

REQUEST FOR BIDDING INTERPRETATION (RFBI)

(Email no later than **July 16, 2026, 5:00 p.m.**)

RECEIVED

By Juvoni Sterling at 12:00 pm, Jul 14, 2026

To: **Juvoni Sterling, Project Director**
Department of Forestry and Fire Protection
Technical Services Section (TSS)
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TSS RFBI No.: _____ **23** _____
Requestor RFBI No.: **15** _____
Request Date: 7.14.26
From (Bidder): Gustav Keoni dba Precision
Construction Services

Contact: Ruby Cruz
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Email: precon@precision.services

All RFBI's received prior to deadline identified above, and responses from the State will be published on <http://www.caleprocure.ca.gov>. Click on "Start Search." In the event name field, enter the project number and click search. While viewing the Event Details, click on "View Event Package" to view RFBI responses.

Project No.: 3540SRAEUCO0182
Project Name: Parkfield Fire Station Facility Replacement
Location: 70331 Vineyard Canyon Road, Parkfield, California

Drawing Reference: CS102 Project Manual Reference: N/A

Question:

What is the current production capacity of the well? Are records of the most recent well yield and water quality testing available? If so, please provide copies.

Well capacity during testing was 0.4 gpm per foot for approximately 108 feet draw down. Well Installation report dated 6/25/24 has recent yield of 46.5 gpm and water quality testing. However, 46.5 gpm is not sustainable. See Specification 331113 for Wells for designed pump characteristics. Well Installation report attached
-C. Easton

Bidder's Authorized Signature: Ruby Cruz

[] Check here if additional pages attached

Page 1 of 1

POTABLE WATER SUPPLY WELL INSTALLATION SUMMARY REPORT



PREPARED FOR:

**DEPARTMENT OF FORESTRY AND FIRE PROTECTION
CAL FIRE TECHNICAL SERVICES SECTION
1300 U STREET, BOX 944246
SACRAMENTO, CALIFORNIA 94244-2460**



PREPARED BY:

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Project No. S2120-05-05
June 25, 2024

VIA ELECTRONIC MAIL

State of California
Department of Forestry and Fire Protection
CAL FIRE Technical Services Section
1300 U Street, Box 944246
Sacramento, California 94244-2460

Attention: Gregory Vincent, PE

Subject: POTABLE WATER SUPPLY WELL INSTALLATION SUMMARY REPORT
FUTURE CAL FIRE PARKFIELD FIRE STATION
PARKFIELD, MONTEREY COUNTY, CALIFORNIA

Mr. Vincent:

In accordance with Agreement Number 17496-C – Soil and Geotechnical Engineering *Retainer Services – Coastal California Region* (the Agreement) with the Department of General Services (DGS), Real Estate Services Division (RES), Project Management & Development Branch, Agreement No. 17496-C, Task Order No. 1, dated June 2, 2022, we have prepared this Potable Water Supply Well Installation Summary report for a new water supply well at the future CAL FIRE Parkfield Fire Station in Parkfield, Monterey County, California.

The enclosed report describes the methods and procedures employed for, and presents the results of, drilling, testing, and installation of the well.

We appreciate the opportunity to assist the Department of General Services and Department of Forestry and Fire Protection with this project. Please contact us if you have any questions concerning this report.

Sincerely,

GEOCON CONSULTANTS, INC.


Lauren E. Short, PG
Project Geologist




Dr. Andrew Kopania, PG, CHG
Senior Hydrogeologist


Jeremy J. Zorne, PE, GE
Senior Engineer/QA Review



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POTABLE WATER SUPPLY WELL INSTALLATION SUMMARY REPORT

1.0 INTRODUCTION

The California Department of Forestry and Fire Protection (CAL FIRE) is planning to construct a new fire station facility at 70331 Vineyard Canyon Road (the site) in the town of Parkfield in Monterey County, California, to replace the current fire station facility located approximately 4,000 feet east of the site at 70578 Parkfield-Coalinga Road (Figures 1 and 2). A water supply well for the new facility was required to be installed before construction could begin.

2.0 BACKGROUND

The site is approximately 30.2 acres of relatively flat-lying undeveloped land currently used for grazing. Vegetation at the site consists of grass, shrubs, and localized trees. The site is situated in an alluvial valley near the unincorporated community of Parkfield in southeastern Monterey County. Regionally, the site is located within the Coast Ranges geomorphic province which consists of mountains and valleys located between the central valley of California and the Pacific Ocean. The geologic structure of the Coast Ranges is controlled by faults and folds, with the principal fault being the San Andreas Fault Zone, which is located approximately 1,300 feet east of the site. The predominant bedrock in the area is the Jurassic age Franciscan Formation which is a mélange of folded and faulted blocks of volcanic and sedimentary rocks that were once an exotic terrane consisting of an oceanic trench complex that accreted to the North American tectonic plate.

Locally, the site is situated in a relatively deep alluvial valley formed from sediments derived from the adjacent Middle Mountain and the Cholame Hills. The site is underlain by interfingered alluvial and colluvial sediments from the Cholame Creek drainage and adjacent slopes to the north of the site. The San Andreas Fault trends northwest-southeast, approximately 1,300 feet east of the site. The site is depicted with respect to local geologic conditions on Figure 3. From a groundwater perspective, it is noteworthy that the current fire station and its supply well are located on the opposite side of the San Andreas Fault from the new facility and well.

3.0 PRE-FIELD ACTIVITIES

Prior to the advancement of the exploratory boring and well installation, we performed the following pre-field activities.

3.1 Permitting

We obtained a Water Well Construction Permit from Monterey County Environmental Health Bureau (MCEHB) on June 15, 2023. After completion of the exploratory boring, we submitted a seal interval approval request to MCEHB on August 7, 2023 and received approval from MCEHB on August 8, 2023. We obtained a permit for a Source Capacity Test from MCEHB on September 22, 2023. County-issued permits are included in Appendix A.

Per correspondence with the Central Coast Regional Water Quality Control Board regarding adopted order R3-20196-0089, filing a Notice of Intent permit for discharge of groundwater to land was not required.

3.2 Subcontractor Procurement

We retained Guardino Well Drilling (Guardino) of Morgan Hill, California, a California-licensed C-57 well drilling contractor, for drilling of the exploratory boring (pilot hole), installation of the well, and installation of temporary and permanent pumps. Guardino retained Stewart Well Logging of Woodland, California, for the downhole geophysical logging of the exploratory boring.

We retained the following California accredited analytical laboratories to perform water quality analyses:

- Torrent Laboratory (Torrent), Milpitas, California;
- Monterey County Health Department Consolidated Chemistry Laboratory (MCHDCCL), Salinas California;
- EMSL Analytical, Inc, San Leandro, California; and
- California Laboratory Services (CLS) of Rancho Cordova, California

CLS retained Clinical Laboratory of San Bernardino, San Bernardino, California and Davi Laboratories, Inc. of Hercules, California for additional analysis.

4.0 DRILLING AND LOGGING

The location of the proposed well was determined by CAL FIRE based on the footprint of the station and MCEHB's well setback requirements. We directed Guardino to drill an exploratory boring to assess stratigraphy and potential water bearing geologic units. Following are descriptions of drilling and logging of the exploratory boring.

4.1 Exploratory Boring Advancement

Between July 31 and August 1, 2023, Guardino advanced an 8.75-inch-diameter exploratory boring to a depth of approximately 300 feet using mud rotary drilling techniques. We terminated the exploratory boring when Guardino encountered increasingly difficult drilling conditions. After terminating drilling, Guardino directed Stewart Well Logging to proceed with the downhole geophysical survey.

In the boring, we encountered alluvium consisting of generally alternating layers of coarse-grained material (intermixed sands and gravels) and fine-grained material (clay). The coarse-grained material is the potential water bearing material. The fine-grained material limits groundwater flow. The geologic log is included in Appendix B.

4.2 Downhole Geophysical Logging

Stewart Well Logging conducted a downhole geophysical survey in the exploratory boring to further evaluate the geology for suitable water-bearing zones for testing and to determine well construction specifications. The geophysical survey consisted of the following electric log surveys:

- spontaneous potential/single point resistance;
- short/long normal resistivity; and
- natural gamma.

The geophysical logs are provided in Appendix B. Based on review of the downhole geophysical testing logs, our California Certified Hydrogeologist identified the following four water-bearing zones to evaluate with zone testing:

- Zone A – 280 to 300 feet;
- Zone B – 190 to 265 feet;
- Zone C – 150 to 180 feet; and
- Zone D – 110 to 140 feet.

5.0 GROUNDWATER ZONE TESTING

Following are descriptions of the testing of each of the four water-bearing zones identified by the exploratory boring log and the geophysical logging as described in Section 4.0. Groundwater zone testing was necessary to confirm a sustainable flow rate from each zone and the quality of water being extracted.

5.1 Zone Testing Procedures

Zone testing consisted of isolating each individual zone, airlifting groundwater until parameters had stabilized, measuring flow rate, and collecting a water sample for water quality analysis.

Guardino inserted a 10-foot-long, 4-inch-diameter slotted drilling pipe as a temporary well screen from the bottom of each zone. They then added 6x12 gravel as a filter pack around the well screen through the entire tested interval. Hydrated bentonite chips were used as a temporary seal approximately 3 feet above the screen. Guardino airlifted groundwater while we periodically measured water quality parameters including temperature, pH, electric conductivity, and total dissolved solids (TDS). When those parameters stabilized (United States Environmental Protection Agency [USEPA], 2017), we collected a groundwater sample. Stable parameters were defined as the range of the last three measurements of temperature to be within 3%, conductivity within 3%, pH within 0.1 standard units, TDS within 10 milligrams per liter (mg/l), and turbidity less than 10 Nephelometric Turbidity Units (NTU). Upon completion of the testing of Zone A, the slotted drill pipe was removed and the exploratory boring was

backfilled with hydrated bentonite chips to bottom of the Zone B. Testing procedures for Zone A were the same as Zone B and repeated for zones C and D. Measured water quality parameters were recorded on field records, copies of which are in Appendix C.

We estimated the groundwater yield of each zone by measuring the time to fill a 5-gallon bucket. Estimated yields ranged from 10 to 15 gallons a minute. We collected the water samples from the outlet of the drill pipe into laboratory-supplied containers, labeled them, and placed them in a cooler with ice for transport to the laboratories using standard chain of custody protocol.

5.2 Laboratory Analyses

We directed Torrent to analyze groundwater samples from each zone for the following:

- TDS by Standard Method (SM) 2540C;
- Total drinking water metals (aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, selenium, silver, thallium, vanadium, and zinc) by USEPA 200 series methods; and
- Standard minerals (calcium, magnesium, potassium, sodium, chloride, sulfate, hardness as CaCO_3) by American Public Health Association (APHA)/USEPA methods.

We directed MCHDCCL to analyze groundwater samples from each zone for nitrate as nitrogen (N) by USEPA Test Method 300.0.

Analysis was performed on an expedited one-business day turnaround time.

5.3 Laboratory Analysis Results

Laboratory analysis results for the water samples collected from each of the zones are presented in Table 1 and are summarized below. Laboratory reports and chain-of-custody (COC) documentation are included in Appendix E. We compared reported analyte concentrations to their respective State Water Resources Control Board, Division of Drinking water Primary and Secondary Maximum Contaminant Levels (MCLs). Primary MCLs are health, technology, and economics based. Secondary MCLs relate to aesthetic conditions such as taste and odor.

Based on subsequent laboratory testing results (e.g., see Sections 6.3 and 9.2), the elevated general parameter and metals concentrations for the zone testing, summarized below, were likely due to the presence of drilling mud and other suspended solids in the borehole, since well development had not yet occurred.

5.3.1 Zone A (280 to 300 feet)

TDS and chloride were measured in the water sample collected from Zone A at concentrations of 824 and 395 mg/l, respectively, which exceeds their respective Secondary MCLs of 500 and 250 mg/l. Aluminum, arsenic, and nickel were measured in the water sample collected from Zone A at concentrations of 31,000, 14.8, and 318 micrograms per liter (µg/l), respectively, which exceeds their respective Primary MCLs of 1,000, 10, and 100 µg/l. Iron and manganese were measured in the water sample collected from Zone A at concentrations of 49,000 and 1,200 µg/l, respectively, which exceeds their respective Secondary MCLs of 300 and 50 µg/l.

5.3.2 Zone B (190 to 265 feet)

TDS and chloride were measured in the water sample collected from Zone B at concentrations of 1,380 and 470 mg/l, respectively, which exceeds their respective Secondary MCLs of 500 and 250 mg/l. Aluminum was measured in the water sample collected from Zone B at a concentration of 130,000 µg/l, which exceeds its Primary MCL of 1,000 µg/l. Iron and manganese were measured in the water sample collected from Zone B at concentrations of 5,000 and 260 µg/l, respectively, which exceeds their respective Secondary MCLs of 300 and 50 µg/l.

5.3.3 Zone C (150 to 180 feet)

TDS and sulfate were measured in the water sample collected from Zone C at concentrations of 700 and 403 mg/l, respectively, which exceeds their respective Secondary MCLs of 500 and 250 mg/l. Aluminum, arsenic, barium, chromium, lead, and nickel were measured in the water sample collected from Zone C at concentrations of 130,000, 28.1, 1,890, 336, 50.7, and 1,240 µg/l, respectively, which exceeds their respective Primary MCLs of 1,000, 10, 1,000, 50, 15, and 100 µg/l. Iron and manganese were measured in the water sample collected from Zone C at concentrations of 190,000 and 4,300 µg/l, respectively, which exceeds their respective Secondary MCLs of 300 and 50 µg/l.

5.3.4 Zone D (110 to 140 feet)

TDS was measured in the water sample collected from Zone D at a concentration of 675 mg/l, which exceeds its Secondary MCL of 500 mg/l. Aluminum, arsenic, barium, chromium, lead, and nickel were measured in the water sample collected from Zone D at concentrations of 150,000, 33, 1,870, 414, 49.8, and 1,360 µg/l, respectively, which exceeds their respective Primary MCLs of 1,000, 10, 1,000, 50, 15, and 100 µg/l. Iron and manganese were measured in the water sample collected from Zone D at concentrations of 210,000 and 4,800 µg/l, respectively, which exceeds their respective Secondary MCLs of 300 and 50 µg/l.

6.0 WELL INSTALLATION AND WATER QUALITY TESTING

6.1 Well Installation

On August 8, 2023, Guardino installed well PPW-1 by reaming the exploratory boring from a diameter of 8.75 to 12 inches to a total depth of 120 feet for construction of the sanitary seal. Guardino subsequently reamed the remaining depth of the exploratory boring to a diameter of 10 inches. Guardino installed 5.563-inch outer diameter PVC SDR-17 casing, with screened intervals of 200 to 260 (Zone B) and 280 to 300 feet (Zone A). Following installation of the casing, Guardino installed the filter pack composed of 6x12 gravel to 190 feet deep. On August 9, 2023, Guardino installed the transitional seal of bentonite chips 140 feet below ground surface. Following the installation of the transitional seal, Guardino installed the sanitary seal of 10.3 sack sand slurry concrete using a tremie pipe installed to 140 feet. Guardino then finished the well with a 5-foot by 5-foot by 24-inch-thick concrete pedestal pad. Well construction details are shown on the boring log and the WCR included in Appendix A.

On August 10, 2023, Guardino developed the well by airlifting for approximately two hours to remove fine-grained sediment from the filter pack and well.

Further details of the well construction including the State of California *Well Completion Report* (WCR2024-001993), mill specifications for the PVC casing, and filter pack details are included in Appendix B. Well Development logs are also included in Appendix B.

6.2 Water Quality Sample Collection and Analysis

Well development continued until the discharged groundwater had a measured turbidity of less than 50 NTU for three consecutive readings using a field meter. After development, we collected water samples in laboratory provided containers. The water samples were placed in coolers with ice for transport to the following laboratories under COC protocols for the following analysis:

Torrent Laboratory completed the following analysis:

- Total alkalinity, carbonate, bicarbonate, and hydroxide by SM 2320 B;
- Ferric and ferrous iron by USEPA 6010B and Hach 8146;
- Perchlorate by USEPA 314;
- Cyanide by SM 4500;
- Anions and Cations (bromide, calcium, magnesium, potassium, sodium, chloride, sulfate, fluoride,) by APHA/USEPA methods; and
- Total and dissolved Drinking Water Metals by USEPA 200 series methods.

MCHDCCL completed the following analysis:

- Conductivity by SM 2510B;
- Nitrate as N by USEPA 300;
- Orthophosphate by SM 4500;
- pH by SM 4500;
- TDS by SM2540C;
- Total Suspended Solids by SM 2540D; and
- Turbidity by SM 2130.

6.3 Laboratory Analytical Results

Laboratory analytical test results are presented in Table 2. As shown in Table 2, all reported analyte concentrations, except chloride, TDS, total and dissolved manganese, and dissolved aluminum were less than their respective secondary MCLs. All analyte concentrations, except total aluminum, were less than their respective primary MCLs.

Laboratory reports and chain of custody documentation are included in Appendix E.

7.0 TEMPORARY PUMP INSTALLATION AND TESTING

To assist in evaluating the potential long-term production capability (yield) of the well, we conducted a 24-hour constant rate pumping test. The test results were then used to estimate parameters such as the specific capacity and sustained yield for the well.

7.1 24-hour Constant Rate Pumping Test Procedures

Guardino installed a temporary pump to a depth of 270 feet with a totalizer, sounding tube, and discharge pipe on October 3, 2023. We installed a Solinst LevelLogger at a depth of approximately 265 feet inside the sounding tube. The LevelLogger is a pressure transducer with a datalogger that is used to record groundwater levels within a well.

Under observation of a representative of the MCEHB, we started the 24-hour pump test at a rate of approximate 50 gallons per minute the afternoon of October 3, 2023. We completed the test 24 hours later on October 4, 2023. We measured and recorded water quality parameters including pH, temperature, conductivity, and TDS approximately hourly. Manual water level measurements were also periodically taken using a conductivity-based water level meter when possible. Approximately 69,292 gallons of water were pumped during the test. Discussion of the pump test results is provided in the following section.

7.2 Aquifer Properties and Sustained Yield

The median pumping rate for the duration of the pump test was approximately 46.5 gallons per minute (gpm). Total drawdown as a result of 24-hours of pumping was approximately 108 feet.

The specific capacity of a well is defined as the pumping rate in gpm divided by the drawdown in feet (Domenico and Schwartz, 1990). The specific capacity of this well is approximately 0.4 gpm per foot. The specific capacity is an indicator of the productivity of a well and can be used to estimate aquifer properties such as transmissivity and hydraulic conductivity (Thomasson, et al., 1960). A specific capacity of 0.4 gpm per foot is equivalent to a transmissivity of approximately 100 feet squared per day (ft²/day) or 1.1 square centimeters per second (cm²/sec). Assuming a saturated thickness of 145 feet in the well, the hydraulic conductivity would be approximately 0.69 feet per day (ft/day) or 2.50×10^{-4} centimeters per second (cm/sec). The saturated thickness was calculated based on the interval of each zone identified in Section 4.2 that is within the gravel pack in the well.

We used the computer software program AQTESOLV (Duffield, 2007) to calculate transmissivity and hydraulic conductivity based on drawdown measurements and pump rates. We used the Neuman, 1974 solution for curve matching which is a derived analytical solution for a pumping well fully penetrating an unconfined aquifer (Neuman, 1974). We performed the automatic curve matching three times to estimate transmissivity and hydraulic conductivity. Transmissivity was estimated to be 0.51 cm²/sec. Hydraulic conductivity was calculated to be 1.12×10^{-4} cm/sec.

The estimated transmissivity and hydraulic conductivity values calculated using the referenced empirical correlation with specific capacity are about twice the values identified using the more rigorous Neuman (1974) method in AQTESOLV (Duffield, 2007). Given the appreciable difference in the two estimation methods, the similarity in the values is very good and provides an additional level of confidence in the results. The hydraulic conductivity values identified using these two methods are associated with geologic materials such as fine sand to silt sand (Fetter, 2000; Freeze and Cherry, 1979). As described in Section 4.1, soil conditions in the screened zones ranged from poorly graded sand with gravel to poorly graded gravel with sand. The sand is within the pore spaces between the gravels, which decreases the porosity of the course-grained units compared to gravel without any sand or silt.

Time-series plots of depth to water during and after the test, along with pump rates, field sheets, and AQTESOLV curve matching results are in Appendix D. On the time series plots, there are additional drawdown periods apparent in the hydrograph that are interpreted to be the result of pumping of other wells in the vicinity during the 24-hour aquifer pumping test. Review of the AQTESOLV curve matching plots indicates that these extraneous pumping events do not affect the overall interpretation of the pumping test data because the other events were of relatively short duration and had a small effect on the water level in PPW-1 compared to the 24-hour test.

The transmissivity and hydraulic conductivity values for the new well are generally considered to be low for wells installed in alluvial aquifers. As a result, long-term sustainable yield from well PPW-1 is not anticipated to be greater than the median rate that was achieved during the 24-hour aquifer pumping test, which was 46.5 gpm.

8.0 EXISTING FIRE STATION WELL WATER QUALITY TESTING

To assist with decisions regarding water quality, we collected a water sample from the existing fire station on August 10, 2023. The results were compared to the results from the sample collected after well development of PPW-1 was completed. Well construction details of the existing well were unknown at the time of preparation of this report.

8.1 Sample collection

We discharged water from one of the outside hoses for approximately 10 minutes onto the lawn. We filled the laboratory provided containers and then placed the containers in a cooler with ice to be transported to the laboratories under COC protocol.

8.2 Laboratory Analysis

We submitted the water sample to Torrent to complete the following analysis:

- Standard minerals (calcium, magnesium, potassium, sodium, chloride, sulfate, hardness as CaCO_3) by APHA/USEPA methods;
- Bromide and fluoride by USEPA 200 and 300 series methods; and
- Total drinking water metals (aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, selenium, silver, thallium, vanadium, and zinc) by USEPA 200 series methods.

We also submitted the water sample to MCHDCCL for the following analysis:

- TDS by SM 2540C; and
- Orthophosphate as P by SM 4500;

8.3 Laboratory Results

Laboratory analysis results for the water sample collected from the existing fire station well are shown on Table 3 and are summarized below. Laboratory reports and COC documentation are in Appendix F. We compared reported analyte concentrations to their respective State Water Resources Control Board, Division of Drinking water Primary and Secondary MCLs. Primary MCLs are health, technology, and economics based. Secondary MCLs relate to aesthetic factors such as taste and odor.

TDS was measured in the water sample from the existing well at a concentration of 985 mg/l, which exceeds its Secondary MCL of 500 mg/l. Total and dissolved boron were each measured in the water sample at a concentration of 2,500 µg/l, which exceeds California's Notification Level of 1,000 µg/l.

8.4 Comparison

The water quality of the existing well is similar to that from PPW-1 for most analytes (Table 3). However, chloride, hardness, magnesium, TDS, barium, and manganese concentrations in the sample from PPW-1 are appreciably greater than those in the water sample from the existing well. In contrast, the boron and zinc concentrations in PPW-1 are appreciably less than those in the existing well.

Section 11.2 provides additional discussion and recommendations related to water quality.

9.0 FINAL WATER QUALITY SAMPLING

We collected a final water quality sample from the new well once the pump test was completed. Details of sampling are provided below.

9.1 Sampling Procedure and Analysis

We collected a water sample on October 5, 2023, approximately 19 hours after the completion of the 24-hour pumping test. Prior to sampling, we purged the well for approximately 25 minutes. We only recorded one measurement of water quality parameters including pH, temperature conductivity, turbidity, and TDS due to the high pumping rate. We purged approximately 1,550 gallons of water which is approximately 7.9 well casing volumes. We collected water samples from the outlet hose into laboratory-supplied containers, labeled and placed them in coolers with ice for transport to the following laboratories for the following analysis:

Torrent completed the following analysis:

- Standard minerals (bromide, calcium, magnesium, potassium, sodium, chloride, sulfate, fluoride, total alkalinity, carbonate, bicarbonate, hydroxide alkalinity and hardness as CaCO₃) by APHA/USEPA methods;
- Total and dissolved drinking water metals (aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, silver, thallium, vanadium, and zinc) by USEPA 200 series methods;
- Hexavalent chromium by USEPA Test Method 218.6;
- Cyanide by SM 4500;
- Silica by USEPA Test Method 200.7;
- Ferric and Ferrous Iron by USEPA Test Method 6010B and Hach 8146;
- Volatile organic compounds (VOC) by USEPA Test Method 542.2;

- Semi-volatile organic compounds (SVOC) by USEPA Test Method 8270C;
- Pesticides by USEPA Test Method 8081A;
- Perchlorate by USEPA Test Method E314.0;
- Chlorophenoxyacid Herbicides by USEPA Test Method 8321B; and
- Turbidity by USEPA Test Method E180.1.

MCHDCCL completed the following analysis:

- Total and fecal coliform by SM 9223B;
- Conductivity by SM 2510;
- Nitrate as N by USEPA Test Method 300; and
- Orthophosphate as P and pH by SM 4500.

CLS completed the following analysis:

- MBAS by SM 5540;
- Thiobencarb by USEPA 507; and
- Threshold odor number by USEPA method 140.1

EMSL Analytical, Inc. completed determination of asbestos (chrysotile) structure >10 micrometers in Drinking water by USEPA Test Method 100.2. Clinical Laboratory of San Bernardino completed analysis for uranium by USEPA Test Method 200.8. Davi Laboratories, Inc. completed analysis gross alpha and gross beta by USEPA Test Method 900.0.

Upon completion of sample collection, Guardino removed the temporary pump, sounding tube, and accessory pipes and hoses and chlorinated the well.

9.2 Water Quality Results

As shown on Table 2, all reported analyte concentrations, except chloride, TDS, and manganese were below their respective secondary MCLs. All analyte concentrations, except gross beta and total coliform were below their respective primary MCLs.

Laboratory reports and chain of custody documentation are in Appendix C.

10.0 POTENTIAL HYDRAULIC INFLUENCE BETWEEN THE NEW WELL AND NEARBY WELLS

Our scope of work included temporarily removing the pump and sounding tube from the existing well on site to monitor groundwater levels during the 24-hour pump test. Guardino discovered that the pump assembly included a hand pump in addition to the submersible pump. This combination is common in small ranch wells. The hand pump in the well serves as a backup if the submersible pump stops working. The challenge with hand pumped wells is they are very difficult to take apart and sourcing parts when repairs are needed. Geocon and Guardino did not feel comfortable with the liability of taking the hand pump apart. We informed MCEHB about the presence of the hand pump and they approved the decision not to monitor the on-site well.

There are two domestic wells within a 1,000-foot radius of PPW-1 north of Vineyard Canyon Road (Figure 2). We were unable to access the property of domestic Well #1 for a wellhead inspection. We were able to inspect the wellhead of domestic Well #2 as it is adjacent to the road. We observed the wellhead to be in poor condition and, therefore, we did not remove the pump assembly to avoid potential damage.

To compensate for lack of access to the existing wells and to offsite wells, we installed a water level transducer with a data logger in PPW-1 after collection of the final water sample. We recorded water level measurements at one-hour intervals from October 6, 2023 through December 26, 2023 (81 days). As shown on post-pump test graph results in Appendix C, water levels remained stable through the monitoring period. However, as discussed in Section 7.2, small, short duration effects attributable to offsite wells were observed in the data collected during the 24-hour aquifer pumping test on October 3 to October 4, 2023. Due to the short duration and small magnitude, any such offsite pumping effects that may have occurred from October 6 through December 26, 2023, may not have been detected due to the one-hour recording interval. In any case, we conclude that any potential influence between the wells is negligible.

11.0 CONCLUSIONS AND RECOMMENDATIONS

In August and October of 2023, we coordinated and oversaw the drilling of an exploratory boring, installation of a new water supply well, and the performance of a constant rate pumping test. The data and analyses obtained during this process, and our recommendations, are summarized below.

11.1 Well Yield and Future Pump Installation

The estimated well yield based on the results of the 24-hour constant rate pumping tests is 46.5 gpm for PPW-1. The well yield exceeds CAL FIRE's water demand of 20 gpm. The pump to be installed in PPW-1 in the future should be sized based on the water demand of 20 gpm and the estimated yield of 46.5 gpm.

11.2 Water Quality

Since PPW-1 is not intended to serve a public water system, the only water quality parameters that must meet their primary MCLs are total and fecal coliform and nitrate. The total coliform concentration of 3 MPN/100ml in the water quality sample exceeds the primary MCL of 2.2 MPN/100ml. Nitrate was not detected in the final water sample.

The gross beta radioactivity concentration in the groundwater of 7.39 picocuries per liter (pCi/L) exceeds the primary MCL of 4 pCi/L. Gross beta is naturally occurring due to the decay of radioactive elements found in rocks. As this station is staffed between 6 and 8 months out of the year with rotating crews, the health risk is considered low.

The concentrations of chloride, TDS, and total and dissolved manganese exceeded their respective secondary MCLs. Secondary MCLs relate to aesthetic qualities such as taste and odor, or staining. Users may be able to taste the saltiness from the water sourced from PPW-1. The level of discomfort is dependent on the individual user's tolerance. To encourage adequate hydration of station staff, we recommend installing an under-the-sink reverse osmosis treatment system. These systems are sold at any major hardware store and are designed to be easily installed and maintained. The under-the-sink systems only need to be installed at sinks where water is used for drinking or cooking. Installing them in bathrooms is unnecessary. At the existing Parkfield Fire Station, there is an under-the-sink reverse osmosis treatment system installed in the kitchen. The station staff reported to Geocon that the under-the-sink system mitigates the salty taste of the water. Based on the water quality results from the well at the existing fire station, we conclude that installation of an under-the-sink reverse osmosis treatment system will be desirable for use with PPW-1.

Silica deposits may form on the new station's toilets, sinks, showers, glassware, piping, equipment, and water tanks. These deposits look similar to hard water deposits and do not pose a danger to human health. There are currently no cost-effective treatment options to decrease silica concentrations. Therefore, we recommend frequent cleaning of fixtures to avoid damage.

11.3 Well Chlorination

The well and temporary pump were chlorinated after development and during the temporary pump installation. The chlorine was pumped out and/or dissipated by the end of the pump test. Chlorine was placed again after removal of the temporary pump. As noted above, total coliform was present in the final water samples; however, we attribute the concentrations to cross-contamination for the discharge pipe. Prior to connection to the future fire station, PPW-1 should be chlorinated again by a California-licensed C-57 water well contractor or a C-61/D21 machinery and pump contractor or a water system contractor. Guardino recommends chlorination, then pump to waste for 8 hours, and then dechlorinate on an annual basis. Under no circumstances should chlorine be placed in the well via the sounding tube (see Section 11.4). A benefit of routine chlorination is to keep other bacteria from growing inside the well screen and filter pack. These other bacteria are usually not a danger to human health but may clog the filter pack and screen causing the well yield to drop.

11.4 Pump Installation

Based on results from the 24-hour pump test, we recommend a 1.5-horsepower, 208-volt pump rated for 25 gpm to be installed. As discussed in Section 7.2, the median pump rate of 46.5 gallons per minute is not sustainable. To comply with groundwater management regulations and ease of future well maintenance activities, we recommend installing a 1-inch PVC sounding tube from top of the casing to the top of the pump to measure depth to water without interfering with the pump assembly. We recommend installing totalizer meters to record how many gallons of water are pumped from the well. Sudden drops in well yield could indicate a malfunction in the pump or pump assembly or plugging of the well screen or filter pack (see Section 11.5).

11.5 Well Maintenance

We recommend using water from the well as a source of water during construction (potable and non-potable use) and filling CAL FIRE's water transport equipment (such as fire trucks). Semi-regular pumping of the well will keep the filter pack and pump assembly free of mineralization buildup and therefore minimize the amount of flushing required prior to domestic hookup.

During construction, contractors must take care not to damage the above-ground well head casing or the well pad. If damage were to occur, inspection and repairs are required to be completed by a California-licensed C-57 water well contractor under supervision of MCEHB.

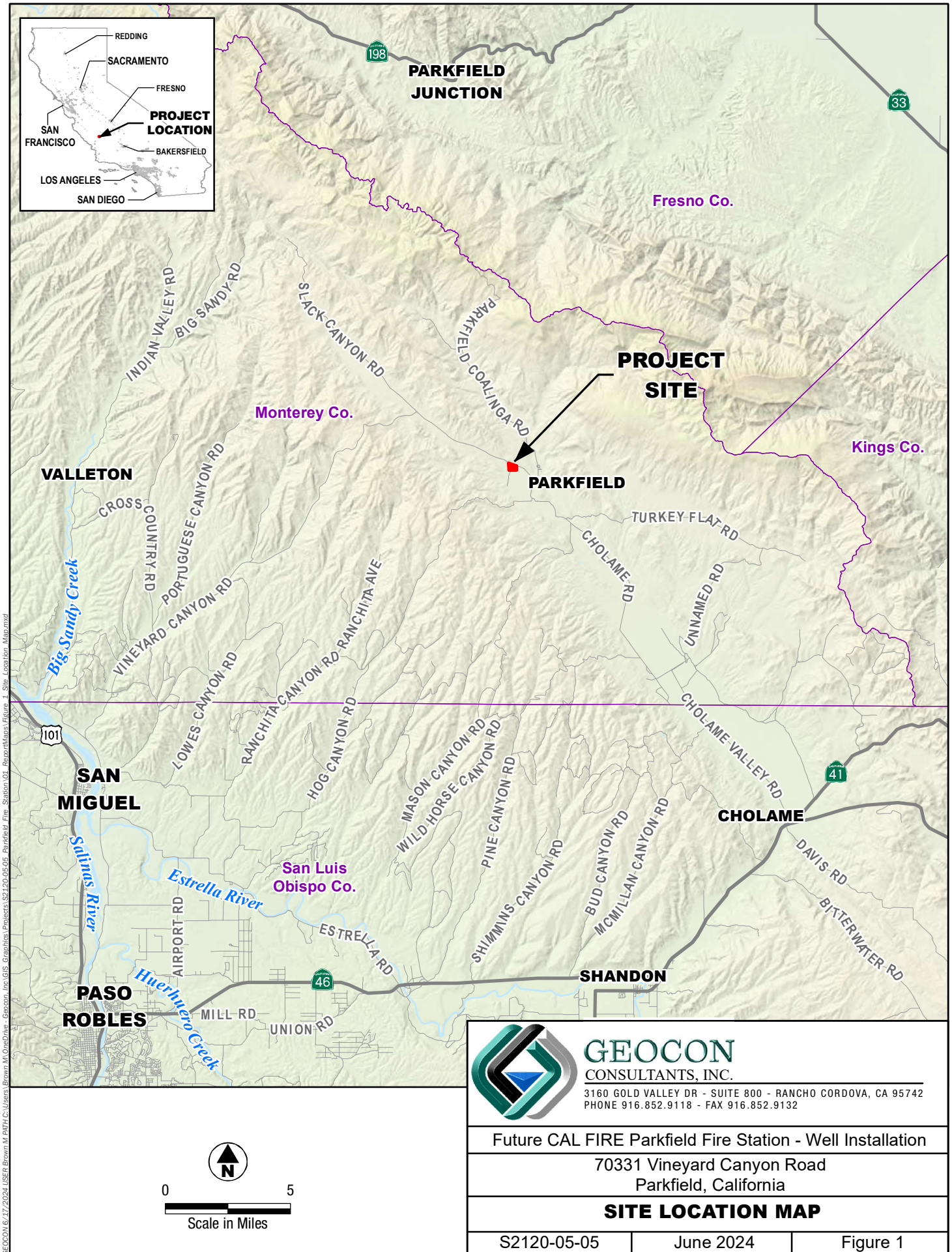
After the final connection, depth to water should be measured twice per year and water samples be collected and analyzed once per year. Water analysis requirements should include total and fecal coliform and nitrate. The time required for PPW-1 to fill the domestic water above-ground tank should be measured once a year to monitor well yield. Well yield is expected to decrease over time. Sudden drops in well yield could indicate a malfunction in the pump or pump assembly or plugging of the filter pack. If a drop in well yield is documented, direct a California-licensed C-57 water well contractor or a C-61/D21 machinery and pump contractor to inspect and make the necessary repairs.

12.0 LIMITATIONS

The conclusions contained in this report are based on the data collected, test results, and our professional experience with similar projects. Our professional services were performed, our findings obtained, and our conclusions and recommendations prepared in accordance with generally accepted hydrogeological principles and practices used in this area at this time. We make no warranty, express or implied.

13.0 REFERENCES

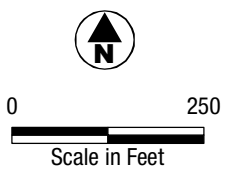
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\\GEOCON\GIS\Projects\S2120-05-05_Parkfield_Fire Station\GIS\Report\Map_Figure_2_Site_Plan_100ftb\fer.mxd



- Legend**
- Approximate Location of PPW-1
 - Approximate Location of Existing Well
 - Approximate Domestic Well Location
 - Fence Line
 - 1,000-Foot Buffer
 - Pavement/Concrete
 - Structures





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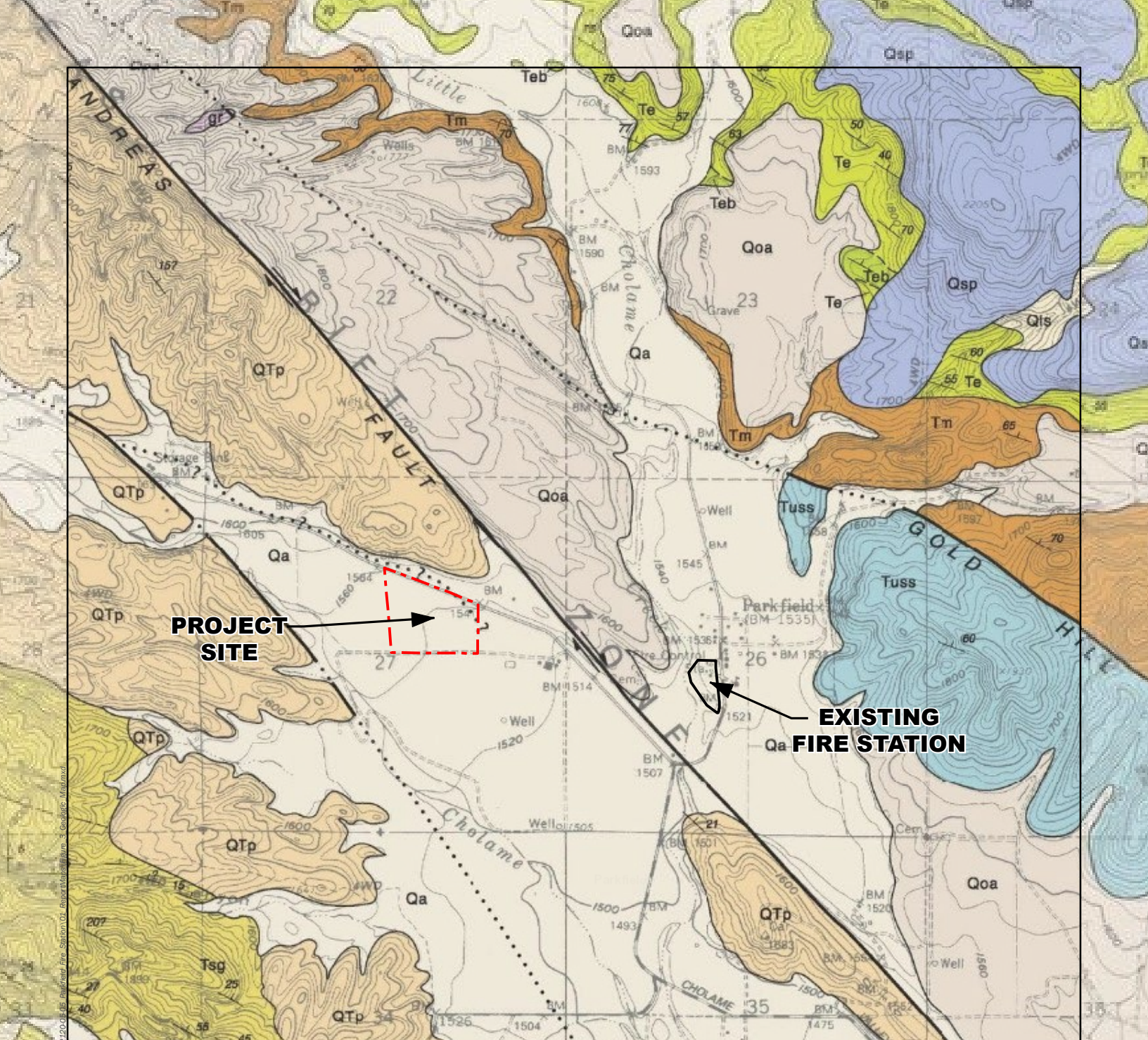
3160 GOLD VALLEY DR - SUITE 800 - RANCHO CORDOVA, CA 95742
PHONE 916.852.9118 - FAX 916.852.9132

Future CAL FIRE Parkfield Fire Station - Well Installation

70331 Vineyard Canyon Road
Parkfield, California

SITE PLAN

S2120-05-05	June 2024	Figure 2



Geologic Map of Parkfield 7.5' Quadrangle, Fresno and Monterey Counties, California;
Thomas W. Dibble, Jr., 2005

Unit Explanation

Qa	Alluvial, Surficial Sediments
Qoa	Alluvial, Older Surficial Sediments
Qls	Landslide Rubble
Qsp	Landslide Rubble; extensive landslide of serpentine rubble
QTp	Paso Robles Formation
Tsg	Conglomerate
gr	Crystalline Basement; Granitic rock
Te	Etchegoin Formation
Teb	Etchegoin Formation; blue sandstone
Tm	Monterey Shale
Tuss	Unnamed Sandstone



0 2,000
Scale in Feet



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Future CAL FIRE Parkfield Fire Station - Well Installation

70331 Vineyard Canyon Road
Parkfield, California

GEOLOGIC MAP

S2120-05-05

June 2024

Figure 3

TABLE 1
 ZONE TESTING WATER QUALITY LABORATORY TEST RESULTS
 PROPOSED PARKFIELD FIRE STATION
 PARKFIELD, MONTEREY COUNTY, CALIFORNIA

Sample Name	Zone A	Zone B	Zone C	Zone D	Units	Primary MCL	Secondary MCL
Sample Date	8/1/2023	8/2/2023	8/2/2023	8/2/2023			
General Chemistry							
Calcium	76	62	160	180	mg/l	n/a	n/a
Chloride	395	470	190	207	mg/l	n/a	250
Magnesium	150	150	250	250	mg/l	n/a	n/a
Nitrate as N	<0.1	<0.1	<0.1	0.2	mg/l	10	n/a
Potassium	9.9	5.4	21	26	mg/l	n/a	n/a
Sodium	150	150	100	130	mg/l	n/a	n/a
Sulfate	30.7	26	40.3	72.3	mg/l	500	250
Total Dissolved Solids	824	1380	700	675	mg/l	n/a	500
Drinking Water Metals							
Aluminum	31000	3500	130000	150000	ug/l	1000	50 to 200
Antimony	<0.45	<0.45	<0.45	<0.45	ug/l	6	n/a
Arsenic	14.8	3.64	28.1	33	ug/l	10	n/a
Barium	587	433	1890	1870	ug/l	1000	n/a
Beryllium	<0.56	<0.56	2.22	2.32	ug/l	4	n/a
Boron	950	700	640	700	ug/l	1000	n/a
Cadmium	<0.25	<0.25	2.84	2.55	ug/l	5	n/a
Chromium	107	9.85	336	414	ug/l	50	n/a
Copper	57.5	4.1	339	341	ug/l	1300	1000
Iron	49000	5000	190000	210000	ug/l	n/a	300
Lead	9.55	<0.32	50.7	49.8	ug/l	15	n/a
Manganese	1200	260	4300	4800	ug/l	n/a	50
Mercury	<0.10	<0.10	1.4	1.3	ug/l	2	n/a
Nickel	318	23.6	1240	1360	ug/l	100	n/a
Selenium	2.63	<0.65	10.2	11.3	ug/l	50	n/a
Silver	<0.21	<0.21	1.31	1.21	ug/l	n/a	100
Thallium	<1.3	<1.3	<1.3	<1.3	ug/l	2	n/a
Vanadium	46	7.29	109	161	ug/l	n/a	n/a
Zinc	170	13	310	400	ug/l	n/a	5000

Notes:

mg/L: Milligrams per liter

µg/L: micrograms per liter

B: Constituent also detected in the associated laboratory blank

Primary MCL: Primary maximum contaminant level (health based + technology and economics)

Secondary MCL: Secondary maximum contaminant level (taste and odor or welfare based)

Draft MCL: MCL not officially adopted

Concentration exceeds Primary MCL

Concentration exceeds Secondary MCL

n/a: no applicable MCL

TABLE 2
COMPLETED WELL WATER QUALITY LABORATORY TEST RESULTS
PROPOSED PARKFIELD FIRE STATION
PARKFIELD, MONTEREY COUNTY, CALIFORNIA

Sample Name	PPW-1	PPW-1	Units	Primary MCL	Secondary MCL
Sample Date	8/10/2023	10/5/2023			
Bacteria					
Fecal Coliform	--	<1	MPN/100ml	2.2	n/a
E. Coliform	--	<1	MPN/100ml	2	n/a
Total Coliform	--	3	MPN/100ml	2.2	n/a
General Chemistry					
Bicarbonate	320	330	mg/L	n/a	n/a
Bromide	1.51	1.66	mg/L	n/a	n/a
Calcium	55	62	mg/L	n/a	n/a
Carbonate	<1.0	<1.0	mg/L	n/a	n/a
Chloride	436	500	mg/L	n/a	250
Fluoride	<0.095	<0.095	mg/L	2	2
Total Hardness	652	752	mg/L	n/a	n/a
Calcium Hardness	140	150	mg/L	n/a	n/a
Hydroxide (as CaCO3)	<1.0	<1.0	mg/L	n/a	n/a
Magnesium	130	150	mg/L	n/a	n/a
Nitrate as N	<0.1	<0.1	mg/L	10	n/a
Orthophosphate as P	0.08	0.08	mg/L	n/a	n/a
pH	8.3	7.7	±, pH units @ 25°C	n/a	6.5 to 8.5
Potassium	<0.094	<0.094	mg/L	n/a	n/a
Silica	--	35	mg/L	n/a	n/a
Sodium	120	130	mg/L	n/a	n/a
Sulfate	22.7	20.4	mg/L	500	250
Total Alkalinity	320	330	mg/L	n/a	n/a
Total Dissolved Solids	985	1100	mg/L	n/a	500
Total Drinking Water Metals					
Aluminum	2100	<24	µg/L	1000	50 to 200
Antimony	<0.45	<0.45	µg/L	6	n/a
Arsenic	3.93	3.84	µg/L	10	n/a
Barium	454	458	µg/L	1000	n/a
Beryllium	<0.56	<0.56	µg/L	4	n/a
Boron	560	650	µg/L	1000	n/a
Cadmium	<0.25	<0.25	µg/L	5	n/a
Chromium	6.15	<0.42	µg/L	50	n/a
Copper	3.11	<0.25	µg/L	1300	1000
Iron	2000	<48	µg/L	n/a	300
Lead	<0.32	<0.32	µg/L	15	n/a
Manganese	180	150	µg/L	n/a	50
Mercury	<0.10	<0.10	µg/L	2	n/a
Nickel	11.9	<0.49	µg/L	100	n/a
Selenium	<0.65	<0.65	µg/L	50	n/a
Silver	<0.21	<0.21	µg/L	n/a	100
Thallium	<1.3	<1.3	µg/L	2	n/a
Vanadium	4.70	2.50	µg/L	n/a	n/a
Zinc	57.3	15.4	µg/L	n/a	5000
Dissolved Drinking Water Metals					
Aluminum	160	<24	µg/L	1000	50 to 200
Antimony	<0.45	<0.45	µg/L	6	n/a
Arsenic	3.8	3.8	µg/L	10	n/a
Barium	440	450	µg/L	1000	n/a
Beryllium	<0.56	<0.56	µg/L	4	n/a
Boron	550	660	µg/L	1000	n/a
Cadmium	<0.25	<0.25	µg/L	5	n/a

TABLE 2
COMPLETED WELL WATER QUALITY LABORATORY TEST RESULTS
PROPOSED PARKFIELD FIRE STATION
PARKFIELD, MONTEREY COUNTY, CALIFORNIA

Sample Name	PPW-1	PPW-1	Units	Primary MCL	Secondary MCL
Sample Date	8/10/2023	10/5/2023			
Chromium	1.5	<0.42	µg/L	50	n/a
Copper	<0.25	<0.25	µg/L	1300	1000
Iron	<34	<34	µg/L	n/a	300
Lead	<0.32	<0.32	µg/L	15	n/a
Manganese	100	140	µg/L	n/a	50
Mercury	<0.10	<0.10	µg/L	2	n/a
Nickel	2.4	<0.49	µg/L	100	n/a
Selenium	<0.65	<0.65	µg/L	50	n/a
Silver	<0.21	<0.21	µg/L	n/a	100
Thallium	<1.3	<1.3	µg/L	2	n/a
Vanadium	2.7	2.5	µg/L	n/a	n/a
Zinc	38	<1.5	µg/L	n/a	5000
Pesticides					
Chloramben	--	5.14	µg/L	n/a	n/a
Asbestos					
Chrysotile	--	0.35	MFL	7	n/a
Volatile Organic Compounds					
Chloroform	--	5.4	µg/L	80	n/a
Toluene	--	3.1	µg/L	150	n/a
Miscellaneous Analytes					
Perchlorate	<0.44	<0.44	mg/L	0.06	n/a
Total Cyanide	<0.0086	<0.0086	mg/L	0.15	n/a
Ferrous Iron	<0.10	<0.10	mg/L		
Radioactivity					
Gross Alpha	--	9.67 ± 2.54	pCi/L	15	n/a
Gross Beta	--	7.39 ± 1.46	pCi/L	4	n/a
Uranium	--	<1.0	pCi/L	20	n/a

Notes:

µg/L: micrograms per liter

mg/L: Milligrams per liter

MPN/100 ml: Most probable number per 100 milliliters

pCi/L: picocuries per liter

MFL: Million fibers per liter

<: Analyte not detected below the laboratory detection limit

Primary MCL: Primary maximum contaminant level (health based + technology and economics)

Secondary MCL: Secondary maximum contaminant level (taste and odor or welfare based)

Draft MCL: MCL not officially adopted

Concentration exceeds Primary MCL

Concentration exceeds Secondary MCL

Concentration exceeds Draft MCL

---: not analyzed

n/a: no applicable MCL

TABLE 3
WATER QUALITY LABORATORY TEST RESULTS
CALFIRE PARKFIELD STATION WELL AND PROPOSED PARKFIELD FIRE STATION WELL
PARKFIELD, MONTEREY COUNTY, CALIFORNIA

Sample Name	PPW-1	CFPS	Units	Primary MCL	Secondary MCL
Sample Date	10/5/2023	8/10/2023			
General Chemistry					
Bicarbonate	330	360	mg/L	n/a	n/a
Bromide	1.66	<0.42	mg/L	n/a	n/a
Calcium	62	52	mg/L	n/a	n/a
Carbonate	<1.0	<1.0	mg/L	n/a	n/a
Chloride	500	175	mg/L	n/a	250
Fluoride	<0.095	0.382	mg/L	2	2
Hardness	752	413	mg/L	n/a	n/a
Magnesium	150	71	mg/L	n/a	n/a
Nitrate as N	<0.1	---	mg/L	10	n/a
Orthophosphate as P	0.08	0.08	mg/L	n/a	n/a
Potassium	<0.094	<0.094	mg/L	n/a	n/a
Sodium	130	160	mg/L	n/a	n/a
Sulfate	20.4	201	mg/L	500	250
Total Alkalinity	330	360	mg/L	n/a	n/a
Total Dissolved Solids	1100	985	mg/L	n/a	500
Total Drinking Water Metals					
Aluminum	<24	<24	µg/L	1000	50 to 200
Antimony	<0.45	<0.45	µg/L	6	n/a
Arsenic	3.84	1.87	µg/L	10	n/a
Barium	458	30.3	µg/L	1000	n/a
Beryllium	<0.56	<0.56	µg/L	4	n/a
Boron	650	2500	µg/L	n/a	n/a
Cadmium	<0.25	<0.25	µg/L	5	n/a
Chromium	<0.42	2.16	µg/L	50	n/a
Copper	<0.25	1.53	µg/L	1300	1000
Iron	<48	<34	µg/L	n/a	300
Lead	<0.32	<0.32	µg/L	15	n/a
Manganese	150	<2.1	µg/L	n/a	50
Mercury	<0.10	<0.10	µg/L	2	n/a
Nickel	<0.49	<0.49	µg/L	100	n/a
Selenium	<0.65	2.34	µg/L	50	n/a
Silver	<0.21	<0.21	µg/L	n/a	100
Thallium	<1.3	<1.3	µg/L	2	n/a
Vanadium	2.50	3.77	µg/L	n/a	n/a
Zinc	15.4	277	µg/L	n/a	5000
Dissolved Drinking Water Metals					
Aluminum	<24	<24	µg/L	1000	50 to 200
Antimony	<0.45	<0.45	µg/L	6	n/a
Arsenic	3.8	1.9	µg/L	10	n/a
Barium	450	30	µg/L	1000	n/a

TABLE 3
WATER QUALITY LABORATORY TEST RESULTS
CALFIRE PARKFIELD STATION WELL AND PROPOSED PARKFIELD FIRE STATION WELL
PARKFIELD, MONTEREY COUNTY, CALIFORNIA

Sample Name	PPW-1	CFPS	Units	Primary MCL	Secondary MCL
Sample Date	10/5/2023	8/10/2023			
Beryllium	<0.56	<0.56	µg/L	4	n/a
Boron	660	2500	µg/L	n/a	n/a
Cadmium	<0.25	<0.25	µg/L	5	n/a
Chromium	<0.42	1.9	µg/L	50	n/a
Copper	<0.25	1.5	µg/L	1300	1000
Iron	<34	<34	µg/L	n/a	300
Lead	<0.32	<0.32	µg/L	15	n/a
Manganese	140	<2.1	µg/L	n/a	50
Mercury	<0.10	<0.10	µg/L	2	n/a
Nickel	<0.49	2.6	µg/L	100	n/a
Selenium	<0.65	2.5	µg/L	50	n/a
Silver	<0.21	<0.21	µg/L	n/a	100
Thallium	<1.3	<1.3	µg/L	2	n/a
Vanadium	2.5	3.7	µg/L	n/a	n/a
Zinc	<1.5	270	µg/L	n/a	5000

Notes:

µg/L: micrograms per liter

mg/L: Milligrams per liter

pCi/L: picocuries per liter

<: Analyte not detected below the laboratory detection limit

Primary MCL: Primary maximum contaminant level (health based + technology and economics)

Secondary MCL: Secondary maximum contaminant level (taste and odor or welfare based)

Concentration exceeds Primary MCL

Concentration exceeds Secondary MCL

---: not analyzed

n/a: no applicable MCL

PPW-1: Well located at 70331 Vineyard Canyon Road

CFPS: Well located at 70578 Parkfield-Coalinga Road

APPENDIX

A

From: [Bishop, James@Waterboards](mailto:Bishop_James@Waterboards)
To: [Lauren Short](#)
Cc: [Lemus, Mark@Waterboards](mailto:Lemus_Mark@Waterboards)
Subject: RE: Notice of Intent for Pump Tests for Water Supply Wells
Date: Wednesday, June 7, 2023 4:36:19 PM
Attachments: [image002.png](#)
[image003.png](#)

This message was sent from outside your organization.

Hi Lauren,

Thank you for the follow-up and for the summary of your findings. All three of the wells can qualify under section A. Regarding the pump test reports, no, you do not need to submit these to us.

Thanks,
James

James Bishop, PG
Engineering Geologist
Central Coast Water Board
Waste Discharge Requirement (WDR) Program
(805) 542-4628
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

From: Lauren Short <short@geoconinc.com>
Sent: Wednesday, June 7, 2023 3:56 PM
To: Bishop, James@Waterboards <James.Bishop@Waterboards.ca.gov>
Cc: Lemus, Mark@Waterboards <Mark.Lemus@Waterboards.ca.gov>
Subject: RE: Notice of Intent for Pump Tests for Water Supply Wells

EXTERNAL:

Hi James,

I appreciate the explanation.

CT Hearst

No regulated sites within a one-mile of the well on Geotracker. GAMA shows 2 wells about 1,400 feet southeast from our well with TDS concentrations ranging from 360 to 580 mg/l from samples collected in 2017. Which makes sense considering are close to the coast. The water quality concerns that we likely have are TDS and coliform. The well does not have a sanitary seal. Would the CT Hearst well still remain in Section A discharge category?

CALFIRE Proposed Parkfield Fire Station

No regulated sites within a one-mile of the proposed Fire Station on Geotracker except Irrigated

Lands Regulatory Permit for Parkfield Vineyards (southeastern adjoining property). The wells of Parkfield Vineyards are listed in GAMA. TDS ranges from 960 to 1330 mg/l and Nitrate ranges from 2.8 to 5.53 mg/L. Samples were collected in 2012. Do I still qualify for Section A with these results?

CALFIRE Antelope Fire Station Well Replacement

No regulated sites within a one-mile of the station on Geotracker. There is a well about 1,200 feet from the fire station sample in 2019. TDS (801 mg/l) and sodium (156 mg/l) are flagged in GAMA. Same question as the other 2 wells, do I still qualify for Section A?

My last question: if I qualify under section A do I need to submit a copy of the pump test report to you?

I appreciate the assistance. This project is important to CALFIRE and Parks, therefore I want to make sure every box is checked before I mobilize.

Thanks!
Lauren



Lauren E. Short, PG
Project Geologist
she/her
O | 916.852.9118
F | 916.852.9132
M | 669.294.3357
short@geoconinc.com

GEOCON CONSULTANTS, INC.

3160 Gold Valley Drive, Suite 800, Rancho Cordova, California 95742

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Brownfields/Redevelopment

Natural Resources

From: Bishop, James@Waterboards <James.Bishop@Waterboards.ca.gov>

Sent: Wednesday, June 7, 2023 11:38 AM

To: Lauren Short <short@geoconinc.com>

Cc: Lemus, Mark@Waterboards <Mark.Lemus@Waterboards.ca.gov>

Subject: RE: Notice of Intent for Pump Tests for Water Supply Wells

Hi Lauren,

Our administrative staff forwarded me your email. Our general waiver for specific types of discharges ([Order No. R3-2019-0089](#)) allows for the discharge of water associated with well construction, development, and aquifer and well pump testing. If this activity meets the criteria in Section A of [Attachment A](#), then you don't need to submit anything to us. If the activity instead falls under Section C of Attachment A, then you'll need to submit a report of waste discharge (i.e., notice of intent), form 200, and a fee.

The primary difference between being in section A or section C is whether the groundwater being pumped as part of the construction/development/testing is known to have water quality issues. This primarily applies to our groundwater contamination cleanup site where there is a known impact and the activity falls under discharge category Section C.

Please review Attachment A, section A and C to determine which discharge category each of the wells will fall under. Also, please take a look at GeoTracker and GAMA to see if there are any easily identifiable water quality issues within a one-mile radius of the proposed new well locations. If you think any of the wells meet the criteria for Section C, you can submit a notice of intent, form 200, and application fee to me and copy our [@WB-RB3-WDR](#) inbox.

Thanks,
James

James Bishop, PG
Engineering Geologist
Central Coast Water Board
Waste Discharge Requirement (WDR) Program
(805) 542-4628
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

From: WB-RB3-WDR <RB3-WDR@Waterboards.ca.gov>

Sent: Wednesday, June 7, 2023 11:03 AM

To: Bishop, James@Waterboards <James.Bishop@Waterboards.ca.gov>; Lemus, Mark@Waterboards <Mark.Lemus@Waterboards.ca.gov>

Subject: FW: Notice of Intent for Pump Tests for Water Supply Wells

Hi James and Mark,
I believe these sites are in your areas. Would you like to address the question?
Thanks!
Anna

From: Lauren Short <short@geoconinc.com>

Sent: Thursday, June 1, 2023 11:43 AM

To: WB-RB3-WDR <RB3-WDR@Waterboards.ca.gov>

Subject: Notice of Intent for Pump Tests for Water Supply Wells

EXTERNAL:

Hello!

I have three projects in the Central Coast region that have well development and pump tests for 2 new water supply wells and one existing one. None of the projects have existing WDRs. I want to know if I can file Form 200 and a NOI under WDR r3-2019-0089.

Description of the three projects are below:

CT Hearst

A existing old domestic cable tool well that CalTrans acquired during the realignment of HWY 1. CalTrans is offered the well the State Parks. State Parks tasked Geocon to do water quality testing and a 24-hour pump test of the well. The results will be used for planning a replacement well in the general area. We anticipate the pump rate to be between 10 and 15 gpm for the test and subsequent sampling. Assuming a 15 GPM pump rate, we anticipate discharging approximating 22,500 gallons of water onto land designated by CalTrans. I do not have any water quality data from this well.

Location: 35.691622,-121.289375

CALFIRE Proposed Parkfield Fire Station

CALFIRE is building a new fire station at 70331 Vineyard Canyon Rd, Parkfield, CA 93451. Geocon is tasked with drilling and installing a water supply well to serve the station. We are scoped for a 6-inch well to a maximum depth of 500 feet. Our well permit is currently pending with the County. Discharging activities include discharged water from zone testing, well development, sampling, and pump testing (either 24-hours or 10-day). I do not have any water quality data from the site. We anticipate chlorinating the well prior to the pump test. We plan to discharge on to land. The current land use is grazing for cows.

CALFIRE Antelope Fire Station Well Replacement

CALFIRE needs to replace the well at the Antelope Fire Station at 20400 Panoche Rd, Paicines, CA 95043. Geocon is tasked with drilling and installing a water supply well to serve the station. We are scoped for a 6-inch well to a maximum depth of 400 feet. We have not filled our well permit application yet. Discharging activities include discharged water from zone testing, well development, sampling, and a 24-hour pump test. CALFIRE may have historical data from their existing well but I currently do not have it in my possession. We would discharge on land away from the existing septic system. I have not fully flushed out the plan yet. We anticipate chlorinating the well prior to the pump test and prior to installing the permanent pump.

Thank you and have a wonderful day!

Lauren



Lauren E. Short, PG

Project Geologist

she/her

O | 916.852.9118

F | 916.852.9132

M | 669.294.3357

short@geoconinc.com

GEOCON CONSULTANTS, INC.

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Land Development

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Natural Resources

MONTEREY COUNTY

**DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH BUREAU
1270 Natividad Road
Salinas, CA 93906
(831) 755-4507**



WATER WELL CONSTRUCTION PERMIT

WELL PERMIT: 22-000235

ISSUANCE DATE: 6/15/23

SITE LOCATION: 70331 Vineyard Canyon Road

EXPIRATION DATE: 6/15/24

INTENDED USE: Domestic/Single Connection

APN: 423-173-077

PROPERTY OWNER: Department of Forestry and Fire Protection

APPLICANT: Lauren Short, PG

ADDRESS: 3160 Gold Valley Drive

PHONE: 669-294-3357

CITY: Rancho Cordova, CA 95742

DRILLING CONTRACTOR: Guardino Well Drilling, Inc. LICENSE: 664960

ISSUED BY: _____

Isalah Tuazon, REHS

PROJECT DESCRIPTION:

This well permit authorizes the construction of a domestic/single connection well subject to the conditions of approval set forth herein. The issuance of this permit is exempt from the California Environmental Quality Act pursuant to Ministerial Project under Section 21080 (b) of the CEQA Guidelines.

CONDITION OF APPROVAL:

1. Owner, Applicant and any agents working on Owner's or Applicant's behalf (hereafter collectively referred to as "Permittee") shall comply with all requirements set forth in Monterey Code Chapter 15.08 and the California Department of Water Resources California Well Standards Bulletins 74-81 and 74-90 and shall comply with all the conditions of approval of this permit.
2. The well shall be at least 100 feet from any septic tank; any portion of any leach field or animal enclosure; 50 feet from any sewer main, line or lateral; and 150 feet from any seepage pit. If type of absorption field is unknown, the distance shall be 150 feet.

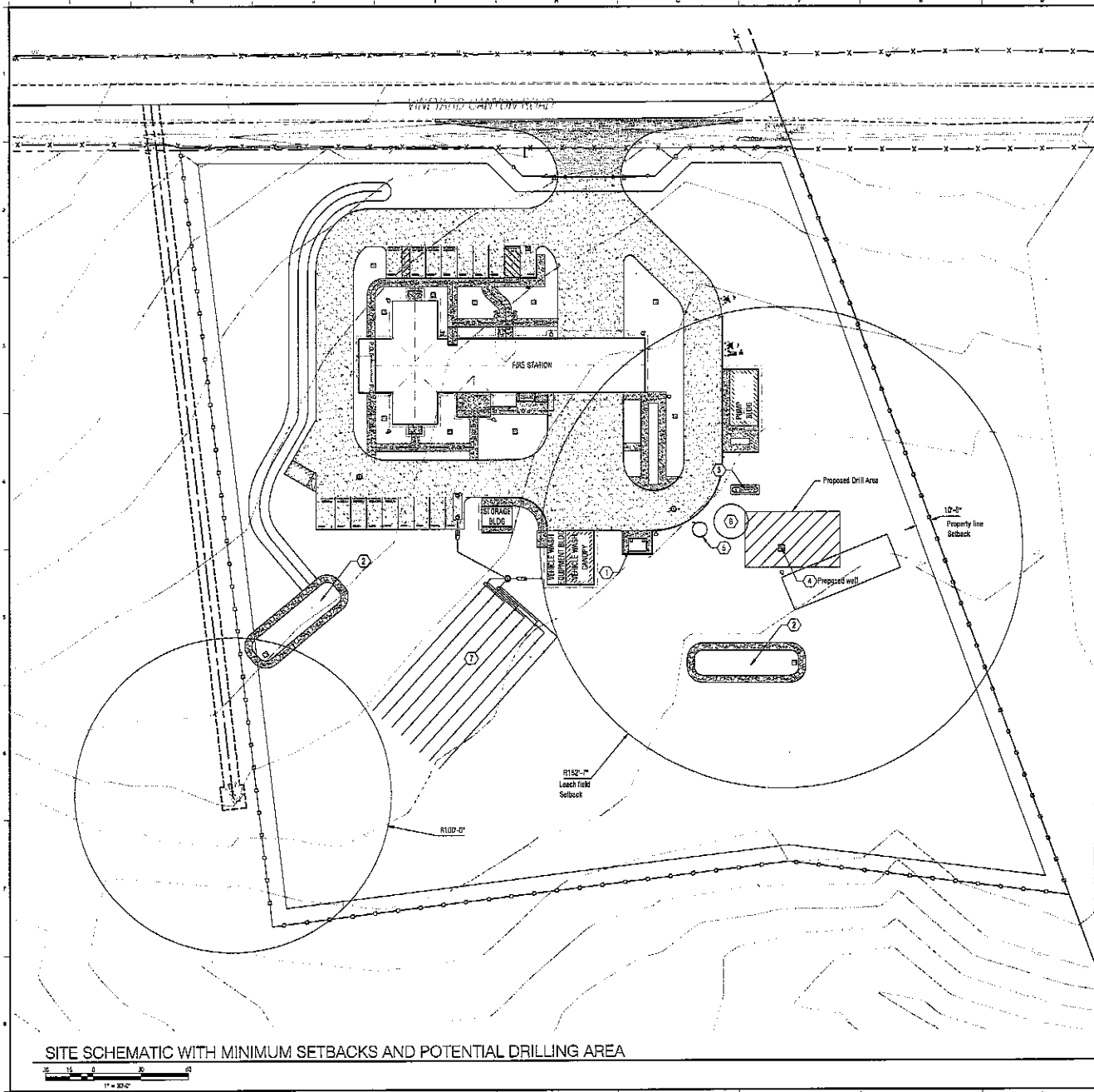
3. Location of the well shall not prevent the installation, relocation or expansion of the septic system on any adjoining lot.
4. Water well permit shall be kept on site at all times while work is in progress.
5. The well shall be drilled in the approved location delineated on the attached map, **Exhibit A**. The well cannot be drilled in any other location without prior approval from Monterey County Health Department, Environmental Health Bureau (EHB) and receipt of an amended permit.
6. Any water well on the premises which is to be abandoned, or which has been abandoned shall be properly destroyed within six months of the completion of this well.
7. Notify the EHB at least 24 hours prior to moving on site.
8. Notify the EHB 24 hours prior to the time you expect to place any seal.
9. If the seal(s) cannot be witnessed by the EHB, a detailed, written description of the seal(s) shall be submitted to the EHB within ten days.
10. Surface construction features of the completed well shall be in accordance with the California Well Standards Bulletin 74-81 and Bulletin 74-90 Section 10.
11. The Owner and Applicant shall defend, indemnify and hold harmless the County and its officers, agents, and employees from and against any and all actions or claims of any description brought on account of approval of this permit or any injury or damages sustained by any person or property resulting from the issuance of the permit or the conduct of the activities authorized under said permit.
12. Issuance of this permit to construct a water well does not create, transfer, assign or acknowledge any legal rights to water associated with this property.
13. Issuance of this permit to construct a water well does not guarantee that the well can be approved for domestic use.
14. An electric log shall be performed and it shall be submitted to the EHB before the well is sealed. Interpretation of the electric log including a written water quality report shall be provided by the contractor indicating the best location(s) for sealing off poor quality water and the proposed seal depth. The exact location of sanitary and strata seals shall be approved by the EHB in consultation with the appropriate water management agency, before the well is sealed. A geologic log shall be submitted with the electric log. The permit applicant may request review of the approved seal depth by a 3rd party licensed hydrogeologist at the applicant's expense if the applicant disagrees with the approved seal depth.
15. The well shall be properly disinfected before use.

16. In the event there shall be a chemical injector installed on the discharge line of this well, an approved backflow prevention device shall be installed between the well and the injection port.
17. **Within 60 days of completing construction of the well, collect and submit water quality results to EHB.** Sample collection shall be done after development of the well and shall include analysis of coliform bacteria, and primary inorganics and secondary compounds as listed in Tables 64431-A and 64449-A&B in Title 22 of the California Code of Regulations. Waivers for asbestos, MTBE, and thiobencarb may be available.

END

Well Permit 22-000235,

Sheet A



SITE SCHEMATIC WITH MINIMUM SETBACKS AND POTENTIAL DRILLING AREA

GENERAL SHEET NOTES

1. Monterey County Minimum Setbacks
 - 1.1. From property line at least 10'
 - 1.2. From septic tanks and leach fields at least 100'
 - 1.3. From existing wells at least 10'

SHEET KEYNOTES

1. 2,000 GAL ABOVE-GROUND FUEL VAULT (500 GAS/1500 DIESEL)
2. STORMWATER BASIN
3. 1,000 GALLON LPG TANKS AND CONCRETE PAD
4. WATER WELL - PROPOSED SITE
5. DOMESTIC WATER TANK
6. FIRE WATER TANK
7. LEACH FIELD

DSA Approval

OSFM Approval



PARKFIELD FIRE STATION FACILITY REPLACEMENT

70331 VINEYARD CANYON ROAD
PARKFIELD, CALIFORNIA 95661
MONTEREY COUNTY



1131 S STREET, SACRAMENTO, CA 95811-0880

REVISIONS

NO.	DATE	DESCRIPTION

JOB NUMBER **2244**

DRAWN BY **C. EASTON**

DESIGNED BY **C. EASTON**

REVIEWED BY

FILE DATE

SHEET TITLE

Site Schematic

SHEET NUMBER



V1



Project No. S2120-05-05

August 7, 2023

VIA ELECTRONIC MAIL

Isaiah Tuazon, R.E.H.S.
Environmental Health Specialist II
Monterey County Health Department
Drinking Water Protection Services-Well Program, Environmental Health Bureau
1270 Natividad Road
Salinas, CA 93906

Subject: SEAL INTERVAL APPROVAL REQUEST
PROPOSED CAL FIRE PARKFIELD STATION
WELL PERMIT: 22-000235
70331 VINEYARD CANYON ROAD
PARKFIELD, CALIFORNIA

Isaiah Tuazon:

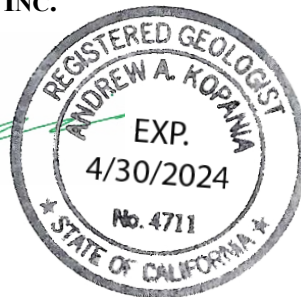
Appended is the lithologic log, electrical log, laboratory results, proposed sealing interval, proposed well construction details, and proposed construction diagram. We propose a well seal from 0-120 feet below ground service. We propose to install a transitional bentonite seal from 120 feet to 190 feet to reduce the risk of melting the casing during sealing while sealing off the undesirable water-bearing zones.

Please advise as soon as possible so we can continue with the well construction schedule.

Sincerely,

GEOCON CONSULTANTS, INC.

Dr. Andrew Kopania
California PG #4711
California CHG #31
Senior Hydrogeologist



Lauren E. Short
California PG #9774
Project Geologist

LITHOLOGY:

Interval Start (Feet below ground surface)	Interval End (Feet below ground surface)	Lithology Description
0	2	Tilled Soil – Silty SAND
2	85	Alluvium – Poorly graded SAND, medium, with trace fine gravel
80	100	CLAY
100	150	Poorly graded GRAVEL, coarse, with few sand
150	180	Gravelly SAND, coarse gravel with medium to coarse sand
180	195	CLAY
195	260	Poorly graded GRAVEL, fine to medium, with few fine to medium sand
260	285	CLAY
285	298	Poorly Graded GRAVEL

PROPOSED CASING INTERVALS:

Interval Start (Feet)	Interval End (Feet)	Spiral or straight casing	Casing Material Type	Outside Diameter (Inches)	Thickness (Inches)	Casing Type	Screen Type
0	200	straight	PVC - SDR: 17	5.563	0.327	Blank	
200	260	straight	PVC - SDR: 17	5.563	0.327	Screen	Milled Slots
260	280	straight	PVC - SDR: 17	5.563	0.327	Blank	
280	300	straight	PVC - SDR: 17	5.563	0.327	Screen	Milled Slots

PROPOSED ANNULAR MATERIALS:

Interval Start (Feet)	Interval End (Feet)	Borehole Diameter (inches)	Fill	Fill Type Details	Description
0	120	11	Cement	10.3 Sack Mix	Sand Slurry
120	190	10	Bentoni te	Non-Hydrated Bentonite	3/8 Hole Plug
190	300	10	Filter Pack	6 x 12	Washed Gravel

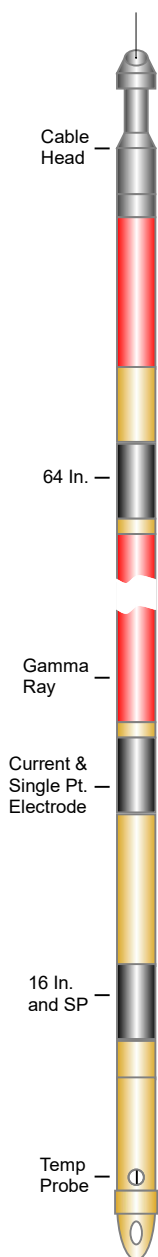
SUMMARY OF SELECTED LABORATORY RESULTS:

Zone	Interval (Feet)	Nitrate (mg/l)	Total Dissolved Solids (mg/l)	Arsenic (mg/l)
A	280-300	Non-detect	824	14.8
B	190-265	Non-detect	1380	3.64
C	150-180	Non-detect	700	28.1
D	110-140	0.2	675	33

STEWART WELL LOGGING SERVICE ELECTRIC - GAMMA RAY-TEMPERATURE LOG	
Stewart Well Logging Service	
Phone: (530)908-6928 Email: STEWARTWELLOGGING@GMAIL.COM	
Filing No.	COMPANY <u>Guardino Well Drilling, Inc.</u>
WELL <u>Proposed Parkfield Well Cal Fire</u>	
FIELD <u>Parkfield</u>	
STATE <u>California</u> COUNTY <u>Monterey</u>	
LOCATION:	OTHER SERVICES: None
Job No. 1410	SEC: <u>27</u> TWP: <u>23S</u> RGE: <u>14E</u> LAT.: <u>35.9008744</u> LONG.: <u>-120.4452405</u>
Permanent Datum: <u>Ground Level</u> Elev.: <u>1545</u> Ft. Elevs.: K.B. <u> </u> Ft. Log Measured From: <u>Ground Level</u> , <u>0</u> Ft. Above Perm. Datum D.F. <u> </u> Ft. Drilling Measured From: <u>Rotary Table</u> G.L. <u> </u> Ft.	
Run	One
Date	Aug 01, 2023
Depth-Driller	300 Ft
Depth-Logger	298 Ft
Top Logged Interval	298 Ft
Btm Logged Interval	10 Ft
Casing-Driller	In @ Ft
Casing - Logger In@Ft	In @ Ft
Bit Size	8-3/4 In @ 300 Ft
Time On Bottom	1400
Type Fluid in Hole	Bentonite
Density	Viscosity
pH	Fluid Loss
Source of Sample	Lift Pump
Rm @ Mea. Temp	6.2 @ 75 °F
Rmf @ Mea. Temp	6 @ 75 °F
Rmc @ Mea. Temp	4.5 @ °F
Source Rmf	Rmc
Rm @ BHT	82 @ °F
Time Since Circ.	1 Hr
Max. Rec. Temp.	83.5 °F
Van No.	Location
Recorded By	Paschke
Witnessed By	A. Guardino L. Short

This Eagle Plot Heading Conforms To API RP 31A

ELECTRIC - GAMMA RAY-TEMPERATURE LOG TOOL



SPONTANEOUS POTENTIAL LOGS:

SP Logs record potentials or voltages developed between the borehole fluid and the surrounding formation and are representations of lithology and water quality. Recording of SP logs are limited to water-filled or mud-filled open holes.

NORMAL RESISTIVITY LOGS:

Normal Resistivity Logs record the electrical resistivity of the borehole environment with lower resistivities indicative of clays and higher resistivities being sands and gravels. Normal resistivity logs are affected by bed thickness, Borehole diameter and borehole fluid.

SINGLE POINT RESISTIVITY LOGS:

Single Point Resistivity Logs record the electrical resistance from points within the borehole to an electrical ground at land surface. Single-point resistance logs are useful in the determination of lithology, water quality, and location of fracture zones.

GAMMA RAY LOGS:

Gamma Ray Logs record the amount of natural gamma radiation emitted by the rocks surrounding the borehole. The most significant naturally occurring sources of gamma radiation are potassium 40 and daughter products of the uranium and thorium decay series. Clay and shale bearing rocks commonly emit relatively high gamma radiation because they include weathering products of potassium feldspar and mica and tend to concentrate uranium and thorium by ion absorption and exchange.

TEMPERATURE LOGS:

Temperature Logs record the water temperature in the borehole. Temperature logs are useful for delineating water-bearing zones and identifying vertical flow in the borehole between zones of differing hydraulic head penetrated by wells. Borehole flow between zones is indicated by temperature gradients that are less than the regional geothermal gradient.

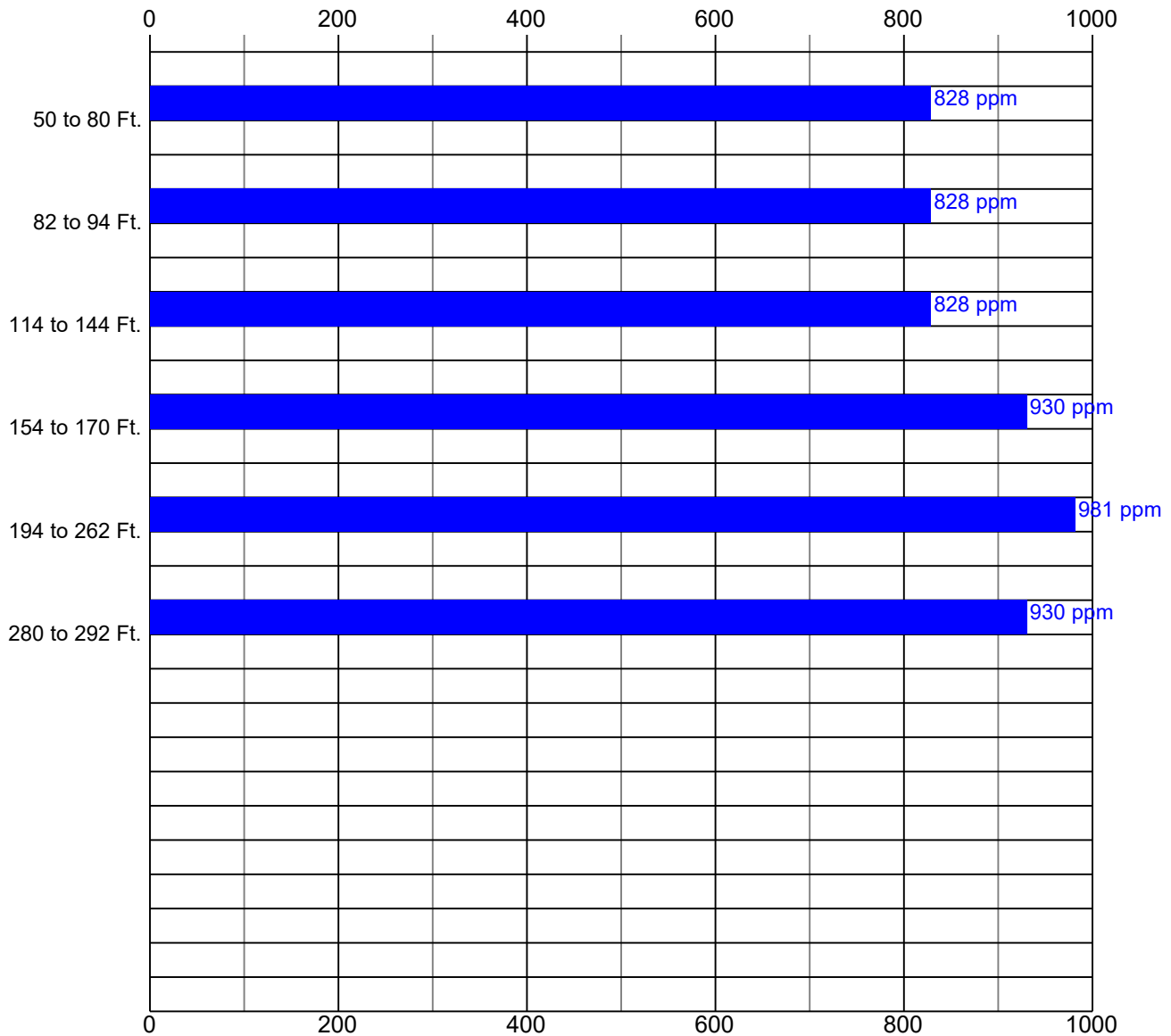
ELECTRIC LOG SPECIFICATIONS:

Diameter	1.73 Inches
Length	8.37 Feet
Weight	21.7 Lbs.
Max. Temp	158° F
Resist. Range	0 - 10,000 ohm-m
Gamma Ray	1.97 inches long x .98 inches diameter Scintillation crystal

TOTAL DISSOLVED SOLIDS

* NaCl 

Parts Per Million - ppm



TDS Classes

Class 1: Excellent to Good – Less than 700 ppm

Class 2: Good to Injurious – 700 to 2000 ppm

Class 3: Injurious to Poor – More than 2000 ppm

NaCl = Sodium Chloride

NOTICE

All interpretations are opinions based on inferences from electrical and other measurements and we do not guarantee the accuracy or correctness of any verbal or written interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by one of our officers, agents or employees. These interpretations are also subject to our General Terms and Conditions as set out in our current Price Schedule.

REMARKS

Guardino Well Drilling, Inc.
Proposed Parkfield Well Cal Fire
Aug 01, 2023

ELECTRIC - GAMMA RAY-TEMPERATURE LOG

Single Page

DEPTHS
(Feet)

0 Gamma Ray(api) 200
< - S.P. (10 mV/div) S.P. + >

100 64 Inch Normal (ohmm²/m) x10 1000
0 64 Inch Normal (ohmm²/m) 100
100 16 Inch Normal (ohmm²/m) x10 1000 80
0 16 Inch Normal (ohmm²/m) 100 0
Temperature (°F) 90
Single Point(ohms) 50

50'

100'

150'

200'

250'

Log Depth 298'

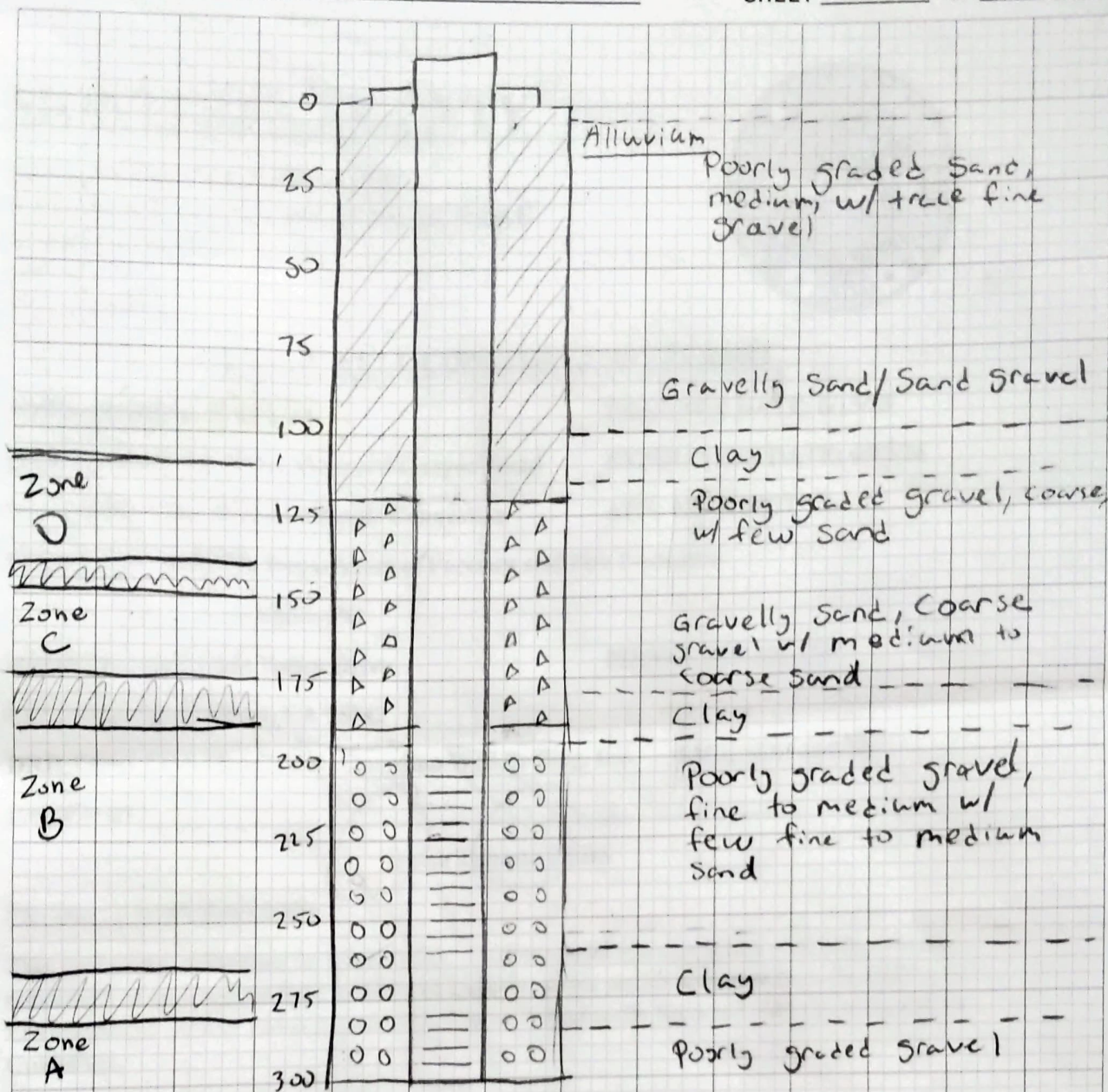
PROJECT NAME Proposed CAL FIRE
Parkfield Station

PROJECT NO 52120-05-05
 BY LES DATE 8/14/15
 SHEET 1 OF 1

REVISIONS

BY _____ DATE _____
 BY _____ DATE _____

BY _____ DATE _____
 CHECKED BY _____



Proposed Well Construction

Cement Seal: 0 - 120'
 Bentonite Seal: 120 - 190'
 Blank : 0 - 200'

Screen: 200 - 260'

Blank: 260 - 280'

Screen: 280 - 300'

Total Depth: 300'

GEOCON



MONTEREY COUNTY HEALTH DEPARTMENT

Consolidated Chemistry Laboratory

1270 Natividad Road Salinas, CA 93906

Phone (831)755-4516 Fax (831) 755-4652

ELAP Certification Number: 1395

Lauren Short, PG
3160 Gold Valley Drive Suite 800
Rancho Cordova, CA 95742

Thursday, August 3, 2023

Lab Number: AC73032

Client code: OTHER

Sample Site: 70331 VINEYARD CANYON RD PARKFIELD CA 93451

Collection Date/Time: 8/1/2023 18:00

Source Code :

Submittal Date/Time: 8/2/2023 8:43

Other ID: PPW-1-A

Sample Collector: RICE N

Sample Comments: Special Drinking Water. Receiving temperature 4.4°C.

Analyte	Method	Unit	Result	DLR	MCL	PQL	Analysis Start Date/Time
Nitrate Nitrogen	EPA300.0	mg/L	<0.1	0.4	10	0.1	8/2/2023 10:31
NO3 (Nitrate)	EPA300.0 REV	mg/L	<0.5	2.0	45*	0.5	8/2/2023 10:31

Report approved by:

A handwritten signature in cursive script that reads "Donna Ferguson".

Donna Ferguson, Ph.D, P.H.M
Laboratory Director

mg/L : Milligrams per liter (=ppm)

PQL : Practical Quantitation Limit

DLR : Detection Limit for Reporting

ug/L : Micrograms per liter (=ppb)

MCL : Maximum Contaminant Level

ND : Not Detected

N/A : Not Applicable

* : Primary Standards

** : Secondary Standards

*** : Action Level



MONTEREY COUNTY HEALTH DEPARTMENT

Consolidated Chemistry Laboratory

1270 Natividad Road Salinas, CA 93906
Phone (831)755-4516 Fax (831) 755-4652

ELAP Certification Number: 1395

Lauren Short, PG
3160 Gold Valley Drive Suite 800
Rancho Cordova, CA 95742

Page 1 of 2

Friday, August 4, 2023

Lab Number: AC73087

Sample Site: 70331 VINEYARD CANYON RD PARKFIELD CA 93451
Source Code:
Other ID: PPW-1-B

Client Code: OTHER

Collection Date/Time: 8/2/2023 11:20
Submittal Date/Time: 8/3/2023 7:53
Sample Collector: SHORT L

Sample Comments: Special Drinking Water. Receiving temperature 2.5 °C.

Analyte	Method	Unit	Result	DLR	MCL	PQL	Analysis Start Date/Time
Nitrate Nitrogen	EPA300.0	mg/L	<0.1	0.4	10	0.1	8/3/2023 9:55
NO3 (Nitrate)	EPA300.0 REV	mg/L	<0.5	2.0	45*	0.5	8/3/2023 9:55

Lab Number: AC73088

Sample Site: 70331 VINEYARD CANYON RD PARKFIELD CA 93451
Source Code:
Other ID: PPW-1-C

Client Code: OTHER

Collection Date/Time: 8/2/2023 14:00
Submittal Date/Time: 8/3/2023 7:53
Sample Collector: SHORT L

Sample Comments: Special Drinking Water. Receiving temperature 3.6 °C.

Analyte	Method	Unit	Result	DLR	MCL	PQL	Analysis Start Date/Time
Nitrate Nitrogen	EPA300.0	mg/L	<0.1	0.4	10	0.1	8/3/2023 10:08
NO3 (Nitrate)	EPA300.0 REV	mg/L	<0.5	2.0	45*	0.5	8/3/2023 10:08

Lab Number: AC73089

Sample Site: 70331 VINEYARD CANYON RD PARKFIELD CA 93451
Source Code:
Other ID: PPW-1-D

Client Code: OTHER

Collection Date/Time: 8/2/2023 15:45
Submittal Date/Time: 8/3/2023 7:53
Sample Collector: SHORT L

Sample Comments: Special Drinking Water. Receiving temperature 2.9 °C.

Analyte	Method	Unit	Result	DLR	MCL	PQL	Analysis Start Date/Time
Nitrate Nitrogen	EPA300.0	mg/L	0.2	0.4	10	0.1	8/3/2023 10:21
NO3 (Nitrate)	EPA300.0 REV	mg/L	0.9	2.0	45*	0.5	8/3/2023 10:21

mg/L : Milligrams per liter (=ppm)

PQL : Practical Quantitation Limit

DLR : Detection Limit for Reporting

ug/L : Micrograms per liter (=ppb)

MCL : Maximum Contaminant Level

ND : Not Detected

* : Primary Standards

** : Secondary Standards

N/A : Not Applicable

*** : Action Level

Report approved by:



Donna Ferguson, Ph.D, P.H.M
Laboratory Director

mg/L : Milligrams per liter (=ppm)
PQL : Practical Quantitation Limit
DLR : Detection Limit for Reporting

ug/L : Micrograms per liter (=ppb)
MCL : Maximum Contaminant Level
ND : Not Detected

* : Primary Standards
** : Secondary Standards
*** : Action Level
N/A : Not Applicable



Geocon Consultants, Inc.
3160 Gold Valley Drive, Suite 800
Rancho Cordova, California 95742
RE: CALFIRE PARKFIELD FS

Work Order No.: 2308008

Dear Lauren Short:

Torrent Laboratory, Inc. received 1 sample(s) on August 02, 2023 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

A handwritten signature in blue ink, appearing to read "Patti L. Sandrock", is written over a light blue horizontal line.

Patti L Sandrock
QA Officer

August 03, 2023

Date



Date: 8/3/2023

Client: Geocon Consultants, Inc.

Project: CALFIRE PARKFIELD FS

Work Order: 2308008

CASE NARRATIVE

Unless otherwise indicated in the following narrative, no issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

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Analytical Comments for method E 200.8, 2308008-001A MS/MSD, QC Preparation Batch ID 1153262, Note: The % recoveries for Antimony, Beryllium and Zinc are outside of laboratory control limits but RPD is within limits. The associated LCS/LCSD is within both % Recovery and RPD limits. No corrective action required.

Barium and Nickel are not recoverable (NR). The sample concentration is greater than 4X the spike concentration. No corrective action is required.



Sample Result Summary

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date Received: 08/02/23

Date Reported: 08/03/23

PPW-1-A

2308008-001

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Aluminum	E200.7	1	0.024	2.0	31	mg/L
Calcium	E200.7	1	0.034	2.0	76	mg/L
Iron	E200.7	1	0.048	0.30	49	mg/L
Magnesium	E200.7	1	0.0050	2.0	150	mg/L
Manganese	E200.7	1	0.0020	0.050	1.2	mg/L
Potassium	E200.7	1	0.094	5.0	9.9	mg/L
Sodium	E200.7	1	0.030	5.0	150	mg/L
Boron	E200.7	1	0.010	0.050	0.95	mg/L
Arsenic	E200.8	1	0.40	1.0	14.8	ug/L
Chromium	E200.8	1	0.42	1.0	107	ug/L
Copper	E200.8	1	0.25	1.0	57.5	ug/L
Lead	E200.8	1	0.32	1.0	9.55	ug/L
Selenium	E200.8	1	0.65	2.0	2.63	ug/L
Vanadium	E200.8	1	0.70	2.0	46.0	ug/L
Barium	E200.8	10	8.0	20	587	ug/L
Nickel	E200.8	10	4.9	10	318	ug/L
Zinc	E200.8	10	15	25	170	ug/L
Chloride	E300.0	10	0.16	2.00	395	mg/L
Sulfate	E300.0	10	3.1	5.00	30.7	mg/L
Total Dissolved Solids	SM2540C	1	2.0	20	824	mg/L



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/02/23, 10:00 am

Date Reported: 08/03/23

Client Sample ID:	PPW-1-A	Lab Sample ID:	2308008-001A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/01/23 / 18:00		
SDG:			

Prep Method:	245.1P	Prep Batch Date/Time:	8/2/23	12:10:00PM
Prep Batch ID:	1153268	Prep Analyst:	ROME	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury	E245.1	1	0.00010	0.00020	ND		mg/L	08/03/23	10:42	BJAY	476913



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/02/23, 10:00 am
Date Reported: 08/03/23

Client Sample ID:	PPW-1-A	Lab Sample ID:	2308008-001A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/01/23 / 18:00		
SDG:			

Prep Method: 200.7P	Prep Batch Date/Time: 8/2/23 12:10:00PM
Prep Batch ID: 1153272	Prep Analyst: ROME

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aluminum	E200.7	1	0.024	2.0	31		mg/L	08/02/23	18:11	AT	476901
Calcium	E200.7	1	0.034	2.0	76		mg/L	08/02/23	18:11	AT	476901
Iron	E200.7	1	0.048	0.30	49		mg/L	08/02/23	18:11	AT	476901
Magnesium	E200.7	1	0.0050	2.0	150		mg/L	08/02/23	18:11	AT	476901
Manganese	E200.7	1	0.0020	0.050	1.2		mg/L	08/02/23	18:11	AT	476901
Potassium	E200.7	1	0.094	5.0	9.9		mg/L	08/02/23	18:11	AT	476901
Sodium	E200.7	1	0.030	5.0	150		mg/L	08/02/23	18:11	AT	476901
Boron	E200.7	1	0.010	0.050	0.95		mg/L	08/02/23	18:11	AT	476901



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/02/23, 10:00 am

Date Reported: 08/03/23

Client Sample ID:	PPW-1-A	Lab Sample ID:	2308008-001A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/01/23 / 18:00		
SDG:			

Prep Method:	200.8P	Prep Batch Date/Time:	8/2/23 12:01:00PM
Prep Batch ID:	1153262	Prep Analyst:	ERAGUDO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony	E200.8	1	0.45	1.0	ND		ug/L	08/02/23	19:18	ERR	476917
Arsenic	E200.8	1	0.40	1.0	14.8		ug/L	08/02/23	19:18	ERR	476917
Beryllium	E200.8	1	0.56	2.0	ND		ug/L	08/02/23	19:18	ERR	476917
Cadmium	E200.8	1	0.25	1.0	ND		ug/L	08/02/23	19:18	ERR	476917
Chromium	E200.8	1	0.42	1.0	107		ug/L	08/02/23	19:18	ERR	476917
Copper	E200.8	1	0.25	1.0	57.5		ug/L	08/02/23	19:18	ERR	476917
Lead	E200.8	1	0.32	1.0	9.55		ug/L	08/02/23	19:18	ERR	476917
Selenium	E200.8	1	0.65	2.0	2.63		ug/L	08/02/23	19:18	ERR	476917
Silver	E200.8	1	0.21	0.50	ND		ug/L	08/02/23	19:18	ERR	476917
Thallium	E200.8	1	1.3	2.0	ND		ug/L	08/02/23	19:18	ERR	476917
Vanadium	E200.8	1	0.70	2.0	46.0		ug/L	08/02/23	19:18	ERR	476917



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/02/23, 10:00 am
Date Reported: 08/03/23

Client Sample ID:	PPW-1-A	Lab Sample ID:	2308008-001A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/01/23 / 18:00		
SDG:			

Prep Method: 200.8P	Prep Batch Date/Time: 8/2/23 12:01:00PM
Prep Batch ID: 1153262	Prep Analyst: ERAGUDO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Barium	E200.8	10	8.0	20	587		ug/L	08/02/23	19:42	ERR	476917
Nickel	E200.8	10	4.9	10	318		ug/L	08/02/23	19:42	ERR	476917
Zinc	E200.8	10	15	25	170		ug/L	08/02/23	19:42	ERR	476917



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/02/23, 10:00 am

Date Reported: 08/03/23

Client Sample ID:	PPW-1-A	Lab Sample ID:	2308008-001B
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/01/23 / 18:00		
SDG:			

Prep Method:	300.0P	Prep Batch Date/Time:	8/2/23	6:00:00PM
Prep Batch ID:	1153294	Prep Analyst:	PHUFANO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Chloride	E300.0	10	0.16	2.00	395		mg/L	08/02/23	21:47	PH	476898
Sulfate	E300.0	10	3.1	5.00	30.7		mg/L	08/02/23	21:47	PH	476898



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/02/23, 10:00 am
Date Reported: 08/03/23

Client Sample ID:	PPW-1-A	Lab Sample ID:	2308008-001B
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/01/23 / 18:00		
SDG:			

Prep Method:	TDS-P	Prep Batch Date/Time:	8/2/23	6:00:00PM
Prep Batch ID:	1153321	Prep Analyst:	KAURN	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Total Dissolved Solids	SM2540C	1	2.0	20	824		mg/L	08/03/23	14:00	NK	476929



MB Summary Report

Work Order:	2308008	Prep Method:	200.8P	Prep Date:	08/02/23	Prep Batch:	1153262
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/2/2023	Analytical Batch:	476917
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Antimony	0.45	1.0	ND		
Arsenic	0.40	1.0	ND		
Barium	0.80	2.0	ND		
Beryllium	0.56	1.0	ND		
Cadmium	0.25	1.0	ND		
Chromium	0.42	1.0	ND		
Copper	0.25	1.0	ND		
Lead	0.32	1.0	ND		
Nickel	0.49	1.0	ND		
Selenium	0.65	2.0	ND		
Silver	0.21	0.50	ND		
Thallium	1.3	2.0	ND		
Vanadium	0.70	2.0	ND		
Zinc	1.5	5.0	1.8		

Work Order:	2308008	Prep Method:	245.1P	Prep Date:	08/02/23	Prep Batch:	1153268
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	8/3/2023	Analytical Batch:	476913
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Mercury	0.00010	0.00020	ND		



MB Summary Report

Work Order:	2308008	Prep Method:	200.7P	Prep Date:	08/02/23	Prep Batch:	1153272
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	8/2/2023	Analytical Batch:	476901
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Antimony	0.0050	0.050	ND		
Arsenic	0.0040	0.010	ND		
Barium	0.00050	0.050	ND		
Beryllium	0.00020	0.050	ND		
Cadmium	0.0020	0.050	ND		
Chromium	0.00090	0.050	ND		
Cobalt	0.00050	0.050	ND		
Copper	0.0020	0.050	ND		
Lead	0.0014	0.050	ND		
Molybdenum	0.0020	0.050	ND		
Nickel	0.0020	0.050	ND		
Selenium	0.0073	0.050	ND		
Silver	0.0040	0.050	ND		
Thallium	0.0040	0.050	ND		
Vanadium	0.0010	0.050	0.0011		
Zinc	0.0020	0.050	ND		
Aluminum	0.024	2.0	ND		
Calcium	0.034	5.0	ND		
Iron	0.048	0.30	ND		
Magnesium	0.0050	5.0	ND		
Manganese	0.0020	0.050	ND		
Potassium	0.094	5.0	ND		
Sodium	0.030	5.0	ND		
Boron	0.010	0.050	ND		

Work Order:	2308008	Prep Method:	300.0P	Prep Date:	08/02/23	Prep Batch:	1153294
Matrix:	Water	Analytical Method:	E300.0	Analyzed Date:	8/2/2023	Analytical Batch:	476898
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Chloride	0.016	0.20	ND		
Nitrate as N	0.16	0.25	ND		
Nitrite as N	0.045	0.20	ND		
Sulfate	0.31	0.50	ND		



MB Summary Report

Work Order:	2308008	Prep Method:	TDS-P	Prep Date:	08/02/23	Prep Batch:	1153321
Matrix:	Water	Analytical Method:	SM2540C	Analyzed Date:	8/3/2023	Analytical Batch:	476929
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Total Dissolved Solids	1.0	10	1.00		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308008	Prep Method:	200.8P	Prep Date:	08/02/23	Prep Batch:	1153262
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/2/2023	Analytical Batch:	476917
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony	0.45	1.0	ND	50	102	104		85 - 115	20	
Arsenic	0.40	1.0	ND	50	97.7	99.6		85 - 115	20	
Barium	0.80	2.0	ND	50	96.3	98.3		85 - 115	20	
Beryllium	0.32	2.0	ND	50	96.1	97.9		85 - 115	20	
Cadmium	0.43	1.0	ND	50	97.3	99.0		85 - 115	20	
Chromium	0.42	1.0	ND	50	98.0	98.6		85 - 115	20	
Copper	0.25	1.0	ND	50	97.8	98.1		85 - 115	20	
Lead	0.42	1.0	ND	50	96.0	98.3		85 - 115	20	
Nickel	0.49	1.0	ND	50	98.2	99.1		85 - 115	20	
Selenium	0.42	2.0	ND	50	97.5	98.1		85 - 115	20	
Silver	0.21	0.50	ND	50	97.2	97.7		85 - 115	20	
Thallium	1.3	2.0	ND	50	95.1	98.0		85 - 115	20	
Vanadium	0.70	2.0	ND	50	98.1	99.2		85 - 115	20	
Zinc	1.5	5.0	1.8	50	102	105		85 - 115	20	

Work Order:	2308008	Prep Method:	245.1P	Prep Date:	08/02/23	Prep Batch:	1153268
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	8/3/2023	Analytical Batch:	476913
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Mercury	0.00013	0.00020	ND	0.015	104	105	0.000	85 - 115	20	



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308008	Prep Method:	200.7P	Prep Date:	08/02/23	Prep Batch:	1153272
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	8/2/2023	Analytical Batch:	476901
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony	0.0050	0.010	ND	1.0	99.0	97.6	1.42	80 - 120	20	
Arsenic	0.0040	0.010	ND	1.0	100	97.8	2.22	80 - 120	20	
Barium	0.00050	0.0050	ND	1.0	100	97.9	2.12	80 - 120	20	
Beryllium	0.00020	0.0050	ND	1.0	100	97.9	2.12	80 - 120	20	
Cadmium	0.0020	0.0050	ND	1.0	99.8	97.5	2.33	80 - 120	20	
Chromium	0.00090	0.0050	ND	1.0	99.8	97.4	2.43	80 - 120	20	
Cobalt	0.00050	0.0050	ND	1.0	99.9	97.5	2.43	80 - 120	20	
Copper	0.0020	0.0050	ND	1.0	101	97.9	3.12	80 - 120	20	
Lead	0.0014	0.010	ND	1.0	100	97.7	2.33	80 - 120	20	
Molybdenum	0.0020	0.0050	ND	1.0	99.5	97.8	1.72	80 - 120	20	
Nickel	0.0020	0.0050	ND	1.0	99.8	97.5	2.33	80 - 120	20	
Selenium	0.0073	0.010	ND	1.0	100	98.3	1.71	80 - 120	20	
Silver	0.0040	0.010	ND	1.0	99.8	97.5	2.33	80 - 120	20	
Thallium	0.0040	0.020	ND	1.0	99.6	97.3	2.34	80 - 120	20	
Vanadium	0.0010	0.0050	0.0011	1.0	99.8	97.6	2.23	80 - 120	20	
Zinc	0.0020	0.0050	ND	1.0	99.9	97.5	2.43	80 - 120	20	
Aluminum	0.024	2.0	ND	10	100	98.2	1.82	80 - 120	20	
Calcium	0.034	5.0	ND	10	99.8	97.5	2.33	80 - 120	20	
Iron	0.048	0.30	ND	10	99.8	97.6	2.23	80 - 120	20	
Magnesium	0.0050	5.0	ND	10	100	97.8	2.22	80 - 120	20	
Manganese	0.0020	0.010	ND	1.0	100	97.8	2.22	80 - 120	20	
Potassium	0.094	5.0	ND	10	101	98.8	2.20	80 - 120	20	
Sodium	0.030	5.0	ND	10	99.1	96.4	2.76	80 - 120	20	
Boron	0.010	0.050	ND	1.0	99.1	96.7	2.45	80 - 120	20	

Work Order:	2308008	Prep Method:	300.0P	Prep Date:	08/02/23	Prep Batch:	1153294
Matrix:	Water	Analytical Method:	E300.0	Analyzed Date:	8/2/2023	Analytical Batch:	476898
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Chloride	0.031	0.20	ND	2.5	95.9	95.9	0.000	80 - 120	20	
Nitrate as N	0.0070	0.10	ND	2.5	99.4	99.6	0.402	80 - 120	20	
Nitrite as N	0.0090	0.10	ND	2.5	106	106	0.000	80 - 120	20	
Sulfate	0.00050	0.50	ND	2.5	90.1	90.3	0.443	80 - 120	20	



MS/MSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308008	Prep Method:	200.8P	Prep Date:	08/02/23	Prep Batch:	1153262
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/2/2023	Analytical Batch:	476917
Spiked Sample:	2308008-001A						
Units:	ug/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony	0.019	0.50	ND	50	41.6	39.3	5.43	75 - 125	20	S
Arsenic	0.19	0.50	14.8	50	104	102	1.66	75 - 125	20	
Barium	0.066	0.50	565	50	0	0	2.86	75 - 125	20	NR
Beryllium	0.018	0.50	0.595	50	74.7	73.1	2.40	75 - 125	20	S
Cadmium	0.033	0.50	0.597	50	97.0	94.8	2.27	75 - 125	20	
Chromium	0.044	0.50	107	50	78.2	79.3	0.683	75 - 125	20	
Copper	0.25	1.0	57.5	50	108	105	0.905	75 - 125	20	
Lead	0.031	0.50	9.55	50	83.3	81.2	2.17	75 - 125	20	
Nickel	0.30	1.0	305	50	0	0	0.844	75 - 125	20	NR
Selenium	0.034	0.50	2.63	50	92.8	91.3	1.44	75 - 125	20	
Silver	0.012	0.50	ND	50	96.8	93.8	3.15	75 - 125	20	
Thallium	0.0040	0.50	ND	50	84.6	83.0	1.91	75 - 125	20	
Vanadium	0.020	0.50	46.0	50	82.4	82.1	0.115	75 - 125	20	
Zinc	0.59	2.0	152	50	167	140	6.11	75 - 125	20	S



Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit/Reporting Limit/Limit of Quantitation (PQL/RL/LOQ) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs/RLs/LODs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - mg/L and mg/Kg (equivalent to PPM - parts per million in liquid and solid), ug/L and ug/Kg (equivalent to PPB - parts per billion in liquid and solid), ug/m3 , mg/m3 , ppbv and ppmv (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), ug/Wipe (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS

B - Indicates when the analyte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H - Indicates that the recommended holding time for the analyte or compound has been exceeded
J - Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
ND - Not Detected at a concentration greater than the PQL/RL or, if reported to the MDL, at greater than the MDL.
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R - The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S - Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.



Sample Receipt Checklist

Client Name: Geocon Consultants, Inc.

Date and Time Received: 8/2/2023 10:00:00AM

Project Name: CALFIRE PARKFIELD FS

Received By: Lorna Imbat

Work Order No.: 2308008

Physically Logged By: Lorna Imbat

Checklist Completed By: Lorna Imbat

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present?	<u>Yes</u>
Chain of custody signed when relinquished and received?	<u>Yes</u>
Chain of custody agrees with sample labels?	<u>Yes</u>
Custody seals intact on sample bottles?	<u>Not Present</u>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	<u>Not Present</u>
Shipping Container/Cooler In Good Condition?	<u>Yes</u>
Samples in proper container/bottle?	<u>Yes</u>
Samples containers intact?	<u>Yes</u>
Sufficient sample volume for indicated test?	<u>Yes</u>

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	<u>Yes</u>	
Container/Temp Blank temperature in compliance?	<u>Yes</u>	Temperature: 3.0 °C
Water-VOA vials have zero headspace?	<u>No VOA vials submitted</u>	
Water-pH acceptable upon receipt?	<u>N/A</u>	
pH Checked by: Lorna Imbat	pH Adjusted by: N/A	

Comments:



Login Summary Report

Client ID: TL5309 Geocon Consultants, Inc.

QC Level: II

Project Name: CALFIRE PARKFIELD FS

TAT Requested: 1 Day Rush:1

Project # : S2120-05-05

Date Received: 8/2/2023

Report Due Date: 8/3/2023

Time Received: 10:00 am

Comments:

Work Order # : 2308008

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
2308008-001A	PPW-1-A	08/01/23 18:00	Water	09/15/23			Met_W_200.8CAM17 Hg_W_7470A Met_200.7 Full Hg_245.1	
2308008-001B	PPW-1-A	08/01/23 18:00	Water	09/15/23			Anion_W_300.0 TDS_2540C	
<u>Sample Note:</u>	Cl,SO4 (300)							



CHAIN OF CUSTODY

2308008

Reset

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

Company Name: Geocon Consultants, Inc			☐ Env. ☒ Non Env.	Project #: S2120-05-05	PO#:
Address: 3160 Gold Valley Drive				Project Name: CALFIRE Parkfield FS	
City: Rancho Cordova	State: CA	Zip Code: 95742	Comments: Water from a proposed <u>drinking water supply well</u>		
Telephone:		Cell: 669-294-3357	SAMPLER: Nick Rice		
REPORT TO: Lauren Short		BILL TO: Lauren Short	EMAIL: short@geoconinc.com, Rice @ geoconinc.com		

☐ 2 - 8 Hours ☐ 2 Work Days ☐ 5 Work Days
☐ Noon - Nxt Day ☐ 3 Work Days ☐ 7 Work Days
☒ 1 Work Day ☐ 4 Work Days ☐ 10 Work Days

☒ Drinking Water ☐ Storm Water ☐ Air
☐ Waste Water ☐ Wip
☒ Ground Water ☐ Oth
☐ Soil ☐ Product / Bulk

☒ Level II - Std.
☐ DoD/DoE Level III
☐ DoD/DoE Level III

☒ Excel - EDD ☐ EDF
☐ Client Specific EDD

Calcium, Magnesium,
Sodium, Potassium,
Chloride, and Sulfate by
EPA 200 & 300
Drinking Water Metals
by EPA 200

TDS
(if enough water)

TDS
(if enough water)

ANALYSIS
REQUESTED[illegible]

1	Relinquished By: Nick Rice	Print: [Signature]	Date: 8/2/23	Time: 0700	Received By: LE Swart	Print: [Signature]	Date: 8/2/23	Time: 0700
2	Relinquished By: [Signature]	Print: LE Swart	Date: 8/2/23	Time: 0830	Received By: Cym	Print: Claudia Moreno	Date: 8/2/23	Time: 10:00am

Cooler Temperature 2.6 #3

Samples Received on ice? Yes ☒ No ☐

Method of Shipment D/O

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made.

QA-F-065, Rev 1.0, TLICD-959

Page ____ of ____



Geocon Consultants, Inc.
3160 Gold Valley Drive, Suite 800
Rancho Cordova, California 95742

RE: CALFIRE PARKFIELD FS

Work Order No.: 2308018

Dear Lauren Short:

Torrent Laboratory, Inc. received 3 sample(s) on August 03, 2023 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

A handwritten signature in blue ink, appearing to read "Patti L. Sandrock", is written over a light blue horizontal line.

Patti L Sandrock
QA Officer

August 04, 2023

Date



Date: 8/4/2023

Client: Geocon Consultants, Inc.

Project: CALFIRE PARKFIELD FS

Work Order: 2308018

CASE NARRATIVE

Unless otherwise indicated in the following narrative, no issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Laboratory, Inc.

Analytical Comments for method 200.8, 2308018-001A MS/MSD, QC Preparation Batch ID 1153305, Note: Barium is not recoverable (NR). The sample concentration is greater than 4X the spike concentration. No corrective action is required.

Analytical Comments for method 300.0, 2308018-001A MS/MSD, QC Preparation Batch ID 1153331, Note: Chloride is not recoverable (NR). The sample concentration is greater than 4X the spike concentration. No corrective action is required.

Analytical Comments for method E 200.7, 2308018-001A MS/MSD, QC Preparation Batch ID 1153308 Note: The % recoveries for Magnesium and Sodium are outside of laboratory control limits but RPD is within limits. The associated LCS/LCSD is within both % Recovery and RPD limits. No corrective action required.



Sample Result Summary

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date Received: 08/03/23

Date Reported: 08/04/23

PPW-1-B

2308018-001

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Aluminum	E200.7	1	0.024	2.0	3.5	mg/L
Calcium	E200.7	1	0.034	2.0	62	mg/L
Iron	E200.7	1	0.048	0.30	5.0	mg/L
Magnesium	E200.7	1	0.0050	2.0	150	mg/L
Manganese	E200.7	1	0.0020	0.050	0.26	mg/L
Potassium	E200.7	1	0.094	5.0	5.4	mg/L
Sodium	E200.7	1	0.030	5.0	150	mg/L
Boron	E200.7	1	0.010	0.050	0.70	mg/L
Arsenic	E200.8	1	0.40	1.0	3.64	ug/L
Barium	E200.8	1	0.80	2.0	433	ug/L
Chromium	E200.8	1	0.42	1.0	9.85	ug/L
Copper	E200.8	1	0.25	1.0	4.10	ug/L
Nickel	E200.8	1	0.49	1.0	23.6	ug/L
Vanadium	E200.8	1	0.70	2.0	7.29	ug/L
Zinc	E200.8	1	1.5	2.5	13.0	ug/L
Chloride	E300.0	10	0.16	2.00	470	mg/L
Sulfate	E300.0	10	3.1	5.00	26.0	mg/L
Total Dissolved Solids	SM2540C	1	1.0	10	1380	mg/L

PPW-1-C

2308018-002

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Aluminum	E200.7	1	0.024	2.0	130	mg/L
Calcium	E200.7	1	0.034	2.0	160	mg/L
Iron	E200.7	1	0.048	0.30	190	mg/L
Magnesium	E200.7	1	0.0050	2.0	250	mg/L
Manganese	E200.7	1	0.0020	0.050	4.3	mg/L
Potassium	E200.7	1	0.094	5.0	21	mg/L
Sodium	E200.7	1	0.030	5.0	100	mg/L
Boron	E200.7	1	0.010	0.050	0.64	mg/L
Arsenic	E200.8	1	0.40	1.0	28.1	ug/L
Beryllium	E200.8	1	0.56	2.0	2.22	ug/L
Cadmium	E200.8	1	0.25	1.0	2.84	ug/L
Chromium	E200.8	1	0.42	1.0	336	ug/L
Copper	E200.8	1	0.25	1.0	339	ug/L
Lead	E200.8	1	0.32	1.0	50.7	ug/L
Selenium	E200.8	1	0.65	2.0	10.2	ug/L
Silver	E200.8	1	0.21	0.50	1.31	ug/L
Vanadium	E200.8	1	0.70	2.0	109	ug/L
Zinc	E200.8	1	1.5	2.5	310	ug/L
Barium	E200.8	10	8.0	20	1890	ug/L
Nickel	E200.8	10	4.9	10	1240	ug/L
Mercury	E245.1	1	0.00010	0.00020	0.0014	mg/L
Chloride	E300.0	10	0.16	2.00	190	mg/L
Sulfate	E300.0	10	3.1	5.00	40.3	mg/L
Total Dissolved Solids	SM2540C	1	3.3	33	700	mg/L



Sample Result Summary

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date Received: 08/03/23

Date Reported: 08/04/23

PPW-1-D

2308018-003

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Aluminum	E200.7	1	0.024	2.0	150	mg/L
Calcium	E200.7	1	0.034	2.0	180	mg/L
Iron	E200.7	1	0.048	0.30	210	mg/L
Magnesium	E200.7	1	0.0050	2.0	250	mg/L
Manganese	E200.7	1	0.0020	0.050	4.8	mg/L
Potassium	E200.7	1	0.094	5.0	26	mg/L
Sodium	E200.7	1	0.030	5.0	130	mg/L
Boron	E200.7	1	0.010	0.050	0.70	mg/L
Arsenic	E200.8	1	0.40	1.0	33.0	ug/L
Beryllium	E200.8	1	0.56	2.0	2.32	ug/L
Cadmium	E200.8	1	0.25	1.0	2.55	ug/L
Chromium	E200.8	1	0.42	1.0	414	ug/L
Copper	E200.8	1	0.25	1.0	341	ug/L
Lead	E200.8	1	0.32	1.0	49.8	ug/L
Selenium	E200.8	1	0.65	2.0	11.3	ug/L
Silver	E200.8	1	0.21	0.50	1.21	ug/L
Vanadium	E200.8	1	0.70	2.0	161	ug/L
Zinc	E200.8	1	1.5	2.5	400	ug/L
Barium	E200.8	10	8.0	20	1870	ug/L
Nickel	E200.8	10	4.9	10	1360	ug/L
Mercury	E245.1	1	0.00010	0.00020	0.0013	mg/L
Chloride	E300.0	10	0.16	2.00	207	mg/L
Sulfate	E300.0	10	3.1	5.00	72.3	mg/L
Total Dissolved Solids	SM2540C	1	5.0	50	675	mg/L



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am
Date Reported: 08/04/23

Client Sample ID:	PPW-1-B	Lab Sample ID:	2308018-001A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 11:20		
SDG:			

Prep Method: 245.1P	Prep Batch Date/Time: 8/3/23 12:00:00PM
Prep Batch ID: 1153311	Prep Analyst: ROME

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury	E245.1	1	0.00010	0.00020	ND		mg/L	08/04/23	10:49	BJAY	476955



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am
Date Reported: 08/04/23

Client Sample ID:	PPW-1-B	Lab Sample ID:	2308018-001A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 11:20		
SDG:			

Prep Method: 200.7P	Prep Batch Date/Time: 8/3/23 12:00:00PM
Prep Batch ID: 1153308	Prep Analyst: ROME

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aluminum	E200.7	1	0.024	2.0	3.5		mg/L	08/03/23	19:59	AT	476962
Calcium	E200.7	1	0.034	2.0	62		mg/L	08/03/23	19:59	AT	476962
Iron	E200.7	1	0.048	0.30	5.0		mg/L	08/03/23	19:59	AT	476962
Magnesium	E200.7	1	0.0050	2.0	150		mg/L	08/03/23	19:59	AT	476962
Manganese	E200.7	1	0.0020	0.050	0.26		mg/L	08/03/23	19:59	AT	476962
Potassium	E200.7	1	0.094	5.0	5.4		mg/L	08/03/23	19:59	AT	476962
Sodium	E200.7	1	0.030	5.0	150		mg/L	08/03/23	19:59	AT	476962
Boron	E200.7	1	0.010	0.050	0.70		mg/L	08/03/23	19:59	AT	476962



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am
Date Reported: 08/04/23

Client Sample ID:	PPW-1-B	Lab Sample ID:	2308018-001A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 11:20		
SDG:			

Prep Method: 200.8P	Prep Batch Date/Time: 8/3/23 11:35:00AM
Prep Batch ID: 1153305	Prep Analyst: ERAGUDO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony	E200.8	1	0.45	1.0	ND		ug/L	08/03/23	16:02	ERR	476937
Arsenic	E200.8	1	0.40	1.0	3.64		ug/L	08/03/23	16:02	ERR	476937
Barium	E200.8	1	0.80	2.0	433		ug/L	08/03/23	16:02	ERR	476937
Beryllium	E200.8	1	0.56	2.0	ND		ug/L	08/03/23	16:02	ERR	476937
Cadmium	E200.8	1	0.25	1.0	ND		ug/L	08/03/23	16:02	ERR	476937
Chromium	E200.8	1	0.42	1.0	9.85		ug/L	08/03/23	16:02	ERR	476937
Copper	E200.8	1	0.25	1.0	4.10		ug/L	08/03/23	16:02	ERR	476937
Lead	E200.8	1	0.32	1.0	ND		ug/L	08/03/23	16:02	ERR	476937
Nickel	E200.8	1	0.49	1.0	23.6		ug/L	08/03/23	16:02	ERR	476937
Selenium	E200.8	1	0.65	2.0	ND		ug/L	08/03/23	16:02	ERR	476937
Silver	E200.8	1	0.21	0.50	ND		ug/L	08/03/23	16:02	ERR	476937
Thallium	E200.8	1	1.3	2.0	ND		ug/L	08/03/23	16:02	ERR	476937
Vanadium	E200.8	1	0.70	2.0	7.29		ug/L	08/03/23	16:02	ERR	476937
Zinc	E200.8	1	1.5	2.5	13.0		ug/L	08/03/23	16:02	ERR	476937



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am

Date Reported: 08/04/23

Client Sample ID:	PPW-1-B	Lab Sample ID:	2308018-001B
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 11:20		
SDG:			

Prep Method:	300.0P	Prep Batch Date/Time:	8/3/23	6:00:00PM
Prep Batch ID:	1153331	Prep Analyst:	PHUFANO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Chloride	E300.0	10	0.16	2.00	470		mg/L	08/03/23	21:33	PH	476940
Sulfate	E300.0	10	3.1	5.00	26.0		mg/L	08/03/23	21:33	PH	476940



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am

Date Reported: 08/04/23

Client Sample ID:	PPW-1-B	Lab Sample ID:	2308018-001B
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 11:20		
SDG:			

Prep Method: TDS-P	Prep Batch Date/Time: 8/3/23 6:00:00PM
Prep Batch ID: 1153362	Prep Analyst: KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Total Dissolved Solids	SM2540C	1	1.0	10	1380		mg/L	08/04/23	14:00	NK	476968



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am

Date Reported: 08/04/23

Client Sample ID:	PPW-1-C	Lab Sample ID:	2308018-002A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 14:00		
SDG:			

Prep Method:	245.1P	Prep Batch Date/Time:	8/3/23 12:00:00PM
Prep Batch ID:	1153311	Prep Analyst:	ROME

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury	E245.1	1	0.00010	0.00020	0.0014		mg/L	08/04/23	10:51	BJAY	476955



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am
Date Reported: 08/04/23

Client Sample ID:	PPW-1-C	Lab Sample ID:	2308018-002A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 14:00		
SDG:			

Prep Method: 200.7P	Prep Batch Date/Time: 8/3/23 12:00:00PM
Prep Batch ID: 1153308	Prep Analyst: ROME

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aluminum	E200.7	1	0.024	2.0	130		mg/L	08/03/23	20:07	AT	476962
Calcium	E200.7	1	0.034	2.0	160		mg/L	08/03/23	20:07	AT	476962
Iron	E200.7	1	0.048	0.30	190		mg/L	08/03/23	20:07	AT	476962
Magnesium	E200.7	1	0.0050	2.0	250		mg/L	08/03/23	20:07	AT	476962
Manganese	E200.7	1	0.0020	0.050	4.3		mg/L	08/03/23	20:07	AT	476962
Potassium	E200.7	1	0.094	5.0	21		mg/L	08/03/23	20:07	AT	476962
Sodium	E200.7	1	0.030	5.0	100		mg/L	08/03/23	20:07	AT	476962
Boron	E200.7	1	0.010	0.050	0.64		mg/L	08/03/23	20:07	AT	476962



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am
Date Reported: 08/04/23

Client Sample ID:	PPW-1-C	Lab Sample ID:	2308018-002A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 14:00		
SDG:			

Prep Method:	200.8P	Prep Batch Date/Time:	8/3/23 11:35:00AM
Prep Batch ID:	1153305	Prep Analyst:	ERAGUDO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony	E200.8	1	0.45	1.0	ND		ug/L	08/03/23	16:16	ERR	476937
Arsenic	E200.8	1	0.40	1.0	28.1		ug/L	08/03/23	16:16	ERR	476937
Beryllium	E200.8	1	0.56	2.0	2.22		ug/L	08/03/23	16:16	ERR	476937
Cadmium	E200.8	1	0.25	1.0	2.84		ug/L	08/03/23	16:16	ERR	476937
Chromium	E200.8	1	0.42	1.0	336		ug/L	08/03/23	16:16	ERR	476937
Copper	E200.8	1	0.25	1.0	339		ug/L	08/03/23	16:16	ERR	476937
Lead	E200.8	1	0.32	1.0	50.7		ug/L	08/03/23	16:16	ERR	476937
Selenium	E200.8	1	0.65	2.0	10.2		ug/L	08/03/23	16:16	ERR	476937
Silver	E200.8	1	0.21	0.50	1.31		ug/L	08/03/23	16:16	ERR	476937
Thallium	E200.8	1	1.3	2.0	ND		ug/L	08/03/23	16:16	ERR	476937
Vanadium	E200.8	1	0.70	2.0	109		ug/L	08/03/23	16:16	ERR	476937
Zinc	E200.8	1	1.5	2.5	310		ug/L	08/03/23	16:16	ERR	476937



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am

Date Reported: 08/04/23

Client Sample ID:	PPW-1-C	Lab Sample ID:	2308018-002A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 14:00		
SDG:			

Prep Method:	200.8P	Prep Batch Date/Time:	8/3/23	11:35:00AM
Prep Batch ID:	1153305	Prep Analyst:	ERAGUDO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Barium	E200.8	10	8.0	20	1890		ug/L	08/03/23	16:26	ERR	476937
Nickel	E200.8	10	4.9	10	1240		ug/L	08/03/23	16:26	ERR	476937



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am

Date Reported: 08/04/23

Client Sample ID:	PPW-1-C	Lab Sample ID:	2308018-002B
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 14:00		
SDG:			

Prep Method:	300.0P	Prep Batch Date/Time:	8/3/23	6:00:00PM
Prep Batch ID:	1153331	Prep Analyst:	PHUFANO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Chloride	E300.0	10	0.16	2.00	190		mg/L	08/03/23	22:38	PH	476940
Sulfate	E300.0	10	3.1	5.00	40.3		mg/L	08/03/23	22:38	PH	476940



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am

Date Reported: 08/04/23

Client Sample ID:	PPW-1-C	Lab Sample ID:	2308018-002B
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 14:00		
SDG:			

Prep Method:	TDS-P	Prep Batch Date/Time:	8/3/23	6:00:00PM
Prep Batch ID:	1153362	Prep Analyst:	KAURN	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Total Dissolved Solids	SM2540C	1	3.3	33	700		mg/L	08/04/23	14:00	NK	476968



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am

Date Reported: 08/04/23

Client Sample ID:	PPW-1-D	Lab Sample ID:	2308018-003A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 15:45		
SDG:			

Prep Method:	245.1P	Prep Batch Date/Time:	8/3/23	12:00:00PM
Prep Batch ID:	1153311	Prep Analyst:	ROME	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury	E245.1	1	0.00010	0.00020	0.0013		mg/L	08/04/23	10:58	BJAY	476955



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am

Date Reported: 08/04/23

Client Sample ID:	PPW-1-D	Lab Sample ID:	2308018-003A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 15:45		
SDG:			

Prep Method:	200.7P	Prep Batch Date/Time:	8/3/23	12:00:00PM
Prep Batch ID:	1153308	Prep Analyst:	ROME	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aluminum	E200.7	1	0.024	2.0	150		mg/L	08/03/23	20:09	AT	476962
Calcium	E200.7	1	0.034	2.0	180		mg/L	08/03/23	20:09	AT	476962
Iron	E200.7	1	0.048	0.30	210		mg/L	08/03/23	20:09	AT	476962
Magnesium	E200.7	1	0.0050	2.0	250		mg/L	08/03/23	20:09	AT	476962
Manganese	E200.7	1	0.0020	0.050	4.8		mg/L	08/03/23	20:09	AT	476962
Potassium	E200.7	1	0.094	5.0	26		mg/L	08/03/23	20:09	AT	476962
Sodium	E200.7	1	0.030	5.0	130		mg/L	08/03/23	20:09	AT	476962
Boron	E200.7	1	0.010	0.050	0.70		mg/L	08/03/23	20:09	AT	476962



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am

Date Reported: 08/04/23

Client Sample ID:	PPW-1-D	Lab Sample ID:	2308018-003A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 15:45		
SDG:			

Prep Method:	200.8P	Prep Batch Date/Time:	8/3/23	11:35:00AM
Prep Batch ID:	1153305	Prep Analyst:	ERAGUDO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony	E200.8	1	0.45	1.0	ND		ug/L	08/03/23	16:21	ERR	476937
Arsenic	E200.8	1	0.40	1.0	33.0		ug/L	08/03/23	16:21	ERR	476937
Beryllium	E200.8	1	0.56	2.0	2.32		ug/L	08/03/23	16:21	ERR	476937
Cadmium	E200.8	1	0.25	1.0	2.55		ug/L	08/03/23	16:21	ERR	476937
Chromium	E200.8	1	0.42	1.0	414		ug/L	08/03/23	16:21	ERR	476937
Copper	E200.8	1	0.25	1.0	341		ug/L	08/03/23	16:21	ERR	476937
Lead	E200.8	1	0.32	1.0	49.8		ug/L	08/03/23	16:21	ERR	476937
Selenium	E200.8	1	0.65	2.0	11.3		ug/L	08/03/23	16:21	ERR	476937
Silver	E200.8	1	0.21	0.50	1.21		ug/L	08/03/23	16:21	ERR	476937
Thallium	E200.8	1	1.3	2.0	ND		ug/L	08/03/23	16:21	ERR	476937
Vanadium	E200.8	1	0.70	2.0	161		ug/L	08/03/23	16:21	ERR	476937
Zinc	E200.8	1	1.5	2.5	400		ug/L	08/03/23	16:21	ERR	476937



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am
Date Reported: 08/04/23

Client Sample ID:	PPW-1-D	Lab Sample ID:	2308018-003A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 15:45		
SDG:			

Prep Method:	200.8P	Prep Batch Date/Time:	8/3/23 11:35:00AM
Prep Batch ID:	1153305	Prep Analyst:	ERAGUDO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Barium	E200.8	10	8.0	20	1870		ug/L	08/03/23	16:31	ERR	476937
Nickel	E200.8	10	4.9	10	1360		ug/L	08/03/23	16:31	ERR	476937



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am

Date Reported: 08/04/23

Client Sample ID:	PPW-1-D	Lab Sample ID:	2308018-003B
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 15:45		
SDG:			

Prep Method:	300.0P	Prep Batch Date/Time:	8/3/23	6:00:00PM
Prep Batch ID:	1153331	Prep Analyst:	PHUFANO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Chloride	E300.0	10	0.16	2.00	207		mg/L	08/03/23	22:59	PH	476940
Sulfate	E300.0	10	3.1	5.00	72.3		mg/L	08/03/23	22:59	PH	476940



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am
Date Reported: 08/04/23

Client Sample ID:	PPW-1-D	Lab Sample ID:	2308018-003B
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 15:45		
SDG:			

Prep Method:	TDS-P	Prep Batch Date/Time:	8/3/23	6:00:00PM
Prep Batch ID:	1153362	Prep Analyst:	KAURN	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Total Dissolved Solids	SM2540C	1	5.0	50	675		mg/L	08/04/23	14:00	NK	476968



MB Summary Report

Work Order:	2308018	Prep Method:	200.8P	Prep Date:	08/03/23	Prep Batch:	1153305
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/3/2023	Analytical Batch:	476937
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Antimony	0.45	1.0	ND		
Arsenic	0.40	1.0	ND		
Barium	0.80	2.0	ND		
Beryllium	0.56	1.0	ND		
Cadmium	0.25	1.0	ND		
Chromium	0.42	1.0	ND		
Copper	0.25	1.0	ND		
Lead	0.32	1.0	ND		
Nickel	0.49	1.0	ND		
Selenium	0.65	2.0	ND		
Silver	0.21	0.50	ND		
Thallium	1.3	2.0	ND		
Vanadium	0.70	2.0	ND		
Zinc	1.5	5.0	ND		

Work Order:	2308018	Prep Method:	200.7P	Prep Date:	08/03/23	Prep Batch:	1153308
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	8/3/2023	Analytical Batch:	476962
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Aluminum	0.024	2.0	ND		
Calcium	0.034	5.0	0.039		
Iron	0.048	0.30	ND		
Magnesium	0.0050	5.0	ND		
Manganese	0.0020	0.050	ND		
Potassium	0.094	5.0	0.13		
Sodium	0.030	5.0	1.4		
Boron	0.010	0.050	ND		

Work Order:	2308018	Prep Method:	245.1P	Prep Date:	08/03/23	Prep Batch:	1153311
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	8/4/2023	Analytical Batch:	476955
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Mercury	0.00010	0.00020	ND		



MB Summary Report

Work Order:	2308018	Prep Method:	300.0P	Prep Date:	08/03/23	Prep Batch:	1153331
Matrix:	Water	Analytical Method:	E300.0	Analyzed Date:	8/3/2023	Analytical Batch:	476940
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Chloride	0.016	0.20	ND		
Sulfate	0.31	0.50	ND		

Work Order:	2308018	Prep Method:	TDS-P	Prep Date:	08/03/23	Prep Batch:	1153362
Matrix:	Water	Analytical Method:	SM2540C	Analyzed Date:	8/4/2023	Analytical Batch:	476968
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Total Dissolved Solids	1.0	10	1.00		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308018	Prep Method:	200.8P	Prep Date:	08/03/23	Prep Batch:	1153305
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/3/2023	Analytical Batch:	476937
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony	0.45	1.0	ND	50	100.	98.8	1.21	85 - 115	20	
Arsenic	0.40	1.0	ND	50	97.5	96.4	1.03	85 - 115	20	
Barium	0.80	2.0	ND	50	97.2	96.0	1.24	85 - 115	20	
Beryllium	0.32	2.0	ND	50	99.0	98.7	0.202	85 - 115	20	
Cadmium	0.43	1.0	ND	50	97.7	97.1	0.821	85 - 115	20	
Chromium	0.42	1.0	ND	50	99.4	100	0.802	85 - 115	20	
Copper	0.25	1.0	ND	50	97.2	95.4	1.87	85 - 115	20	
Lead	0.42	1.0	ND	50	99.5	101	1.79	85 - 115	20	
Nickel	0.49	1.0	ND	50	96.1	95.2	1.04	85 - 115	20	
Selenium	0.42	2.0	ND	50	96.4	95.6	0.833	85 - 115	20	
Silver	0.21	0.50	ND	50	99.6	98.0	1.62	85 - 115	20	
Thallium	1.3	2.0	ND	50	98.1	98.6	0.407	85 - 115	20	
Vanadium	0.70	2.0	ND	50	98.9	97.2	1.83	85 - 115	20	
Zinc	1.5	5.0	ND	50	100	100	0.199	85 - 115	20	

Work Order:	2308018	Prep Method:	200.7P	Prep Date:	08/03/23	Prep Batch:	1153308
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	8/3/2023	Analytical Batch:	476962
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Aluminum	0.024	2.0	ND	10	103	102	0.976	80 - 120	20	
Calcium	0.034	5.0	0.039	10	102	101	0.985	80 - 120	20	
Iron	0.048	0.30	ND	10	102	102	0.000	80 - 120	20	
Magnesium	0.0050	5.0	ND	10	102	101	0.985	80 - 120	20	
Manganese	0.0020	0.010	ND	1.0	102	102	0.000	80 - 120	20	
Potassium	0.094	5.0	0.13	10	103	102	0.976	80 - 120	20	
Sodium	0.030	5.0	1.4	10	113	111	1.79	80 - 120	20	
Boron	0.010	0.050	ND	1.0	101	100	0.995	80 - 120	20	
Titanium						103	0.976	-	20	
Yttrium						-99900	0.000	-	20	,S
Tin						102	0.000	-	20	,

Work Order:	2308018	Prep Method:	245.1P	Prep Date:	08/03/23	Prep Batch:	1153311
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	8/4/2023	Analytical Batch:	476955
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Mercury	0.00013	0.00020	ND	0.015	109	106	3.73	85 - 115	20	,



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308018	Prep Method:	300.0P	Prep Date:	08/03/23	Prep Batch:	1153331
Matrix:	Water	Analytical Method:	E300.0	Analyzed Date:	8/3/2023	Analytical Batch:	476940
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Chloride	0.031	0.20	ND	2.5	95.8	96.5	0.833	80 - 120	20	,
Sulfate	0.00050	0.50	ND	2.5	90.1	90.6	0.885	80 - 120	20	,



MS/MSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308018	Prep Method:	200.8P	Prep Date:	08/03/23	Prep Batch:	1153305
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/3/2023	Analytical Batch:	476937
Spiked Sample:	2308018-001A						
Units:	ug/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony	0.019	0.50	ND	50	91.4	92.7	1.30	75 - 125	20	NR
Arsenic	0.19	0.50	3.64	50	102	103	1.10	75 - 125	20	
Barium	0.066	0.50	433	50	0	0	0.821	75 - 125	20	
Beryllium	0.018	0.50	ND	50	86.0	85.7	0.233	75 - 125	20	
Cadmium	0.033	0.50	ND	50	92.9	93.6	0.643	75 - 125	20	
Chromium	0.044	0.50	9.85	50	88.9	89.2	0.184	75 - 125	20	
Copper	0.25	1.0	4.10	50	94.7	93.3	1.37	75 - 125	20	
Lead	0.031	0.50	0.733	50	85.4	84.6	0.926	75 - 125	20	
Nickel	0.30	1.0	23.6	50	94.1	93.5	0.425	75 - 125	20	
Selenium	0.034	0.50	ND	50	94.7	96.6	1.88	75 - 125	20	
Silver	0.012	0.50	ND	50	94.1	94.1	0.213	75 - 125	20	
Thallium	0.0040	0.50	ND	50	86.5	87.7	1.38	75 - 125	20	
Vanadium	0.020	0.50	7.29	50	93.4	93.7	0.370	75 - 125	20	
Zinc	0.59	2.0	13.0	50	91.6	92.3	0.678	75 - 125	20	

Work Order:	2308018	Prep Method:	200.7P	Prep Date:	08/03/23	Prep Batch:	1153308
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	8/3/2023	Analytical Batch:	476962
Spiked Sample:	2308018-001A						
Units:	mg/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Aluminum	0.024	2.0	3.50	10	109	108	0.702	75 - 125	20	S
Calcium	0.034	5.0	62.0	10	86.0	83.0	0.423	75 - 125	20	
Iron	0.048	0.30	5.00	10	100	99.1	0.669	75 - 125	20	
Magnesium	0.0050	5.0	150	10	70.0	60.0	0.647	75 - 125	20	
Manganese	0.0020	0.010	0.260	1.0	125	125	0.000	75 - 125	20	
Potassium	0.094	5.0	5.40	10	118	117	0.583	75 - 125	20	S
Sodium	0.030	5.0	150	10	60.0	60.0	0.000	75 - 125	20	
Boron	0.010	0.020	ND	1.0	102	102	0.000	75 - 125	20	

Work Order:	2308018	Prep Method:	245.1P	Prep Date:	08/03/23	Prep Batch:	1153311
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	8/4/2023	Analytical Batch:	476955
Spiked Sample:	2308018-002A						
Units:	mg/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Mercury	0.000130	0.000200	0.00140	0.015	94.5	94.8	0.000	70 - 130	20	



MS/MSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308018	Prep Method:	300.0P	Prep Date:	08/03/23	Prep Batch:	1153331
Matrix:	Water	Analytical Method:	E300.0	Analyzed Date:	8/3/2023	Analytical Batch:	476940
Spiked Sample:	2308018-001B						
Units:	mg/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Chloride	0.16	2.00	470	25.0	0	0	0.607	75 - 125	20	NR
Sulfate	3.1	5.00	26.0	25.0	90.4	91.6	0.615	75 - 125	20	



Duplicate QC Summary Report

Work Order:	2308018	Prep Method:	TDS-P	Prep Date:	8/3/2023	Prep Batch:	1153362
Matrix:		Analytical Method:	SM2540C	Analyzed Date:	08/04/23	Analytical Batch:	476968
Units:						Lab Sample ID: 2308018-001B-DUP-1153362	

Parameters	<u>MDL</u>	<u>PQL</u>	<u>Sample Result</u>	<u>Duplicate Result</u>	<u>% RPD</u>	
Total Dissolved Solids	1.0	10	1380	1380	0.00	



Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit/Reporting Limit/Limit of Quantitation (PQL/RL/LOQ) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs/RLs/LODs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - mg/L and mg/Kg (equivalent to PPM - parts per million in liquid and solid), ug/L and ug/Kg (equivalent to PPB - parts per billion in liquid and solid), ug/m3 , mg/m3 , ppbv and ppmv (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), ug/Wipe (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS

B - Indicates when the analyte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H - Indicates that the recommended holding time for the analyte or compound has been exceeded
J - Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
ND - Not Detected at a concentration greater than the PQL/RL or, if reported to the MDL, at greater than the MDL.
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R - The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S - Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.



Sample Receipt Checklist

Client Name: Geocon Consultants, Inc.

Date and Time Received: 8/3/2023 9:14:00AM

Project Name: CALFIRE PARKFIELD FS

Received By: JC

Work Order No.: 2308018

Physically Logged By: Lorna Imbat

Checklist Completed By: Lorna Imbat

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present? Yes

Chain of custody signed when relinquished and received? Yes

Chain of custody agrees with sample labels? Yes

Custody seals intact on sample bottles? Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler? Not Present

Shipping Container/Cooler In Good Condition? Yes

Samples in proper container/bottle? Yes

Samples containers intact? Yes

Sufficient sample volume for indicated test? Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?

Container/Temp Blank temperature in compliance? Yes Temperature: 2.0 °C

Water-VOA vials have zero headspace? No VOA vials submitted

Water-pH acceptable upon receipt? Yes

pH Checked by: Lorna Imbat

pH Adjusted by: n/a

Comments:



Login Summary Report

Client ID: TL5309 Geocon Consultants, Inc.

QC Level: II

Project Name: CALFIRE PARKFIELD FS

TAT Requested: 1 Day Rush:1

Project # : S2120-05-05

Date Received: 8/3/2023

Report Due Date: 8/4/2023

Time Received: 9:14 am

Comments:

Work Order # : 2308018

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
2308018-001A	PPW-1-B	08/02/23 11:20	Water	09/16/23			Met_W_200.8CAM17 Met_200.7 Full Hg_245.1	
2308018-001B	PPW-1-B	08/02/23 11:20	Water	09/16/23			Anion_W_300.0 TDS_2540C	
<u>Sample Note:</u>	Cl,SO4.							
2308018-002A	PPW-1-C	08/02/23 14:00	Water	09/16/23			Met_W_200.8CAM17 Met_200.7 Full Hg_245.1	
2308018-002B	PPW-1-C	08/02/23 14:00	Water	09/16/23			Anion_W_300.0 TDS_2540C	
2308018-003A	PPW-1-D	08/02/23 15:45	Water	09/16/23			Met_W_200.8CAM17 Met_200.7 Full Hg_245.1	
2308018-003B	PPW-1-D	08/02/23 15:45	Water	09/16/23			Anion_W_300.0 TDS_2540C	



CHAIN OF CUSTODY

23080/8

Reset

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

Company Name: Geocon Consultants, Inc		☐ Env. ☒ Non Env.	Project #: S2120-05-05	PO#:
Address: 3160 Gold Valley Drive			Project Name: CALFIRE Parkfield FS	
City: Rancho Cordova	State: CA	Zip Code: 95742	Comments: Water from a proposed <u>drinking water supply well</u>	
Telephone:	Cell: 669-294-3357		SAMPLER: <i>Short / Rice</i>	
REPORT TO: Lauren Short	BILL TO: Lauren Short		EMAIL: short@geoconinc.com	

TURNAROUND TIME: ☐ 2 - 8 Hours ☐ 2 Work Days ☐ 5 Work Days ☐ Noon - Nxt Day ☐ 3 Work Days ☐ 7 Work Days ☐ 1 Work Day ☐ 4 Work Days ☐ 10 Work Days			SAMPLE TYPE: ☒ Drinking Water ☐ Storm Water ☐ Air ☐ Waste Water ☐ Wipe ☐ Other ☒ Ground Water ☐ Soil ☐ Product / Bulk			REPORT FORMAT: ☒ Level II - Std. ☐ DoD/DoE Level III ☐ DoD/DoE Level III ☒ Excel - EDD ☐ EDF ☐ Client Specific EDD			1. Magnesium, Potassium, e, and Sulfate by 0 & 300 ing Water Metals 200 <i>no mg in water</i>			ANALYSIS REQUESTED		

[illegible]

1	Relinquished By: <u>[Signature]</u>	Print: <u>C. Shores</u>	Date: <u>8/2/23</u>	Time: <u>1600</u>	Received By: <u>[Signature]</u>	Print: <u>Tamela</u>	Date: <u>8-3-23</u>	Time: <u>9:14</u>
2	Relinquished By: <u>[Signature]</u>	Print: <u>Nick Rice</u>	Date: <u>8/2/23</u>	Time: <u>1600</u>	Received By: <u>[Signature]</u>	Print: <u>D. Jones</u>	Date: <u>8-3-23</u>	Time: <u></u>

Cooler Temperature 2.0 °C Samples Received on ice? Yes ☒ No ☐

Method of Shipment

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made.

Page of

QA-F-065, Rev 1.0, TLICD-959



Project No. S2120-05-05
September 11, 2023

VIA ELECTRONIC MAIL

Isaiah Tuazon, R.E.H.S.
Environmental Health Specialist II
Monterey County Health Department
Drinking Water Protection Services-Well Program, Environmental Health Bureau
1270 Natividad Road
Salinas, CA 93906

Subject: APPLICATION FOR SOURCE CAPACITY TEST
PROPOSED CALFIRE PARKFIELD STATION
WELL PERMIT: 22-000235
70331 VINEYARD CANYON ROAD
PARKFIELD, CALIFORNIA

Isaiah Tuazon:

Appended is our application for source capacity testing for the water supply well installed on August 9, 2023, at 70331 Vineyard Canyon Road in Parkfield for the proposed Parkfield CALFIRE Station. We propose a discharge rate of 60 gallons per minute for 24 hours. A 24-hour test meets CALFIRE requirements to complete the water system design for the proposed fire station.

Guardino Drilling (Geocon's subcontractor for the project) will provide the pump and other associated equipment for the test. Guardino Drilling will remove the pump assembly at the existing on-site well (Figure 1) to install a sounding tube for monitoring during and after the source capacity test. Water levels in the on-site well will be monitored using a water level transducer with a data logger and supplemented with manual depth-to-water measurements.

We identified two domestic wells north of Vineyard Canyon Road serving two residences (Figure 1). We were unable to access the property of domestic well 1 for a well head inspection. We were able to inspect the well head of domestic well 2 as it is adjacent to the road. We observed the well head to be in poor condition and we will not remove the pump assembly to avoid potentially damaging the well and pump assembly. To compensate for lack of access, we propose to monitor water levels in the new fire station supply well for at least 30 days (the remainder of the dry season) after the source capacity test is completed using a water level transducer with a data logger. We can observe potential well interference without disturbing the domestic wells.

Please advise as soon as possible so we can continue with the testing schedule.

Sincerely,

GEOCON CONSULTANTS, INC.



Richard W. Day
California PG #5479
California CHG #74
Senior Geologist
day@geoconinc.com



Lauren E. Short
California PG #9774
Project Geologist
short@geoconinc.com

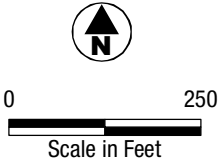
Attachment: Figure 1 – Site Plan, 1,000 Foot Well Buffer

\\GEOCON\9\8\2023\USER Brown M\PATH\C\Users\Brown M\OneDrive - Geocon, Inc\GIS\Graphics\Projects\S2120\05-05_Parkfield_Fire_Station\01_Report\Map\Figure_1_Site_Plan_100ftbuffer.mxd



Legend

- Approximate Location of Proposed Well
- Approximate Location of Existing Well
- Approximate Domestic Well Location
- Fence Line
- Pavement/Concrete
- Structures



GEOCON
CONSULTANTS, INC.
3160 GOLD VALLEY DR - SUITE 800 - RANCHO CORDOVA, CA 95742
PHONE 916.852.9118 - FAX 916.852.9132

Parkfield Fire Station - Well Install
70331 Vinyard Canyon Road
Parkfield, California

SITE PLAN-1,000 FOOT WELL BUFFER

S2120-05-05	September 2023	Figure 1



COUNTY OF MONTEREY HEALTH DEPARTMENT

Elsa Jimenez, Director of Health

Administration Animal Services Behavioral Health Clinic Services
Emergency Medical Services Environmental Health Public Administrator/Public Guardian Public Health

Application for Source Capacity Test

Test site address: 70331 VINEYARD CANYON ROAD PARKFIELD

APN: 423-173-077 Related Planning Permit #: _____ Well Permit # 22-000235

Billing Address: Geocon Consultants, Inc 3160 Gold Valley Drive Suite 800 Rancho Cordova, CA 95742

Property Owner: CALFIRE Phone/Address: 707 Third ST 5TH FL MS 505 West Sacramento 95605

Responsible Party: _____ Phone/Address: _____

Contractor: Geocon Consultants, Inc Phone/Address: Geocon Consultants, Inc 3160 Gold Valley Drive Suite 800 Rancho Cordova, CA 95742

Contractor's qualifications: Certified Hydrogeologist #74

Purpose of test: () Water System () Single Family Dwelling () Commercial () Subdivision () Irrigation
() MPWMD distribution permit (X) Other, explain Fire Station

Is there another well within 1000' of well? ☒ yes ☐ no Show wells on map with distance to well

If the well is proposed to serve a water system, what is the proposed number of connections? _____

(Connections include all habitable structures, including caretaker and senior units - See page three for capacity requirements)

Proposed discharge rate (gpm): 60 Pump Specifications: 5 HP submersible Pump depth: 270 feet

Requested test start date and time: 10/3/2023 1200 (Subject to availability. Wells in non-alluvial materials shall only be tested during August, September, and October and shall start on a Monday or Tuesday between 9 a.m. and 2 p.m. If it is proposed to pump multiple wells at the same time, complete an application for each well)

Alternative requested test start dates: _____

Proposed test duration ☐ 8 hrs (alluvial only) ☐ 72 hrs (non-alluvial formations)
☒ 24 hrs (alluvial only) ☐ 10 days (non-alluvial formations)

Include the following documents with the application (see page 2 for test set-up requirements):

1. Map and directions to test site (include location of test well and all wells within 1000')
2. Well completion report/drillers log (Please note that if well does not meet current construction standards, it may not be able to be used for a water system or subdivision with individual wells. Minimum construction standards include a minimum of a 50' seal. Wells near the end of their useful life may also not be used for subdivisions or new water systems).
3. Prepayment of the Department's current rate of **\$806 (alluvial test up to 4hrs), and \$1,208 (non-alluvial test up to 6hrs).** Time spent in addition to 4 hours will be billed at the completion of the test at the Department's current hourly rate of \$201/hr.
4. Wells that will serve a public water system have additional requirements shown on page 2. These systems serve at least 25 people at least 60 days per year or 15 residential service connections.

I declare that all information in this application is correct and I hereby agree to comply with all applicable requirements in the Monterey County Health Department, Bureau of Environmental Health's Source Capacity Testing Procedures.

SIGNATURE OF PROPERTY OWNER

X

Date 9/11/2023

Print Jonathan Pike

SIGNATURE OF CONTRACTOR

X

Date Sep 11, 2023

Print Richard Day

Application for source capacity test, page 2

Test Set-up Requirements for ALL Wells:

1. Well shall be equipped with a meter that measures instantaneous and total flow. Tests conducted on wells that produce less than 10 gpm shall be equipped with a meter with 1 gpm increments.
2. Discharge water shall be managed to prevent recharge of the well during the testing/recovery period and shall not be allowed to pond/percolate within 200 feet of the well. For a well to discharge into a storm drain there must be no history of contaminants in the area. The risk of erosion must be minimal and not allow sediment to be transported into the storm drain. If there is already sediment in the curb or catch basin, it should be removed prior to beginning the test. The discharge should be run through some type of filter such as a sediment sock or gravel bag berm.
3. If multiple proposed production wells for the same water system are located within:
 - a. 500 feet of each other in a non-alluvial formation, the wells shall be pumped simultaneously in order to receive source capacity credit for both wells.
 - b. 300 feet of each other in an alluvial formation, the wells shall be pumped simultaneously in order to receive source capacity credit for both wells.
4. If there is a nearby well within 1000 feet on the same or neighboring parcel, the well should be monitored for drawdown as the source well is tested.
5. Well shall be equipped with a sounding tube.
6. The sounding line shall be clearly marked with a minimum of 10-foot intervals. The sounding line will be checked before it's lowered into the well to verify starting measurement.
7. For the purpose of obtaining an accurate static water level value, at least twelve hours before beginning the test, pump the well at the proposed pump discharge rate for no more than two hours, then discontinue pumping.

Public Water System Additional Requirements:

Include the additional following documents for wells that will serve a noncommunity or community public water system:

1. A copy of a United States Geological Survey 7 ½-minute topographic map of the site at a scale of 1:24,000 or larger (1 inch equals 2,000 feet or 1 inch equals less than 2,000 feet) or, if necessary, a site sketch at a scale providing more detail, that clearly indicates:
 - a. The well discharge location(s) during the test;
 - b. The location of surface waters, water staff gauges, and other production wells within a radius of 1000 feet;
2. For wells located in or having an influence on the aquifer from which the new well will draw water, a description of the wells' operating schedules and the estimated amount of groundwater to be extracted, while the new well is tested and during normal operations prior to and after the new well is in operation;
3. A description of the surface waters, water staff gauges, and production wells-shown in 1b.
4. A description of how the well discharge will be managed to ensure the discharge doesn't interfere with the test;
5. A written description of the aquifer's annual recharge.

Required Source Capacity for New Development

Non-Residential¹

- Provide engineered calculations using similar size/type system or water demand charts.

Application for source capacity test, page 3

Required Source Capacity for New Development, cont.

Residential²

<u>Type of System</u>	<u>Capacity Needed¹</u>
Private Well (unshared)	3 gpm
2 connections	6 gpm
3 connections	9 gpm
4 connections	12 gpm

	<u>Alluvial</u>	<u>Non-Alluvial</u>
5 connections	13 gpm	15 gpm
6 connections	13 gpm	18 gpm
7 connections	13 gpm	21 gpm
8 connections	13 gpm	24 gpm
9 connections	13 gpm	27 gpm
10 connections	14 gpm	30 gpm
11 connections	14 gpm	33 gpm
12 connections	14 gpm	36 gpm
13 connections	14 gpm	39 gpm
14 connections	14 gpm	42 gpm
≥15 connections (metered)	1 gpm/conn ²	1 gpm/conn ^{2,3}

¹The minimum required source capacity calculations must include the 25/50% policy for all Public Water System utilizing a well in a non-alluvial formation. For example, a business with a non-alluvial well that needs 10 gpm must have a well that is credited to produce 40 gpm.

²The minimum required source capacity for ≥15 connections is 1 gpm/connection unless existing usage data is available and calculations are done according to Section 64554 of Title 22 of the California Code of Regulations (see requirements on next page).

³The 25/50% credit policy does **not** apply to wells in non-alluvial formation that will serve 1-14 residential connections since the minimum capacity already addresses the concern that many non-alluvial wells lose production over time. The 25/50% credit policy **does** apply to wells in non-alluvial formation that will serve 15 or more residential connections. The 1 gpm/residential connection is the amount required all the approved well yield has been appropriately reduced for non-alluvial wells.

Additional Requirements (based on Chapters 15 and 19 of the Monterey County Code and Title 22 of the California Code of Regulations)

- New community water systems (serves 15 or more residences) are required to have two sources of supply.
- New community water systems are required to meet maximum day demand with the highest producing source offline
- All water systems with treatment are required to size the treatment facility to produce at least maximum day demand
- All water systems with treatment are required to increase the source capacity to meet maximum day demand after subtracting losses from the treatment facility (i.e., backwash, brine, filter-to-waste)

Section 64554 of Title 22 of the California Code of Regulations for public water systems (15 or more connections).

(a) At all times, a public water system's water source(s) shall have the capacity to meet the system's maximum day demand (MDD). MDD shall be determined pursuant to subsection (b).

(3) Both the MDD (max day demand) and PHD (peak hourly demand) requirements shall be met in the system as a whole and in each individual pressure zone.

Application for source capacity test, page 4

Section 64554 of Title 22 of the California Code of Regulations, cont.

(b) A system shall estimate MDD and PHD for the water system as a whole (total source capacity and number of service connections) and for each pressure zone within the system (total water supply available from the water sources and interzonal transfers directly supplying the zone and number of service connections within the zone), as follows:

- (1) If daily water usage data are available, identify the day with the highest usage during the past ten years to obtain MDD; determine the average hourly flow during MDD and multiply by a peaking factor of at least 1.5 to obtain the PHD.
- (2) If no daily water usage data are available and monthly water usage data are available:
 - (A) Identify the month with the highest water usage (maximum month) during at least the most recent ten years of operation or, if the system has been operating for less than ten years, during its period of operation;
 - (B) To calculate average daily usage during maximum month, divide the total water usage during the maximum month by the number of days in that month; and
 - (C) To calculate the MDD, multiply the average daily usage by a peaking factor that is a minimum of 1.5; and
 - (D) To calculate the PHD, determine the average hourly flow during MDD and multiply by a peaking factor that is a minimum of 1.5.
- (3) If only annual water usage data are available:
 - (A) Identify the year with the highest water usage during at least the most recent ten years of operation or, if the system has been operating for less than ten years, during its years of operation;
 - (B) To calculate the average daily use, divide the total annual water usage for the year with the highest use by 365 days; and
 - (C) To calculate the MDD, multiply the average daily usage by a peaking factor of 2.25.
 - (D) To calculate the PHD, determine the average hourly flow during MDD and multiply by a peaking factor that is a minimum of 1.5.
- (4) If no water usage data are available, utilize records from a system that is similar in size, elevation, climate, demography, residential property size, and metering to determine the average water usage per service connection. From the average water usage per service connection, calculate the average daily demand and follow the steps in paragraph (3) to calculate the MDD and PHD.

(Rev. 6/08, 6/09, 6/11, 7/17, 7/18, 7/19, 7/20, 7/21, 7/22, 6/23)

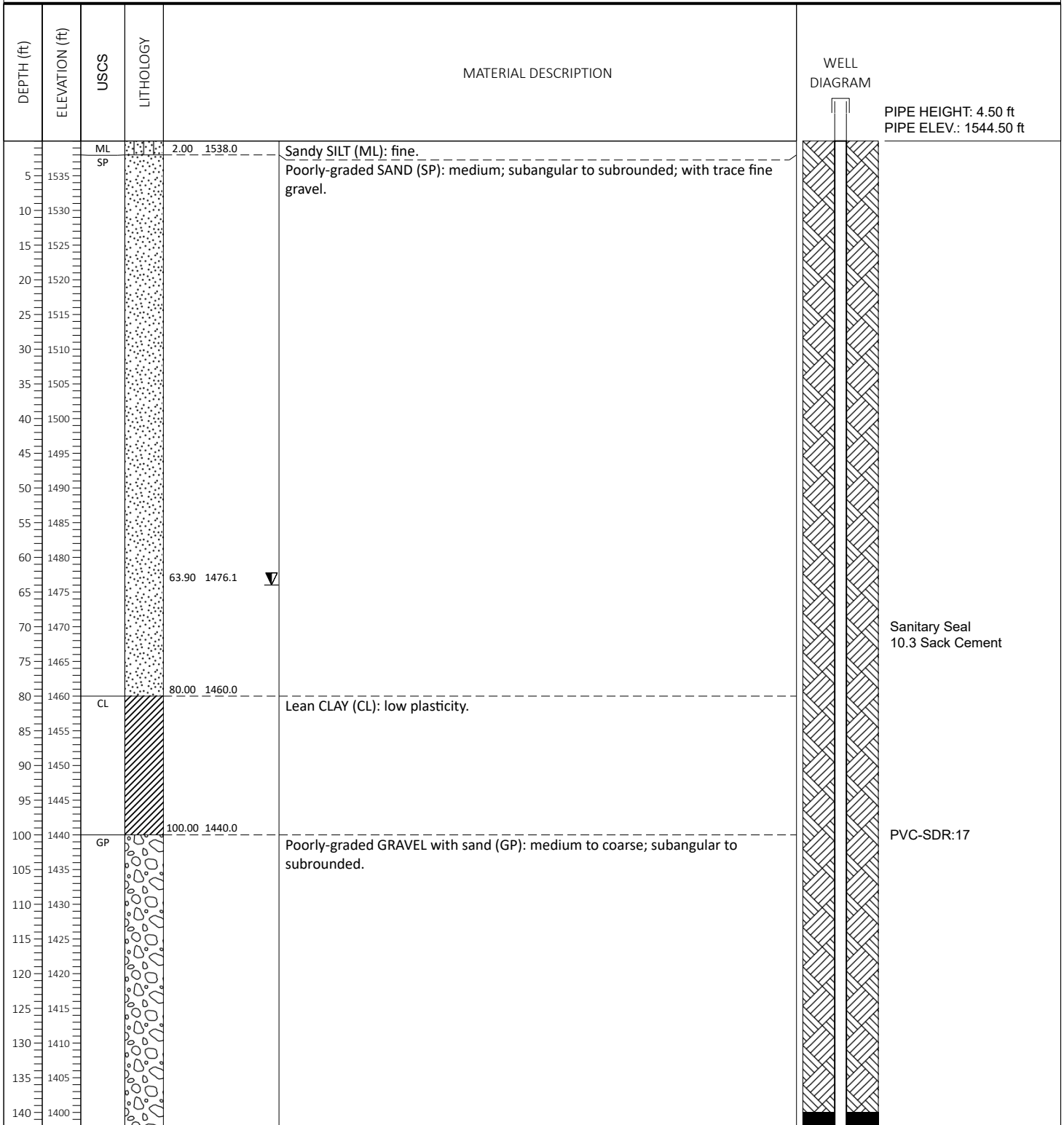
APPENDIX

B



PROJECT NAME Parkfield FS Well Installation
PROJECT NUMBER S2120-05-05
DATE STARTED 08-01-2023 **COMPLETED** 08-06-2023
DRILLING CONTRACTOR Guardino Well Drilling
DRILLING RIG TYPE GEFCO 30K **METHOD** Mud Rotary
HAMMER TYPE
BORING DIAMETER 12.0/10.0 in.
LOGGED BY Lauren E. Short, PG

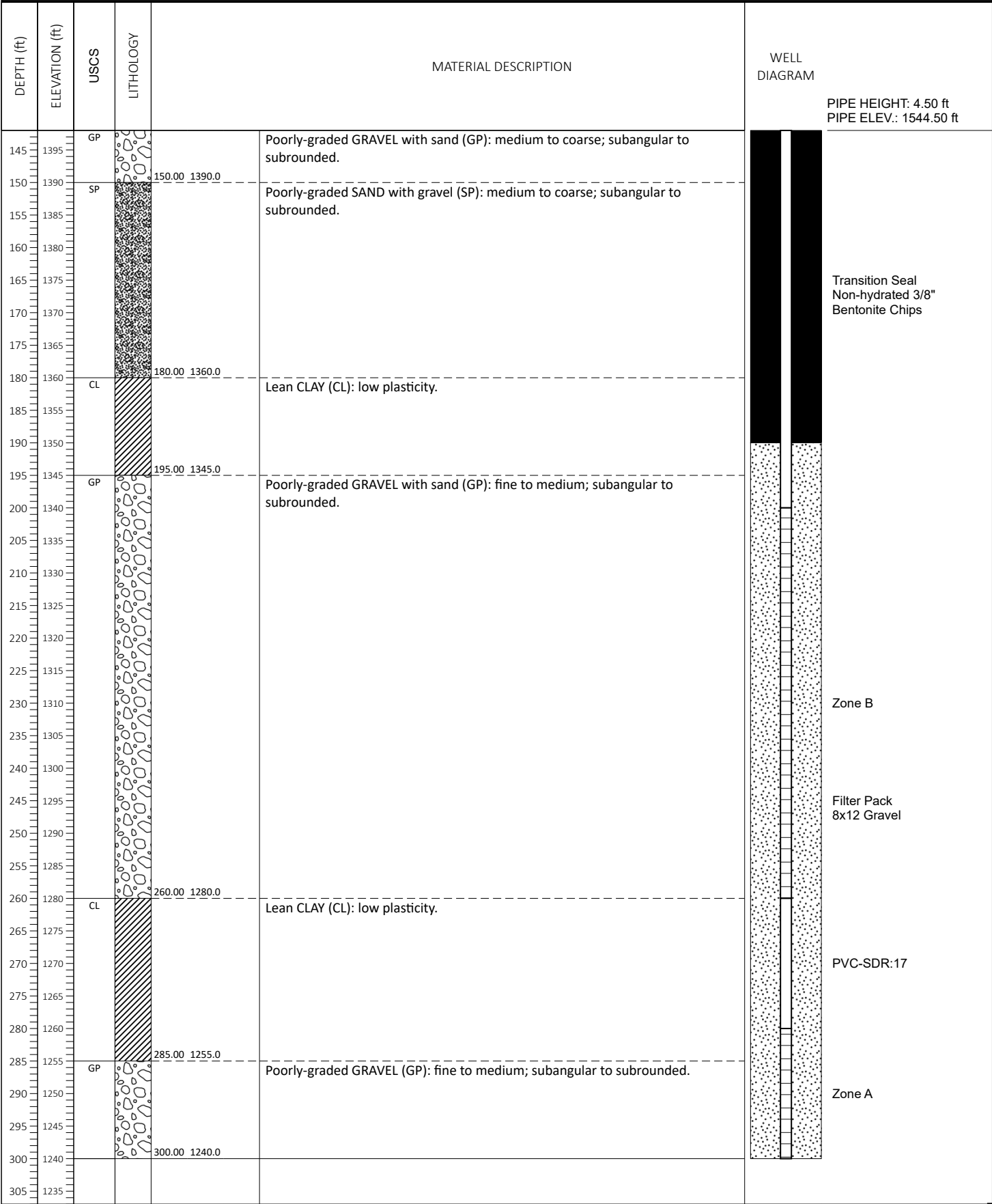
LATITUDE 35.900847 **LONGITUDE** -120.445206
DRILL DEPTH 300.0 ft
TOP OF BORING ELEVATION 1540.0 ft
GROUNDWATER DEPTHS
▽ **FIRST ENCOUNTERED** NA
▼ **AT END OF DRILLING** NA
▼ **AFTER DRILLING** 63.90 **TIME AFTER DRILLING** NA



THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.



PROJECT NUMBER S2120-05-05 PROJECT NAME Parkfield FS Well Installation

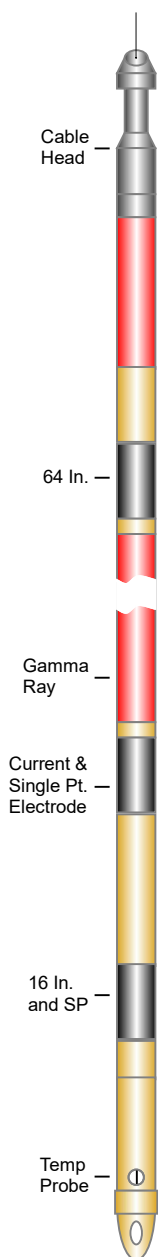


THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

STEWART WELL LOGGING SERVICE		ELECTRIC - GAMMA RAY-TEMPERATURE LOG			
Stewart Well Logging Service					
Phone: (530)908-6928 Email: STEWARTWELLOGGING@GMAIL.COM					
Filing No.	COMPANY Guardino Well Drilling, Inc.				
	WELL Proposed Parkfield Well Cal Fire				
	FIELD Parkfield				
	STATE California COUNTY Monterey				
	LOCATION:				OTHER SERVICES: None
Job No. 1410	SEC: 27 TWP: 23S RGE: 14E LAT.: 35.9008744 LONG.: -120.4452405				
Permanent Datum: Ground Level		Elev.: 1545 Ft.		Elevs.: K.B. _____ Ft.	
Log Measured From: Ground Level		, 0 Ft. Above Perm. Datum		D.F. _____ Ft.	
Drilling Measured From: Rotary Table				G.L. _____ Ft.	
Run	One				
Date	Aug 01, 2023				
Depth-Driller	300	Ft		Ft	
Depth-Logger	298	Ft		Ft	
Top Logged Interval	298	Ft		Ft	
Btm Logged Interval	10	Ft		Ft	
Casing-Driller	In @	Ft	In @	Ft	In @
Casing - Logger In@Ft	In @	Ft	In @	Ft	In @
Bit Size	8-3/4	In @ 300 Ft	In @	Ft	In @
Time On Bottom	1400				
Type Fluid in Hole	Bentonite				
Density	Viscosity				
pH	Fluid Loss		ml		ml
Source of Sample	Lift Pump				
Rm @ Mea. Temp	6.2	@ 75 °F	@	°F	@
Rmf @ Mea. Temp	6	@ 75 °F	@	°F	@
Rmc @ Mea. Temp	4.5	@ °F	@	°F	@
Source Rmf	Rmc	Meas.			
Rm @ BHT	82	@ °F	@	°F	@
Time Since Circ.	1	Hr		Hr	
Max. Rec. Temp.	83.5	°F		°F	
Van No.	Location	SWLS-1 WOODLAND			
Recorded By	Paschke				
Witnessed By	A. Guardino		L. Short		

This Eagle Plot Heading Conforms To API RP 31A

ELECTRIC - GAMMA RAY-TEMPERATURE LOG TOOL



SPONTANEOUS POTENTIAL LOGS:

SP Logs record potentials or voltages developed between the borehole fluid and the surrounding formation and are representations of lithology and water quality. Recording of SP logs are limited to water-filled or mud-filled open holes.

NORMAL RESISTIVITY LOGS:

Normal Resistivity Logs record the electrical resistivity of the borehole environment with lower resistivities indicative of clays and higher resistivities being sands and gravels. Normal resistivity logs are affected by bed thickness, Borehole diameter and borehole fluid.

SINGLE POINT RESISTIVITY LOGS:

Single Point Resistivity Logs record the electrical resistance from points within the borehole to an electrical ground at land surface. Single-point resistance logs are useful in the determination of lithology, water quality, and location of fracture zones.

GAMMA RAY LOGS:

Gamma Ray Logs record the amount of natural gamma radiation emitted by the rocks surrounding the borehole. The most significant naturally occurring sources of gamma radiation are potassium 40 and daughter products of the uranium and thorium decay series. Clay and shale bearing rocks commonly emit relatively high gamma radiation because they include weathering products of potassium feldspar and mica and tend to concentrate uranium and thorium by ion absorption and exchange.

TEMPERATURE LOGS:

Temperature Logs record the water temperature in the borehole. Temperature logs are useful for delineating water-bearing zones and identifying vertical flow in the borehole between zones of differing hydraulic head penetrated by wells. Borehole flow between zones is indicated by temperature gradients that are less than the regional geothermal gradient.

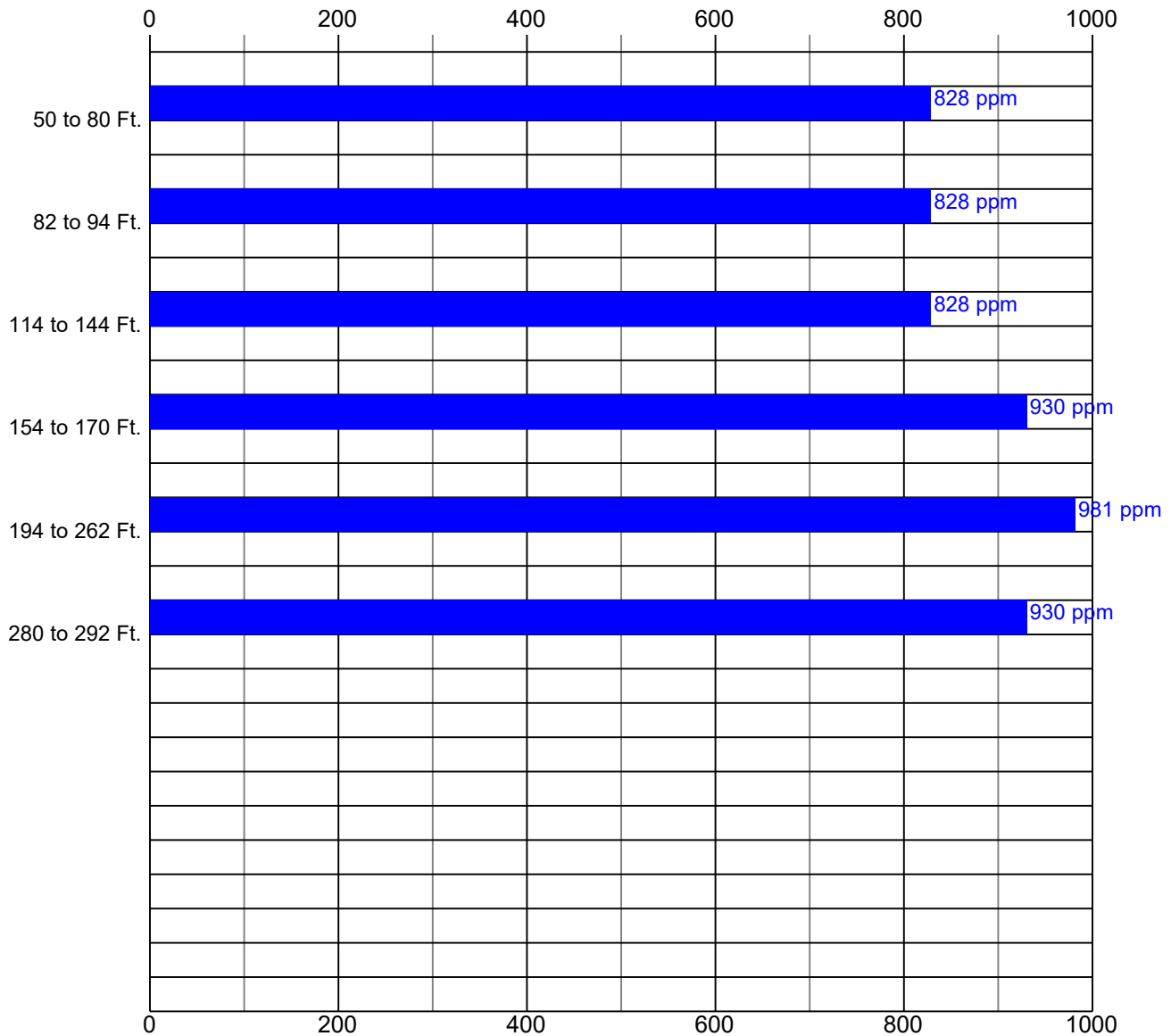
ELECTRIC LOG SPECIFICATIONS:

Diameter	1.73 Inches
Length	8.37 Feet
Weight	21.7 Lbs.
Max. Temp	158° F
Resist. Range	0 - 10,000 ohm-m
Gamma Ray	1.97 inches long x .98 inches diameter Scintillation crystal

TOTAL DISSOLVED SOLIDS

* NaCl 

Parts Per Million - ppm



TDS Classes

Class 1: Excellent to Good – Less than 700 ppm

Class 2: Good to Injurious – 700 to 2000 ppm

Class 3: Injurious to Poor – More than 2000 ppm

NaCl = Sodium Chloride

NOTICE

All interpretations are opinions based on inferences from electrical and other measurements and we do not guarantee the accuracy or correctness of any verbal or written interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by one of our officers, agents or employees. These interpretations are also subject to our General Terms and Conditions as set out in our current Price Schedule.

REMARKS

Guardino Well Drilling, Inc.
Proposed Parkfield Well Cal Fire
Aug 01, 2023

ELECTRIC - GAMMA RAY-TEMPERATURE LOG

Single Page

DEPTHS
(Feet)

0 Gamma Ray(api) 200
< - S.P. (10 mV/div) S.P. + >

100 64 Inch Normal (ohmm²/m) x10 1000
64 Inch Normal (ohmm²/m) 100
100 16 Inch Normal (ohmm²/m) x10 1000 80
16 Inch Normal (ohmm²/m) 100 0
Temperature (°F) 90
Single Point(ohms) 50

50'

100'

150'

200'

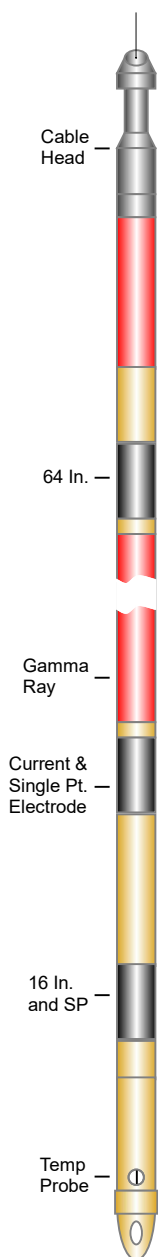
250'

Log Depth 298'

STEWART WELL LOGGING SERVICE ELECTRIC - GAMMA RAY-TEMPERATURE LOG				
Stewart Well Logging Service				
Phone: (530)908-6928 Email: STEWARTWELLOGGING@GMAIL.COM				
Filing No.	COMPANY <u>Guardino Well Drilling, Inc.</u> WELL <u>Proposed Parkfield Well Cal Fire</u> FIELD <u>Parkfield</u> STATE <u>California</u> COUNTY <u>Monterey</u> LOCATION:			
Job No. 1410	SEC: <u>27</u> TWP: <u>23S</u> RGE: <u>14E</u> LAT.: <u>35.9008744</u> LONG.: <u>-120.4452405</u> OTHER SERVICES: None			
Permanent Datum: <u>Ground Level</u> Elev.: <u>1545</u> Ft. Elevs.: K.B. <u> </u> Ft. Log Measured From: <u>Ground Level</u> , <u>0</u> Ft. Above Perm. Datum D.F. <u> </u> Ft. Drilling Measured From: <u>Rotary Table</u> G.L. <u> </u> Ft.				
Run	One			
Date	Aug 01, 2023			
Depth-Driller	300	Ft	Ft	Ft
Depth-Logger	298	Ft	Ft	Ft
Top Logged Interval	298	Ft	Ft	Ft
Btm Logged Interval	10	Ft	Ft	Ft
Casing-Driller	In @	Ft	In @	Ft
Casing - Logger In@Ft	In @	Ft	In @	Ft
Bit Size	8-3/4 In @ 300	Ft	In @	Ft
Time On Bottom	1400			
Type Fluid in Hole	Bentonite			
Density	Viscosity			
pH	Fluid Loss		ml	ml
Source of Sample	Lift Pump			
Rm @ Mea. Temp	6.2 @ 75	°F	@	°F
Rmf @ Mea. Temp	6 @ 75	°F	@	°F
Rmc @ Mea. Temp	4.5 @	°F	@	°F
Source Rmf	Meas.			
Rm @ BHT	82 @	°F	@	°F
Time Since Circ.	1	Hr	Hr	Hr
Max. Rec. Temp.	83.5	°F	°F	°F
Van No.	Location	SWLS-1 WOODLAND		
Recorded By	Paschke			
Witnessed By	A. Guardino	L. Short		

This Eagle Plot Heading Conforms To API RP 31A

ELECTRIC - GAMMA RAY-TEMPERATURE LOG TOOL



SPONTANEOUS POTENTIAL LOGS:

SP Logs record potentials or voltages developed between the borehole fluid and the surrounding formation and are representations of lithology and water quality. Recording of SP logs are limited to water-filled or mud-filled open holes.

NORMAL RESISTIVITY LOGS:

Normal Resistivity Logs record the electrical resistivity of the borehole environment with lower resistivities indicative of clays and higher resistivities being sands and gravels. Normal resistivity logs are affected by bed thickness, Borehole diameter and borehole fluid.

SINGLE POINT RESISTIVITY LOGS:

Single Point Resistivity Logs record the electrical resistance from points within the borehole to an electrical ground at land surface. Single-point resistance logs are useful in the determination of lithology, water quality, and location of fracture zones.

GAMMA RAY LOGS:

Gamma Ray Logs record the amount of natural gamma radiation emitted by the rocks surrounding the borehole. The most significant naturally occurring sources of gamma radiation are potassium 40 and daughter products of the uranium and thorium decay series. Clay and shale bearing rocks commonly emit relatively high gamma radiation because they include weathering products of potassium feldspar and mica and tend to concentrate uranium and thorium by ion absorption and exchange.

TEMPERATURE LOGS:

Temperature Logs record the water temperature in the borehole. Temperature logs are useful for delineating water-bearing zones and identifying vertical flow in the borehole between zones of differing hydraulic head penetrated by wells. Borehole flow between zones is indicated by temperature gradients that are less than the regional geothermal gradient.

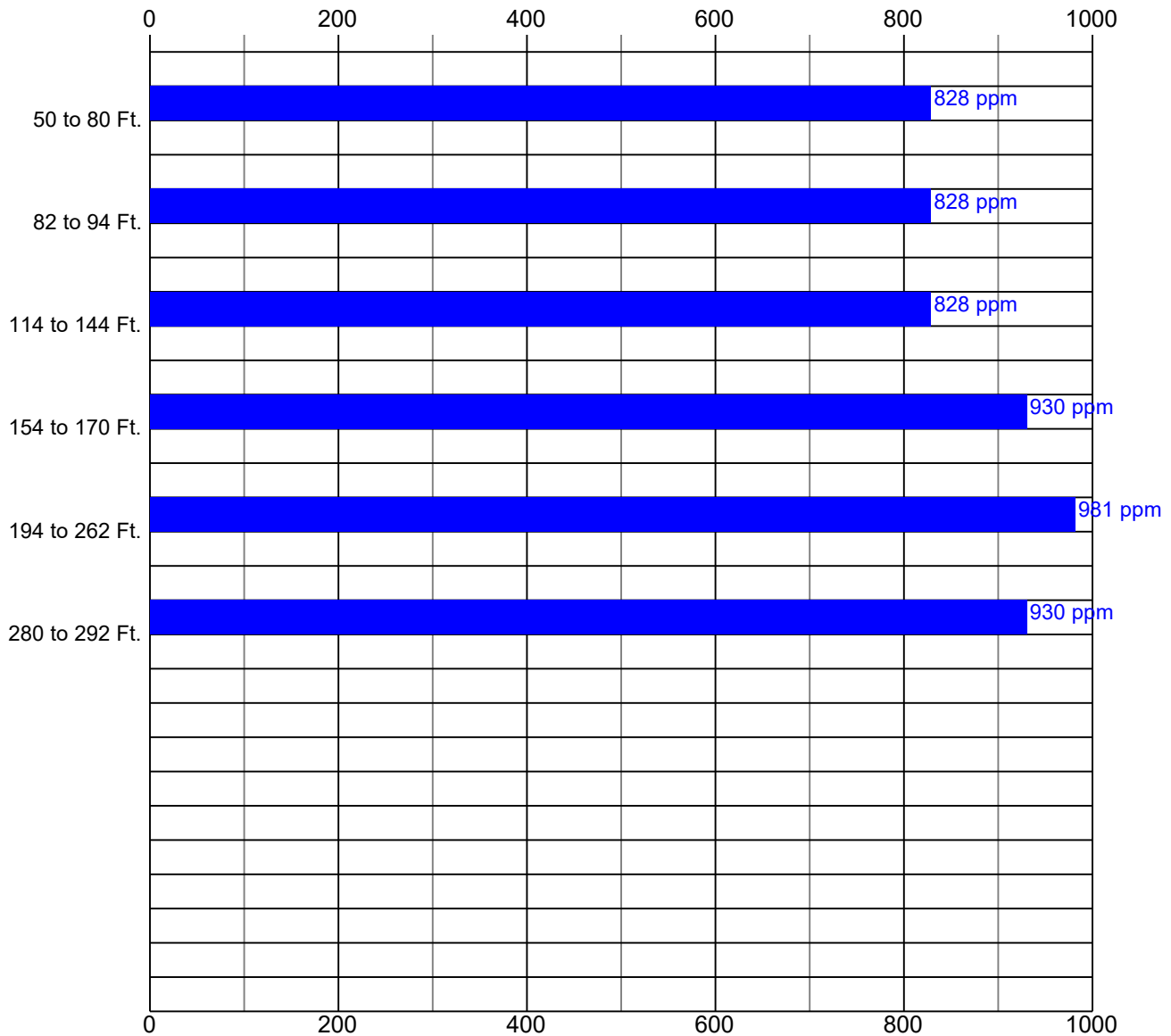
ELECTRIC LOG SPECIFICATIONS:

Diameter	1.73 Inches
Length	8.37 Feet
Weight	21.7 Lbs.
Max. Temp	158° F
Resist. Range	0 - 10,000 ohm-m
Gamma Ray	1.97 inches long x .98 inches diameter Scintillation crystal

TOTAL DISSOLVED SOLIDS

* NaCl 

Parts Per Million - ppm



TDS Classes

Class 1: Excellent to Good – Less than 700 ppm

Class 2: Good to Injurious – 700 to 2000 ppm

Class 3: Injurious to Poor – More than 2000 ppm

NaCl = Sodium Chloride

NOTICE

All interpretations are opinions based on inferences from electrical and other measurements and we do not guarantee the accuracy or correctness of any verbal or written interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by one of our officers, agents or employees. These interpretations are also subject to our General Terms and Conditions as set out in our current Price Schedule.

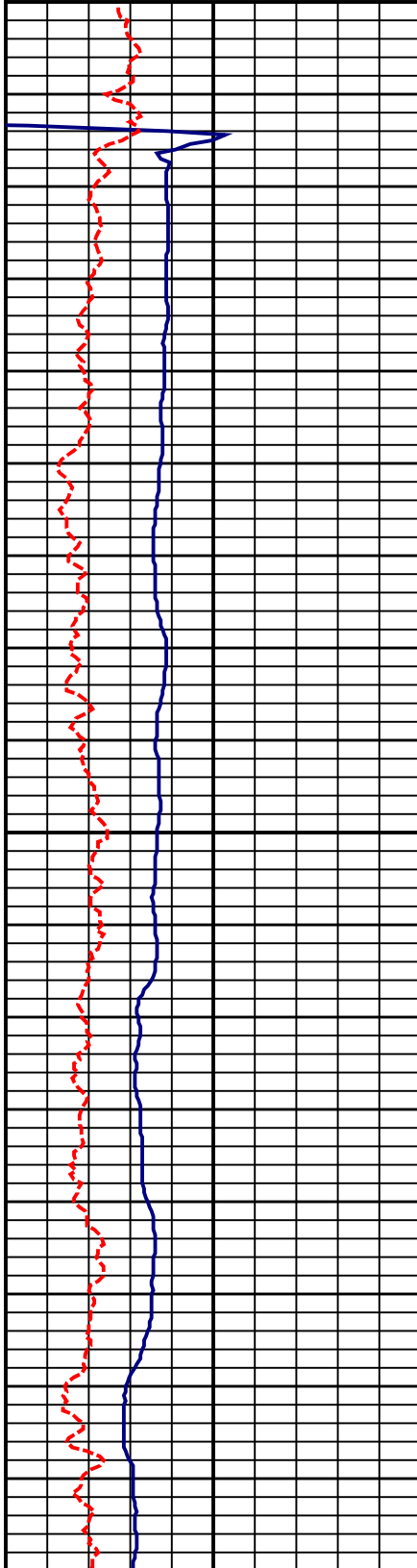
REMARKS

Guardino Well Drilling, Inc.
Proposed Parkfield Well Cal Fire
Aug 01, 2023

Mult. Pages
5"/100'

DEPTHS
(Feet)

0 Gamma Ray(api) 200
< - S.P. (10 mV/div) S.P. + >



50'

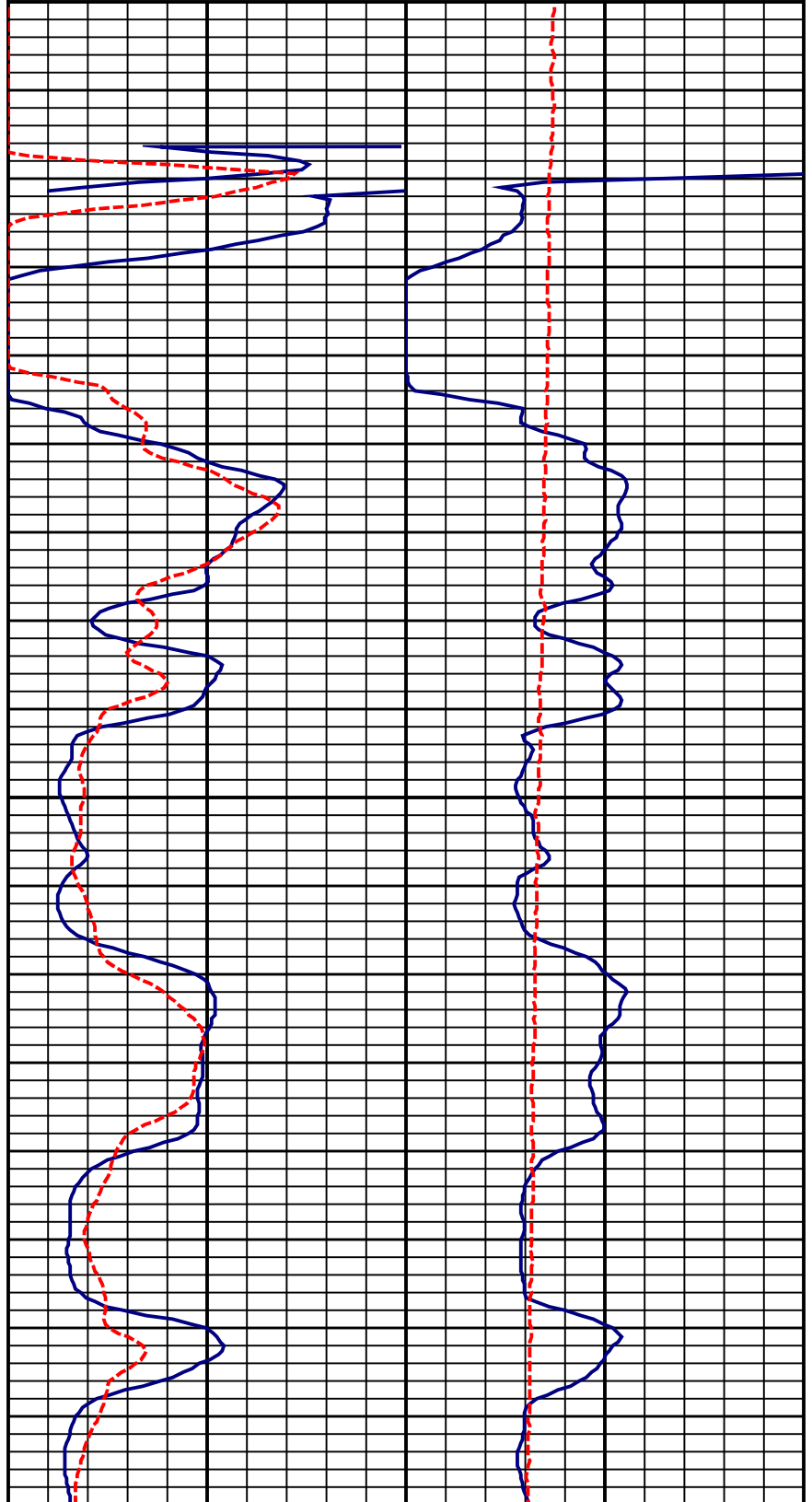
100'

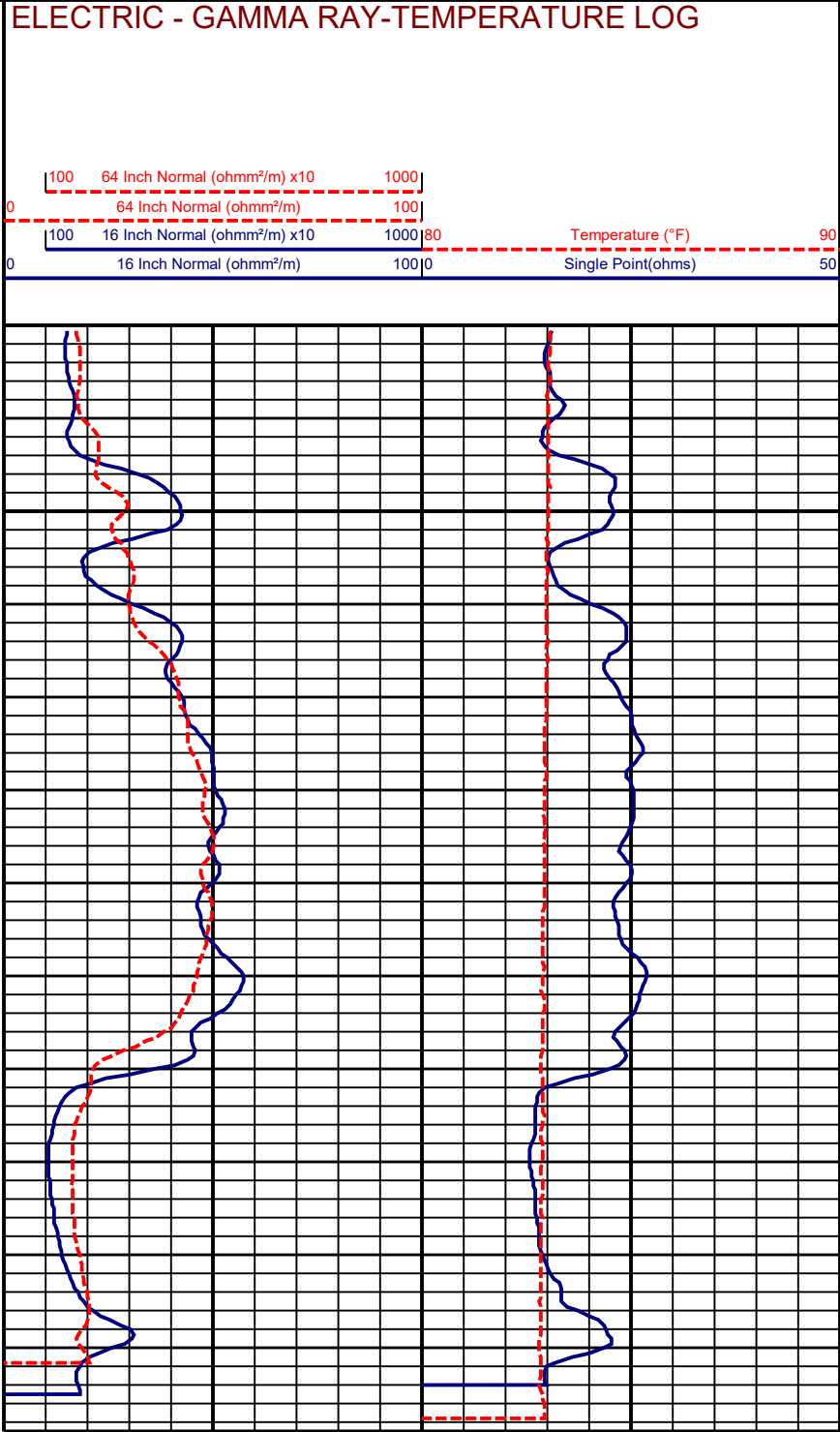
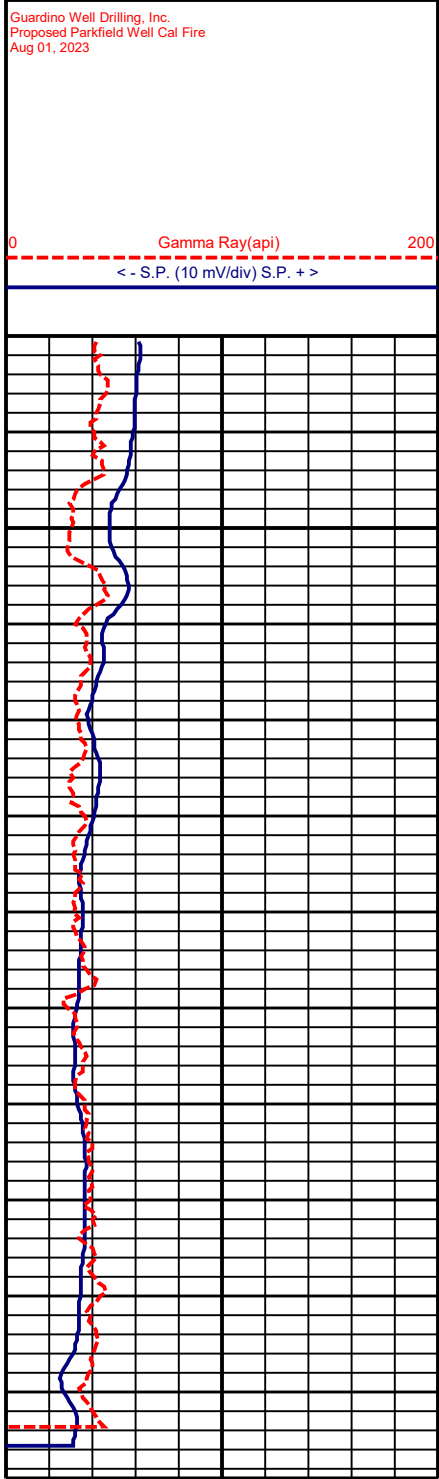
150'

181'

ELECTRIC - GAMMA RAY-TEMPERATURE LOG

100 64 Inch Normal (ohmm²/m) x10 1000
64 Inch Normal (ohmm²/m) 100
100 16 Inch Normal (ohmm²/m) x10 1000 80 Temperature (°F) 90
16 Inch Normal (ohmm²/m) 100 0 Single Point(ohms) 50





Log Depth 298'

State of California
Well Completion Report
Form DWR 188 Submitted 3/8/2024
WCR2024-001993

Owner's Well Number PPW-1 Date Work Began 08/01/2023 Date Work Ended 08/06/2023
Local Permit Agency Environmental Health Services of Monterey County
Secondary Permit Agency _____ Permit Number 22-000235 Permit Date 06/15/2023

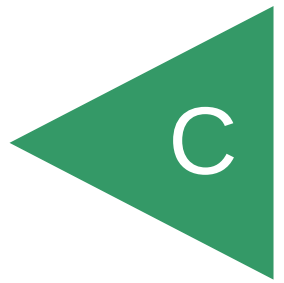
Well Owner (must remain confidential pursuant to Water Code 13752)		Planned Use and Activity	
Name	<u>CALIFORNIA DEPARTMENT OF GENERAL SERVICES,</u>	Activity	<u>New Well</u>
Mailing Address	<u>707 THIRD STREET</u>	Planned Use	<u>Water Supply Domestic</u>
	<u>Fifth Floor</u>		
City	<u>West Sacramento</u>		
	State <u>CA</u> Zip <u>95605</u>		

Well Location									
Address <u>70331 Vineyard Canyon RD</u>					APN <u>423-173-077</u>				
City <u>Parkfield</u>		Zip <u>93451</u>		County <u>Monterey</u>		Township <u>23 S</u>			
Latitude <u>35</u> <u>54</u> <u>3.0491</u> <u>N</u>		Longitude <u>-120</u> <u>26</u> <u>42.7415</u> <u>W</u>				Range <u>14 E</u>			
Deg. Min. Sec.		Deg. Min. Sec.				Section <u>27</u>			
Dec. Lat. <u>35.900847</u>		Dec. Long. <u>-120.445206</u>				Baseline Meridian <u>Mount Diablo</u>			
Vertical Datum <u>NAVD88</u>		Horizontal Datum <u>WGS84</u>				Ground Surface Elevation <u>1540</u>			
Location Accuracy <u>5 Ft</u>		Location Determination Method <u>GPS</u>				Elevation Accuracy <u>10 Ft</u>			
						Elevation Determination Method <u>USGS Quad</u>			

Borehole Information			Water Level and Yield of Completed Well		
Orientation	<u>Vertical</u>	Specify _____	Depth to first water _____ (Feet below surface)		
Drilling Method	<u>Direct Rotary</u>	Drilling Fluid <u>Bentonite</u>	Depth to Static _____		
			Water Level <u>63.90</u> (Feet) Date Measured <u>10/03/2023</u>		
			Estimated Yield* <u>25</u> (GPM) Test Type <u>Pump</u>		
Total Depth of Boring <u>300</u> Feet			Test Length <u>24</u> (Hours) Total Drawdown _____ (feet)		
Total Depth of Completed Well <u>300</u> Feet			*May not be representative of a well's long term yield.		

Geologic Log - USCS/ASTM D2488				
Depth from Surface Feet to Feet		Soil Class	Soil Color	Soil Description
0	2	(SM) Silty sand		
2	80	(SP) Poorly graded sand		
80	100	(CL) Lean clay		
100	150	(GP) Poorly graded gravel with sand		
150	180	(SP) Poorly graded sand with gravel		
180	195	(CL) Lean clay		
195	260	(GP) Poorly graded gravel with sand		
260	285	(CL) Lean clay		
285	300	(GP) Poorly graded gravel		

APPENDIX



Zone Testing

[illegible]

Zone Testing

Project Name:		CALFIRE PARKFIELD	Project Number:		S2120-05-05	Date:	8/1/23
Well No.:		PPW-1	Purging Method:		Airlift	Field Personnel:	Lauren Short
Pipe Diameter (in):		4.8	Screened Pipe Length (ft):		20	Mud Depth Before Purging:	
Bottom of Screened Pipe:		265	ft	Pump Set Depth (ft):		Start Purging Time:	
PURGING CHARACTERISTICS							
TIME	TEMPERATURE (°C)	pH	CONDUCTIVITY (µs/cm)	TDS (mg/L)	TURBIDITY (NTU)	TURBIDITY Qualifier	
11:05							
11:05							
11:10							
11:15	23.2	8.82	7	159	105	Clear	
Comments: Sample Time 1120							
Gravel pack: 266-191							
Hole Plug 189-190							
DTW outside of drill pipe = 45' during airlift							

Zone Testing

Project Name:			CALFIRE PARKFIELD	Project Number:		S2120-05-05	Date:	8/3/23
Well No.:			PPW-1	Purging Method:		Airlift	Field Personnel:	Lauren Short
Pipe Diameter (in):			4.8	Screened Pipe Length (ft):		20	Mud Depth Before Purging:	
Bottom of Screened Pipe:			175 ft	Pump Set Depth (ft):			Start Purging Time:	
PURGING CHARACTERISTICS								
TIME	TEMPERATURE (°C)	pH	CONDUCTIVITY (µs/cm)	TDS (mg/L)	TURBIDITY (NTU)	TURBIDITY Qualifier		
13:30	24.7	8.89	1165	580		Cloudy		
13:38	22.3	8.71				Cloudy		
13:40	22	8.7				Cloudy		
13:48	22.7	8.72				Cloudy		
13:50	22.2	8.72				Cloudy		
Comments:								
Sample time 1400								

Zone Testing

Project Name:		CALFIRE PARKFIELD	Project Number:		S2120-05-05	Date:	8/2/23
Well No.:		PPW-1	Purging Method:		Airlift	Field Personnel:	Lauren Short
Pipe Diameter (in):		4.8	Screened Pipe Length (ft):		20	Mud Depth Before Purging:	
Bottom of Screened Pipe:		140	ft		Pump Set Depth (ft):	Start Purging Time:	
PURGING CHARACTERISTICS							
TIME	TEMPERATURE °C)	pH	CONDUCTIVITY (µs/cm)	TDS (mg/L)	TURBIDITY (NTU)	TURBIDITY Qualifier	
15:15	27.7	8.66	1159	667	--	Cloudy	
15:20	26.4	8.74	1212	711	--	Cloudy	
15:25	26.2	8.78	1439	712	--	Cloudy	
15:30	26.1	8.79	1450	724	--	Cloudy	
15:35	25.6	8.72	1440	730	--	Cloudy	
Comments:							



Geocon Consultants, Inc.
3160 Gold Valley Drive, Suite 800
Rancho Cordova, California 95742
RE: CALFIRE PARKFIELD FS

Work Order No.: 2308008

Dear Lauren Short:

Torrent Laboratory, Inc. received 1 sample(s) on August 02, 2023 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

A handwritten signature in blue ink, appearing to read "Patti L. Sandrock", is written over a light blue horizontal line.

Patti L Sandrock
QA Officer

August 03, 2023

Date



Date: 8/3/2023

Client: Geocon Consultants, Inc.

Project: CALFIRE PARKFIELD FS

Work Order: 2308008

CASE NARRATIVE

Unless otherwise indicated in the following narrative, no issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Laboratory, Inc.

Analytical Comments for method E 200.8, 2308008-001A MS/MSD, QC Preparation Batch ID 1153262, Note: The % recoveries for Antimony, Beryllium and Zinc are outside of laboratory control limits but RPD is within limits. The associated LCS/LCSD is within both % Recovery and RPD limits. No corrective action required.

Barium and Nickel are not recoverable (NR). The sample concentration is greater than 4X the spike concentration. No corrective action is required.



Sample Result Summary

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date Received: 08/02/23

Date Reported: 08/03/23

PPW-1-A

2308008-001

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Aluminum	E200.7	1	0.024	2.0	31	mg/L
Calcium	E200.7	1	0.034	2.0	76	mg/L
Iron	E200.7	1	0.048	0.30	49	mg/L
Magnesium	E200.7	1	0.0050	2.0	150	mg/L
Manganese	E200.7	1	0.0020	0.050	1.2	mg/L
Potassium	E200.7	1	0.094	5.0	9.9	mg/L
Sodium	E200.7	1	0.030	5.0	150	mg/L
Boron	E200.7	1	0.010	0.050	0.95	mg/L
Arsenic	E200.8	1	0.40	1.0	14.8	ug/L
Chromium	E200.8	1	0.42	1.0	107	ug/L
Copper	E200.8	1	0.25	1.0	57.5	ug/L
Lead	E200.8	1	0.32	1.0	9.55	ug/L
Selenium	E200.8	1	0.65	2.0	2.63	ug/L
Vanadium	E200.8	1	0.70	2.0	46.0	ug/L
Barium	E200.8	10	8.0	20	587	ug/L
Nickel	E200.8	10	4.9	10	318	ug/L
Zinc	E200.8	10	15	25	170	ug/L
Chloride	E300.0	10	0.16	2.00	395	mg/L
Sulfate	E300.0	10	3.1	5.00	30.7	mg/L
Total Dissolved Solids	SM2540C	1	2.0	20	824	mg/L



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/02/23, 10:00 am
Date Reported: 08/03/23

Client Sample ID:	PPW-1-A	Lab Sample ID:	2308008-001A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/01/23 / 18:00		
SDG:			

Prep Method:	245.1P	Prep Batch Date/Time:	8/2/23 12:10:00PM
Prep Batch ID:	1153268	Prep Analyst:	ROME

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury	E245.1	1	0.00010	0.00020	ND		mg/L	08/03/23	10:42	BJAY	476913



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/02/23, 10:00 am

Date Reported: 08/03/23

Client Sample ID:	PPW-1-A	Lab Sample ID:	2308008-001A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/01/23 / 18:00		
SDG:			

Prep Method:	200.7P	Prep Batch Date/Time:	8/2/23	12:10:00PM
Prep Batch ID:	1153272	Prep Analyst:	ROME	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aluminum	E200.7	1	0.024	2.0	31		mg/L	08/02/23	18:11	AT	476901
Calcium	E200.7	1	0.034	2.0	76		mg/L	08/02/23	18:11	AT	476901
Iron	E200.7	1	0.048	0.30	49		mg/L	08/02/23	18:11	AT	476901
Magnesium	E200.7	1	0.0050	2.0	150		mg/L	08/02/23	18:11	AT	476901
Manganese	E200.7	1	0.0020	0.050	1.2		mg/L	08/02/23	18:11	AT	476901
Potassium	E200.7	1	0.094	5.0	9.9		mg/L	08/02/23	18:11	AT	476901
Sodium	E200.7	1	0.030	5.0	150		mg/L	08/02/23	18:11	AT	476901
Boron	E200.7	1	0.010	0.050	0.95		mg/L	08/02/23	18:11	AT	476901



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/02/23, 10:00 am

Date Reported: 08/03/23

Client Sample ID:	PPW-1-A	Lab Sample ID:	2308008-001A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/01/23 / 18:00		
SDG:			

Prep Method:	200.8P	Prep Batch Date/Time:	8/2/23	12:01:00PM
Prep Batch ID:	1153262	Prep Analyst:	ERAGUDO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony	E200.8	1	0.45	1.0	ND		ug/L	08/02/23	19:18	ERR	476917
Arsenic	E200.8	1	0.40	1.0	14.8		ug/L	08/02/23	19:18	ERR	476917
Beryllium	E200.8	1	0.56	2.0	ND		ug/L	08/02/23	19:18	ERR	476917
Cadmium	E200.8	1	0.25	1.0	ND		ug/L	08/02/23	19:18	ERR	476917
Chromium	E200.8	1	0.42	1.0	107		ug/L	08/02/23	19:18	ERR	476917
Copper	E200.8	1	0.25	1.0	57.5		ug/L	08/02/23	19:18	ERR	476917
Lead	E200.8	1	0.32	1.0	9.55		ug/L	08/02/23	19:18	ERR	476917
Selenium	E200.8	1	0.65	2.0	2.63		ug/L	08/02/23	19:18	ERR	476917
Silver	E200.8	1	0.21	0.50	ND		ug/L	08/02/23	19:18	ERR	476917
Thallium	E200.8	1	1.3	2.0	ND		ug/L	08/02/23	19:18	ERR	476917
Vanadium	E200.8	1	0.70	2.0	46.0		ug/L	08/02/23	19:18	ERR	476917



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/02/23, 10:00 am
Date Reported: 08/03/23

Client Sample ID:	PPW-1-A	Lab Sample ID:	2308008-001A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/01/23 / 18:00		
SDG:			

Prep Method:	200.8P	Prep Batch Date/Time:	8/2/23 12:01:00PM
Prep Batch ID:	1153262	Prep Analyst:	ERAGUDO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Barium	E200.8	10	8.0	20	587		ug/L	08/02/23	19:42	ERR	476917
Nickel	E200.8	10	4.9	10	318		ug/L	08/02/23	19:42	ERR	476917
Zinc	E200.8	10	15	25	170		ug/L	08/02/23	19:42	ERR	476917



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/02/23, 10:00 am

Date Reported: 08/03/23

Client Sample ID:	PPW-1-A	Lab Sample ID:	2308008-001B
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/01/23 / 18:00		
SDG:			

Prep Method:	300.0P	Prep Batch Date/Time:	8/2/23	6:00:00PM
Prep Batch ID:	1153294	Prep Analyst:	PHUFANO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Chloride	E300.0	10	0.16	2.00	395		mg/L	08/02/23	21:47	PH	476898
Sulfate	E300.0	10	3.1	5.00	30.7		mg/L	08/02/23	21:47	PH	476898



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/02/23, 10:00 am
Date Reported: 08/03/23

Client Sample ID:	PPW-1-A	Lab Sample ID:	2308008-001B
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/01/23 / 18:00		
SDG:			

Prep Method: TDS-P	Prep Batch Date/Time: 8/2/23 6:00:00PM
Prep Batch ID: 1153321	Prep Analyst: KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Total Dissolved Solids	SM2540C	1	2.0	20	824		mg/L	08/03/23	14:00	NK	476929



MB Summary Report

Work Order:	2308008	Prep Method:	200.8P	Prep Date:	08/02/23	Prep Batch:	1153262
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/2/2023	Analytical Batch:	476917
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Antimony	0.45	1.0	ND		
Arsenic	0.40	1.0	ND		
Barium	0.80	2.0	ND		
Beryllium	0.56	1.0	ND		
Cadmium	0.25	1.0	ND		
Chromium	0.42	1.0	ND		
Copper	0.25	1.0	ND		
Lead	0.32	1.0	ND		
Nickel	0.49	1.0	ND		
Selenium	0.65	2.0	ND		
Silver	0.21	0.50	ND		
Thallium	1.3	2.0	ND		
Vanadium	0.70	2.0	ND		
Zinc	1.5	5.0	1.8		

Work Order:	2308008	Prep Method:	245.1P	Prep Date:	08/02/23	Prep Batch:	1153268
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	8/3/2023	Analytical Batch:	476913
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Mercury	0.00010	0.00020	ND		



MB Summary Report

Work Order:	2308008	Prep Method:	200.7P	Prep Date:	08/02/23	Prep Batch:	1153272
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	8/2/2023	Analytical Batch:	476901
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Antimony	0.0050	0.050	ND		
Arsenic	0.0040	0.010	ND		
Barium	0.00050	0.050	ND		
Beryllium	0.00020	0.050	ND		
Cadmium	0.0020	0.050	ND		
Chromium	0.00090	0.050	ND		
Cobalt	0.00050	0.050	ND		
Copper	0.0020	0.050	ND		
Lead	0.0014	0.050	ND		
Molybdenum	0.0020	0.050	ND		
Nickel	0.0020	0.050	ND		
Selenium	0.0073	0.050	ND		
Silver	0.0040	0.050	ND		
Thallium	0.0040	0.050	ND		
Vanadium	0.0010	0.050	0.0011		
Zinc	0.0020	0.050	ND		
Aluminum	0.024	2.0	ND		
Calcium	0.034	5.0	ND		
Iron	0.048	0.30	ND		
Magnesium	0.0050	5.0	ND		
Manganese	0.0020	0.050	ND		
Potassium	0.094	5.0	ND		
Sodium	0.030	5.0	ND		
Boron	0.010	0.050	ND		

Work Order:	2308008	Prep Method:	300.0P	Prep Date:	08/02/23	Prep Batch:	1153294
Matrix:	Water	Analytical Method:	E300.0	Analyzed Date:	8/2/2023	Analytical Batch:	476898
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Chloride	0.016	0.20	ND		
Nitrate as N	0.16	0.25	ND		
Nitrite as N	0.045	0.20	ND		
Sulfate	0.31	0.50	ND		



MB Summary Report

Work Order:	2308008	Prep Method:	TDS-P	Prep Date:	08/02/23	Prep Batch:	1153321
Matrix:	Water	Analytical Method:	SM2540C	Analyzed Date:	8/3/2023	Analytical Batch:	476929
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Total Dissolved Solids	1.0	10	1.00		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308008	Prep Method:	200.8P	Prep Date:	08/02/23	Prep Batch:	1153262
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/2/2023	Analytical Batch:	476917
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony	0.45	1.0	ND	50	102	104		85 - 115	20	
Arsenic	0.40	1.0	ND	50	97.7	99.6		85 - 115	20	
Barium	0.80	2.0	ND	50	96.3	98.3		85 - 115	20	
Beryllium	0.32	2.0	ND	50	96.1	97.9		85 - 115	20	
Cadmium	0.43	1.0	ND	50	97.3	99.0		85 - 115	20	
Chromium	0.42	1.0	ND	50	98.0	98.6		85 - 115	20	
Copper	0.25	1.0	ND	50	97.8	98.1		85 - 115	20	
Lead	0.42	1.0	ND	50	96.0	98.3		85 - 115	20	
Nickel	0.49	1.0	ND	50	98.2	99.1		85 - 115	20	
Selenium	0.42	2.0	ND	50	97.5	98.1		85 - 115	20	
Silver	0.21	0.50	ND	50	97.2	97.7		85 - 115	20	
Thallium	1.3	2.0	ND	50	95.1	98.0		85 - 115	20	
Vanadium	0.70	2.0	ND	50	98.1	99.2		85 - 115	20	
Zinc	1.5	5.0	1.8	50	102	105		85 - 115	20	

Work Order:	2308008	Prep Method:	245.1P	Prep Date:	08/02/23	Prep Batch:	1153268
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	8/3/2023	Analytical Batch:	476913
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Mercury	0.00013	0.00020	ND	0.015	104	105	0.000	85 - 115	20	



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308008	Prep Method:	200.7P	Prep Date:	08/02/23	Prep Batch:	1153272
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	8/2/2023	Analytical Batch:	476901
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony	0.0050	0.010	ND	1.0	99.0	97.6	1.42	80 - 120	20	
Arsenic	0.0040	0.010	ND	1.0	100	97.8	2.22	80 - 120	20	
Barium	0.00050	0.0050	ND	1.0	100	97.9	2.12	80 - 120	20	
Beryllium	0.00020	0.0050	ND	1.0	100	97.9	2.12	80 - 120	20	
Cadmium	0.0020	0.0050	ND	1.0	99.8	97.5	2.33	80 - 120	20	
Chromium	0.00090	0.0050	ND	1.0	99.8	97.4	2.43	80 - 120	20	
Cobalt	0.00050	0.0050	ND	1.0	99.9	97.5	2.43	80 - 120	20	
Copper	0.0020	0.0050	ND	1.0	101	97.9	3.12	80 - 120	20	
Lead	0.0014	0.010	ND	1.0	100	97.7	2.33	80 - 120	20	
Molybdenum	0.0020	0.0050	ND	1.0	99.5	97.8	1.72	80 - 120	20	
Nickel	0.0020	0.0050	ND	1.0	99.8	97.5	2.33	80 - 120	20	
Selenium	0.0073	0.010	ND	1.0	100	98.3	1.71	80 - 120	20	
Silver	0.0040	0.010	ND	1.0	99.8	97.5	2.33	80 - 120	20	
Thallium	0.0040	0.020	ND	1.0	99.6	97.3	2.34	80 - 120	20	
Vanadium	0.0010	0.0050	0.0011	1.0	99.8	97.6	2.23	80 - 120	20	
Zinc	0.0020	0.0050	ND	1.0	99.9	97.5	2.43	80 - 120	20	
Aluminum	0.024	2.0	ND	10	100	98.2	1.82	80 - 120	20	
Calcium	0.034	5.0	ND	10	99.8	97.5	2.33	80 - 120	20	
Iron	0.048	0.30	ND	10	99.8	97.6	2.23	80 - 120	20	
Magnesium	0.0050	5.0	ND	10	100	97.8	2.22	80 - 120	20	
Manganese	0.0020	0.010	ND	1.0	100	97.8	2.22	80 - 120	20	
Potassium	0.094	5.0	ND	10	101	98.8	2.20	80 - 120	20	
Sodium	0.030	5.0	ND	10	99.1	96.4	2.76	80 - 120	20	
Boron	0.010	0.050	ND	1.0	99.1	96.7	2.45	80 - 120	20	

Work Order:	2308008	Prep Method:	300.0P	Prep Date:	08/02/23	Prep Batch:	1153294
Matrix:	Water	Analytical Method:	E300.0	Analyzed Date:	8/2/2023	Analytical Batch:	476898
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Chloride	0.031	0.20	ND	2.5	95.9	95.9	0.000	80 - 120	20	
Nitrate as N	0.0070	0.10	ND	2.5	99.4	99.6	0.402	80 - 120	20	
Nitrite as N	0.0090	0.10	ND	2.5	106	106	0.000	80 - 120	20	
Sulfate	0.00050	0.50	ND	2.5	90.1	90.3	0.443	80 - 120	20	



MS/MSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308008	Prep Method:	200.8P	Prep Date:	08/02/23	Prep Batch:	1153262
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/2/2023	Analytical Batch:	476917
Spiked Sample:	2308008-001A						
Units:	ug/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony	0.019	0.50	ND	50	41.6	39.3	5.43	75 - 125	20	S
Arsenic	0.19	0.50	14.8	50	104	102	1.66	75 - 125	20	
Barium	0.066	0.50	565	50	0	0	2.86	75 - 125	20	NR
Beryllium	0.018	0.50	0.595	50	74.7	73.1	2.40	75 - 125	20	S
Cadmium	0.033	0.50	0.597	50	97.0	94.8	2.27	75 - 125	20	
Chromium	0.044	0.50	107	50	78.2	79.3	0.683	75 - 125	20	
Copper	0.25	1.0	57.5	50	108	105	0.905	75 - 125	20	
Lead	0.031	0.50	9.55	50	83.3	81.2	2.17	75 - 125	20	
Nickel	0.30	1.0	305	50	0	0	0.844	75 - 125	20	NR
Selenium	0.034	0.50	2.63	50	92.8	91.3	1.44	75 - 125	20	
Silver	0.012	0.50	ND	50	96.8	93.8	3.15	75 - 125	20	
Thallium	0.0040	0.50	ND	50	84.6	83.0	1.91	75 - 125	20	
Vanadium	0.020	0.50	46.0	50	82.4	82.1	0.115	75 - 125	20	
Zinc	0.59	2.0	152	50	167	140	6.11	75 - 125	20	S



Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit/Reporting Limit/Limit of Quantitation (PQL/RL/LOQ) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs/RLs/LODs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - mg/L and mg/Kg (equivalent to PPM - parts per million in liquid and solid), ug/L and ug/Kg (equivalent to PPB - parts per billion in liquid and solid), ug/m3 , mg/m3 , ppbv and ppmv (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), ug/Wipe (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS

B - Indicates when the analyte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H - Indicates that the recommended holding time for the analyte or compound has been exceeded
J - Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
ND - Not Detected at a concentration greater than the PQL/RL or, if reported to the MDL, at greater than the MDL.
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R - The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S - Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.



Sample Receipt Checklist

Client Name: Geocon Consultants, Inc.

Date and Time Received: 8/2/2023 10:00:00AM

Project Name: CALFIRE PARKFIELD FS

Received By: Lorna Imbat

Work Order No.: 2308008

Physically Logged By: Lorna Imbat

Checklist Completed By: Lorna Imbat

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present? Yes

Chain of custody signed when relinquished and received? Yes

Chain of custody agrees with sample labels? Yes

Custody seals intact on sample bottles? Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler? Not Present

Shipping Container/Cooler In Good Condition? Yes

Samples in proper container/bottle? Yes

Samples containers intact? Yes

Sufficient sample volume for indicated test? Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes

Container/Temp Blank temperature in compliance? Yes Temperature: 3.0 °C

Water-VOA vials have zero headspace? No VOA vials submitted

Water-pH acceptable upon receipt? N/A

pH Checked by: Lorna Imbat

pH Adjusted by: N/A

Comments:



Login Summary Report

Client ID: TL5309

Project Name: CALFIRE PARKFIELD FS

Project # : S2120-05-05

Report Due Date: 8/3/2023

Comments:

Work Order # : 2308008

Geocon Consultants, Inc.

QC Level: II

TAT Requested: 1 Day Rush:1

Date Received: 8/2/2023

Time Received: 10:00 am

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
2308008-001A	PPW-1-A	08/01/23 18:00	Water	09/15/23			Met_W_200.8CAM17 Hg_W_7470A Met_200.7 Full Hg_245.1	
2308008-001B	PPW-1-A	08/01/23 18:00	Water	09/15/23			Anion_W_300.0 TDS_2540C	
<u>Sample Note:</u>	Cl,SO4 (300)							



CHAIN OF CUSTODY

2308008

Reset

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

Company Name: Geocon Consultants, Inc			☐ Env. ☒ Non Env.	Project #: S2120-05-05	PO#:
Address: 3160 Gold Valley Drive				Project Name: CALFIRE Parkfield FS	
City: Rancho Cordova	State: CA	Zip Code: 95742	Comments: Water from a proposed <u>drinking water supply well</u>		
Telephone:		Cell: 669-294-3357	SAMPLER: Nick Rice		
REPORT TO: Lauren Short		BILL TO: Lauren Short	EMAIL: short@geoconinc.com, Rice @ geoconinc.com		

D

ANALYSIS
REQUESTED[illegible]

1	Relinquished By: Nick Rice	Print: [Signature]	Date: 8/2/23	Time: 0700	Received By: LE Swart	Print: [Signature]	Date: 8/2/23	Time: 0700
2	Relinquished By: [Signature]	Print: LE Swart	Date: 8/2/23	Time: 0830	Received By: Cym	Print: Claudia Moreno	Date: 8/2/23	Time: 10:00am

Cooler Temperature 2.6 #3

Samples Received on ice? Yes ☒ No ☐

Method of Shipment D/O

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made.

QA-F-065, Rev 1.0, TLICD-959

Page ____ of ____



Geocon Consultants, Inc.
3160 Gold Valley Drive, Suite 800
Rancho Cordova, California 95742

RE: CALFIRE PARKFIELD FS

Work Order No.: 2308018

Dear Lauren Short:

Torrent Laboratory, Inc. received 3 sample(s) on August 03, 2023 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

A handwritten signature in blue ink, appearing to read "Patti L. Sandrock", is written over a light blue horizontal line.

Patti L Sandrock
QA Officer

August 04, 2023

Date



Date: 8/4/2023

Client: Geocon Consultants, Inc.

Project: CALFIRE PARKFIELD FS

Work Order: 2308018

CASE NARRATIVE

Unless otherwise indicated in the following narrative, no issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Laboratory, Inc.

Analytical Comments for method 200.8, 2308018-001A MS/MSD, QC Preparation Batch ID 1153305, Note: Barium is not recoverable (NR). The sample concentration is greater than 4X the spike concentration. No corrective action is required.

Analytical Comments for method 300.0, 2308018-001A MS/MSD, QC Preparation Batch ID 1153331, Note: Chloride is not recoverable (NR). The sample concentration is greater than 4X the spike concentration. No corrective action is required.

Analytical Comments for method E 200.7, 2308018-001A MS/MSD, QC Preparation Batch ID 1153308 Note: The % recoveries for Magnesium and Sodium are outside of laboratory control limits but RPD is within limits. The associated LCS/LCSD is within both % Recovery and RPD limits. No corrective action required.



Sample Result Summary

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date Received: 08/03/23

Date Reported: 08/04/23

PPW-1-B

2308018-001

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Aluminum	E200.7	1	0.024	2.0	3.5	mg/L
Calcium	E200.7	1	0.034	2.0	62	mg/L
Iron	E200.7	1	0.048	0.30	5.0	mg/L
Magnesium	E200.7	1	0.0050	2.0	150	mg/L
Manganese	E200.7	1	0.0020	0.050	0.26	mg/L
Potassium	E200.7	1	0.094	5.0	5.4	mg/L
Sodium	E200.7	1	0.030	5.0	150	mg/L
Boron	E200.7	1	0.010	0.050	0.70	mg/L
Arsenic	E200.8	1	0.40	1.0	3.64	ug/L
Barium	E200.8	1	0.80	2.0	433	ug/L
Chromium	E200.8	1	0.42	1.0	9.85	ug/L
Copper	E200.8	1	0.25	1.0	4.10	ug/L
Nickel	E200.8	1	0.49	1.0	23.6	ug/L
Vanadium	E200.8	1	0.70	2.0	7.29	ug/L
Zinc	E200.8	1	1.5	2.5	13.0	ug/L
Chloride	E300.0	10	0.16	2.00	470	mg/L
Sulfate	E300.0	10	3.1	5.00	26.0	mg/L
Total Dissolved Solids	SM2540C	1	1.0	10	1380	mg/L

PPW-1-C

2308018-002

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Aluminum	E200.7	1	0.024	2.0	130	mg/L
Calcium	E200.7	1	0.034	2.0	160	mg/L
Iron	E200.7	1	0.048	0.30	190	mg/L
Magnesium	E200.7	1	0.0050	2.0	250	mg/L
Manganese	E200.7	1	0.0020	0.050	4.3	mg/L
Potassium	E200.7	1	0.094	5.0	21	mg/L
Sodium	E200.7	1	0.030	5.0	100	mg/L
Boron	E200.7	1	0.010	0.050	0.64	mg/L
Arsenic	E200.8	1	0.40	1.0	28.1	ug/L
Beryllium	E200.8	1	0.56	2.0	2.22	ug/L
Cadmium	E200.8	1	0.25	1.0	2.84	ug/L
Chromium	E200.8	1	0.42	1.0	336	ug/L
Copper	E200.8	1	0.25	1.0	339	ug/L
Lead	E200.8	1	0.32	1.0	50.7	ug/L
Selenium	E200.8	1	0.65	2.0	10.2	ug/L
Silver	E200.8	1	0.21	0.50	1.31	ug/L
Vanadium	E200.8	1	0.70	2.0	109	ug/L
Zinc	E200.8	1	1.5	2.5	310	ug/L
Barium	E200.8	10	8.0	20	1890	ug/L
Nickel	E200.8	10	4.9	10	1240	ug/L
Mercury	E245.1	1	0.00010	0.00020	0.0014	mg/L
Chloride	E300.0	10	0.16	2.00	190	mg/L
Sulfate	E300.0	10	3.1	5.00	40.3	mg/L
Total Dissolved Solids	SM2540C	1	3.3	33	700	mg/L



Sample Result Summary

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date Received: 08/03/23

Date Reported: 08/04/23

PPW-1-D

2308018-003

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Aluminum	E200.7	1	0.024	2.0	150	mg/L
Calcium	E200.7	1	0.034	2.0	180	mg/L
Iron	E200.7	1	0.048	0.30	210	mg/L
Magnesium	E200.7	1	0.0050	2.0	250	mg/L
Manganese	E200.7	1	0.0020	0.050	4.8	mg/L
Potassium	E200.7	1	0.094	5.0	26	mg/L
Sodium	E200.7	1	0.030	5.0	130	mg/L
Boron	E200.7	1	0.010	0.050	0.70	mg/L
Arsenic	E200.8	1	0.40	1.0	33.0	ug/L
Beryllium	E200.8	1	0.56	2.0	2.32	ug/L
Cadmium	E200.8	1	0.25	1.0	2.55	ug/L
Chromium	E200.8	1	0.42	1.0	414	ug/L
Copper	E200.8	1	0.25	1.0	341	ug/L
Lead	E200.8	1	0.32	1.0	49.8	ug/L
Selenium	E200.8	1	0.65	2.0	11.3	ug/L
Silver	E200.8	1	0.21	0.50	1.21	ug/L
Vanadium	E200.8	1	0.70	2.0	161	ug/L
Zinc	E200.8	1	1.5	2.5	400	ug/L
Barium	E200.8	10	8.0	20	1870	ug/L
Nickel	E200.8	10	4.9	10	1360	ug/L
Mercury	E245.1	1	0.00010	0.00020	0.0013	mg/L
Chloride	E300.0	10	0.16	2.00	207	mg/L
Sulfate	E300.0	10	3.1	5.00	72.3	mg/L
Total Dissolved Solids	SM2540C	1	5.0	50	675	mg/L



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am
Date Reported: 08/04/23

Client Sample ID:	PPW-1-B	Lab Sample ID:	2308018-001A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 11:20		
SDG:			

Prep Method:	245.1P	Prep Batch Date/Time:	8/3/23	12:00:00PM
Prep Batch ID:	1153311	Prep Analyst:	ROME	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury	E245.1	1	0.00010	0.00020	ND		mg/L	08/04/23	10:49	BJAY	476955



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am
Date Reported: 08/04/23

Client Sample ID:	PPW-1-B	Lab Sample ID:	2308018-001A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 11:20		
SDG:			

Prep Method: 200.7P	Prep Batch Date/Time: 8/3/23 12:00:00PM
Prep Batch ID: 1153308	Prep Analyst: ROME

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aluminum	E200.7	1	0.024	2.0	3.5		mg/L	08/03/23	19:59	AT	476962
Calcium	E200.7	1	0.034	2.0	62		mg/L	08/03/23	19:59	AT	476962
Iron	E200.7	1	0.048	0.30	5.0		mg/L	08/03/23	19:59	AT	476962
Magnesium	E200.7	1	0.0050	2.0	150		mg/L	08/03/23	19:59	AT	476962
Manganese	E200.7	1	0.0020	0.050	0.26		mg/L	08/03/23	19:59	AT	476962
Potassium	E200.7	1	0.094	5.0	5.4		mg/L	08/03/23	19:59	AT	476962
Sodium	E200.7	1	0.030	5.0	150		mg/L	08/03/23	19:59	AT	476962
Boron	E200.7	1	0.010	0.050	0.70		mg/L	08/03/23	19:59	AT	476962



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am
Date Reported: 08/04/23

Client Sample ID:	PPW-1-B	Lab Sample ID:	2308018-001A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 11:20		
SDG:			

Prep Method: 200.8P	Prep Batch Date/Time: 8/3/23 11:35:00AM
Prep Batch ID: 1153305	Prep Analyst: ERAGUDO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony	E200.8	1	0.45	1.0	ND		ug/L	08/03/23	16:02	ERR	476937
Arsenic	E200.8	1	0.40	1.0	3.64		ug/L	08/03/23	16:02	ERR	476937
Barium	E200.8	1	0.80	2.0	433		ug/L	08/03/23	16:02	ERR	476937
Beryllium	E200.8	1	0.56	2.0	ND		ug/L	08/03/23	16:02	ERR	476937
Cadmium	E200.8	1	0.25	1.0	ND		ug/L	08/03/23	16:02	ERR	476937
Chromium	E200.8	1	0.42	1.0	9.85		ug/L	08/03/23	16:02	ERR	476937
Copper	E200.8	1	0.25	1.0	4.10		ug/L	08/03/23	16:02	ERR	476937
Lead	E200.8	1	0.32	1.0	ND		ug/L	08/03/23	16:02	ERR	476937
Nickel	E200.8	1	0.49	1.0	23.6		ug/L	08/03/23	16:02	ERR	476937
Selenium	E200.8	1	0.65	2.0	ND		ug/L	08/03/23	16:02	ERR	476937
Silver	E200.8	1	0.21	0.50	ND		ug/L	08/03/23	16:02	ERR	476937
Thallium	E200.8	1	1.3	2.0	ND		ug/L	08/03/23	16:02	ERR	476937
Vanadium	E200.8	1	0.70	2.0	7.29		ug/L	08/03/23	16:02	ERR	476937
Zinc	E200.8	1	1.5	2.5	13.0		ug/L	08/03/23	16:02	ERR	476937



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am

Date Reported: 08/04/23

Client Sample ID:	PPW-1-B	Lab Sample ID:	2308018-001B
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 11:20		
SDG:			

Prep Method:	300.0P	Prep Batch Date/Time:	8/3/23	6:00:00PM
Prep Batch ID:	1153331	Prep Analyst:	PHUFANO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Chloride	E300.0	10	0.16	2.00	470		mg/L	08/03/23	21:33	PH	476940
Sulfate	E300.0	10	3.1	5.00	26.0		mg/L	08/03/23	21:33	PH	476940



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am
Date Reported: 08/04/23

Client Sample ID:	PPW-1-B	Lab Sample ID:	2308018-001B
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 11:20		
SDG:			

Prep Method: TDS-P	Prep Batch Date/Time: 8/3/23 6:00:00PM
Prep Batch ID: 1153362	Prep Analyst: KAURN

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Total Dissolved Solids	SM2540C	1	1.0	10	1380		mg/L	08/04/23	14:00	NK	476968



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am

Date Reported: 08/04/23

Client Sample ID:	PPW-1-C	Lab Sample ID:	2308018-002A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 14:00		
SDG:			

Prep Method:	245.1P	Prep Batch Date/Time:	8/3/23	12:00:00PM
Prep Batch ID:	1153311	Prep Analyst:	ROME	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury	E245.1	1	0.00010	0.00020	0.0014		mg/L	08/04/23	10:51	BJAY	476955



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am

Date Reported: 08/04/23

Client Sample ID:	PPW-1-C	Lab Sample ID:	2308018-002A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 14:00		
SDG:			

Prep Method:	200.7P	Prep Batch Date/Time:	8/3/23	12:00:00PM
Prep Batch ID:	1153308	Prep Analyst:	ROME	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aluminum	E200.7	1	0.024	2.0	130		mg/L	08/03/23	20:07	AT	476962
Calcium	E200.7	1	0.034	2.0	160		mg/L	08/03/23	20:07	AT	476962
Iron	E200.7	1	0.048	0.30	190		mg/L	08/03/23	20:07	AT	476962
Magnesium	E200.7	1	0.0050	2.0	250		mg/L	08/03/23	20:07	AT	476962
Manganese	E200.7	1	0.0020	0.050	4.3		mg/L	08/03/23	20:07	AT	476962
Potassium	E200.7	1	0.094	5.0	21		mg/L	08/03/23	20:07	AT	476962
Sodium	E200.7	1	0.030	5.0	100		mg/L	08/03/23	20:07	AT	476962
Boron	E200.7	1	0.010	0.050	0.64		mg/L	08/03/23	20:07	AT	476962



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am
Date Reported: 08/04/23

Client Sample ID:	PPW-1-C	Lab Sample ID:	2308018-002A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 14:00		
SDG:			

Prep Method:	200.8P	Prep Batch Date/Time:	8/3/23 11:35:00AM
Prep Batch ID:	1153305	Prep Analyst:	ERAGUDO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony	E200.8	1	0.45	1.0	ND		ug/L	08/03/23	16:16	ERR	476937
Arsenic	E200.8	1	0.40	1.0	28.1		ug/L	08/03/23	16:16	ERR	476937
Beryllium	E200.8	1	0.56	2.0	2.22		ug/L	08/03/23	16:16	ERR	476937
Cadmium	E200.8	1	0.25	1.0	2.84		ug/L	08/03/23	16:16	ERR	476937
Chromium	E200.8	1	0.42	1.0	336		ug/L	08/03/23	16:16	ERR	476937
Copper	E200.8	1	0.25	1.0	339		ug/L	08/03/23	16:16	ERR	476937
Lead	E200.8	1	0.32	1.0	50.7		ug/L	08/03/23	16:16	ERR	476937
Selenium	E200.8	1	0.65	2.0	10.2		ug/L	08/03/23	16:16	ERR	476937
Silver	E200.8	1	0.21	0.50	1.31		ug/L	08/03/23	16:16	ERR	476937
Thallium	E200.8	1	1.3	2.0	ND		ug/L	08/03/23	16:16	ERR	476937
Vanadium	E200.8	1	0.70	2.0	109		ug/L	08/03/23	16:16	ERR	476937
Zinc	E200.8	1	1.5	2.5	310		ug/L	08/03/23	16:16	ERR	476937



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am

Date Reported: 08/04/23

Client Sample ID:	PPW-1-C	Lab Sample ID:	2308018-002A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 14:00		
SDG:			

Prep Method:	200.8P	Prep Batch Date/Time:	8/3/23	11:35:00AM
Prep Batch ID:	1153305	Prep Analyst:	ERAGUDO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Barium	E200.8	10	8.0	20	1890		ug/L	08/03/23	16:26	ERR	476937
Nickel	E200.8	10	4.9	10	1240		ug/L	08/03/23	16:26	ERR	476937



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am

Date Reported: 08/04/23

Client Sample ID:	PPW-1-C	Lab Sample ID:	2308018-002B
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 14:00		
SDG:			

Prep Method:	300.0P	Prep Batch Date/Time:	8/3/23	6:00:00PM
Prep Batch ID:	1153331	Prep Analyst:	PHUFANO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Chloride	E300.0	10	0.16	2.00	190		mg/L	08/03/23	22:38	PH	476940
Sulfate	E300.0	10	3.1	5.00	40.3		mg/L	08/03/23	22:38	PH	476940



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am

Date Reported: 08/04/23

Client Sample ID:	PPW-1-C	Lab Sample ID:	2308018-002B
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 14:00		
SDG:			

Prep Method:	TDS-P	Prep Batch Date/Time:	8/3/23	6:00:00PM
Prep Batch ID:	1153362	Prep Analyst:	KAURN	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Total Dissolved Solids	SM2540C	1	3.3	33	700		mg/L	08/04/23	14:00	NK	476968



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am

Date Reported: 08/04/23

Client Sample ID:	PPW-1-D	Lab Sample ID:	2308018-003A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 15:45		
SDG:			

Prep Method: 245.1P	Prep Batch Date/Time: 8/3/23 12:00:00PM
Prep Batch ID: 1153311	Prep Analyst: ROME

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury	E245.1	1	0.00010	0.00020	0.0013		mg/L	08/04/23	10:58	BJAY	476955



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am
Date Reported: 08/04/23

Client Sample ID:	PPW-1-D	Lab Sample ID:	2308018-003A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 15:45		
SDG:			

Prep Method:	200.7P	Prep Batch Date/Time:	8/3/23 12:00:00PM
Prep Batch ID:	1153308	Prep Analyst:	ROME

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aluminum	E200.7	1	0.024	2.0	150		mg/L	08/03/23	20:09	AT	476962
Calcium	E200.7	1	0.034	2.0	180		mg/L	08/03/23	20:09	AT	476962
Iron	E200.7	1	0.048	0.30	210		mg/L	08/03/23	20:09	AT	476962
Magnesium	E200.7	1	0.0050	2.0	250		mg/L	08/03/23	20:09	AT	476962
Manganese	E200.7	1	0.0020	0.050	4.8		mg/L	08/03/23	20:09	AT	476962
Potassium	E200.7	1	0.094	5.0	26		mg/L	08/03/23	20:09	AT	476962
Sodium	E200.7	1	0.030	5.0	130		mg/L	08/03/23	20:09	AT	476962
Boron	E200.7	1	0.010	0.050	0.70		mg/L	08/03/23	20:09	AT	476962



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am

Date Reported: 08/04/23

Client Sample ID:	PPW-1-D	Lab Sample ID:	2308018-003A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 15:45		
SDG:			

Prep Method:	200.8P	Prep Batch Date/Time:	8/3/23	11:35:00AM
Prep Batch ID:	1153305	Prep Analyst:	ERAGUDO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony	E200.8	1	0.45	1.0	ND		ug/L	08/03/23	16:21	ERR	476937
Arsenic	E200.8	1	0.40	1.0	33.0		ug/L	08/03/23	16:21	ERR	476937
Beryllium	E200.8	1	0.56	2.0	2.32		ug/L	08/03/23	16:21	ERR	476937
Cadmium	E200.8	1	0.25	1.0	2.55		ug/L	08/03/23	16:21	ERR	476937
Chromium	E200.8	1	0.42	1.0	414		ug/L	08/03/23	16:21	ERR	476937
Copper	E200.8	1	0.25	1.0	341		ug/L	08/03/23	16:21	ERR	476937
Lead	E200.8	1	0.32	1.0	49.8		ug/L	08/03/23	16:21	ERR	476937
Selenium	E200.8	1	0.65	2.0	11.3		ug/L	08/03/23	16:21	ERR	476937
Silver	E200.8	1	0.21	0.50	1.21		ug/L	08/03/23	16:21	ERR	476937
Thallium	E200.8	1	1.3	2.0	ND		ug/L	08/03/23	16:21	ERR	476937
Vanadium	E200.8	1	0.70	2.0	161		ug/L	08/03/23	16:21	ERR	476937
Zinc	E200.8	1	1.5	2.5	400		ug/L	08/03/23	16:21	ERR	476937



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am
Date Reported: 08/04/23

Client Sample ID:	PPW-1-D	Lab Sample ID:	2308018-003A
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 15:45		
SDG:			

Prep Method:	200.8P	Prep Batch Date/Time:	8/3/23 11:35:00AM
Prep Batch ID:	1153305	Prep Analyst:	ERAGUDO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Barium	E200.8	10	8.0	20	1870		ug/L	08/03/23	16:31	ERR	476937
Nickel	E200.8	10	4.9	10	1360		ug/L	08/03/23	16:31	ERR	476937



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am

Date Reported: 08/04/23

Client Sample ID:	PPW-1-D	Lab Sample ID:	2308018-003B
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 15:45		
SDG:			

Prep Method:	300.0P	Prep Batch Date/Time:	8/3/23	6:00:00PM
Prep Batch ID:	1153331	Prep Analyst:	PHUFANO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Chloride	E300.0	10	0.16	2.00	207		mg/L	08/03/23	22:59	PH	476940
Sulfate	E300.0	10	3.1	5.00	72.3		mg/L	08/03/23	22:59	PH	476940



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/03/23, 9:14 am
Date Reported: 08/04/23

Client Sample ID:	PPW-1-D	Lab Sample ID:	2308018-003B
Project Name/Location:	CALFIRE PARKFIELD FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/02/23 / 15:45		
SDG:			

Prep Method:	TDS-P	Prep Batch Date/Time:	8/3/23	6:00:00PM
Prep Batch ID:	1153362	Prep Analyst:	KAURN	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Total Dissolved Solids	SM2540C	1	5.0	50	675		mg/L	08/04/23	14:00	NK	476968



MB Summary Report

Work Order:	2308018	Prep Method:	200.8P	Prep Date:	08/03/23	Prep Batch:	1153305
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/3/2023	Analytical Batch:	476937
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Antimony	0.45	1.0	ND		
Arsenic	0.40	1.0	ND		
Barium	0.80	2.0	ND		
Beryllium	0.56	1.0	ND		
Cadmium	0.25	1.0	ND		
Chromium	0.42	1.0	ND		
Copper	0.25	1.0	ND		
Lead	0.32	1.0	ND		
Nickel	0.49	1.0	ND		
Selenium	0.65	2.0	ND		
Silver	0.21	0.50	ND		
Thallium	1.3	2.0	ND		
Vanadium	0.70	2.0	ND		
Zinc	1.5	5.0	ND		

Work Order:	2308018	Prep Method:	200.7P	Prep Date:	08/03/23	Prep Batch:	1153308
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	8/3/2023	Analytical Batch:	476962
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Aluminum	0.024	2.0	ND		
Calcium	0.034	5.0	0.039		
Iron	0.048	0.30	ND		
Magnesium	0.0050	5.0	ND		
Manganese	0.0020	0.050	ND		
Potassium	0.094	5.0	0.13		
Sodium	0.030	5.0	1.4		
Boron	0.010	0.050	ND		

Work Order:	2308018	Prep Method:	245.1P	Prep Date:	08/03/23	Prep Batch:	1153311
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	8/4/2023	Analytical Batch:	476955
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Mercury	0.00010	0.00020	ND		



MB Summary Report

Work Order:	2308018	Prep Method:	300.0P	Prep Date:	08/03/23	Prep Batch:	1153331
Matrix:	Water	Analytical Method:	E300.0	Analyzed Date:	8/3/2023	Analytical Batch:	476940
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Chloride	0.016	0.20	ND		
Sulfate	0.31	0.50	ND		

Work Order:	2308018	Prep Method:	TDS-P	Prep Date:	08/03/23	Prep Batch:	1153362
Matrix:	Water	Analytical Method:	SM2540C	Analyzed Date:	8/4/2023	Analytical Batch:	476968
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Total Dissolved Solids	1.0	10	1.00		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308018	Prep Method:	200.8P	Prep Date:	08/03/23	Prep Batch:	1153305
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/3/2023	Analytical Batch:	476937
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony	0.45	1.0	ND	50	100.	98.8	1.21	85 - 115	20	
Arsenic	0.40	1.0	ND	50	97.5	96.4	1.03	85 - 115	20	
Barium	0.80	2.0	ND	50	97.2	96.0	1.24	85 - 115	20	
Beryllium	0.32	2.0	ND	50	99.0	98.7	0.202	85 - 115	20	
Cadmium	0.43	1.0	ND	50	97.7	97.1	0.821	85 - 115	20	
Chromium	0.42	1.0	ND	50	99.4	100	0.802	85 - 115	20	
Copper	0.25	1.0	ND	50	97.2	95.4	1.87	85 - 115	20	
Lead	0.42	1.0	ND	50	99.5	101	1.79	85 - 115	20	
Nickel	0.49	1.0	ND	50	96.1	95.2	1.04	85 - 115	20	
Selenium	0.42	2.0	ND	50	96.4	95.6	0.833	85 - 115	20	
Silver	0.21	0.50	ND	50	99.6	98.0	1.62	85 - 115	20	
Thallium	1.3	2.0	ND	50	98.1	98.6	0.407	85 - 115	20	
Vanadium	0.70	2.0	ND	50	98.9	97.2	1.83	85 - 115	20	
Zinc	1.5	5.0	ND	50	100	100	0.199	85 - 115	20	

Work Order:	2308018	Prep Method:	200.7P	Prep Date:	08/03/23	Prep Batch:	1153308
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	8/3/2023	Analytical Batch:	476962
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Aluminum	0.024	2.0	ND	10	103	102	0.976	80 - 120	20	
Calcium	0.034	5.0	0.039	10	102	101	0.985	80 - 120	20	
Iron	0.048	0.30	ND	10	102	102	0.000	80 - 120	20	
Magnesium	0.0050	5.0	ND	10	102	101	0.985	80 - 120	20	
Manganese	0.0020	0.010	ND	1.0	102	102	0.000	80 - 120	20	
Potassium	0.094	5.0	0.13	10	103	102	0.976	80 - 120	20	
Sodium	0.030	5.0	1.4	10	113	111	1.79	80 - 120	20	
Boron	0.010	0.050	ND	1.0	101	100	0.995	80 - 120	20	
Titanium						103	0.976	-	20	
Yttrium						-99900	0.000	-	20	,S
Tin						102	0.000	-	20	,

Work Order:	2308018	Prep Method:	245.1P	Prep Date:	08/03/23	Prep Batch:	1153311
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	8/4/2023	Analytical Batch:	476955
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Mercury	0.00013	0.00020	ND	0.015	109	106	3.73	85 - 115	20	,



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308018	Prep Method:	300.0P	Prep Date:	08/03/23	Prep Batch:	1153331
Matrix:	Water	Analytical Method:	E300.0	Analyzed Date:	8/3/2023	Analytical Batch:	476940
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Chloride	0.031	0.20	ND	2.5	95.8	96.5	0.833	80 - 120	20	,
Sulfate	0.00050	0.50	ND	2.5	90.1	90.6	0.885	80 - 120	20	,



MS/MSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308018	Prep Method:	200.8P	Prep Date:	08/03/23	Prep Batch:	1153305
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/3/2023	Analytical Batch:	476937
Spiked Sample:	2308018-001A						
Units:	ug/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony	0.019	0.50	ND	50	91.4	92.7	1.30	75 - 125	20	NR
Arsenic	0.19	0.50	3.64	50	102	103	1.10	75 - 125	20	
Barium	0.066	0.50	433	50	0	0	0.821	75 - 125	20	
Beryllium	0.018	0.50	ND	50	86.0	85.7	0.233	75 - 125	20	
Cadmium	0.033	0.50	ND	50	92.9	93.6	0.643	75 - 125	20	
Chromium	0.044	0.50	9.85	50	88.9	89.2	0.184	75 - 125	20	
Copper	0.25	1.0	4.10	50	94.7	93.3	1.37	75 - 125	20	
Lead	0.031	0.50	0.733	50	85.4	84.6	0.926	75 - 125	20	
Nickel	0.30	1.0	23.6	50	94.1	93.5	0.425	75 - 125	20	
Selenium	0.034	0.50	ND	50	94.7	96.6	1.88	75 - 125	20	
Silver	0.012	0.50	ND	50	94.1	94.1	0.213	75 - 125	20	
Thallium	0.0040	0.50	ND	50	86.5	87.7	1.38	75 - 125	20	
Vanadium	0.020	0.50	7.29	50	93.4	93.7	0.370	75 - 125	20	
Zinc	0.59	2.0	13.0	50	91.6	92.3	0.678	75 - 125	20	

Work Order:	2308018	Prep Method:	200.7P	Prep Date:	08/03/23	Prep Batch:	1153308
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	8/3/2023	Analytical Batch:	476962
Spiked Sample:	2308018-001A						
Units:	mg/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Aluminum	0.024	2.0	3.50	10	109	108	0.702	75 - 125	20	S
Calcium	0.034	5.0	62.0	10	86.0	83.0	0.423	75 - 125	20	
Iron	0.048	0.30	5.00	10	100	99.1	0.669	75 - 125	20	
Magnesium	0.0050	5.0	150	10	70.0	60.0	0.647	75 - 125	20	
Manganese	0.0020	0.010	0.260	1.0	125	125	0.000	75 - 125	20	S
Potassium	0.094	5.0	5.40	10	118	117	0.583	75 - 125	20	
Sodium	0.030	5.0	150	10	60.0	60.0	0.000	75 - 125	20	
Boron	0.010	0.020	ND	1.0	102	102	0.000	75 - 125	20	

Work Order:	2308018	Prep Method:	245.1P	Prep Date:	08/03/23	Prep Batch:	1153311
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	8/4/2023	Analytical Batch:	476955
Spiked Sample:	2308018-002A						
Units:	mg/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Mercury	0.000130	0.000200	0.00140	0.015	94.5	94.8	0.000	70 - 130	20	



MS/MSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308018	Prep Method:	300.0P	Prep Date:	08/03/23	Prep Batch:	1153331
Matrix:	Water	Analytical Method:	E300.0	Analyzed Date:	8/3/2023	Analytical Batch:	476940
Spiked Sample:	2308018-001B						
Units:	mg/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Chloride	0.16	2.00	470	25.0	0	0	0.607	75 - 125	20	NR
Sulfate	3.1	5.00	26.0	25.0	90.4	91.6	0.615	75 - 125	20	



Duplicate QC Summary Report

Work Order:	2308018	Prep Method:	TDS-P	Prep Date:	8/3/2023	Prep Batch:	1153362
Matrix:		Analytical Method:	SM2540C	Analyzed Date:	08/04/23	Analytical Batch:	476968
Units:						Lab Sample ID: 2308018-001B-DUP-1153362	

Parameters	<u>MDL</u>	<u>PQL</u>	<u>Sample Result</u>	<u>Duplicate Result</u>	<u>% RPD</u>	
Total Dissolved Solids	1.0	10	1380	1380	0.00	



Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit/Reporting Limit/Limit of Quantitation (PQL/RL/LOQ) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs/RLs/LODs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - mg/L and mg/Kg (equivalent to PPM - parts per million in liquid and solid), ug/L and ug/Kg (equivalent to PPB - parts per billion in liquid and solid), ug/m3 , mg/m3 , ppbv and ppmv (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), ug/Wipe (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS

B - Indicates when the analyte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H - Indicates that the recommended holding time for the analyte or compound has been exceeded
J - Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
ND - Not Detected at a concentration greater than the PQL/RL or, if reported to the MDL, at greater than the MDL.
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R - The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S - Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.



Sample Receipt Checklist

Client Name: Geocon Consultants, Inc.

Date and Time Received: 8/3/2023 9:14:00AM

Project Name: CALFIRE PARKFIELD FS

Received By: JC

Work Order No.: 2308018

Physically Logged By: Lorna Imbat

Checklist Completed By: Lorna Imbat

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present? Yes

Chain of custody signed when relinquished and received? Yes

Chain of custody agrees with sample labels? Yes

Custody seals intact on sample bottles? Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler? Not Present

Shipping Container/Cooler In Good Condition? Yes

Samples in proper container/bottle? Yes

Samples containers intact? Yes

Sufficient sample volume for indicated test? Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?

Container/Temp Blank temperature in compliance? Yes Temperature: 2.0 °C

Water-VOA vials have zero headspace? No VOA vials submitted

Water-pH acceptable upon receipt? Yes

pH Checked by: Lorna Imbat

pH Adjusted by: n/a

Comments:



Login Summary Report

Client ID: TL5309 Geocon Consultants, Inc.

QC Level: II

Project Name: CALFIRE PARKFIELD FS

TAT Requested: 1 Day Rush:1

Project # : S2120-05-05

Date Received: 8/3/2023

Report Due Date: 8/4/2023

Time Received: 9:14 am

Comments:

Work Order # : 2308018

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
2308018-001A	PPW-1-B	08/02/23 11:20	Water	09/16/23			Met_W_200.8CAM17 Met_200.7 Full Hg_245.1	
2308018-001B	PPW-1-B	08/02/23 11:20	Water	09/16/23			Anion_W_300.0 TDS_2540C	
<u>Sample Note:</u>	Cl,SO4.							
2308018-002A	PPW-1-C	08/02/23 14:00	Water	09/16/23			Met_W_200.8CAM17 Met_200.7 Full Hg_245.1	
2308018-002B	PPW-1-C	08/02/23 14:00	Water	09/16/23			Anion_W_300.0 TDS_2540C	
2308018-003A	PPW-1-D	08/02/23 15:45	Water	09/16/23			Met_W_200.8CAM17 Met_200.7 Full Hg_245.1	
2308018-003B	PPW-1-D	08/02/23 15:45	Water	09/16/23			Anion_W_300.0 TDS_2540C	



CHAIN OF CUSTODY

23080/8

Reset

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

Company Name: Geocon Consultants, Inc			☐ Env. ☒ Non Env.	Project #: S2120-05-05	PO#:
Address: 3160 Gold Valley Drive				Project Name: CALFIRE Parkfield FS	
City: Rancho Cordova	State: CA	Zip Code: 95742		Comments: Water from a proposed <u>drinking water supply well</u>	
Telephone:		Cell: 669-294-3357		SAMPLER: <i>Short / Rice</i>	
REPORT TO: Lauren Short		BILL TO: Lauren Short		EMAIL: short@geoconinc.com	

TURNAROUND TIME: ☐ 2 - 8 Hours ☐ 2 Work Days ☐ 5 Work Days ☐ Noon - Nxt Day ☐ 3 Work Days ☐ 7 Work Days ☐ 1 Work Day ☐ 4 Work Days ☐ 10 Work Days			SAMPLE TYPE: ☒ Drinking Water ☐ Storm Water ☐ Air ☐ Waste Water ☐ Wipe ☐ Other ☒ Ground Water ☐ Soil ☐ Product / Bulk			REPORT FORMAT: ☒ Level II - Std. ☐ DoD/DoE Level III ☐ DoD/DoE Level III ☒ Excel - EDD ☐ EDF ☐ Client Specific EDD			1. Magnesium, Potassium, e, and Sulfate by 0 & 300 ing Water Metals 200 <i>no mg in water</i>			ANALYSIS REQUESTED		

[illegible]

1	Relinquished By: <i>[Signature]</i>	Print: <i>C. Shores</i>	Date: <i>8/2/23</i>	Time: <i>1600</i>	Received By: <i>[Signature]</i>	Print: <i>Tawatha</i>	Date: <i>8-3-23</i>	Time: <i>9:14</i>
2	Relinquished By: <i>[Signature]</i>	Print: <i>Nick Rice</i>	Date: <i>8/2/23</i>	Time: <i>1600</i>	Received By: <i>[Signature]</i>	Print: <i>T. D. James</i>	Date: <i>8-3-23</i>	Time: <i>9:14</i>

Cooler Temperature 2.0 °C Samples Received on ice? Yes ☒ No ☐

Method of Shipment

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made.

Page of

QA-F-065, Rev 1.0, TLICD-959



MONTEREY COUNTY HEALTH DEPARTMENT

Consolidated Chemistry Laboratory

1270 Natividad Road Salinas, CA 93906
Phone (831)755-4516 Fax (831) 755-4652

ELAP Certification Number: 1395

Lauren Short, PG
3160 Gold Valley Drive Suite 800
Rancho Cordova, CA 95742

Page 1 of 2

Friday, August 4, 2023

Lab Number: AC73087

Sample Site: 70331 VINEYARD CANYON RD PARKFIELD CA 93451
Source Code:
Other ID: PPW-1-B

Client Code: OTHER

Collection Date/Time: 8/2/2023 11:20
Submittal Date/Time: 8/3/2023 7:53
Sample Collector: SHORT L

Sample Comments: Special Drinking Water. Receiving temperature 2.5 °C.

Analyte	Method	Unit	Result	DLR	MCL	PQL	Analysis Start Date/Time
Nitrate Nitrogen	EPA300.0	mg/L	<0.1	0.4	10	0.1	8/3/2023 9:55
NO3 (Nitrate)	EPA300.0 REV	mg/L	<0.5	2.0	45*	0.5	8/3/2023 9:55

Lab Number: AC73088

Sample Site: 70331 VINEYARD CANYON RD PARKFIELD CA 93451
Source Code:
Other ID: PPW-1-C

Client Code: OTHER

Collection Date/Time: 8/2/2023 14:00
Submittal Date/Time: 8/3/2023 7:53
Sample Collector: SHORT L

Sample Comments: Special Drinking Water. Receiving temperature 3.6 °C.

Analyte	Method	Unit	Result	DLR	MCL	PQL	Analysis Start Date/Time
Nitrate Nitrogen	EPA300.0	mg/L	<0.1	0.4	10	0.1	8/3/2023 10:08
NO3 (Nitrate)	EPA300.0 REV	mg/L	<0.5	2.0	45*	0.5	8/3/2023 10:08

Lab Number: AC73089

Sample Site: 70331 VINEYARD CANYON RD PARKFIELD CA 93451
Source Code:
Other ID: PPW-1-D

Client Code: OTHER

Collection Date/Time: 8/2/2023 15:45
Submittal Date/Time: 8/3/2023 7:53
Sample Collector: SHORT L

Sample Comments: Special Drinking Water. Receiving temperature 2.9 °C.

Analyte	Method	Unit	Result	DLR	MCL	PQL	Analysis Start Date/Time
Nitrate Nitrogen	EPA300.0	mg/L	0.2	0.4	10	0.1	8/3/2023 10:21
NO3 (Nitrate)	EPA300.0 REV	mg/L	0.9	2.0	45*	0.5	8/3/2023 10:21

mg/L : Milligrams per liter (=ppm)

PQL : Practical Quantitation Limit

DLR : Detection Limit for Reporting

ug/L : Micrograms per liter (=ppb)

MCL : Maximum Contaminant Level

ND : Not Detected

* : Primary Standards

** : Secondary Standards

N/A : Not Applicable

*** : Action Level

Report approved by:



Donna Ferguson, Ph.D, P.H.M
Laboratory Director

mg/L : Milligrams per liter (=ppm)
PQL : Practical Quantitation Limit
DLR : Detection Limit for Reporting

ug/L : Micrograms per liter (=ppb)
MCL : Maximum Contaminant Level
ND : Not Detected

* : Primary Standards
** : Secondary Standards
*** : Action Level
N/A : Not Applicable



MONTEREY COUNTY HEALTH DEPARTMENT

Consolidated Chemistry Laboratory

1270 Natividad Road Salinas, CA 93906

Phone (831)755-4516 Fax (831) 755-4652

ELAP Certification Number: 1395

Lauren Short, PG
3160 Gold Valley Drive Suite 800
Rancho Cordova, CA 95742

Thursday, August 3, 2023

Lab Number: AC73032

Client code: OTHER

Sample Site: 70331 VINEYARD CANYON RD PARKFIELD CA 93451

Collection Date/Time: 8/1/2023 18:00

Source Code :

Submittal Date/Time: 8/2/2023 8:43

Other ID: PPW-1-A

Sample Collector: RICE N

Sample Comments: Special Drinking Water. Receiving temperature 4.4°C.

Analyte	Method	Unit	Result	DLR	MCL	PQL	Analysis Start Date/Time
Nitrate Nitrogen	EPA300.0	mg/L	<0.1	0.4	10	0.1	8/2/2023 10:31
NO3 (Nitrate)	EPA300.0 REV	mg/L	<0.5	2.0	45*	0.5	8/2/2023 10:31

Report approved by:

A handwritten signature in cursive script that reads 'Donna Ferguson'.

Donna Ferguson, Ph.D, P.H.M
Laboratory Director

mg/L : Milligrams per liter (=ppm)

PQL : Practical Quantitation Limit

DLR : Detection Limit for Reporting

ug/L : Micrograms per liter (=ppb)

MCL : Maximum Contaminant Level

ND : Not Detected

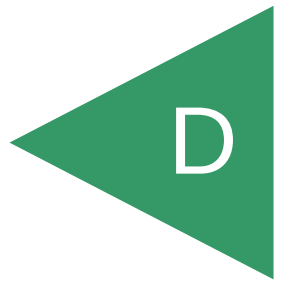
N/A : Not Applicable

* : Primary Standards

** : Secondary Standards

*** : Action Level

APPENDIX



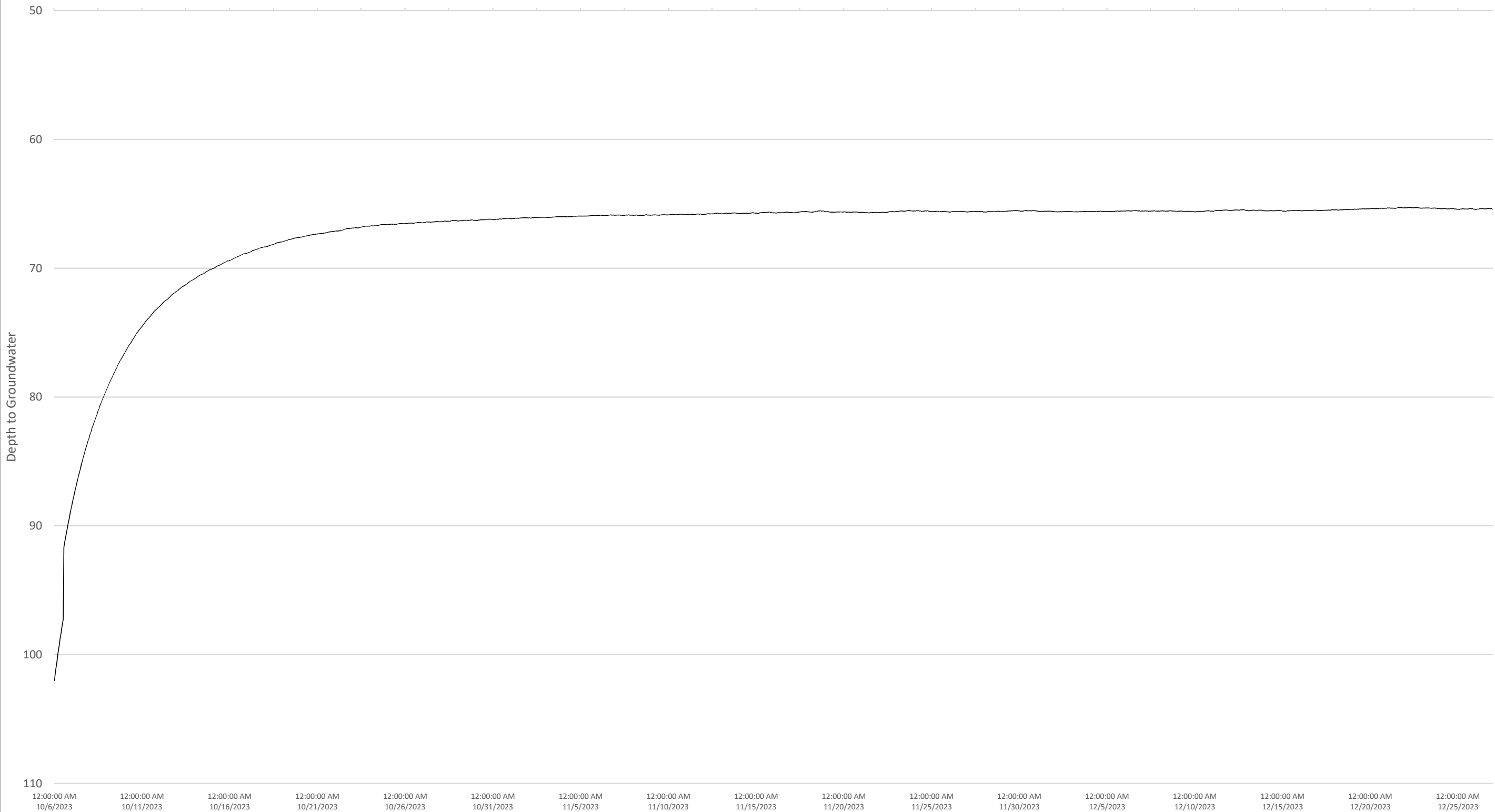
24-hour Pump Test

Project Name: Proposed Parkfield FS			Project Number: S2120-05-05		Date: 10/3-10/4/23		Field Personnel: Lauren Short/Austin Perry/Rick Day			
Well No.: PPW-1			Purging Method: Temp Pump		Depth to Water Before Purging: 63.90		Starting Totalizer Readings: 814,000		Well Volumes Purged: 287.7	
Well Diameter (in): 5 5"=1.02 gallons per foot			Screened Casing Length (ft): 200-260, 280-300		Calculated Water Column Volume: 240.82		Gallons Purged: 69,290		Total Time (hours): 24.82	
Depth to Bottom (ft): 300			Pump Set Depth (ft): 270		Start Purging Time: 10/3/2023 12:56 PM		End Purging Time: 10/4/2023 1:45 PM		Overall Flow Rate (gpm): 46.5	
PURGING CHARACTERISTICS										
DATE AND TIME	TEMPERATURE (°C)	pH	CONDUCTIVITY (µs/cm)	TDS	TURBIDITY (NTU)	PSI	DEPTH TO WATER	TOTALIZER READING	Estimated Pump Rate	Gallons Purged
Step Test										
10/3/23 12:56							65.40	814000		
10/3/23 13:03							98.68			
10/3/23 13:03							99.71			
10/3/23 13:04							100.10			
10/3/23 13:05							101.25			
10/3/23 13:06							102.46			
10/3/23 13:07							103.55			
10/3/23 13:09							105.20			
10/3/23 13:10							105.98			
10/3/23 13:12							110.58	815100	68.8	1,100
10/3/23 13:22							110.65			
10/3/23 13:28							110.40			
Begin 24-hour Pump Test										
10/3/23 13:29							111.31	815890	46.5	1,890
10/3/23 13:35							112.55			
10/3/23 13:36							112.70			
10/3/23 13:38							113.11			
10/3/23 13:39							113.31			
10/3/23 13:40							113.50			
10/3/23 13:41								816090	16.7	2,090
10/3/23 13:42							113.88			
10/3/23 13:43							114.07			
10/3/23 13:44							114.24			
10/3/23 13:45							114.41			
10/3/23 13:46							114.58			
10/3/23 14:02							116.96			
10/3/23 14:10							123.83	817600	52.1	3,600
10/3/23 15:00	25.2	7.77	1902	940				820620	60.4	6,620
10/3/23 16:00	22.2	8.07	1870	939			126.95	823000	39.7	9,000
10/3/23 17:00	23.4	8.15	1880	942			130.38	825900	48.3	11,900
10/3/23 18:00	22.3	8.11	1849	924			133.45	828800	48.3	14,800
10/3/23 19:00							136.40	831700	48.3	17,700
10/3/23 20:00							139.05	834600	48.3	20,600
10/3/23 21:00							141.54	837200	43.3	23,200
10/3/23 22:00							144.02	840200	50.0	26,200
10/3/23 23:00							146.35	843000	46.7	29,000

24-hour Pump Test

Project Name:			Proposed Parkfield FS		Project Number:		S2120-05-05		Date:		10/3-10/4/23		Field Personnel:		Lauren Short/Austin Perry/Rick Day						
Well No.:		PPW-1			Purging Method:		Temp Pump		Depth to Water Before Purging:		63.90		Starting Totalizer Readings:		814,000		Well Volumes Purged:		287.7		
Well Diameter (in):		5		5"=1.02 gallons per foot		Screened Casing Length (ft):		200-260, 280-300		Calculated Water Column Volume:		240.82		Gallons Purged:		69,290		Total Time (hours):		24.82	
Depth to Bottom (ft):		300			Pump Set Depth (ft):		270		Start Purging Time:		10/3/2023 12:56 PM		End Purging Time:		10/4/2023 1:45 PM		Overall Flow Rate (gpm):		46.5		
PURGING CHARACTERISTICS																					
DATE AND TIME		TEMPERATURE (°C)	pH	CONDUCTIVITY (µs/cm)	TDS	TURBIDITY (NTU)	PSI		DEPTH TO WATER		TOTALIZER READING		Estimated Pump Rate		Gallons Purged						
10/4/23 0:00										148.51	845800		46.7		31,800						
10/4/23 1:00										150.75	848700		48.3		34,700						
10/4/23 2:00										152.75	851500		46.7		37,500						
10/4/23 3:00											854200		45.0		40,200						
10/4/23 4:00											858900		78.3		44,900						
10/4/23 5:00											859700		13.3		45,700						
10/4/23 6:00											862400		45.0		48,400						
10/4/23 7:00		14.7	8.40	1800	899						865100		45.0		51,100						
10/4/23 8:00		18.8	8.43	1744	8.72						867800		45.0		53,800						
10/4/23 8:33										164.30											
10/4/23 8:43		22.7	8.16	1822	911																
10/4/23 9:15										165.50											
10/4/23 9:30										165.75											
10/4/23 10:00										166.70	872000		35.0		58,000						
10/4/23 10:30		27.2	8.19	1867	939					167.40	873200		40.0		59,200						
10/4/23 11:06										168.20	874600		38.9		60,600						
10/4/23 11:30		23.2	8.20	1877	936					168.82											
10/4/23 12:00										169.55											
10/4/23 12:30		23.2	8.21	1875	936					170.25	879920		63.3		65,920						
10/4/23 13:15										171.40											
10/4/23 13:38		23.2	8.17	1822	909																
10/4/23 13:40										171.85											
10/4/23 13:45											883290		44.9		69,290						

Depth to Groundwater in PPW-1 After 24-Hour Pump Test



DTW

Data Set: R:\GEOCON WORKING FILES\S2100-S2149\S2120 DGS On-Call Geotech (North and Coastal)\S2120-C

Date: 03/14/24

Time: 10:06:38

PROJECT INFORMATION

Company: Geocon Consultants

Client: CALFIRE

Project: S2120-05-05

Test Date: 10/3/2023

Test Well: PPW-1

AQUIFER DATA

Saturated Thickness: 145. ft

Anisotropy Ratio (Kz/Kr): 0.1

PUMPING WELL DATA

No. of pumping wells: 1

Pumping Well No. 1: PPW-1

X Location: 0. ft

Y Location: 0. ft

Casing Radius: 0.46 ft

Well Radius: 0.46 ft

Fully Penetrating Well

No. of pumping periods: 26

Pumping Period Data			
<u>Time (sec)</u>	<u>Rate (gal/min)</u>	<u>Time (sec)</u>	<u>Rate (gal/min)</u>
0.	46.47	4.506E+4	46.67
2460.	41.71	4.866E+4	45.
5460.	60.4	5.226E+4	78.33
9060.	39.67	5.586E+4	13.33
1.266E+4	48.33	5.946E+4	45.
1.626E+4	48.33	6.306E+4	45.
1.986E+4	48.33	6.666E+4	45.
2.346E+4	48.33	7.026E+4	35.
2.706E+4	43.33	7.206E+4	40.
3.066E+4	50.	7.422E+4	38.89
3.426E+4	46.67	7.926E+4	63.33
3.786E+4	46.67	8.376E+4	44.93
4.146E+4	48.33	8.64E+4	0.

OBSERVATION WELL DATA

No. of observation wells: 1

Observation Well No. 1: PPW-1

X Location: 0. ft

Y Location: 0. ft

Radial distance from PPW-1: 0. ft

Fully Penetrating Well

No. of Observations: 45

<u>Observation Data</u>			
<u>Time (sec)</u>	<u>Displacement (ft)</u>	<u>Time (sec)</u>	<u>Displacement (ft)</u>
60.	33.28	1.416E+4	61.55
120.	34.31	1.776E+4	64.98
180.	34.7	2.136E+4	68.05
240.	35.85	2.496E+4	71.
360.	37.06	2.856E+4	73.65
420.	38.15	3.216E+4	76.14
540.	39.8	3.576E+4	78.62
1140.	40.58	3.936E+4	80.95
1500.	45.18	4.296E+4	83.11
1560.	45.	4.656E+4	85.35
1920.	45.91	5.016E+4	87.35
1980.	47.15	7.074E+4	98.9
2040.	47.3	7.356E+4	100.1
2100.	47.71	7.536E+4	100.3
2160.	47.91	7.716E+4	101.3
2220.	48.1	7.932E+4	102.
2340.	48.48	8.076E+4	102.8
2400.	48.67	8.256E+4	103.4
2460.	48.84	8.436E+4	104.2
2520.	49.01	8.706E+4	104.8
3480.	49.18	8.844E+4	106.
3960.	51.56	8.886E+4	106.5
6960.	58.43		

SOLUTION

Pumping Test

Aquifer Model: Unconfined

Solution Method: Neuman

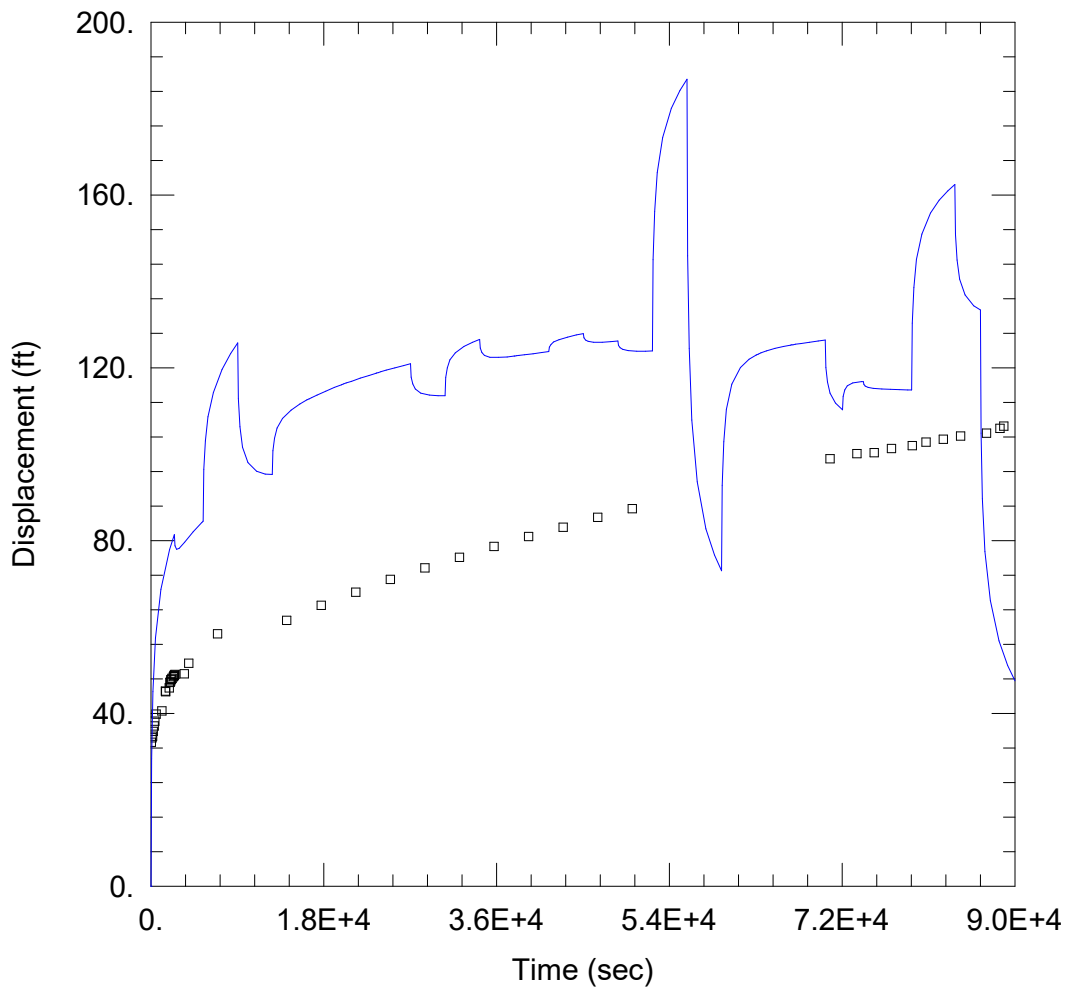
VISUAL ESTIMATION RESULTS

Estimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
T	0.5106	cm ² /sec
S	0.06175	
Sy	0.5	
β	1.006E-6	

K = T/b = 0.0001155 cm/sec

Ss = S/b = 0.0004259 1/ft



WELL TEST ANALYSIS

Data Set: R:\...\PPW-1_v3.aqt

Date: 03/14/24

Time: 10:06:59

PROJECT INFORMATION

Company: Geocon Consultants

Client: CALFIRE

Project: S2120-05-05

Test Well: PPW-1

Test Date: 10/3/2023

AQUIFER DATA

Saturated Thickness: 145. ft

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
PPW-1	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
□ PPW-1	0	0

SOLUTION

Aquifer Model: Unconfined

Solution Method: Neuman

T = 0.5106 cm²/sec

S = 0.06175

Sy = 0.5

β = 1.006E-6

APPENDIX

E



MONTEREY COUNTY HEALTH DEPARTMENT

Consolidated Chemistry Laboratory

1270 Natividad Road Salinas, CA 93906

Phone (831)755-4516 Fax (831) 755-4652

ELAP Certification Number: 1395

Lauren Short, PG
3160 Gold Valley Drive, Suite 800
Rancho Cordova, CA 95742

Wednesday, August 16, 2023

Lab Number: AC73458

Client code: OTHER

Sample Site: 70331 VINEYARD CANYON RD PARKFIELD CA 93451

Collection Date/Time: 8/10/2023 9:45

Source Code :

Submittal Date/Time: 8/10/2023 15:13

Other ID: PPW-1

Sample Collector: SHORT L

Sample Comments: Special Drinking Water. Copy forwarded to Monterey County Environmental Health. Receiving temperature 1.4 °C.

Analyte	Method	Unit	Result	DLR	MCL	PQL	Analysis Start Date/Time
Conductivity	SM2510 B-201	umho/cm	1970	N/A	900**	2	8/11/2023 8:25
Nitrate Nitrogen	EPA300.0	mg/L	<0.1	0.4	10	0.1	8/11/2023 11:34
NO3 (Nitrate)	EPA300.0 REV	mg/L	<0.5	2.0	45*	0.5	8/11/2023 11:34
Orthophosphate as P	SM4500 P E-2	mg/L	0.08	N/A		0.05	8/11/2023 15:00
pH (Laboratory)	SM4500H+ B-2	pH	8.3	N/A	6.5-8.5**	0.1	8/10/2023 15:49
Total Dissolved Solids (TDS SM2540 C-201		mg/L	990	N/A	500**	5	8/10/2023 16:05
Total Suspended Solids	SM2540 D-201	mg/L	50	N/A		5	8/15/2023 13:38
Turbidity (Laboratory)	SM2130 B-201	NTU	15	N/A	5*	0.05	8/11/2023 10:55

Report approved by:

A handwritten signature in cursive script, appearing to read "Donna Ferguson".

Donna Ferguson, Ph.D, P.H.M
Laboratory Director

mg/L : Milligrams per liter (=ppm)

PQL : Practical Quantitation Limit

DLR : Detection Limit for Reporting

ug/L : Micrograms per liter (=ppb)

MCL : Maximum Contaminant Level

ND : Not Detected

N/A : Not Applicable

* : Primary Standards

** : Secondary Standards

*** : Action Level



Geocon Consultants, Inc.
3160 Gold Valley Drive, Suite 800
Rancho Cordova, California 95742
RE: CALFIRE Parkfield FS

Work Order No.: 2308078

Dear Lauren Short:

Torrent Laboratory, Inc. received 1 sample(s) on August 10, 2023 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

A handwritten signature in blue ink, appearing to read "Patti L. Sandrock", is written over a light blue horizontal line.

Patti L Sandrock
QA Officer

August 21, 2023

Date



Date: 8/21/2023

Client: Geocon Consultants, Inc.

Project: CALFIRE Parkfield FS

Work Order: 2308078

CASE NARRATIVE

Unless otherwise indicated in the following narrative, no issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Laboratory, Inc.

Analytical Comments for method E 200.8 2308078-001A MS/MSD, QC Preparation Batch ID 1153635, Note: The % recoveries for Zinc are outside of laboratory control limits but RPD is within limits. A Post Digestion Spike was analyzed and recovered within acceptance criteria. The associated LCS/LCSD is within both % Recovery and RPD limits. No further corrective action required.

Barium is not recoverable. The sample concentration is greater than 4X the spike concentration. The sample was analyzed at a 5x dilution and agrees within 10% of the undiluted sample.



Sample Result Summary

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date Received: 08/10/23

Date Reported: 08/21/23

PPW-1

2308078-001

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Alkalinity, Total (as CaCO ₃)	A2320B	1	1.0	2.0	320	mg/L
Alkalinity, Bicarbonate (as CaCO ₃)	A2320B	1	1.0	2.0	320	mg/L
Aluminum	E200.7	1	0.024	0.10	2.1	mg/L
Calcium	E200.7	1	0.048	0.20	55	mg/L
Iron	E200.7	1	0.034	0.30	2.0	mg/L
Magnesium	E200.7	1	0.0048	20	130	mg/L
Manganese	E200.7	1	0.0021	0.020	0.18	mg/L
Sodium	E200.7	1	0.25	2.0	120	mg/L
Boron	E200.7	1	0.010	0.050	0.56	mg/L
Aluminium (Dissolved)	E200.7	1	0.024	0.10	0.16	mg/L
Manganese (Dissolved)	E200.7	1	0.0021	0.020	0.10	mg/L
Boron (Dissolved)	E200.7	1	0.010	0.050	0.55	mg/L
Arsenic	E200.8	1	0.00040	0.0010	0.00393	mg/L
Chromium	E200.8	1	0.00042	0.0010	0.00615	mg/L
Copper	E200.8	1	0.00025	0.0010	0.00311	mg/L
Nickel	E200.8	1	0.00049	0.0010	0.0119	mg/L
Vanadium	E200.8	1	0.00070	0.0020	0.00470	mg/L
Zinc	E200.8	1	0.0015	0.0025	0.0573	mg/L
Barium	E200.8	5	0.0040	0.010	0.454	mg/L
Arsenic (Dissolved)	E200.8	1	0.00040	0.0010	0.0038	mg/L
Chromium (Dissolved)	E200.8	1	0.00042	0.0010	0.0015	mg/L
Nickel (Dissolved)	E200.8	1	0.00049	0.0010	0.0024	mg/L
Vanadium (Dissolved)	E200.8	1	0.00070	0.0020	0.0027	mg/L
Zinc (Dissolved)	E200.8	1	0.0015	0.0025	0.038	mg/L
Barium (Dissolved)	E200.8	5	0.0040	0.010	0.44	mg/L
Bromide	E300.0	1	0.42	1.00	1.51	mg/L
Sulfate	E300.0	10	3.1	5.00	22.7	mg/L
Chloride	E300.0	50	0.80	10.0	436	mg/L
Calcium Hardness (as CaCO ₃)	SM2340B	1	0.083	1.0	140	mg/L
Total Hardness (as CaCO ₃)	SM2340B	1	0.10	1.0	652	mg/L



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm

Date Reported: 08/21/23

Client Sample ID:	PPW-1	Lab Sample ID:	2308078-001A
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 9:42		
SDG:			

Prep Method:	HARD-P	Prep Batch Date/Time:	8/15/23	5:25:00PM
Prep Batch ID:	1153663	Prep Analyst:	TNGO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Calcium Hardness (as CaCO ₃)	SM2340B	1	0.083	1.0	140		mg/L	08/15/23	21:00	AT	477270
Total Hardness (as CaCO ₃)	SM2340B	1	0.10	1.0	652		mg/L	08/15/23	21:00	AT	477270



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm
Date Reported: 08/21/23

Client Sample ID:	PPW-1	Lab Sample ID:	2308078-001A
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 9:42		
SDG:			

Prep Method:	245.1P	Prep Batch Date/Time:	8/15/23	5:10:00PM
Prep Batch ID:	1153660	Prep Analyst:	TNGO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury	E245.1	1	0.00010	0.00020	ND		mg/L	08/16/23	11:24	BJAY	477257



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm
Date Reported: 08/21/23

Client Sample ID: PPW-1
Project Name/Location: CALFIRE Parkfield FS
Project Number: S2120-05-05
Date/Time Sampled: 08/10/23 / 9:42
SDG:

Lab Sample ID: 2308078-001A
Sample Matrix: Groundwater

Prep Method: 200.7P
Prep Batch ID: 1153662

Prep Batch Date/Time: 8/15/23 5:10:00PM
Prep Analyst: TNGO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aluminum	E200.7	1	0.024	0.10	2.1		mg/L	08/15/23	21:10	AT	477271
Calcium	E200.7	1	0.048	0.20	55		mg/L	08/15/23	21:10	AT	477271
Iron	E200.7	1	0.034	0.30	2.0		mg/L	08/15/23	21:10	AT	477271
Magnesium	E200.7	1	0.0048	20	130		mg/L	08/15/23	21:10	AT	477271
Manganese	E200.7	1	0.0021	0.020	0.18		mg/L	08/15/23	21:10	AT	477271
Potassium	E200.7	1	0.094	20	ND		mg/L	08/15/23	21:10	AT	477271
Sodium	E200.7	1	0.25	2.0	120		mg/L	08/15/23	21:10	AT	477271
Boron	E200.7	1	0.010	0.050	0.56		mg/L	08/15/23	21:10	AT	477271



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm

Date Reported: 08/21/23

Client Sample ID:	PPW-1	Lab Sample ID:	2308078-001A
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 9:42		
SDG:			

Prep Method:	200.8P	Prep Batch Date/Time:	8/14/23	3:35:00PM
Prep Batch ID:	1153635	Prep Analyst:	BJAY	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony	E200.8	1	0.00045	0.0010	ND		mg/L	08/15/23	16:20	ERR	477237
Arsenic	E200.8	1	0.00040	0.0010	0.00393		mg/L	08/15/23	16:20	ERR	477237
Beryllium	E200.8	1	0.00056	0.0020	ND		mg/L	08/15/23	16:20	ERR	477237
Cadmium	E200.8	1	0.00025	0.0010	ND		mg/L	08/15/23	16:20	ERR	477237
Chromium	E200.8	1	0.00042	0.0010	0.00615		mg/L	08/15/23	16:20	ERR	477237
Copper	E200.8	1	0.00025	0.0010	0.00311		mg/L	08/15/23	16:20	ERR	477237
Lead	E200.8	1	0.00032	0.0010	ND		mg/L	08/15/23	16:20	ERR	477237
Nickel	E200.8	1	0.00049	0.0010	0.0119		mg/L	08/15/23	16:20	ERR	477237
Selenium	E200.8	1	0.00065	0.0020	ND		mg/L	08/15/23	16:20	ERR	477237
Silver	E200.8	1	0.00021	0.00050	ND		mg/L	08/15/23	16:20	ERR	477237
Thallium	E200.8	1	0.0013	0.0020	ND		mg/L	08/15/23	16:20	ERR	477237
Vanadium	E200.8	1	0.00070	0.0020	0.00470		mg/L	08/15/23	16:20	ERR	477237
Zinc	E200.8	1	0.0015	0.0025	0.0573		mg/L	08/15/23	16:20	ERR	477237



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm

Date Reported: 08/21/23

Client Sample ID:	PPW-1	Lab Sample ID:	2308078-001A
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 9:42		
SDG:			

Prep Method:	200.8P	Prep Batch Date/Time:	8/14/23	3:35:00PM
Prep Batch ID:	1153635	Prep Analyst:	BJAY	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Barium	E200.8	5	0.0040	0.010	0.454		mg/L	08/15/23	17:52	ERR	477237



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm
Date Reported: 08/21/23

Client Sample ID:	PPW-1	Lab Sample ID:	2308078-001B
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 9:42		
SDG:			

Prep Method: Alk-P	Prep Batch Date/Time: 8/16/23	2:00:00PM
Prep Batch ID: 1153788	Prep Analyst: BJAY	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Alkalinity, Total (as CaCO ₃)	A2320B	1	1.0	2.0	320		mg/L	08/16/23	14:00	BJAY	477367
Alkalinity, Bicarbonate (as CaCO ₃)	A2320B	1	1.0	2.0	320		mg/L	08/16/23	14:00	BJAY	477367
Alkalinity, Carbonate (as CaCO ₃)	A2320B	1	1.0	2.0	ND		mg/L	08/16/23	14:00	BJAY	477367
Alkalinity, Hydroxide (as CaCO ₃)	A2320B	1	1.0	2.0	ND		mg/L	08/16/23	14:00	BJAY	477367



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm

Date Reported: 08/21/23

Client Sample ID:	PPW-1	Lab Sample ID:	2308078-001B
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 9:42		
SDG:			

Prep Method:	300.0P	Prep Batch Date/Time:	8/17/23	6:00:00PM
Prep Batch ID:	1153759	Prep Analyst:	PHUFANO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Fluoride	E300.0	1	0.095	0.200	ND		mg/L	08/18/23	1:22	PH	477342
Bromide	E300.0	1	0.42	1.00	1.51		mg/L	08/18/23	1:22	PH	477342



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm

Date Reported: 08/21/23

Client Sample ID:	PPW-1	Lab Sample ID:	2308078-001B
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 9:42		
SDG:			

Prep Method:	300.0P	Prep Batch Date/Time:	8/17/23	6:00:00PM
Prep Batch ID:	1153759	Prep Analyst:	PHUFANO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Sulfate	E300.0	10	3.1	5.00	22.7		mg/L	08/18/23	2:27	PH	477342



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm
Date Reported: 08/21/23

Client Sample ID:	PPW-1	Lab Sample ID:	2308078-001B
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 9:42		
SDG:			

Prep Method:	300.0P	Prep Batch Date/Time:	8/17/23	6:00:00PM
Prep Batch ID:	1153759	Prep Analyst:	PHUFANO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Chloride	E300.0	50	0.80	10.0	436		mg/L	08/18/23	3:31	PH	477342



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm

Date Reported: 08/21/23

Client Sample ID: PPW-1
Project Name/Location: CALFIRE Parkfield FS
Project Number: S2120-05-05
Date/Time Sampled: 08/10/23 / 9:42
SDG:

Lab Sample ID: 2308078-001B
Sample Matrix: Groundwater

Prep Method: 314.0WP
Prep Batch ID: 1153775

Prep Batch Date/Time: 8/12/23 12:15:00PM
Prep Analyst: PHUFANO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Perchlorate	E314.0	1	0.44	2.0	ND		ug/L	08/12/23	13:50	PH	477352



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm
Date Reported: 08/21/23

Client Sample ID:	PPW-1	Lab Sample ID:	2308078-001C
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 9:42		
SDG:			

Prep Method: Ferrous-P	Prep Batch Date/Time: 8/10/23 7:15:00PM
Prep Batch ID: 1153776	Prep Analyst: PHUFANO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Ferrous Iron	H8146	1	0.10	0.10	ND		mg/L	08/10/23	19:15	PH	477353



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm

Date Reported: 08/21/23

Client Sample ID:	PPW-1	Lab Sample ID:	2308078-001D
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 9:42		
SDG:			

Prep Method:	CN-W-P	Prep Batch Date/Time:	8/15/23	4:00:00PM
Prep Batch ID:	1153696	Prep Analyst:	TNGO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Total Cyanide	SM4500CN	1	0.0086	0.030	ND		mg/L	08/15/23	20:30	TON	477281



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm
Date Reported: 08/21/23

Client Sample ID:	PPW-1	Lab Sample ID:	2308078-001E
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 9:42		
SDG:			

Prep Method: 245.1P	Prep Batch Date/Time: 8/15/23 5:50:00PM
Prep Batch ID: 1153661	Prep Analyst: TNGO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury (Dissolved)	E245.1	1	0.00010	0.00020	ND		mg/L	08/16/23	11:08	BJAY	477258



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm
Date Reported: 08/21/23

Client Sample ID:	PPW-1	Lab Sample ID:	2308078-001E
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 9:42		
SDG:			

Prep Method:	200.7P	Prep Batch Date/Time:	8/15/23	5:45:00PM
Prep Batch ID:	1153665	Prep Analyst:	TNGO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aluminium (Dissolved)	E200.7	1	0.024	0.10	0.16		mg/L	08/15/23	21:25	AT	477274
Iron (Dissolved)	E200.7	1	0.034	0.30	ND		mg/L	08/15/23	21:25	AT	477274
Manganese (Dissolved)	E200.7	1	0.0021	0.020	0.10		mg/L	08/15/23	21:25	AT	477274
Boron (Dissolved)	E200.7	1	0.010	0.050	0.55		mg/L	08/15/23	21:25	AT	477274



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm
Date Reported: 08/21/23

Client Sample ID:	PPW-1	Lab Sample ID:	2308078-001E
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 9:42		
SDG:			

Prep Method:	200.8P	Prep Batch Date/Time:	8/14/23	3:35:00PM
Prep Batch ID:	1153634	Prep Analyst:	BJAY	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony (Dissolved)	E200.8	1	0.00045	0.0010	ND		mg/L	08/15/23	15:51	ERR	477235
Arsenic (Dissolved)	E200.8	1	0.00040	0.0010	0.0038		mg/L	08/15/23	15:51	ERR	477235
Beryllium (Dissolved)	E200.8	1	0.00056	0.0020	ND		mg/L	08/15/23	15:51	ERR	477235
Cadmium (Dissolved)	E200.8	1	0.00025	0.0010	ND		mg/L	08/15/23	15:51	ERR	477235
Chromium (Dissolved)	E200.8	1	0.00042	0.0010	0.0015		mg/L	08/15/23	15:51	ERR	477235
Copper (Dissolved)	E200.8	1	0.00025	0.0010	ND		mg/L	08/15/23	15:51	ERR	477235
Lead (Dissolved)	E200.8	1	0.00032	0.0010	ND		mg/L	08/15/23	15:51	ERR	477235
Nickel (Dissolved)	E200.8	1	0.00049	0.0010	0.0024		mg/L	08/15/23	15:51	ERR	477235
Selenium (Dissolved)	E200.8	1	0.00065	0.0020	ND		mg/L	08/15/23	15:51	ERR	477235
Silver (Dissolved)	E200.8	1	0.00021	0.00050	ND		mg/L	08/15/23	15:51	ERR	477235
Thallium (Dissolved)	E200.8	1	0.0013	0.0020	ND		mg/L	08/15/23	15:51	ERR	477235
Vanadium (Dissolved)	E200.8	1	0.00070	0.0020	0.0027		mg/L	08/15/23	15:51	ERR	477235
Zinc (Dissolved)	E200.8	1	0.0015	0.0025	0.038		mg/L	08/15/23	15:51	ERR	477235



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm
Date Reported: 08/21/23

Client Sample ID:	PPW-1	Lab Sample ID:	2308078-001E
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 9:42		
SDG:			

Prep Method:	200.8P	Prep Batch Date/Time:	8/14/23	3:35:00PM
Prep Batch ID:	1153634	Prep Analyst:	BJAY	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Barium (Dissolved)	E200.8	5	0.0040	0.010	0.44		mg/L	08/15/23	17:47	ERR	477235



MB Summary Report

Work Order:	2308078	Prep Method:	200.8P	Prep Date:	08/14/23	Prep Batch:	1153634
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/15/2023	Analytical Batch:	477235
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Antimony (Dissolved)	0.45	1.0	ND		
Arsenic (Dissolved)	0.40	1.0	ND		
Barium (Dissolved)	0.80	2.0	ND		
Beryllium (Dissolved)	0.56	2.0	ND		
Cadmium (Dissolved)	0.25	1.0	ND		
Chromium (Dissolved)	0.42	1.0	ND		
Copper (Dissolved)	0.25	1.0	ND		
Lead (Dissolved)	0.32	1.0	ND		
Nickel (Dissolved)	0.49	1.0	ND		
Selenium (Dissolved)	0.65	2.0	ND		
Silver (Dissolved)	0.21	0.50	ND		
Thallium (Dissolved)	1.3	2.0	ND		
Vanadium (Dissolved)	0.70	2.0	ND		
Zinc (Dissolved)	1.5	2.5	ND		

Work Order:	2308078	Prep Method:	200.8P	Prep Date:	08/14/23	Prep Batch:	1153635
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/15/2023	Analytical Batch:	477237
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Antimony	0.45	1.0	ND		
Arsenic	0.40	1.0	ND		
Barium	0.80	2.0	ND		
Beryllium	0.56	2.0	ND		
Cadmium	0.25	1.0	ND		
Chromium	0.42	1.0	ND		
Copper	0.25	1.0	ND		
Lead	0.32	1.0	ND		
Nickel	0.49	1.0	ND		
Selenium	0.65	2.0	ND		
Silver	0.21	0.50	ND		
Thallium	1.3	2.0	ND		
Vanadium	0.70	2.0	ND		
Zinc	1.5	2.5	ND		



MB Summary Report

Work Order:	2308078	Prep Method:	245.1P	Prep Date:	08/15/23	Prep Batch:	1153660
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	8/16/2023	Analytical Batch:	477257
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	

Mercury 0.00010 0.00020 ND

Work Order:	2308078	Prep Method:	245.1P	Prep Date:	08/15/23	Prep Batch:	1153661
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	8/16/2023	Analytical Batch:	477258
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	

Mercury (Dissolved) 0.00010 0.00020 ND

Work Order:	2308078	Prep Method:	200.7P	Prep Date:	08/15/23	Prep Batch:	1153662
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	8/15/2023	Analytical Batch:	477271
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	

Aluminum	0.024	0.10	0.034	
Calcium	0.048	0.20	0.11	
Iron	0.034	0.30	ND	
Magnesium	0.0048	20	0.015	
Manganese	0.0021	0.020	0.0037	
Potassium	0.094	20	ND	
Sodium	0.25	2.0	ND	
Boron	0.010	0.050	0.014	

Work Order:	2308078	Prep Method:	HARD-P	Prep Date:	08/15/23	Prep Batch:	1153663
Matrix:	Water	Analytical Method:	SM2340B	Analyzed Date:	8/15/2023	Analytical Batch:	477270
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	

Total Hardness (as CaCO3)	0.20	1.0	ND	
Calcium Hardness (as CaCO3)	0.083	1.0	ND	



MB Summary Report

Work Order:	2308078	Prep Method:	200.7P	Prep Date:	08/15/23	Prep Batch:	1153665
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	8/15/2023	Analytical Batch:	477274
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Aluminium (Dissolved)	0.024	2.0	ND		
Iron (Dissolved)	0.034	0.30	0.15		
Manganese (Dissolved)	0.0021	0.050	ND		
Boron (Dissolved)	0.010	0.050	ND		

Work Order:	2308078	Prep Method:	CN-W-P	Prep Date:	08/15/23	Prep Batch:	1153696
Matrix:	Water	Analytical Method:	SM4500CN	Analyzed Date:	8/15/2023	Analytical Batch:	477281
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Total Cyanide	0.0086	0.030	ND		

Work Order:	2308078	Prep Method:	300.0P	Prep Date:	08/17/23	Prep Batch:	1153759
Matrix:	Water	Analytical Method:	E300.0	Analyzed Date:	8/17/2023	Analytical Batch:	477342
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Fluoride	0.095	0.20	ND		
Chloride	0.016	0.20	ND		
Nitrate as N	0.16	0.25	ND		
Bromide	0.42	1.0	ND		
Nitrite as N	0.045	0.20	ND		
Sulfate	0.31	0.50	ND		

Work Order:	2308078	Prep Method:	314.0WP	Prep Date:	08/12/23	Prep Batch:	1153775
Matrix:	Water	Analytical Method:	E314.0	Analyzed Date:	8/12/2023	Analytical Batch:	477352
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Perchlorate	0.44	2.0	ND		



MB Summary Report

Work Order:	2308078	Prep Method:	Ferrous-P	Prep Date:	08/10/23	Prep Batch:	1153776
Matrix:	Water	Analytical Method:	H8146	Analyzed Date:	8/10/2023	Analytical Batch:	477353
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Ferrous Iron	0.10	0.10	ND		

Work Order:	2308078	Prep Method:	Alk-P	Prep Date:	08/16/23	Prep Batch:	1153788
Matrix:	Water	Analytical Method:	A2320B	Analyzed Date:	8/16/2023	Analytical Batch:	477367
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Alkalinity, Total (as CaCO ₃)	1.0	2.0	1.0		
Alkalinity, Bicarbonate (as CaCO ₃)	1.0	2.0	1.0		
Alkalinity, Carbonate (as CaCO ₃)	1.0	2.0	ND		
Alkalinity, Hydroxide (as CaCO ₃)	1.0	2.0	ND		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308078	Prep Method:	200.8P	Prep Date:	08/14/23	Prep Batch:	1153634
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/15/2023	Analytical Batch:	477235
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony (Dissolved)	0.019	0.50	ND	50	101	102	0.197	85 - 115	20	
Arsenic (Dissolved)	0.19	0.50	ND	50	97.5	95.8	1.86	85 - 115	20	
Barium (Dissolved)	0.066	0.50	ND	50	99.9	99.3	0.803	85 - 115	20	
Beryllium (Dissolved)	0.018	0.50	ND	50	99.9	104	3.73	85 - 115	20	
Cadmium (Dissolved)	0.033	0.50	ND	50	98.6	97.9	0.815	85 - 115	20	
Chromium (Dissolved)	0.044	0.50	ND	50	100	103	2.94	85 - 115	20	
Copper (Dissolved)	0.64	1.0	ND	50	96.8	94.7	2.30	85 - 115	20	
Lead (Dissolved)	0.031	0.50	ND	50	100.	103	2.57	85 - 115	20	
Nickel (Dissolved)	0.30	1.0	ND	50	99.3	96.7	2.86	85 - 115	20	
Selenium (Dissolved)	0.034	0.50	ND	50	96.9	95.8	1.04	85 - 115	20	
Silver (Dissolved)	0.012	0.50	ND	50	101	100	0.795	85 - 115	20	
Thallium (Dissolved)	0.0040	0.50	ND	50	99.8	99.5	0.402	85 - 115	20	
Vanadium (Dissolved)	0.020	0.50	ND	50	100	101	1.19	85 - 115	20	
Zinc (Dissolved)	0.59	2.0	ND	50	105	101	3.87	85 - 115	20	

Work Order:	2308078	Prep Method:	200.8P	Prep Date:	08/14/23	Prep Batch:	1153635
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/15/2023	Analytical Batch:	477237
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony	0.45	1.0		50	104	103	1.16	85 - 115	20	
Arsenic	0.40	1.0		50	100	99.2	1.00	85 - 115	20	
Barium	0.80	2.0		50	102	100	1.39	85 - 115	20	
Beryllium	0.32	2.0		50	103	102	1.17	85 - 115	20	
Cadmium	0.43	1.0		50	101	99.3	1.40	85 - 115	20	
Chromium	0.42	1.0		50	104	104	0.000	85 - 115	20	
Copper	0.25	1.0		50	99.0	97.7	1.42	85 - 115	20	
Lead	0.42	1.0		50	101	101	0.198	85 - 115	20	
Nickel	0.49	1.0		50	101	99.7	1.40	85 - 115	20	
Selenium	0.42	2.0		50	100	99.2	0.803	85 - 115	20	
Silver	0.21	0.50		50	103	102	0.978	85 - 115	20	
Thallium	1.3	2.0		50	101	100	0.795	85 - 115	20	
Vanadium	0.70	2.0		50	104	103	0.775	85 - 115	20	
Zinc	1.5	5.0		50	103	102	0.391	85 - 115	20	

Work Order:	2308078	Prep Method:	245.1P	Prep Date:	08/15/23	Prep Batch:	1153660
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	8/16/2023	Analytical Batch:	477257
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Mercury	0.00013	0.00020	ND	0.015	92.6	91.3	1.45	85 - 115	20	



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308078	Prep Method:	245.1P	Prep Date:	08/15/23	Prep Batch:	1153661
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	8/16/2023	Analytical Batch:	477258
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Mercury (Dissolved)	0.00013	0.00020	ND	0.015	91.5	89.1	2.21	85 - 115	20	

Work Order:	2308078	Prep Method:	200.7P	Prep Date:	08/15/23	Prep Batch:	1153662
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	8/15/2023	Analytical Batch:	477271
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Aluminum	0.024	2.0	0.034	10	96.1	96.9	0.829	80 - 120	20	
Calcium	0.034	5.0	0.11	10	97.0	97.7	0.719	80 - 120	20	
Iron	0.048	0.30	ND	10	96.0	97.1	1.14	80 - 120	20	
Magnesium	0.0050	5.0	0.015	10	96.2	97.3	1.14	80 - 120	20	
Manganese	0.0020	0.010	0.0037	1.0	96.6	98.5	1.95	80 - 120	20	
Potassium	0.094	5.0	ND	10	96.1	97.6	1.55	80 - 120	20	
Sodium	0.030	5.0	ND	10	97.5	98.5	1.02	80 - 120	20	
Boron	0.010	0.050	0.014	1.0	96.9	97.4	0.515	80 - 120	20	

Work Order:	2308078	Prep Method:	200.7P	Prep Date:	08/15/23	Prep Batch:	1153665
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	8/15/2023	Analytical Batch:	477274
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Aluminium (Dissolved)	0.024	0.10	ND	10	96.7	94.4	2.41	80 - 120	20	
Iron (Dissolved)	0.034	0.30	0.15	10	98.2	95.9	2.37	80 - 120	20	
Manganese (Dissolved)	0.0021	0.020	ND	1	97.3	94.9	2.50	80 - 120	20	
Boron (Dissolved)	0.010	0.052	ND	1	97.0	94.8	2.30	80 - 120	20	

Work Order:	2308078	Prep Method:	CN-W-P	Prep Date:	08/15/23	Prep Batch:	1153696
Matrix:	Water	Analytical Method:	SM4500CN	Analyzed Date:	8/15/2023	Analytical Batch:	477281
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Total Cyanide	0.0086	0.030	ND	0.1	104	87.0	17.8	80 - 120	20	



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308078	Prep Method:	300.0P	Prep Date:	08/17/23	Prep Batch:	1153759
Matrix:	Water	Analytical Method:	E300.0	Analyzed Date:	8/17/2023	Analytical Batch:	477342
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Fluoride	0.010	0.20	ND	2.5	113	113	0.354	80 - 120	20	
Chloride	0.031	0.20	ND	2.5	99.6	99.2	0.402	80 - 120	20	
Nitrate as N	0.0070	0.10	ND	2.5	100	100	0.399	80 - 120	20	
Bromide	0.014	0.20	ND	2.5	98.7	98.4	0.406	80 - 120	20	
Nitrite as N	0.0090	0.10	ND	2.5	111	110	0.363	80 - 120	20	
Sulfate	0.00050	0.50	ND	2.5	99.2	98.4	0.810	80 - 120	20	

Work Order:	2308078	Prep Method:	314.0WP	Prep Date:	08/12/23	Prep Batch:	1153775
Matrix:	Water	Analytical Method:	E314.0	Analyzed Date:	8/12/2023	Analytical Batch:	477352
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Perchlorate	0.44	2.0	ND	50	100	99.6	0.601	80 - 120	20	



MS/MSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308078	Prep Method:	200.8P	Prep Date:	08/14/23	Prep Batch:	1153635
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/15/2023	Analytical Batch:	477237
Spiked Sample:	2308078-001A						
Units:	mg/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony	0.000019	0.00050	ND	0.05	93.2	94.4	1.27	75 - 125	20	
Arsenic	0.00019	0.00050	0.00393	0.05	99.2	99.3	0.187	75 - 125	20	
Barium	0.000066	0.00050	0.434	0.05	0	0	3.61	75 - 125	20	NR
Beryllium	0.000018	0.00050	ND	0.05	92.7	93.7	1.07	75 - 125	20	
Cadmium	0.000033	0.00050	ND	0.05	94.4	94.8	0.423	75 - 125	20	
Chromium	0.000044	0.00050	0.00615	0.05	97.1	94.7	2.22	75 - 125	20	
Copper	0.00025	0.0010	0.00311	0.05	93.2	92.4	0.808	75 - 125	20	
Lead	0.000031	0.00050	0.000608	0.05	90.9	90.4	0.653	75 - 125	20	
Nickel	0.00030	0.0010	0.0119	0.05	99.4	94.9	3.64	75 - 125	20	
Selenium	0.000034	0.00050	ND	0.05	88.5	87.7	0.899	75 - 125	20	
Silver	0.000012	0.00050	ND	0.05	98.9	98.6	0.405	75 - 125	20	
Thallium	0.000004	0.00050	ND	0.05	90.8	92.4	1.96	75 - 125	20	
Vanadium	0.000020	0.00050	0.00470	0.05	98.4	97.1	1.31	75 - 125	20	
Zinc	0.00059	0.0020	0.0573	0.05	0	-15.4	0.402	75 - 125	20	S

Work Order:	2308078	Prep Method:	200.7P	Prep Date:	08/15/23	Prep Batch:	1153662
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	8/15/2023	Analytical Batch:	477271
Spiked Sample:	2308078-001A						
Units:	mg/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Aluminum	0.024	2.0	2.10	10	118	120	1.68	75 - 125	20	
Calcium	0.034	5.0	55.0	10	91.0	92.0	0.157	75 - 125	20	
Iron	0.048	0.30	2.00	10	113	115	1.75	75 - 125	20	
Magnesium	0.0050	5.0	130	10	90.0	90.0	0.000	75 - 125	20	
Manganese	0.0020	0.010	0.180	1.0	112	113	0.889	75 - 125	20	
Potassium	0.094	5.0	ND	10	109	111	1.35	75 - 125	20	
Sodium	0.030	5.0	120	10	90.0	90.0	0.000	75 - 125	20	
Boron	0.010	0.020	ND	1.0	97.0	100	1.94	75 - 125	20	



MS/MSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308078	Prep Method:	300.0P	Prep Date:	08/17/23	Prep Batch:	1153759
Matrix:	Water	Analytical Method:	E300.0	Analyzed Date:	8/18/2023	Analytical Batch:	477342
Spiked Sample:	2308078-001B						
Units:	mg/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Fluoride	0.095	0.200	ND	2.50	86.6	87.9	1.30	75 - 125	20	
Chloride	0.016	0.200	8.72	2.50	96.0	96.0	0.000	75 - 125	20	
Bromide	0.42	1.00	1.51	2.50	95.9	97.9	1.27	75 - 125	20	
Sulfate	0.31	0.500	2.27	2.50	90.8	91.6	0.440	75 - 125	20	

Work Order:	2308078	Prep Method:	314.0WP	Prep Date:	08/12/23	Prep Batch:	1153775
Matrix:	Water	Analytical Method:	E314.0	Analyzed Date:	8/12/2023	Analytical Batch:	477352
Spiked Sample:	2308078-001B						
Units:	ug/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Perchlorate	0.44	2.0	ND	50	84.5	84.1	0.237	75 - 125	20	



Duplicate QC Summary Report

Work Order:	2308078	Prep Method:	Alk-P	Prep Date:	8/16/2023	Prep Batch:	1153788
Matrix:		Analytical Method:	A2320B	Analyzed Date:	08/16/23	Analytical Batch:	477367
Units:						Lab Sample ID: 2308078-001B-DUP-1153788	

Parameters	<u>MDL</u>	<u>PQL</u>	<u>Sample Result</u>	<u>Duplicate Result</u>	<u>% RPD</u>	
Alkalinity, Total (as CaCO3)	1.0	2.0	320	320	0.00	

Work Order:	2308078	Prep Method:	Ferrous-P	Prep Date:	8/10/2023	Prep Batch:	1153776
Matrix:		Analytical Method:	H8146	Analyzed Date:	08/10/23	Analytical Batch:	477353
Units:						Lab Sample ID: 2308078-001C-DUP-1153776	

Parameters	<u>MDL</u>	<u>PQL</u>	<u>Sample Result</u>	<u>Duplicate Result</u>	<u>% RPD</u>	
Ferrous Iron	0.10	0.10	0.0200	ND	5.13	



Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit/Reporting Limit/Limit of Quantitation (PQL/RL/LOQ) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs/RLs/LODs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - mg/L and mg/Kg (equivalent to PPM - parts per million in liquid and solid), ug/L and ug/Kg (equivalent to PPB - parts per billion in liquid and solid), ug/m3 , mg/m3 , ppbv and ppmv (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), ug/Wipe (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS

B - Indicates when the analyte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted)
Values reported with an E qualifier should be considered as estimated.
H - Indicates that the recommended holding time for the analyte or compound has been exceeded
J - Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
ND - Not Detected at a concentration greater than the PQL/RL or, if reported to the MDL, at greater than the MDL.
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R - The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S - Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards.
Further explanation may or may not be provided within the sample footnote and/or the case narrative.



Sample Receipt Checklist

Client Name: Geocon Consultants, Inc.

Date and Time Received: 8/10/2023 4:53:00PM

Project Name: CALFIRE Parkfield FS

Received By: tt

Work Order No.: 2308078

Physically Logged By: Lorna Imbat

Checklist Completed By: Lorna Imbat

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present?	<u>Yes</u>
Chain of custody signed when relinquished and received?	<u>Yes</u>
Chain of custody agrees with sample labels?	<u>Yes</u>
Custody seals intact on sample bottles?	<u>Not Present</u>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	<u>Not Present</u>
Shipping Container/Cooler In Good Condition?	<u>Yes</u>
Samples in proper container/bottle?	<u>Yes</u>
Samples containers intact?	<u>Yes</u>
Sufficient sample volume for indicated test?	<u>Yes</u>

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	<u>Yes</u>	
Container/Temp Blank temperature in compliance?	<u>Yes</u>	Temperature: 1.0 °C
Water-VOA vials have zero headspace?	<u>No VOA vials submitted</u>	
Water-pH acceptable upon receipt?	<u>Yes</u>	
pH Checked by: Lorna Imbat	pH Adjusted by: Lorna Imbat	

Comments:



Login Summary Report

Client ID: TL5309 Geocon Consultants, Inc.

QC Level: II

Project Name: CALFIRE Parkfield FS

TAT Requested: 7 Day:7

Project # : S2120-05-05

Date Received: 8/10/2023

Report Due Date: 8/21/2023

Time Received: 4:53 pm

Comments:

Work Order # : 2308078

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
2308078-001A	PPW-1	08/10/23 9:42	Water	09/24/23			Hardness_Calc Hg_245.1 Met_200.7 Full Met_W_200.8CAM17	
Sample Note: 200.7 for Ca, Mg, Mn, Na, K, Fe, Al, B. 200.8 for CAM17 minus Mo, Co								
2308078-001B	PPW-1	08/10/23 9:42	Water	09/24/23			Perchlorate_W_314.0 Alkalinity_2320B Anion_W_300.0 TDS_2540C	
Sample Note: Anions for Chloride, sulfate, Bromide, fluoride								
2308078-001C	PPW-1	08/10/23 9:42	Water	09/24/23			Ferrous Iron_W	
Sample Note: Ferric and Ferrous Iron								
2308078-001D	PPW-1	08/10/23 9:42	Water	09/24/23			CN_W_SM4500C,G	
2308078-001E	PPW-1	08/10/23 9:42	Water	09/24/23			Hg_W_245.1Dis Met_W_200.8CAM17 Diss Met_W_200.7+Cat-Di ss	
Sample Note: Dissolved metals Lab to filter. 200.8 CAM 17 minus Co, Mo. 200.7 for Al, B, Fe, Mn. Report B on W line								



CHAIN OF CUSTODY

2308 078

Reset

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

Company Name: Geocon Consultants, Inc			☐ Env. ☒ Non Env.	Project #: S2120-05-05	PO#:
Address: 3160 Gold Valley Drive				Project Name: CALFIRE Parkfield FS	
City: Rancho Cordova	State: CA	Zip Code: 95742		Comments: Water from a proposed drinking water supply well	
Telephone:		Cell: 669-294-3357		SAMPLER: Lauren Short	
REPORT TO: Lauren Short		BILL TO: Lauren Short		EMAIL: short@geoconinc.com	

TURNAROUND TIME:	SAMPLE TYPE:	REPORT FORMAT:
☐ 2 - 8 Hours ☐ 2 Work Days ☐ 5 Work Days ☐ Noon - Nxt Day ☐ 3 Work Days ☒ 7 Work Days ☐ 1 Work Day ☐ 4 Work Days ☐ 10 Work Days	☒ Drinking Water ☐ Storm Water ☐ Waste Water ☒ Ground Water ☐ Soil ☐ Air ☐ Wipe ☐ Other ☐ Product / Bulk	☒ Level II - Std. ☐ DoD/DoE Level III ☐ DoD/DoE Level III ☒ Excel- EDD ☐ EDF ☐ Client Specific EDD

[illegible]

Relinquished By: <i>[Signature]</i>	Print: <i>LG Jure</i>	Date: <i>8/10/23</i>	Time: <i>1651</i>	Received By: <i>[Signature]</i>	Print: <i>TAMMY THACH</i>	Date: <i>08/10/2023</i>	Time: <i>16:53</i>
2 Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:

Cooler Temperature 0.4 °C #3 Samples Received on ice? Yes ☒ No ☐

Method of Shipment Drop off

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made.

QA-F-065, Rev 1.0, TLICD-959

Page of

SUPPLY WELL SAMPLING

Project Name: Proposed Parkfield FS		Project Number: S2120-05-05		Date: =10/5/2023		Field Personnel: L. Short/ A. Perry					
Well No.: PPW-1		Purging Method: Temp Pump		Water Depth Before Purging: 102.00		Starting Totalizer Readings: 883290		Well Volumes Purged: 7.9			
Well Diameter (in): 5		5"=1.02 gallons per foot		Screened Casing Length (ft): 200-260, 280-300		Calculated Water Column Volume: 196		Gallons Purged: 1,550		Total Time: 0:25	
Depth to Bottom (ft): 300		Pump Set Depth (ft): 270		Start Purging Time: 10/5/2023 9:00		End Purging Time: 10/5/2023 9:25		Overall Flow Rate (gpm): 62.0			

[illegible]

Comments:	3 well volumes =	588	gallions
Sample Collected:			
Sample Time:			



CALIFORNIA LABORATORY SERVICES

Committed. Responsive. Flexible.

November 08, 2023

CLS Work Order #: 23J0430

COC #:

Lauren Short
Geocon Consultants
3160 Gold Valley Dr. Suite #800
Rancho Cordova, CA 95742

Project Name: Parkfield FS

Enclosed are the results of analyses for samples received by the laboratory on 10/06/23 09:28. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

Daniel Johnson
Technical Director

CA SWRCB ELAP Accreditation/Registration number 1233

AIR BILL #



CALIFORNIA LABORATORY SERVICES

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Page 2 of 6

11/08/23 14:40

Geocon Consultants
3160 Gold Valley Dr. Suite #800
Rancho Cordova, CA 95742

Project: Parkfield FS
Project Number: [none]
Project Manager: Lauren Short

CLS Work Order #: 23J0430
COC #:

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PPW-1 (23J0430-01) Water Sampled: 10/05/23 09:20 Received: 10/06/23 09:28									
Color	2	1	Color Units	1	2308442	10/07/23	10/07/23	SM2120B	
MBAS as LAS, mol wt 340	ND	0.10	mg/L	"	2308432	10/06/23	10/06/23	SM5540 C	
Threshold Odor Number	ND	1	T.O.N.	"	2308442	10/07/23	10/07/23	EPA 140.1	HT-1



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11/08/23 14:40

Geocon Consultants
3160 Gold Valley Dr. Suite #800
Rancho Cordova, CA 95742

Project: Parkfield FS
Project Number: [none]
Project Manager: Lauren Short

CLS Work Order #: 23J0430
COC #:

Nitrogen/Phosphorus Pesticides by EPA Method 507

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PPW-1 (23J0430-01) Water Sampled: 10/05/23 09:20 Received: 10/06/23 09:28									
Thiobencarb*	ND	1.0	µg/L	1	2308534	10/11/23	10/11/23	EPA 507	
Surrogate: EPN		128 %	50-150		"	"	"	"	



CALIFORNIA LABORATORY SERVICES

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11/08/23 14:40

Geocon Consultants
3160 Gold Valley Dr. Suite #800
Rancho Cordova, CA 95742

Project: Parkfield FS
Project Number: [none]
Project Manager: Lauren Short

CLS Work Order #: 23J0430
COC #:

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 2308432 - General Preparation

Blank (2308432-BLK1)

Prepared & Analyzed: 10/06/23

MBAS as LAS, mol wt 340 ND 0.10 mg/L

LCS (2308432-BS1)

Prepared & Analyzed: 10/06/23

MBAS as LAS, mol wt 340 0.478 0.10 mg/L 0.500 96 80-120

LCS Dup (2308432-BSD1)

Prepared & Analyzed: 10/06/23

MBAS as LAS, mol wt 340 0.459 0.10 mg/L 0.500 92 80-120 4 20

Matrix Spike (2308432-MS1)

Source: 23J0430-01

Prepared & Analyzed: 10/06/23

MBAS as LAS, mol wt 340 0.528 0.10 mg/L 0.500 0.0840 89 75-125

Matrix Spike Dup (2308432-MSD1)

Source: 23J0430-01

Prepared & Analyzed: 10/06/23

MBAS as LAS, mol wt 340 0.519 0.10 mg/L 0.500 0.0840 87 75-125 2 25

Batch 2308442 - General

Blank (2308442-BLK1)

Prepared & Analyzed: 10/07/23

Threshold Odor Number ND 1 T.O.N.

Color ND 1 Color Units

Duplicate (2308442-DUP1)

Source: 23J0430-01

Prepared & Analyzed: 10/07/23

Threshold Odor Number ND 1 T.O.N. ND 20

Color 2.00 1 Color Units 2.00 0.00 20



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11/08/23 14:40

Geocon Consultants
3160 Gold Valley Dr. Suite #800
Rancho Cordova, CA 95742

Project: Parkfield FS
Project Number: [none]
Project Manager: Lauren Short

CLS Work Order #: 23J0430
COC #:

Nitrogen/Phosphorus Pesticides by EPA Method 507 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 2308534 - EPA 3510B GCNV

Blank (2308534-BLK1)

Prepared & Analyzed: 10/11/23

Alachlor	ND	1.0	µg/L							
Atrazine	ND	0.50	"							
Butachlor	ND	0.38	"							
Metolachlor	ND	1.0	"							
Metribuzin	ND	1.0	"							
Molinate	ND	2.0	"							
Simazine	ND	1.0	"							
Bromacil*	ND	10	"							
Diazinon*	ND	0.25	"							
Dimethoate*	ND	10	"							
Prometryn*	ND	2.0	"							
Propachlor*	ND	0.50	"							
Thiobencarb*	ND	1.0	"							
Surrogate: EPN	2.83		"	2.50		113	50-150			

LCS (2308534-BS1)

Prepared & Analyzed: 10/11/23

Alachlor	5.85	1.0	µg/L	5.00		117	50-150			
Butachlor	5.64	0.38	"	5.00		113	50-150			
Molinate	5.67	2.0	"	5.00		113	50-150			
Thiobencarb*	5.51	1.0	"	5.00		110	50-150			
Surrogate: EPN	3.57		"	2.50		143	50-150			

LCS Dup (2308534-BSD1)

Prepared & Analyzed: 10/11/23

Alachlor	5.76	1.0	µg/L	5.00		115	50-150	2	30	
Butachlor	5.58	0.38	"	5.00		112	50-150	1	30	
Molinate	5.87	2.0	"	5.00		117	50-150	3	30	
Thiobencarb*	5.42	1.0	"	5.00		108	50-150	2	30	
Surrogate: EPN	3.49		"	2.50		140	50-150			



CALIFORNIA LABORATORY SERVICES

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11/08/23 14:40

Geocon Consultants
3160 Gold Valley Dr. Suite #800
Rancho Cordova, CA 95742

Project: Parkfield FS
Project Number: [none]
Project Manager: Lauren Short

CLS Work Order #: 23J0430
COC #:

Notes and Definitions

HT-1	The sample was received outside of the EPA recommended holding time.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
*	The laboratory does not hold CA-ELAP accreditation for this analyte or method. Accreditation may not be available from CA-ELAP for this analyte or method.

Clinical Laboratory of San Bernardino, Inc.

**CLS Labs**

3249 Fitzgerald Rd.
Rancho Cordova CA, 95742

Project: Drinking Water Analysis

Sub Project: 23J0430

Project Manager: Client Services

Work Order: 23J1082

Received: 10/10/23 10:45

Reported: 10/23/23

PPW-1

23J1082-01 (Water)

Sample Date: 10/05/23 9:20

Sampler: Not Listed

Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier

Radiochemistry Analyses

Uranium	EPA 200.8	ND	pCi/L	1.0	20	10/18/23	10/19/23	2342093	

ND Analyte NOT DETECTED at or above the reporting limit

Stu Styles

Client Services Manager

Clinical Laboratory of San Bernardino, Inc.



CLS Labs

3249 Fitzgerald Rd.
Rancho Cordova CA, 95742

Project: Drinking Water Analysis

Sub Project: 23J0430

Project Manager: Client Services

Work Order: 23J1082

Received: 10/10/23 10:45

Reported: 10/23/23

Radiochemistry Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%Rec	%Rec Limits	RPD	RPD Limit	Qualifier
Batch 2342093 Analyst: AP1										
Blank (2342093-BLK1)										
Uranium	ND	1.0	pCi/L							Prepared: 10/18/23 Analyzed: 10/19/23
Blank (2342093-BLK2)										
Uranium	ND	1.0	pCi/L							Prepared: 10/18/23 Analyzed: 10/19/23
Blank (2342093-BLK3)										
Uranium	ND	1.0	pCi/L							Prepared: 10/18/23 Analyzed: 10/19/23
Blank (2342093-BLK4)										
Uranium	ND	1.0	pCi/L							Prepared: 10/18/23 Analyzed: 10/19/23
Blank (2342093-BLK5)										
Uranium	ND	1.0	pCi/L							Prepared: 10/18/23 Analyzed: 10/19/23
LCS (2342093-BS1)										
Uranium	33.5	1.0	pCi/L	34		99	85-115			Prepared: 10/18/23 Analyzed: 10/19/23
LCS (2342093-BS2)										
Uranium	33.0	1.0	pCi/L	34		97	85-115			Prepared: 10/18/23 Analyzed: 10/19/23
LCS (2342093-BS3)										
Uranium	33.0	1.0	pCi/L	34		97	85-115			Prepared: 10/18/23 Analyzed: 10/19/23
LCS (2342093-BS4)										
Uranium	33.2	1.0	pCi/L	34		98	85-115			Prepared: 10/18/23 Analyzed: 10/19/23
LCS (2342093-BS5)										
Uranium	34.2	1.0	pCi/L	34		101	85-115			Prepared: 10/18/23 Analyzed: 10/19/23

Clinical Laboratory of San Bernardino, Inc.


CLS Labs

3249 Fitzgerald Rd.
Rancho Cordova CA, 95742

Project: Drinking Water Analysis

Sub Project: 23J0430

Project Manager: Client Services

Work Order: 23J1082

Received: 10/10/23 10:45

Reported: 10/23/23

Radiochemistry Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%Rec	%Rec Limits	RPD	RPD Limit	Qualifier
Batch 2342093 Analyst: AP1										
Matrix Spike (2342093-MS1) Source: 23I2604-06 Prepared: 10/18/23 Analyzed: 10/19/23										
Uranium	35.7	1.0	pCi/L	34	3.01	97	70-130			
Matrix Spike (2342093-MS2) Source: 23J1114-05 Prepared: 10/18/23 Analyzed: 10/19/23										
Uranium	32.7	1.0	pCi/L	34	ND	97	70-130			
Matrix Spike (2342093-MS3) Source: 23J1345-03 Prepared: 10/18/23 Analyzed: 10/19/23										
Uranium	50.2	1.0	pCi/L	34	17.6	97	70-130			
Matrix Spike Dup (2342093-MSD1) Source: 23I2604-06 Prepared: 10/18/23 Analyzed: 10/19/23										
Uranium	35.6	1.0	pCi/L	34	3.01	97	70-130	0.5	30	
Matrix Spike Dup (2342093-MSD2) Source: 23J1114-05 Prepared: 10/18/23 Analyzed: 10/19/23										
Uranium	32.1	1.0	pCi/L	34	ND	95	70-130	2	30	
Matrix Spike Dup (2342093-MSD3) Source: 23J1345-03 Prepared: 10/18/23 Analyzed: 10/19/23										
Uranium	52.4	1.0	pCi/L	34	17.6	103	70-130	4	30	

ND Analyte NOT DETECTED at or above the reporting limit

Stu Styles

Client Services Manager

23J0430

SENDING LABORATORY:

CLS Labs
3249 Fitzgerald Rd.
Rancho Cordova, CA 95742
Phone: 916-638-7301
Fax: 916-638-4510
Project Manager: Mark Smith
Project: Parkfield FS

RECEIVING LABORATORY:

Clinical Lab of San Bernardino
21881 Barton Road
Grand Terrace, CA 92313
Phone : (909) 825-7693
Fax: (909) 825-7696

2351082

Analysis	TAT	Due	Expires	Laboratory ID	Sample Date	Received	Matrix
U ICP/MS 200.8 Radiological, SUB	7	10/19/23 12:00	04/02/24 09:20	23J0430-01	10/05/23 09:20	10/06/23 09:28	Water

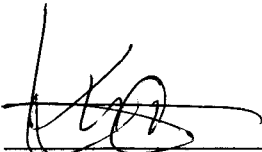
Client sample ID: PPW-1

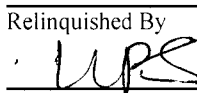
Sampler:

Laboratory sample ID: 23J0430-01

Please use client sample ID on all reports

Containers Supplied:125 ml Poly - HNO₃ (E)

	10/9/23	MA/ Christina/CLSB	10/10/23	1045
Relinquished By	Date	Received By	Date	

	NW 9560	8307	
Relinquished By	Date	Received By	Date
Shipped By	Airbill Number		

2310-4

SUBCONTRACT ORDER

23J0430

SENDING LABORATORY:

CLS Labs
3249 Fitzgerald Rd.
Rancho Cordova, CA 95742
Phone: 916-638-7301
Fax: 916-638-4510
Project Manager: Mark Smith
Project: Parkfield FS

RECEIVING LABORATORY:

Davi Laboratories
730 Alfred Nobel Dr.
Hercules, CA 94547
Phone : (510) 724-9450
Fax:

Analysis	TAT	Due	Expires	Laboratory ID	Sample Date	Received	Matrix
Gross beta SUB	10	10/24/23 12:00	11/04/23 09:20	23J0430-01	10/05/23 09:20	10/06/23 09:28	Water

Client sample ID: PPW-1

Sampler:

Laboratory sample ID: 23J0430-01

Please use client sample ID on all reports

Containers Supplied:

500 mL Poly HNO3 (D)

Gross alpha SUB	10	10/24/23 12:00	11/04/23 09:20	23J0430-01	10/05/23 09:20	10/06/23 09:28	Water

Client sample ID: PPW-1

Sampler:

Laboratory sample ID: 23J0430-01

Please use client sample ID on all reports

Containers Supplied:

500 mL Poly HNO3 (D)

Relinquished By

Date

Received By

Date

Relinquished By

Date

Received By

Date

Shipped By

Airbill Number

Page 2 of 2

[Signature]

10/9/23

P. Davi

10/11/23

(1330)

UPS

92 9757 7518

742

**DAVI LABORATORIES, ENVIRONMENTAL ASSOCIATES**

730 Alfred Nobel Dr, Hercules CA 94547

**ANALYTICAL RESULTS
REPORT**

Company: **CLS Labs**
Address: 3249 Fitzgerald Dr
Rancho Cordova, CA95742

Project Manager: **Mark Smith**
Report Date: 11/3/2023
Subcontractor Order: **23J0430**
Source Name:

TABLE I

Sample ID	Collection Date	Time	Matrix	EPA Method	Analyses	Results pCi/L	2 Sigma error	MDA
23J0430	-01 10/5/2023	0920	Water					
PPW-1				900.0	Gross Alpha	9.67 $\pm$	2.54	1.03
				900.0	Gross Beta	7.39 $\pm$	1.46	3.40

Analyst: PD
Analyses Date: 10/31/2023

TABLE II QA/QC

Analyses	Spike Added	Detected Activity	% Agreement
Gross Alpha	335.00 pCi/L	325.45 pCi/L	97.15
Gross Alpha	425.90 pCi/L	421.10 pCi/L	98.87

Patricia Davi

DAVI LABORATORIES
Patricia Davi
QA/QC Manager



EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577
Phone/Fax: (510) 895-3675 / (510) 895-3680
<http://www.EMSL.com> / sanleandrolab@emsl.com

EMSL Order ID: 092321724
Customer ID: GECN80
Customer PO: S2120-05-05
Project ID:

Attn: Lauren Short
Geocon Consultants, Inc.
3160 Gold Valley Drive
Suite 800
Rancho Cordova, CA 95742
Proj: PARKFIELD FS / S2120-05-05

Phone: (916) 852-9118
Fax: (916) 852-9132
Received: 10/05/2023
Analyzed: 10/20/2023

Test Report: Determination of Asbestos Structures >10µm in Drinking Water Performed by the 100.2 Method (EPA 600/R-94/134)

Sample ID Client / EMSL	Sample Filtration Date/Time	Original Sample Vol. Filtered (ml)	Effective Filter Area (mm²)	Area Analyzed (mm²)	ASBESTOS				
					Asbestos Types	Fibers Detected	Analytical Sensitivity	Concentration	Confidence Limits
					MFL (million fibers per liter)				
PPW-1 092321724-0001	10/6/2023 01:50 PM	100	1304	0.0750	Chrysotile	2	0.17	0.35	0.04 - 1.30
Collection Date/Time: 10/05/2023 09:20 AM									

Analyst(s)

Cecilia Yu (1)

Cecilia Yu, Laboratory Manager
or Other Approved Signatory

Any questions please contact Cecilia Yu.

Initial report from: 10/20/2023 13:03:55

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. Estimation of uncertainty is available on request. Sample collection performed by the client. Pre-cleaned sample containers are available for purchase from EMSL. Note if sample containers are provided by the client, acceptable bottle blank level is defined as ≤ 0.01 MFL for $\geq 10\mu\text{m}$ fibers. ND=None Detected. No Fibers Detected: the value will be reported as less than 369% of the concentration equivalent to one fiber. 1 to 4 fibers: The result will be reported as less than the corresponding upper 95% confidence limit (Poisson). 5 to 30 fibers: Mean and 95% confidence intervals will be reported on the basis of the Poisson assumption. When more than 30 fibers are counted, both the Gaussian 95% confidence interval and the Poisson 95% confidence interval will be calculated. The large of these two intervals will be selected for data reporting. When the Gaussian 95% confidence interval is selected for data reporting, the Poisson will also be noted.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA CA ELAP 1620, HI reciprocity, ID CA 01477, WA C884



MONTEREY COUNTY HEALTH DEPARTMENT

Consolidated Chemistry Laboratory

1270 Natividad Road Salinas, CA 93906

Phone (831)755-4516 Fax (831) 755-4652

ELAP Certification Number: 1395

Lauren Short
3160 Gold Valley Dr Suite 800
Rancho Cordova, CA 95742

Monday, October 9, 2023

Lab Number: AC75141

Client code: OTHER

Sample Site: 70331 VINEYARD CANYON RD PARKFIELD CA 93451

Collection Date/Time: 10/5/2023 9:20

Source Code :

Submittal Date/Time: 10/5/2023 14:30

Other ID: PPW-1

Sample Collector: PERRY A

Sample Comments: Special drinking water. Copy forwarded to Monterey County Environmental Health. Receiving temperature 1.3 °C.

Analyte	Method	Unit	Result	DLR	MCL	PQL	Analysis Start Date/Time
Conductivity	SM2510 B-201	umho/cm	2110	N/A	900**	2	10/6/2023 7:34
E. coli-Q	SM9223B-2004	MPN/100 mL	<1	N/A		1	10/5/2023 14:45
Fecal Coliform-Q	SM9223B-2004	MPN/100 ml	<1	N/A		1	10/5/2023 14:45
Nitrate Nitrogen	EPA300.0	mg/L	<0.1	0.4	10	0.1	10/6/2023 11:55
Nitrite as nitrogen	SM4500 NO2 B	mg/L	<0.05	0.4	1.0*	0.05	10/6/2023 10:08
NO3 (Nitrate)	EPA300.0 REV	mg/L	<0.5	2.0	45*	0.5	10/6/2023 11:55
Orthophosphate as P	SM4500 P E-2	mg/L	0.08	N/A		0.05	10/6/2023 9:42
pH (Laboratory)	SM4500H+ B-2	pH	7.7	N/A	6.5-8.5**	0.1	10/5/2023 14:35
Total coliform-Q	SM9223B-2004	MPN/100 mL	3	N/A		1	10/5/2023 14:45
Total Dissolved Solids (TDS SM2540 C-201		mg/L	1100	N/A	500**	5	10/5/2023 14:45

Report approved by:

A handwritten signature in cursive script, appearing to read "Donna Ferguson".

Donna Ferguson, Ph.D, P.H.M
Laboratory Director

mg/L : Milligrams per liter (=ppm)

PQL : Practical Quantitation Limit

DLR : Detection Limit for Reporting

ug/L : Micrograms per liter (=ppb)

MCL : Maximum Contaminant Level

ND : Not Detected

N/A : Not Applicable

* : Primary Standards

** : Secondary Standards

*** : Action Level



Geocon Consultants, Inc.
3160 Gold Valley Drive, Suite 800
Rancho Cordova, California 95742
RE: CALFIRE Parkfield FS

Work Order No.: 2310045

Dear Lauren Short:

Torrent Laboratory, Inc. received 1 sample(s) on October 05, 2023 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

A handwritten signature in blue ink that reads "Kathie Evans". The signature is written in a cursive, flowing style.

Kathie Evans
Project Manager

October 19, 2023

Date



Date: 10/19/2023

Client: Geocon Consultants, Inc.

Project: CALFIRE Parkfield FS

Work Order: 2310045

CASE NARRATIVE

Unless otherwise indicated in the following narrative, no issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Laboratory, Inc.

Analytical Comment for method 524, QC Preparation Batch ID 1155056, Note: The % recoveries for several analytes in the LCS and/or LCSD are outside of laboratory control limits. The outliers will be considered in the next control chart update.

Analytical Comments for method SM4500CN, 2310045-001MS/MSD, QC Preparation Batch ID 1155203, Note: The % recoveries for Cyanide are outside of laboratory control limits but % RPDs are within limits. The associated LCS/LCSD is within both % Recovery and % RPD limits. No corrective action required.

Analytical Comments for method 245.1, 2310045-001MS/MSD, QC Preparation Batch ID 1155017, Note: The % recoveries for Mercury are outside of laboratory control limits but % RPDs are within limits. The associated LCS/LCSD is within both % Recovery and % RPD limits. No corrective action required.



Sample Result Summary

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date Received: 10/05/23

Date Reported: 10/19/23

PPW-1

2310045-001

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Alkalinity, Total (as CaCO ₃)	A2320B	1	1.0	2.0	330	mg/L
Alkalinity, Bicarbonate (as CaCO ₃)	A2320B	1	1.0	2.0	330	mg/L
Turbidity	E180.1	1	0.20	0.20	0.470	NTU
Calcium	E200.7	1	0.034	2.0	62	mg/L
Magnesium	E200.7	1	0.0050	2.0	150	mg/L
Manganese	E200.7	1	0.0020	0.050	0.15	mg/L
Sodium	E200.7	1	0.030	5.0	130	mg/L
Boron	E200.7	1	0.010	0.050	0.65	mg/L
Silica	E200.7	1	0.021	0.11	35	mg/L
Manganese (Dissolved)	E200.7	1	0.0021	0.020	0.14	mg/L
Boron (Dissolved)	E200.7	1	0.010	0.050	0.66	mg/L
Arsenic	E200.8	1	0.00040	0.0010	0.00384	mg/L
Barium	E200.8	1	0.00080	0.0020	0.458	mg/L
Vanadium	E200.8	1	0.00070	0.0020	0.00250	mg/L
Zinc	E200.8	1	0.0015	0.0025	0.0154	mg/L
Arsenic (Dissolved)	E200.8	1	0.00040	0.0010	0.0038	mg/L
Barium (Dissolved)	E200.8	1	0.00080	0.0020	0.45	mg/L
Vanadium (Dissolved)	E200.8	1	0.00070	0.0020	0.0025	mg/L
Bromide	E300.0	1	0.42	1.00	1.66	mg/L
Sulfate	E300.0	10	3.1	5.00	20.4	mg/L
Chloride	E300.0	50	0.80	10.0	500	mg/L
Chloroform	E524.2	1	0.063	0.50	5.4	ug/L
Toluene	E524.2	1	0.20	0.50	3.1	ug/L
Calcium Hardness (as CaCO ₃)	SM2340B	1	0.083	1.0	150	mg/L
Total Hardness (as CaCO ₃)	SM2340B	1	0.10	1.0	752	mg/L
Chloramben	SW8321B	1	1.4	2.0	5.14	ug/L



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm
Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001A
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method:	HARD-P	Prep Batch Date/Time:	10/11/23 12:10:00PM
Prep Batch ID:	1155102	Prep Analyst:	BJAY

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Calcium Hardness (as CaCO ₃)	SM2340B	1	0.083	1.0	150		mg/L	10/11/23	18:40	AT	478722
Total Hardness (as CaCO ₃)	SM2340B	1	0.10	1.0	752		mg/L	10/11/23	18:40	AT	478722



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm
Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001A
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method:	245.1P	Prep Batch Date/Time:	10/6/23	7:00:00PM
Prep Batch ID:	1155017	Prep Analyst:	ATRUONG	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury	E245.1	1	0.00010	0.00020	ND		mg/L	10/10/23	11:04	BJAY	478629



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm
Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001A
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method:	200.7P	Prep Batch Date/Time:	10/11/23 12:10:00PM
Prep Batch ID:	1155100	Prep Analyst:	BJAY

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aluminum	E200.7	1	0.024	2.0	ND		mg/L	10/13/23	12:20	AT	478723
Calcium	E200.7	1	0.034	2.0	62		mg/L	10/13/23	12:20	AT	478723
Iron	E200.7	1	0.048	0.30	ND		mg/L	10/13/23	12:20	AT	478723
Magnesium	E200.7	1	0.0050	2.0	150		mg/L	10/13/23	12:20	AT	478723
Manganese	E200.7	1	0.0020	0.050	0.15		mg/L	10/13/23	12:20	AT	478723
Potassium	E200.7	1	0.094	5.0	ND		mg/L	10/13/23	12:20	AT	478723
Sodium	E200.7	1	0.030	5.0	130		mg/L	10/13/23	12:20	AT	478723
Boron	E200.7	1	0.010	0.050	0.65		mg/L	10/13/23	12:20	AT	478723
Silica	E200.7	1	0.021	0.11	35		mg/L	10/13/23	12:20	AT	478723



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm
Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001A
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method: 200.8P	Prep Batch Date/Time: 10/10/23 4:10:00PM
Prep Batch ID: 1155074	Prep Analyst: BJAY

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony	E200.8	1	0.00045	0.0010	ND		mg/L	10/17/23	22:20	AT	478815
Arsenic	E200.8	1	0.00040	0.0010	0.00384		mg/L	10/17/23	22:20	AT	478815
Barium	E200.8	1	0.00080	0.0020	0.458		mg/L	10/17/23	22:20	AT	478815
Beryllium	E200.8	1	0.00056	0.0020	ND		mg/L	10/17/23	22:20	AT	478815
Cadmium	E200.8	1	0.00025	0.0010	ND		mg/L	10/17/23	22:20	AT	478815
Chromium	E200.8	1	0.00042	0.0010	ND		mg/L	10/17/23	22:20	AT	478815
Copper	E200.8	1	0.00025	0.0010	ND		mg/L	10/17/23	22:20	AT	478815
Lead	E200.8	1	0.00032	0.0010	ND		mg/L	10/17/23	22:20	AT	478815
Nickel	E200.8	1	0.00049	0.0010	ND		mg/L	10/17/23	22:20	AT	478815
Selenium	E200.8	1	0.00065	0.0020	ND		mg/L	10/17/23	22:20	AT	478815
Silver	E200.8	1	0.00021	0.00050	ND		mg/L	10/17/23	22:20	AT	478815
Thallium	E200.8	1	0.0013	0.0020	ND		mg/L	10/17/23	22:20	AT	478815
Vanadium	E200.8	1	0.00070	0.0020	0.00250		mg/L	10/17/23	22:20	AT	478815
Zinc	E200.8	1	0.0015	0.0025	0.0154		mg/L	10/17/23	22:20	AT	478815



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm

Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001B
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method: Alk-P	Prep Batch Date/Time: 10/11/23 1:10:00PM
Prep Batch ID: 1155291	Prep Analyst: BJAY

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Alkalinity, Total (as CaCO ₃)	A2320B	1	1.0	2.0	330		mg/L	10/11/23	13:10	BJAY	478854
Alkalinity, Bicarbonate (as CaCO ₃)	A2320B	1	1.0	2.0	330		mg/L	10/11/23	13:10	BJAY	478854
Alkalinity, Carbonate (as CaCO ₃)	A2320B	1	1.0	2.0	ND		mg/L	10/11/23	13:10	BJAY	478854
Alkalinity, Hydroxide (as CaCO ₃)	A2320B	1	1.0	2.0	ND		mg/L	10/11/23	13:10	BJAY	478854



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm

Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001B
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method:	300.0P	Prep Batch Date/Time:	10/14/23	2:26:00PM
Prep Batch ID:	1155245	Prep Analyst:	PHUFANO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Fluoride	E300.0	1	0.095	0.200	ND		mg/L	10/14/23	15:31	PH	478811
Bromide	E300.0	1	0.42	1.00	1.66		mg/L	10/14/23	15:31	PH	478811



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm
Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001B
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method:	300.0P	Prep Batch Date/Time:	10/14/23	2:26:00PM
Prep Batch ID:	1155245	Prep Analyst:	PHUFANO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Sulfate	E300.0	10	3.1	5.00	20.4		mg/L	10/14/23	15:52	PH	478811



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm

Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001B
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method:	300.OP	Prep Batch Date/Time:	10/14/23	2:26:00PM
Prep Batch ID:	1155245	Prep Analyst:	PHUFANO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Chloride	E300.0	50	0.80	10.0	500		mg/L	10/14/23	16:13	PH	478811



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm
Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001B
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method: 314.0WP	Prep Batch Date/Time: 10/6/23 11:55:00PM
Prep Batch ID: 1155246	Prep Analyst: PHUFANO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Perchlorate	E314.0	1	0.44	2.0	ND		ug/L	10/07/23	1:01	PH	478813



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm
Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001C
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method:	Ferrous-P	Prep Batch Date/Time:	10/5/23	7:10:00PM
Prep Batch ID:	1155244	Prep Analyst:	PHUFANO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Ferrous Iron	H8146	1	0.10	0.10	ND		mg/L	10/05/23	19:10	PH	478810

NOTE: Sample was ND for both iron and ferrous iron. So sample is also ND for ferrous iron at 0.3 mg/L



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm
Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001D
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method:	CN-W-P	Prep Batch Date/Time:	10/11/23 4:30:00PM
Prep Batch ID:	1155203	Prep Analyst:	TNGO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Total Cyanide	SM4500CN	1	0.0086	0.030	ND		mg/L	10/12/23	19:00	TON	478755



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm
Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001E
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method: 245.1P	Prep Batch Date/Time: 10/11/23 12:10:00PM
Prep Batch ID: 1155103	Prep Analyst: BJAY

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury (Dissolved)	E245.1	1	0.00010	0.00020	ND		mg/L	10/12/23	11:48	BJAY	478698



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm

Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001E
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method:	200.7P	Prep Batch Date/Time:	10/11/23 12:10:00PM
Prep Batch ID:	1155101	Prep Analyst:	BJAY

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aluminium (Dissolved)	E200.7	1	0.024	0.10	ND		mg/L	10/13/23	12:27	AT	478724
Iron (Dissolved)	E200.7	1	0.034	0.30	ND		mg/L	10/13/23	12:27	AT	478724
Manganese (Dissolved)	E200.7	1	0.0021	0.020	0.14		mg/L	10/13/23	12:27	AT	478724
Boron (Dissolved)	E200.7	1	0.010	0.050	0.66		mg/L	10/13/23	12:27	AT	478724



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm

Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001E
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method:	200.8P	Prep Batch Date/Time:	10/10/23 4:10:00PM
Prep Batch ID:	1155075	Prep Analyst:	BJAY

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony (Dissolved)	E200.8	1	0.00045	0.0010	ND		mg/L	10/17/23	22:40	AT	478816
Arsenic (Dissolved)	E200.8	1	0.00040	0.0010	0.0038		mg/L	10/17/23	22:40	AT	478816
Barium (Dissolved)	E200.8	1	0.00080	0.0020	0.45		mg/L	10/17/23	22:40	AT	478816
Beryllium (Dissolved)	E200.8	1	0.00056	0.0020	ND		mg/L	10/17/23	22:40	AT	478816
Cadmium (Dissolved)	E200.8	1	0.00025	0.0010	ND		mg/L	10/17/23	22:40	AT	478816
Chromium (Dissolved)	E200.8	1	0.00042	0.0010	ND		mg/L	10/17/23	22:40	AT	478816
Copper (Dissolved)	E200.8	1	0.00025	0.0010	ND		mg/L	10/17/23	22:40	AT	478816
Lead (Dissolved)	E200.8	1	0.00032	0.0010	ND		mg/L	10/17/23	22:40	AT	478816
Nickel (Dissolved)	E200.8	1	0.00049	0.0010	ND		mg/L	10/17/23	22:40	AT	478816
Selenium (Dissolved)	E200.8	1	0.00065	0.0020	ND		mg/L	10/17/23	22:40	AT	478816
Silver (Dissolved)	E200.8	1	0.00021	0.00050	ND		mg/L	10/17/23	22:40	AT	478816
Thallium (Dissolved)	E200.8	1	0.0013	0.0020	ND		mg/L	10/17/23	22:40	AT	478816
Vanadium (Dissolved)	E200.8	1	0.00070	0.0020	0.0025		mg/L	10/17/23	22:40	AT	478816
Zinc (Dissolved)	E200.8	1	0.0015	0.0025	ND		mg/L	10/17/23	22:40	AT	478816



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm
Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001F
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method: 7199/218.6-WP	Prep Batch Date/Time: 10/5/23 11:08:00PM
Prep Batch ID: 1155205	Prep Analyst: PHUFANO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Hexavalent Chromium	SW7199	1	0.16	0.50	ND		ug/L	10/06/23	0:12	PH	478759



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm

Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001F
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method: Turb-P	Prep Batch Date/Time: 10/6/23 3:00:00PM
Prep Batch ID: 1155006	Prep Analyst: ROME

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Turbidity	E180.1	1	0.20	0.20	0.470		NTU	10/06/23	15:00	RE	478559



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm
Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001G
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method: 524.2P	Prep Batch Date/Time: 10/9/23 11:35:00AM
Prep Batch ID: 1155056	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	E524.2	1	0.090	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Chloromethane	E524.2	1	0.10	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Vinyl Chloride	E524.2	1	0.13	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Bromomethane	E524.2	1	0.087	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Chloroethane	E524.2	1	0.077	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Trichlorofluoromethane	E524.2	1	0.049	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
1,1-Dichloroethene	E524.2	1	0.028	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Freon 113	E524.2	1	0.056	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Methylene Chloride	E524.2	1	0.054	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
trans-1,2-Dichloroethene	E524.2	1	0.051	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
MTBE	E524.2	1	0.095	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
tert-Butanol	E524.2	1	0.61	2.0	ND		ug/L	10/09/23	17:10	JZ	478616
Diisopropyl ether (DIPE)	E524.2	1	0.043	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
1,1-Dichloroethane	E524.2	1	0.033	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
ETBE	E524.2	1	0.063	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
cis-1,2-Dichloroethene	E524.2	1	0.045	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
2,2-Dichloropropane	E524.2	1	0.072	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Bromochloromethane	E524.2	1	0.052	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Chloroform	E524.2	1	0.063	0.50	5.4		ug/L	10/09/23	17:10	JZ	478616
Carbon Tetrachloride	E524.2	1	0.075	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
1,1,1-Trichloroethane	E524.2	1	0.045	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
1,1-Dichloropropene	E524.2	1	0.077	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Benzene	E524.2	1	0.044	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
TAME	E524.2	1	0.24	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
1,2-Dichloroethane	E524.2	1	0.049	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Trichloroethylene	E524.2	1	0.064	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Dibromomethane	E524.2	1	0.077	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
1,2-Dichloropropane	E524.2	1	0.080	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Bromodichloromethane	E524.2	1	0.051	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
cis-1,3-Dichloropropene	E524.2	1	0.060	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Toluene	E524.2	1	0.20	0.50	3.1		ug/L	10/09/23	17:10	JZ	478616
Tetrachloroethylene	E524.2	1	0.087	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
trans-1,3-Dichloropropene	E524.2	1	0.079	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
1,1,2-Trichloroethane	E524.2	1	0.12	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Dibromochloromethane	E524.2	1	0.099	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
1,3-Dichloropropane	E524.2	1	0.089	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
1,2-Dibromoethane	E524.2	1	0.29	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Chlorobenzene	E524.2	1	0.032	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Ethyl Benzene	E524.2	1	0.033	0.50	ND		ug/L	10/09/23	17:10	JZ	478616



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm
Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001G
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method: 524.2P	Prep Batch Date/Time: 10/9/23 11:35:00AM
Prep Batch ID: 1155056	Prep Analyst: JZHAO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
1,1,1,2-Tetrachloroethane	E524.2	1	0.34	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
m,p-Xylene	E524.2	1	0.035	1.0	ND		ug/L	10/09/23	17:10	JZ	478616
o-Xylene	E524.2	1	0.030	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Bromoform	E524.2	1	0.093	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Styrene	E524.2	1	0.017	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Isopropyl Benzene	E524.2	1	0.031	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
Bromobenzene	E524.2	1	0.048	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
n-Propylbenzene	E524.2	1	0.041	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
1,1,1,2-Tetrachloroethane	E524.2	1	0.15	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
2-Chlorotoluene	E524.2	1	0.036	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
1,2,3-Trichloropropane	E524.2	1	0.11	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
1,3,5-Trimethylbenzene	E524.2	1	0.030	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
4-Chlorotoluene	E524.2	1	0.038	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
tert-Butylbenzene	E524.2	1	0.043	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
1,2,4-Trimethylbenzene	E524.2	1	0.031	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
sec-Butyl Benzene	E524.2	1	0.036	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
1,3-Dichlorobenzene	E524.2	1	0.059	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
p-Isopropyltoluene	E524.2	1	0.041	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
1,4-Dichlorobenzene	E524.2	1	0.070	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
n-Butylbenzene	E524.2	1	0.048	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
1,2-Dichlorobenzene	E524.2	1	0.053	0.50	ND		ug/L	10/09/23	17:10	JZ	478616
1,2-Dibromo-3-Chloropropane	E524.2	1	0.21	2.0	ND		ug/L	10/09/23	17:10	JZ	478616
1,2,4-Trichlorobenzene	E524.2	1	0.20	2.0	ND		ug/L	10/09/23	17:10	JZ	478616
Hexachlorobutadiene	E524.2	1	0.14	2.0	ND		ug/L	10/09/23	17:10	JZ	478616
Naphthalene	E524.2	1	0.18	2.0	ND		ug/L	10/09/23	17:10	JZ	478616
1,2,3-Trichlorobenzene	E524.2	1	0.23	2.0	ND		%	10/09/23	17:10	JZ	478616
(S) Dibromofluoromethane	E524.2		70 - 130		84.4		%	10/09/23	17:10	JZ	478616
(S) 4-Bromofluorobenzene	E524.2		70 - 130		111		%	10/09/23	17:10	JZ	478616



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm
Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001H
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method: Herb-DI	Prep Batch Date/Time: 10/9/23 1:18:00PM
Prep Batch ID: 1155032	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Bentazone	SW8321B	1	0.80	2.0	ND		ug/L	10/10/23	20:43	TA	478908
Dinoseb	SW8321B	1	0.54	2.0	ND		ug/L	10/10/23	20:43	TA	478908
Dichloroprop	SW8321B	1	1.3	2.0	ND		ug/L	10/10/23	20:43	TA	478908
2,4,5-TP (Silvex)	SW8321B	1	1.2	2.0	ND		ug/L	10/10/23	20:43	TA	478908
2,4,5-T	SW8321B	1	1.0	2.0	ND		ug/L	10/10/23	20:43	TA	478908
2,4-D	SW8321B	1	1.3	2.0	ND		ug/L	10/10/23	20:43	TA	478908
Picloram	SW8321B	1	0.72	2.0	ND		ug/L	10/10/23	20:43	TA	478908
MCPA	SW8321B	1	1.1	2.0	ND		ug/L	10/10/23	20:43	TA	478908
Acifluofen	SW8321B	1	0.84	2.0	ND		ug/L	10/10/23	20:43	TA	478908
MCPP	SW8321B	1	0.94	2.0	ND		ug/L	10/10/23	20:43	TA	478908
3,5-DCBA	SW8321B	1	1.2	2.0	ND		ug/L	10/10/23	20:43	TA	478908
4-Nitrophenol	SW8321B	1	0.60	2.0	ND		ug/L	10/10/23	20:43	TA	478908
Dicamba	SW8321B	1	0.71	2.0	ND		ug/L	10/10/23	20:43	TA	478908
2,4-DB	SW8321B	1	0.86	2.0	ND		ug/L	10/10/23	20:43	TA	478908
Pentachlorophenol (PCP)	SW8321B	1	0.56	2.0	ND		ug/L	10/10/23	20:43	TA	478908
Chloramben	SW8321B	1	1.4	2.0	5.14		ug/L	10/10/23	20:43	TA	478908
Acceptance Limits											
Atrazine d-5 (S)	SW8321B		50 - 150		79.2		%	10/10/23	20:43	TA	478908



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm
Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001H
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method: 3510_OCP	Prep Batch Date/Time: 10/6/23 10:37:00AM
Prep Batch ID: 1154983	Prep Analyst: NDUM

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
alpha-BHC	SW8081B	1	0.00068	0.021	ND		ug/L	10/06/23	21:57	MK	478604
gamma-BHC (Lindane)	SW8081B	1	0.0020	0.021	ND		ug/L	10/06/23	21:57	MK	478604
beta-BHC	SW8081B	1	0.0048	0.021	ND		ug/L	10/06/23	21:57	MK	478604
delta-BHC	SW8081B	1	0.0010	0.021	ND		ug/L	10/06/23	21:57	MK	478604
Heptachlor	SW8081B	1	0.011	0.021	ND		ug/L	10/06/23	21:57	MK	478604
Aldrin	SW8081B	1	0.00089	0.021	ND		ug/L	10/06/23	21:57	MK	478604
Heptachlor Epoxide	SW8081B	1	0.0032	0.021	ND		ug/L	10/06/23	21:57	MK	478604
gamma-Chlordane	SW8081B	1	0.0041	0.021	ND		ug/L	10/06/23	21:57	MK	478604
alpha-Chlordane	SW8081B	1	0.0036	0.021	ND		ug/L	10/06/23	21:57	MK	478604
4,4-DDE	SW8081B	1	0.0092	0.021	ND		ug/L	10/06/23	21:57	MK	478604
Endosulfan I	SW8081B	1	0.0062	0.021	ND		ug/L	10/06/23	21:57	MK	478604
Dieldrin	SW8081B	1	0.0032	0.021	ND		ug/L	10/06/23	21:57	MK	478604
Endrin	SW8081B	1	0.0035	0.021	ND		ug/L	10/06/23	21:57	MK	478604
4,4-DDD	SW8081B	1	0.0029	0.021	ND		ug/L	10/06/23	21:57	MK	478604
Endosulfan II	SW8081B	1	0.0022	0.021	ND		ug/L	10/06/23	21:57	MK	478604
4,4-DDT	SW8081B	1	0.0053	0.021	ND		ug/L	10/06/23	21:57	MK	478604
Endrin Aldehyde	SW8081B	1	0.015	0.021	ND		ug/L	10/06/23	21:57	MK	478604
Methoxychlor	SW8081B	1	0.0048	0.021	ND		ug/L	10/06/23	21:57	MK	478604
Endosulfan Sulfate	SW8081B	1	0.0028	0.021	ND		ug/L	10/06/23	21:57	MK	478604
Endrin Ketone	SW8081B	1	0.0084	0.021	ND		ug/L	10/06/23	21:57	MK	478604
Chlordane, Technical	SW8081B	1	0.14	0.26	ND		ug/L	10/06/23	21:57	MK	478604
Toxaphene	SW8081B	1	0.32	1.0	ND		ug/L	10/06/23	21:57	MK	478604
Tetrachloro-M-Xylene	SW8081B	1			89.2		ug/L	10/06/23	21:57	MK	478604
Decachlorobiphenyl	SW8081B	1			80.9		ug/L	10/06/23	21:57	MK	478604



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm
Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001H
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method:	3510_BNA	Prep Batch Date/Time:	10/6/23 2:42:00PM
Prep Batch ID:	1155003	Prep Analyst:	SSUTRA

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
N-Nitrosodimethylamine	SW8270C	1	2.35	20	ND		ug/L	10/06/23	18:08	MK	478590
Aniline	SW8270C	1	2.48	20	ND		ug/L	10/06/23	18:08	MK	478590
Phenol	SW8270C	1	1.46	20	ND		ug/L	10/06/23	18:08	MK	478590
Bis(2-chloroethyl) ether	SW8270C	1	1.69	10	ND		ug/L	10/06/23	18:08	MK	478590
2-Chlorophenol	SW8270C	1	2.50	20	ND		ug/L	10/06/23	18:08	MK	478590
1,3-Dichlorobenzene	SW8270C	1	1.33	10	ND		ug/L	10/06/23	18:08	MK	478590
1,4-Dichlorobenzene	SW8270C	1	1.58	10	ND		ug/L	10/06/23	18:08	MK	478590
1,2-Dichlorobenzene	SW8270C	1	1.31	10	ND		ug/L	10/06/23	18:08	MK	478590
2-Methylphenol (o-Cresol)	SW8270C	1	1.75	20	ND		ug/L	10/06/23	18:08	MK	478590
Bis(2-chloroisopropyl)ether	SW8270C	1	1.49	10	ND		ug/L	10/06/23	18:08	MK	478590
3-/4-Methylphenol (p-/m-Cresol)	SW8270C	1	1.64	20	ND		ug/L	10/06/23	18:08	MK	478590
N-nitroso-di-n-propylamine	SW8270C	1	2.67	20	ND		ug/L	10/06/23	18:08	MK	478590
Hexachloroethane	SW8270C	1	1.33	10	ND		ug/L	10/06/23	18:08	MK	478590
Nitrobenzene	SW8270C	1	1.41	10	ND		ug/L	10/06/23	18:08	MK	478590
Isophorone	SW8270C	1	1.49	10	ND		ug/L	10/06/23	18:08	MK	478590
2-Nitrophenol	SW8270C	1	2.72	20	ND		ug/L	10/06/23	18:08	MK	478590
2,4-Dimethylphenol	SW8270C	1	1.91	20	ND		ug/L	10/06/23	18:08	MK	478590
Bis(2-Chloroethoxy)methane	SW8270C	1	1.38	10	ND		ug/L	10/06/23	18:08	MK	478590
2,4-Dichlorophenol	SW8270C	1	2.13	20	ND		ug/L	10/06/23	18:08	MK	478590
1,2,4-Trichlorobenzene	SW8270C	1	1.50	10	ND		ug/L	10/06/23	18:08	MK	478590
Naphthalene	SW8270C	1	1.42	10	ND		ug/L	10/06/23	18:08	MK	478590
2,6-Dichlorophenol	SW8270C	1	2.42	20	ND		ug/L	10/06/23	18:08	MK	478590
Hexachloro-1,3-butadiene	SW8270C	1	1.51	10	ND		ug/L	10/06/23	18:08	MK	478590
4-Chloro-3-methylphenol	SW8270C	1	1.47	20	ND		ug/L	10/06/23	18:08	MK	478590
2-Methylnaphthalene	SW8270C	1	1.34	10	ND		ug/L	10/06/23	18:08	MK	478590
Hexachlorocyclopentadiene	SW8270C	1	1.55	10	ND		ug/L	10/06/23	18:08	MK	478590
2,4,6-Trichlorophenol	SW8270C	1	2.50	20	ND		ug/L	10/06/23	18:08	MK	478590
2-Chloronaphthalene	SW8270C	1	1.43	10	ND		ug/L	10/06/23	18:08	MK	478590
Dimethyl phthalate	SW8270C	1	1.24	10	ND		ug/L	10/06/23	18:08	MK	478590
Acenaphthylene	SW8270C	1	1.48	10	ND		ug/L	10/06/23	18:08	MK	478590
2,6-Dinitrotoluene	SW8270C	1	1.29	10	ND		ug/L	10/06/23	18:08	MK	478590
Acenaphthene	SW8270C	1	1.40	10	ND		ug/L	10/06/23	18:08	MK	478590
2,4-Dinitrophenol	SW8270C	1	5.68	40	ND		ug/L	10/06/23	18:08	MK	478590
4-Nitrophenol	SW8270C	1	1.26	40	ND		ug/L	10/06/23	18:08	MK	478590
2,4-Dinitrotoluene	SW8270C	1	1.04	10	ND		ug/L	10/06/23	18:08	MK	478590
Diethylphthalate	SW8270C	1	0.760	10	ND		ug/L	10/06/23	18:08	MK	478590
Fluorene	SW8270C	1	1.18	10	ND		ug/L	10/06/23	18:08	MK	478590
4-Chlorophenyl phenyl ether	SW8270C	1	1.25	10	ND		ug/L	10/06/23	18:08	MK	478590
Diphenylamine	SW8270C	1	0.974	10	ND		ug/L	10/06/23	18:08	MK	478590



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 10/05/23, 3:20 pm
Date Reported: 10/19/23

Client Sample ID:	PPW-1	Lab Sample ID:	2310045-001H
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	10/05/23 / 9:20		
SDG:			

Prep Method: 3510_BNA	Prep Batch Date/Time: 10/6/23 2:42:00PM
Prep Batch ID: 1155003	Prep Analyst: SSUTRA

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Azobenzene	SW8270C	1	1.46	10	ND		ug/L	10/06/23	18:08	MK	478590
4-Bromophenyl phenyl ether	SW8270C	1	1.30	10	ND		ug/L	10/06/23	18:08	MK	478590
Hexachlorobenzene	SW8270C	1	1.22	10	ND		ug/L	10/06/23	18:08	MK	478590
Pentachlorophenol	SW8270C	1	1.53	20	ND		ug/L	10/06/23	18:08	MK	478590
Phenanthrene	SW8270C	1	0.911	10	ND		ug/L	10/06/23	18:08	MK	478590
Anthracene	SW8270C	1	0.922	10	ND		ug/L	10/06/23	18:08	MK	478590
Di-n-butylphthalate	SW8270C	1	0.639	10	ND		ug/L	10/06/23	18:08	MK	478590
Fluoranthene	SW8270C	1	0.272	10	ND		ug/L	10/06/23	18:08	MK	478590
Benzidine	SW8270C	1	18.0	20	ND		ug/L	10/06/23	18:08	MK	478590
Pyrene	SW8270C	1	0.585	10	ND		ug/L	10/06/23	18:08	MK	478590
Benzyl butyl phthalate	SW8270C	1	2.12	10	ND		ug/L	10/06/23	18:08	MK	478590
Benz[a]anthracene	SW8270C	1	0.304	10	ND		ug/L	10/06/23	18:08	MK	478590
3,3-Dichlorobenzidine	SW8270C	1	3.40	20	ND		ug/L	10/06/23	18:08	MK	478590
Chrysene	SW8270C	1	0.322	10	ND		ug/L	10/06/23	18:08	MK	478590
Bis(2-Ethylhexyl)phthalate	SW8270C	1	1.10	10	ND		ug/L	10/06/23	18:08	MK	478590
Di-n-octyl phthalate	SW8270C	1	0.581	10	ND		ug/L	10/06/23	18:08	MK	478590
Benzo[b]fluoranthene	SW8270C	1	0.389	10	ND		ug/L	10/06/23	18:08	MK	478590
Benzo[k]fluoranthene	SW8270C	1	0.427	10	ND		ug/L	10/06/23	18:08	MK	478590
Benzo[a]pyrene	SW8270C	1	0.394	10	ND		ug/L	10/06/23	18:08	MK	478590
Indeno[1,2,3-cd]pyrene	SW8270C	1	0.558	10	ND		ug/L	10/06/23	18:08	MK	478590
Dibenz[a,h]anthracene	SW8270C	1	0.630	10	ND		ug/L	10/06/23	18:08	MK	478590
Benzo[g,h,i]perylene	SW8270C	1	0.704	10	ND		ug/L	10/06/23	18:08	MK	478590
Acceptance Limits											
2-Fluorophenol (S)	SW8270C		21 - 100		51.4		%	10/06/23	18:08	MK	478590
Phenol-d6 (S)	SW8270C		10 - 94		38.5		%	10/06/23	18:08	MK	478590
Nitrobenzene-d5 (S)	SW8270C		31 - 116		100.		%	10/06/23	18:08	MK	478590
2-Fluorobiphenyl (S)	SW8270C		21.3 - 123		81.6		%	10/06/23	18:08	MK	478590
2,4,6-Tribromophenol (S)	SW8270C		29.6 - 130		76.6		%	10/06/23	18:08	MK	478590
p-Terphenyl-d14 (S)	SW8270C		50 - 150		112		%	10/06/23	18:08	MK	478590



MB Summary Report

Work Order:	2310045	Prep Method:	3510_OCP	Prep Date:	10/06/23	Prep Batch:	1154983
Matrix:	Water	Analytical Method:	SW8081B	Analyzed Date:	10/6/2023	Analytical Batch:	478604
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
alpha-BHC	0.00065	0.020	ND	
gamma-BHC (Lindane)	0.0019	0.020	ND	
beta-BHC	0.0046	0.020	ND	
delta-BHC	0.0010	0.020	ND	
Heptachlor	0.010	0.020	ND	
Aldrin	0.00085	0.020	ND	
Heptachlor Epoxide	0.0031	0.020	ND	
gamma-Chlordane	0.0040	0.020	ND	
alpha-Chlordane	0.0035	0.020	ND	
4,4-DDE	0.0088	0.020	ND	
Endosulfan I	0.0060	0.020	ND	
Dieldrin	0.0031	0.020	ND	
Endrin	0.0034	0.020	ND	
4,4-DDD	0.0028	0.020	ND	
Endosulfan II	0.0021	0.020	ND	
4,4-DDT	0.0051	0.020	ND	
Endrin Aldehyde	0.014	0.020	ND	
Methoxychlor	0.0046	0.020	ND	
Endosulfan Sulfate	0.0027	0.020	ND	
Endrin Ketone	0.0080	0.020	ND	
Chlordane, Technical	0.13	0.25	ND	
Toxaphene	0.31	1.0	ND	
Tetrachloro-M-Xylene			87.1	
Decachlorobiphenyl			90.9	



MB Summary Report

Work Order:	2310045	Prep Method:	3510_BNA	Prep Date:	10/06/23	Prep Batch:	1155003
Matrix:	Water	Analytical Method:	SW8270C	Analyzed Date:	10/6/2023	Analytical Batch:	478590
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
N-Nitrosodimethylamine	2.12	20	ND		
Aniline	2.35	20	ND		
Phenol	2.48	20	ND		
Bis(2-chloroethyl) ether	1.46	20	ND		
2-Chlorophenol	1.69	10	ND		
1,3-Dichlorobenzene	2.50	20	ND		
1,4-Dichlorobenzene	1.33	10	ND		
1,2-Dichlorobenzene	1.58	10	ND		
2-Methylphenol (o-Cresol)	1.34	10	ND		
Bis(2-chloroisopropyl)ether	1.31	10	ND		
3-/4-Methylphenol (p-/m-Cresol)	1.75	20	ND		
N-nitroso-di-n-propylamine	1.14	10	ND		
Hexachloroethane	1.49	10	ND		
Nitrobenzene	1.64	20	ND		
Isophorone	2.67	20	ND		
2-Nitrophenol	1.33	10	ND		
2,4-Dimethylphenol	1.41	10	ND		
Bis(2-Chloroethoxy)methane	1.49	10	ND		
2,4-Dichlorophenol	2.72	20	ND		
1,2,4-Trichlorobenzene	1.91	20	ND		
Naphthalene	2.76	20	ND		
2,6-Dichlorophenol	1.38	10	ND		
Hexachloro-1,3-butadiene	2.13	20	ND		
4-Chloro-3-methylphenol	1.50	10	ND		
2-Methylnaphthalene	1.42	10	ND		
Hexachlorocyclopentadiene	1.76	10	ND		
2,4,6-Trichlorophenol	2.42	20	ND		
2-Chloronaphthalene	1.51	10	ND		
Dimethyl phthalate	1.47	20	ND		
Acenaphthylene	1.34	10	ND		
2,6-Dinitrotoluene	1.47	10	ND		
Acenaphthene	1.55	10	ND		
2,4-Dinitrophenol	2.50	20	ND		
4-Nitrophenol	1.87	20	ND		
2,4-Dinitrotoluene	1.43	10	ND		
Diethylphthalate	2.27	20	ND		
Fluorene	1.15	10	ND		
4-Chlorophenyl phenyl ether	1.24	10	ND		
Diphenylamine	1.43	10	ND		
Azobenzene	1.48	10	ND		
4-Bromophenyl phenyl ether	1.29	10	ND		
Hexachlorobenzene	1.44	10	ND		
Pentachlorophenol	4.34	20	ND		
Phenanthrene	1.39	40	ND		
Anthracene	5.68	40	ND		



MB Summary Report

Work Order:	2310045	Prep Method:	3510_BNA	Prep Date:	10/06/23	Prep Batch:	1155003
Matrix:	Water	Analytical Method:	SW8270C	Analyzed Date:	10/6/2023	Analytical Batch:	478590
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Di-n-butylphthalate	1.26	40	ND		
Fluoranthene	1.27	10	ND		
Benzidine	1.04	10	ND		
Pyrene	1.44	20	ND		
Benzyl butyl phthalate	1.58	20	ND		
Benz[a]anthracene	0.760	10	ND		
3,3-Dichlorobenzidine	1.18	10	ND		
Chrysene	1.25	10	ND		
Bis(2-Ethylhexyl)phthalate	3.81	20	ND		
Di-n-octyl phthalate	2.80	20	ND		
Benzo[b]fluoranthene	0.974	10	ND		
Benzo[k]fluoranthene	1.46	10	ND		
Benzo[a]pyrene	1.30	10	ND		
Indeno[1,2,3-cd]pyrene	1.22	10	ND		
Dibenz[a,h]anthracene	1.53	20	ND		
Benzo[g,h,i]perylene	0.911	10	ND		
2-Fluorophenol (S)			52.9		
Phenol-d6 (S)			34.9		
Nitrobenzene-d5 (S)			102		
2-Fluorobiphenyl (S)			92.2		
2,4,6-Tribromophenol (S)			79.2		
p-Terphenyl-d14 (S)			129		

Work Order:	2310045	Prep Method:	Turb-P	Prep Date:	10/06/23	Prep Batch:	1155006
Matrix:	Water	Analytical Method:	E180.1	Analyzed Date:	10/6/2023	Analytical Batch:	478559
Units:	NTU						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Turbidity	0.20	0.20	ND		

Work Order:	2310045	Prep Method:	245.1P	Prep Date:	10/06/23	Prep Batch:	1155017
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	10/10/2023	Analytical Batch:	478629
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Mercury	0.00010	0.00020	ND		



MB Summary Report

Work Order:	2310045	Prep Method:	Herb-DI	Prep Date:	10/09/23	Prep Batch:	1155032
Matrix:	Water	Analytical Method:	SW8321B	Analyzed Date:	10/10/2023	Analytical Batch:	478908
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Bentazone	0.80	2.0	ND		
Dinoseb	0.54	2.0	ND		
Dichloroprop	1.3	2.0	ND		
2,4,5-TP (Silvex)	1.2	2.0	ND		
2,4,5-T	1.0	2.0	ND		
2,4-D	1.3	2.0	ND		
Picloram	0.72	2.0	ND		
MCPA	1.1	2.0	ND		
Acifluorfen	0.84	2.0	ND		
MCPP	0.94	2.0	ND		
3,5-DCBA	1.2	2.0	ND		
4-Nitrophenol	0.60	2.0	ND		
Chloramben	1.4	2.0	ND		
Dicamba	0.71	2.0	ND		
Pentachlorophenol (PCP)	0.56	2.0	ND		
2,4-DB	0.86	2.0	ND		
Atrazine d-5 (S)			79.3		



MB Summary Report

Work Order:	2310045	Prep Method:	524.2P	Prep Date:	10/09/23	Prep Batch:	1155056
Matrix:	Water	Analytical Method:	E524.2	Analyzed Date:	10/9/2023	Analytical Batch:	478616
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Dichlorodifluoromethane	0.090	0.50	ND	
Chloromethane	0.10	0.50	ND	
Vinyl Chloride	0.13	0.50	ND	
Bromomethane	0.087	0.50	0.17	
Chloroethane	0.077	0.50	ND	
Trichlorofluoromethane	0.049	0.50	ND	
1,1-Dichloroethene	0.028	0.50	ND	
Freon 113	0.056	0.50	ND	
Methylene Chloride	0.054	0.50	0.060	
trans-1,2-Dichloroethene	0.051	0.50	ND	
MTBE	0.095	0.50	ND	
tert-Butanol	0.61	2.0	ND	
Diisopropyl ether (DIPE)	0.043	0.50	ND	
1,1-Dichloroethane	0.033	0.50	ND	
ETBE	0.063	0.50	ND	
cis-1,2-Dichloroethene	0.045	0.50	ND	
2,2-Dichloropropane	0.072	0.50	ND	
Bromochloromethane	0.052	0.50	ND	
Chloroform	0.063	0.50	ND	
Carbon Tetrachloride	0.075	0.50	ND	
1,1,1-Trichloroethane	0.045	0.50	ND	
1,1-Dichloropropene	0.077	0.50	ND	
Benzene	0.044	0.50	ND	
TAME	0.24	0.50	ND	
1,2-Dichloroethane	0.049	0.50	ND	
Trichloroethylene	0.064	0.50	ND	
Dibromomethane	0.077	0.50	ND	
1,2-Dichloropropane	0.080	0.50	ND	
Bromodichloromethane	0.051	0.50	ND	
cis-1,3-Dichloropropene	0.060	0.50	ND	
Toluene	0.20	0.50	ND	
Tetrachloroethylene	0.087	0.50	ND	
trans-1,3-Dichloropropene	0.079	0.50	ND	
1,1,2-Trichloroethane	0.12	0.50	ND	
Dibromochloromethane	0.099	0.50	ND	
1,3-Dichloropropane	0.089	0.50	ND	
1,2-Dibromoethane	0.29	0.50	ND	
Chlorobenzene	0.032	0.50	ND	
Ethyl Benzene	0.033	0.50	ND	
1,1,1,2-Tetrachloroethane	0.34	0.50	ND	
m,p-Xylene	0.035	1.0	ND	
o-Xylene	0.030	0.50	ND	
Bromoform	0.093	0.50	ND	
Styrene	0.017	0.50	ND	
Isopropyl Benzene	0.031	0.50	ND	



MB Summary Report

Work Order:	2310045	Prep Method:	524.2P	Prep Date:	10/09/23	Prep Batch:	1155056
Matrix:	Water	Analytical Method:	E524.2	Analyzed Date:	10/9/2023	Analytical Batch:	478616
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Bromobenzene	0.048	0.50	ND		
n-Propylbenzene	0.041	0.50	ND		
1,1,2,2-Tetrachloroethane	0.15	0.50	ND		
2-Chlorotoluene	0.036	0.50	ND		
1,2,3-Trichloropropane	0.11	0.50	ND		
1,3,5-Trimethylbenzene	0.030	0.50	ND		
4-Chlorotoluene	0.038	0.50	ND		
tert-Butylbenzene	0.043	0.50	ND		
1,2,4-Trimethylbenzene	0.031	0.50	ND		
sec-Butyl Benzene	0.036	0.50	ND		
1,3-Dichlorobenzene	0.059	0.50	ND		
p-Isopropyltoluene	0.041	0.50	ND		
1,4-Dichlorobenzene	0.070	0.50	ND		
n-Butylbenzene	0.048	0.50	ND		
1,2-Dichlorobenzene	0.053	0.50	ND		
1,2-Dibromo-3-Chloropropane	0.21	2.0	ND		
1,2,4-Trichlorobenzene	0.20	2.0	ND		
Hexachlorobutadiene	0.14	2.0	ND		
Naphthalene	0.18	2.0	ND		
1,2,3-Trichlorobenzene	0.23	2.0	ND		
(S) Dibromofluoromethane			95		
(S) 4-Bromofluorobenzene			98		



MB Summary Report

Work Order:	2310045	Prep Method:	200.8P	Prep Date:	10/10/23	Prep Batch:	1155074
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	10/17/2023	Analytical Batch:	478815
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Antimony	0.45	1.0	ND		
Arsenic	0.40	1.0	ND		
Barium	0.80	2.0	ND		
Beryllium	0.56	1.0	ND		
Cadmium	0.25	1.0	ND		
Chromium	0.42	1.0	ND		
Cobalt	0.27	1.0	ND		
Copper	0.25	1.0	ND		
Lead	0.32	1.0	ND		
Molybdenum	0.41	1.0	ND		
Nickel	0.49	1.0	ND		
Selenium	0.65	2.0	ND		
Silver	0.21	0.50	ND		
Thallium	1.3	2.0	ND		
Vanadium	0.70	2.0	ND		
Zinc	1.5	5.0	2.9		

Work Order:	2310045	Prep Method:	200.8P	Prep Date:	10/10/23	Prep Batch:	1155075
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	10/17/2023	Analytical Batch:	478816
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Antimony (Dissolved)	0.45	1.0	ND		
Arsenic (Dissolved)	0.40	1.0	ND		
Barium (Dissolved)	0.80	2.0	ND		
Beryllium (Dissolved)	0.56	2.0	ND		
Cadmium (Dissolved)	0.25	1.0	ND		
Chromium (Dissolved)	0.42	1.0	ND		
Cobalt (Dissolved)	0.27	1.0	ND		
Copper (Dissolved)	0.25	1.0	ND		
Lead (Dissolved)	0.32	1.0	ND		
Molybdenum (Dissolved)	0.41	1.0	ND		
Nickel (Dissolved)	0.49	1.0	ND		
Selenium (Dissolved)	0.65	2.0	ND		
Silver (Dissolved)	0.21	0.50	ND		
Thallium (Dissolved)	1.3	2.0	ND		
Vanadium (Dissolved)	0.70	2.0	ND		
Zinc (Dissolved)	1.5	2.0	ND		



MB Summary Report

Work Order:	2310045	Prep Method:	200.7P	Prep Date:	10/11/23	Prep Batch:	1155100
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	10/13/2023	Analytical Batch:	478723
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Aluminum	0.024	2.0	ND		
Calcium	0.034	5.0	ND		
Iron	0.048	0.30	ND		
Magnesium	0.0050	5.0	ND		
Manganese	0.0020	0.050	ND		
Potassium	0.094	5.0	ND		
Sodium	0.030	5.0	ND		
Boron	0.010	0.050	ND		
Silica	0.022	0.11	0.044		

Work Order:	2310045	Prep Method:	200.7P	Prep Date:	10/11/23	Prep Batch:	1155101
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	10/13/2023	Analytical Batch:	478724
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Aluminium (Dissolved)	0.024	2.0	ND		
Iron (Dissolved)	0.034	0.30	ND		
Manganese (Dissolved)	0.0021	0.050	0.0030		
Boron (Dissolved)	0.010	0.050	ND		

Work Order:	2310045	Prep Method:	HARD-P	Prep Date:	10/11/23	Prep Batch:	1155102
Matrix:	Water	Analytical Method:	SM2340B	Analyzed Date:	10/11/2023	Analytical Batch:	478722
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Total Hardness (as CaCO ₃)	0.20	1.0	ND		
Calcium Hardness (as CaCO ₃)	0.083	1.0	ND		

Work Order:	2310045	Prep Method:	245.1P	Prep Date:	10/11/23	Prep Batch:	1155103
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	10/12/2023	Analytical Batch:	478698
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Mercury (Dissolved)	0.00010	0.00020	ND		



MB Summary Report

Work Order:	2310045	Prep Method:	CN-W-P	Prep Date:	10/11/23	Prep Batch:	1155203
Matrix:	Water	Analytical Method:	SM4500CN	Analyzed Date:	10/12/2023	Analytical Batch:	478755
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	

Total Cyanide 0.0086 0.030 ND

Work Order:	2310045	Prep Method:	7199/218.6-WP	Prep Date:	10/05/23	Prep Batch:	1155205
Matrix:	Water	Analytical Method:	SW7199	Analyzed Date:	10/5/2023	Analytical Batch:	478759
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	

Hexavalent Chromium 0.00016 0.00050 ND

Work Order:	2310045	Prep Method:	Ferrous-P	Prep Date:	10/05/23	Prep Batch:	1155244
Matrix:	Water	Analytical Method:	H8146	Analyzed Date:	10/5/2023	Analytical Batch:	478810
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	

Ferrous Iron 0.10 0.10 ND

Work Order:	2310045	Prep Method:	300.0P	Prep Date:	10/14/23	Prep Batch:	1155245
Matrix:	Water	Analytical Method:	E300.0	Analyzed Date:	10/14/2023	Analytical Batch:	478811
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	

Fluoride 0.095 0.20 ND
Chloride 0.016 0.20 ND
Bromide 0.42 1.0 ND
Sulfate 0.31 0.50 ND

Work Order:	2310045	Prep Method:	314.0WP	Prep Date:	10/06/23	Prep Batch:	1155246
Matrix:	Water	Analytical Method:	E314.0	Analyzed Date:	10/6/2023	Analytical Batch:	478813
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	

Perchlorate 0.44 2.0 ND



MB Summary Report

Work Order:	2310045	Prep Method:	Alk-P	Prep Date:	10/11/23	Prep Batch:	1155291
Matrix:	Water	Analytical Method:	A2320B	Analyzed Date:	10/11/2023	Analytical Batch:	478854
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Alkalinity, Total (as CaCO ₃)	1.0	2.0	1.0		
Alkalinity, Bicarbonate (as CaCO ₃)	1.0	2.0	1.0		
Alkalinity, Carbonate (as CaCO ₃)	1.0	2.0	ND		
Alkalinity, Hydroxide (as CaCO ₃)	1.0	2.0	ND		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2310045	Prep Method:	3510_OCP	Prep Date:	10/06/23	Prep Batch:	1154983
Matrix:	Water	Analytical Method:	SW8081B	Analyzed Date:	10/6/2023	Analytical Batch:	478604
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
gamma-BHC (Lindane)	0.0019	0.020	ND	0.200	88.5	91.3	3.33	25 - 135	30	
gamma-BHC (Lindane)	0.010	0.020	ND	0.200	86.1	84.0	2.35	40 - 130	30	
Aldrin	0.00085	0.020	ND	0.200	105	104	0.477	25 - 140	30	
Dieldrin	0.031	0.020	ND	0.200	94.2	100	6.68	60 - 130	30	
Endrin	0.0034	0.020	ND	0.200	80.8	84.3	4.23	55 - 135	30	
4,4-DDT	0.0051	0.020	ND	0.200	96.7	100	4.06	45 - 140	30	
Tetrachloro-M-Xylene			ND	100				35 - 105		
Decachlorobiphenyl			ND	100				44 - 101		

Work Order:	2310045	Prep Method:	3510_BNA	Prep Date:	10/06/23	Prep Batch:	1155003
Matrix:	Water	Analytical Method:	SW8270C	Analyzed Date:	10/6/2023	Analytical Batch:	478590
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Phenol	1.5	20	ND	30.00	38.3	39.0	1.72	25 - 100	30	
2-Chlorophenol	2.5	20	ND	30.00	85.2	83.6	1.58	35 - 105	30	
1,4-Dichlorobenzene	1.6	10	ND	10.00	80.7	77.7	3.79	30 - 100	30	
N-nitroso-di-n-propylamine	2.7	20	ND	10.00	113	112	0.889	35 - 130	30	
1,2,4-Trichlorobenzene	1.5	10	ND	10.00	81.6	80.1	1.86	35 - 105	30	
4-Chloro-3-methylphenol	1.5	20	ND	30.00	89.1	90.3	1.49	30 - 110	30	
Acenaphthene	1.4	10	ND	10.00	87.7	85.1	3.01	45 - 110	30	
4-Nitrophenol	1.3	40	ND	30.00	46.2	49.1	5.59	25 - 115	30	
2,4-Dinitrotoluene	1.0	10	ND	10.00	99.7	101	1.30	50 - 120	30	
Pentachlorophenol	1.2	10	ND	30.00	116	127	8.77	40 - 135	30	
Pyrene	0.59	10	ND	10.00	99.2	94.5	4.85	50 - 130	30	
2-Fluorophenol (S)				11110	56.5	53.9		21 - 100		
Phenol-d6 (S)				11110	37.9	37.1		10 - 94		
Nitrobenzene-d5 (S)				5556	108	98.6		31 - 116		
2-Fluorobiphenyl (S)				5556	85.5	83.1		21.3 - 123		
2,4,6-Tribromophenol (S)				11110	98.8	103		29.6 - 130		
p-Terphenyl-d14 (S)				5556	105	96.5		50 - 150		

Work Order:	2310045	Prep Method:	245.1P	Prep Date:	10/06/23	Prep Batch:	1155017
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	10/10/2023	Analytical Batch:	478629
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Mercury	0.00013	0.00020	ND	0.015	106	106	0.000	85 - 115	20	



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2310045	Prep Method:	Herb-DI	Prep Date:	10/09/23	Prep Batch:	1155032
Matrix:	Water	Analytical Method:	SW8321B	Analyzed Date:	10/10/2023	Analytical Batch:	478908
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Bentazone	0.80	2.0	ND	15	58.2	54.2	6.99	30 - 170	30	
2,4-D	0.86	2.0	ND	15	125	97.3	25.2	30 - 170	30	
Picloram	0.72	2.0	ND	15	121	120	0.000	30 - 170	30	
2,4,5-TP (Silvex)	1.1	2.0	ND	15	74.8	72.2	3.64	30 - 170	30	
Atrazine d-5 (S)				150	69.1	70.6		30 - 170		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2310045	Prep Method:	524.2P	Prep Date:	10/09/23	Prep Batch:	1155056
Matrix:	Water	Analytical Method:	E524.2	Analyzed Date:	10/9/2023	Analytical Batch:	478616
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Dichlorodifluoromethane	0.0900	0.500	ND	2.38	99.5	93.2	6.54	80 - 120	30	
Chloromethane	0.100	0.500	ND	2.38	103	106	3.21	80 - 120	30	
Vinyl Chloride	0.134	0.500	ND	2.38	113	110	2.26	80 - 120	30	
Bromomethane	0.0870	0.500	0.17	2.38	86.5	84.8	1.96	80 - 120	30	
Chloroethane	0.0770	0.500	ND	2.38	116	114	1.10	80 - 120	30	
Trichlorofluoromethane	0.0490	0.500	ND	2.38	101	96.6	4.26	80 - 120	30	
1,1-Dichloroethene	0.0280	0.500	ND	2.38	105	110	4.69	80 - 120	30	
Freon 113	0.0560	0.500	ND	2.38	101	110	7.97	80 - 120	30	
Methylene Chloride	0.0540	0.500	0.060	2.38	100.	104	4.12	80 - 120	30	
trans-1,2-Dichloroethene	0.0510	0.500	ND	2.38	106	108	1.18	80 - 120	30	
MTBE	0.0950	0.500	ND	2.38	89.9	91.1	1.39	80 - 120	30	
tert-Butanol	0.605	2.00	ND	11.9	92.5	85.3	7.55	80 - 120	30	
Diisopropyl ether (DIPE)	0.0430	0.500	ND	2.38	93.7	92.8	0.901	80 - 120	30	
1,1-Dichloroethane	0.0330	0.500	ND	2.38	106	108	1.57	80 - 120	30	
ETBE	0.0630	0.500	ND	2.38	86.1	84.4	1.97	80 - 120	30	
cis-1,2-Dichloroethene	0.0450	0.500	ND	2.38	102	105	2.85	80 - 120	30	
2,2-Dichloropropane	0.0720	0.500	ND	2.38	76.4	84.4	9.92	80 - 120	30	S
Bromochloromethane	0.0520	0.500	ND	2.38	103	102	0.816	80 - 120	30	
Chloroform	0.0630	0.500	ND	2.38	105	99.5	4.94	80 - 120	30	
Carbon Tetrachloride	0.0750	0.500	ND	2.38	109	111	1.53	80 - 120	30	
1,1,1-Trichloroethane	0.0450	0.500	ND	2.38	107	106	0.394	80 - 120	30	
1,1-Dichloropropene	0.0770	0.500	ND	2.38	107	108	1.56	80 - 120	30	
Benzene	0.0440	0.500	ND	2.38	105	101	3.67	80 - 120	30	
TAME	0.243	0.500	ND	2.38	89.0	89.9	0.939	80 - 120	30	
1,2-Dichloroethane	0.0490	0.500	ND	2.38	104	107	2.39	80 - 120	30	
Trichloroethylene	0.0640	0.500	ND	2.38	104	106	2.00	80 - 120	30	
Dibromomethane	0.0770	0.500	ND	2.38	105	104	0.402	80 - 120	30	
1,2-Dichloropropane	0.0800	0.500	ND	2.38	109	113	3.40	80 - 120	30	
Bromodichloromethane	0.0510	0.500	ND	2.38	104	108	3.56	80 - 120	30	
cis-1,3-Dichloropropene	0.0600	0.500	ND	2.38	85.3	94.1	9.84	80 - 120	30	
Toluene	0.198	0.500	ND	2.38	105	101	3.67	80 - 120	30	
Tetrachloroethylene	0.0870	0.500	ND	2.38	112	120	6.52	80 - 120	30	
trans-1,3-Dichloropropene	0.0790	0.500	ND	2.38	77.3	83.2	7.33	80 - 120	30	
1,1,2-Trichloroethane	0.118	0.500	ND	2.38	111	103	7.44	80 - 120	30	
Dibromochloromethane	0.0990	0.500	ND	2.38	108	106	1.57	80 - 120	30	
1,3-Dichloropropane	0.0890	0.500	ND	2.38	105	108	2.77	80 - 120	30	
1,2-Dibromoethane	0.288	0.500	ND	2.38	104	102	1.22	80 - 120	30	
Chlorobenzene	0.0320	0.500	ND	2.38	107	105	1.58	80 - 120	30	
Ethyl Benzene	0.0330	0.500	ND	2.38	93.2	97.0	3.97	80 - 120	30	
1,1,1,2-Tetrachloroethane	0.336	0.500	ND	2.38	115	110	3.73	80 - 120	30	
m,p-Xylene	0.0350	1.00	ND	4.76	91.1	90.5	0.694	80 - 120	30	
o-Xylene	0.0300	0.500	ND	2.38	96.2	98.7	2.59	80 - 120	30	
Bromoform	0.0930	0.500	ND	2.38	101	108	6.81	80 - 120	30	
Styrene	0.0170	0.500	ND	2.38	81.1	81.9	1.03	80 - 120	30	
Isopropyl Benzene	0.0310	0.500	ND	2.38	96.2	94.1	2.21	80 - 120	30	
Bromobenzene	0.0480	0.500	ND	2.38	110	106	4.27	80 - 120	30	



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2310045	Prep Method:	524.2P	Prep Date:	10/09/23	Prep Batch:	1155056
Matrix:	Water	Analytical Method:	E524.2	Analyzed Date:	10/9/2023	Analytical Batch:	478616
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
n-Propylbenzene	0.0410	0.500	ND	2.38	94.1	97.0	3.08	80 - 120	30	
1,1,2,2-Tetrachloroethane	0.145	0.500	ND	2.38	112	113	0.746	80 - 120	30	
2-Chlorotoluene	0.0360	0.500	ND	2.38	101	102	1.24	80 - 120	30	
1,2,3-Trichloropropane	0.106	0.500	ND	2.38	103	118	13.7	80 - 120	30	
1,3,5-Trimethylbenzene	0.0300	0.500	ND	2.38	86.9	92.0	5.63	80 - 120	30	
4-Chlorotoluene	0.0380	0.500	ND	2.38	95.8	94.9	0.881	80 - 120	30	
tert-Butylbenzene	0.0430	0.500	ND	2.38	99.1	102	2.51	80 - 120	30	
1,2,4-Trimethylbenzene	0.0310	0.500	ND	2.38	87.4	86.9	0.482	80 - 120	30	
sec-Butyl Benzene	0.0360	0.500	ND	2.38	96.6	102	5.50	80 - 120	30	
1,3-Dichlorobenzene	0.0590	0.500	ND	2.38	97.4	98.7	1.28	80 - 120	30	
p-Isopropyltoluene	0.0410	0.500	ND	2.38	87.4	92.0	5.15	80 - 120	30	
1,4-Dichlorobenzene	0.0700	0.500	ND	2.38	100	104	3.70	80 - 120	30	
n-Butylbenzene	0.0480	0.500	ND	2.38	89.0	94.1	5.50	80 - 120	30	
1,2-Dichlorobenzene	0.0530	0.500	ND	2.38	105	98.7	6.58	80 - 120	30	
1,2-Dibromo-3-Chloropropane	0.205	2.00	ND	2.38	84.4	68.0	21.5	80 - 120	30	,S
1,2,4-Trichlorobenzene	0.204	2.00	ND	2.38	74.8	76.0	1.67	80 - 120	30	,S
Hexachlorobutadiene	0.135	2.00	ND	2.38	101	114	11.7	80 - 120	30	,
Naphthalene	0.177	2.00	ND	2.38	65.5	72.7	10.3	80 - 120	30	,S
1,2,3-Trichlorobenzene	0.231	2.00	ND	2.38	66.4	71.8	7.90	80 - 120	30	,S
(S) Dibromofluoromethane				2.27	103	103		70 - 130		,
(S) 4-Bromofluorobenzene				2.27	102	105		70 - 130		,

Work Order:	2310045	Prep Method:	200.8P	Prep Date:	10/10/23	Prep Batch:	1155074
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	10/17/2023	Analytical Batch:	478815
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony	0.45	1.0	ND	50	102	107	4.80	85 - 115	20	,
Arsenic	0.40	1.0	ND	50	99.9	106	6.03	85 - 115	20	,
Barium	0.80	2.0	ND	50	97.5	102	4.41	85 - 115	20	,
Beryllium	0.32	2.0	ND	50	98.2	106	7.83	85 - 115	20	,
Cadmium	0.43	1.0	ND	50	99.3	106	6.80	85 - 115	20	,
Chromium	0.42	1.0	ND	50	96.9	103	6.40	85 - 115	20	,
Cobalt	0.27	1.0	ND	50	97.2	105	7.52	85 - 115	20	,
Copper	0.25	1.0	ND	50	97.7	105	7.31	85 - 115	20	,
Lead	0.42	1.0	ND	50	99.2	105	5.49	85 - 115	20	,
Molybdenum	0.61	1.0	ND	50	97.1	104	6.97	85 - 115	20	,
Nickel	0.49	1.0	ND	50	97.9	104	6.13	85 - 115	20	,
Selenium	0.42	2.0	ND	50	104	109	4.70	85 - 115	20	,
Silver	0.21	0.50	ND	50	101	109	7.98	85 - 115	20	,
Thallium	1.3	2.0	ND	50	95.9	103	6.85	85 - 115	20	,
Vanadium	0.70	2.0	ND	50	97.2	103	6.18	85 - 115	20	,
Zinc	1.5	5.0	2.9	50	105	113	7.53	85 - 115	20	,



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2310045	Prep Method:	200.8P	Prep Date:	10/10/23	Prep Batch:	1155075
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	10/17/2023	Analytical Batch:	478816
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony (Dissolved)	0.019	0.50	ND	50	105	110	4.09	85 - 115	20	,
Arsenic (Dissolved)	0.19	0.50	ND	50	103	108	5.13	85 - 115	20	,
Barium (Dissolved)	0.066	0.50	ND	50	101	105	3.50	85 - 115	20	,
Beryllium (Dissolved)	0.018	0.50	ND	50	106	113	5.48	85 - 115	20	,
Cadmium (Dissolved)	0.033	0.50	ND	50	104	109	5.07	85 - 115	20	,
Chromium (Dissolved)	0.044	0.50	ND	50	101	106	4.64	85 - 115	20	,
Cobalt (Dissolved)	0.026	0.50	ND	50	102	105	3.10	85 - 115	20	,
Copper (Dissolved)	0.64	1.0	ND	50	101	105	3.50	85 - 115	20	,
Lead (Dissolved)	0.031	0.50	ND	50	105	107	1.89	85 - 115	20	,
Molybdenum (Dissolved)	0.018	0.50	ND	50	101	106	5.23	85 - 115	20	,
Nickel (Dissolved)	0.30	1.0	ND	50	100	105	4.69	85 - 115	20	,
Selenium (Dissolved)	0.034	0.50	ND	50	108	114	5.43	85 - 115	20	,
Silver (Dissolved)	0.012	0.50	ND	50	104	111	6.52	85 - 115	20	,
Thallium (Dissolved)	0.0040	0.50	ND	50	102	106	3.85	85 - 115	20	,
Vanadium (Dissolved)	0.020	0.50	ND	50	102	106	3.85	85 - 115	20	,
Zinc (Dissolved)	0.59	2.0	ND	50	110	114	3.40	85 - 115	20	,

Work Order:	2310045	Prep Method:	200.7P	Prep Date:	10/11/23	Prep Batch:	1155100
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	10/13/2023	Analytical Batch:	478723
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Aluminum	0.024	2.0	ND	10	107	105	1.89	80 - 120	20	,
Calcium	0.034	5.0	ND	10	105	103	1.92	80 - 120	20	,
Iron	0.048	0.30	ND	10	106	104	1.90	80 - 120	20	,
Magnesium	0.0050	5.0	ND	10	106	104	1.90	80 - 120	20	,
Manganese	0.0020	0.010	ND	1.0	106	104	1.90	80 - 120	20	,
Potassium	0.094	5.0	ND	10	107	105	1.89	80 - 120	20	,
Sodium	0.030	5.0	ND	10	106	104	1.90	80 - 120	20	,
Boron	0.010	0.050	ND	1.0	106	104	1.90	80 - 120	20	,
Silica	0.010	0.020	0.044	1.0	103	101	1.96	80 - 120	20	,

Work Order:	2310045	Prep Method:	200.7P	Prep Date:	10/11/23	Prep Batch:	1155101
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	10/13/2023	Analytical Batch:	478724
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Aluminium (Dissolved)	0.024	0.10	ND	10	108	107	0.930	80 - 120	20	,
Iron (Dissolved)	0.034	0.30	ND	10	107	105	1.89	80 - 120	20	,
Manganese (Dissolved)	0.0021	0.020	0.0030	1	107	105	1.89	80 - 120	20	,
Boron (Dissolved)	0.010	0.052	ND	1	107	106	0.939	80 - 120	20	,



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2310045	Prep Method:	245.1P	Prep Date:	10/11/23	Prep Batch:	1155103
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	10/12/2023	Analytical Batch:	478698
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Mercury (Dissolved)	0.00013	0.00020	ND	0.015	85.9	98.5	13.7	85 - 115	20	,

Work Order:	2310045	Prep Method:	CN-W-P	Prep Date:	10/11/23	Prep Batch:	1155203
Matrix:	Water	Analytical Method:	SM4500CN	Analyzed Date:	10/12/2023	Analytical Batch:	478755
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Total Cyanide	0.0086	0.030	ND	0.1	96.0	90.0	6.45	80 - 120	20	,

Work Order:	2310045	Prep Method:	7199/218.6-WP	Prep Date:	10/05/23	Prep Batch:	1155205
Matrix:	Water	Analytical Method:	SW7199	Analyzed Date:	10/5/2023	Analytical Batch:	478759
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Hexavalent Chromium	0.083	0.50	ND	10	100	99.0	1.01	90 - 110	20	,

Work Order:	2310045	Prep Method:	300.0P	Prep Date:	10/14/23	Prep Batch:	1155245
Matrix:	Water	Analytical Method:	E300.0	Analyzed Date:	10/14/2023	Analytical Batch:	478811
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Fluoride	0.010	0.20	ND	2.5	114	115	0.699	80 - 120	20	,
Chloride	0.031	0.20	ND	2.5	99.9	100	0.399	80 - 120	20	,
Bromide	0.014	0.20	ND	2.5	98.3	98.6	0.000	80 - 120	20	,
Sulfate	0.00050	0.50	ND	2.5	98.6	98.7	0.000	80 - 120	20	,

Work Order:	2310045	Prep Method:	314.0WP	Prep Date:	10/06/23	Prep Batch:	1155246
Matrix:	Water	Analytical Method:	E314.0	Analyzed Date:	10/7/2023	Analytical Batch:	478813
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Perchlorate	0.44	2.0	ND	50	97.4	97.4	0.000	80 - 120	20	,



MS/MSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2310045	Prep Method:	245.1P	Prep Date:	10/06/23	Prep Batch:	1155017
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	10/10/2023	Analytical Batch:	478629
Spiked Sample:	2310045-001A						
Units:	mg/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Mercury	0.000130	0.000200	ND	0.015	49.7	47.9	3.67	70 - 130	20	S

Work Order:	2310045	Prep Method:	CN-W-P	Prep Date:	10/11/23	Prep Batch:	1155203
Matrix:	Water	Analytical Method:	SM4500CN	Analyzed Date:	10/12/2023	Analytical Batch:	478755
Spiked Sample:	2310045-001D						
Units:	mg/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Total Cyanide	0.0086	0.030	ND	0.1	65.0	60.0	8.00	75 - 125	20	S

Work Order:	2310045	Prep Method:	7199/218.6-WP	Prep Date:	10/05/23	Prep Batch:	1155205
Matrix:	Water	Analytical Method:	SW7199	Analyzed Date:	10/6/2023	Analytical Batch:	478759
Spiked Sample:	2310045-001F						
Units:	ug/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Hexavalent Chromium	0.083	0.50	ND	10	103	101	1.96	85 - 115	20	

Work Order:	2310045	Prep Method:	314.0WP	Prep Date:	10/06/23	Prep Batch:	1155246
Matrix:	Water	Analytical Method:	E314.0	Analyzed Date:	10/7/2023	Analytical Batch:	478813
Spiked Sample:	2310045-001B						
Units:	ug/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Perchlorate	0.44	2.0	ND	50	90.6	89.4	1.33	75 - 125	20	



Duplicate QC Summary Report

Work Order:	2310045	Prep Method:	Alk-P	Prep Date:	10/11/2023	Prep Batch:	1155291
Matrix:		Analytical Method:	A2320B	Analyzed Date:	10/11/23	Analytical Batch:	478854
Units:						Lab Sample ID:	2310045-001B-DUP-1155291

Parameters	<u>MDL</u>	<u>PQL</u>	<u>Sample Result</u>	<u>Duplicate Result</u>	<u>% RPD</u>	
Alkalinity, Total (as CaCO3)	1.0	2.0	330	340	2.99	

Work Order:	2310045	Prep Method:	Ferrous-P	Prep Date:	10/5/2023	Prep Batch:	1155244
Matrix:		Analytical Method:	H8146	Analyzed Date:	10/05/23	Analytical Batch:	478810
Units:						Lab Sample ID:	2310045-001C-DUP-1155244

Parameters	<u>MDL</u>	<u>PQL</u>	<u>Sample Result</u>	<u>Duplicate Result</u>	<u>% RPD</u>	
Ferrous Iron	0.10	0.10	0.0200	ND	0.00	

Work Order:	2310045	Prep Method:	Turb-P	Prep Date:	10/6/2023	Prep Batch:	1155006
Matrix:		Analytical Method:	E180.1	Analyzed Date:	10/06/23	Analytical Batch:	478559
Units:						Lab Sample ID:	2310045-001F-DUP-1155006

Parameters	<u>MDL</u>	<u>PQL</u>	<u>Sample Result</u>	<u>Duplicate Result</u>	<u>% RPD</u>	
Turbidity	0.20	0.20	0.470	0.460	2.15	



Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit/Reporting Limit/Limit of Quantitation (PQL/RL/LOQ) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs/RLs/LODs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - mg/L and mg/Kg (equivalent to PPM - parts per million in liquid and solid), ug/L and ug/Kg (equivalent to PPB - parts per billion in liquid and solid), ug/m3 , mg/m3 , ppbv and ppmv (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), ug/Wipe (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS

B - Indicates when the analyte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H - Indicates that the recommended holding time for the analyte or compound has been exceeded
J - Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
ND - Not Detected at a concentration greater than the PQL/RL or, if reported to the MDL, at greater than the MDL.
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R - The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S - Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.



Sample Receipt Checklist

Client Name: Geocon Consultants, Inc.

Date and Time Received: 10/5/2023 3:20:00PM

Project Name: CALFIRE Parkfield FS

Received By: Claudia Moreno

Work Order No.: 2310045

Physically Logged By: Claudia Moreno

Checklist Completed By: Claudia Moreno

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present?	<u>Yes</u>
Chain of custody signed when relinquished and received?	<u>Yes</u>
Chain of custody agrees with sample labels?	<u>Yes</u>
Custody seals intact on sample bottles?	<u>Not Present</u>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	<u>Not Present</u>
Shipping Container/Cooler In Good Condition?	<u>Yes</u>
Samples in proper container/bottle?	<u>Yes</u>
Samples containers intact?	<u>Yes</u>
Sufficient sample volume for indicated test?	<u>Yes</u>

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	<u>Yes</u>	
Container/Temp Blank temperature in compliance?	<u>Yes</u>	Temperature: 5.0 °C
Water-VOA vials have zero headspace?	<u>Yes</u>	
Water-pH acceptable upon receipt?	<u>Yes</u>	
pH Checked by: Claudia Moreno	pH Adjusted by: IO	

Comments:



Login Summary Report

Client ID: TL5309 Geocon Consultants, Inc.
Project Name: CALFIRE Parkfield FS
Project # : S2120-05-05
Report Due Date: 10/19/2023

QC Level: II
TAT Requested: 10 Day:10
Date Received: 10/5/2023
Time Received: 3:20 pm

Comments:

Work Order # : **2310045**

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
2310045-001A	PPW-1	10/05/23 9:20	Water	11/19/23			Hardness_Calc Hg_245.1 Met_W_200.8CAM17 Met_200.7 Full	
Sample Note: Ag, Al, As, B, Ba, Be, Cd, Cr, Cu, Fe, Hg, Mn, Ni, Pb, Sb, Se, Ti, V, Zn, Ca, Mg, Na, K, Silica								
2310045-001B	PPW-1	10/05/23 9:20	Water	11/19/23			TDS_2540C Alkalinity_2320B Perchlorate_W_314.0 Anion_W_300.0	
Sample Note: 300.0 for Chloride, Sulfate, Bromide, Fluoride								
2310045-001C	PPW-1	10/05/23 9:20	Water	11/19/23				
2310045-001D	PPW-1	10/05/23 9:20	Water	11/19/23			Ferrous Iron_W	
2310045-001E	PPW-1	10/05/23 9:20	Water	11/19/23			CN_W_SM4500C,G Hg_W_245.1Dis Met_W_200.7+Cat-Di ss Met_W_200.8CAM17 Diss	
Sample Note: DISS LAB TO FILTER								
Ag, Al, As, B, Ba, Be, Cd, Cr, Cu, Fe, Hg, Mn, Ni, Pb, Sb, Se, Ti, V, Zn No line for B, report on Ti line								
2310045-001F	PPW-1	10/05/23 9:20	Water	11/19/23			Turb_W_180.1 Cr6_W_7199	
Sample Note:								
2310045-001G	PPW-1	10/05/23 9:20	Water	11/19/23			VOC_W_524.2	
Sample Note:								
2310045-001H	PPW-1	10/05/23 9:20	Water	11/19/23			Herb_W_8321B (M) SVOCs_W_8270C Pest_W_8081OCP	
Sample Note:								



CHAIN OF CUSTODY

LAB WORK NUMBER NO
2310045

Company Name: Geocon Consultants, Inc			☐ Env. ☒ Non Env.	Project #: S2120-05-05	PO#:
Address: 3160 Gold Valley Drive				Project Name: CALFIRE Parkfield FS	
City: Rancho Cordova	State: CA	Zip Code: 95742		Comments: Water from a drinking water supply well	
Telephone:		Cell: 669-294-3357		SAMPLER:	
REPORT TO: Lauren Short		BILL TO: Lauren Short		EMAIL: short@geoconinc.com	

TURNAROUND TIME:

☐ 2 - 8 Hours	☐ 2 Work Days	☐ 5 Work Days
☐ Noon - Nxt Day	☐ 3 Work Days	☐ 7 Work Days
☐ 1 Work Day	☐ 4 Work Days	☒ 10 Work Days

SAMPLE TYPE:

☒ Drinking Water	☐ Air
☐ Storm Water	☐ Wipe
☐ Waste Water	☐ Other
☒ Ground Water	
☐ Soil	☐ Product / Bulk

REPORT FORMAT:

☒ Level II - Std.

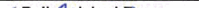
☐ DoD/DoE Level III

☐ DoD/DoE Level III

☒ Excel - EDD ☐ EDF

☐ Client Specific EDD

[illegible]

1	Relinquished By: 	Print: LE Sharr	Date: 10/5/23	Time: 1520	Received By: 	Print: Claudia M	Date: 10/5/23	Time: 15:20
2	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:

Cooler Temperature 5.4 °C ##

Samples Received on ice? Yes ☐ No ☐

Method of Shipment

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made.

QA-F-065, Rev 1.0, TLICD-959

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CALIFORNIA LABORATORY SERVICES

Committed. Responsive. Flexible.

November 08, 2023

CLS Work Order #: 23J0430

COC #:

Lauren Short
Geocon Consultants
3160 Gold Valley Dr. Suite #800
Rancho Cordova, CA 95742

Project Name: Parkfield FS

Enclosed are the results of analyses for samples received by the laboratory on 10/06/23 09:28. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

Daniel Johnson
Technical Director

CA SWRCB ELAP Accreditation/Registration number 1233

Report To:				Client Job Number S2120-05-05			ANALYSIS REQUESTED											
Geocon Consultants, Inc				Destination Laboratory														
3160 Gold Valley Dr. #800, Rancho Cordova, CA 95742				X CLS (916) 638-7301 3249 Fitzgerald Road Rancho Cordova, CA 95742 www.californialab.com ☐ OTHER			PRESERVATIVES MBAS Color and Odor Thiocarb Uranium by EPA 900 Gross Alpha and Beta EPA 900								GEOTRACKER			
Project Manager Lauren Short															EDF REPORT ☐ YES ☐ NO			
Project Name Parkfield FS															GLOBAL ID.			
Sampled By Austin Perry															FIELD CONDITIONS:			
Job Description From a new domestic water supply well																		
Site Location							TURNAROUND TIME IN DAYS				SPECIAL INSTRUCTIONS							
DATE	TIME	SAMPLE IDENTIFICATION	FIELD ID.	MATRIX	NO.	TYPE	1	2	3	5								
9/5/23	0920	PPW-1		GW	5	Amber, Blg	x	x	x	x	4					x	Whenever uranium results are available All results in one report.	
																	INVOICE TO: Short@geocon.com	
																	PO#	
																	QUOTE#	
SUSPECTED CONSTITUENTS							SAMPLE RETENTION TIME				PRESERVATIVES (1) HCL (3)= COLD (2) HNO ₃ (4)= H ₂ SO ₄)							
RELINQUISHED BY (Signature)		PRINT NAME/COMPANY			DATE/TIME		RECEIVED BY (Signature)				PRINT NAME/COMPANY							
[Signature]		Austin Perry / Geocon			9/16/23 0928													
RECEIVED AT LAB BY: [Signature]					DATE/TIME: 9/16/23 928		CONDITIONS/COMMENTS: 0.7/0.3											
SHIPPED BY:		☐ FED EX ☐ UPS ☐ OTHER															AIR BILL #	

APPENDIX





MONTEREY COUNTY HEALTH DEPARTMENT

Consolidated Chemistry Laboratory

1270 Natividad Road Salinas, CA 93906

Phone (831)755-4516 Fax (831) 755-4652

ELAP Certification Number: 1395

Lauren Short, PG
3160 Gold Valley Drive, Suite 800
Rancho Cordova, CA 95742

Wednesday, August 16, 2023

Lab Number: AC73459

Client code: OTHER

Sample Site: CALFIRE PARKFIELD STATION - 70578 PARKFIELD COALING Collection Date/Time: 8/10/2023 12:45
Source Code : Submittal Date/Time: 8/10/2023 15:12
Other ID: CFPS Sample Collector: SHORT L

Sample Comments: Special Drinking Water. Receiving temperature 3.8 °C.

Analyte	Method	Unit	Result	DLR	MCL	PQL	Analysis Start Date/Time
Orthophosphate as P	SM4500 P E-2	mg/L	0.08	N/A		0.05	8/11/2023 15:00
Total Dissolved Solids (TDS SM2540 C-201		mg/L	985	N/A	500**	5	8/10/2023 16:05

Report approved by:

A handwritten signature in cursive script that reads "Donna Ferguson".

Donna Ferguson, Ph.D, P.H.M
Laboratory Director

mg/L : Milligrams per liter (=ppm)

PQL : Practical Quantitation Limit

DLR : Detection Limit for Reporting

ug/L : Micrograms per liter (=ppb)

MCL : Maximum Contaminant Level

ND : Not Detected

N/A : Not Applicable

* : Primary Standards

** : Secondary Standards

*** : Action Level



Geocon Consultants, Inc.
3160 Gold Valley Drive, Suite 800
Rancho Cordova, California 95742
RE: CALFIRE Parkfield FS

Work Order No.: 2308079

Dear Lauren Short:

Torrent Laboratory, Inc. received 1 sample(s) on August 10, 2023 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

A handwritten signature in blue ink, appearing to read "Patti L. Sandrock", is written over a light blue horizontal line.

Patti L Sandrock
QA Officer

August 21, 2023

Date



Date: 8/21/2023

Client: Geocon Consultants, Inc.

Project: CALFIRE Parkfield FS

Work Order: 2308079

CASE NARRATIVE

Unless otherwise indicated in the following narrative, no issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Laboratory, Inc.



Sample Result Summary

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date Received: 08/10/23

Date Reported: 08/21/23

CFPS

2308079-001

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Alkalinity, Total (as CaCO ₃)	A2320B	1	1.0	2.0	360	mg/L
Alkalinity, Bicarbonate (as CaCO ₃)	A2320B	1	1.0	2.0	360	mg/L
Calcium	E200.7	1	0.048	0.20	52	mg/L
Magnesium	E200.7	1	0.0048	20	71	mg/L
Sodium	E200.7	1	0.25	2.0	160	mg/L
Boron	E200.7	1	0.010	0.050	2.5	mg/L
Boron (Dissolved)	E200.7	1	0.010	0.050	2.5	mg/L
Arsenic	E200.8	1	0.00040	0.0010	0.00187	mg/L
Barium	E200.8	1	0.00080	0.0020	0.0303	mg/L
Chromium	E200.8	1	0.00042	0.0010	0.00216	mg/L
Copper	E200.8	1	0.00025	0.0010	0.00153	mg/L
Nickel	E200.8	1	0.00049	0.0010	0.00225	mg/L
Selenium	E200.8	1	0.00065	0.0020	0.00234	mg/L
Vanadium	E200.8	1	0.00070	0.0020	0.00377	mg/L
Zinc	E200.8	1	0.0015	0.0025	0.277	mg/L
Arsenic (Dissolved)	E200.8	1	0.00040	0.0010	0.0019	mg/L
Barium (Dissolved)	E200.8	1	0.00080	0.0020	0.030	mg/L
Chromium (Dissolved)	E200.8	1	0.00042	0.0010	0.0019	mg/L
Copper (Dissolved)	E200.8	1	0.00025	0.0010	0.0015	mg/L
Nickel (Dissolved)	E200.8	1	0.00049	0.0010	0.0026	mg/L
Selenium (Dissolved)	E200.8	1	0.00065	0.0020	0.0025	mg/L
Vanadium (Dissolved)	E200.8	1	0.00070	0.0020	0.0037	mg/L
Zinc (Dissolved)	E200.8	1	0.0015	0.0025	0.27	mg/L
Fluoride	E300.0	1	0.095	0.200	0.382	mg/L
Chloride	E300.0	50	0.80	10.0	175	mg/L
Sulfate	E300.0	50	15	25.0	201	mg/L
Calcium Hardness (as CaCO ₃)	SM2340B	1	0.083	1.0	130	mg/L
Total Hardness (as CaCO ₃)	SM2340B	1	0.10	1.0	413	mg/L



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm

Date Reported: 08/21/23

Client Sample ID:	CFPS	Lab Sample ID:	2308079-001A
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 12:45		
SDG:			

Prep Method:	HARD-P	Prep Batch Date/Time:	8/15/23	5:25:00PM
Prep Batch ID:	1153663	Prep Analyst:	TNGO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Calcium Hardness (as CaCO ₃)	SM2340B	1	0.083	1.0	130		mg/L	08/15/23	21:01	AT	477270
Total Hardness (as CaCO ₃)	SM2340B	1	0.10	1.0	413		mg/L	08/15/23	21:01	AT	477270



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm
Date Reported: 08/21/23

Client Sample ID:	CFPS	Lab Sample ID:	2308079-001A
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 12:45		
SDG:			

Prep Method:	245.1P	Prep Batch Date/Time:	8/15/23	5:10:00PM
Prep Batch ID:	1153660	Prep Analyst:	TNGO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury	E245.1	1	0.00010	0.00020	ND		mg/L	08/16/23	11:26	BJAY	477257



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm
Date Reported: 08/21/23

Client Sample ID: CFPS
Project Name/Location: CALFIRE Parkfield FS
Project Number: S2120-05-05
Date/Time Sampled: 08/10/23 / 12:45
SDG:

Lab Sample ID: 2308079-001A
Sample Matrix: Groundwater

Prep Method: 200.7P
Prep Batch ID: 1153662

Prep Batch Date/Time: 8/15/23 5:10:00PM
Prep Analyst: TNGO

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aluminum	E200.7	1	0.024	0.10	ND		mg/L	08/15/23	21:18	AT	477271
Calcium	E200.7	1	0.048	0.20	52		mg/L	08/15/23	21:18	AT	477271
Iron	E200.7	1	0.034	0.30	ND		mg/L	08/15/23	21:18	AT	477271
Magnesium	E200.7	1	0.0048	20	71		mg/L	08/15/23	21:18	AT	477271
Manganese	E200.7	1	0.0021	0.020	ND		mg/L	08/15/23	21:18	AT	477271
Potassium	E200.7	1	0.094	20	ND		mg/L	08/15/23	21:18	AT	477271
Sodium	E200.7	1	0.25	2.0	160		mg/L	08/15/23	21:18	AT	477271
Boron	E200.7	1	0.010	0.050	2.5		mg/L	08/15/23	21:18	AT	477271



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm
Date Reported: 08/21/23

Client Sample ID:	CFPS	Lab Sample ID:	2308079-001A
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 12:45		
SDG:			

Prep Method: 200.8P	Prep Batch Date/Time: 8/14/23 3:35:00PM
Prep Batch ID: 1153635	Prep Analyst: BJAY

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony	E200.8	1	0.00045	0.0010	ND		mg/L	08/15/23	16:44	ERR	477237
Arsenic	E200.8	1	0.00040	0.0010	0.00187		mg/L	08/15/23	16:44	ERR	477237
Barium	E200.8	1	0.00080	0.0020	0.0303		mg/L	08/15/23	16:44	ERR	477237
Beryllium	E200.8	1	0.00056	0.0020	ND		mg/L	08/15/23	16:44	ERR	477237
Cadmium	E200.8	1	0.00025	0.0010	ND		mg/L	08/15/23	16:44	ERR	477237
Chromium	E200.8	1	0.00042	0.0010	0.00216		mg/L	08/15/23	16:44	ERR	477237
Copper	E200.8	1	0.00025	0.0010	0.00153		mg/L	08/15/23	16:44	ERR	477237
Lead	E200.8	1	0.00032	0.0010	ND		mg/L	08/15/23	16:44	ERR	477237
Nickel	E200.8	1	0.00049	0.0010	0.00225		mg/L	08/15/23	16:44	ERR	477237
Selenium	E200.8	1	0.00065	0.0020	0.00234		mg/L	08/15/23	16:44	ERR	477237
Silver	E200.8	1	0.00021	0.00050	ND		mg/L	08/15/23	16:44	ERR	477237
Thallium	E200.8	1	0.0013	0.0020	ND		mg/L	08/15/23	16:44	ERR	477237
Vanadium	E200.8	1	0.00070	0.0020	0.00377		mg/L	08/15/23	16:44	ERR	477237
Zinc	E200.8	1	0.0015	0.0025	0.277		mg/L	08/15/23	16:44	ERR	477237



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm

Date Reported: 08/21/23

Client Sample ID:	CFPS	Lab Sample ID:	2308079-001B
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 12:45		
SDG:			

Prep Method: Alk-P	Prep Batch Date/Time: 8/16/23	2:00:00PM
Prep Batch ID: 1153788	Prep Analyst: BJAY	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Alkalinity, Total (as CaCO ₃)	A2320B	1	1.0	2.0	360		mg/L	08/16/23	14:00	BJAY	477367
Alkalinity, Bicarbonate (as CaCO ₃)	A2320B	1	1.0	2.0	360		mg/L	08/16/23	14:00	BJAY	477367
Alkalinity, Carbonate (as CaCO ₃)	A2320B	1	1.0	2.0	ND		mg/L	08/16/23	14:00	BJAY	477367
Alkalinity, Hydroxide (as CaCO ₃)	A2320B	1	1.0	2.0	ND		mg/L	08/16/23	14:00	BJAY	477367



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm

Date Reported: 08/21/23

Client Sample ID:	CFPS	Lab Sample ID:	2308079-001B
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 12:45		
SDG:			

Prep Method:	300.0P	Prep Batch Date/Time:	8/17/23	6:00:00PM
Prep Batch ID:	1153759	Prep Analyst:	PHUFANO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Fluoride	E300.0	1	0.095	0.200	0.382		mg/L	08/18/23	18:06	PH	477342
Bromide	E300.0	1	0.42	1.00	ND		mg/L	08/18/23	18:06	PH	477342



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm
Date Reported: 08/21/23

Client Sample ID:	CFPS	Lab Sample ID:	2308079-001B
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 12:45		
SDG:			

Prep Method:	300.0P	Prep Batch Date/Time:	8/17/23	6:00:00PM
Prep Batch ID:	1153759	Prep Analyst:	PHUFANO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Chloride	E300.0	50	0.80	10.0	175		mg/L	08/18/23	18:49	PH	477342
Sulfate	E300.0	50	15	25.0	201		mg/L	08/18/23	18:49	PH	477342



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm

Date Reported: 08/21/23

Client Sample ID:	CFPS	Lab Sample ID:	2308079-001C
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 12:45		
SDG:			

Prep Method:	245.1P	Prep Batch Date/Time:	8/15/23	5:50:00PM
Prep Batch ID:	1153661	Prep Analyst:	TNGO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury (Dissolved)	E245.1	1	0.00010	0.00020	ND		mg/L	08/16/23	11:10	BJAY	477258



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm
Date Reported: 08/21/23

Client Sample ID:	CFPS	Lab Sample ID:	2308079-001C
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 12:45		
SDG:			

Prep Method:	200.7P	Prep Batch Date/Time:	8/15/23	5:45:00PM
Prep Batch ID:	1153665	Prep Analyst:	TNGO	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Aluminium (Dissolved)	E200.7	1	0.024	0.10	ND		mg/L	08/15/23	21:27	AT	477274
Iron (Dissolved)	E200.7	1	0.034	0.30	ND		mg/L	08/15/23	21:27	AT	477274
Manganese (Dissolved)	E200.7	1	0.0021	0.020	ND		mg/L	08/15/23	21:27	AT	477274
Boron (Dissolved)	E200.7	1	0.010	0.050	2.5		mg/L	08/15/23	21:27	AT	477274



SAMPLE RESULTS

Report prepared for: Lauren Short
Geocon Consultants, Inc.

Date/Time Received: 08/10/23, 4:53 pm

Date Reported: 08/21/23

Client Sample ID:	CFPS	Lab Sample ID:	2308079-001C
Project Name/Location:	CALFIRE Parkfield FS	Sample Matrix:	Groundwater
Project Number:	S2120-05-05		
Date/Time Sampled:	08/10/23 / 12:45		
SDG:			

Prep Method:	200.8P	Prep Batch Date/Time:	8/14/23	3:35:00PM
Prep Batch ID:	1153634	Prep Analyst:	BJAY	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony (Dissolved)	E200.8	1	0.00045	0.0010	ND		mg/L	08/15/23	15:56	ERR	477235
Arsenic (Dissolved)	E200.8	1	0.00040	0.0010	0.0019		mg/L	08/15/23	15:56	ERR	477235
Barium (Dissolved)	E200.8	1	0.00080	0.0020	0.030		mg/L	08/15/23	15:56	ERR	477235
Beryllium (Dissolved)	E200.8	1	0.00056	0.0020	ND		mg/L	08/15/23	15:56	ERR	477235
Cadmium (Dissolved)	E200.8	1	0.00025	0.0010	ND		mg/L	08/15/23	15:56	ERR	477235
Chromium (Dissolved)	E200.8	1	0.00042	0.0010	0.0019		mg/L	08/15/23	15:56	ERR	477235
Copper (Dissolved)	E200.8	1	0.00025	0.0010	0.0015		mg/L	08/15/23	15:56	ERR	477235
Lead (Dissolved)	E200.8	1	0.00032	0.0010	ND		mg/L	08/15/23	15:56	ERR	477235
Nickel (Dissolved)	E200.8	1	0.00049	0.0010	0.0026		mg/L	08/15/23	15:56	ERR	477235
Selenium (Dissolved)	E200.8	1	0.00065	0.0020	0.0025		mg/L	08/15/23	15:56	ERR	477235
Silver (Dissolved)	E200.8	1	0.00021	0.00050	ND		mg/L	08/15/23	15:56	ERR	477235
Thallium (Dissolved)	E200.8	1	0.0013	0.0020	ND		mg/L	08/15/23	15:56	ERR	477235
Vanadium (Dissolved)	E200.8	1	0.00070	0.0020	0.0037		mg/L	08/15/23	15:56	ERR	477235
Zinc (Dissolved)	E200.8	1	0.0015	0.0025	0.27		mg/L	08/15/23	15:56	ERR	477235



MB Summary Report

Work Order:	2308079	Prep Method:	200.8P	Prep Date:	08/14/23	Prep Batch:	1153634
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/15/2023	Analytical Batch:	477235
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Antimony (Dissolved)	0.45	1.0	ND		
Arsenic (Dissolved)	0.40	1.0	ND		
Barium (Dissolved)	0.80	2.0	ND		
Beryllium (Dissolved)	0.56	2.0	ND		
Cadmium (Dissolved)	0.25	1.0	ND		
Chromium (Dissolved)	0.42	1.0	ND		
Copper (Dissolved)	0.25	1.0	ND		
Lead (Dissolved)	0.32	1.0	ND		
Nickel (Dissolved)	0.49	1.0	ND		
Selenium (Dissolved)	0.65	2.0	ND		
Silver (Dissolved)	0.21	0.50	ND		
Thallium (Dissolved)	1.3	2.0	ND		
Vanadium (Dissolved)	0.70	2.0	ND		
Zinc (Dissolved)	1.5	2.5	ND		

Work Order:	2308079	Prep Method:	200.8P	Prep Date:	08/14/23	Prep Batch:	1153635
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/15/2023	Analytical Batch:	477237
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Antimony	0.45	1.0	ND		
Arsenic	0.40	1.0	ND		
Barium	0.80	2.0	ND		
Beryllium	0.56	2.0	ND		
Cadmium	0.25	1.0	ND		
Chromium	0.42	1.0	ND		
Copper	0.25	1.0	ND		
Lead	0.32	1.0	ND		
Nickel	0.49	1.0	ND		
Selenium	0.65	2.0	ND		
Silver	0.21	0.50	ND		
Thallium	1.3	2.0	ND		
Vanadium	0.70	2.0	ND		
Zinc	1.5	2.5	ND		



MB Summary Report

Work Order:	2308079	Prep Method:	245.1P	Prep Date:	08/15/23	Prep Batch:	1153660
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	8/16/2023	Analytical Batch:	477257
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	

Mercury 0.00010 0.00020 ND

Work Order:	2308079	Prep Method:	245.1P	Prep Date:	08/15/23	Prep Batch:	1153661
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	8/16/2023	Analytical Batch:	477258
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	

Mercury (Dissolved) 0.00010 0.00020 ND

Work Order:	2308079	Prep Method:	200.7P	Prep Date:	08/15/23	Prep Batch:	1153662
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	8/15/2023	Analytical Batch:	477271
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	

Aluminum	0.024	0.10	0.034	
Calcium	0.048	0.20	0.11	
Iron	0.034	0.30	ND	
Magnesium	0.0048	20	0.015	
Manganese	0.0021	0.020	0.0037	
Potassium	0.094	20	ND	
Sodium	0.25	2.0	ND	
Boron	0.010	0.050	0.014	

Work Order:	2308079	Prep Method:	HARD-P	Prep Date:	08/15/23	Prep Batch:	1153663
Matrix:	Water	Analytical Method:	SM2340B	Analyzed Date:	8/15/2023	Analytical Batch:	477270
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	

Total Hardness (as CaCO3)	0.20	1.0	ND	
Calcium Hardness (as CaCO3)	0.083	1.0	ND	



MB Summary Report

Work Order:	2308079	Prep Method:	200.7P	Prep Date:	08/15/23	Prep Batch:	1153665
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	8/15/2023	Analytical Batch:	477274
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Aluminium (Dissolved)	0.024	2.0	ND		
Iron (Dissolved)	0.034	0.30	0.15		
Manganese (Dissolved)	0.0021	0.050	ND		
Boron (Dissolved)	0.010	0.050	ND		

Work Order:	2308079	Prep Method:	300.0P	Prep Date:	08/17/23	Prep Batch:	1153759
Matrix:	Water	Analytical Method:	E300.0	Analyzed Date:	8/17/2023	Analytical Batch:	477342
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Fluoride	0.095	0.20	ND		
Chloride	0.016	0.20	ND		
Nitrate as N	0.16	0.25	ND		
Bromide	0.42	1.0	ND		
Nitrite as N	0.045	0.20	ND		
Sulfate	0.31	0.50	ND		

Work Order:	2308079	Prep Method:	Alk-P	Prep Date:	08/16/23	Prep Batch:	1153788
Matrix:	Water	Analytical Method:	A2320B	Analyzed Date:	8/16/2023	Analytical Batch:	477367
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Alkalinity, Total (as CaCO ₃)	1.0	2.0	1.0		
Alkalinity, Bicarbonate (as CaCO ₃)	1.0	2.0	1.0		
Alkalinity, Carbonate (as CaCO ₃)	1.0	2.0	ND		
Alkalinity, Hydroxide (as CaCO ₃)	1.0	2.0	ND		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308079	Prep Method:	200.8P	Prep Date:	08/14/23	Prep Batch:	1153634
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/15/2023	Analytical Batch:	477235
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony (Dissolved)	0.019	0.50	ND	50	101	102	0.197	85 - 115	20	
Arsenic (Dissolved)	0.19	0.50	ND	50	97.5	95.8	1.86	85 - 115	20	
Barium (Dissolved)	0.066	0.50	ND	50	99.9	99.3	0.803	85 - 115	20	
Beryllium (Dissolved)	0.018	0.50	ND	50	99.9	104	3.73	85 - 115	20	
Cadmium (Dissolved)	0.033	0.50	ND	50	98.6	97.9	0.815	85 - 115	20	
Chromium (Dissolved)	0.044	0.50	ND	50	100	103	2.94	85 - 115	20	
Copper (Dissolved)	0.64	1.0	ND	50	96.8	94.7	2.30	85 - 115	20	
Lead (Dissolved)	0.031	0.50	ND	50	100.	103	2.57	85 - 115	20	
Nickel (Dissolved)	0.30	1.0	ND	50	99.3	96.7	2.86	85 - 115	20	
Selenium (Dissolved)	0.034	0.50	ND	50	96.9	95.8	1.04	85 - 115	20	
Silver (Dissolved)	0.012	0.50	ND	50	101	100	0.795	85 - 115	20	
Thallium (Dissolved)	0.0040	0.50	ND	50	99.8	99.5	0.402	85 - 115	20	
Vanadium (Dissolved)	0.020	0.50	ND	50	100	101	1.19	85 - 115	20	
Zinc (Dissolved)	0.59	2.0	ND	50	105	101	3.87	85 - 115	20	

Work Order:	2308079	Prep Method:	200.8P	Prep Date:	08/14/23	Prep Batch:	1153635
Matrix:	Water	Analytical Method:	E200.8	Analyzed Date:	8/15/2023	Analytical Batch:	477237
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony	0.45	1.0		50	104	103	1.16	85 - 115	20	
Arsenic	0.40	1.0		50	100	99.2	1.00	85 - 115	20	
Barium	0.80	2.0		50	102	100	1.39	85 - 115	20	
Beryllium	0.32	2.0		50	103	102	1.17	85 - 115	20	
Cadmium	0.43	1.0		50	101	99.3	1.40	85 - 115	20	
Chromium	0.42	1.0		50	104	104	0.000	85 - 115	20	
Copper	0.25	1.0		50	99.0	97.7	1.42	85 - 115	20	
Lead	0.42	1.0		50	101	101	0.198	85 - 115	20	
Nickel	0.49	1.0		50	101	99.7	1.40	85 - 115	20	
Selenium	0.42	2.0		50	100	99.2	0.803	85 - 115	20	
Silver	0.21	0.50		50	103	102	0.978	85 - 115	20	
Thallium	1.3	2.0		50	101	100	0.795	85 - 115	20	
Vanadium	0.70	2.0		50	104	103	0.775	85 - 115	20	
Zinc	1.5	5.0		50	103	102	0.391	85 - 115	20	

Work Order:	2308079	Prep Method:	245.1P	Prep Date:	08/15/23	Prep Batch:	1153660
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	8/16/2023	Analytical Batch:	477257
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Mercury	0.00013	0.00020	ND	0.015	92.6	91.3	1.45	85 - 115	20	



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308079	Prep Method:	245.1P	Prep Date:	08/15/23	Prep Batch:	1153661
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	8/16/2023	Analytical Batch:	477258
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Mercury (Dissolved)	0.00013	0.00020	ND	0.015	91.5	89.1	2.21	85 - 115	20	

Work Order:	2308079	Prep Method:	200.7P	Prep Date:	08/15/23	Prep Batch:	1153662
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	8/15/2023	Analytical Batch:	477271
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Aluminum	0.024	2.0	0.034	10	96.1	96.9	0.829	80 - 120	20	
Calcium	0.034	5.0	0.11	10	97.0	97.7	0.719	80 - 120	20	
Iron	0.048	0.30	ND	10	96.0	97.1	1.14	80 - 120	20	
Magnesium	0.0050	5.0	0.015	10	96.2	97.3	1.14	80 - 120	20	
Manganese	0.0020	0.010	0.0037	1.0	96.6	98.5	1.95	80 - 120	20	
Potassium	0.094	5.0	ND	10	96.1	97.6	1.55	80 - 120	20	
Sodium	0.030	5.0	ND	10	97.5	98.5	1.02	80 - 120	20	
Boron	0.010	0.050	0.014	1.0	96.9	97.4	0.515	80 - 120	20	

Work Order:	2308079	Prep Method:	200.7P	Prep Date:	08/15/23	Prep Batch:	1153665
Matrix:	Water	Analytical Method:	E200.7	Analyzed Date:	8/15/2023	Analytical Batch:	477274
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Aluminium (Dissolved)	0.024	0.10	ND	10	96.7	94.4	2.41	80 - 120	20	
Iron (Dissolved)	0.034	0.30	0.15	10	98.2	95.9	2.37	80 - 120	20	
Manganese (Dissolved)	0.0021	0.020	ND	1	97.3	94.9	2.50	80 - 120	20	
Boron (Dissolved)	0.010	0.052	ND	1	97.0	94.8	2.30	80 - 120	20	

Work Order:	2308079	Prep Method:	300.0P	Prep Date:	08/17/23	Prep Batch:	1153759
Matrix:	Water	Analytical Method:	E300.0	Analyzed Date:	8/17/2023	Analytical Batch:	477342
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Fluoride	0.010	0.20	ND	2.5	113	113	0.354	80 - 120	20	
Chloride	0.031	0.20	ND	2.5	99.6	99.2	0.402	80 - 120	20	
Nitrate as N	0.0070	0.10	ND	2.5	100	100	0.399	80 - 120	20	
Bromide	0.014	0.20	ND	2.5	98.7	98.4	0.406	80 - 120	20	
Nitrite as N	0.0090	0.10	ND	2.5	111	110	0.363	80 - 120	20	
Sulfate	0.00050	0.50	ND	2.5	99.2	98.4	0.810	80 - 120	20	



MS/MSD Summary Report

Raw values are used in quality control assessment.

Work Order:	2308079	Prep Method:	245.1P	Prep Date:	08/15/23	Prep Batch:	1153660
Matrix:	Water	Analytical Method:	E245.1	Analyzed Date:	8/16/2023	Analytical Batch:	477257
Spiked Sample:	2308079-001A						
Units:	mg/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Mercury	0.000130	0.000200	ND	0.015	73.7	73.5	0.000	70 - 130	20	



Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit/Reporting Limit/Limit of Quantitation (PQL/RL/LOQ) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs/RLs/LODs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - mg/L and mg/Kg (equivalent to PPM - parts per million in liquid and solid), ug/L and ug/Kg (equivalent to PPB - parts per billion in liquid and solid), ug/m3 , mg/m3 , ppbv and ppmv (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), ug/Wipe (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS

B - Indicates when the analyte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H - Indicates that the recommended holding time for the analyte or compound has been exceeded
J - Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
ND - Not Detected at a concentration greater than the PQL/RL or, if reported to the MDL, at greater than the MDL.
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R - The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S - Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.



Sample Receipt Checklist

Client Name: Geocon Consultants, Inc.

Date and Time Received: 8/10/2023 4:53:00PM

Project Name: CALFIRE Parkfield FS

Received By: TT

Work Order No.: 2308079

Physically Logged By: Lorna Imbat

Checklist Completed By: Lorna Imbat

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present?	<u>Yes</u>
Chain of custody signed when relinquished and received?	<u>Yes</u>
Chain of custody agrees with sample labels?	<u>Yes</u>
Custody seals intact on sample bottles?	<u>Not Present</u>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	<u>Not Present</u>
Shipping Container/Cooler In Good Condition?	<u>Yes</u>
Samples in proper container/bottle?	<u>Yes</u>
Samples containers intact?	<u>Yes</u>
Sufficient sample volume for indicated test?	<u>Yes</u>

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	<u>Yes</u>	
Container/Temp Blank temperature in compliance?	<u>Yes</u>	Temperature: 1.0 °C
Water-VOA vials have zero headspace?	<u>No VOA vials submitted</u>	
Water-pH acceptable upon receipt?	<u>Yes</u>	
pH Checked by: <u>Lorna Imbat</u>	pH Adjusted by: <u>N/A</u>	

Comments:



Login Summary Report

Client ID: TL5309 Geocon Consultants, Inc.

QC Level: II

Project Name: CALFIRE Parkfield FS

TAT Requested: 7 Day:7

Project # : S2120-05-05

Date Received: 8/10/2023

Report Due Date: 8/21/2023

Time Received: 4:53 pm

Comments:

Work Order # : 2308079

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
2308079-001A	CFPS	08/10/23 12:45	Water	09/24/23			Hardness_Calc Hg_245.1 Met_200.7 Full Met_W_200.8CAM17	
Sample Note: 200.7 for Ca, Mg, Mn, Na, K, Fe, Al, B. 200.8 for CAM17 minus Mo, Co								
2308079-001B	CFPS	08/10/23 12:45	Water	09/24/23			Anion_W_300.0 Alkalinity_2320B	
Sample Note: Anions for Chloride, Sulfate, Bromide, Fluoride								
2308079-001C	CFPS	08/10/23 12:45	Water	09/24/23			Hg_W_245.1Dis Met_W_200.8CAM17 Diss Met_W_200.7+Cat-Di ss	
Sample Note: Lab filter for dissolved metals. 200.8 for CAM17 minus Co, Mo. 200.7 for B, Fe, Mn, Al Report B on W line								



483 Sinclair Frontage Road
Milpitas, CA 95035
Phone: 408.263.5258
FAX: 408.263.8293
www.torrentlab.com

CHAIN OF CUSTODY

LAB WORK ORDER NO

2308079

Reset

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

Company Name: Geocon Consultants, Inc		☐ Env. ☒ Non Env.	Project #: S2120-05-05	PO#:
Address: 3160 Gold Valley Drive			Project Name: CALFIRE Parkfield FS	
City: Rancho Cordova	State: CA	Zip Code: 95742	Comments: Water from a proposed drinking water supply well	
Telephone:		Cell: 669-294-3357	SAMPLER: Lauren Short	
REPORT TO: Lauren Short		BILL TO: Lauren Short	EMAIL: short@geoconinc.com	

TURNAROUND TIME:

- ☐ 2-8 Hours ☐ 2 Work Days ☐ 5 Work Days
☐ Noon - Nxt Day ☐ 3 Work Days ☒ 7 Work Days
☐ 1 Work Day ☐ 4 Work Days ☐ 10 Work Days

SAMPLE TYPE:

- ☒ Drinking Water
☐ Storm Water
☐ Waste Water
☒ Ground Water
☐ Soil ☐ Product / Bulk

REPORT FORMAT:

- ☒ Level II - Std.
☐ DoD/DoE Level III
☐ DoD/DoE Level III
☒ Excel - EDD ☐ EDF
☐ Client Specific EDD

Calcium, Magnesium,
Sodium, Potassium,
Chloride, and Sulfate by
EPA 200 & 300
Drinking Water Metals
by EPA 200
Bromide, Fluoride
by EPA 200.3
total alkalinity,
hardness, CaCO₃
bicarbonate

ANALYSIS
REQUESTED

LAB ID	CANISTER I.D.	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	Calcium, Magnesium, Sodium, Potassium, Chloride, and Sulfate by EPA 200 & 300	Drinking Water Metals by EPA 200	Bromide, Fluoride by EPA 200.3	total alkalinity, hardness, CaCO ₃ bicarbonate	REMARKS
		CFPS	9/10/23 1245	GW	3	poly	x	x	x	x	Drinking water metals include:
											Ag, Al, As, B, Ba, Be, Cd, Cr, Cu, Fe, Hg, Mn, Ni, Pb
											Sb, Se, Ti, V, Zn
											Total
											Dissolved metals
											Priority: sulfate, mercury, arsenic
											Lab
		note:									filter
			70578	Parkfield	cooling	Rd	Parkfield, CA				
			existing	fire	station	- hose					

1 Relinquished By: <i>[Signature]</i>	Print: <i>LE Short</i>	Date: <i>9/10/23</i>	Time: <i>1645</i>	Received By: <i>[Signature]</i>	Print: <i>TAMMY THACH</i>	Date: <i>08/10/2023</i>	Time: <i>16:53</i>
2 Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:

Cooler Temperature *0.4* °C *#3* Samples Received on ice? Yes ☒ No ☐

Method of Shipment *Drop of*

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made.

QA-F-065, Rev 1.0, TLICD-959

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