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**2024 FIRST SEMIANNUAL
GROUNDWATER QUALITY MONITORING REPORT
Genesis Solar Energy Project**

Riverside County, California

COC S&W-20

July 10, 2024

Prepared By:

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SIGNATURE PAGE

2024 FIRST SEMIANNUAL GROUNDWATER QUALITY MONITORING REPORT

RIVERSIDE COUNTY, CALIFORNIA

PROFESSIONAL STATEMENT

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

I further certify that this report has been reviewed by the appropriate authority at NextEra Energy Resources and is being submitted with their written consent.



Arlin W. Brewster

Professional Geologist 9207

July 10, 2024

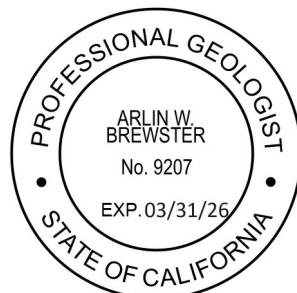


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1.0 INTRODUCTION

Northstar Environmental Remediation (Northstar) has prepared this 2024 First Semiannual Groundwater Quality Monitoring Report on behalf of Genesis Solar, LLC (Genesis). This report details groundwater quality monitoring performed in June 2024 at the Genesis Solar Energy Project (GSEP). The GSEP lies roughly 25 miles west of the city of Blythe, California in eastern Riverside County on lands managed by the Bureau of Land Management (BLM) (**Figure 1**). The GSEP consist of two independent concentrated solar electric generating facilities with a nominal net electric output of 125 megawatts (MW) each (a total net electrical output of 250 MW).

Northstar conducts groundwater quality monitoring in accordance with Condition of Certification Soil & Water 20 (COC S&W-20) as presented in the California Energy Commission (CEC) Final Decision document dated October 12, 2010 (CEC, 2010). The COC S&W-20 requires compliance with Waste Discharge Requirements (WDR) and Monitoring and Reporting Program (MRP) Board Order No. R7-2013-0005, issued by the California Regional Water Quality Control Board, Colorado River Basin Region (CRWQCB).

1.1 Background

Genesis filed an updated Plan of Development (POD) for the GSEP to the BLM in September 2010 (Genesis Solar, LLC, 2010), and an Application for Certification (AFC) to the California Energy Commission (CEC) in August 2009 (Genesis Solar, LLC, 2009). The CEC issued its Final Decision on the GSEP on October 12, 2010 (CEC, 2010). The BLM issued the Final Environmental Impact Statement (FEIS) for the GSEP for public comment on August 27, 2010. The Final Decision and the FEIS adopted COC S&W-20 to monitor groundwater quality within a 10-mile radius of the GSEP.

GSEP uses dry cooling technology and relies on groundwater as a water source during operation. Three groundwater production wells were installed within the GSEP site boundary between July and October 2011. These production wells are permitted to pump groundwater at an average rate of 202 acre-feet per year (afy) (up to 1,348 afy during construction).

Two evaporation ponds, licensed as Class II Surface Impoundments, located between Solar Fields 1 and 2 accept wastewater generated during operation of the GSEP. Three detection monitoring wells (DM-1, DM-2, and DM-3) were installed, per the Final Decision, along the west, east, and south perimeter of the evaporation ponds in February 2012. Groundwater samples were collected for four quarterly events prior to GSEP operation to establish baseline conditions. Semiannual sampling is conducted to comply with the requirements of COC S&W-6 and the WDR and MRP documents.

1.2 Geographic Setting

The GSEP is located between the communities of Blythe and Desert Center, California (**Figure 1**). Land use is predominantly open space and conservation and wilderness areas occupied by a community of low creosote and bursage vegetation. Chuckwalla and Ironwood State Prisons are located roughly 6 miles to the southeast.

The GSEP lies on a broad, relatively flat topography sloping north to south at elevations between 400 and 370 feet above mean sea level (amsl). The surface is underlain by alluvial deposits derived from the Palen Mountains to the north-northwest, and the McCoy Mountains to the northeast (**Figure 1**).

The deposits immediately adjacent the mountains have formed alluvial fans from multiple identifiable sources. The multiple fan surfaces have coalesced into a single bajada surface that wraps around each of these mountain fronts. Between the bajada surfaces lies a broad valley-axial drainage that extends southward between the mountains and drains to the Ford Dry Lake playa, located about 1 mile south of the GSEP facility (DWR, 1963).

Climatic data collected from Weather Station Blythe Riverside Airport (33.61°N, -114.71°W, at an elevation of about 387 feet amsl) indicate that the average maximum temperature in the airport vicinity is approximately 87.8°F (31.0°C). Average rainfall is reported to be approximately 3.83 inches (97.3 mm). These data were received from National Oceanic and Atmospheric Administration (NOAA) National Centers for Environmental Information 1981-2010 Normals.

1.3 Hydrogeologic Setting

The GSEP lies within the Chuckwalla Valley Groundwater Basin (Chuckwalla Basin) which has a surface area of approximately 940 mi² (2,435 km²) underlying Chuckwalla Valley. It is bounded up gradient by three groundwater basins including the eastern part of the Orocopia Valley and Pinto Valley Groundwater Basins and the southern part of the Cadiz Valley Groundwater Basin; and, down gradient by the Palo Verde Mesa Groundwater Basin (Palo Verde Basin) (U.S. Bureau of Reclamation, 1972). Groundwater occurs at depths of about 80 to 130 feet below ground surface (bgs), and flow direction is southeast to eastward from the Chuckwalla Basin into the Palo Verde Basin (**Figure 2**).

Sources of groundwater recharge to the Chuckwalla Basin include precipitation, inflow from the Orocopia Valley and Pinto Valley Groundwater Basins, and return flows from agricultural sources and treated wastewater effluent. Groundwater is the only available water resource in Chuckwalla Valley, with extraction to meet local demand the primary source of groundwater outflow. Other minor sources of outflow include underflow to the Palo Verde Basin and evapotranspiration in portions of Palen Dry Lake (where shallow groundwater is present).

Calculations of the Chuckwalla Basin groundwater budget before GSEP operations indicate a stable surplus of 2,600 afy (CEC, 2010). Current operational demand, based on calendar year 2023 extraction data, is approximately 126.0 afy.

The region of the Chuckwalla Basin occupied by the GSEP and associated groundwater monitoring wells is underlain by four geological units. The shallowest unit is the unconsolidated Holocene-aged Alluvium, consisting of geologically recent lake, river, and wind deposits (DWR, 1963). Beneath the alluvium is the unconsolidated Pleistocene-aged Pinto Formation consisting of coarse alluvial fan deposits (known as fanglomerate), interspersed with clays and basalt (DWR, 1963). Beneath the Pinto Formation lies the unconsolidated to partially consolidated Pliocene-aged Bouse Formation, consisting of coarse alluvium and fanglomerate deposits (Wilson and Owen-Joyce, 1994). The Bouse Formation is underlain by bedrock consisting of metamorphic rocks and intrusive igneous basalts (DWR, 1963).

Groundwater in the GSEP monitoring region occurs in two aquifers: the shallower Alluvium aquifer, extending to a maximum approximate depth of 250 feet bgs; and, the deeper Bouse Formation aquifer, extending between approximately 250 to 6,500 feet bgs (Wilson and Owen-Joyce, 1994). The Pinto Formation exists only on the eastern fringe of the Chuckwalla Basin and is not encountered by the GSEP monitoring wells. Monitoring data indicate a downward vertical hydraulic gradient of groundwater flow from the Alluvium to the Bouse Formation aquifer.

Based on recent monitoring data, the depth to groundwater in the Bouse Formation ranges from approximately 87.35 feet bgs (300.05 feet amsl) in TW-1, located upgradient of the site, to 136.37 feet bgs (255.73 feet amsl) in Well 23a, located downgradient of the site. Perched water exists at the Chuckwalla State Prison but is unlikely to occur within the GSEP boundaries as there is no irrigation.

1.4 Monitoring Program Objectives

Northstar performs groundwater quality monitoring in accordance with COC S&W-20 as described in the CEC's Final Decision. Monitoring is completed semiannually during the Second and Fourth Quarter of each year. The primary objectives of groundwater quality monitoring are:

- to identify potential changes in the existing water quality of the water supply resulting from GSEP pumping in compliance with COC S&W-20;
- to establish groundwater quality data within a 10-mile radius of the GSEP; and,
- to provide a mechanism for early warning to help avoid, minimize, or mitigate significant impacts to groundwater quality.

2.0 GROUNDWATER MONITORING PROGRAM

2.1 Monitoring Well Network

The following provides a summary of the monitoring well network for the GSEP required under COCS&W-20. Well locations are illustrated in **Figure 3** and summarized in **Table 1**.

- Offsite wells installed for the project include deep test wells TW-1 and TW-2, shallow observation well OBS-1, and buried-transducer well OBS-2 (currently inoperative).
- Existing and functional offsite wells located within two miles of the GSEP and project right-of-way include CalTrans water supply well 23a and Sempra Energy wells 24-1, 24-2, and 24-3.
- Well 14, a water supply well located along Chuckwalla Valley Road south of I-10, was added to the program at the request of CEC staff.
- Three groundwater extraction wells (PW-0, PW-1, and PW-2) were installed on the GSEP facility to provide water for construction and operations. Currently, PW-0 pumps water intermittently; PW-1 is sealed with a metal plate; and PW-2 pumps regularly. All three wells are equipped with pressure transducers and totalizers are installed on PW-0 and PW-2.
- Three groundwater monitoring wells (DM-1, DM-2, and DM-3) were installed adjacent to the evaporation ponds and serve to monitor the surrounding groundwater for signs of releases.
- Other water wells within 10 miles of GSEP for which water level data are available from the National Water Information System (NWIS) database maintained by the U.S. Geological Survey (USGS). Data reported for these wells has been inconsistent but is used for general groundwater contouring if data exists within the last six months.

2.2 Groundwater Quality Monitoring Activities

Groundwater quality monitoring includes the following scope of work:

- Field staff collect groundwater level measurements in the monitoring well network;
- Purging and sampling of wells;
- Analysis of the groundwater samples for general minerals, major anions and cations, deuterium and oxygen-18, oil & grease, heat transfer fluid, and general parameters;
- Compilation of water level and water quality data for wells located in the Chuckwalla Basin within 10 miles of the GSEP for which data is available from public sources;
- Evaluation of water quality data, including appropriate statistical and graphical methods;
- Evaluation of stable isotope data for potential water sources; and,
- Evaluation of water level data and preparation of a potentiometric surface map.

3.0 FIELD METHODS

Northstar performed the most recent semiannual groundwater quality monitoring at the GSEP on June 6, 2024. A description of the field methods used is provided below.

3.1 Manual Water Level Measurements

Northstar measured depth to groundwater in each well using a Solinst interface probe (Solinst) as quickly as practical to best represent the potentiometric surface across the GSEP at a given time. Field staff recorded depth to water to the nearest hundredth (0.01) foot below a surveyed measuring mark located on the north side of the top of casing (toc) on a groundwater level measurement form ([Appendix A](#)).

Table 2 provides a summary of current and historical groundwater level measurements and calculated groundwater elevations for wells included in the monitoring well network, and additional wells in the Chuckwalla Basin located within 10 miles of the GSEP. Groundwater elevation contours and flow direction are illustrated in [Figure 4](#).

3.2 Electronic Water Level Measurements

In past monitoring events, field staff used a Geokon Model 800 data logger to retrieve groundwater level data from an array of four Geokon Model 4500S vibrating wire pressure transducers installed in OBS-2 ([Table 2](#)). The transducers were placed at depths of 270, 315, 370, and 400 feet below ground surface. Data from the transducers became irretrievable in 2014 due to calibration issues and are currently not monitored.

Solinst Levellogger pressure transducers are currently installed in OBS-1, TW-1, and PW-1. The transducers record the feet of water above the sensor at 6-hour intervals. In addition, a Solinst Barologger installed in Well OBS-1 above the water table records changes in barometric pressure. Using Solinst software, the Levellogger data is calibrated to the manual groundwater elevation measurements and adjusted for changes in barometric pressure using the Barologger data. Data is used to assess seasonal and diurnal trends in the shallower Alluvium aquifer (OBS-1) and the deeper Bouse Formation aquifer (TW-1 and PW-1). Transducer data is currently collected and kept on file for reference.

3.3 Groundwater Sampling

Northstar collected groundwater samples from offsite monitoring wells 23a, TW-1, TW-2, and OBS-1 using disposable bailers. Field data sheets are included in [Appendix A](#).

Detection monitoring wells DM-1, DM-2, and DM-3 are each equipped with a dedicated 1.66-inch diameter Geotech® submersible bladder pump with water intakes set at the middle of wetted screen (approximately 115 feet btoc). Field staff collect samples from these wells using the low flow purging method in accordance with the most recent EPA guidance document (USEPA, 2017). Field data sheets are included in [Appendix A](#).

Groundwater extraction wells PW-0 and PW-2 are equipped with dedicated water production pumps. Pumps may intermittently be turned online or offline depending on the needs of the facility. Northstar

coordinates with GSEP staff to turn on these pumps when necessary to collect groundwater samples. Field data sheets are included in **Appendix A**.

Field staff measured groundwater parameters with a YSI water quality field instrument equipped with a flow-through cell. Staff calibrated the YSI at the beginning of each day and decontaminated the instrument prior to use and between wells. Measurements of field parameters (pH, electrical conductivity (EC), temperature, turbidity, and oxidation-reduction potential (ORP)) were taken at 5-minute intervals and at the time of sampling as part of the low flow purge method of sampling. An equipment blank was not collected from the instrument because it is disconnected prior to sampling.

Staff purged each detection monitoring well until water quality parameters stabilized over three successive readings (+/- 0.2 for pH, +/- 10% for EC, ORP and turbidity) and the discharge volume exceeded the drawdown, tubing, and flow-through cell volume. Northstar staff recorded the sampling methods, volume of water purged, pumping rate, field parameter measurements, and observations of water turbidity and odor on the groundwater sampling field form (**Appendix A**).

Groundwater purged from the GSEP wells was temporarily contained in a sealed container and then disposed of in the evaporation ponds as directed in the MRP (Part II A.1.b.). The measured field parameters documented at the end of purging are included in **Table 3**.

3.4 Equipment Decontamination

Northstar decontaminated reusable/non-dedicated equipment (e.g., water level probe and flow-through cell) before use at each well. Decontamination of reusable equipment consisted of washing with a laboratory-grade non-phosphate detergent (Liquinox, Alconox, or equivalent) and potable water solution followed by a double rinse with demineralized water.

3.5 Collection of Groundwater Samples

Groundwater samples were collected using standard field procedures. The sampler wore new nitrile gloves while collecting groundwater samples. Samples were collected directly from the pump discharge tube, extraction well sampling port, or sampling bailer into laboratory-prepared bottles. Where directed by the laboratory, samples were passed through a new, disposable 0.45 micrometer filter utilizing a peristaltic pump. The purpose of the filter is to remove particulates larger than 0.45 micrometers before being placed in bottles. Prior to sampling, the tubing is disconnected from the flow-through cell and the flow rate reduced as low as feasible to minimize volatilization.

3.6 Laboratory Analytical

Laboratory samples are submitted to SunStar Laboratories, Inc. (SunStar) of Lake Forest, California. SunStar subcontracts the heat transfer fluid analysis to Eurofins Calscience Laboratories, Inc. (Eurofins) of Tustin, California. They also subcontract the oxygen-18 and deuterium stable isotope analyses to Isotech Laboratories, Inc. of Champaign, Illinois. All laboratories are state and federally certified and analyze the samples by the following methods, as detailed in the Final Decision, WDR, and MRP documents:

- Chloride, Sulfate, and Nitrate by EPA Method 300.0;
- Mercury by Standard Method 7470A;
- Total Dissolved Solids by Standard Method 2540C;
- pH by Standard Method 4500H;
- Specific Conductance by Standard Method 2510B;
- Heat Transfer Fluid (HTF) by EPA Method 8015B;
- Heavy Metals by EPA Method 200.7 and 200.8;
- Oil & Grease by EPA Method 1664A; and,
- Oxygen-18 and Deuterium by Isotope Geochemistry.

3.7 Sample Handling

Field staff labeled sample containers before sampling and placed them into an ice cooled chest immediately after sample collection. Glass bottles were sealed in protective packing sleeves for transport. Exposure to dust, direct sunlight, high temperature, adverse weather conditions and possible cross-contamination were avoided.

Standard chain of custody (COC) protocols were followed for the groundwater samples. Northstar delivered the samples under proper chain of custody protocol to SunStar which signed as receiver of the samples. SunStar sent the subcontract samples under proper COC protocols.

3.8 Quality Assurance / Quality Control

The laboratory conducted standard Quality Assurance/Quality Control (QA/QC) to assure analytical accuracy and precision. This included preparation and analysis of method blanks, surrogate spikes, matrix spike/matrix spike duplicate (MS/MSD) pairs and laboratory control samples (LCS).

Northstar collects a duplicate sample once per sampling event from a single well and submits it to the laboratory without identifiers including date and time. During this event, a duplicate sample was collected from well PW-2. Analytical results for the duplicate sample are included in **Table 4** immediately below the regular sample for this well.

A set of quality control blank samples (including a field and trip blank) were collected and put on hold at the laboratory pending analysis of the groundwater samples. The field blank bottle set is filled with demineralized water and set adjacent to the work area with the lids off during the workday and is intended to screen out constituents in ambient air. The trip blank bottle sets are prepared at the laboratory and are sealed throughout the groundwater sampling event. They are stored inside the sample coolers and are intended to screen out constituents in the coolers. The quality control blank samples are only analyzed if there is anomalous data present for the groundwater sampling results.

4.0 RESULTS OF LABORATORY ANALYSES

All laboratory analytical reports for this reporting period are included in **Appendix D**. Results are tabulated for the monitoring network in **Table 4** and for wells outside the monitoring network (but still within the Chuckwalla Groundwater Basin) in **Table 5**.

4.1 General Inorganic Chemical Analysis

This section presents results of inorganic chemical analyses (major cations and anions, mineral constituents, and general parameters) performed on groundwater samples collected in the monitoring well network. Time series plots for each inorganic constituent are included as Charts 1 to 24 in **Appendix B**. Remarks about each chart are as follows:

- Chart 1: **Chloride** – Recent concentrations are within the normal range except for Well 23a. The concentration in Well 23a was the lowest ever recorded.
- Chart 2: **Sulfate as SO₄** – Recent concentrations are within the normal range.
- Chart 3: **Nitrate as NO₃** – Appears in low concentrations mostly in shallow monitoring wells, including upgradient well OBS-1. Recent concentrations are within the normal range except for PW-0. The concentration in PW-0 was the highest ever recorded.
- Chart 4: **Calcium** – Recent concentrations are within the normal range except for upgradient wells OBS-1 and TW-1, where the concentrations increased. The concentration in TW-1 was the highest ever recorded.
- Chart 5: **Copper** – Historically occurs in only a few wells at low concentrations, and was not detected during this event. There are no apparent trends.
- Chart 6: **Sodium** – Recent concentrations are within the normal range except for upgradient wells OBS-1 and TW-1, where the concentrations increased.
- Chart 7: **Potassium** – Was not detected during this monitoring event due to higher reporting limits. The data has been inconsistent since the fourth quarter of 2017 and suggests irregular but significant influxes of potassium from an upgradient source.
- Chart 8: **Iron** – Was not detected during this monitoring event.
- Chart 9: **Magnesium** – In recent sampling events, has only been detected in shallow wells (DM-1, DM-2, DM-3, and OBS-1) and upgradient deep well TW-1. Recent concentrations are consistent for the DM wells but increased in upgradient wells OBS-1 and TW-1. The concentration in TW-1 was the highest ever recorded.
- Chart 10: **Antimony** – There have been no detections to date.
- Chart 11: **Arsenic** – Detected in decreasing concentrations in production wells PW-0 and PW-2 during this event. Arsenic is normally detected in these wells and appears to be naturally occurring.
- Chart 12: **Barium** – Recent concentrations are generally within the normal range, but appear to be decreasing in production well PW-0 and PW-2, and have been erratic in downgradient well TW-2. The concentrations in DM-1, DM-2, and PW-0 were the lowest ever recorded.
- Chart 13: **Cadmium** – There have been no detections to date.
- Chart 14: **Chromium (Total)** – Not detected during this event.
- Chart 15: **Cobalt** – There have been no detections to date.
- Chart 16: **Lead** – There have only been two detections to date – one in TW-1 (fourth quarter 2017) and in 23a (second quarter 2016).

- Chart 17: **Manganese** – Occurs in very low concentrations in most wells but punctuated by two larger detections in 23a (fourth quarter 2010) and TW-1 (second quarter 2016). Manganese has not been analyzed since the 2nd quarter of 2018 because it is no longer part of the standard set of analytes included in the analytical method.
- Chart 18: **Nickel** – Not detected during this event.
- Chart 19: **Selenium** – Only detected in shallow groundwater wells OBS-1, DM-1, DM-2, and DM-3 during this event, at concentrations within the normal range.
- Chart 20: **Zinc** – Due to a decrease in laboratory reporting limits, zinc was detected in several wells during this event when it normally is not. All concentrations are within the normal range.
- Chart 21: **Mercury** – Has occurred only once at a very low concentration in well DM-1 (second quarter 2015). Mercury has never been detected in the evaporation ponds.
- Chart 22: **Total Dissolved Solids** – Concentrations are within the normal range for all wells except Well 23a, which was higher than all historical concentrations. This is likely due to well deterioration, as large flakes of steel casing were observed in the bailer during sampling.
- Chart 23: **Specific Conductance** - Concentrations are within the normal range except for PW-0. The concentration in PW-0 was the highest ever recorded.
- Chart 24: **pH** – Values are near baseline conditions for this reporting period. Overall, pH values have been very stable for all wells except for TW-1 and TW-2.

4.2 Organic Chemical Analysis

This section presents results of organic chemical analyses (oil & grease and heat transfer fluid) performed on groundwater samples collected in the monitoring well network. Time series plots for each organic constituent are included as Charts 25 and 26 in **Appendix B**. Remarks about each chart are as follows:

- Chart 25: **Oil & Grease** – Appears only sporadically in wells TW-2, OBS-1, PW-0, and PW-2. Not detected in any monitoring wells during this reporting period. There are no apparent trends.
- Chart 26: **Heat Transfer Fluid** – There have been no detections to date.

4.3 Stable Isotope Analysis

Oxygen-18 and deuterium are naturally occurring stable isotopes of oxygen and hydrogen that occur at varying concentrations in all water. Concentrations of these heavier isotopes vary in precipitation depending on latitude, elevation and climate (Froehlich and Yurtsever, 1995; Izicki, Martin and Michel, 1995; Kendall and Coplen, 2001). Precipitation falling at higher elevations, higher latitudes, or cooler climates tend to be depleted in these heavier isotopes. The isotope depletion relative to Vienna Standard Mean Ocean Water (VSMOW) is expressed in delta notation as parts per thousand (‰). The ratio of oxygen-18 to deuterium has been well established around the world as falling on a straight line called the Global Meteoric Water Line (GMWL). This relationship between oxygen-18 and deuterium is useful for determining the source and history of a water sample. Departures from the GMWL can occur due to evaporation (which leaves the remaining water enriched in heavier isotopes), due to mixing with waters from other origins, or due to chemical reactions with surrounding materials or the atmosphere (Domenico and Schwartz, 1998).

Table 4 provides the oxygen-18 and deuterium content of the water samples collected to date. A time series plot of the stable isotopes is presented in Chart 27 and 28, and a graph of the oxygen-18 and

deuterium relative to the GMWL is presented as Chart 29 in [Appendix B](#). The data indicates several environmental conditions, as follows:

- Groundwater in the shallow Alluvium aquifer is less depleted than the deeper Bouse Formation aquifer, indicating that it is closer to the point of origin of groundwater recharge (ie, it is recharged by precipitation or runoff that occurs locally).
- Both aquifers are more depleted downgradient, indicating they are further from the source of precipitation or groundwater recharge.
- Upgradient groundwater in both aquifers display a greater depletion compared to the GMWL, indicating that the groundwater is becoming more enriched in oxygen-18 and deuterium in the downgradient direction, which may be a function of evapotranspiration.

The 2024 first semiannual monitoring event shows results that are consistent with historical data.

4.4 Statistical Analysis

In addition to the graphical representation of concentration trends, the results were analyzed using the Mann-Kendall (M-K), non-parametric statistical test to evaluate trends as directed in COC S&W-20, Part E. The M-K test compares the most recent round of groundwater data with the results of historical rounds. The statistical analysis tests whether the trend in the data set is increasing, decreasing, or is stable/has no determined trend. The M-K test typically requires a minimum data set of between 4 to 10 values, and M-K tests performed on data sets within this range may not necessarily yield reliable results. The M-K test results are also subject to seasonal variations when there is a limited data set.

For this reporting period, the M-K statistical analysis was applied to wells 23a, TW-1, TW-2, OBS-1, DM-1, DM-2, DM-3, PW-0, PW-1, and PW-2. A summary of the results is included in [Appendix C](#). The analysis was run (where possible) for all analytes except pH, oil & grease, heat transfer fluid, and stable isotopes (deuterium and oxygen-18) for each well and trend direction is reported at the 95% confidence interval. The M-K analysis was not performed on analytes that were not detected during the reporting period. Additionally, analytes with insufficient data have not been statistically analyzed, but the M-K statistical analysis will be applied to these constituents once enough data points are available. Below is a summary of the M-K statistical analysis for this reporting period:

- TW-1: No significant increasing trends were identified.
- TW-2: A significant increasing trend was identified for chloride, sodium, barium, and conductivity.
- OBS-1: No significant increasing trends were identified.
- 23a: A significant increasing trend was identified for sodium.
- DM-1: A significant increasing trend was identified for sodium, magnesium, and selenium.
- DM-2: A significant increasing trend was identified for chloride, sodium, magnesium, selenium, and conductivity.
- DM-3: A significant increasing trend was identified for sodium, magnesium, and arsenic.

- PW-0: A significant increasing trend was identified for nitrate, calcium, sodium, total dissolved solids, and conductivity.
- PW-1: There is not enough data available for this well to perform the Mann-Kendall analysis for any analytes.
- PW-2: A significant increasing trend was identified for sodium and arsenic.

4.5 Quality Assurance/Quality Control

As documented in the attached laboratory reports (**Appendix D**), groundwater samples collected from network wells during the reporting period were received by the laboratory in good condition, within the temperature limits required, and analyzed within the required holding times using the specified methods (with the exception of pH, which has a 15-minute hold time, and nitrate as NO₃, which has a 48-hour hold time).

No analytes were detected in the method blank sample.

Matrix spike/matrix spike duplicate (MS/MSD) and laboratory control sample (LCS) recoveries for each method and analytical batch were within the laboratory's established control limits for the final report, with the following exceptions:

- The spike recovery and/or relative percent difference (RPD) was outside acceptable limits for the MS and/or MSD, but the batch was accepted based on acceptable LCS recovery data. This may have affected the results for **copper and zinc**.
- The spike recovery was outside acceptable limits for the MS and/or MSD due to possible matrix interference. The LCS was within acceptable criteria and the data was accepted because the chemist determined that there should be no impact to the final results. This may have affected the results for **chloride and sulfate as SO₄**.

Duplicate sample control: For this event, a duplicate sample (named DUP) was collected from sample point PW-2. The sample was submitted to the laboratory without date or time qualifiers. For this event, all sample results for PW-2 and DUP agreed within 10%.

5.0 ANNUAL SUMMARY

The 2024 annual summary will be included in the 2024 Second Semiannual and Annual Groundwater Quality Monitoring Report, which will be produced by Northstar by January 15, 2025.

6.0 CONCLUSIONS

Based on the available data, it does not appear the GSEP has negatively impacted the groundwater quality in the Chuckwalla Basin or within a 10-mile radius of the GSEP facility to date. In general, all available groundwater quality data is stable and consistent with historical data.

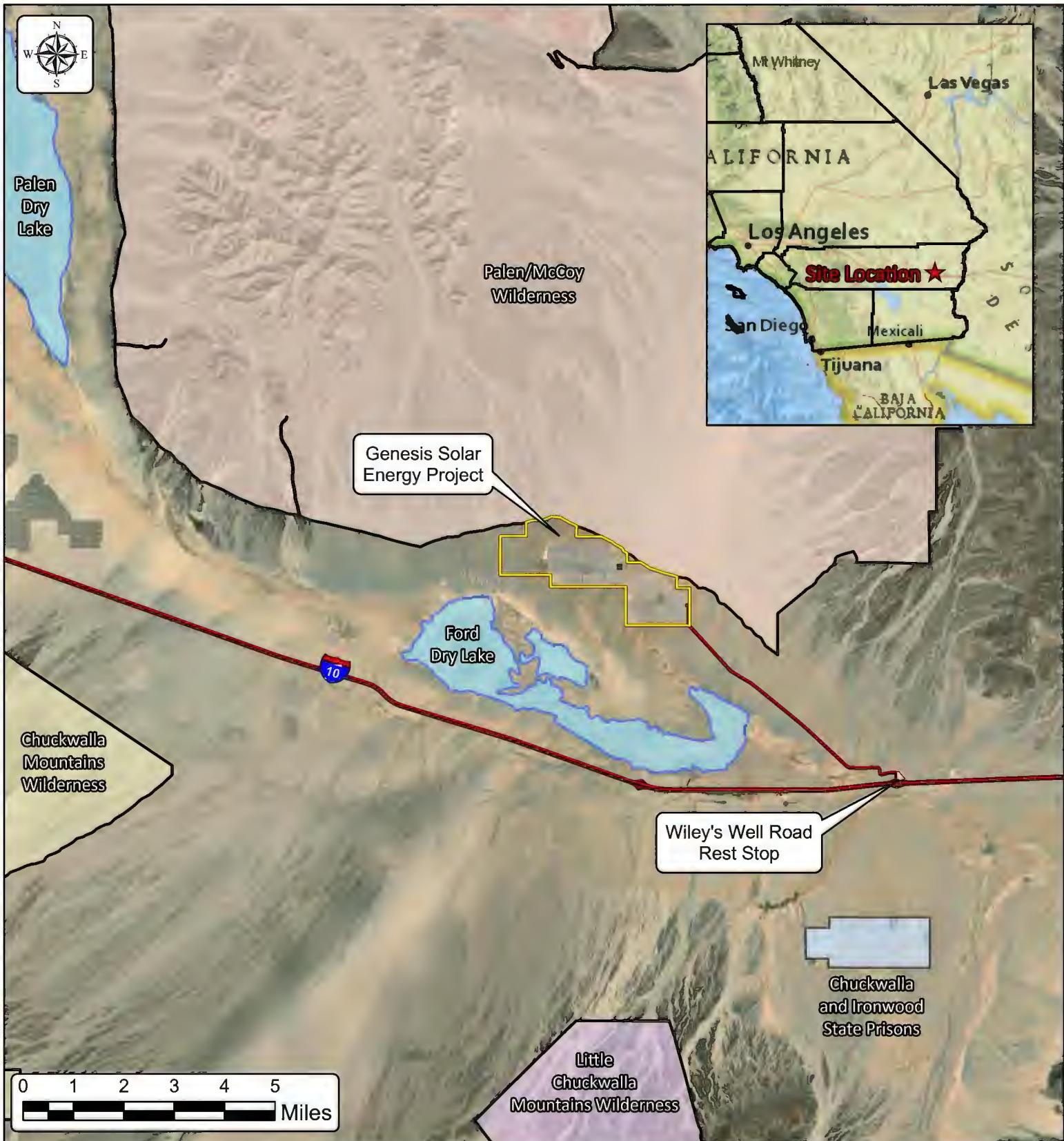
Increases in sodium and magnesium in upgradient groundwater monitoring wells OBS-1 (shallow) and TW-1 (deep) indicate an influx of hard water from an unknown source. Though there was precipitation in the area in January and February, the stable isotope data does not appear to indicate that the source is from rainwater.

The steel well casing in downgradient monitoring well 23a is continuing to deteriorate, which is perhaps apparent in the laboratory data with elevated concentrations of total dissolved solids.

7.0 REFERENCES

- Bureau of Land Management, 2010. *Final Environmental Impact Statement, Genesis Solar Energy Project*. August 27, 2010.
- California Department of Water Resources (DWR), 1963. *Data on Water Wells and Springs in the Chuckwalla Valley Area, Riverside County, California*. Bulletin No. 91-7.
- California Energy Commission (CEC), 2010. *Genesis Solar Energy Project Commission Decision*. October 12, 2010.
- California Regional Water Quality Control Board – Colorado River Basin Region, 2013a. *Board Order R7-2013-0005: Monitoring and Reporting Program for Genesis Solar LLC*. March 21, 2013.
- California Regional Water Quality Control Board – Colorado River Basin Region, 2013b. *Board Order R7-2013-0005: Waste Discharge Requirements for Genesis Solar LLC*. March 21, 2013.
- Domenico, P. and Schwartz, F., 1998. *Physical and Chemical Hydrogeology*. J. Wiley & Sons.
- Froehlich, K. and Yurtsever, Y., 1995. *Isotope Techniques for Water Resources in Arid and Semiarid Regions: in Applications of Tracers in Arid Zone Hydrology*. IAHS Publication no. 232.
- Genesis Solar, LLC, 2009. *Application for Certification, Genesis Solar Energy Project, Riverside County, California*. August 31, 2009.
- Genesis Solar, LLC, 2010. *Plan of Development CA48880, Genesis Solar Energy Project, Riverside County, California*. October 2010.
- Izbicki, J., Martin, P. and Michel, R., 1995. *Source, Movement and Age of Groundwater in the Upper Part of the Mojave River Basin, California, USA: in Applications of Tracers in Arid Zone Hydrology*. IAHS Publication no. 232.
- Kendall, C. and Coplen, T., 2001. *Distribution of Oxygen-18 and Deuterium in River Waters Across the United States*.
- U.S. Bureau of Reclamation, 1972. *Inland Basins Project, California-Nevada, Summary Report: Reconnaissance Investigations*. 1972.
- U.S. Environmental Protection Agency (USEPA), 2017. *Low Stress (low flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells*. September 19, 2017.
- Wilson, R.P., and Owen-Joyce, S.J., 1994. *Method to identify wells that yield water that will be replaced by Colorado River water in Arizona, California, Nevada, and Utah*. U.S. Geological Survey, Water Resources Investigation Report 94-4005.

FIGURES



Legend

- GSEP Property Boundary
- Chuckwalla and Ironwood State Prisons
- Chuckwalla Mountains Wilderness Area
- Little Chuckwalla Mountains Wilderness Area
- Palen/McCoy Wilderness Area
- Dry Lakes
- Roads

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FIGURE 1
Site Vicinity Map

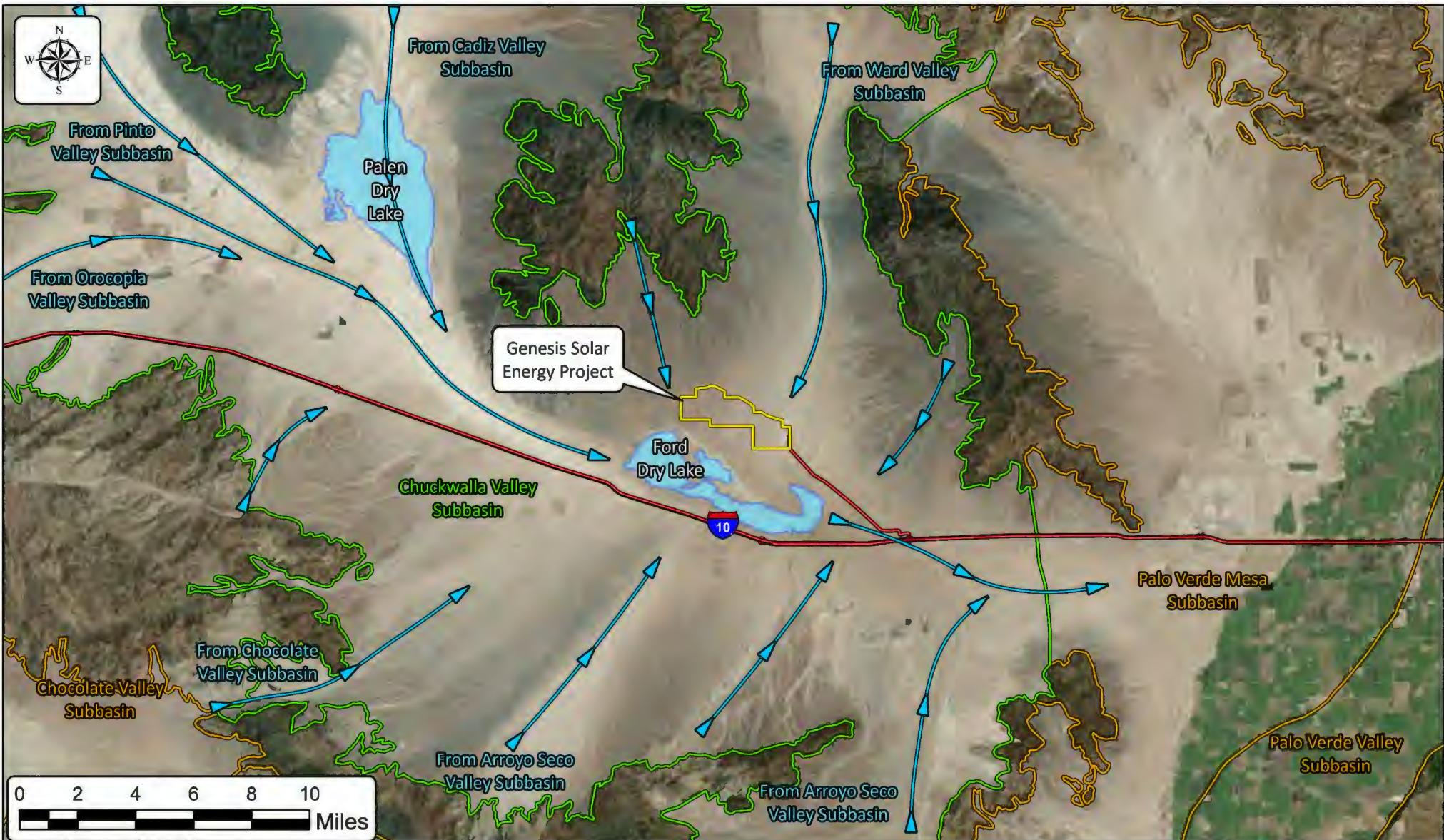


Project No. 196-004

Drawn By: AWB

Draw Date: 9 Jul 2024

Checked By: AWB



Legend

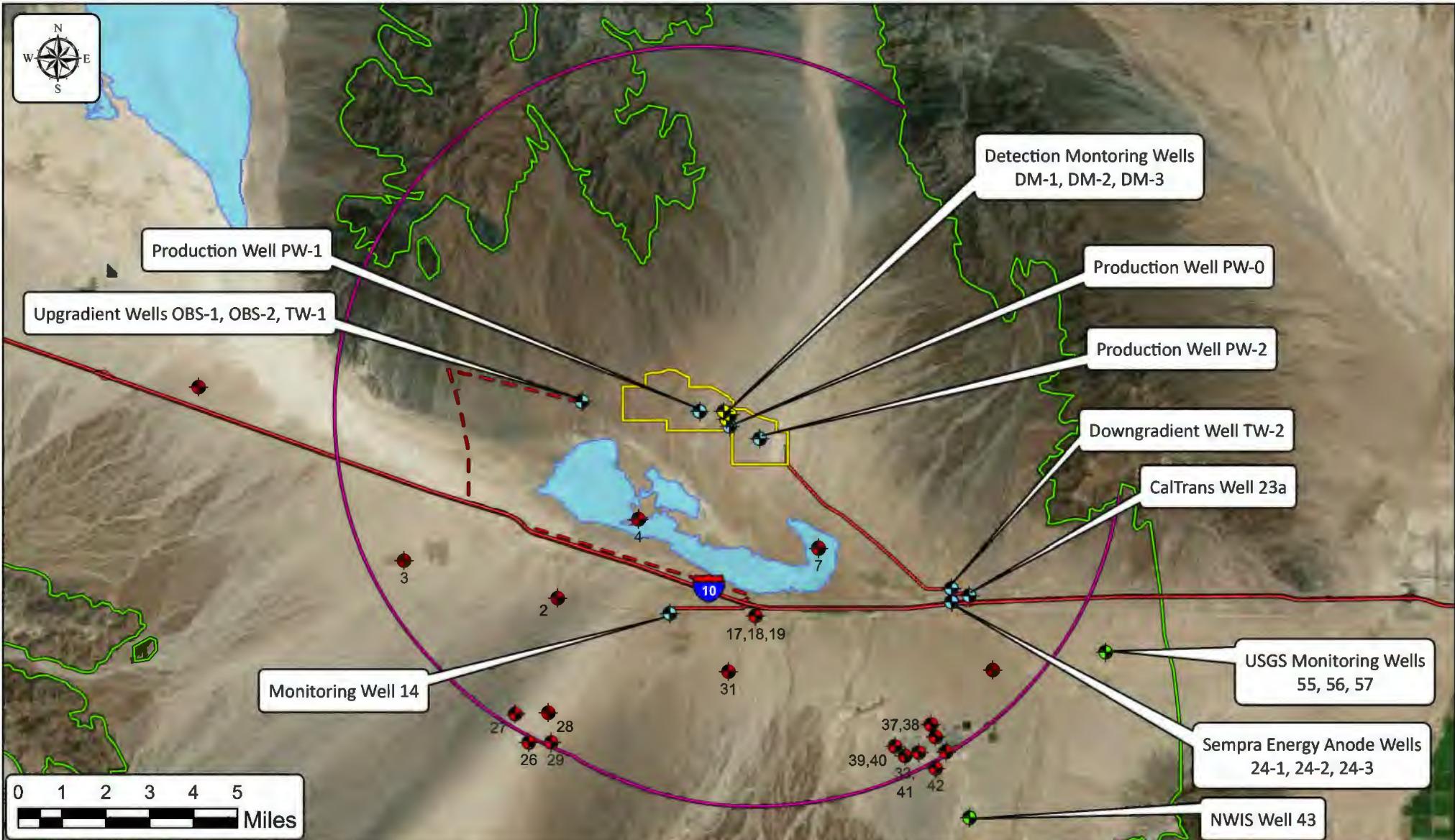
- GSEP Property Boundary
- Chuckwalla Valley Groundwater Subbasin
- Adjacent Groundwater Subbasins
- Dry Lakes
- Water Flow Direction

Genesis Solar Energy Project
11995 Wiley's Well Road, Blythe, CA 92225

FIGURE 2
Hydrogeologic Setting



Project No. 196-004	Draw Date: 9 Jul 2024
Drawn By: AWB	Checked By: AWB



Genesis Solar Energy Project
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FIGURE 3
Monitoring Area Showing all
Groundwater Monitoring Wells

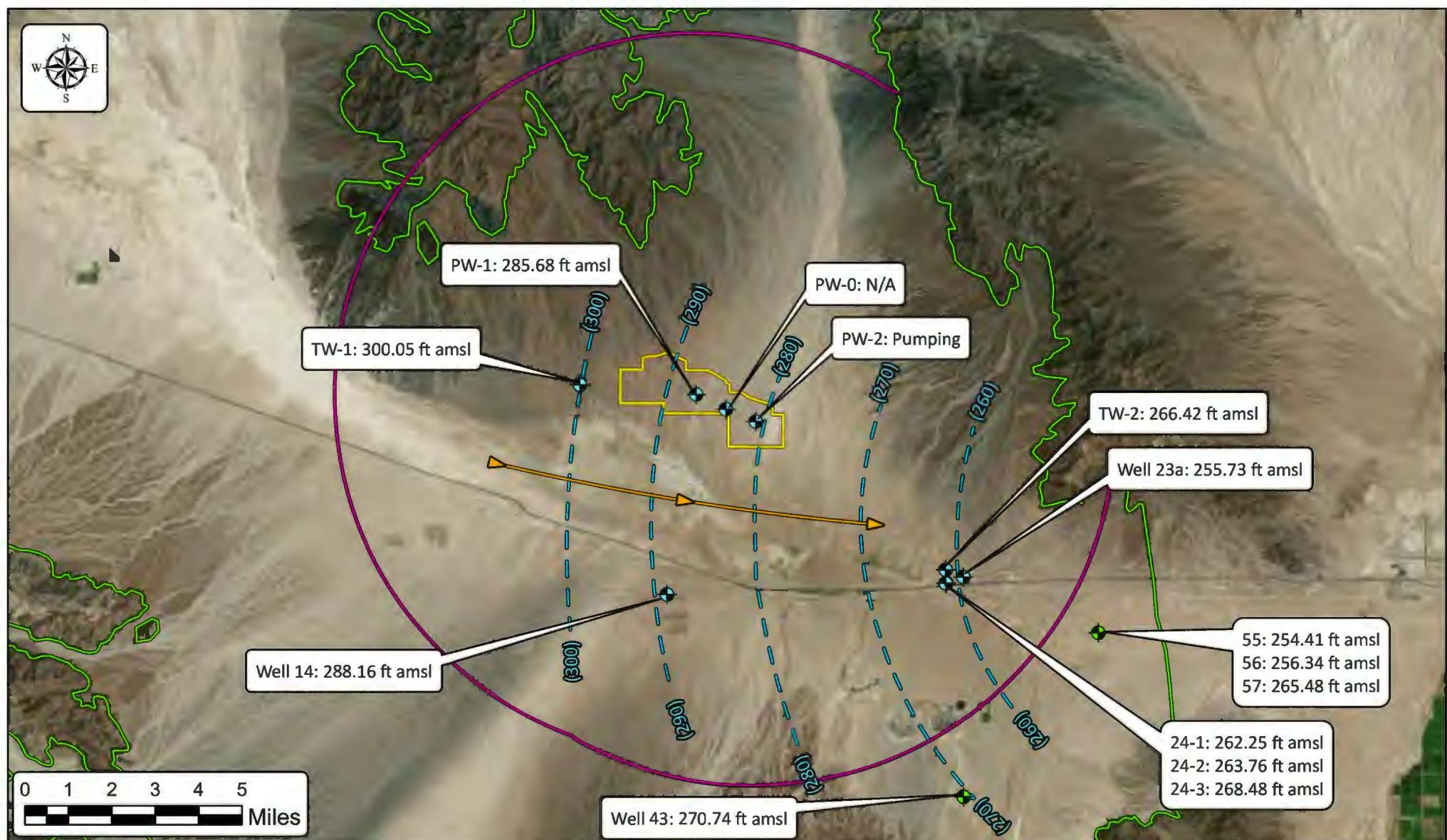


Project No. 196-004

Draw Date: 9 Jul 2024

Drawn By: AWB

Checked By: AWB



Legend

- GSEP Property Boundary
- Chuckwalla Valley Groundwater Subbasin
- 10 Mile Boundary
- Groundwater Elevation Contour
- Groundwater Gradient Direction
- Active Monitoring Wells
- Active NWIS Wells

Genesis Solar Energy Project
11995 Wiley's Well Road, Blythe, CA 92225

FIGURE 4
Bouse Formation Groundwater Elevation
Contour Map - June 2024



Project No. 196-004

Draw Date: 9 Jul 2024

Drawn By: AWB

Checked By: AWB

TABLES

TABLE 1
INVENTORY OF WELLS IN THE GROUNDWATER MONITORING AREA
 Genesis Solar Energy Project, Riverside County, California

Well ID	State Well Number	Other Name	Owner	Installation Date	Use/Status	Well Casing Diameter (inches)	Approximate Ground Surface Elevation (feet amsl)	Top Of Casing Elevation (feet amsl)	Well Depth (feet bgs)	Screened Interval (feet bgs)	Geologic Unit
WELLS INCLUDED IN THE GROUNDWATER MONITORING PROGRAM											
OBS-1 ¹	--	Shallow Observation Well 1	Genesis Solar, LLC	5/9/2009	Monitoring / Active	5	385.857	388.3	160	100-150	Alluvium
OBS-2-270 ^{1,2}	--	Nested Observation Well 2	Genesis Solar, LLC	7/2/2009	Buried Transducer / Inactive	--	385.617	388.14	270	265-275	Bouse Formation
OBS-2-315 ^{1,2}	--	Nested Observation Well 2	Genesis Solar, LLC	7/2/2009	Buried Transducer / Inactive	--	385.617	388.14	315	304-327	Bouse Formation
OBS-2-370 ^{1,2}	--	Nested Observation Well 2	Genesis Solar, LLC	7/2/2009	Buried Transducer / Inactive	--	385.617	388.14	370	359-374	Bouse Formation
OBS-2-400 ^{1,2}	--	Nested Observation Well 2	Genesis Solar, LLC	7/2/2009	Buried Transducer / Inactive	--	385.617	388.14	400	387-418	Bouse Formation
TW-1 ¹	--	Test Well 1	Genesis Solar, LLC	5/22/2009	Monitoring / Active	5	385.91	387.4	565	340-564	Bouse Formation
TW-2 ¹	--	Test Well 2	Genesis Solar, LLC	12/9/2009	Monitoring and Dust Control / Active	5	390.003	393.47	1,841	793-873, 1042-1123, 1439-1601, 1739-1820	Bouse Formation / Fanglomerate
PW-0	--	Production Well 0	Genesis Solar, LLC	7/9/2011	Production Well	10	--	--	1,251	882-1002, 1226-1251	Bouse Formation / Fanglomerate
PW-1	--	Production Well 1	Genesis Solar, LLC	8/14/2011	Production Well	10	--	--	1,360	930-950, 990-1000, 1040-1100, 1120-1140, 1160-1200, 1260-1360	Bouse Formation / Fanglomerate
PW-2	--	Production Well 2	Genesis Solar, LLC	9/15/2011	Production Well	10	--	--	1,125	770-930, 980-1120	Bouse Formation
DM-1	--	Detection Monitoring Well 1	Genesis Solar, LLC	2/22/2012	Monitoring / Active	4	--	391.49	120	100-120	Alluvium
DM-2	--	Detection Monitoring Well 2	Genesis Solar, LLC	2/21/2012	Monitoring / Active	4	--	391.32	120	100-120	Alluvium
DM-3	--	Detection Monitoring Well 3	Genesis Solar, LLC	2/20/2012	Monitoring / Active	4	--	388.34	120	100-120	Alluvium
14 ^{1,3}	6S/19E-32	--	Lorne Frosts (AZCA Drilling)	5/1/1991	Domestic/ Irrigation/ Dust Control	12 to 10	393.548	388.14	982 (obstructed at 450)	890-940	Fanglomerate
23a ^{1,4}	6S/20E-33C1	CalTrans Well @ WWRS	CalTrans	Unknown	Water Supply / Inactive	8	397.28	392.1	1,825	1800-1825	Fanglomerate
24-1 ^{1,5}	6S/20E-33	SCG Anode Well	So Cal Gas	4/29/1989	Anode / Inactive	2	389.3	389.4	435	235-435	Alluvium/Bouse Formation
24-2 ⁵	6S/20E-33	SCG Anode Well	So Cal Gas	Unknown	Anode / Inactive	1	389.09	388.86	Obstructed at 373 feet	235-435	Alluvium/Bouse Formation
24-3 ⁵	6S/20E-33	SCG Anode Well	So Cal Gas	Unknown	Anode / Inactive	1	388.2	392.04	Unknown	--	Alluvium/Bouse Formation
ADDITIONAL WELLS IN THE CHUCKWALLA VALLEY GROUNDWATER BASIN WITHIN 10 MILES OF THE SITE FOR WHICH MONITORING DATA IS AVAILABLE											
2	6S/18E-36E1	--	CA Jojoba Research and Development	12/18/1981	Irrigation	10 to 6	424	--	940	250-290, 770-810	Alluvium/Bouse Formation
3	6S/18E-29	Siddall Well	Agra Energy Corp.	2/26/1982	Irrigation	20 to 8	498	--	957	560-940	Bouse Formation
4	6S/19E-19I1	--	--	--	Unused	12	354	--	--	--	--
9	6S/19E-28R1	--	--	--	Unused	--	354	--	--	--	--
15	6S/19E-32K1	--	--	--	--	12.5	390.2	--	Obstructed at 526 feet	--	Bouse Formation
16	6S/19E-32K2	--	--	--	--	10.5	390	--	Obstructed at 297 feet	--	Bouse Formation
22	6S/20E-33L1	--	--	--	Unknown / Destroyed	--	--	--	--	--	Bouse Formation
23	6S/20E-33C1	--	--	--	Unknown / Destroyed	10	392	--	400	--	--
26	7S/18E-14F1	--	U.S. AgriResearch and Development	12/26/1982	Irrigation	16 to 10	562.58	--	1,000 (obstructed at 952 feet)	410-630, 750-770, 810-870	Alluvium/Bouse Formation
27	7S/18E-11N1	--	--	--	Unused	16	555	--	486.4	--	Bouse Formation
28	7S/18E-11R1	--	--	--	Unused	16	520	--	779.4	--	Bouse Formation
29	7S/18E-14H1	--	U.S. AgriResearch and Development	1/16/1983	Irrigation	10	545.91	--	985 (obstructed at 950 feet)	420-460, 500-520, 540-580, 620-820, 840-990	Bouse Formation
31	7S/19E-4R1	Teaque Well	--	--	Unused	12	423.89	--	242.2	--	Alluvium
32	7S/20E-4R1	Vada McBride	--	--	Unused	16	418	--	315.7	--	Bouse Formation
33	7S/20E-16M1	--	CA Department of Corrections	--	--	30 to 16	456.02	--	1,200	690-1190	Bouse Formation/ Fanglomerate
34	7S/20E-17L1	WP-4	CA Department of Corrections	9/8/1992	Public Water Supply	24	458.3	--	1,200	690-1190	Bouse Formation/ Fanglomerate
35	7S/20E-17K1	--	CA Department of Corrections	12/20/1989	--	30 to 16	456.48	--	1,200	690-1190	Bouse Formation/ Fanglomerate
36 ⁶	7S/20E-17G1	--	CA Department of Corrections	12/30/1987	Industrial	30 to 16 to 10	443.5	--	1,200	690-1190	Bouse Formation/ Fanglomerate
37 ⁶	7S/20E-17C1	78, North Well	CA Department of Corrections	7/28/1981	Irrigation	14-10	433.09	--	1,050	750-1,050	Bouse Formation/ Fanglomerate
39	7S/20E-18H1	--	CA Department of Corrections	--	--	--	442.9	--	1,139	--	Bouse Formation/ Fanglomerate
40	7S/20E-18K1	WP-6	CA Department of Corrections	11/4/1992	Public Water Supply	15 to 10	449.4	--	1,200	690-1,200	Bouse Formation/ Fanglomerate
41	7S/20E-18R1	WP-5	CA Department of Corrections	10/24/1992	Public Water Supply	13.5 to 10	453.6	--	1,160	--	Fanglomerate
42	7S/20E-20B1	79 / Observation Well 3	--	6/4/1905	Irrigation	16 to 12	470	--	1,100	738-1,100	Bouse Formation/ Fanglomerate
43	7S/20E-28C1	7S/20E-28F1/80	Jojoba Inc.	3/15/1982	Irrigation	10 to 8	505.6	--	830	510-600, 680-780	Bouse Formation
44	7S/20E-28C2	--	Jojoba Southwest	11/30/1989	Irrigation	16 to 12	505.3	--	1,100	700-1,100	Bouse Formation/ Fanglomerate
47	8S/20E-10N2	60	--	1984	--	4	621	--	872	500-580, 620-640, 710-850	Bouse Formation
50	6S/17E-3M1	--	--	--	--	--	566	--	818	--	Bouse Formation
54	8S/20E-28N1	--	--	--	--	--	654.5	--	500	--	Bouse Formation
55	7S/20E-1M1	CWV1#1	USGS	1/23/2012	Exploratory	2	415.4	--	993	973-993	Bouse Formation

TABLE 1
INVENTORY OF WELLS IN THE GROUNDWATER MONITORING AREA
 Genesis Solar Energy Project, Riverside County, California

Well ID	State Well Number	Other Name	Owner	Installation Date	Use/Status	Well Casing Diameter (inches)	Approximate Ground Surface Elevation (feet amsl)	Top Of Casing Elevation (feet amsl)	Well Depth (feet bgs)	Screened Interval (feet bgs)	Geologic Unit
56	7S/20E-1M2	CWV1#2	USGS	1/23/2012	Exploratory	2	415.4	--	505	485-505	Pinto Formation
57	7S/20E-1M3	CWV1#3	USGS	1/23/2012	Exploratory	2	415.4	--	230	210-230	Alluvium
ADDITIONAL WELLS IN THE CHUCKWALLA VALLEY GROUNDWATER BASIN WITHIN 10 MILES OF THE SITE FOR WHICH MONITORING DATA ARE NOT AVAILABLE											
1	5S/20E-16M1	McCoy Spring and DWR-17	--	--	Unused	--	889	--	--	--	--
5	6S/19E-25P1	--	--	--	Unknown / Destroyed	10	360	--	85.7	--	Alluvium
6	6S/19E-25R1	--	--	--	Unknown / Destroyed	10	360	--	61.9	--	Alluvium
7	6S/19E-25	Boreholes 1A, 1B, 1C	USGS	1978	Exploratory Borehole / Abandoned	--	358	--	--	--	--
8	6S/19E-26Z1	--	--	--	Unknown / Destroyed	--	--	--	--	--	--
10	6S/19E-29E1	--	--	--	Destroyed/ Collapsed	6	377	--	Obstructed at 19.7	--	--
11	6S/19E-30H1	--	--	--	Destroyed	6	370	--	28.7	--	Alluvium
12	6S/19E-31Z1	--	--	--	Destroyed	--	--	--	--	--	--
13	6S/19E-32	--	Jacado Agri Corp.	6/27/1982	Destroyed	22 to 18 to 12	392	--	732	307-327, 365-732	Bouse Formation
17	6S/19E-33A1	Hopkins Well and DWR-33X1	--	1911	Destroyed	12 to 8	361	--	1,200 (obstructed at 267 feet)	1,175-1,200	Fanglomerate
18	6S/19E-34	--	So Cal Gas	4/29/1989	Anode	1	368	--	400	200-400	Alluvium/Bouse Formation
19	6S/19E-34	--	So Cal Gas	7/15/1981	Other	--	369	--	274	0-274	Alluvium/Bouse Formation
20	6S/19E-36A1	--	--	--	Destroyed	10	365	--	64.8	--	Alluvium
21	6S/20E-30Z1	Ford Well	--	--	Stock / Destroyed	10	--	--	--	--	--
25	6S/20E-33	--	So Cal Gas	7/20/1981	Monitoring / Presumed Destroyed	1	397	--	278	0-278	Alluvium/Bouse Formation
30	7S/18E-14H1	--	--	--	Destroyed	6	546	--	123.9	--	Alluvium
38	7/20E-17C2	Observation Well 1	CA Department of Corrections	6/20/1986	Monitoring / Presumed Destroyed	1 1/4	433	--	1,040	795-815, 995-1,015	Bouse Formation/ Fanglomerate
45	7S/20E-28	--	Chuckwalla Jojoba Inc Great American Securities	6/6/1989	Test Hole/Abandoned	--	505	--	825	--	--
46	7S/20E-27L1	--	--	--	Destroyed	8	517	--	53.6	--	Alluvium

Notes:

-- = information not available or unknown

amsl = above mean sea level

bgs = below ground surface

1. Wells were surveyed on February 8 & 9, 2011. Ground surface elevation survey measurement taken at top of concrete pad.

2. Nested pressure transducer buried in place.

3. Well is obstructed at 450 feet and therefore not suitable for groundwater quality monitoring. Used for groundwater level monitoring only.

4. Well completion and screened interval determined by video log performed on 11/09/2010

5. Anode well completed with Coke Breeze and not considered to be suitable for water quality sampling and used for groundwater level monitoring program only.

6. No access port for groundwater level monitoring; used for groundwater quality monitoring only.

TABLE 2
GROUNDWATER LEVEL MEASUREMENTS
 Genesis Solar Energy Project, Riverside County, California

Well ID	Date	Source	Top of Casing Elevation (feet amsl) ¹	Depth to Water (feet below TOC)	Groundwater Elevation (feet amsl)	Difference from Baseline (feet)	Comments / Use
WELLS INCLUDED IN THE GROUNDWATER LEVEL MONITORING PROGRAM							
TW-1	5/23/2009	WorleyParsons	387.40	89.75	297.65	N/A	Monitoring
TW-1	11/10/2010	WorleyParsons	387.40	86.65	300.75	0.00	Baseline
TW-1	2/8/2011	WorleyParsons	387.40	86.67	300.73	-0.02	Monitoring
TW-1	6/8/2011	WorleyParsons	387.40	86.58	300.82	0.07	Monitoring
TW-1	9/25/2011	WorleyParsons	387.40	86.48	300.92	0.17	Monitoring
TW-1	12/13/2011	WorleyParsons	387.40	86.25	301.15	0.40	Monitoring
TW-1	2/21/2012	WorleyParsons	387.40	86.58	300.82	0.07	Monitoring
TW-1	5/23/2012	WorleyParsons	387.40	86.43	300.97	0.22	Monitoring
TW-1	7/26/2012	WorleyParsons	387.40	86.47	300.93	0.18	Monitoring
TW-1	10/23/2012	WorleyParsons	387.40	86.43	300.97	0.22	Monitoring
TW-1	3/29/2013	WorleyParsons	387.40	86.46	300.94	0.19	Monitoring
TW-1	6/20/2013	WorleyParsons	387.40	86.43	300.97	0.22	Monitoring
TW-1	8/13/2013	WorleyParsons	387.40	86.43	300.97	0.22	Monitoring
TW-1	11/14/2013	WorleyParsons	387.40	86.53	300.87	0.12	Monitoring
TW-1	2/26/2014	WorleyParsons	387.40	86.49	300.91	0.16	Monitoring
TW-1	5/20/2014	Northstar	387.40	86.47	300.93	0.18	Monitoring
TW-1	8/8/2014	Northstar	387.40	86.46	300.94	0.19	Monitoring
TW-1	12/4/2014	Northstar	387.40	86.50	300.90	0.15	Monitoring
TW-1	3/26/2015	Northstar	387.40	86.56	300.84	0.09	Monitoring
TW-1	6/11/2015	Northstar	387.40	86.50	300.90	0.15	Monitoring
TW-1	12/10/2015	Northstar	387.40	86.56	300.84	0.09	Monitoring
TW-1	6/2/2016	Northstar	387.40	86.58	300.82	0.07	Monitoring
TW-1	11/30/2016	Northstar	387.40	86.70	300.70	-0.05	Monitoring
TW-1	6/1/2017	Northstar	387.40	86.60	300.80	0.05	Monitoring
TW-1	12/5/2017	Northstar	387.40	86.70	300.70	-0.05	Monitoring
TW-1	6/1/2018	Northstar	387.40	86.61	300.79	0.04	Monitoring
TW-1	12/4/2018	Northstar	387.40	86.75	300.65	-0.10	Monitoring
TW-1	6/13/2019	Northstar	387.40	86.70	300.70	-0.05	Monitoring
TW-1	12/5/2019	Northstar	387.40	86.70	300.70	-0.05	Monitoring
TW-1	6/5/2020	Northstar	387.40	86.78	300.62	-0.13	Monitoring
TW-1	12/3/2020	Northstar	387.40	87.05	300.35	-0.40	Monitoring
TW-1	6/4/2021	Northstar	387.40	87.10	300.30	-0.45	Monitoring
TW-1	12/3/2021	Northstar	387.40	87.72	299.68	-1.07	Monitoring
TW-1	6/2/2022	Northstar	387.40	87.40	300.00	-0.75	Monitoring
TW-1	12/1/2022	Northstar	387.40	87.28	300.12	-0.63	Monitoring
TW-1	6/8/2023	Northstar	387.40	87.35	300.05	-0.70	Monitoring
TW-1	12/7/2023	Northstar	387.40	87.20	300.20	-0.55	Monitoring
TW-1	6/6/2024	Northstar	387.40	87.35	300.05	-0.70	Monitoring
TW-2	1/5/2010	WorleyParsons	393.47	132.37	261.10	N/A	Monitoring
TW-2	11/9/2010	WorleyParsons	393.47	127.09	266.38	0.00	Baseline
TW-2	1/19/2011	WorleyParsons	393.47	125.68	267.79	1.41	Monitoring
TW-2	2/8/2011	WorleyParsons	393.47	Pumping		N/A	Pumping
TW-2	6/9/2011	WorleyParsons	393.47	126.46	267.01	0.63	Monitoring
TW-2	9/26/2011	WorleyParsons	393.47	128.04	265.43	0.95	Monitoring
TW-2	12/14/2011	WorleyParsons	393.47	127.75	265.72	-0.66	Monitoring
TW-2	2/21/2012	WorleyParsons	393.47	127.85	265.62	-0.76	Monitoring
TW-2	5/24/2012	WorleyParsons	393.47	127.88	265.59	-0.79	Monitoring
TW-2	7/26/2012	WorleyParsons	393.47	128.09	265.38	-1.00	Monitoring
TW-2	10/23/2012	WorleyParsons	393.47	127.87	265.60	-0.78	Monitoring
TW-2	3/28/2013	WorleyParsons	393.47	127.22	266.25	-0.13	Monitoring
TW-2	6/20/2013	WorleyParsons	393.47	127.52	265.95	-0.43	Monitoring
TW-2	8/13/2013	WorleyParsons	393.47	127.88	265.59	-0.79	Monitoring
TW-2	11/12/2013	WorleyParsons	393.47	128.07	265.40	-0.98	Monitoring
TW-2	2/26/2014	WorleyParsons	393.47	127.00	266.47	0.09	Monitoring
TW-2	5/20/2014	Northstar	393.47	127.18	266.29	-0.09	Monitoring
TW-2	8/8/2014	Northstar	393.47	127.40	266.07	-0.31	Monitoring
TW-2	12/4/2014	Northstar	393.47	127.22	266.25	-0.13	Monitoring
TW-2	3/26/2015	Northstar	393.47	127.08	266.39	0.01	Monitoring
TW-2	6/11/2015	Northstar	393.47	127.00	266.47	0.09	Monitoring
TW-2	12/10/2015	Northstar	393.47	126.71	266.76	0.38	Monitoring
TW-2	6/2/2016	Northstar	393.47	126.60	266.87	0.49	Monitoring
TW-2	11/30/2016	Northstar	393.47	126.86	266.61	0.23	Monitoring
TW-2	6/1/2017	Northstar	393.47	126.60	266.87	0.49	Monitoring
TW-2	12/5/2017	Northstar	393.47	126.75	266.72	0.34	Monitoring
TW-2	6/1/2018	Northstar	393.47	126.78	266.69	0.31	Monitoring
TW-2	12/4/2018	Northstar	393.47	127.38	266.09	-0.29	Monitoring
TW-2	6/14/2019	Northstar	393.47	127.05	266.42	0.04	Monitoring
TW-2	12/5/2019	Northstar	393.47	126.75	266.72	0.34	Monitoring
TW-2	6/5/2020	Northstar	393.47	126.60	266.87	0.49	Monitoring
TW-2	12/3/2020	Northstar	393.47	126.98	266.49	0.11	Monitoring
TW-2	6/4/2021	Northstar	393.47	126.60	266.87	0.49	Monitoring

TABLE 2
GROUNDWATER LEVEL MEASUREMENTS
 Genesis Solar Energy Project, Riverside County, California

Well ID	Date	Source	Top of Casing Elevation (feet amsl) ¹	Depth to Water (feet below TOC)	Groundwater Elevation (feet amsl)	Difference from Baseline (feet)	Comments / Use
TW-2	12/2/2021	Northstar	393.47	127.01	266.46	0.08	Monitoring
TW-2	6/2/2022	Northstar	393.47	126.75	266.72	0.34	Monitoring
TW-2	12/1/2022	Northstar	393.47	126.88	266.59	0.21	Monitoring
TW-2	6/8/2023	Northstar	393.47	126.48	266.99	0.61	Monitoring
TW-2	12/7/2023	Northstar	393.47	126.90	266.57	0.19	Monitoring
TW-2	6/6/2024	Northstar	393.47	127.05	266.42	0.04	Monitoring
OBS-1	5/25/2009	WorleyParsons	388.30	79.22	309.08	N/A	Monitoring
OBS-1	11/10/2010	WorleyParsons	388.30	77.67	310.63	0.00	Baseline
OBS-1	2/8/2011	WorleyParsons	388.30	77.98	310.32	-0.31	Monitoring
OBS-1	6/8/2011	WorleyParsons	388.30	77.99	310.31	-0.32	Monitoring
OBS-1	9/25/2011	WorleyParsons	388.30	78.08	310.22	-0.41	Monitoring
OBS-1	12/13/2011	WorleyParsons	388.30	78.29	310.01	-0.62	Monitoring
OBS-1	2/21/2012	WorleyParsons	388.30	78.17	310.13	-0.50	Monitoring
OBS-1	5/23/2012	WorleyParsons	388.30	78.14	310.16	-0.47	Monitoring
OBS-1	7/26/2012	WorleyParsons	388.30	78.15	310.15	-0.48	Monitoring
OBS-1	10/23/2012	WorleyParsons	388.30	78.09	310.21	-0.42	Monitoring
OBS-1	3/29/2013	WorleyParsons	388.30	78.06	310.24	-0.39	Monitoring
OBS-1	6/20/2013	WorleyParsons	388.30	78.05	310.25	-0.38	Monitoring
OBS-1	8/13/2013	WorleyParsons	388.30	78.07	310.23	-0.40	Monitoring
OBS-1	11/14/2013	WorleyParsons	388.30	78.15	310.15	-0.48	Monitoring
OBS-1	2/26/2014	WorleyParsons	388.30	78.12	310.18	-0.45	Monitoring
OBS-1	5/20/2014	Northstar	388.30	78.06	310.24	-0.39	Monitoring
OBS-1	8/8/2014	Northstar	388.30	78.05	310.25	-0.38	Monitoring
OBS-1	12/4/2014	Northstar	388.30	78.10	310.20	-0.43	Monitoring
OBS-1	3/26/2015	Northstar	388.30	78.15	310.15	-0.48	Monitoring
OBS-1	6/11/2015	Northstar	388.30	78.10	310.20	-0.43	Monitoring
OBS-1	12/10/2015	Northstar	388.30	78.20	310.10	-0.53	Monitoring
OBS-1	6/2/2016	Northstar	388.30	78.14	310.16	-0.47	Monitoring
OBS-1	11/30/2016	Northstar	388.30	78.20	310.10	-0.53	Monitoring
OBS-1	6/1/2017	Northstar	388.30	78.13	310.17	-0.46	Monitoring
OBS-1	12/5/2017	Northstar	388.30	78.18	310.12	-0.51	Monitoring
OBS-1	6/1/2018	Northstar	388.30	78.10	310.20	-0.43	Monitoring
OBS-1	12/4/2018	Northstar	388.30	78.18	310.12	-0.51	Monitoring
OBS-1	6/13/2019	Northstar	388.30	78.12	310.18	-0.45	Monitoring
OBS-1	12/5/2019	Northstar	388.30	78.10	310.20	-0.43	Monitoring
OBS-1	6/5/2020	Northstar	388.30	78.10	310.20	-0.43	Monitoring
OBS-1	12/3/2020	Northstar	388.30	78.25	310.05	-0.58	Monitoring
OBS-1	6/4/2021	Northstar	388.30	78.15	310.15	-0.48	Monitoring
OBS-1	12/3/2021	Northstar	388.30	78.22	310.08	-0.55	Monitoring
OBS-1	6/2/2022	Northstar	388.30	78.15	310.15	-0.48	Monitoring
OBS-1	12/1/2022	Northstar	388.30	78.15	310.15	-0.48	Monitoring
OBS-1	6/8/2023	Northstar	388.30	78.15	310.15	-0.48	Monitoring
OBS-1	12/7/2023	Northstar	388.30	78.12	310.18	-0.45	Monitoring
OBS-1	6/6/2024	Northstar	388.30	78.11	310.19	-0.44	Monitoring
OBS-2-270 ⁶	7/9/2009	WorleyParsons	388.14	78.75	309.39	N/A	Monitoring
OBS-2-270 ⁶	11/10/2010	WorleyParsons	388.14	80.56	307.58	0.00	Baseline
OBS-2-270 ⁶	2/8/2011	WorleyParsons	388.14	80.61	307.53	-0.05	Monitoring
OBS-2-270 ⁶	2/8/2011	WorleyParsons	388.14	80.68	307.46	-0.12	Monitoring
OBS-2-270 ⁶	9/25/2011	WorleyParsons	388.14	80.77	307.37	-0.21	Monitoring
OBS-2-270 ⁶	12/14/2011	WorleyParsons	388.14	NM ²		N/A	Monitoring
OBS-2-270 ⁶	2/21/2012	WorleyParsons	388.14	80.47	307.67	0.09	Monitoring
OBS-2-270 ⁶	5/25/2012	WorleyParsons	388.14	81.28	306.86	-0.72	Monitoring
OBS-2-270 ⁶	7/26/2012	WorleyParsons	388.14	81.00	307.14	-0.44	Monitoring
OBS-2-270 ⁶	10/23/2012	WorleyParsons	388.14	81.01	307.13	-0.45	Monitoring
OBS-2-270 ⁶	3/29/2013	WorleyParsons	388.14	80.99	307.15	-0.43	Monitoring
OBS-2-270 ⁶	6/20/2013	WorleyParsons	388.14	NM ²		N/A	Monitoring
OBS-2-270 ⁶	8/13/2013	WorleyParsons	388.14	NM ²		N/A	Monitoring
OBS-2-270 ⁶	11/12/2013	WorleyParsons	388.14	81.24	306.90	-0.68	Monitoring
OBS-2-270 ⁶	2/26/2014	WorleyParsons	388.14	81.48	306.66	-0.92	Monitoring
OBS-2-315 ⁶	7/9/2009	WorleyParsons	388.14	80.89	307.25	N/A	Monitoring
OBS-2-315 ⁶	11/10/2010	WorleyParsons	388.14	82.51	305.63	0.00	Baseline
OBS-2-315 ⁶	2/8/2011	WorleyParsons	388.14	82.61	305.53	-0.10	Monitoring
OBS-2-315 ⁶	2/8/2011	WorleyParsons	388.14	82.83	305.31	-0.32	Monitoring
OBS-2-315 ⁶	9/25/2011	WorleyParsons	388.14	83.03	305.11	-0.52	Monitoring
OBS-2-315 ⁶	12/14/2011	WorleyParsons	388.14	NM ²		N/A	Monitoring
OBS-2-315 ⁶	2/21/2012	WorleyParsons	388.14	82.81	305.33	-0.30	Monitoring
OBS-2-315 ⁶	5/25/2012	WorleyParsons	388.14	NM ²		N/A	Monitoring

TABLE 2
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 Genesis Solar Energy Project, Riverside County, California

Well ID	Date	Source	Top of Casing Elevation (feet amsl) ¹	Depth to Water (feet below TOC)	Groundwater Elevation (feet amsl)	Difference from Baseline (feet)	Comments / Use
OBS-2-315 ⁶	7/26/2012	WorleyParsons	388.14	83.38	304.76	-0.87	Monitoring
OBS-2-315 ⁶	10/23/2012	WorleyParsons	388.14	83.43	304.71	-0.92	Monitoring
OBS-2-315 ⁶	3/29/2013	WorleyParsons	388.14	83.45	304.69	-0.94	Monitoring
OBS-2-315 ⁶	6/20/2013	WorleyParsons	388.14	NM ²		N/A	Monitoring
OBS-2-315 ⁶	8/13/2013	WorleyParsons	388.14	NM ²		N/A	Monitoring
OBS-2-315 ⁶	11/12/2013	WorleyParsons	388.14	83.74	304.40	-1.23	Monitoring
OBS-2-315 ⁶	2/26/2014	WorleyParsons	388.14	83.96	304.18	-1.45	Monitoring
OBS-2-370 ⁶	7/9/2009	WorleyParsons	388.14	82.46	305.68	N/A	Monitoring
OBS-2-370 ⁶	11/10/2010	WorleyParsons	388.14	84.60	303.54	0.00	Baseline
OBS-2-370 ⁶	2/8/2011	WorleyParsons	388.14	85.01	303.13	-0.41	Monitoring
OBS-2-370 ⁶	9/25/2011	WorleyParsons	388.14	85.24	302.90	-0.64	Monitoring
OBS-2-370 ⁶	12/14/2011	WorleyParsons	388.14	NM ²		N/A	Monitoring
OBS-2-370 ⁶	2/21/2012	WorleyParsons	388.14	85.05	303.09	-0.45	Monitoring
OBS-2-370 ⁶	5/25/2012	WorleyParsons	388.14	85.84	302.30	-1.24	Monitoring
OBS-2-370 ⁶	7/26/2012	WorleyParsons	388.14	85.64	302.50	-1.04	Monitoring
OBS-2-370 ⁶	10/23/2012	WorleyParsons	388.14	85.70	302.44	-1.10	Monitoring
OBS-2-370 ⁶	3/29/2013	WorleyParsons	388.14	85.75	302.39	-1.15	Monitoring
OBS-2-370 ⁶	6/20/2013	WorleyParsons	388.14	NM ²		N/A	Monitoring
OBS-2-370 ⁶	8/13/2013	WorleyParsons	388.14	NM ²		N/A	Monitoring
OBS-2-370 ⁶	11/12/2013	WorleyParsons	388.14	86.05	302.09	-1.45	Monitoring
OBS-2-370 ⁶	2/26/2014	WorleyParsons	388.14	86.27	301.87	-1.67	Monitoring
OBS-2-400 ⁶	7/9/2009	WorleyParsons	388.14	86.26	301.88	N/A	Monitoring
OBS-2-400 ⁶	11/10/2010	WorleyParsons	388.14	87.34	300.80	0.00	Baseline
OBS-2-400 ⁶	2/8/2011	WorleyParsons	388.14	87.41	300.73	-0.07	Monitoring
OBS-2-400 ⁶	2/8/2011	WorleyParsons	388.14	87.57	300.57	-0.23	Monitoring
OBS-2-400 ⁶	9/25/2011	WorleyParsons	388.14	87.73	300.41	-0.39	Monitoring
OBS-2-400 ⁶	12/14/2011	WorleyParsons	388.14	NM ²		N/A	Monitoring
OBS-2-400 ⁶	2/21/2012	WorleyParsons	388.14	87.47	300.67	-0.13	Monitoring
OBS-2-400 ⁶	5/25/2012	WorleyParsons	388.14	88.20	299.94	-0.86	Monitoring
OBS-2-400 ⁶	7/26/2012	WorleyParsons	388.14	87.96	300.18	-0.62	Monitoring
OBS-2-400 ⁶	10/23/2012	WorleyParsons	388.14	87.97	300.17	-0.63	Monitoring
OBS-2-400 ⁶	3/29/2013	WorleyParsons	388.14	88.20	299.94	-0.86	Monitoring
OBS-2-400 ⁶	6/20/2013	WorleyParsons	388.14	NM ²		N/A	Monitoring
OBS-2-400 ⁶	8/13/2013	WorleyParsons	388.14	NM ²		N/A	Monitoring
OBS-2-400 ⁶	11/12/2013	WorleyParsons	388.14	88.12	300.02	-0.78	Monitoring
OBS-2-400 ⁶	2/26/2014	WorleyParsons	388.14	88.31	299.83	-0.97	Monitoring
14	6/8/2011	WorleyParsons	388.14	100.98	287.16	0.00	Baseline
14	9/26/2011	WorleyParsons	388.14	100.65	287.49	0.33	Monitoring
14	12/14/2011	WorleyParsons	388.14	100.87	287.27	0.11	Monitoring
14	2/21/2012	WorleyParsons	388.14	100.85	287.29	0.13	Monitoring
14	5/24/2012	WorleyParsons	388.14	100.70	287.44	0.28	Monitoring
14	7/26/2012	WorleyParsons	388.14	100.72	287.42	0.26	Monitoring
14	10/23/2012	WorleyParsons	388.14	100.66	287.48	0.32	Monitoring
14	3/28/2013	WorleyParsons	388.14	100.49	287.65	0.49	Monitoring
14	6/20/2013	WorleyParsons	388.14	100.46	287.68	0.52	Monitoring
14	8/13/2013	WorleyParsons	388.14	100.46	287.68	0.52	Monitoring
14	11/12/2013	WorleyParsons	388.14	NM ⁴		N/A	Monitoring
14	2/26/2014	WorleyParsons	388.14	100.39	287.75	0.59	Monitoring
14	5/20/2014	Northstar	388.14	100.35	287.79	0.63	Monitoring
14	8/8/2014	Northstar	388.14	100.26	287.88	0.72	Monitoring
14	12/4/2014	Northstar	388.14	100.25	287.89	0.73	Monitoring
14	3/26/2015	Northstar	388.14	100.25	287.89	0.73	Monitoring
14	6/11/2015	Northstar	388.14	100.15	287.99	0.83	Monitoring
14	12/10/2015	Northstar	388.14	100.12	288.02	0.86	Monitoring
14	6/2/2016	Northstar	388.14	100.08	288.06	0.90	Monitoring
14	11/30/2016	Northstar	388.14	100.10	288.04	0.88	Monitoring
14	6/2/2017	Northstar	388.14	100.13	288.01	0.85	Monitoring
14 ⁸	12/5/2017	Northstar	388.14	128.75		N/A	Monitoring
14	6/1/2018	Northstar	388.14	100.60	287.54	0.38	Monitoring
14	12/4/2018	Northstar	388.14	100.52	287.62	0.46	Monitoring
14	6/13/2019	Northstar	388.14	100.20	287.94	0.78	Monitoring
14	12/5/2019	Northstar	388.14	100.85	287.29	0.13	Monitoring
14	6/4/2020	Northstar	388.14	100.60	287.54	0.38	Monitoring
14	12/3/2020	Northstar	388.14	100.47	287.67	0.51	Monitoring
14	6/3/2021	Northstar	388.14	100.15	287.99	0.83	Monitoring

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Well ID	Date	Source	Top of Casing Elevation (feet amsl) ¹	Depth to Water (feet below TOC)	Groundwater Elevation (feet amsl)	Difference from Baseline (feet)	Comments / Use
14	12/3/2021	Northstar	388.14	100.20	287.94	0.78	Monitoring
14	6/2/2022	Northstar	388.14	100.03	288.11	0.95	Monitoring
14	12/1/2022	Northstar	388.14	99.95	288.19	1.03	Monitoring
14	6/8/2023	Northstar	388.14	99.90	288.24	1.08	Monitoring
14	12/7/2023	Northstar	388.14	99.85	288.29	1.13	Monitoring
14	6/6/2024	Northstar	388.14	99.98	288.16	1.00	Monitoring
23a	11/11/2010	WorleyParsons	392.10	138.05	254.05	0.00	Baseline
23a	2/8/2011	WorleyParsons	392.10	137.12	254.98	0.93	Monitoring
23a	6/7/2011	WorleyParsons	392.10	137.58	254.52	0.47	Monitoring
23a	9/26/2011	WorleyParsons	392.10	138.01	254.09	0.04	Monitoring
23a	12/14/2011	WorleyParsons	392.10	138.88	253.22	-0.83	Monitoring
23a	2/22/2012	WorleyParsons	392.10	137.70	254.40	0.35	Monitoring
23a	5/24/2012	WorleyParsons	392.10	137.74	254.36	0.31	Monitoring
23a	7/26/2012	WorleyParsons	392.10	137.76	254.34	0.29	Monitoring
23a	10/23/2012	WorleyParsons	392.10	137.94	254.16	0.11	Monitoring
23a	3/28/2013	WorleyParsons	392.10	137.27	254.83	0.78	Monitoring
23a	6/20/2013	WorleyParsons	392.10	137.77	254.33	0.28	Monitoring
23a	8/13/2013	WorleyParsons	392.10	137.81	254.29	0.24	Monitoring
23a	11/12/2013	WorleyParsons	392.10	138.01	254.09	0.04	Monitoring
23a	2/25/2014	WorleyParsons	392.10	136.90	255.20	1.15	Monitoring
23a	5/20/2014	Northstar	392.10	137.15	254.95	0.90	Monitoring
23a	8/8/2014	Northstar	392.10	137.31	254.79	0.74	Monitoring
23a	12/4/2014	Northstar	392.10	137.18	254.92	0.87	Monitoring
23a	3/26/2015	Northstar	392.10	NM ⁷		N/A	Monitoring
23a	6/11/2015	Northstar	392.10	NM ⁷		N/A	Monitoring
23a	12/10/2015	Northstar	392.10	136.60	255.50	1.45	Monitoring
23a	6/2/2016	Northstar	392.10	136.55	255.55	1.50	Monitoring
23a	11/30/2016	Northstar	392.10	136.75	255.35	1.30	Monitoring
23a	6/1/2017	Northstar	392.10	136.40	255.70	1.65	Monitoring
23a	12/5/2017	Northstar	392.10	136.70	255.40	1.35	Monitoring
23a	6/1/2018	Northstar	392.10	136.60	255.50	1.45	Monitoring
23a	12/4/2018	Northstar	392.10	NM ⁷		N/A	Monitoring
23a	6/14/2019	Northstar	392.10	136.60	255.50	1.45	Monitoring
23a	12/5/2019	Northstar	392.10	136.75	255.35	1.30	Monitoring
23a	6/5/2020	Northstar	392.10	136.40	255.70	1.65	Monitoring
23a	12/3/2020	Northstar	392.10	136.80	255.30	1.25	Monitoring
23a	6/4/2021	Northstar	392.10	136.35	255.75	1.70	Monitoring
23a	12/3/2021	Northstar	392.10	136.68	255.42	1.37	Monitoring
23a	6/2/2022	Northstar	392.10	NM ⁷		N/A	Monitoring
23a	12/1/2022	Northstar	392.10	136.58	255.52	1.47	Monitoring
23a	6/8/2023	Northstar	392.10	136.18	255.92	1.87	Monitoring
23a	12/7/2023	Northstar	392.10	136.35	255.75	1.70	Monitoring
23a	6/6/2024	Northstar	392.10	136.37	255.73	1.68	Monitoring
24-1	2/8/2011	WorleyParsons	389.40	123.66	265.74	N/A	Monitoring
24-1	6/8/2011	WorleyParsons	389.40	126.71	262.69	0.00	Baseline
24-1	9/26/2011	WorleyParsons	389.40	127.15	262.25	-0.44	Monitoring
24-1	12/13/2011	WorleyParsons	389.40	126.98	262.42	-0.27	Monitoring
24-1	2/22/2012	WorleyParsons	389.40	127.20	262.20	-0.49	Monitoring
24-1	5/23/2012	WorleyParsons	389.40	127.14	262.26	-0.43	Monitoring
24-1	7/26/2012	WorleyParsons	389.40	127.31	262.09	-0.60	Monitoring
24-1	10/23/2012	WorleyParsons	389.40	127.21	262.19	-0.50	Monitoring
24-1	3/28/2013	WorleyParsons	389.40	126.73	262.67	-0.02	Monitoring
24-1	6/19/2013	WorleyParsons	389.40	127.95	261.45	1.24	Monitoring
24-1	8/14/2013	WorleyParsons	389.40	127.18	262.22	-0.47	Monitoring
24-1	11/13/2013	WorleyParsons	389.40	127.31	262.09	-0.60	Monitoring
24-1	2/25/2014	WorleyParsons	389.40	125.70	263.70	1.01	Monitoring
24-1	5/22/2014	Northstar	389.40	126.84	262.56	-0.13	Monitoring
24-1	8/8/2014	Northstar	389.40	126.91	262.49	-0.20	Monitoring
24-1	12/5/2014	Northstar	389.40	126.91	262.49	-0.20	Monitoring
24-1	3/26/2015	Northstar	389.40	127.10	262.30	-0.39	Monitoring
24-1	6/11/2015	Northstar	389.40	127.02	262.38	-0.31	Monitoring
24-1	12/11/2015	Northstar	389.40	126.80	262.60	-0.09	Monitoring
24-1	6/3/2016	Northstar	389.40	126.79	262.61	-0.08	Monitoring
24-1	11/30/2016	Northstar	389.40	126.93	262.47	-0.22	Monitoring
24-1	6/2/2017	Northstar	389.40	126.88	262.52	-0.17	Monitoring
24-1	12/5/2017	Northstar	389.40	126.95	262.45	-0.24	Monitoring
24-1	6/1/2018	Northstar	389.40	126.91	262.49	-0.20	Monitoring
24-1	12/4/2018	Northstar	389.40	127.36	262.04	-0.65	Monitoring
24-1	6/13/2019	Northstar	389.40	127.27	262.13	-0.56	Monitoring
24-1	12/5/2019	Northstar	389.40	127.10	262.30	-0.39	Monitoring
24-1	6/4/2020	Northstar	389.40	126.90	262.50	-0.19	Monitoring

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24-1	12/3/2020	Northstar	389.40	127.30	262.10	-0.59	Monitoring
24-1	6/3/2021	Northstar	389.40	126.98	262.42	-0.27	Monitoring
24-1	12/3/2021	Northstar	389.40	127.31	262.09	-0.60	Monitoring
24-1	6/2/2022	Northstar	389.40	127.11	262.29	-0.40	Monitoring
24-1	12/1/2022	Northstar	389.40	126.98	262.42	-0.27	Monitoring
24-1	6/8/2023	Northstar	389.40	127.13	262.27	-0.42	Monitoring
24-1	12/7/2023	Northstar	389.40	127.00	262.40	-0.29	Monitoring
24-1	6/6/2024	Northstar	389.40	127.15	262.25	-0.44	Monitoring
24-2	2/8/2011	WorleyParsons	388.86	124.91	263.95	0.00	Baseline
24-2	10/23/2011	WorleyParsons	388.86	125.69	263.17	-0.78	Monitoring
24-2	6/19/2013	WorleyParsons	388.86	125.40	263.46	-0.49	Monitoring
24-2	8/14/2013	WorleyParsons	388.86	126.60	262.26	-1.69	Monitoring
24-2	5/22/2014	Northstar	388.86	125.82	263.04	-0.91	Monitoring
24-2	8/8/2014	Northstar	388.86	125.33	263.53	-0.42	Monitoring
24-2	12/5/2014	Northstar	388.86	125.95	262.91	-1.04	Monitoring
24-2	3/26/2015	Northstar	388.86	125.20	263.66	-0.29	Monitoring
24-2	6/11/2015	Northstar	388.86	125.15	263.71	-0.24	Monitoring
24-2	12/11/2015	Northstar	388.86	124.90	263.96	0.01	Monitoring
24-2	6/3/2016	Northstar	388.86	124.90	263.96	0.01	Monitoring
24-2	11/30/2016	Northstar	388.86	125.08	263.78	-0.17	Monitoring
24-2	6/2/2017	Northstar	388.86	125.00	263.86	-0.09	Monitoring
24-2	12/5/2017	Northstar	388.86	125.05	263.81	-0.14	Monitoring
24-2	6/1/2018	Northstar	388.86	125.00	263.86	-0.09	Monitoring
24-2	12/4/2018	Northstar	388.86	125.45	263.41	-0.54	Monitoring
24-2	6/13/2019	Northstar	388.86	125.35	263.51	-0.44	Monitoring
24-2	12/5/2019	Northstar	388.86	125.10	263.76	-0.19	Monitoring
24-2	6/4/2020	Northstar	388.86	124.89	263.97	0.02	Monitoring
24-2	12/3/2020	Northstar	388.86	125.30	263.56	-0.39	Monitoring
24-2	6/3/2021	Northstar	388.86	124.97	263.89	-0.06	Monitoring
24-2	12/3/2021	Northstar	388.86	125.25	263.61	-0.34	Monitoring
24-2	6/2/2022	Northstar	388.86	125.02	263.84	-0.11	Monitoring
24-2	12/1/2022	Northstar	388.86	124.90	263.96	0.01	Monitoring
24-2	6/8/2023	Northstar	388.86	125.03	263.83	-0.12	Monitoring
24-2	12/7/2023	Northstar	388.86	124.97	263.89	-0.06	Monitoring
24-2	6/6/2024	Northstar	388.86	125.10	263.76	-0.19	Monitoring
24-3	2/8/2011	WorleyParsons	392.04	126.45	265.59	N/A	Monitoring
24-3	10/23/2011	WorleyParsons	392.04	124.48	267.56	0.00	Baseline
24-3	6/19/2013	WorleyParsons	392.04	124.15	267.89	0.33	Monitoring
24-3	8/14/2013	WorleyParsons	392.04	124.44	267.60	0.04	Monitoring
24-3	5/22/2014	Northstar	392.04	124.00	268.04	0.48	Monitoring
24-3	8/8/2014	Northstar	392.04	124.07	267.97	0.41	Monitoring
24-3	12/5/2014	Northstar	392.04	124.05	267.99	0.43	Monitoring
24-3	3/26/2015	Northstar	392.04	123.90	268.14	0.58	Monitoring
24-3	6/11/2015	Northstar	392.04	123.85	268.19	0.63	Monitoring
24-3	12/11/2015	Northstar	392.04	123.55	268.49	0.93	Monitoring
24-3	6/3/2016	Northstar	392.04	123.48	268.56	1.00	Monitoring
24-3	11/30/2016	Northstar	392.04	123.65	268.39	0.83	Monitoring
24-3	6/2/2017	Northstar	392.04	123.55	268.49	0.93	Monitoring
24-3	12/5/2017	Northstar	392.04	123.65	268.39	0.83	Monitoring
24-3	6/1/2018	Northstar	392.04	123.57	268.47	0.91	Monitoring
24-3	12/4/2018	Northstar	392.04	124.08	267.96	0.40	Monitoring
24-3	6/13/2019	Northstar	392.04	123.95	268.09	0.53	Monitoring
24-3	12/5/2019	Northstar	392.04	123.71	268.33	0.77	Monitoring
24-3	6/4/2020	Northstar	392.04	123.43	268.61	1.05	Monitoring
24-3	12/3/2020	Northstar	392.04	123.81	268.23	0.67	Monitoring
24-3	6/3/2021	Northstar	392.04	123.50	268.54	0.98	Monitoring
24-3	12/3/2021	Northstar	392.04	123.72	268.32	0.76	Monitoring
24-3	6/2/2022	Northstar	392.04	123.50	268.54	0.98	Monitoring
24-3	12/1/2022	Northstar	392.04	123.35	268.69	1.13	Monitoring
24-3	6/8/2023	Northstar	392.04	123.50	268.54	0.98	Monitoring
24-3	12/7/2023	Northstar	392.04	123.40	268.64	1.08	Monitoring
24-3	6/6/2024	Northstar	392.04	123.56	268.48	0.92	Monitoring
PW-0	12/14/2011	WorleyParsons	385.64	NM ³		N/A	Production/Monitoring
PW-0	2/23/2012	WorleyParsons	385.64	NM ³		N/A	Production/Monitoring
PW-0	5/23/2012	WorleyParsons	385.64	NM ³		N/A	Production/Monitoring
PW-0	7/26/2012	WorleyParsons	385.64	NM ³		N/A	Production/Monitoring
PW-0	10/23/2012	WorleyParsons	385.64	Pumping		N/A	Production/Monitoring
PW-0	3/28/2013	WorleyParsons	385.64	67.71	317.93	N/A	Production/Monitoring
PW-0	6/19/2013	WorleyParsons	385.64	Pumping		N/A	Production/Monitoring
PW-0	8/13/2013	WorleyParsons	385.64	100.49	285.15	N/A	Production/Monitoring

TABLE 2
GROUNDWATER LEVEL MEASUREMENTS
 Genesis Solar Energy Project, Riverside County, California

Well ID	Date	Source	Top of Casing Elevation (feet amsl) ¹	Depth to Water (feet below TOC)	Groundwater Elevation (feet amsl)	Difference from Baseline (feet)	Comments / Use
PW-0	11/13/2013	WorleyParsons	385.64	118.10	267.54	N/A	Production/Monitoring
PW-0	2/26/2014	WorleyParsons	385.64	98.46	287.18	N/A	Production/Monitoring
PW-0	5/20/2014	Northstar	385.64	99.60	286.04	N/A	Production/Monitoring
PW-0	8/8/2014	Northstar	385.64	99.06	286.58	N/A	Production/Monitoring
PW-0	12/4/2014	Northstar	385.64	99.65	285.99	N/A	Production/Monitoring
PW-0	3/26/2015	Northstar	385.64	99.62	286.02	N/A	Production/Monitoring
PW-0	6/11/2015	Northstar	385.64	98.00	287.64	N/A	Production/Monitoring
PW-0	12/10/2015	Northstar	385.64	99.55	286.09	N/A	Production/Monitoring
PW-0	6/3/2016	Northstar	385.64	99.78	285.86	N/A	Production/Monitoring
PW-0	11/30/2016	Northstar	385.64	99.50	286.14	N/A	Production/Monitoring
PW-0	6/1/2017	Northstar	385.64	99.32	286.32	N/A	Production/Monitoring
PW-0	12/5/2017	Northstar	385.64	98.00	287.64	N/A	Production/Monitoring
PW-0	5/30/2018	Northstar	385.64	99.27	286.37	N/A	Production/Monitoring
PW-0	12/4/2018	Northstar	385.64	NM ⁹		N/A	Production/Monitoring
PW-0	6/13/2019	Northstar	385.64	NM ⁹		N/A	Production/Monitoring
PW-0	12/5/2019	Northstar	385.64	NM ⁹		N/A	Production/Monitoring
PW-0	6/4/2020	Northstar	385.64	NM ⁹		N/A	Production/Monitoring
PW-0	12/3/2020	Northstar	385.64	NM ⁹		N/A	Production/Monitoring
PW-0	6/4/2021	Northstar	385.64	NM ⁹		N/A	Production/Monitoring
PW-0	12/2/2021	Northstar	385.64	NM ⁹		N/A	Production/Monitoring
PW-0	6/2/2022	Northstar	385.64	NM ⁹		N/A	Production/Monitoring
PW-0	12/1/2022	Northstar	385.64	NM ⁹		N/A	Production/Monitoring
PW-0	6/8/2023	Northstar	385.64	NM ⁹		N/A	Production/Monitoring
PW-0	12/7/2023	Northstar	385.64	NM ⁹		N/A	Production/Monitoring
PW-0	6/6/2024	Northstar	385.64	NM ⁹		N/A	Production/Monitoring
PW-1	12/14/2011	WorleyParsons	384.43	Pumping		N/A	Production/Monitoring
PW-1	2/23/2012	WorleyParsons	384.43	100.84	283.59	N/A	Production/Monitoring
PW-1	5/23/2012	WorleyParsons	384.43	Pumping		N/A	Production/Monitoring
PW-1	7/26/2012	WorleyParsons	384.43	101.09		N/A	Production/Monitoring
PW-1	10/23/2012	WorleyParsons	384.43	100.89	283.54	N/A	Production/Monitoring
PW-1	3/28/2013	WorleyParsons	384.43	100.60	283.83	N/A	Production/Monitoring
PW-1	6/19/2013	WorleyParsons	384.43	Pumping		N/A	Production/Monitoring
PW-1	8/13/2013	WorleyParsons	384.43	109.35	275.08	N/A	Production/Monitoring
PW-1	11/13/2013	WorleyParsons	384.43	99.89	284.54	N/A	Production/Monitoring
PW-1	2/26/2014	WorleyParsons	384.43	98.49	285.94	N/A	Production/Monitoring
PW-1	5/20/2014	Northstar	384.43	NM ⁵		N/A	Production/Monitoring
PW-1	8/8/2014	Northstar	384.43	NM ⁵		N/A	Production/Monitoring
PW-1	12/4/2014	Northstar	384.43	NM ⁵		N/A	Production/Monitoring
PW-1	3/26/2015	Northstar	384.43	NM ⁵		N/A	Production/Monitoring
PW-1	6/11/2015	Northstar	384.43	NM ⁵		N/A	Production/Monitoring
PW-1	12/10/2015	Northstar	384.43	NM ⁵		N/A	Production/Monitoring
PW-1	6/2/2016	Northstar	384.43	NM ⁵		N/A	Production/Monitoring
PW-1	11/30/2016	Northstar	384.43	NM ⁵		N/A	Production/Monitoring
PW-1	6/1/2017	Northstar	384.43	98.20	286.23	N/A	Production/Monitoring
PW-1	12/5/2017	Northstar	384.43	98.30	286.13	N/A	Production/Monitoring
PW-1	5/30/2018	Northstar	384.43	98.24	286.19	N/A	Production/Monitoring
PW-1	12/4/2018	Northstar	384.43	98.78	285.65	N/A	Production/Monitoring
PW-1	6/13/2019	Northstar	384.43	98.55	285.88	N/A	Production/Monitoring
PW-1	12/5/2019	Northstar	384.43	98.12	286.31	N/A	Production/Monitoring
PW-1	6/4/2020	Northstar	384.43	98.25	286.18	N/A	Production/Monitoring
PW-1	12/3/2020	Northstar	384.43	NM ⁵		N/A	Production/Monitoring
PW-1	6/4/2021	Northstar	384.43	NM ⁵		N/A	Production/Monitoring
PW-1	12/2/2021	Northstar	384.43	NM ⁵		N/A	Production/Monitoring
PW-1	6/2/2022	Northstar	384.43	98.85	285.58	N/A	Production/Monitoring
PW-1	12/1/2022	Northstar	384.43	98.70	285.73	N/A	Production/Monitoring
PW-1	6/8/2023	Northstar	384.43	98.85	285.58	N/A	Production/Monitoring
PW-1	12/7/2023	Northstar	384.43	98.60	285.83	N/A	Production/Monitoring
PW-1	6/6/2024	Northstar	384.43	98.75	285.68	N/A	Production/Monitoring
PW-2	12/14/2011	WorleyParsons	385.15	Pumping		N/A	Production/Monitoring
PW-2	2/23/2012	WorleyParsons	385.15	Pumping		N/A	Production/Monitoring
PW-2	5/23/2012	WorleyParsons	385.15	Pumping		N/A	Production/Monitoring
PW-2	7/26/2012	WorleyParsons	385.15	101.30	283.85	N/A	Production/Monitoring
PW-2	10/23/2012	WorleyParsons	385.15	Pumping		N/A	Production/Monitoring
PW-2	3/28/2013	WorleyParsons	385.15	Pumping		N/A	Production/Monitoring
PW-2	6/19/2013	WorleyParsons	385.15	Pumping		N/A	Production/Monitoring
PW-2	8/13/2013	WorleyParsons	385.15	101.75	283.40	N/A	Production/Monitoring
PW-2	11/12/2013	WorleyParsons	385.15	102.69	282.46	N/A	Production/Monitoring
PW-2	2/26/2014	WorleyParsons	385.15	100.52	284.63	N/A	Production/Monitoring

TABLE 2
GROUNDWATER LEVEL MEASUREMENTS
 Genesis Solar Energy Project, Riverside County, California

Well ID	Date	Source	Top of Casing Elevation (feet amsl) ¹	Depth to Water (feet below TOC)	Groundwater Elevation (feet amsl)	Difference from Baseline (feet)	Comments / Use
PW-2	5/20/2014	Northstar	385.15	Pumping		N/A	Production/Monitoring
PW-2	8/8/2014	Northstar	385.15	Pumping		N/A	Production/Monitoring
PW-2	12/4/2014	Northstar	385.15	Pumping		N/A	Production/Monitoring
PW-2	3/26/2015	Northstar	385.15	Pumping		N/A	Production/Monitoring
PW-2	6/11/2015	Northstar	385.15	Pumping		N/A	Production/Monitoring
PW-2	12/10/2015	Northstar	385.15	Pumping		N/A	Production/Monitoring
PW-2	6/2/2016	Northstar	385.15	Pumping		N/A	Production/Monitoring
PW-2	11/30/2016	Northstar	385.15	Pumping		N/A	Production/Monitoring
PW-2	6/1/2017	Northstar	385.15	Pumping		N/A	Production/Monitoring
PW-2	12/5/2017	Northstar	385.15	Pumping		N/A	Production/Monitoring
PW-2	5/30/2018	Northstar	385.15	105.69	279.46	N/A	Production/Monitoring
PW-2	12/4/2018	Northstar	385.15	NM ⁹		N/A	Production/Monitoring
PW-2	6/13/2019	Northstar	385.15	NM ⁹		N/A	Production/Monitoring
PW-2	12/5/2019	Northstar	385.15	NM ⁹		N/A	Production/Monitoring
PW-2	6/4/2020	Northstar	385.15	NM ⁹		N/A	Production/Monitoring
PW-2	12/3/2020	Northstar	385.15	NM ⁹		N/A	Production/Monitoring
PW-2	6/4/2021	Northstar	385.15	NM ⁹		N/A	Production/Monitoring
PW-2	12/2/2021	Northstar	385.15	NM ⁹		N/A	Production/Monitoring
PW-2	6/2/2022	Northstar	385.15	Pumping		N/A	Production/Monitoring
PW-2	12/1/2022	Northstar	385.15	Pumping		N/A	Production/Monitoring
PW-2	6/8/2023	Northstar	385.15	Pumping		N/A	Production/Monitoring
PW-2	12/7/2023	Northstar	385.15	Pumping		N/A	Production/Monitoring
PW-2	6/6/2024	Northstar	385.15	Pumping		N/A	Production/Monitoring
DM-1	2/27/2012	WorleyParsons	391.49	106.63	284.86	N/A	Monitoring
DM-1	5/24/2012	WorleyParsons	391.49	107.11	284.38	0.00	Baseline
DM-1	7/26/2012	WorleyParsons	391.49	107.10	284.39	0.01	Monitoring
DM-1	11/14/2012	WorleyParsons	391.49	108.15	283.34	-1.04	Monitoring
DM-1	3/29/2013	WorleyParsons	391.49	107.34	284.15	-0.23	Monitoring
DM-1	6/19/2013	WorleyParsons	391.49	107.19	284.30	-0.08	Monitoring
DM-1	8/13/2013	WorleyParsons	391.49	107.07	284.42	0.04	Monitoring
DM-1	11/12/2013	WorleyParsons	391.49	107.22	284.27	-0.11	Monitoring
DM-1	2/26/2014	WorleyParsons	391.49	107.13	284.36	-0.02	Monitoring
DM-1	5/22/2014	Northstar	391.49	107.05	284.44	0.06	Monitoring
DM-1	8/8/2014	Northstar	391.49	107.11	284.38	0.00	Monitoring
DM-1	12/4/2014	Northstar	391.49	107.03	284.46	0.08	Monitoring
DM-1	3/26/2015	Northstar	391.49	107.22	284.27	-0.11	Monitoring
DM-1	6/11/2015	Northstar	391.49	107.01	284.48	0.10	Monitoring
DM-1	12/10/2015	Northstar	391.49	106.98	284.51	0.13	Monitoring
DM-1	6/2/2016	Northstar	391.49	107.18	284.31	-0.07	Monitoring
DM-1	11/30/2016	Northstar	391.49	107.27	284.22	-0.16	Monitoring
DM-1	6/1/2017	Northstar	391.49	107.12	284.37	-0.01	Monitoring
DM-1	12/5/2017	Northstar	391.49	107.38	284.11	-0.27	Monitoring
DM-1	5/30/2018	Northstar	391.49	107.10	284.39	0.01	Monitoring
DM-1	12/4/2018	Northstar	391.49	107.45	284.04	-0.34	Monitoring
DM-1	6/14/2019	Northstar	391.49	107.18	284.31	-0.07	Monitoring
DM-1	12/5/2019	Northstar	391.49	107.42	284.07	-0.31	Monitoring
DM-1	6/4/2020	Northstar	391.49	107.10	284.39	0.01	Monitoring
DM-1	12/3/2020	Northstar	391.49	107.70	283.79	-0.59	Monitoring
DM-1	6/3/2021	Northstar	391.49	107.06	284.43	0.05	Monitoring
DM-1	12/2/2021	Northstar	391.49	107.35	284.14	-0.24	Monitoring
DM-1	6/2/2022	Northstar	391.49	107.25	284.24	-0.14	Monitoring
DM-1	12/1/2022	Northstar	391.49	107.40	284.09	-0.29	Monitoring
DM-1	6/8/2023	Northstar	391.49	107.49	284.00	-0.38	Monitoring
DM-1	12/7/2023	Northstar	391.49	107.41	284.08	-0.30	Monitoring
DM-1	6/6/2024	Northstar	391.49	107.44	284.05	-0.33	Monitoring
DM-2	2/27/2012	WorleyParsons	391.32	106.92	284.40	N/A	Monitoring
DM-2	5/24/2012	WorleyParsons	391.32	107.37	283.95	0.00	Baseline
DM-2	7/26/2012	WorleyParsons	391.32	107.33	283.99	0.04	Monitoring
DM-2	11/14/2012	WorleyParsons	391.32	108.33	282.99	-0.96	Monitoring
DM-2	3/29/2013	WorleyParsons	391.32	107.59	283.73	-0.22	Monitoring
DM-2	6/19/2013	WorleyParsons	391.32	107.41	283.91	-0.04	Monitoring
DM-2	8/13/2013	WorleyParsons	391.32	107.31	284.01	0.06	Monitoring
DM-2	11/12/2013	WorleyParsons	391.32	107.63	283.69	-0.26	Monitoring
DM-2	2/26/2014	WorleyParsons	391.32	107.40	283.92	-0.03	Monitoring
DM-2	5/22/2014	Northstar	391.32	107.28	284.04	0.09	Monitoring
DM-2	8/8/2014	Northstar	391.32	107.28	284.04	0.09	Monitoring
DM-2	12/4/2014	Northstar	391.32	107.43	283.89	-0.06	Monitoring
DM-2	3/26/2015	Northstar	391.32	107.61	283.71	-0.24	Monitoring
DM-2	6/11/2015	Northstar	391.32	107.40	283.92	-0.03	Monitoring
DM-2	12/10/2015	Northstar	391.32	107.30	284.02	0.07	Monitoring

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 Genesis Solar Energy Project, Riverside County, California

Well ID	Date	Source	Top of Casing Elevation (feet amsl) ¹	Depth to Water (feet below TOC)	Groundwater Elevation (feet amsl)	Difference from Baseline (feet)	Comments / Use
DM-2	6/2/2016	Northstar	391.32	107.38	283.94	-0.01	Monitoring
DM-2	11/30/2016	Northstar	391.32	107.52	283.80	-0.15	Monitoring
DM-2	6/1/2017	Northstar	391.32	107.47	283.85	-0.10	Monitoring
DM-2	12/5/2017	Northstar	391.32	107.78	283.54	-0.41	Monitoring
DM-2	5/30/2018	Northstar	391.32	107.45	283.87	-0.08	Monitoring
DM-2	12/4/2018	Northstar	391.32	107.80	283.52	-0.43	Monitoring
DM-2	6/14/2019	Northstar	391.32	107.55	283.77	-0.18	Monitoring
DM-2	12/5/2019	Northstar	391.32	107.72	283.60	-0.35	Monitoring
DM-2	6/4/2020	Northstar	391.32	107.45	283.87	-0.08	Monitoring
DM-2	12/3/2020	Northstar	391.32	108.03	283.29	-0.66	Monitoring
DM-2	6/3/2021	Northstar	391.32	107.64	283.68	-0.27	Monitoring
DM-2	12/2/2021	Northstar	391.32	107.71	283.61	-0.34	Monitoring
DM-2	6/2/2022	Northstar	391.32	107.65	283.67	-0.28	Monitoring
DM-2	12/1/2022	Northstar	391.32	107.72	283.60	-0.35	Monitoring
DM-2	6/8/2023	Northstar	391.32	107.82	283.50	-0.45	Monitoring
DM-2	12/7/2023	Northstar	391.32	107.74	283.58	-0.37	Monitoring
DM-2	6/6/2024	Northstar	391.32	107.79	283.53	-0.42	Monitoring
DM-3	2/27/2012	WorleyParsons	388.34	103.85	284.49	N/A	Monitoring
DM-3	5/24/2012	WorleyParsons	388.34	104.35	283.99	0.00	Baseline
DM-3	7/26/2012	WorleyParsons	388.34	104.28	284.06	0.07	Monitoring
DM-3	11/14/2012	WorleyParsons	388.34	105.25	283.09	-0.90	Monitoring
DM-3	3/29/2013	WorleyParsons	388.34	104.35	283.99	0.00	Monitoring
DM-3	6/19/2013	WorleyParsons	388.34	104.20	284.14	0.15	Monitoring
DM-3	8/13/2013	WorleyParsons	388.34	104.31	284.03	0.04	Monitoring
DM-3	11/12/2013	WorleyParsons	388.34	104.43	283.91	-0.08	Monitoring
DM-3	2/26/2014	WorleyParsons	388.34	104.31	284.03	0.04	Monitoring
DM-3	5/22/2014	Northstar	388.34	104.20	284.14	0.15	Monitoring
DM-3	8/8/2014	Northstar	388.34	104.21	284.13	0.14	Monitoring
DM-3	12/4/2014	Northstar	388.34	104.39	283.95	-0.04	Monitoring
DM-3	3/26/2015	Northstar	388.34	104.59	283.75	-0.24	Monitoring
DM-3	6/12/2015	Northstar	388.34	104.18	284.16	0.17	Monitoring
DM-3	12/11/2015	Northstar	388.34	103.96	284.38	0.39	Monitoring
DM-3	6/3/2016	Northstar	388.34	104.38	283.96	-0.03	Monitoring
DM-3	12/2/2016	Northstar	388.34	104.28	284.06	0.07	Monitoring
DM-3	6/1/2017	Northstar	388.34	104.25	284.09	0.10	Monitoring
DM-3	12/5/2017	Northstar	388.34	104.62	283.72	-0.27	Monitoring
DM-3	5/30/2018	Northstar	388.34	104.27	284.07	0.08	Monitoring
DM-3	12/4/2018	Northstar	388.34	104.68	283.66	-0.33	Monitoring
DM-3	6/14/2019	Northstar	388.34	104.38	283.96	-0.03	Monitoring
DM-3	12/6/2019	Northstar	388.34	104.66	283.68	-0.31	Monitoring
DM-3	6/5/2020	Northstar	388.34	104.32	284.02	0.03	Monitoring
DM-3	12/3/2020	Northstar	388.34	104.80	283.54	-0.45	Monitoring
DM-3	6/3/2021	Northstar	388.34	104.29	284.05	0.06	Monitoring
DM-3	12/2/2021	Northstar	388.34	104.50	283.84	-0.15	Monitoring
DM-3	6/2/2022	Northstar	388.34	104.50	283.84	-0.15	Monitoring
DM-3	12/1/2022	Northstar	388.34	104.50	283.84	-0.15	Monitoring
DM-3	6/8/2023	Northstar	388.34	104.68	283.66	-0.33	Monitoring
DM-3	12/7/2023	Northstar	388.34	104.52	283.82	-0.17	Monitoring
DM-3	6/6/2024	Northstar	388.34	104.56	283.78	-0.21	Monitoring
ADDITIONAL WELLS IN THE CHUCKWALLA VALLEY GROUNDWATER BASIN WITHIN 10 MILES OF THE SITE FOR WHICH GROUNDWATER LEVEL DATA IS AVAILABLE							
2	5/19/1961	DWR, 1963	424	140.00	284.00	N/A	Irrigation
3	2/26/1982	DWR Well Records	498	180.00	318.00	N/A	Irrigation
4	7/24/1961	DWR, 1963	354	60.05	293.95	N/A	Unused
9	9/16/1990	USGS-NWIS	354	81.36	272.64	N/A	Unknown
9	9/24/1990	USGS-NWIS	354	81.56	272.44	N/A	Unknown
9	2/13/1992	USGS-NWIS	354	81.20	272.80	N/A	Unknown
15	2/17/1992	USGS-NWIS	390.2	104.36	285.84	N/A	Unknown
15	3/15/2000	USGS-NWIS	390.2	97.36	292.84	N/A	Unknown
15	9/23/2009	WorleyParsons	390.2	97.00	293.20	N/A	Unknown
16	2/17/1992	USGS-NWIS	390	110.39	279.61	N/A	Unknown
16	9/23/2009	WorleyParsons	390	103.00	287.00	N/A	Unknown
22	2/4/2002	USGS-NWIS	387.6	125.29	262.31	N/A	Unknown
23	9/26/1990	USGS-NWIS	392.1	134.10	258.00	N/A	Unknown
23	2/10/1992	USGS-NWIS	392.1	134.80	257.30	N/A	Unknown
26	12/26/1982	USGS-NWIS	562.6	300.00	262.60	N/A	Irrigation
26	2/13/1992	USGS-NWIS	562.6	270.28	292.32	N/A	Irrigation
26	3/15/2000	USGS-NWIS	562.6	269.85	292.75	N/A	Irrigation
26	9/23/2009	WorleyParsons	562.6	282.00	280.60	N/A	Irrigation
27	6/19/1961	DWR, 1963	555	258.83	296.17	N/A	Unused
28	6/19/1961	DWR, 1963	520	21.65	498.35	N/A	Unused
29	1/16/1983	USGS-NWIS	545.9	270.00	275.90	N/A	Irrigation

TABLE 2
GROUNDWATER LEVEL MEASUREMENTS
 Genesis Solar Energy Project, Riverside County, California

Well ID	Date	Source	Top of Casing Elevation (feet amsl) ¹	Depth to Water (feet below TOC)	Groundwater Elevation (feet amsl)	Difference from Baseline (feet)	Comments / Use
29	2/13/1992	USGS-NWIS	545.9	257.61	288.29	N/A	Irrigation
29	3/15/2000	USGS-NWIS	545.9	257.22	288.68	N/A	Irrigation
29	9/23/2009	WorleyParsons	545.9	250.00	295.90	N/A	Irrigation
29	4/28/2011	USGS-NWIS	545.9	257.83	288.07	N/A	Irrigation
31	9/16/1990	USGS-NWIS	423.9	144.25	279.65	N/A	Unused
31	3/29/2000	USGS-NWIS	423.9	144.41	279.49	N/A	Unused
32	6/12/1961	USGS-NWIS	418	151.83	266.17	N/A	Unused
32	10/10/1961	USGS-NWIS	418	151.09	266.91	N/A	Unused
32	11/8/1961	USGS-NWIS	418	151.03	266.97	N/A	Unused
32	1/10/1962	USGS-NWIS	418	151.04	266.96	N/A	Unused
32	3/8/1962	USGS-NWIS	418	150.89	267.11	N/A	Unused
32	4/9/1962	USGS-NWIS	418	150.73	267.27	N/A	Unused
32	5/7/1962	USGS-NWIS	418	150.83	267.17	N/A	Unused
32	10/31/1962	USGS-NWIS	418	150.90	267.10	N/A	Unused
32	3/13/1963	USGS-NWIS	418	150.84	267.16	N/A	Unused
32	10/31/1963	USGS-NWIS	418	150.91	267.09	N/A	Unused
32	3/19/1964	USGS-NWIS	418	150.77	267.23	N/A	Unused
32	11/25/1964	USGS-NWIS	418	151.13	266.87	N/A	Unused
32	3/18/1965	USGS-NWIS	418	151.21	266.79	N/A	Unused
32	11/18/1965	USGS-NWIS	418	151.40	266.60	N/A	Unused
32	3/2/1966	USGS-NWIS	418	150.66	267.34	N/A	Unused
32	10/27/1966	USGS-NWIS	418	150.89	267.11	N/A	Unused
32	3/16/1967	USGS-NWIS	418	150.92	267.08	N/A	Unused
32	10/25/1967	USGS-NWIS	418	150.86	267.14	N/A	Unused
32	10/23/1969	USGS-NWIS	418	150.89	267.11	N/A	Unused
32	4/30/1970	USGS-NWIS	418	150.95	267.05	N/A	Unused
33	1987	USGS-NWIS	457.5	202.25	255.25	N/A	Unknown
33	9/17/1990	USGS-NWIS	457.5	205.62	251.88	N/A	Unknown
33	2/10/1992	USGS-NWIS	457.5	206.70	250.80	N/A	Unknown
33	2/11/1992	USGS-NWIS	457.5	206.27	251.23	N/A	Unknown
34	10/8/1992	USGS-NWIS	458.3	213.00	245.30	N/A	Public Water Supply
35	12/1987	USGS-NWIS	456.5	205.00	251.50	N/A	Unknown
35	2/10/1992	USGS-NWIS	456.5	200.50	256.00	N/A	Unknown
35	2/11/1992	USGS-NWIS	456.5	199.07	257.43	N/A	Unknown
35	2/11/1992	USGS-NWIS	456.5	199.60	256.90	N/A	Unknown
36	12/1987	USGS-NWIS	443.5	203.00	240.50	N/A	Public Water Supply
36	9/17/1990	USGS-NWIS	443.5	189.05	254.45	N/A	Public Water Supply
36	2/10/1992	USGS-NWIS	443.5	187.70	255.80	N/A	Public Water Supply
36	2/10/1992	USGS-NWIS	443.5	186.20	257.30	N/A	Public Water Supply
36	3/16/2000	USGS-NWIS	443.5	199.24	244.26	N/A	Public Water Supply
37	7/1/1981	Kennedy/Jenks/Chilton	433.09	163.00	270.09	N/A	Irrigation (abandoned)
37	2/11/1992	USGS-NWIS	433.09	174.47	258.62	N/A	Irrigation (abandoned)
39	4/5/1961	USGS-NWIS	442.9	168.37	274.53	N/A	Irrigation
39	4/30/1970	USGS-NWIS	442.9	171.81	271.09	N/A	Irrigation
39	7/31/1979	USGS-NWIS	442.9	173.48	269.42	N/A	Irrigation
39	7/24/1980	USGS-NWIS	442.9	169.06	273.84	N/A	Irrigation
39	1/23/1981	USGS-NWIS	442.9	169.22	273.68	N/A	Irrigation
39	9/23/1981	USGS-NWIS	442.9	169.23	273.67	N/A	Irrigation
39	3/3/1982	USGS-NWIS	442.9	170.26	272.64	N/A	Irrigation
39	1/28/1983	USGS-NWIS	442.9	170.54	272.36	N/A	Irrigation
39	7/31/1984	USGS-NWIS	442.9	170.65	272.25	N/A	Irrigation
39	2/27/1985	USGS-NWIS	442.9	171.10	271.80	N/A	Irrigation
39	6/12/1985	USGS-NWIS	442.9	172.90	270.00	N/A	Irrigation
39	2/9/1992	USGS-NWIS	442.9	183.46	259.44	N/A	Irrigation
40	10/30/1992	USGS-NWIS	449.4	193.00	256.40	N/A	Public Water Supply
41	10/19/1992	USGS-NWIS	453.6	202.00	251.60	N/A	Public Water Supply
42	1/1/1982	Kennedy/Jenks/Chilton	470	197.00	273.00	N/A	Irrigation
43	3/15/1982	USGS-NWIS	505.6	248.00	257.60	N/A	Irrigation
43	2/13/1992	USGS-NWIS	505.6	232.35	273.25	N/A	Irrigation
43	3/29/2000	USGS-NWIS	505.6	234.50	271.10	N/A	Baseline
43	10/5/2000	USGS-NWIS	505.6	234.84	270.76	N/A	Irrigation
43	1/10/2001	USGS-NWIS	505.6	234.89	270.71	N/A	Irrigation
43	2/23/2001	USGS-NWIS	505.6	234.45	271.15	N/A	Irrigation
43	4/16/2001	USGS-NWIS	505.6	234.82	270.78	N/A	Irrigation
43	4/16/2001	USGS-NWIS	505.6	234.82	270.78	N/A	Irrigation
43	7/10/2001	USGS-NWIS	505.6	235.40	270.20	N/A	Irrigation
43	11/7/2001	USGS-NWIS	505.6	235.66	269.94	N/A	Irrigation
43	11/7/2001	USGS-NWIS	505.6	235.69	269.91	N/A	Irrigation
43	4/3/2002	USGS-NWIS	505.6	234.69	270.91	N/A	Irrigation
43	10/2/2002	USGS-NWIS	505.6	236.04	269.56	N/A	Irrigation
43	10/2/2002	USGS-NWIS	505.6	236.16	269.44	N/A	Irrigation
43	6/3/2003	USGS-NWIS	505.6	235.59	270.01	N/A	Irrigation

TABLE 2
GROUNDWATER LEVEL MEASUREMENTS
 Genesis Solar Energy Project, Riverside County, California

Well ID	Date	Source	Top of Casing Elevation (feet amsl) ¹	Depth to Water (feet below TOC)	Groundwater Elevation (feet amsl)	Difference from Baseline (feet)	Comments / Use
43	6/3/2003	USGS-NWIS	505.6	235.61	269.99	N/A	Irrigation
43	11/5/2003	USGS-NWIS	505.6	236.46	269.14	N/A	Irrigation
43	11/5/2003	USGS-NWIS	505.6	236.45	269.15	N/A	Irrigation
43	3/2/2004	USGS-NWIS	505.6	235.65	269.95	N/A	Irrigation
43	3/2/2004	USGS-NWIS	505.6	235.63	269.97	N/A	Irrigation
43	8/4/2004	USGS-NWIS	505.6	235.85	269.75	N/A	Irrigation
43	12/8/2004	USGS-NWIS	505.6	235.78	269.82	N/A	Irrigation
43	4/15/2005	USGS-NWIS	505.6	235.28	270.32	N/A	Irrigation
43	8/31/2005	USGS-NWIS	505.6	235.89	269.71	N/A	Irrigation
43	8/31/2005	USGS-NWIS	505.6	235.84	269.76	N/A	Irrigation
43	2/14/2006	USGS-NWIS	505.6	235.78	269.82	N/A	Irrigation
43	2/14/2006	USGS-NWIS	505.6	235.79	269.81	N/A	Irrigation
43	5/5/2006	USGS-NWIS	505.6	236.38	269.22	N/A	Irrigation
43	5/5/2006	USGS-NWIS	505.6	236.39	269.21	N/A	Irrigation
43	8/10/2006	USGS-NWIS	505.6	236.66	268.94	N/A	Irrigation
43	8/10/2006	USGS-NWIS	505.6	236.66	268.94	N/A	Irrigation
43	12/8/2006	USGS-NWIS	505.6	236.57	269.03	N/A	Irrigation
43	12/8/2006	USGS-NWIS	505.6	236.57	269.03	N/A	Irrigation
43	2/7/2007	USGS-NWIS	505.6	236.16	269.44	N/A	Irrigation
43	2/7/2007	USGS-NWIS	505.6	236.16	269.44	N/A	Irrigation
43	5/17/2007	USGS-NWIS	505.6	236.55	269.05	N/A	Irrigation
43	5/17/2007	USGS-NWIS	505.6	236.56	269.04	N/A	Irrigation
43	9/5/2007	USGS-NWIS	505.6	236.91	268.69	N/A	Irrigation
43	9/5/2007	USGS-NWIS	505.6	236.91	268.69	N/A	Irrigation
43	9/5/2007	USGS-NWIS	505.6	236.91	268.69	N/A	Irrigation
43	12/13/2007	USGS-NWIS	505.6	236.55	269.05	N/A	Irrigation
43	12/13/2007	USGS-NWIS	505.6	236.54	269.06	N/A	Irrigation
43	3/19/2008	USGS-NWIS	505.6	235.65	269.95	N/A	Irrigation
43	3/19/2008	USGS-NWIS	505.6	235.64	269.96	N/A	Irrigation
43	3/19/2008	USGS-NWIS	505.6	235.67	269.93	N/A	Irrigation
43	6/25/2008	USGS-NWIS	505.6	235.62	269.98	N/A	Irrigation
43	6/25/2008	USGS-NWIS	505.6	235.60	270.00	N/A	Irrigation
43	9/24/2008	USGS-NWIS	505.6	235.73	269.87	N/A	Irrigation
43	9/24/2008	USGS-NWIS	505.6	235.73	269.87	N/A	Irrigation
43	9/24/2008	USGS-NWIS	505.6	235.72	269.88	N/A	Irrigation
43	1/14/2009	USGS-NWIS	505.6	235.25	270.35	N/A	Irrigation
43	1/14/2009	USGS-NWIS	505.6	235.26	270.34	N/A	Irrigation
43	4/16/2009	USGS-NWIS	505.6	235.28	270.32	N/A	Irrigation
43	4/16/2009	USGS-NWIS	505.6	235.29	270.31	N/A	Irrigation
43	7/30/2009	USGS-NWIS	505.6	235.80	269.80	N/A	Irrigation
43	7/30/2009	USGS-NWIS	505.6	235.79	269.81	N/A	Irrigation
43	10/29/2009	USGS-NWIS	505.6	235.61	269.99	N/A	Irrigation
43	10/29/2009	USGS-NWIS	505.6	235.60	270.00	N/A	Irrigation
43	1/20/2010	USGS-NWIS	505.6	235.98	269.62	N/A	Irrigation
43	1/20/2010	USGS-NWIS	505.6	235.99	269.61	N/A	Irrigation
43	4/23/2010	USGS-NWIS	505.6	235.26	270.34	N/A	Irrigation
43	4/23/2010	USGS-NWIS	505.6	235.26	270.34	N/A	Irrigation
43	7/22/2010	USGS-NWIS	505.6	235.67	269.93	N/A	Irrigation
43	11/4/2010	USGS-NWIS	505.6	235.71	269.89	N/A	Irrigation
43	11/4/2010	USGS-NWIS	505.6	235.73	269.87	N/A	Irrigation
43	1/13/2011	USGS-NWIS	505.6	235.27	270.33	N/A	Irrigation
43	4/28/2011	USGS-NWIS	505.6	235.12	270.48	N/A	Irrigation
43	10/18/2011	USGS-NWIS	505.6	235.48	270.12	N/A	Irrigation
43	5/9/2012	USGS-NWIS	505.6	235.25	270.35	N/A	Irrigation
43	5/11/2012	USGS-NWIS	505.6	235.24	270.36	N/A	Irrigation
43	10/5/2012	USGS-NWIS	505.6	235.65	269.95	N/A	Irrigation
43	2/12/2013	USGS-NWIS	505.6	235.36	270.24	N/A	Irrigation
43	8/29/2013	USGS-NWIS	505.6	235.62	269.98	N/A	Irrigation
43	11/21/2013	USGS-NWIS	505.6	235.36	270.24	N/A	Irrigation
43	5/7/2014	USGS-NWIS	505.6	235.08	270.52	N/A	Irrigation
43	12/19/2014	USGS-NWIS	505.6	235.35	270.25	N/A	Irrigation
43	4/7/2015	USGS-NWIS	505.6	235.17	270.43	N/A	Irrigation
43	9/2/2015	USGS-NWIS	505.6	235.12	270.48	N/A	Irrigation
43	1/26/2016	USGS-NWIS	505.6	234.89	270.71	N/A	Irrigation
43	3/23/2016	USGS-NWIS	505.6	234.76	270.84	N/A	Irrigation
43	6/15/2016	USGS-NWIS	505.6	234.74	270.86	N/A	Irrigation
43	10/19/2016	USGS-NWIS	505.6	234.94	270.66	N/A	Irrigation
43	1/24/2017	USGS-NWIS	505.6	234.63	270.97	N/A	Irrigation
43	5/23/2017	USGS-NWIS	505.6	234.67	270.93	N/A	Irrigation
43	8/22/2017	USGS-NWIS	505.6	235.13	270.47	N/A	Irrigation
43	12/5/2017	USGS-NWIS	505.6	234.99	270.61	N/A	Irrigation
43	3/14/2018	USGS-NWIS	505.6	234.59	271.01	N/A	Irrigation
43	5/29/2018	USGS-NWIS	505.6	234.83	270.77	N/A	Irrigation

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Well ID	Date	Source	Top of Casing Elevation (feet amsl) ¹	Depth to Water (feet below TOC)	Groundwater Elevation (feet amsl)	Difference from Baseline (feet)	Comments / Use
43	9/4/2018	USGS-NWIS	505.6	235.27	270.33	N/A	Irrigation
43	11/14/2018	USGS-NWIS	505.6	235.54	270.06	N/A	Irrigation
43	3/18/2019	USGS-NWIS	505.6	235.21	270.39	N/A	Irrigation
43	6/12/2019	USGS-NWIS	505.6	235.60	270.00	N/A	Irrigation
43	8/21/2019	USGS-NWIS	505.6	235.36	270.24	N/A	Irrigation
43	11/6/2019	USGS-NWIS	505.6	235.18	270.42	N/A	Irrigation
43	3/19/2020	USGS-NWIS	505.6	234.87	270.73	N/A	Irrigation
43	5/27/2020	USGS-NWIS	505.6	234.94	270.66	N/A	Irrigation
43	8/26/2020	USGS-NWIS	505.6	234.92	270.68	N/A	Irrigation
43	10/19/2020	USGS-NWIS	505.6	235.17	270.43	N/A	Irrigation
43	3/31/2021	USGS-NWIS	505.6	234.88	270.72	N/A	Irrigation
43	6/2/2021	USGS-NWIS	505.6	234.85	270.75	N/A	Irrigation
43	9/1/2021	USGS-NWIS	505.6	235.00	270.60	N/A	Irrigation
43	12/27/2021	USGS-NWIS	505.6	235.02	270.58	N/A	Irrigation
43	3/24/2022	USGS-NWIS	505.6	235.28	270.32	N/A	Irrigation
43	6/21/2022	USGS-NWIS	505.6	235.16	270.44	N/A	Irrigation
43	12/15/2022	USGS-NWIS	505.6	235.05	270.55	N/A	Irrigation
43	2/27/2023	USGS-NWIS	505.6	234.72	270.88	N/A	Irrigation
43	5/23/2023	USGS-NWIS	505.6	234.88	270.72	N/A	Irrigation
43	8/29/2023	USGS-NWIS	505.6	234.85	270.75	N/A	Irrigation
43	12/21/2023	USGS-NWIS	505.6	235.23	270.37	N/A	Irrigation
43	4/4/2024	USGS-NWIS	505.6	234.82	270.78	N/A	Irrigation
43	6/5/2024	USGS-NWIS	505.6	234.86	270.74	N/A	Irrigation
44	11/29/1989	USGS-NWIS	505.3	234.00	271.30	N/A	Irrigation
47	2/14/1984	USGS-NWIS	580.90	300.00	280.90	N/A	Unknown
47	9/28/1990	USGS-NWIS	580.90	299.61	281.29	N/A	Unknown
47	2/9/1992	USGS-NWIS	580.90	299.69	281.21	N/A	Unknown
47	3/30/2000	USGS-NWIS	580.90	300.05	280.85	N/A	Unknown
50	4/7/1961	USGS-NWIS	566	189.85	376.15	N/A	Unknown
50	4/20/1961	USGS-NWIS	566	189.98	376.02	N/A	Unknown
54	5/1/1985	USGS-NWIS	654.5	360.00	294.50	N/A	Unknown
54	9/28/1990	USGS-NWIS	654.5	369.19	285.31	N/A	Unknown
54	2/10/1992	USGS-NWIS	654.5	369.15	285.35	N/A	Unknown
54	3/30/2000	USGS-NWIS	654.5	369.08	285.42	N/A	Unknown
55	1/23/2012	USGS-NWIS	415.4	162.60	252.80	N/A	Exploratory
55	5/9/2012	USGS-NWIS	415.4	162.57	252.83	N/A	Exploratory
55	9/2/2015	USGS-NWIS	415.4	161.88	253.52	N/A	Exploratory
55	1/26/2016	USGS-NWIS	415.4	161.42	253.98	N/A	Exploratory
55	3/23/2016	USGS-NWIS	415.4	161.43	253.97	N/A	Exploratory
55	6/15/2016	USGS-NWIS	415.4	161.37	254.03	N/A	Exploratory
55	10/19/2016	USGS-NWIS	415.4	161.63	253.77	N/A	Exploratory
55	1/24/2017	USGS-NWIS	415.4	161.31	254.09	N/A	Exploratory
55	5/23/2017	USGS-NWIS	415.4	161.37	254.03	N/A	Exploratory
55	8/22/2017	USGS-NWIS	415.4	161.89	253.51	N/A	Exploratory
55	12/5/2017	USGS-NWIS	415.4	161.47	253.93	N/A	Exploratory
55	3/14/2018	USGS-NWIS	415.4	161.24	254.16	N/A	Exploratory
55	5/29/2018	USGS-NWIS	415.4	161.51	253.89	N/A	Exploratory
55	9/4/2018	USGS-NWIS	415.4	162.08	253.32	N/A	Exploratory
55	11/14/2018	USGS-NWIS	415.4	162.04	253.36	N/A	Exploratory
55	3/18/2019	USGS-NWIS	415.4	161.82	253.58	N/A	Exploratory
55	6/12/2019	USGS-NWIS	415.4	162.24	253.16	N/A	Exploratory
55	8/21/2019	USGS-NWIS	415.4	162.06	253.34	N/A	Exploratory
55	11/7/2019	USGS-NWIS	415.4	161.70	253.70	N/A	Exploratory
55	3/19/2020	USGS-NWIS	415.4	161.31	254.09	N/A	Exploratory
55	5/27/2020	USGS-NWIS	415.4	161.54	253.86	N/A	Exploratory
55	8/27/2020	USGS-NWIS	415.4	161.63	253.77	N/A	Exploratory
55	10/20/2020	USGS-NWIS	415.4	161.85	253.55	N/A	Exploratory
55	3/31/2021	USGS-NWIS	415.4	161.15	254.25	N/A	Exploratory
55	6/2/2021	USGS-NWIS	415.4	161.38	254.02	N/A	Exploratory
55	9/1/2021	USGS-NWIS	415.4	161.60	253.80	N/A	Exploratory
55	12/27/2021	USGS-NWIS	415.4	161.41	253.99	N/A	Exploratory
55	3/24/2022	USGS-NWIS	415.4	161.63	253.77	N/A	Exploratory
55	6/21/2022	USGS-NWIS	415.4	161.62	253.78	N/A	Exploratory
55	12/15/2022	USGS-NWIS	415.4	161.19	254.21	N/A	Exploratory
55	2/28/2023	USGS-NWIS	415.4	160.93	254.47	N/A	Exploratory
55	5/23/2023	USGS-NWIS	415.4	161.21	254.19	N/A	Exploratory
55	12/21/2023	USGS-NWIS	415.4	161.46	253.94	N/A	Exploratory
55	4/4/2024	USGS-NWIS	415.4	160.98	254.42	N/A	Exploratory
55	6/5/2024	USGS-NWIS	415.4	160.99	254.41	N/A	Exploratory
56	1/23/2012	USGS-NWIS	415.4	159.69	255.71	N/A	Exploratory
56	5/9/2012	USGS-NWIS	415.4	159.89	255.51	N/A	Exploratory

TABLE 2
GROUNDWATER LEVEL MEASUREMENTS
 Genesis Solar Energy Project, Riverside County, California

Well ID	Date	Source	Top of Casing Elevation (feet amsl) ¹	Depth to Water (feet below TOC)	Groundwater Elevation (feet amsl)	Difference from Baseline (feet)	Comments / Use
56	1/26/2016	USGS-NWIS	415.4	159.71	255.69	N/A	Exploratory
56	3/23/2016	USGS-NWIS	415.4	159.63	255.77	N/A	Exploratory
56	6/15/2016	USGS-NWIS	415.4	159.58	255.82	N/A	Exploratory
56	10/19/2016	USGS-NWIS	415.4	159.57	255.83	N/A	Exploratory
56	1/24/2017	USGS-NWIS	415.4	159.57	255.83	N/A	Exploratory
56	5/23/2017	USGS-NWIS	415.4	159.38	256.02	N/A	Exploratory
56	8/22/2017	USGS-NWIS	415.4	159.53	255.87	N/A	Exploratory
56	12/5/2017	USGS-NWIS	415.4	159.55	255.85	N/A	Exploratory
56	3/14/2018	USGS-NWIS	415.4	159.29	256.11	N/A	Exploratory
56	5/29/2018	USGS-NWIS	415.4	159.30	256.10	N/A	Exploratory
56	9/4/2018	USGS-NWIS	415.4	159.40	256.00	N/A	Exploratory
56	11/14/2018	USGS-NWIS	415.4	159.75	255.65	N/A	Exploratory
56	3/18/2019	USGS-NWIS	415.4	159.38	256.02	N/A	Exploratory
56	6/12/2019	USGS-NWIS	415.4	159.53	255.87	N/A	Exploratory
56	8/21/2019	USGS-NWIS	415.4	159.40	256.00	N/A	Exploratory
56	11/7/2019	USGS-NWIS	415.4	159.44	255.96	N/A	Exploratory
56	3/19/2020	USGS-NWIS	415.4	159.32	256.08	N/A	Exploratory
56	5/27/2020	USGS-NWIS	415.4	159.34	256.06	N/A	Exploratory
56	8/27/2020	USGS-NWIS	415.4	159.23	256.17	N/A	Exploratory
56	10/20/2020	USGS-NWIS	415.4	159.36	256.04	N/A	Exploratory
56	3/31/2021	USGS-NWIS	415.4	159.39	256.01	N/A	Exploratory
56	6/2/2021	USGS-NWIS	415.4	159.27	256.13	N/A	Exploratory
56	9/1/2021	USGS-NWIS	415.4	159.20	256.20	N/A	Exploratory
56	12/27/2021	USGS-NWIS	415.4	159.21	256.19	N/A	Exploratory
56	3/24/2022	USGS-NWIS	415.4	159.37	256.03	N/A	Exploratory
56	6/21/2022	USGS-NWIS	415.4	159.38	256.02	N/A	Exploratory
56	12/15/2022	USGS-NWIS	415.4	159.30	256.10	N/A	Exploratory
56	2/28/2023	USGS-NWIS	415.4	159.20	256.20	N/A	Exploratory
56	5/23/2023	USGS-NWIS	415.4	159.13	256.27	N/A	Exploratory
56	12/21/2023	USGS-NWIS	415.4	159.07	256.33	N/A	Exploratory
56	4/4/2024	USGS-NWIS	415.4	159.09	256.31	N/A	Exploratory
56	6/5/2024	USGS-NWIS	415.4	159.06	256.34	N/A	Exploratory
57	1/23/2012	USGS-NWIS	415.4	154.20	261.20	N/A	Exploratory
57	5/9/2012	USGS-NWIS	415.4	154.28	261.12	N/A	Exploratory
57	9/2/2015	USGS-NWIS	415.4	153.39	262.01	N/A	Exploratory
57	3/23/2016	USGS-NWIS	415.4	153.29	262.11	N/A	Exploratory
57	6/15/2016	USGS-NWIS	415.4	153.15	262.25	N/A	Exploratory
57	10/19/2016	USGS-NWIS	415.4	153.08	262.32	N/A	Exploratory
57	1/24/2017	USGS-NWIS	415.4	153.12	262.28	N/A	Exploratory
57	5/23/2017	USGS-NWIS	415.4	152.78	262.62	N/A	Exploratory
57	8/22/2017	USGS-NWIS	415.4	152.73	262.67	N/A	Exploratory
57	12/5/2017	USGS-NWIS	415.4	152.66	262.74	N/A	Exploratory
57	3/14/2018	USGS-NWIS	415.4	152.49	262.91	N/A	Exploratory
57	5/29/2018	USGS-NWIS	415.4	152.35	263.05	N/A	Exploratory
57	9/4/2018	USGS-NWIS	415.4	152.37	263.03	N/A	Exploratory
57	11/14/2018	USGS-NWIS	415.4	152.24	263.16	N/A	Exploratory
57	3/18/2019	USGS-NWIS	415.4	152.09	263.31	N/A	Exploratory
57	6/12/2019	USGS-NWIS	415.4	152.00	263.40	N/A	Exploratory
57	8/21/2019	USGS-NWIS	415.4	151.95	263.45	N/A	Exploratory
57	11/7/2019	USGS-NWIS	415.4	151.83	263.57	N/A	Exploratory
57	3/19/2020	USGS-NWIS	415.4	151.85	263.55	N/A	Exploratory
57	5/27/2020	USGS-NWIS	415.4	151.60	263.80	N/A	Exploratory
57	8/27/2020	USGS-NWIS	415.4	151.49	263.91	N/A	Exploratory
57	10/20/2020	USGS-NWIS	415.4	151.44	263.96	N/A	Exploratory
57	3/31/2021	USGS-NWIS	415.4	151.37	264.03	N/A	Exploratory
57	6/2/2021	USGS-NWIS	415.4	151.17	264.23	N/A	Exploratory
57	9/1/2021	USGS-NWIS	415.4	151.10	264.30	N/A	Exploratory
57	12/27/2021	USGS-NWIS	415.4	150.94	264.46	N/A	Exploratory
57	3/24/2022	USGS-NWIS	415.4	150.87	264.53	N/A	Exploratory
57	6/21/2022	USGS-NWIS	415.4	150.78	264.62	N/A	Exploratory
57	12/15/2022	USGS-NWIS	415.4	150.55	264.85	N/A	Exploratory
57	2/28/2023	USGS-NWIS	415.4	150.45	264.95	N/A	Exploratory
57	5/23/2023	USGS-NWIS	415.4	150.34	265.06	N/A	Exploratory
57	12/21/2023	USGS-NWIS	415.4	150.13	265.27	N/A	Exploratory
57	4/4/2024	USGS-NWIS	415.4	149.85	265.55	N/A	Exploratory
57	6/5/2024	USGS-NWIS	415.4	149.92	265.48	N/A	Exploratory

Notes:

amsl = above mean sea level

TOC = top of casing

1. Wells were surveyed on February 8 & 9, 2011. Top of Casing elevation for all other wells are approximate.

TABLE 2
GROUNDWATER LEVEL MEASUREMENTS
 Genesis Solar Energy Project, Riverside County, California

Well ID	Date	Source	Top of Casing Elevation (feet amsl) ¹	Depth to Water (feet below TOC)	Groundwater Elevation (feet amsl)	Difference from Baseline (feet)	Comments / Use
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- 2. No data was collected due to equipment or software malfunction
- 3. Sounding tube is blocked with concrete
- 4. Well not accessible - Unknown lock on well
- 5. Well not accessible - Steel plate welded over well
- 6. Due to loss of configuration file and calibration data following the 1st Quarter 2014 monitoring event, the OBS-2 buried transducers are no longer accessible.
- 7. Well not accessible - Access agreement issue
- 8. Well pumped by others on 10/10/17 at 250-300 gpm; water level at time of monitoring was 128.75 ft bgs / 259.39 ft amsl.
- 9. Sounding port obstructed

TABLE 3
MOST RECENT GROUNDWATER QUALITY MONITORING DATA
 Genesis Solar Energy Project, Riverside, California

Well ID	Date	Groundwater Purging			Field Parameters					
		Rate of Groundwater Discharge (mL/min)	Purging Method	Total Volume Purged (mL)	Temperature (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	ORP (mV)	D.O. (mg/L)
23a	6/6/2024	N/A	Bailer	5,750	36.7	6.70	3.3	13.2	+66	2.24
OBS-1	6/6/2024	N/A	Bailer	5,750	34.3	6.60	23.3	3.6	+68	3.58
TW-1	6/6/2024	N/A	Bailer	5,750	30.7	5.15	16.5	56	+68	8.89
TW-2	6/6/2024	N/A	Bailer	5,750	34.8	6.71	6.0	102	-142	2.35
PW-0	6/6/2024	N/A	Production Pump	N/A ²	38.0	6.87	6.8	1.1	-151	2.84
PW-1	6/6/2024	N/A	N/A	N/A ¹	--	--	--	--	--	--
PW-2	6/6/2024	N/A	Production Pump	N/A ²	44.8	6.91	4.1	0.3	-1	3.04
DM-1	6/6/2024	180	Bladder Pump	3,600	32.1	6.93	17.8	7.6	+83	5.45
DM-2	6/6/2024	138	Bladder Pump	3,600	29.9	7.01	18.1	89.0	+89	0.74
DM-3	6/6/2024	143	Bladder Pump	3,600	34.2	6.78	17.0	0.2	+120	5.42

NOTES:

mL = milliliters

mL/min = milliliters per minute

mS/cm = millisiemens per centimeter

NTU = Nephelometric Turbidity Units

DO = Dissolved Oxygen

mg/L = milligrams per Liter

°C = degrees Celsius

mV = millivolts

N/A = Not Applicable or Not Available

-- = Not Measured

1. Not sampled - well not accessible

2. Well was sampled during continuous production pumping and therefore purging was not necessary.

TABLE 4
SUMMARY OF LABORATORY ANALYTICAL RESULTS
Genesis Solar Energy Project

Well ID	Date Sampled	Sampling Method	Chloride (mg/L)	Sulfate (SO4) (mg/L)	Nitrate (NO3) (mg/L)	Calcium (mg/L)	Copper (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Iron (mg/L)	Magnesium (mg/L)	Antimony (ug/L)	Arsenic (ug/L)	Barium (ug/L)	Cadmium (ug/L)	Chromium (All Species) (ug/L)	Cobalt (ug/L)	Lead (ug/L)	Manganese (ug/L)	Nickel (ug/L)	Selenium (ug/L)	Zinc (ug/L)	Mercury (ug/L)	Total Dissolved Solids (mg/L)	Specific Conductance (us/cm)	pH (standard Units)	Oil & Grease / HEM (mg/L)	HTF ^t (mg/L)	Deuterium (% relative to VSMOW)	Oxygen-18 (% relative to VSMOW)
			EPA Method 300.0			EPA Method 200.7						EPA Method 200.8												SM7470A	SM2540C	SM2510B	SM4500H	SM1664A	8015B	Isotope Geochemistry
TW-1	6/5/2009	Low Flow	5,600	1,500	<0.25	160	<0.010	4,500	30	1.4	38	-	-	-	-	-	-	-	65	-	-	-	-	9,500	19,000	7.9	-	-	-	-
TW-1	7/9/2009	Low Flow	5,300	1,400	-	-	<0.010	4,000	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10,000	19,000	7.9	-	-	-	-
TW-1	7/13/2009	Low Flow	6,400	1,800	-	-	<0.010	3,600	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9,500	18,000	7.9	-	-	-	-
TW-1	7/16/2009	Low Flow	4,700	1,200	<0.25	-	<0.010	3,600	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,900	18,000	7.8	-	-	-	-
TW-1	11/10/2010	Low Flow	6,200	1,600	<0.25	170	<0.010	4,000	23	1.7	35	-	-	-	-	-	-	-	79	-	-	-	-	11,000	18,000	8.0	-	-	-69.90	-8.61
TW-1	11/10/2010	Low Flow	6,100	1,600	<0.25	170	<0.010	4,100	22	1.6	34	-	-	-	-	-	-	-	77	-	-	-	-	9,900	18,000	8.0	-	-	-69.30	-8.56
TW-1	6/8/2011	Low Flow	5,100	1,600	<0.25	170	<0.010	3,300	24	5.1	30	-	-	-	-	-	-	-	73	-	-	-	-	10,000	20,000	8.0	-	-	-67.00	-8.24
TW-1	12/13/2011	Low Flow	3,900	1,300	<1.1	82	<0.010	3,400	23	9.5	25	-	-	-	-	-	-	-	-	-	-	-	-	9,100	9,800	9.0	-	-	-63.70	-8.20
TW-1	12/13/2011	Hydrasleeve	3,900	1,300	<1.1	75	0.0052	3,100	21	30	24	-	-	-	-	-	-	-	-	-	-	-	-	9,200	15,000	9.0	-	-	-64.20	-8.20
TW-1	5/23/2012	Hydrasleeve	4,400	1,700	<2.2	81	<0.010	3,000	20	<0.040	21	-	-	-	-	-	-	-	-	-	-	-	-	8,800	17,000	9.2	-	-	-66.30	-8.20
TW-1	10/23/2012	Hydrasleeve	4,100	1,700	<2.2	71	<0.010	3,100	19	<0.040	23	-	-	-	-	-	-	-	-	-	-	-	-	9,000	15,000	9.2	-	-	-66.00	-8.00
TW-1	5/20/2014	Hydrasleeve	3,900	1,400	-	81	<0.010	3,000	20	0.29	12	<10	2.5 ^j	17	<5.0	<10	<5.0	<5.0	9.6	2.9 ^j	<10	<100	<0.20	8,900	15,000	9.7	<4.7	-	-63.74	-7.83
TW-1	12/4/2014	Hydrasleeve	3,900	1,200	<2.2	86	<0.050	3,200	21	0.057 ^j	11	<10	3.8 ^j	17	<5.0	<10	<5.0	<5.0	8.6	4.4 ^j	<10	<100	<0.20	8,500	15,000	9.9	<4.7	<0.095	-65.20	-8.12
TW-1	6/11/2015	Hydrasleeve	4,100	1,400	<2.2	73	<0.10	3,000	19	<0.40	8.5	<10	4.2 ^j	17	<5.0	<10	<5.0	<5.0	6.6	<10	<100	<0.20	8,800	15,000	9.9	<4.7	<0.10	-62.50	-8.18	
TW-1	12/10/2015	Hydrasleeve	4,200	1,500	<5.5	82	<0.010	3,000	21	<0.040	7.6	4.3 ^j	4.2 ^j	22	<5.0	<10	<5.0	<5.0	5.2	3.4 ^j	2.8 ^j	<100	<0.20	9,400	16,000	9.9	1.7 ^j	<0.094	-63.40	-8.08
TW-1	6/2/2016	Hydrasleeve	3,600	1,300	6.5	71	<0.10	3,000	17	51	11	<2.0	6.0	16	<1.0	<2.0	<1.0	<1.0	310	<2.0	1.0 ^j	<10	<0.20	8,500	18,000	9.6	<4.8	<0.094	-63.67	-8.11
TW-1	11/30/2016	Hydrasleeve	4,000	1,400	<5.5	72	<0.010	3,000	21	0.51	5.9	<10	3.1 ^j	13	<5.0	<10	<5.0	<5.0	8.4	<10	9.0 ^j	<100	<0.20	8,600	13,000	9.6	<4.7	<0.095	-64.00	-8.04
TW-1	6/1/2017	Hydrasleeve	3,600	1,300	<5.5	79	<0.010	3,400	20	<1.0	6.1	<10	8.2	15	<5.0	<10	<5.0	<5.0	4.0 ^j	92	<100	<0.20	8,700	12,000	9.7	<5.2	<0.095	-63.50	-7.97	
TW-1	12/5/2017	Hydrasleeve	3,510	1,130	<0.500	80	<0.025	1,000	33	0.43 ^j	6.4	<1.0	13	14	<1.0	<1.0	<1.0	<1.0	2.5	-	<1.0	<1.0	<0.50	7,800	13,900	10	<5.0	<0.10	-62.35	-8.38
TW-1	6/1/2018	Bailer	4,130	1,390	<10	74	0.11 ^j	3,100	53	<10	5.0	<0.50	6.0	5.9	<0.50	<0.50	<0.50	<0.50	-	<0.50	<5.0	<5.0	<0.50	9,300	14,000	10	1.70 ^j	<0.12	-62.80	-7.93
TW-1	12/4/2018	Bailer	6,910	2,400	<0.500	89	<0.5	4,800	35	<20	<10	<10	20	15	<10	<10	<10	<10	-	<10	<10	<10	<0.50	8,100	13,900	10	<5.0	<0.099	-63.50	-7.97
TW-1	6/13/2019	Bailer	4,070	1,230	<0.500	75	<0.005	3,700	57	1.8	3.4	<10	<10	<10	<10	<10	<10	<10	-	<0.50	6,800	14,200	11	<5.0	<0.10	-63.60	-7.97			
TW-1	12/5/2019	Bailer	7,300	2,490	<0.500	77	0.007	5,100	24	0.025 ^j	6.0	<5.0	<5.0	12	<5.0	0.30 ^j	<5.0	<5.0	-	<5.0	<5.0	47	<0.50	7,900	14,100	9.7	<5.0	<0.11	-61.30	-7.64
TW-1	6/5/2020	Bailer	4,190	1,370	<0.500	75	0.006	3,100	34	<0.20	8.8	<5.0	<5.0	17	<5.0	<5.0	&													

TABLE 4
SUMMARY OF LABORATORY ANALYTICAL RESULTS
Genesis Solar Energy Project

TABLE 4
SUMMARY OF LABORATORY ANALYTICAL RESULTS
Genesis Solar Energy Project

Well ID	Date Sampled	Sampling Method	Chloride (mg/L)	Sulfate (SO4) (mg/L)	Nitrate (NO3) (mg/L)	Calcium (mg/L)	Copper (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Iron (mg/L)	Magnesium (mg/L)	Antimony (ug/L)	Arsenic (ug/L)	Barium (ug/L)	Cadmium (ug/L)	Chromium (All Species) (ug/L)	Cobalt (ug/L)	Lead (ug/L)	Manganese (ug/L)	Nickel (ug/L)	Selenium (ug/L)	Zinc (ug/L)	Mercury (ug/L)	Total Dissolved Solids (mg/L)	Specific Conductance (us/cm)	pH (standard units)	Oil & Grease / HEM (mg/L)	HTF ^t (mg/L)	Deuterium (% relative to VSMOW)	Oxygen-18 (% relative to VSMOW)				
			EPA Method 300.0						EPA Method 200.7						EPA Method 200.8												SM7470A	SM2540C	SM2510B	SM4500H	SM1664A	8015B	Isotope Geochemistry	
DM-1	6/1/2017	Low Flow	4,600	1,900	4.2 ^j	250	<0.10	4,100	21	<1.0	62	<10	4.8 ^j	28	<5.0	5.9 ^j	<5.0	<5.0	<5.0	7.6 ^j	6.9 ^j	<100	<0.20	11,000	16,000	7.9	<5.1	<0.094	-70.30	-8.57				
DM-1	12/5/2017	Low Flow	7,130	2,770	12.8	230	0.025	1,100	30	<1.0	59	<1.0	6.2	28	<2.5	3.1	<2.5	<2.5	-	<2.5	5.1	6.6	<0.50	10,000	17,200	7.8	<5.0	<0.10	-69.14	-8.90				
DM-1	5/30/2018	Low Flow	5,190	2,030	14.7	270	0.096 ^j	5,200	63	0.78 ^j	64	<0.50	5.0	30	<0.50	<5.0	<0.50	<5.0	-	<5.0	5.9	9.5	<0.50	11,000	17,300	7.9	<5.0	<0.10	-71.10	-8.57				
DM-1	12/4/2018	Low Flow	8,180	3,280	9.00	260	<0.5	4,800	33	<20	68	<10	10	31	<10	<10	<10	<10	-	<10	<10	<10	<0.50	11,000	17,400	7.7	<5.0	<0.10	-70.10	-8.55				
DM-1	6/14/2019	Low Flow	5,040	1,930	8.76	280	0.006	4,800	65	0.35	63	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<0.50	9,600	17,700	7.2	<5.0	<0.10	-70.40	-8.58				
DM-1	12/5/2019	Low Flow	7,460	2,150 ^j	16.3	250	0.004 ^j	4,200	32	<0.20	67	<5.0	0.80 ^j	32	<5.0	2.1 ^j	<5.0	<5.0	<5.0	0.80 ^j	47	<0.50	11,000	17,600	7.7	<5.0	<0.10	-70.10	-8.55					
DM-1	6/4/2020	Low Flow	5,500	2,090	8.04	220	0.007	4,300	24	<0.20	53	<5.0	<5.0	33	<5.0	<5.0	<5.0	<5.0	-	<5.0	13	16	<0.50	12,000	17,800	7.3	<5.0	<0.096	-70.30	-8.57				
DM-1	12/3/2020	Low Flow	5,530	2,150	8.50	230	<0.005	9,500	35	<0.20	49	<5.0	<5.0	35	<5.0	<5.0	<5.0	<5.0	-	<5.0	0.87	<0.50	12,000	18,000	7.9	<5.0	<0.11	-70.20	-8.57					
DM-1	6/3/2021	Low Flow	5,520	2,050	8.28	220	<0.50	3,800	<50	<20	57	<10	<10	31	<10	<10	<10	<10	-	<10	17	<10	<0.50	8,100	17,800	7.7	<5.0	<0.095	-70.80	-8.62				
DM-1	12/2/2021	Low Flow	5,360	1,930	8.59	230	<0.50	4,200	<50	<20	58	<10	<10	29	<10	<10	<10	<10	-	<10	16	<10	<1.0	14,000	17,800	7.8	<5.0	<0.099	-70.10	-8.58				
DM-1	6/2/2022	Low Flow	5,530	2,070	8.70	240	<2.5	4,500	<250	<100	69	<50	<50	50	<50	<50	<50	<50	-	<50	52	<50	<1.0	9,300	17,800	7.8	<5.0	<0.095	-70.20	-8.62				
DM-1	12/1/2022	Low Flow	5,130	1,960	7.36	230	<0.005	4,500	58	<0.20	61	<25	<25	26	<25	<25	<25	<25	-	<25	<25	<25	<1.0	11,000	17,900	7.8	<5.0	<0.096	-70.20	-8.62				
DM-1	6/8/2023	Low Flow	5,300	2,000	7.58	240	<0.50	4,100	<50	<20	65	<10	<10	29	<10	<10	<10	<10	-	<10	<10	<10	<1.0	10,000	18,000	7.8	<5.0	<0.097	-69.30	-8.53				
DM-1	12/7/2023	Low Flow	5,290	1,830	7.18	230	<0.50	4,500	<50	<20	65	<25	<25	29	<25	<25	<25	<25	-	<25	<25	<25	<1.0	10,000	18,400	8.2	<5.0	<0.100	-69.80	-8.59				
DM-1	6/6/2024	Low Flow	5,510	1,920	7.81	230	<0.50	4,200	<50	<20	62	<5.0	5.6	25	<5.0	<5.0	<5.0	<5.0	-	<5.0	7.2	8.8	<1.0	10,000	18,600	8.0	<5.0	<0.100	-70.10	-8.63				
DM-2	5/24/2012	Low Flow	4,500	2,000	2.9	290	<0.10	3,500	25.0	<0.40	59	-	-	-	-	-	-	-	-	-	-	-	-	13,000	16,000	7.8	-	-	-71.70	-8.80				
DM-2	10/23/2012	Low Flow	4,800	2,000	<1.1	470	<0.010	2,600	27.0	<0.040	54	-	-	-	-	-	-	-	-	-	-	-	-	9,900	16,000	7.7	-	-	-70.90	-8.90				
DM-2	5/22/2014	Low Flow	5,100	2,000	-	320	<0.020	3,500	23	0.022 ^j	54	<10	4.7 ^j	97	<5.0	<10	<5.0	<5.0	59	4.1 ^j	3.3 ^j	<100	<0.20	11,000	18,000	7.8	<5.1	-	-69.95	-8.72				
DM-2	12/4/2014	Low Flow	4,400	1,600	3.0	300	<0.050	3,100	20	0.082 ^j	55	<10	5.7	140	<5.0	<10	<5.0	<5.0	90	8.4 ^j	<10	<100	<0.20	9,900	17,000	7.9	<4.7	<0.095	-68.90	-8.42				
DM-2	6/11/2015	Low Flow	4,500	2,000	3.8 ^j	290	<0.10	3,500	22	<0.40	55	<10	4.1 ^j	110	<5.0	2.9 ^j	<5.0	<5.0	40	4.9 ^j	<10	<100	<0.20	9,600	18,000	7.9	<4.7	<0.10	-68.20	-8.52				

TABLE 4
SUMMARY OF LABORATORY ANALYTICAL RESULTS
Genesis Solar Energy Project

Well ID	Date Sampled	Sampling Method	Chloride (mg/L)	Sulfate (SO4) (mg/L)	Nitrate (NO3) (mg/L)	Calcium (mg/L)	Copper (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Iron (mg/L)	Magnesium (mg/L)	Antimony (ug/L)	Arsenic (ug/L)	Barium (ug/L)	Cadmium (ug/L)	Chromium (All Species) (ug/L)	Cobalt (ug/L)	Lead (ug/L)	Manganese (ug/L)	Nickel (ug/L)	Selenium (ug/L)	Zinc (ug/L)	Mercury (ug/L)	Total Dissolved Solids (mg/L)	Specific Conductance (us/cm)	pH (standard Units)	Oil & Grease / HEM (mg/L)	HTF [†] (mg/L)	Deuterium (‰ relative to VSMOW)	Oxygen-18 (‰ relative to VSMOW)				
			EPA Method 300.0						EPA Method 200.7						EPA Method 200.8												SM7470A	SM2540C	SM2510B	SM4500H	SM1664A	8015B	Isotope Geochemistry	
PW-0	12/4/2018	Spigot	2,100	698	<0.500	100	<0.5	1,100	25	<20	<10	<10	45	55	<10	<10	<10	<10	-	<10	<10	92	<0.50	2,600	6,170	7.9	<5.0	<0.10	-76.30	-10.01				
PW-0	6/13/2019	Spigot	1,740	535	<0.500	130	<0.005	1,500	57	0.33	1.9	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	-	<0.50	2,600	6,300	7.1	5.60	<0.10	-76.50	-10.01				
PW-0	12/5/2019	Spigot	3,220	944	<0.500	120	0.004 ^j	1,300	26	0.12 ^j	1.8	<5.0	42	60	<5.0	0.0002 ^j	<5.0	<5.0	-	<5.0	<5.0	51	<0.50	3,400	6,290	8.2	<5.0	<0.10	-75.70	-9.90				
PW-0	6/4/2020	Spigot	1,810	540	<0.500	110	0.007	1,300	25	0.37	1.5	<5.0	45	55	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	47	<0.50	3,000	6,390	8.3	<5.0	<0.098	-76.30	-10.01				
PW-0	12/3/2020	Spigot	1,880	625	0.641	96	<0.005	2,300	23	0.35	1.4	<5.0	5.0	63	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	4.2	<0.50	3,200	6,400	8.3	<5.0	<0.11	-76.70	-10.07				
PW-0	6/4/2021	Spigot	1,820	577	<0.500	99	<0.50	1,300	54	<20	<10	<10	55	59	<10	<10	<10	<10	-	<10	<10	44	<0.50	3,400	6,390	8.1	<5.0	<0.096	-76.00	-10.01				
PW-0	12/2/2021	Spigot	1,720	<500	<0.500	110	<0.50	1,300	<50	<20	<10	<10	49	62	<10	<10	<10	<10	-	<10	<10	29	<1.0	2,500	6,400	8.2	<5.0	<0.100	-76.20	-10.03				
PW-0	6/2/2022	Spigot	1,860	566	0.668	100	<2.5	1,400	<250	<100	<50	<50	59	61	<50	<50	<50	<50	-	<50	<50	50	<1.0	3,200	6,380	8.2	<5.0	<0.094	-76.10	-10.04				
PW-0	12/1/2022	Spigot	1,780	542	<0.500	110	<0.005	1,500	35	0.31	1.9	<25	53	48	<25	<25	<25	<25	-	<25	<25	130	<1.0	3,400	6,430	7.9	<5.0	<0.094	-76.00	-10.03				
PW-0	6/8/2023	Spigot	1,780	541	<0.500	120	<0.50	1,300	<50	<20	<10	<10	56	56	<10	<10	<10	<10	-	<10	<10	10	<1.0	3,400	6,430	8.2	<5.0	<0.099	-76.60	-10.09				
PW-0	12/7/2023	Spigot	1,620	540	0.899	110	<0.50	1,400	<50	<20	<10	<25	50	58	<25	<25	<25	<25	-	<25	<25	25	<1.0	3,800	6,640	8.1	<5.0	<0.100	-75.80	-10.03				
PW-0	6/6/2024	Spigot	1,730	528	0.925	120	<0.50	1,500	<50	<20	<10	<5.0	43	46	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	94	<1.0	3,700	6,690	8.5	<5.0	<0.096	-75.90	-10.01				
PW-1	12/14/2011	Spigot	1,300	470	<0.55	100	<0.010	1,100	7	0.11	6.9	-	-	-	-	-	-	-	-	-	-	-	3,000	3,800	8.0	-	-	-	-78.10	-10.30				
PW-1	5/23/2012	Spigot	1,100	510	<0.55	92	<0.010	850	8.2	<0.040	6.8	-	-	-	-	-	-	-	-	-	-	-	2,100	5,100	8.1	-	-	-	-79.60	-10.40				
PW-1	10/23/2012	Spigot	1,300	540	<1.1	90	<0.010	850	8.2	0.018 ^j	7.5	-	-	-	-	-	-	-	-	-	-	-	3,200	5,000	8.0	-	-	-	-79.10	-10.20				
PW-2	12/14/2011	Spigot	890	440	<0.22	63	0.0062	740	6.7	1.7	6.1	-	-	-	-	-	-	-	-	-	-	-	2,200	2,900	8.1	-	-	-	-77.70	-10.40				
PW-2	5/23/2012	Spigot	810	450	<0.55	53	<0.010	700	5.5	<0.040	4.7	-	-	-	-	-	-	-	-	-	-	-	2,200	4,100	8.1	-	-	-	-79.60	-10.40				
PW-2	10/23/2012	Spigot	880	530	<0.55	48	<0.010	560	5.0	<0.040	4.8	-	-	-	-	-	-	-	-	-	-	-	2,300	3,800	8.0	-	-	-	-80.00	-10.30				
PW-2	5/20/2014	Spigot	570	290	-	50	<0.010	700	5.1	0.030 ^j	4.1	<10	27	39	<5.0	<10	<5.0	<5.0	19	<10	<10	<100	<0.20	2,100	3,800	8.2	1.5 ^j	-	-	-76.65	-10.08			
PW-2	12/4/2014	Spigot	900	440	<0.55	52	<0.010	670	5.6	0.075	4.3	<10	28	40	<5.0	<10	<5.0	<5.0	22	<10	<10	<100	<0.20	2,100	3,900	8.1	<4.7	<0.095	-	-79.40	-10.44			
PW-2	12/4/2014 ^j	Spigot	840	440	<0.55	52	<0.010	670	5.7	0.072	4.4	<10	28	38	<5.0	<10	<5.0	<5.0	23	2.7 ^j	<10	<100	<0.20	2,100	3,900	8.1	<4.8	<0.096	-	-80.20	-10.39			
PW-2	6/11/2015	Spigot	800	420	<0.22	49	<0																											

TABLE 4
SUMMARY OF LABORATORY ANALYTICAL RESULTS
Genesis Solar Energy Project

Well ID	Date Sampled	Sampling Method	Chloride (mg/L)	Sulfate (SO ₄) (mg/L)	Nitrate (NO ₃) (mg/L)	Calcium (mg/L)	Copper (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Iron (mg/L)	Magnesium (mg/L)	Antimony (ug/L)	Arsenic (ug/L)	Barium (ug/L)	Cadmium (All Species) (ug/L)	Chromium (ug/L)	Cobalt (ug/L)	Lead (ug/L)	Manganese (ug/L)	Nickel (ug/L)	Selenium (ug/L)	Zinc (ug/L)	Mercury (ug/L)	Total Dissolved Solids (mg/L)	Specific Conductance (us/cm)	pH (standard Units)	Oil & Grease / HEM (mg/L)	HTF [†] (mg/L)	Deuterium (% relative to VSMOW)	Oxygen-18 (% relative to VSMOW)
			EPA Method 300.0			EPA Method 200.7						EPA Method 200.8												SM7470A	SM2540C	SM2510B	SM4500H	SM1664A	8015B	Isotope Geochemistry

ug/L = micrograms per liter

uS/cm = microsiemens per centimeter

% = parts per thousand

VSMOW = Vienna Standard Mean Ocean Water

< = not detected at or above the indicated reporting limit

- = information is unknown / not applicable / not analyzed

B - Compound was detected in the laboratory equipment blank.

J - Result is less than the reporting limit but greater than or equal to the method detection limit, thus the concentration is an approximate value.

† - Heat Transfer Fluid (HTF) is characterized by the analytes 1,1'-oxybis-benzene and 1,1'-biphenyl.

1 - Duplicate sample

TABLE 5
HISTORICAL ANALYTICAL DATA FOR OFFSITE WELLS WITHIN MONITORING AREA
 Genesis Solar Energy Project, Riverside, California

Well ID	Date Sampled	Data Source	Sample Depth (ft amsl)	Fluoride (mg/L)	Chloride (mg/L)	Sulfate (SO4) (mg/L)	Sodium (mg/L)	Silica (Total) (mg/L)	Potassium (mg/L)	Magnesium (mg/L)	Calcium (mg/L)	Total Hardness (as CaCO3) (mg/L)	Total Dissolved Solids (mg/L)
1	5/19/1961	DWR, 1963	--	--	656	--	--	--	--	--	--	--	1,760
3	4/20/2009	Azca Drilling and Pump	560 to 940	--	--	--	--	--	--	--	--	--	910
3	9/3/2009	WorleyParsons	560 to 940	--	--	--	--	--	--	--	--	--	970
5	10/10/1961	DWR, 1963	? to 85.7	--	1,770	--	--	--	--	--	--	--	5,730
14	6/25/1991	DWR Well Records	890 to 940	--	--	--	--	--	--	--	--	--	2,400
14	7/29/2009	WorleyParsons	--	--	3,400	--	--	--	--	--	--	--	6,600
15	9/16/2009	WorleyParsons	200.0	--	--	--	--	--	--	--	--	--	19,000
15	9/16/2009	WorleyParsons	500.0	--	--	--	--	--	--	--	--	--	26,000
16	9/16/2009	WorleyParsons	247.00	--	--	--	--	--	--	--	--	--	3,100
17	1959	DWR, 1963	1,175 to 1,200	--	986	--	--	--	--	--	--	--	2,150
17	9/17/2009	WorleyParsons	247	--	--	--	--	--	--	--	--	--	20,000
21	10/17/1917	DWR, 1963	--	--	865	--	--	--	--	--	--	--	3,820
23	4/19/1979	NWIS	--	6.3	950	450	800	38	16	0.6	67	170	2,350
26	9/16/2009	WorleyParsons	760.00	--	--	--	--	--	--	--	--	--	1,100
27	10/10/1961	DWR, 1963	? to 486.4	--	718	--	--	--	--	--	--	--	2,210
28	10/10/1961	DWR, 1963	? to 779.4	--	273	--	--	--	--	--	--	--	1,470
29	9/16/2009	WorleyParsons	720	--	--	--	--	--	--	--	--	--	1,100
31	10/10/1961	DWR, 1963	? to 242.2	--	734	--	--	--	--	--	--	--	2,560
32	10/10/1961	DWR, 1963	? to 315.7	--	3,250	--	--	--	--	--	--	--	8,150
37	6/4/1990	Engineering Science, 1990	750 to 1,050	--	214	--	--	--	--	--	--	--	752
38	6/20/1986	Woodward-Clyde Consultants	275 to 815	--	519	--	--	--	--	--	--	--	1,313
38	6/20/1986	Woodward-Clyde Consultants	835 to 1,015	--	267	--	--	--	--	--	--	--	719
39	6/12/1961	DWR, 1963	853 to 1,083	--	216	--	--	--	--	--	--	--	--
39	1/1986	CH2M Hill and Boyle Eng.	853 to 1,083	--	--	--	--	--	--	--	--	--	786
42	8/24/1983	Woodward-Clyde Consultants	738 to 1,100	--	199	--	--	--	--	--	--	--	--
42	5/1/1988	CH2M Hill and Boyle Eng.	738 to 1,100	--	--	--	--	--	--	--	--	--	765
43	1/1986	Kennedy/Jenks/Chilton, 1986	510 to 780	--	460	--	--	--	--	--	--	--	1,150
47	1/4/1984	Woodward-Clyde Consultants	490	--	550	--	--	--	--	--	--	--	1,380
47	1/5/1984	Woodward-Clyde Consultants	590	--	586	--	--	--	--	--	--	--	1,350
47	2/7/1984	Woodward-Clyde Consultants	850	--	570	--	--	--	--	--	--	--	2,090
47	1/1986	Kennedy/Jenks/Chilton, 1986	500 to 850	--	520	--	--	--	--	--	--	--	1,740
50	1959	DWR, 1963	? to 818	--	131	--	--	--	--	--	--	--	--

NOTES:

amsl = above mean sea level

mg/L = milligrams per liter

-- = Information not available or not applicable

SOURCES:

CH2M Hill and Boyle Engineering, 1995. Technical Memorandum, Water Treatment Plant Evaluation - Phase I. Dated March 30, 1995

DWR, 1963. Data on Water Wells and Springs in the Chuckwalla Valley Area. DWR Bulletin 91-7

Kennedy/Jenks/Chilton, 1986. Final Report Sampling and Analysis in the Wiley's Well Area. Dated March 19, 1986

NWIS = National Water Information System

Woodward-Clyde Consultants, 1986. Final Report, Groundwater Quality Investigation, Wiley's Well Area. Dated March 13, 1986

APPENDIX A

FIELD DATA SHEETS



GROUNDWATER LEVEL MEASUREMENT FORM

GROUNDWATER LEVEL MEASUREMENT FORM

Date: 06/06/24	Site: Genesis Solar Energy Project	Project No: 196-004-07
Project:	Groundwater Monitoring Program	PM: AWB
Measurement Method/Device:	Geotech Interface Probe	Technicians: AWB

Weather: Hot

Well No.	Date	TOC Reference Elevation (ft)	Depth to Water (ft)	Corrected Water Level Elevation (ft)	Comments
TW-1	6/6/2024	387.40	87.35	300.05	Levelogger 62100045
TW-2	6/6/2024	393.47	127.05	266.42	Manual Measurement
OBS-1	6/6/2024	388.30	78.11	310.19	Levelogger 32045678; Barologger 12100120
OBS-2-270	N/A	388.14	N/A	N/A	Buried Transducer Cable
OBS-2-315	N/A	388.14	N/A	N/A	Buried Transducer Cable
OBS-2-370	N/A	388.14	N/A	N/A	Buried Transducer Cable
OBS-2-400	N/A	388.14	N/A	N/A	Buried Transducer Cable
14	6/6/2024	388.14	99.98	288.16	Manual Measurement
23a	6/6/2024	392.10	136.37	255.73	Manual Measurement
24-1	6/6/2024	389.40	127.15	262.25	Manual Measurement
24-2	6/6/2024	388.86	125.10	263.76	Manual Measurement
24-3	6/6/2024	392.04	123.56	268.48	Manual Measurement
PW-0	6/6/2024	385.64	N/A	N/A	Manual Measurement
PW-1	6/6/2024	384.43	98.75	285.68	Levelogger 62149233
PW-2	6/6/2024	385.15	N/A	N/A	Manual Measurement
DM-1	6/6/2024	391.49	107.44	284.05	Manual Measurement
DM-2	6/6/2024	391.32	107.79	283.53	Manual Measurement
DM-3	6/6/2024	388.34	104.56	283.78	Manual Measurement

Additional Notes:



GROUNDWATER SAMPLING FIELD FORM

Date: 06/06/24	Site: Genesis Solar Energy Project	Project No: 196-004-07
Project: Groundwater Quality Monitoring Program		Project Manager: AWB
Technicians: AWB		Weather: Hot
Sampling Method: Bailer Grab Sample		

Well No.	23a	Temp °C	pH	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	DO (mg/L)
Casing Diameter (in.)	8.0	36.7	6.70	3.3	13.2	+66	2.24
Total Depth (ft btoc)	1,825						
Screen Interval (ft btoc)	1800 - 1825						
Depth to Water (ft btoc)	136.37						
Sample Date	6/6/2024						
Sample Time	14:30						

General Well Location: CalTrans Rest Stop at Wiley's Well Road (2 days notice to CalTrans required)

COMMENTS:

Well No.	OBS-1	Temp °C	pH	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	DO (mg/L)
Casing Diameter (in.)	5.0	34.3	6.60	23.3	3.6	+68	3.58
Total Depth (ft btoc)	160						
Screen Interval (ft btoc)	100 - 150						
Depth to Water (ft btoc)	78.11						
Sample Date	6/6/2024						
Sample Time	13:00						

General Well Location: Approximately 1 mile west of property boundary; access via Ford Dry Lake service road

COMMENTS:

Well No.	TW-1	Temp °C	pH	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	DO (mg/L)
Casing Diameter (in.)	5.0	30.7	5.15	16.5	56	+68	8.89
Total Depth (ft btoc)	565						
Screen Interval (ft btoc)	340 - 564						
Depth to Water (ft btoc)	87.35						
Sample Date	6/6/2024						
Sample Time	12:30						

General Well Location: Approximately 1 mile west of property boundary; access via Ford Dry Lake service road

COMMENTS:

Well No.	TW-2	Temp °C	pH	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	DO (mg/L)
Casing Diameter (in.)	5.0	34.8	6.71	6.0	102	-142	2.35
Total Depth (ft btoc)	1,841						
Screen Interval (ft btoc)	Multiple						
Depth to Water (ft btoc)	127.05						
Sample Date	6/6/2024						
Sample Time	16:30						

General Well Location: NE corner of Section 32 (Township 7S, Range 20E); near bend in site access road

COMMENTS:



GROUNDWATER SAMPLING FIELD FORM

Date: 06/06/24	Site: Genesis Solar Energy Project	Project No: 196-004-07
Project: Groundwater Quality Monitoring Program	Project Manager: AWB	
Technicians: AWB	Weather: Hot	
Sampling Method: Production Well Effluent Grab Sample		

Well No.	PW-0	Temp °C	pH	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	DO (mg/L)
Casing Diameter (in.)	10.0	38.0	6.87	6.8	1.1	-151	2.84
Total Depth (ft btoc)	1,251						
Screen Interval (ft btoc)	Multiple						
Depth to Water (ft btoc)	N/A						
Sample Date	6/6/2024						
Sample Time	17:00						

General Well Location: Between Solar Field #1 and #2, near main road

COMMENTS: Access port is blocked

Well No.	PW-1	Temp °C	pH	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	DO (mg/L)
Casing Diameter (in.)	10.0	-	-	-	-	-	-
Total Depth (ft btoc)	1,360						
Screen Interval (ft btoc)	Multiple						
Depth to Water (ft btoc)	98.75						
Sample Date	6/6/2024						
Sample Time	N/A						

General Well Location: NE corner of Solar Field 1 cooling/processing facility, between Block 6 & Block 7

COMMENTS: Not sampled - no access; well is welded shut.

Well No.	PW-2	Temp °C	pH	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	DO (mg/L)
Casing Diameter (in.)	10.0	44.8	6.91	4.1	0.3	-1	3.04
Total Depth (ft btoc)	1,125						
Screen Interval (ft btoc)	Multiple						
Depth to Water (ft btoc)	N/A						
Sample Date	6/6/2024						
Sample Time	17:20						

General Well Location: NW corner of Solar Field 2 cooling/processing facility, between Block 7 & Block 8

COMMENTS: Pump running at time of readings; did not collect water level

Well No.		Temp °C	pH	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	DO (mg/L)
Casing Diameter (in.)							
Total Depth (ft btoc)							
Screen Interval (ft btoc)							
Depth to Water (ft btoc)							
Sample Date							
Sample Time							

General Well Location:

COMMENTS:



GROUNDWATER SAMPLING FIELD FORM

Date: 06/06/24	Site: Genesis Solar Energy Project	Project No: 196-004-07
Project: Groundwater Detection Monitoring Program		Project Manager: AWB
Technicians: AWB		Weather: Hot
Sampling Method: Low-flow sampling with submersible pump (EPA 2017 protocols) and flow-through cell		

Well No.	DM-1	Time (5 Min Int)	Water Level (ft btoc)	Temp °C (3%)	pH (+/- 0.1)	Cond (mS/cm) (3%)	Turbidity (NTUs) (10%)	ORP (mV) (+/- 10)	DO (mg/L) (10%)
Casing Diameter (in.)	4.0	20:10	107.48	33.8	6.83	17.8	12.4	+88	4.02
Total Depth (ft btoc)	120	20:15	107.45	32.2	6.91	17.7	7.8	+85	5.49
Screen Interval (ft btoc)	100 - 120	20:20	107.45	32.1	6.94	17.8	7.6	+84	5.48
Depth to Water (ft btoc)	107.44	20:25	107.45	32.1	6.93	17.8	7.6	+83	5.45
Depth of Inlet (ft btoc)	115.00								
Discharge Time (sec)	30								
Fill Time (sec)	20								
Cycles per Minute	1.2								
Volume per Cycle (mL)	150								
Pump Rate (mL/min)	180								
Volume Purged (mL)	3,600								
Sample Date	06/06/24								
Sample Time	20:50								

Purge Volume Calculation: Total must exceed tubing volume (1,204 mL) plus drawdown volume (2,460 mL/foot) = 1,229 mL

Well No.	DM-2	Time (5 Min Int)	Water Level (ft btoc)	Temp °C (3%)	pH (+/- 0.1)	Cond (mS/cm) (3%)	Turbidity (NTUs) (10%)	ORP (mV) (+/- 10)	DO (mg/L) (10%)
Casing Diameter (in.)	4.0	21:25	108.06	30.8	6.94	17.9	104.0	+89	1.55
Total Depth (ft btoc)	120	21:30	108.18	30.1	6.97	18.1	86.0	+89	0.76
Screen Interval (ft btoc)	100 - 120	21:35	108.23	30.0	6.99	18.1	87.0	+89	0.75
Depth to Water (ft btoc)	107.79	21:40	108.25	29.9	7.01	18.1	89.0	+89	0.74
Depth of Inlet (ft btoc)	115.00								
Discharge Time (sec)	28								
Fill Time (sec)	37								
Cycles per Minute	0.9								
Volume per Cycle (mL)	150								
Pump Rate (mL/min)	138								
Volume Purged (mL)	3,600								
Sample Date	06/06/24								
Sample Time	22:15								

Purge Volume Calculation: Total must exceed tubing volume (1,204 mL) plus drawdown volume (2,460 mL/foot) = 2,336 mL

Well No.	DM-3	Time (5 Min Int)	Water Level (ft btoc)	Temp °C (3%)	pH (+/- 0.1)	Cond (mS/cm) (3%)	Turbidity (NTUs) (10%)	ORP (mV) (+/- 10)	DO (mg/L) (10%)
Casing Diameter (in.)	4.0	18:55	104.60	35.9	6.69	17.2	1.4	+118	5.80
Total Depth (ft btoc)	120	19:00	104.60	34.4	6.76	17.0	0.0	+121	5.44
Screen Interval (ft btoc)	100 - 120	19:05	104.60	34.3	6.78	17.0	0.3	+120	5.43
Depth to Water (ft btoc)	104.56	19:10	104.60	34.2	6.78	17.0	0.2	+120	5.42
Depth of Inlet (ft btoc)	115.00								
Discharge Time (sec)	28								
Fill Time (sec)	35								
Cycles per Minute	1.0								
Volume per Cycle (mL)	150								
Pump Rate (mL/min)	143								
Volume Purged (mL)	3,600								
Sample Date	06/06/24								
Sample Time	19:50								

Purge Volume Calculation: Total must exceed tubing volume (1,204 mL) plus drawdown volume (2,460 mL/foot) = 1,303 mL

APPENDIX B

TIME SERIES CHARTS 1 - 29

Chart 1: Chloride

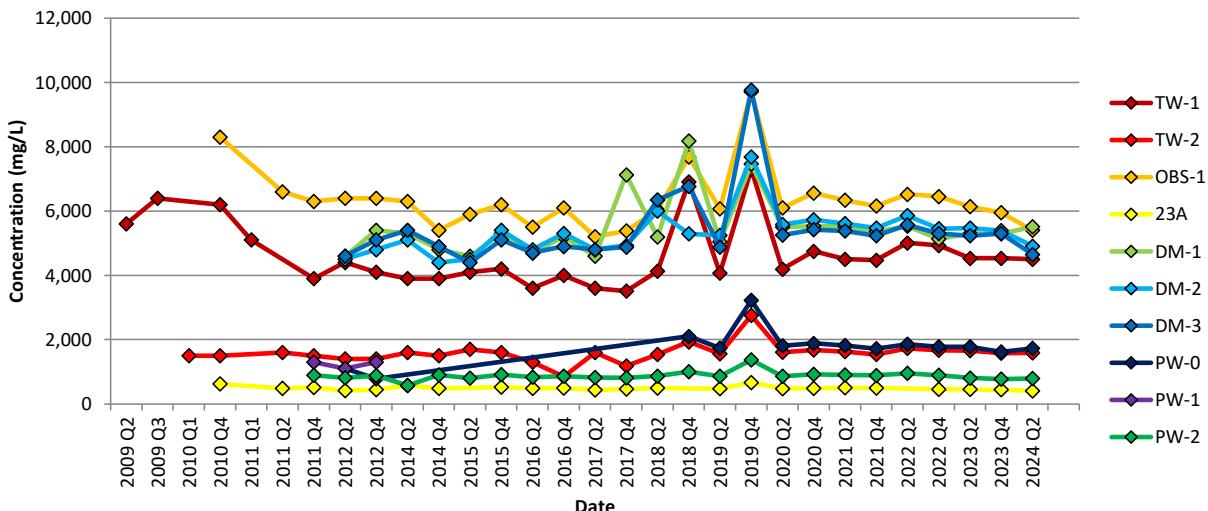


Chart 2: Sulfate (SO₄)

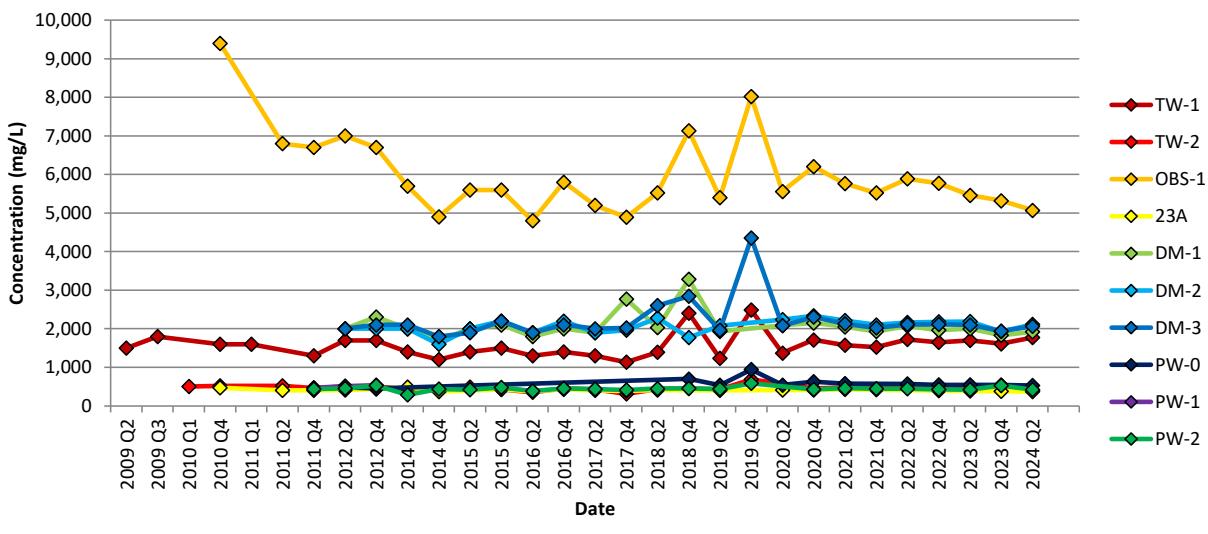


Chart 3: Nitrate (NO₃)

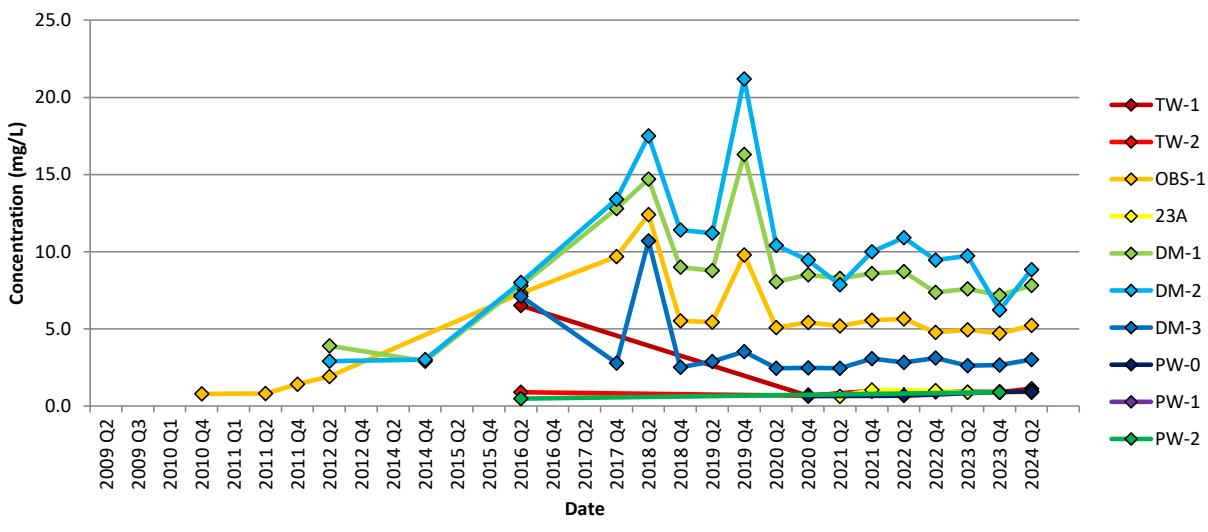


Chart 4: Calcium

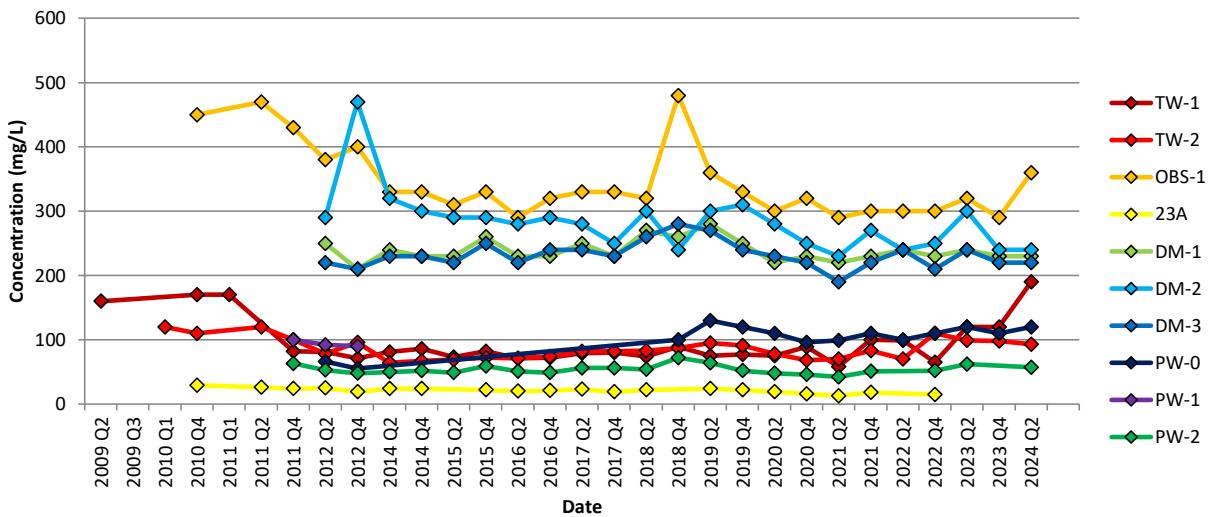


Chart 5: Copper

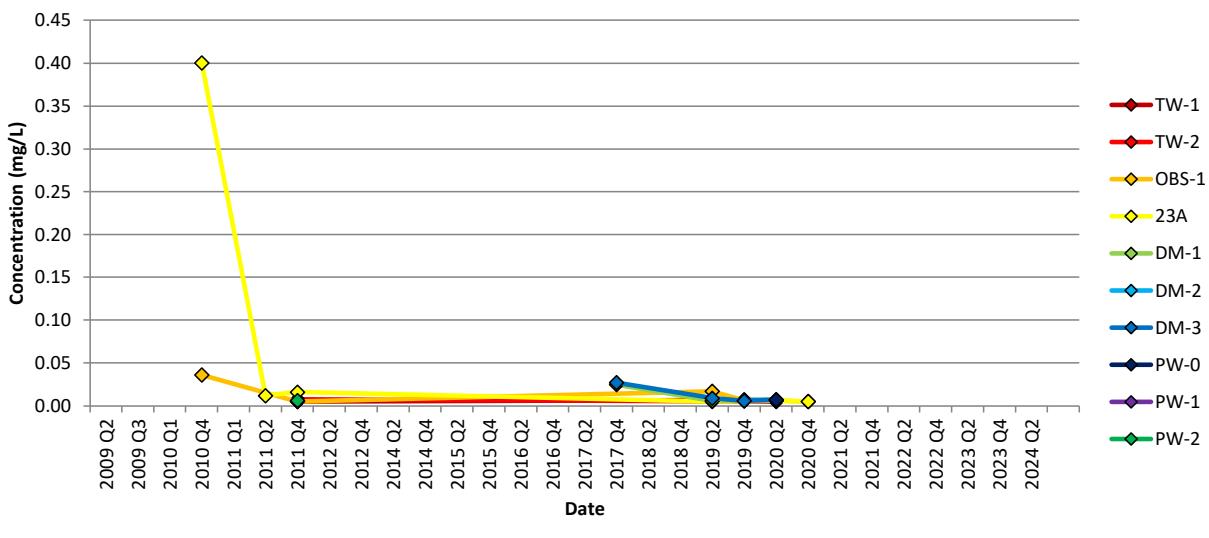


Chart 6: Sodium

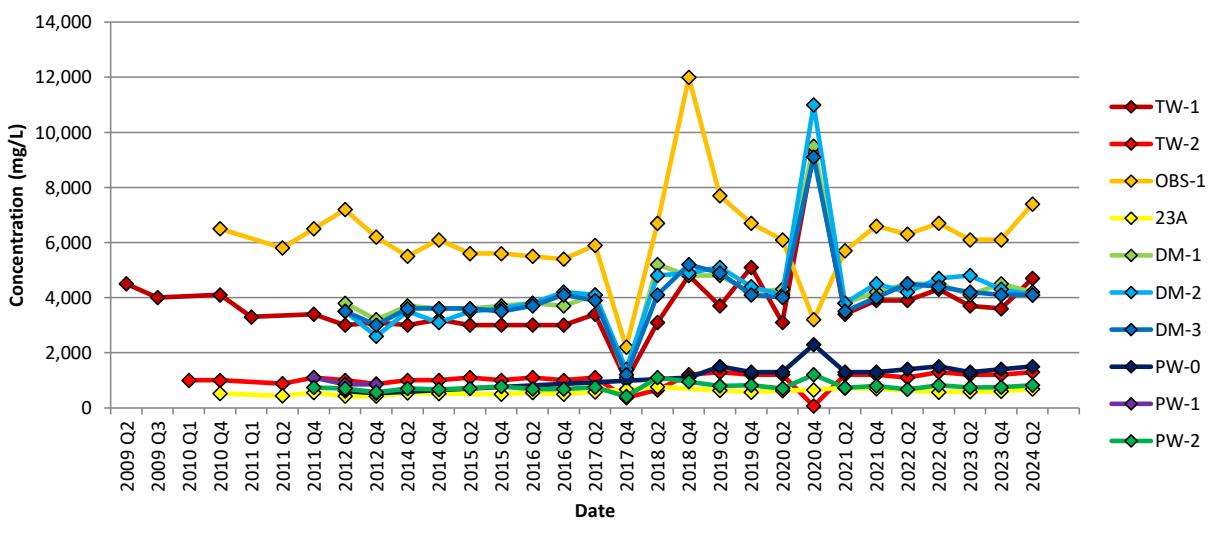


Chart 7: Potassium

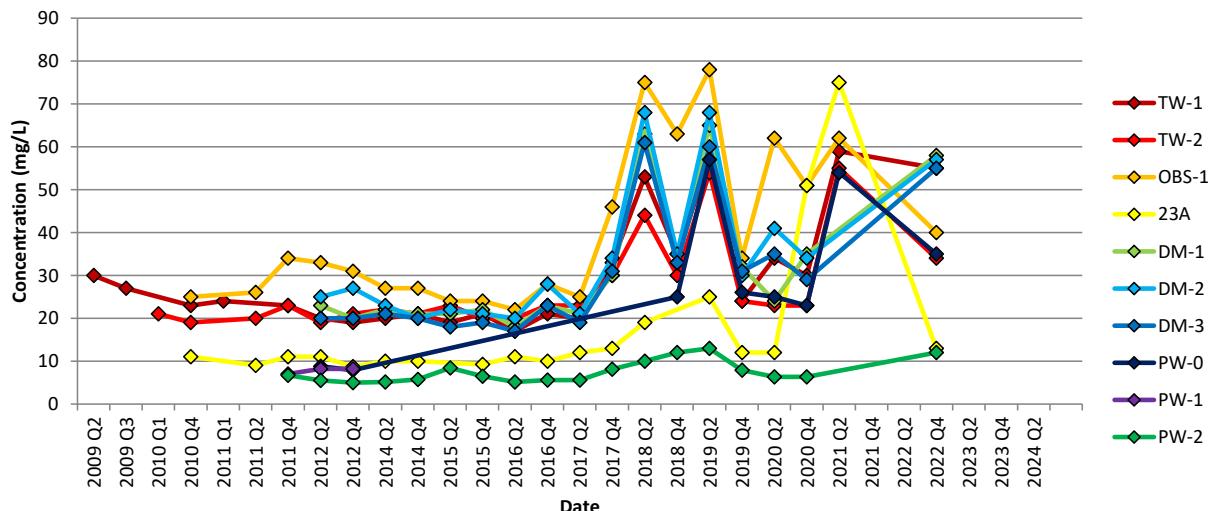


Chart 8: Iron

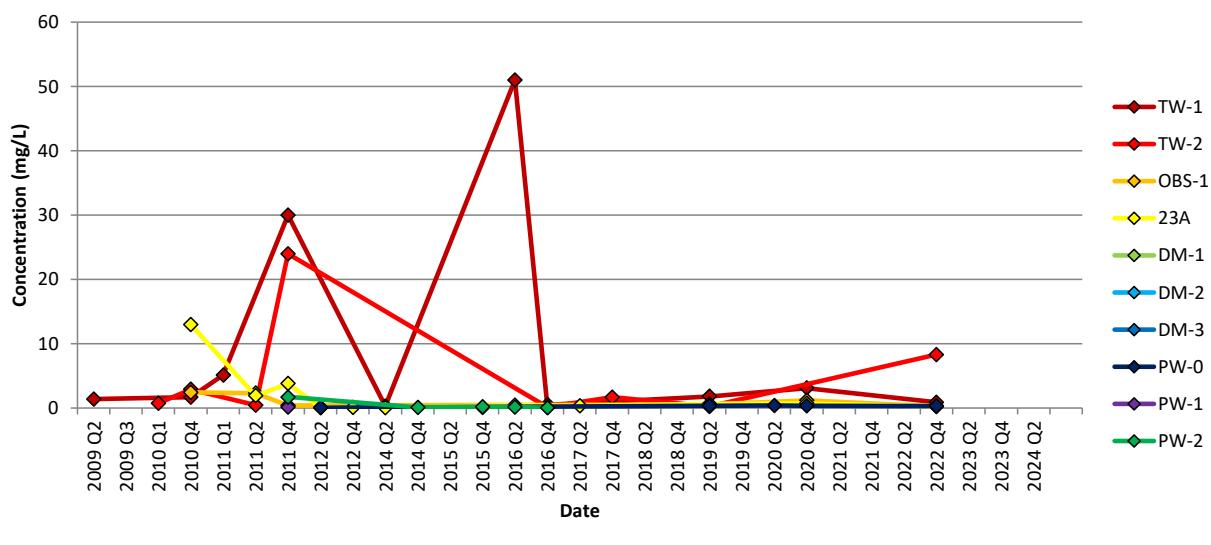


Chart 9: Magnesium

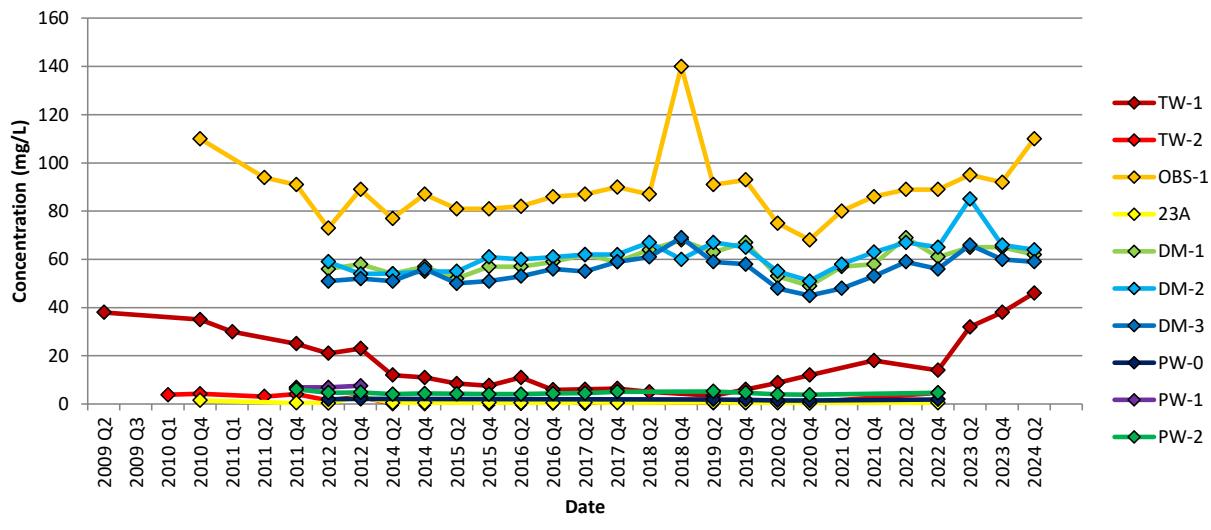


Chart 10: Antimony

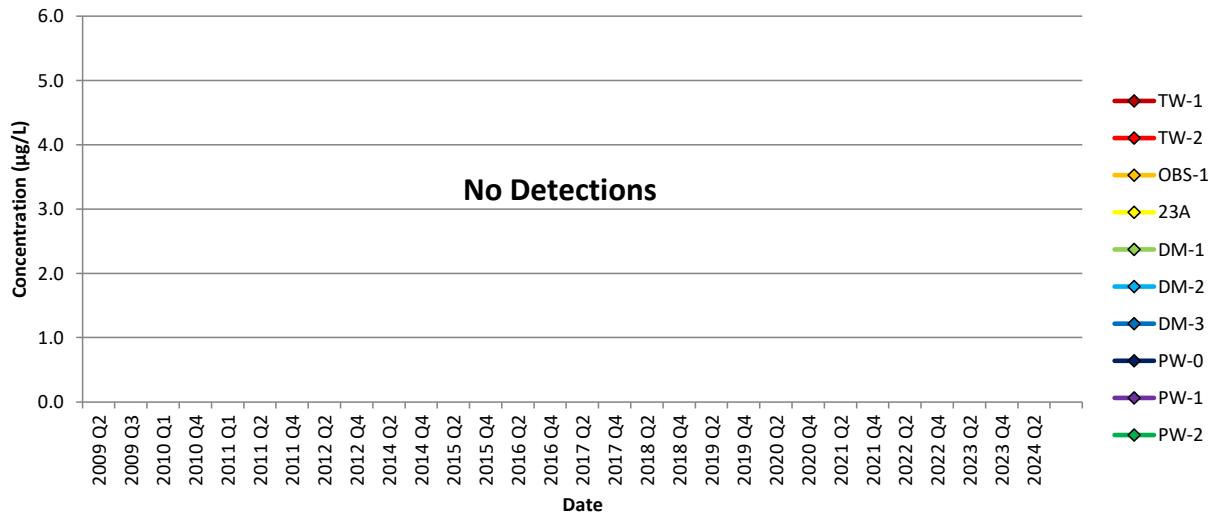


Chart 11: Arsenic

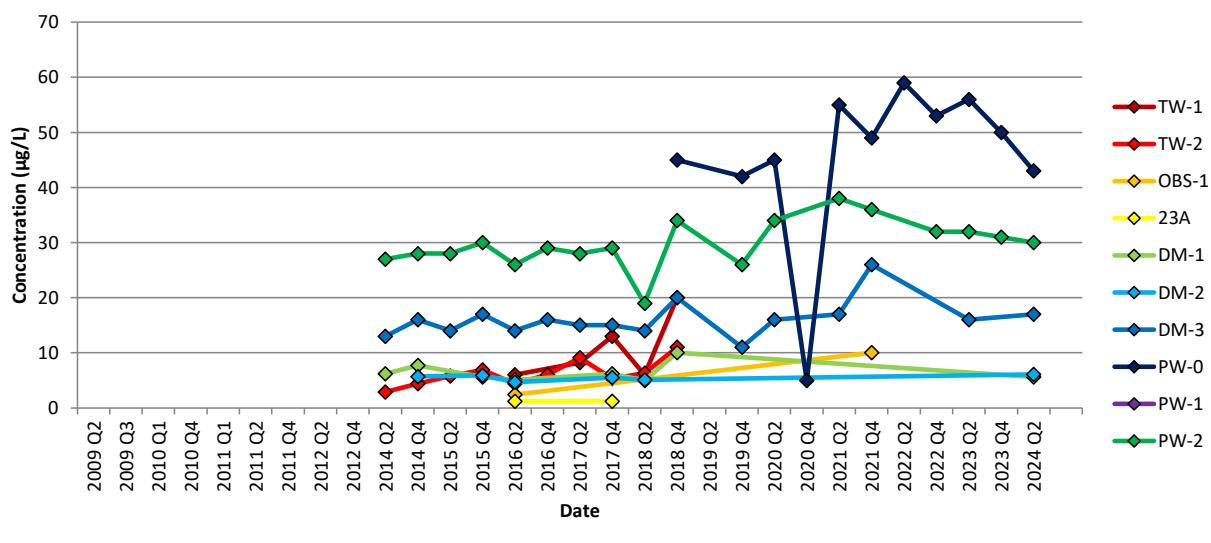


Chart 12: Barium

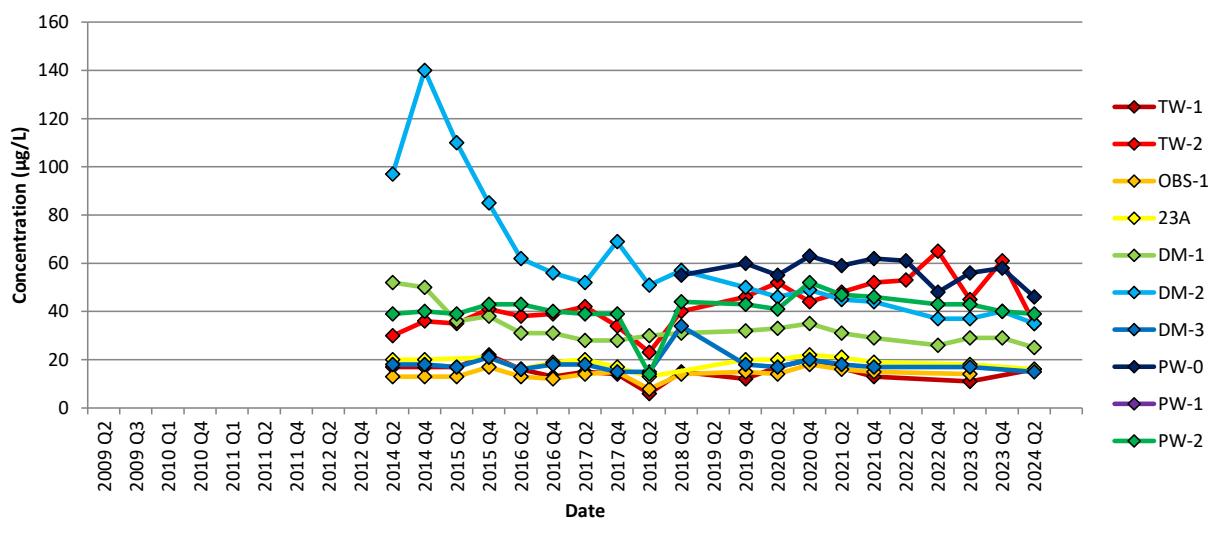


Chart 13: Cadmium

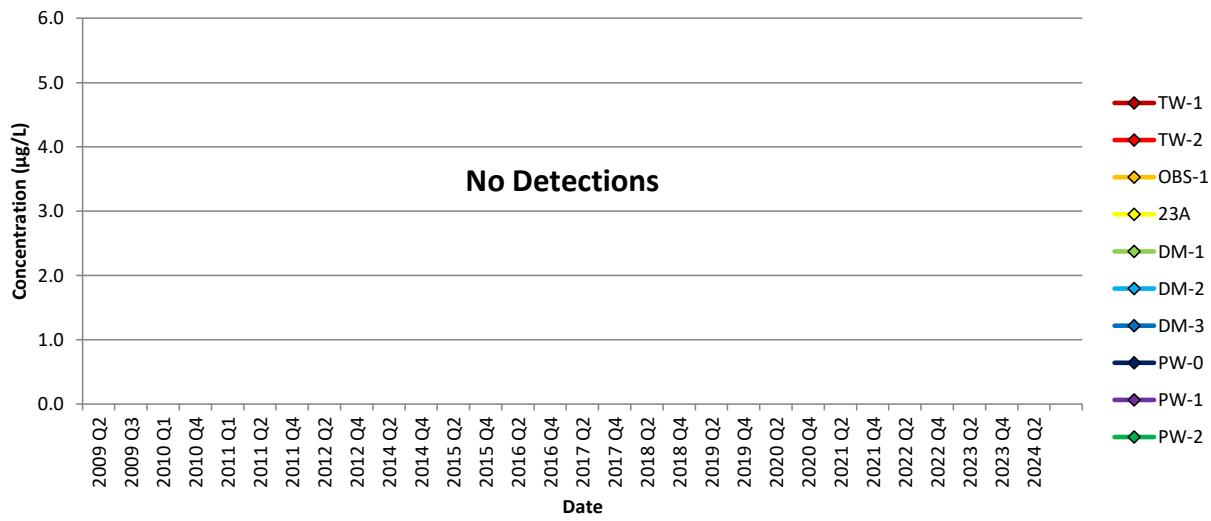


Chart 14: Chromium (All Species)

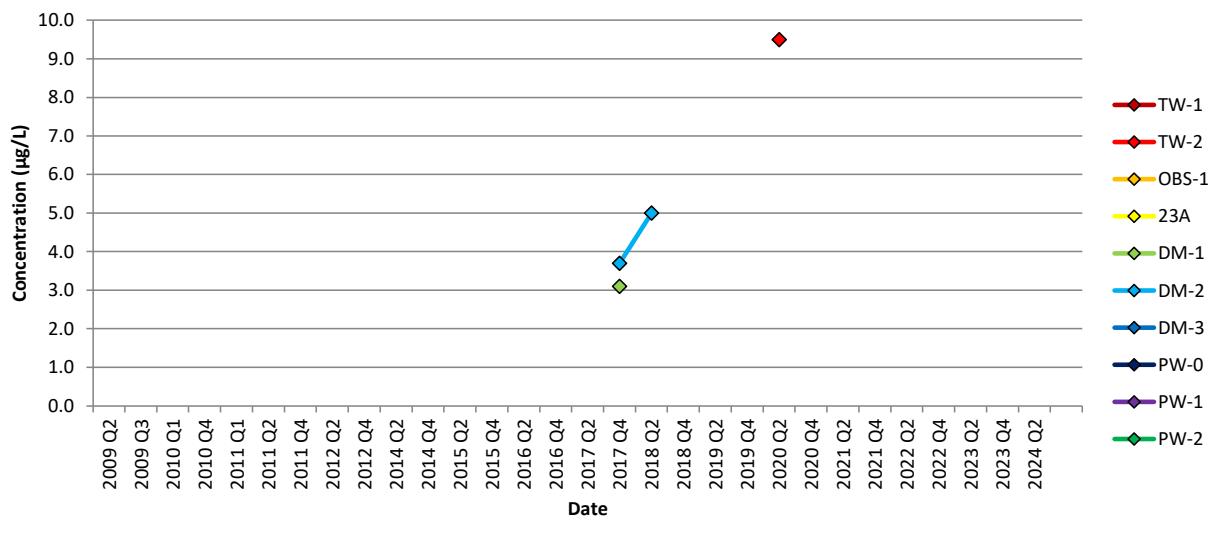


Chart 15: Cobalt

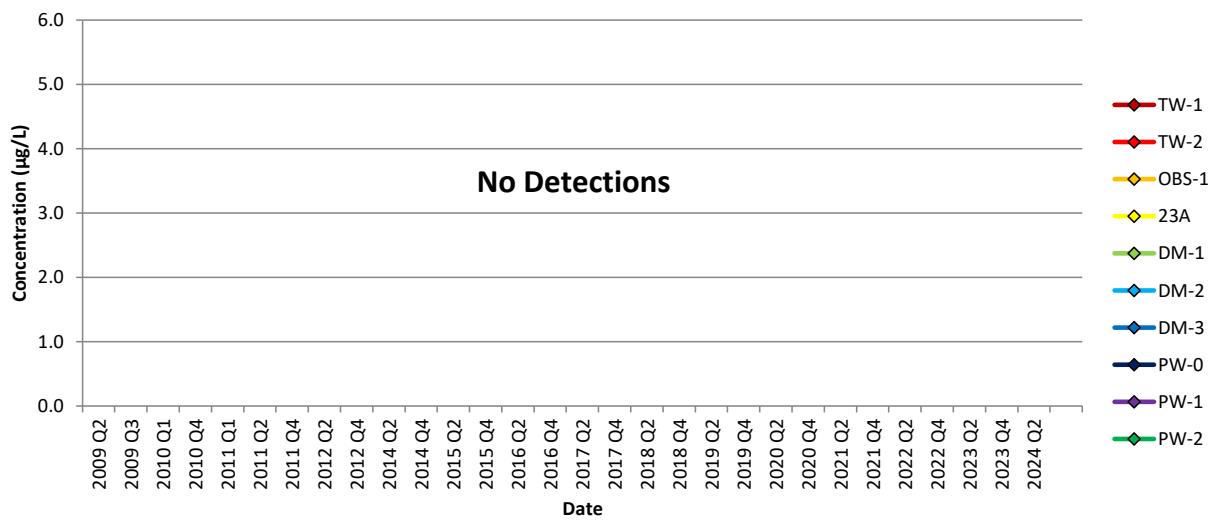


Chart 16: Lead

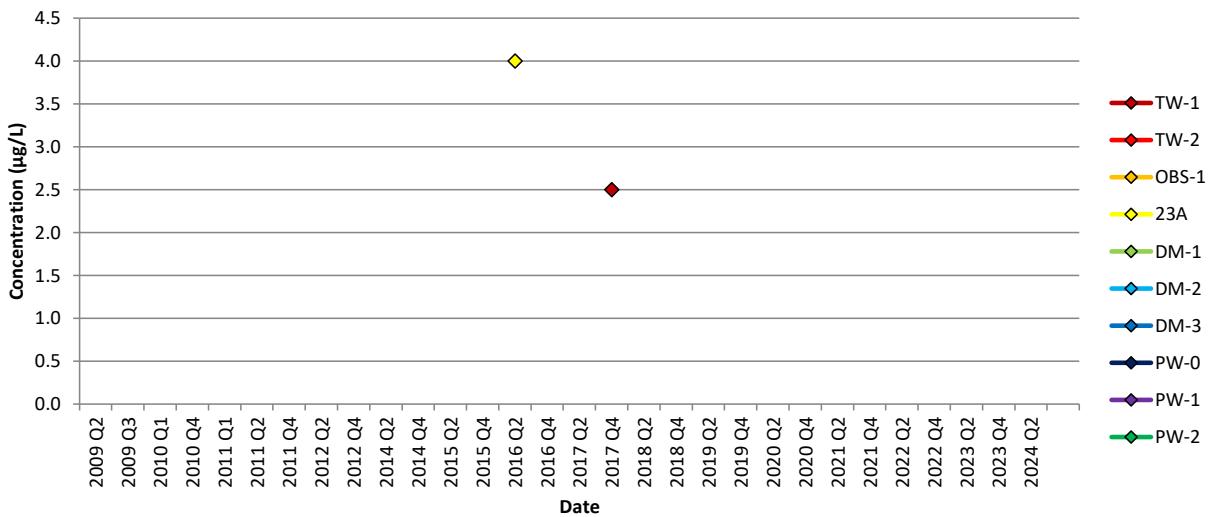


Chart 17: Manganese

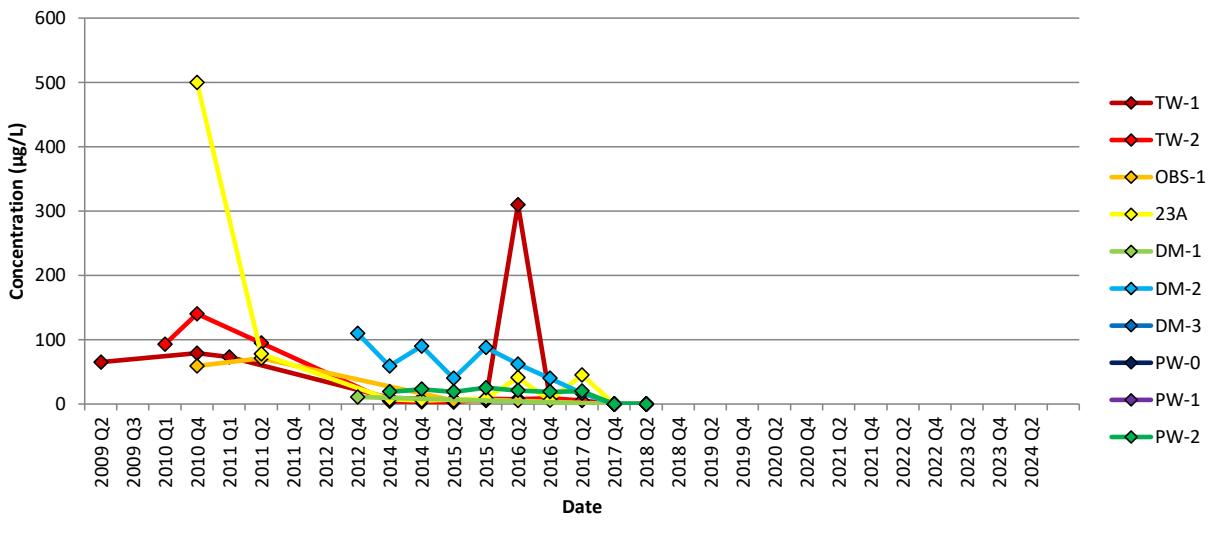


Chart 18: Nickel

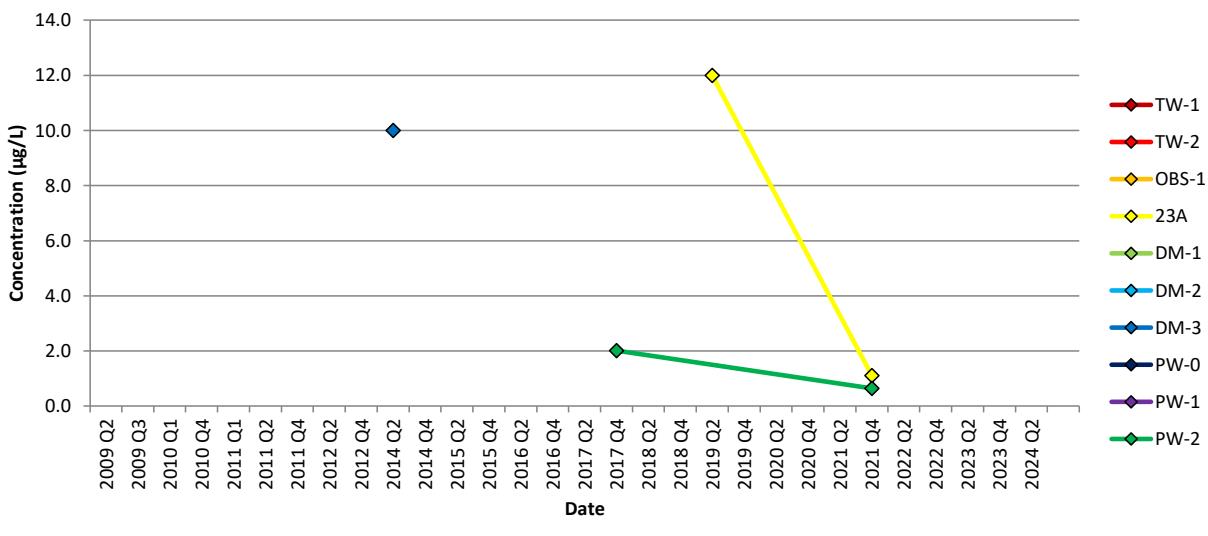


Chart 19: Selenium

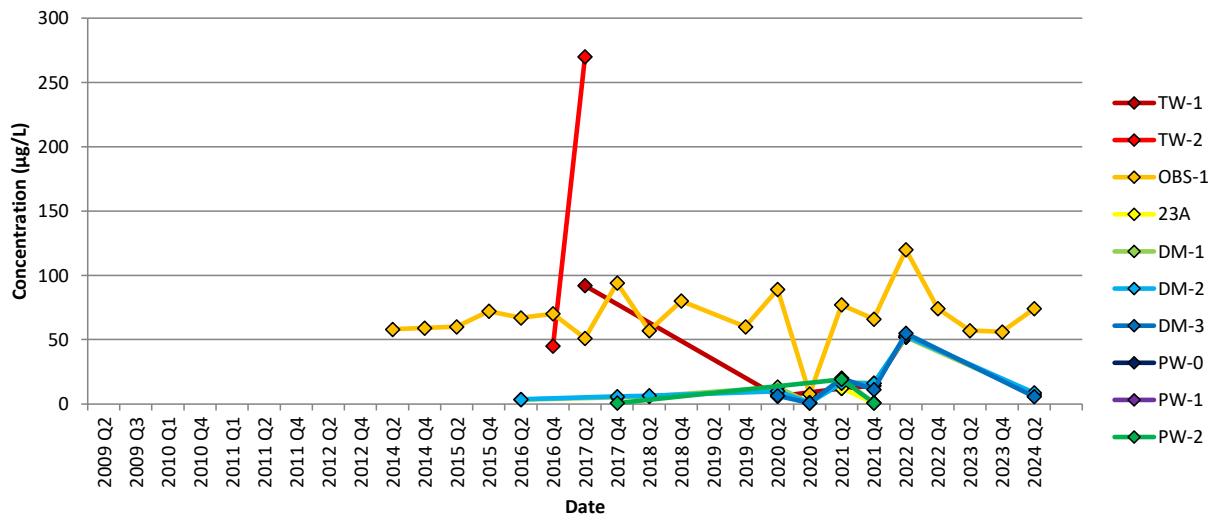


Chart 20: Zinc

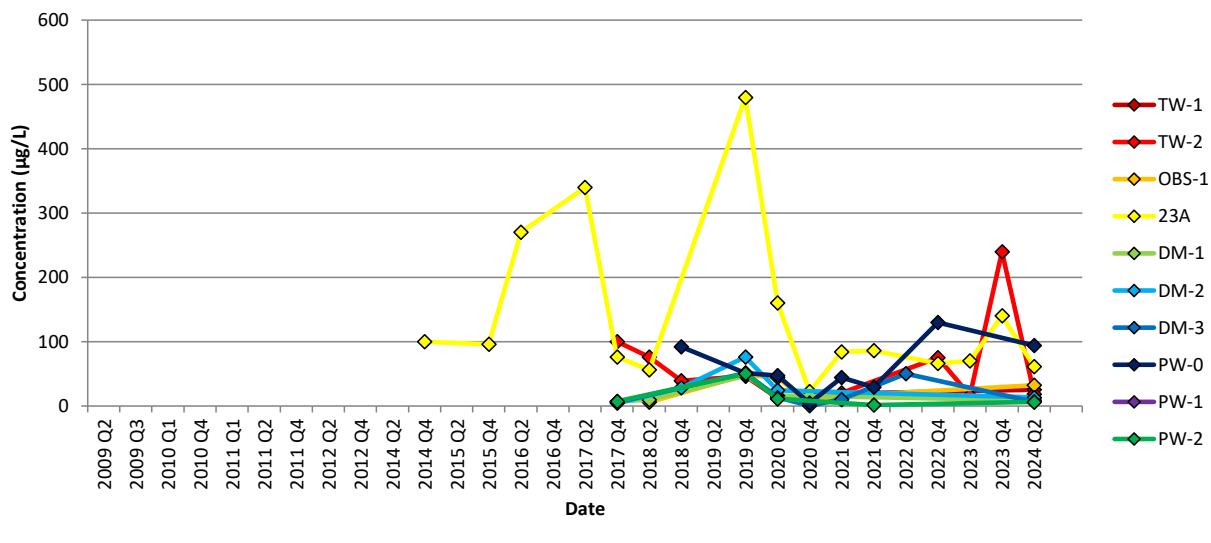


Chart 21: Mercury

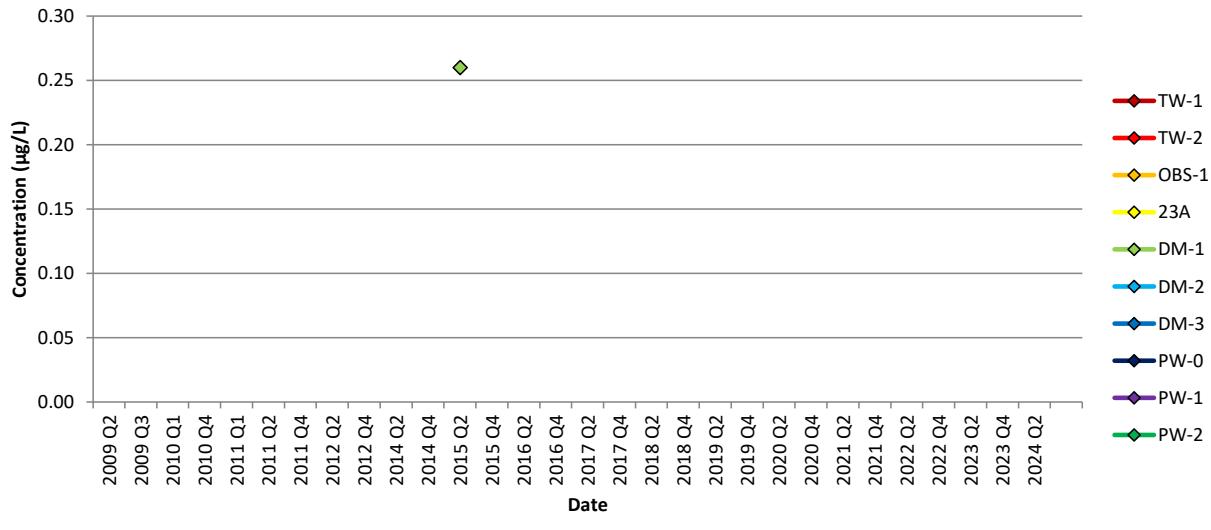


Chart 22: Total Dissolved Solids

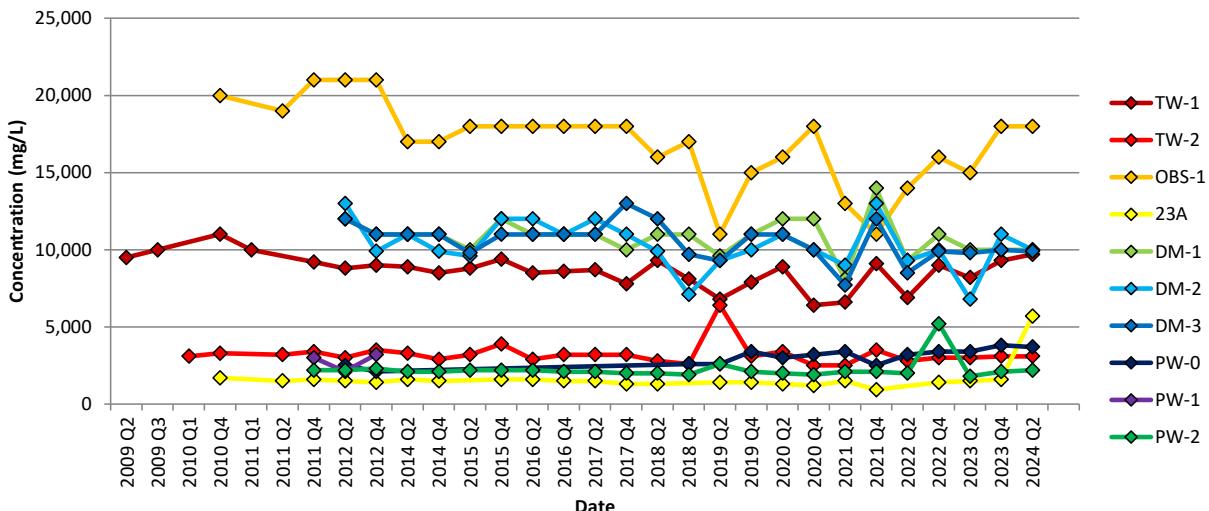


Chart 23: Specific Conductance

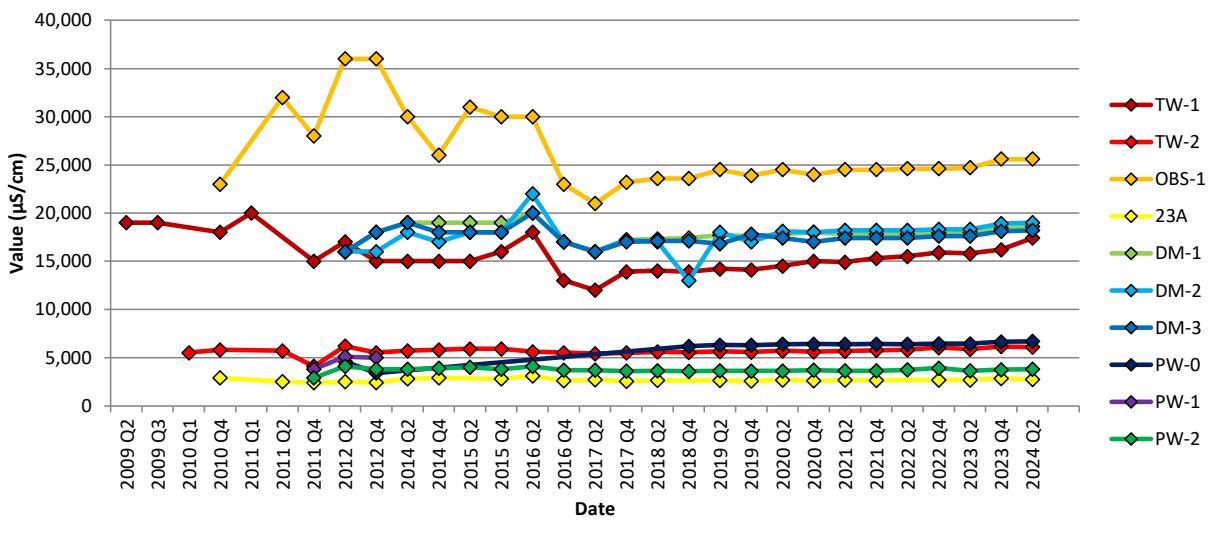


Chart 24: pH

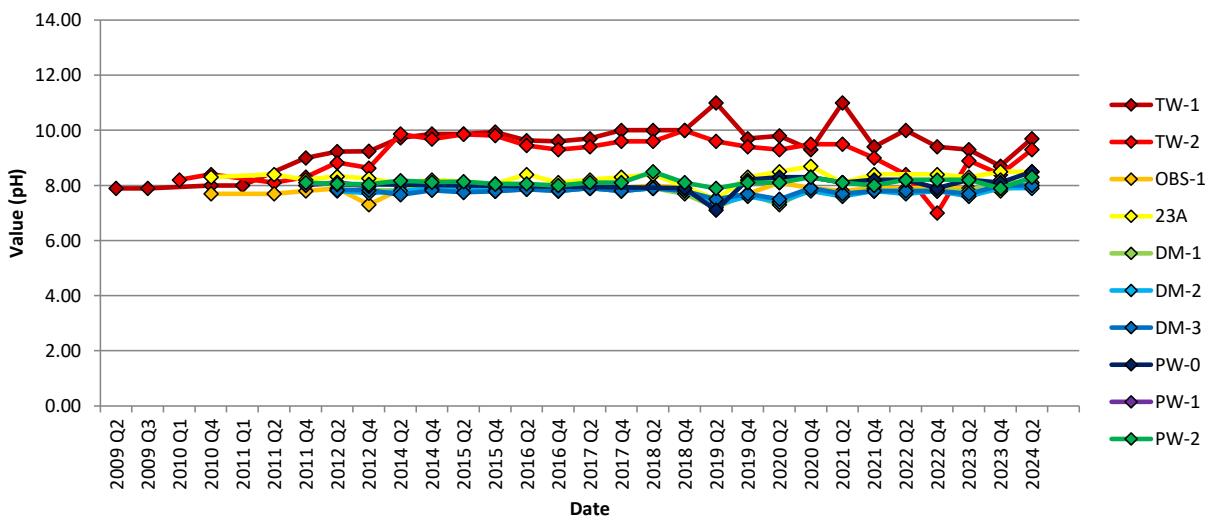


Chart 25: Oil & Grease

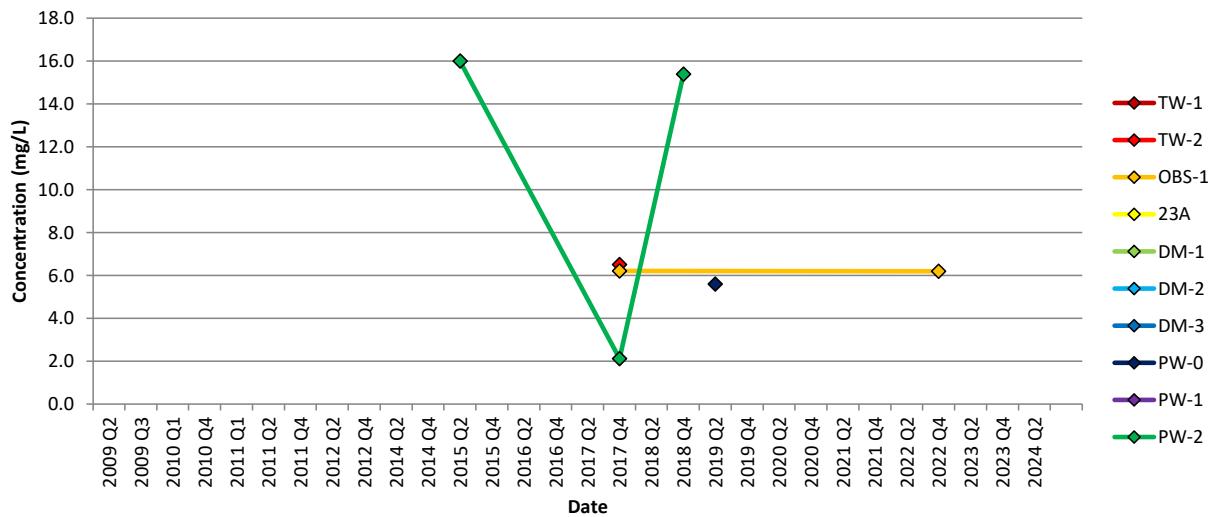


Chart 26: Heat Transfer Fluid

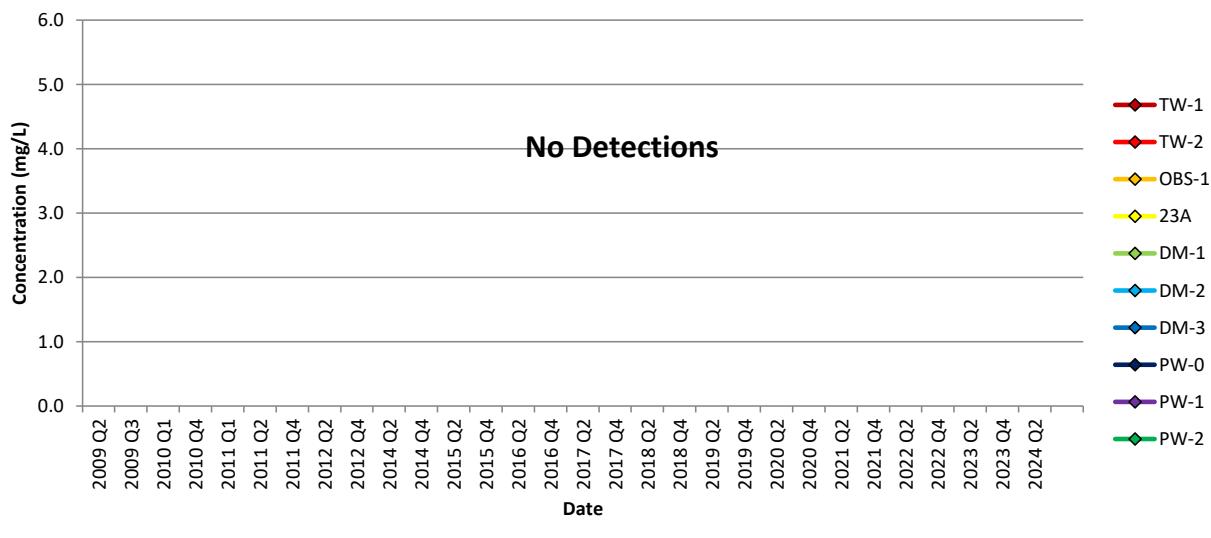


Chart 27: Deuterium

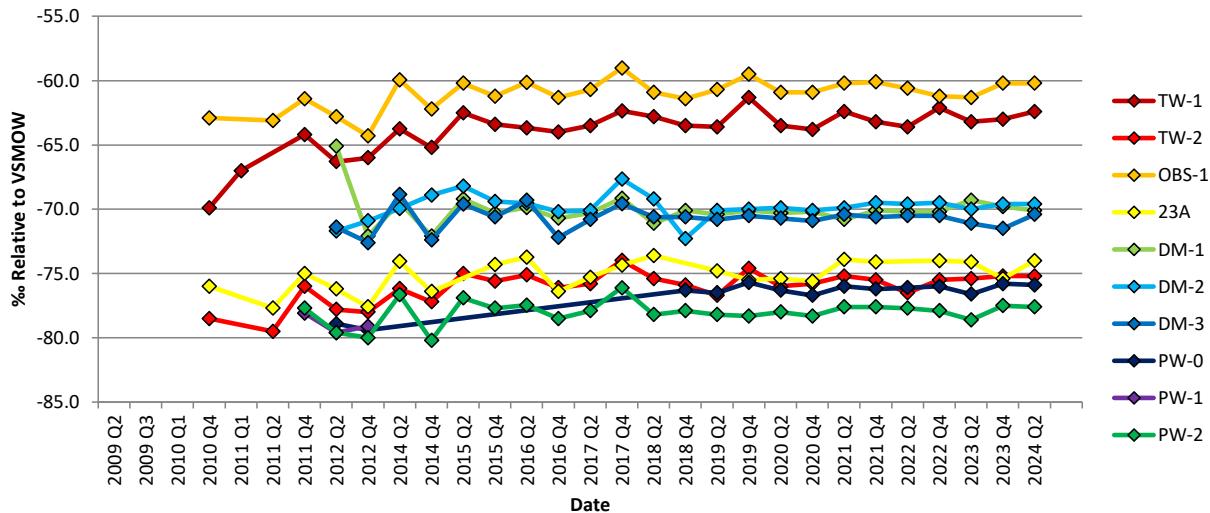


Chart 28: Oxygen-18

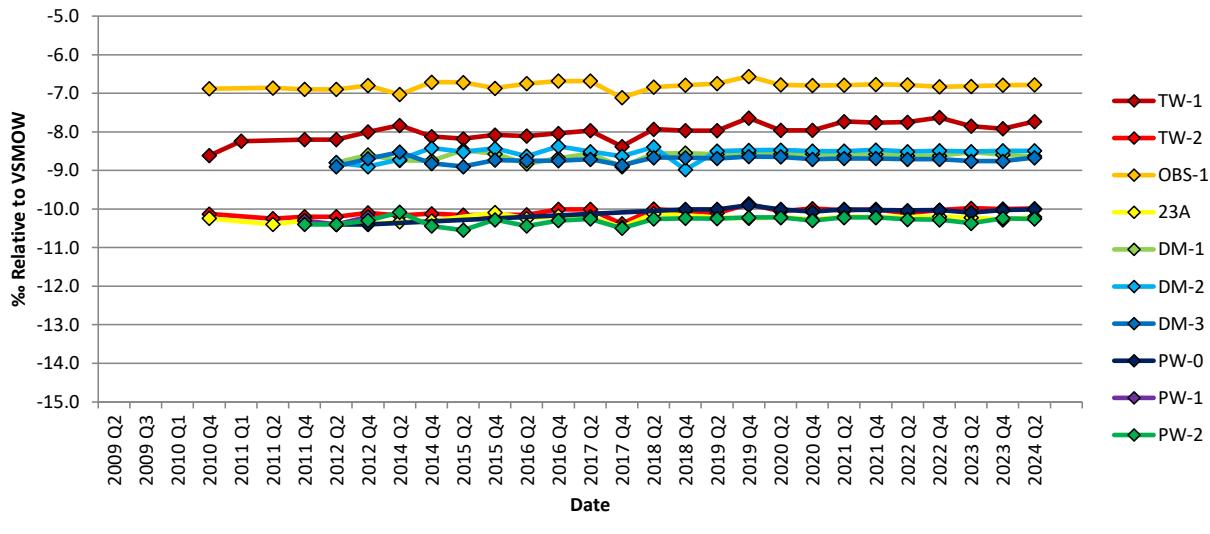
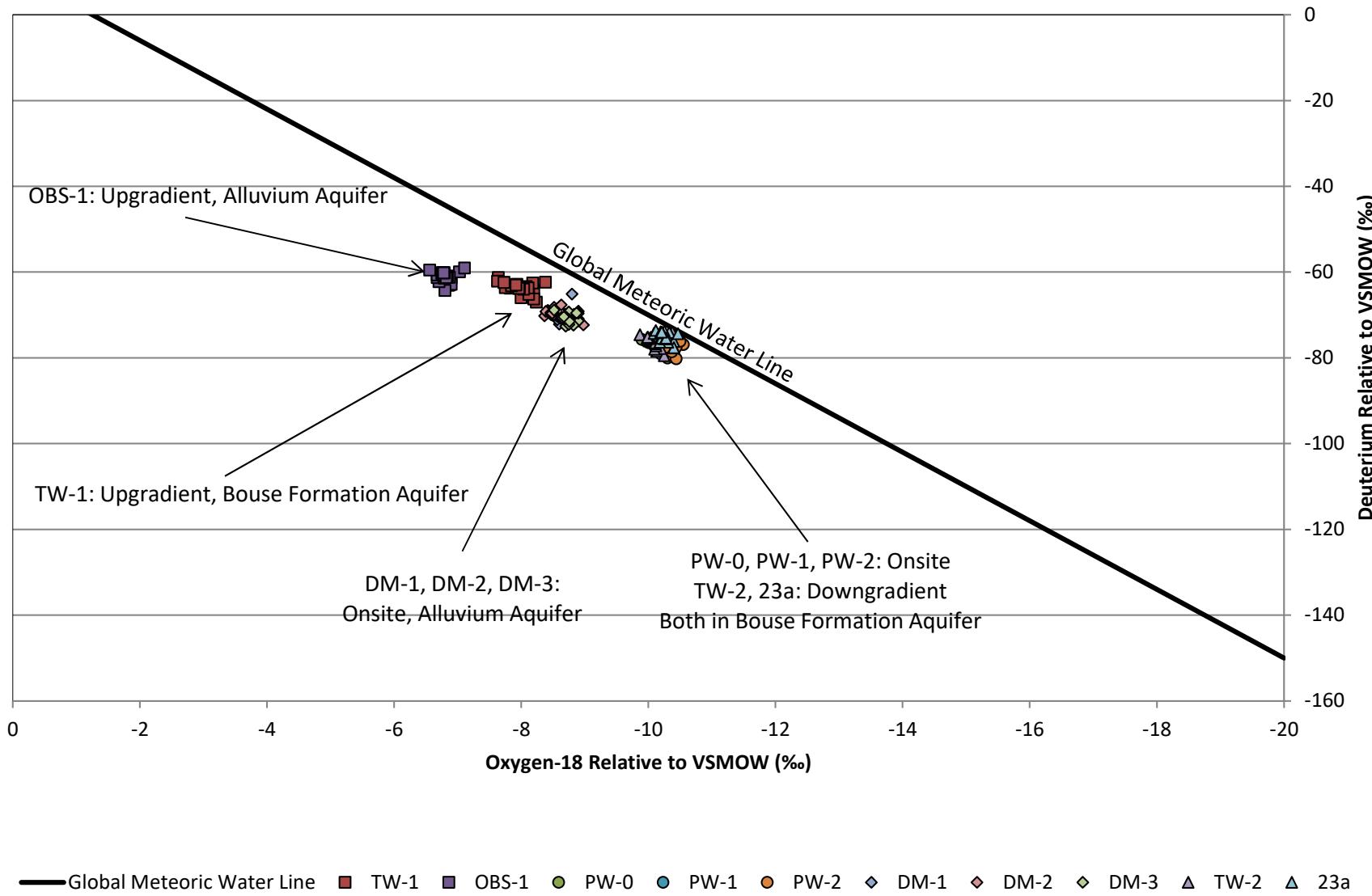


Chart 29: Deuterium vs. Oxygen-18 Concentrations Relative to Vienna Standard Mean Oceanic Water



APPENDIX C

MANN-KENDALL TREND ANALYSIS

Appendix C
2024 First Semiannual Summary of Mann-Kendall Test for Trend
Genesis Solar Energy Project, Blythe, CA

Well ID	Analyte	Minimum	Maximum	Mean	Mann-Kendall at 95% Confidence Interval			
					Mann-Kendall Test Value (S)	Trend Direction	p-Value	Significant Trend?
TW-1	Chloride	3,510	7,300	4,655	29	Increasing	0.290	No
TW-1	Sulfate	1,130	2,490	1,570	51	Increasing	0.161	No
TW-1	Nitrate	0.657	6.5	1.69	1	Increasing	0.500	No
TW-1	Calcium	58	190	96	6	Increasing	0.458	No
TW-1	Copper	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-1	Sodium	1,000	9,300	3,736	73	Increasing	0.076	No
TW-1	Potassium	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	
TW-1	Iron	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	
TW-1	Magnesium	3.40	46	18	-39	Decreasing	0.173	No
TW-1	Antimony	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-1	Arsenic	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-1	Barium	6	22	15	-35	Decreasing	0.061	No
TW-1	Cadmium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-1	Chromium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-1	Cobalt	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-1	Lead	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-1	Manganese	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	
TW-1	Nickel	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-1	Selenium	6	92	35	2	Increasing	0.403	No
TW-1	Zinc	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-1	Mercury	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-1	TDS	6,400	11,000	8,675	-120	Decreasing	0.009	Yes
TW-1	Conductivity	12,000	20,000	15,629	-34	Decreasing	0.256	No
TW-2	Chloride	850	2,750	1,581	103	Increasing	0.016	Yes
TW-2	Sulfate	315	686	462	-54	Decreasing	0.107	No
TW-2	Nitrate	0.659	0.944	0.846	7	Increasing	0.184	No
TW-2	Calcium	64	120	86	3	Increasing	0.483	No
TW-2	Copper	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-2	Sodium	70	1,300	1,024	148	Increasing	0.001	Yes
TW-2	Potassium	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	
TW-2	Iron	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-2	Magnesium	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	
TW-2	Antimony	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-2	Arsenic	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-2	Barium	23	65	43	100	Increasing	0.001	Yes
TW-2	Cadmium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-2	Chromium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-2	Cobalt	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-2	Lead	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-2	Manganese	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-2	Nickel	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-2	Selenium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	

Appendix C
2024 First Semiannual Summary of Mann-Kendall Test for Trend
Genesis Solar Energy Project, Blythe, CA

Well ID	Analyte	Minimum	Maximum	Mean	Mann-Kendall at 95% Confidence Interval			
					Mann-Kendall Test Value (S)	Trend Direction	p-Value	Significant Trend?
TW-2	Zinc	13	240	64	-11	Decreasing	0.186	No
TW-2	Mercury	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
TW-2	TDS	2,500	6,400	3,226	-72	Decreasing	0.068	No
TW-2	Conductivity	4,100	6,200	5,671	98	Increasing	0.021	Yes
OBS-1	Chloride	5,200	9,710	6,350	-41	Decreasing	0.189	No
OBS-1	Sulfate	4,800	9,400	5,989	-88	Decreasing	0.028	Yes
OBS-1	Nitrate	0.78	12.4	5.34	13	Increasing	0.337	No
OBS-1	Calcium	290	480	345	-144	Decreasing	0.001	Yes
OBS-1	Copper	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
OBS-1	Sodium	2,200	12,000	6,204	29	Increasing	0.268	No
OBS-1	Potassium	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	
OBS-1	Iron	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	
OBS-1	Magnesium	68	140	89	41	Increasing	0.188	No
OBS-1	Antimony	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
OBS-1	Arsenic	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
OBS-1	Barium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
OBS-1	Cadmium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
OBS-1	Chromium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
OBS-1	Cobalt	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
OBS-1	Lead	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
OBS-1	Manganese	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
OBS-1	Nickel	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
OBS-1	Selenium	7.60	120	67	19	Increasing	0.279	No
OBS-1	Zinc	3.7	48	24	1	Increasing	0.500	No
OBS-1	Mercury	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
OBS-1	TDS	11,000	21,000	17,000	-146	Decreasing	0.001	Yes
OBS-1	Conductivity	21,000	36,000	26,438	-27	Decreasing	0.282	No
Well 23a	Chloride	407	667	488	-58	Decreasing	0.066	No
Well 23a	Sulfate	370	490	411	-60	Decreasing	0.048	Yes
Well 23a	Nitrate	0.610	1.020	0.856	2	Increasing	0.440	No
Well 23a	Calcium	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	
Well 23a	Copper	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
Well 23a	Sodium	420	760	577	132	Increasing	0.000	Yes
Well 23a	Potassium	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	
Well 23a	Iron	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	
Well 23a	Magnesium	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	
Well 23a	Antimony	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
Well 23a	Arsenic	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
Well 23a	Barium	13	22	19	-12	Decreasing	0.288	No
Well 23a	Cadmium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
Well 23a	Chromium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
Well 23a	Cobalt	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	

Appendix C
2024 First Semiannual Summary of Mann-Kendall Test for Trend
Genesis Solar Energy Project, Blythe, CA

Well ID	Analyte	Minimum	Maximum	Mean	Mann-Kendall at 95% Confidence Interval			
					Mann-Kendall Test Value (S)	Trend Direction	p-Value	Significant Trend?
Well 23a	Lead	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
Well 23a	Manganese	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
Well 23a	Nickel	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
Well 23a	Selenium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
Well 23a	Zinc	22	480	141	-29	Decreasing	0.083	No
Well 23a	Mercury	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
Well 23a	TDS	930	5,700	1,632	-57	Decreasing	0.065	No
Well 23a	Conductivity	2,400	3,100	2,677	45	Increasing	0.122	No
DM-1	Chloride	4,600	8,180	5,486	60	Increasing	0.059	No
DM-1	Sulfate	1,700	3,280	2,082	-18	Decreasing	0.315	No
DM-1	Nitrate	2.90	16.3	8.72	-18	Decreasing	0.242	No
DM-1	Calcium	210	280	239	-16	Decreasing	0.339	No
DM-1	Copper	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-1	Sodium	1,100	9,500	4,213	104	Increasing	0.003	Yes
DM-1	Potassium	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	
DM-1	Iron	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-1	Magnesium	49	69	60	93	Increasing	0.007	Yes
DM-1	Antimony	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-1	Arsenic	5.0	10	6.4	-4	Decreasing	0.353	No
DM-1	Barium	25	52	33	-85	Decreasing	0.002	Yes
DM-1	Cadmium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-1	Chromium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-1	Cobalt	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-1	Lead	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-1	Manganese	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-1	Nickel	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-1	Selenium	0.87	52	13	18	Increasing	0.038	Yes
DM-1	Zinc	6.6	47	18	2	Increasing	0.403	No
DM-1	Mercury	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-1	TDS	8,100	14,000	10,826	-52	Decreasing	0.077	No
DM-1	Conductivity	16,000	20,000	17,926	41	Increasing	0.144	No
DM-2	Chloride	4,400	7,680	5,313	100	Increasing	0.004	Yes
DM-2	Sulfate	1,600	2,340	2,061	51	Increasing	0.078	No
DM-2	Nitrate	2.90	21.2	10.1	-16	Decreasing	0.268	No
DM-2	Calcium	230	470	283	-115	Decreasing	0.001	Yes
DM-2	Copper	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-2	Sodium	1,400	11,000	4,261	114	Increasing	0.001	Yes
DM-2	Potassium	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	
DM-2	Iron	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-2	Magnesium	51	85	62	114	Increasing	0.001	Yes
DM-2	Antimony	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-2	Arsenic	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	

Appendix C
2024 First Semiannual Summary of Mann-Kendall Test for Trend
Genesis Solar Energy Project, Blythe, CA

Well ID	Analyte	Minimum	Maximum	Mean	Mann-Kendall at 95% Confidence Interval			
					Mann-Kendall Test Value (S)	Trend Direction	p-Value	Significant Trend?
DM-2	Barium	35	140	61	-148	Decreasing	0.000	Yes
DM-2	Cadmium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-2	Chromium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-2	Cobalt	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-2	Lead	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-2	Manganese	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-2	Nickel	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-2	Selenium	0.94	53	13	19	Increasing	0.030	Yes
DM-2	Zinc	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-2	Mercury	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-2	TDS	6,800	13,000	10,339	-51	Decreasing	0.091	No
DM-2	Conductivity	13,000	22,000	17,626	134	Increasing	0.000	Yes
DM-3	Chloride	4,400	9,760	5,386	56	Increasing	0.073	No
DM-3	Sulfate	1,800	4,350	2,205	35	Increasing	0.184	No
DM-3	Nitrate	2.44	10.7	3.61	-14	Decreasing	0.260	No
DM-3	Calcium	190	280	232	-9	Decreasing	0.414	No
DM-3	Copper	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-3	Sodium	1,200	9,100	4,083	108	Increasing	0.002	Yes
DM-3	Potassium	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	
DM-3	Iron	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-3	Magnesium	45	69	55	73	Increasing	0.028	Yes
DM-3	Antimony	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-3	Arsenic	11	26	16	39	Increasing	0.041	Yes
DM-3	Barium	15	34	18	-24	Decreasing	0.163	No
DM-3	Cadmium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-3	Chromium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-3	Cobalt	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-3	Lead	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-3	Manganese	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-3	Nickel	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-3	Selenium	0.68	55	16	3	Increasing	0.354	No
DM-3	Zinc	0.55	51	19	-1	Decreasing	0.500	No
DM-3	Mercury	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
DM-3	TDS	7,700	13,000	10,548	-77	Decreasing	0.019	Yes
DM-3	Conductivity	16,000	20,000	17,561	23	Increasing	0.279	No
PW-0	Chloride	780	3,220	1,781	-8	Decreasing	0.351	No
PW-0	Sulfate	450	944	582	-5	Decreasing	0.403	No
PW-0	Nitrate	0.641	0.925	0.783	6	Increasing	0.045	Yes
PW-0	Calcium	55	130	103	31	Increasing	0.047	Yes
PW-0	Copper	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-0	Sodium	530	2,300	1,310	41	Increasing	0.012	Yes
PW-0	Potassium	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	

Appendix C
2024 First Semiannual Summary of Mann-Kendall Test for Trend
Genesis Solar Energy Project, Blythe, CA

Well ID	Analyte	Minimum	Maximum	Mean	Mann-Kendall at 95% Confidence Interval			
					Mann-Kendall Test Value (S)	Trend Direction	p-Value	Significant Trend?
PW-0	Iron	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	
PW-0	Magnesium	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	
PW-0	Antimony	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-0	Arsenic	5.00	59	46	14	Increasing	0.155	No
PW-0	Barium	46	63	57	-12	Decreasing	0.195	No
PW-0	Cadmium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-0	Chromium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-0	Cobalt	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-0	Lead	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-0	Manganese	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-0	Nickel	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-0	Selenium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-0	Zinc	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-0	Mercury	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-0	TDS	2,100	3,800	3,057	58	Increasing	0.001	Yes
PW-0	Conductivity	3,400	6,690	6,065	74	Increasing	0.000	Yes
PW-1	Chloride	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Sulfate	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Nitrate	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Calcium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Copper	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Sodium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Potassium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Iron	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Magnesium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Antimony	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Arsenic	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Barium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Cadmium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Chromium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Cobalt	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Lead	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Manganese	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Nickel	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Selenium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Zinc	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Mercury	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	TDS	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-1	Conductivity	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-2	Chloride	570	1,370	873	15	Increasing	0.364	No
PW-2	Sulfate	290	584	445	-4	Decreasing	0.468	No

Appendix C
2024 First Semiannual Summary of Mann-Kendall Test for Trend
Genesis Solar Energy Project, Blythe, CA

Well ID	Analyte	Minimum	Maximum	Mean	Mann-Kendall at 95% Confidence Interval			
					Mann-Kendall Test Value (S)	Trend Direction	p-Value	Significant Trend?
PW-2	Nitrate	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-2	Calcium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-2	Copper	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-2	Sodium	410	1,200	761	79	Increasing	0.026	Yes
PW-2	Potassium	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	
PW-2	Iron	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-2	Magnesium	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	
PW-2	Antimony	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-2	Arsenic	19	38	30	53	Increasing	0.024	Yes
PW-2	Barium	14	52	41	32	Increasing	0.134	No
PW-2	Cadmium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-2	Chromium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-2	Cobalt	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-2	Lead	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-2	Manganese	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-2	Nickel	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-2	Selenium	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-2	Zinc	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-2	Mercury	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²	
PW-2	TDS	1,800	5,200	2,238	-68	Decreasing	0.043	Yes
PW-2	Conductivity	2,900	4,100	3,718	-30	Decreasing	0.235	No

Notes:

N/A¹ Not Applicable - No new data for the reporting period

N/A² Not Applicable - Not enough data to calculate trend

New max/min value

APPENDIX D

LABORATORY REPORTS



25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

25 June 2024

Arlin Brewster
Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest, CA 92630
RE: Genesis Solar Groundwater

Enclosed are the results of analyses for samples received by the laboratory on 06/07/24 10:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Lee".

Jeff Lee
Project Manager



25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
23a	T242356-01	Water	06/06/24 14:30	06/07/24 10:30
OBS-1	T242356-02	Water	06/06/24 13:00	06/07/24 10:30
TW-1	T242356-03	Water	06/06/24 12:30	06/07/24 10:30
TW-2	T242356-04	Water	06/06/24 16:30	06/07/24 10:30
PW-0	T242356-05	Water	06/06/24 17:00	06/07/24 10:30
PW-2	T242356-06	Water	06/06/24 17:20	06/07/24 10:30
DUP	T242356-07	Water	06/06/24 00:00	06/07/24 10:30

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeff Lee, Project Manager

Page 1 of 27

Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

DETECTIONS SUMMARY

Sample ID: 23a

Laboratory ID: T242356-01

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	16	5.0	ug/l	200.8	FILT
Zinc	61	5.0	ug/l	200.8	FILT
Sodium	680	50	mg/l	EPA 200.7	FILT
Total Dissolved Solids	5700	10	mg/l	TDS by SM2540C	
pH	8.5	0.10	pH Units	SM 4500-H+B	
pH Temperature °C	20		pH Units	SM 4500-H+B	
Specific Conductance (EC)	2740	10.0	mho/cm @25°t	SM2510b mod.	
Chloride	407	250	mg/l	EPA 300.0	
Sulfate as SO4	372	250	mg/l	EPA 300.0	
Nitrate as NO3	0.888	0.500	mg/l	EPA 300.0	O-07
Nitrate as N	0.200	0.200	mg/l	EPA 300.0	O-07

Sample ID: OBS-1

Laboratory ID: T242356-02

Analyte	Result	Reporting Limit	Units	Method	Notes
Calcium	360	50	mg/l	EPA 200.7	FILT
Selenium	74	25	ug/l	200.8	FILT
Magnesium	110	10	mg/l	EPA 200.7	FILT
Zinc	32	25	ug/l	200.8	FILT
Sodium	7400	50	mg/l	EPA 200.7	FILT
pH	8.1	0.10	pH Units	SM 4500-H+B	O-04
Total Dissolved Solids	18000	10	mg/l	TDS by SM2540C	
Specific Conductance (EC)	25600	10.0	mho/cm @25°t	SM2510b mod.	
pH Temperature °C	20		pH Units	SM 4500-H+B	O-04
Chloride	5400	2500	mg/l	EPA 300.0	
Sulfate as SO4	5070	2500	mg/l	EPA 300.0	
Nitrate as NO3	5.21	0.500	mg/l	EPA 300.0	O-07
Nitrate as N	1.18	0.200	mg/l	EPA 300.0	O-07

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Jeff Lee, Project Manager

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

Sample ID: TW-1

Laboratory ID: T242356-03

Analyte	Reporting				Notes
	Result	Limit	Units	Method	
Barium	16	5.0	ug/l	200.8	FILT
Calcium	190	50	mg/l	EPA 200.7	FILT
Magnesium	46	10	mg/l	EPA 200.7	FILT
Zinc	25	5.0	ug/l	200.8	FILT
Sodium	4700	50	mg/l	EPA 200.7	FILT
pH	9.7	0.10	pH Units	SM 4500-H+B	O-04
Total Dissolved Solids	9700	10	mg/l	TDS by SM2540C	
pH Temperature °C	20		pH Units	SM 4500-H+B	O-04
Specific Conductance (EC)	17400	10.0	mho/cm @25°t	SM2510b mod.	
Chloride	4500	2500	mg/l	EPA 300.0	
Sulfate as SO4	1770	250	mg/l	EPA 300.0	
Nitrate as NO3	1.12	0.500	mg/l	EPA 300.0	O-07
Nitrate as N	0.250	0.200	mg/l	EPA 300.0	O-07

Sample ID: TW-2

Laboratory ID: T242356-04

Analyte	Reporting				Notes
	Result	Limit	Units	Method	
Barium	35	5.0	ug/l	200.8	FILT
Calcium	93	50	mg/l	EPA 200.7	FILT
Zinc	18	5.0	ug/l	200.8	FILT
Sodium	1300	50	mg/l	EPA 200.7	FILT
pH	9.3	0.10	pH Units	SM 4500-H+B	
Total Dissolved Solids	3100	10	mg/l	TDS by SM2540C	
Specific Conductance (EC)	6090	10.0	mho/cm @25°t	SM2510b mod.	
pH Temperature °C	20		pH Units	SM 4500-H+B	
Chloride	1590	250	mg/l	EPA 300.0	
Sulfate as SO4	404	250	mg/l	EPA 300.0	
Nitrate as NO3	0.928	0.500	mg/l	EPA 300.0	O-07
Nitrate as N	0.210	0.200	mg/l	EPA 300.0	O-07

Sample ID: PW-0

Laboratory ID: T242356-05

Analyte	Reporting				Notes
	Result	Limit	Units	Method	
Arsenic	43	5.0	ug/l	200.8	FILT
Barium	46	5.0	ug/l	200.8	FILT

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Jeff Lee, Project Manager

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

Sample ID: PW-0

Laboratory ID: T242356-05

Analyte	Reporting				Notes
	Result	Limit	Units	Method	
Calcium	120	50	mg/l	EPA 200.7	FILT
Zinc	94	5.0	ug/l	200.8	FILT
Sodium	1500	50	mg/l	EPA 200.7	FILT
Total Dissolved Solids	3700	10	mg/l	TDS by SM2540C	
pH	8.5	0.10	pH Units	SM 4500-H+B	
Specific Conductance (EC)	6690	10.0	mho/cm @25°t	SM2510b mod.	
pH Temperature °C	20		pH Units	SM 4500-H+B	
Chloride	1730	250	mg/l	EPA 300.0	
Sulfate as SO4	528	250	mg/l	EPA 300.0	
Nitrate as NO3	0.925	0.500	mg/l	EPA 300.0	O-07
Nitrate as N	0.210	0.200	mg/l	EPA 300.0	O-07

Sample ID: PW-2

Laboratory ID: T242356-06

Analyte	Reporting				Notes
	Result	Limit	Units	Method	
Arsenic	27	5.0	ug/l	200.8	FILT
Barium	39	5.0	ug/l	200.8	FILT
Calcium	54	50	mg/l	EPA 200.7	FILT
Sodium	810	50	mg/l	EPA 200.7	FILT
Total Dissolved Solids	2100	10	mg/l	TDS by SM2540C	
pH	8.1	0.10	pH Units	SM 4500-H+B	
pH Temperature °C	21		pH Units	SM 4500-H+B	
Specific Conductance (EC)	3780	10.0	mho/cm @25°t	SM2510b mod.	
Chloride	775	250	mg/l	EPA 300.0	
Sulfate as SO4	414	250	mg/l	EPA 300.0	

Sample ID: DUP

Laboratory ID: T242356-07

Analyte	Reporting				Notes
	Result	Limit	Units	Method	
Arsenic	30	5.0	ug/l	200.8	FILT
Barium	38	5.0	ug/l	200.8	FILT
Calcium	57	50	mg/l	EPA 200.7	FILT
Zinc	6.0	5.0	ug/l	200.8	FILT
Sodium	820	50	mg/l	EPA 200.7	FILT
pH	8.3	0.10	pH Units	SM 4500-H+B	O-04

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

Sample ID: DUP

Laboratory ID: T242356-07

Analyte	Reporting				Notes
	Result	Limit	Units	Method	
Total Dissolved Solids	2200	10	mg/l	TDS by SM2540C	
pH Temperature °C	20		pH Units	SM 4500-H+B	O-04
Specific Conductance (EC)	3790	10.0	mho/cm @25°t	SM2510b mod.	
Chloride	790	250	mg/l	EPA 300.0	
Sulfate as SO4	422	250	mg/l	EPA 300.0	

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

23a

T242356-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

Metals by EPA 200 Series Methods

Calcium	ND	50	mg/l	100	24F0112	06/07/24	06/13/24	EPA 200.7	FILT, R-01
Copper	ND	0.50	"	"	"	"	"	"	FILT, R-01
Iron	ND	20	"	"	"	"	"	"	FILT, R-01
Magnesium	ND	10	"	"	"	"	"	"	FILT, R-01
Potassium	ND	50	"	"	"	"	"	"	FILT, R-01
Sodium	680	50	"	"	"	"	"	"	FILT
Antimony	ND	5.0	ug/l	10	24F0114	06/07/24	06/13/24	200.8	FILT, R-01
Arsenic	ND	5.0	"	"	"	"	"	"	FILT, R-01
Barium	16	5.0	"	"	"	"	"	"	FILT
Cadmium	ND	5.0	"	"	"	"	"	"	FILT, R-01
Chromium	ND	5.0	"	"	"	"	"	"	FILT, R-01
Cobalt	ND	5.0	"	"	"	"	"	"	FILT, R-01
Lead	ND	5.0	"	"	"	"	"	"	FILT, R-01
Nickel	ND	5.0	"	"	"	"	"	"	FILT, R-01
Selenium	ND	5.0	"	"	"	"	"	"	FILT, R-01
Zinc	61	5.0	"	"	"	"	"	"	FILT

Cold Vapor Extraction EPA 7470/7471

Mercury	ND	1.0	ug/l	1	24F0064	06/07/24	06/11/24	EPA 7470A Water	FILT
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Conventional Chemistry Parameters by APHA/EPA/ASTM Methods

Oil & Grease	ND	5.00	mg/l	1	24F0108	06/07/24	06/10/24	EPA 1664B
Specific Conductance (EC)	2740	10.0	umho/cm @25°C	"	24F0145	06/11/24	06/12/24	SM2510b mod.
pH	8.5	0.10	pH Units	"	24F0111	06/07/24	06/11/24	SM 4500-H+B
pH Temperature °C	20	"	"	"	"	"	"	"
Total Dissolved Solids	5700	10	mg/l	"	24F0143	06/11/24	06/14/24	TDS by SM2540C

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

23a

T242356-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

Anions by EPA Method 300.0

Chloride	407	250	mg/l	50	24F0110	06/07/24	06/07/24	EPA 300.0	
Sulfate as SO ₄	372	250	"	"	"	"	"	"	
Nitrate as NO ₃	0.888	0.500	"	1	"	"	06/10/24	"	O-07
Nitrate as N	0.200	0.200	"	"	"	"	"	"	O-07

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

OBS-1

T242356-02 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

Metals by EPA 200 Series Methods

Calcium	360	50	mg/l	100	24F0112	06/07/24	06/13/24	EPA 200.7	FILT
Copper	ND	0.50	"	"	"	"	06/13/24	"	FILT, R-01
Iron	ND	20	"	"	"	"	"	"	FILT, R-01
Magnesium	110	10	"	"	"	"	"	"	FILT
Potassium	ND	50	"	"	"	"	06/13/24	"	FILT, R-01
Sodium	7400	50	"	"	"	"	"	"	FILT
Antimony	ND	25	ug/l	50	24F0114	06/07/24	06/13/24	200.8	FILT, R-01
Arsenic	ND	25	"	"	"	"	"	"	FILT, R-01
Barium	ND	25	"	"	"	"	"	"	FILT, R-01
Cadmium	ND	25	"	"	"	"	"	"	FILT, R-01
Chromium	ND	25	"	"	"	"	"	"	FILT, R-01
Cobalt	ND	25	"	"	"	"	"	"	FILT, R-01
Lead	ND	25	"	"	"	"	"	"	FILT, R-01
Nickel	ND	25	"	"	"	"	"	"	FILT, R-01
Selenium	74	25	"	"	"	"	"	"	FILT
Zinc	32	25	"	"	"	"	"	"	FILT

Cold Vapor Extraction EPA 7470/7471

Mercury	ND	1.0	ug/l	1	24F0064	06/07/24	06/11/24	EPA 7470A Water	FILT
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Conventional Chemistry Parameters by APHA/EPA/ASTM Methods

Oil & Grease	ND	5.00	mg/l	1	24F0108	06/07/24	06/10/24	EPA 1664B	
Specific Conductance (EC)	25600	10.0	umho/cm @25°C	"	24F0145	06/11/24	06/12/24	SM2510b mod.	
pH	8.1	0.10	pH Units	"	24F0111	06/07/24	06/11/24	SM 4500-H+B	O-04
pH Temperature °C	20		"	"	"	"	"	"	O-04
Total Dissolved Solids	18000	10	mg/l	"	24F0143	06/11/24	06/14/24	TDS by SM2540C	

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

OBS-1

T242356-02 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

Anions by EPA Method 300.0

Chloride	5400	2500	mg/l	500	24F0110	06/07/24	06/10/24	EPA 300.0	
Sulfate as SO ₄	5070	2500	"	"	"	"	"	"	
Nitrate as NO ₃	5.21	0.500	"	1	"	"	06/10/24	"	O-07
Nitrate as N	1.18	0.200	"	"	"	"	"	"	O-07

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

TW-1

T242356-03 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

Metals by EPA 200 Series Methods

Calcium	190	50	mg/l	100	24F0112	06/07/24	06/13/24	EPA 200.7	FILT
Copper	ND	0.50	"	"	"	"	"	"	FILT, R-01
Iron	ND	20	"	"	"	"	"	"	FILT, R-01
Magnesium	46	10	"	"	"	"	"	"	FILT
Potassium	ND	50	"	"	"	"	"	"	FILT, R-01
Sodium	4700	50	"	"	"	"	"	"	FILT
Antimony	ND	5.0	ug/l	10	24F0114	06/07/24	06/13/24	200.8	FILT, R-01
Arsenic	ND	5.0	"	"	"	"	"	"	FILT, R-01
Barium	16	5.0	"	"	"	"	"	"	FILT
Cadmium	ND	5.0	"	"	"	"	"	"	FILT, R-01
Chromium	ND	5.0	"	"	"	"	"	"	FILT, R-01
Cobalt	ND	5.0	"	"	"	"	"	"	FILT, R-01
Lead	ND	5.0	"	"	"	"	"	"	FILT, R-01
Nickel	ND	5.0	"	"	"	"	"	"	FILT, R-01
Selenium	ND	5.0	"	"	"	"	"	"	FILT, R-01
Zinc	25	5.0	"	"	"	"	"	"	FILT

Cold Vapor Extraction EPA 7470/7471

Mercury	ND	1.0	ug/l	1	24F0064	06/07/24	06/11/24	EPA 7470A Water	FILT
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Conventional Chemistry Parameters by APHA/EPA/ASTM Methods

Oil & Grease	ND	5.00	mg/l	1	24F0108	06/07/24	06/10/24	EPA 1664B	
Specific Conductance (EC)	17400	10.0	umho/cm @25°C	"	24F0145	06/11/24	06/12/24	SM2510b mod.	
pH	9.7	0.10	pH Units	"	24F0111	06/07/24	06/11/24	SM 4500-H+B	O-04
pH Temperature °C	20		"	"	"	"	"	"	O-04
Total Dissolved Solids	9700	10	mg/l	"	24F0143	06/11/24	06/14/24	TDS by SM2540C	

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

TW-1

T242356-03 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

Anions by EPA Method 300.0

Chloride	4500	2500	mg/l	500	24F0110	06/07/24	06/10/24	EPA 300.0	
Sulfate as SO ₄	1770	250	"	50	"	"	06/07/24	"	
Nitrate as NO ₃	1.12	0.500	"	1	"	"	06/10/24	"	O-07
Nitrate as N	0.250	0.200	"	"	"	"	"	"	O-07

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

TW-2

T242356-04 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

Metals by EPA 200 Series Methods

Calcium	93	50	mg/l	100	24F0112	06/07/24	06/13/24	EPA 200.7	FILT
Copper	ND	0.50	"	"	"	"	"	"	FILT, R-01
Iron	ND	20	"	"	"	"	"	"	FILT, R-01
Magnesium	ND	10	"	"	"	"	"	"	FILT, R-01
Potassium	ND	50	"	"	"	"	"	"	FILT, R-01
Sodium	1300	50	"	"	"	"	"	"	FILT
Antimony	ND	5.0	ug/l	10	24F0114	06/07/24	06/13/24	200.8	FILT, R-01
Arsenic	ND	5.0	"	"	"	"	"	"	FILT, R-01
Barium	35	5.0	"	"	"	"	"	"	FILT
Cadmium	ND	5.0	"	"	"	"	"	"	FILT, R-01
Chromium	ND	5.0	"	"	"	"	"	"	FILT, R-01
Cobalt	ND	5.0	"	"	"	"	"	"	FILT, R-01
Lead	ND	5.0	"	"	"	"	"	"	FILT, R-01
Nickel	ND	5.0	"	"	"	"	"	"	FILT, R-01
Selenium	ND	5.0	"	"	"	"	"	"	FILT, R-01
Zinc	18	5.0	"	"	"	"	"	"	FILT

Cold Vapor Extraction EPA 7470/7471

Mercury	ND	1.0	ug/l	1	24F0064	06/07/24	06/11/24	EPA 7470A Water	FILT
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Conventional Chemistry Parameters by APHA/EPA/ASTM Methods

Oil & Grease	ND	5.00	mg/l	1	24F0108	06/07/24	06/10/24	EPA 1664B
Specific Conductance (EC)	6090	10.0	umho/cm @25°C	"	24F0145	06/11/24	06/12/24	SM2510b mod.
pH	9.3	0.10	pH Units	"	24F0111	06/07/24	06/11/24	SM 4500-H+B
pH Temperature °C	20		"	"	"	"	"	"
Total Dissolved Solids	3100	10	mg/l	"	24F0143	06/11/24	06/14/24	TDS by SM2540C

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

TW-2

T242356-04 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

Anions by EPA Method 300.0

Chloride	1590	250	mg/l	50	24F0110	06/07/24	06/07/24	EPA 300.0	
Sulfate as SO ₄	404	250	"	"	"	"	"	"	
Nitrate as NO ₃	0.928	0.500	"	1	"	"	06/10/24	"	O-07
Nitrate as N	0.210	0.200	"	"	"	"	"	"	O-07

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Jeff Lee, Project Manager

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

PW-0

T242356-05 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

Metals by EPA 200 Series Methods

Calcium	120	50	mg/l	100	24F0112	06/07/24	06/13/24	EPA 200.7	FILT
Copper	ND	0.50	"	"	"	"	"	"	FILT, R-01
Iron	ND	20	"	"	"	"	"	"	FILT, R-01
Magnesium	ND	10	"	"	"	"	"	"	FILT, R-01
Potassium	ND	50	"	"	"	"	"	"	FILT, R-01
Sodium	1500	50	"	"	"	"	"	"	FILT
Antimony	ND	5.0	ug/l	10	24F0114	06/07/24	06/13/24	200.8	FILT, R-01
Arsenic	43	5.0	"	"	"	"	"	"	FILT
Barium	46	5.0	"	"	"	"	"	"	FILT
Cadmium	ND	5.0	"	"	"	"	"	"	FILT, R-01
Chromium	ND	5.0	"	"	"	"	"	"	FILT, R-01
Cobalt	ND	5.0	"	"	"	"	"	"	FILT, R-01
Lead	ND	5.0	"	"	"	"	"	"	FILT, R-01
Nickel	ND	5.0	"	"	"	"	"	"	FILT, R-01
Selenium	ND	5.0	"	"	"	"	"	"	FILT, R-01
Zinc	94	5.0	"	"	"	"	"	"	FILT

Cold Vapor Extraction EPA 7470/7471

Mercury	ND	1.0	ug/l	1	24F0064	06/07/24	06/11/24	EPA 7470A Water	FILT
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Conventional Chemistry Parameters by APHA/EPA/ASTM Methods

Oil & Grease	ND	5.00	mg/l	1	24F0108	06/07/24	06/10/24	EPA 1664B
Specific Conductance (EC)	6690	10.0	umho/cm @25°C	"	24F0145	06/11/24	06/12/24	SM2510b mod.
pH	8.5	0.10	pH Units	"	24F0111	06/07/24	06/11/24	SM 4500-H+B
pH Temperature °C	20	"	"	"	"	"	"	"
Total Dissolved Solids	3700	10	mg/l	"	24F0143	06/11/24	06/14/24	TDS by SM2540C

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

PW-0

T242356-05 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

Anions by EPA Method 300.0

Fluoride	ND	25.0	mg/l	50	24F0110	06/07/24	06/07/24	EPA 300.0	
Chloride	1730	250	"	"	"	"	"	"	"
Sulfate as SO4	528	250	"	"	"	"	"	"	"
Nitrate as NO3	0.925	0.500	"	1	"	"	06/10/24	"	O-07
Nitrate as N	0.210	0.200	"	"	"	"	"	"	O-07

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

PW-2

T242356-06 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

Metals by EPA 200 Series Methods

Calcium	54	50	mg/l	100	24F0112	06/07/24	06/13/24	EPA 200.7	FILT
Copper	ND	0.50	"	"	"	"	"	"	FILT, R-01
Iron	ND	20	"	"	"	"	"	"	FILT, R-01
Magnesium	ND	10	"	"	"	"	"	"	FILT, R-01
Potassium	ND	50	"	"	"	"	"	"	FILT, R-01
Sodium	810	50	"	"	"	"	"	"	FILT
Antimony	ND	5.0	ug/l	10	24F0114	06/07/24	06/13/24	200.8	FILT, R-01
Arsenic	27	5.0	"	"	"	"	"	"	FILT
Barium	39	5.0	"	"	"	"	"	"	FILT
Cadmium	ND	5.0	"	"	"	"	"	"	FILT, R-01
Chromium	ND	5.0	"	"	"	"	"	"	FILT, R-01
Cobalt	ND	5.0	"	"	"	"	"	"	FILT, R-01
Lead	ND	5.0	"	"	"	"	"	"	FILT, R-01
Nickel	ND	5.0	"	"	"	"	"	"	FILT, R-01
Selenium	ND	5.0	"	"	"	"	"	"	FILT, R-01
Zinc	ND	5.0	"	"	"	"	"	"	FILT, R-01

Cold Vapor Extraction EPA 7470/7471

Mercury	ND	1.0	ug/l	1	24F0064	06/07/24	06/11/24	EPA 7470A Water	FILT
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Conventional Chemistry Parameters by APHA/EPA/ASTM Methods

Oil & Grease	ND	5.00	mg/l	1	24F0108	06/07/24	06/10/24	EPA 1664B
Specific Conductance (EC)	3780	10.0	umho/cm @25°C	"	24F0145	06/11/24	06/12/24	SM2510b mod.
pH	8.1	0.10	pH Units	"	24F0111	06/07/24	06/11/24	SM 4500-H+B
pH Temperature °C	21	"	"	"	"	"	"	"
Total Dissolved Solids	2100	10	mg/l	"	24F0143	06/11/24	06/14/24	TDS by SM2540C

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

PW-2

T242356-06 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

Anions by EPA Method 300.0

Fluoride	ND	25.0	mg/l	50	24F0110	06/07/24	06/07/24	EPA 300.0	
Chloride	775	250	"	"	"	"	"	"	
Sulfate as SO4	414	250	"	"	"	"	"	"	
Nitrate as NO3	ND	0.500	"	1	"	"	06/10/24	"	O-07
Nitrate as N	ND	0.200	"	"	"	"	"	"	O-07

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

DUP

T242356-07 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

Metals by EPA 200 Series Methods

Calcium	57	50	mg/l	100	24F0112	06/07/24	06/13/24	EPA 200.7	FILT
Copper	ND	0.50	"	"	"	"	"	"	FILT, R-01
Iron	ND	20	"	"	"	"	"	"	FILT, R-01
Magnesium	ND	10	"	"	"	"	"	"	FILT, R-01
Potassium	ND	50	"	"	"	"	"	"	FILT, R-01
Sodium	820	50	"	"	"	"	"	"	FILT
Antimony	ND	5.0	ug/l	10	24F0114	06/07/24	06/13/24	200.8	R-01, FILT
Arsenic	30	5.0	"	"	"	"	"	"	FILT
Barium	38	5.0	"	"	"	"	"	"	FILT
Cadmium	ND	5.0	"	"	"	"	"	"	R-01, FILT
Chromium	ND	5.0	"	"	"	"	"	"	R-01, FILT
Cobalt	ND	5.0	"	"	"	"	"	"	R-01, FILT
Lead	ND	5.0	"	"	"	"	"	"	R-01, FILT
Nickel	ND	5.0	"	"	"	"	"	"	R-01, FILT
Selenium	ND	5.0	"	"	"	"	"	"	FILT, R-01
Zinc	6.0	5.0	"	"	"	"	"	"	FILT

Cold Vapor Extraction EPA 7470/7471

Mercury	ND	1.0	ug/l	1	24F0064	06/07/24	06/11/24	EPA 7470A Water	FILT
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Conventional Chemistry Parameters by APHA/EPA/ASTM Methods

Oil & Grease	ND	5.00	mg/l	1	24F0108	06/07/24	06/10/24	EPA 1664B	
Specific Conductance (EC)	3790	10.0	umho/cm @25°C	"	24F0145	06/11/24	06/12/24	SM2510b mod.	
pH	8.3	0.10	pH Units	"	24F0111	06/07/24	06/11/24	SM 4500-H+B	O-04
pH Temperature °C	20		"	"	"	"	"	"	O-04
Total Dissolved Solids	2200	10	mg/l	"	24F0143	06/11/24	06/14/24	TDS by SM2540C	

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

DUP

T242356-07 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

Anions by EPA Method 300.0

Chloride	790	250	mg/l	50	24F0110	06/07/24	06/07/24	EPA 300.0	
Sulfate as SO ₄	422	250	"	"	"	"	"	"	
Nitrate as NO ₃	ND	0.500	"	1	"	"	06/10/24	"	O-07
Nitrate as N	ND	0.200	"	"	"	"	"	"	O-07

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

Metals by EPA 200 Series Methods - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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Batch 24F0112 - EPA 3010A

Blank (24F0112-BLK1)				Prepared: 06/07/24 Analyzed: 06/13/24			
Cadmium	ND	0.005	mg/l				
Chromium	ND	0.005	"				
Copper	ND	0.005	"				
Lead	ND	0.005	"				
Molybdenum	ND	0.005	"				
Nickel	ND	0.005	"				
Silver	ND	0.030	"				
Zinc	ND	0.030	"				

LCS (24F0112-BS1)				Prepared: 06/07/24 Analyzed: 06/13/24			
Cadmium	1.48	0.005	mg/l	1.50	99.0	85-115	
Chromium	1.47	0.005	"	1.50	98.0	85-115	
Copper	1.50	0.005	"	1.50	100	85-115	
Lead	1.49	0.005	"	1.50	99.4	85-115	
Molybdenum	1.48	0.005	"	1.50	98.9	85-115	
Nickel	1.48	0.005	"	1.50	98.5	85-115	
Zinc	1.48	0.030	"	1.50	98.9	85-115	

Matrix Spike (24F0112-MS1)				Source: T242356-01 Prepared: 06/07/24 Analyzed: 06/13/24			
Cadmium	1.77	0.50	mg/l	1.50	ND	118	70-130
Chromium	1.62	0.50	"	1.50	ND	108	70-130
Copper	2.09	0.50	"	1.50	0.049	136	70-130
Lead	1.81	0.50	"	1.50	ND	121	70-130
Molybdenum	1.41	0.50	"	1.50	ND	93.7	70-130
Nickel	1.67	0.50	"	1.50	ND	112	70-130
Zinc	2.08	3.0	"	1.50	ND	139	70-130

Matrix Spike Dup (24F0112-MSD1)				Source: T242356-01 Prepared: 06/07/24 Analyzed: 06/13/24			
Cadmium	1.65	0.50	mg/l	1.50	ND	110	70-130
Chromium	1.49	0.50	"	1.50	ND	99.1	70-130
Copper	1.81	0.50	"	1.50	0.049	117	70-130
Lead	1.48	0.50	"	1.50	ND	98.5	70-130
Molybdenum	1.30	0.50	"	1.50	ND	86.7	70-130
Nickel	1.51	0.50	"	1.50	ND	101	70-130
Zinc	1.86	3.0	"	1.50	ND	124	70-130

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

Metals by EPA 200 Series Methods - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	RPD Limits	RPD Limit	Notes
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Batch 24F0114 - EPA 3010A

Blank (24F0114-BLK1)			Prepared: 06/07/24 Analyzed: 06/13/24				
Antimony	ND	0.50	ug/l				
Arsenic	ND	0.50	"				
Barium	ND	0.50	"				
Cadmium	ND	0.50	"				
Chromium	ND	0.50	"				
Cobalt	ND	0.50	"				
Lead	ND	0.50	"				
Nickel	ND	0.50	"				
Selenium	ND	0.50	"				
Zinc	ND	0.50	"				

LCS (24F0114-BS1)

			Prepared: 06/07/24 Analyzed: 06/13/24				
Arsenic	26.1	0.50	ug/l	25.0	104	85-115	
Barium	25.0	0.50	"	25.0	100	85-115	
Cadmium	25.2	0.50	"	25.0	101	85-115	
Chromium	23.6	0.50	"	25.0	94.6	85-115	
Lead	25.0	0.50	"	25.0	99.8	85-115	

Matrix Spike (24F0114-MS1)

			Source: T242356-01 Prepared: 06/07/24 Analyzed: 06/13/24				
Arsenic	28.7	5.0	ug/l	25.0	1.70	108	70-130
Barium	40.6	5.0	"	25.0	16.2	97.6	70-130
Cadmium	24.0	5.0	"	25.0	0.400	94.4	70-130
Chromium	24.0	5.0	"	25.0	0.300	94.8	70-130
Lead	25.8	5.0	"	25.0	0.500	101	70-130

Matrix Spike Dup (24F0114-MSD1)

			Source: T242356-01 Prepared: 06/07/24 Analyzed: 06/13/24				
Arsenic	27.2	5.0	ug/l	25.0	1.70	102	70-130
Barium	38.9	5.0	"	25.0	16.2	90.8	70-130
Cadmium	23.8	5.0	"	25.0	0.400	93.6	70-130
Chromium	23.3	5.0	"	25.0	0.300	92.0	70-130
Lead	24.6	5.0	"	25.0	0.500	96.4	70-130

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26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

Cold Vapor Extraction EPA 7470/7471 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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Batch 24F0064 - EPA 7470A Water

Blank (24F0064-BLK1)

Prepared: 06/05/24 Analyzed: 06/11/24

Mercury ND 1.0 ug/l

LCS (24F0064-BS1)

Prepared: 06/05/24 Analyzed: 06/11/24

Mercury 6.93 1.0 ug/l 7.50 92.4 80-120

Matrix Spike (24F0064-MS1)

Source: T242306-02 Prepared: 06/05/24 Analyzed: 06/11/24

Mercury 6.56 1.0 ug/l 7.50 ND 87.4 80-120

Matrix Spike Dup (24F0064-MSD1)

Source: T242306-02 Prepared: 06/05/24 Analyzed: 06/11/24

Mercury 6.63 1.0 ug/l 7.50 ND 88.4 80-120 1.06 20

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

Conventional Chemistry Parameters by APHA/EPA/ASTM Methods - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	RPD Limits	RPD Limit	Notes
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Batch 24F0108 - General Preparation

Blank (24F0108-BLK1)	Prepared: 06/07/24 Analyzed: 06/10/24							
Oil & Grease	ND	5.00	mg/l					
LCS (24F0108-BS1)	Prepared: 06/07/24 Analyzed: 06/10/24							
Oil & Grease	51.8	5.00	mg/l	53.1	97.6	78-114		
LCS Dup (24F0108-BSD1)	Prepared: 06/07/24 Analyzed: 06/10/24							
Oil & Grease	48.0	5.00	mg/l	53.1	90.4	78-114	7.62	20

Batch 24F0111 - General Preparation

Duplicate (24F0111-DUP1)	Source: T242356-01	Prepared: 06/07/24 Analyzed: 06/11/24						
pH	8.46	0.10	pH Units	8.47	0.118	10		
pH Temperature °C	20.3	"		19.8	2.49	200		

Batch 24F0143 - General Preparation

Blank (24F0143-BLK1)	Prepared: 06/11/24 Analyzed: 06/14/24							
Total Dissolved Solids	ND	10	mg/l					
LCS (24F0143-BS1)	Prepared: 06/11/24 Analyzed: 06/14/24							
Total Dissolved Solids	539	10	mg/l	500	108	80-120		
Duplicate (24F0143-DUP1)	Source: T242356-02	Prepared: 06/11/24 Analyzed: 06/14/24						
Total Dissolved Solids	17200	10	mg/l	17800	3.56	20		

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

Conventional Chemistry Parameters by APHA/EPA/ASTM Methods - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	RPD Limits	RPD Limit	Notes
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Batch 24F0145 - General Preparation

Duplicate (24F0145-DUP1)	Source: T242356-01	Prepared: 06/11/24 Analyzed: 06/12/24		
Specific Conductance (EC)	2740	10.0 umho/cm @25°C	2740	0.00 15

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

Anions by EPA Method 300.0 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	RPD Limits	RPD Limit	Notes
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Batch 24F0110 - General Preparation

Blank (24F0110-BLK1)				Prepared & Analyzed: 06/07/24				
Fluoride	ND	0.500	mg/l					
Chloride	ND	5.00	"					
Sulfate as SO4	ND	5.00	"					
Nitrate as NO3	ND	0.500	"					
Nitrate as N	ND	0.200	"					

LCS (24F0110-BS1)				Prepared & Analyzed: 06/07/24				
Fluoride	25.5	0.500	mg/l	25.0	102	75-125		
Chloride	23.2	5.00	"	25.0	92.6	75-125		
Sulfate as SO4	23.1	5.00	"	25.0	92.5	75-125		
Nitrate as NO3	23.3	0.500	"	25.0	93.1	75-125		

Matrix Spike (24F0110-MS1)				Source: T242356-01 Prepared & Analyzed: 06/07/24				
Fluoride	21.4	25.0	mg/l	25.0	3.80	70.4	75-125	
Chloride	418	250	"	25.0	407	40.8	75-125	QM-05
Sulfate as SO4	383	250	"	25.0	372	45.0	75-125	QM-05
Nitrate as NO3	23.3	0.500	"	25.0	0.888	89.7	75-125	

Matrix Spike (24F0110-MS2)				Source: T242360-01 Prepared: 06/07/24 Analyzed: 06/11/24				
Fluoride	26.5	50.0	mg/l	25.0	2.70	95.2	75-125	
Chloride	5120	500	"	25.0	5510	NR	75-125	QM-05
Sulfate as SO4	1830	500	"	25.0	1920	NR	75-125	QM-05
Nitrate as NO3	33.7	0.500	"	25.0	7.81	103	75-125	

Matrix Spike Dup (24F0110-MSD1)				Source: T242356-01 Prepared & Analyzed: 06/07/24				
Fluoride	23.0	25.0	mg/l	25.0	3.80	76.6	75-125	6.99
Chloride	420	250	"	25.0	407	50.2	75-125	0.561
Sulfate as SO4	386	250	"	25.0	372	56.4	75-125	0.741
Nitrate as NO3	23.6	0.500	"	25.0	0.888	90.9	75-125	1.31

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Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

Anions by EPA Method 300.0 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

Batch 24F0110 - General Preparation

Matrix Spike Dup (24F0110-MSD2)	Source: T242360-01			Prepared: 06/07/24 Analyzed: 06/11/24						
Fluoride	26.1	50.0	mg/l	25.0	2.70	93.6	75-125	1.52	20	
Chloride	5050	500	"	25.0	5510	NR	75-125	1.43	20	QM-05
Sulfate as SO4	1790	500	"	25.0	1920	NR	75-125	2.21	20	QM-05
Nitrate as NO3	33.7	0.500	"	25.0	7.81	104	75-125	0.0979	20	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeff Lee, Project Manager

Page 26 of 27



25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest CA, 92630

Project: Genesis Solar Groundwater
Project Number: 196-004-06
Project Manager: Arlin Brewster

Reported:
06/25/24 14:50

Notes and Definitions

- R-01 The Reporting Limit has been raised to account for dilution necessary due to matrix interference.
- QM-07 The spike recovery and/or RPD was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to possible matrix interference. The LCS was within acceptance criteria. The data is acceptable as no negative impact on data is expected.
- O-07 The sample was analyzed outside the EPA recommended holding time of 48 hours.
- O-04 This sample was received and analyzed outside the EPA recommended holding time.
- FILT The sample was filtered prior to analysis.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jeff Lee, Project Manager

boratories, Inc.
mercentre Dr
t, CA 92630
20

star Environmental Remediation
225 Enterprise Court, Lake Forest, CA 92630
274-1719
ager: Arlin Brewster

Chain of Custody Record

Page: 1 of 1

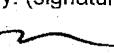
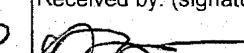
Project Name: Genesis Solar Groundwater

Collector: Arlin Brewster

Client Project #: 196-004-06

Batch #: T242356

EDF #: T10000006093

Sample ID	Date Sampled	Time	Sample Type	Container Type	200.7 - Dissolved Metals: Ca, Cu, Na, K, Fe, Mg (FIELD FILTERED)	200.8 - Dissolved Metals: Sb, As, Ba, Cd, Cr, Co, Pb, Ni, Se, Zn (F.F.)	300.0 - Chloride, Nitrate, Sulfate	1664 - Oil and Grease	7470A - Mercury	9040 - pH	SM2510B - Conductivity, Specific	SM2540C - Total Dis. Solids	8015M - Thermomol (Subcontract)	Deuterium, Oxygen-18 (Subcont.)	300.0 - Fluoride	Laboratory ID #	Comments/Preservative
23a	6/6/24	1430	W	Various	X	X	X	X	X	X	X	X	X	X	X		
BS-1	6/6/24	1300	W	Various	X	X	X	X	X	X	X	X	X	X	X		
W-1	6/6/24	1230	W	Various	X	X	X	X	X	X	X	X	X	X	X		
W-2	6/6/24	1630	W	Various	X	X	X	X	X	X	X	X	X	X	X		
W-0	6/6/24	1700	W	Various	X	X	X	X	X	X	X	X	X	X	X		
W-2	6/6/24	1720	W	Various	X	X	X	X	X	X	X	X	X	X	X		
UP	N/A	N/A	W	Various	X	X	X	X	X	X	X	X	X	X	X		
y: (signature)	Date / Time		Received by: (signature)		Date / Time								Total # of containers	42	Notes		
	6/7/24 @ 1030				6/7/24 1030								Chain of Custody seals Y/N	NA			
y: (signature)	Date / Time		Received by: (signature)		Date / Time								Seals intact? Y/N	NA			
y: (signature)	Date / Time		Received by: (signature)		Date / Time								Received good condition/cold	I-19			
													Turn around time: Standard **				

Instructions: Disposal @ \$2.00 each _____ Return to client _____ Pickup _____

** Deuterium & Oxygen-18 subcontract has 10 days Reporting limits must be followed previous reports



SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #:

T242356

Client Name: Northstar Environmental

Project: Genesis Solar Groundwater

Delivered by:

Client SunStar Courier GLS FedEx Other

If Courier, Received by:

Date/Time Courier

Received:

Lab Received by:

Date/Time Lab

Received:

Total number of coolers received:

Thermometer ID: SC-1

Calibration due: 11/17/2024

Temperature: Cooler #1 1.0 °C +/- the CF (+ 0.1°C) = 1.1 °C corrected temperature

Temperature: Cooler #2 °C +/- the CF (+ 0.1°C) = °C corrected temperature

Temperature: Cooler #3 °C +/- the CF (+ 0.1°C) = °C corrected temperature

**Temperature criteria = ≤ 6°C
(no frozen containers)**

Within criteria?

Yes No N/A

If NO:

Samples received on ice? Yes

No →
Complete Non-Conformance Sheet

If on ice, samples received same day collected? Yes → Acceptable

No →
Complete Non-Conformance Sheet

Custody seals intact on cooler/sample

Yes No* N/A

Sample containers intact

Yes No*

Sample labels match Chain of Custody IDs

Yes No*

Total number of containers received match COC

Yes No*

Proper containers received for analyses requested on COC

Yes No*

Proper preservative indicated on COC/containers for analyses requested

Yes No* N/A

Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times

Yes No*

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date:

DS 6/7/24

Comments:

ANALYTICAL REPORT

PREPARED FOR

Attn: Jeff Lee
SunStar Laboratories Inc
25712 Commercentre Drive
Lake Forest, California 92630

Generated 6/20/2024 8:46:42 AM

JOB DESCRIPTION

T242356

JOB NUMBER

570-187546-1

Eurofins Calscience
2841 Dow Avenue, Suite 100
Tustin CA 92780

See page two for job notes and contact information.

Eurofins Calscience

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Calscience Project Manager.

Authorization



Generated
6/20/2024 8:46:42 AM

Authorized for release by
Sandy Tat, Project Manager I
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(714)895-5494

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Definitions/Glossary

Client: SunStar Laboratories Inc
Project/Site: T242356

Job ID: 570-187546-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.	1
□	Listed under the "D" column to designate that the result is reported on a dry weight basis	2
%R	Percent Recovery	3
CFL	Contains Free Liquid	4
CFU	Colony Forming Unit	5
CNF	Contains No Free Liquid	6
DER	Duplicate Error Ratio (normalized absolute difference)	7
Dil Fac	Dilution Factor	8
DL	Detection Limit (DoD/DOE)	9
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	10
DLC	Decision Level Concentration (Radiochemistry)	11
EDL	Estimated Detection Limit (Dioxin)	12
LOD	Limit of Detection (DoD/DOE)	13
LOQ	Limit of Quantitation (DoD/DOE)	14
MCL	EPA recommended "Maximum Contaminant Level"	15
MDA	Minimum Detectable Activity (Radiochemistry)	
MDC	Minimum Detectable Concentration (Radiochemistry)	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
MPN	Most Probable Number	
MQL	Method Quantitation Limit	
NC	Not Calculated	
ND	Not Detected at the reporting limit (or MDL or EDL if shown)	
NEG	Negative / Absent	
POS	Positive / Present	
PQL	Practical Quantitation Limit	
PRES	Presumptive	
QC	Quality Control	
RER	Relative Error Ratio (Radiochemistry)	
RL	Reporting Limit or Requested Limit (Radiochemistry)	
RPD	Relative Percent Difference, a measure of the relative difference between two points	
TEF	Toxicity Equivalent Factor (Dioxin)	
TEQ	Toxicity Equivalent Quotient (Dioxin)	
TNTC	Too Numerous To Count	

Case Narrative

Client: SunStar Laboratories Inc
Project: T242356

Job ID: 570-187546-1

Job ID: 570-187546-1

Eurofins Calscience

Job Narrative 570-187546-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 6/10/2024 1:40 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C.

Diesel Range Organics

Method 8015B_DRO: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-450249. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Method: 8015B_DRO

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: SunStar Laboratories Inc
Project/Site: T242356

Job ID: 570-187546-1

Client Sample ID: T242356-01

Lab Sample ID: 570-187546-1

No Detections.

Client Sample ID: T242356-02

Lab Sample ID: 570-187546-2

No Detections.

Client Sample ID: T242356-03

Lab Sample ID: 570-187546-3

No Detections.

Client Sample ID: T242356-04

Lab Sample ID: 570-187546-4

No Detections.

Client Sample ID: T242356-05

Lab Sample ID: 570-187546-5

No Detections.

Client Sample ID: T242356-06

Lab Sample ID: 570-187546-6

No Detections.

Client Sample ID: T242356-07

Lab Sample ID: 570-187546-7

No Detections.

This Detection Summary does not include radiochemical test results.

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Client Sample Results

Client: SunStar Laboratories Inc
Project/Site: T242356

Job ID: 570-187546-1

Method: SW846 8015B - Diesel Range Organics (DRO) (GC)

Client Sample ID: T242356-01							Lab Sample ID: 570-187546-1			
Date Collected: 06/06/24 14:30							Matrix: Water			
Date Received: 06/10/24 13:40										
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Benzene, 1,1'-oxybis-1,1'-Biphenyl	ND		86	ug/L		06/12/24 13:53	06/13/24 14:51	1		1
	ND		86	ug/L		06/12/24 13:53	06/13/24 14:51	1		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac		
n-Octacosane (Surr)	58		53 - 151			06/12/24 13:53	06/13/24 14:51	1		1
Client Sample ID: T242356-02							Lab Sample ID: 570-187546-2			
Date Collected: 06/06/24 13:00							Matrix: Water			
Date Received: 06/10/24 13:40										
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Benzene, 1,1'-oxybis-1,1'-Biphenyl	ND		94	ug/L		06/12/24 13:53	06/13/24 15:15	1		1
	ND		94	ug/L		06/12/24 13:53	06/13/24 15:15	1		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac		
n-Octacosane (Surr)	67		53 - 151			06/12/24 13:53	06/13/24 15:15	1		1
Client Sample ID: T242356-03							Lab Sample ID: 570-187546-3			
Date Collected: 06/06/24 12:30							Matrix: Water			
Date Received: 06/10/24 13:40										
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Benzene, 1,1'-oxybis-1,1'-Biphenyl	ND		93	ug/L		06/12/24 13:53	06/13/24 15:40	1		1
	ND		93	ug/L		06/12/24 13:53	06/13/24 15:40	1		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac		
n-Octacosane (Surr)	64		53 - 151			06/12/24 13:53	06/13/24 15:40	1		1
Client Sample ID: T242356-04							Lab Sample ID: 570-187546-4			
Date Collected: 06/06/24 16:30							Matrix: Water			
Date Received: 06/10/24 13:40										
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Benzene, 1,1'-oxybis-1,1'-Biphenyl	ND		110	ug/L		06/12/24 13:53	06/13/24 16:04	1		1
	ND		110	ug/L		06/12/24 13:53	06/13/24 16:04	1		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac		
n-Octacosane (Surr)	63		53 - 151			06/12/24 13:53	06/13/24 16:04	1		1
Client Sample ID: T242356-05							Lab Sample ID: 570-187546-5			
Date Collected: 06/06/24 17:00							Matrix: Water			
Date Received: 06/10/24 13:40										
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Benzene, 1,1'-oxybis-1,1'-Biphenyl	ND		96	ug/L		06/12/24 13:53	06/13/24 16:29	1		1
	ND		96	ug/L		06/12/24 13:53	06/13/24 16:29	1		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac		
n-Octacosane (Surr)	63		53 - 151			06/12/24 13:53	06/13/24 16:29	1		1
Client Sample ID: T242356-06							Lab Sample ID: 570-187546-6			
Date Collected: 06/06/24 17:20							Matrix: Water			
Date Received: 06/10/24 13:40										
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Benzene, 1,1'-oxybis-1,1'-Biphenyl	ND		89	ug/L		06/12/24 13:53	06/13/24 16:53	1		1
	ND		89	ug/L		06/12/24 13:53	06/13/24 16:53	1		1

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Client Sample Results

Client: SunStar Laboratories Inc
Project/Site: T242356

Job ID: 570-187546-1

Method: SW846 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
<i>n</i> -Octacosane (Surr)	54		53 - 151	06/12/24 13:53	06/13/24 16:53	1		
Client Sample ID: T242356-07								
Date Collected: 06/06/24 00:00								
Date Received: 06/10/24 13:40								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		100	ug/L		06/12/24 13:53	06/13/24 17:17	1
1,1'-Biphenyl	ND		100	ug/L		06/12/24 13:53	06/13/24 17:17	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
<i>n</i> -Octacosane (Surr)	65		53 - 151	06/12/24 13:53	06/13/24 17:17	1		

Surrogate Summary

Client: SunStar Laboratories Inc
Project/Site: T242356

Job ID: 570-187546-1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

OTCSN1

(53-151)

Lab Sample ID	Client Sample ID	OTCSN1 (53-151)
570-187546-1	T242356-01	58
570-187546-2	T242356-02	67
570-187546-3	T242356-03	64
570-187546-4	T242356-04	63
570-187546-5	T242356-05	63
570-187546-6	T242356-06	54
570-187546-7	T242356-07	65
LCS 570-450249/2-A	Lab Control Sample	88
LCSD 570-450249/3-A	Lab Control Sample Dup	67
MB 570-450249/1-A	Method Blank	63

Surrogate Legend

OTCSN = n-Octacosane (Surr)

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

QC Sample Results

Client: SunStar Laboratories Inc
Project/Site: T242356

Job ID: 570-187546-1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 570-450249/1-A

Matrix: Water

Analysis Batch: 450621

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 450249

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		100	ug/L		06/12/24 13:52	06/13/24 13:38	1
1,1'-Biphenyl	ND		100	ug/L		06/12/24 13:52	06/13/24 13:38	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	63		53 - 151			06/12/24 13:52	06/13/24 13:38	1

Lab Sample ID: LCS 570-450249/2-A

Matrix: Water

Analysis Batch: 452056

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 450249

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene, 1,1'-oxybis-	1000	792.7		ug/L		79	57 - 120
1,1'-Biphenyl	1000	774.6		ug/L		77	45 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
<i>n</i> -Octacosane (Surr)	88		53 - 151				

Lab Sample ID: LCSD 570-450249/3-A

Matrix: Water

Analysis Batch: 450621

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 450249

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene, 1,1'-oxybis-	1000	695.9		ug/L		70	57 - 120	13	20
1,1'-Biphenyl	1000	675.3		ug/L		68	45 - 120	14	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
<i>n</i> -Octacosane (Surr)	67		53 - 151						

QC Association Summary

Client: SunStar Laboratories Inc
Project/Site: T242356

Job ID: 570-187546-1

GC Semi VOA

Prep Batch: 450249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-187546-1	T242356-01	Total/NA	Water	3510C	1
570-187546-2	T242356-02	Total/NA	Water	3510C	2
570-187546-3	T242356-03	Total/NA	Water	3510C	3
570-187546-4	T242356-04	Total/NA	Water	3510C	4
570-187546-5	T242356-05	Total/NA	Water	3510C	5
570-187546-6	T242356-06	Total/NA	Water	3510C	6
570-187546-7	T242356-07	Total/NA	Water	3510C	7
MB 570-450249/1-A	Method Blank	Total/NA	Water	3510C	8
LCS 570-450249/2-A	Lab Control Sample	Total/NA	Water	3510C	9
LCSD 570-450249/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	10

Analysis Batch: 450621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-187546-1	T242356-01	Total/NA	Water	8015B	450249
570-187546-2	T242356-02	Total/NA	Water	8015B	450249
570-187546-3	T242356-03	Total/NA	Water	8015B	450249
570-187546-4	T242356-04	Total/NA	Water	8015B	450249
570-187546-5	T242356-05	Total/NA	Water	8015B	450249
570-187546-6	T242356-06	Total/NA	Water	8015B	450249
570-187546-7	T242356-07	Total/NA	Water	8015B	450249
MB 570-450249/1-A	Method Blank	Total/NA	Water	8015B	450249
LCSD 570-450249/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	450249

Analysis Batch: 452056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 570-450249/2-A	Lab Control Sample	Total/NA	Water	8015B	450249

Lab Chronicle

Client: SunStar Laboratories Inc
Project/Site: T242356

Job ID: 570-187546-1

Client Sample ID: T242356-01
Date Collected: 06/06/24 14:30
Date Received: 06/10/24 13:40

Lab Sample ID: 570-187546-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			290.9 mL	2.5 mL	450249	06/12/24 13:53	H6FE	EET CAL 4
Total/NA	Analysis	8015B		1	1 mL	1 mL	450621	06/13/24 14:51	SP9M	EET CAL 4
Instrument ID: GC70B										

Client Sample ID: T242356-02
Date Collected: 06/06/24 13:00
Date Received: 06/10/24 13:40

Lab Sample ID: 570-187546-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			265.4 mL	2.5 mL	450249	06/12/24 13:53	H6FE	EET CAL 4
Total/NA	Analysis	8015B		1	1 mL	1 mL	450621	06/13/24 15:15	SP9M	EET CAL 4
Instrument ID: GC70B										

Client Sample ID: T242356-03
Date Collected: 06/06/24 12:30
Date Received: 06/10/24 13:40

Lab Sample ID: 570-187546-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			269 mL	2.5 mL	450249	06/12/24 13:53	H6FE	EET CAL 4
Total/NA	Analysis	8015B		1	1 mL	1 mL	450621	06/13/24 15:40	SP9M	EET CAL 4
Instrument ID: GC70B										

Client Sample ID: T242356-04
Date Collected: 06/06/24 16:30
Date Received: 06/10/24 13:40

Lab Sample ID: 570-187546-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			220.5 mL	2.5 mL	450249	06/12/24 13:53	H6FE	EET CAL 4
Total/NA	Analysis	8015B		1	1 mL	1 mL	450621	06/13/24 16:04	SP9M	EET CAL 4
Instrument ID: GC70B										

Client Sample ID: T242356-05
Date Collected: 06/06/24 17:00
Date Received: 06/10/24 13:40

Lab Sample ID: 570-187546-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			261.6 mL	2.5 mL	450249	06/12/24 13:53	H6FE	EET CAL 4
Total/NA	Analysis	8015B		1	1 mL	1 mL	450621	06/13/24 16:29	SP9M	EET CAL 4
Instrument ID: GC70B										

Lab Chronicle

Client: SunStar Laboratories Inc
Project/Site: T242356

Job ID: 570-187546-1

Client Sample ID: T242356-06

Lab Sample ID: 570-187546-6

Matrix: Water

Date Collected: 06/06/24 17:20

Date Received: 06/10/24 13:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			281.7 mL	2.5 mL	450249	06/12/24 13:53	H6FE	EET CAL 4
Total/NA	Analysis	8015B		1	1 mL	1 mL	450621	06/13/24 16:53	SP9M	EET CAL 4
Instrument ID: GC70B										

Client Sample ID: T242356-07

Lab Sample ID: 570-187546-7

Matrix: Water

Date Collected: 06/06/24 00:00

Date Received: 06/10/24 13:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			245.6 mL	2.5 mL	450249	06/12/24 13:53	H6FE	EET CAL 4
Total/NA	Analysis	8015B		1	1 mL	1 mL	450621	06/13/24 17:17	SP9M	EET CAL 4
Instrument ID: GC70B										

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

Accreditation/Certification Summary

Client: SunStar Laboratories Inc
Project/Site: T242356

Job ID: 570-187546-1

Laboratory: Eurofins Calscience

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4175	02-02-25

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Method Summary

Client: SunStar Laboratories Inc
Project/Site: T242356

Job ID: 570-187546-1

Method	Method Description	Protocol	Laboratory
8015B	Diesel Range Organics (DRO) (GC)	SW846	EET CAL 4
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CAL 4

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

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Sample Summary

Client: SunStar Laboratories Inc
Project/Site: T242356

Job ID: 570-187546-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-187546-1	T242356-01	Water	06/06/24 14:30	06/10/24 13:40
570-187546-2	T242356-02	Water	06/06/24 13:00	06/10/24 13:40
570-187546-3	T242356-03	Water	06/06/24 12:30	06/10/24 13:40
570-187546-4	T242356-04	Water	06/06/24 16:30	06/10/24 13:40
570-187546-5	T242356-05	Water	06/06/24 17:00	06/10/24 13:40
570-187546-6	T242356-06	Water	06/06/24 17:20	06/10/24 13:40
570-187546-7	T242356-07	Water	06/06/24 00:00	06/10/24 13:40

SUBCONTRACT ORDER

SunStar Laboratories, Inc.

T242356**SENDING LABORATORY:**

SunStar Laboratories, Inc.
 25712 Commercentre Drive
 Lake Forest, CA 92630
 Phone: (949) 297-5020
 Fax: (949) 297-5027
 Project Manager: Jeff Lee

RECEIVING LABORATORY:

Eurofins Calscience (Tustin)
 2841 Dow Ave, Suite 100
 Tustin, CA 92780
 Phone : (949) 261-1022
 Fax: N/A



570-187546 Chain of Custody

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: T242356-01	Water	Sampled:06/06/24 14:30	[Redacted]	
Misc Water Testing #1	06/14/24 15 00	12/03/24 14 30	8015M- Therminol	<i>Containers Supplied.</i>
Sample ID: T242356-02	Water	Sampled:06/06/24 13:00	[Redacted]	
Misc Water Testing #1	06/14/24 15 00	12/03/24 13 00	8015M- Therminol	<i>Containers Supplied</i>
Sample ID: T242356-03	Water	Sampled:06/06/24 12:30	[Redacted]	
Misc Water Testing #1	06/14/24 15 00	12/03/24 12 30	8015M- Therminol	<i>Containers Supplied.</i>
Sample ID: T242356-04	Water	Sampled:06/06/24 16:30	[Redacted]	
Misc Water Testing #1	06/14/24 15 00	12/03/24 16 30	8015M- Therminol	<i>Containers Supplied.</i>
Sample ID: T242356-05	Water	Sampled:06/06/24 17:00	[Redacted]	
Misc Water Testing #1	06/14/24 15 00	12/03/24 17 00	8015M- Therminol	<i>Containers Supplied.</i>
Sample ID: T242356-06	Water	Sampled:06/06/24 17:20	[Redacted]	
Misc Water Testing #1	06/14/24 15 00	12/03/24 17.20	8015M- Therminol	<i>Containers Supplied.</i>

Released By

6-10-24
Date

Received By

Date

Released By

Date

Received By

Date

187546

SUBCONTRACT ORDER**SunStar Laboratories, Inc.****T242356**

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: T242356-07	Water	Sampled:06/06/24 00:00	7	
Misc Water Testing #1 <i>Containers Supplied.</i>	06/14/24 15:00	12/03/24 00:00		8015M- Therminol

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 6-10-24 13:40  6/10/24 13:40
 Released By Date Received By Date

Released By Date Received By Date
 WESO 2-6/20 SC12 Page 2 of 2
 Page 18 of 19 6/20/2024

Login Sample Receipt Checklist

Client: SunStar Laboratories Inc

Job Number: 570-187546-1

Login Number: 187546

List Source: Eurofins Calscience

List Number: 1

Creator: Vitente, Precy

Question	Answer	Comment	
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A		1
The cooler's custody seal, if present, is intact.	True		2
Sample custody seals, if present, are intact.	True		3
The cooler or samples do not appear to have been compromised or tampered with.	True		4
Samples were received on ice.	True		5
Cooler Temperature is acceptable.	True		6
Cooler Temperature is recorded.	True		7
COC is present.	True		8
COC is filled out in ink and legible.	True		9
COC is filled out with all pertinent information.	True		10
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.	11
There are no discrepancies between the containers received and the COC.	True		12
Samples are received within Holding Time (excluding tests with immediate HTs)	True		13
Sample containers have legible labels.	True		14
Containers are not broken or leaking.	True		15
Sample collection date/times are provided.	True		
Appropriate sample containers are used.	True		
Sample bottles are completely filled.	True		
Sample Preservation Verified.	True		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True		
Multiphasic samples are not present.	True		
Samples do not require splitting or compositing.	True		
Residual Chlorine Checked.	N/A		

**Lab #:** 925903**Job #:** 58893**CoreTrac:** IS-101168**Co. Job#:** T242356**Sample Name:** T242356-01**Co. Lab#:** T242356-01**Company:** SunStar Laboratories, Inc**Container:** Amber Bottle**Sampling Point:** 23a**Date Sampled:** 06/06/2024 14:30**Date Received:** 06/11/2024 **Date Reported:** 06/25/2024

δD of water	-74.0‰ relative to VSMOW
$\delta^{18}\text{O}$ of water	-10.21‰ relative to VSMOW
Tritium content of water	na
$\delta^{13}\text{C}$ of DIC	na
^{14}C content of DIC	na
$\delta^{15}\text{N}$ of nitrate	na
$\delta^{18}\text{O}$ of nitrate	na
$\delta^{34}\text{S}$ of sulfate	na
$\delta^{18}\text{O}$ of sulfate	na
Vacuum Distilled? *	No

Remarks:

nd = not detected. na = not analyzed.

*Indicates if vacuum distillation was utilized for hydrogen and oxygen isotopic analysis of water

**Lab #:** 925904**Job #:** 58893**CoreTrac:** IS-101168**Co. Job#:** T242356**Sample Name:** T242356-02**Co. Lab#:** T242356-02**Company:** SunStar Laboratories, Inc**Container:** Amber Bottle**Sampling Point:** OBS-1**Date Sampled:** 06/06/2024 13:00**Date Received:** 06/11/2024 **Date Reported:** 06/25/2024

δD of water	-60.2‰ relative to VSMOW
$\delta^{18}\text{O}$ of water	-6.78‰ relative to VSMOW
Tritium content of water	na
$\delta^{13}\text{C}$ of DIC	na
^{14}C content of DIC	na
$\delta^{15}\text{N}$ of nitrate	na
$\delta^{18}\text{O}$ of nitrate	na
$\delta^{34}\text{S}$ of sulfate	na
$\delta^{18}\text{O}$ of sulfate	na
Vacuum Distilled? *	No

Remarks:

nd = not detected. na = not analyzed.

*Indicates if vacuum distillation was utilized for hydrogen and oxygen isotopic analysis of water

**Lab #:** 925905**Job #:** 58893**CoreTrac:** IS-101168**Co. Job#:** T242356**Sample Name:** T242356-03**Co. Lab#:** T242356-03**Company:** SunStar Laboratories, Inc**Container:** Amber Bottle**Sampling Point:** TW-1**Date Sampled:** 06/06/2024 12:30**Date Received:** 06/11/2024 **Date Reported:** 06/25/2024

δD of water	-62.4‰ relative to VSMOW
$\delta^{18}\text{O}$ of water	-7.73‰ relative to VSMOW
Tritium content of water	na
$\delta^{13}\text{C}$ of DIC	na
^{14}C content of DIC	na
$\delta^{15}\text{N}$ of nitrate	na
$\delta^{18}\text{O}$ of nitrate	na
$\delta^{34}\text{S}$ of sulfate	na
$\delta^{18}\text{O}$ of sulfate	na
Vacuum Distilled? *	No

Remarks:

nd = not detected. na = not analyzed.

*Indicates if vacuum distillation was utilized for hydrogen and oxygen isotopic analysis of water

**Lab #:** 925906**Job #:** 58893**CoreTrac:** IS-101168**Co. Job#:** T242356**Sample Name:** T242356-04**Co. Lab#:** T242356-04**Company:** SunStar Laboratories, Inc**Container:** Amber Bottle**Sampling Point:** TW-2**Date Sampled:** 06/06/2024 16:30**Date Received:** 06/11/2024 **Date Reported:** 06/25/2024

δD of water	-75.2‰ relative to VSMOW
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$\delta^{18}O$ of water	-9.99‰ relative to VSMOW
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Tritium content of water	na
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$\delta^{13}C$ of DIC	na
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^{14}C content of DIC	na
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$\delta^{15}N$ of nitrate	na
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$\delta^{18}O$ of nitrate	na
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$\delta^{34}S$ of sulfate	na
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$\delta^{18}O$ of sulfate	na
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Vacuum Distilled? *	No
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Remarks:

nd = not detected. na = not analyzed.

*Indicates if vacuum distillation was utilized for hydrogen and oxygen isotopic analysis of water

**Lab #:** 925907**Job #:** 58893**CoreTrac:** IS-101168**Co. Job#:** T242356**Sample Name:** T242356-05**Co. Lab#:** T242356-05**Company:** SunStar Laboratories, Inc**Container:** Amber Bottle**Sampling Point:** PW-0**Date Sampled:** 06/06/2024 17:00**Date Received:** 06/11/2024 **Date Reported:** 06/25/2024

δD of water	-75.9‰ relative to VSMOW
$\delta^{18}\text{O}$ of water	-10.01‰ relative to VSMOW
Tritium content of water	na
$\delta^{13}\text{C}$ of DIC	na
^{14}C content of DIC	na
$\delta^{15}\text{N}$ of nitrate	na
$\delta^{18}\text{O}$ of nitrate	na
$\delta^{34}\text{S}$ of sulfate	na
$\delta^{18}\text{O}$ of sulfate	na
Vacuum Distilled? *	No

Remarks:

nd = not detected. na = not analyzed.

*Indicates if vacuum distillation was utilized for hydrogen and oxygen isotopic analysis of water

**Lab #:** 925908**Job #:** 58893**CoreTrac:** IS-101168**Co. Job#:** T242356**Sample Name:** T242356-06**Co. Lab#:** T242356-06**Company:** SunStar Laboratories, Inc**Container:** Amber Bottle**Sampling Point:** PW-2**Date Sampled:** 06/06/2024 17:20**Date Received:** 06/11/2024 **Date Reported:** 06/25/2024 **δ D of water** -77.6‰ relative to VSMOW **$\delta^{18}\text{O}$ of water** -10.26‰ relative to VSMOW**Tritium content of water** na **$\delta^{13}\text{C}$ of DIC** na **^{14}C content of DIC** na **$\delta^{15}\text{N}$ of nitrate** na **$\delta^{18}\text{O}$ of nitrate** na **$\delta^{34}\text{S}$ of sulfate** na **$\delta^{18}\text{O}$ of sulfate** na**Vacuum Distilled? *** No**Remarks:**

nd = not detected. na = not analyzed.

*Indicates if vacuum distillation was utilized for hydrogen and oxygen isotopic analysis of water

**Lab #:** 925909**Job #:** 58893**CoreTrac:** IS-101168**Co. Job#:** T242356**Sample Name:** T242356-07**Co. Lab#:** T242356-07**Company:** SunStar Laboratories, Inc**Container:** Amber Bottle**Sampling Point:** DUP**Date Sampled:** 06/06/2024 00:00**Date Received:** 06/11/2024 **Date Reported:** 06/25/2024

δD of water	-77.5‰ relative to VSMOW
$\delta^{18}\text{O}$ of water	-10.20‰ relative to VSMOW
Tritium content of water	na
$\delta^{13}\text{C}$ of DIC	na
^{14}C content of DIC	na
$\delta^{15}\text{N}$ of nitrate	na
$\delta^{18}\text{O}$ of nitrate	na
$\delta^{34}\text{S}$ of sulfate	na
$\delta^{18}\text{O}$ of sulfate	na
Vacuum Distilled? *	No

Remarks:

nd = not detected. na = not analyzed.

*Indicates if vacuum distillation was utilized for hydrogen and oxygen isotopic analysis of water

WORK ORDER

T242356

Client: Northstar Environmental Remediation
Project: Genesis Solar Groundwater

Project Manager: Jeff Lee
Project Number: 196-004-06

Report To:

Northstar Environmental Remediation
 Arlin Brewster
 26225 Enterprise Court
 Lake Forest, CA 92630

Date Due: 06/14/24 17:00 (5 day TAT)

Received By: Dave Berner

Date Received: 06/07/24 10:30

Logged In By: Jeff Lee

Date Logged In: 06/07/24 12:43

Samples Received at: 1.1°C

Custody Seals No Received On Ice Yes

Containers Intact Yes

COC/Labels Agree Yes

Preservation Confir Yes

Analysis	Due	TAT	Expires	Comments
T242356-01 23a [Water] Sampled 06/06/24 14:30 (GMT-08:00) Pacific Time (US &				
&				
1664	06/14/24 15:00	5	07/04/24 14:30	Oil & Grease
200.7	06/14/24 15:00	5	12/03/24 14:30	Ca,Cu,Na,K,Fe,Mg (Field Filtered)
200.8	06/14/24 15:00	5	12/03/24 14:30	Sb,As,Ba,Cd,Cr,Co,Pb,Ni,Se,Zn (Field Filtered)
300.0 - F, Cl, Br, SO4	06/14/24 15:00	5	07/04/24 14:30	Chloride,Sulfate only
300.0 - NO2, NO3, PO4	06/14/24 15:00	5	06/08/24 14:30	Nitrate
7470/71 Hg	06/14/24 15:00	5	09/04/24 14:30	
Conductivity	06/14/24 15:00	5	07/04/24 14:30	
pH water SM 4500-H+B	06/12/24 15:00	3	06/07/24 14:30	
TDS-160.1	06/14/24 15:00	5	06/13/24 14:30	

T242356-02 OBS-1 [Water] Sampled 06/06/24 13:00 (GMT-08:00) Pacific Time (US &

1664	06/14/24 15:00	5	07/04/24 13:00	Oil & Grease
200.7	06/14/24 15:00	5	12/03/24 13:00	Ca,Cu,Na,K,Fe,Mg (Field Filtered)
200.8	06/14/24 15:00	5	12/03/24 13:00	Sb,As,Ba,Cd,Cr,Co,Pb,Ni,Se,Zn (Field Filtered)
300.0 - F, Cl, Br, SO4	06/14/24 15:00	5	07/04/24 13:00	Chloride,Sulfate only
300.0 - NO2, NO3, PO4	06/14/24 15:00	5	06/08/24 13:00	Nitrate
7470/71 Hg	06/14/24 15:00	5	09/04/24 13:00	
Conductivity	06/14/24 15:00	5	07/04/24 13:00	
pH water SM 4500-H+B	06/12/24 15:00	3	06/07/24 13:00	
TDS-160.1	06/14/24 15:00	5	06/13/24 13:00	

WORK ORDER

T242356

Client: Northstar Environmental Remediation
Project: Genesis Solar Groundwater

Project Manager: Jeff Lee
Project Number: 196-004-06

Analysis	Due	TAT	Expires	Comments
T242356-03 TW-1 [Water] Sampled 06/06/24 12:30 (GMT-08:00) Pacific Time				
(US &				
1664	06/14/24 15:00	5	07/04/24 12:30	Oil & Grease
200.7	06/14/24 15:00	5	12/03/24 12:30	Ca,Cu,Na,K,Fe,Mg (Field Filtered)
200.8	06/14/24 15:00	5	12/03/24 12:30	Sb,As,Ba,Cd,Cr,Co,Pb,Ni,Se,Zn (Field Filtered)
300.0 - F, Cl, Br, SO4	06/14/24 15:00	5	07/04/24 12:30	Chloride,Sulfate only
300.0 - NO2, NO3, PO4	06/14/24 15:00	5	06/08/24 12:30	Nitrate
7470/71 Hg	06/14/24 15:00	5	09/04/24 12:30	
Conductivity	06/14/24 15:00	5	07/04/24 12:30	
pH water SM 4500-H+B	06/12/24 15:00	3	06/07/24 12:30	
TDS-160.1	06/14/24 15:00	5	06/13/24 12:30	
T242356-04 TW-2 [Water] Sampled 06/06/24 16:30 (GMT-08:00) Pacific Time				
(US &				
1664	06/14/24 15:00	5	07/04/24 16:30	Oil & Grease
200.7	06/14/24 15:00	5	12/03/24 16:30	Ca,Cu,Na,K,Fe,Mg (Field Filtered)
200.8	06/14/24 15:00	5	12/03/24 16:30	Sb,As,Ba,Cd,Cr,Co,Pb,Ni,Se,Zn (Field Filtered)
300.0 - F, Cl, Br, SO4	06/14/24 15:00	5	07/04/24 16:30	Chloride,Sulfate only
300.0 - NO2, NO3, PO4	06/14/24 15:00	5	06/08/24 16:30	Nitrate
7470/71 Hg	06/14/24 15:00	5	09/04/24 16:30	
Conductivity	06/14/24 15:00	5	07/04/24 16:30	
pH water SM 4500-H+B	06/12/24 15:00	3	06/07/24 16:30	
TDS-160.1	06/14/24 15:00	5	06/13/24 16:30	
T242356-05 PW-0 [Water] Sampled 06/06/24 17:00 (GMT-08:00) Pacific Time				
(US &				
1664	06/14/24 15:00	5	07/04/24 17:00	Oil & Grease
200.7	06/14/24 15:00	5	12/03/24 17:00	Ca,Cu,Na,K,Fe,Mg (Field Filtered)
200.8	06/14/24 15:00	5	12/03/24 17:00	Sb,As,Ba,Cd,Cr,Co,Pb,Ni,Se,Zn (Field Filtered)
300.0 - F, Cl, Br, SO4	06/14/24 15:00	5	07/04/24 17:00	Chloride,Sulfate, and Fluoride only
300.0 - NO2, NO3, PO4	06/14/24 15:00	5	06/08/24 17:00	Nitrate
7470/71 Hg	06/14/24 15:00	5	09/04/24 17:00	
Conductivity	06/14/24 15:00	5	07/04/24 17:00	
pH water SM 4500-H+B	06/12/24 15:00	3	06/07/24 17:00	
TDS-160.1	06/14/24 15:00	5	06/13/24 17:00	

WORK ORDER

T242356

Client: Northstar Environmental Remediation
Project: Genesis Solar Groundwater

Project Manager: Jeff Lee
Project Number: 196-004-06

Analysis	Due	TAT	Expires	Comments
T242356-06 PW-2 [Water] Sampled 06/06/24 17:20 (GMT-08:00) Pacific Time (US &				
1664	06/14/24 15:00	5	07/04/24 17:20	Oil & Grease
200.7	06/14/24 15:00	5	12/03/24 17:20	Ca,Cu,Na,K,Fe,Mg (Field Filtered)
200.8	06/14/24 15:00	5	12/03/24 17:20	Sb,As,Ba,Cd,Cr,Co,Pb,Ni,Se,Zn (Field Filtered)
300.0 - F, Cl, Br, SO4	06/14/24 15:00	5	07/04/24 17:20	Chloride,Sulfate, and Fluoride only
300.0 - NO2, NO3, PO4	06/14/24 15:00	5	06/08/24 17:20	Nitrate
7470/71 Hg	06/14/24 15:00	5	09/04/24 17:20	
Conductivity	06/14/24 15:00	5	07/04/24 17:20	
pH water SM 4500-H+B	06/12/24 15:00	3	06/07/24 17:20	
TDS-160.1	06/14/24 15:00	5	06/13/24 17:20	

T242356-07 DUP [Water] Sampled 06/06/24 00:00 (GMT-08:00) Pacific Time (US &

1664	06/14/24 15:00	5	07/04/24 00:00	Oil & Grease
200.7	06/14/24 15:00	5	12/03/24 00:00	Ca,Cu,Na,K,Fe,Mg (Field Filtered)
200.8	06/14/24 15:00	5	12/03/24 00:00	Sb,As,Ba,Cd,Cr,Co,Pb,Ni,Se,Zn (Field Filtered)
300.0 - F, Cl, Br, SO4	06/14/24 15:00	5	07/04/24 00:00	Chloride,Sulfate only
300.0 - NO2, NO3, PO4	06/14/24 15:00	5	06/08/24 00:00	Nitrate
7470/71 Hg	06/14/24 15:00	5	09/04/24 00:00	
Conductivity	06/14/24 15:00	5	07/04/24 00:00	
pH water SM 4500-H+B	06/12/24 15:00	3	06/07/24 00:00	
TDS-160.1	06/14/24 15:00	5	06/13/24 00:00	

Eurofins Calscience (Tustin)

T242356-01 23a [Water] Sampled 06/06/24 14:30 (GMT-08:00) Pacific Time (US &

Misc Water Testing #1	06/14/24 15:00	5	12/03/24 14:30	8015M- Therminol
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T242356-02 OBS-1 [Water] Sampled 06/06/24 13:00 (GMT-08:00) Pacific Time (US &

Misc Water Testing #1	06/14/24 15:00	5	12/03/24 13:00	8015M- Therminol
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T242356-03 TW-1 [Water] Sampled 06/06/24 12:30 (GMT-08:00) Pacific Time (US &

Misc Water Testing #1	06/14/24 15:00	5	12/03/24 12:30	8015M- Therminol
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T242356-04 TW-2 [Water] Sampled 06/06/24 16:30 (GMT-08:00) Pacific Time (US &

Misc Water Testing #1	06/14/24 15:00	5	12/03/24 16:30	8015M- Therminol
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WORK ORDER

T242356

Client: Northstar Environmental Remediation
Project: Genesis Solar Groundwater

Project Manager: Jeff Lee
Project Number: 196-004-06

Analysis	Due	TAT	Expires	Comments
Eurofins Calscience (Tustin)				
T242356-05 PW-0 [Water] Sampled 06/06/24 17:00 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #1	06/14/24 15:00	5	12/03/24 17:00	8015M- Therminol
T242356-06 PW-2 [Water] Sampled 06/06/24 17:20 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #1	06/14/24 15:00	5	12/03/24 17:20	8015M- Therminol
T242356-07 DUP [Water] Sampled 06/06/24 00:00 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #1	06/14/24 15:00	5	12/03/24 00:00	8015M- Therminol
Isotech Laboratories, Inc.				
T242356-01 23a [Water] Sampled 06/06/24 14:30 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #2	06/14/24 15:00	5	12/03/24 14:30	Deuterium,Oxygen-18
T242356-02 OBS-1 [Water] Sampled 06/06/24 13:00 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #2	06/14/24 15:00	5	12/03/24 13:00	Deuterium,Oxygen-18
T242356-03 TW-1 [Water] Sampled 06/06/24 12:30 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #2	06/14/24 15:00	5	12/03/24 12:30	Deuterium,Oxygen-18
T242356-04 TW-2 [Water] Sampled 06/06/24 16:30 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #2	06/14/24 15:00	5	12/03/24 16:30	Deuterium,Oxygen-18
T242356-05 PW-0 [Water] Sampled 06/06/24 17:00 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #2	06/14/24 15:00	5	12/03/24 17:00	Deuterium,Oxygen-18
T242356-06 PW-2 [Water] Sampled 06/06/24 17:20 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #2	06/14/24 15:00	5	12/03/24 17:20	Deuterium,Oxygen-18
T242356-07 DUP [Water] Sampled 06/06/24 00:00 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #2	06/14/24 15:00	5	12/03/24 00:00	Deuterium,Oxygen-18