03	SPK of 2417280-01	Chloride	29.5	67.8	mg/L	95			3	Splt# 2417280-01 (29.5mg/L)
QC2432467-04	SPKD of 2417280-01	Chloride	29.5	68.4	mg/L	97	0		3	Splt# 2417280-01 (29.5mg/L)
QC2432467-06	LCS	Chloride		39.1	mg/L	97			3	

QC list for Run#: *2087673* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432532-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2432532-02	LCS	Total Dissolved Solids		95	mg/L	100		13.2	20	
QC2432532-03	DUP of 2418353-03	Total Dissolved Solids	41	40	mg/L		2	13.2	20	Splt# 2418353-03 (41mg/L)
QC2432532-04	DUP of 2417295-03	Total Dissolved Solids	180	181	mg/L		0	13.2	20	Splt# 2417295-03 (180mg/L)

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Water Quality Laboratory

FOLDER ID: 2417295

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 10/09/2024
Sampling Team: Field

Lab Sample#: 2417295-01 **Sample Source:** WSB_SF26_TAR145 **External ID:**
Date Collected: 10/09/2024 11:20AM **Date Received:** 10/09/2024 12:19PM **Sample Matrix:** Aqueous **Location Desc:** SF#26 - GRT HWY/TARAVAL MW145

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	41.6	mg/L	1		3	10/09/2024	2087624 MSWONG	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	464	µmhos/cm	1		1	10/09/2024	2087631 ALEE	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	264	mg/L	1	13.2	20	10/15/2024	2087673 MSWONG	

Lab Sample#: 2417295-02 **Sample Source:** WSB_SF27_TAR240 **External ID:**
Date Collected: 10/09/2024 11:07AM **Date Received:** 10/09/2024 12:19PM **Sample Matrix:** Aqueous **Location Desc:** SF#27 - GRT HWY/TARAVAL MW240

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	32.2	mg/L	1		3	10/09/2024	2087624 MSWONG	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	384	µmhos/cm	1		1	10/09/2024	2087631 ALEE	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	218	mg/L	1	13.2	20	10/15/2024	2087673 MSWONG	

Lab Sample#: 2417295-03 **Sample Source:** WSB_SF28_TAR400 **External ID:**
Date Collected: 10/09/2024 10:34AM **Date Received:** 10/09/2024 12:19PM **Sample Matrix:** Aqueous **Location Desc:** SF#28 - GRT HWY/TARAVAL MW400

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	27.6	mg/L	1		3	10/09/2024	2087624 MSWONG	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	319	µmhos/cm	1		1	10/09/2024	2087631 ALEE	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	180	mg/L	1	13.2	20	10/15/2024	2087673 MSWONG	

Lab Sample#: 2417295-04 **Sample Source:** WSB_SF29_TAR530 **External ID:**
Date Collected: 10/09/2024 10:47AM **Date Received:** 10/09/2024 12:19PM **Sample Matrix:** Aqueous **Location Desc:** SF#29 - GRT HWY/TARAVAL MW530

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	24.6	mg/L	1		3	10/09/2024	2087624 MSWONG	
MBP_COND(SM 2510 B)								

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2417295

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 10/09/2024
Sampling Team: Field

Specific Conductance @25°C	366	µmhos/cm	1		1	10/09/2024	2087631	ALEE

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	209	mg/L	1	13.2	20	10/15/2024	2087673	MSWONG	

Lab Sample#: 2417295-05 **Sample Source:** WSB_SF_DUP **External ID:**

Date Collected: 10/09/2024 11:13AM **Date Received:** 10/09/2024 12:19PM **Sample Matrix:** Aqueous **Location Desc:** SF#27 - GRT HWY/TARAVAL MW240

Test/Analyte

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	32.1	mg/L	1		3	10/09/2024	2087624	MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	386	µmhos/cm	1		1	10/09/2024	2087631	ALEE	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	223	mg/L	1	13.2	20	10/15/2024	2087673	MSWONG	

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FOLDER ID: 2417295

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 10/09/2024
Sampling Team: Field

QC list for Run#: *2087624* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432496-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2432496-02	MRL_CK	Chloride		2.72	mg/L	90				
QC2432496-03	SPK of 2417295-03	Chloride	27.6	66.2	mg/L	96			3	Splt# 2417295-03 (27.6mg/L)
QC2432496-04	SPKD of 2417295-03	Chloride	27.6	66.1	mg/L	96	0		3	Splt# 2417295-03 (27.6mg/L)
QC2432496-06	LCS	Chloride		38.8	mg/L	97			3	

QC list for Run#: *2087631* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432498-02	ICV	Specific Conductance @25°C		144	µmhos/cm	97				
QC2432498-03	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2432498-04	MRL_CK	Specific Conductance @25°C		10.5	µmhos/cm	105				
QC2432498-05	DUP of 2417854-04	Specific Conductance @25°C	93.1	93.9	µmhos/cm		0		1	Splt# 2417854-04 (93.1µmhos/cm)
QC2432498-06	CCV	Specific Conductance @25°C		99.1	µmhos/cm	99				

QC list for Run#: *2087673* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432532-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2432532-02	LCS	Total Dissolved Solids		95	mg/L	100		13.2	20	
QC2432532-03	DUP of 2418353-03	Total Dissolved Solids	41	40	mg/L		2	13.2	20	Splt# 2418353-03 (41mg/L)
QC2432532-04	DUP of 2417295-03	Total Dissolved Solids	180	181	mg/L		0	13.2	20	Splt# 2417295-03 (180mg/L)

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FOLDER ID: 2417296

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 10/10/2024
Sampling Team: Field

Lab Sample#: 2417296-01 **Sample Source:** WSB_SF41_WSPLAY **External ID:**
Date Collected: 10/10/2024 11:47AM **Date Received:** 10/10/2024 01:57PM **Sample Matrix:** Aqueous **Location Desc:** SF#41 - WEST SUNSET PLAYGROUND

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	49.7	mg/L	5	0.5	2.5	10/10/2024	2087699 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	9.87	mg/L	1	0.005	1	10/16/2024	2087907 BTRINH	
Magnesium, Mg	44.3	mg/L	1	0.021	0.2	10/16/2024	2087907 BTRINH	
Potassium, K	1.24	mg/L	1	0.06	0.2	10/16/2024	2087907 BTRINH	
Sodium, Na	38.4	mg/L	1	0.2	1	10/16/2024	2087907 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	174	mg/L	1	0.593	3	10/10/2024	2087683 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	46.1	mg/L	1		3	10/10/2024	2087688 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	556	µmhos/cm	1		1	10/10/2024	2087690 JWOO	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	202	mg/L	1	0.474	3	10/10/2024	2087702 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	8.63	pH	1			10/10/2024	2087695 JWOO	H1,H3
Temperature (°C)	18.9	°C	1			10/10/2024	2087695 JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	288	mg/L	1	13.2	20	10/15/2024	2087673 MSWONG	

Lab Sample#: 2417296-01A **Sample Source:** WSB_SF41_WSPLAY **External ID:**
Date Collected: 10/10/2024 11:47AM **Date Received:** 10/10/2024 01:57PM **Sample Matrix:** Aqueous **Location Desc:** SF#41 - WEST SUNSET PLAYGROUND

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	<0.04	mg/L	1	0.034	0.04	10/10/2024	2087699 PWARNER	

Lab Sample#: 2417296-02 **Sample Source:** WSB_SB-M-1 **External ID:**
Date Collected: 10/10/2024 09:41AM **Date Received:** 10/10/2024 01:57PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SB_CUP-M-1, MILLBRAE CORP. YARD, tem

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	20.5	mg/L	10	1	5	10/10/2024	2087699 PWARNER	
Nitrate as N	4.19	mg/L	10	0.34	0.4	10/10/2024	2087699 PWARNER	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

SEWPCP 1721

Water Quality Laboratory

MILLBRAE 1449

FOLDER ID: 2417296

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 10/10/2024
Sampling Team: Field

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	28.4	mg/L	1	0.005	1	10/16/2024	2087907	BTRINH	
Magnesium, Mg	19.5	mg/L	1	0.021	0.2	10/16/2024	2087907	BTRINH	
Potassium, K	1.59	mg/L	1	0.06	0.2	10/16/2024	2087907	BTRINH	
Sodium, Na	31	mg/L	1	0.2	1	10/16/2024	2087907	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	117	mg/L	1	0.593	3	10/10/2024	2087683	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	46.9	mg/L	1		3	10/10/2024	2087688	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	456	µmhos/cm	1		1	10/10/2024	2087690	JWOO	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	147	mg/L	1	0.474	3	10/10/2024	2087702	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	6.77	pH	1			10/10/2024	2087695	JWOO	H1,H3
Temperature (°C)	19.1	°C	1			10/10/2024	2087695	JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	270	mg/L	1	13.2	20	10/15/2024	2087673	MSWONG	

Lab Sample#: 2417296-03 **Sample Source:** WSB_SB_DUP **External ID:**

Date Collected: 10/10/2024 12:15PM **Date Received:** 10/10/2024 01:57PM **Sample Matrix:** Aqueous **Location Desc:** SF#41 - WEST SUNSET PLAYGROUND

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	49.7	mg/L	5	0.5	2.5	10/10/2024	2087699	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	10	mg/L	1	0.005	1	10/16/2024	2087907	BTRINH	
Magnesium, Mg	45	mg/L	1	0.021	0.2	10/16/2024	2087907	BTRINH	
Potassium, K	1.28	mg/L	1	0.06	0.2	10/16/2024	2087907	BTRINH	
Sodium, Na	38.9	mg/L	1	0.2	1	10/16/2024	2087907	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	170	mg/L	1	0.593	3	10/10/2024	2087683	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	45.4	mg/L	1		3	10/10/2024	2087688	ALEE	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2417296

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 10/10/2024
Sampling Team: Field

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	557	µmhos/cm	1		1	10/10/2024	2087690	JWOO	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	200	mg/L	1	0.474	3	10/10/2024	2087702	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	8.58	pH	1			10/10/2024	2087695	JWOO	H1,H3
Temperature (°C)	19.1	°C	1			10/10/2024	2087695	JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	278	mg/L	1	13.2	20	10/15/2024	2087673	MSWONG	

Lab Sample#: 2417296-03A **Sample Source:** WSB_SB_DUP **External ID:**

Date Collected: 10/10/2024 12:15PM **Date Received:** 10/10/2024 01:57PM **Sample Matrix:** Aqueous **Location Desc:** SF#41 - WEST SUNSET PLAYGROUND

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Nitrate as N	<0.04	mg/L	1	0.034	0.04	10/10/2024	2087699	PWARNER	

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Water Quality Laboratory

FOLDER ID: 2417296

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 10/10/2024
Sampling Team: Field

QC list for Run#: *2087673* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432532-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2432532-02	LCS	Total Dissolved Solids		95	mg/L	100		13.2	20	
QC2432532-03	DUP of 2418353-03	Total Dissolved Solids	41	40	mg/L		2	13.2	20	Splt# 2418353-03 (41mg/L)
QC2432532-04	DUP of 2417295-03	Total Dissolved Solids	180	181	mg/L		0	13.2	20	Splt# 2417295-03 (180mg/L)

QC list for Run#: *2087683* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432550-01	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2432550-02	MRL_CK	Alkalinity		2.96	mg/L	98				
QC2432550-03	SPK of 2417827-01	Alkalinity	27.5	68.8	mg/L	103			3	Splt# 2417827-01 (27.5mg/L)
QC2432550-04	SPKD of 2417827-01	Alkalinity	27.5	69	mg/L	104	0		3	Splt# 2417827-01 (27.5mg/L)
QC2432550-06	LCS	Alkalinity		43.3	mg/L	108			3	

QC list for Run#: *2087688* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432551-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2432551-02	MRL_CK	Chloride		3.08	mg/L	103				
QC2432551-03	SPK of 2417827-01	Chloride	6.05	44.8	mg/L	96			3	Splt# 2417827-01 (6.05mg/L)
QC2432551-04	SPKD of 2417827-01	Chloride	6.05	46.3	mg/L	101	3		3	Splt# 2417827-01 (6.05mg/L)
QC2432551-06	LCS	Chloride		39.1	mg/L	97			3	

QC list for Run#: *2087690* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432546-01	CAL	Specific Conductance @25°C		1420	µmhos/cm	100				
QC2432546-02	ICV	Specific Conductance @25°C		145	µmhos/cm	99				
QC2432546-03	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2432546-04	MRL_CK	Specific Conductance @25°C		10.5	µmhos/cm	105				

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FOLDER ID: 2417296

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 10/10/2024
Sampling Team: Field

QC list for Run#: *2087690* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432546-05										
	DUP of 2417824-02	Specific Conductance @25°C	89.8	90	µmhos/cm		0		1	Splt# 2417824-02 (89.8µmhos/cm)
QC2432546-06										
	CCV	Specific Conductance @25°C		99.2	µmhos/cm	99				
QC2432546-07										
	CCV	Specific Conductance @25°C		1420	µmhos/cm	101				

QC list for Run#: *2087695* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432543-04										
	ICV	pH		9.04	pH	99				
	ICV	Temperature (°C)		21.4	°C					
QC2432543-05										
	DUP of 2417824-02	pH	9.29	9.28	pH		0			Splt# 2417824-02 (9.29pH) H1,H3
	DUP of 2417824-02	Temperature (°C)	17.9	17.7	°C					Splt# 2417824-02 (17.9°C)
QC2432543-06										
	CCV	pH		9.04	pH	99				
	CCV	Temperature (°C)		21.5	°C					
QC2432543-07										
	CCV	pH		9.03	pH	99				
	CCV	Temperature (°C)		21.4	°C					

QC list for Run#: *2087699* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432549-01										
	MRL_CK	Chloride		0.509	mg/L	102				
	MRL_CK	Sulfate		0.5	mg/L	99				
	MRL_CK	Nitrate as N		0.0418	mg/L	105				
QC2432549-02										
	CCV	Chloride		2.5	mg/L	100				
	CCV	Sulfate		2.45	mg/L	98				
	CCV	Nitrate as N		0.196	mg/L	98				
QC2432549-03										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2432549-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2432549-05										
	LCS	Chloride		0.0994	mg/L	19				
	LCS	Sulfate		0.282	mg/L	18				

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FOLDER ID: 2417296

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 10/10/2024
Sampling Team: Field

QC list for Run#: *2087699* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	LCS	Nitrate as N		0.0482	mg/L	19				
QC2432549-06										
	LCSD of QC2432549-11	Chloride	0.5	0.498	mg/L	99	0			Splt# QC2432549-11 (0.5mg/L)
	LCSD of QC2432549-11	Sulfate	1.53	1.49	mg/L	99	2			Splt# QC2432549-11 (1.53mg/L)
	LCSD of QC2432549-11	Nitrate as N	0.248	0.243	mg/L	97	2			Splt# QC2432549-11 (0.248mg/L)
QC2432549-07										
	CCV	Chloride		20.3	mg/L	101				
	CCV	Sulfate		20.3	mg/L	101				
	CCV	Nitrate as N		1.66	mg/L	104				
QC2432549-08										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2432549-09										
	SPK of 2417296-02	Sulfate	20.5	35.5	mg/L	100				Splt# 2417296-02 (20.5mg/L)
	SPK of 2417296-02	Nitrate as N	4.19	6.72	mg/L	101				Splt# 2417296-02 (4.19mg/L)
QC2432549-10										
	SPKD of 2417296-02	Sulfate	20.5	35.6	mg/L	101	0			Splt# 2417296-02 (20.5mg/L)
	SPKD of 2417296-02	Nitrate as N	4.19	6.74	mg/L	102	0			Splt# 2417296-02 (4.19mg/L)
QC2432549-11										
	LCS	Chloride		0.5	mg/L	100				
	LCS	Sulfate		1.53	mg/L	102				
	LCS	Nitrate as N		0.248	mg/L	99				

QC list for Run#: *2087702* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432552-01										
	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2432552-02										
	MRL_CK	Hardness, Total, as CaCO3		2.57	mg/L	85				
QC2432552-03										
	DUP of 2417827-02	Hardness, Total, as CaCO3	21.8	21.6	mg/L		0	0.474	3	Splt# 2417827-02 (21.8mg/L)
QC2432552-04										
	LCS	Hardness, Total, as CaCO3		43.8	mg/L	109			3	

QC list for Run#: *2087907* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432676-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	

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MILLBRAE 1449

FOLDER ID: 2417296

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 10/10/2024
Sampling Team: Field

QC list for Run#: *2087907* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2432676-02										
	LCS	Calcium, Ca		2	mg/L	99		0.04	1	
	LCS	Magnesium, Mg		2.03	mg/L	102		0.007	0.2	
	LCS	Potassium, K		2	mg/L	100		0.04	0.2	
	LCS	Sodium, Na		2.15	mg/L	107		0.02	1	
QC2432676-03										
	DUP of 2417275-01	Calcium, Ca	69.7	70.2	mg/L		0	0.005	1	Splt# 2417275-01 (69.7mg/L)
	DUP of 2417275-01	Magnesium, Mg	74.1	74.6	mg/L		0	0.021	0.2	Splt# 2417275-01 (74.1mg/L)
	DUP of 2417275-01	Potassium, K	3.22	3.32	mg/L		3	0.06	0.2	Splt# 2417275-01 (3.22mg/L)
	DUP of 2417275-01	Sodium, Na	44.9	45.1	mg/L		0	0.2	1	Splt# 2417275-01 (44.9mg/L)
QC2432676-04										
	SPK of 2417275-01	Calcium, Ca	69.7	71.1	mg/L	67		0.04	1	Splt# 2417275-01 (69.7mg/L)
	SPK of 2417275-01	Magnesium, Mg	74.1	75.4	mg/L	64		0.007	0.2	Splt# 2417275-01 (74.1mg/L)
	SPK of 2417275-01	Potassium, K	3.22	5.3	mg/L	104		0.04	0.2	Splt# 2417275-01 (3.22mg/L)
	SPK of 2417275-01	Sodium, Na	44.9	46.3	mg/L	73		0.02	1	Splt# 2417275-01 (44.9mg/L)
QC2432676-05										
	SPKD of 2417275-01	Calcium, Ca	69.7	71.8	mg/L	105	1	0.04	1	Splt# 2417275-01 (69.7mg/L)
	SPKD of 2417275-01	Magnesium, Mg	74.1	76.2	mg/L	104	1	0.007	0.2	Splt# 2417275-01 (74.1mg/L)
	SPKD of 2417275-01	Potassium, K	3.22	5.38	mg/L	108	1	0.04	0.2	Splt# 2417275-01 (3.22mg/L)
	SPKD of 2417275-01	Sodium, Na	44.9	46.6	mg/L	86	0	0.02	1	Splt# 2417275-01 (44.9mg/L)
QC2432676-06										
	MRL_CK	Calcium, Ca		0.0301	mg/L	75		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0473	mg/L	94		0.021	0.021	
	MRL_CK	Potassium, K		0.21	mg/L	105		0.06	0.06	
	MRL_CK	Sodium, Na		0.376	mg/L	188		0.2	0.2	
QC2432700-01										
	ICV	Calcium, Ca		10.2	mg/L	103		0.05	1	
	ICV	Magnesium, Mg		9.95	mg/L	100		0.01	0.2	
	ICV	Potassium, K		98.4	mg/L	99		0.03	0.2	
	ICV	Sodium, Na		10.1	mg/L	101		0.002	1	

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FOLDER ID: 2417297

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 10/15/2024
Sampling Team: Field

Lab Sample#: 2417297-01 **Sample Source:** WSB_SB-44-1-190 **External ID:**
Date Collected: 10/15/2024 11:13AM **Date Received:** 10/15/2024 02:06PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SB_CUP-44-1-190, GG NATIONAL CEMETE

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))									
Sulfate	112	mg/L	10	1	5	10/15/2024	2087858	PWARNER	
Nitrate as N	5.79	mg/L	10	0.34	0.4	10/15/2024	2087858	PWARNER	
SEM_200.7_DW(EPA 200.7)									
Calcium, Ca	50.3	mg/L	1	0.005	1	10/22/2024	2088178	BTRINH	
Magnesium, Mg	36.2	mg/L	1	0.021	0.2	10/22/2024	2088178	BTRINH	
Potassium, K	1.41	mg/L	1	0.06	0.2	10/22/2024	2088178	BTRINH	
Sodium, Na	133	mg/L	1	0.2	1	10/22/2024	2088178	BTRINH	
MBP_ALK(SM 2320 B)									
Alkalinity	289	mg/L	1	1.19	6	10/15/2024	2087873	ALEE	
MBP_CHLORIDE(SM 4500-CL- D)									
Chloride	94.2	mg/L	1		6	10/15/2024	2087874	ALEE	
MBP_COND(SM 2510 B)									
Specific Conductance @25°C	1080	µmhos/cm	1		1	10/15/2024	2087852	MSWONG	>MCL
MBP_HARDNESS_T(SM 2340 C)									
Hardness, Total, as CaCO3	262	mg/L	1	0.948	6	10/15/2024	2087875	ALEE	
MBP_PH(SM 4500-H+ B)									
pH	6.59	pH	1			10/15/2024	2087850	MSWONG	H1,H3
Temperature (°C)	19.7	°C	1			10/15/2024	2087850	MSWONG	
MBP_TDS(SM 2540 C)									
Total Dissolved Solids	620	mg/L	1	13.2	20	10/19/2024	2087971	ALEE	>MCL

Lab Sample#: 2417297-02 **Sample Source:** WSB_SB-44-1-300 **External ID:**
Date Collected: 10/15/2024 12:18PM **Date Received:** 10/15/2024 02:06PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SB_CUP-44-1-300, GG NATIONAL CEMETE

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))									
Sulfate	104	mg/L	10	1	5	10/15/2024	2087858	PWARNER	
Nitrate as N	5.35	mg/L	10	0.34	0.4	10/15/2024	2087858	PWARNER	
SEM_200.7_DW(EPA 200.7)									
Calcium, Ca	50	mg/L	1	0.005	1	10/22/2024	2088178	BTRINH	
Magnesium, Mg	35.1	mg/L	1	0.021	0.2	10/22/2024	2088178	BTRINH	
Potassium, K	1.57	mg/L	1	0.06	0.2	10/22/2024	2088178	BTRINH	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721

FOLDER ID: 2417297

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 10/15/2024
Sampling Team: Field

Sodium, Na	127	mg/L	1	0.2	1	10/22/2024	2088178	BTRINH

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	293	mg/L	1	1.19	6	10/15/2024	2087873 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	94.5	mg/L	1		6	10/15/2024	2087874 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	1060	µmhos/cm	1		1	10/15/2024	2087852 MSWONG	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	263	mg/L	1	0.948	6	10/15/2024	2087875 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	6.58	pH	1			10/15/2024	2087850 MSWONG	H1,H3
Temperature (°C)	19.9	°C	1			10/15/2024	2087850 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	630	mg/L	1	13.2	20	10/19/2024	2087971 ALEE	>MCL

Lab Sample#: 2417297-03 **Sample Source:** WSB_SB-44-1-460 **External ID:**
Date Collected: 10/15/2024 12:26PM **Date Received:** 10/15/2024 02:06PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SB_CUP-44-1-460, GG NATIONAL CEMETE

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	96.9	mg/L	10	1	5	10/15/2024	2087858 PWARNER	
Nitrate as N	0.916	mg/L	10	0.34	0.4	10/15/2024	2087858 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	52.4	mg/L	1	0.005	1	10/22/2024	2088178 BTRINH	
Magnesium, Mg	44	mg/L	1	0.021	0.2	10/22/2024	2088178 BTRINH	
Potassium, K	3.06	mg/L	1	0.06	0.2	10/22/2024	2088178 BTRINH	
Sodium, Na	63.9	mg/L	1	0.2	1	10/22/2024	2088178 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	175	mg/L	1	1.19	6	10/15/2024	2087873 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	129	mg/L	1		6	10/15/2024	2087874 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	913	µmhos/cm	1		1	10/15/2024	2087852 MSWONG	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

MILLBRAE 1449

Water Quality Laboratory

SEWPCP 1721

FOLDER ID: 2417297

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 10/15/2024
Sampling Team: Field

Hardness, Total, as CaCO3	305	mg/L	1	0.948	6	10/15/2024	2087875	ALEE

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	6.58	pH	1			10/15/2024	2087850	MSWONG	H1,H3
Temperature (°C)	20.5	°C	1			10/15/2024	2087850	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	519	mg/L	1	13.2	20	10/19/2024	2087971	ALEE	>MCL

Lab Sample#: 2417297-04 **Sample Source:** WSB_SB-44-1-580 **External ID:**

Date Collected: 10/15/2024 10:32AM **Date Received:** 10/15/2024 02:06PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SB_CUP-44-1-580, GG NATIONAL CEMETE

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	369	mg/L	20	2	10	10/15/2024	2087858	PWARNER	>MCL

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	118	mg/L	1	0.005	1	10/22/2024	2088178	BTRINH	
Magnesium, Mg	99.6	mg/L	1	0.021	0.2	10/22/2024	2088178	BTRINH	
Potassium, K	5.54	mg/L	1	0.06	0.2	10/22/2024	2088178	BTRINH	
Sodium, Na	110	mg/L	1	0.2	1	10/22/2024	2088178	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	283	mg/L	1	2.96	15	10/15/2024	2087873	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	195	mg/L	1		15	10/15/2024	2087874	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1710	µmhos/cm	1		1	10/15/2024	2087852	MSWONG	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	690	mg/L	1	2.37	15	10/15/2024	2087875	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.57	pH	1			10/15/2024	2087850	MSWONG	H1,H3
Temperature (°C)	18.9	°C	1			10/15/2024	2087850	MSWONG	

Lab Sample#: 2417297-04A **Sample Source:** WSB_SB-44-1-580 **External ID:**

Date Collected: 10/15/2024 10:32AM **Date Received:** 10/15/2024 02:06PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SB_CUP-44-1-580, GG NATIONAL CEMETE

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Nitrate as N	<0.8	mg/L	20	0.68	0.8	10/15/2024	2087858	PWARNER	

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MILLBRAE 1449

Water Quality Laboratory

SEWPCP 1721

FOLDER ID: 2417297

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 10/15/2024
Sampling Team: Field

Lab Sample#: 2417297-04B **Sample Source:** WSB_SB-44-1-580 **External ID:**

Date Collected: 10/15/2024 10:32AM **Date Received:** 10/15/2024 02:06PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SB_CUP-44-1-580, GG NATIONAL CEMETE

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBP_TDS(SM 2540 C)									
Total Dissolved Solids	**1099**	**mg/L**	1	26.4	40	10/20/2024	2087971	ALEE	>MCL

Lab Sample#: 2417297-05 **Sample Source:** WSB_SB_DUP **External ID:**

Date Collected: 10/15/2024 11:30AM **Date Received:** 10/15/2024 02:06PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SB_CUP-44-1-190, GG NATIONAL CEMETE

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))									
Sulfate	**107**	**mg/L**	10	1	5	10/15/2024	2087858	PWARNER	
Nitrate as N	**5.62**	**mg/L**	10	0.34	0.4	10/15/2024	2087858	PWARNER	
SEM_200.7_DW(EPA 200.7)									
Calcium, Ca	**50.1**	**mg/L**	1	0.005	1	10/22/2024	2088178	BTRINH	
Magnesium, Mg	**36.1**	**mg/L**	1	0.021	0.2	10/22/2024	2088178	BTRINH	
Potassium, K	**1.45**	**mg/L**	1	0.06	0.2	10/22/2024	2088178	BTRINH	
Sodium, Na	**133**	**mg/L**	1	0.2	1	10/22/2024	2088178	BTRINH	
MBP_ALK(SM 2320 B)									
Alkalinity	**286**	**mg/L**	1	1.19	6	10/15/2024	2087873	ALEE	
MBP_CHLORIDE(SM 4500-CL- D)									
Chloride	**93.8**	**mg/L**	1		6	10/15/2024	2087874	ALEE	
MBP_COND(SM 2510 B)									
Specific Conductance @25°C	**1070**	**µmhos/cm**	1		1	10/15/2024	2087852	MSWONG	>MCL
MBP_HARDNESS_T(SM 2340 C)									
Hardness, Total, as CaCO3	**262**	**mg/L**	1	0.948	6	10/15/2024	2087875	ALEE	
MBP_PH(SM 4500-H+ B)									
pH	**6.6**	**pH**	1			10/15/2024	2087850	MSWONG	H1,H3
Temperature (°C)	**19.6**	**°C**	1			10/15/2024	2087850	MSWONG	
MBP_TDS(SM 2540 C)									
Total Dissolved Solids	**618**	**mg/L**	1	13.2	20	10/19/2024	2087971	ALEE	>MCL

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FOLDER ID: 2417297

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 10/15/2024
Sampling Team: Field

QC list for Run#: *2087850* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432681-04										
	ICV	pH		9.03	pH	99				
	ICV	Temperature (°C)		21.7	°C					
QC2432681-05										
	DUP of 2418354-02	pH	9.39	9.37	pH		0			Splt# 2418354-02 (9.39pH) H1,H3
	DUP of 2418354-02	Temperature (°C)	18.9	18.9	°C					Splt# 2418354-02 (18.9°C)
QC2432681-06										
	CCV	pH		9.06	pH	100				
	CCV	Temperature (°C)		21.7	°C					

QC list for Run#: *2087852* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432682-02										
	ICV	Specific Conductance @25°C		145	µmhos/cm	98				
QC2432682-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2432682-04										
	MRL_CK	Specific Conductance @25°C		10.6	µmhos/cm	106				
QC2432682-05										
	DUP of 2418354-02	Specific Conductance @25°C	87.1	87.6	µmhos/cm		0		1	Splt# 2418354-02 (87.1µmhos/cm)
QC2432682-06										
	CCV	Specific Conductance @25°C		99.1	µmhos/cm	99				
QC2432682-07										
	CCV	Specific Conductance @25°C		1420	µmhos/cm	101				

QC list for Run#: *2087858* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432661-01										
	MRL_CK	Chloride		0.472	mg/L	94				
	MRL_CK	Sulfate		0.466	mg/L	93				
	MRL_CK	Nitrate as N		0.0391	mg/L	98				
QC2432661-02										
	CCV	Chloride		2.44	mg/L	97				
	CCV	Sulfate		2.4	mg/L	96				
	CCV	Nitrate as N		0.19	mg/L	95				
QC2432661-03										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2432661-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2432661-05										

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FOLDER ID: 2417297

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 10/15/2024
Sampling Team: Field

QC list for Run#: *2087858* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	LCS	Chloride		0.491	mg/L	98				
	LCS	Sulfate		1.47	mg/L	97				
	LCS	Nitrate as N		0.241	mg/L	96				
QC2432661-06										
	LCSD of QC2432661-05	Chloride	0.491	0.486	mg/L	97	1			Splt# QC2432661-05 (0.491mg/L)
	LCSD of QC2432661-05	Sulfate	1.47	1.45	mg/L	97	0			Splt# QC2432661-05 (1.47mg/L)
	LCSD of QC2432661-05	Nitrate as N	0.241	0.238	mg/L	95	1			Splt# QC2432661-05 (0.241mg/L)
QC2432661-07										
	CCV	Chloride		19.6	mg/L	98				
	CCV	Sulfate		19.6	mg/L	98				
	CCV	Nitrate as N		1.6	mg/L	101				
QC2432661-08										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2432661-09										
	SPK of 2418354-03	Sulfate	5.75	7.3	mg/L	104				Splt# 2418354-03 (5.75mg/L)
	SPK of 2418354-03	Nitrate as N	0.0869	0.329	mg/L	97				Splt# 2418354-03 (0.0869mg/L)
QC2432661-10										
	SPKD of 2418354-03	Sulfate	5.75	7.52	mg/L	118	2			Splt# 2418354-03 (5.75mg/L)
	SPKD of 2418354-03	Nitrate as N	0.0869	0.359	mg/L	109	8			Splt# 2418354-03 (0.0869mg/L)

QC list for Run#: *2087873* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432677-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2432677-02										
	MRL_CK	Alkalinity		3.12	mg/L	104				
QC2432677-03										
	SPK of 2418436-01	Alkalinity	26	68.5	mg/L	106			3	Splt# 2418436-01 (26mg/L)
QC2432677-04										
	SPKD of 2418436-01	Alkalinity	26	68	mg/L	105	0		3	Splt# 2418436-01 (26mg/L)
QC2432677-05										
	DUP of 2418595-01	Alkalinity	28.9	29.2	mg/L		1	0.593	3	Splt# 2418595-01 (28.9mg/L)
QC2432677-06										
	LCS	Alkalinity		43.4	mg/L	109			3	

QC list for Run#: *2087874* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432678-01										
	BLK	Chloride		<3	mg/L			1.16	3	

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Water Quality Laboratory

ELAP Cert #:
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SEWPCP 1721

FOLDER ID: 2417297

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 10/15/2024
Sampling Team: Field

QC list for Run#: *2087874* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432678-02	MRL_CK	Chloride		2.92	mg/L	97				
QC2432678-03	SPK of 2418436-01	Chloride	5.84	44.2	mg/L	96			3	Splt# 2418436-01 (5.84mg/L)
QC2432678-04	SPKD of 2418436-01	Chloride	5.84	44.6	mg/L	97	0		3	Splt# 2418436-01 (5.84mg/L)
QC2432678-05	DUP of 2418595-01	Chloride	4.88	5.43	mg/L		10		3	Splt# 2418595-01 (4.88mg/L)
QC2432678-06	LCS	Chloride		39	mg/L	97			3	

QC list for Run#: *2087875* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432679-01	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2432679-02	MRL_CK	Hardness, Total, as CaCO3		2.55	mg/L	85				
QC2432679-03	DUP of 2417297-05	Hardness, Total, as CaCO3	262	261	mg/L		0	0.948	6	Splt# 2417297-05 (262mg/L)
QC2432679-04	LCS	Hardness, Total, as CaCO3		41.3	mg/L	103			3	

QC list for Run#: *2087971* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432748-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2432748-02	LCS	Total Dissolved Solids		88	mg/L	92		13.2	20	
QC2432748-03	DUP of 2418354-02	Total Dissolved Solids	36	39	mg/L		8	13.2	20	Splt# 2418354-02 (36mg/L)
QC2432748-04	DUP of 2417298-03	Total Dissolved Solids	326	337	mg/L		3	13.2	20	Splt# 2417298-03 (326mg/L)

QC list for Run#: *2088178* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432842-01	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2432842-02	LCS	Calcium, Ca		2.05	mg/L	103		0.04	1	
	LCS	Magnesium, Mg		2.11	mg/L	105		0.007	0.2	
	LCS	Potassium, K		2.09	mg/L	104		0.04	0.2	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721

FOLDER ID: 2417297

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 10/15/2024
Sampling Team: Field

QC list for Run#: *2088178* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	LCS	Sodium, Na		2.17	mg/L	108		0.02	1	
QC2432842-03										
	DUP of 2417297-01	Calcium, Ca	50.3	50.4	mg/L		0	0.005	1	Splt# 2417297-01 (50.3mg/L)
	DUP of 2417297-01	Magnesium, Mg	36.2	36.3	mg/L		0	0.021	0.2	Splt# 2417297-01 (36.2mg/L)
	DUP of 2417297-01	Potassium, K	1.41	1.48	mg/L		4	0.06	0.2	Splt# 2417297-01 (1.41mg/L)
	DUP of 2417297-01	Sodium, Na	133	134	mg/L		0	0.2	1	Splt# 2417297-01 (133mg/L)
QC2432842-04										
	SPK of 2417297-01	Calcium, Ca	50.3	52.3	mg/L	98		0.04	1	Splt# 2417297-01 (50.3mg/L)
	SPK of 2417297-01	Magnesium, Mg	36.2	38.2	mg/L	102		0.007	0.2	Splt# 2417297-01 (36.2mg/L)
	SPK of 2417297-01	Potassium, K	1.41	3.58	mg/L	108		0.04	0.2	Splt# 2417297-01 (1.41mg/L)
	SPK of 2417297-01	Sodium, Na	133	135	mg/L	82		0.02	1	Splt# 2417297-01 (133mg/L)
QC2432842-05										
	SPKD of 2417297-01	Calcium, Ca	50.3	52.7	mg/L	123	0	0.04	1	Splt# 2417297-01 (50.3mg/L)
	SPKD of 2417297-01	Magnesium, Mg	36.2	38.6	mg/L	119	0	0.007	0.2	Splt# 2417297-01 (36.2mg/L)
	SPKD of 2417297-01	Potassium, K	1.41	3.6	mg/L	110	0	0.04	0.2	Splt# 2417297-01 (1.41mg/L)
	SPKD of 2417297-01	Sodium, Na	133	136	mg/L	147	0	0.02	1	Splt# 2417297-01 (133mg/L)
QC2432842-06										
	MRL_CK	Calcium, Ca		0.0252	mg/L	63		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0486	mg/L	97		0.021	0.021	
	MRL_CK	Potassium, K		0.23	mg/L	115		0.06	0.06	
	MRL_CK	Sodium, Na		0.384	mg/L	192		0.2	0.2	
QC2432895-01										
	ICV	Calcium, Ca		10.1	mg/L	103		0.05	1	
	ICV	Magnesium, Mg		9.9	mg/L	99		0.01	0.2	
	ICV	Potassium, K		98.8	mg/L	99		0.03	0.2	
	ICV	Sodium, Na		10.1	mg/L	101		0.002	1	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2417298

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 10/16/2024
Sampling Team: Field

Lab Sample#: 2417298-01 **Sample Source:** WSB_SS-36-1-160 **External ID:**
Date Collected: 10/16/2024 11:21AM **Date Received:** 10/16/2024 12:13PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SS_CUP-36-1-160, ROW AT FUNERAL HON

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))									
Sulfate	97.9	mg/L	10	1	5	10/17/2024	2087974	PWARNER	
Nitrate as N	10.6	mg/L	10	0.34	0.4	10/17/2024	2087974	PWARNER	>MCL
SEM_200.7_DW(EPA 200.7)									
Calcium, Ca	67.4	mg/L	1	0.005	1	10/22/2024	2088178	BTRINH	
Magnesium, Mg	33.9	mg/L	1	0.021	0.2	10/22/2024	2088178	BTRINH	
Potassium, K	2.51	mg/L	1	0.06	0.2	10/22/2024	2088178	BTRINH	
Sodium, Na	94.7	mg/L	1	0.2	1	10/22/2024	2088178	BTRINH	
MBP_ALK(SM 2320 B)									
Alkalinity	235	mg/L	1	1.19	6	10/16/2024	2087924	ALEE	
MBP_CHLORIDE(SM 4500-CL- D)									
Chloride	89.4	mg/L	1		6	10/16/2024	2087926	ALEE	
MBP_COND(SM 2510 B)									
Specific Conductance @25°C	997	µmhos/cm	1		1	10/16/2024	2087935	ABALALIO	>MCL
MBP_HARDNESS_T(SM 2340 C)									
Hardness, Total, as CaCO3	295	mg/L	1	0.948	6	10/16/2024	2087927	ALEE	
MBP_PH(SM 4500-H+ B)									
pH	7	pH	1			10/16/2024	2087934	ABALALIO	H1,H3
Temperature (°C)	18.9	°C	1			10/16/2024	2087934	ABALALIO	
MBP_TDS(SM 2540 C)									
Total Dissolved Solids	604	mg/L	1	13.2	20	10/19/2024	2087971	ALEE	>MCL

Lab Sample#: 2417298-02 **Sample Source:** WSB_SS-36-1-270 **External ID:**
Date Collected: 10/16/2024 11:27AM **Date Received:** 10/16/2024 12:13PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SS_CUP-36-1-270, ROW AT FUNERAL HON

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))									
Sulfate	21.7	mg/L	5	0.5	2.5	10/17/2024	2087974	PWARNER	
Nitrate as N	1.73	mg/L	5	0.17	0.2	10/17/2024	2087974	PWARNER	
SEM_200.7_DW(EPA 200.7)									
Calcium, Ca	36	mg/L	1	0.005	1	10/22/2024	2088178	BTRINH	
Magnesium, Mg	31.9	mg/L	1	0.021	0.2	10/22/2024	2088178	BTRINH	
Potassium, K	2.32	mg/L	1	0.06	0.2	10/22/2024	2088178	BTRINH	

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Water Quality Laboratory

ELAP Cert #:
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MILLBRAE 1449

FOLDER ID: 2417298

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 10/16/2024
Sampling Team: Field

Sodium, Na	59.5	mg/L	1	0.2	1	10/22/2024	2088178	BTRINH

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	139	mg/L	1	1.19	6	10/16/2024	2087924 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	118	mg/L	1		6	10/16/2024	2087926 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	709	µmhos/cm	1		1	10/16/2024	2087935 ABALALIO	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	207	mg/L	1	0.948	6	10/16/2024	2087927 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.39	pH	1			10/16/2024	2087934 ABALALIO	H1,H3
Temperature (°C)	18.8	°C	1			10/16/2024	2087934 ABALALIO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	370	mg/L	1	13.2	20	10/19/2024	2087971 ALEE	

Lab Sample#: 2417298-03 **Sample Source:** WSB_SS-36-1-455 **External ID:**

Date Collected: 10/16/2024 10:26AM **Date Received:** 10/16/2024 12:13PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SS_CUP-36-1-455, ROW AT FUNERAL HON

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	<0.5	mg/L	1	0.1	0.5	10/17/2024	2087974 PWARNER	
Nitrate as N	<0.04	mg/L	1	0.034	0.04	10/17/2024	2087974 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	42.2	mg/L	1	0.005	1	10/22/2024	2088178 BTRINH	
Magnesium, Mg	24.9	mg/L	1	0.021	0.2	10/22/2024	2088178 BTRINH	
Potassium, K	4.94	mg/L	1	0.06	0.2	10/22/2024	2088178 BTRINH	
Sodium, Na	64.2	mg/L	1	0.2	1	10/22/2024	2088178 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	231	mg/L	1	1.19	6	10/16/2024	2087924 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	86.2	mg/L	1		6	10/16/2024	2087926 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	708	µmhos/cm	1		1	10/16/2024	2087935 ABALALIO	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2417298

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 10/16/2024
Sampling Team: Field

Hardness, Total, as CaCO3	197	mg/L	1	0.948	6	10/16/2024	2087927	ALEE

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.25	pH	1			10/16/2024	2087934	ABALALIO	H1,H3
Temperature (°C)	18	°C	1			10/16/2024	2087934	ABALALIO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	326	mg/L	1	13.2	20	10/19/2024	2087971	ALEE	

Lab Sample#: 2417298-04 **Sample Source:** WSB_SS-36-1-585 **External ID:**
Date Collected: 10/16/2024 10:16AM **Date Received:** 10/16/2024 12:13PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SS_CUP-36-1-585, ROW AT FUNERAL HON

Test/Analyte

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	110	mg/L	1	0.005	1	10/22/2024	2088178	BTRINH	
Magnesium, Mg	66.7	mg/L	1	0.021	0.2	10/22/2024	2088178	BTRINH	
Potassium, K	4.98	mg/L	1	0.06	0.2	10/22/2024	2088178	BTRINH	
Sodium, Na	84.8	mg/L	1	0.2	1	10/22/2024	2088178	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	232	mg/L	1	2.96	15	10/16/2024	2087924	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	176	mg/L	1		15	10/16/2024	2087926	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1410	µmhos/cm	1		1	10/16/2024	2087935	ABALALIO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	533	mg/L	1	2.37	15	10/16/2024	2087927	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7	pH	1			10/16/2024	2087934	ABALALIO	H1,H3
Temperature (°C)	18.1	°C	1			10/16/2024	2087934	ABALALIO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	853	mg/L	1	13.2	20	10/19/2024	2087971	ALEE	>MCL

Lab Sample#: 2417298-04A **Sample Source:** WSB_SS-36-1-585 **External ID:**
Date Collected: 10/16/2024 10:16AM **Date Received:** 10/16/2024 12:13PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SS_CUP-36-1-585, ROW AT FUNERAL HON

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Nitrate as N	<0.04	mg/L	1	0.034	0.04	10/17/2024	2087974	PWARNER	

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Water Quality Laboratory

ELAP Cert #:
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MILLBRAE 1449

FOLDER ID: 2417298

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 10/16/2024
Sampling Team: Field

Lab Sample#: 2417298-04B **Sample Source:** WSB_SS-36-1-585 **External ID:**
Date Collected: 10/16/2024 10:16AM **Date Received:** 10/16/2024 12:13PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SS_CUP-36-1-585, ROW AT FUNERAL HON

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))									
Sulfate	236	mg/L	20	2	10	10/17/2024	2087974	PWARNER	

Lab Sample#: 2417298-05 **Sample Source:** WSB_SS_DUP **External ID:**
Date Collected: 10/16/2024 11:35AM **Date Received:** 10/16/2024 12:13PM **Sample Matrix:** Aqueous **Location Desc:** GSR_SS_CUP-36-1-160, ROW AT FUNERAL HON

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))									
Sulfate	95.3	mg/L	10	1	5	10/17/2024	2087974	PWARNER	
Nitrate as N	10.9	mg/L	10	0.34	0.4	10/17/2024	2087974	PWARNER	>MCL
SEM_200.7_DW(EPA 200.7)									
Calcium, Ca	68.8	mg/L	1	0.005	1	10/22/2024	2088178	BTRINH	
Magnesium, Mg	34.4	mg/L	1	0.021	0.2	10/22/2024	2088178	BTRINH	
Potassium, K	2.55	mg/L	1	0.06	0.2	10/22/2024	2088178	BTRINH	
Sodium, Na	95.7	mg/L	1	0.2	1	10/22/2024	2088178	BTRINH	
MBP_ALK(SM 2320 B)									
Alkalinity	239	mg/L	1	1.19	6	10/16/2024	2087924	ALEE	
MBP_CHLORIDE(SM 4500-CL- D)									
Chloride	92.8	mg/L	1		6	10/16/2024	2087926	ALEE	
MBP_COND(SM 2510 B)									
Specific Conductance @25°C	1010	µmhos/cm	1		1	10/16/2024	2087935	ABALALIO	>MCL
MBP_HARDNESS_T(SM 2340 C)									
Hardness, Total, as CaCO3	296	mg/L	1	0.948	6	10/16/2024	2087927	ALEE	
MBP_PH(SM 4500-H+ B)									
pH	7.03	pH	1			10/16/2024	2087934	ABALALIO	H1,H3
Temperature (°C)	19	°C	1			10/16/2024	2087934	ABALALIO	
MBP_TDS(SM 2540 C)									
Total Dissolved Solids	597	mg/L	1	13.2	20	10/19/2024	2087971	ALEE	>MCL

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FOLDER ID: 2417298

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 10/16/2024
Sampling Team: Field

QC list for Run#: *2087924* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432713-01	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2432713-02	MRL_CK	Alkalinity		3.22	mg/L	107				
QC2432713-03	SPK of 2417298-01	Alkalinity	235	317	mg/L	102			6	Splt# 2417298-01 (235mg/L)
QC2432713-04	SPKD of 2417298-01	Alkalinity	235	317	mg/L	102	0		6	Splt# 2417298-01 (235mg/L)
QC2432713-05	DUP of 2417298-05	Alkalinity	239	240	mg/L		0	1.19	6	Splt# 2417298-05 (239mg/L)
QC2432713-06	LCS	Alkalinity		43.5	mg/L	109			3	

QC list for Run#: *2087926* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432714-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2432714-02	MRL_CK	Chloride		2.83	mg/L	94				
QC2432714-03	SPK of 2417298-01	Chloride	89.4	165	mg/L	94			6	Splt# 2417298-01 (89.4mg/L)
QC2432714-04	SPKD of 2417298-01	Chloride	89.4	167	mg/L	97	1		6	Splt# 2417298-01 (89.4mg/L)
QC2432714-05	DUP of 2417298-05	Chloride	92.8	93	mg/L		0		6	Splt# 2417298-05 (92.8mg/L)
QC2432714-06	LCS	Chloride		38.7	mg/L	96			3	

QC list for Run#: *2087927* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432715-01	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2432715-02	MRL_CK	Hardness, Total, as CaCO3		2.85	mg/L	95				
QC2432715-03	DUP of 2417298-05	Hardness, Total, as CaCO3	296	290	mg/L		1	0.948	6	Splt# 2417298-05 (296mg/L)
QC2432715-04	LCS	Hardness, Total, as CaCO3		41.4	mg/L	103			3	

QC list for Run#: *2087934* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432719-04	ICV	pH		9.03	pH	99				
	ICV	Temperature (°C)		21	°C					
QC2432719-05										

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2417298

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 10/16/2024
Sampling Team: Field

QC list for Run#: *2087934* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	DUP of 2417823-01	pH	9.45	9.47	pH		0			Splt# 2417823-01 (9.45pH) H1,H3
	DUP of 2417823-01	Temperature (°C)	15.7	15.2	°C					Splt# 2417823-01 (15.7°C)
QC2432719-06										
	CCV	pH		9.04	pH	99				
	CCV	Temperature (°C)		20.6	°C					
QC2432719-07										
	CCV	pH		9.04	pH	99				
	CCV	Temperature (°C)		20.4	°C					

QC list for Run#: *2087935* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432720-01										
	CAL	Specific Conductance @25°C		1420	µmhos/cm	101				
QC2432720-02										
	ICV	Specific Conductance @25°C		146	µmhos/cm	99				
QC2432720-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2432720-04										
	MRL_CK	Specific Conductance @25°C		10.6	µmhos/cm	106				
QC2432720-05										
	DUP of 2417823-01	Specific Conductance @25°C	89.7	90	µmhos/cm		0		1	Splt# 2417823-01 (89.7µmhos/cm)
QC2432720-06										
	CCV	Specific Conductance @25°C		99	µmhos/cm	99				
QC2432720-07										
	CCV	Specific Conductance @25°C		1420	µmhos/cm	101				

QC list for Run#: *2087971* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432748-01										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2432748-02										
	LCS	Total Dissolved Solids		88	mg/L	92		13.2	20	
QC2432748-03										
	DUP of 2418354-02	Total Dissolved Solids	36	39	mg/L		8	13.2	20	Splt# 2418354-02 (36mg/L)
QC2432748-04										
	DUP of 2417298-03	Total Dissolved Solids	326	337	mg/L		3	13.2	20	Splt# 2417298-03 (326mg/L)

QC list for Run#: *2087974* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432751-01										
	MRL_CK	Chloride		0.491	mg/L	98				
	MRL_CK	Sulfate		0.492	mg/L	98				
	MRL_CK	Nitrate as N		0.0413	mg/L	104				

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ELAP Cert #:
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FOLDER ID: 2417298

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 10/16/2024
Sampling Team: Field

QC list for Run#: *2087974* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432751-02										
	CCV	Chloride		2.46	mg/L	98				
	CCV	Sulfate		2.42	mg/L	96				
	CCV	Nitrate as N		0.194	mg/L	97				
QC2432751-03										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2432751-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2432751-05										
	LCS	Chloride		0.496	mg/L	99				
	LCS	Sulfate		1.47	mg/L	98				
	LCS	Nitrate as N		0.242	mg/L	96				
QC2432751-06										
	LCSD of QC2432751-05	Chloride	0.496	0.493	mg/L	98	0			Splt# QC2432751-05 (0.496mg/L)
	LCSD of QC2432751-05	Sulfate	1.47	1.46	mg/L	97	0			Splt# QC2432751-05 (1.47mg/L)
	LCSD of QC2432751-05	Nitrate as N	0.242	0.24	mg/L	95	0			Splt# QC2432751-05 (0.242mg/L)
QC2432751-07										
	CCV	Chloride		20.1	mg/L	100				
	CCV	Sulfate		20	mg/L	99				
	CCV	Nitrate as N		1.63	mg/L	103				
QC2432751-08										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2432751-09										
	SPK of 2417298-03	Sulfate	<0.5	1.62	mg/L	108				Splt# 2417298-03 (<0.5mg/L)
	SPK of 2417298-03	Nitrate as N	<0.04	0.214	mg/L	85				Splt# 2417298-03 (<0.04mg/L)
QC2432751-10										
	SPKD of 2417298-03	Sulfate	<0.5	1.58	mg/L	105	2			Splt# 2417298-03 (<0.5mg/L)
	SPKD of 2417298-03	Nitrate as N	<0.04	0.214	mg/L	85	0			Splt# 2417298-03 (<0.04mg/L)

QC list for Run#: *2088178* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432842-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	

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Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2417298

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 10/16/2024
Sampling Team: Field

QC list for Run#: *2088178* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2432842-02										
	LCS	Calcium, Ca		2.05	mg/L	103		0.04	1	
	LCS	Magnesium, Mg		2.11	mg/L	105		0.007	0.2	
	LCS	Potassium, K		2.09	mg/L	104		0.04	0.2	
	LCS	Sodium, Na		2.17	mg/L	108		0.02	1	
QC2432842-03										
	DUP of 2417297-01	Calcium, Ca	50.3	50.4	mg/L		0	0.005	1	Splt# 2417297-01 (50.3mg/L)
	DUP of 2417297-01	Magnesium, Mg	36.2	36.3	mg/L		0	0.021	0.2	Splt# 2417297-01 (36.2mg/L)
	DUP of 2417297-01	Potassium, K	1.41	1.48	mg/L		4	0.06	0.2	Splt# 2417297-01 (1.41mg/L)
	DUP of 2417297-01	Sodium, Na	133	134	mg/L		0	0.2	1	Splt# 2417297-01 (133mg/L)
QC2432842-04										
	SPK of 2417297-01	Calcium, Ca	50.3	52.3	mg/L	98		0.04	1	Splt# 2417297-01 (50.3mg/L)
	SPK of 2417297-01	Magnesium, Mg	36.2	38.2	mg/L	102		0.007	0.2	Splt# 2417297-01 (36.2mg/L)
	SPK of 2417297-01	Potassium, K	1.41	3.58	mg/L	108		0.04	0.2	Splt# 2417297-01 (1.41mg/L)
	SPK of 2417297-01	Sodium, Na	133	135	mg/L	82		0.02	1	Splt# 2417297-01 (133mg/L)
QC2432842-05										
	SPKD of 2417297-01	Calcium, Ca	50.3	52.7	mg/L	123	0	0.04	1	Splt# 2417297-01 (50.3mg/L)
	SPKD of 2417297-01	Magnesium, Mg	36.2	38.6	mg/L	119	0	0.007	0.2	Splt# 2417297-01 (36.2mg/L)
	SPKD of 2417297-01	Potassium, K	1.41	3.6	mg/L	110	0	0.04	0.2	Splt# 2417297-01 (1.41mg/L)
	SPKD of 2417297-01	Sodium, Na	133	136	mg/L	147	0	0.02	1	Splt# 2417297-01 (133mg/L)
QC2432842-06										
	MRL_CK	Calcium, Ca		0.0252	mg/L	63		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0486	mg/L	97		0.021	0.021	
	MRL_CK	Potassium, K		0.23	mg/L	115		0.06	0.06	
	MRL_CK	Sodium, Na		0.384	mg/L	192		0.2	0.2	
QC2432895-01										
	ICV	Calcium, Ca		10.1	mg/L	103		0.05	1	
	ICV	Magnesium, Mg		9.9	mg/L	99		0.01	0.2	
	ICV	Potassium, K		98.8	mg/L	99		0.03	0.2	
	ICV	Sodium, Na		10.1	mg/L	101		0.002	1	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2417299

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 10/23/2024
Sampling Team: Field

Lab Sample#: 2417299-01 **Sample Source:** WSB_SF42_ZOO275 **External ID:**
Date Collected: 10/23/2024 11:00AM **Date Received:** 10/23/2024 12:01PM **Sample Matrix:** Aqueous **Location Desc:** SF#42 - ZOO MW275

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	73.5	mg/L	1		3	10/23/2024	2088293 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	525	µmhos/cm	1		1	10/23/2024	2088302 ABALALIO	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	245	mg/L	1	13.2	20	10/26/2024	2088291 DCARDONA	

Lab Sample#: 2417299-02 **Sample Source:** WSB_SF43_ZOO450 **External ID:**
Date Collected: 10/23/2024 10:15AM **Date Received:** 10/23/2024 12:01PM **Sample Matrix:** Aqueous **Location Desc:** SF#43 - ZOO MW450

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	51.3	mg/L	1		3	10/23/2024	2088293 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	586	µmhos/cm	1		1	10/23/2024	2088302 ABALALIO	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	324	mg/L	1	13.2	20	10/26/2024	2088291 DCARDONA	

Lab Sample#: 2417299-03 **Sample Source:** WSB_SF45_ZOO565 **External ID:**
Date Collected: 10/23/2024 10:21AM **Date Received:** 10/23/2024 12:01PM **Sample Matrix:** Aqueous **Location Desc:** SF#45 - ZOO MW565

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	46.4	mg/L	1		3	10/23/2024	2088293 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	420	µmhos/cm	1		1	10/23/2024	2088302 ABALALIO	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	214	mg/L	1	13.2	20	10/26/2024	2088291 DCARDONA	

Lab Sample#: 2417299-04 **Sample Source:** WSB_SF_DUP **External ID:**
Date Collected: 10/23/2024 10:22AM **Date Received:** 10/23/2024 12:01PM **Sample Matrix:** Aqueous **Location Desc:** SF#43 - ZOO MW450

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	51.5	mg/L	1		3	10/23/2024	2088293 ALEE	
MBP_COND(SM 2510 B)								

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Water Quality Laboratory

FOLDER ID: 2417299

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 10/23/2024
Sampling Team: Field

Specific Conductance @25°C	587	µmhos/cm	1		1	10/23/2024	2088302	ABALALIO

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	325	mg/L	1	13.2	20	10/26/2024	2088291	DCARDONA	

QC list for Run#: *2088291* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432969-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2432969-02	LCS	Total Dissolved Solids		87	mg/L	91		13.2	20	
QC2432969-03	DUP of 2418246-02	Total Dissolved Solids	468	496	mg/L		5	13.2	20	Splt# 2418246-02 (468mg/L)
QC2432969-04	DUP of 2417299-02	Total Dissolved Solids	324	326	mg/L		0	13.2	20	Splt# 2417299-02 (324mg/L)

QC list for Run#: *2088293* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432974-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2432974-02	MRL_CK	Chloride		3.34	mg/L	111				
QC2432974-03	SPK of 2418358-03	Chloride	5.23	43.7	mg/L	96			3	Splt# 2418358-03 (5.23mg/L)
QC2432974-04	SPKD of 2418358-03	Chloride	5.23	43.6	mg/L	96	0		3	Splt# 2418358-03 (5.23mg/L)
QC2432974-06	LCS	Chloride		38.6	mg/L	96			3	
QC2432974-07	DUP of 2418358-05	Chloride	6.38	6.43	mg/L		0		3	Splt# 2418358-05 (6.38mg/L)

QC list for Run#: *2088302* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432979-01	CAL	Specific Conductance @25°C		1420	µmhos/cm	100				
QC2432979-02	ICV	Specific Conductance @25°C		145	µmhos/cm	98				
QC2432979-03	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2432979-04	MRL_CK	Specific Conductance @25°C		10.7	µmhos/cm	107				
QC2432979-05	DUP of 2417299-01	Specific Conductance @25°C	525	524	µmhos/cm		0		1	Splt# 2417299-01 (525µmhos/cm)
QC2432979-06	CCV	Specific Conductance @25°C		98.4	µmhos/cm	98				

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FOLDER ID: 2417300

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/12/2024
Sampling Team: Field

Lab Sample#: 2417300-01 **Sample Source:** WSB_SS11SSLP120 **External ID:**
Date Collected: 11/12/2024 10:15AM **Date Received:** 11/12/2024 11:13AM **Sample Matrix:** Aqueous **Location Desc:** SS#11 - SS LINEAR PARK MW-120

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	59.5	mg/L	5	0.5	2.5	11/12/2024	2089226 ABALALIO	
SEM_200.7_DW(EPA 200.7)								
Calcium, Ca	63.3	mg/L	1	0.005	1	11/20/2024	2089667 BTRINH	
Magnesium, Mg	45.8	mg/L	1	0.021	0.2	11/20/2024	2089667 BTRINH	
Potassium, K	3.1	mg/L	1	0.06	0.2	11/20/2024	2089667 BTRINH	
Sodium, Na	93.6	mg/L	1	0.2	1	11/20/2024	2089667 BTRINH	
MBP_ALK(SM 2320 B)								
Alkalinity	295	mg/L	1	1.19	6	11/12/2024	2089269 ALEE	
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	133	mg/L	1		6	11/12/2024	2089273 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	1070	µmhos/cm	1		1	11/12/2024	2089240 PWARNER	>MCL
MBP_HARDNESS_T(SM 2340 C)								
Hardness, Total, as CaCO3	336	mg/L	1	0.948	6	11/12/2024	2089254 ALEE	
MBP_PH(SM 4500-H+ B)								
pH	7.15	pH	1			11/12/2024	2089243 PWARNER	H1,H3
Temperature (°C)	18.7	°C	1			11/12/2024	2089243 PWARNER	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	587	mg/L	1	13.2	20	11/18/2024	2089377 MSWONG	>MCL

Lab Sample#: 2417300-01A **Sample Source:** WSB_SS11SSLP120 **External ID:**
Date Collected: 11/12/2024 10:15AM **Date Received:** 11/12/2024 11:13AM **Sample Matrix:** Aqueous **Location Desc:** SS#11 - SS LINEAR PARK MW-120

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Nitrate as N	<0.04	mg/L	1	0.034	0.04	11/12/2024	2089226 ABALALIO	

Lab Sample#: 2417300-02 **Sample Source:** WSB_SS12SSLP220 **External ID:**
Date Collected: 11/12/2024 09:49AM **Date Received:** 11/12/2024 11:13AM **Sample Matrix:** Aqueous **Location Desc:** SS#12 - SS LINEAR PARK MW-220

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	19.9	mg/L	2	0.2	1	11/12/2024	2089226 ABALALIO	
Nitrate as N	0.896	mg/L	2	0.068	0.08	11/12/2024	2089226 ABALALIO	

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SEWPCP 1721

FOLDER ID: 2417300

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/12/2024
Sampling Team: Field

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	31.7	mg/L	1	0.005	1	11/20/2024	2089667	BTRINH	
Magnesium, Mg	27.8	mg/L	1	0.021	0.2	11/20/2024	2089667	BTRINH	
Potassium, K	2.18	mg/L	1	0.06	0.2	11/20/2024	2089667	BTRINH	
Sodium, Na	55.1	mg/L	1	0.2	1	11/20/2024	2089667	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	137	mg/L	1	0.593	3	11/12/2024	2089269	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	102	mg/L	1		3	11/12/2024	2089273	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	651	µmhos/cm	1		1	11/12/2024	2089240	PWARNER	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	187	mg/L	1	0.474	3	11/12/2024	2089254	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.18	pH	1			11/12/2024	2089243	PWARNER	H1,H3
Temperature (°C)	18.3	°C	1			11/12/2024	2089243	PWARNER	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	345	mg/L	1	13.2	20	11/18/2024	2089377	MSWONG	

Lab Sample#: 2417300-03 **Sample Source:** WSB_SS13SSLP440 **External ID:**

Date Collected: 11/12/2024 09:09AM **Date Received:** 11/12/2024 11:13AM **Sample Matrix:** Aqueous **Location Desc:** SS#13 - SS LINEAR PARK MW-440

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	<0.5	mg/L	1	0.1	0.5	11/12/2024	2089226	ABALALIO	
Nitrate as N	<0.04	mg/L	1	0.034	0.04	11/12/2024	2089226	ABALALIO	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	30.4	mg/L	1	0.005	1	11/20/2024	2089667	BTRINH	
Magnesium, Mg	26.4	mg/L	1	0.021	0.2	11/20/2024	2089667	BTRINH	
Potassium, K	5.43	mg/L	1	0.06	0.2	11/20/2024	2089667	BTRINH	
Sodium, Na	56.8	mg/L	1	0.2	1	11/20/2024	2089667	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	229	mg/L	1	0.593	3	11/12/2024	2089269	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	68.2	mg/L	1		3	11/12/2024	2089273	ALEE	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721

FOLDER ID: 2417300

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/12/2024
Sampling Team: Field

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	632	µmhos/cm	1		1	11/12/2024	2089240 PWARNER	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	179	mg/L	1	0.474	3	11/12/2024	2089254 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.47	pH	1			11/12/2024	2089243 PWARNER	H1,H3
Temperature (°C)	18.1	°C	1			11/12/2024	2089243 PWARNER	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	313	mg/L	1	13.2	20	11/18/2024	2089377 MSWONG	

Lab Sample#: 2417300-04 **Sample Source:** WSB_SS14SSLP520 **External ID:**

Date Collected: 11/12/2024 09:11AM **Date Received:** 11/12/2024 11:13AM **Sample Matrix:** Aqueous **Location Desc:** SS#14 - SS LINEAR PARK MW-520

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	26.6	mg/L	5	0.5	2.5	11/12/2024	2089226 ABALALIO	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	38.2	mg/L	1	0.005	1	11/20/2024	2089667 BTRINH	
Magnesium, Mg	14	mg/L	1	0.021	0.2	11/20/2024	2089667 BTRINH	
Potassium, K	3.38	mg/L	1	0.06	0.2	11/20/2024	2089667 BTRINH	
Sodium, Na	88.5	mg/L	1	0.2	1	11/20/2024	2089667 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	212	mg/L	1	0.593	3	11/12/2024	2089269 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	77.1	mg/L	1		3	11/12/2024	2089273 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	631	µmhos/cm	1		1	11/12/2024	2089240 PWARNER	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	148	mg/L	1	0.474	3	11/12/2024	2089254 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.43	pH	1			11/12/2024	2089243 PWARNER	H1,H3
Temperature (°C)	18.3	°C	1			11/12/2024	2089243 PWARNER	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	368	mg/L	1	13.2	20	11/18/2024	2089377 MSWONG	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2417300

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/12/2024
Sampling Team: Field

Lab Sample#: 2417300-04A **Sample Source:** WSB_SS14SSLP520 **External ID:**
Date Collected: 11/12/2024 09:11AM **Date Received:** 11/12/2024 11:13AM **Sample Matrix:** Aqueous **Location Desc:** SS#14 - SS LINEAR PARK MW-520

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	<0.04	mg/L	1	0.034	0.04	11/12/2024	2089226 ABALALIO	

Lab Sample#: 2417300-05 **Sample Source:** WSB_SS_DUP **External ID:**
Date Collected: 11/12/2024 09:34AM **Date Received:** 11/12/2024 11:13AM **Sample Matrix:** Aqueous **Location Desc:** SS#13 - SS LINEAR PARK MW-440

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	<0.5	mg/L	1	0.1	0.5	11/12/2024	2089226 ABALALIO	
Nitrate as N	<0.04	mg/L	1	0.034	0.04	11/12/2024	2089226 ABALALIO	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	29.8	mg/L	1	0.005	1	11/20/2024	2089667 BTRINH	
Magnesium, Mg	25.9	mg/L	1	0.021	0.2	11/20/2024	2089667 BTRINH	
Potassium, K	5.33	mg/L	1	0.06	0.2	11/20/2024	2089667 BTRINH	
Sodium, Na	55.8	mg/L	1	0.2	1	11/20/2024	2089667 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	229	mg/L	1	0.593	3	11/12/2024	2089269 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	68.4	mg/L	1		3	11/12/2024	2089273 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	700	µmhos/cm	1		1	11/12/2024	2089240 PWARNER	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	180	mg/L	1	0.474	3	11/12/2024	2089254 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.32	pH	1			11/12/2024	2089243 PWARNER	H1,H3
Temperature (°C)	18.2	°C	1			11/12/2024	2089243 PWARNER	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	304	mg/L	1	13.2	20	11/18/2024	2089377 MSWONG	

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Water Quality Laboratory

FOLDER ID: 2417300

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/12/2024
Sampling Team: Field

QC list for Run#: *2089226* **and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433650-01										
	MRL_CK	Chloride		0.496	mg/L	99				
	MRL_CK	Sulfate		0.492	mg/L	98				
	MRL_CK	Nitrate as N		0.0394	mg/L	99				
QC2433650-02										
	CCV	Chloride		2.52	mg/L	101				
	CCV	Sulfate		2.51	mg/L	100				
	CCV	Nitrate as N		0.198	mg/L	99				
QC2433650-03										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433650-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433650-05										
	LCS	Chloride		0.497	mg/L	99				
	LCS	Sulfate		1.49	mg/L	99				
	LCS	Nitrate as N		0.242	mg/L	96				
QC2433650-06										
	LCSD of QC2433650-05	Chloride	0.497	0.502	mg/L	100	0			Splt# QC2433650-05 (0.497mg/L)
	LCSD of QC2433650-05	Sulfate	1.49	1.5	mg/L	100	0			Splt# QC2433650-05 (1.49mg/L)
	LCSD of QC2433650-05	Nitrate as N	0.242	0.244	mg/L	97	0			Splt# QC2433650-05 (0.242mg/L)
QC2433650-07										
	CCV	Chloride		20.1	mg/L	100				
	CCV	Sulfate		20	mg/L	100				
	CCV	Nitrate as N		1.62	mg/L	101				
QC2433650-08										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433650-09										
	SPK of 2419151-01	Sulfate	6.37	7.8	mg/L	95				Splt# 2419151-01 (6.37mg/L)
	SPK of 2419151-01	Nitrate as N	0.104	0.336	mg/L	93				Splt# 2419151-01 (0.104mg/L)
QC2433650-10										
	SPKD of 2419151-01	Sulfate	6.37	7.82	mg/L	96	0			Splt# 2419151-01 (6.37mg/L)
	SPKD of 2419151-01	Nitrate as N	0.104	0.339	mg/L	94	0			Splt# 2419151-01 (0.104mg/L)
QC2433650-11										
	SPK of 2418674-01	Nitrate as N	0.102	0.336	mg/L	93				Splt# 2418674-01 (0.102mg/L)
QC2433650-12										

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Water Quality Laboratory

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SEWPCP 1721

FOLDER ID: 2417300

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/12/2024
Sampling Team: Field

QC list for Run#: *2089226* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	SPKD of 2418674-01	Nitrate as N	0.102	0.34	mg/L	94	0			Splt# 2418674-01 (0.102mg/L)
QC2433650-13										
	CCV	Chloride		2.53	mg/L	101				
	CCV	Sulfate		2.51	mg/L	101				
	CCV	Nitrate as N		0.198	mg/L	99				
QC2433650-14										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	

QC list for Run#: *2089240* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433658-01										
	CAL	Specific Conductance @25°C		1420	µmhos/cm	101				
QC2433658-02										
	ICV	Specific Conductance @25°C		146	µmhos/cm	99				
QC2433658-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2433658-04										
	MRL_CK	Specific Conductance @25°C		9.46	µmhos/cm	94				
QC2433658-05										
	DUP of 2418551-01	Specific Conductance @25°C	99.6	99.8	µmhos/cm		0		1	Splt# 2418551-01 (99.6µmhos/cm)
QC2433658-06										
	CCV	Specific Conductance @25°C		98.7	µmhos/cm	98				
QC2433658-07										
	CCV	Specific Conductance @25°C		1410	µmhos/cm	99				

QC list for Run#: *2089243* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433659-01										
	CAL	pH		7.01	pH	100				
	CAL	Temperature (°C)		21	°C					
QC2433659-02										
	CAL	pH		4.01	pH	100				
	CAL	Temperature (°C)		21.1	°C					
QC2433659-03										
	CAL	pH		10	pH	100				
	CAL	Temperature (°C)		21.1	°C					
QC2433659-04										
	ICV	pH		9.05	pH	100				
	ICV	Temperature (°C)		21	°C					
QC2433659-05										

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SEWPCP 1721

FOLDER ID: 2417300

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/12/2024
Sampling Team: Field

QC list for Run#: *2089243* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	DUP of 2418551-01	pH	9.55	9.54	pH		0			Splt# 2418551-01 (9.55pH) H1,H3
	DUP of 2418551-01	Temperature (°C)	16	16.1	°C					Splt# 2418551-01 (16°C)
QC2433659-06										
	CCV	pH		9.05	pH	100				
	CCV	Temperature (°C)		20.6	°C					
QC2433659-07										
	CCV	pH		9.05	pH	100				
	CCV	Temperature (°C)		20.5	°C					

QC list for Run#: *2089254* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433681-01										
	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2433681-02										
	MRL_CK	Hardness, Total, as CaCO3		2.69	mg/L	89				
QC2433681-03										
	DUP of 2418558-04	Hardness, Total, as CaCO3	23.7	23.8	mg/L		0	0.474	3	Splt# 2418558-04 (23.7mg/L)
QC2433681-04										
	LCS	Hardness, Total, as CaCO3		39.9	mg/L	99			3	

QC list for Run#: *2089269* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433673-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2433673-02										
	MRL_CK	Alkalinity		3.2	mg/L	107				
QC2433673-03										
	SPK of 2418558-01	Alkalinity	30.7	70.7	mg/L	100			3	Splt# 2418558-01 (30.7mg/L)
QC2433673-04										
	SPKD of 2418558-01	Alkalinity	30.7	71	mg/L	101	0		3	Splt# 2418558-01 (30.7mg/L)
QC2433673-06										
	LCS	Alkalinity		42.2	mg/L	106			3	

QC list for Run#: *2089273* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433680-01										
	BLK	Chloride		<3	mg/L			1.16	3	
QC2433680-02										
	MRL_CK	Chloride		3.31	mg/L	110				
QC2433680-03										
	SPK of 2418558-01	Chloride	6.43	45.2	mg/L	97			3	Splt# 2418558-01 (6.43mg/L)
QC2433680-04										
	SPKD of 2418558-01	Chloride	6.43	45.3	mg/L	97	0		3	Splt# 2418558-01 (6.43mg/L)
QC2433680-06										

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Water Quality Laboratory

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FOLDER ID: 2417300

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/12/2024
Sampling Team: Field

QC list for Run#: *2089273* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	LCS	Chloride		39.4	mg/L	98			3	

QC list for Run#: *2089377* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433759-01										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2433759-02										
	LCS	Total Dissolved Solids		91	mg/L	95		13.2	20	
QC2433759-03										
	DUP of 2417300-04	Total Dissolved Solids	368	375	mg/L		1	13.2	20	Splt# 2417300-04 (368mg/L)
QC2433759-04										
	DUP of 2417301-01	Total Dissolved Solids	539	524	mg/L		2	13.2	20	Splt# 2417301-01 (539mg/L)

QC list for Run#: *2089667* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433918-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2433918-02										
	LCS	Calcium, Ca		2.02	mg/L	101		0.04	1	
	LCS	Magnesium, Mg		2.06	mg/L	103		0.007	0.2	
	LCS	Potassium, K		2.02	mg/L	101		0.04	0.2	
	LCS	Sodium, Na		2.15	mg/L	108		0.02	1	
QC2433918-03										
	DUP of 2417300-01	Calcium, Ca	63.3	62.5	mg/L		1	0.005	1	Splt# 2417300-01 (63.3mg/L)
	DUP of 2417300-01	Magnesium, Mg	45.8	45.1	mg/L		1	0.021	0.2	Splt# 2417300-01 (45.8mg/L)
	DUP of 2417300-01	Potassium, K	3.1	3.07	mg/L		0	0.06	0.2	Splt# 2417300-01 (3.1mg/L)
	DUP of 2417300-01	Sodium, Na	93.6	92.7	mg/L		0	0.2	1	Splt# 2417300-01 (93.6mg/L)
QC2433918-04										
	SPK of 2417300-01	Calcium, Ca	63.3	64.3	mg/L	51		0.04	1	Splt# 2417300-01 (63.3mg/L)
	SPK of 2417300-01	Magnesium, Mg	45.8	47.3	mg/L	78		0.007	0.2	Splt# 2417300-01 (45.8mg/L)
	SPK of 2417300-01	Potassium, K	3.1	5.58	mg/L	124		0.04	0.2	Splt# 2417300-01 (3.1mg/L)
	SPK of 2417300-01	Sodium, Na	93.6	93.9	mg/L	12		0.02	1	Splt# 2417300-01 (93.6mg/L)
QC2433918-05										
	SPKD of 2417300-01	Calcium, Ca	63.3	63.9	mg/L	32	0	0.04	1	Splt# 2417300-01 (63.3mg/L)
	SPKD of 2417300-01	Magnesium, Mg	45.8	46.8	mg/L	50	1	0.007	0.2	Splt# 2417300-01 (45.8mg/L)
	SPKD of 2417300-01	Potassium, K	3.1	5.09	mg/L	99	9	0.04	0.2	Splt# 2417300-01 (3.1mg/L)
	SPKD of 2417300-01	Sodium, Na	93.6	93.8	mg/L	8	0	0.02	1	Splt# 2417300-01 (93.6mg/L)
QC2433918-06										
	DUP of 2417300-02	Calcium, Ca	31.7	31.6	mg/L		0	0.005	1	Splt# 2417300-02 (31.7mg/L)

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721

FOLDER ID: 2417300

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/12/2024
Sampling Team: Field

QC list for Run#: *2089667* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	DUP of 2417300-02	Magnesium, Mg	27.8	27.7	mg/L		0	0.021	0.2	Splt# 2417300-02 (27.8mg/L)
	DUP of 2417300-02	Potassium, K	2.18	2.15	mg/L		1	0.06	0.2	Splt# 2417300-02 (2.18mg/L)
	DUP of 2417300-02	Sodium, Na	55.1	54.7	mg/L		0	0.2	1	Splt# 2417300-02 (55.1mg/L)
QC2433918-07										
	SPK of 2417300-02	Calcium, Ca	31.7	33.4	mg/L	87		0.04	1	Splt# 2417300-02 (31.7mg/L)
	SPK of 2417300-02	Magnesium, Mg	27.8	29.6	mg/L	89		0.007	0.2	Splt# 2417300-02 (27.8mg/L)
	SPK of 2417300-02	Potassium, K	2.18	4.19	mg/L	100		0.04	0.2	Splt# 2417300-02 (2.18mg/L)
	SPK of 2417300-02	Sodium, Na	55.1	56.3	mg/L	63		0.02	1	Splt# 2417300-02 (55.1mg/L)
QC2433918-08										
	SPKD of 2417300-02	Calcium, Ca	31.7	33.4	mg/L	88	0	0.04	1	Splt# 2417300-02 (31.7mg/L)
	SPKD of 2417300-02	Magnesium, Mg	27.8	29.7	mg/L	95	0	0.007	0.2	Splt# 2417300-02 (27.8mg/L)
	SPKD of 2417300-02	Potassium, K	2.18	4.19	mg/L	100	0	0.04	0.2	Splt# 2417300-02 (2.18mg/L)
	SPKD of 2417300-02	Sodium, Na	55.1	56.7	mg/L	81	0	0.02	1	Splt# 2417300-02 (55.1mg/L)
QC2433918-09										
	MRL_CK	Calcium, Ca		0.0316	mg/L	79		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0579	mg/L	116		0.021	0.021	
	MRL_CK	Potassium, K		0.16	mg/L	80		0.06	0.06	
	MRL_CK	Sodium, Na		0.345	mg/L	172		0.2	0.2	
QC2433965-01										
	ICV	Calcium, Ca		10.2	mg/L	104		0.05	1	
	ICV	Magnesium, Mg		9.97	mg/L	100		0.01	0.2	
	ICV	Potassium, K		100	mg/L	101		0.03	0.2	
	ICV	Sodium, Na		10.1	mg/L	101		0.002	1	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2417301

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/13/2024
Sampling Team: Field

Lab Sample#: 2417301-01 **Sample Source:** WSB_CM-23-230 **External ID:**
Date Collected: 11/13/2024 11:20AM **Date Received:** 11/13/2024 01:06PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CM_CUP-23-230, TREASURE ISLAND TRAII

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	40.9	mg/L	10	1	5	11/13/2024	2089315 ABALALIO	
Nitrate as N	9.09	mg/L	10	0.34	0.4	11/13/2024	2089315 ABALALIO	
SEM_200.7_DW(EPA 200.7)								
Calcium, Ca	63.3	mg/L	1	0.005	1	11/20/2024	2089667 BTRINH	
Magnesium, Mg	56.7	mg/L	1	0.021	0.2	11/20/2024	2089667 BTRINH	
Potassium, K	1.92	mg/L	1	0.06	0.2	11/20/2024	2089667 BTRINH	
Sodium, Na	61.4	mg/L	1	0.2	1	11/20/2024	2089667 BTRINH	
MBP_ALK(SM 2320 B)								
Alkalinity	324	mg/L	1	0.593	3	11/13/2024	2089336 ALEE	
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	91.5	mg/L	1		3	11/13/2024	2089337 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	995	µmhos/cm	1		1	11/13/2024	2089326 PWARNER	>MCL
MBP_PH(SM 4500-H+ B)								
pH	7.26	pH	1			11/13/2024	2089325 PWARNER	H1,H3
Temperature (°C)	17.7	°C	1			11/13/2024	2089325 PWARNER	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	539	mg/L	1	13.2	20	11/18/2024	2089377 MSWONG	>MCL

Lab Sample#: 2417301-01A **Sample Source:** WSB_CM-23-230 **External ID:**
Date Collected: 11/13/2024 11:20AM **Date Received:** 11/13/2024 01:06PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CM_CUP-23-230, TREASURE ISLAND TRAII

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBP_HARDNESS_T(SM 2340 C)								
Hardness, Total, as CaCO3	366	mg/L	1	0.948	6	11/13/2024	2089338 ALEE	

Lab Sample#: 2417301-02 **Sample Source:** WSB_CM-23-440 **External ID:**
Date Collected: 11/13/2024 10:37AM **Date Received:** 11/13/2024 01:06PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CM_CUP-23-440, TREASURE ISLAND TRAII

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	18.9	mg/L	1	0.1	0.5	11/13/2024	2089315 ABALALIO	A1
Nitrate as N	0.592	mg/L	1	0.034	0.04	11/13/2024	2089315 ABALALIO	
SEM_200.7_DW(EPA 200.7)								

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2417301

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/13/2024
Sampling Team: Field

Calcium, Ca	**29.6**	mg/L	1	0.005	1	11/20/2024	2089667	BTRINH
Magnesium, Mg	**29.1**	mg/L	1	0.021	0.2	11/20/2024	2089667	BTRINH
Potassium, K	**1.91**	mg/L	1	0.06	0.2	11/20/2024	2089667	BTRINH
Sodium, Na	**42.5**	mg/L	1	0.2	1	11/20/2024	2089667	BTRINH

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	**176**	mg/L	1	0.593	3	11/13/2024	2089336	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	**65**	mg/L	1		3	11/13/2024	2089337	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	**568**	µmhos/cm	1		1	11/13/2024	2089326	PWARNER	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	**187**	mg/L	1	0.474	3	11/13/2024	2089338	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	**8**	pH	1			11/13/2024	2089325	PWARNER	H1,H3
Temperature (°C)	**16.1**	°C	1			11/13/2024	2089325	PWARNER	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	**303**	mg/L	1	13.2	20	11/18/2024	2089377	MSWONG	

Lab Sample#: **2417301-03** **Sample Source:** WSB_CM-23-515 **External ID:**

Date Collected: 11/13/2024 09:39AM **Date Received:** 11/13/2024 01:06PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CM_CUP-23-515, TREASURE ISLAND TRAII

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	**18.9**	mg/L	5	0.5	2.5	11/13/2024	2089315	ABALALIO	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	**46.6**	mg/L	1	0.005	1	11/20/2024	2089667	BTRINH	
Magnesium, Mg	**36.5**	mg/L	1	0.021	0.2	11/20/2024	2089667	BTRINH	
Potassium, K	**3.42**	mg/L	1	0.06	0.2	11/20/2024	2089667	BTRINH	
Sodium, Na	**55.7**	mg/L	1	0.2	1	11/20/2024	2089667	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	**285**	mg/L	1	0.593	3	11/13/2024	2089336	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	**63.7**	mg/L	1		3	11/13/2024	2089337	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	**749**	µmhos/cm	1		1	11/13/2024	2089326	PWARNER	

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Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721

FOLDER ID: 2417301

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/13/2024
Sampling Team: Field

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	261	mg/L	1	0.474	3	11/13/2024	2089338 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.23	pH	1			11/13/2024	2089325 PWARNER	H1,H3
Temperature (°C)	15.5	°C	1			11/13/2024	2089325 PWARNER	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	406	mg/L	1	13.2	20	11/18/2024	2089377 MSWONG	

Lab Sample#: 2417301-03A **Sample Source:** WSB_CM-23-515 **External ID:**
Date Collected: 11/13/2024 09:39AM **Date Received:** 11/13/2024 01:06PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CM_CUP-23-515, TREASURE ISLAND TRAII

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	<0.04	mg/L	1	0.034	0.04	11/13/2024	2089315 ABALALIO	

Lab Sample#: 2417301-04 **Sample Source:** WSB_CM-23-600 **External ID:**
Date Collected: 11/13/2024 10:58AM **Date Received:** 11/13/2024 01:06PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CM_CUP-23-600, TREASURE ISLAND TRAII

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	46.8	mg/L	20	2	10	11/13/2024	2089315 ABALALIO	
Nitrate as N	21.9	mg/L	20	0.68	0.8	11/13/2024	2089315 ABALALIO	>MCL

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	48.8	mg/L	1	0.005	1	11/20/2024	2089667 BTRINH	
Magnesium, Mg	51.7	mg/L	1	0.021	0.2	11/20/2024	2089667 BTRINH	
Potassium, K	2.22	mg/L	1	0.06	0.2	11/20/2024	2089667 BTRINH	
Sodium, Na	52.6	mg/L	1	0.2	1	11/20/2024	2089667 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	208	mg/L	1	0.593	3	11/13/2024	2089336 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	76.2	mg/L	1		3	11/13/2024	2089337 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	878	µmhos/cm	1		1	11/13/2024	2089326 PWARNER	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	321	mg/L	1	0.474	3	11/13/2024	2089338 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2417301

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/13/2024
Sampling Team: Field

pH	7.28	pH	1		11/13/2024	2089325	PWARNER	H1,H3
Temperature (°C)	16.7	°C	1		11/13/2024	2089325	PWARNER	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	470	mg/L	1	13.2	20	11/18/2024	2089377	MSWONG	

Lab Sample#: 2417301-05 **Sample Source:** WSB_CM_DUP **External ID:**
Date Collected: 11/13/2024 11:37AM **Date Received:** 11/13/2024 01:06PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CM_CUP-23-600, TREASURE ISLAND TRAII

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	46.9	mg/L	20	2	10	11/13/2024	2089315	ABALALIO	
Nitrate as N	22	mg/L	20	0.68	0.8	11/13/2024	2089315	ABALALIO	>MCL

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	49.3	mg/L	1	0.005	1	11/20/2024	2089667	BTRINH	
Magnesium, Mg	52.2	mg/L	1	0.021	0.2	11/20/2024	2089667	BTRINH	
Potassium, K	2.21	mg/L	1	0.06	0.2	11/20/2024	2089667	BTRINH	
Sodium, Na	53.1	mg/L	1	0.2	1	11/20/2024	2089667	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	207	mg/L	1	0.593	3	11/13/2024	2089336	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	76.2	mg/L	1		3	11/13/2024	2089337	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	877	µmhos/cm	1		1	11/13/2024	2089326	PWARNER	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	318	mg/L	1	0.474	3	11/13/2024	2089338	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.21	pH	1			11/13/2024	2089325	PWARNER	H1,H3
Temperature (°C)	17.5	°C	1			11/13/2024	2089325	PWARNER	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	476	mg/L	1	13.2	20	11/18/2024	2089377	MSWONG	

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Water Quality Laboratory

FOLDER ID: 2417301

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/13/2024
Sampling Team: Field

QC list for Run#: *2089315* **and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433710-01										
	MRL_CK	Chloride		0.502	mg/L	100				
	MRL_CK	Sulfate		0.499	mg/L	99				
	MRL_CK	Nitrate as N		0.0403	mg/L	101				
QC2433710-02										
	CCV	Chloride		2.53	mg/L	101				
	CCV	Sulfate		2.52	mg/L	101				
	CCV	Nitrate as N		0.199	mg/L	100				
QC2433710-03										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433710-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433710-05										
	LCS	Chloride		0.485	mg/L	97				
	LCS	Sulfate		1.45	mg/L	96				
	LCS	Nitrate as N		0.235	mg/L	94				
QC2433710-06										
	LCSD of QC2433710-05	Chloride	0.485	0.49	mg/L	97	0			Splt# QC2433710-05 (0.485mg/L)
	LCSD of QC2433710-05	Sulfate	1.45	1.47	mg/L	97	1			Splt# QC2433710-05 (1.45mg/L)
	LCSD of QC2433710-05	Nitrate as N	0.235	0.238	mg/L	95	1			Splt# QC2433710-05 (0.235mg/L)
QC2433710-07										
	CCV	Chloride		20.1	mg/L	100				
	CCV	Sulfate		20	mg/L	100				
	CCV	Nitrate as N		1.62	mg/L	102				
QC2433710-08										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433710-09										
	SPK of 2417301-02	Sulfate	18.9	20.2	mg/L	81				Splt# 2417301-02 (18.9mg/L) A1
	SPK of 2417301-02	Nitrate as N	0.592	0.829	mg/L	94				Splt# 2417301-02 (0.592mg/L)
QC2433710-10										
	SPKD of 2417301-02	Sulfate	18.9	20.2	mg/L	82	0			Splt# 2417301-02 (18.9mg/L) A1
	SPKD of 2417301-02	Nitrate as N	0.592	0.83	mg/L	94	0			Splt# 2417301-02 (0.592mg/L)

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Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721

FOLDER ID: 2417301

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/13/2024
Sampling Team: Field

QC list for Run#: *2089325* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433717-01										
	ICV	pH		9.05	pH	100				
	ICV	Temperature (°C)		20.4	°C					
QC2433717-02										
	DUP of 2419318-01	pH	7.05	7.04	pH		0			Splt# 2419318-01 (7.05pH) H1,H3
	DUP of 2419318-01	Temperature (°C)	17.7	17.7	°C					Splt# 2419318-01 (17.7°C)
QC2433717-03										
	CCV	pH		9.06	pH	100				
	CCV	Temperature (°C)		20.3	°C					
QC2433717-04										
	CCV	pH		9.05	pH	100				
	CCV	Temperature (°C)		20.4	°C					

QC list for Run#: *2089326* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433718-01										
	CAL	Specific Conductance @25°C		1420	µmhos/cm	101				
QC2433718-02										
	ICV	Specific Conductance @25°C		146	µmhos/cm	99				
QC2433718-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2433718-04										
	MRL_CK	Specific Conductance @25°C		9.57	µmhos/cm	95				
QC2433718-05										
	DUP of 2419318-01	Specific Conductance @25°C	12.6	12.8	µmhos/cm		1		1	Splt# 2419318-01 (12.6µmhos/cm)
QC2433718-06										
	CCV	Specific Conductance @25°C		99	µmhos/cm	99				
QC2433718-07										
	CCV	Specific Conductance @25°C		1410	µmhos/cm	99				

QC list for Run#: *2089336* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433726-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2433726-02										
	MRL_CK	Alkalinity		3.24	mg/L	108				
QC2433726-03										
	SPK of 2419318-01	Alkalinity	4.8	46.7	mg/L	105			3	Splt# 2419318-01 (4.8mg/L)
QC2433726-04										
	SPKD of 2419318-01	Alkalinity	4.8	46.7	mg/L	105	0		3	Splt# 2419318-01 (4.8mg/L)
QC2433726-06										
	LCS	Alkalinity		41.9	mg/L	105			3	

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FOLDER ID: 2417301

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/13/2024
Sampling Team: Field

QC list for Run#: *2089337* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433727-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2433727-02	MRL_CK	Chloride		3.32	mg/L	111				
QC2433727-03	SPK of 2419318-01	Chloride	<3	39	mg/L	97			3	Splt# 2419318-01 (<3mg/L)
QC2433727-04	SPKD of 2419318-01	Chloride	<3	39.5	mg/L	98	1		3	Splt# 2419318-01 (<3mg/L)
QC2433727-06	LCS	Chloride		39.4	mg/L	98			3	

QC list for Run#: *2089338* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433728-01	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2433728-02	MRL_CK	Hardness, Total, as CaCO3		2.62	mg/L	87				
QC2433728-03	DUP of 2419318-01	Hardness, Total, as CaCO3	3.65	3.52	mg/L		3	0.474	3	Splt# 2419318-01 (3.65mg/L)
QC2433728-04	LCS	Hardness, Total, as CaCO3		39.8	mg/L	99			3	

QC list for Run#: *2089377* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433759-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2433759-02	LCS	Total Dissolved Solids		91	mg/L	95		13.2	20	
QC2433759-03	DUP of 2417300-04	Total Dissolved Solids	368	375	mg/L		1	13.2	20	Splt# 2417300-04 (368mg/L)
QC2433759-04	DUP of 2417301-01	Total Dissolved Solids	539	524	mg/L		2	13.2	20	Splt# 2417301-01 (539mg/L)

QC list for Run#: *2089667* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433918-01	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2433918-02	LCS	Calcium, Ca		2.02	mg/L	101		0.04	1	
	LCS	Magnesium, Mg		2.06	mg/L	103		0.007	0.2	
	LCS	Potassium, K		2.02	mg/L	101		0.04	0.2	

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FOLDER ID: 2417301

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/13/2024
Sampling Team: Field

QC list for Run#: *2089667* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	LCS	Sodium, Na		2.15	mg/L	108		0.02	1	
QC2433918-03										
	DUP of 2417300-01	Calcium, Ca	63.3	62.5	mg/L		1	0.005	1	Splt# 2417300-01 (63.3mg/L)
	DUP of 2417300-01	Magnesium, Mg	45.8	45.1	mg/L		1	0.021	0.2	Splt# 2417300-01 (45.8mg/L)
	DUP of 2417300-01	Potassium, K	3.1	3.07	mg/L		0	0.06	0.2	Splt# 2417300-01 (3.1mg/L)
	DUP of 2417300-01	Sodium, Na	93.6	92.7	mg/L		0	0.2	1	Splt# 2417300-01 (93.6mg/L)
QC2433918-04										
	SPK of 2417300-01	Calcium, Ca	63.3	64.3	mg/L	51		0.04	1	Splt# 2417300-01 (63.3mg/L)
	SPK of 2417300-01	Magnesium, Mg	45.8	47.3	mg/L	78		0.007	0.2	Splt# 2417300-01 (45.8mg/L)
	SPK of 2417300-01	Potassium, K	3.1	5.58	mg/L	124		0.04	0.2	Splt# 2417300-01 (3.1mg/L)
	SPK of 2417300-01	Sodium, Na	93.6	93.9	mg/L	12		0.02	1	Splt# 2417300-01 (93.6mg/L)
QC2433918-05										
	SPKD of 2417300-01	Calcium, Ca	63.3	63.9	mg/L	32	0	0.04	1	Splt# 2417300-01 (63.3mg/L)
	SPKD of 2417300-01	Magnesium, Mg	45.8	46.8	mg/L	50	1	0.007	0.2	Splt# 2417300-01 (45.8mg/L)
	SPKD of 2417300-01	Potassium, K	3.1	5.09	mg/L	99	9	0.04	0.2	Splt# 2417300-01 (3.1mg/L)
	SPKD of 2417300-01	Sodium, Na	93.6	93.8	mg/L	8	0	0.02	1	Splt# 2417300-01 (93.6mg/L)
QC2433918-06										
	DUP of 2417300-02	Calcium, Ca	31.7	31.6	mg/L		0	0.005	1	Splt# 2417300-02 (31.7mg/L)
	DUP of 2417300-02	Magnesium, Mg	27.8	27.7	mg/L		0	0.021	0.2	Splt# 2417300-02 (27.8mg/L)
	DUP of 2417300-02	Potassium, K	2.18	2.15	mg/L		1	0.06	0.2	Splt# 2417300-02 (2.18mg/L)
	DUP of 2417300-02	Sodium, Na	55.1	54.7	mg/L		0	0.2	1	Splt# 2417300-02 (55.1mg/L)
QC2433918-07										
	SPK of 2417300-02	Calcium, Ca	31.7	33.4	mg/L	87		0.04	1	Splt# 2417300-02 (31.7mg/L)
	SPK of 2417300-02	Magnesium, Mg	27.8	29.6	mg/L	89		0.007	0.2	Splt# 2417300-02 (27.8mg/L)
	SPK of 2417300-02	Potassium, K	2.18	4.19	mg/L	100		0.04	0.2	Splt# 2417300-02 (2.18mg/L)
	SPK of 2417300-02	Sodium, Na	55.1	56.3	mg/L	63		0.02	1	Splt# 2417300-02 (55.1mg/L)
QC2433918-08										
	SPKD of 2417300-02	Calcium, Ca	31.7	33.4	mg/L	88	0	0.04	1	Splt# 2417300-02 (31.7mg/L)
	SPKD of 2417300-02	Magnesium, Mg	27.8	29.7	mg/L	95	0	0.007	0.2	Splt# 2417300-02 (27.8mg/L)
	SPKD of 2417300-02	Potassium, K	2.18	4.19	mg/L	100	0	0.04	0.2	Splt# 2417300-02 (2.18mg/L)
	SPKD of 2417300-02	Sodium, Na	55.1	56.7	mg/L	81	0	0.02	1	Splt# 2417300-02 (55.1mg/L)
QC2433918-09										
	MRL_CK	Calcium, Ca		0.0316	mg/L	79		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0579	mg/L	116		0.021	0.021	
	MRL_CK	Potassium, K		0.16	mg/L	80		0.06	0.06	
	MRL_CK	Sodium, Na		0.345	mg/L	172		0.2	0.2	
QC2433965-01										
	ICV	Calcium, Ca		10.2	mg/L	104		0.05	1	
	ICV	Magnesium, Mg		9.97	mg/L	100		0.01	0.2	
	ICV	Potassium, K		100	mg/L	101		0.03	0.2	
	ICV	Sodium, Na		10.1	mg/L	101		0.002	1	

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Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
SUB_LAB 2813
MILLBRAE 1449

FOLDER ID: 2417302

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 11/14/2024
Sampling Team: Field

Lab Sample#: 2417302-01 **Sample Source:** WSB_CAL-19-475 **External ID:**

Date Collected: 11/19/2024 10:22AM **Date Received:** 11/19/2024 11:42AM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-19-475, ROW AT SERRAMONTE

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	50.5	mg/L	5	0.5	2.5	11/19/2024	2089603 PWARNER	
Nitrate as N	1.68	mg/L	5	0.17	0.2	11/19/2024	2089603 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	41.3	mg/L	1	0.005	1	11/25/2024	2089893 BTRINH	
Magnesium, Mg	38.4	mg/L	1	0.021	0.2	11/25/2024	2089893 BTRINH	
Potassium, K	2.41	mg/L	1	0.06	0.2	11/25/2024	2089893 BTRINH	
Sodium, Na	50.8	mg/L	1	0.2	1	11/25/2024	2089893 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	168	mg/L	1	1.19	6	11/19/2024	2089615 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	110	mg/L	1		6	11/19/2024	2089619 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	767	µmhos/cm	1		1	11/19/2024	2089616 PWARNER	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	125	mg/L	1	0.474	3	11/19/2024	2089623 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.51	pH	1			11/19/2024	2089613 PWARNER	H1,H3
Temperature (°C)	18.1	°C	1			11/19/2024	2089613 PWARNER	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	434	mg/L	1	13.2	20	11/21/2024	2089624 MSWONG	

SUB_PERCHLORATE_331(EPA 331)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Perchlorate, ClO4-	<0.5	µg/L			0.5	11/20/2024	6253888 SUB	

Lab Sample#: 2417302-02 **Sample Source:** WSB_CAL-19-600 **External ID:**

Date Collected: 11/14/2024 11:20AM **Date Received:** 11/14/2024 12:52PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-19-600, ROW AT SERRAMONTE

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	15.2	mg/L	10	1	5	11/14/2024	2089381 ABALALIO	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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MILLBRAE	1449

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Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 11/14/2024
Sampling Team: Field

Calcium, Ca	51	mg/L	1	0.005	1	11/20/2024	2089667	BTRINH
Magnesium, Mg	41.8	mg/L	1	0.021	0.2	11/20/2024	2089667	BTRINH
Potassium, K	2.39	mg/L	1	0.06	0.2	11/20/2024	2089667	BTRINH
Sodium, Na	58.5	mg/L	1	0.2	1	11/20/2024	2089667	BTRINH

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	286	mg/L	1	2.96	15	11/14/2024	2089399 PWARNER	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	104	mg/L	1		15	11/14/2024	2089401 PWARNER	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	824	µmhos/cm	1		1	11/14/2024	2089404 PWARNER	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	305	mg/L	1	2.37	15	11/14/2024	2089402 PWARNER	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.58	pH	1			11/14/2024	2089403 PWARNER	H1,H3
Temperature (°C)	18	°C	1			11/14/2024	2089403 PWARNER	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	439	mg/L	1	13.2	20	11/18/2024	2089377 MSWONG	

SUB_PERCHLORATE_331(EPA 331)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Perchlorate, ClO4-	<0.5	µg/L			0.5	11/15/2024	6248888 SUB	

Lab Sample#: 2417302-02A **Sample Source:** WSB_CAL-19-600 **External ID:**
Date Collected: 11/14/2024 11:20AM **Date Received:** 11/14/2024 12:52PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-19-600, ROW AT SERRAMONTE

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	<0.04	mg/L	1	0.034	0.04	11/14/2024	2089381 ABALALIO	

Lab Sample#: 2417302-03 **Sample Source:** WSB_CAL-19-690 **External ID:**
Date Collected: 11/14/2024 11:22AM **Date Received:** 11/14/2024 12:52PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-19-690, ROW AT SERRAMONTE

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	49.9	mg/L	10	1	5	11/14/2024	2089381 ABALALIO	
Nitrate as N	7.66	mg/L	10	0.34	0.4	11/14/2024	2089381 ABALALIO	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	41.5	mg/L	1	0.005	1	11/20/2024	2089667 BTRINH	

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FOLDER ID: 2417302

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 11/14/2024
Sampling Team: Field

Magnesium, Mg	**38.7**	mg/L	1	0.021	0.2	11/20/2024	2089667	BTRINH
Potassium, K	**2.24**	mg/L	1	0.06	0.2	11/20/2024	2089667	BTRINH
Sodium, Na	**49.6**	mg/L	1	0.2	1	11/20/2024	2089667	BTRINH

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	**164**	mg/L	1	2.96	15	11/14/2024	2089399	PWARNER	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	**96.2**	mg/L	1		15	11/14/2024	2089401	PWARNER	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	**750**	µmhos/cm	1		1	11/14/2024	2089404	PWARNER	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	**256**	mg/L	1	2.37	15	11/14/2024	2089402	PWARNER	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	**7.36**	pH	1			11/14/2024	2089403	PWARNER	H1,H3
Temperature (°C)	**18.2**	°C	1			11/14/2024	2089403	PWARNER	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	**410**	mg/L	1	13.2	20	11/18/2024	2089377	MSWONG	

SUB_PERCHLORATE_331(EPA 331)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Perchlorate, ClO4-	**0.75**	µg/L			0.5	11/15/2024	6248888	SUB	

Lab Sample#: 2417302-04 **Sample Source:** WSB_CAL_DUP **External ID:**

Date Collected: 11/19/2024 10:34AM **Date Received:** 11/19/2024 11:42AM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-19-475, ROW AT SERRAMONTE

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	**50.8**	mg/L	5	0.5	2.5	11/19/2024	2089603	PWARNER	
Nitrate as N	**1.7**	mg/L	5	0.17	0.2	11/19/2024	2089603	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	**41.7**	mg/L	1	0.005	1	11/25/2024	2089893	BTRINH	
Magnesium, Mg	**38.7**	mg/L	1	0.021	0.2	11/25/2024	2089893	BTRINH	
Potassium, K	**2.39**	mg/L	1	0.06	0.2	11/25/2024	2089893	BTRINH	
Sodium, Na	**51.2**	mg/L	1	0.2	1	11/25/2024	2089893	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	**163**	mg/L	1	1.19	6	11/19/2024	2089615	ALEE	

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FOLDER ID: 2417302

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 11/14/2024
Sampling Team: Field

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	106	mg/L	1		6	11/19/2024	2089619 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	760	µmhos/cm	1		1	11/19/2024	2089616 PWARNER	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	127	mg/L	1	0.474	3	11/19/2024	2089623 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.44	pH	1			11/19/2024	2089613 PWARNER	H1,H3
Temperature (°C)	18.1	°C	1			11/19/2024	2089613 PWARNER	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	412	mg/L	1	13.2	20	11/21/2024	2089624 MSWONG	

SUB_PERCHLORATE_331(EPA 331)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Perchlorate, ClO4-	<0.5	µg/L			0.5	11/20/2024	6253888 SUB	

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FOLDER ID: 2417302

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 11/14/2024
Sampling Team: Field

QC list for Run#: *2089377* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433759-01										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2433759-02										
	LCS	Total Dissolved Solids		91	mg/L	95		13.2	20	
QC2433759-03										
	DUP of 2417300-04	Total Dissolved Solids	368	375	mg/L		1	13.2	20	Splt# 2417300-04 (368mg/L)
QC2433759-04										
	DUP of 2417301-01	Total Dissolved Solids	539	524	mg/L		2	13.2	20	Splt# 2417301-01 (539mg/L)

QC list for Run#: *2089381* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433764-01										
	MRL_CK	Chloride		0.486	mg/L	97				
	MRL_CK	Sulfate		0.483	mg/L	96				
	MRL_CK	Nitrate as N		0.0391	mg/L	98				
QC2433764-02										
	CCV	Chloride		2.46	mg/L	98				
	CCV	Sulfate		2.44	mg/L	97				
	CCV	Nitrate as N		0.192	mg/L	96				
QC2433764-03										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433764-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433764-05										
	LCS	Chloride		0.497	mg/L	99				
	LCS	Sulfate		1.49	mg/L	99				
	LCS	Nitrate as N		0.242	mg/L	96				
QC2433764-06										
	LCSD of QC2433764-05	Chloride	0.497	0.497	mg/L	99	0			Splt# QC2433764-05 (0.497mg/L)
	LCSD of QC2433764-05	Sulfate	1.49	1.49	mg/L	99	0			Splt# QC2433764-05 (1.49mg/L)
	LCSD of QC2433764-05	Nitrate as N	0.242	0.242	mg/L	96	0			Splt# QC2433764-05 (0.242mg/L)
QC2433764-07										
	CCV	Chloride		19.6	mg/L	98				
	CCV	Sulfate		19.6	mg/L	97				
	CCV	Nitrate as N		1.58	mg/L	98				
QC2433764-08										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	

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FOLDER ID: 2417302

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 11/14/2024
Sampling Team: Field

QC list for Run#: *2089381* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433764-09										
	SPK of 2417302-02	Sulfate	15.2	30	mg/L	99				Splt# 2417302-02 (15.2mg/L)
	SPK of 2417302-02	Nitrate as N	<0.4	2.36	mg/L	94				Splt# 2417302-02 (<0.4mg/L)
QC2433764-10										
	SPKD of 2417302-02	Sulfate	15.2	30	mg/L	99	0			Splt# 2417302-02 (15.2mg/L)
	SPKD of 2417302-02	Nitrate as N	<0.4	2.37	mg/L	94	0			Splt# 2417302-02 (<0.4mg/L)

QC list for Run#: *2089399* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433774-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2433774-02										
	MRL_CK	Alkalinity		3.25	mg/L	108				
QC2433774-03										
	SPK of 2418664-01	Alkalinity	28.1	70.9	mg/L	107			3	Splt# 2418664-01 (28.1mg/L)
QC2433774-04										
	SPKD of 2418664-01	Alkalinity	28.1	70.3	mg/L	106	0		3	Splt# 2418664-01 (28.1mg/L)
QC2433774-06										
	LCS	Alkalinity		41.7	mg/L	104			3	

QC list for Run#: *2089401* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433775-01										
	BLK	Chloride		<3	mg/L			1.16	3	
QC2433775-02										
	MRL_CK	Chloride		3.21	mg/L	107				
QC2433775-03										
	SPK of 2418664-01	Chloride	6.62	46.2	mg/L	99			3	Splt# 2418664-01 (6.62mg/L)
QC2433775-04										
	SPKD of 2418664-01	Chloride	6.62	46	mg/L	98	0		3	Splt# 2418664-01 (6.62mg/L)
QC2433775-06										
	LCS	Chloride		39.4	mg/L	98			3	

QC list for Run#: *2089402* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433776-01										
	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2433776-02										
	MRL_CK	Hardness, Total, as CaCO3		2.61	mg/L	87				
QC2433776-03										
	DUP of 2418664-01	Hardness, Total, as CaCO3	23.2	23.4	mg/L		1	0.474	3	Splt# 2418664-01 (23.2mg/L)

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FOLDER ID: 2417302

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 11/14/2024
Sampling Team: Field

QC list for Run#: *2089402* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433776-04										
	LCS	Hardness, Total, as CaCO3		40	mg/L	99			3	

QC list for Run#: *2089403* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433777-04										
	ICV	pH		9.05	pH	100				
	ICV	Temperature (°C)		20.9	°C					
QC2433777-05										
	DUP of 2418663-01	pH	9.43	9.42	pH		0			Splt# 2418663-01 (9.43pH) H1,H3
	DUP of 2418663-01	Temperature (°C)	16.8	17	°C					Splt# 2418663-01 (16.8°C)
QC2433777-06										
	CCV	pH		9.05	pH	100				
	CCV	Temperature (°C)		20.8	°C					
QC2433777-07										
	CCV	pH		9.05	pH	100				
	CCV	Temperature (°C)		20.6	°C					

QC list for Run#: *2089404* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433778-01										
	CAL	Specific Conductance @25°C		1420	µmhos/cm	101				
QC2433778-02										
	ICV	Specific Conductance @25°C		146	µmhos/cm	99				
QC2433778-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2433778-04										
	MRL_CK	Specific Conductance @25°C		9.6	µmhos/cm	96				
QC2433778-05										
	DUP of 2418663-01	Specific Conductance @25°C	97.7	99.4	µmhos/cm		1		1	Splt# 2418663-01 (97.7µmhos/cm)
QC2433778-06										
	CCV	Specific Conductance @25°C		101	µmhos/cm	101				
QC2433778-07										
	CCV	Specific Conductance @25°C		1410	µmhos/cm	99				

QC list for Run#: *2089603* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433923-01										
	MRL_CK	Chloride		0.496	mg/L	99				
	MRL_CK	Sulfate		0.491	mg/L	98				
	MRL_CK	Nitrate as N		0.0398	mg/L	100				
QC2433923-02										

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FOLDER ID: 2417302

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 11/14/2024
Sampling Team: Field

QC list for Run#: *2089603* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	CCV	Chloride		2.53	mg/L	101				
	CCV	Sulfate		2.5	mg/L	100				
	CCV	Nitrate as N		0.198	mg/L	99				
QC2433923-03										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433923-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433923-05										
	LCS	Chloride		0.504	mg/L	101				
	LCS	Sulfate		1.49	mg/L	99				
	LCS	Nitrate as N		0.243	mg/L	97				
QC2433923-06										
	LCSD of QC2433923-05	Chloride	0.504	0.502	mg/L	100	0			Splt# QC2433923-05 (0.504mg/L)
	LCSD of QC2433923-05	Sulfate	1.49	1.49	mg/L	99	0			Splt# QC2433923-05 (1.49mg/L)
	LCSD of QC2433923-05	Nitrate as N	0.243	0.242	mg/L	96	0			Splt# QC2433923-05 (0.243mg/L)
QC2433923-07										
	CCV	Chloride		20.2	mg/L	101				
	CCV	Sulfate		20	mg/L	100				
	CCV	Nitrate as N		1.62	mg/L	101				
QC2433923-08										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433923-09										
	SPK of 2414871-01	Sulfate	6.3	7.73	mg/L	95				Splt# 2414871-01 (6.3mg/L)
	SPK of 2414871-01	Nitrate as N	0.0846	0.31	mg/L	90				Splt# 2414871-01 (0.0846mg/L)
QC2433923-10										
	SPKD of 2414871-01	Sulfate	6.3	7.72	mg/L	94	0			Splt# 2414871-01 (6.3mg/L)
	SPKD of 2414871-01	Nitrate as N	0.0846	0.306	mg/L	88	1			Splt# 2414871-01 (0.0846mg/L)

QC list for Run#: *2089613* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433926-01										
	ICV	pH		9.03	pH	99				
	ICV	Temperature (°C)		22	°C					
QC2433926-02										

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FOLDER ID: 2417302

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 11/14/2024
Sampling Team: Field

QC list for Run#: *2089613* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	DUP of 2419155-01	pH	9.4	9.37	pH		0			Splt# 2419155-01 (9.4pH) H1,H3
	DUP of 2419155-01	Temperature (°C)	16.6	16.9	°C					Splt# 2419155-01 (16.6°C)
QC2433926-03										
	CCV	pH		9.04	pH	99				
	CCV	Temperature (°C)		21.9	°C					
QC2433926-04										
	CCV	pH		9.04	pH	99				
	CCV	Temperature (°C)		22	°C					

QC list for Run#: *2089615* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433928-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2433928-02										
	MRL_CK	Alkalinity		3.31	mg/L	110				
QC2433928-03										
	SPK of 2419157-05	Alkalinity	31	70.5	mg/L	98			3	Splt# 2419157-05 (31mg/L)
QC2433928-04										
	SPKD of 2419157-05	Alkalinity	31	71	mg/L	100	0		3	Splt# 2419157-05 (31mg/L)
QC2433928-06										
	LCS	Alkalinity		41.7	mg/L	104			3	
QC2433928-07										
	DUP of 2419573-01	Alkalinity	30.4	30.3	mg/L		0	0.593	3	Splt# 2419573-01 (30.4mg/L)

QC list for Run#: *2089616* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433929-01										
	CAL	Specific Conductance @25°C		1420	µmhos/cm	100				
QC2433929-02										
	ICV	Specific Conductance @25°C		146	µmhos/cm	99				
QC2433929-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2433929-04										
	MRL_CK	Specific Conductance @25°C		9.66	µmhos/cm	96				
QC2433929-05										
	DUP of 2419155-01	Specific Conductance @25°C	105	105	µmhos/cm		0		1	Splt# 2419155-01 (105µmhos/cm)
QC2433929-06										
	CCV	Specific Conductance @25°C		99.1	µmhos/cm	99				
QC2433929-07										
	CCV	Specific Conductance @25°C		1440	µmhos/cm	102				

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FOLDER ID: 2417302

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 11/14/2024
Sampling Team: Field

QC list for Run#: *2089619* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433931-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2433931-02	MRL_CK	Chloride		3.49	mg/L	116				
QC2433931-03	SPK of 2419157-05	Chloride	6.88	46.3	mg/L	98			3	Splt# 2419157-05 (6.88mg/L)
QC2433931-04	SPKD of 2419157-05	Chloride	6.88	46.6	mg/L	99	0		3	Splt# 2419157-05 (6.88mg/L)
QC2433931-06	LCS	Chloride		39.6	mg/L	99			3	
QC2433931-07	DUP of 2419573-01	Chloride	6.42	6.38	mg/L		0		3	Splt# 2419573-01 (6.42mg/L)

QC list for Run#: *2089623* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433935-01	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2433935-02	MRL_CK	Hardness, Total, as CaCO3		2.68	mg/L	89				
QC2433935-03	DUP of 2419452-01	Hardness, Total, as CaCO3	25	24.8	mg/L		0	0.474	3	Splt# 2419452-01 (25mg/L)
QC2433935-04	LCS	Hardness, Total, as CaCO3		39.9	mg/L	99			3	

QC list for Run#: *2089624* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433937-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2433937-02	LCS	Total Dissolved Solids		92	mg/L	96		13.2	20	
QC2433937-03	DUP of 2417302-01	Total Dissolved Solids	434	426	mg/L		1	13.2	20	Splt# 2417302-01 (434mg/L)

QC list for Run#: *2089667* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433918-01	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2433918-02	LCS	Calcium, Ca		2.02	mg/L	101		0.04	1	
	LCS	Magnesium, Mg		2.06	mg/L	103		0.007	0.2	

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Water Quality Laboratory

ELAP Cert #:

SEWPCP	1721
SUB_LAB	2813
MILLBRAE	1449

FOLDER ID: 2417302

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 11/14/2024
Sampling Team: Field

QC list for Run#: *2089667* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	LCS	Potassium, K		2.02	mg/L	101		0.04	0.2	
	LCS	Sodium, Na		2.15	mg/L	108		0.02	1	
QC2433918-03										
	DUP of 2417300-01	Calcium, Ca	63.3	62.5	mg/L		1	0.005	1	Splt# 2417300-01 (63.3mg/L)
	DUP of 2417300-01	Magnesium, Mg	45.8	45.1	mg/L		1	0.021	0.2	Splt# 2417300-01 (45.8mg/L)
	DUP of 2417300-01	Potassium, K	3.1	3.07	mg/L		0	0.06	0.2	Splt# 2417300-01 (3.1mg/L)
	DUP of 2417300-01	Sodium, Na	93.6	92.7	mg/L		0	0.2	1	Splt# 2417300-01 (93.6mg/L)
QC2433918-04										
	SPK of 2417300-01	Calcium, Ca	63.3	64.3	mg/L	51		0.04	1	Splt# 2417300-01 (63.3mg/L)
	SPK of 2417300-01	Magnesium, Mg	45.8	47.3	mg/L	78		0.007	0.2	Splt# 2417300-01 (45.8mg/L)
	SPK of 2417300-01	Potassium, K	3.1	5.58	mg/L	124		0.04	0.2	Splt# 2417300-01 (3.1mg/L)
	SPK of 2417300-01	Sodium, Na	93.6	93.9	mg/L	12		0.02	1	Splt# 2417300-01 (93.6mg/L)
QC2433918-05										
	SPKD of 2417300-01	Calcium, Ca	63.3	63.9	mg/L	32	0	0.04	1	Splt# 2417300-01 (63.3mg/L)
	SPKD of 2417300-01	Magnesium, Mg	45.8	46.8	mg/L	50	1	0.007	0.2	Splt# 2417300-01 (45.8mg/L)
	SPKD of 2417300-01	Potassium, K	3.1	5.09	mg/L	99	9	0.04	0.2	Splt# 2417300-01 (3.1mg/L)
	SPKD of 2417300-01	Sodium, Na	93.6	93.8	mg/L	8	0	0.02	1	Splt# 2417300-01 (93.6mg/L)
QC2433918-06										
	DUP of 2417300-02	Calcium, Ca	31.7	31.6	mg/L		0	0.005	1	Splt# 2417300-02 (31.7mg/L)
	DUP of 2417300-02	Magnesium, Mg	27.8	27.7	mg/L		0	0.021	0.2	Splt# 2417300-02 (27.8mg/L)
	DUP of 2417300-02	Potassium, K	2.18	2.15	mg/L		1	0.06	0.2	Splt# 2417300-02 (2.18mg/L)
	DUP of 2417300-02	Sodium, Na	55.1	54.7	mg/L		0	0.2	1	Splt# 2417300-02 (55.1mg/L)
QC2433918-07										
	SPK of 2417300-02	Calcium, Ca	31.7	33.4	mg/L	87		0.04	1	Splt# 2417300-02 (31.7mg/L)
	SPK of 2417300-02	Magnesium, Mg	27.8	29.6	mg/L	89		0.007	0.2	Splt# 2417300-02 (27.8mg/L)
	SPK of 2417300-02	Potassium, K	2.18	4.19	mg/L	100		0.04	0.2	Splt# 2417300-02 (2.18mg/L)
	SPK of 2417300-02	Sodium, Na	55.1	56.3	mg/L	63		0.02	1	Splt# 2417300-02 (55.1mg/L)
QC2433918-08										
	SPKD of 2417300-02	Calcium, Ca	31.7	33.4	mg/L	88	0	0.04	1	Splt# 2417300-02 (31.7mg/L)
	SPKD of 2417300-02	Magnesium, Mg	27.8	29.7	mg/L	95	0	0.007	0.2	Splt# 2417300-02 (27.8mg/L)
	SPKD of 2417300-02	Potassium, K	2.18	4.19	mg/L	100	0	0.04	0.2	Splt# 2417300-02 (2.18mg/L)
	SPKD of 2417300-02	Sodium, Na	55.1	56.7	mg/L	81	0	0.02	1	Splt# 2417300-02 (55.1mg/L)
QC2433918-09										
	MRL_CK	Calcium, Ca		0.0316	mg/L	79		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0579	mg/L	116		0.021	0.021	
	MRL_CK	Potassium, K		0.16	mg/L	80		0.06	0.06	
	MRL_CK	Sodium, Na		0.345	mg/L	172		0.2	0.2	
QC2433965-01										
	ICV	Calcium, Ca		10.2	mg/L	104		0.05	1	
	ICV	Magnesium, Mg		9.97	mg/L	100		0.01	0.2	

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Water Quality Laboratory

ELAP Cert #:

SEWPCP	1721
SUB_LAB	2813
MILLBRAE	1449

FOLDER ID: 2417302

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 11/14/2024
Sampling Team: Field

QC list for Run#: *2089667* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	ICV	Potassium, K		100	mg/L	101		0.03	0.2	
	ICV	Sodium, Na		10.1	mg/L	101		0.002	1	

QC list for Run#: *2089893* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2434054-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2434054-02										
	LCS	Calcium, Ca		2.02	mg/L	101		0.04	1	
	LCS	Magnesium, Mg		2.03	mg/L	101		0.007	0.2	
	LCS	Potassium, K		2	mg/L	100		0.04	0.2	
	LCS	Sodium, Na		2.09	mg/L	105		0.02	1	
QC2434054-03										
	DUP of 2417303-01	Calcium, Ca	59.6	59.4	mg/L		0	0.005	1	Splt# 2417303-01 (59.6mg/L)
	DUP of 2417303-01	Magnesium, Mg	46	45.9	mg/L		0	0.021	0.2	Splt# 2417303-01 (46mg/L)
	DUP of 2417303-01	Potassium, K	2.53	2.52	mg/L		0	0.06	0.2	Splt# 2417303-01 (2.53mg/L)
	DUP of 2417303-01	Sodium, Na	62.4	62.2	mg/L		0	0.2	1	Splt# 2417303-01 (62.4mg/L)
QC2434054-04										
	SPK of 2417303-01	Calcium, Ca	59.6	61.6	mg/L	99		0.04	1	Splt# 2417303-01 (59.6mg/L)
	SPK of 2417303-01	Magnesium, Mg	46	48.1	mg/L	102		0.007	0.2	Splt# 2417303-01 (46mg/L)
	SPK of 2417303-01	Potassium, K	2.53	4.61	mg/L	104		0.04	0.2	Splt# 2417303-01 (2.53mg/L)
	SPK of 2417303-01	Sodium, Na	62.4	64.4	mg/L	96		0.02	1	Splt# 2417303-01 (62.4mg/L)
QC2434054-05										
	SPKD of 2417303-01	Calcium, Ca	59.6	61.2	mg/L	75	0	0.04	1	Splt# 2417303-01 (59.6mg/L)
	SPKD of 2417303-01	Magnesium, Mg	46	47.7	mg/L	81	0	0.007	0.2	Splt# 2417303-01 (46mg/L)
	SPKD of 2417303-01	Potassium, K	2.53	4.52	mg/L	99	1	0.04	0.2	Splt# 2417303-01 (2.53mg/L)
	SPKD of 2417303-01	Sodium, Na	62.4	63.9	mg/L	72	0	0.02	1	Splt# 2417303-01 (62.4mg/L)
QC2434054-06										
	MRL_CK	Calcium, Ca		0.0475	mg/L	119		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.059	mg/L	118		0.021	0.021	
	MRL_CK	Potassium, K		0.2	mg/L	100		0.06	0.06	
	MRL_CK	Sodium, Na		0.376	mg/L	188		0.2	0.2	
QC2434127-01										
	ICV	Calcium, Ca		10.3	mg/L	105		0.05	1	
	ICV	Magnesium, Mg		10	mg/L	101		0.01	0.2	
	ICV	Potassium, K		101	mg/L	102		0.03	0.2	
	ICV	Sodium, Na		10.1	mg/L	101		0.002	1	

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Water Quality Laboratory

ELAP Cert #:	
SEWPCP	1721
SUB_LAB	2813
MILLBRAE	1449

FOLDER ID: 2417302

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 11/14/2024
Sampling Team: Field

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Water Quality Laboratory

FOLDER ID: 2417303

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/18/2024
Sampling Team: Field

Lab Sample#: 2417303-01 **Sample Source:** WSB_CAL-22A-290 **External ID:**
Date Collected: 11/18/2024 11:16AM **Date Received:** 11/18/2024 12:11PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-22A-290, ROW AT HICKEY BL

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	52.7	mg/L	10	1	5	11/18/2024	2089528 PWARNER	
Nitrate as N	8.14	mg/L	10	0.34	0.4	11/18/2024	2089528 PWARNER	
SEM_200.7_DW(EPA 200.7)								
Calcium, Ca	59.6	mg/L	1	0.005	1	11/25/2024	2089893 BTRINH	
Magnesium, Mg	46	mg/L	1	0.021	0.2	11/25/2024	2089893 BTRINH	
Potassium, K	2.53	mg/L	1	0.06	0.2	11/25/2024	2089893 BTRINH	
Sodium, Na	62.4	mg/L	1	0.2	1	11/25/2024	2089893 BTRINH	
MBP_ALK(SM 2320 B)								
Alkalinity	273	mg/L	1	2.96	15	11/18/2024	2089540 PWARNER	
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	96.6	mg/L	1		15	11/18/2024	2089541 PWARNER	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	928	µmhos/cm	1		1	11/18/2024	2089543 PWARNER	>MCL
MBP_HARDNESS_T(SM 2340 C)								
Hardness, Total, as CaCO3	334	mg/L	1	2.37	15	11/18/2024	2089542 PWARNER	
MBP_PH(SM 4500-H+ B)								
pH	7.32	pH	1			11/18/2024	2089544 PWARNER	H1,H3
Temperature (°C)	18.6	°C	1			11/18/2024	2089544 PWARNER	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	541	mg/L	1	13.2	20	11/21/2024	2089624 MSWONG	>MCL

Lab Sample#: 2417303-02 **Sample Source:** WSB_CAL-22A-440 **External ID:**
Date Collected: 11/18/2024 10:31AM **Date Received:** 11/18/2024 12:11PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-22A-440, ROW AT HICKEY BL

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	52.2	mg/L	10	1	5	11/18/2024	2089528 PWARNER	
Nitrate as N	6.91	mg/L	10	0.34	0.4	11/18/2024	2089528 PWARNER	
SEM_200.7_DW(EPA 200.7)								
Calcium, Ca	57.4	mg/L	1	0.005	1	11/25/2024	2089893 BTRINH	
Magnesium, Mg	45.3	mg/L	1	0.021	0.2	11/25/2024	2089893 BTRINH	
Potassium, K	2.59	mg/L	1	0.06	0.2	11/25/2024	2089893 BTRINH	

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FOLDER ID: 2417303

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/18/2024
Sampling Team: Field

Sodium, Na	61.8	mg/L	1	0.2	1	11/25/2024	2089893	BTRINH

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	266	mg/L	1	2.96	15	11/18/2024	2089540 PWARNER	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	95.6	mg/L	1		15	11/18/2024	2089541 PWARNER	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	903	µmhos/cm	1		1	11/18/2024	2089543 PWARNER	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	320	mg/L	1	2.37	15	11/18/2024	2089542 PWARNER	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.4	pH	1			11/18/2024	2089544 PWARNER	H1,H3
Temperature (°C)	18.4	°C	1			11/18/2024	2089544 PWARNER	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	521	mg/L	1	13.2	20	11/21/2024	2089624 MSWONG	>MCL

Lab Sample#: 2417303-03 **Sample Source:** WSB_CAL-22A-545 **External ID:**
Date Collected: 11/18/2024 10:19AM **Date Received:** 11/18/2024 12:11PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-22A-545, ROW AT HICKEY BL

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	86.3	mg/L	10	1	5	11/18/2024	2089528 PWARNER	
Nitrate as N	4.94	mg/L	10	0.34	0.4	11/18/2024	2089528 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	69.4	mg/L	1	0.005	1	11/25/2024	2089893 BTRINH	
Magnesium, Mg	52.1	mg/L	1	0.021	0.2	11/25/2024	2089893 BTRINH	
Potassium, K	3.04	mg/L	1	0.06	0.2	11/25/2024	2089893 BTRINH	
Sodium, Na	86	mg/L	1	0.2	1	11/25/2024	2089893 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	350	mg/L	1	2.96	15	11/18/2024	2089540 PWARNER	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	98.2	mg/L	1		15	11/18/2024	2089541 PWARNER	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	1090	µmhos/cm	1		1	11/18/2024	2089543 PWARNER	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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FOLDER ID: 2417303

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/18/2024
Sampling Team: Field

Hardness, Total, as CaCO3	383	mg/L	1	2.37	15	11/18/2024	2089542	PWARNER

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	6.84	pH	1			11/18/2024	2089544	PWARNER	H1,H3
Temperature (°C)	18.5	°C	1			11/18/2024	2089544	PWARNER	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	638	mg/L	1	13.2	20	11/21/2024	2089624	MSWONG	>MCL

Lab Sample#: 2417303-04 **Sample Source:** WSB_CAL_DUP **External ID:**
Date Collected: 11/18/2024 10:44AM **Date Received:** 11/18/2024 12:11PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-22A-545, ROW AT HICKEY BL

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	86.1	mg/L	10	1	5	11/18/2024	2089528	PWARNER	
Nitrate as N	4.93	mg/L	10	0.34	0.4	11/18/2024	2089528	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	70	mg/L	1	0.005	1	11/25/2024	2089893	BTRINH	
Magnesium, Mg	52.5	mg/L	1	0.021	0.2	11/25/2024	2089893	BTRINH	
Potassium, K	3.09	mg/L	1	0.06	0.2	11/25/2024	2089893	BTRINH	
Sodium, Na	86.7	mg/L	1	0.2	1	11/25/2024	2089893	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	350	mg/L	1	2.96	15	11/18/2024	2089540	PWARNER	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	98.2	mg/L	1		15	11/18/2024	2089541	PWARNER	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1090	µmhos/cm	1		1	11/18/2024	2089543	PWARNER	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	383	mg/L	1	2.37	15	11/18/2024	2089542	PWARNER	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	6.83	pH	1			11/18/2024	2089544	PWARNER	H1,H3
Temperature (°C)	18.9	°C	1			11/18/2024	2089544	PWARNER	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	648	mg/L	1	13.2	20	11/21/2024	2089624	MSWONG	>MCL

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2417303

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/18/2024
Sampling Team: Field

QC list for Run#: *2089528* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433868-01										
	MRL_CK	Chloride		0.491	mg/L	98				
	MRL_CK	Sulfate		0.48	mg/L	96				
	MRL_CK	Nitrate as N		0.0392	mg/L	98				
QC2433868-02										
	CCV	Chloride		2.52	mg/L	101				
	CCV	Sulfate		2.5	mg/L	100				
	CCV	Nitrate as N		0.197	mg/L	99				
QC2433868-03										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433868-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433868-05										
	LCS	Chloride		0.502	mg/L	100				
	LCS	Sulfate		1.49	mg/L	99				
	LCS	Nitrate as N		0.242	mg/L	96				
QC2433868-06										
	LCSD of QC2433868-05	Chloride	0.502	0.501	mg/L	100	0			Splt# QC2433868-05 (0.502mg/L)
	LCSD of QC2433868-05	Sulfate	1.49	1.49	mg/L	99	0			Splt# QC2433868-05 (1.49mg/L)
	LCSD of QC2433868-05	Nitrate as N	0.242	0.242	mg/L	96	0			Splt# QC2433868-05 (0.242mg/L)
QC2433868-07										
	CCV	Chloride		20.1	mg/L	101				
	CCV	Sulfate		20.1	mg/L	100				
	CCV	Nitrate as N		1.62	mg/L	102				
QC2433868-08										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433868-09										
	SPK of 2417303-01	Sulfate	52.7	68	mg/L	102				Splt# 2417303-01 (52.7mg/L)
	SPK of 2417303-01	Nitrate as N	8.14	10.7	mg/L	101				Splt# 2417303-01 (8.14mg/L)
QC2433868-10										
	SPKD of 2417303-01	Sulfate	52.7	67.8	mg/L	101	0			Splt# 2417303-01 (52.7mg/L)
	SPKD of 2417303-01	Nitrate as N	8.14	10.6	mg/L	100	0			Splt# 2417303-01 (8.14mg/L)

QC list for Run#: *2089540* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433876-01										

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2417303

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/18/2024
Sampling Team: Field

QC list for Run#: *2089540* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433876-01	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2433876-02	MRL_CK	Alkalinity		3.2	mg/L	107				
QC2433876-03	SPK of 2417303-01	Alkalinity	273	469	mg/L	98			15	Splt# 2417303-01 (273mg/L)
QC2433876-04	SPKD of 2417303-01	Alkalinity	273	469	mg/L	98	0		15	Splt# 2417303-01 (273mg/L)
QC2433876-06	LCS	Alkalinity		41.7	mg/L	104			3	

QC list for Run#: *2089541* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433877-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2433877-02	MRL_CK	Chloride		3.15	mg/L	105				
QC2433877-03	SPK of 2417303-01	Chloride	96.6	294	mg/L	98			15	Splt# 2417303-01 (96.6mg/L)
QC2433877-04	SPKD of 2417303-01	Chloride	96.6	295	mg/L	99	0		15	Splt# 2417303-01 (96.6mg/L)
QC2433877-06	LCS	Chloride		39.6	mg/L	99			3	

QC list for Run#: *2089542* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433878-01	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2433878-02	MRL_CK	Hardness, Total, as CaCO3		2.52	mg/L	84				
QC2433878-03	DUP of 2417303-04	Hardness, Total, as CaCO3	383	379	mg/L		1	2.37	15	Splt# 2417303-04 (383mg/L)
QC2433878-04	LCS	Hardness, Total, as CaCO3		40	mg/L	100			3	
QC2433878-05	LCS	Hardness, Total, as CaCO3		40	mg/L	100			3	

QC list for Run#: *2089543* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433879-01	CAL	Specific Conductance @25°C		1420	µmhos/cm	101				
QC2433879-02	ICV	Specific Conductance @25°C		145	µmhos/cm	98				
QC2433879-03	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2433879-04										

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Water Quality Laboratory

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FOLDER ID: 2417303

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/18/2024
Sampling Team: Field

QC list for Run#: *2089543* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	MRL_CK	Specific Conductance @25°C		9.63	µmhos/cm	96				
QC2433879-05										
	DUP of 2418874-01	Specific Conductance @25°C	101	101	µmhos/cm		0		1	Splt# 2418874-01 (101µmhos/cm)
QC2433879-06										
	CCV	Specific Conductance @25°C		98.7	µmhos/cm	98				
QC2433879-07										
	CCV	Specific Conductance @25°C		1400	µmhos/cm	98				

QC list for Run#: *2089544* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433881-01										
	ICV	pH		9.04	pH	99				
	ICV	Temperature (°C)		22.2	°C					
QC2433881-02										
	DUP of 2418874-01	pH	9.51	9.5	pH		0			Splt# 2418874-01 (9.51pH) H1,H3
	DUP of 2418874-01	Temperature (°C)	12.7	12.8	°C					Splt# 2418874-01 (12.7°C)
QC2433881-03										
	CCV	pH		9.05	pH	100				
	CCV	Temperature (°C)		21.7	°C					
QC2433881-04										
	CCV	pH		9.05	pH	100				
	CCV	Temperature (°C)		21.6	°C					

QC list for Run#: *2089624* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433937-01										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2433937-02										
	LCS	Total Dissolved Solids		92	mg/L	96		13.2	20	
QC2433937-03										
	DUP of 2417302-01	Total Dissolved Solids	434	426	mg/L		1	13.2	20	Splt# 2417302-01 (434mg/L)

QC list for Run#: *2089893* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2434054-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2434054-02										
	LCS	Calcium, Ca		2.02	mg/L	101		0.04	1	
	LCS	Magnesium, Mg		2.03	mg/L	101		0.007	0.2	

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Water Quality Laboratory

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FOLDER ID: 2417303

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/18/2024
Sampling Team: Field

QC list for Run#: *2089893* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result		Units	% Rec	RPD	MDL	MRL	Flag/Comments
			Parent	Current						
	LCS	Potassium, K		2	mg/L	100		0.04	0.2	
	LCS	Sodium, Na		2.09	mg/L	105		0.02	1	
QC2434054-03										
	DUP of 2417303-01	Calcium, Ca	59.6	59.4	mg/L		0	0.005	1	Splt# 2417303-01 (59.6mg/L)
	DUP of 2417303-01	Magnesium, Mg	46	45.9	mg/L		0	0.021	0.2	Splt# 2417303-01 (46mg/L)
	DUP of 2417303-01	Potassium, K	2.53	2.52	mg/L		0	0.06	0.2	Splt# 2417303-01 (2.53mg/L)
	DUP of 2417303-01	Sodium, Na	62.4	62.2	mg/L		0	0.2	1	Splt# 2417303-01 (62.4mg/L)
QC2434054-04										
	SPK of 2417303-01	Calcium, Ca	59.6	61.6	mg/L	99		0.04	1	Splt# 2417303-01 (59.6mg/L)
	SPK of 2417303-01	Magnesium, Mg	46	48.1	mg/L	102		0.007	0.2	Splt# 2417303-01 (46mg/L)
	SPK of 2417303-01	Potassium, K	2.53	4.61	mg/L	104		0.04	0.2	Splt# 2417303-01 (2.53mg/L)
	SPK of 2417303-01	Sodium, Na	62.4	64.4	mg/L	96		0.02	1	Splt# 2417303-01 (62.4mg/L)
QC2434054-05										
	SPKD of 2417303-01	Calcium, Ca	59.6	61.2	mg/L	75	0	0.04	1	Splt# 2417303-01 (59.6mg/L)
	SPKD of 2417303-01	Magnesium, Mg	46	47.7	mg/L	81	0	0.007	0.2	Splt# 2417303-01 (46mg/L)
	SPKD of 2417303-01	Potassium, K	2.53	4.52	mg/L	99	1	0.04	0.2	Splt# 2417303-01 (2.53mg/L)
	SPKD of 2417303-01	Sodium, Na	62.4	63.9	mg/L	72	0	0.02	1	Splt# 2417303-01 (62.4mg/L)
QC2434054-06										
	MRL_CK	Calcium, Ca		0.0475	mg/L	119		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.059	mg/L	118		0.021	0.021	
	MRL_CK	Potassium, K		0.2	mg/L	100		0.06	0.06	
	MRL_CK	Sodium, Na		0.376	mg/L	188		0.2	0.2	
QC2434127-01										
	ICV	Calcium, Ca		10.3	mg/L	105		0.05	1	
	ICV	Magnesium, Mg		10	mg/L	101		0.01	0.2	
	ICV	Potassium, K		101	mg/L	102		0.03	0.2	
	ICV	Sodium, Na		10.1	mg/L	101		0.002	1	

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Water Quality Laboratory

ELAP Cert #:

MILLBRAE	1449
SUB_LAB	2813
SEWPCP	1721

FOLDER ID: 2417304

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/04/2024
Sampling Team: Field

Lab Sample#: 2417304-01 **Sample Source:** WSB_DC-10A-160 **External ID:**

Date Collected: 11/04/2024 09:29AM **Date Received:** 11/04/2024 01:34PM **Sample Matrix:** Aqueous **Location Desc:** GSR_DC_CUP-10A-160, ROW AT SERRA BOWL

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	63.7	mg/L	10	1	5	11/04/2024	2088867 PWARNER	
Nitrate as N	8.45	mg/L	10	0.34	0.4	11/04/2024	2088867 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	64.4	mg/L	1	0.005	1	11/14/2024	2089378 BTRINH	
Magnesium, Mg	63.9	mg/L	1	0.021	0.2	11/14/2024	2089378 BTRINH	
Potassium, K	1.4	mg/L	1	0.06	0.2	11/14/2024	2089378 BTRINH	
Sodium, Na	73.7	mg/L	1	0.2	1	11/14/2024	2089378 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	334	mg/L	1	2.96	15	11/04/2024	2088855 MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	122	mg/L	1		15	11/04/2024	2088857 MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	1120	µmhos/cm	1		1	11/04/2024	2088872 ABALALIO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	420	mg/L	1	2.37	15	11/04/2024	2088859 MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	6.92	pH	1			11/04/2024	2088871 ABALALIO	H1,H3
Temperature (°C)	17.6	°C	1			11/04/2024	2088871 ABALALIO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	633	mg/L	1	13.2	20	11/07/2024	2088909 MSWONG	>MCL

Lab Sample#: 2417304-03 **Sample Source:** WSB_DC-10A-500 **External ID:**

Date Collected: 11/04/2024 10:29AM **Date Received:** 11/04/2024 01:34PM **Sample Matrix:** Aqueous **Location Desc:** GSR_DC_CUP-10A-500 ROW AT SERRA BOWL

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	88.8	mg/L	10	1	5	11/04/2024	2088867 PWARNER	
Nitrate as N	7.2	mg/L	10	0.34	0.4	11/04/2024	2088867 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	61.9	mg/L	1	0.005	1	11/14/2024	2089378 BTRINH	
Magnesium, Mg	63.4	mg/L	1	0.021	0.2	11/14/2024	2089378 BTRINH	

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Water Quality Laboratory

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SUB_LAB 2813
SEWPCP 1721

FOLDER ID: 2417304

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/04/2024
Sampling Team: Field

Potassium, K	1.35	mg/L	1	0.06	0.2	11/14/2024	2089378	BTRINH
Sodium, Na	71.3	mg/L	1	0.2	1	11/14/2024	2089378	BTRINH

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	283	mg/L	1	2.96	15	11/04/2024	2088855 MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	128	mg/L	1		15	11/04/2024	2088857 MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	1110	µmhos/cm	1		1	11/04/2024	2088872 ABALALIO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	406	mg/L	1	2.37	15	11/04/2024	2088859 MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	6.79	pH	1			11/04/2024	2088871 ABALALIO	H1,H3
Temperature (°C)	16.8	°C	1			11/04/2024	2088871 ABALALIO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	612	mg/L	1	13.2	20	11/07/2024	2088909 MSWONG	>MCL

SUB_PERCHLORATE_331(EPA 331)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Perchlorate, ClO4-	0.98	µg/L			0.5	11/06/2024	6234888 SUB	

Lab Sample#: 2417304-04 **Sample Source:** WSB_DC-10A-710 **External ID:**
Date Collected: 11/04/2024 09:42AM **Date Received:** 11/04/2024 01:34PM **Sample Matrix:** Aqueous **Location Desc:** GSR_DC_CUP-10A-710 ROW AT SERRA BOWL

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	89.3	mg/L	10	1	5	11/04/2024	2088867 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	72.2	mg/L	1	0.005	1	11/14/2024	2089378 BTRINH	
Magnesium, Mg	48.1	mg/L	1	0.021	0.2	11/14/2024	2089378 BTRINH	
Potassium, K	3.88	mg/L	1	0.06	0.2	11/14/2024	2089378 BTRINH	
Sodium, Na	93.4	mg/L	1	0.2	1	11/14/2024	2089378 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	246	mg/L	1	2.96	15	11/04/2024	2088855 MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	185	mg/L	1		15	11/04/2024	2088857 MSWONG	

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Water Quality Laboratory

ELAP Cert #:

MILLBRAE	1449
SUB_LAB	2813
SEWPCP	1721

FOLDER ID: 2417304

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/04/2024
Sampling Team: Field

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1180	µmhos/cm	1		1	11/04/2024	2088872	ABALALIO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	371	mg/L	1	2.37	15	11/04/2024	2088859	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.26	pH	1			11/04/2024	2088871	ABALALIO	H1,H3
Temperature (°C)	17.2	°C	1			11/04/2024	2088871	ABALALIO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	635	mg/L	1	13.2	20	11/07/2024	2088909	MSWONG	>MCL

SUB_PERCHLORATE_331(EPA 331)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Perchlorate, ClO4-	<0.5	µg/L			0.5	11/06/2024	6234888	SUB	

Lab Sample#: 2417304-04A **Sample Source:** WSB_DC-10A-710 **External ID:**
Date Collected: 11/04/2024 09:42AM **Date Received:** 11/04/2024 01:34PM **Sample Matrix:** Aqueous **Location Desc:** GSR_DC_CUP-10A-710 ROW AT SERRA BOWL

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Nitrate as N	<0.4	mg/L	10	0.34	0.4	11/04/2024	2088867	PWARNER	

Lab Sample#: 2417304-05 **Sample Source:** WSB_DC_DUP **External ID:**
Date Collected: 11/04/2024 10:07AM **Date Received:** 11/04/2024 01:34PM **Sample Matrix:** Aqueous **Location Desc:** GSR_DC_CUP-10A-160, ROW AT SERRA BOWL

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	65.3	mg/L	10	1	5	11/04/2024	2088867	PWARNER	
Nitrate as N	8.5	mg/L	10	0.34	0.4	11/04/2024	2088867	PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	64.8	mg/L	1	0.005	1	11/14/2024	2089378	BTRINH	
Magnesium, Mg	64.2	mg/L	1	0.021	0.2	11/14/2024	2089378	BTRINH	
Potassium, K	1.34	mg/L	1	0.06	0.2	11/14/2024	2089378	BTRINH	
Sodium, Na	74.2	mg/L	1	0.2	1	11/14/2024	2089378	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	332	mg/L	1	2.96	15	11/04/2024	2088855	MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	122	mg/L	1		15	11/04/2024	2088857	MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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Water Quality Laboratory

ELAP Cert #:

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SUB_LAB	2813
SEWPCP	1721

FOLDER ID: 2417304

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/04/2024
Sampling Team: Field

Specific Conductance @25°C	**1130**	**µmhos/cm**	1		1	11/04/2024	2088872	ABALALIO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	**418**	**mg/L**	1	2.37	15	11/04/2024	2088859	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	**6.91**	**pH**	1			11/04/2024	2088871	ABALALIO	H1,H3
Temperature (°C)	**18**	**°C**	1			11/04/2024	2088871	ABALALIO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	**644**	**mg/L**	1	13.2	20	11/07/2024	2088909	MSWONG	>MCL

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FOLDER ID: 2417304

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/04/2024
Sampling Team: Field

QC list for Run#: *2088855* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433390-01	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2433390-02	MRL_CK	Alkalinity		3.26	mg/L	109				
QC2433390-03	SPK of 2418339-06	Alkalinity	103	144	mg/L	103			3	Splt# 2418339-06 (103mg/L)
QC2433390-04	SPKD of 2418339-06	Alkalinity	103	145	mg/L	104	0		3	Splt# 2418339-06 (103mg/L)
QC2433390-06	LCS	Alkalinity		43.5	mg/L	109			3	

QC list for Run#: *2088857* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433391-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2433391-02	MRL_CK	Chloride		3.65	mg/L	122				
QC2433391-03	SPK of 2418339-06	Chloride	6.77	45.6	mg/L	97			3	Splt# 2418339-06 (6.77mg/L)
QC2433391-04	SPKD of 2418339-06	Chloride	6.77	46	mg/L	98	0		3	Splt# 2418339-06 (6.77mg/L)
QC2433391-06	LCS	Chloride		39.1	mg/L	97			3	

QC list for Run#: *2088859* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433388-01	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2433388-02	MRL_CK	Hardness, Total, as CaCO3		2.5	mg/L	83				
QC2433388-03		Hardness, Total, as CaCO3		21.2	mg/L		or: No Pare	0.474	3	
QC2433388-04	LCS	Hardness, Total, as CaCO3		39.8	mg/L	99			3	

QC list for Run#: *2088867* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433389-01	MRL_CK	Chloride		0.525	mg/L	105				
	MRL_CK	Sulfate		0.519	mg/L	104				
	MRL_CK	Nitrate as N		0.0395	mg/L	99				
QC2433389-02	CCV	Chloride		2.57	mg/L	103				

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FOLDER ID: 2417304

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/04/2024
Sampling Team: Field

QC list for Run#: *2088867* **and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	CCV	Sulfate		2.57	mg/L	103				
	CCV	Nitrate as N		0.201	mg/L	101				
QC2433389-03										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433389-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433389-05										
	LCS	Chloride		0.509	mg/L	102				
	LCS	Sulfate		1.53	mg/L	102				
	LCS	Nitrate as N		0.249	mg/L	99				
QC2433389-06										
	LCSD of QC2433389-05	Chloride	0.509	0.51	mg/L	102	0			Splt# QC2433389-05 (0.509mg/L)
	LCSD of QC2433389-05	Sulfate	1.53	1.53	mg/L	102	0			Splt# QC2433389-05 (1.53mg/L)
	LCSD of QC2433389-05	Nitrate as N	0.249	0.248	mg/L	99	0			Splt# QC2433389-05 (0.249mg/L)
QC2433389-07										
	CCV	Chloride		20.6	mg/L	103				
	CCV	Sulfate		20.6	mg/L	103				
	CCV	Nitrate as N		1.65	mg/L	104				
QC2433389-08										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433389-09										
	SPK of 2417304-01	Sulfate	63.7	78.7	mg/L	99				Splt# 2417304-01 (63.7mg/L)
	SPK of 2417304-01	Nitrate as N	8.45	10.9	mg/L	99				Splt# 2417304-01 (8.45mg/L)
QC2433389-10										
	SPKD of 2417304-01	Sulfate	63.7	78.7	mg/L	100	0			Splt# 2417304-01 (63.7mg/L)
	SPKD of 2417304-01	Nitrate as N	8.45	10.9	mg/L	99	0			Splt# 2417304-01 (8.45mg/L)

QC list for Run#: *2088871* **and Test: MBP_PH (SM 4500-H+ B)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433395-04										
	ICV	pH		9.05	pH	100				
	ICV	Temperature (°C)		20.1	°C					
QC2433395-05										
	DUP of 2417304-01	pH	6.92	6.92	pH		0			Splt# 2417304-01 (6.92pH) H1,H3

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FOLDER ID: 2417304

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/04/2024
Sampling Team: Field

QC list for Run#: *2088871* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	DUP of 2417304-01	Temperature (°C)	17.6	17.5	°C					Splt# 2417304-01 (17.6°C)
QC2433395-06										
	CCV	pH		9.05	pH	100				
	CCV	Temperature (°C)		19.7	°C					

QC list for Run#: *2088872* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433396-02										
	ICV	Specific Conductance @25°C		147	µmhos/cm	100				
QC2433396-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2433396-04										
	MRL_CK	Specific Conductance @25°C		9.62	µmhos/cm	96				
QC2433396-05										
	DUP of 2417304-01	Specific Conductance @25°C	1120	1130	µmhos/cm		0		1	Splt# 2417304-01 (1120µmhos/cm)
QC2433396-06										
	CCV	Specific Conductance @25°C		99.4	µmhos/cm	99				

QC list for Run#: *2088909* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433421-01										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2433421-02										
	LCS	Total Dissolved Solids		88	mg/L	92		13.2	20	
QC2433421-03										
	DUP of 2419147-03	Total Dissolved Solids	41	38	mg/L		7	13.2	20	Splt# 2419147-03 (41mg/L)
QC2433421-04										
	DUP of 2417305-02	Total Dissolved Solids	449	441	mg/L		1	13.2	20	Splt# 2417305-02 (449mg/L)

QC list for Run#: *2089378* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433732-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2433732-02										
	LCS	Calcium, Ca		2.01	mg/L	101		0.04	1	
	LCS	Magnesium, Mg		2.06	mg/L	103		0.007	0.2	
	LCS	Potassium, K		1.98	mg/L	99		0.04	0.2	
	LCS	Sodium, Na		2.19	mg/L	109		0.02	1	
QC2433732-03										

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FOLDER ID: 2417304

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/04/2024
Sampling Team: Field

QC list for Run#: *2089378* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	DUP of 2417304-01	Calcium, Ca	64.4	65.1	mg/L		1	0.005	1	Splt# 2417304-01 (64.4mg/L)
	DUP of 2417304-01	Magnesium, Mg	63.9	64.7	mg/L		1	0.021	0.2	Splt# 2417304-01 (63.9mg/L)
	DUP of 2417304-01	Potassium, K	1.4	1.38	mg/L		1	0.06	0.2	Splt# 2417304-01 (1.4mg/L)
	DUP of 2417304-01	Sodium, Na	73.7	74.4	mg/L		0	0.2	1	Splt# 2417304-01 (73.7mg/L)
QC2433732-04										
	SPK of 2417304-01	Calcium, Ca	64.4	67.7	mg/L	164		0.04	1	Splt# 2417304-01 (64.4mg/L)
	SPK of 2417304-01	Magnesium, Mg	63.9	67.3	mg/L	165		0.007	0.2	Splt# 2417304-01 (63.9mg/L)
	SPK of 2417304-01	Potassium, K	1.4	3.5	mg/L	105		0.04	0.2	Splt# 2417304-01 (1.4mg/L)
	SPK of 2417304-01	Sodium, Na	73.7	77	mg/L	166		0.02	1	Splt# 2417304-01 (73.7mg/L)
QC2433732-05										
	SPKD of 2417304-01	Calcium, Ca	64.4	66.4	mg/L	100	1	0.04	1	Splt# 2417304-01 (64.4mg/L)
	SPKD of 2417304-01	Magnesium, Mg	63.9	65.9	mg/L	97	2	0.007	0.2	Splt# 2417304-01 (63.9mg/L)
	SPKD of 2417304-01	Potassium, K	1.4	3.41	mg/L	100	2	0.04	0.2	Splt# 2417304-01 (1.4mg/L)
	SPKD of 2417304-01	Sodium, Na	73.7	75.6	mg/L	94	1	0.02	1	Splt# 2417304-01 (73.7mg/L)
QC2433732-06										
	DUP of 2417304-03	Calcium, Ca	61.9	60.8	mg/L		1	0.005	1	Splt# 2417304-03 (61.9mg/L)
	DUP of 2417304-03	Magnesium, Mg	63.4	62.2	mg/L		1	0.021	0.2	Splt# 2417304-03 (63.4mg/L)
	DUP of 2417304-03	Potassium, K	1.35	1.33	mg/L		1	0.06	0.2	Splt# 2417304-03 (1.35mg/L)
	DUP of 2417304-03	Sodium, Na	71.3	70.1	mg/L		1	0.2	1	Splt# 2417304-03 (71.3mg/L)
QC2433732-07										
	SPK of 2417304-03	Calcium, Ca	61.9	62.8	mg/L	45		0.04	1	Splt# 2417304-03 (61.9mg/L)
	SPK of 2417304-03	Magnesium, Mg	63.4	64.2	mg/L	39		0.007	0.2	Splt# 2417304-03 (63.4mg/L)
	SPK of 2417304-03	Potassium, K	1.35	3.38	mg/L	102		0.04	0.2	Splt# 2417304-03 (1.35mg/L)
	SPK of 2417304-03	Sodium, Na	71.3	72	mg/L	34		0.02	1	Splt# 2417304-03 (71.3mg/L)
QC2433732-08										
	SPKD of 2417304-03	Calcium, Ca	61.9	64.7	mg/L	142	3	0.04	1	Splt# 2417304-03 (61.9mg/L)
	SPKD of 2417304-03	Magnesium, Mg	63.4	66.3	mg/L	141	3	0.007	0.2	Splt# 2417304-03 (63.4mg/L)
	SPKD of 2417304-03	Potassium, K	1.35	3.43	mg/L	104	1	0.04	0.2	Splt# 2417304-03 (1.35mg/L)
	SPKD of 2417304-03	Sodium, Na	71.3	74.2	mg/L	142	2	0.02	1	Splt# 2417304-03 (71.3mg/L)
QC2433732-09										
	MRL_CK	Calcium, Ca		0.0327	mg/L	81		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0473	mg/L	94		0.021	0.021	
	MRL_CK	Potassium, K		0.23	mg/L	115		0.06	0.06	
	MRL_CK	Sodium, Na		0.314	mg/L	157		0.2	0.2	
QC2433760-01										
	ICV	Calcium, Ca		0.205	mg/L	104		0.001	0.02	
	ICV	Magnesium, Mg		0.199	mg/L	100		0.0002	0.004	
	ICV	Potassium, K		1.99	mg/L	100		0.0006	0.004	
	ICV	Sodium, Na		0.204	mg/L	102		0.00004	0.02	

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SUB_LAB	2813

FOLDER ID: 2417305

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 11/05/2024
Sampling Team: Field

Lab Sample#: 2417305-01 **Sample Source:** WSB_CAL-18-230 **External ID:**

Date Collected: 11/05/2024 11:50AM **Date Received:** 11/05/2024 01:03PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-18-230, ROW AT COLMA BLVD

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	40.5	mg/L	5	0.5	2.5	11/05/2024	2088900 ABALALIO	
Nitrate as N	2.95	mg/L	5	0.17	0.2	11/05/2024	2088900 ABALALIO	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	39	mg/L	1	0.005	1	11/14/2024	2089378 BTRINH	
Magnesium, Mg	36.3	mg/L	1	0.021	0.2	11/14/2024	2089378 BTRINH	
Potassium, K	1.77	mg/L	1	0.06	0.2	11/14/2024	2089378 BTRINH	
Sodium, Na	66.8	mg/L	1	0.2	1	11/14/2024	2089378 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	181	mg/L	1	1.19	6	11/05/2024	2088921 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	116	mg/L	1		6	11/05/2024	2088925 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	811	µmhos/cm	1		1	11/05/2024	2088944 ABALALIO	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	246	mg/L	1	0.948	6	11/05/2024	2088926 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	6.75	pH	1			11/05/2024	2088943 ABALALIO	H1,H3
Temperature (°C)	18.5	°C	1			11/05/2024	2088943 ABALALIO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	442	mg/L	1	13.2	20	11/07/2024	2088909 MSWONG	

Lab Sample#: 2417305-02 **Sample Source:** WSB_CAL-18-425 **External ID:**

Date Collected: 11/05/2024 11:17AM **Date Received:** 11/05/2024 01:03PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-18-425, ROW AT COLMA BLVD

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	40.8	mg/L	5	0.5	2.5	11/05/2024	2088900 ABALALIO	
Nitrate as N	3.03	mg/L	5	0.17	0.2	11/05/2024	2088900 ABALALIO	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	38.7	mg/L	1	0.005	1	11/14/2024	2089378 BTRINH	
Magnesium, Mg	35.8	mg/L	1	0.021	0.2	11/14/2024	2089378 BTRINH	

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Water Quality Laboratory

ELAP Cert #:
MILLBRAE 1449
SEWPCP 1721
SUB_LAB 2813

FOLDER ID: 2417305

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 11/05/2024
Sampling Team: Field

Potassium, K	1.76	mg/L	1	0.06	0.2	11/14/2024	2089378	BTRINH
Sodium, Na	66.8	mg/L	1	0.2	1	11/14/2024	2089378	BTRINH

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	181	mg/L	1	1.19	6	11/05/2024	2088921 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	117	mg/L	1		6	11/05/2024	2088925 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	812	µmhos/cm	1		1	11/05/2024	2088944 ABALALIO	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	243	mg/L	1	0.948	6	11/05/2024	2088926 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	6.7	pH	1			11/05/2024	2088943 ABALALIO	H1,H3
Temperature (°C)	18.6	°C	1			11/05/2024	2088943 ABALALIO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	449	mg/L	1	13.2	20	11/07/2024	2088909 MSWONG	

Lab Sample#: 2417305-03 **Sample Source:** WSB_CAL-18-490 **External ID:**
Date Collected: 11/05/2024 10:11AM **Date Received:** 11/05/2024 01:03PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-18-490, ROW AT COLMA BLVD

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	41.2	mg/L	5	0.5	2.5	11/05/2024	2088900 ABALALIO	
Nitrate as N	3.08	mg/L	5	0.17	0.2	11/05/2024	2088900 ABALALIO	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	39.8	mg/L	1	0.005	1	11/14/2024	2089378 BTRINH	
Magnesium, Mg	36.8	mg/L	1	0.021	0.2	11/14/2024	2089378 BTRINH	
Potassium, K	1.85	mg/L	1	0.06	0.2	11/14/2024	2089378 BTRINH	
Sodium, Na	67.4	mg/L	1	0.2	1	11/14/2024	2089378 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	181	mg/L	1	1.19	6	11/05/2024	2088921 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	115	mg/L	1		6	11/05/2024	2088925 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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SUB_LAB 2813

FOLDER ID: 2417305

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 11/05/2024
Sampling Team: Field

Specific Conductance @25°C	805	µmhos/cm	1		1	11/05/2024	2088944	ABALALIO

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	240	mg/L	1	0.948	6	11/05/2024	2088926 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	6.74	pH	1			11/05/2024	2088943 ABALALIO	H1,H3
Temperature (°C)	19	°C	1			11/05/2024	2088943 ABALALIO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	442	mg/L	1	13.2	20	11/07/2024	2088909 MSWONG	

SUB_PERCHLORATE_331(EPA 331)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Perchlorate, ClO4-	0.94	µg/L			0.5	11/06/2024	6235888 SUB	

Lab Sample#: 2417305-04 **Sample Source:** WSB_CAL-18-595 **External ID:**

Date Collected: 11/05/2024 10:13AM **Date Received:** 11/05/2024 01:03PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-18-595, ROW AT COLMA BLVD

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	0.357	mg/L	5	0.17	0.2	11/05/2024	2088900 ABALALIO	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	88.2	mg/L	1	0.005	1	11/14/2024	2089378 BTRINH	
Magnesium, Mg	72.7	mg/L	1	0.021	0.2	11/14/2024	2089378 BTRINH	
Potassium, K	3.36	mg/L	1	0.06	0.2	11/14/2024	2089378 BTRINH	
Sodium, Na	80	mg/L	1	0.2	1	11/14/2024	2089378 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	286	mg/L	1	2.96	15	11/05/2024	2088921 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	197	mg/L	1		15	11/05/2024	2088925 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	1380	µmhos/cm	1		1	11/05/2024	2088944 ABALALIO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	521	mg/L	1	2.37	15	11/05/2024	2088926 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.13	pH	1			11/05/2024	2088943 ABALALIO	H1,H3
Temperature (°C)	18.8	°C	1			11/05/2024	2088943 ABALALIO	

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FOLDER ID: 2417305

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Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 11/05/2024
Sampling Team: Field

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	771	mg/L	1	13.2	20	11/07/2024	2088909	MSWONG	>MCL

SUB_PERCHLORATE_331(EPA 331)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Perchlorate, ClO4-	<0.5	µg/L			0.5	11/06/2024	6235888	SUB	

Lab Sample#: 2417305-04A **Sample Source:** WSB_CAL-18-595 **External ID:**

Date Collected: 11/05/2024 10:13AM **Date Received:** 11/05/2024 01:03PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-18-595, ROW AT COLMA BLVD

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	150	mg/L	10	1	5	11/06/2024	2088994	ABALALIO	

Lab Sample#: 2417305-05 **Sample Source:** WSB_CAL_DUP **External ID:**

Date Collected: 11/05/2024 10:50AM **Date Received:** 11/05/2024 01:03PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-18-595, ROW AT COLMA BLVD

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Nitrate as N	0.384	mg/L	5	0.17	0.2	11/05/2024	2088900	ABALALIO	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	88.5	mg/L	1	0.005	1	11/14/2024	2089378	BTRINH	
Magnesium, Mg	72.9	mg/L	1	0.021	0.2	11/14/2024	2089378	BTRINH	
Potassium, K	3.39	mg/L	1	0.06	0.2	11/14/2024	2089378	BTRINH	
Sodium, Na	80.4	mg/L	1	0.2	1	11/14/2024	2089378	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	290	mg/L	1	2.96	15	11/05/2024	2088921	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	199	mg/L	1		15	11/05/2024	2088925	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1380	µmhos/cm	1		1	11/05/2024	2088944	ABALALIO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	517	mg/L	1	2.37	15	11/05/2024	2088926	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.12	pH	1			11/05/2024	2088943	ABALALIO	H1,H3
Temperature (°C)	19.1	°C	1			11/05/2024	2088943	ABALALIO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	761	mg/L	1	13.2	20	11/07/2024	2088909	MSWONG	>MCL

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FOLDER ID: 2417305

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Scheduled Sample Date: 11/05/2024
Sampling Team: Field

SUB_PERCHLORATE_331(EPA 331)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Perchlorate, ClO4-	<0.5	µg/L			0.5	11/06/2024	6235888	SUB	

Lab Sample#: 2417305-05A **Sample Source:** WSB_CAL_DUP **External ID:**

Date Collected: 11/05/2024 10:50AM **Date Received:** 11/05/2024 01:03PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-18-595, ROW AT COLMA BLVD

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	150	mg/L	10	1	5	11/06/2024	2088994	ABALALIO	

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FOLDER ID: 2417305

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 11/05/2024
Sampling Team: Field

QC list for Run#: *2088900* **and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433418-01										
	MRL_CK	Chloride		0.515	mg/L	103				
	MRL_CK	Sulfate		0.566	mg/L	113				
	MRL_CK	Nitrate as N		0.0402	mg/L	101				
QC2433418-02										
	CCV	Chloride		2.63	mg/L	105				
	CCV	Sulfate		2.62	mg/L	105				
	CCV	Nitrate as N		0.206	mg/L	103				
QC2433418-03										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433418-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433418-05										
	LCS	Chloride		0.516	mg/L	103				
	LCS	Sulfate		1.55	mg/L	103				
	LCS	Nitrate as N		0.25	mg/L	100				
QC2433418-06										
	LCSD of QC2433418-05	Chloride	0.516	0.515	mg/L	103	0			Splt# QC2433418-05 (0.516mg/L)
	LCSD of QC2433418-05	Sulfate	1.55	1.57	mg/L	104	1			Splt# QC2433418-05 (1.55mg/L)
	LCSD of QC2433418-05	Nitrate as N	0.25	0.25	mg/L	100	0			Splt# QC2433418-05 (0.25mg/L)
QC2433418-07										
	CCV	Chloride		20.9	mg/L	105				
	CCV	Sulfate		20.8	mg/L	104				
	CCV	Nitrate as N		1.67	mg/L	105				
QC2433418-08										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433418-09										
	SPK of 2419147-01	Sulfate	6.28	7.72	mg/L	95				Splt# 2419147-01 (6.28mg/L)
	SPK of 2419147-01	Nitrate as N	0.114	0.349	mg/L	94				Splt# 2419147-01 (0.114mg/L)
QC2433418-10										
	SPKD of 2419147-01	Sulfate	6.28	7.73	mg/L	96	0			Splt# 2419147-01 (6.28mg/L)
	SPKD of 2419147-01	Nitrate as N	0.114	0.352	mg/L	95	0			Splt# 2419147-01 (0.114mg/L)
QC2433418-11										

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Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 11/05/2024
Sampling Team: Field

QC list for Run#: *2088900* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	MRL_CK	Chloride		0.518	mg/L	104				
	MRL_CK	Sulfate		0.509	mg/L	102				
	MRL_CK	Nitrate as N		0.0391	mg/L	98				

QC list for Run#: *2088909* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433421-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2433421-02	LCS	Total Dissolved Solids		88	mg/L	92		13.2	20	
QC2433421-03	DUP of 2419147-03	Total Dissolved Solids	41	38	mg/L		7	13.2	20	Splt# 2419147-03 (41mg/L)
QC2433421-04	DUP of 2417305-02	Total Dissolved Solids	449	441	mg/L		1	13.2	20	Splt# 2417305-02 (449mg/L)

QC list for Run#: *2088921* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433426-01	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2433426-02	MRL_CK	Alkalinity		3.07	mg/L	102				
QC2433426-03	SPK of 2418417-01	Alkalinity	32.7	74.5	mg/L	105			3	Splt# 2418417-01 (32.7mg/L)
QC2433426-04	SPKD of 2418417-01	Alkalinity	32.7	75.2	mg/L	106	0		3	Splt# 2418417-01 (32.7mg/L)
QC2433426-05	DUP of 2419106-01	Alkalinity	29.8	58.1	mg/L		64	0.593	3	Splt# 2419106-01 (29.8mg/L)
QC2433426-06	LCS	Alkalinity		44.2	mg/L	110			3	
QC2433426-07	DUP of 2419106-01A	Alkalinity	29.9	29.8	mg/L		0	0.593	3	Splt# 2419106-01A (29.9mg/L)
QC2433426-08	LCS	Alkalinity		43.9	mg/L	110			3	

QC list for Run#: *2088925* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433428-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2433428-02	MRL_CK	Chloride		3.29	mg/L	110				
QC2433428-03	SPK of 2418417-01	Chloride	5.1	43.2	mg/L	95			3	Splt# 2418417-01 (5.1mg/L)
QC2433428-04										

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FOLDER ID: 2417305

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 11/05/2024
Sampling Team: Field

QC list for Run#: *2088925* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	SPKD of 2418417-01	Chloride	5.1	43.4	mg/L	95	0		3	Splt# 2418417-01 (5.1mg/L)
QC2433428-05										
	DUP of 2419106-01	Chloride	5.37	5.34	mg/L		0		3	Splt# 2419106-01 (5.37mg/L)
QC2433428-06										
	LCS	Chloride		39	mg/L	97			3	
QC2433428-07										
	DUP of 2419106-01B	Chloride	5.44	5.41	mg/L		0		3	Splt# 2419106-01B (5.44mg/L)
QC2433428-08										
	LCS	Chloride		39.3	mg/L	98			3	

QC list for Run#: *2088926* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433429-01										
	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2433429-02										
	MRL_CK	Hardness, Total, as CaCO3		2.51	mg/L	83				
QC2433429-03										
	DUP of 2418417-08	Hardness, Total, as CaCO3	23.6	23.6	mg/L		0	0.474	3	Splt# 2418417-08 (23.6mg/L)
QC2433429-04										
	LCS	Hardness, Total, as CaCO3		40.1	mg/L	100			3	

QC list for Run#: *2088943* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433443-04										
	ICV	pH		9.05	pH	100				
	ICV	Temperature (°C)		20	°C					
QC2433443-05										
	DUP of 2419147-01	pH	9.37	9.37	pH		0			Splt# 2419147-01 (9.37pH) H1,H3
	DUP of 2419147-01	Temperature (°C)	18.5	18.4	°C					Splt# 2419147-01 (18.5°C)
QC2433443-06										
	CCV	pH		9.05	pH	100				
	CCV	Temperature (°C)		19.8	°C					
QC2433443-07										
	CCV	pH		9.05	pH	100				
	CCV	Temperature (°C)		19.8	°C					

QC list for Run#: *2088944* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433444-02										
	ICV	Specific Conductance @25°C		147	µmhos/cm	99				
QC2433444-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	

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SUB_LAB 2813

FOLDER ID: 2417305

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B
Scheduled Sample Date: 11/05/2024
Sampling Team: Field

QC list for Run#: *2088944* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433444-04										
	MRL_CK	Specific Conductance @25°C		9.55	µmhos/cm	95				
QC2433444-05										
	DUP of 2419147-01	Specific Conductance @25°C	92	92.2	µmhos/cm		0		1	Splt# 2419147-01 (92µmhos/cm)
QC2433444-06										
	CCV	Specific Conductance @25°C		98.9	µmhos/cm	98				
QC2433444-07										
	CCV	Specific Conductance @25°C		1420	µmhos/cm	100				

QC list for Run#: *2088994* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433474-01										
	MRL_CK	Chloride		0.499	mg/L	99				
	MRL_CK	Sulfate		0.498	mg/L	99				
	MRL_CK	Nitrate as N		0.0404	mg/L	101				
QC2433474-02										
	CCV	Chloride		2.5	mg/L	100				
	CCV	Sulfate		2.5	mg/L	99				
	CCV	Nitrate as N		0.198	mg/L	99				
QC2433474-03										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433474-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433474-05										
	LCS	Chloride		0.5	mg/L	100				
	LCS	Sulfate		1.49	mg/L	99				
	LCS	Nitrate as N		0.243	mg/L	97				
QC2433474-06										
	LCSD of QC2433474-05	Chloride	0.5	0.506	mg/L	101	1			Splt# QC2433474-05 (0.5mg/L)
	LCSD of QC2433474-05	Sulfate	1.49	1.51	mg/L	101	1			Splt# QC2433474-05 (1.49mg/L)
	LCSD of QC2433474-05	Nitrate as N	0.243	0.246	mg/L	98	0			Splt# QC2433474-05 (0.243mg/L)
QC2433474-07										
	CCV	Chloride		20	mg/L	100				
	CCV	Sulfate		20	mg/L	99				
	CCV	Nitrate as N		1.62	mg/L	102				
QC2433474-08										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	

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ELAP Cert #:

MILLBRAE	1449
SEWPCP	1721
SUB_LAB	2813

FOLDER ID: 2417305

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 11/05/2024
Sampling Team: Field

QC list for Run#: *2088994* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433474-09										
	SPK of 2417306-01	Sulfate	167	182	mg/L	99				Splt# 2417306-01 (167mg/L)
	SPK of 2417306-01	Nitrate as N	10.6	13.1	mg/L	98				Splt# 2417306-01 (10.6mg/L)
QC2433474-10										
	SPKD of 2417306-01	Sulfate	167	182	mg/L	101	0			Splt# 2417306-01 (167mg/L)
	SPKD of 2417306-01	Nitrate as N	10.6	13.1	mg/L	99	0			Splt# 2417306-01 (10.6mg/L)

QC list for Run#: *2089378* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433732-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2433732-02										
	LCS	Calcium, Ca		2.01	mg/L	101		0.04	1	
	LCS	Magnesium, Mg		2.06	mg/L	103		0.007	0.2	
	LCS	Potassium, K		1.98	mg/L	99		0.04	0.2	
	LCS	Sodium, Na		2.19	mg/L	109		0.02	1	
QC2433732-03										
	DUP of 2417304-01	Calcium, Ca	64.4	65.1	mg/L		1	0.005	1	Splt# 2417304-01 (64.4mg/L)
	DUP of 2417304-01	Magnesium, Mg	63.9	64.7	mg/L		1	0.021	0.2	Splt# 2417304-01 (63.9mg/L)
	DUP of 2417304-01	Potassium, K	1.4	1.38	mg/L		1	0.06	0.2	Splt# 2417304-01 (1.4mg/L)
	DUP of 2417304-01	Sodium, Na	73.7	74.4	mg/L		0	0.2	1	Splt# 2417304-01 (73.7mg/L)
QC2433732-04										
	SPK of 2417304-01	Calcium, Ca	64.4	67.7	mg/L	164		0.04	1	Splt# 2417304-01 (64.4mg/L)
	SPK of 2417304-01	Magnesium, Mg	63.9	67.3	mg/L	165		0.007	0.2	Splt# 2417304-01 (63.9mg/L)
	SPK of 2417304-01	Potassium, K	1.4	3.5	mg/L	105		0.04	0.2	Splt# 2417304-01 (1.4mg/L)
	SPK of 2417304-01	Sodium, Na	73.7	77	mg/L	166		0.02	1	Splt# 2417304-01 (73.7mg/L)
QC2433732-05										
	SPKD of 2417304-01	Calcium, Ca	64.4	66.4	mg/L	100	1	0.04	1	Splt# 2417304-01 (64.4mg/L)
	SPKD of 2417304-01	Magnesium, Mg	63.9	65.9	mg/L	97	2	0.007	0.2	Splt# 2417304-01 (63.9mg/L)
	SPKD of 2417304-01	Potassium, K	1.4	3.41	mg/L	100	2	0.04	0.2	Splt# 2417304-01 (1.4mg/L)
	SPKD of 2417304-01	Sodium, Na	73.7	75.6	mg/L	94	1	0.02	1	Splt# 2417304-01 (73.7mg/L)
QC2433732-06										
	DUP of 2417304-03	Calcium, Ca	61.9	60.8	mg/L		1	0.005	1	Splt# 2417304-03 (61.9mg/L)
	DUP of 2417304-03	Magnesium, Mg	63.4	62.2	mg/L		1	0.021	0.2	Splt# 2417304-03 (63.4mg/L)
	DUP of 2417304-03	Potassium, K	1.35	1.33	mg/L		1	0.06	0.2	Splt# 2417304-03 (1.35mg/L)

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SEWPCP	1721
SUB_LAB	2813

FOLDER ID: 2417305

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.B

Scheduled Sample Date: 11/05/2024
Sampling Team: Field

QC list for Run#: *2089378* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	DUP of 2417304-03	Sodium, Na	71.3	70.1	mg/L		1	0.2	1	Splt# 2417304-03 (71.3mg/L)
QC2433732-07										
	SPK of 2417304-03	Calcium, Ca	61.9	62.8	mg/L	45		0.04	1	Splt# 2417304-03 (61.9mg/L)
	SPK of 2417304-03	Magnesium, Mg	63.4	64.2	mg/L	39		0.007	0.2	Splt# 2417304-03 (63.4mg/L)
	SPK of 2417304-03	Potassium, K	1.35	3.38	mg/L	102		0.04	0.2	Splt# 2417304-03 (1.35mg/L)
	SPK of 2417304-03	Sodium, Na	71.3	72	mg/L	34		0.02	1	Splt# 2417304-03 (71.3mg/L)
QC2433732-08										
	SPKD of 2417304-03	Calcium, Ca	61.9	64.7	mg/L	142	3	0.04	1	Splt# 2417304-03 (61.9mg/L)
	SPKD of 2417304-03	Magnesium, Mg	63.4	66.3	mg/L	141	3	0.007	0.2	Splt# 2417304-03 (63.4mg/L)
	SPKD of 2417304-03	Potassium, K	1.35	3.43	mg/L	104	1	0.04	0.2	Splt# 2417304-03 (1.35mg/L)
	SPKD of 2417304-03	Sodium, Na	71.3	74.2	mg/L	142	2	0.02	1	Splt# 2417304-03 (71.3mg/L)
QC2433732-09										
	MRL_CK	Calcium, Ca		0.0327	mg/L	81		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0473	mg/L	94		0.021	0.021	
	MRL_CK	Potassium, K		0.23	mg/L	115		0.06	0.06	
	MRL_CK	Sodium, Na		0.314	mg/L	157		0.2	0.2	
QC2433760-01										
	ICV	Calcium, Ca		0.205	mg/L	104		0.001	0.02	
	ICV	Magnesium, Mg		0.199	mg/L	100		0.0002	0.004	
	ICV	Potassium, K		1.99	mg/L	100		0.0006	0.004	
	ICV	Sodium, Na		0.204	mg/L	102		0.00004	0.02	

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SUB_LAB	2813

FOLDER ID: 2417306

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/06/2024
Sampling Team: Field

Lab Sample#: 2417306-01 **Sample Source:** WSB_SF71_PP195 **External ID:**

Date Collected: 11/06/2024 10:32AM **Date Received:** 11/06/2024 12:52PM **Sample Matrix:** Aqueous **Location Desc:** SF #71 - PARK PLAZA MW195

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	167	mg/L	10	1	5	11/06/2024	2088994	ABALALIO	
Nitrate as N	10.6	mg/L	10	0.34	0.4	11/06/2024	2088994	ABALALIO	>MCL

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	106	mg/L	1	0.005	1	11/14/2024	2089378	BTRINH	
Magnesium, Mg	85.9	mg/L	1	0.021	0.2	11/14/2024	2089378	BTRINH	
Potassium, K	3.91	mg/L	1	0.06	0.2	11/14/2024	2089378	BTRINH	
Sodium, Na	79.8	mg/L	1	0.2	1	11/14/2024	2089378	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	412	mg/L	1	2.96	15	11/06/2024	2089008	ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	136	mg/L	1		15	11/06/2024	2089010	ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1460	µmhos/cm	1		1	11/06/2024	2089013	MSWONG	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	594	mg/L	1	2.37	15	11/06/2024	2089015	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.16	pH	1			11/06/2024	2089011	MSWONG	H1,H3
Temperature (°C)	19.2	°C	1			11/06/2024	2089011	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	862	mg/L	1	13.2	20	11/10/2024	2089125	ABALALIO	>MCL

Lab Sample#: 2417306-02 **Sample Source:** WSB_SF50_PP460 **External ID:**

Date Collected: 11/06/2024 09:47AM **Date Received:** 11/06/2024 12:52PM **Sample Matrix:** Aqueous **Location Desc:** SF#50 - PARK PLAZA MW460

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	50.2	mg/L	10	1	5	11/06/2024	2088994	ABALALIO	
Nitrate as N	6.22	mg/L	10	0.34	0.4	11/06/2024	2088994	ABALALIO	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	40.3	mg/L	1	0.005	1	11/14/2024	2089378	BTRINH	
Magnesium, Mg	42.2	mg/L	1	0.021	0.2	11/14/2024	2089378	BTRINH	

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MILLBRAE 1449
SUB_LAB 2813

FOLDER ID: 2417306

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/06/2024
Sampling Team: Field

Potassium, K	1.75	mg/L	1	0.06	0.2	11/14/2024	2089378	BTRINH
Sodium, Na	47.8	mg/L	1	0.2	1	11/14/2024	2089378	BTRINH

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	229	mg/L	1	1.19	6	11/06/2024	2089008 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	63.6	mg/L	1		6	11/06/2024	2089010 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	756	µmhos/cm	1		1	11/06/2024	2089013 MSWONG	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	612	mg/L	1	0.948	6	11/06/2024	2089015 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.42	pH	1			11/06/2024	2089011 MSWONG	H1,H3
Temperature (°C)	18.6	°C	1			11/06/2024	2089011 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	427	mg/L	1	13.2	20	11/10/2024	2089125 ABALALIO	

SUB_PERCHLORATE_331(EPA 331)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Perchlorate, ClO4-	0.88	µg/L			0.5	11/11/2024	6237888 SUB	

Lab Sample#: 2417306-03 **Sample Source:** WSB_SF51_PP620 **External ID:**
Date Collected: 11/06/2024 10:02AM **Date Received:** 11/06/2024 12:52PM **Sample Matrix:** Aqueous **Location Desc:** SF#51 - PARK PLAZA MW620

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	57	mg/L	5	0.5	2.5	11/06/2024	2088994 ABALALIO	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	38.9	mg/L	1	0.005	1	11/14/2024	2089378 BTRINH	
Magnesium, Mg	34.3	mg/L	1	0.021	0.2	11/14/2024	2089378 BTRINH	
Potassium, K	2.26	mg/L	1	0.06	0.2	11/14/2024	2089378 BTRINH	
Sodium, Na	50.3	mg/L	1	0.2	1	11/14/2024	2089378 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	183	mg/L	1	1.19	6	11/06/2024	2089008 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	76.4	mg/L	1		6	11/06/2024	2089010 ALEE	

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SUB_LAB 2813

FOLDER ID: 2417306

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/06/2024
Sampling Team: Field

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	697	µmhos/cm	1		1	11/06/2024	2089013 MSWONG	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	234	mg/L	1	0.948	6	11/06/2024	2089015 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.83	pH	1			11/06/2024	2089011 MSWONG	H1,H3
Temperature (°C)	18.7	°C	1			11/06/2024	2089011 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	399	mg/L	1	13.2	20	11/10/2024	2089125 ABALALIO	

SUB_PERCHLORATE_331(EPA 331)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Perchlorate, ClO4-	<0.5	µg/L			0.5	11/11/2024	6237888 SUB	

Lab Sample#: 2417306-03A **Sample Source:** WSB_SF51_PP620 **External ID:**
Date Collected: 11/06/2024 10:02AM **Date Received:** 11/06/2024 12:52PM **Sample Matrix:** Aqueous **Location Desc:** SF#51 - PARK PLAZA MW620

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	<0.04	mg/L	1	0.034	0.04	11/06/2024	2088994 ABALALIO	

Lab Sample#: 2417306-04 **Sample Source:** WSB_SF_DUP **External ID:**
Date Collected: 11/06/2024 10:48AM **Date Received:** 11/06/2024 12:52PM **Sample Matrix:** Aqueous **Location Desc:** SF #71 - PARK PLAZA MW195

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	172	mg/L	10	1	5	11/06/2024	2088994 ABALALIO	
Nitrate as N	11.1	mg/L	10	0.34	0.4	11/06/2024	2088994 ABALALIO	>MCL

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	103	mg/L	1	0.005	1	11/14/2024	2089378 BTRINH	
Magnesium, Mg	83.7	mg/L	1	0.021	0.2	11/14/2024	2089378 BTRINH	
Potassium, K	3.77	mg/L	1	0.06	0.2	11/14/2024	2089378 BTRINH	
Sodium, Na	77.8	mg/L	1	0.2	1	11/14/2024	2089378 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	386	mg/L	1	2.96	15	11/06/2024	2089008 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	133	mg/L	1		15	11/06/2024	2089010 ALEE	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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Water Quality Laboratory

ELAP Cert #:

SEWPCP	1721
MILLBRAE	1449
SUB_LAB	2813

FOLDER ID: 2417306

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/06/2024
Sampling Team: Field

Specific Conductance @25°C	**1460**	**µmhos/cm**	1		1	11/06/2024	2089013	MSWONG	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	**602**	**mg/L**	1	2.37	15	11/06/2024	2089015	ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	**7.16**	**pH**	1			11/06/2024	2089011	MSWONG	H1,H3
Temperature (°C)	**19**	**°C**	1			11/06/2024	2089011	MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	**831**	**mg/L**	1	13.2	20	11/10/2024	2089125	ABALALIO	>MCL

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FOLDER ID: 2417306

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/06/2024
Sampling Team: Field

QC list for Run#: *2088994* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433474-01										
	MRL_CK	Chloride		0.499	mg/L	99				
	MRL_CK	Sulfate		0.498	mg/L	99				
	MRL_CK	Nitrate as N		0.0404	mg/L	101				
QC2433474-02										
	CCV	Chloride		2.5	mg/L	100				
	CCV	Sulfate		2.5	mg/L	99				
	CCV	Nitrate as N		0.198	mg/L	99				
QC2433474-03										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433474-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433474-05										
	LCS	Chloride		0.5	mg/L	100				
	LCS	Sulfate		1.49	mg/L	99				
	LCS	Nitrate as N		0.243	mg/L	97				
QC2433474-06										
	LCSD of QC2433474-05	Chloride	0.5	0.506	mg/L	101	1			Splt# QC2433474-05 (0.5mg/L)
	LCSD of QC2433474-05	Sulfate	1.49	1.51	mg/L	101	1			Splt# QC2433474-05 (1.49mg/L)
	LCSD of QC2433474-05	Nitrate as N	0.243	0.246	mg/L	98	0			Splt# QC2433474-05 (0.243mg/L)
QC2433474-07										
	CCV	Chloride		20	mg/L	100				
	CCV	Sulfate		20	mg/L	99				
	CCV	Nitrate as N		1.62	mg/L	102				
QC2433474-08										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433474-09										
	SPK of 2417306-01	Sulfate	167	182	mg/L	99				Splt# 2417306-01 (167mg/L)
	SPK of 2417306-01	Nitrate as N	10.6	13.1	mg/L	98				Splt# 2417306-01 (10.6mg/L)
QC2433474-10										
	SPKD of 2417306-01	Sulfate	167	182	mg/L	101	0			Splt# 2417306-01 (167mg/L)
	SPKD of 2417306-01	Nitrate as N	10.6	13.1	mg/L	99	0			Splt# 2417306-01 (10.6mg/L)

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FOLDER ID: 2417306

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/06/2024
Sampling Team: Field

QC list for Run#: *2089008* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433483-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2433483-02										
	MRL_CK	Alkalinity		2.9	mg/L	96				
QC2433483-03										
	SPK of 2419251-01	Alkalinity	12.1	54.3	mg/L	106			3	Splt# 2419251-01 (12.1mg/L)
QC2433483-04										
	SPKD of 2419251-01	Alkalinity	12.1	54.2	mg/L	105	0		3	Splt# 2419251-01 (12.1mg/L)
QC2433483-06										
	LCS	Alkalinity		41.9	mg/L	105			3	

QC list for Run#: *2089010* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433485-01										
	BLK	Chloride		<3	mg/L			1.16	3	
QC2433485-02										
	MRL_CK	Chloride		3.43	mg/L	114				
QC2433485-03										
	SPK of 2419251-01	Chloride	3.45	42	mg/L	96			3	Splt# 2419251-01 (3.45mg/L)
QC2433485-04										
	SPKD of 2419251-01	Chloride	3.45	42.2	mg/L	96	0		3	Splt# 2419251-01 (3.45mg/L)
QC2433485-06										
	LCS	Chloride		39	mg/L	97			3	

QC list for Run#: *2089011* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433486-04										
	ICV	pH		9.05	pH	100				
	ICV	Temperature (°C)		20.5	°C					
QC2433486-05										
	DUP of 2418419-06	pH	9.38	9.37	pH		0			Splt# 2418419-06 (9.38pH) H1,H3
	DUP of 2418419-06	Temperature (°C)	16.5	16.5	°C					Splt# 2418419-06 (16.5°C)
QC2433486-06										
	CCV	pH		9.05	pH	100				
	CCV	Temperature (°C)		20.4	°C					
QC2433486-07										
	CCV	pH		9.05	pH	100				
	CCV	Temperature (°C)		20.4	°C					

QC list for Run#: *2089013* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433488-01										

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FOLDER ID: 2417306

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/06/2024
Sampling Team: Field

QC list for Run#: *2089013* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433488-02	CAL	Specific Conductance @25°C		1430	µmhos/cm	101				
QC2433488-03	ICV	Specific Conductance @25°C		148	µmhos/cm	101				
QC2433488-04	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2433488-05	MRL_CK	Specific Conductance @25°C		9.68	µmhos/cm	96				
QC2433488-06	DUP of 2418419-06	Specific Conductance @25°C	94.7	94.8	µmhos/cm		0		1	Splt# 2418419-06 (94.7µmhos/cm)
QC2433488-07	CCV	Specific Conductance @25°C		101	µmhos/cm	101				
	CCV	Specific Conductance @25°C		1430	µmhos/cm	101				

QC list for Run#: *2089015* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433490-01	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2433490-02	MRL_CK	Hardness, Total, as CaCO3		2.59	mg/L	86				
QC2433490-03		Hardness, Total, as CaCO3		595	mg/L		or: No Pare	2.37	15	
QC2433490-04	LCS	Hardness, Total, as CaCO3		40	mg/L	100			3	

QC list for Run#: *2089125* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433572-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2433572-02	DUP of 2417306-02	Total Dissolved Solids	427	428	mg/L		0	13.2	20	Splt# 2417306-02 (427mg/L)
QC2433572-03	LCS	Total Dissolved Solids		93	mg/L	97		13.2	20	

QC list for Run#: *2089378* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433732-01	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2433732-02										

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FOLDER ID: 2417306

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/06/2024
Sampling Team: Field

QC list for Run#: *2089378* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	LCS	Calcium, Ca		2.01	mg/L	101		0.04	1	
	LCS	Magnesium, Mg		2.06	mg/L	103		0.007	0.2	
	LCS	Potassium, K		1.98	mg/L	99		0.04	0.2	
	LCS	Sodium, Na		2.19	mg/L	109		0.02	1	
QC2433732-03										
	DUP of 2417304-01	Calcium, Ca	64.4	65.1	mg/L		1	0.005	1	Splt# 2417304-01 (64.4mg/L)
	DUP of 2417304-01	Magnesium, Mg	63.9	64.7	mg/L		1	0.021	0.2	Splt# 2417304-01 (63.9mg/L)
	DUP of 2417304-01	Potassium, K	1.4	1.38	mg/L		1	0.06	0.2	Splt# 2417304-01 (1.4mg/L)
	DUP of 2417304-01	Sodium, Na	73.7	74.4	mg/L		0	0.2	1	Splt# 2417304-01 (73.7mg/L)
QC2433732-04										
	SPK of 2417304-01	Calcium, Ca	64.4	67.7	mg/L	164		0.04	1	Splt# 2417304-01 (64.4mg/L)
	SPK of 2417304-01	Magnesium, Mg	63.9	67.3	mg/L	165		0.007	0.2	Splt# 2417304-01 (63.9mg/L)
	SPK of 2417304-01	Potassium, K	1.4	3.5	mg/L	105		0.04	0.2	Splt# 2417304-01 (1.4mg/L)
	SPK of 2417304-01	Sodium, Na	73.7	77	mg/L	166		0.02	1	Splt# 2417304-01 (73.7mg/L)
QC2433732-05										
	SPKD of 2417304-01	Calcium, Ca	64.4	66.4	mg/L	100	1	0.04	1	Splt# 2417304-01 (64.4mg/L)
	SPKD of 2417304-01	Magnesium, Mg	63.9	65.9	mg/L	97	2	0.007	0.2	Splt# 2417304-01 (63.9mg/L)
	SPKD of 2417304-01	Potassium, K	1.4	3.41	mg/L	100	2	0.04	0.2	Splt# 2417304-01 (1.4mg/L)
	SPKD of 2417304-01	Sodium, Na	73.7	75.6	mg/L	94	1	0.02	1	Splt# 2417304-01 (73.7mg/L)
QC2433732-06										
	DUP of 2417304-03	Calcium, Ca	61.9	60.8	mg/L		1	0.005	1	Splt# 2417304-03 (61.9mg/L)
	DUP of 2417304-03	Magnesium, Mg	63.4	62.2	mg/L		1	0.021	0.2	Splt# 2417304-03 (63.4mg/L)
	DUP of 2417304-03	Potassium, K	1.35	1.33	mg/L		1	0.06	0.2	Splt# 2417304-03 (1.35mg/L)
	DUP of 2417304-03	Sodium, Na	71.3	70.1	mg/L		1	0.2	1	Splt# 2417304-03 (71.3mg/L)
QC2433732-07										
	SPK of 2417304-03	Calcium, Ca	61.9	62.8	mg/L	45		0.04	1	Splt# 2417304-03 (61.9mg/L)
	SPK of 2417304-03	Magnesium, Mg	63.4	64.2	mg/L	39		0.007	0.2	Splt# 2417304-03 (63.4mg/L)
	SPK of 2417304-03	Potassium, K	1.35	3.38	mg/L	102		0.04	0.2	Splt# 2417304-03 (1.35mg/L)
	SPK of 2417304-03	Sodium, Na	71.3	72	mg/L	34		0.02	1	Splt# 2417304-03 (71.3mg/L)
QC2433732-08										
	SPKD of 2417304-03	Calcium, Ca	61.9	64.7	mg/L	142	3	0.04	1	Splt# 2417304-03 (61.9mg/L)
	SPKD of 2417304-03	Magnesium, Mg	63.4	66.3	mg/L	141	3	0.007	0.2	Splt# 2417304-03 (63.4mg/L)
	SPKD of 2417304-03	Potassium, K	1.35	3.43	mg/L	104	1	0.04	0.2	Splt# 2417304-03 (1.35mg/L)
	SPKD of 2417304-03	Sodium, Na	71.3	74.2	mg/L	142	2	0.02	1	Splt# 2417304-03 (71.3mg/L)
QC2433732-09										
	MRL_CK	Calcium, Ca		0.0327	mg/L	81		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0473	mg/L	94		0.021	0.021	
	MRL_CK	Potassium, K		0.23	mg/L	115		0.06	0.06	
	MRL_CK	Sodium, Na		0.314	mg/L	157		0.2	0.2	
QC2433760-01										

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FOLDER ID: 2417306

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/06/2024
Sampling Team: Field

QC list for Run#: *2089378* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	ICV	Calcium, Ca		0.205	mg/L	104		0.001	0.02	
	ICV	Magnesium, Mg		0.199	mg/L	100		0.0002	0.004	
	ICV	Potassium, K		1.99	mg/L	100		0.0006	0.004	
	ICV	Sodium, Na		0.204	mg/L	102		0.00004	0.02	

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FOLDER ID: 2417307

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/07/2024
Sampling Team: Field

Lab Sample#: 2417307-01 **Sample Source:** WSB_CAL-31A-145 **External ID:**

Date Collected: 11/07/2024 11:30AM **Date Received:** 11/07/2024 02:04PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-31-145

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	51.4	mg/L	5	0.5	2.5	11/07/2024	2089052	ABALALIO	
Nitrate as N	0.9	mg/L	5	0.17	0.2	11/07/2024	2089052	ABALALIO	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	71.3	mg/L	1	0.005	1	11/14/2024	2089378	BTRINH	
Magnesium, Mg	62.9	mg/L	1	0.021	0.2	11/14/2024	2089378	BTRINH	
Potassium, K	3.87	mg/L	1	0.06	0.2	11/14/2024	2089378	BTRINH	
Sodium, Na	76.7	mg/L	1	0.2	1	11/14/2024	2089378	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	483	mg/L	1	2.96	15	11/07/2024	2089069	MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	47.3	mg/L	1		15	11/07/2024	2089070	MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	1060	µmhos/cm	1		1	11/07/2024	2089076	ABALALIO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	418	mg/L	1	2.37	15	11/07/2024	2089071	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	6.81	pH	1			11/07/2024	2089074	ABALALIO	H1,H3
Temperature (°C)	18.4	°C	1			11/07/2024	2089074	ABALALIO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	593	mg/L	1	13.2	20	11/10/2024	2089125	ABALALIO	>MCL

SUB_524_T22(EPA 524.2)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
1,1,1-Trichloroethane	<0.5	µg/L			0.5	11/16/2024	6238888	SUB	
1,1,2,2-Tetrachloroethane	<0.5	µg/L			0.5	11/16/2024	6238888	SUB	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	<0.5	µg/L			0.5	11/16/2024	6238888	SUB	
1,1,2-Trichloroethane	<0.5	µg/L			0.5	11/16/2024	6238888	SUB	
1,1-Dichloroethane	<0.5	µg/L			0.5	11/16/2024	6238888	SUB	
1,1-Dichloroethylene	<0.5	µg/L			0.5	11/16/2024	6238888	SUB	
1,2,4-Trichlorobenzene	<0.5	µg/L			0.5	11/16/2024	6238888	SUB	
1,2-Dichlorobenzene	<0.5	µg/L			0.5	11/16/2024	6238888	SUB	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449
SUB_LAB 2813

FOLDER ID: 2417307

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/07/2024
Sampling Team: Field

1,2-Dichloroethane	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
1,2-Dichloropropane	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
1,3-Dichloropropene Total (cis+ trans)	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
1,4-Dichlorobenzene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Benzene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Carbon tetrachloride	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Chlorobenzene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
cis-1,2-dichloroethylene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Ethylbenzene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Methyl t-butyl ether	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Methylene chloride	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Styrene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Tetrachloroethylene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Toluene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Trichlorofluoromethane (F-11)	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Vinyl chloride	<0.3	µg/L	0.3	11/16/2024	6238888	SUB	
Xylene (total: p, m, o)	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
trans-1,2-Dichloroethylene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Trichloroethylene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
cis-1,3-dichloropropene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
trans-1,3-Dichloropropene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
m,p-Xylene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
o-Xylene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	

Lab Sample#: 2417307-02 **Sample Source:** WSB_CAL-31A-280 **External ID:**

Date Collected: 11/07/2024 10:59AM **Date Received:** 11/07/2024 02:04PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-31-280

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	79.5	mg/L	10	1	5	11/07/2024	2089052	ABALALIO	
Nitrate as N	3.14	mg/L	10	0.34	0.4	11/07/2024	2089052	ABALALIO	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	54.7	mg/L	1	0.005	1	11/14/2024	2089378	BTRINH	
Magnesium, Mg	50.5	mg/L	1	0.021	0.2	11/14/2024	2089378	BTRINH	
Potassium, K	2.86	mg/L	1	0.06	0.2	11/14/2024	2089378	BTRINH	
Sodium, Na	76.3	mg/L	1	0.2	1	11/14/2024	2089378	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	334	mg/L	1	1.19	6	11/07/2024	2089069	MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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Water Quality Laboratory

ELAP Cert #:

SEWPCP	1721
MILLBRAE	1449
SUB_LAB	2813

FOLDER ID: 2417307

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/07/2024
Sampling Team: Field

Chloride	45.1	mg/L	1		6	11/07/2024	2089070	MSWONG

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	914	µmhos/cm	1		1	11/07/2024	2089076	ABALALIO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	317	mg/L	1	0.948	6	11/07/2024	2089071	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.03	pH	1			11/07/2024	2089074	ABALALIO	H1,H3
Temperature (°C)	15.8	°C	1			11/07/2024	2089074	ABALALIO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	525	mg/L	1	13.2	20	11/10/2024	2089125	ABALALIO	>MCL

SUB_524_T22(EPA 524.2)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
1,1,1-Trichloroethane	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,1,2,2-Tetrachloroethane	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,1,2-Trichloroethane	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,1-Dichloroethane	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,1-Dichloroethylene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,2,4-Trichlorobenzene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,2-Dichlorobenzene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,2-Dichloroethane	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,2-Dichloropropane	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,3-Dichloropropene Total (cis+ trans)	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,4-Dichlorobenzene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Benzene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Carbon tetrachloride	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Chlorobenzene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
cis-1,2-dichloroethylene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Ethylbenzene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Methyl t-butyl ether	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Methylene chloride	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Styrene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Tetrachloroethylene	190	µg/L			5	11/17/2024	6238888	SUB	
Toluene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Trichlorofluoromethane (F-11)	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Vinyl chloride	<0.3	µg/L			0.3	11/17/2024	6238888	SUB	
Xylene (total: p, m, o)	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	

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Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449
SUB_LAB 2813

FOLDER ID: 2417307

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/07/2024
Sampling Team: Field

trans-1,2-Dichloroethylene	<0.5	µg/L		0.5	11/17/2024	6238888	SUB
Trichloroethylene	3.3	µg/L		0.5	11/17/2024	6238888	SUB
cis-1,3-dichloropropene	<0.5	µg/L		0.5	11/17/2024	6238888	SUB
trans-1,3-Dichloropropene	<0.5	µg/L		0.5	11/17/2024	6238888	SUB
m,p-Xylene	<0.5	µg/L		0.5	11/17/2024	6238888	SUB
o-Xylene	<0.5	µg/L		0.5	11/17/2024	6238888	SUB

Lab Sample#: 2417307-03 **Sample Source:** WSB_CAL-31A-480 **External ID:**
Date Collected: 11/07/2024 10:15AM **Date Received:** 11/07/2024 02:04PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-31-480

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	<0.5	mg/L	1	0.1	0.5	11/07/2024	2089052 ABALALIO	
Nitrate as N	<0.04	mg/L	1	0.034	0.04	11/07/2024	2089052 ABALALIO	A1,M,M1

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	31.7	mg/L	1	0.005	1	11/14/2024	2089378 BTRINH	
Magnesium, Mg	41.8	mg/L	1	0.021	0.2	11/14/2024	2089378 BTRINH	
Potassium, K	11.4	mg/L	1	0.06	0.2	11/14/2024	2089378 BTRINH	
Sodium, Na	56.2	mg/L	1	0.2	1	11/14/2024	2089378 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	356	mg/L	1	1.19	6	11/07/2024	2089069 MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	38.2	mg/L	1		6	11/07/2024	2089070 MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	764	µmhos/cm	1		1	11/07/2024	2089076 ABALALIO	

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	239	mg/L	1	0.948	6	11/07/2024	2089071 MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.47	pH	1			11/07/2024	2089074 ABALALIO	H1,H3
Temperature (°C)	15.2	°C	1			11/07/2024	2089074 ABALALIO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	396	mg/L	1	13.2	20	11/10/2024	2089125 ABALALIO	

SUB_524_T22(EPA 524.2)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
1,1,1-Trichloroethane	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	
1,1,2,2-Tetrachloroethane	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	

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Water Quality Laboratory

ELAP Cert #:

SEWPCP	1721
MILLBRAE	1449
SUB_LAB	2813

FOLDER ID: 2417307

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/07/2024
Sampling Team: Field

1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
1,1,2-Trichloroethane	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
1,1-Dichloroethane	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
1,1-Dichloroethylene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
1,2,4-Trichlorobenzene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
1,2-Dichlorobenzene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
1,2-Dichloroethane	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
1,2-Dichloropropane	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
1,3-Dichloropropene Total (cis+ trans)	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
1,4-Dichlorobenzene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Benzene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Carbon tetrachloride	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Chlorobenzene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
cis-1,2-dichloroethylene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Ethylbenzene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Methyl t-butyl ether	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Methylene chloride	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Styrene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Tetrachloroethylene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Toluene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Trichlorofluoromethane (F-11)	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Vinyl chloride	<0.3	µg/L	0.3	11/16/2024	6238888	SUB	
Xylene (total: p, m, o)	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
trans-1,2-Dichloroethylene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Trichloroethylene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
cis-1,3-dichloropropene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
trans-1,3-Dichloropropene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
m,p-Xylene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
o-Xylene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	

Lab Sample#: 2417307-04 **Sample Source:** WSB_CAL-31A-595 **External ID:**

Date Collected: 11/07/2024 10:25AM **Date Received:** 11/07/2024 02:04PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-31-595

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	299	mg/L	20	2	10	11/07/2024	2089052	ABALALIO	>MCL

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	107	mg/L	1	0.005	1	11/14/2024	2089378	BTRINH	
Magnesium, Mg	73.5	mg/L	1	0.021	0.2	11/14/2024	2089378	BTRINH	
Potassium, K	4.68	mg/L	1	0.06	0.2	11/14/2024	2089378	BTRINH	

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Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449
SUB_LAB 2813

FOLDER ID: 2417307

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/07/2024
Sampling Team: Field

Sodium, Na	120	mg/L	1	0.2	1	11/14/2024	2089378	BTRINH

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	226	mg/L	1	2.96	15	11/07/2024	2089069 MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	217	mg/L	1		15	11/07/2024	2089070 MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	1610	µmhos/cm	1		1	11/07/2024	2089076 ABALALIO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	559	mg/L	1	2.37	15	11/07/2024	2089071 MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.14	pH	1			11/07/2024	2089074 ABALALIO	H1,H3
Temperature (°C)	16.6	°C	1			11/07/2024	2089074 ABALALIO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	977	mg/L	1	13.2	20	11/10/2024	2089125 ABALALIO	>MCL

SUB_524_T22(EPA 524.2)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
1,1,1-Trichloroethane	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	
1,1,2,2-Tetrachloroethane	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	
1,1,2-Trichloroethane	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	
1,1-Dichloroethane	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	
1,1-Dichloroethylene	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	
1,2,4-Trichlorobenzene	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	
1,2-Dichlorobenzene	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	
1,2-Dichloroethane	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	
1,2-Dichloropropane	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	
1,3-Dichloropropene Total (cis+ trans)	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	
1,4-Dichlorobenzene	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	
Benzene	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	
Carbon tetrachloride	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	
Chlorobenzene	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	
cis-1,2-dichloroethylene	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	
Ethylbenzene	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	
Methyl t-butyl ether	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	
Methylene chloride	<0.5	µg/L			0.5	11/16/2024	6238888 SUB	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449
SUB_LAB 2813

FOLDER ID: 2417307

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/07/2024
Sampling Team: Field

Styrene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Tetrachloroethylene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Toluene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Trichlorofluoromethane (F-11)	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Vinyl chloride	<0.3	µg/L	0.3	11/16/2024	6238888	SUB	
Xylene (total: p, m, o)	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
trans-1,2-Dichloroethylene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
Trichloroethylene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
cis-1,3-dichloropropene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
trans-1,3-Dichloropropene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
m,p-Xylene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	
o-Xylene	<0.5	µg/L	0.5	11/16/2024	6238888	SUB	

Lab Sample#: 2417307-04A **Sample Source:** WSB_CAL-31A-595 **External ID:**
Date Collected: 11/07/2024 10:25AM **Date Received:** 11/07/2024 02:04PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-31-595

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Nitrate as N	<0.04	mg/L	1	0.034	0.04	11/07/2024	2089052	ABALALIO	

Lab Sample#: 2417307-05 **Sample Source:** WSB_CAL_DUP **External ID:**
Date Collected: 11/07/2024 11:17AM **Date Received:** 11/07/2024 02:04PM **Sample Matrix:** Aqueous **Location Desc:** GSR_CAL_CUP-31-280

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Sulfate	81	mg/L	10	1	5	11/07/2024	2089052	ABALALIO	
Nitrate as N	3.16	mg/L	10	0.34	0.4	11/07/2024	2089052	ABALALIO	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Calcium, Ca	54.3	mg/L	1	0.005	1	11/14/2024	2089378	BTRINH	
Magnesium, Mg	50.2	mg/L	1	0.021	0.2	11/14/2024	2089378	BTRINH	
Potassium, K	2.85	mg/L	1	0.06	0.2	11/14/2024	2089378	BTRINH	
Sodium, Na	76	mg/L	1	0.2	1	11/14/2024	2089378	BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Alkalinity	328	mg/L	1	1.19	6	11/07/2024	2089069	MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Chloride	44.8	mg/L	1		6	11/07/2024	2089070	MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Specific Conductance @25°C	923	µmhos/cm	1		1	11/07/2024	2089076	ABALALIO	>MCL

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ELAP Cert #:

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MILLBRAE	1449
SUB_LAB	2813

FOLDER ID: 2417307

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/07/2024
Sampling Team: Field

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Hardness, Total, as CaCO3	311	mg/L	1	0.948	6	11/07/2024	2089071	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	7.08	pH	1			11/07/2024	2089074	ABALALIO	H1,H3
Temperature (°C)	16.6	°C	1			11/07/2024	2089074	ABALALIO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	537	mg/L	1	13.2	20	11/10/2024	2089125	ABALALIO	>MCL

SUB_524_T22(EPA 524.2)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
1,1,1-Trichloroethane	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,1,2,2-Tetrachloroethane	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,1,2-Trichloroethane	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,1-Dichloroethane	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,1-Dichloroethylene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,2,4-Trichlorobenzene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,2-Dichlorobenzene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,2-Dichloroethane	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,2-Dichloropropane	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,3-Dichloropropene Total (cis+ trans)	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,4-Dichlorobenzene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Benzene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Carbon tetrachloride	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Chlorobenzene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
cis-1,2-dichloroethylene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Ethylbenzene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Methyl t-butyl ether	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Methylene chloride	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Styrene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Tetrachloroethylene	170	µg/L			5	11/17/2024	6238888	SUB	
Toluene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Trichlorofluoromethane (F-11)	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Vinyl chloride	<0.3	µg/L			0.3	11/17/2024	6238888	SUB	
Xylene (total: p, m, o)	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
trans-1,2-Dichloroethylene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Trichloroethylene	3	µg/L			0.5	11/17/2024	6238888	SUB	
cis-1,3-dichloropropene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
trans-1,3-Dichloropropene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
m,p-Xylene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:

SEWPCP	1721
MILLBRAE	1449
SUB_LAB	2813

FOLDER ID: 2417307

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/07/2024
Sampling Team: Field

o-Xylene	<0.5	µg/L		0.5	11/17/2024	6238888	SUB	

Lab Sample#: 2417307-06 **Sample Source:** QC_TRIP_BLANK **External ID:**
Date Collected: 11/07/2024 10:15AM **Date Received:** 11/07/2024 02:04PM **Sample Matrix:** Aqueous **Location Desc:** TRIP_BLANK_GSR_CAL_CUP-31

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
SUB_524_T22(EPA 524.2)									
1,1,1-Trichloroethane	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,1,2,2-Tetrachloroethane	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	^3+
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	*+
1,1,2-Trichloroethane	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,1-Dichloroethane	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,1-Dichloroethylene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,2,4-Trichlorobenzene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	^3+
1,2-Dichlorobenzene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,2-Dichloroethane	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,2-Dichloropropane	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,3-Dichloropropene Total (cis+ trans)	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
1,4-Dichlorobenzene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Benzene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Carbon tetrachloride	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Chlorobenzene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
cis-1,2-dichloroethylene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Ethylbenzene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Methyl t-butyl ether	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Methylene chloride	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Styrene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Tetrachloroethylene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Toluene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Trichlorofluoromethane (F-11)	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	*+
Vinyl chloride	<0.3	µg/L			0.3	11/17/2024	6238888	SUB	
Xylene (total: p, m, o)	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
trans-1,2-Dichloroethylene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
Trichloroethylene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
cis-1,3-dichloropropene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
trans-1,3-Dichloropropene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
m,p-Xylene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	
o-Xylene	<0.5	µg/L			0.5	11/17/2024	6238888	SUB	

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ELAP Cert #:

SEWPCP	1721
MILLBRAE	1449
SUB_LAB	2813

FOLDER ID: 2417307

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/07/2024
Sampling Team: Field

QC list for Run#: *2089052* **and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433520-01										
	MRL_CK	Chloride		0.503	mg/L	101				
	MRL_CK	Sulfate		0.502	mg/L	100				
	MRL_CK	Nitrate as N		0.0405	mg/L	102				
QC2433520-02										
	CCV	Chloride		2.52	mg/L	101				
	CCV	Sulfate		2.52	mg/L	101				
	CCV	Nitrate as N		0.2	mg/L	100				
QC2433520-03										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433520-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433520-05										
	LCS	Chloride		0.493	mg/L	98				
	LCS	Sulfate		1.47	mg/L	98				
	LCS	Nitrate as N		0.24	mg/L	95				
QC2433520-06										
	LCSD of QC2433520-05	Chloride	0.493	0.493	mg/L	98	0			Splt# QC2433520-05 (0.493mg/L)
	LCSD of QC2433520-05	Sulfate	1.47	1.47	mg/L	98	0			Splt# QC2433520-05 (1.47mg/L)
	LCSD of QC2433520-05	Nitrate as N	0.24	0.24	mg/L	96	0			Splt# QC2433520-05 (0.24mg/L)
QC2433520-07										
	CCV	Chloride		20	mg/L	100				
	CCV	Sulfate		19.9	mg/L	99				
	CCV	Nitrate as N		1.61	mg/L	101				
QC2433520-08										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433520-09										
	SPK of 2417307-03	Sulfate	<0.5	1.23	mg/L	82				Splt# 2417307-03 (<0.5mg/L)
	SPK of 2417307-03	Nitrate as N	<0.04	0.197	mg/L	78				Splt# 2417307-03 (<0.04mg/L) A1,M,M1
QC2433520-10										
	SPKD of 2417307-03	Sulfate	<0.5	1.24	mg/L	82	0			Splt# 2417307-03 (<0.5mg/L)
	SPKD of 2417307-03	Nitrate as N	<0.04	0.2	mg/L	80	1			Splt# 2417307-03 (<0.04mg/L) A1,M,M1
QC2433520-11										

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FOLDER ID: 2417307

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/07/2024
Sampling Team: Field

QC list for Run#: *2089052* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	MRL_CK	Chloride		0.49	mg/L	97				
	MRL_CK	Sulfate		0.485	mg/L	97				
	MRL_CK	Nitrate as N		0.0389	mg/L	97				
QC2433520-12										
	CCV	Chloride		2.48	mg/L	99				
	CCV	Sulfate		2.46	mg/L	98				
	CCV	Nitrate as N		0.193	mg/L	96				
QC2433520-13										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2433520-14										
	SPK of 2417307-03	Sulfate	<0.5	1.2	mg/L	80				Splt# 2417307-03 (<0.5mg/L)
	SPK of 2417307-03	Nitrate as N	<0.04	0.196	mg/L	78				Splt# 2417307-03 (<0.04mg/L)
QC2433520-15										
	SPKD of 2417307-03	Sulfate	<0.5	1.21	mg/L	80	0			Splt# 2417307-03 (<0.5mg/L)
	SPKD of 2417307-03	Nitrate as N	<0.04	0.196	mg/L	78	0			Splt# 2417307-03 (<0.04mg/L)
QC2433520-16										
	CCV	Chloride		19.8	mg/L	98				
	CCV	Sulfate		19.7	mg/L	98				
	CCV	Nitrate as N		1.59	mg/L	99				
QC2433520-17										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	

QC list for Run#: *2089069* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433532-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2433532-02										
	MRL_CK	Alkalinity		3.18	mg/L	106				
QC2433532-03										
	SPK of 2418451-01	Alkalinity	27.5	67.3	mg/L	99			3	Splt# 2418451-01 (27.5mg/L)
QC2433532-04										
	SPKD of 2418451-01	Alkalinity	27.5	67.3	mg/L	99	0		3	Splt# 2418451-01 (27.5mg/L)
QC2433532-06										
	LCS	Alkalinity		41.8	mg/L	105			3	

QC list for Run#: *2089070* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments

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FOLDER ID: 2417307

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/07/2024
Sampling Team: Field

QC list for Run#: *2089070* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433533-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2433533-02	MRL_CK	Chloride		3.29	mg/L	110				
QC2433533-03	SPK of 2418451-01	Chloride	7.43	46.2	mg/L	97			3	Splt# 2418451-01 (7.43mg/L)
QC2433533-04	SPKD of 2418451-01	Chloride	7.43	46.4	mg/L	97	0		3	Splt# 2418451-01 (7.43mg/L)
QC2433533-06	LCS	Chloride		39.2	mg/L	98			3	

QC list for Run#: *2089071* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433534-01	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2433534-02	MRL_CK	Hardness, Total, as CaCO3		2.53	mg/L	84				
QC2433534-03	DUP of 2418451-02	Hardness, Total, as CaCO3	21.8	21.8	mg/L		0	0.474	3	Splt# 2418451-02 (21.8mg/L)
QC2433534-04	LCS	Hardness, Total, as CaCO3		39.8	mg/L	99			3	

QC list for Run#: *2089074* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433536-01	CAL	pH		7.01	pH	100				
	CAL	Temperature (°C)		21.2	°C					
QC2433536-02	CAL	pH		4.01	pH	100				
	CAL	Temperature (°C)		21.3	°C					
QC2433536-03	CAL	pH		10	pH	100				
	CAL	Temperature (°C)		21.3	°C					
QC2433536-04	ICV	pH		9.04	pH	99				
	ICV	Temperature (°C)		21.1	°C					
QC2433536-05	DUP of 2418450-01	pH	9.62	9.64	pH		0			Splt# 2418450-01 (9.62pH) H1,H3
	DUP of 2418450-01	Temperature (°C)	14.5	13.6	°C					Splt# 2418450-01 (14.5°C)
QC2433536-06	CCV	pH		9.05	pH	100				
	CCV	Temperature (°C)		20.6	°C					

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Water Quality Laboratory

ELAP Cert #:
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MILLBRAE 1449
SUB_LAB 2813

FOLDER ID: 2417307

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A
Scheduled Sample Date: 11/07/2024
Sampling Team: Field

QC list for Run#: *2089074* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433536-07										
	CCV	pH		9.05	pH	100				
	CCV	Temperature (°C)		19.9	°C					

QC list for Run#: *2089076* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433537-01										
	CAL	Specific Conductance @25°C		1420	µmhos/cm	101				
QC2433537-02										
	ICV	Specific Conductance @25°C		147	µmhos/cm	100				
QC2433537-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2433537-04										
	MRL_CK	Specific Conductance @25°C		9.67	µmhos/cm	96				
QC2433537-05										
	DUP of 2418450-01	Specific Conductance @25°C	93	93.8	µmhos/cm		0		1	Splt# 2418450-01 (93µmhos/cm)
QC2433537-06										
	CCV	Specific Conductance @25°C		100	µmhos/cm	100				
QC2433537-07										
	CCV	Specific Conductance @25°C		1420	µmhos/cm	101				

QC list for Run#: *2089125* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433572-01										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2433572-02										
	DUP of 2417306-02	Total Dissolved Solids	427	428	mg/L		0	13.2	20	Splt# 2417306-02 (427mg/L)
QC2433572-03										
	LCS	Total Dissolved Solids		93	mg/L	97		13.2	20	

QC list for Run#: *2089378* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433732-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2433732-02										
	LCS	Calcium, Ca		2.01	mg/L	101		0.04	1	
	LCS	Magnesium, Mg		2.06	mg/L	103		0.007	0.2	
	LCS	Potassium, K		1.98	mg/L	99		0.04	0.2	
	LCS	Sodium, Na		2.19	mg/L	109		0.02	1	

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SUB_LAB	2813

FOLDER ID: 2417307

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/07/2024
Sampling Team: Field

QC list for Run#: *2089378* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433732-03										
	DUP of 2417304-01	Calcium, Ca	64.4	65.1	mg/L		1	0.005	1	Splt# 2417304-01 (64.4mg/L)
	DUP of 2417304-01	Magnesium, Mg	63.9	64.7	mg/L		1	0.021	0.2	Splt# 2417304-01 (63.9mg/L)
	DUP of 2417304-01	Potassium, K	1.4	1.38	mg/L		1	0.06	0.2	Splt# 2417304-01 (1.4mg/L)
	DUP of 2417304-01	Sodium, Na	73.7	74.4	mg/L		0	0.2	1	Splt# 2417304-01 (73.7mg/L)
QC2433732-04										
	SPK of 2417304-01	Calcium, Ca	64.4	67.7	mg/L	164		0.04	1	Splt# 2417304-01 (64.4mg/L)
	SPK of 2417304-01	Magnesium, Mg	63.9	67.3	mg/L	165		0.007	0.2	Splt# 2417304-01 (63.9mg/L)
	SPK of 2417304-01	Potassium, K	1.4	3.5	mg/L	105		0.04	0.2	Splt# 2417304-01 (1.4mg/L)
	SPK of 2417304-01	Sodium, Na	73.7	77	mg/L	166		0.02	1	Splt# 2417304-01 (73.7mg/L)
QC2433732-05										
	SPKD of 2417304-01	Calcium, Ca	64.4	66.4	mg/L	100	1	0.04	1	Splt# 2417304-01 (64.4mg/L)
	SPKD of 2417304-01	Magnesium, Mg	63.9	65.9	mg/L	97	2	0.007	0.2	Splt# 2417304-01 (63.9mg/L)
	SPKD of 2417304-01	Potassium, K	1.4	3.41	mg/L	100	2	0.04	0.2	Splt# 2417304-01 (1.4mg/L)
	SPKD of 2417304-01	Sodium, Na	73.7	75.6	mg/L	94	1	0.02	1	Splt# 2417304-01 (73.7mg/L)
QC2433732-06										
	DUP of 2417304-03	Calcium, Ca	61.9	60.8	mg/L		1	0.005	1	Splt# 2417304-03 (61.9mg/L)
	DUP of 2417304-03	Magnesium, Mg	63.4	62.2	mg/L		1	0.021	0.2	Splt# 2417304-03 (63.4mg/L)
	DUP of 2417304-03	Potassium, K	1.35	1.33	mg/L		1	0.06	0.2	Splt# 2417304-03 (1.35mg/L)
	DUP of 2417304-03	Sodium, Na	71.3	70.1	mg/L		1	0.2	1	Splt# 2417304-03 (71.3mg/L)
QC2433732-07										
	SPK of 2417304-03	Calcium, Ca	61.9	62.8	mg/L	45		0.04	1	Splt# 2417304-03 (61.9mg/L)
	SPK of 2417304-03	Magnesium, Mg	63.4	64.2	mg/L	39		0.007	0.2	Splt# 2417304-03 (63.4mg/L)
	SPK of 2417304-03	Potassium, K	1.35	3.38	mg/L	102		0.04	0.2	Splt# 2417304-03 (1.35mg/L)
	SPK of 2417304-03	Sodium, Na	71.3	72	mg/L	34		0.02	1	Splt# 2417304-03 (71.3mg/L)
QC2433732-08										
	SPKD of 2417304-03	Calcium, Ca	61.9	64.7	mg/L	142	3	0.04	1	Splt# 2417304-03 (61.9mg/L)
	SPKD of 2417304-03	Magnesium, Mg	63.4	66.3	mg/L	141	3	0.007	0.2	Splt# 2417304-03 (63.4mg/L)
	SPKD of 2417304-03	Potassium, K	1.35	3.43	mg/L	104	1	0.04	0.2	Splt# 2417304-03 (1.35mg/L)
	SPKD of 2417304-03	Sodium, Na	71.3	74.2	mg/L	142	2	0.02	1	Splt# 2417304-03 (71.3mg/L)
QC2433732-09										
	MRL_CK	Calcium, Ca		0.0327	mg/L	81		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0473	mg/L	94		0.021	0.021	
	MRL_CK	Potassium, K		0.23	mg/L	115		0.06	0.06	
	MRL_CK	Sodium, Na		0.314	mg/L	157		0.2	0.2	
QC2433760-01										
	ICV	Calcium, Ca		0.205	mg/L	104		0.001	0.02	
	ICV	Magnesium, Mg		0.199	mg/L	100		0.0002	0.004	
	ICV	Potassium, K		1.99	mg/L	100		0.0006	0.004	
	ICV	Sodium, Na		0.204	mg/L	102		0.00004	0.02	

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Water Quality Laboratory

ELAP Cert #:	
SEWPCP	1721
MILLBRAE	1449
SUB_LAB	2813

FOLDER ID: 2417307

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC+Consult.A

Scheduled Sample Date: 11/07/2024
Sampling Team: Field

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ELAP Cert #:
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MILLBRAE 1449

FOLDER ID: 2418246

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 10/21/2024
Sampling Team: Field

Lab Sample#: 2418246-02 **Sample Source:** WSB_SF08_LM2D **External ID:**

Date Collected: 10/21/2024 12:50PM **Date Received:** 10/21/2024 02:10PM **Sample Matrix:** Aqueous **Location Desc:** SF#08 - LMMW2D

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	47.2	mg/L	5	0.5	2.5	10/21/2024	2088135 PWARNER	
Nitrate as N	3.44	mg/L	5	0.17	0.2	10/21/2024	2088135 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	46.7	mg/L	1	0.005	1	11/04/2024	2088815 BTRINH	
Magnesium, Mg	50.7	mg/L	1	0.021	0.2	11/04/2024	2088815 BTRINH	
Potassium, K	2.57	mg/L	1	0.06	0.2	11/04/2024	2088815 BTRINH	
Sodium, Na	61	mg/L	1	0.2	1	11/04/2024	2088815 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	222	mg/L	1	1.19	6	10/21/2024	2088150 MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	125	mg/L	1		6	10/21/2024	2088151 MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	932	µmhos/cm	1		1	10/21/2024	2088145 JWOO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	314	mg/L	1	0.948	6	10/21/2024	2088152 MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.73	pH	1			10/21/2024	2088148 JWOO	H1,H3
Temperature (°C)	18.7	°C	1			10/21/2024	2088148 JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	468	mg/L	1	13.2	20	10/26/2024	2088291 DCARDONA	

Lab Sample#: 2418246-03 **Sample Source:** WSB_SF09_LM2S **External ID:**

Date Collected: 10/21/2024 11:00AM **Date Received:** 10/21/2024 02:10PM **Sample Matrix:** Aqueous **Location Desc:** SF#09 - LMMW2S

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	69.4	mg/L	10	1	5	10/21/2024	2088135 PWARNER	
Nitrate as N	7.76	mg/L	10	0.34	0.4	10/21/2024	2088135 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	66.4	mg/L	1	0.005	1	11/04/2024	2088815 BTRINH	
Magnesium, Mg	68.4	mg/L	1	0.021	0.2	11/04/2024	2088815 BTRINH	
Potassium, K	2.62	mg/L	1	0.06	0.2	11/04/2024	2088815 BTRINH	

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FOLDER ID: 2418246

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 10/21/2024
Sampling Team: Field

Sodium, Na	109	mg/L	1	0.2	1	11/04/2024	2088815	BTRINH

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	255	mg/L	1	2.96	15	10/21/2024	2088150 MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	235	mg/L	1		15	10/21/2024	2088151 MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	1430	µmhos/cm	1		1	10/21/2024	2088145 JWOO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	426	mg/L	1	2.37	15	10/21/2024	2088152 MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	7.59	pH	1			10/21/2024	2088148 JWOO	H1,H3
Temperature (°C)	18.5	°C	1			10/21/2024	2088148 JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	736	mg/L	1	13.2	20	10/26/2024	2088291 DCARDONA	>MCL

Lab Sample#: 2418246-05 **Sample Source:** WSB_SF_DUP_FULL **External ID:**
Date Collected: 10/21/2024 11:04AM **Date Received:** 10/21/2024 02:10PM **Sample Matrix:** Aqueous **Location Desc:** SF#09 - LMMW2S

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	69.5	mg/L	10	1	5	10/21/2024	2088135 PWARNER	
Nitrate as N	7.78	mg/L	10	0.34	0.4	10/21/2024	2088135 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	67.8	mg/L	1	0.005	1	11/04/2024	2088815 BTRINH	
Magnesium, Mg	69.8	mg/L	1	0.021	0.2	11/04/2024	2088815 BTRINH	
Potassium, K	2.7	mg/L	1	0.06	0.2	11/04/2024	2088815 BTRINH	
Sodium, Na	111	mg/L	1	0.2	1	11/04/2024	2088815 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	252	mg/L	1	2.96	15	10/21/2024	2088150 MSWONG	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	233	mg/L	1		15	10/21/2024	2088151 MSWONG	

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	1430	µmhos/cm	1		1	10/21/2024	2088145 JWOO	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments

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FOLDER ID: 2418246

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 10/21/2024
Sampling Team: Field

Hardness, Total, as CaCO3	**432**	**mg/L**	1	2.37	15	10/21/2024	2088152	MSWONG	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
pH	**7.62**	**pH**	1			10/21/2024	2088148	JWOO	H1,H3
Temperature (°C)	**17.7**	**°C**	1			10/21/2024	2088148	JWOO	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst		Flag/Comments
Total Dissolved Solids	**742**	**mg/L**	1	13.2	20	10/26/2024	2088291	DCARDONA	>MCL

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FOLDER ID: 2418246

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 10/21/2024
Sampling Team: Field

QC list for Run#: *2088135* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432862-01										
	MRL_CK	Chloride		0.488	mg/L	97				
	MRL_CK	Sulfate		0.484	mg/L	96				
	MRL_CK	Nitrate as N		0.0403	mg/L	101				
QC2432862-02										
	CCV	Chloride		2.45	mg/L	97				
	CCV	Sulfate		2.41	mg/L	96				
	CCV	Nitrate as N		0.19	mg/L	95				
QC2432862-03										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2432862-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2432862-05										
	LCS	Chloride		0.498	mg/L	99				
	LCS	Sulfate		1.47	mg/L	97				
	LCS	Nitrate as N		0.239	mg/L	95				
QC2432862-06										
	LCSD of QC2432862-05	Chloride	0.498	0.498	mg/L	99	0			Splt# QC2432862-05 (0.498mg/L)
	LCSD of QC2432862-05	Sulfate	1.47	1.46	mg/L	97	0			Splt# QC2432862-05 (1.47mg/L)
	LCSD of QC2432862-05	Nitrate as N	0.239	0.237	mg/L	95	0			Splt# QC2432862-05 (0.239mg/L)
QC2432862-07										
	CCV	Chloride		19.8	mg/L	98				
	CCV	Sulfate		19.7	mg/L	98				
	CCV	Nitrate as N		1.62	mg/L	102				
QC2432862-08										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2432862-09										
	SPK of 2418246-02	Sulfate	47.2	53.6	mg/L	85				Splt# 2418246-02 (47.2mg/L) A1
	SPK of 2418246-02	Nitrate as N	3.44	4.62	mg/L	94				Splt# 2418246-02 (3.44mg/L)
QC2432862-10										
	SPKD of 2418246-02	Sulfate	47.2	53.6	mg/L	85	0			Splt# 2418246-02 (47.2mg/L) A1
	SPKD of 2418246-02	Nitrate as N	3.44	4.62	mg/L	94	0			Splt# 2418246-02 (3.44mg/L)

QC list for Run#: *2088145* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2418246

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 10/21/2024
Sampling Team: Field

QC list for Run#: *2088145* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432869-01										
	CAL	Specific Conductance @25°C		1420	µmhos/cm	101				
QC2432869-02										
	ICV	Specific Conductance @25°C		146	µmhos/cm	99				
QC2432869-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2432869-04										
	MRL_CK	Specific Conductance @25°C		10.7	µmhos/cm	107				
QC2432869-05										
	DUP of 2418004-02	Specific Conductance @25°C	89	88.7	µmhos/cm		0		1	Splt# 2418004-02 (89µmhos/cm)
QC2432869-06										
	CCV	Specific Conductance @25°C		99.2	µmhos/cm	99				
QC2432869-07										
	CCV	Specific Conductance @25°C		1430	µmhos/cm	101				

QC list for Run#: *2088148* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432872-04										
	ICV	pH		9.06	pH	101				
	ICV	Temperature (°C)		21.5	°C					
QC2432872-05										
	DUP of 2418004-02	pH	9.58	9.59	pH		0			Splt# 2418004-02 (9.58pH) H1,H3
	DUP of 2418004-02	Temperature (°C)	17.2	16.4	°C					Splt# 2418004-02 (17.2°C)
QC2432872-06										
	CCV	pH		9.06	pH	100				
	CCV	Temperature (°C)		21.6	°C					
QC2432872-07										
	CCV	pH		9.06	pH	100				
	CCV	Temperature (°C)		21.4	°C					

QC list for Run#: *2088150* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432874-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2432874-02										
	MRL_CK	Alkalinity		3.04	mg/L	101				
QC2432874-03										
	SPK of 2418758-01	Alkalinity	28.5	70.6	mg/L	105			3	Splt# 2418758-01 (28.5mg/L)
QC2432874-04										
	SPKD of 2418758-01	Alkalinity	28.5	70.6	mg/L	105	0		3	Splt# 2418758-01 (28.5mg/L)
QC2432874-06										
	LCS	Alkalinity		43.8	mg/L	110			3	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2418246

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 10/21/2024
Sampling Team: Field

QC list for Run#: *2088151* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432875-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2432875-02	MRL_CK	Chloride		3.46	mg/L	115				
QC2432875-03	SPK of 2418758-01	Chloride	5.16	43.9	mg/L	96			3	Splt# 2418758-01 (5.16mg/L)
QC2432875-04	SPKD of 2418758-01	Chloride	5.16	43.5	mg/L	95	0		3	Splt# 2418758-01 (5.16mg/L)
QC2432875-06	LCS	Chloride		38.9	mg/L	97			3	

QC list for Run#: *2088152* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432877-01	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2432877-02	MRL_CK	Hardness, Total, as CaCO3		2.44	mg/L	81				
QC2432877-03	DUP of 2418246-02	Hardness, Total, as CaCO3	314	316	mg/L		0	0.948	6	Splt# 2418246-02 (314mg/L)
QC2432877-04	LCS	Hardness, Total, as CaCO3		40	mg/L	100			3	

QC list for Run#: *2088291* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432969-01	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2432969-02	LCS	Total Dissolved Solids		87	mg/L	91		13.2	20	
QC2432969-03	DUP of 2418246-02	Total Dissolved Solids	468	496	mg/L		5	13.2	20	Splt# 2418246-02 (468mg/L)
QC2432969-04	DUP of 2417299-02	Total Dissolved Solids	324	326	mg/L		0	13.2	20	Splt# 2417299-02 (324mg/L)

QC list for Run#: *2088815* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433307-01	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2433307-02	LCS	Calcium, Ca		2.01	mg/L	101		0.04	1	
	LCS	Magnesium, Mg		2.05	mg/L	103		0.007	0.2	
	LCS	Potassium, K		2.05	mg/L	102		0.04	0.2	

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FOLDER ID: 2418246

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 10/21/2024
Sampling Team: Field

QC list for Run#: *2088815* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	LCS	Sodium, Na		2.17	mg/L	108		0.02	1	
QC2433307-03										
	DUP of 2418246-02	Calcium, Ca	46.7	47.2	mg/L		1	0.005	1	Splt# 2418246-02 (46.7mg/L)
	DUP of 2418246-02	Magnesium, Mg	50.7	51.4	mg/L		1	0.021	0.2	Splt# 2418246-02 (50.7mg/L)
	DUP of 2418246-02	Potassium, K	2.57	2.64	mg/L		2	0.06	0.2	Splt# 2418246-02 (2.57mg/L)
	DUP of 2418246-02	Sodium, Na	61	61.7	mg/L		1	0.2	1	Splt# 2418246-02 (61mg/L)
QC2433307-04										
	SPK of 2418246-02	Calcium, Ca	46.7	48.2	mg/L	77		0.04	1	Splt# 2418246-02 (46.7mg/L)
	SPK of 2418246-02	Magnesium, Mg	50.7	52.4	mg/L	82		0.007	0.2	Splt# 2418246-02 (50.7mg/L)
	SPK of 2418246-02	Potassium, K	2.57	4.63	mg/L	103		0.04	0.2	Splt# 2418246-02 (2.57mg/L)
	SPK of 2418246-02	Sodium, Na	61	62.4	mg/L	67		0.02	1	Splt# 2418246-02 (61mg/L)
QC2433307-05										
	SPKD of 2418246-02	Calcium, Ca	46.7	48.9	mg/L	109	1	0.04	1	Splt# 2418246-02 (46.7mg/L)
	SPKD of 2418246-02	Magnesium, Mg	50.7	53.1	mg/L	117	1	0.007	0.2	Splt# 2418246-02 (50.7mg/L)
	SPKD of 2418246-02	Potassium, K	2.57	4.69	mg/L	106	1	0.04	0.2	Splt# 2418246-02 (2.57mg/L)
	SPKD of 2418246-02	Sodium, Na	61	63.2	mg/L	109	1	0.02	1	Splt# 2418246-02 (61mg/L)
QC2433307-06										
	MRL_CK	Calcium, Ca		0.0433	mg/L	108		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0681	mg/L	136		0.021	0.021	
	MRL_CK	Potassium, K		0.26	mg/L	130		0.06	0.06	
	MRL_CK	Sodium, Na		0.458	mg/L	229		0.2	0.2	
QC2433353-01										
	ICV	Calcium, Ca		10.2	mg/L	104		0.05	1	
	ICV	Magnesium, Mg		10	mg/L	101		0.01	0.2	
	ICV	Potassium, K		100	mg/L	101		0.03	0.2	
	ICV	Sodium, Na		10.1	mg/L	101		0.002	1	

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2418484

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC
Scheduled Sample Date: 10/22/2024
Sampling Team: Field

Lab Sample#: 2418484-01 **Sample Source:** WSB_SF07_LM1S **External ID:**
Date Collected: 10/22/2024 10:11AM **Date Received:** 10/22/2024 02:27PM **Sample Matrix:** Aqueous **Location Desc:** SF#07 - LMMW1S

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sulfate	127	mg/L	10	1	5	10/22/2024	2088191 PWARNER	

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Calcium, Ca	78.4	mg/L	1	0.005	1	11/04/2024	2088815 BTRINH	
Magnesium, Mg	118	mg/L	1	0.021	0.2	11/04/2024	2088815 BTRINH	
Potassium, K	3.65	mg/L	1	0.06	0.2	11/04/2024	2088815 BTRINH	

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	267	mg/L	1	2.96	15	10/22/2024	2088228 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	449	mg/L	1		15	10/22/2024	2088229 ALEE	>MCL

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	2410	µmhos/cm	1		1	10/22/2024	2088224 MSWONG	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	672	mg/L	1	2.37	15	10/22/2024	2088230 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	6.71	pH	1			10/22/2024	2088222 MSWONG	H1,H3
Temperature (°C)	16.9	°C	1			10/22/2024	2088222 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	1240	mg/L	1	13.2	20	10/26/2024	2088291 DCARDONA	>MCL

Lab Sample#: 2418484-01C **Sample Source:** WSB_SF07_LM1S **External ID:**
Date Collected: 10/22/2024 10:11AM **Date Received:** 10/22/2024 02:27PM **Sample Matrix:** Aqueous **Location Desc:** SF#07 - LMMW1S

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	40.6	mg/L	50	1.7	2	10/23/2024	2088258 PWARNER	>MCL

Lab Sample#: 2418484-01D **Sample Source:** WSB_SF07_LM1S **External ID:**
Date Collected: 10/22/2024 10:11AM **Date Received:** 10/22/2024 02:27PM **Sample Matrix:** Aqueous **Location Desc:** SF#07 - LMMW1S

Test/Analyte

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sodium, Na	227	mg/L	10	2	10	11/04/2024	2088815 BTRINH	

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FOLDER ID: 2418484

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 10/22/2024
Sampling Team: Field

Lab Sample#: 2418484-02 **Sample Source:** WSB_SF63_LM1D **External ID:**

Date Collected: 10/22/2024 11:46AM **Date Received:** 10/22/2024 02:27PM **Sample Matrix:** Aqueous **Location Desc:** SF#63 - LMMW1D

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	30.6	mg/L	10	1	5	10/22/2024	2088191 PWARNER	
Nitrate as N	12.3	mg/L	10	0.34	0.4	10/22/2024	2088191 PWARNER	>MCL
SEM_200.7_DW(EPA 200.7)								
Calcium, Ca	35.1	mg/L	1	0.005	1	11/04/2024	2088815 BTRINH	
Magnesium, Mg	52.8	mg/L	1	0.021	0.2	11/04/2024	2088815 BTRINH	
Potassium, K	3.18	mg/L	1	0.06	0.2	11/04/2024	2088815 BTRINH	
Sodium, Na	53.2	mg/L	1	0.2	1	11/04/2024	2088815 BTRINH	
MBP_ALK(SM 2320 B)								
Alkalinity	193	mg/L	1	1.19	6	10/22/2024	2088228 ALEE	
MBP_CHLORIDE(SM 4500-CL- D)								
Chloride	108	mg/L	1		6	10/22/2024	2088229 ALEE	
MBP_COND(SM 2510 B)								
Specific Conductance @25°C	842	µmhos/cm	1		1	10/22/2024	2088224 MSWONG	
MBP_HARDNESS_T(SM 2340 C)								
Hardness, Total, as CaCO3	293	mg/L	1	0.948	6	10/22/2024	2088230 ALEE	
MBP_PH(SM 4500-H+ B)								
pH	7.94	pH	1			10/22/2024	2088222 MSWONG	H1,H3
Temperature (°C)	17.5	°C	1			10/22/2024	2088222 MSWONG	
MBP_TDS(SM 2540 C)								
Total Dissolved Solids	421	mg/L	1	13.2	20	10/26/2024	2088291 DCARDONA	

Lab Sample#: 2418484-03 **Sample Source:** WSB_SF_DUP_FULL **External ID:**

Date Collected: 10/22/2024 10:13AM **Date Received:** 10/22/2024 02:27PM **Sample Matrix:** Aqueous **Location Desc:** SF#07 - LMMW1S

Test/Analyte	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
MBI_IC_ANIONS_A(EPA 300.0 (A))								
Sulfate	125	mg/L	10	1	5	10/22/2024	2088191 PWARNER	
SEM_200.7_DW(EPA 200.7)								
Calcium, Ca	77.5	mg/L	1	0.005	1	11/04/2024	2088815 BTRINH	
Magnesium, Mg	116	mg/L	1	0.021	0.2	11/04/2024	2088815 BTRINH	
Potassium, K	3.49	mg/L	1	0.06	0.2	11/04/2024	2088815 BTRINH	

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Water Quality Laboratory

MILLBRAE 1449

FOLDER ID: 2418484

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 10/22/2024
Sampling Team: Field

MBP_ALK(SM 2320 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Alkalinity	265	mg/L	1	2.96	15	10/22/2024	2088228 ALEE	

MBP_CHLORIDE(SM 4500-CL- D)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Chloride	449	mg/L	1		15	10/22/2024	2088229 ALEE	>MCL

MBP_COND(SM 2510 B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Specific Conductance @25°C	2390	µmhos/cm	1		1	10/22/2024	2088224 MSWONG	>MCL

MBP_HARDNESS_T(SM 2340 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Hardness, Total, as CaCO3	664	mg/L	1	2.37	15	10/22/2024	2088230 ALEE	

MBP_PH(SM 4500-H+ B)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
pH	6.64	pH	1			10/22/2024	2088222 MSWONG	H1,H3
Temperature (°C)	16.9	°C	1			10/22/2024	2088222 MSWONG	

MBP_TDS(SM 2540 C)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Total Dissolved Solids	1270	mg/L	1	13.2	20	10/26/2024	2088291 DCARDONA	>MCL

Lab Sample#: 2418484-03A **Sample Source:** WSB_SF_DUP_FULL **External ID:**

Date Collected: 10/22/2024 10:13AM **Date Received:** 10/22/2024 02:27PM **Sample Matrix:** Aqueous **Location Desc:** SF#07 - LMMW1S

Test/Analyte

MBI_IC_ANIONS_A(EPA 300.0 (A))	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Nitrate as N	41.3	mg/L	50	1.7	2	10/23/2024	2088258 PWARNER	>MCL

Lab Sample#: 2418484-03C **Sample Source:** WSB_SF_DUP_FULL **External ID:**

Date Collected: 10/22/2024 10:13AM **Date Received:** 10/22/2024 02:27PM **Sample Matrix:** Aqueous **Location Desc:** SF#07 - LMMW1S

Test/Analyte

SEM_200.7_DW(EPA 200.7)	Result	Unit	Dilution	MDL	MRL	Analysis Date	Run#/Analyst	Flag/Comments
Sodium, Na	226	mg/L	10	2	10	11/04/2024	2088815 BTRINH	

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FOLDER ID: 2418484

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 10/22/2024
Sampling Team: Field

QC list for Run#: *2088191* **and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432906-01										
	MRL_CK	Chloride		0.508	mg/L	102				
	MRL_CK	Sulfate		0.501	mg/L	100				
	MRL_CK	Nitrate as N		0.0415	mg/L	104				
QC2432906-02										
	CCV	Chloride		2.5	mg/L	100				
	CCV	Sulfate		2.43	mg/L	97				
	CCV	Nitrate as N		0.192	mg/L	96				
QC2432906-03										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2432906-04										
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2432906-05										
	LCS	Chloride		0.5	mg/L	100				
	LCS	Sulfate		1.47	mg/L	97				
	LCS	Nitrate as N		0.24	mg/L	95				
QC2432906-06										
	LCSD of QC2432906-05	Chloride	0.5	0.501	mg/L	100	0			Splt# QC2432906-05 (0.5mg/L)
	LCSD of QC2432906-05	Sulfate	1.47	1.46	mg/L	97	0			Splt# QC2432906-05 (1.47mg/L)
	LCSD of QC2432906-05	Nitrate as N	0.24	0.238	mg/L	95	0			Splt# QC2432906-05 (0.24mg/L)
QC2432906-07										
	CCV	Chloride		20.2	mg/L	101				
	CCV	Sulfate		20	mg/L	99				
	CCV	Nitrate as N		1.65	mg/L	104				
QC2432906-08										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2432906-09										
	SPK of 2418355-01A	Sulfate	5.6	7.13	mg/L	102				Splt# 2418355-01A (5.6mg/L)
	SPK of 2418355-01A	Nitrate as N	0.101	0.348	mg/L	98				Splt# 2418355-01A (0.101mg/L)
QC2432906-10										
	SPKD of 2418355-01A	Sulfate	5.6	7.13	mg/L	102	0			Splt# 2418355-01A (5.6mg/L)
	SPKD of 2418355-01A	Nitrate as N	0.101	0.353	mg/L	101	1			Splt# 2418355-01A (0.101mg/L)
QC2432906-11										
	CCV	Chloride		2.46	mg/L	98				

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2418484

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 10/22/2024
Sampling Team: Field

QC list for Run#: *2088191* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	CCV	Sulfate		2.43	mg/L	97				
	CCV	Nitrate as N		0.19	mg/L	95				
QC2432906-12										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	

QC list for Run#: *2088222* and Test: MBP_PH (SM 4500-H+ B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432926-04										
	ICV	pH		9.04	pH	99				
	ICV	Temperature (°C)		21.3	°C					
QC2432926-05										
	DUP of 2418771-04	pH	9.49	9.48	pH		0			Splt# 2418771-04 (9.49pH) H1,H3
	DUP of 2418771-04	Temperature (°C)	18.1	18.3	°C					Splt# 2418771-04 (18.1°C)
QC2432926-06										
	CCV	pH		9.04	pH	99				
	CCV	Temperature (°C)		21.3	°C					
QC2432926-07										
	CCV	pH		9.04	pH	99				
	CCV	Temperature (°C)		21.2	°C					

QC list for Run#: *2088224* and Test: MBP_COND (SM 2510 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432927-02										
	ICV	Specific Conductance @25°C		145	µmhos/cm	98				
QC2432927-03										
	BLK	Specific Conductance @25°C		<1	µmhos/cm				1	
QC2432927-04										
	MRL_CK	Specific Conductance @25°C		10.6	µmhos/cm	106				
QC2432927-05										
	DUP of 2418771-04	Specific Conductance @25°C	86.8	87.2	µmhos/cm		0		1	Splt# 2418771-04 (86.8µmhos/cm)
QC2432927-06										
	CCV	Specific Conductance @25°C		98.4	µmhos/cm	98				
QC2432927-07										
	CCV	Specific Conductance @25°C		1420	µmhos/cm	101				

QC list for Run#: *2088228* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432923-01										
	BLK	Alkalinity		<3	mg/L			0.593	3	
QC2432923-02										
	MRL_CK	Alkalinity		3.08	mg/L	103				

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ELAP Cert #:
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MILLBRAE 1449

FOLDER ID: 2418484

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 10/22/2024
Sampling Team: Field

QC list for Run#: *2088228* and Test: MBP_ALK (SM 2320 B)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432923-03	SPK of 2418358-01	Alkalinity	28.4	69.8	mg/L	103			3	Splt# 2418358-01 (28.4mg/L)
QC2432923-04	SPKD of 2418358-01	Alkalinity	28.4	69.6	mg/L	103	0		3	Splt# 2418358-01 (28.4mg/L)
QC2432923-05	DUP of 2418437-01	Alkalinity	27.8	27.9	mg/L		0	0.593	3	Splt# 2418437-01 (27.8mg/L)
QC2432923-06	LCS	Alkalinity		43.3	mg/L	108			3	

QC list for Run#: *2088229* and Test: MBP_CHLORIDE (SM 4500-CL- D)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432924-01	BLK	Chloride		<3	mg/L			1.16	3	
QC2432924-02	MRL_CK	Chloride		3.17	mg/L	106				
QC2432924-03	SPK of 2418358-01	Chloride	5.32	43.5	mg/L	95			3	Splt# 2418358-01 (5.32mg/L)
QC2432924-04	SPKD of 2418358-01	Chloride	5.32	43.8	mg/L	96	0		3	Splt# 2418358-01 (5.32mg/L)
QC2432924-05	DUP of 2418437-01	Chloride	6.38	6.44	mg/L		0		3	Splt# 2418437-01 (6.38mg/L)
QC2432924-06	LCS	Chloride		38.9	mg/L	97			3	

QC list for Run#: *2088230* and Test: MBP_HARDNESS_T (SM 2340 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432925-01	BLK	Hardness, Total, as CaCO3		<3	mg/L			0.474	3	
QC2432925-02	MRL_CK	Hardness, Total, as CaCO3		2.5	mg/L	83				
QC2432925-03	DUP of 2418437-01	Hardness, Total, as CaCO3	21	20.9	mg/L		0	0.474	3	Splt# 2418437-01 (21mg/L)
QC2432925-04	LCS	Hardness, Total, as CaCO3		40	mg/L	100			3	

QC list for Run#: *2088258* and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432959-01	MRL_CK	Chloride		0.481	mg/L	96				
	MRL_CK	Sulfate		0.481	mg/L	96				
	MRL_CK	Nitrate as N		0.0397	mg/L	99				
QC2432959-02	CCV	Chloride		2.48	mg/L	99				
	CCV	Sulfate		2.45	mg/L	97				

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Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2418484

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 10/22/2024
Sampling Team: Field

QC list for Run#: *2088258* **and Test: MBI_IC_ANIONS_A (EPA 300.0 (A))**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	CCV	Nitrate as N		0.193	mg/L	96				
QC2432959-03										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2432959-04										
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2432959-05										
	LCS	Chloride		0.527	mg/L	105				
	LCS	Sulfate		1.61	mg/L	107				
	LCS	Nitrate as N		0.259	mg/L	104				
QC2432959-06										
	LCSD of QC2432959-05	Chloride	0.527	0.539	mg/L	108	2			Splt# QC2432959-05 (0.527mg/L)
	LCSD of QC2432959-05	Sulfate	1.61	1.69	mg/L	112	4			Splt# QC2432959-05 (1.61mg/L)
	LCSD of QC2432959-05	Nitrate as N	0.259	0.266	mg/L	107	2			Splt# QC2432959-05 (0.259mg/L)
QC2432959-07										
	CCV	Chloride		20.1	mg/L	100				
	CCV	Sulfate		20.1	mg/L	100				
	CCV	Nitrate as N		1.65	mg/L	104				
QC2432959-08										
	BLK	Chloride		<0.5	mg/L			0.2	0.5	
	BLK	Sulfate		<0.5	mg/L			0.1	0.5	
	BLK	Nitrate as N		<0.04	mg/L			0.034	0.04	
QC2432959-09										
	SPK of 2418484-01A	Nitrate as N	42.4	48.1	mg/L	91				Splt# 2418484-01A (42.4mg/L)
QC2432959-10										
	SPKD of 2418484-01C	Nitrate as N	40.6	53.5	mg/L	103	0			Splt# 2418484-01C (40.6mg/L)
QC2432959-11										
	LCS	Chloride		0.5	mg/L	99				
	LCS	Sulfate		1.47	mg/L	97				
	LCS	Nitrate as N		0.239	mg/L	95				
QC2432959-12										
	LCSD of QC2432959-11	Chloride	0.5	0.488	mg/L	97	2			Splt# QC2432959-11 (0.5mg/L)
	LCSD of QC2432959-11	Sulfate	1.47	1.46	mg/L	97	0			Splt# QC2432959-11 (1.47mg/L)
	LCSD of QC2432959-11	Nitrate as N	0.239	0.238	mg/L	95	0			Splt# QC2432959-11 (0.239mg/L)
QC2432959-13										
	SPK of 2418484-01C	Nitrate as N	40.6	53.8	mg/L	106				Splt# 2418484-01C (40.6mg/L)

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MILLBRAE 1449

SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

FOLDER ID: 2418484

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 10/22/2024
Sampling Team: Field

QC list for Run#: *2088291* and Test: MBP_TDS (SM 2540 C)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2432969-01										
	BLK	Total Dissolved Solids		<20	mg/L			13.2	20	
QC2432969-02										
	LCS	Total Dissolved Solids		87	mg/L	91		13.2	20	
QC2432969-03										
	DUP of 2418246-02	Total Dissolved Solids	468	496	mg/L		5	13.2	20	Splt# 2418246-02 (468mg/L)
QC2432969-04										
	DUP of 2417299-02	Total Dissolved Solids	324	326	mg/L		0	13.2	20	Splt# 2417299-02 (324mg/L)

QC list for Run#: *2088815* and Test: SEM_200.7_DW (EPA 200.7)

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
QC2433307-01										
	BLK	Calcium, Ca		<1	mg/L			0.005	1	
	BLK	Magnesium, Mg		<0.2	mg/L			0.021	0.2	
	BLK	Potassium, K		<0.2	mg/L			0.06	0.2	
	BLK	Sodium, Na		<1	mg/L			0.2	1	
QC2433307-02										
	LCS	Calcium, Ca		2.01	mg/L	101		0.04	1	
	LCS	Magnesium, Mg		2.05	mg/L	103		0.007	0.2	
	LCS	Potassium, K		2.05	mg/L	102		0.04	0.2	
	LCS	Sodium, Na		2.17	mg/L	108		0.02	1	
QC2433307-03										
	DUP of 2418246-02	Calcium, Ca	46.7	47.2	mg/L		1	0.005	1	Splt# 2418246-02 (46.7mg/L)
	DUP of 2418246-02	Magnesium, Mg	50.7	51.4	mg/L		1	0.021	0.2	Splt# 2418246-02 (50.7mg/L)
	DUP of 2418246-02	Potassium, K	2.57	2.64	mg/L		2	0.06	0.2	Splt# 2418246-02 (2.57mg/L)
	DUP of 2418246-02	Sodium, Na	61	61.7	mg/L		1	0.2	1	Splt# 2418246-02 (61mg/L)
QC2433307-04										
	SPK of 2418246-02	Calcium, Ca	46.7	48.2	mg/L	77		0.04	1	Splt# 2418246-02 (46.7mg/L)
	SPK of 2418246-02	Magnesium, Mg	50.7	52.4	mg/L	82		0.007	0.2	Splt# 2418246-02 (50.7mg/L)
	SPK of 2418246-02	Potassium, K	2.57	4.63	mg/L	103		0.04	0.2	Splt# 2418246-02 (2.57mg/L)
	SPK of 2418246-02	Sodium, Na	61	62.4	mg/L	67		0.02	1	Splt# 2418246-02 (61mg/L)
QC2433307-05										
	SPKD of 2418246-02	Calcium, Ca	46.7	48.9	mg/L	109	1	0.04	1	Splt# 2418246-02 (46.7mg/L)
	SPKD of 2418246-02	Magnesium, Mg	50.7	53.1	mg/L	117	1	0.007	0.2	Splt# 2418246-02 (50.7mg/L)
	SPKD of 2418246-02	Potassium, K	2.57	4.69	mg/L	106	1	0.04	0.2	Splt# 2418246-02 (2.57mg/L)
	SPKD of 2418246-02	Sodium, Na	61	63.2	mg/L	109	1	0.02	1	Splt# 2418246-02 (61mg/L)
QC2433307-06										
	MRL_CK	Calcium, Ca		0.0433	mg/L	108		0.005	0.005	
	MRL_CK	Magnesium, Mg		0.0681	mg/L	136		0.021	0.021	
	MRL_CK	Potassium, K		0.26	mg/L	130		0.06	0.06	
	MRL_CK	Sodium, Na		0.458	mg/L	229		0.2	0.2	
QC2433353-01										

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SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Water Quality Laboratory

ELAP Cert #:
SEWPCP 1721
MILLBRAE 1449

FOLDER ID: 2418484

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 10/22/2024
Sampling Team: Field

QC list for Run#: *2088815* **and Test: SEM_200.7_DW (EPA 200.7)**

Sample #	Name	Analyte	Result Parent	Result Current	Units	% Rec	RPD	MDL	MRL	Flag/Comments
	ICV	Calcium, Ca		10.2	mg/L	104		0.05	1	
	ICV	Magnesium, Mg		10	mg/L	101		0.01	0.2	
	ICV	Potassium, K		100	mg/L	101		0.03	0.2	
	ICV	Sodium, Na		10.1	mg/L	101		0.002	1	

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Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 10/22/2024
Sampling Team: Field

Qualifiers Legend:

Flag

Code	Description
A1	See case narrative, notes, or comments.
B1	Target analyte detected in associated Method Blank.
B2	Target analyte detected in Travel/Trip/Equipment Blank.
E1	Estimated value. Exceeds calibration range. Reanalysis not possible due to insufficient sample vol.
E2	Estimated value. Exceeds calibration range. Reanalysis not performed due to hold time requirement.
E3	EMPC (estimated maximum possible concentration)
H1	Sample analysis performed past the method specified hold time per client request.
H2	Initial analysis within hold time. Reanalysis for the required dilution was past hold time.
H3	Sample was received past hold time.
H4	Confirmatory analysis was past hold time.
H5	Confirmatory analysis was past hold time. Original result not confirmed.
H6	Filtration not completed within method specific time; Filtered in Lab. Filtration exceeded hold time.
I1	I.S. recovery or R.T. outside method limits. Interference confirmed by reanalysis/dilution. GC/GCMS
L1	LCS and/or LCSD is outside acceptance limits. Results might be low biased.
L2	LCS and/or LCSD is outside acceptance limits. Results might be high biased.
M	Matrix interference suspected.
M1	MS/MSD % rec. outside acceptable limits. Batch acceptance by LCS.
M2	MS/MSD RPD outside acceptable limits. Batch acceptance by LCS.
M3	Sample diluted due to matrix. MS recovery not useful. Batch acceptance by LCS.
NA	Not Analyzed
NC	Not for Compliance
NC1	Method specification(s) not met
NC2	Test/analyte is not accredited or accreditation is not available.
NP	Not provided
NS	Not sampled (or no sample received)
P1	Sample received and analyzed without chemical preservation.
P2	Sample received without chemical preservation but preserved by the laboratory.
P3	Sample received with inadequate chemical preservation, but preserved by the laboratory
P4	Sample was received outside recommended temperature range.
P5	Sample received in inappropriate sample container.
P6	Insufficient sample received to meet method requirements.
P7	Sample received with head space.
Q	%D (difference) between the 1st and 2nd column/detector is >50%. Lower value reported.
Q1	Minimum Reporting Limit (MRL) verification failed high, but target analyte was not detected.
R	Data rejected
S	Dilution due to sample matrix effects, the surrogate recovery was outside the acceptance limits.
S1	Sample diluted due to matrix. Surrogate spike recovery provides no useful information.
S2	Surrogate recovery below acceptable limits. Results might be low biased.
S3	Surrogate recovery exceeds acceptable limits. Results might be high biased.
TIC	Tentatively Identified Compound
U	Analyzed but not detected

RQualifier

Code	Description
+	Positive
-	Negative
<	Less Than

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FOLDER ID: 2418484

Client: SF_PUC_PLANNING
Project: WESTSIDE_BASIN
Routine: WSB_SFPUC

Scheduled Sample Date: 10/22/2024
Sampling Team: Field

=	Equals
>	Greater Than
A	Bacti result, absent
DNQ	Detected, but Not Quantified
E	Estimated value
I	Bacti result, Inconclusive value. Analyzed, but result is undetermined
ND	Non-detected
P	Bacti result, present

QC Type

Code	Description
BLK	Method Blank Sample
CAL	Calibration Sample
CCV	Continuing Calibration Verification Sample
DUP	Duplicate Sample
ICV	Initial Calibration Verification Sample
LCS	Laboratory Control Standard Sample
LCSD	Laboratory Control Standard Duplicate Sample
MRL_CK	Method Reporting Level Check Sample
SPK	Matrix Spike Sample
SPKD	Matrix Spike Duplicate Sample

Please email labfeedback@sfwater.org <mailto:labfeedback@sfwater.org> to report any comments, complaints, compliments or suggestions. Please provide detailed descriptions and attach documentation as necessary.

Reported By: Technical Manager
Megan Hinman

Reported On: 8-Jan-2025

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Bay Side Groundwater Monitoring Laboratory Analytical Results

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

09 April 2024

San Bruno, City of - DW
Attn: Steve Salazar
225 Huntington Avenue
San Bruno, CA 94066
RE: SF Intrusion Project
Work Order: 24C2971

Enclosed are the results of analyses for samples received by the laboratory on 03/19/24 21:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Robbie C. Phillips
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

San Bruno, City of - DW	Project Manager: Steve Salazar	
225 Huntington Avenue	Project: SF Intrusion Project	Reported:
San Bruno, CA 94066	Project Number: [none]	04/09/24 08:03

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D| Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SFO-D	24C2971-01	Water	03/19/24 09:10	03/19/24 21:30
SFO-S	24C2971-02	Water	03/19/24 09:20	03/19/24 21:30
BURLINGAME-D	24C2971-03	Water	03/19/24 08:20	03/19/24 21:30
BURLINGAME-M	24C2971-04	Water	03/19/24 08:30	03/19/24 21:30
BURLINGAME-S	24C2971-05	Water	03/19/24 08:40	03/19/24 21:30

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Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

San Bruno, City of - DW	Project Manager: Steve Salazar	
225 Huntington Avenue	Project: SF Intrusion Project	Reported:
San Bruno, CA 94066	Project Number: [none]	04/09/24 08:03

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SFO-D (24C2971-01)			**Sample Type: Water**			**Sampled: 03/19/24 09:10**				
Metals by EPA 200 Series Methods										**P-02**
Boron	ND	mg/L	0.20	1	AC45269	04/02/24 14:47	04/08/24 13:02	1551	EPA 200.7	
Calcium	**110**	**mg/L**	**1.0**	1	AC45269	04/02/24 14:47	04/03/24 14:35	1551	EPA 200.7	
Magnesium	**89**	**mg/L**	**1.0**	1	AC45269	04/02/24 14:47	04/03/24 14:35	1551	EPA 200.7	
Potassium	**11**	**mg/L**	**1.0**	1	AC45269	04/02/24 14:47	04/03/24 14:35	1551	EPA 200.7	
Sodium	**520**	**mg/L**	**1.0**	1	AC45269	04/02/24 14:47	04/03/24 14:35	1551	EPA 200.7	
Conventional Chemistry Parameters by APHA/EPA Methods										
Bicarbonate	**300**	**mg/L**	**5.0**	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
pH	**7.36**	**pH Units**	**1.68**	1	AC44638	03/20/24 16:00	03/20/24 17:00	1551	SM4500-H+ B	T-14
Specific Conductance (EC)	**3900**	**umhos/cm**	**20**	1	AC44638	03/20/24 16:00	03/20/24 17:00	1551	SM2510B	
Total Dissolved Solids	**640**	**mg/L**	**10**	1	AC44686	03/20/24 17:30	03/29/24 14:54	1551	SM2540C	
Bicarbonate Alkalinity as CaCO3	**250**	**mg/L**	**5.0**	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
Total Alkalinity as CaCO3	**250**	**mg/L**	**5.0**	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
Anions by EPA Method 300.0										
Chloride	**480**	**mg/L**	**50**	100	AC44621	03/21/24 16:34	03/21/24 16:34	1551	EPA 300.0	
Nitrate as N	ND	mg/L	0.40	2	AC44621	03/20/24 16:00	03/20/24 16:00	1551	EPA 300.0	R-01
Orthophosphate as P	**0.21**	**mg/L**	**0.20**	2	AC44621	03/20/24 16:00	03/20/24 16:00	1551	EPA 300.0	
Sulfate as SO4	**44**	**mg/L**	**1.0**	2	AC44621	03/20/24 16:00	03/20/24 16:00	1551	EPA 300.0	
Anions by EPA Method 300.1										
Bromide	**1.7**	**mg/L**	**0.50**	10	AC45247	03/29/24 05:10	03/29/24 05:10	1551	EPA 300.1	
Surrogate: Dichloroacetate	*97.4 %*		*90-115*		*AC45247*	*03/29/24 05:10*	*03/29/24 05:10*	1551	*EPA 300.1*	
SFO-S (24C2971-02)			**Sample Type: Water**			**Sampled: 03/19/24 09:20**				
Metals by EPA 200 Series Methods										**P-02**
Boron	ND	mg/L	1.0	5	AC45269	04/02/24 14:47	04/08/24 13:12	1551	EPA 200.7	R-01
Calcium	**420**	**mg/L**	**1.0**	1	AC45269	04/02/24 14:47	04/03/24 15:25	1551	EPA 200.7	
Magnesium	**480**	**mg/L**	**1.0**	1	AC45269	04/02/24 14:47	04/03/24 15:25	1551	EPA 200.7	
Potassium	**60**	**mg/L**	**1.0**	1	AC45269	04/02/24 14:47	04/03/24 15:25	1551	EPA 200.7	
Sodium	**4500**	**mg/L**	**5.0**	5	AC45269	04/02/24 14:47	04/03/24 14:55	1551	EPA 200.7	

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Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

San Bruno, City of - DW	Project Manager: Steve Salazar	
225 Huntington Avenue	Project: SF Intrusion Project	Reported:
San Bruno, CA 94066	Project Number: [none]	04/09/24 08:03

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SFO-S (24C2971-02)			**Sample Type: Water**				**Sampled: 03/19/24 09:20**			
Conventional Chemistry Parameters by APHA/EPA Methods										
Bicarbonate	**840**	**mg/L**	**5.0**	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
pH	**7.10**	**pH Units**	**1.68**	1	AC44638	03/20/24 16:00	03/20/24 17:00	1551	SM4500-H+ B	T-14
Specific Conductance (EC)	**28000**	**umhos/cm**	**20**	1	AC44638	03/20/24 16:00	03/20/24 17:00	1551	SM2510B	
Total Dissolved Solids	**840**	**mg/L**	**10**	1	AC44686	03/20/24 17:30	03/29/24 14:54	1551	SM2540C	
Bicarbonate Alkalinity as CaCO3	**680**	**mg/L**	**5.0**	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
Total Alkalinity as CaCO3	**680**	**mg/L**	**5.0**	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
Anions by EPA Method 300.0										
Chloride	**11000**	**mg/L**	**500**	1000	AC44621	03/21/24 16:50	03/21/24 16:50	1551	EPA 300.0	
Nitrate as N	ND	mg/L	2.0	10	AC44621	03/20/24 16:17	03/20/24 16:17	1551	EPA 300.0	R-01
Orthophosphate as P	ND	mg/L	1.0	10	AC44621	03/20/24 16:17	03/20/24 16:17	1551	EPA 300.0	R-01
Sulfate as SO4	**700**	**mg/L**	**50**	100	AC44621	03/21/24 05:23	03/21/24 05:23	1551	EPA 300.0	
Anions by EPA Method 300.1										
Bromide	**34**	**mg/L**	**5.0**	100	AC45247	03/29/24 05:50	03/29/24 05:50	1551	EPA 300.1	
Surrogate: Dichloroacetate	*96.6 %*		*90-115*		*AC45247*	*03/29/24 05:50*	*03/29/24 05:50*	1551	*EPA 300.1*	
BURLINGAME-D (24C2971-03)			**Sample Type: Water**				**Sampled: 03/19/24 08:20**			
Metals by EPA 200 Series Methods										**P-02**
Boron	ND	mg/L	0.20	1	AC45269	04/02/24 14:47	04/08/24 15:54	1551	EPA 200.7	
Calcium	**34**	**mg/L**	**1.0**	1	AC45269	04/02/24 14:47	04/03/24 15:46	1551	EPA 200.7	
Magnesium	**13**	**mg/L**	**1.0**	1	AC45269	04/02/24 14:47	04/03/24 15:46	1551	EPA 200.7	
Potassium	**1.9**	**mg/L**	**1.0**	1	AC45269	04/02/24 14:47	04/03/24 15:46	1551	EPA 200.7	
Sodium	**43**	**mg/L**	**1.0**	1	AC45269	04/02/24 14:47	04/03/24 15:46	1551	EPA 200.7	

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Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

San Bruno, City of - DW	Project Manager: Steve Salazar	
225 Huntington Avenue	Project: SF Intrusion Project	Reported:
San Bruno, CA 94066	Project Number: [none]	04/09/24 08:03

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
BURLINGAME-D (24C2971-03)			**Sample Type: Water**				**Sampled: 03/19/24 08:20**			
Conventional Chemistry Parameters by APHA/EPA Methods										
Bicarbonate	**190**	**mg/L**	**5.0**	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
pH	**7.46**	**pH Units**	**1.68**	1	AC44638	03/20/24 16:00	03/20/24 17:00	1551	SM4500-H+ B	T-14
Specific Conductance (EC)	**490**	**umhos/cm**	**20**	1	AC44638	03/20/24 16:00	03/20/24 17:00	1551	SM2510B	
Total Dissolved Solids	**270**	**mg/L**	**10**	1	AC45034	03/25/24 16:45	03/29/24 16:41	1551	SM2540C	
Bicarbonate Alkalinity as CaCO3	**160**	**mg/L**	**5.0**	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
Total Alkalinity as CaCO3	**160**	**mg/L**	**5.0**	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
Anions by EPA Method 300.0										
Chloride	**20**	**mg/L**	**5.0**	10	AC44621	03/21/24 02:23	03/21/24 02:23	1551	EPA 300.0	
Nitrate as N	ND	mg/L	0.20	1	AC44621	03/20/24 16:33	03/20/24 16:33	1551	EPA 300.0	
Orthophosphate as P	ND	mg/L	0.10	1	AC44621	03/20/24 16:33	03/20/24 16:33	1551	EPA 300.0	
Sulfate as SO4	**7.5**	**mg/L**	**0.50**	1	AC44621	03/20/24 16:33	03/20/24 16:33	1551	EPA 300.0	
Anions by EPA Method 300.1										
Bromide	**0.067**	**mg/L**	**0.050**	1	AC45247	03/29/24 06:31	03/29/24 06:31	1551	EPA 300.1	
Surrogate: Dichloroacetate	*103 %*		*90-115*		*AC45247*	*03/29/24 06:31*	*03/29/24 06:31*	1551	*EPA 300.1*	
BURLINGAME-M (24C2971-04)			**Sample Type: Water**				**Sampled: 03/19/24 08:30**			
Metals by EPA 200 Series Methods										**P-02**
Boron	ND	mg/L	0.20	1	AC45269	04/02/24 14:47	04/08/24 15:58	1551	EPA 200.7	
Calcium	**21**	**mg/L**	**1.0**	1	AC45269	04/02/24 14:47	04/03/24 15:51	1551	EPA 200.7	
Magnesium	**10**	**mg/L**	**1.0**	1	AC45269	04/02/24 14:47	04/03/24 15:51	1551	EPA 200.7	
Potassium	**2.4**	**mg/L**	**1.0**	1	AC45269	04/02/24 14:47	04/03/24 15:51	1551	EPA 200.7	
Sodium	**37**	**mg/L**	**1.0**	1	AC45269	04/02/24 14:47	04/03/24 15:51	1551	EPA 200.7	

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San Bruno, City of - DW	Project Manager: Steve Salazar	
225 Huntington Avenue	Project: SF Intrusion Project	Reported:
San Bruno, CA 94066	Project Number: [none]	04/09/24 08:03

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
BURLINGAME-M (24C2971-04)			**Sample Type: Water**				**Sampled: 03/19/24 08:30**			
Conventional Chemistry Parameters by APHA/EPA Methods										
Bicarbonate	**73**	**mg/L**	**5.0**	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
pH	**6.97**	**pH Units**	**1.68**	1	AC44638	03/20/24 16:00	03/20/24 17:00	1551	SM4500-H+ B	T-14
Specific Conductance (EC)	**370**	**umhos/cm**	**20**	1	AC44638	03/20/24 16:00	03/20/24 17:00	1551	SM2510B	
Total Dissolved Solids	**230**	**mg/L**	**10**	1	AC45034	03/25/24 16:45	03/29/24 16:41	1551	SM2540C	
Bicarbonate Alkalinity as CaCO3	**60**	**mg/L**	**5.0**	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
Total Alkalinity as CaCO3	**60**	**mg/L**	**5.0**	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
Anions by EPA Method 300.0										
Chloride	**17**	**mg/L**	**0.50**	1	AC44621	03/20/24 17:23	03/20/24 17:23	1551	EPA 300.0	
Nitrate as N	**0.36**	**mg/L**	**0.20**	1	AC44621	03/20/24 17:23	03/20/24 17:23	1551	EPA 300.0	
Orthophosphate as P	ND	mg/L	0.10	1	AC44621	03/20/24 17:23	03/20/24 17:23	1551	EPA 300.0	
Sulfate as SO4	**3.9**	**mg/L**	**0.50**	1	AC44621	03/20/24 17:23	03/20/24 17:23	1551	EPA 300.0	
Anions by EPA Method 300.1										
Bromide	**0.062**	**mg/L**	**0.050**	1	AC45247	03/29/24 07:11	03/29/24 07:11	1551	EPA 300.1	
Surrogate: Dichloroacetate	*109 %*		*90-115*		*AC45247*	*03/29/24 07:11*	*03/29/24 07:11*	1551	*EPA 300.1*	
BURLINGAME-S (24C2971-05)			**Sample Type: Water**				**Sampled: 03/19/24 08:40**			
Metals by EPA 200 Series Methods										**P-02**
Boron	ND	mg/L	0.20	1	AC45269	04/02/24 14:47	04/08/24 16:02	1551	EPA 200.7	
Calcium	**100**	**mg/L**	**1.0**	1	AC45269	04/02/24 14:47	04/03/24 15:55	1551	EPA 200.7	
Magnesium	**83**	**mg/L**	**1.0**	1	AC45269	04/02/24 14:47	04/03/24 15:55	1551	EPA 200.7	
Potassium	**8.2**	**mg/L**	**1.0**	1	AC45269	04/02/24 14:47	04/03/24 15:55	1551	EPA 200.7	
Sodium	**650**	**mg/L**	**1.0**	1	AC45269	04/02/24 14:47	04/03/24 15:55	1551	EPA 200.7	

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San Bruno, City of - DW	Project Manager: Steve Salazar	
225 Huntington Avenue	Project: SF Intrusion Project	Reported:
San Bruno, CA 94066	Project Number: [none]	04/09/24 08:03

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
BURLINGAME-S (24C2971-05)			**Sample Type: Water**				**Sampled: 03/19/24 08:40**			
Conventional Chemistry Parameters by APHA/EPA Methods										
Bicarbonate	**560**	**mg/L**	**5.0**	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
pH	**7.35**	**pH Units**	**1.68**	1	AC44638	03/20/24 16:00	03/20/24 17:00	1551	SM4500-H+ B	T-14
Specific Conductance (EC)	**4300**	**umhos/cm**	**20**	1	AC44638	03/20/24 16:00	03/20/24 17:00	1551	SM2510B	
Total Dissolved Solids	**2300**	**mg/L**	**10**	1	AC45034	03/25/24 16:45	03/29/24 16:41	1551	SM2540C	
Bicarbonate Alkalinity as CaCO3	**460**	**mg/L**	**5.0**	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
Total Alkalinity as CaCO3	**460**	**mg/L**	**5.0**	1	AC45052	03/27/24 12:30	03/27/24 15:00	1551	SM2320B	
Anions by EPA Method 300.0										
Chloride	**1200**	**mg/L**	**50**	100	AC44621	03/21/24 17:07	03/21/24 17:07	1551	EPA 300.0	
Nitrate as N	ND	mg/L	1.0	5	AC44621	03/20/24 17:39	03/20/24 17:39	1551	EPA 300.0	R-01
Orthophosphate as P	ND	mg/L	0.50	5	AC44621	03/20/24 17:39	03/20/24 17:39	1551	EPA 300.0	R-01
Sulfate as SO4	**28**	**mg/L**	**2.5**	5	AC44621	03/20/24 17:39	03/20/24 17:39	1551	EPA 300.0	
Anions by EPA Method 300.1										
Bromide	**4.8**	**mg/L**	**1.0**	20	AC45247	03/29/24 09:12	03/29/24 09:12	1551	EPA 300.1	
Surrogate: Dichloroacetate	*98.5 %*		*90-115*		*AC45247*	*03/29/24 09:12*	*03/29/24 09:12*	1551	*EPA 300.1*	

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San Bruno, City of - DW	Project Manager: Steve Salazar	
225 Huntington Avenue	Project: SF Intrusion Project	Reported:
San Bruno, CA 94066	Project Number: [none]	04/09/24 08:03

Notes and Definitions

P-02	Sample acidified to pH <2 and allowed to sit 24 hours before further processing.
QM-01	The spike recovery for this QC sample is outside of established control limits possibly due to a sample matrix interference.
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
T-14	Residual chlorine, dissolved oxygen, sulfite, and pH must be analyzed in the field to meet the EPA specified 15 minute hold time.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.

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Alpha Analytical Laboratories Inc.
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WATERS, SEDIMENTS, SOLIDS

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Bay Area Laboratory
262 Rickenbacker Circle, Livermore, CA 94551
925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Unioin Park Wy., #113, Elk Grove, CA 95624
916-686-5190 F) 916-686-5192

3.1°C

Work Order

Chain of Custody Record

Lab No. 24C2971 Page_____ of_____

Name: City of San Bruno - Drinking Water	**Project No:** SF Intrusion Project
Mailing Address: 225 Huntington Avenue, San Bruno, CA 94066	**Project ID:**
Project Contact (Hardcopy or PDF to): Steve Salazar, ssalazar@sanbruno.ca.gov	PO#
Phone/Fax: ssalazar@sanbruno.ca.gov	**Bill to:**

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Print Name & Signature: J. Baker Joe G

Sample Identification	Sample Collection Date	Time	Container: 40ml VOA	Poly	Amber	Sleeve		Preservative: HCL	HNO3	H2SO4	other	None	Matrix: Water	Soil		Analysis Request: B,Ca,Mg,Na,K,Bicarbonate	Sulfate, Chloride, TDS, Alkalinity	Nitrate as N, Orthophosphate as P	pH, Conductance	Bromide
SFO-D	3/19/24	9:10		2								x	x			x	x	x	x	x
SFO-S	3/19/24	9:20		2								x	x			x	x	x	x	x
BURLINGAME -D	3/19/24	8:20		2								x	x			x	x	x	x	x
BURLINGAME-M	3/19/24	8:30		2								x	x			x	x	x	x	x
BURLINGAME-S	3/19/24	8:40		2								x	x			x	x	x	x	x

Sample Notes:

TAT: 24 hr ○ 48 hr ○ *Lab Approval Required* — 1 wk ○ 2 wk (standard) ○ — Lab Approval Required For Rush

Relinquished by:	Received by:	Date	Time
Joe G	M Molar Lua	3/19/24	1415
M Molar Lua	JW	3-19-24	1730
JW	JW	3-19-24	2130

Relinquished by: | Received for Laboratory by: | Date | Time

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

05 September 2024

San Bruno, City of - DW
Attn: Steve Salazar
225 Huntington Avenue
San Bruno, CA 94066
RE: SF Intrusion Project
Work Order: 24H2705

Enclosed are the results of analyses for samples received by the laboratory on 08/15/24 22:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Robbie C. Phillips
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

San Bruno, City of - DW	Project Manager: Steve Salazar	
225 Huntington Avenue	Project: SF Intrusion Project	Reported:
San Bruno, CA 94066	Project Number: [none]	09/05/24 12:25

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D| Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SFO-D	24H2705-01	Water	08/15/24 08:10	08/15/24 22:00
SFO-S	24H2705-02	Water	08/15/24 08:20	08/15/24 22:00
BURLINGAME-D	24H2705-03	Water	08/15/24 07:20	08/15/24 22:00
BURLINGAME-M	24H2705-04	Water	08/15/24 07:30	08/15/24 22:00
BURLINGAME-S	24H2705-05	Water	08/15/24 07:45	08/15/24 22:00

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Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

San Bruno, City of - DW	Project Manager: Steve Salazar	
225 Huntington Avenue	Project: SF Intrusion Project	Reported:
San Bruno, CA 94066	Project Number: [none]	09/05/24 12:25

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SFO-D (24H2705-01)			**Sample Type: Water**			**Sampled: 08/15/24 08:10**				
Metals by EPA 200 Series Methods										
Boron	ND	mg/L	0.20	1	AH44870	08/27/24 11:58	08/28/24 19:24	1551	EPA 200.7	
Calcium	**100**	**mg/L**	**1.0**	1	AH44870	08/27/24 11:58	08/28/24 19:24	1551	EPA 200.7	
Magnesium	**86**	**mg/L**	**1.0**	1	AH44870	08/27/24 11:58	08/28/24 19:24	1551	EPA 200.7	
Potassium	**11**	**mg/L**	**1.0**	1	AH44870	08/27/24 11:58	08/28/24 19:24	1551	EPA 200.7	
Sodium	**480**	**mg/L**	**1.0**	1	AH44870	08/27/24 11:58	08/28/24 19:24	1551	EPA 200.7	
Conventional Chemistry Parameters by APHA/EPA Methods										
Bicarbonate	**320**	**mg/L**	**5.0**	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
pH	**7.42**	**pH Units**	**1.68**	1	AH44380	08/16/24 16:00	08/16/24 17:00	1551	SM4500-H+ B	T-14
Specific Conductance (EC)	**4500**	**umhos/cm**	**20**	1	AH44380	08/16/24 16:00	08/16/24 17:00	1551	SM2510B	
Total Dissolved Solids	**2700**	**mg/L**	**10**	1	AH44515	08/21/24 11:30	09/04/24 12:54	1551	SM2540C	
Bicarbonate Alkalinity as CaCO3	**260**	**mg/L**	**5.0**	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
Total Alkalinity as CaCO3	**260**	**mg/L**	**5.0**	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
Anions by EPA Method 300.0										
Chloride	**1300**	**mg/L**	**50**	100	AH44166	08/19/24 17:29	08/19/24 17:29	1551	EPA 300.0	
Nitrate as N	ND	mg/L	1.0	5	AH44166	08/16/24 17:56	08/16/24 17:56	1551	EPA 300.0	R-01
Orthophosphate as P	ND	mg/L	0.50	5	AH44166	08/16/24 17:56	08/16/24 17:56	1551	EPA 300.0	R-01
Sulfate as SO4	**120**	**mg/L**	**2.5**	5	AH44166	08/16/24 17:56	08/16/24 17:56	1551	EPA 300.0	
Anions by EPA Method 300.1										
Bromide	**4.8**	**mg/L**	**0.50**	10	AH44659	08/23/24 07:09	08/23/24 07:09	1551	EPA 300.1	
Surrogate: Dichloroacetate	*99.4 %*		*90-115*		*AH44659*	*08/23/24 07:09*	*08/23/24 07:09*	1551	*EPA 300.1*	
SFO-S (24H2705-02)			**Sample Type: Water**			**Sampled: 08/15/24 08:20**				
Metals by EPA 200 Series Methods										
Boron	**0.81**	**mg/L**	**0.20**	1	AH44870	08/27/24 11:58	08/28/24 19:45	1551	EPA 200.7	
Calcium	**490**	**mg/L**	**1.0**	1	AH44870	08/27/24 11:58	08/28/24 19:45	1551	EPA 200.7	
Magnesium	**550**	**mg/L**	**1.0**	1	AH44870	08/27/24 11:58	08/28/24 19:45	1551	EPA 200.7	
Potassium	**65**	**mg/L**	**10**	10	AH44870	08/27/24 11:58	09/04/24 20:05	1551	EPA 200.7	
Sodium	**4500**	**mg/L**	**10**	10	AH44870	08/27/24 11:58	09/04/24 20:05	1551	EPA 200.7	

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Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

San Bruno, City of - DW	Project Manager: Steve Salazar	
225 Huntington Avenue	Project: SF Intrusion Project	Reported:
San Bruno, CA 94066	Project Number: [none]	09/05/24 12:25

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SFO-S (24H2705-02)			**Sample Type: Water**				**Sampled: 08/15/24 08:20**			
Conventional Chemistry Parameters by APHA/EPA Methods										
Bicarbonate	**830**	**mg/L**	**5.0**	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
pH	**7.11**	**pH Units**	**1.68**	1	AH44380	08/16/24 16:00	08/16/24 17:00	1551	SM4500-H+ B	T-14
Specific Conductance (EC)	**27000**	**umhos/cm**	**20**	1	AH44380	08/16/24 16:00	08/16/24 17:00	1551	SM2510B	
Total Dissolved Solids	**18000**	**mg/L**	**10**	1	AH44515	08/21/24 11:30	09/04/24 12:54	1551	SM2540C	
Bicarbonate Alkalinity as CaCO3	**680**	**mg/L**	**5.0**	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
Total Alkalinity as CaCO3	**680**	**mg/L**	**5.0**	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
Anions by EPA Method 300.0										
Chloride	**10000**	**mg/L**	**500**	1000	AH44166	08/19/24 17:46	08/19/24 17:46	1551	EPA 300.0	
Nitrate as N	ND	mg/L	4.0	20	AH44166	08/16/24 18:29	08/16/24 18:29	1551	EPA 300.0	R-01
Orthophosphate as P	ND	mg/L	2.0	20	AH44166	08/16/24 18:29	08/16/24 18:29	1551	EPA 300.0	R-01
Sulfate as SO4	**780**	**mg/L**	**10**	20	AH44166	08/16/24 18:29	08/16/24 18:29	1551	EPA 300.0	
Anions by EPA Method 300.1										
Bromide	**36**	**mg/L**	**5.0**	100	AH44659	08/23/24 07:58	08/23/24 07:58	1551	EPA 300.1	
Surrogate: Dichloroacetate	*99.1 %*		*90-115*		*AH44659*	*08/23/24 07:58*	*08/23/24 07:58*	1551	*EPA 300.1*	
BURLINGAME-D (24H2705-03)			**Sample Type: Water**				**Sampled: 08/15/24 07:20**			
Metals by EPA 200 Series Methods										
Boron	ND	mg/L	0.20	1	AH44870	08/27/24 11:58	08/28/24 20:28	1551	EPA 200.7	
Calcium	**24**	**mg/L**	**1.0**	1	AH44870	08/27/24 11:58	08/28/24 20:28	1551	EPA 200.7	
Magnesium	**12**	**mg/L**	**1.0**	1	AH44870	08/27/24 11:58	08/28/24 20:28	1551	EPA 200.7	
Potassium	**1.6**	**mg/L**	**1.0**	1	AH44870	08/27/24 11:58	08/28/24 20:28	1551	EPA 200.7	
Sodium	**39**	**mg/L**	**1.0**	1	AH44870	08/27/24 11:58	08/28/24 20:28	1551	EPA 200.7	

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Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

San Bruno, City of - DW	Project Manager: Steve Salazar	
225 Huntington Avenue	Project: SF Intrusion Project	Reported:
San Bruno, CA 94066	Project Number: [none]	09/05/24 12:25

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
BURLINGAME-D (24H2705-03)			**Sample Type: Water**				**Sampled: 08/15/24 07:20**			
Conventional Chemistry Parameters by APHA/EPA Methods										
Bicarbonate	**160**	**mg/L**	**5.0**	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
pH	**7.34**	**pH Units**	**1.68**	1	AH44380	08/16/24 16:00	08/16/24 17:00	1551	SM4500-H+ B	T-14
Specific Conductance (EC)	**580**	**umhos/cm**	**20**	1	AH44380	08/16/24 16:00	08/16/24 17:00	1551	SM2510B	
Total Dissolved Solids	**260**	**mg/L**	**10**	1	AH44515	08/21/24 11:30	09/04/24 12:54	1551	SM2540C	
Bicarbonate Alkalinity as CaCO3	**130**	**mg/L**	**5.0**	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
Total Alkalinity as CaCO3	**130**	**mg/L**	**5.0**	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
Anions by EPA Method 300.0										
Chloride	**74**	**mg/L**	**5.0**	10	AH44166	08/16/24 19:18	08/16/24 19:18	1551	EPA 300.0	
Nitrate as N	ND	mg/L	0.20	1	AH44166	08/16/24 19:02	08/16/24 19:02	1551	EPA 300.0	
Orthophosphate as P	ND	mg/L	0.10	1	AH44166	08/16/24 19:02	08/16/24 19:02	1551	EPA 300.0	
Sulfate as SO4	**17**	**mg/L**	**0.50**	1	AH44166	08/16/24 19:02	08/16/24 19:02	1551	EPA 300.0	
Anions by EPA Method 300.1										
Bromide	**0.25**	**mg/L**	**0.050**	1	AH44659	08/23/24 08:46	08/23/24 08:46	1551	EPA 300.1	
Surrogate: Dichloroacetate	*100 %*		*90-115*		*AH44659*	*08/23/24 08:46*	*08/23/24 08:46*	1551	*EPA 300.1*	
BURLINGAME-M (24H2705-04)			**Sample Type: Water**				**Sampled: 08/15/24 07:30**			
Metals by EPA 200 Series Methods										
Boron	ND	mg/L	0.20	1	AH44870	08/27/24 11:58	08/28/24 20:33	1551	EPA 200.7	
Calcium	**12**	**mg/L**	**1.0**	1	AH44870	08/27/24 11:58	08/28/24 20:33	1551	EPA 200.7	
Magnesium	**3.9**	**mg/L**	**1.0**	1	AH44870	08/27/24 11:58	08/28/24 20:33	1551	EPA 200.7	
Potassium	**1.6**	**mg/L**	**1.0**	1	AH44870	08/27/24 11:58	08/28/24 20:33	1551	EPA 200.7	
Sodium	**16**	**mg/L**	**1.0**	1	AH44870	08/27/24 11:58	08/28/24 20:33	1551	EPA 200.7	

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Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

San Bruno, City of - DW	Project Manager: Steve Salazar	
225 Huntington Avenue	Project: SF Intrusion Project	Reported:
San Bruno, CA 94066	Project Number: [none]	09/05/24 12:25

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
BURLINGAME-M (24H2705-04)			**Sample Type: Water**				**Sampled: 08/15/24 07:30**			
Conventional Chemistry Parameters by APHA/EPA Methods										
Bicarbonate	**98**	**mg/L**	**5.0**	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
pH	**7.14**	**pH Units**	**1.68**	1	AH44380	08/16/24 16:00	08/16/24 17:00	1551	SM4500-H+ B	T-14
Specific Conductance (EC)	**550**	**umhos/cm**	**20**	1	AH44380	08/16/24 16:00	08/16/24 17:00	1551	SM2510B	
Total Dissolved Solids	**340**	**mg/L**	**10**	1	AH44515	08/21/24 11:30	09/04/24 12:54	1551	SM2540C	
Bicarbonate Alkalinity as CaCO3	**80**	**mg/L**	**5.0**	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
Total Alkalinity as CaCO3	**80**	**mg/L**	**5.0**	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
Anions by EPA Method 300.0										
Chloride	**100**	**mg/L**	**5.0**	10	AH44166	08/16/24 20:24	08/16/24 20:24	1551	EPA 300.0	
Nitrate as N	ND	mg/L	0.20	1	AH44166	08/16/24 20:08	08/16/24 20:08	1551	EPA 300.0	
Orthophosphate as P	ND	mg/L	0.10	1	AH44166	08/16/24 20:08	08/16/24 20:08	1551	EPA 300.0	
Sulfate as SO4	**10**	**mg/L**	**0.50**	1	AH44166	08/16/24 20:08	08/16/24 20:08	1551	EPA 300.0	
Anions by EPA Method 300.1										
Bromide	**0.39**	**mg/L**	**0.050**	1	AH44659	08/23/24 09:34	08/23/24 09:34	1551	EPA 300.1	
Surrogate: Dichloroacetate	*99.6 %*		*90-115*		*AH44659*	*08/23/24 09:34*	*08/23/24 09:34*	1551	*EPA 300.1*	
BURLINGAME-S (24H2705-05)			**Sample Type: Water**				**Sampled: 08/15/24 07:45**			
Metals by EPA 200 Series Methods										
Boron	ND	mg/L	0.20	1	AH44870	08/27/24 11:58	08/28/24 20:46	1551	EPA 200.7	
Calcium	**98**	**mg/L**	**1.0**	1	AH44870	08/27/24 11:58	08/28/24 20:46	1551	EPA 200.7	
Magnesium	**83**	**mg/L**	**1.0**	1	AH44870	08/27/24 11:58	08/28/24 20:46	1551	EPA 200.7	
Potassium	**7.4**	**mg/L**	**1.0**	1	AH44870	08/27/24 11:58	08/28/24 20:46	1551	EPA 200.7	
Sodium	**600**	**mg/L**	**1.0**	1	AH44870	08/27/24 11:58	08/28/24 20:46	1551	EPA 200.7	

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San Bruno, City of - DW	Project Manager: Steve Salazar	
225 Huntington Avenue	Project: SF Intrusion Project	Reported:
San Bruno, CA 94066	Project Number: [none]	09/05/24 12:25

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
BURLINGAME-S (24H2705-05)			**Sample Type: Water**			**Sampled: 08/15/24 07:45**				
Conventional Chemistry Parameters by APHA/EPA Methods										
Bicarbonate	**490**	**mg/L**	**5.0**	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
pH	**7.31**	**pH Units**	**1.68**	1	AH44380	08/16/24 16:00	08/16/24 17:00	1551	SM4500-H+ B	T-14
Specific Conductance (EC)	**4100**	**umhos/cm**	**20**	1	AH44380	08/16/24 16:00	08/16/24 17:00	1551	SM2510B	
Total Dissolved Solids	**2300**	**mg/L**	**10**	1	AH44515	08/21/24 11:30	09/04/24 12:54	1551	SM2540C	
Bicarbonate Alkalinity as CaCO3	**400**	**mg/L**	**5.0**	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
Total Alkalinity as CaCO3	**400**	**mg/L**	**5.0**	1	AH44613	08/23/24 09:00	08/23/24 14:30	1551	SM2320B	
Anions by EPA Method 300.0										
Chloride	**1100**	**mg/L**	**50**	100	AH44166	08/19/24 18:02	08/19/24 18:02	1551	EPA 300.0	
Nitrate as N	ND	mg/L	1.0	5	AH44166	08/16/24 20:41	08/16/24 20:41	1551	EPA 300.0	R-01
Orthophosphate as P	ND	mg/L	0.50	5	AH44166	08/16/24 20:41	08/16/24 20:41	1551	EPA 300.0	R-01
Sulfate as SO4	**28**	**mg/L**	**2.5**	5	AH44166	08/16/24 20:41	08/16/24 20:41	1551	EPA 300.0	
Anions by EPA Method 300.1										
Bromide	**4.7**	**mg/L**	**1.0**	20	AH44659	08/23/24 10:23	08/23/24 10:23	1551	EPA 300.1	
Surrogate: Dichloroacetate	*102 %*		*90-115*		*AH44659*	*08/23/24 10:23*	*08/23/24 10:23*	1551	*EPA 300.1*	

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San Bruno, City of - DW	Project Manager: Steve Salazar	
225 Huntington Avenue	Project: SF Intrusion Project	Reported:
San Bruno, CA 94066	Project Number: [none]	09/05/24 12:25

Notes and Definitions

QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
T-14	Residual chlorine, dissolved oxygen, sulfite, and pH must be analyzed in the field to meet the EPA specified 15 minute hold time.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.

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Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

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Work Order

Chain of Custody Record

3.1°C

Lab No. 24H2705 Page____ of____

Name: City of San Bruno - Drinking Water	**Project No:** SF Intrusion Project
Mailing Address: 225 Huntington Avenue, San Bruno, CA 94066	**Project ID:**
Project Contact (Hardcopy or PDF to): Steve Salazar, ssalazar@sanbruno.ca.gov	PO#
Phone/Fax: ssalazar@sanbruno.ca.gov	**Bill to:**

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Print Name & Signature: J Galea

Sample Identification	Sample Collection Date	Sample Collection Time	Container: 40ml VOA	Container: Poly	Container: Amber	Container: Sleeve	Container:	Preservative: HCL	Preservative: HNO3	Preservative: H2SO4	Preservative: other	Preservative: None	Matrix: Water	Matrix: Soil	Analysis Request: B,Ca,Mg,Na,K,Bicarbonate	Analysis Request: Sulfate, Chloride, TDS, Alkalinity	Analysis Request: Nitrate as N, Orthophosphate as P	Analysis Request: pH, Conductance	Analysis Request: Bromide	Sample Notes
SFO-D	8/15/24	8:10		2								x	x		x	x	x	x	x	
SFO-S	8/15/24	8:20		2								x	x		x	x	x	x	x	
BURLINGAME -D	8/15/24	7:20		2								x	x		x	x	x	x	x	
BURLINGAME-M	8/15/24	7:30		2								x	x		x	x	x	x	x	
BURLINGAME-S	8/15/24	7:45		2								x	x		x	x	x	x	x	

TAT: 24 hr ○ 48 hr ○ *Lab Approval Required* 1 wk ○ 2 wk (standard) ○ — Lab Approval Required For Rush

		Date	Time
Relinquished by:	Received by:	8/15/24	1442
Relinquished by:	Received by:	8.15.24	1900
Relinquished by:	Received by:	8-15-24	2200
Relinquished by:	Received by:		
Relinquished by:	Received for Laboratory by:		

Appendix C
Westside Basin Groundwater Monitoring Manual of Procedures

Westside Basin Groundwater Monitoring Manual of Procedures

Final

March 2014

San Francisco Public Utilities Commission
Water Quality Engineering

Foreword

The San Francisco Public Utilities Commission (SFPUC) has authorized two new groundwater projects to help meet the SFPUC's regular and dry year water supply needs. The San Francisco Groundwater Supply Project (SFGW) will provide a total of up to 4 mgd from 6 wells in San Francisco as a regular water supply to supplement the existing surface water supply in San Francisco. The Regional Groundwater Storage and Recovery (GSR) Project will pump up to 7.2 mgd from 16 wells in northern San Mateo County as a regional dry year water supply.

Over the past 15 years, the SFPUC has worked with the Dal City, San Bruno and Cal Water to develop a network of monitoring and test wells and a sampling program to characterize groundwater quality and water levels in the Westside Basin. This program allows basin users to monitor the long-term condition of the basin; helps establish baseline conditions prior to implementation of the SFPUC's projects; and will inform future basin operations.

This document outlines the technical procedures for the SFPUC groundwater sampling programs in the Westside Basin. The Water Quality Division (WQD) will complete sampling and coordination with the Water Resources Division (WRD) according to standards and programmatic details described in this manual. WRD will continue to provide groundwater project management, data analysis, and reporting.

This formal program description applies to routine monitoring and sampling. Additional monitoring Standard Operating Procedures (SOPs) for environmental assessments and remediation, environmental discharges for future drinking wells, and other special studies will require alternative sampling procedures. The SFPUC Water Quality Division would like to acknowledge and thank the following individuals who have contributed to this project:

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1.1. Overview

The San Francisco Public Utilities Commission (SFPUC) has developed a groundwater monitoring program for the Westside Basin in support of its groundwater management goals and various planned groundwater projects. Monitoring of groundwater elevations and water quality is conducted to evaluate the potential for seawater intrusion, determine water quality and groundwater conditions in areas of potential groundwater development, define lake-aquifer interaction, assess general conditions in the Westside Basin resulting from historical and ongoing pumping, and establish baseline groundwater conditions prior to and during implementation of various groundwater projects.

This manual provides formal procedures and program descriptions of Westside Groundwater Basin monitoring for SFPUC staff involved with the sampling and field analytical measurement, as well as for the data analysis and reporting for the various groundwater programs. The manual does not, however, include any environmental assessment protocols that may affect groundwater quality. This information can be referenced from the latest Drinking Water Source Assessment Program documents for the proposed San Francisco Groundwater (SFGW) Project as well as the proposed Regional Groundwater Storage and Recovery (GSR) Project.

1.2. Background

The Westside Basin is composed of a series of aquifers with its north boundary located in Golden Gate Park in San Francisco stretching to its southern boundary in the City of Burlingame in San Mateo County. The City of Daly City, California Water Service Company (Cal Water), and the City of San Bruno currently operate a series of wells that distribute groundwater from the Westside Basin to their respective systems. These entities also receive water from the SFPUC's Regional Water System.

As with the agencies noted above, the SFPUC plans to supplement existing surface water supplies with groundwater. The SFGW project was developed to supply up to four million gallons per day (MGD) from the North Westside Basin from six production wells. These wells will be operated continuously in order to increase the long term availability of water in San Francisco. The GSR project was designed to supply up to 7.2 MGD of groundwater from the South Westside Basin during drought conditions.

In 2000, the San Mateo County Environmental Health Services Agency initiated the effort in sampling and testing groundwater conditions throughout the Westside Basin. In 2004, the program coordination was shifted to the SFPUC in cooperation with Daly City, San Bruno, and Cal Water (Partner Agencies). The SFPUC continues to lead the monitoring and sampling programs in the Westside Basin based on groundwater management goals and any supporting data needed for the SFGW and GSR projects.

Water quality and level sampling is currently handled by the Natural Resources Division (NRD) and an outside consulting firm with oversight and coordination by the Water Resources Division (WRD). The Water Quality Division will assume the role of sampling during fall of 2013. Water quality samples are processed through Millbrae Laboratories and select samples are sent to subcontracted laboratories for analysis.

All well locations are sampled from a network of existing monitoring and production wells located throughout the Westside Basin. A complete list of individual well sites and map locations can be found in Appendix F.

This document is not intended to cover monitoring procedures for any future potable water well facilities.

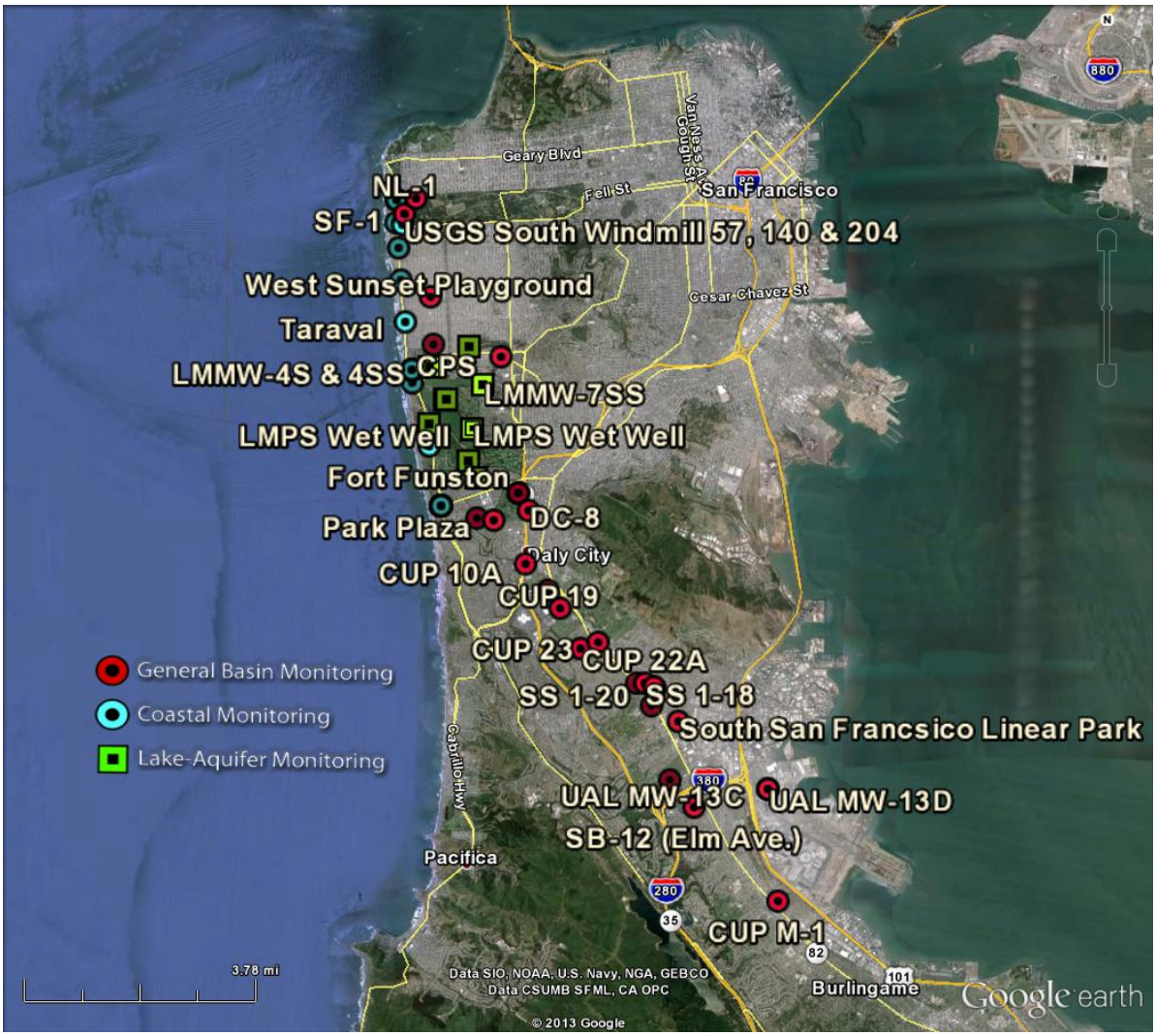

Figure 1: Westside Basin Groundwater Well Location Overview

1.3. Governing Regulations

Groundwater regulations and guidance materials for the procedures listed in this manual were researched from available literature, web search of regulatory sites and through contact with the local California Department of Public Health. Existing practices already in use by Water Resources & Natural Resources Divisions and various consultants were also considered.

No specific regulations were identified governing monitoring well sample techniques, operations and maintenance. Most of the available guidelines were found from U.S. EPA, Region 9 (Western Region) and Region 4 Science, Ecosystem Support Division (SESD, Southeast Region based in Atlanta). The latter SESD document was dated 2013 and referenced several other research and guidance recommendations found online.

Summaries of key regulations and guidelines governing monitoring well sampling, operations and maintenance, sorted by agency, are as follows:

United States Environmental Protection Agency (U.S. EPA), Region 9 and Region 4. No regulations were found, however several guidance documents were published on sampling and operating procedure, well and depth measurement, decontamination and field equipment cleaning.

California Department of Water Resources (CA DWR). Published regulations for monitoring well construction, disinfection and destruction/abandonment in DWR Bulletin 74 and Bulletin 91. No specific regulations or guidance were found for operations, sampling or monitoring of wells. DWR permits monitoring wells, and construction data must be submitted to DWR and assigned a state well number.

California Regional Water Quality Control Board. Governs discharges to state water bodies and reinjection of water into the aquifer. No specific regulations or guidance were found for operations, sampling or monitoring of wells.

California Department of Public Health. Oversees drinking water regulations and statutes in California Code of Regulations Title 22. Regulations cite aquifer protection and prevention of groundwater contamination. No specific regulations or guidance found for operations, or sampling or monitoring of wells.

San Francisco Department of Public Health. Provides local jurisdiction of wells and enforces City and County of San Francisco regulations. Regulations in Article 12B of the San Francisco Health Code include language regarding prohibiting contamination of groundwater and well/boring construction and destruction requirements. No specific regulations or guidance were found for operations, sampling or monitoring of wells.

Project Objective

The objective of this project is to create a Manual of Procedures (MOP) for the various groundwater sampling and monitoring programs for the Westside Basin. It includes details and descriptions for each monitoring program, locations for each well site, coordinates and direction data for each well, and standard operating procedures (SOPs) for water quality, water level sampling, and the various types of equipment used for groundwater sampling.

The basin monitoring programs are divided into five categories. The description for each category is as follows:

Table 2.1-1: Well Monitoring Categories and Objectives

Category	Objective
General Basin Monitoring	Hydrogeologic dynamics of groundwater conditions (levels)
Coastal Monitoring	Detection of seawater intrusion at coastal and bayside locations
Lake-Aquifer Monitoring	Characterization of lake-aquifer interactions around Lake Merced
Groundwater Supply	Assessment of groundwater conditions at proposed local and regional drinking water well locations
Miscellaneous Projects	Sampling support for all other groundwater-related projects (e.g. Contaminants of Emerging Concern (CEC) Study)

Well Locations and Descriptions

Wells used for the various sampling protocols for the Westside Basin are located locally throughout Golden Gate Park, Sunset District, and Lake Merced, as well as in Daly City, Colma, South San Francisco, Millbrae, Burlingame, and San Bruno. These wells include various monitoring wells and existing wells developed by SFPUC and Partner Agencies along the Peninsula. Appendix A lists each well sampling location along with its associated physical parameters that may aid in the sampling process. These parameters include:

Well type
Sample method
Geospatial coordinates
Location
Water level from previous sampling event
Case diameter
Total depth of casing, below top of casing (BTOC)
Measured total depth of casing, BTOC
Screen interval
Year Installed
Additional comments (well condition, special access or location information)

Table 3.1-1 below tabulates typical sampling and analyses for well sites in the Westside Basin. Additional constituents are added on an as-needed basis.

Table 3.1-1: Analyses and Associated Well Sites

Analyses	Well Names
Chloride, TDS, Specific Conductance	USGS South Windmill MW57, 140 Kirkham MW130, 255, 385, 435 Ortega MW125, 265, 400, 475 Taraval MW145, 240, 400, 530 Zoo MW275, 450, 565
Total Alkalinity, pH, Specific Conductance, TDS**,** Hardness, Calcium, Magnesium, Sodium, Potassium, Bicarbonate as CaCO3, Chloride, Sulfate, and Nitrate	NL-1 SF-1 NWM-3 SWM-3 West Sunset Playground LMMW-1S, 1D, 2S, 2D, 3S, 3D, 6D

Analyses	Well Names
Total Alkalinity, pH, Specific Conductance, TDS, Hardness, Calcium, Magnesium, Sodium, Potassium, Bicarbonate as CaCO3, Chloride, Sulfate, Nitrate, Total and Dissolved Iron and Manganese	CUP 3A MW180, 240, 450, 580 CUP 10A MW160, 250, 500 CUP 18A MW230, 425, 490 CUP 19 MW475, 600, 690 CUP 22A MW290, 440, 545 CUP 23 MW230, 440, 515, 600 CUP 31A MW145, 280, 480, 595 CUP 36-1 MW160, 270, 455, 585 CUP 44-1 MW190, 300, 460, 580 CUP MW-M1 Park Plaza MW195, 460, 620 SSFLP MW120, 220, 440, 520
Water Level	CPS MW190, 270 CUP 3A MW180, 240, 450, 580 CUP 10A MW160, 250, 500, 710 CUP 18A MW230, 425, 490, 595 CUP 19 MW180, 475, 600, 690 CUP 22A MW140, 290, 440, 545 CUP 23 MW230, 440, 515, 600 CUP 31A MW145, 280, 480, 595 CUP 36-1 MW160, 270, 455, 585 CUP 44-1 MW190, 300, 460, 580 CUP MW-M1 DC-1 (Westlake) DC-8 Fort Funston S, M, D LMMW 1S, 1D, 2S, 2D, 2SS, 3S, 3SS, 3D, 4S, 4SS, 5S, 5SS, 6D 7SS, 8SS, 9SS LMPS MW155, 270, 440, 575 LMPS Wet Well NL-1 NWM-3 Ortega MW125, 265, 400, 475 Park Plaza MW135, 190, 460, 620 Kirkham MW130, 255, 385, 435 SB-12 SF-1 SS 1-02, SS 1-18, SS 1-20 SSFLP MW120, 220, 440, 520 SWM-3 Taraval MW145, 240, 400, 530 Thornton Beach MW225, 360, 670 UAL MW13C, 13D USGS South Windmill 57, 140 West Sunset Playground Zoo MW275, 450, 565

Monitoring Schedule

A monitoring schedule has been implemented to accommodate the various sampling events throughout the calendar year. The program list includes Semi-Annual (water quality, level), Quarterly, Annual Production (Title 22 for various test/monitoring wells), Specific Sampling (repeat sampling for detected contaminants of concern), and Special Projects. Figure 2 shows the overall Basin monitoring schedule.

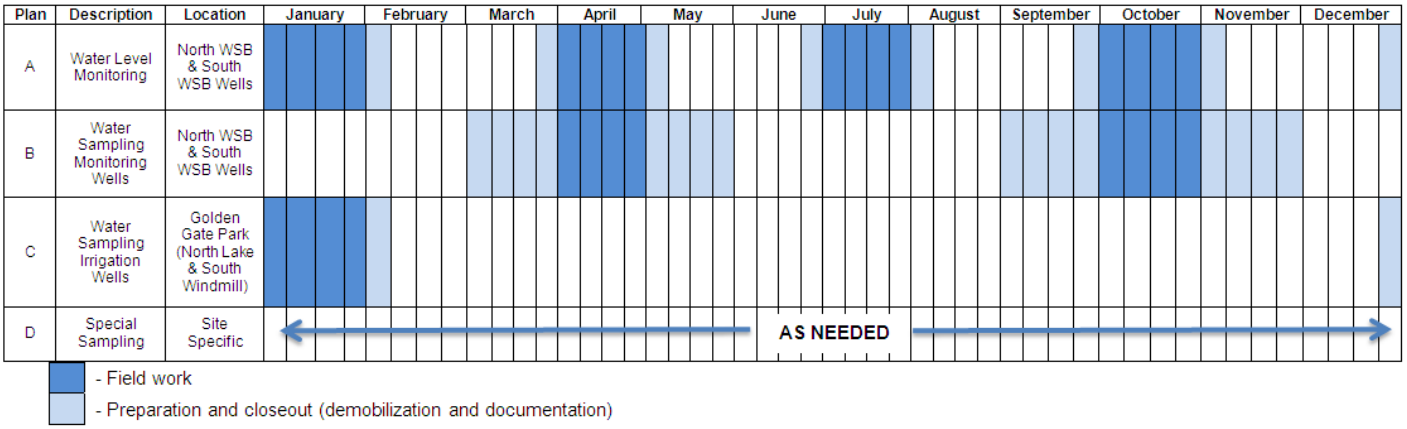

Figure 2: Groundwater Sampling and Monitoring Schedule

Staffing

WQD will maintain field sampling equipment, conduct field sampling, compile field sampling records, coordinate pick-up and drop-off of sample containers, and coordinate with WRD according to the standards and programmatic details described in this manual. WRD will provide project management, data analysis, and reporting.

A minimum of one engineer/scientist and one senior technician from WQD will be needed to conduct the field work for each sampling event. The engineer/ scientist will review & analyze data, reporting and program development. The scientist will manage equipment, scheduling, and preparation for sampling, and perform field work and analysis with assistance from the team.

Note: The field work component of the prior water sampling events required two full-time scientists from the Natural Resource Division (NRD) for two weeks for shallow well sampling and two full-time staff members from Baseline Environmental Consulting for two weeks for deep

well sampling. Coordination and program management by one scientist from WRD remains unchanged for the new program.

Major Equipment

Westside Groundwater Basin monitoring and sampling requires mechanical and electrical equipment to measure water level and well depths, and extract water from the well. These equipment are sized to fit within the 2" diameter well casing, and needs to be securely fastened so that the equipment can be retrieved after measurement and sampling.

A multi-parameter field analyzer is needed to monitor the water quality during the purging process, where specific parameters are measured for stability and consistency.

Equipment is bulky and heavy and requires a large vehicle for transport. Operations, maintenance and safety protocols are provided in Appendix G. Key equipment are listed and briefly discussed below:

Level Tape and Reel

Tape measures to 0.01 feet and is attached to a probe with an electrode sensor to detect water depth, with either a manual hand crank or automated reel. Westside Basin monitoring requires tape lengths of 500' to 750'. Tape should be decontaminated and cleaned between uses**.**

Well Pump

Groundwater can be extracted from wells by hand bailers or pump-tubing systems. Pumps allow the sampler to purge standing well water and obtain fresh groundwater from the source aquifer. For the Westside Basin monitoring, two pump systems are used.

Submersible Pump – (e.g. Grundflos RediFlo2 electrical submersible pump, Portable Purge and Sampling Pump System, 100ml/min to 9gpm, 5.5lbs. 5HP. 220V 5.5amps; 1.8 in diameter). This multistage centrifugal pump provides a higher flow to purge shallow wells (280' or less), and provide continuous flow for sampling. Pump placement should be within the top 3 to 5' of the water surface so that the casing can be purged of at least 3 well casing volumes of water. The pump and tubing/ hose reel assembly is operated with a VFD flow controller. A stainless steel wireline cable is attached to the pump to ensure retrieval from well.

Bladder Pump – (e.g. Geotech bladder pump). This pump, equipped with small diameter tubing (1/4 in and 3/8 in OD) is used to sample deeper wells (up to 1000' depth), and provides continuous low flow (at 100 – 500 ml/min) for sampling. The pump operates with pressurized CO_2 gas to expand and compress the bladder to suction lift the sample to the surface. Gas does not come into contact with the sample. The pump fits within 2" diameter monitoring wells. Pump placement should be at mid-screen depth so that formation water is extracted directly from the target aquifer. Purging of water inside the sample tubing is required (to at least 3 tubing volumes). Other equipment used in conjunction with the bladder pump include: flow controller,

CO_2 cylinder with pressure regulator and stainless steel cable to ensure retrieval from the well.

Other Pumps – Other types of pumps include bailers, peristaltic pumps, and hydra-sleeves. A peristaltic pump may be used to purge and sample shallow wells (to about 25 feet). Also, it is used when decontaminating the tubing and pump.

Tubing

Silicon Silicone Tubing (1/2" ID, 5/8" OD, 300'). Stain, corrosion and ozone/UV resistant tubing used to purge and sample wells. Tubing is odorless and inert, but susceptible to high temperatures and should be replaced if gummy. NSF61 certified. For use with submersible pump.

Polyethylene tubing (1/4" ID, 3/8" OD, 1000')

Teflon Tubing (Teflon® and Silastic® or Tygon®, PTFE Type 1, Grade E5, 150 psi, ¼" OD x0.040 wall and 3/8"OD x 0.062 wall/SS nuts and fittings or equivalent)

Generator

A gas generator is used to power the submersible pump. A Honda 2000i EU Inverter is available for use. This unit provides 2000 watts, 120V, 9.6 hours run time for 1 gal of gas. Weight: 47 lbs.

Multi-parameter Water Quality instrument

Field parameters such as pH, conductivity, DO, ORP, temperature and turbidity are measured and monitored when purging wells. Multi-parameter water quality meter used include: YSI 556, YSI Professional Plus, Horiba U-10, Hach MP-6, Hach 40-D, and Hach 2100P Turbidimeter. The multi-parameter meters are recommended for use with a flow-through cell unit.

Leveloader

Some of the wells are equipped with transducers/data loggers that continuously monitor water level and temperature. In particular, Solinst Leveloggers and Barologgers may be found suspended on a wire line cable or coaxial "direct read cables" inside the well. The table in Appendix A indicates the wells that currently have transducers and/or barologgers installed in them. Connecting the cable end of the data loggers to a Leveloader allows viewing of the data, downloading and/or programming in the field.

5.1 Groundwater Sampling Protocol

This section describes general and specific procedures, methods and considerations to be used and observed in the collection and documentation of groundwater well data and groundwater samples for field screening and laboratory analysis, during its quarterly, semi-annual and annual schedules.

5.2 Monitoring and Sampling Overview

The following list highlights key procedures when planning any groundwater monitoring and sampling activities:

Determine monitoring/sampling schedule as calendared

Determine and coordinate activity requirements (inter-agency services, e.g. access, sample bottles from the laboratory, and equipment)

Understand field safety procedures, undergo training as necessary, and make available field safety equipment and PPE

Know proper safety protocols when handling and operating field equipment and appurtenances

Review well construction data and sampling history including purge stabilization data such as pump rates/ flow control adjustments, and water level data.

Coordinate sampling event with Millbrae Laboratory. Providing type of sampling (e.g. regulatory Title 22, basin study), well and analyte lists, QA/QC samples (field, equipment and trip blanks, and duplicates needed), as well as transportation and receiving procedures and deadlines.

Complete, check, calibrate, test and decontaminate monitoring and sampling equipment

Understand and manage applicable purge method and water sampling practices

Apply proper sampling protocol and field analytical techniques

Know proper field activity logging, recording, chain-of-custody procedures, and reporting

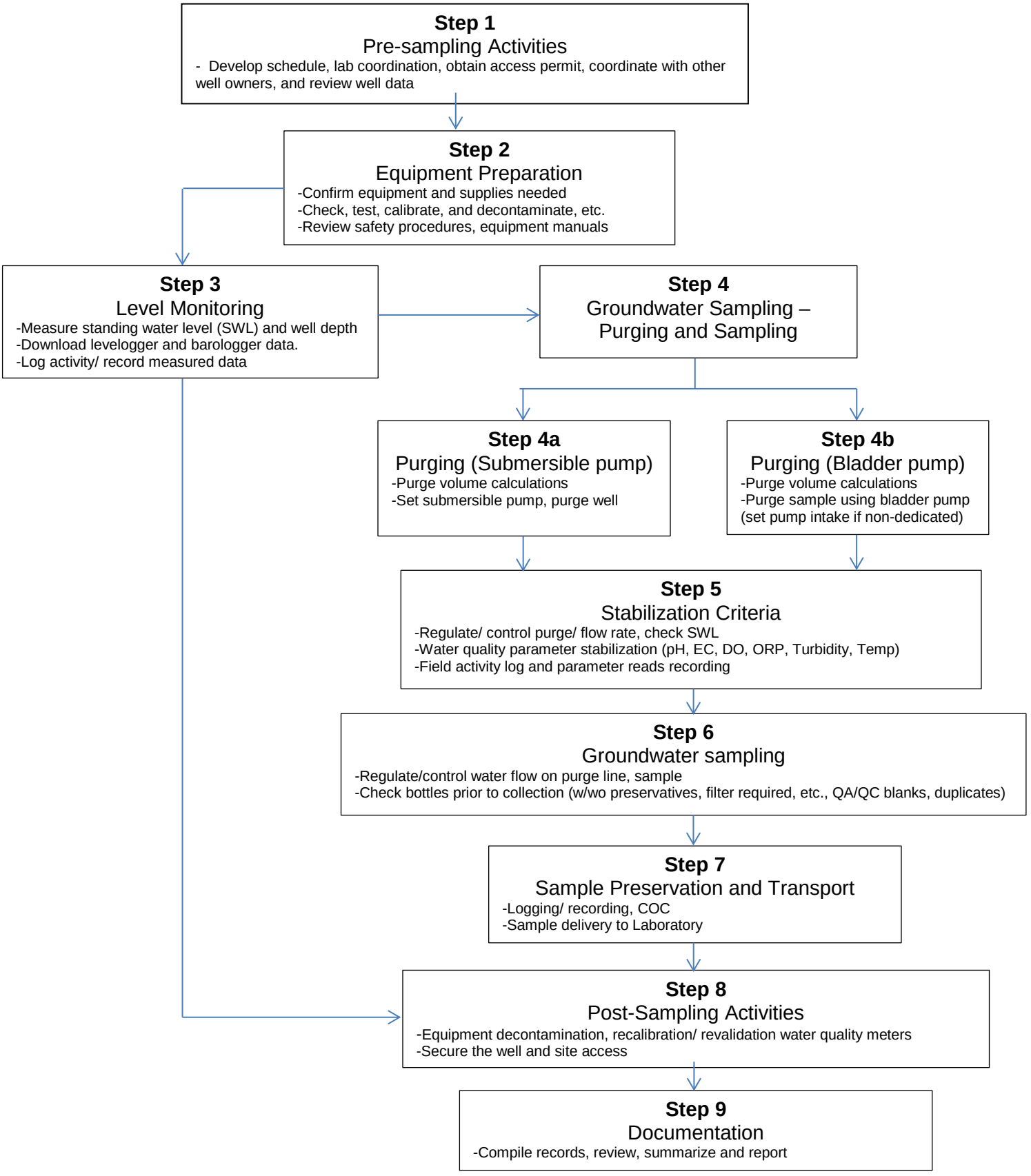

Figure 3: Groundwater Monitoring and Sampling Flow Chart

Table 5.2-1: Groundwater Monitoring and Sampling Plan Summary

Step(s)	Procedure	Materials/Equipment
Step 1 & 2: **Pre-sampling Activity/ Mobilization**	Determine monitoring/ sampling schedule. Review last well data (level, purging and sampling data), and safety protocols. Schedule field activities and lab requirements, coordinate well access/ permits Confirm schedule, goals, and analytes with groundwater project managers List and procure monitoring/sampling and safety equipment/ supplies (sample bottles, preservatives, filters, cooler, ice, etc.) Complete, clean, calibrate, test, check batteries, and decontaminate sampling equipment Site inspection	SOP manual, well sampling data from last monitoring event Equipment and supply list
Step 3: **Level Monitoring**	Open well cover and cap, note integrity. Clean and de-water if necessary Measure and record water level and well depth (reference point as marked/or north side of top of casing) Download data, if data loggers are present. Decontaminate submerged meter and probe Secure well if only doing level monitoring.	Set of keys, tools Water Level meter Levelogger Barologger Leveloader Field record sheets
Step 4 & 5: **Well Purging and Recording**	Install submersible pump or bladder pump to intake depth. Pump water to a minimum of 3x standing water volume. *If using bladder pump, purge a minimum of 3x line/tubing volumes as calculated. Regulate flow and monitor water quality parameters until stable: pH, EC, DO, ORP, Temperature, Turbidity. Refer to stabilization criteria Record water quality data and pump data	Submersible pump (lift range to 300 ft.) Generator Bladder pump (used with deeper wells and/or if dedicated tube is present) Water level meter Laptop
Step 6: **Sample Collection and Recording**	Regulate water flow, use sample purge line for sampling. Use filter only if required. Check sample bottles to use with type of analysis (w/ or w/o preservative), field blanks, standards. Water level meter re-validation/ calibration (last sampling site) Equipment decontamination (pump, hose and tubing in contact with groundwater). Complete COC	Field blanks (Travel & Equipment blank, if necessary) Sample labels Duplicate samples and bottles Field forms, COC
Step 7: **Sample Preservation, Storage and Transport**	Place samples in cooler and keep chilled during transport to the laboratory. Preservation includes cooling the sample to 4°C (40°F) during transport, shipping and storage. It is best to deliver the samples to the laboratory on the same day as sampling.	Cooler Ice packs and chemical preservatives (if necessary)
Step 8: **Post Sampling Activity**	WQ meter/ probe calibration/revalidation). Clean and pack equipment and supplies Brush/ clean inside casing protector (if necessary) and secure the well.	
Step 9: **Documentation**	Compile data and review results Summarize results for sampling/monitoring event and report	

Measurements of Groundwater Indicator Parameters

Indicator parameters are measured in the field to evaluate well flow stabilization during purging, provide information on general ground water quality, and to help evaluate well construction, or indicate when well maintenance is needed. Indicator parameters measured during well purging and sampling activities include specific conductance, pH, dissolved oxygen, oxidation-reduction potential, turbidity and temperature. These are reliably measured using multi-parameter water quality meters, or a combination of available meters and probes. Calibration procedures vary with each meter. Hence, it is important to follow the operating instructions supplied for each piece of equipment.

Calibration of instruments should be conducted prior to each day of monitoring/ sampling activity. Although calibration is preferred to be done in the field as close to the time of use, it may be conducted in a controlled environment that is in the laboratory or field office. It is always a good practice to re-calibrate and validate all instruments used after the last sampling location to compare with the initial calibration results while noting any significant deviations.

pH

Measurement of pH is conducted to determine the acid balance of the water on a scale of 1 (being strongly acid) to 14 (being strongly alkaline). It is ideally measured on site at the time of sampling.

Conductivity

Conductivity is a measure of the ability of water to conduct electricity. This is directly related to the concentration of dissolved ions; thus, it is a reasonable indication of the concentration of dissolved solids in the water. Like pH, conductivity is ideally measured in the field.

Temperature

Temperature is not necessarily an indicator of ground water chemical stabilization, and is generally not very sensitive in distinguishing between stagnant casing water and formation water. Nevertheless, temperature is important for data interpretation. Groundwater temperature is subject to rapid changes when collected for parameter measurement. Its usefulness is subject to question for the purpose of determining parameter stability. However, it is still advisable to record the sample temperature, along with the other groundwater chemistry parameters during well purging, as it may be needed to interpret other chemical parameter results in some situations.

Dissolved Oxygen (DO)

Dissolved oxygen (DO) has been noted to be a reliable indicator of the chemical stabilization of purge water under most ground water purging and sampling circumstances. DO is a good indicator when sampling for volatile organic compounds (VOCs), because erratic or elevated DO readings may reflect procedures that are causing excessive agitation and aeration of the ground water being drawn from the well and subsequent loss of VOCs. Artificially aerated ground water may also adversely affect dissolved metals analyses.

Turbidity

Turbidity is not an indicator of ground water chemical stabilization and does not distinguish between stagnant casing water and formation water. However, turbidity can be useful to measure during purging. Relatively high or erratic measurements may indicate improper sampling procedures, such as purging at an excessive rate that exceeds the well yield. Purging and sampling in a manner that produces low-turbidity water is particularly important when analyzing for total metals. When sampling for contaminants or parameters that may be biased by turbidity, stabilizing the turbidity readings at or below 10 Nephelometric Turbidity Units (NTUs) is recommended.

Oxidation Reduction Potential Meter

Oxidation-reduction potential (ORP), also referred to as redox potential or Eh, is a numerical index of the intensity of the oxidizing or reducing conditions within an aqueous solution such as groundwater. Oxidizing conditions are indicated by positive potentials and reducing conditions are indicated by negative potentials. ORP measurements are generally expressed in millivolts (mV).

Purge Stabilization Criteria

An adequate purge is achieved when the pH and specific conductance of the ground water have stabilized, and the turbidity has either stabilized or is below 10 NTUs. Although 10 NTUs is normally considered the minimum goal for most ground water sampling objectives, lower turbidity has been shown to be easily achievable in most situations and reasonable attempts should be made to achieve these lower levels.

Stabilization occurs when, for at least three consecutive measurements, the pH remains constant within 0.1 Standard Unit (SU) and specific conductance varies no more than approximately 5 percent. Other parameters, such as dissolved oxygen (DO), may also be used as a purge adequacy parameter. Normal goals for DO are 0.2 mg/L or 10% saturation, whichever is greater. DO measurements must be conducted using either a flow-through cell or an over-topping cell to minimize or reduce any oxygenation of the sample during measurement. Oxidation Reduction Potential (ORP) should not be used as a purge stabilization parameter but

may be measured during purging to obtain the measurement of record for ORP for the sampling event (see Table 3 – Stabilization Criteria).

If the chemical parameters have not stabilized according to the above criteria after three well volumes have been removed, purging should continue up to five well volumes. If the parameters have not stabilized within five volumes, it is at the discretion of the project leader whether or not to collect a sample or to continue purging. If, after five well volumes, pH and conductivity have stabilized and the turbidity is still decreasing and approaching an acceptable level, additional purging should be considered to obtain the best sample possible, with respect to turbidity. The conditions of sampling should be noted in the field log.

Table 5.4-1: Stabilization Criteria (Note: ORP is for reference only and not recommended for use to determine stabilization)

Parameter	Stabilization Criteria
pH	± 0.1 standard units
Specific Conductance	± 5%
Oxidation-Reduction Potential (ORP)	± 10 millivolts
Turbidity	± 10% (when > 10 NTUs); maintained at <10 NTUs, consider stabilized
Dissolved Oxygen (DO)	± 0.2 milligrams per liter or 10% saturation; If 3 DO values<0.5 mg/L, consider stabilized

Note: Stabilization criteria based on U.S. EPA Groundwater Sampling Operating Procedure **(**Science and Ecosystem Support Division (SESD), SESDPROC-301-R3 section 3.2.1.1.2, effective March 6, 2013).

Procedural Precautions

The following precautions should be considered when collecting groundwater samples:

Avoid contaminating samples, start sampling from least suspected contaminated site.
Always wear new clean sterile gloves per sample site, or as necessary.
Always wash/spray wash the water level/depth level measuring probe and/or line, and pumping equipment with a phosphate free detergent (ex. Alconox), rinse with distilled or de-ionized water, and wipe clean each time it is used in a well. This minimizes the opportunity for cross-contamination to occur during sampling.
Sample as soon as possible after purging
Always document field events (e.g. well access, monitoring, purging and sampling procedural deviations) in a field logbook or appropriate field form.
Chain-of-custody documents shall be filled out and remain with the samples until custody is relinquished.

Special Sampling Considerations

Volatile Organic Compounds (VOC) Analysis

Groundwater samples for VOC analysis are typically collected in 40 ml glass vials that are preserved with concentrated hydrochloric acid. Absolutely no bubbles or headspace should be present in the vial after it is capped.

After the cap is securely tightened, the vial should be inverted to see if any undetected bubbles are present. If a bubble or bubbles are present, the vial should be topped off with care so as not to flush any preservative out of the vial. If bubbles are still present after capping, a new vial should be obtained and the sample re-collected.

Groundwater producing large amount of fine bubbles will render the sample unacceptable. In this case, unpreserved vials should be used and arrangements must be made with the laboratory to meet the sample holding times.

Note: VOC analysis based on U.S. EPA Groundwater Sampling Operating Procedure (SESDPROC-301-R3 section 2.1, effective March 6, 2013).

Sample Handling and Preservation Requirements

All sample vessels that do not contain preservatives should be rinsed twice with sample water. Groundwater samples will typically be collected from the discharge line of a pump. Reduce the flow from either the pump discharge line during sample collection to minimize sample agitation.

During sample collection, make sure that the pump discharge line does not come in contact with the sample container.

Samples may be collected from either designated tubing or reused tubing after purging decontamination.

Place the sample into appropriate, labeled containers. Samples collected for VOC, acidity and alkalinity analysis must **not** have any headspace. All other sample containers can be filled with headspace.

Quality Control

To assure adequate QA/QC in the field, the sampling plan should be followed consistently. The laboratory typically provides the tools to verify if procedures are contaminating water samples, hence, a variety of samples and blanks need to be collected and analyzed. The following are typical checks:

Field Duplicate - Field duplicates are prepared by the laboratory to be collected at a frequency of one per sampling event (or one a day) or one (1) per 10 sampling locations. Field forms should note the wells from which field duplicates were collected.

Trip Blanks - Trip blanks are generally prepared by the laboratory and are included in each cooler containing VOC samples. At a minimum, at least one trip blank should accompany each sampling event. Trip blanks are never opened in the field.

Equipment Blanks - Whenever non-dedicated sampling equipment is used, equipment/field blanks should be collected. An equipment/field blank is obtained by passing analyte-free, distilled or deionized water through a cleaned sampling apparatus (pump, bailer, filtration gear, etc.) and collecting it in a clean container. This blank is used to assess the effectiveness of the decontamination procedures implemented between sampling locations.

Immediately after sampling, well data measurements shall be recorded in a field logbook or field monitoring/sampling form, and Chain-of-Custody documentation shall be completed.

Field Procedures

Accessing the Well

Monitoring wells are usually secured with a locking cover or bolted metal housing, either at ground level in well box or inside a 2- to 3- foot tall metal pipe housing. Inside the housing, the actual monitoring well (usually a 2- or 4-inch PVC pipe) is sealed with an expandable rubber plug that can be locked tight. The plug is sometimes sealed with a keyed padlock. Specific entities will need to be notified in order to access certain wells/properties and to schedule site work.

After completion of monitoring and sampling activities, all locking covers, locks, housing covers, and access gates should be secured safely to ensure protection of the well. Any maintenance or improvement needs should be recorded and reported to the supervisor and WRD.

Level readings

Groundwater level and well depth measurements are needed to determine the volume of water or drawdown in the well casing for proper purging. These measurements also provide indication of the well condition.

All groundwater level and well depth measurements are made relative to an established reference point on the well casing documented in the field records. This reference point is usually identified by a permanent marker for PVC wells, or by a notch at the top of casing. By convention, this marking is usually placed on the north side of the top of casing. If no mark is apparent, the person performing the measurements should take both water level and depth measurements from the north side of the top of casing and note this procedure in the field logbook

Water levels should be allowed to equilibrate prior to measurement after removing sealing caps. When the sounding probe comes in contact with the water, the circuit is closed and a meter light and/or audible buzzer attached to the spool will signal contact. At least two readings are made. Measurements should be made and recorded to the nearest 0.01 foot.

The well sounder, a weighted tape or electronic water level indicators can be used to determine water level and the total well depth. Measuring well depth is accomplished by lowering the tape or cable until the weighted end is felt resting on the bottom of the well. The operator may find it easier to allow the weight to touch bottom and then detect the ‘tug’ on the tape while lifting the weight off the well bottom. Well depths do not need to be measured when we are only checking water levels (i.e., not sampling).

As a cautionary note, when measuring well depths with the electronic water level indicators, the person performing the measurement should initially check if the water level probe has its circuit closing electrode referenced to the tape distance markings and specific for water level

sounding. In some instances, one must measure and add the length of the probe beneath the circuit closing electrodes to the depth measured to obtain the true depth

Note: Level reading procedures based on U.S. EPA Groundwater Level and Well Depth Measurement Operating Procedure (SESDPROC-105-R2, effective January 29, 2013).

Data Loggers

Solinst Leveloggers and Barologgers may be found suspended on a wire line cable or coaxial "direct read cables" inside the well. The table in Appendix A indicates the wells that currently have transducers and/or barologgers installed in them. Additionally, prior to each water level measurement event, WRD will provide a list of water level measurements from the previous event; the list will also include a notation of which wells have transducers and/or barologgers installed in them. Connecting the cable end of the data loggers to a Leveloader allows viewing of the data, downloading and/or programming in the field. It is important to record the lapsed time real-time data logging was disturbed for later data interpretation.

After removing the data logging unit from the well, the water level is allowed to equilibrate/stabilize and is then measured using a water level sounder. After water level and depth measurements, purging and groundwater sampling are conducted the Levelogger and Barologger are placed back in the well as previously set.

Decontamination

Equipment and tools shall be kept cleaned and decontaminated throughout the groundwater sampling activities. Equipment in direct contact with groundwater such as water level meter tapes, probes, tubings, pumps, and protective sheaths will be new or decontaminated using at least the following process: Phosphate free soap (Alconox, Liquinox or equivalent) and water wash, and DI water rinse. Soap and DI water bath and sprays may be used for the process. Decontamination wastes such as rinsates, liquid spray, soil, nitrile gloves and other debris should be fully contained and collected for proper waste management and disposal.

Note: Decontamination procedures based on U.S. EPA Field Equipment Cleaning and Decontamination (SESD, SESDPROC-205-R2, effective December 20, 2011).

Purging Requirements

Prior to sampling a monitoring well, the well must be purged to remove standing water from the well. Purging also serves to rinse and condition the sampling equipment with well water.

Purge Volume Determination and Purge Adequacy

Prior to initiating the purge, the amount of water standing in the well should be determined. To do this, the diameter of the well/ casing must be determined and the water level and total depth of the well should be measured and recorded. Measuring the depth of a well indicates the amount of siltation that has occurred. Natural siltation can block water from entering, which could lead to erroneous water level measurements and bias analytical results by increasing sample turbidity. Checking depth also provides a check on casing integrity.

Once this information is obtained, calculate the approximate volume of water in the well using the following equation:

$$V = 0.041 \times d^2 \times h$$

Where:

h = length of water column* (ft)
d = diameter of well (in)
V = volume of water (gal)

*The length of the water column (h) is the total depth of the well minus the depth to water. Multiply the calculated volume (V) by the desired number of well volumes to determine the purge volume, in gallons.

With respect to volume, an adequate purge is normally achieved when three to five well volumes have been removed. The field notes should reflect the single well volume calculation, and a reference to the appropriate multiplication of that volume, i.e., a minimum three well volumes, identified as a purge volume goal.

Equipment Considerations for Purging

Monitoring well purging is accomplished by using in-place plumbing and dedicated pumps or by using portable pumps/equipment when dedicated systems are not present. The equipment utilized consists of a variable speed submersible pump and dedicated/ in-place bladder pumps. Standard operating procedures for these 2 methods are discussed in the following sections. In addition, the manufacturer's manual on operation, calibration and maintenance manuals for all groundwater monitoring and sampling equipment used by our crew are included in Appendix G.

Well Purging and Sampling Standard Operating Procedure

Method 1 – Submersible Pump

When a submersible pump, e.g. Grundfos RediFlo2, is used for well purging/ sampling, the pump itself is lowered into the water column. The pump/hose assembly used in purging should be lowered into the top of the standing water column, but not deep into the column. This is done so that the purging will "pull" water from the formation into the screened area of the well and up through the casing so that the entire static volume can be removed. If the pump is placed deep into the water column, the water above the pump may not be removed, and the subsequent samples may not be representative of the aquifer conditions. The pump should be lowered no more than three to five feet into the water column. If the recovery rate of the well is faster than the pump rate and no observable drawdown occurs, the pump should be raised until the intake is within one foot of the top of the water column for the duration of purging. If the pump rate exceeds the recovery rate of the well, the pump will have to be lowered, as needed, to accommodate the drawdown.

Before purging begins, prepare the necessary field forms. Review past well data, including pump depth placement and Variable Flow Drive (VFD) settings. Complete the field form including the type of equipment being used. Lay plastic sheeting around the well to prevent contaminating the equipment.

1. Using a water level meter, measure and record the depth to static/standing water level and the depth of the well inside the casing.

2. Calculate and record the well water volume (multiply by 3 to get purge volume).

3. In the monitoring well, lower the submersible pump followed by a water-level sensor to the desired location of the pump intake. Lower the equipment slowly and smoothly to avoid stirring up particulates. Position the pump intake between 3 ft (~0.9 m) below static water surface and a minimum distance above the top of the open/screened interval. The water-level sensor should be a maximum of 1 ft (~0.3 m) below water surface.

4. Start the generator. Connect the pump terminals to the generator, then run the pump using the VFD keypad controls. Gradually increase and (or) adjust the pumping rate to limit drawdown to between 0.5 and 1.0 ft (~0.15 to ~0.3 m). Measure the water level as purging progresses. The pumping rate for a pump can be determined by collecting the discharge from the pump in a bucket of known volume and timing how long it takes to fill the bucket. The pumping rate is recorded in gallons per minute.

5. If the final intake position is above the screened or open interval, the final pumping rate should be about 500 to 1,000 milliliters per minute. Do not exceed 1 ft of drawdown.

6. If the final intake position is within the screened or open interval, the final pumping rate should be about 200 to 500 milliliters per minute. Do not exceed 0.5 ft of drawdown. After approximately one to two well volumes are removed, a flow-through cell may be hooked-up to the discharge tubing of the pump.

7. If the pump and intake position are fixed, as in a supply well, control the rate of flow for field measurements through flow-splitting valve(s). Do not move the pump during

purging or sample collection after the intake has been set at the final location.

8. Throughout purging, monitor and record field-measurement readings. Check for special instructions regarding field-measurement or field-analysis requirements. Consult criteria for establishing field-measurement stabilization.

9. Record field measurements at regular time intervals, about 3 to 5 minutes apart. For deep wells, the time intervals could be 15 minutes or longer. The time intervals selected will depend on the well characteristics and hydraulic properties of the aquifer, but the intervals must be sufficiently spaced to yield results representative of aquifer properties.

10. Purge a minimum of three well volumes or the purge volume dictated by study.

11. As the third or last well volume is purged, when the final field measurements are recorded, adjust the purge rate to the pumping rate to be used during sampling.

12. If criteria are being met--record at least five sequential measurements and report the median value.

13. If criteria are not being met, consult the study requirements and objectives. Extend the purge time if readings still do not stabilize; report the median value of the last five or more sequential measurements.

14. Contain purge water as required by Federal, State, or local regulations.

15. Complete field forms and report the data. Report the median of the recorded field-measurement readings as the final well volume is purged. Record anomalies, difficulties, and adjustments on the field form. Record the purge volume, rate of pumping, initial and final intake locations, and time and respective reading of sequential field measurements.

16. Prepare the sample bottles and collect groundwater samples using the same purge tubing. Place bottles in coolers and add ice/ ice packs in sealed bags.

17. Turn off pump, shut off generator. Slowly pull out the pump/hose assembly. Wipe dry the portion of the submerged hose and pump, and set up to decontaminate as per SOP (see section 5.8.4). Bag or wrap the pump with clean plastic prior to storage.

Note: Purging and sampling procedure based on U.S. EPA Groundwater Sampling Operating Procedure (SESDPROC-301-R3 section 3.3.1, effective March 6, 2013).

Method 2 - Bladder Pump

The following describes the purging and sampling procedures for the collection of ground-water samples when using a bladder pump. These procedures describe steps for both dedicated and non-dedicated systems. Some WSB monitoring wells have dedicated bladder pumps installed at set depths. Two surface tubing lines (air supply line and intake line) are required to hook up to the Micro Purge Basics Controller (Model MP-10 Controller).

Before purging begins, lay out plastic sheeting around the well to minimize the likelihood of contamination of sampling/purging equipment from the soil. Place monitoring, purging and sampling equipment on the sheeting.

1. Measure water level depth and well casing depth (to nearest 0.01 feet, and at least twice to confirm) relative to a reference measuring point on the well casing with an electronic water level indicator and record in logbook or ground-water sampling log.

2. Calculate the volume of the water inside the tubing that extends from the top of the monitoring well to the depth of the intake.

3. For a dedicated system – The pump (a QED P1101M bladder pump) has already been installed. Refer to the available monitoring well data from the last purge/ sampling and enter pertinent information into the new blank form (Baseline Environmental Consulting Groundwater Sampling Form). Note purge data, including pump intake depth, purge volume and (MP-10) controller settings

4. For a non-dedicated system - Place the pump and support equipment at the wellhead and slowly lower the pump and tubing down into the monitoring well until the location of the pump intake is set at a pre-determined location within the screen interval. The placement of the pump intake should be positioned with a calibrated sampling pump hose, sounded with a weighted-tape, or using a pre-measured hose. Measure the depth of the pump intake while lowering the pump into location. Record pump location in a field logbook or sampling log.

5. For both non-dedicated system and dedicated systems, the following procedure applies - Measure the water level and record information on the ground-water sampling log, leave water level indicator probe in the monitoring well.

6. For both non-dedicated and dedicated systems - Connect the discharge line from the pump to a flow-through cell. A “T” connection is recommended prior to the flow cell to allow for the collection of water for the turbidity measurements. The discharge line from the flow-through cell must be directed to a container to contain the purge water during the purging and sampling of the monitoring well.

7. Non-dedicated and dedicated system – Connect all tubing/ fittings to air supply and pump to controller. Set air supply pressure (max 125 psi), set cycle and discharge values, set air intake psi and cycle frequency in the MP-10 Controller. Turn on pump and throttle/ adjust refill and discharge flow rates. Start pumping the well at a low flow rate (0.2 to 0.5 liter per minute) and slowly increase the speed. Check water level. Maintain a steady flow rate while maintaining a drawdown of less than 0.33 feet. If drawdown is greater than 0.33 feet lower the flow rate. Measure the discharge rate of the pump with a graduated cylinder and a stop watch. Also, measure the water level and record both flow rate and water level on the groundwater sampling log.

8. Non-dedicated and dedicated system - Continue purging, monitor and record water level and pump rate every three to five minutes during purging. Pumping rates should be kept at minimal flow to ensure minimal drawdown in the monitoring well.

9. Non-dedicated and dedicated system - During the purging, a minimum of one tubing volume (including the volume of water in the pump and flow cell) must be purged prior to recording the water-quality indicator parameters. Then monitor and record the water-quality indicator parameters every three to five minutes.

10. Once the criteria have been successfully met indicating that the water quality indicator parameters have stabilized, then sample collection can take place. If two tubing volumes (including the volume of water in the pump and flow cell) have been removed during purging then sampling can proceed. All information should be noted in the field notebook and groundwater sampling form with an explanation if a different purging and sampling procedure was conducted.

11. Prepare the sample bottles and collect groundwater samples using the same purge tubing. Place bottles in coolers and add ice/ ice packs in sealed bags.

12. After sampling, recording and properly storing the samples, turn off pump and air supply, and disconnect fittings. In a non-dedicated system slowly pull out/ remove the pump and tubing assembly from the monitoring well. Decontaminate the pump and tubing.

13. For a dedicated system, disconnect all surface tubing that extends from the plate at the wellhead (or cap). Rinse, bag and seal for future use in the same well. Also, decontaminate the tubing if to be used in other wells.

Note: Purging and sampling procedure based on U.S. EPA Groundwater Sampling Operating Procedure (SESDPROC-301-R3 section 3.3.2, effective March 6, 2013).

Sampling for Laboratory Analysis

For monitoring wells, the same pump should be used for purging and sampling without stopping or removing the pump. Samples should be collected directly from the discharge port of the pump tubing prior to passing through the flow-through cell. Alternatively, disconnect the pump's tubing from the flow-through-cell so that the samples are collected from the pump's discharge tubing.

The sequence of the samples is immaterial unless filtered (dissolved) samples are collected and they must be collected last. However, the preferred order of sampling is metals first, followed by other inorganic analytes, extractable organic compounds and volatile organic compounds. All sample containers should be filled with minimal turbulence by allowing the ground water to flow from the tubing gently down the inside of the container.

Access to production wells can be more difficult. Ideally, sample water should be collected directly from the well. A sample valve or spigot will be located in the water pipeline at a point in the distribution system that comes before the water enters any treatment and as close to the well as possible. In some cases it may be possible to gain access to the well casing through an access pipe. If you are sampling directly from a production well by means of a portable submersible pump, considerable care must be taken to avoid tangling or wedging the sampling/ testing equipment between the production line, cables, and other equipment typically suspended in a well casing.

Documentation and Field Forms

As mentioned previously, all field documentation should be accurately recorded. Accurate records are critical for historical purposes, including regulatory and liability issues. Appendix E lists all field forms related to all groundwater sampling activities.

We have two (2) level monitoring and groundwater sampling forms adapted from previous works: (1) the SFPUC Groundwater Level Data Field Form which is used for level monitoring survey only, and (2) the Groundwater Sampling Form, which is includes more well data than the SFPUC Well Sampling Form used when purging/ sampling with the Grundfos submersible pump. This second form is adapted from Baseline Environmental Consulting for continuity. Because it is available in an electronic program, it is easier to determine when purge stabilization has been achieved. It is necessary to review and copy previous data for reference and guidance in setting flow controls for purging, sampling, and recording. Additional information or issues such as well/site condition and maintenance requirements should be recorded in the comments section.

A Field Daily Activity Log is kept on site and updated with all activities and events. The form is self-explanatory and is completed by filling in the box items such as changes from plans and procedures, important decisions made pertaining to water level monitoring, purging and

sampling, weather conditions, visitors on site, notes on well site number, sample number/ label collected, QA/QC field duplicates collected, personnel on site, etc.

Chain-of-Custody (COC) forms are provided with the sample bottles by the laboratory and accompany the samples collected at all times. The forms are updated as soon as samples have been collected, checked and stored, prior to moving to the next sampling site or finally transporting and submitting all samples to the laboratory.

References

U.S. EPA Groundwater Sampling Operating Procedure, Science and Ecosystem Studies Division (SESD), SESDPROC-301-R3, effective March 6, 2013.

U.S. EPA Groundwater Level and Well Depth Measurement Operating Procedure, SESD, SESDPROC-105-R2, effective January 29, 2013.

U.S. EPA Field Equipment Cleaning and Decontamination, SESD, SESDPROC-205-R2, effective December 20, 2011.

CS-179 Groundwater Monitoring Program: Agreement between the City and County of San Francisco and Baseline Environmental Consulting – Westside Basin Services to be provided by Contractor.

Field Procedures – Westside Basin Monitoring Project, SFPUC Natural Resources Division – Limnology

Groundwater Quality Monitoring – Sampling and Testing Protocol for Westside Basin, Luhdorf and Scalmanini Consulting Engineers, November 2006