DOCKETED	
Docket Number:	09-AFC-08C
Project Title:	Genesis Solar Energy Project
TN #:	236536
Document Title:	Genesis Solar 2020 Second Semi-Annual and Annual Groundwater Quality Monitoring Report
Description:	N/A
Filer:	Glen T King
Organization:	NextEra Energy
Submitter Role:	Applicant
Submission Date:	2/1/2021 9:10:21 AM
Docketed Date:	2/1/2021

2020 SECOND SEMIANNUAL and ANNUAL GROUNDWATER QUALITY MONITORING REPORT

Genesis Solar Energy Project

Riverside County, California

COC S&W-20

December 28, 2020

Prepared By:

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2020 SECOND SEMIANNUAL and ANNUAL 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

December 28, 2020

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1.0 INTRODUCTION

Northstar Environmental Remediation (Northstar) has prepared this 2020 Second Semiannual and Annual Groundwater Quality Monitoring Report on behalf of Genesis Solar, LLC (Genesis). This report details groundwater quality monitoring performed in December 2020 at the Genesis Solar Energy Project (GSEP) and provides an annual summary. 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 mi^2 (2,435 km^2) 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 2019 extraction data, is approximately 103 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 87.05 feet bgs (300.35 feet amsl) in TW-1, located upgradient of the site, to 136.80 feet bgs (255.30 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 COC S&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 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 most recent year.

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 groundwater quality monitoring at the GSEP on December 3, 2020. 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 Levelogger pressure transducers are currently installed in OBS-1 and TW-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 Levelogger 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). 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 Pro field instrument equipped with a flow-through cell. Staff calibrated the YSI Pro 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 in the evaporation ponds as directed in the MRP. 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 Irvine, 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** – Concentrations have increased compared to the previous monitoring event and are comparable to baseline values. Chloride concentrations have been elevated in the winter months since 2017.
- Chart 2: **Sulfate** – Concentrations have increased compared to the previous monitoring event and are comparable to baseline values. Sulfate concentrations have been elevated in shallow groundwater samples in the winter months since 2018.
- Chart 3: **Nitrate** – Appears in low concentrations mostly in shallow monitoring wells, including upgradient OBS-1. Concentrations generally increased compared to the previous monitoring event.
- Chart 4: **Calcium** - Concentrations are generally the same or lower than baseline results.
- Chart 5: **Copper** – Occurs in only a few wells at low concentrations. There are no apparent trends.
- Chart 6: **Sodium** – Concentrations have increased significantly in most of the shallow wells during this event. The concentration in OBS-1 has been steadily decreasing since the 4th quarter of 2018.
- Chart 7: **Potassium** – Concentrations have generally decreased in all wells during this event.
- Chart 8: **Iron** – Concentrations, where above the detection limit, are near baseline conditions.
- Chart 9: **Magnesium** - Concentrations are generally the same or lower than baseline results.
- Chart 10: **Antimony** – There have been no detections to date.
- Chart 11: **Arsenic** – Only detected in production well PW-0 during this event at a concentration significantly lower than the previous event.
- Chart 12: **Barium** – Detected at baseline concentrations during this monitoring period.
- 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 analytical method.
- Chart 18: **Nickel** – There have only been three detections to date at very low concentrations – one in DM-3 (second quarter 2014), PW-2 (fourth quarter 2017), and 23a (second quarter 2019).
- Chart 19: **Selenium** – Occurs sporadically in several wells but has appeared more consistently in shallow monitoring wells, particularly upgradient well OBS-1. There are no apparent trends.

- Chart 20: **Zinc** – Occurs only in well 23a from fourth quarter 2014, but in several other wells since fourth quarter 2017, a result of lower detection limits. There are no apparent trends.
- Chart 21: **Mercury** – Has occurred only once at a very low concentration in well DM-1 (second quarter 2015).
- Chart 22: **Total Dissolved Solids** – Concentrations are near baseline conditions in this reporting period.
- Chart 23: **Specific Conductance** - Concentrations are near baseline conditions in this reporting period.
- Chart 24: **pH** – Concentrations are near baseline conditions in this reporting period.

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. Was not detected during this monitoring event. 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 varies in precipitation depending on latitude, elevation and climate (Froehlich and Yurtsever, 1995; Izbicki, 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 tends to leave the remaining water enriched in heavier isotopes (less depleted), 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 are 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 closer to the source of precipitation or groundwater recharge upgradient.
- 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 2020 second semiannual monitoring event show 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 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 Mann-Kendall 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 for arsenic, barium, calcium, chloride, selenium, sulfate, specific conductance, total dissolved solids, and zinc for each well and trend direction is reported at the 95% confidence interval. Additional constituents that are projected to be present in the wastewater discharge in the evaporation ponds, as identified in the WDR (CRWQCB, 2013b), either lack sufficient data to be statistically analyzed (chromium, copper, lead, mercury, and nickel) or have not been detected above reporting limits to date (antimony, cadmium, and cobalt). 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 increasing trends identified.
- TW-2: An increasing trend was identified only for barium.
- OBS-1: No increasing trends identified.
- 23a: No increasing trends identified.
- DM-1: No increasing trends identified.
- DM-2: An increasing trend was identified only for chloride.
- DM-3: No increasing trends identified.
- PW-2: No increasing trends identified.

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).

None of the analytes were detected in the laboratory method blank samples.

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 was outside acceptable limits for the MS and/or MSD due to possible matrix interference. The LCS was within acceptable criteria. Affected analytes:
    - Chloride in sample 23a
    - Sulfate in sample 23a

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% except for Sodium by EPA Method 200.7, which was reported at concentrations of 1,200 and 2,000 mg/l, respectively.

5.0 ANNUAL SUMMARY

Groundwater analytical data for calendar year 2020 are generally consistent with historical analytical data, including seasonal increases of chloride and sulfate in the fourth quarter of the year. This is likely related to an increase in precipitation and/or decrease in irrigation at this time of year.

Well PW-2 was the only water production well consistently utilized during the calendar year, as PW-0 remains on standby and was turned on only intermittently for testing, maintenance, and sampling, and PW-1 is sealed indefinitely. The Mann-Kendall test for trends typically requires a minimum data set of between 4 to 10 values collected at regular intervals throughout the year to encompass seasonal changes. Currently, all wells but PW-0 and PW-1 have a data set large enough to perform the M-K test.

The following is a list of the analytes that have displayed increasing trends during the 2020 calendar year:

- TW-2 displayed an increasing trend for arsenic in the 2nd quarter and for barium in the 4th quarter.
- DM-2 displayed an increasing trend for chloride in the 2nd and 4th quarters.
- DM-3 displayed an increasing trend for calcium in the 2nd quarter.

Zinc was added to the Mann-Kendall analysis in the 4th quarter of this year.

The stable isotope analysis returned results within the normal range through the entire 2020 calendar year.

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. All available groundwater quality data is generally stable and consistent with historical data.

7.0 REFERENCES

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FIGURES

GSEP Footprint
Prisons
Wilderness Area

0 1.25 2.5 5 7.5 10 Miles

N
W E
S

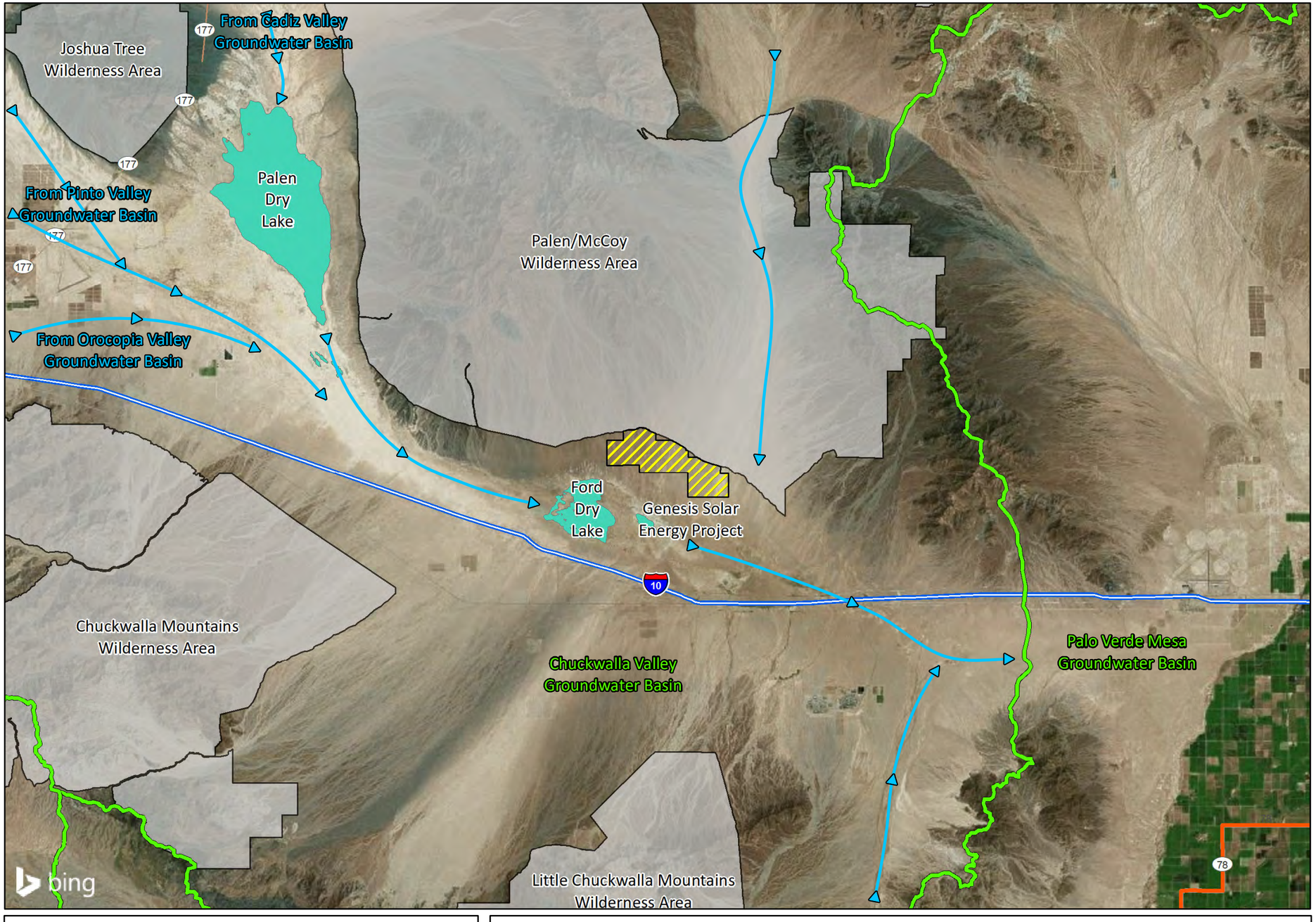
NORTHSTAR
ENVIRONMENTAL REMEDIATION

Northstar Environmental
Remediation
26225 Enterprise Court
Lake Forest, California 92630
(949) 580-2800

Project Number:
196-004-06

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

Figure 1
Site Vicinity Map



GSEP Footprint
Watershed Boundary
Lake
Wilderness Area
Water Flow Direction

0 1.25 2.5 5 7.5 10 Miles

N
W E
S

NORTHSTAR
ENVIRONMENTAL REMEDIATION

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Lake Forest, California 92630
(949) 580-2800

Project Number:
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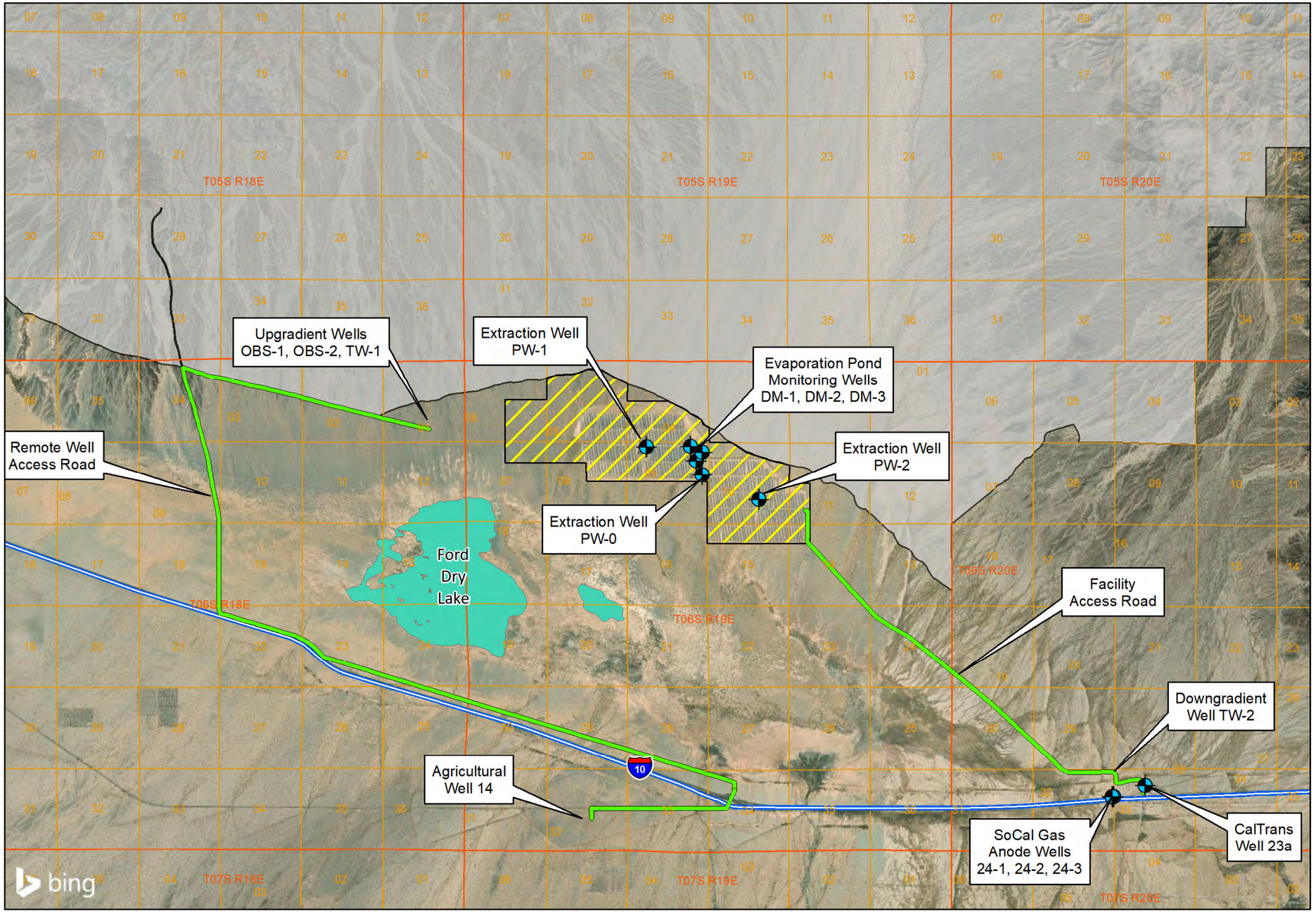
Blythe, California 92225

Figure 2
Hydrogeologic Setting



Legend

- GSEP Footprint
- Active Monitoring Wells
- Lake
- Wilderness Area
- Access Road

0 0.5 1 2 3 4 Miles

N W E S

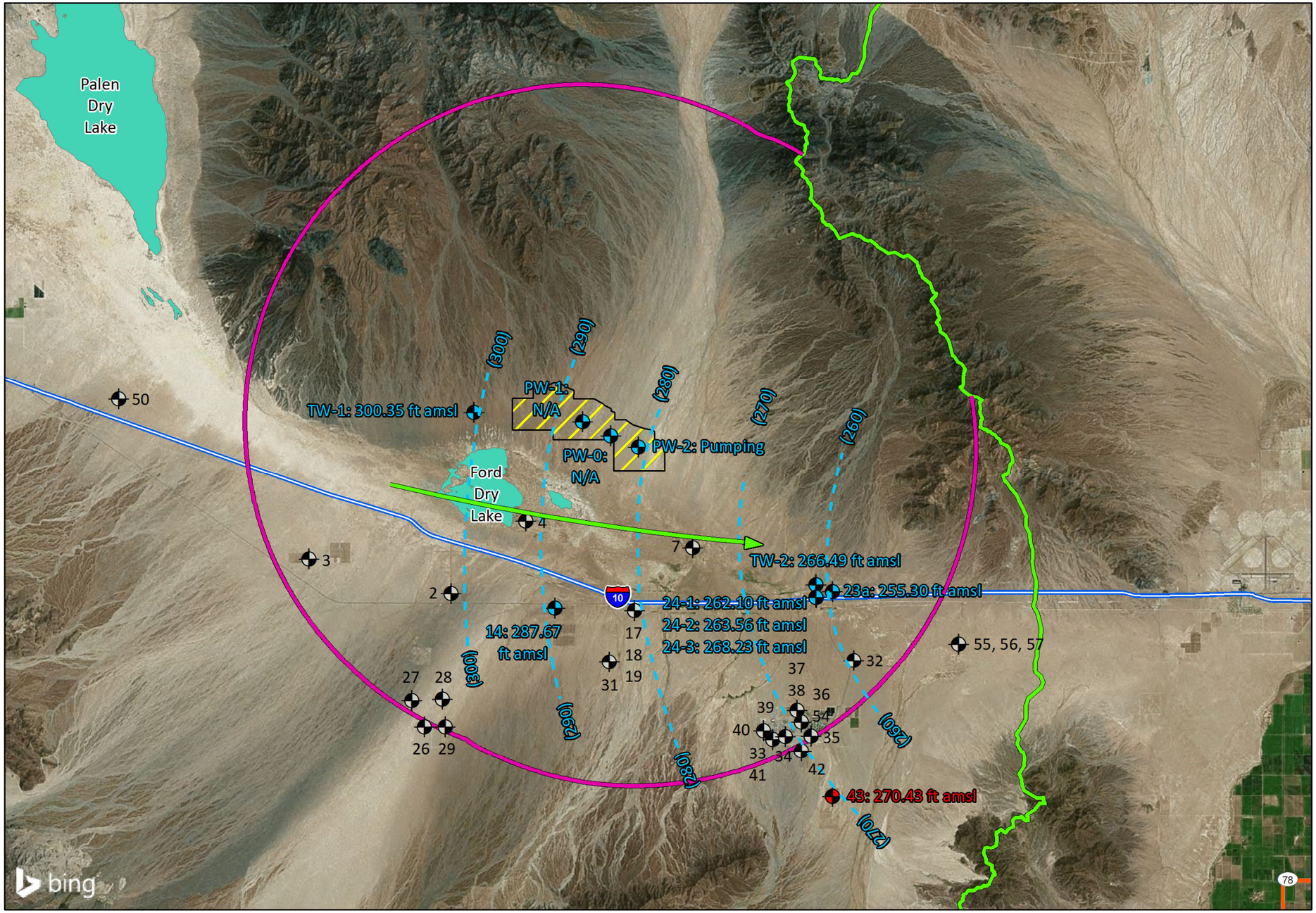
NORTHSTAR ENVIRONMENTAL REMEDIATION

Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest, California 92630
(949) 580-2800

Project Number:
196-004-06

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

Figure 3
Groundwater Monitoring Area and Well Locations



Active Monitoring Wells
NWIS Active Wells
NWIS Inactive Wells
Groundwater Elevation Contour
Groundwater Gradient Direction
10 Mile Boundary
Watershed Boundary
GSEP Footprint

0 1 2 4 6 8 Miles

N
W E
S

NORTHSTAR
ENVIRONMENTAL REMEDIATION

Northstar Environmental
Remediation
26225 Enterprise Court
Lake Forest, California 92630
(949) 580-2800

Project Number:
196-004-06

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

Figure 4
Bouse Formation Groundwater
Elevation Contour Map

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 to 150	Alluvium
OBS-2-270 [1,2]	--	Nested Observation Well 2	Genesis Solar, LLC	7/2/2009	Buried Transducer / Active	--	385.617	388.14	270	265 to 275	Bouse Formation
OBS-2-315 [1,2]	--	Nested Observation Well 2	Genesis Solar, LLC	7/2/2009	Buried Transducer / Active	--	385.617	388.14	315	304 to 327	Bouse Formation
OBS-2-370 [1,2]	--	Nested Observation Well 2	Genesis Solar, LLC	7/2/2009	Buried Transducer / Active	--	385.617	388.14	370	359 to 374	Bouse Formation
OBS-2-400 [1,2]	--	Nested Observation Well 2	Genesis Solar, LLC	7/2/2009	Buried Transducer / Active	--	385.617	388.14	400	387 to 418	Bouse Formation
TW-1 [1]	--	Test Well 1	Genesis Solar, LLC	5/22/2009	Monitoring / Active	5	385.91	387.4	565	340 to 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 to 120	Alluvium
DM-2	--	Detection Monitoring Well 2	Genesis Solar, LLC	2/21/2012	Monitoring / Active	4	--	391.32	120	100 to 120	Alluvium
DM-3	--	Detection Monitoring Well 3	Genesis Solar, LLC	2/20/2012	Monitoring / Active	4	--	388.34	120	100 to 120	Alluvium
14 [1,3]	6S/19E-32	--	Lorne Froats (AZCA Drilling)	5/1/1991	Domestic/ Irrigation/ Dust Control	12 to 10	393.548	388.14	982 (obstructed at 450)	890 to 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 to 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 to 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 to 290 770 to 810	Alluvium/Bouse Formation
3	6S/18E-29	Siddall Well	Agra Energy Corp.	2/26/1982	Irrigation	20 to 8	498	--	957	560 to 940	Bouse Formation
4	6S/19E-19J1	--	--	--	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 to 630 750 to 770 810 to 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 to 460, 500 to 520, 540 to 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 to 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 to 1190	Bouse Formation/ Fanglomerate
35	7S/20E-17K1	--	CA Department of Corrections	12/20/1989	--	30 to 16	456.48	--	1,200	690 to 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 to 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 to 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 to 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 to 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 to 600 and 680 to 780	Bouse Formation
44	7S/20E-28C2	--	Jojoba Southwest	11/30/1989	Irrigation	16 to 12	505.3	--	1,100	700 to 1,100	Bouse Formation/ Fanglomerate
47	8S/20E-10N2	60	--	1984	--	4	621	--	872	500 to 580, 620 to 640, 710 to 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 to 993	Bouse Formation
56	7S/20E-1M2	CWV1#2	USGS	1/23/2012	Exploratory	2	415.4	--	505	485 to 505	Pinto Formation
57	7S/20E-1M3	CWV1#3	USGS	1/23/2012	Exploratory	2	415.4	--	230	210 to 230	Alluvium

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
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 to 327 365 to 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 to 1,200	Fanglomerate
18	6S/19E-34	--	So Cal Gas	4/29/1989	Anode	1	368	--	400	200 to 400	Alluvium/Bouse
19	6S/19E-34	--	So Cal Gas	7/15/1981	Other	--	369	--	274	0 to 274	Alluvium/Bouse
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 to 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 to 815 and 995 to 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-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
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

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
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-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
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

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
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
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

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
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
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
24-1	12/3/2020	Northstar	389.40	127.30	262.10	-0.59	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
24-3	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

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
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
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
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-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-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

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	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
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
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-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
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-3	2/27/2012	WorleyParsons	388.34	103.85	284.49	N/A	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
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
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	DWRWell 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
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

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
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	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
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

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	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
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
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

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
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
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
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
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

Notes:

amsl = above mean sea level

TOC = top of casi

1. Wells were surveyed on February 8 & 9, 2011. Top of Casing elevation for all other wells are approximate.
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)	pH	Conductivity (mS/cm)	Turbidity (NTU)	D.O. (mg/L)	Temperature (°C)	ORP (mV)
23a	12/3/2020	N/A	Bailer	5,750	8.68	2.78	20.5	2.08	28.40	-8.0
OBS-1	12/3/2020	N/A	Bailer	5,750	8.80	14.3	13.5	6.02	25.22	-14
TW-1	12/3/2020	N/A	Bailer	5,750	8.36	24.2	25.3	3.42	24.34	+11
TW-2	12/3/2020	N/A	Bailer	5,750	8.10	5.60	8.6	2.50	28.95	-216
PW-0	12/3/2020	N/A	Production Pump	N/A[2]	6.93	6.48	8.5	1.93	35.10	-69
PW-1	12/3/2020	N/A	N/A	N/A[1]	-	-	-	-	-	-
PW-2	12/3/2020	N/A	Production Pump	N/A[2]	7.38	3.89	48.0	2.75	37.80	+37
DM-1	12/3/2020	188	Bladder Pump	3,760	7.43	17.3	10.1	3.98	19.43	+82
DM-2	12/3/2020	120	Bladder Pump	2,400	7.58	18.2	49.1	1.60	21.12	+111
DM-3	12/3/2020	121	Bladder Pump	2,420	7.33	17.0	0.5	4.01	23.23	+109

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

^{o}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)-N (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 (Total) (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 (std. 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	
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	-8.2
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	-8.2
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	-8.2
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	-8.0
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	<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]	11[J]	<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	<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	2.5	-	<1.0	<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	-	<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	<5.0	<5.0	-	<5.0	5.8	12	<0.50	8,900	14,500	9.8	<5.0	<0.10	-63.50	-7.96
TW-1	12/3/2020	Bailer	4,750	1,710	0.657	89	<0.005	9,300	30	3.1	12	<5.0	<5.0	20	<5.0	<5.0	<5.0	<5.0	-	<5.0	<0.50	<0.50	<0.50	6,400	15,000	9.3	<5.0	<0.11	-63.80	-7.96
TW-2	1/8/2010	Low Flow	1,500	460	<0.25	98	<0.010	860	18	<0.3	1.9	-	-	-	-	-	-	-	80	-	-	-	-	3,100	5,500	8.2	-	-	-	-
TW-2	1/8/2010	Low Flow	1,400	500	<0.25	100	<0.010	1,000	18	0.5	3.8	-	-	-	-	-	-	-	5	-	-	-	-	3,000	5,500	8.0	-	-	-	-
TW-2	1/21/2010	Low Flow	1,500	500	<0.25	120	<0.010	1,000	21	0.73	3.4	-	-	-	-	-	-	-	93	-	-	-	-	3,100	5,400	8.0	-	-	-	-
TW-2	11/9/2010	Low Flow	1,500	520	<0.25	110	<0.010	1,000	19	2.9	4.2	-	-	-	-	-	-	-	140	-	-	-	-	3,300	5,800	8.4	-	-	-78.50	-10.13
TW-2	6/7/2011	Low Flow	1,600	520	<0.25	120	<0.010	870	20	0.38	3.1	-	-	-	-	-	-	-	94	-	-	-	-	3,200	5,700	8.1	-	-	-79.50	-10.25
TW-2	6/7/2011	Low Flow	1,500	510	<0.25	120	<0.010	880	20	0.42	3.1	-	-	-	-	-	-	-	95	-	-	-	-	3,100	5,500	8.0	-	-	-78.30	-10.14
TW-2	12/14/2011	Hydrasleeve	1,500	460	<0.55	100	0.0076	1,100	23	24	4.1	-	-	-	-	-	-	-	-	-	-	-	-	3,400	4,100	8.3	-	-	-76.00	-10.2
TW-2	5/24/2012	Hydrasleeve	1,400	500	<1.1	78	<0.010	1,000	19	<0.040	1.5	-	-	-	-	-	-	-	-	-	-	-	-	3,000	6,200	8.8	-	-	-77.80	-10.2
TW-2	10/23/2012	Hydrasleeve	1,400	500	<1.1	96	<0.010	870	21	<0.040	3.1	-	-	-	-	-	-	-	-	-	-	-	-	3,500	5,500	8.6	-	-	-78.00	-10.1
TW-2	5/20/2014	Hydrasleeve	1,600	430	-	64	<0.010	1,000	22	0.022[J]	0.093	<2.0	2.9	30	<1.0	<2.0	<1.0	<1.0	4.1	0.91[J]	<2.0	<20	<0.20	3,300	5,700	9.9	<4.7	-	-76.18	-10.17
TW-2	12/4/2014	Hydrasleeve	1,500	420	<1.1	67	<0.020	1,000	21	0.041[J]	0.11	<2.0	4.4	36	<1.0	<2.0	<1.0	<1.0	3.4	1.8[J]	<2.0	2.9[J]	<0.20	2,900	5,800	9.7	<4.7	<0.096	-77.20	-10.12
TW-2	6/11/2015	Hydrasleeve	1,700	490	<0.55	69	<0.10	1,100	23	<0.40	<0.20	<2.0	5.8	35	<1.0	<2.0	<1.0	<1.0	2.8	0.68[J]	<2.0	<20	<0.20	3,200	5,900	9.9	1.6[J]	<0.10	-75.00	-10.16
TW-2	12/10/2015	Hydrasleeve	1,600	430	<1.1	72	<0.010	1,000	20	0.030[J]	0.13	<10	6.9	41	<5.0	<10	<5.0	<5.0	7.8	<10	4.0[J]	<100	<0.20	3,900	5,900	9.8	<5.0	<0.095	-75.60	-10.15
TW-2	6/2/2016	Hydrasleeve	1,300	350	0.88	71	<0.10	1,100	20	<0.40	0.22	<2.0	4.4	38	<1.0	<2.0	<1.0	<1.0	7.6	<2.0	1.9[J]	<20	<0.20	2,900	5,600	9.5	<4.7	<0.095	-75.11	-10.15
TW-2	11/30/2016	Hydrasleeve	850	450	<0.55	74	<0.010	1,000	23	0.12	0.39	<10	6.0	39	<5.0	<10	<5.0	<5.0	8.7	<10	45	<100	<0.20	3,200	5,500	9.3	<4.7	<0.097	-76.10	-10.01
TW-2	6/1/2017	Hydrasleeve	1,600	430	<1.1	82	<0.050	1,100	23	<0.50	0.28	<10	9.1	42	<5.0	<10	<5.0	<5.0	5.5	<10	270	<100	<0.20	3,200	5,400	9.4	<5.4	<0.096	-75.80	-10.01
TW-2	12/5/2017	Hydrasleeve	1,180	315	<0.50	82	<0.025	370	30	1.7	<0.50	<0.50	5.3	34	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	100	<0.50	3,200	5,490	9.6	6.5	<0.10	-73.97	-10.38
TW-2	6/1/2018	Bailer	1,540	439	<5.0	83	0.089[J]	650	44	5.4[J]	<5.0	<0.50	6.3	23	<0.50	<0.50	<0.50	<0.50	-	<5.0	<5.0	76	<0.50	2,800	5,590	9.6	<5.0	<0.11	-75.40	-10.00
TW-2	12/4/2018	Bailer	1,930	454	<0.500	87	<0.5	1,200	30	<20	<10	<10	11	40	<10	<10	<10	<10	-	<10	<10	39	<0.50	2,600	5,540	10	<5.0	<0.10	-75.90	-10.05
TW-2	6/14/2019	Bailer	1,560	430	<0.500	95	<0.005	1,300	54	0.23	0.42	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	-	<0.50	6,400	5,640	10	<5.0	<0.10	-76.70	-10.11
TW-2	12/5/2019	Bailer	2,750	686	<0.500	91	0.004[J]	1,200	24	0.095[J]	0.65	<5.0	<5.0	46	<5.0	0.0002[J]	<5.0	<5.0	-	<5.0	<5.0	46	<0.50	3,100	5,580	9.4	<5.0	<0.10	-74.60	-9.87
TW-2	6/5/2020	Bailer	1,610	<500	<0.500	78	0.005	1,200	23	<0.20	0.62	<5.0	<5.0	52	<5.0	9.5	<5.0	<5.0	-	<5.0	<5.0	13	<0.50	3,400	5,700	9.3	<5.0	<0.10	-76.00	-10.06
TW-2	12/3/2020	Bailer	1,680	454	0.659	68	<0.005	70	23	<0.20	0.63	<5.0	<5.0	44	<5.0	<5.0	<5.0	<5.0	-	<5.0	<0.50	<0.50	<0.50	2,500	5,600	9.5	<5.0	<0.11	-75.80	-9.99
OBS-1	11/10/2010	Low Flow	8,300	9,400	0.78	450	0.036	6,500	25	2.4	110	-	-	-	-	-	-	-	59	-	-	-	-	20,000	23,000	7.7	-	-	-62.90	-6.88
OBS-1	6/8/2011	Low Flow	6,600	6,800	0.81	460	<0.010	5,800	26	2.3	94	-	-	-	-	-	-	-	60	-	-	-	-	19,000	32,000	7.7	-	-	-63.10	-6.82
OBS-1	6/8/2011	Low Flow	6,600	6,800	0.64	470	<0.010	5,800	25	2.3	91	-	-	-	-	-	-	-	71	-	-	-	-	19,000	31,000	7.7	-	-	-62.70	-6.86
OBS-1	12/13/2011	Low Flow	6,300	6,700	1.4	430	0.0051	6,500	34	0.4	91	-	-	-	-	-	-	-	-	-	-	-	-	21,000	27,000	7.8	-	-	-60.90	-6.80
OBS-1	12/13/2011	Hydrasleeve	6,200	6,500	1.4	400	0.0045	6,300	32	0.35	87	-	-	-	-	-	-	-	-	-	-	-	-	20,000	28,000	7.8	-	-	-61.40	-6.90
OBS-1	5/23/2012	Hydrasleeve	6,400	7,000	1.9	380	<0.010	7,200	33	<0.040	73	-	-	-	-	-	-	-	-	-	-	-	-	21,000	36,000	7.9	-	-	-62.80	-6.90
OBS-1	10/23/2012	Hydrasleeve	6,400	6,700	<2.2	400	<0.010	6,200	31	<0.040	89	-	-	-	-	-	-	-	-	-	-	-	-	21,000	36,000	7.3	-	-	-64.30	-6.80
OBS-1	5/20/2014	Hydrasleeve	6,300	5,700	-	330	<0.020	5,500	27	<0.040	77	<10	<5.0	13	<5.0	<10	<5.0	<5.0	4.9[J]	4.7[J]	58	<100	<0.20	17,000	30,000	7.9	<4.7	-	-59.93	-7.03
OBS-1	12/4/2014	Hydrasleeve	5,400	4,900	4.3[J]	330	<0.050	6,100	27	<0.20	87	<10	2.8[J]	13	<5.0	<10	<5.0	<5.0	2.5[J]	6.8[J]	59	18[J]	<0.20	17,000	26,000	8.0	<4.7	<0.094	-62.20	-6.71
OBS-1	6/11/2015	Hydrasleeve	5,900	5,600	<5.5	310	<0.10	5,600	24	<0.40	81	<10	<5.0	13	<5.0	<10	<5.0	<5.0	5.5	3.9[J]	60	13[J]	<0.20	18,000	31,000	8.0	<4.7	<0.099	-60.20	-6.72
OBS-1	12/10/2015	Hydrasleeve	6,200	5,600	<5.5	330	<0.010	5,600	24	<0.040	81	<10	2.7[J]	17	<5.0	<10	<5.0	<5.0	6.2	<10	72	<100	<0.20	18,000	30,000	7.9	<5.0	<0.094	-61.20	-6.87
OBS-1	6/2/2016	Hydrasleeve	5,500	4,800	7.3	290	<0.10	5,500	22	0.34[J]	82	1.6[J]	2.4	13	0.34[J]	0.63[J]	<1.0	<1.0	5.1	0.87[J]	67	5.2[J]	<0.20	18,000	30,000	8.0	<4.7	<0.096	-60.14	-6.75
OBS-1	11/30/2016	Hydrasleeve	6,100	5,800	<5.5	320	<0.010	5,400	28	<0.040	86	<20	<10	12	<10	<20	<10	<10	<10	<20	70	<200	<0.20	18,000	23,000	7.9	<4.7	<0.093	-61.30	-6.68
OBS-1	6/1/2017	Hydrasleeve	5,200	5,200	<11	330	<0.10	5,900	25	<1.0	87	<10	3.4[J]	14	<5.0	<10	<5.0	<5.0	3.2[J]	3.6[J]	51	<100	<0.20	18,000	21,000	8.0	<5.1	<0.094	-60.70	-6.68
OBS-1	12/5/2017	Hydrasleeve	5,380	4,890	9.69	330	<0.025	2,200	46	<0.035	90	<5.0	<5.0	15	<5.0	<5.0	<5.0	<5.0	-	<5.0	94	<5.0	<0.50	18,000	23,200	7.9	6.21	<0.10	-59.01	-7.11
OBS-1	6/1/2018	Bailer	6,040	5,520	12.4	320	0.10[J]	6,700	75	<10	87	<0.5	<5.0	7.8	<0.5	<0.5	<0.5	<0.5	-	<5.0	57	5.8	<0.50	16,000	23,600	8.0	<5.0	<0.11	-60.90	-6.84
OBS-1	12/4/2018	Bailer	7,680	7,130	5.52	480	<0.5	12,000	63	<20	140	<10	<10	14	<10	<10	<10	<10	-	<10	80	<10	<0.50	17,000	23,600	7.9	<5.0	<0.10	-61.40	-6.79
OBS-1	6/13/2019	Bailer	6,070	5,400	5.42	360	0.017	7,700	78	0.53	91	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	-	<0.50	11,000	24,500	7.5	<5.0	<0.10	-60.70	-6.75
OBS-1	12/5/2019	Bailer	9,710	8,020	9.79	330	0.006	6,700	34	<0.20	93	<5.0	<5.0	15	<5.0	0.10[J]	<5.0	<5.0	-	<5.0	60	48	<0.50	15,000	23,900	7.7	<5.0	<0.10	-59.50	-6.56
OBS-1	6/5/2020	Bailer	6,100	5,560	5.07	300	0.006	6,100	62	<0.20	75	<5.0	<5.0	14	<5.0	<5.0	<5.0	<5.0	-	<5.0	89	44	<0.50	16,000	24,500	8.1	<5.0	<0.097	-60.90	-6.78
OBS-1	12/3/2020	Bailer	6,560	6,200	5.41	320	0.005	3,200	51	1.2	68	<5.0	<5.0	18	<5.0	<5.0	<5.0	<5.0	-	<5.0	7.6	3.7	<0.50	18,000	24,000	7.9	<5.0	<0.11	-60.90	-6.80
OBS-2	6/17/2009	Grab	2,300	810	0.5	66	<0.010	1,500	12	0.46	14	-	-	-	-	-	-	-	29	-	-	-	-	5,000	8,800	7.8	-	-	-	-

TABLE 4
SUMMARY OF LABORATORY ANALYTICAL RESULTS
Genesis Solar Energy Project

		Sampling	Chloride (mg/L)	Sulfate (SO4) (mg/L)	Nitrate (NO3)-N (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 (Total) (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 (std. Units)	Oil & Grease / HEM (mg/L)	HTF[†] (mg/L)	Deuterium (‰ relative to VSMOW)	Oxygen-18 (‰ relative to VSMOW)
Well 36	11/10/2010	Spigot	270	250	<0.25	13	<0.010	300	1.8	<0.30	0.76	-	-	-	-	-	-	-	<5	-	-	-	-	860	1,500	8.7	-	-	-77.20	-9.79
Well 36	6/8/2011	Spigot	240	250	<0.25	14	<0.010	270	2.2	<0.30	0.63	-	-	-	-	-	-	-	<5	-	-	-	-	840	1,500	8.7	-	-	-77.80	-9.78
Well 36	12/14/2011	Spigot	240	210	0.082	12	<0.010	290	2.3	0.034	0.65	-	-	-	-	-	-	-	-	-	-	-	-	870	1,300	8.6	-	-	-74.60	-9.8
Well 23a	11/11/2010	Hydrasleeve	620	470	<0.25	29	0.4	520	11	13	1.5	-	-	-	-	-	-	-	500	-	-	-	-	1,700	2,900	8.3	-	-	-76.00	-10.24
Well 23a	6/7/2011	Hydrasleeve	480	400	<0.25	26	0.012	440	9	1.9	<0.50	-	-	-	-	-	-	-	78	-	-	-	-	1,500	2,500	8.4	-	-	-77.70	-10.40
Well 23a	12/14/2011	Hydrasleeve	510	400	<0.22	24	0.016	550	11.0	3.8	0.47	-	-	-	-	-	-	-	-	-	-	-	-	1,600	2,400	8.2	-	-	-75.00	-10.30
Well 23a	5/24/2012	Hydrasleeve	410	410	<0.22	25	<0.010	420	11.0	0.071	0.29	-	-	-	-	-	-	-	-	-	-	-	-	1,500	2,500	8.3	-	-	-76.20	-10.40
Well 23a	10/23/2012	Hydrasleeve	440	440	<0.22	19	<0.010	420	8.7	0.059	3.0	-	-	-	-	-	-	-	-	-	-	-	-	1,400	2,400	8.3	-	-	-77.60	-10.40
Well 23a	5/20/2014	Hydrasleeve	570	490	-	24	<0.010	540	10	0.042	0.51	<10	<5.0	20	<5.0	<10	<5.0	<5.0	7.2	<10	<10	100[B]	<0.20	1,600	2,800	8.1	<4.7	-	-74.05	-10.33
Well 23a	12/4/2014	Hydrasleeve	480	370	<0.22	24	<0.010	520	10	0.011[J]	0.51	<10	<5.0	20	<5.0	<10	<5.0	<5.0	5.6	<10	<10	100	<0.20	1,500	2,900	8.2	<4.7	<0.095	-76.40	-10.31
Well 23a	12/10/2015	Hydrasleeve	520	430	<0.22	22	<0.010	490	9.2	0.015[J]	0.60	<4.0	1.6[J]	21	<2.0	<4.0	<2.0	<2.0	8.6	<4.0	1.9[J]	96	<0.20	1,600	2,800	8.1	<5.1	<0.095	-74.30	-10.09
Well 23a	6/2/2016	Hydrasleeve	480	380	<0.11	20	<0.010	550	11	0.42	0.55	<2.0	1.2	16	<1.0	<2.0	<1.0	4.0	41	0.69[J]	0.98[J]	270	<0.20	1,600	3,100	8.4	<4.7	<0.094	-73.73	-10.25
Well 23a	11/30/2016	Hydrasleeve	490	430	<0.22	21	<0.010	490	10	<0.040	0.47	<10	<5.0	19	<5.0	<10	<5.0	<5.0	5.6	<10	5.0[J]	74[J]	<0.20	1,500	2,600	8.1	<4.7	<0.095	-76.40	-10.18
Well 23a	6/1/2017	Hydrasleeve	430	400	<0.22	23	<0.010	580	12	0.31	0.68	<10	<5.0	20	<5.0	<10	<5.0	3.2[J]	45	<10	<10	340	<0.20	1,500	2,700	8.2	<5.1	<0.096	-75.30	-10.20
Well 23a	12/5/2017	Hydrasleeve	466	389	<0.50	19	<0.005	670	13	0.060[J]	0.52	<0.50	1.2	17	<0.50	<0.50	<0.50	<0.50	-	<0.50	<0.50	76	<0.50	1,300	2,550	8.3	1.40[J]	<0.10	-74.35	-10.47
Well 23a	6/1/2018	Bailer	491	415	<0.50	22	0.082[J]	760	19	<10	<5	<0.50	<5.0	13	<0.50	<0.50	<0.50	<0.50	-	<0.50	<5.0	56	<0.50	1,300	2,640	8.4	<5.0	<0.11	-73.60	-10.12
Well 23a	6/14/2019	Bailer	473	405	<0.50	24	0.005	630	25	0.63	0.68	<10	<10	<10	<10	<10	<10	<10	-	12	<10	-	<0.50	1,400	2,630	7.5	<5.0	<0.10	-74.80	-10.22
Well 23a	12/5/2019	Bailer	667	492	<0.02	22	0.003[J]	570	0.41	<0.20	0.50	<5.0	<5.0	20	<5.0	0.30[J]	<5.0	<5.0	-	<5.0	1.4[J]	480	<0.50	1,400	2,570	8.3	<5.0	<0.10	-75.50	-10.24
Well 23a	6/5/2020	Bailer	478	409	<0.50	19	0.006	620	12	<0.20	0.44	<5.0	<5.0	20	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	160	<0.50	1,300	2,690	8.5	<5.0	<0.10	-75.40	-10.21
Well 23a	12/3/2020	Bailer	481	411	0.704	16	0.005	650	51	0.71	0.35	<5.0	<5.0	22	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	22	<0.50	1,200	2,600	8.7	<5.0	<0.11	-75.60	-10.27
DM-1	5/24/2012	Low Flow	4,600	2,000	3.9	250	<0.10	3,800	23.0	<0.40	56	-	-	-	-	-	-	-	-	-	-	-	-	12,000	16,000	7.8	-	-	-65.10	-8.8
DM-1	10/24/2012	Low Flow	5,400	2,300	<1.1	210	<0.010	3,200	20.0	<0.040	58	-	-	-	-	-	-	-	11	-	-	-	-	11,000	18,000	7.8	-	-	-72.10	-8.6
DM-1	5/22/2014	Low Flow	5,300	2,000	-	240	<0.010	3,700	22	<0.040	54	<10	6.2	52	<5.0	<10	<5.0	<5.0	2.5[J]	4.6[J]	3.0[J]	<100	<0.20	11,000	19,000	7.8	<5.0	-	-68.50	-8.51
DM-1	5/22/2014 [1]	Low Flow	5,200	2,000	-	230	<0.010	3,600	22	<0.040	53	<10	5.6	50	<5.0	<10	<5.0	<5.0	<5.0	3.9[J]	3.1[J]	<100	<0.20	11,000	19,000	7.7	<5.3	-	-69.47	-8.74
DM-1	12/4/2014	Low Flow	4,800	1,700	2.9	230	<0.050	3,600	21	<0.20	57	<10	7.7	50	<5.0	<10	<5.0	<5.0	<5.0	9.2[J]	<10	25[J]	0.15[J]	11,000	19,000	7.9	<4.7	<0.094	-72.10	-8.75
DM-1	6/11/2015	Low Flow	4,600	2,000	3.7[J]	230	<0.10	3,600	21	<0.40	52	<10	3.8[J]	36	<5.0	2.9[J]	<5.0	<5.0	3.6[J]	6.3[J]	3.6[J]	<100	0.26	10,000	19,000	7.8	<4.7	<0.10	-69.20	-8.47
DM-1	12/10/2015	Low Flow	5,300	2,100	4.9[J]	260	<0.010	3,700	22	<0.040	57	<10	5.6	38	<5.0	<10	<5.0	<5.0	<5.0	<10	5.2[J]	<100	<0.20	12,000	19,000	7.8	<5.0	<0.094	-70.30	-8.57
DM-1	6/2/2016	Low Flow	4,700	1,800	7.8	230	<0.10	3,800	18	<0.40	57	<2.0	5.1	31	<1.0	1.9[J]	<1.0	<1.0	0.99[J]	1.1[J]	3.3	2.5[J]	<0.20	11,000	20,000	7.9	<4.7	<0.094	-69.87	-8.83
DM-1	11/30/2016	Low Flow	5,200	2,000	<5.5	230	<0.010	3,700	23	<0.040	59	<20	6.7[J]	31	<10	<20	<10	<10	<10	<10	13[J]	<200	<0.20	11,000	17,000	7.8	<4.7	<0.093	-70.70	-8.68
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	-	<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	<0.50	12,000	18,000	7.9	<5.0	<0.11	-70.20	-8.57
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	-8.8
DM-2	10/23/2012	Low Flow	4,800	2,000	<1.1	470	<0.010	2,600	27.0	<0.040	54	-	-	-	-	-	-	-	110	-	-	-	-	9,900	16,000	7.7	-	-	-70.90	-8.9
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
DM-2	12/10/2015	Low Flow	5,400	2,200	<5.5	290	<0.010	3,600	21	0.062	61	<10	5.9	85	<5.0	<10	<5.0	<5.0	88	<10	5.5[J]	<100	<0.20	12,000	18,000	7.9	<5.0	<0.096	-69.40	-8.43
DM-2	6/2/2016	Low Flow	4,800	1,900	8.0	280	<0.10	3,800	20	0.27[J]	60	0.51[J]	4.7	62	<1.0	1.5[J]	<1.0	<1.0	62	1.1[J]	3.5	<20	<0.20	12,000	22,000	8.0	<4.9	<0.097	-69.53	-8.63
DM-2	11/30/2016	Low Flow	5,300	2,200	2.8[J]	290	<0.010	4,200	28	<0.040	61	<20	5.9[J]	56	<10	<20	<10	<10	40	<20	18[J]	<200	<0.20	11,000	17,000	7.8	<4.7	<0.097	-70.20	-8.37
DM-2	6/1/2017	Low Flow	4,800	1,900	3.1[J]	280	<0.10	4,100	21	<1.0	62	<10	4.4[J]	52	<5.0	<10	<5.0	<5.0	17	5.2[J]	5.6[J]	<100	<0.20	12,000	16,000	7.9	<5.2	<0.097	-70.10	-8.51
DM-2	12/5/2017	Low Flow	4,930	1,960	13.4	250	<0.025	1,400	34	<1.0	62	<1.0	5.5	69	<2.5	3.7	<2.5	<2.5	-	<2.5	5.7	4.5	<0.50	11,000	17,200	7.8	<5.0	<0.10	-67.66	-8.63
DM-2	5/30/2018	Low Flow	6,000	2,280	17.5	300	0.11[J]	4,800	68	<10	67	<5.0	5.1	51	<0.50	5.0	<0.50	<0.50	-	<0.50	6.3	<5.0	<0.50	9,900	17,000	7.9	<5.0	<0.11	-69.20	-8.39
DM-2	12/4/2018	Low Flow	5,290	1,770	11.4	240	<0.5	4,900	35	<20	60	<10	<10	57	<10	<10	<10	<10	-	<10	<10	28	<0.50	7,100	13,000	7.8	<5.0	<0.10	-72.30	-8.98
DM-2	6/14/2019	Low Flow	5,240	2,080	11.2	300	<0.005	5,100	68	<0.20	67	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	-	<0.50	9,300	18,000	7.3	<5.0	<0.10	-70.10	-8.50
DM-2	12/5/2019	Low Flow	7,680	2,330 [J]	21.2	310	0.007	4,400	30	<0.20	65	<5.0	<5.0	50	<5.0	2.9 [J]	<5.0	<5.0	-	<5.0	3.2 [J]	76	<0.50	10,000	17,000	7.6	<5.0	<0.10	-70.00	-8.48
DM-2	6/4/2020	Low Flow	5,580	2,240	10.4	280	0.007	4,100	41	<0.20	55	<5.0	<5.0	46	<5.0	<5.0	<5.0	<5.0	-	<5.0	9.8	24	<0.50	11,000	18,100	7.4	<5.0	<0.096	-69.90	-8.47
DM-2	12/3/2020	Low Flow	5,730	2,340	9.46	250	<0.005	11,000	34	<0.20	51	<5.0	<5.0	49	<5.0	<5.0	<5.0	<5.0	-	<5.0	0.94	<0.50	<0.50	10,000	18,000	7.8	<5.0	<0.11	-70.10	-8.50
DM-3	5/24/2012	Low Flow	4,600	2,000	<2.2	220	<0.10	3,500	20.0	<0.40	51	-	-	-	-	-	-	-	-	-	-	-	-	12,000	16,000	7.8	-	-	-71.40	-8.9
DM-3	10/23/2012	Low Flow	5,100	2,100	<2.2	210	<0.010	3,000	20.0	<0.040	52	-	-	-	-	-	-	-	<1.0	-	-	-	-	11,000	18,000	7.8	-	-	-72.60	-8.7
DM-3	5/22/2014	Low Flow	5,400	2,100	-	230	<0.010	3,600	21	<0.040	51	<10	13	18	<5.0	<10	<5.0	<5.0	<5.0	10	<10	<100	<0.20	11,000	19,000	7.7	<4.9	-	-68.86	-8.52
DM-3	12/5/2014	Low Flow	4,900	1,800	1.8[J]	230	<0.050	3,600	20	<0.20	56	<10	16	18	<5.0	<10	<5.0	<5.0	<5.0	9.6[J]	<10	<100	<0.20	11,000	18,000	7.8	<4.7	<0.099	-72.40	-8.82
DM-3	6/12/2015	Low Flow	4,400	1,900	<5.5	220	<0.10	3,600	18	<0.40	50	<10	14	17	<5.0	<10	<5.0	<5.0	<5.0	4.5[J]	<10	<100	<0.20	9,800	18,000	7.8	<4.9	<0.10	-69.60	-8.90
DM-3	12/11/2015	Low Flow	5,100	2,200	<5.5	250	0.0057[J]	3,500	19	<0.040	51	<10	17	21	<5.0	<10	<5.0	<5.0	<5.0	<10	3.1[J]	<100	<0.20	11,000	18,000	7.8	<5.0	<0.094	-70.60	-8.73
DM-3	6/3/2016	Low Flow	4,700	1,900	7.1	220	<0.10	3,700	17	<0.40	53	<2.0	14	16	<1.0	0.66[J]	<1.0	<1.0	0.64[J]	0.88[J]	1.0[J]	5.1[J]	<0.20	11,000	20,000	7.9	<4.7	<0.093	-69.29	-8.75
DM-3	12/2/2016	Low Flow	4,900	2,100	<5.5	240	0.0052[J]	4,100	23	<0.040	56	<10	16	18	<5.0	<10	<5.0	<5.0	<5.0	<10	5.6[J]	<100	<0.20	11,000	17,000	7.8	<4.8	<0.097	-72.20	-8.75
DM-3	6/1/2017	Low Flow	4,800	2,000	<5.5	240	<0.10	3,900	19	<1.0	55	<10	15	18	<5.0	<10	<5.0	<5.0	<5.0	3.9[J]	2.7[J]	<100	<0.20	11,000	16,000	7.9	<5.1	<0.095	-70.80	-8.71
DM-3	12/5/2017	Low Flow	4,880	2,020	2.77	230	0.027	1,200	31	0.073[J]	59	<2.5	15	15	<2.5	<2.5	<2.5	<2.5	-	<2.5	<2.5	5.6	<0.50	13,000	17,000	7.8	<5.0	<0.10	-69.57	-8.87
DM-3	5/30/2018	Low Flow	6,350	2,600	10.7	260	0.11[J]	4,100	61	<10	61	<0.50	14	15	<0.50	<5.0	<0.50	<0.50	-	<0.50	<5.0	<5.0	<0.50	12,000	17,100	7.9	<5.0	<0.11	-70.60	-8.67
DM-3	12/4/2018	Low Flow	6,770	2,840	2.50	280	<0.5	5,200	33	<20	69	<10	20	34	<10	<10	<10	<10	-	<10	<10	<10	<0.50	9,700	17,100	7.8	<5.0	<0.10	-70.60	-8.67
DM-3	6/14/2019	Low Flow	4,880	1,960	2.87	270	0.009	4,900	60	<0.20	59	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	-	<0.50	9,300	16,800	7.5	<5.0	<0.10	-70.80	-8.69
DM-3	12/6/2019	Low Flow	9,760	4,350	3.52	240	0.006	4,100	31	<0.20	58	<5.0	11	18	<5.0	0.90 [J]	<5.0	<5.0	-	<5.0	0.40 [J]	51	<0.50	11,000	17,800	7.7	<5.0	<0.10	-70.50	-8.64
DM-3	6/5/2020	Low Flow	5,250	2,080	2.44	230	0.007	4,000	35	<0.20	48	<5.0	16	17	<5.0	<5.0	<5.0	<5.0	-	<5.0	6.4	13	<0.50	11,000	17,400	7.5	<5.0	<0.097	-70.70	-8.65
DM-3	12/3/2020	Low Flow	5,420	2,300	2.47	220	<0.005	9,100	29	<0.20	45	<5.0	<5.0	20	<5.0	<5.0	<5.0	<5.0	-	<5.0	0.68	0.55	<0.50	10,000	17,000	7.9	<5.0	<0.11	-70.90	-8.71

TABLE 4
SUMMARY OF LABORATORY ANALYTICAL RESULTS
Genesis Solar Energy Project

		Sampling	Chloride (mg/L)	Sulfate (SO4) (mg/L)	Nitrate (NO3)-N (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 (Total) (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 (std. Units)	Oil & Grease / HEM (mg/L)	HTF† (mg/L)	Deuterium (‰ relative to VSMOW)	Oxygen-18 (‰ relative to VSMOW)
PW-0	5/23/2012	Spigot	1,100	480	<0.55	66	<0.010	610	8.8	0.015	2.0	-	-	-	-	-	-	-	-	-	-	-	-	2,500	4,600	8.0	-	-	-78.90	-10.40
PW-0	10/23/2012	Spigot	780	450	<0.55	55	<0.010	530	7.9	0.015 J	2.1	-	-	-	-	-	-	-	-	-	-	-	-	2,100	3,400	8.0	-	-	-79.40	-10.40
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-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	-10.3
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	-10.4
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 [1]	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	<0.10	710	5.6	0.12 J	4.0	<10	28	39	<5.0	<10	<5.0	<5.0	19	<10	<10	<100	<0.20	2,200	4,000	8.1	16	<0.10	-76.70	-10.41
PW-2	6/11/2015 [1]	Spigot	790	420	<0.22	49	<0.10	710	8.4	0.22 J	4.2	<10	28	38	<5.0	<10	<5.0	<5.0	18	<10	<10	<100	<0.20	2,200	4,000	8.1	<4.8	<0.10	-76.90	-10.55
PW-2	12/10/2015	Spigot	910	450	<0.22	59	<0.010	770	5.6	0.16	4.1	<4.0	30	43	<2.0	<4.0	<2.0	<2.0	23	<4.0	<4.0	<40	<0.20	2,100	3,800	8.1	<5.1	<0.098	-77.70	-10.28
PW-2	12/10/2015 [1]	Spigot	910	480	<0.55	53	<0.010	700	6.5	0.079	4.1	<4.0	29	41	<2.0	<4.0	<2.0	<2.0	25	<4.0	<4.0	<40	<0.20	2,200	3,800	8.1	4.1 J	<0.095	-77.20	-10.21
PW-2	6/2/2016	Spigot	830	390	0.46	51	<0.010	680	5.1	0.10	4.1	<2.0	26	43	<1.0	<2.0	<1.0	<1.0	20	<2.0	0.63 J	<20	<0.20	2,200	4,100	8.1	<4.8	<0.096	-77.30	-10.38
PW-2	6/2/2016 [1]	Spigot	820	380	0.37	51	<0.010	680	5.1	0.12	4.1	<2.0	26	42	<1.0	<2.0	<1.0	<1.0	21	0.87 J	<2.0	<20	<0.20	2,200	4,100	8.1	<4.8	<0.096	-77.46	-10.44
PW-2	11/30/2016	Spigot	750	410	<0.22	49	<0.010	650	5.4	0.049	4.3	<10	29	40	<5.0	<10	<5.0	<5.0	19	<10	3.4 J	<100	<0.20	2,100	3,600	8.0	<4.8	<0.095	-78.00	-10.21
PW-2	11/30/2016 [1]	Spigot	860	450	<0.22	49	<0.010	680	5.6	0.050	4.4	<10	29	39	<5.0	<10	<5.0	<5.0	18	<10	2.7 J	<100	<0.20	2,100	3,700	7.9	<4.7	<0.095	-78.50	-10.30
PW-2	6/1/2017	Spigot	800	440	<0.55	56	<0.010	750	5.6	0.085 J	4.5	<10	27	38	<5.0	<10	<5.0	<5.0	19	<10	6.7 J	<100	<0.20	2,100	3,500	8.1	1.7 J	<0.098	-77.70	-10.21
PW-2	6/1/2017 [1]	Spigot	820	430	<0.55	54	<0.010	740	5.5	0.084 J	4.5	<10	28	39	<5.0	<10	<5.0	<5.0	20	<10	<10	<100	<0.20	2,100	3,700	8.0	<5.4	<0.096	-77.90	-10.26
PW-2	12/5/2017	Spigot	812	415	<0.50	54	<0.025	270	7.9	0.076 J	4.8	<0.50	28	39	<0.50	<0.50	<0.50	<0.50	-	<0.50	0.51	4.5	<0.50	2,000	3,570	7.9	<5.0	<0.10	-76.11	-10.50
PW-2	12/5/2017 [1]	Spigot	739	375	<0.50	56	<0.025	410	8.1	0.11 J	5.1	<0.50	29	38	<0.50	<0.50	<0.50	<0.50	-	2.0	0.61	7.0	<0.50	2,000	3,590	8.1	2.11	<0.10	-75.80	-10.48
PW-2	6/1/2018	Spigot	865	449	<2.50	51	0.099 J	1000	9.8	<10	4.1 J	<0.50	19	14	<0.50	<0.50	<0.50	<0.50	-	<0.50	<5.0	<5.0	<0.50	2,000	3,620	8.5	<5.00	<0.11	-77.70	-10.22
PW-2	6/1/2018 [1]	Spigot	857	445	<2.50	54	0.11 J	1100	10	<10	4.2 J	<0.50	12	7.3	<0.50	<0.50	<0.50	<0.50	-	<0.50	<5.0	<5.0	<0.50	2,000	3,630	8.2	<5.00	<0.11	-78.20	-10.26
PW-2	12/4/2018	Spigot	895	454	<0.500	55	<0.5	690	11	<20	<10	<10	34	41	<10	<10	<10	<10	-	<10	<10	<10	<0.50	1,900	3,580	8.1	<5.00	<0.11	-77.90	-10.24
PW-2	12/4/2018 [1]	Spigot	998	454	<0.500	72	<0.5	950	12	<20	<10	<10	33	44	<10	<10	<10	<10	-	<10	<10	<10	<0.50	1,800	3,580	8.1	15.4	<0.10	-77.80	-10.24
PW-2	6/13/2019	Spigot	860	431	<0.500	62	<0.005	780	13	<0.20	5.0	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	-	<0.50	2,300	3,600	7.4	<5.00	<0.11	-78.20	-10.26
PW-2	6/13/2019 [1]	Spigot	820	436	<0.500	64	<0.005	800	13	<0.20	5.2	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	-	<0.50	2,600	3,630	7.9	<5.00	<0.11	-78.20	-10.25
PW-2	12/5/2019	Spigot	1,300	515	<0.500	52	0.003 J	800	6.5	0.039 J	4.7	<5.0	25	43	<5.0	1.2 J	<5.0	<5.0	-	<5.0	<5.0	50	<0.50	2,100	3,610	8.1	<5.00	<0.10	-77.80	-10.22
PW-2	12/5/2019 [1]	Spigot	1,370	584	<0.500	52	0.002 J	820	7.9	0.150 J	4.5	<5.0	26	42	<5.0	0.30 J	<5.0	<5.0	-	<5.0	<5.0	46	<0.50	1,600	3,600	8.1	<5.00	<0.10	-78.30	-10.22
PW-2	6/4/2020	Spigot	864	<500	<0.500	49	<0.005	710	6.4	<0.20	4.1	<5.0	34	41	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	11	<0.50	2,100	3,610	8.1	<5.00	<0.10	-78.00	-10.22
PW-2	6/4/2020 [1]	Spigot	876	<500	<0.500	48	0.006	700	6.3	<0.20	4.0	<5.0	34	44	<5.0	<5.0	<5.0	<5.0	-	<5.0	6.7	64	<0.50	2,000	3,610	7.9	<5.00	<0.097	-78.60	-10.27
PW-2	12/3/2020	Spigot	1,010	436	<0.500	47	<0.005	1,200	6.4	<0.20	3.8	<5.0	<5.0	52	<5.0	<5.0	<5.0	<5.0	-	<5.0	<0.50	<0.50	<0.50	1,900	3,700	8.3	<5.00	<0.097	-78.30	-10.30
PW-2	12/3/2020 [1]	Spigot	920	431	<0.500	46	<0.005	2,000	6.3	<0.20	3.9	<5.0	<5.0	53	<5.0	<5.0	<5.0	<5.0	-	<5.0	<0.50	0.66	<0.50	1,900	3,700	8.3	<5.00	<0.11	-78.80	-10.31

NOTES:
mg/L = milligrams per liter
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

Date: 12/3/20	Site: Genesis Solar Energy Project	Project No: 196-004-06
Project: Groundwater Level Monitoring Program		PM: AWB
Measurement Method/Device: Solinst Interface Probe		Technicians: AWB/RCD
Weather: Clear, cool		

Well No.	Date	TOC Reference Elevation (ft)	Depth to Water (ft)	Corrected Water Level Elevation (ft)	Comments
TW-1	12/3/2020	387.40	87.05	300.35	Solinst Levelogger Transducer
TW-2	12/3/2020	393.47	126.98	266.49	Manual Measurement
OBS-1	12/3/2020	388.30	78.25	310.05	Solinst Levelogger Transducer
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	12/3/2020	388.14	100.47	287.67	Manual Measurement
23a	12/3/2020	392.10	136.80	255.30	Manual Measurement
24-1	12/3/2020	389.40	127.30	262.10	Manual Measurement
24-2	12/3/2020	388.86	125.30	263.56	Manual Measurement
24-3	12/3/2020	392.04	123.81	268.23	Manual Measurement
PW-0	12/3/2020	385.64	N/A	N/A	Manual Measurement
PW-1	12/3/2020	384.43	N/A	N/A	Manual Measurement
PW-2	12/3/2020	385.15	N/A	N/A	Manual Measurement
DM-1	12/3/2020	391.49	107.70	283.79	Manual Measurement
DM-2	12/3/2020	391.32	108.03	283.29	Manual Measurement
DM-3	12/3/2020	388.34	104.80	283.54	Manual Measurement

Additional Notes:

GROUNDWATER SAMPLING FIELD FORM

Date: Dec 03, 2020	Site: Genesis Solar Energy Project	Project No: 196-004-06
Project: Groundwater Quality Monitoring Program		Project Manager: AWB
Technicians: RCD/AWB		Weather: Clear, cool
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	28.40	8.68	2.78	20.5	-8.0	2.08
Total Depth (ft btoc)	1,825						
Screen Interval (ft btoc)	1800 - 1825						
Depth to Water (ft btoc)	136.80						
Sample Date	12/3/2020						
Sample Time	13:35						

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	25.22	8.80	14.30	13.5	-14	6.02
Total Depth (ft btoc)	160						
Screen Interval (ft btoc)	100 - 150						
Depth to Water (ft btoc)	78.25						
Sample Date	12/3/2020						
Sample Time	14:40						

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	24.34	8.36	24.15	25.3	10.6	3.42
Total Depth (ft btoc)	565						
Screen Interval (ft btoc)	340 - 564						
Depth to Water (ft btoc)	87.05						
Sample Date	12/3/2020						
Sample Time	15:00						

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	28.95	8.10	5.60	8.6	-216	2.50
Total Depth (ft btoc)	1,841						
Screen Interval (ft btoc)	Multiple						
Depth to Water (ft btoc)	126.98						
Sample Date	12/3/2020						
Sample Time	13:10						

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

GROUNDWATER SAMPLING FIELD FORM

Date: Dec 03, 2020	Site: Genesis Solar Energy Project	Project No: 196-004-06
Project: Groundwater Quality Monitoring Program		Project Manager: AWB
Technicians: RCD/AWB		Weather: Clear, cool
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	35.10	6.93	6.48	8.5	-69.1	1.93
Total Depth (ft btoc)	1,251						
Screen Interval (ft btoc)	Multiple						
Depth to Water (ft btoc)	N/A						
Sample Date	12/3/2020						
Sample Time	12:40						

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)	N/A						
Sample Date	12/3/2020						
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 and buried under gravel stockpile

Well No.	PW-2	Temp °C	pH	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	DO (mg/L)
Casing Diameter (in.)	10.0	37.80	7.38	3.89	48	37	2.75
Total Depth (ft btoc)	1,125						
Screen Interval (ft btoc)	Multiple						
Depth to Water (ft btoc)	N/A						
Sample Date	12/3/2020						
Sample Time	12:50						

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

COMMENTS: Access port is blocked

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: Dec 03, 2020	Site: Genesis Solar Energy Project	Project No: 196-004-06
Project: Groundwater Quality Monitoring Program		Project Manager: AWB
Technicians: RCD/AWB		Weather: Clear, cool
Sampling Method: Low-Flow Sampling with Submersible Pump (EPA 2017 Protocols)		

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	8:45	107.72	18.70	7.69	17.48	26.4	84	4.12
Total Depth (ft btoc)	120	8:50	107.72	19.35	7.50	17.40	11.0	85	4.10
Screen Interval (ft btoc)	100 - 120	8:55	107.72	19.40	7.48	17.37	10.4	83	4.06
Depth to Water (ft btoc)	107.70	9:00	107.72	19.43	7.43	17.30	10.1	82	3.98
Depth of Inlet (ft btoc)	115.00								
Discharge Time (sec)	25								
Fill Time (sec)	15								
Cycles per Minute	1.5								
Volume per Cycle (mL)	125								
Pump Rate (mL/min)	188								
Volume Purged (mL)	3,760								
Sample Time	9:15								

Purge Volume Calculation: Total must exceed tubing volume (1,204 mL) plus drawdown volume (2,460 mL/foot) = **1,254 mL**

COMMENTS:

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	9:45	108.20	21.05	7.48	18.25	52.3	115	1.83
Total Depth (ft btoc)	120	9:50	108.38	21.08	7.55	18.25	50.3	112	1.62
Screen Interval (ft btoc)	100 - 120	9:55	108.39	21.11	7.55	18.22	49.8	112	1.61
Depth to Water (ft btoc)	108.03	10:00	108.40	21.12	7.58	18.20	49.1	111	1.60
Depth of Inlet (ft btoc)	115.00								
Discharge Time (sec)	27								
Fill Time (sec)	40								
Cycles per Minute	0.9								
Volume per Cycle (mL)	125								
Pump Rate (mL/min)	120								
Volume Purged (mL)	2,400								
Sample Time	10:15								

Purge Volume Calculation: Total must exceed tubing volume (1,204 mL) plus drawdown volume (2,460 mL/foot) = **2,115 mL**

COMMENTS:

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	11:00	104.78	23.12	7.40	16.98	10.3	118	3.96
Total Depth (ft btoc)	120	11:05	104.84	23.18	7.39	16.98	8.3	112	3.98
Screen Interval (ft btoc)	100 - 120	11:10	104.86	23.20	7.36	16.99	3.6	110	3.99
Depth to Water (ft btoc)	104.80	11:15	104.86	23.23	7.33	17.00	0.5	109	4.01
Depth of Inlet (ft btoc)	115.00								
Discharge Time (sec)	27								
Fill Time (sec)	35								
Cycles per Minute	0.97								
Volume per Cycle (mL)	125								
Pump Rate (mL/min)	121								
Volume Purged (mL)	2,420								
Sample Time	11:30								

Purge Volume Calculation: Total must exceed tubing volume (1,204 mL) plus drawdown volume (2,460 mL/foot) = **1,352 mL**

COMMENTS:

APPENDIX B

CHARTS 1 - 29

Chart 1: Chloride

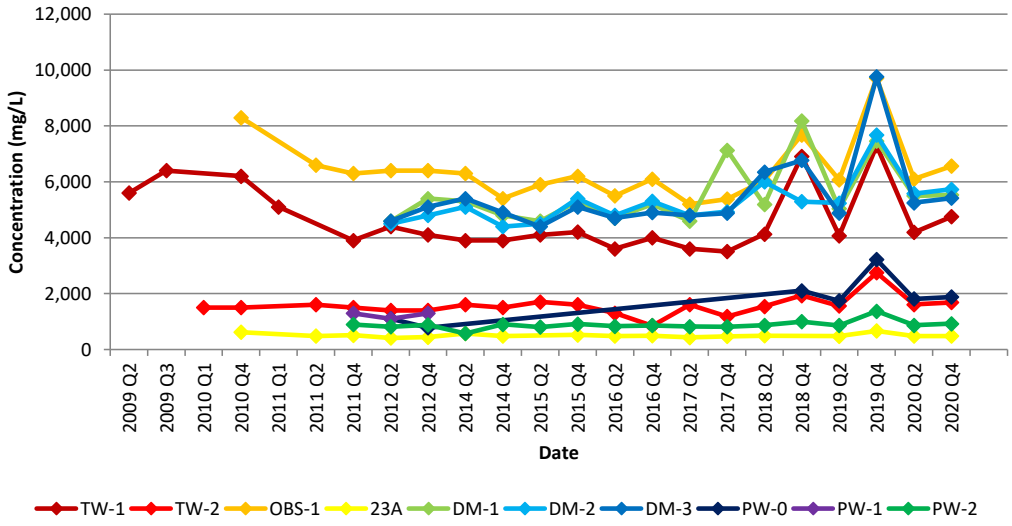


Chart 2: Sulfate (SO_4)

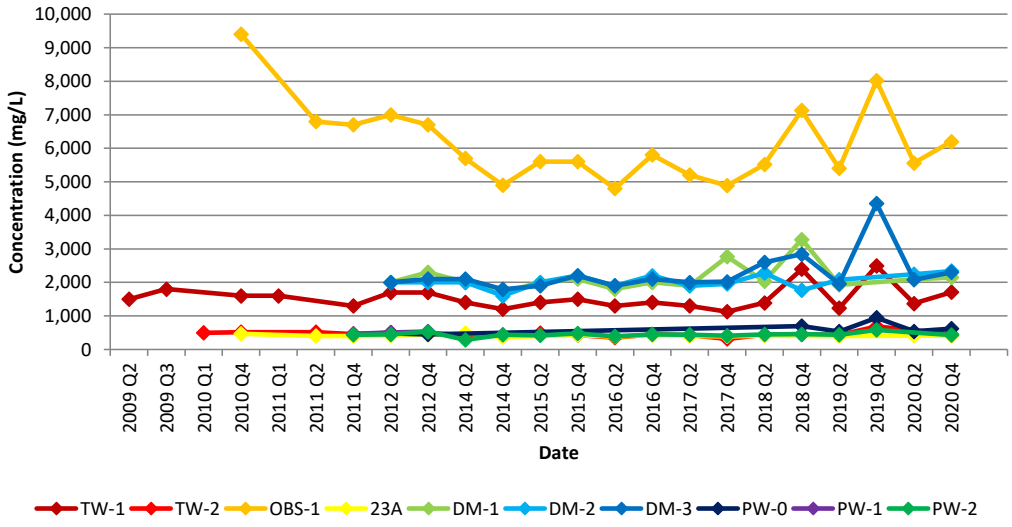


Chart 3: Nitrate (NO_3)

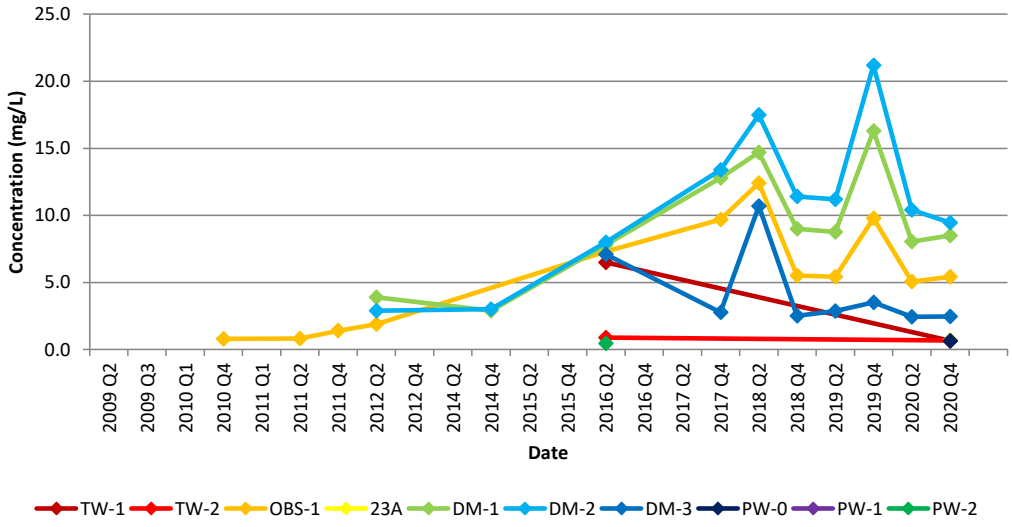


Chart 4: Calcium

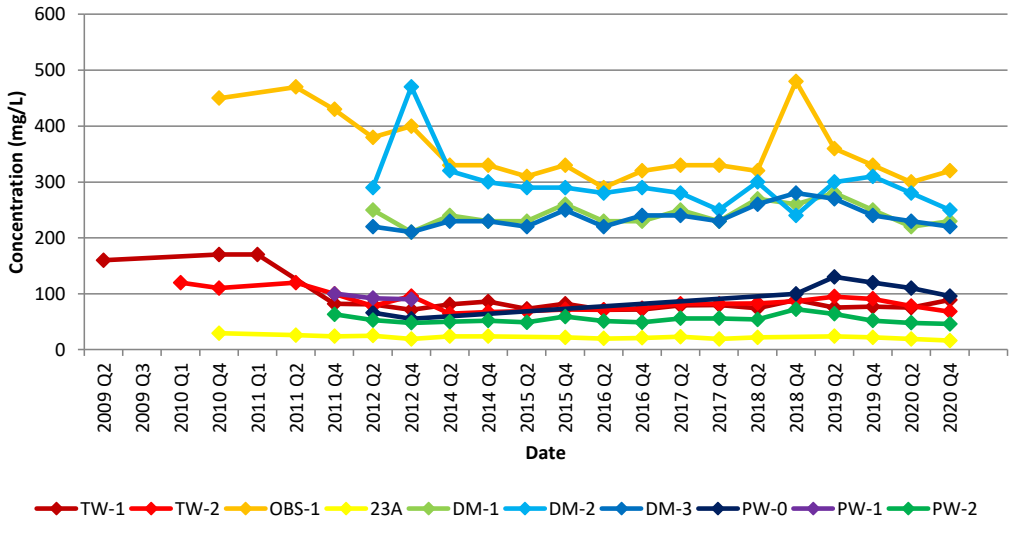


Chart 5: Copper

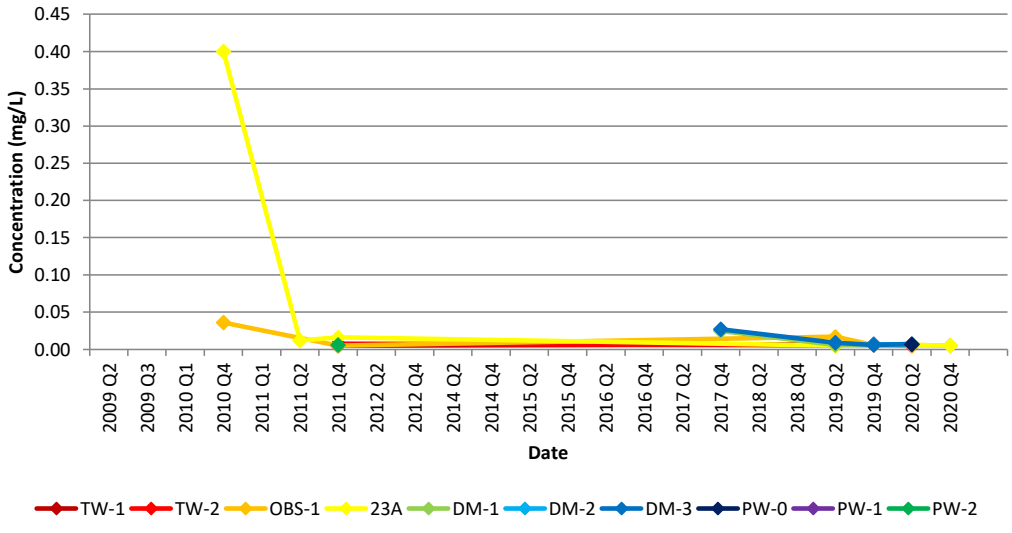


Chart 6: Sodium

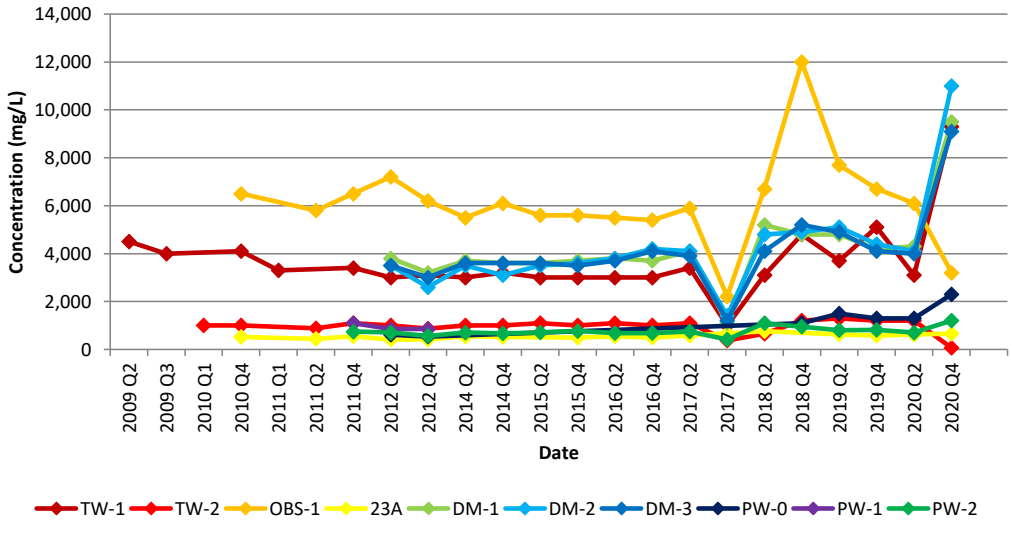


Chart 7: Potassium

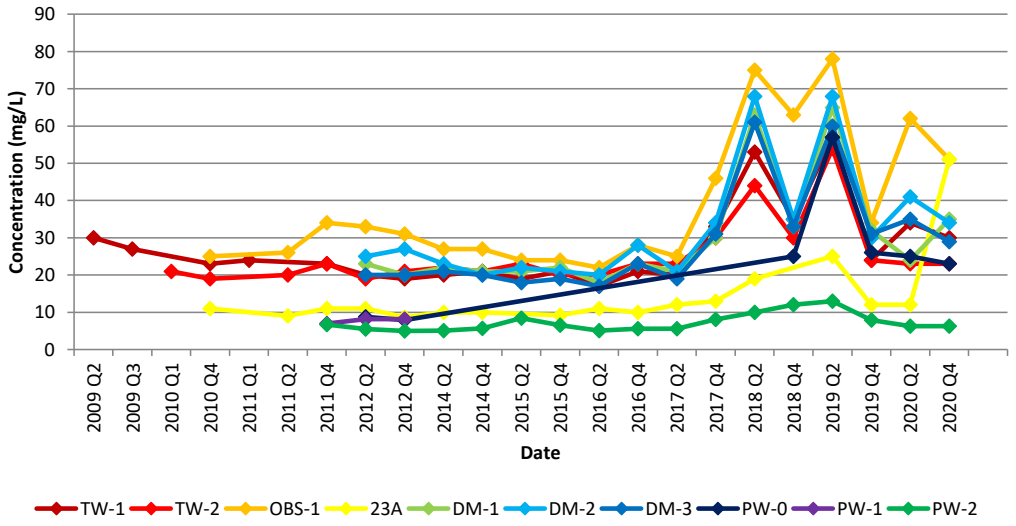


Chart 8: Iron

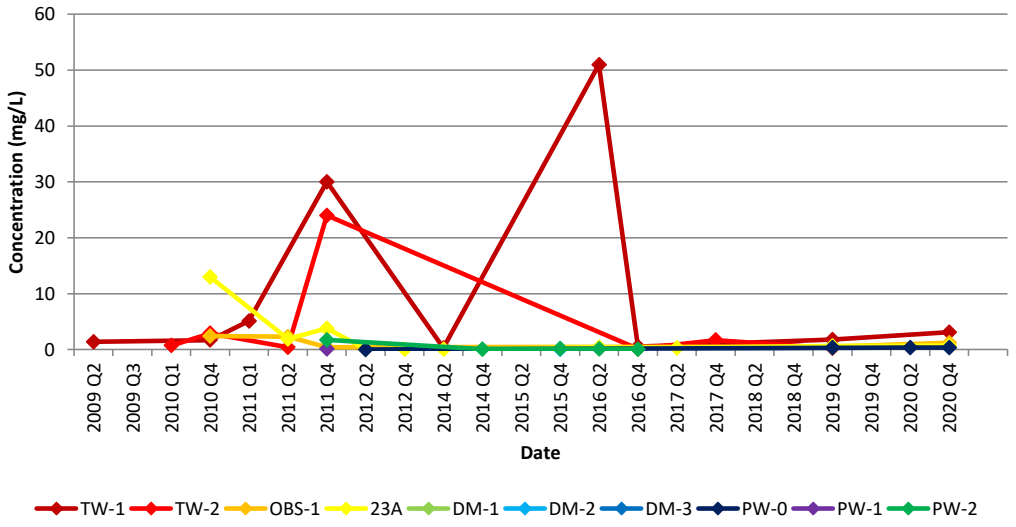


Chart 9: Magnesium

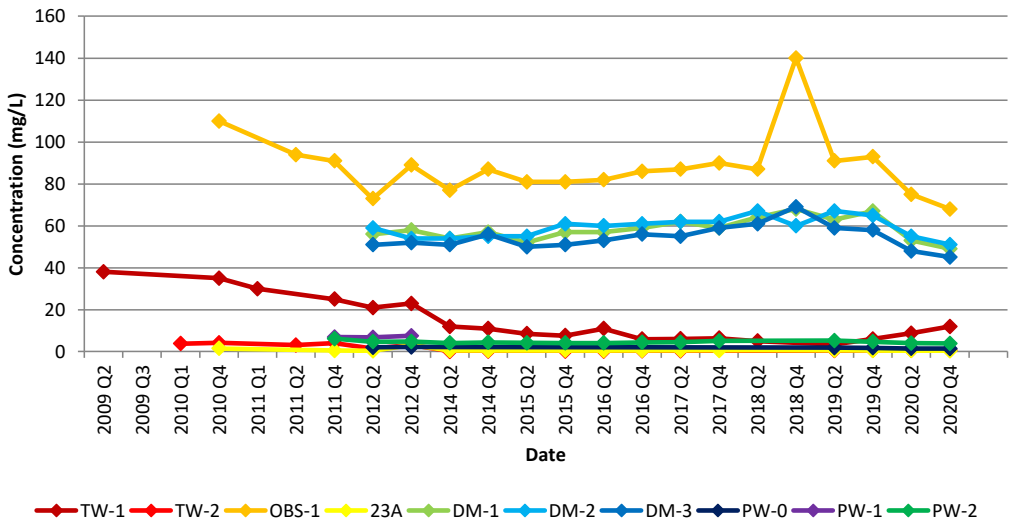


Chart 10: Antimony

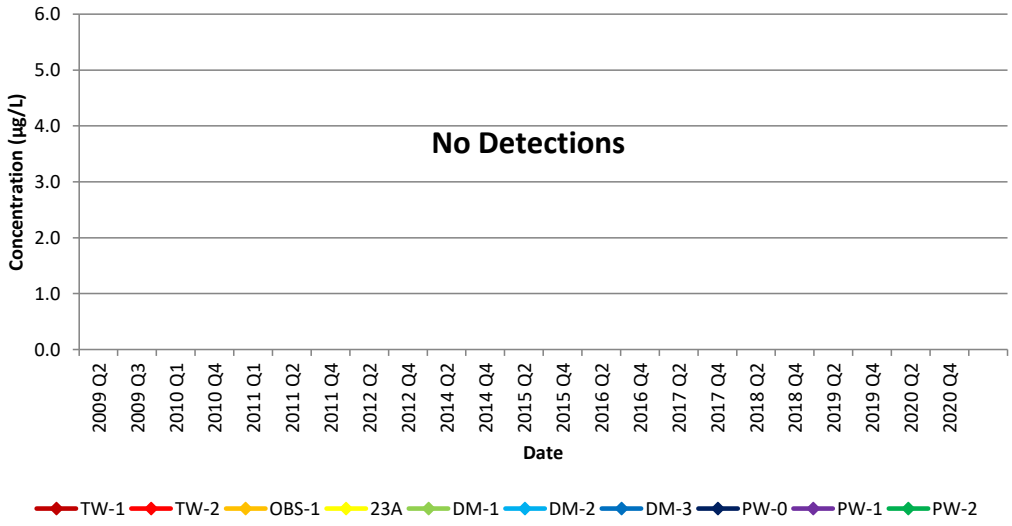


Chart 11: Arsenic

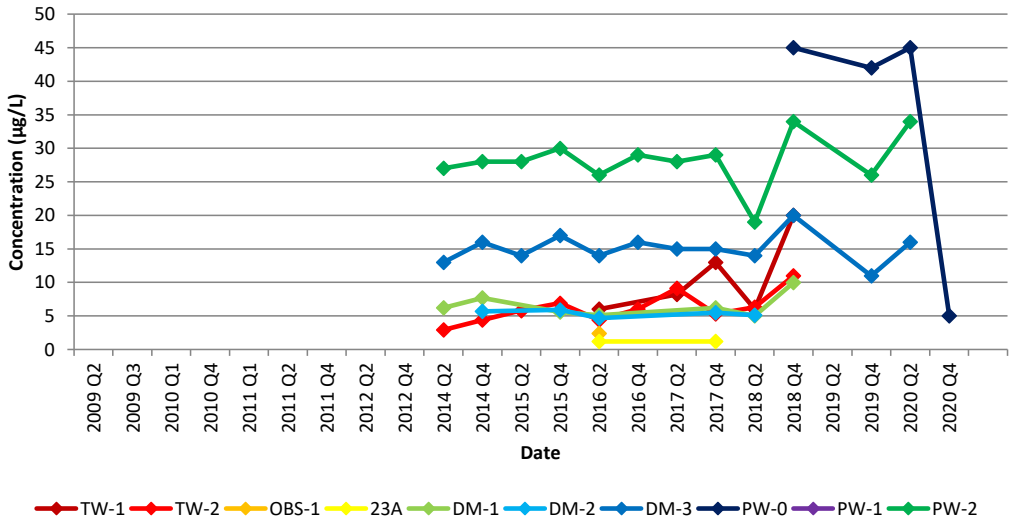


Chart 12: Barium

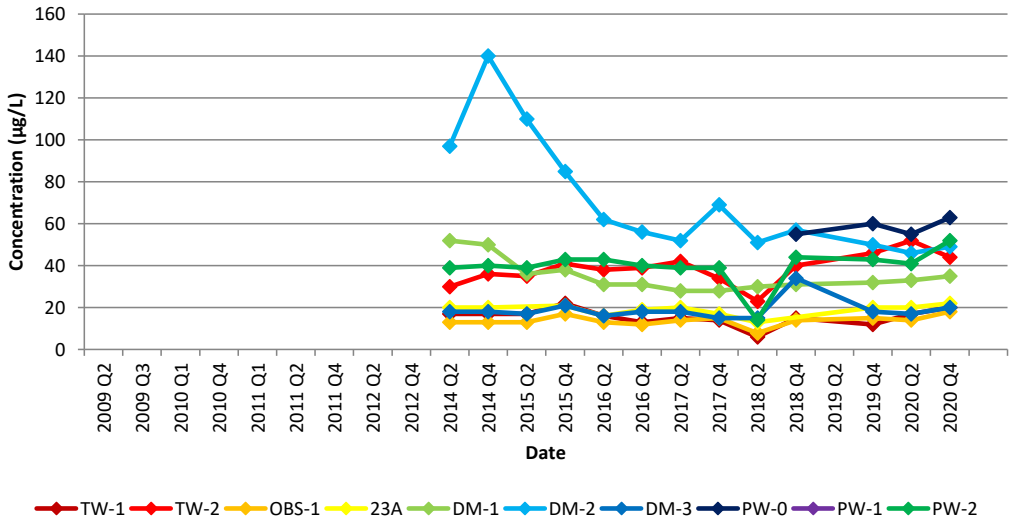


Chart 13: Cadmium

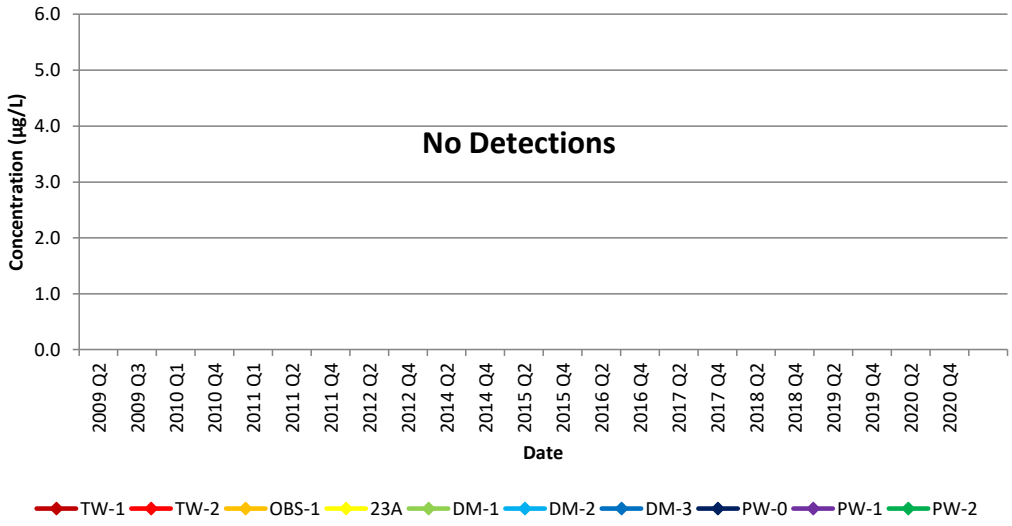


Chart 14: Chromium (Total)

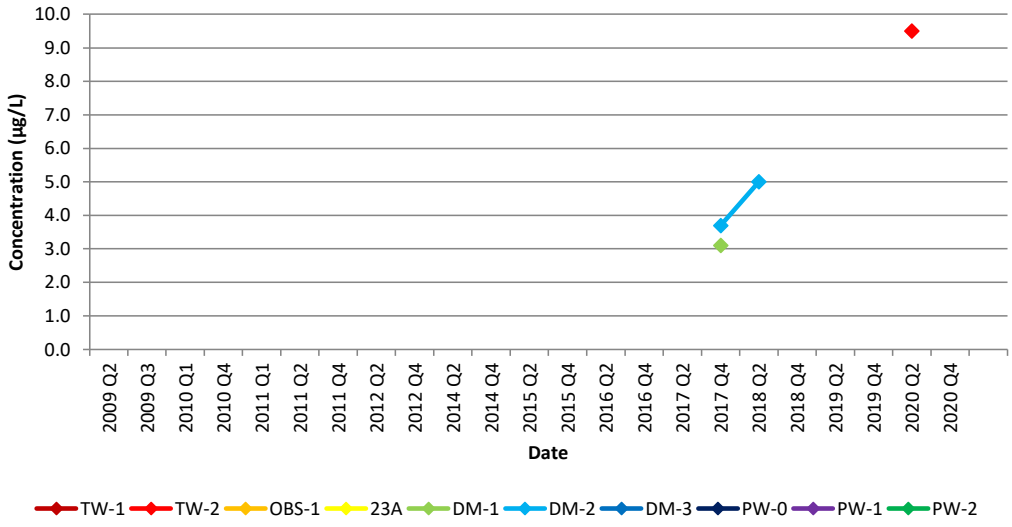


Chart 15: Cobalt

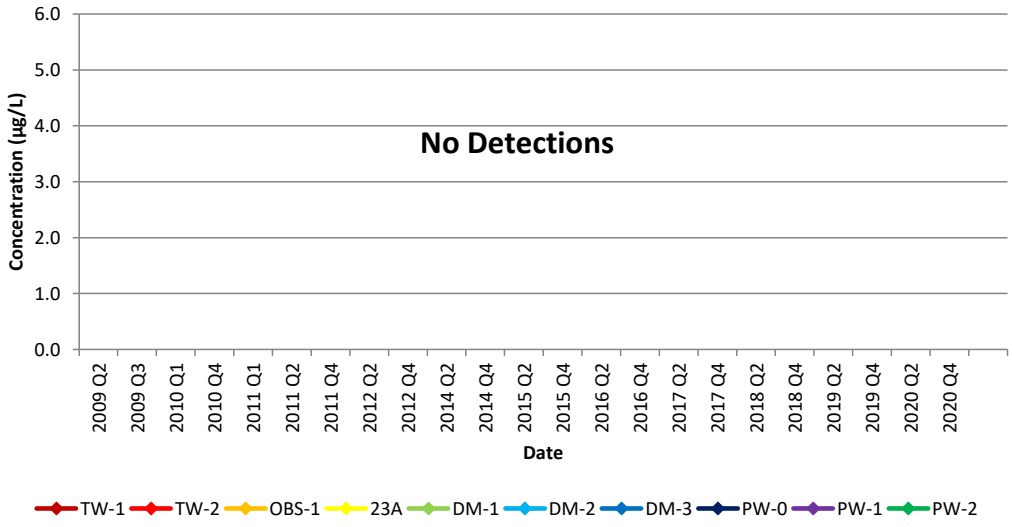


Chart 16: Lead

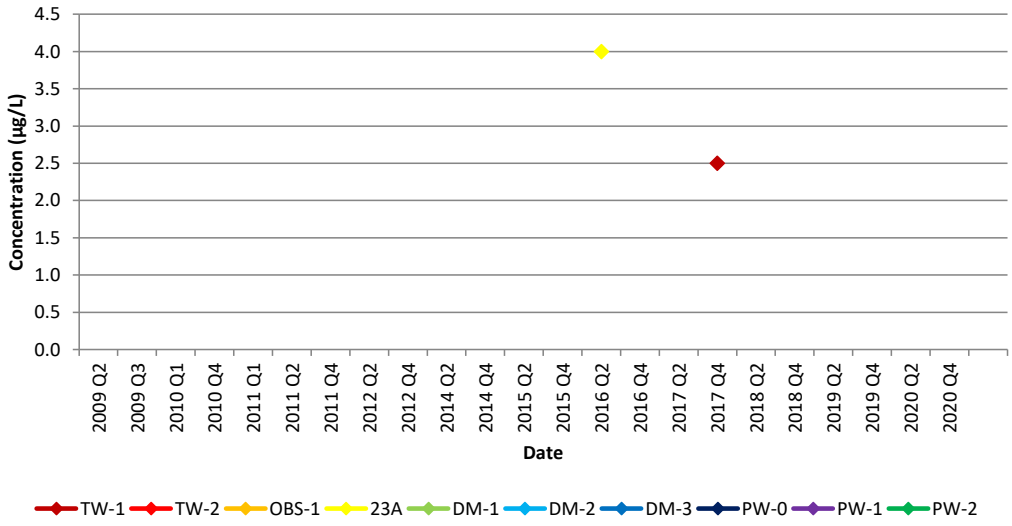


Chart 17: Manganese

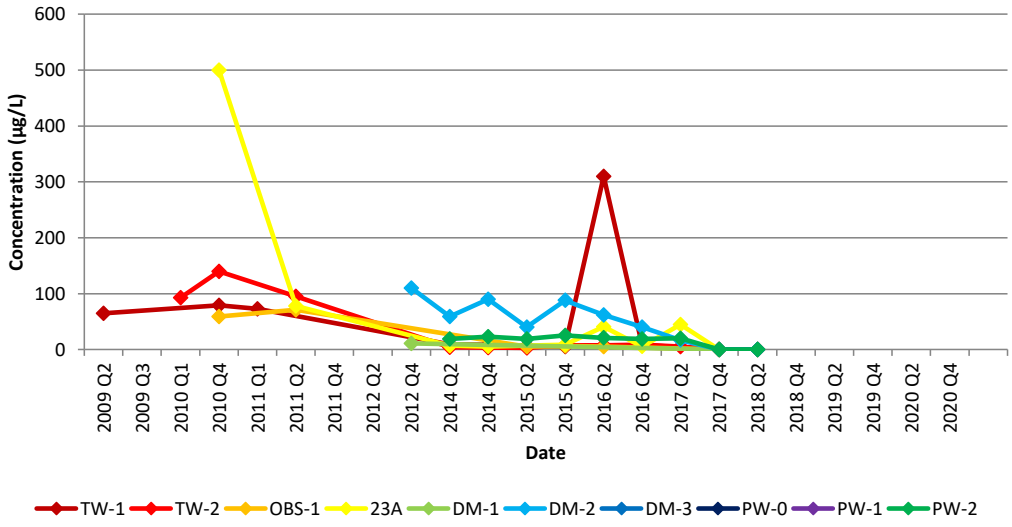


Chart 18: Nickel

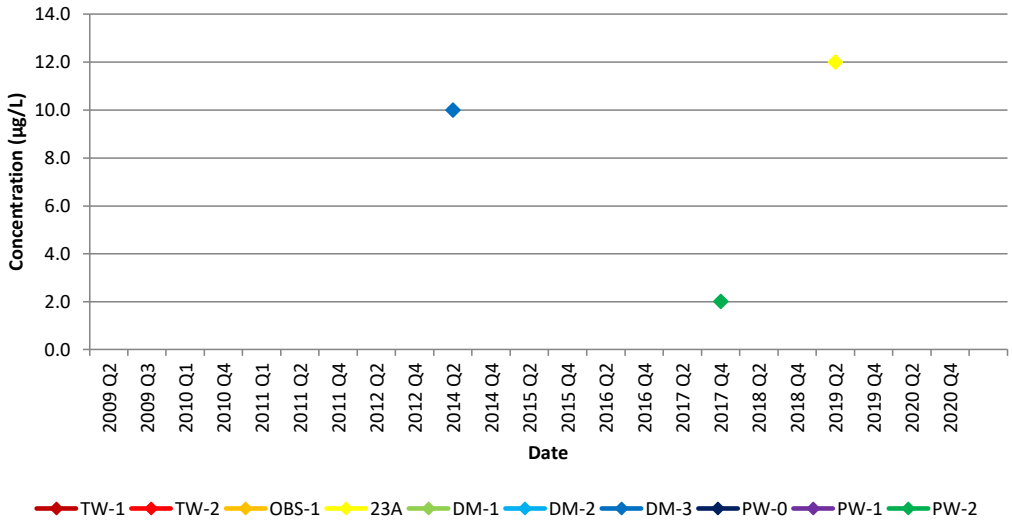


Chart 19: Selenium

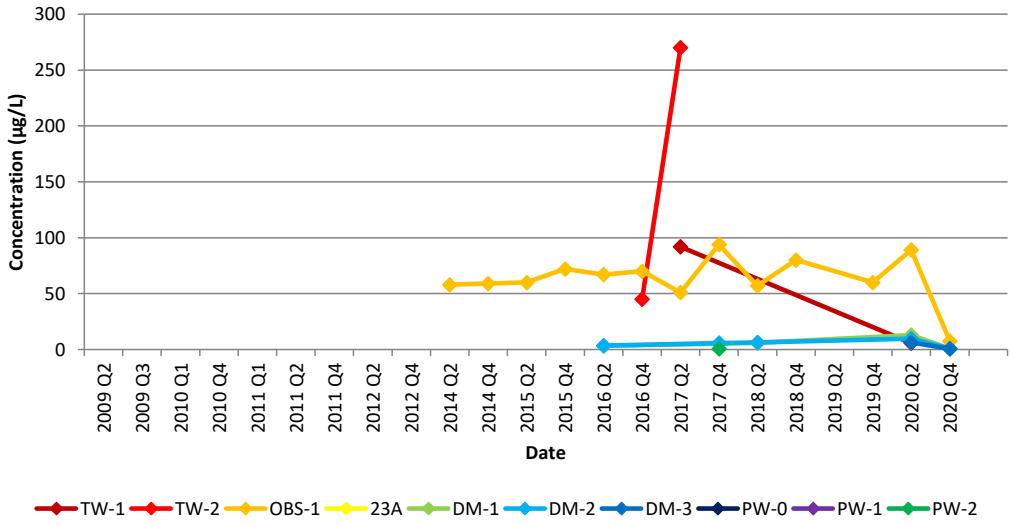


Chart 20: Zinc

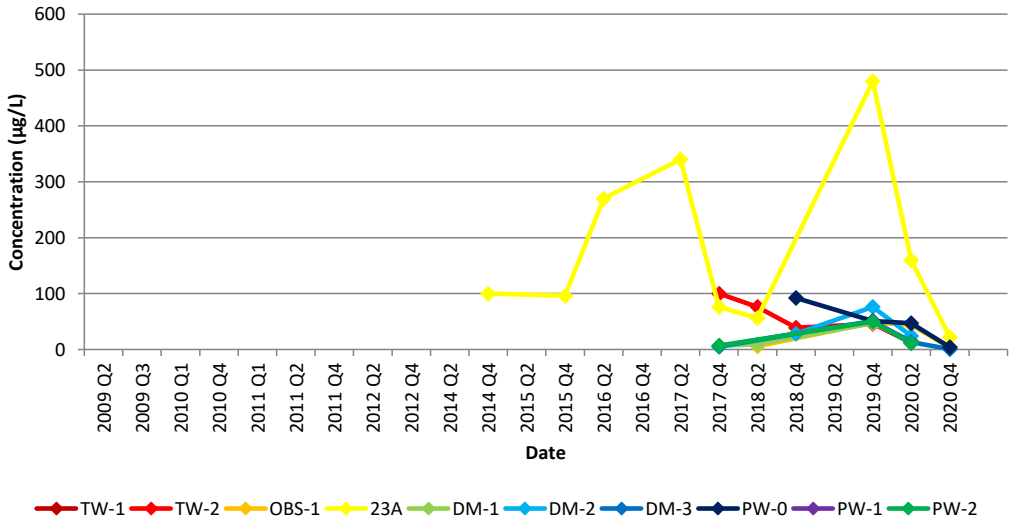


Chart 21: Mercury

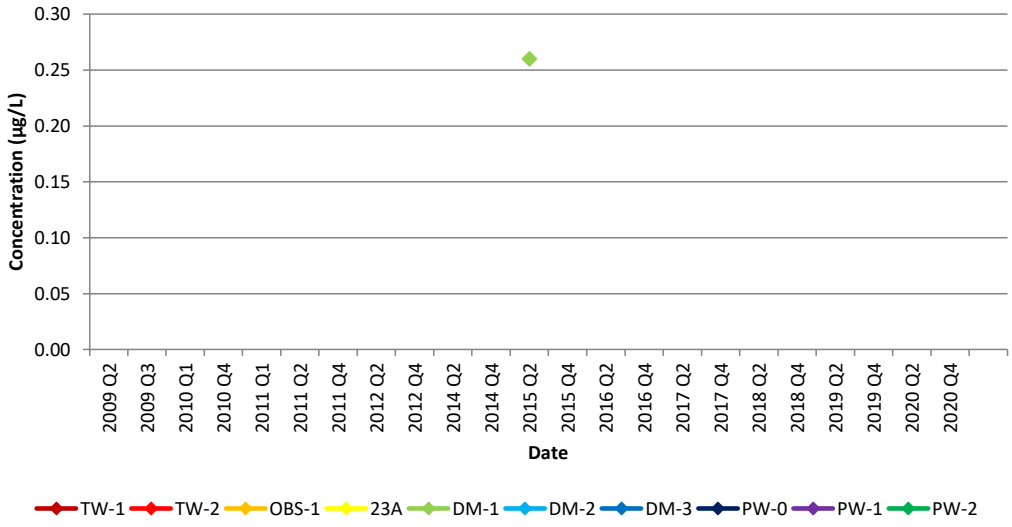


Chart 22: Total Dissolved Solids

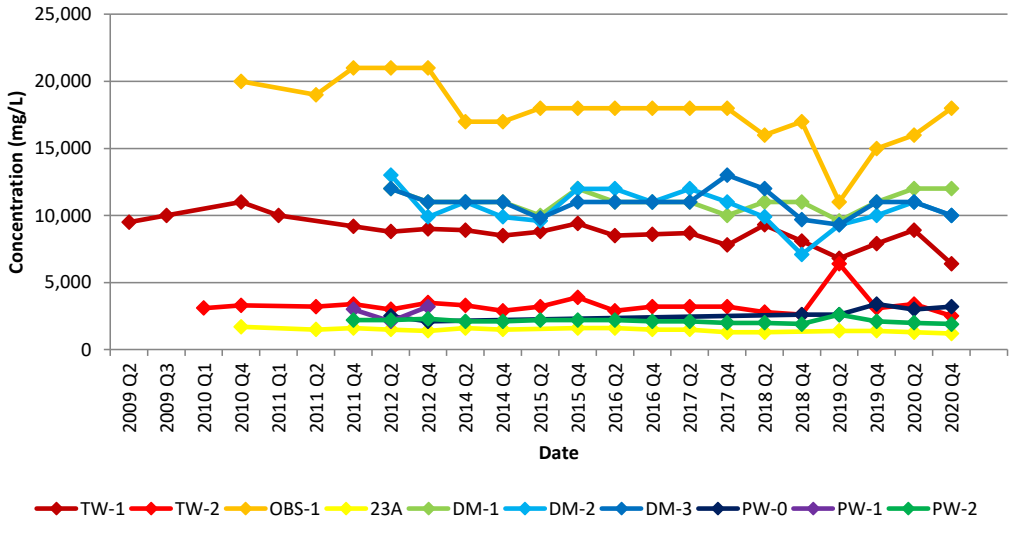


Chart 23: Specific Conductance

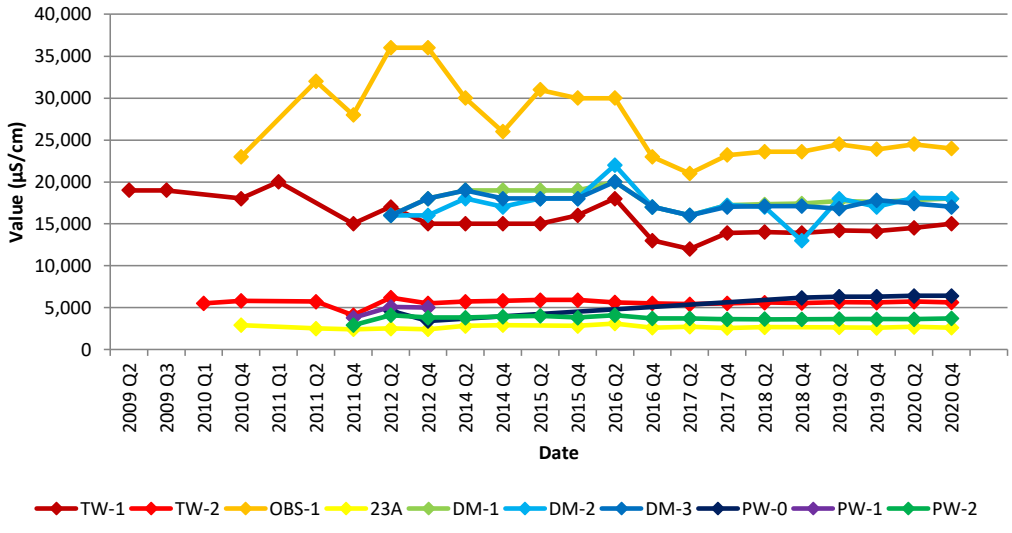
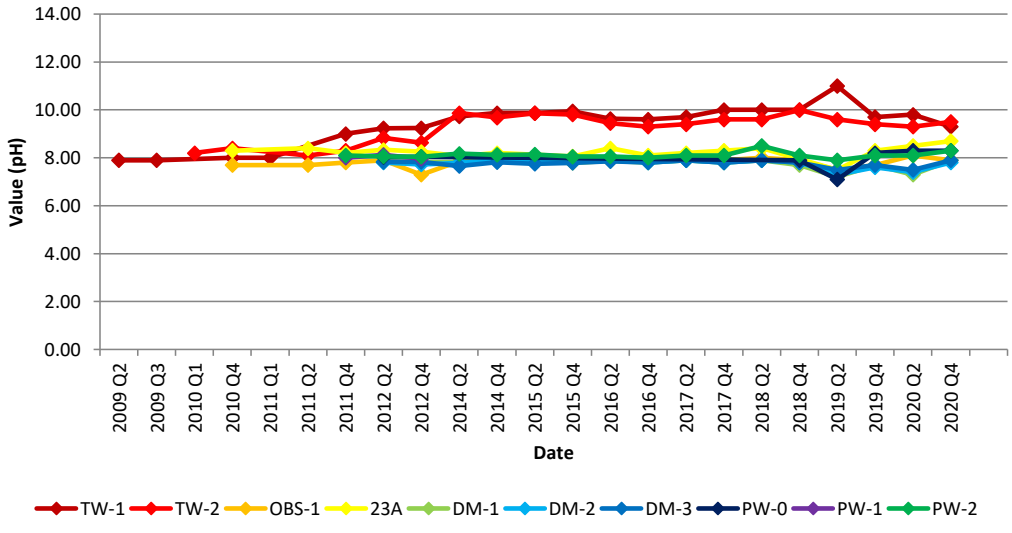


Chart 24: pH



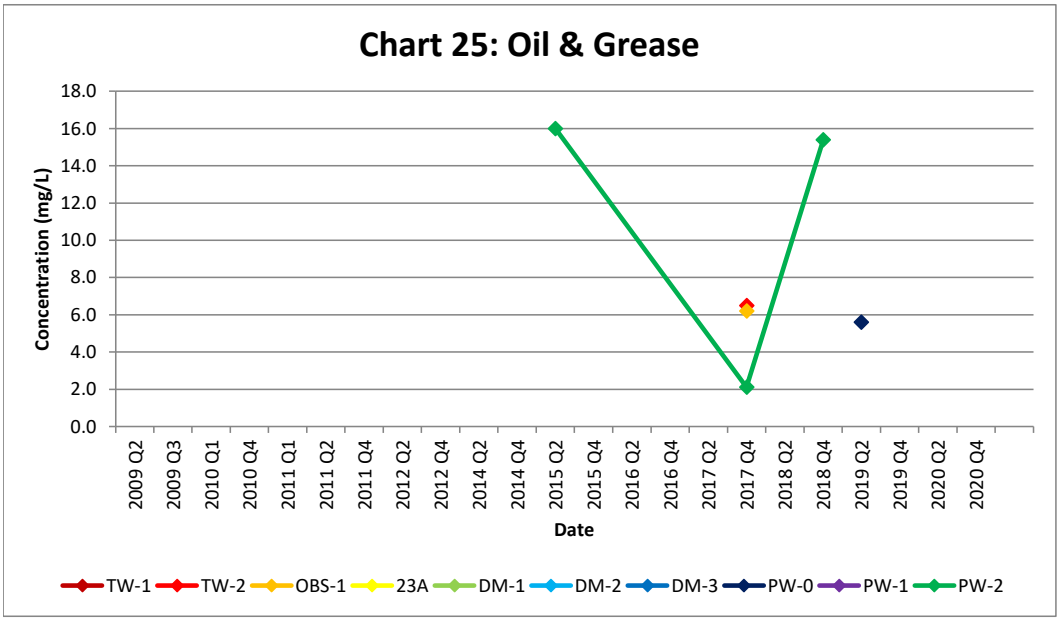


Chart 25: Oil & Grease
Concentration (mg/L)
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
2009 Q2
2009 Q3
2010 Q1
2010 Q4
2011 Q1
2011 Q2
2011 Q4
2012 Q2
2012 Q4
2014 Q2
2014 Q4
2015 Q2
2015 Q4
2016 Q2
2016 Q4
2017 Q2
2017 Q4
2018 Q2
2018 Q4
2019 Q2
2019 Q4
2020 Q2
2020 Q4
Date
TW-1
TW-2
OBS-1
23A
DM-1
DM-2
DM-3
PW-0
PW-1
PW-2

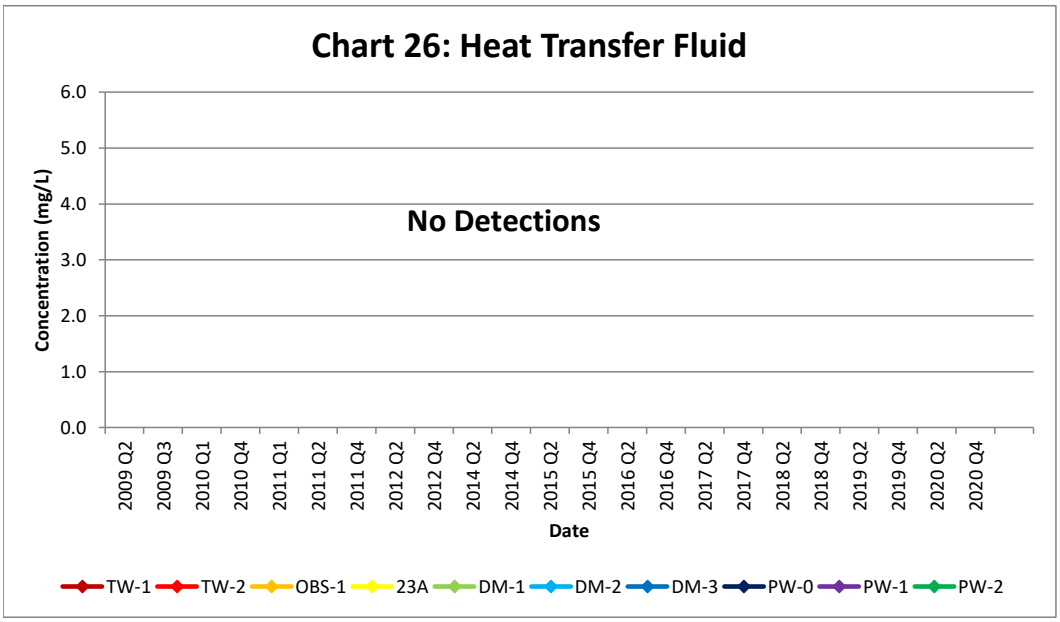


Chart 26: Heat Transfer Fluid
Concentration (mg/L)
6.0
5.0
4.0
3.0
2.0
1.0
0.0
No Detections
2009 Q2
2009 Q3
2010 Q1
2010 Q4
2011 Q1
2011 Q2
2011 Q4
2012 Q2
2012 Q4
2014 Q2
2014 Q4
2015 Q2
2015 Q4
2016 Q2
2016 Q4
2017 Q2
2017 Q4
2018 Q2
2018 Q4
2019 Q2
2019 Q4
2020 Q2
2020 Q4
Date
TW-1
TW-2
OBS-1
23A
DM-1
DM-2
DM-3
PW-0
PW-1
PW-2

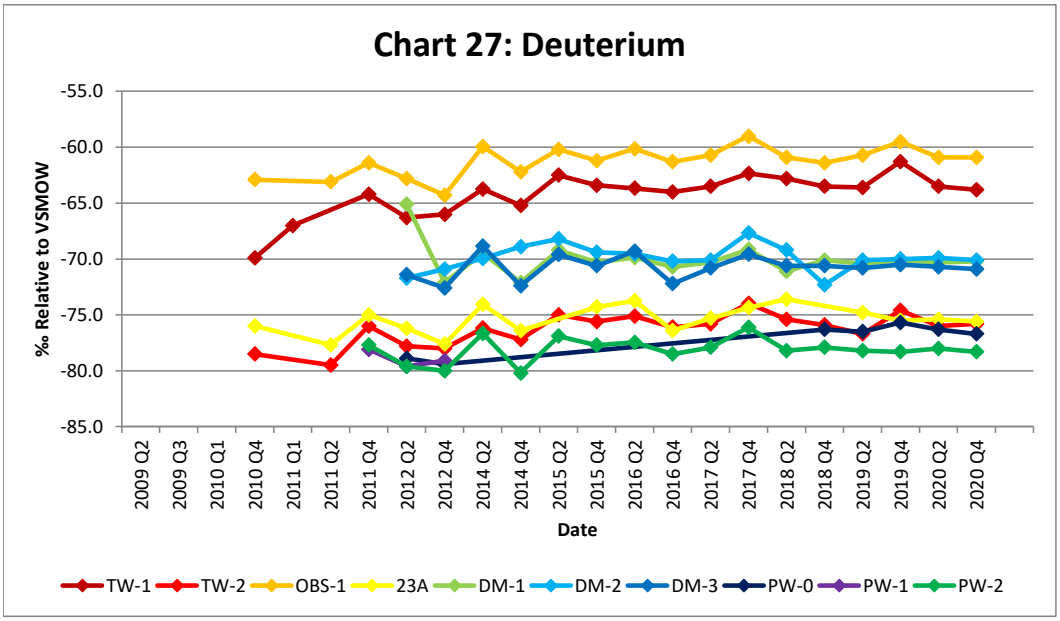


Chart 27: Deuterium
‰ Relative to VSMOW
-55.0
-60.0
-65.0
-70.0
-75.0
-80.0
-85.0
2009 Q2
2009 Q3
2010 Q1
2010 Q4
2011 Q1
2011 Q2
2011 Q4
2012 Q2
2012 Q4
2014 Q2
2014 Q4
2015 Q2
2015 Q4
2016 Q2
2016 Q4
2017 Q2
2017 Q4
2018 Q2
2018 Q4
2019 Q2
2019 Q4
2020 Q2
2020 Q4
Date
TW-1
TW-2
OBS-1
23A
DM-1
DM-2
DM-3
PW-0
PW-1
PW-2

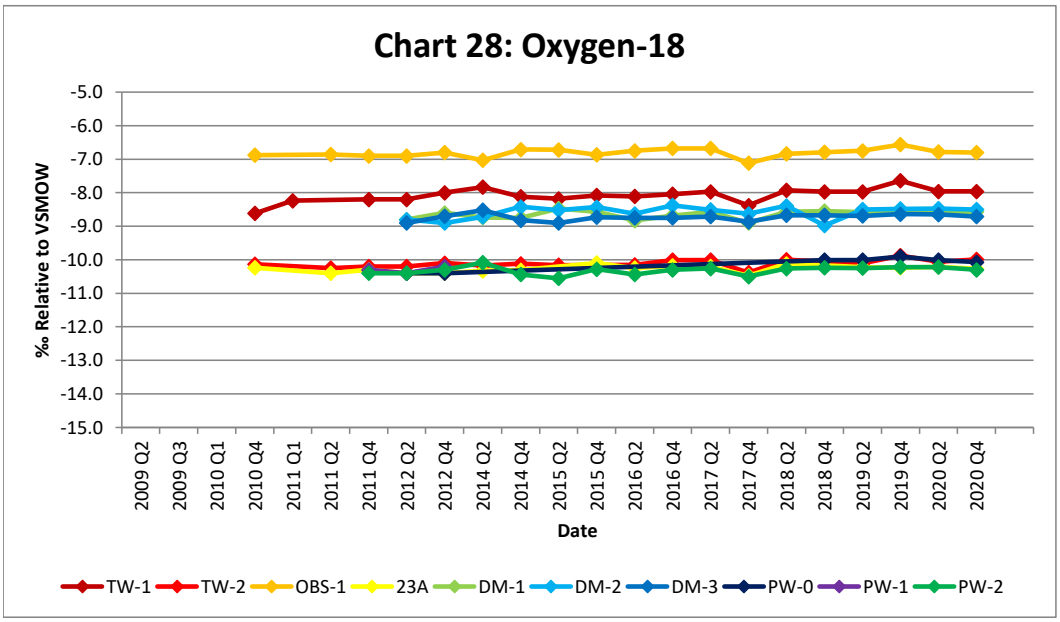
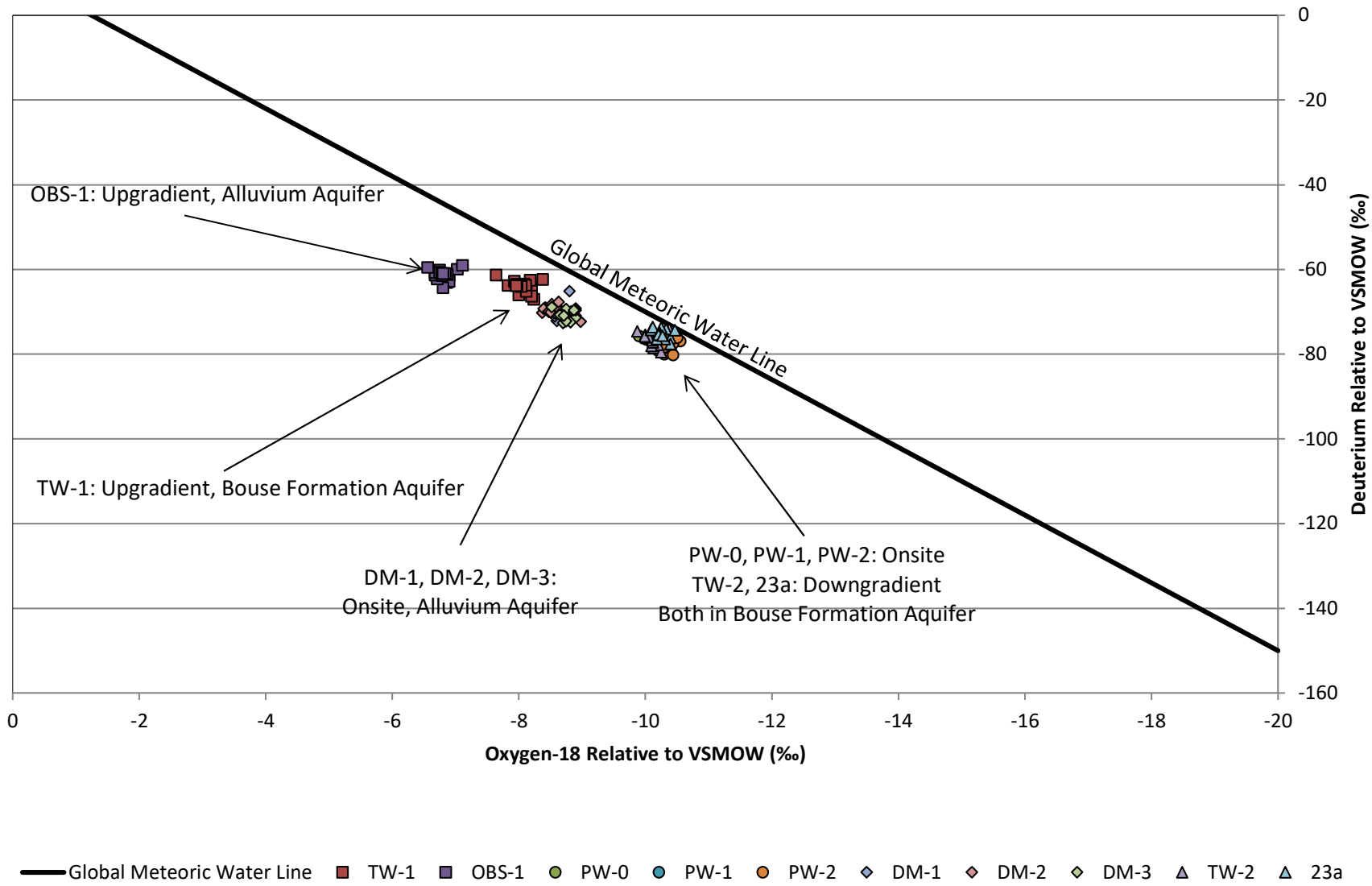


Chart 28: Oxygen-18
‰ Relative to VSMOW
-5.0
-6.0
-7.0
-8.0
-9.0
-10.0
-11.0
-12.0
-13.0
-14.0
-15.0
2009 Q2
2009 Q3
2010 Q1
2010 Q4
2011 Q1
2011 Q2
2011 Q4
2012 Q2
2012 Q4
2014 Q2
2014 Q4
2015 Q2
2015 Q4
2016 Q2
2016 Q4
2017 Q2
2017 Q4
2018 Q2
2018 Q4
2019 Q2
2019 Q4
2020 Q2
2020 Q4
Date
TW-1
TW-2
OBS-1
23A
DM-1
DM-2
DM-3
PW-0
PW-1
PW-2

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



APPENDIX C

MANN-KENDALL TREND ANALYSIS

Appendix C
2020 Second Semiannual Summary of Mann-Kendall Test for Trend
Genesis Solar Energy Project, Blythe, CA

Well ID	Constituent	Minimum	Maximum	Mean	Kendall Tau Value	2-Sided p-Value	Trend Direction at 95% Confidence Interval
TW-1	Arsenic	N/A	N/A	N/A	N/A	N/A	No New Data
	Barium	5.9	22	15.5	-0.228	0.32013	No Statistical Trend
	Calcium	71	170	91.9	-0.235	0.16165	No Statistical Trend
	Chloride	3,510	7,300	4,685	-0.192	0.21359	No Statistical Trend
	Selenium	N/A	N/A	N/A	N/A	N/A	No New Data
	Specific Conductivity	12,000	20,000	15,765	-0.539	0.00055	Decreasing Trend
	Sulfate	1,130	2,490	1,523	-0.057	0.72986	No Statistical Trend
	Total Dissolved Solids	6,400	10,000	8,757	-0.593	0.00010	Decreasing Trend
	Zinc	N/A	N/A	N/A	N/A	N/A	Not Enough Data
TW-2	Arsenic	2.9	11	6.2	0.584	0.02476	No New Data
	Barium	23	52	38.5	0.462	0.03274	Increasing Trend
	Calcium	64	120	86.0	-0.202	0.21485	No Statistical Trend
	Chloride	850	2,750	1,562	0.273	0.09883	No Statistical Trend
	Selenium	N/A	N/A	N/A	N/A	N/A	No New Data
	Specific Conductivity	4,100	6,200	5,578	0.010	0.97578	No Statistical Trend
	Sulfate	315	686	464	-0.306	0.07141	No Statistical Trend
	Total Dissolved Solids	2,500	6,400	3,295	-0.129	0.44541	No Statistical Trend
	Zinc	N/A	N/A	N/A	N/A	N/A	Not Enough Data
OBS-1	Arsenic	N/A	N/A	N/A	N/A	N/A	No New Data
	Barium	7.8	18	13.8	0.33	0.15004	No Statistical Trend
	Calcium	290	480	358	-0.402	0.02236	Decreasing Trend
	Chloride	5,200	9,710	6,428	-0.153	0.38089	No Statistical Trend
	Selenium	7.6	94	63.4	0.116	0.62485	No Statistical Trend
	Specific Conductivity	21,000	36,000	27,016	-0.287	0.09852	No Statistical Trend
	Sulfate	4,800	9,400	6,154	-0.229	0.18316	No Statistical Trend
	Total Dissolved Solids	11,000	21,000	17,737	-0.544	0.00238	Decreasing Trend
	Zinc	N/A	N/A	N/A	N/A	N/A	Not Enough Data
23a	Arsenic	N/A	N/A	N/A	N/A	N/A	No New Data
	Barium	13	22	18.9	0.060	0.86956	No Statistical Trend
	Calcium	16	29	22.3	-0.554	0.00302	Decreasing Trend
	Chloride	410	667	499	-0.037	0.86872	No Statistical Trend
	Selenium	N/A	N/A	N/A	N/A	N/A	No New Data
	Specific Conductivity	1,690	3,100	2,605	-0.097	0.61960	No Statistical Trend
	Sulfate	370	490	416	-0.085	0.68391	No Statistical Trend
	Total Dissolved Solids	1,300	1,700	1,465	-0.610	0.00148	Decreasing Trend
	Zinc	22	480	178	-0.167	0.60217	No Statistical Trend
DM-1	Arsenic	N/A	N/A	N/A	N/A	N/A	No New Data
	Barium	28	52	35	-0.263	0.24225	No Statistical Trend
	Calcium	210	280	242	0.136	0.51407	No Statistical Trend
	Chloride	4,600	8,180	5,533	0.322	0.09418	No Statistical Trend
	Selenium	N/A	N/A	N/A	N/A	N/A	No New Data
	Specific Conductivity	16,000	20,000	17,875	0.017	0.96370	No Statistical Trend
	Sulfate	1,700	3,280	2,137	/226	0.27113	No Statistical Trend
	Total Dissolved Solids	9,600	12,000	11,038	-0.010	1.00000	No Statistical Trend
	Zinc	N/A	N/A	N/A	N/A	N/A	Not Enough Data
DM-2	Arsenic	N/A	N/A	N/A	N/A	N/A	No New Data
	Barium	46	140	71.0	-0.769	0.00032	Decreasing Trend
	Calcium	240	470	296	-0.362	0.06684	No Statistical Trend
	Chloride	4,400	7,680	5,253	0.559	0.00328	Increasing Trend
	Selenium	N/A	N/A	N/A	N/A	N/A	No New Data
	Specific Conductivity	13,000	22,000	17,269	0.173	0.40353	No Statistical Trend
	Sulfate	1,600	2,340	2,031	0.287	0.16029	No Statistical Trend
	Total Dissolved Solids	7,100	13,000	10,544	-0.221	0.27148	No Statistical Trend
	Zinc	N/A	N/A	N/A	N/A	N/A	Not Enough Data
DM-3	Arsenic	N/A	N/A	N/A	N/A	N/A	No New Data
	Barium	15	34	18.8	0.000	1.00000	No Statistical Trend
	Calcium	210	280	237	0.330	0.09763	No Statistical Trend
	Chloride	4,400	9,760	5,451	0.346	0.07086	No Statistical Trend
	Selenium	N/A	N/A	N/A	N/A	N/A	No New Data
	Specific Conductivity	16,000	20,000	17,513	-0.219	0.27282	No Statistical Trend
	Sulfate	1,800	2,840	2,266	0.332	0.08529	No Statistical Trend
	Total Dissolved Solids	9,300	13,000	10,925	-0.230	0.27153	No Statistical Trend
	Zinc	N/A	N/A	N/A	N/A	N/A	Not Enough Data

Appendix C
2020 Second Semiannual Summary of Mann-Kendall Test for Trend
Genesis Solar Energy Project, Blythe, CA

Well ID	Constituent	Minimum	Maximum	Mean	Kendall Tau Value	2-Sided p-Value	Trend Direction at 95% Confidence Interval
PW-0	Arsenic	N/A	N/A	N/A	N/A	N/A	Not Enough Data
	Barium	N/A	N/A	N/A	N/A	N/A	Not Enough Data
	Calcium	N/A	N/A	N/A	N/A	N/A	Not Enough Data
	Chloride	N/A	N/A	N/A	N/A	N/A	Not Enough Data
	Selenium	N/A	N/A	N/A	N/A	N/A	Not Enough Data
	Specific Conductivity	N/A	N/A	N/A	N/A	N/A	Not Enough Data
	Sulfate	N/A	N/A	N/A	N/A	N/A	Not Enough Data
	Total Dissolved Solids	N/A	N/A	N/A	N/A	N/A	Not Enough Data
	Zinc	N/A	N/A	N/A	N/A	N/A	Not Enough Data
PW-1	Arsenic	N/A	N/A	N/A	N/A	N/A	Not Enough Data
	Barium	N/A	N/A	N/A	N/A	N/A	Not Enough Data
	Calcium	N/A	N/A	N/A	N/A	N/A	Not Enough Data
	Chloride	N/A	N/A	N/A	N/A	N/A	Not Enough Data
	Selenium	N/A	N/A	N/A	N/A	N/A	Not Enough Data
	Specific Conductivity	N/A	N/A	N/A	N/A	N/A	Not Enough Data
	Sulfate	N/A	N/A	N/A	N/A	N/A	Not Enough Data
	Total Dissolved Solids	N/A	N/A	N/A	N/A	N/A	Not Enough Data
	Zinc	N/A	N/A	N/A	N/A	N/A	Not Enough Data
PW-2	Arsenic	N/A	N/A	N/A	N/A	N/A	No New Data
	Barium	7.3	53	39.1	0.225	0.32384	No Statistical Trend
	Calcium	46	72	53.5	-0.008	1.00000	No Statistical Trend
	Chloride	570	1,300	865	0.258	0.16099	No Statistical Trend
	Selenium	N/A	N/A	N/A	N/A	N/A	No New Data
	Specific Conductivity	2,900	4,100	3,694	-0.189	0.31940	No Statistical Trend
	Sulfate	290	530	434	0.076	0.71789	No Statistical Trend
	Total Dissolved Solids	1,600	2,300	2,076	-0.568	0.00305	Decreasing Trend
	Zinc	N/A	N/A	N/A	N/A	N/A	Not Enough Data

N/A - Not Applicable; not enough data to calculate trend or no new data for the reporting period

APPENDIX D

LABORATORY REPORTS

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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23 December 2020

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 12/04/20 12:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Joann Marroquin For Jeff Lee
Project Manager

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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Lake Forest, California 92630
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Northstar Environmental Remediation	Project: Genesis Solar Groundwater	
26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
23a	T204118-01	Water	12/03/20 09:15	12/04/20 12:45
OBS-1	T204118-02	Water	12/03/20 14:40	12/04/20 12:45
TW-1	T204118-03	Water	12/03/20 15:00	12/04/20 12:45
TW-2	T204118-04	Water	12/03/20 13:10	12/04/20 12:45
PW-0	T204118-05	Water	12/03/20 12:40	12/04/20 12:45
PW-2	T204118-06	Water	12/03/20 12:50	12/04/20 12:45
DM-1	T204118-07	Water	12/03/20 09:15	12/04/20 12:45
DM-2	T204118-08	Water	12/03/20 10:15	12/04/20 12:45
DM-3	T204118-09	Water	12/03/20 11:30	12/04/20 12:45
DUP	T204118-10	Water	12/03/20 00:00	12/04/20 12:45

Metals analysis for EPA 200.8 and 200.7 were filtered in the field prior to laboratory analysis. The results are reported as dissolved metals. JL 12/16/20

Nitrate samples were originally analyzed within 48hr hold time. However, due to sample matrix, additional dilutions were required. The extra dilutions were conducted outside of method recommended hold time. JL 12/16/20

SunStar Laboratories, Inc.

Joann Marroquin

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Joann Marroquin For Jeff Lee, Project Manager

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Northstar Environmental Remediation	Project: Genesis Solar Groundwater	
26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

DETECTIONS SUMMARY

Sample ID: 23a **Laboratory ID:** T204118-01

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**22**	5.0	ug/l	200.8	FILT
Copper	**0.005**	0.005	mg/l	EPA 200.7	FILT
Zinc	**22**	0.50	ug/l	200.8	FILT
Calcium	**16**	0.10	mg/l	EPA 200.7	FILT
Iron	**0.71**	0.20	mg/l	EPA 200.7	FILT
Potassium	**51**	0.50	mg/l	EPA 200.7	FILT
Magnesium	**0.35**	0.10	mg/l	EPA 200.7	FILT
Sodium	**650**	12	mg/l	EPA 200.7	FILT
Total Dissolved Solids	**1200**	10	mg/l	TDS by SM2540C	
pH	**8.7**	0.10	pH Units	SM 4500-H+B	O-04
Specific Conductance (EC)	**2600**	10	umhos/cm	SM2510b/120.1	
Chloride	**481**	50.0	mg/l	EPA 300.0	QM-05
Sulfate as SO4	**411**	50.0	mg/l	EPA 300.0	QM-05
Nitrate as NO3	**0.704**	0.500	mg/l	EPA 300.0	

Sample ID: OBS-1 **Laboratory ID:** T204118-02

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**18**	5.0	ug/l	200.8	FILT
Copper	**0.005**	0.005	mg/l	EPA 200.7	FILT
Selenium	**7.6**	0.50	ug/l	200.8	FILT
Zinc	**3.7**	0.50	ug/l	200.8	FILT
Calcium	**320**	30	mg/l	EPA 200.7	FILT
Iron	**1.2**	0.20	mg/l	EPA 200.7	FILT
Potassium	**51**	0.50	mg/l	EPA 200.7	FILT
Magnesium	**68**	0.10	mg/l	EPA 200.7	FILT
Sodium	**320**	150	mg/l	EPA 200.7	FILT
pH	**7.9**	0.10	pH Units	SM 4500-H+B	
Total Dissolved Solids	**18000**	10	mg/l	TDS by SM2540C	
Specific Conductance (EC)	**24000**	10	umhos/cm	SM2510b/120.1	
Chloride	**6560**	1000	mg/l	EPA 300.0	
Sulfate as SO4	**6200**	1000	mg/l	EPA 300.0	

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Joann Marroquin

Joann Marroquin For Jeff Lee, Project Manager

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Northstar Environmental Remediation	Project: Genesis Solar Groundwater	
26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

Sample ID: OBS-1 **Laboratory ID:** T204118-02

Analyte	Result	Reporting Limit	Units	Method	Notes
Nitrate as NO3	**5.41**	0.500	mg/l	EPA 300.0	
Nitrate as N	**1.22**	0.200	mg/l	EPA 300.0	

Sample ID: TW-1 **Laboratory ID:** T204118-03

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**20**	5.0	ug/l	200.8	FILT
Calcium	**89**	0.10	mg/l	EPA 200.7	FILT
Iron	**3.1**	0.20	mg/l	EPA 200.7	FILT
Potassium	**30**	0.50	mg/l	EPA 200.7	FILT
Magnesium	**12**	0.10	mg/l	EPA 200.7	FILT
Sodium	**9300**	150	mg/l	EPA 200.7	FILT
pH	**9.3**	0.10	pH Units	SM 4500-H+B	
Total Dissolved Solids	**6400**	10	mg/l	TDS by SM2540C	
Specific Conductance (EC)	**15000**	10	umhos/cm	SM2510b/120.1	
Chloride	**4750**	500	mg/l	EPA 300.0	
Sulfate as SO4	**1710**	500	mg/l	EPA 300.0	
Nitrate as NO3	**0.657**	0.500	mg/l	EPA 300.0	

Sample ID: TW-2 **Laboratory ID:** T204118-04

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**44**	5.0	ug/l	200.8	FILT
Calcium	**68**	0.10	mg/l	EPA 200.7	FILT
Potassium	**23**	0.50	mg/l	EPA 200.7	FILT
Magnesium	**0.63**	0.10	mg/l	EPA 200.7	FILT
Sodium	**70**	40	mg/l	EPA 200.7	FILT
pH	**9.5**	0.10	pH Units	SM 4500-H+B	O-04
Total Dissolved Solids	**2500**	10	mg/l	TDS by SM2540C	
Specific Conductance (EC)	**5600**	10	umhos/cm	SM2510b/120.1	
Chloride	**1680**	500	mg/l	EPA 300.0	
Sulfate as SO4	**454**	50.0	mg/l	EPA 300.0	
Nitrate as NO3	**0.659**	0.500	mg/l	EPA 300.0	

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26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

Sample ID: PW-0 **Laboratory ID:** T204118-05

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**5.0**	5.0	ug/l	200.8	FILT
Barium	**63**	5.0	ug/l	200.8	FILT
Zinc	**4.2**	0.50	ug/l	200.8	FILT
Calcium	**96**	0.10	mg/l	EPA 200.7	FILT
Iron	**0.35**	0.20	mg/l	EPA 200.7	FILT
Magnesium	**1.4**	0.10	mg/l	EPA 200.7	FILT
Potassium	**23**	0.50	mg/l	EPA 200.7	FILT
Sodium	**2300**	50	mg/l	EPA 200.7	FILT
pH	**8.3**	0.10	pH Units	SM 4500-H+B	O-04
Total Dissolved Solids	**3200**	10	mg/l	TDS by SM2540C	
Specific Conductance (EC)	**6300**	10	umhos/cm	SM2510b/120.1	
Chloride	**1880**	250	mg/l	EPA 300.0	
Sulfate as SO4	**625**	100	mg/l	EPA 300.0	
Nitrate as NO3	**0.641**	0.500	mg/l	EPA 300.0	

Sample ID: PW-2 **Laboratory ID:** T204118-06

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**52**	5.0	ug/l	200.8	FILT
Calcium	**47**	0.10	mg/l	EPA 200.7	FILT
Magnesium	**3.8**	0.10	mg/l	EPA 200.7	FILT
Potassium	**6.4**	0.50	mg/l	EPA 200.7	FILT
Sodium	**1200**	25	mg/l	EPA 200.7	FILT
pH	**8.3**	0.10	pH Units	SM 4500-H+B	O-04
Total Dissolved Solids	**1900**	10	mg/l	TDS by SM2540C	
Specific Conductance (EC)	**3700**	10	umhos/cm	SM2510b/120.1	
Chloride	**1010**	250	mg/l	EPA 300.0	
Sulfate as SO4	**436**	50.0	mg/l	EPA 300.0	

Sample ID: DM-1 **Laboratory ID:** T204118-07

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**35**	5.0	ug/l	200.8	FILT
Selenium	**0.87**	0.50	ug/l	200.8	FILT
Calcium	**230**	20	mg/l	EPA 200.7	FILT

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Northstar Environmental Remediation	Project: Genesis Solar Groundwater	
26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

Sample ID: DM-1 **Laboratory ID:** T204118-07

Analyte	Result	Reporting Limit	Units	Method	Notes
Magnesium	**49**	0.10	mg/l	EPA 200.7	FILT
Potassium	**35**	0.50	mg/l	EPA 200.7	FILT
Sodium	**9500**	100	mg/l	EPA 200.7	FILT
pH	**7.9**	0.10	pH Units	SM 4500-H+B	O-04
Total Dissolved Solids	**12000**	10	mg/l	TDS by SM2540C	
Specific Conductance (EC)	**18000**	10	umhos/cm	SM2510b/120.1	
Chloride	**5530**	1000	mg/l	EPA 300.0	
Sulfate as SO4	**2150**	250	mg/l	EPA 300.0	
Nitrate as NO3	**8.50**	0.500	mg/l	EPA 300.0	
Nitrate as N	**1.92**	0.200	mg/l	EPA 300.0	

Sample ID: DM-2 **Laboratory ID:** T204118-08

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**49**	5.0	ug/l	200.8	FILT
Selenium	**0.94**	0.50	ug/l	200.8	FILT
Calcium	**250**	20	mg/l	EPA 200.7	FILT
Potassium	**34**	0.50	mg/l	EPA 200.7	FILT
Magnesium	**51**	0.10	mg/l	EPA 200.7	FILT
Sodium	**11000**	100	mg/l	EPA 200.7	FILT
pH	**7.8**	0.10	pH Units	SM 4500-H+B	O-04
Total Dissolved Solids	**10000**	10	mg/l	TDS by SM2540C	
Specific Conductance (EC)	**18000**	10	umhos/cm	SM2510b/120.1	
Chloride	**5730**	1000	mg/l	EPA 300.0	
Sulfate as SO4	**2340**	500	mg/l	EPA 300.0	
Nitrate as NO3	**9.46**	0.500	mg/l	EPA 300.0	
Nitrate as N	**2.14**	0.200	mg/l	EPA 300.0	

Sample ID: DM-3 **Laboratory ID:** T204118-09

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**20**	5.0	ug/l	200.8	FILT
Selenium	**0.68**	0.50	ug/l	200.8	FILT
Zinc	**0.55**	0.50	ug/l	200.8	FILT
Calcium	**220**	20	mg/l	EPA 200.7	FILT

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26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

Sample ID: DM-3 **Laboratory ID:** T204118-09

Analyte	Result	Reporting Limit	Units	Method	Notes
Magnesium	**45**	0.10	mg/l	EPA 200.7	FILT
Potassium	**29**	0.50	mg/l	EPA 200.7	FILT
Sodium	**9100**	100	mg/l	EPA 200.7	FILT
pH	**7.9**	0.10	pH Units	SM 4500-H+B	O-04
Total Dissolved Solids	**10000**	10	mg/l	TDS by SM2540C	
Specific Conductance (EC)	**17000**	10	umhos/cm	SM2510b/120.1	
Chloride	**5420**	1000	mg/l	EPA 300.0	
Sulfate as SO4	**2300**	500	mg/l	EPA 300.0	
Nitrate as NO3	**2.47**	0.500	mg/l	EPA 300.0	
Nitrate as N	**0.560**	0.200	mg/l	EPA 300.0	

Sample ID: DUP **Laboratory ID:** T204118-10

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**53**	5.0	ug/l	200.8	FILT
Zinc	**0.66**	0.50	ug/l	200.8	FILT
Calcium	**46**	0.10	mg/l	EPA 200.7	FILT
Magnesium	**3.9**	0.10	mg/l	EPA 200.7	FILT
Potassium	**6.3**	0.50	mg/l	EPA 200.7	FILT
Sodium	**2000**	50	mg/l	EPA 200.7	FILT
Total Dissolved Solids	**1900**	10	mg/l	TDS by SM2540C	
pH	**8.3**	0.10	pH Units	SM 4500-H+B	O-04
Specific Conductance (EC)	**3700**	10	umhos/cm	SM2510b/120.1	
Chloride	**920**	50.0	mg/l	EPA 300.0	
Sulfate as SO4	**431**	50.0	mg/l	EPA 300.0	

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Joann Marroquin

Joann Marroquin For Jeff Lee, Project Manager

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Northstar Environmental Remediation	Project: Genesis Solar Groundwater	
26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

23a

T204118-01 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 200 Series Methods									
Copper	**0.005**	0.005	mg/l	1	0120420	12/04/20	12/14/20	EPA 200.7	FILT
Calcium	**16**	0.10	"	"	"	"	12/14/20	"	FILT
Iron	**0.71**	0.20	"	"	"	"	"	"	FILT
Magnesium	**0.35**	0.10	"	"	"	"	"	"	FILT
Potassium	**51**	0.50	"	"	"	"	"	"	FILT
Sodium	**650**	12	"	25	"	"	"	"	FILT
Antimony	ND	5.0	ug/l	10	0120419	12/04/20	12/11/20	200.8	FILT
Arsenic	ND	5.0	"	1	"	"	12/11/20	"	FILT
Barium	**22**	5.0	"	10	"	"	12/11/20	"	FILT
Cadmium	ND	5.0	"	"	"	"	"	"	FILT
Chromium	ND	5.0	"	"	"	"	"	"	FILT
Cobalt	ND	5.0	"	"	"	"	"	"	FILT
Lead	ND	5.0	"	"	"	"	"	"	FILT
Nickel	ND	5.0	"	"	"	"	"	"	FILT
Selenium	ND	0.50	"	1	"	"	12/11/20	"	FILT
Zinc	**22**	0.50	"	"	"	"	"	"	FILT
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.50	ug/l	1	0120421	12/04/20	12/11/20	EPA 7470A Water	
Conventional Chemistry Parameters by APHA/EPA/ASTM Methods									
Oil & Grease	ND	5.00	mg/l	1	0120425	12/04/20	12/09/20	EPA 1664B	
pH	**8.7**	0.10	pH Units	"	0120411	12/04/20	12/04/20	SM 4500-H+B	O-04
Total Dissolved Solids	**1200**	10	mg/l	"	0120715	12/07/20	12/08/20	TDS by SM2540C	

SunStar Laboratories, Inc.

Joann Marroquin

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Northstar Environmental Remediation	Project: Genesis Solar Groundwater	
26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

23a

T204118-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Miscellaneous Physical/Conventional Chemistry Parameters									
Specific Conductance (EC)	**2600**	10	umhos/cm	1	0120412	12/04/20	12/04/20	SM2510b/12 0.1	
Anions by EPA Method 300.0									
Chloride	**481**	50.0	mg/l	10	0120413	12/04/20	12/05/20	EPA 300.0	QM-05
Sulfate as SO4	**411**	50.0	"	"	"	"	"	"	QM-05
Nitrate as NO3	**0.704**	0.500	"	1	"	"	12/05/20	"	
Nitrate as N	ND	0.200	"	"	"	"	"	"	

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Northstar Environmental Remediation	Project: Genesis Solar Groundwater	
26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

OBS-1

T204118-02 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 200 Series Methods									
Copper	**0.005**	0.005	mg/l	1	0120420	12/04/20	12/15/20	EPA 200.7	FILT
Calcium	**320**	30	"	300	"	"	12/15/20	"	FILT
Iron	**1.2**	0.20	"	1	"	"	12/15/20	"	FILT
Magnesium	**68**	0.10	"	"	"	"	"	"	FILT
Potassium	**51**	0.50	"	"	"	"	"	"	FILT
Sodium	**320**	150	"	300	"	"	12/15/20	"	FILT
Antimony	ND	5.0	ug/l	10	0120419	12/04/20	12/11/20	200.8	FILT
Arsenic	ND	5.0	"	1	"	"	12/11/20	"	FILT
Barium	**18**	5.0	"	10	"	"	12/11/20	"	FILT
Cadmium	ND	5.0	"	"	"	"	"	"	FILT
Chromium	ND	5.0	"	"	"	"	"	"	FILT
Cobalt	ND	5.0	"	"	"	"	"	"	FILT
Lead	ND	5.0	"	"	"	"	"	"	FILT
Nickel	ND	5.0	"	"	"	"	"	"	FILT
Selenium	**7.6**	0.50	"	1	"	"	12/11/20	"	FILT
Zinc	**3.7**	0.50	"	"	"	"	"	"	FILT
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.50	ug/l	1	0120421	12/04/20	12/11/20	EPA 7470A Water	
Conventional Chemistry Parameters by APHA/EPA/ASTM Methods									
Oil & Grease	ND	5.00	mg/l	1	0120425	12/04/20	12/09/20	EPA 1664B	
pH	**7.9**	0.10	pH Units	"	0120411	12/04/20	12/04/20	SM 4500-H+B	
Total Dissolved Solids	**18000**	10	mg/l	"	0120715	12/07/20	12/08/20	TDS by SM2540C	

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Northstar Environmental Remediation	Project: Genesis Solar Groundwater	
26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

OBS-1

T204118-02 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Miscellaneous Physical/Conventional Chemistry Parameters									
Specific Conductance (EC)	**24000**	10	umhos/cm	1	0120412	12/04/20	12/04/20	SM2510b/12 0.1	
Anions by EPA Method 300.0									
Chloride	**6560**	1000	mg/l	200	0120413	12/04/20	12/07/20	EPA 300.0	
Sulfate as SO4	**6200**	1000	"	"	"	"	"	"	
Nitrate as NO3	**5.41**	0.500	"	1	"	"	12/05/20	"	
Nitrate as N	**1.22**	0.200	"	"	"	"	"	"	

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26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

TW-1

T204118-03 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 200 Series Methods									
Copper	ND	0.005	mg/l	1	0120420	12/04/20	12/15/20	EPA 200.7	FILT
Calcium	**89**	0.10	"	"	"	"	12/15/20	"	FILT
Iron	**3.1**	0.20	"	"	"	"	"	"	FILT
Magnesium	**12**	0.10	"	"	"	"	"	"	FILT
Potassium	**30**	0.50	"	"	"	"	"	"	FILT
Sodium	**9300**	150	"	300	"	"	12/15/20	"	FILT
Antimony	ND	5.0	ug/l	10	0120419	12/04/20	12/11/20	200.8	FILT
Arsenic	ND	5.0	"	1	"	"	12/11/20	"	FILT
Barium	**20**	5.0	"	10	"	"	12/11/20	"	FILT
Cadmium	ND	5.0	"	"	"	"	"	"	FILT
Chromium	ND	5.0	"	"	"	"	"	"	FILT
Cobalt	ND	5.0	"	"	"	"	"	"	FILT
Lead	ND	5.0	"	"	"	"	"	"	FILT
Nickel	ND	5.0	"	"	"	"	"	"	FILT
Selenium	ND	0.50	"	1	"	"	12/11/20	"	FILT
Zinc	ND	0.50	"	"	"	"	"	"	FILT
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.50	ug/l	1	0120421	12/04/20	12/11/20	EPA 7470A Water	
Conventional Chemistry Parameters by APHA/EPA/ASTM Methods									
Oil & Grease	ND	5.00	mg/l	1	0120425	12/04/20	12/09/20	EPA 1664B	
pH	**9.3**	0.10	pH Units	"	0120411	12/04/20	12/04/20	SM 4500-H+B	
Total Dissolved Solids	**6400**	10	mg/l	"	0120715	12/07/20	12/08/20	TDS by SM2540C	

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Northstar Environmental Remediation	Project: Genesis Solar Groundwater	
26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

TW-1

T204118-03 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Miscellaneous Physical/Conventional Chemistry Parameters									
Specific Conductance (EC)	**15000**	10	umhos/cm	1	0120412	12/04/20	12/04/20	SM2510b/12	
		0.1							
Anions by EPA Method 300.0									
Chloride	**4750**	500	mg/l	100	0120413	12/04/20	12/07/20	EPA 300.0	
Sulfate as SO4	**1710**	500	"	"	"	"	"	"	
Nitrate as NO3	**0.657**	0.500	"	1	"	"	12/05/20	"	
Nitrate as N	ND	0.200	"	"	"	"	"	"	

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26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

TW-2

T204118-04 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 200 Series Methods									
Copper	ND	0.005	mg/l	1	0120420	12/04/20	12/15/20	EPA 200.7	FILT
Calcium	**68**	0.10	"	"	"	"	"	"	FILT
Iron	ND	0.20	"	"	"	"	"	"	FILT
Magnesium	**0.63**	0.10	"	"	"	"	"	"	FILT
Potassium	**23**	0.50	"	"	"	"	"	"	FILT
Sodium	**70**	40	"	80	"	"	12/15/20	"	FILT
Antimony	ND	5.0	ug/l	10	0120419	12/04/20	12/11/20	200.8	FILT
Arsenic	ND	5.0	"	1	"	"	12/11/20	"	FILT
Barium	**44**	5.0	"	10	"	"	12/11/20	"	FILT
Cadmium	ND	5.0	"	"	"	"	"	"	FILT
Chromium	ND	5.0	"	"	"	"	"	"	FILT
Cobalt	ND	5.0	"	"	"	"	"	"	FILT
Lead	ND	5.0	"	"	"	"	"	"	FILT
Nickel	ND	5.0	"	"	"	"	"	"	FILT
Selenium	ND	0.50	"	1	"	"	12/11/20	"	FILT
Zinc	ND	0.50	"	"	"	"	"	"	FILT
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.50	ug/l	1	0120421	12/04/20	12/11/20	EPA 7470A Water	
Conventional Chemistry Parameters by APHA/EPA/ASTM Methods									
Oil & Grease	ND	5.00	mg/l	1	0120425	12/04/20	12/09/20	EPA 1664B	
pH	**9.5**	0.10	pH Units	"	0120411	12/04/20	12/04/20	SM 4500-H+B	O-04
Total Dissolved Solids	**2500**	10	mg/l	"	0120715	12/07/20	12/08/20	TDS by SM2540C	

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26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

TW-2

T204118-04 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Miscellaneous Physical/Conventional Chemistry Parameters									
Specific Conductance (EC)	**5600**	10	umhos/cm	1	0120412	12/04/20	12/04/20	SM2510b/12 0.1	
Anions by EPA Method 300.0									
Chloride	**1680**	500	mg/l	100	0120413	12/04/20	12/07/20	EPA 300.0	
Sulfate as SO4	**454**	50.0	"	10	"	"	12/05/20	"	
Nitrate as NO3	**0.659**	0.500	"	1	"	"	12/05/20	"	
Nitrate as N	ND	0.200	"	"	"	"	"	"	

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26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

PW-0

T204118-05 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 200 Series Methods									
Copper	ND	0.005	mg/l	1	0120420	12/04/20	12/15/20	EPA 200.7	FILT
Calcium	**96**	0.10	"	"	"	"	12/15/20	"	FILT
Iron	**0.35**	0.20	"	"	"	"	"	"	FILT
Magnesium	**1.4**	0.10	"	"	"	"	"	"	FILT
Potassium	**23**	0.50	"	"	"	"	"	"	FILT
Sodium	**2300**	50	"	100	"	"	12/15/20	"	FILT
Antimony	ND	5.0	ug/l	10	0120419	12/04/20	12/11/20	200.8	FILT
Arsenic	**5.0**	5.0	"	1	"	"	12/11/20	"	FILT
Barium	**63**	5.0	"	10	"	"	12/11/20	"	FILT
Cadmium	ND	5.0	"	"	"	"	"	"	FILT
Chromium	ND	5.0	"	"	"	"	"	"	FILT
Cobalt	ND	5.0	"	"	"	"	"	"	FILT
Lead	ND	5.0	"	"	"	"	"	"	FILT
Nickel	ND	5.0	"	"	"	"	"	"	FILT
Selenium	ND	0.50	"	1	"	"	12/11/20	"	FILT
Zinc	**4.2**	0.50	"	"	"	"	"	"	FILT
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.50	ug/l	1	0120421	12/04/20	12/11/20	EPA 7470A Water	
Conventional Chemistry Parameters by APHA/EPA/ASTM Methods									
Oil & Grease	ND	5.00	mg/l	1	0120425	12/04/20	12/09/20	EPA 1664B	
pH	**8.3**	0.10	pH Units	"	0120411	12/04/20	12/04/20	SM 4500-H+B	O-04
Total Dissolved Solids	**3200**	10	mg/l	"	0120715	12/07/20	12/08/20	TDS by SM2540C	

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26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

PW-0

T204118-05 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Miscellaneous Physical/Conventional Chemistry Parameters									
Specific Conductance (EC)	**6300**	10	umhos/cm	1	0120412	12/04/20	12/04/20	SM2510b/12 0.1	
Anions by EPA Method 300.0									
Fluoride	ND	0.500	mg/l	1	0120413	12/04/20	12/07/20	EPA 300.0	
Chloride	**1880**	250	"	50	"	"	12/07/20	"	
Sulfate as SO4	**625**	100	"	20	"	"	12/07/20	"	
Nitrate as NO3	**0.641**	0.500	"	1	"	"	12/05/20	"	
Nitrate as N	ND	0.200	"	"	"	"	"	"	

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26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

PW-2

T204118-06 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 200 Series Methods									
Copper	ND	0.005	mg/l	1	0120420	12/04/20	12/15/20	EPA 200.7	FILT
Calcium	**47**	0.10	"	"	"	"	12/15/20	"	FILT
Iron	ND	0.20	"	"	"	"	"	"	FILT
Magnesium	**3.8**	0.10	"	"	"	"	"	"	FILT
Potassium	**6.4**	0.50	"	"	"	"	"	"	FILT
Sodium	**1200**	25	"	50	"	"	12/15/20	"	FILT
Antimony	ND	5.0	ug/l	10	0120419	12/04/20	12/11/20	200.8	FILT
Arsenic	ND	5.0	"	1	"	"	12/11/20	"	FILT
Barium	**52**	5.0	"	10	"	"	12/11/20	"	FILT
Cadmium	ND	5.0	"	"	"	"	"	"	FILT
Chromium	ND	5.0	"	"	"	"	"	"	FILT
Cobalt	ND	5.0	"	"	"	"	"	"	FILT
Copper	ND	0.50	"	1	"	"	"	"	FILT
Lead	ND	5.0	"	10	"	"	"	"	FILT
Nickel	ND	5.0	"	"	"	"	"	"	FILT
Selenium	ND	0.50	"	1	"	"	12/11/20	"	FILT
Zinc	ND	0.50	"	"	"	"	"	"	FILT
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.50	ug/l	1	0120421	12/04/20	12/11/20	EPA 7470A Water	
Conventional Chemistry Parameters by APHA/EPA/ASTM Methods									
Oil & Grease	ND	5.00	mg/l	1	0120425	12/04/20	12/09/20	EPA 1664B	
pH	**8.3**	0.10	pH Units	"	0120411	12/04/20	12/04/20	SM 4500-H+B	O-04
Total Dissolved Solids	**1900**	10	mg/l	"	0120715	12/07/20	12/08/20	TDS by SM2540C	

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26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

PW-2

T204118-06 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Miscellaneous Physical/Conventional Chemistry Parameters									
Specific Conductance (EC)	**3700**	10	umhos/cm	1	0120412	12/04/20	12/04/20	SM2510b/12 0.1	
Anions by EPA Method 300.0									
Fluoride	ND	0.500	mg/l	1	0120413	12/04/20	12/07/20	EPA 300.0	
Chloride	**1010**	250	"	50	"	"	"	"	
Sulfate as SO4	**436**	50.0	"	10	"	"	12/05/20	"	
Nitrate as NO3	ND	0.500	"	1	"	"	12/05/20	"	
Nitrate as N	ND	0.200	"	"	"	"	"	"	

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Northstar Environmental Remediation	Project: Genesis Solar Groundwater	
26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

DM-1

T204118-07 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 200 Series Methods									
Copper	ND	0.005	mg/l	1	0120420	12/04/20	12/15/20	EPA 200.7	FILT
Calcium	**230**	20	"	200	"	"	12/15/20	"	FILT
Iron	ND	0.20	"	1	"	"	12/15/20	"	FILT
Magnesium	**49**	0.10	"	"	"	"	"	"	FILT
Potassium	**35**	0.50	"	"	"	"	"	"	FILT
Sodium	**9500**	100	"	200	"	"	12/15/20	"	FILT
Antimony	ND	5.0	ug/l	10	0120419	12/04/20	12/11/20	200.8	FILT
Arsenic	ND	5.0	"	1	"	"	12/11/20	"	FILT
Barium	**35**	5.0	"	10	"	"	12/11/20	"	FILT
Cadmium	ND	5.0	"	"	"	"	"	"	FILT
Chromium	ND	5.0	"	"	"	"	"	"	FILT
Cobalt	ND	5.0	"	"	"	"	"	"	FILT
Lead	ND	5.0	"	"	"	"	"	"	FILT
Nickel	ND	5.0	"	"	"	"	"	"	FILT
Selenium	**0.87**	0.50	"	1	"	"	12/11/20	"	FILT
Zinc	ND	0.50	"	"	"	"	"	"	FILT
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.50	ug/l	1	0120421	12/04/20	12/11/20	EPA 7470A Water	
Conventional Chemistry Parameters by APHA/EPA/ASTM Methods									
Oil & Grease	ND	5.00	mg/l	1	0120425	12/04/20	12/09/20	EPA 1664B	
pH	**7.9**	0.10	pH Units	"	0120411	12/04/20	12/04/20	SM 4500-H+B	O-04
Total Dissolved Solids	**12000**	10	mg/l	"	0120715	12/07/20	12/08/20	TDS by SM2540C	

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26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

DM-1

T204118-07 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Miscellaneous Physical/Conventional Chemistry Parameters									
Specific Conductance (EC)	**18000**	10	umhos/cm	1	0120412	12/04/20	12/04/20	SM2510b/12 0.1	
Anions by EPA Method 300.0									
Chloride	**5530**	1000	mg/l	200	0120413	12/04/20	12/07/20	EPA 300.0	
Sulfate as SO4	**2150**	250	"	50	"	"	12/07/20	"	
Nitrate as NO3	**8.50**	0.500	"	1	"	"	12/05/20	"	
Nitrate as N	**1.92**	0.200	"	"	"	"	"	"	

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26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

DM-2

T204118-08 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 200 Series Methods									
Copper	ND	0.005	mg/l	1	0120420	12/04/20	12/15/20	EPA 200.7	FILT
Calcium	**250**	20	"	200	"	"	12/15/20	"	FILT
Iron	ND	0.20	"	1	"	"	12/15/20	"	FILT
Magnesium	**51**	0.10	"	"	"	"	"	"	FILT
Potassium	**34**	0.50	"	"	"	"	"	"	FILT
Sodium	**11000**	100	"	200	"	"	12/15/20	"	FILT
Antimony	ND	5.0	ug/l	10	0120419	12/04/20	12/11/20	200.8	FILT
Arsenic	ND	5.0	"	1	"	"	12/11/20	"	FILT
Barium	**49**	5.0	"	10	"	"	12/11/20	"	FILT
Cadmium	ND	5.0	"	"	"	"	"	"	FILT
Chromium	ND	5.0	"	"	"	"	"	"	FILT
Cobalt	ND	5.0	"	"	"	"	"	"	FILT
Lead	ND	5.0	"	"	"	"	"	"	FILT
Nickel	ND	5.0	"	"	"	"	"	"	FILT
Selenium	**0.94**	0.50	"	1	"	"	12/11/20	"	FILT
Zinc	ND	0.50	"	"	"	"	"	"	FILT
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.50	ug/l	1	0120421	12/04/20	12/11/20	EPA 7470A Water	
Conventional Chemistry Parameters by APHA/EPA/ASTM Methods									
Oil & Grease	ND	5.00	mg/l	1	0120425	12/04/20	12/09/20	EPA 1664B	
pH	**7.8**	0.10	pH Units	"	0120411	12/04/20	12/04/20	SM 4500-H+B	O-04
Total Dissolved Solids	**10000**	10	mg/l	"	0120715	12/07/20	12/08/20	TDS by SM2540C	

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Northstar Environmental Remediation	Project: Genesis Solar Groundwater	
26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

DM-2

T204118-08 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Miscellaneous Physical/Conventional Chemistry Parameters									
Specific Conductance (EC)	**18000**	10	umhos/cm	1	0120412	12/04/20	12/04/20	SM2510b/12 0.1	
Anions by EPA Method 300.0									
Chloride	**5730**	1000	mg/l	200	0120413	12/04/20	12/07/20	EPA 300.0	
Sulfate as SO4	**2340**	500	"	100	"	"	12/07/20	"	
Nitrate as NO3	**9.46**	0.500	"	1	"	"	12/05/20	"	
Nitrate as N	**2.14**	0.200	"	"	"	"	"	"	

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Northstar Environmental Remediation	Project: Genesis Solar Groundwater	
26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

DM-3

T204118-09 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 200 Series Methods									
Copper	ND	0.005	mg/l	1	0120420	12/04/20	12/15/20	EPA 200.7	FILT
Calcium	**220**	20	"	200	"	"	12/15/20	"	FILT
Iron	ND	0.20	"	1	"	"	12/15/20	"	FILT
Magnesium	**45**	0.10	"	"	"	"	"	"	FILT
Potassium	**29**	0.50	"	"	"	"	"	"	FILT
Sodium	**9100**	100	"	200	"	"	12/15/20	"	FILT
Antimony	ND	5.0	ug/l	10	0120419	12/04/20	12/11/20	200.8	FILT
Arsenic	ND	5.0	"	1	"	"	12/11/20	"	FILT
Barium	**20**	5.0	"	10	"	"	12/11/20	"	FILT
Cadmium	ND	5.0	"	"	"	"	"	"	FILT
Chromium	ND	5.0	"	"	"	"	"	"	FILT
Cobalt	ND	5.0	"	"	"	"	"	"	FILT
Lead	ND	5.0	"	"	"	"	"	"	FILT
Nickel	ND	5.0	"	"	"	"	"	"	FILT
Selenium	**0.68**	0.50	"	1	"	"	12/11/20	"	FILT
Zinc	**0.55**	0.50	"	"	"	"	"	"	FILT
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.50	ug/l	1	0120421	12/04/20	12/11/20	EPA 7470A Water	
Conventional Chemistry Parameters by APHA/EPA/ASTM Methods									
Oil & Grease	ND	5.00	mg/l	1	0120425	12/04/20	12/09/20	EPA 1664B	
pH	**7.9**	0.10	pH Units	"	0120411	12/04/20	12/04/20	SM 4500-H+B	O-04
Total Dissolved Solids	**10000**	10	mg/l	"	0120715	12/07/20	12/08/20	TDS by SM2540C	

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Northstar Environmental Remediation	Project: Genesis Solar Groundwater	
26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

DM-3

T204118-09 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Miscellaneous Physical/Conventional Chemistry Parameters									
Specific Conductance (EC)	**17000**	10	umhos/cm	1	0120412	12/04/20	12/04/20	SM2510b/12 0.1	
Anions by EPA Method 300.0									
Chloride	**5420**	1000	mg/l	200	0120413	12/04/20	12/07/20	EPA 300.0	
Sulfate as SO4	**2300**	500	"	100	"	"	12/07/20	"	
Nitrate as NO3	**2.47**	0.500	"	1	"	"	12/05/20	"	
Nitrate as N	**0.560**	0.200	"	"	"	"	"	"	

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26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

DUP

T204118-10 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 200 Series Methods									
Copper	ND	0.005	mg/l	1	0120420	12/04/20	12/15/20	EPA 200.7	FILT
Calcium	**46**	0.10	"	"	"	"	12/15/20	"	FILT
Iron	ND	0.20	"	"	"	"	"	"	FILT
Magnesium	**3.9**	0.10	"	"	"	"	"	"	FILT
Potassium	**6.3**	0.50	"	"	"	"	"	"	FILT
Sodium	**2000**	50	"	100	"	"	12/15/20	"	FILT
Antimony	ND	5.0	ug/l	10	0120419	12/04/20	12/11/20	200.8	FILT
Arsenic	ND	5.0	"	1	"	"	12/11/20	"	FILT
Barium	**53**	5.0	"	10	"	"	12/11/20	"	FILT
Cadmium	ND	5.0	"	"	"	"	"	"	FILT
Chromium	ND	5.0	"	"	"	"	"	"	FILT
Cobalt	ND	5.0	"	"	"	"	"	"	FILT
Lead	ND	5.0	"	"	"	"	"	"	FILT
Nickel	ND	5.0	"	"	"	"	"	"	FILT
Selenium	ND	0.50	"	1	"	"	12/11/20	"	FILT
Zinc	**0.66**	0.50	"	"	"	"	"	"	FILT
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.50	ug/l	1	0120421	12/04/20	12/11/20	EPA 7470A Water	
Conventional Chemistry Parameters by APHA/EPA/ASTM Methods									
Oil & Grease	ND	5.00	mg/l	1	0120425	12/04/20	12/09/20	EPA 1664B	
pH	**8.3**	0.10	pH Units	"	0120411	12/04/20	12/04/20	SM 4500-H+B	O-04
Total Dissolved Solids	**1900**	10	mg/l	"	0120715	12/07/20	12/08/20	TDS by SM2540C	

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Northstar Environmental Remediation	Project: Genesis Solar Groundwater	
26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

DUP

T204118-10 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Miscellaneous Physical/Conventional Chemistry Parameters									
Specific Conductance (EC)	**3700**	10	umhos/cm	1	0120412	12/04/20	12/04/20	SM2510b/12 0.1	
Anions by EPA Method 300.0									
Chloride	**920**	50.0	mg/l	10	0120413	12/04/20	12/07/20	EPA 300.0	
Sulfate as SO4	**431**	50.0	"	"	"	"	12/05/20	"	
Nitrate as NO3	ND	0.500	"	1	"	"	12/05/20	"	O-07
Nitrate as N	ND	0.200	"	"	"	"	"	"	O-07

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Northstar Environmental Remediation	Project: Genesis Solar Groundwater	
26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

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 Limit	Notes
Batch 0120419 - EPA 3010A										
Blank (0120419-BLK1)				Prepared: 12/04/20 Analyzed: 12/11/20						
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 (0120419-BS1)				Prepared: 12/04/20 Analyzed: 12/11/20						
Arsenic	59.1	0.50	ug/l	50.0		118	80-120			
Barium	49.8	0.50	"	50.0		99.6	80-120			
Cadmium	58.6	0.50	"	50.0		117	80-120			
Chromium	49.4	0.50	"	50.0		98.8	80-120			
Lead	53.4	0.50	"	50.0		107	80-120			
Matrix Spike (0120419-MS1)	**Source: T204118-01**			Prepared: 12/04/20 Analyzed: 12/11/20						
Arsenic	5.66	0.50	ug/l	50.0	0.300	10.7	75-125			QM-05
Barium	79.1	5.0	"	50.0	21.9	114	75-125			
Cadmium	50.6	5.0	"	50.0	ND	101	75-125			
Chromium	51.2	5.0	"	50.0	0.800	101	75-125			
Lead	58.4	5.0	"	50.0	3.00	111	75-125			
Matrix Spike Dup (0120419-MSD1)	**Source: T204118-01**			Prepared: 12/04/20 Analyzed: 12/11/20						
Arsenic	5.81	0.50	ug/l	50.0	0.300	11.0	75-125	2.62	20	QM-05
Barium	77.8	5.0	"	50.0	21.9	112	75-125	1.66	20	
Cadmium	51.1	5.0	"	50.0	ND	102	75-125	0.983	20	
Chromium	53.9	5.0	"	50.0	0.800	106	75-125	5.14	20	
Lead	57.9	5.0	"	50.0	3.00	110	75-125	0.860	20	

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26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

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 Limit	Notes
Batch 0120420 - EPA 3010A										
Blank (0120420-BLK1)				Prepared: 12/04/20 Analyzed: 12/14/20						
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	"							
Calcium	ND	0.10	"							
Iron	ND	0.20	"							
Potassium	ND	0.50	"							
Magnesium	ND	0.10	"							
Sodium	0.948	0.50	"							QB-01
LCS (0120420-BS1)				Prepared: 12/04/20 Analyzed: 12/14/20						
Cadmium	0.495	0.005	mg/l	0.500		99.1	85-115			
Chromium	0.494	0.005	"	0.500		98.7	85-115			
Copper	0.502	0.005	"	0.500		100	85-115			
Lead	0.500	0.005	"	0.500		100	85-115			
Molybdenum	0.490	0.005	"	0.500		98.0	85-115			
Nickel	0.491	0.005	"	0.500		98.2	85-115			
Silver	0.505		"	0.500		101	85-115			
Zinc	0.498	0.030	"	0.500		99.6	85-115			
Matrix Spike (0120420-MS1)	**Source: T204118-01**			Prepared: 12/04/20 Analyzed: 12/14/20						
Cadmium	0.533	0.005	mg/l	0.500	ND	107	70-130			
Chromium	0.496	0.005	"	0.500	ND	99.3	70-130			
Copper	0.517	0.005	"	0.500	0.005	102	70-130			
Lead	0.491	0.005	"	0.500	0.003	97.7	70-130			
Molybdenum	0.579	0.005	"	0.500	0.054	105	70-130			
Nickel	0.489	0.005	"	0.500	ND	97.8	70-130			
Silver	0.492		"	0.500	0.011	96.2	70-130			
Zinc	0.780	0.030	"	0.500	0.222	111	70-130			

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Northstar Environmental Remediation	Project: Genesis Solar Groundwater	
26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

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 Limit	Notes
Batch 0120420 - EPA 3010A										
Matrix Spike Dup (0120420-MSD1)	**Source: T204118-01**			Prepared: 12/04/20 Analyzed: 12/14/20						
Cadmium	0.538	0.005	mg/l	0.500	ND	108	70-130	1.10	30	
Chromium	0.506	0.005	"	0.500	ND	101	70-130	1.87	30	
Copper	0.523	0.005	"	0.500	0.005	104	70-130	1.13	30	
Lead	0.501	0.005	"	0.500	0.003	99.5	70-130	1.84	30	
Molybdenum	0.579	0.005	"	0.500	0.054	105	70-130	0.124	30	
Nickel	0.494	0.005	"	0.500	ND	98.8	70-130	1.00	30	
Silver	0.483		"	0.500	0.011	94.4	70-130	1.85	30	
Zinc	0.788	0.030	"	0.500	0.222	113	70-130	1.12	30	

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26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

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 Limit	Notes
Batch 0120421 - EPA 7470A Water										
Blank (0120421-BLK1)				Prepared: 12/04/20 Analyzed: 12/11/20						
Mercury	ND	0.50	ug/l							
LCS (0120421-BS1)				Prepared: 12/04/20 Analyzed: 12/11/20						
Mercury	4.92	0.50	ug/l	5.00		98.3	80-120			
Matrix Spike (0120421-MS1)	**Source: T204118-01**			Prepared: 12/04/20 Analyzed: 12/11/20						
Mercury	4.01	0.50	ug/l	5.00	0.0287	79.7	75-125			
Matrix Spike Dup (0120421-MSD1)	**Source: T204118-01**			Prepared: 12/04/20 Analyzed: 12/11/20						
Mercury	4.14	0.50	ug/l	5.00	0.0287	82.2	75-125	3.06	20	

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Northstar Environmental Remediation	Project: Genesis Solar Groundwater	
26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

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

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0120411 - General Preparation										
Duplicate (0120411-DUP1)		**Source: T204118-01**		Prepared & Analyzed: 12/04/20						
pH	8.66	0.10	pH Units		8.67			0.115	20	
Batch 0120425 - General Preparation										
Blank (0120425-BLK1)				Prepared: 12/04/20 Analyzed: 12/09/20						
Oil & Grease	ND	5.00	mg/l							
LCS (0120425-BS1)				Prepared: 12/04/20 Analyzed: 12/09/20						
Oil & Grease	30.2	5.00	mg/l	35.4		85.3	80-120			
LCS Dup (0120425-BSD1)				Prepared: 12/04/20 Analyzed: 12/09/20						
Oil & Grease	31.5	5.00	mg/l	35.4		89.0	80-120	4.21	20	
Batch 0120715 - General Preparation										
Blank (0120715-BLK1)				Prepared: 12/07/20 Analyzed: 12/08/20						
Total Dissolved Solids	ND	10	mg/l							
LCS (0120715-BS1)				Prepared: 12/07/20 Analyzed: 12/08/20						
Total Dissolved Solids	472	10	mg/l	500		94.4	80-120			
Duplicate (0120715-DUP1)		**Source: T204118-01**		Prepared: 12/07/20 Analyzed: 12/08/20						
Total Dissolved Solids	1260	10	mg/l		1250			0.957	20	

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26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

Miscellaneous Physical/Conventional Chemistry Parameters - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0120412 - General Preparation										
Duplicate (0120412-DUP1)		**Source: T204118-01**		Prepared & Analyzed: 12/04/20						
Specific Conductance (EC)	2600	10	umhos/cm		2630			1.15	15	

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Northstar Environmental Remediation	Project: Genesis Solar Groundwater	
26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

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 Limit	Notes
Batch 0120413 - General Preparation										
Blank (0120413-BLK1)				Prepared: 12/04/20 Analyzed: 12/05/20						
Chloride	ND	5.00	mg/l							
Sulfate as SO4	ND	5.00	"							
Nitrate as NO3	ND	0.500	"							
Nitrate as N	ND	0.200	"							
LCS (0120413-BS1)				Prepared: 12/04/20 Analyzed: 12/05/20						
Chloride	26.1	5.00	mg/l	25.0		105	75-125			
Sulfate as SO4	26.1	5.00	"	25.0		104	75-125			
Nitrate as NO3	26.3	0.500	"	25.0		105	75-125			
Matrix Spike (0120413-MS1)		**Source: T204118-01**		Prepared: 12/04/20 Analyzed: 12/05/20						
Chloride	490	50.0	mg/l	25.0	481	36.3	75-125			QM-05
Sulfate as SO4	423	50.0	"	25.0	411	49.7	75-125			QM-05
Nitrate as NO3	25.8	0.500	"	25.0	0.704	100	75-125			
Matrix Spike Dup (0120413-MSD1)		**Source: T204118-01**		Prepared: 12/04/20 Analyzed: 12/05/20						
Chloride	488	50.0	mg/l	25.0	481	26.2	75-125	0.515	20	QM-05
Sulfate as SO4	422	50.0	"	25.0	411	43.0	75-125	0.395	20	QM-05
Nitrate as NO3	25.8	0.500	"	25.0	0.704	101	75-125	0.310	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.

Joann Marroquin For Jeff Lee, Project Manager

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Northstar Environmental Remediation	Project: Genesis Solar Groundwater	
26225 Enterprise Court	Project Number: 196-004-06	**Reported:**
Lake Forest CA, 92630	Project Manager: Arlin Brewster	12/23/20 14:54

Notes and Definitions

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.
QB-01	The method blank contains analyte at a concentration above the MRL; however, concentration is less than 10% of the sample result, which is negligible according to method criteria.
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.

Joann Marroquin For Jeff Lee, Project Manager

SunStar Laboratories, Inc.
25712 Commercentre Dr
Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: Northstar Environmental Remediation _____
Address: 26225 Enterprise Court, Lake Forest, CA 92630 _____
Phone: 949-274-1719 _____ Fax: _____
Project Manager: Arlin Brewster _____

Date: 12/04/20 Page: 1 of 1
Project Name: Genesis Solar Groundwater _____
Collector: Arlin Brewster _____ Client Project #: 196-004-06 _____
Batch #: T204118 EDF #: T10000006093 _____

Sample ID	Date Sampled	Time	Sample Type	Container Type	200.7 - Metals: Ca, Cu, Na, K, Fe, Mg (FIELD FILTERED)	200.8 - 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 - Therminol (Subcontract)	Deuterium, Oxygen-18 (Subcont.)	300.0 - Fluoride	Laboratory ID #	Comments/Preservative	Total # of containers
23a	12/3/20	1335	W	Various	X	X	X	X	X	X	X	X	X	X		01		7
OBS-1	12/3/20	1440	W	Various	X	X	X	X	X	X	X	X	X	X		02		7
TW-1	12/3/20	1508	W	Various	X	X	X	X	X	X	X	X	X	X		03		7
TW-2	12/3/20	1310	W	Various	X	X	X	X	X	X	X	X	X	X		04		7
PW-0	12/3/20	12:40	W	Various	X	X	X	X	X	X	X	X	X	X	X	05		7
PW-2	12/3/20	1250	W	Various	X	X	X	X	X	X	X	X	X	X	X	06		7
DM-1	12/3/20	0915	W	Various	X	X	X	X	X	X	X	X	X	X		07		7
DM-2	12/3/20	1015	W	Various	X	X	X	X	X	X	X	X	X	X		08		7
DM-3	12/3/20	1130	W	Various	X	X	X	X	X	X	X	X	X	X		09		7
DUP	N/A	N/A	W	Various	X	X	X	X	X	X	X	X	X	X		10		7
Field Blank	N/A	N/A	W	Various												11	HOLD	
Trip Blank	N/A	N/A	W	Various												12	HOLD	

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	12/04/20 @ 1245	[signature]	12-4-20 1245
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers	70
Chain of Custody seals Y/N/NA	
Seals intact? Y/N/NA	
Received good condition/cold	2.3°C

Turn around time: Standard **

Notes
** Deuterium & Oxygen-18 subcontract has 10 day TAT

Reporting limits must match previous reports

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T20 4118

Client Name: Northstar Environmental Remediation Project: Genesis Solar Groundwater

Delivered by: ☑ Client ☐ SunStar Courier ☐ GLS ☐ FedEx ☐ Other

If Courier, Received by: _____ Date/Time Courier Received: _____

Lab Received by: Dave Date/Time Lab Received: 12/4/2020 12:45

Total number of coolers received: 1 Thermometer ID: SC-1 Calibration due: 8/17/21

Temperature:	Cooler #1	2.5 °C +/- the CF (-0.2°C) =	2.3	°C corrected temperature
Temperature:	Cooler #2	°C +/- the CF (-0.2°C) =		°C corrected temperature
Temperature:	Cooler #3	°C +/- the CF (-0.2°C) =		°C corrected temperature

Temperature criteria = ≤ 6°C (no frozen containers)	Within criteria?	☑ **Yes** ☐ **No**
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***	

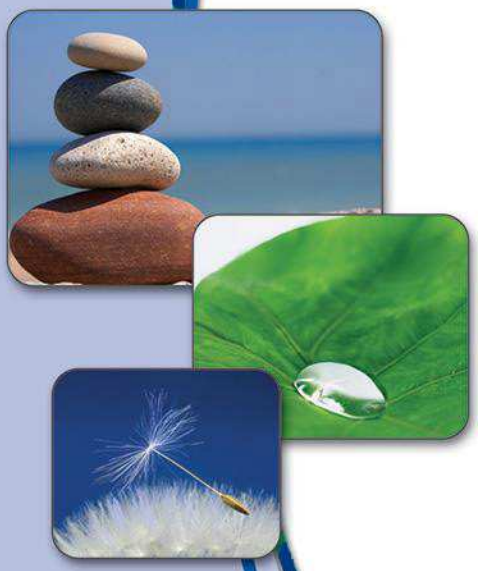
* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date: PB 12/4/2020

Comments:

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-275744-1
Client Project/Site: T204118

For:
SunStar Laboratories Inc
25712 Commercentre Drive
Lake Forest, California 92630

Attn: Jeff Lee

Authorized for release by:
12/11/2020 8:35:27 AM

Danielle Roberts, Senior Project Manager
(949)260-3249
Danielle.Roberts@Eurofinset.com

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Sample Summary

Client: SunStar Laboratories Inc
Project/Site: T204118

Job ID: 440-275744-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-275744-1	T204118-01	Water	12/03/20 09:15	12/07/20 16:09	
440-275744-2	T204118-02	Water	12/03/20 14:40	12/07/20 16:09	
440-275744-3	T204118-03	Water	12/03/20 15:00	12/07/20 16:09	
440-275744-4	T204118-04	Water	12/03/20 13:10	12/07/20 16:09	
440-275744-5	T204118-05	Water	12/03/20 12:40	12/07/20 16:09	
440-275744-6	T204118-06	Water	12/03/20 12:50	12/07/20 16:09	
440-275744-7	T204118-07	Water	12/03/20 09:15	12/07/20 16:09	
440-275744-8	T204118-08	Water	12/03/20 10:15	12/07/20 16:09	
440-275744-9	T204118-09	Water	12/03/20 11:30	12/07/20 16:09	
440-275744-10	T204118-10	Water	12/03/20 00:01	12/07/20 16:09	

Job ID: 440-275744-1

Laboratory: Eurofins Calscience Irvine

Narrative

Job Narrative
440-275744-1

Comments
No additional comments.

Receipt
The samples were received on 12/7/2020 4:09 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.8º C.

GC Semi VOA
Method 8015B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 440-632968 and analytical batch 440-632992. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

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

Organic Prep
Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with 8015 preparation batch 440-632968. LCS was performed in duplicate to provide precision of data.

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: T204118

Job ID: 440-275744-1

Client Sample ID: T204118-01 — Lab Sample ID: 440-275744-1

No Detections.

Client Sample ID: T204118-02 — Lab Sample ID: 440-275744-2

No Detections.

Client Sample ID: T204118-03 — Lab Sample ID: 440-275744-3

No Detections.

Client Sample ID: T204118-04 — Lab Sample ID: 440-275744-4

No Detections.

Client Sample ID: T204118-05 — Lab Sample ID: 440-275744-5

No Detections.

Client Sample ID: T204118-06 — Lab Sample ID: 440-275744-6

No Detections.

Client Sample ID: T204118-07 — Lab Sample ID: 440-275744-7

No Detections.

Client Sample ID: T204118-08 — Lab Sample ID: 440-275744-8

No Detections.

Client Sample ID: T204118-09 — Lab Sample ID: 440-275744-9

No Detections.

Client Sample ID: T204118-10 — Lab Sample ID: 440-275744-10

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Calscience Irvine

Client: SunStar Laboratories Inc
Project/Site: T204118

Job ID: 440-275744-1

Client Sample ID: T204118-01
Lab Sample ID: 440-275744-1
Date Collected: 12/03/20 09:15
Matrix: Water
Date Received: 12/07/20 16:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.11	0.022	mg/L		12/08/20 08:26	12/08/20 19:21	1
1,1'-Biphenyl	ND		0.11	0.022	mg/L		12/08/20 08:26	12/08/20 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*82*		*45 - 120*	*12/08/20 08:26*	*12/08/20 19:21*	*1*

Client Sample ID: T204118-02
Lab Sample ID: 440-275744-2
Date Collected: 12/03/20 14:40
Matrix: Water
Date Received: 12/07/20 16:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.11	0.022	mg/L		12/08/20 08:26	12/08/20 19:44	1
1,1'-Biphenyl	ND		0.11	0.022	mg/L		12/08/20 08:26	12/08/20 19:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*81*		*45 - 120*	*12/08/20 08:26*	*12/08/20 19:44*	*1*

Client Sample ID: T204118-03
Lab Sample ID: 440-275744-3
Date Collected: 12/03/20 15:00
Matrix: Water
Date Received: 12/07/20 16:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.11	0.021	mg/L		12/08/20 08:26	12/08/20 20:08	1
1,1'-Biphenyl	ND		0.11	0.021	mg/L		12/08/20 08:26	12/08/20 20:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*81*		*45 - 120*	*12/08/20 08:26*	*12/08/20 20:08*	*1*

Client Sample ID: T204118-04
Lab Sample ID: 440-275744-4
Date Collected: 12/03/20 13:10
Matrix: Water
Date Received: 12/07/20 16:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.11	0.022	mg/L		12/08/20 08:26	12/08/20 20:56	1
1,1'-Biphenyl	ND		0.11	0.022	mg/L		12/08/20 08:26	12/08/20 20:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*81*		*45 - 120*	*12/08/20 08:26*	*12/08/20 20:56*	*1*

Client Sample ID: T204118-05
Lab Sample ID: 440-275744-5
Date Collected: 12/03/20 12:40
Matrix: Water
Date Received: 12/07/20 16:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.11	0.022	mg/L		12/08/20 08:26	12/08/20 21:19	1
1,1'-Biphenyl	ND		0.11	0.022	mg/L		12/08/20 08:26	12/08/20 21:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*75*		*45 - 120*	*12/08/20 08:26*	*12/08/20 21:19*	*1*

Client Sample ID: T204118-06

Lab Sample ID: 440-275744-6

Date Collected: 12/03/20 12:50

Matrix: Water

Date Received: 12/07/20 16:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.097	0.019	mg/L		12/08/20 08:26	12/08/20 21:43	1
1,1'-Biphenyl	ND		0.097	0.019	mg/L		12/08/20 08:26	12/08/20 21:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*75*		*45 - 120*	*12/08/20 08:26*	*12/08/20 21:43*	*1*

Client Sample ID: T204118-07

Lab Sample ID: 440-275744-7

Date Collected: 12/03/20 09:15

Matrix: Water

Date Received: 12/07/20 16:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.11	0.022	mg/L		12/08/20 08:26	12/08/20 23:41	1
1,1'-Biphenyl	ND		0.11	0.022	mg/L		12/08/20 08:26	12/08/20 23:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*68*		*45 - 120*	*12/08/20 08:26*	*12/08/20 23:41*	*1*

Client Sample ID: T204118-08

Lab Sample ID: 440-275744-8

Date Collected: 12/03/20 10:15

Matrix: Water

Date Received: 12/07/20 16:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.11	0.022	mg/L		12/08/20 08:26	12/09/20 00:04	1
1,1'-Biphenyl	ND		0.11	0.022	mg/L		12/08/20 08:26	12/09/20 00:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*70*		*45 - 120*	*12/08/20 08:26*	*12/09/20 00:04*	*1*

Client Sample ID: T204118-09

Lab Sample ID: 440-275744-9

Date Collected: 12/03/20 11:30

Matrix: Water

Date Received: 12/07/20 16:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.11	0.022	mg/L		12/08/20 08:26	12/09/20 00:28	1
1,1'-Biphenyl	ND		0.11	0.022	mg/L		12/08/20 08:26	12/09/20 00:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*78*		*45 - 120*	*12/08/20 08:26*	*12/09/20 00:28*	*1*

Client Sample ID: T204118-10

Lab Sample ID: 440-275744-10

Date Collected: 12/03/20 00:01

Matrix: Water

Date Received: 12/07/20 16:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.11	0.022	mg/L		12/08/20 08:26	12/09/20 00:51	1
1,1'-Biphenyl	ND		0.11	0.022	mg/L		12/08/20 08:26	12/09/20 00:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*78*		*45 - 120*	*12/08/20 08:26*	*12/09/20 00:51*	*1*

Surrogate Summary

Client: SunStar Laboratories Inc
Project/Site: T204118

Job ID: 440-275744-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	OTCN1 (45-120)									
440-275744-1	T204118-01	82									
440-275744-2	T204118-02	81									
440-275744-3	T204118-03	81									
440-275744-4	T204118-04	81									
440-275744-5	T204118-05	75									
440-275744-6	T204118-06	75									
440-275744-7	T204118-07	68									
440-275744-8	T204118-08	70									
440-275744-9	T204118-09	78									
440-275744-10	T204118-10	78									
LCS 440-632968/2-A	Lab Control Sample	75									
LCSD 440-632968/3-A	Lab Control Sample Dup	79									
MB 440-632968/1-A	Method Blank	82									

Surrogate Legend

OTCN = n-Octacosane

Method Summary

Client: SunStar Laboratories Inc
Project/Site: T204118

Job ID: 440-275744-1

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

Protocol References:

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

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: SunStar Laboratories Inc
Project/Site: T204118

Job ID: 440-275744-1

Client Sample ID: T204118-01
Date Collected: 12/03/20 09:15
Date Received: 12/07/20 16:09

Lab Sample ID: 440-275744-1
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			915 mL	1.0 mL	632968	12/08/20 08:26	NAM	TAL IRV
Total/NA	Analysis	8015B		1			632992	12/08/20 19:21	RMP	TAL IRV

Client Sample ID: T204118-02
Date Collected: 12/03/20 14:40
Date Received: 12/07/20 16:09

Lab Sample ID: 440-275744-2
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			930 mL	1.0 mL	632968	12/08/20 08:26	NAM	TAL IRV
Total/NA	Analysis	8015B		1			632992	12/08/20 19:44	RMP	TAL IRV

Client Sample ID: T204118-03
Date Collected: 12/03/20 15:00
Date Received: 12/07/20 16:09

Lab Sample ID: 440-275744-3
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			940 mL	1.0 mL	632968	12/08/20 08:26	NAM	TAL IRV
Total/NA	Analysis	8015B		1			632992	12/08/20 20:08	RMP	TAL IRV

Client Sample ID: T204118-04
Date Collected: 12/03/20 13:10
Date Received: 12/07/20 16:09

Lab Sample ID: 440-275744-4
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			920 mL	1.0 mL	632968	12/08/20 08:26	NAM	TAL IRV
Total/NA	Analysis	8015B		1			632992	12/08/20 20:56	RMP	TAL IRV

Client Sample ID: T204118-05
Date Collected: 12/03/20 12:40
Date Received: 12/07/20 16:09

Lab Sample ID: 440-275744-5
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			930 mL	1.0 mL	632968	12/08/20 08:26	NAM	TAL IRV
Total/NA	Analysis	8015B		1			632992	12/08/20 21:19	RMP	TAL IRV

Client Sample ID: T204118-06
Date Collected: 12/03/20 12:50
Date Received: 12/07/20 16:09

Lab Sample ID: 440-275744-6
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			1030 mL	1.0 mL	632968	12/08/20 08:26	NAM	TAL IRV
Total/NA	Analysis	8015B		1			632992	12/08/20 21:43	RMP	TAL IRV

Lab Chronicle

Client: SunStar Laboratories Inc
Project/Site: T204118

Job ID: 440-275744-1

Client Sample ID: T204118-07
Date Collected: 12/03/20 09:15
Date Received: 12/07/20 16:09

Lab Sample ID: 440-275744-7
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			930 mL	1.0 mL	632968	12/08/20 08:26	NAM	TAL IRV
Total/NA	Analysis	8015B		1			632992	12/08/20 23:41	RMP	TAL IRV

Client Sample ID: T204118-08
Date Collected: 12/03/20 10:15
Date Received: 12/07/20 16:09

Lab Sample ID: 440-275744-8
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			930 mL	1.0 mL	632968	12/08/20 08:26	NAM	TAL IRV
Total/NA	Analysis	8015B		1			632992	12/09/20 00:04	RMP	TAL IRV

Client Sample ID: T204118-09
Date Collected: 12/03/20 11:30
Date Received: 12/07/20 16:09

Lab Sample ID: 440-275744-9
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			930 mL	1.0 mL	632968	12/08/20 08:26	NAM	TAL IRV
Total/NA	Analysis	8015B		1			632992	12/09/20 00:28	RMP	TAL IRV

Client Sample ID: T204118-10
Date Collected: 12/03/20 00:01
Date Received: 12/07/20 16:09

Lab Sample ID: 440-275744-10
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			900 mL	1.0 mL	632968	12/08/20 08:26	NAM	TAL IRV
Total/NA	Analysis	8015B		1			632992	12/09/20 00:51	RMP	TAL IRV

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

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

Lab Sample ID: MB 440-632968/1-A
Matrix: Water
Analysis Batch: 632992

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632968

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.10	0.020	mg/L		12/08/20 08:26	12/08/20 17:23	1
1,1'-Biphenyl	ND		0.10	0.020	mg/L		12/08/20 08:26	12/08/20 17:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*82*		*45 - 120*	*12/08/20 08:26*	*12/08/20 17:23*	*1*

Lab Sample ID: LCS 440-632968/2-A
Matrix: Water
Analysis Batch: 632992

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632968

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene, 1,1'-oxybis-			0.100	0.0706	J	mg/L		71	50 - 115		
1,1'-Biphenyl			0.100	0.0703	J	mg/L		70	50 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane	*75*		*45 - 120*

Lab Sample ID: LCSD 440-632968/3-A
Matrix: Water
Analysis Batch: 632992

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 632968

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene, 1,1'-oxybis-			0.100	0.0747	J	mg/L		75	50 - 115	6	30
1,1'-Biphenyl			0.100	0.0749	J	mg/L		75	50 - 115	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane	*79*		*45 - 120*

QC Association Summary

Client: SunStar Laboratories Inc
Project/Site: T204118

Job ID: 440-275744-1

GC Semi VOA

Prep Batch: 632968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-275744-1	T204118-01	Total/NA	Water	3510C	
440-275744-2	T204118-02	Total/NA	Water	3510C	
440-275744-3	T204118-03	Total/NA	Water	3510C	
440-275744-4	T204118-04	Total/NA	Water	3510C	
440-275744-5	T204118-05	Total/NA	Water	3510C	
440-275744-6	T204118-06	Total/NA	Water	3510C	
440-275744-7	T204118-07	Total/NA	Water	3510C	
440-275744-8	T204118-08	Total/NA	Water	3510C	
440-275744-9	T204118-09	Total/NA	Water	3510C	
440-275744-10	T204118-10	Total/NA	Water	3510C	
MB 440-632968/1-A	Method Blank	Total/NA	Water	3510C	
LCS 440-632968/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-632968/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 632992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-275744-1	T204118-01	Total/NA	Water	8015B	632968
440-275744-2	T204118-02	Total/NA	Water	8015B	632968
440-275744-3	T204118-03	Total/NA	Water	8015B	632968
440-275744-4	T204118-04	Total/NA	Water	8015B	632968
440-275744-5	T204118-05	Total/NA	Water	8015B	632968
440-275744-6	T204118-06	Total/NA	Water	8015B	632968
440-275744-7	T204118-07	Total/NA	Water	8015B	632968
440-275744-8	T204118-08	Total/NA	Water	8015B	632968
440-275744-9	T204118-09	Total/NA	Water	8015B	632968
440-275744-10	T204118-10	Total/NA	Water	8015B	632968
MB 440-632968/1-A	Method Blank	Total/NA	Water	8015B	632968
LCS 440-632968/2-A	Lab Control Sample	Total/NA	Water	8015B	632968
LCSD 440-632968/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	632968

Definitions/Glossary

Client: SunStar Laboratories Inc
Project/Site: T204118

Job ID: 440-275744-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
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

Accreditation/Certification Summary

Client: SunStar Laboratories Inc
Project/Site: T204118

Job ID: 440-275744-1

Laboratory: Eurofins Calscience Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2706	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B	3510C	Water	1,1'-Biphenyl
8015B	3510C	Water	Benzene, 1,1'-oxybis-

SUBCONTRACT ORDER

SunStar Laboratories, Inc.

T204118

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:

TestAmerica (Irvine) Laboratories
17461 Derian Ave, #100
Irvine, CA 92614
Phone :(949) 261-1022
Fax: N/A

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: T204118-01	**Water**	**Sampled:12/03/20 09:15**		
Misc Water Testing #1	12/11/20 15:00	06/01/21 09:15		8015M- Therminol
Containers Supplied:				
Sample ID: T204118-02	**Water**	**Sampled:12/03/20 14:40**		
Misc Water Testing #1	12/11/20 15:00	06/01/21 14:40		8015M- Therminol
Containers Supplied:				
Sample ID: T204118-03	**Water**	**Sampled:12/03/20 15:00**		
Misc Water Testing #1	12/11/20 15:00	06/01/21 15:00		8015M- Therminol
Containers Supplied:				
Sample ID: T204118-04	**Water**	**Sampled:12/03/20 13:10**		
Misc Water Testing #1	12/11/20 15:00	06/01/21 13:10		8015M- Therminol
Containers Supplied:				
Sample ID: T204118-05	**Water**	**Sampled:12/03/20 12:40**		
Misc Water Testing #1	12/11/20 15:00	06/01/21 12:40		8015M- Therminol
Containers Supplied:				
Sample ID: T204118-06	**Water**	**Sampled:12/03/20 12:50**		
Misc Water Testing #1	12/11/20 15:00	06/01/21 12:50		8015M- Therminol
Containers Supplied:				

440-275744 Chain of Custody

12/7/20

Released By	Date	Received By	Date
12-7-20	1609	ECLRV	12/7/20 1609

SUBCONTRACT ORDER

SunStar Laboratories, Inc.

T204118

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: T204118-07	**Water**	**Sampled: 12/03/20 09:15**		
Misc Water Testing #1	12/11/20 15:00	06/01/21 09:15		8015M- Therminol
Containers Supplied:				
Sample ID: T204118-08	**Water**	**Sampled: 12/03/20 10:15**		
Misc Water Testing #1	12/11/20 15:00	06/01/21 10:15		8015M- Therminol
Containers Supplied:				
Sample ID: T204118-09	**Water**	**Sampled: 12/03/20 11:30**		
Misc Water Testing #1	12/11/20 15:00	06/01/21 11:30		8015M- Therminol
Containers Supplied:				
Sample ID: T204118-10	**Water**	**Sampled: 12/03/20 00:00**		
Misc Water Testing #1	12/11/20 15:00	06/01/21 00:00		8015M- Therminol
Containers Supplied:				

Released By	Date	Received By	Date
[signature]	12-7-20 1609	[signature] ECLPV	12/7/20 1609
Released By	Date	Received By	Date

Login Sample Receipt Checklist

Client: SunStar Laboratories Inc

Job Number: 440-275744-1

Login Number: 275744
List Number: 1
Creator: Skinner, Alma D

List Source: Eurofins Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
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	

T204118

SunStar Laboratories, Inc.

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
Phone: (949) 580-2800
Fax: (949) 580-2802

Invoice To:
Northstar Environmental Remediation
Arlin Brewster
26225 Enterprise Court
Lake Forest, CA 92630
Phone :(949) 580-2800
Fax: (949) 580-2802

Date Due: 12/11/20 17:00 (5 day TAT)
Received By: Dan Marteski
Date Received: 12/04/20 12:45
Logged In By: Dan Marteski
Date Logged In: 12/04/20 14:14

Samples Received at: **2.3°C**
Custody Seals No Received On Ice Yes
Containers Intact Yes
COC/Labels Agree Yes
Preservation Confirı Yes

Analysis	Due	TAT	Expires	Comments
T204118-01 23a [Water] Sampled 12/03/20 09:15 (GMT-08:00) Pacific Time (US &				
200.7	12/11/20 15:00	5	06/01/21 09:15	Ca,Cu,Na,K,Fe,Mg
1664	12/11/20 15:00	5	12/31/20 09:15	Oil & Grease
TDS-160.1	12/11/20 15:00	5	12/10/20 09:15	
pH water SM 4500-H+B	12/11/20 15:00	5	12/04/20 09:15	
200.8	12/11/20 15:00	5	06/01/21 09:15	Sb,As,Ba,Cd,Cr,Co,Pb,Ni,Se,Zn
300.0 - F, Cl, Br, SO4	12/11/20 15:00	5	12/31/20 09:15	Chloride,Sulfate only
Conductivity	12/11/20 15:00	5	12/31/20 09:15	
7470/71 Hg	12/11/20 15:00	5	03/03/21 09:15	
300.0 - NO2, NO3, PO4	12/11/20 15:00	5	12/05/20 09:15	Nitrate
T204118-02 OBS-1 [Water] Sampled 12/03/20 14:40 (GMT-08:00) Pacific Time (US &				
Conductivity	12/11/20 15:00	5	12/31/20 14:40	
pH water SM 4500-H+B	12/11/20 15:00	5	12/04/20 14:40	
7470/71 Hg	12/11/20 15:00	5	03/03/21 14:40	
300.0 - F, Cl, Br, SO4	12/11/20 15:00	5	12/31/20 14:40	Chloride,Sulfate only
1664	12/11/20 15:00	5	12/31/20 14:40	Oil & Grease
200.8	12/11/20 15:00	5	06/01/21 14:40	Sb,As,Ba,Cd,Cr,Co,Pb,Ni,Se,Zn
200.7	12/11/20 15:00	5	06/01/21 14:40	Ca,Cu,Na,K,Fe,Mg
TDS-160.1	12/11/20 15:00	5	12/10/20 14:40	
300.0 - NO2, NO3, PO4	12/11/20 15:00	5	12/05/20 14:40	Nitrate

T204118

SunStar Laboratories, Inc.

Client: Northstar Environmental Remediation
Project: Genesis Solar Groundwater
Project Manager: Jeff Lee
Project Number: 196-004-06

Analysis	Due	TAT	Expires	Comments
T204118-03 TW-1 [Water] Sampled 12/03/20 15:00 (GMT-08:00) Pacific Time (US &				
300.0 - F, Cl, Br, SO4	12/11/20 15:00	5	12/31/20 15:00	Chloride,Sulfate only
TDS-160.1	12/11/20 15:00	5	12/10/20 15:00	
pH water SM 4500-H+B	12/11/20 15:00	5	12/04/20 15:00	
Conductivity	12/11/20 15:00	5	12/31/20 15:00	
300.0 - NO2, NO3, PO4	12/11/20 15:00	5	12/05/20 15:00	Nitrate
200.8	12/11/20 15:00	5	06/01/21 15:00	Sb,As,Ba,Cd,Cr,Co,Pb,Ni,Se,Zn
200.7	12/11/20 15:00	5	06/01/21 15:00	Ca,Cu,Na,K,Fe,Mg
1664	12/11/20 15:00	5	12/31/20 15:00	Oil & Grease
7470/71 Hg	12/11/20 15:00	5	03/03/21 15:00	
T204118-04 TW-2 [Water] Sampled 12/03/20 13:10 (GMT-08:00) Pacific Time (US &				
7470/71 Hg	12/11/20 15:00	5	03/03/21 13:10	
TDS-160.1	12/11/20 15:00	5	12/10/20 13:10	
pH water SM 4500-H+B	12/11/20 15:00	5	12/04/20 13:10	
Conductivity	12/11/20 15:00	5	12/31/20 13:10	
200.7	12/11/20 15:00	5	06/01/21 13:10	Ca,Cu,Na,K,Fe,Mg
200.8	12/11/20 15:00	5	06/01/21 13:10	Sb,As,Ba,Cd,Cr,Co,Pb,Ni,Se,Zn
300.0 - F, Cl, Br, SO4	12/11/20 15:00	5	12/31/20 13:10	Chloride,Sulfate only
1664	12/11/20 15:00	5	12/31/20 13:10	Oil & Grease
300.0 - NO2, NO3, PO4	12/11/20 15:00	5	12/05/20 13:10	Nitrate
T204118-05 PW-0 [Water] Sampled 12/03/20 12:40 (GMT-08:00) Pacific Time (US &				
Conductivity	12/11/20 15:00	5	12/31/20 12:40	
pH water SM 4500-H+B	12/11/20 15:00	5	12/04/20 12:40	
7470/71 Hg	12/11/20 15:00	5	03/03/21 12:40	
300.0 - NO2, NO3, PO4	12/11/20 15:00	5	12/05/20 12:40	Nitrate
300.0 - F, Cl, Br, SO4	12/11/20 15:00	5	12/31/20 12:40	Fluoride, Chloride,Sulfate only
200.8	12/11/20 15:00	5	06/01/21 12:40	Sb,As,Ba,Cd,Cr,Co,Pb,Ni,Se,Zn
200.7	12/11/20 15:00	5	06/01/21 12:40	Ca,Cu,Na,K,Fe,Mg
1664	12/11/20 15:00	5	12/31/20 12:40	Oil & Grease
TDS-160.1	12/11/20 15:00	5	12/10/20 12:40	

T204118

SunStar Laboratories, Inc.

Client: Northstar Environmental Remediation
Project: Genesis Solar Groundwater
Project Manager: Jeff Lee
Project Number: 196-004-06

Analysis	Due	TAT	Expires	Comments
T204118-06 PW-2 [Water] Sampled 12/03/20 12:50 (GMT-08:00) Pacific Time (US &				
200.7	12/11/20 15:00	5	06/01/21 12:50	Ca,Cu,Na,K,Fe,Mg
TDS-160.1	12/11/20 15:00	5	12/10/20 12:50	
pH water SM 4500-H+B	12/11/20 15:00	5	12/04/20 12:50	
300.0 - NO2, NO3, PO4	12/11/20 15:00	5	12/05/20 12:50	Nitrate
200.8	12/11/20 15:00	5	06/01/21 12:50	Sb,As,Ba,Cd,Cr,Co,Pb,Ni,Se,Zn
Conductivity	12/11/20 15:00	5	12/31/20 12:50	
1664	12/11/20 15:00	5	12/31/20 12:50	Oil & Grease
7470/71 Hg	12/11/20 15:00	5	03/03/21 12:50	
300.0 - F, Cl, Br, SO4	12/11/20 15:00	5	12/31/20 12:50	Fluoride, Chloride,Sulfate only
T204118-07 DM-1 [Water] Sampled 12/03/20 09:15 (GMT-08:00) Pacific Time (US &				
TDS-160.1	12/11/20 15:00	5	12/10/20 09:15	
1664	12/11/20 15:00	5	12/31/20 09:15	Oil & Grease
200.7	12/11/20 15:00	5	06/01/21 09:15	Ca,Cu,Na,K,Fe,Mg
200.8	12/11/20 15:00	5	06/01/21 09:15	Sb,As,Ba,Cd,Cr,Co,Pb,Ni,Se,Zn
pH water SM 4500-H+B	12/11/20 15:00	5	12/04/20 09:15	
Conductivity	12/11/20 15:00	5	12/31/20 09:15	
7470/71 Hg	12/11/20 15:00	5	03/03/21 09:15	
300.0 - NO2, NO3, PO4	12/11/20 15:00	5	12/05/20 09:15	Nitrate
300.0 - F, Cl, Br, SO4	12/11/20 15:00	5	12/31/20 09:15	Chloride,Sulfate only
T204118-08 DM-2 [Water] Sampled 12/03/20 10:15 (GMT-08:00) Pacific Time (US &				
1664	12/11/20 15:00	5	12/31/20 10:15	Oil & Grease
TDS-160.1	12/11/20 15:00	5	12/10/20 10:15	
pH water SM 4500-H+B	12/11/20 15:00	5	12/04/20 10:15	
300.0 - NO2, NO3, PO4	12/11/20 15:00	5	12/05/20 10:15	Nitrate
300.0 - F, Cl, Br, SO4	12/11/20 15:00	5	12/31/20 10:15	Chloride,Sulfate only
200.7	12/11/20 15:00	5	06/01/21 10:15	Ca,Cu,Na,K,Fe,Mg
7470/71 Hg	12/11/20 15:00	5	03/03/21 10:15	
200.8	12/11/20 15:00	5	06/01/21 10:15	Sb,As,Ba,Cd,Cr,Co,Pb,Ni,Se,Zn
Conductivity	12/11/20 15:00	5	12/31/20 10:15	

T204118

SunStar Laboratories, Inc.

Client: Northstar Environmental Remediation
Project: Genesis Solar Groundwater
Project Manager: Jeff Lee
Project Number: 196-004-06

Analysis	Due	TAT	Expires	Comments
T204118-09 DM-3 [Water] Sampled 12/03/20 11:30 (GMT-08:00) Pacific Time (US &				
TDS-160.1	12/11/20 15:00	5	12/10/20 11:30	
pH water SM 4500-H+B	12/11/20 15:00	5	12/04/20 11:30	
200.8	12/11/20 15:00	5	06/01/21 11:30	Sb,As,Ba,Cd,Cr,Co,Pb,Ni,Se,Zn
200.7	12/11/20 15:00	5	06/01/21 11:30	Ca,Cu,Na,K,Fe,Mg
1664	12/11/20 15:00	5	12/31/20 11:30	Oil & Grease
300.0 - F, Cl, Br, SO4	12/11/20 15:00	5	12/31/20 11:30	Chloride,Sulfate only
300.0 - NO2, NO3, PO4	12/11/20 15:00	5	12/05/20 11:30	Nitrate
Conductivity	12/11/20 15:00	5	12/31/20 11:30	
7470/71 Hg	12/11/20 15:00	5	03/03/21 11:30	
T204118-10 DUP [Water] Sampled 12/03/20 00:00 (GMT-08:00) Pacific Time (US &				
300.0 - F, Cl, Br, SO4	12/11/20 15:00	5	12/31/20 00:00	Chloride,Sulfate only
pH water SM 4500-H+B	12/11/20 15:00	5	12/04/20 00:00	
Conductivity	12/11/20 15:00	5	12/31/20 00:00	
7470/71 Hg	12/11/20 15:00	5	03/03/21 00:00	
200.7	12/11/20 15:00	5	06/01/21 00:00	Ca,Cu,Na,K,Fe,Mg
TDS-160.1	12/11/20 15:00	5	12/10/20 00:00	
200.8	12/11/20 15:00	5	06/01/21 00:00	Sb,As,Ba,Cd,Cr,Co,Pb,Ni,Se,Zn
300.0 - NO2, NO3, PO4	12/11/20 15:00	5	12/05/20 00:00	Nitrate
1664	12/11/20 15:00	5	12/31/20 00:00	Oil & Grease
T204118-11 FIELD BLANK [Water] Sampled 12/03/20 00:00 (GMT-08:00) Pacific Time (US &				**HOLD**
[NO ANALYSES]				
T204118-12 TRIP BLANK [Water] Sampled 12/03/20 00:00 (GMT-08:00) Pacific Time (US &				**HOLD**
[NO ANALYSES]				

Isotech Laboratories, Inc.

T204118-01 23a [Water] Sampled 12/03/20 09:15 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #2	12/11/20 15:00	5	06/01/21 09:15	Deuterium,Oxygen-18
T204118-02 OBS-1 [Water] Sampled 12/03/20 14:40 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #2	12/11/20 15:00	5	06/01/21 14:40	Deuterium,Oxygen-18

T204118

SunStar Laboratories, Inc.

Client: Northstar Environmental Remediation
Project: Genesis Solar Groundwater
Project Manager: Jeff Lee
Project Number: 196-004-06

Analysis	Due	TAT	Expires	Comments
Isotech Laboratories, Inc.				
T204118-03 TW-1 [Water] Sampled 12/03/20 15:00 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #2	12/11/20 15:00	5	06/01/21 15:00	Deuterium,Oxygen-18
T204118-04 TW-2 [Water] Sampled 12/03/20 13:10 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #2	12/11/20 15:00	5	06/01/21 13:10	Deuterium,Oxygen-18
T204118-05 PW-0 [Water] Sampled 12/03/20 12:40 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #2	12/11/20 15:00	5	06/01/21 12:40	Deuterium,Oxygen-18
T204118-06 PW-2 [Water] Sampled 12/03/20 12:50 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #2	12/11/20 15:00	5	06/01/21 12:50	Deuterium,Oxygen-18
T204118-07 DM-1 [Water] Sampled 12/03/20 09:15 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #2	12/11/20 15:00	5	06/01/21 09:15	Deuterium,Oxygen-18
T204118-08 DM-2 [Water] Sampled 12/03/20 10:15 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #2	12/11/20 15:00	5	06/01/21 10:15	Deuterium,Oxygen-18
T204118-09 DM-3 [Water] Sampled 12/03/20 11:30 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #2	12/11/20 15:00	5	06/01/21 11:30	Deuterium,Oxygen-18
T204118-10 DUP [Water] Sampled 12/03/20 00:00 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #2	12/11/20 15:00	5	06/01/21 00:00	Deuterium,Oxygen-18
TestAmerica (Irvine) Laboratories				
T204118-01 23a [Water] Sampled 12/03/20 09:15 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #1	12/11/20 15:00	5	06/01/21 09:15	8015M- Therminol
T204118-02 OBS-1 [Water] Sampled 12/03/20 14:40 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #1	12/11/20 15:00	5	06/01/21 14:40	8015M- Therminol

T204118

SunStar Laboratories, Inc.

Client: Northstar Environmental Remediation
Project: Genesis Solar Groundwater
Project Manager: Jeff Lee
Project Number: 196-004-06

Analysis	Due	TAT	Expires	Comments
TestAmerica (Irvine) Laboratories				
T204118-03 TW-1 [Water] Sampled 12/03/20 15:00 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #1	12/11/20 15:00	5	06/01/21 15:00	8015M- Therminol
T204118-04 TW-2 [Water] Sampled 12/03/20 13:10 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #1	12/11/20 15:00	5	06/01/21 13:10	8015M- Therminol
T204118-05 PW-0 [Water] Sampled 12/03/20 12:40 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #1	12/11/20 15:00	5	06/01/21 12:40	8015M- Therminol
T204118-06 PW-2 [Water] Sampled 12/03/20 12:50 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #1	12/11/20 15:00	5	06/01/21 12:50	8015M- Therminol
T204118-07 DM-1 [Water] Sampled 12/03/20 09:15 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #1	12/11/20 15:00	5	06/01/21 09:15	8015M- Therminol
T204118-08 DM-2 [Water] Sampled 12/03/20 10:15 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #1	12/11/20 15:00	5	06/01/21 10:15	8015M- Therminol
T204118-09 DM-3 [Water] Sampled 12/03/20 11:30 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #1	12/11/20 15:00	5	06/01/21 11:30	8015M- Therminol
T204118-10 DUP [Water] Sampled 12/03/20 00:00 (GMT-08:00) Pacific Time (US &				
Misc Water Testing #1	12/11/20 15:00	5	06/01/21 00:00	8015M- Therminol

Reviewed By

Date

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-275744-1
Client Project/Site: T204118

For:
SunStar Laboratories Inc
25712 Commercentre Drive
Lake Forest, California 92630

Attn: Jeff Lee

Authorized for release by:
12/11/2020 8:35:27 AM

Danielle Roberts, Senior Project Manager
(949)260-3249
Danielle.Roberts@Eurofinset.com

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Sample Summary

Client: SunStar Laboratories Inc
Project/Site: T204118

Job ID: 440-275744-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-275744-1	T204118-01	Water	12/03/20 09:15	12/07/20 16:09	
440-275744-2	T204118-02	Water	12/03/20 14:40	12/07/20 16:09	
440-275744-3	T204118-03	Water	12/03/20 15:00	12/07/20 16:09	
440-275744-4	T204118-04	Water	12/03/20 13:10	12/07/20 16:09	
440-275744-5	T204118-05	Water	12/03/20 12:40	12/07/20 16:09	
440-275744-6	T204118-06	Water	12/03/20 12:50	12/07/20 16:09	
440-275744-7	T204118-07	Water	12/03/20 09:15	12/07/20 16:09	
440-275744-8	T204118-08	Water	12/03/20 10:15	12/07/20 16:09	
440-275744-9	T204118-09	Water	12/03/20 11:30	12/07/20 16:09	
440-275744-10	T204118-10	Water	12/03/20 00:01	12/07/20 16:09	

Case Narrative

Client: SunStar Laboratories Inc
Project/Site: T204118

Job ID: 440-275744-1

Job ID: 440-275744-1

Laboratory: Eurofins Calscience Irvine

Narrative

Job Narrative
440-275744-1

Comments
No additional comments.

Receipt
The samples were received on 12/7/2020 4:09 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.8º C.

GC Semi VOA
Method 8015B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 440-632968 and analytical batch 440-632992. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

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

Organic Prep
Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with 8015 preparation batch 440-632968. LCS was performed in duplicate to provide precision of data.

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: T204118

Job ID: 440-275744-1

Client Sample ID: T204118-01 — Lab Sample ID: 440-275744-1

No Detections.

Client Sample ID: T204118-02 — Lab Sample ID: 440-275744-2

No Detections.

Client Sample ID: T204118-03 — Lab Sample ID: 440-275744-3

No Detections.

Client Sample ID: T204118-04 — Lab Sample ID: 440-275744-4

No Detections.

Client Sample ID: T204118-05 — Lab Sample ID: 440-275744-5

No Detections.

Client Sample ID: T204118-06 — Lab Sample ID: 440-275744-6

No Detections.

Client Sample ID: T204118-07 — Lab Sample ID: 440-275744-7

No Detections.

Client Sample ID: T204118-08 — Lab Sample ID: 440-275744-8

No Detections.

Client Sample ID: T204118-09 — Lab Sample ID: 440-275744-9

No Detections.

Client Sample ID: T204118-10 — Lab Sample ID: 440-275744-10

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Calscience Irvine

Client Sample ID: T204118-01

Lab Sample ID: 440-275744-1

Date Collected: 12/03/20 09:15

Matrix: Water

Date Received: 12/07/20 16:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.11	0.022	mg/L		12/08/20 08:26	12/08/20 19:21	1
1,1'-Biphenyl	ND		0.11	0.022	mg/L		12/08/20 08:26	12/08/20 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*82*		*45 - 120*	*12/08/20 08:26*	*12/08/20 19:21*	*1*

Client Sample ID: T204118-02

Lab Sample ID: 440-275744-2

Date Collected: 12/03/20 14:40

Matrix: Water

Date Received: 12/07/20 16:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.11	0.022	mg/L		12/08/20 08:26	12/08/20 19:44	1
1,1'-Biphenyl	ND		0.11	0.022	mg/L		12/08/20 08:26	12/08/20 19:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*81*		*45 - 120*	*12/08/20 08:26*	*12/08/20 19:44*	*1*

Client Sample ID: T204118-03

Lab Sample ID: 440-275744-3

Date Collected: 12/03/20 15:00

Matrix: Water

Date Received: 12/07/20 16:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.11	0.021	mg/L		12/08/20 08:26	12/08/20 20:08	1
1,1'-Biphenyl	ND		0.11	0.021	mg/L		12/08/20 08:26	12/08/20 20:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*81*		*45 - 120*	*12/08/20 08:26*	*12/08/20 20:08*	*1*

Client Sample ID: T204118-04

Lab Sample ID: 440-275744-4

Date Collected: 12/03/20 13:10

Matrix: Water

Date Received: 12/07/20 16:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.11	0.022	mg/L		12/08/20 08:26	12/08/20 20:56	1
1,1'-Biphenyl	ND		0.11	0.022	mg/L		12/08/20 08:26	12/08/20 20:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*81*		*45 - 120*	*12/08/20 08:26*	*12/08/20 20:56*	*1*

Client Sample ID: T204118-05

Lab Sample ID: 440-275744-5

Date Collected: 12/03/20 12:40

Matrix: Water

Date Received: 12/07/20 16:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.11	0.022	mg/L		12/08/20 08:26	12/08/20 21:19	1
1,1'-Biphenyl	ND		0.11	0.022	mg/L		12/08/20 08:26	12/08/20 21:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*75*		*45 - 120*	*12/08/20 08:26*	*12/08/20 21:19*	*1*

Client Sample ID: T204118-06
Lab Sample ID: 440-275744-6

Date Collected: 12/03/20 12:50
Matrix: Water
Date Received: 12/07/20 16:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.097	0.019	mg/L		12/08/20 08:26	12/08/20 21:43	1
1,1'-Biphenyl	ND		0.097	0.019	mg/L		12/08/20 08:26	12/08/20 21:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*75*		*45 - 120*	*12/08/20 08:26*	*12/08/20 21:43*	*1*

Client Sample ID: T204118-07
Lab Sample ID: 440-275744-7

Date Collected: 12/03/20 09:15
Matrix: Water
Date Received: 12/07/20 16:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.11	0.022	mg/L		12/08/20 08:26	12/08/20 23:41	1
1,1'-Biphenyl	ND		0.11	0.022	mg/L		12/08/20 08:26	12/08/20 23:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*68*		*45 - 120*	*12/08/20 08:26*	*12/08/20 23:41*	*1*

Client Sample ID: T204118-08
Lab Sample ID: 440-275744-8

Date Collected: 12/03/20 10:15
Matrix: Water
Date Received: 12/07/20 16:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.11	0.022	mg/L		12/08/20 08:26	12/09/20 00:04	1
1,1'-Biphenyl	ND		0.11	0.022	mg/L		12/08/20 08:26	12/09/20 00:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*70*		*45 - 120*	*12/08/20 08:26*	*12/09/20 00:04*	*1*

Client Sample ID: T204118-09
Lab Sample ID: 440-275744-9

Date Collected: 12/03/20 11:30
Matrix: Water
Date Received: 12/07/20 16:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.11	0.022	mg/L		12/08/20 08:26	12/09/20 00:28	1
1,1'-Biphenyl	ND		0.11	0.022	mg/L		12/08/20 08:26	12/09/20 00:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*78*		*45 - 120*	*12/08/20 08:26*	*12/09/20 00:28*	*1*

Client Sample ID: T204118-10
Lab Sample ID: 440-275744-10

Date Collected: 12/03/20 00:01
Matrix: Water
Date Received: 12/07/20 16:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.11	0.022	mg/L		12/08/20 08:26	12/09/20 00:51	1
1,1'-Biphenyl	ND		0.11	0.022	mg/L		12/08/20 08:26	12/09/20 00:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*78*		*45 - 120*	*12/08/20 08:26*	*12/09/20 00:51*	*1*

Surrogate Summary

Client: SunStar Laboratories Inc
Project/Site: T204118

Job ID: 440-275744-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	OTCN1 (45-120)									
440-275744-1	T204118-01	82									
440-275744-2	T204118-02	81									
440-275744-3	T204118-03	81									
440-275744-4	T204118-04	81									
440-275744-5	T204118-05	75									
440-275744-6	T204118-06	75									
440-275744-7	T204118-07	68									
440-275744-8	T204118-08	70									
440-275744-9	T204118-09	78									
440-275744-10	T204118-10	78									
LCS 440-632968/2-A	Lab Control Sample	75									
LCSD 440-632968/3-A	Lab Control Sample Dup	79									
MB 440-632968/1-A	Method Blank	82									

Surrogate Legend

OTCN = n-Octacosane

Method Summary

Client: SunStar Laboratories Inc
Project/Site: T204118

Job ID: 440-275744-1

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

Protocol References:

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

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: SunStar Laboratories Inc
Project/Site: T204118

Job ID: 440-275744-1

Client Sample ID: T204118-01
Date Collected: 12/03/20 09:15
Date Received: 12/07/20 16:09

Lab Sample ID: 440-275744-1
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			915 mL	1.0 mL	632968	12/08/20 08:26	NAM	TAL IRV
Total/NA	Analysis	8015B		1			632992	12/08/20 19:21	RMP	TAL IRV

Client Sample ID: T204118-02
Date Collected: 12/03/20 14:40
Date Received: 12/07/20 16:09

Lab Sample ID: 440-275744-2
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			930 mL	1.0 mL	632968	12/08/20 08:26	NAM	TAL IRV
Total/NA	Analysis	8015B		1			632992	12/08/20 19:44	RMP	TAL IRV

Client Sample ID: T204118-03
Date Collected: 12/03/20 15:00
Date Received: 12/07/20 16:09

Lab Sample ID: 440-275744-3
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			940 mL	1.0 mL	632968	12/08/20 08:26	NAM	TAL IRV
Total/NA	Analysis	8015B		1			632992	12/08/20 20:08	RMP	TAL IRV

Client Sample ID: T204118-04
Date Collected: 12/03/20 13:10
Date Received: 12/07/20 16:09

Lab Sample ID: 440-275744-4
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			920 mL	1.0 mL	632968	12/08/20 08:26	NAM	TAL IRV
Total/NA	Analysis	8015B		1			632992	12/08/20 20:56	RMP	TAL IRV

Client Sample ID: T204118-05
Date Collected: 12/03/20 12:40
Date Received: 12/07/20 16:09

Lab Sample ID: 440-275744-5
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			930 mL	1.0 mL	632968	12/08/20 08:26	NAM	TAL IRV
Total/NA	Analysis	8015B		1			632992	12/08/20 21:19	RMP	TAL IRV

Client Sample ID: T204118-06
Date Collected: 12/03/20 12:50
Date Received: 12/07/20 16:09

Lab Sample ID: 440-275744-6
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			1030 mL	1.0 mL	632968	12/08/20 08:26	NAM	TAL IRV
Total/NA	Analysis	8015B		1			632992	12/08/20 21:43	RMP	TAL IRV

Lab Chronicle

Client: SunStar Laboratories Inc
Project/Site: T204118

Job ID: 440-275744-1

Client Sample ID: T204118-07
Date Collected: 12/03/20 09:15
Date Received: 12/07/20 16:09

Lab Sample ID: 440-275744-7
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			930 mL	1.0 mL	632968	12/08/20 08:26	NAM	TAL IRV
Total/NA	Analysis	8015B		1			632992	12/08/20 23:41	RMP	TAL IRV

Client Sample ID: T204118-08
Date Collected: 12/03/20 10:15
Date Received: 12/07/20 16:09

Lab Sample ID: 440-275744-8
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			930 mL	1.0 mL	632968	12/08/20 08:26	NAM	TAL IRV
Total/NA	Analysis	8015B		1			632992	12/09/20 00:04	RMP	TAL IRV

Client Sample ID: T204118-09
Date Collected: 12/03/20 11:30
Date Received: 12/07/20 16:09

Lab Sample ID: 440-275744-9
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			930 mL	1.0 mL	632968	12/08/20 08:26	NAM	TAL IRV
Total/NA	Analysis	8015B		1			632992	12/09/20 00:28	RMP	TAL IRV

Client Sample ID: T204118-10
Date Collected: 12/03/20 00:01
Date Received: 12/07/20 16:09

Lab Sample ID: 440-275744-10
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			900 mL	1.0 mL	632968	12/08/20 08:26	NAM	TAL IRV
Total/NA	Analysis	8015B		1			632992	12/09/20 00:51	RMP	TAL IRV

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

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

Lab Sample ID: MB 440-632968/1-A
Matrix: Water
Analysis Batch: 632992

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632968

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.10	0.020	mg/L		12/08/20 08:26	12/08/20 17:23	1
1,1'-Biphenyl	ND		0.10	0.020	mg/L		12/08/20 08:26	12/08/20 17:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*82*		*45 - 120*	*12/08/20 08:26*	*12/08/20 17:23*	*1*

Lab Sample ID: LCS 440-632968/2-A
Matrix: Water
Analysis Batch: 632992

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632968

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene, 1,1'-oxybis-			0.100	0.0706	J	mg/L		71	50 - 115		
1,1'-Biphenyl			0.100	0.0703	J	mg/L		70	50 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane	*75*		*45 - 120*

Lab Sample ID: LCSD 440-632968/3-A
Matrix: Water
Analysis Batch: 632992

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 632968

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene, 1,1'-oxybis-			0.100	0.0747	J	mg/L		75	50 - 115	6	30
1,1'-Biphenyl			0.100	0.0749	J	mg/L		75	50 - 115	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane	*79*		*45 - 120*

QC Association Summary

Client: SunStar Laboratories Inc
Project/Site: T204118

Job ID: 440-275744-1

GC Semi VOA

Prep Batch: 632968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-275744-1	T204118-01	Total/NA	Water	3510C	
440-275744-2	T204118-02	Total/NA	Water	3510C	
440-275744-3	T204118-03	Total/NA	Water	3510C	
440-275744-4	T204118-04	Total/NA	Water	3510C	
440-275744-5	T204118-05	Total/NA	Water	3510C	
440-275744-6	T204118-06	Total/NA	Water	3510C	
440-275744-7	T204118-07	Total/NA	Water	3510C	
440-275744-8	T204118-08	Total/NA	Water	3510C	
440-275744-9	T204118-09	Total/NA	Water	3510C	
440-275744-10	T204118-10	Total/NA	Water	3510C	
MB 440-632968/1-A	Method Blank	Total/NA	Water	3510C	
LCS 440-632968/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-632968/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 632992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-275744-1	T204118-01	Total/NA	Water	8015B	632968
440-275744-2	T204118-02	Total/NA	Water	8015B	632968
440-275744-3	T204118-03	Total/NA	Water	8015B	632968
440-275744-4	T204118-04	Total/NA	Water	8015B	632968
440-275744-5	T204118-05	Total/NA	Water	8015B	632968
440-275744-6	T204118-06	Total/NA	Water	8015B	632968
440-275744-7	T204118-07	Total/NA	Water	8015B	632968
440-275744-8	T204118-08	Total/NA	Water	8015B	632968
440-275744-9	T204118-09	Total/NA	Water	8015B	632968
440-275744-10	T204118-10	Total/NA	Water	8015B	632968
MB 440-632968/1-A	Method Blank	Total/NA	Water	8015B	632968
LCS 440-632968/2-A	Lab Control Sample	Total/NA	Water	8015B	632968
LCSD 440-632968/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	632968

Definitions/Glossary

Client: SunStar Laboratories Inc
Project/Site: T204118

Job ID: 440-275744-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
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

Accreditation/Certification Summary

Client: SunStar Laboratories Inc
Project/Site: T204118

Job ID: 440-275744-1

Laboratory: Eurofins Calscience Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2706	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B	3510C	Water	1,1'-Biphenyl
8015B	3510C	Water	Benzene, 1,1'-oxybis-

SUBCONTRACT ORDER

SunStar Laboratories, Inc.

T204118

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:

TestAmerica (Irvine) Laboratories
17461 Derian Ave, #100
Irvine, CA 92614
Phone :(949) 261-1022
Fax: N/A

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: T204118-01	**Water**	**Sampled:12/03/20 09:15**		
Misc Water Testing #1	12/11/20 15:00	06/01/21 09:15		8015M- Therminol
Containers Supplied:				
Sample ID: T204118-02	**Water**	**Sampled:12/03/20 14:40**		
Misc Water Testing #1	12/11/20 15:00	06/01/21 14:40		8015M- Therminol
Containers Supplied:				
Sample ID: T204118-03	**Water**	**Sampled:12/03/20 15:00**		
Misc Water Testing #1	12/11/20 15:00	06/01/21 15:00		8015M- Therminol
Containers Supplied:				
Sample ID: T204118-04	**Water**	**Sampled:12/03/20 13:10**		
Misc Water Testing #1	12/11/20 15:00	06/01/21 13:10		8015M- Therminol
Containers Supplied:				
Sample ID: T204118-05	**Water**	**Sampled:12/03/20 12:40**		
Misc Water Testing #1	12/11/20 15:00	06/01/21 12:40		8015M- Therminol
Containers Supplied:				
Sample ID: T204118-06	**Water**	**Sampled:12/03/20 12:50**		
Misc Water Testing #1	12/11/20 15:00	06/01/21 12:50		8015M- Therminol
Containers Supplied:				

440-275744 Chain of Custody

12/7/20

Released By	Date	Received By	Date
[signature]	12-7-20 1609	[signature] ECLRV	12/7/20 1609
Released By	Date	Received By	Date

49/48 12 89

SUBCONTRACT ORDER

SunStar Laboratories, Inc.

T204118

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: T204118-07	**Water**	**Sampled:12/03/20 09:15**		
Misc Water Testing #1	12/11/20 15:00	06/01/21 09:15		8015M- Therminol
Containers Supplied:				
Sample ID: T204118-08	**Water**	**Sampled:12/03/20 10:15**		
Misc Water Testing #1	12/11/20 15:00	06/01/21 10:15		8015M- Therminol
Containers Supplied:				
Sample ID: T204118-09	**Water**	**Sampled:12/03/20 11:30**		
Misc Water Testing #1	12/11/20 15:00	06/01/21 11:30		8015M- Therminol
Containers Supplied:				
Sample ID: T204118-10	**Water**	**Sampled:12/03/20 00:00**		
Misc Water Testing #1	12/11/20 15:00	06/01/21 00:00		8015M- Therminol
Containers Supplied:				

Released By	Date	Received By	Date
[signature]	12-7-20 1609	[signature] ECLPV	12/7/20 1609
Released By	Date	Received By	Date

Login Sample Receipt Checklist

Client: SunStar Laboratories Inc

Job Number: 440-275744-1

Login Number: 275744
List Number: 1
Creator: Skinner, Alma D

List Source: Eurofins Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
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	

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Lab #:	778499	Job #:	46496	IS-101168	Co. Job#:
Sample Name:	T204118-01				Co. Lab#:
Company:	SunStar Laboratories, Inc				
API/Well:					
Container:	250ml Plastic Bottle				
Field/Site Name:	T204118				
Location:					
Formation/Depth:					
Sampling Point:					
Date Sampled:	12/03/2020 9:15	Date Received:	12/08/2020	Date Reported:	12/23/2020

δD of water	----------	-75.6 ‰ relative to VSMOW
$\delta^{18}O$ of water	----------	-10.27 ‰ relative to VSMOW
Tritium content of water	----------	na
$\delta^{13}C$ of DIC	----------	na
^{14}C content of DIC	----------	na
$\delta^{15}N$ of nitrate	----------	na
$\delta^{18}O$ of nitrate	----------	na
$\delta^{34}S$ of sulfate	----------	na
$\delta^{18}O$ 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

ISOTECH
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Lab #:	778500	Job #:	46496	IS-101168	Co. Job#:
Sample Name:	T204118-02				Co. Lab#:
Company:	SunStar Laboratories, Inc				
API/Well:					
Container:	250ml Plastic Bottle				
Field/Site Name:	T204118				
Location:					
Formation/Depth:					
Sampling Point:					
Date Sampled:	12/03/2020 14:40	Date Received:	12/08/2020	Date Reported:	12/23/2020

δD of water	----------	-60.9 ‰ relative to VSMOW
$\delta^{18}O$ of water	----------	-6.80 ‰ relative to VSMOW
Tritium content of water	----------	na
$\delta^{13}C$ of DIC	----------	na
^{14}C content of DIC	----------	na
$\delta^{15}N$ of nitrate	----------	na
$\delta^{18}O$ of nitrate	----------	na
$\delta^{34}S$ of sulfate	----------	na
$\delta^{18}O$ 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

ISOTECH
a Stratum Reservoir brand
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Lab #:	778501	Job #:	46496	IS-101168	Co. Job#:
Sample Name:	T204118-03				Co. Lab#:
Company:	SunStar Laboratories, Inc				
API/Well:					
Container:	250ml Plastic Bottle				
Field/Site Name:	T204118				
Location:					
Formation/Depth:					
Sampling Point:					
Date Sampled:	12/03/2020 15:00	Date Received:	12/08/2020	Date Reported:	12/23/2020

δD of water	----------	-63.8 ‰ relative to VSMOW
$\delta^{18}O$ of water	----------	-7.96 ‰ relative to VSMOW
Tritium content of water	----------	na
$\delta^{13}C$ of DIC	----------	na
^{14}C content of DIC	----------	na
$\delta^{15}N$ of nitrate	----------	na
$\delta^{18}O$ of nitrate	----------	na
$\delta^{34}S$ of sulfate	----------	na
$\delta^{18}O$ 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

ISOTECH
a Stratum Reservoir brand
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Lab #:	778502	Job #:	46496	IS-101168	Co. Job#:
Sample Name:	T204118-04				Co. Lab#:
Company:	SunStar Laboratories, Inc				
API/Well:					
Container:	250ml Plastic Bottle				
Field/Site Name:	T204118				
Location:					
Formation/Depth:					
Sampling Point:					
Date Sampled:	12/03/2020 13:10	Date Received:	12/08/2020	Date Reported:	12/23/2020

δD of water	----------	-75.8 ‰ relative to VSMOW
δ^{18}O of water	----------	-9.99 ‰ relative to VSMOW
Tritium content of water	----------	na
δ^{13}C of DIC	----------	na
^{14}C content of DIC	----------	na
δ^{15}N of nitrate	----------	na
δ^{18}O of nitrate	----------	na
δ^{34}S of sulfate	----------	na
δ^{18}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

ISOTECH
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Lab #:	778503	Job #:	46496	IS-101168	Co. Job#:
Sample Name:	T204118-05				Co. Lab#:
Company:	SunStar Laboratories, Inc				
API/Well:					
Container:	250ml Plastic Bottle				
Field/Site Name:	T204118				
Location:					
Formation/Depth:					
Sampling Point:					
Date Sampled:	12/03/2020 12:40	Date Received:	12/08/2020	Date Reported:	12/23/2020

δD of water	----------	-76.7 ‰ relative to VSMOW
$\delta^{18}O$ of water	----------	-10.07 ‰ relative to VSMOW
Tritium content of water	----------	na
$\delta^{13}C$ of DIC	----------	na
^{14}C content of DIC	----------	na
$\delta^{15}N$ of nitrate	----------	na
$\delta^{18}O$ of nitrate	----------	na
$\delta^{34}S$ of sulfate	----------	na
$\delta^{18}O$ 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

ISOTECH
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Lab #:	778504	Job #:	46496	IS-101168	Co. Job#:
Sample Name:	T204118-06				Co. Lab#:
Company:	SunStar Laboratories, Inc				
API/Well:					
Container:	250ml Plastic Bottle				
Field/Site Name:	T204118				
Location:					
Formation/Depth:					
Sampling Point:					
Date Sampled:	12/03/2020 12:50	Date Received:	12/08/2020	Date Reported:	12/23/2020

δD of water	----------	-78.3 ‰ relative to VSMOW
$\delta^{18}O$ of water	----------	-10.30 ‰ relative to VSMOW
Tritium content of water	----------	na
$\delta^{13}C$ of DIC	----------	na
^{14}C content of DIC	----------	na
$\delta^{15}N$ of nitrate	----------	na
$\delta^{18}O$ of nitrate	----------	na
$\delta^{34}S$ of sulfate	----------	na
$\delta^{18}O$ 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

ISOTECH
a Stratum Reservoir brand
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Lab #:	778505	Job #:	46496	IS-101168	Co. Job#:
Sample Name:	T204118-07				Co. Lab#:
Company:	SunStar Laboratories, Inc				
API/Well:					
Container:	250ml Plastic Bottle				
Field/Site Name:	T204118				
Location:					
Formation/Depth:					
Sampling Point:					
Date Sampled:	12/03/2020 9:15	Date Received:	12/08/2020	Date Reported:	12/23/2020

δD of water	----------	-70.2 ‰ relative to VSMOW
$\delta^{18}O$ of water	----------	-8.57 ‰ relative to VSMOW
Tritium content of water	----------	na
$\delta^{13}C$ of DIC	----------	na
^{14}C content of DIC	----------	na
$\delta^{15}N$ of nitrate	----------	na
$\delta^{18}O$ of nitrate	----------	na
$\delta^{34}S$ of sulfate	----------	na
$\delta^{18}O$ 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

ISOTECH
a Stratum Reservoir brand
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Lab #:	778506	Job #:	46496	IS-101168	Co. Job#:
Sample Name:	T204118-08				Co. Lab#:
Company:	SunStar Laboratories, Inc				
API/Well:					
Container:	250ml Plastic Bottle				
Field/Site Name:	T204118				
Location:					
Formation/Depth:					
Sampling Point:					
Date Sampled:	12/03/2020 10:15	Date Received:	12/08/2020	Date Reported:	12/23/2020

δD of water	----------	-70.1 ‰ relative to VSMOW
$\delta^{18}O$ of water	----------	-8.50 ‰ relative to VSMOW
Tritium content of water	----------	na
$\delta^{13}C$ of DIC	----------	na
^{14}C content of DIC	----------	na
$\delta^{15}N$ of nitrate	----------	na
$\delta^{18}O$ of nitrate	----------	na
$\delta^{34}S$ of sulfate	----------	na
$\delta^{18}O$ 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

ISOTECH
a Stratum Reservoir brand
www.isotechlabs.com

Lab #:	778507	Job #:	46496	IS-101168	Co. Job#:
Sample Name:	T204118-09				Co. Lab#:
Company:	SunStar Laboratories, Inc				
API/Well:					
Container:	250ml Plastic Bottle				
Field/Site Name:	T204118				
Location:					
Formation/Depth:					
Sampling Point:					
Date Sampled:	12/03/2020 11:30	Date Received:	12/08/2020	Date Reported:	12/23/2020

δD of water	----------	-70.9 ‰ relative to VSMOW
$\delta^{18}O$ of water	----------	-8.71 ‰ relative to VSMOW
Tritium content of water	----------	na
$\delta^{13}C$ of DIC	----------	na
^{14}C content of DIC	----------	na
$\delta^{15}N$ of nitrate	----------	na
$\delta^{18}O$ of nitrate	----------	na
$\delta^{34}S$ of sulfate	----------	na
$\delta^{18}O$ 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

ISOTECH
a Stratum Reservoir brand
www.isotechlabs.com

Lab #:	778508	Job #:	46496	IS-101168	Co. Job#:
Sample Name:	T204118-10				Co. Lab#:
Company:	SunStar Laboratories, Inc				
API/Well:					
Container:	250ml Plastic Bottle				
Field/Site Name:	T204118				
Location:					
Formation/Depth:					
Sampling Point:					
Date Sampled:	12/03/2020 0:00	Date Received:	12/08/2020	Date Reported:	12/23/2020

δD of water	----------	-78.8 ‰ relative to VSMOW
δ^{18}O of water	----------	-10.31 ‰ relative to VSMOW
Tritium content of water	----------	na
δ^{13}C of DIC	----------	na
^{14}C content of DIC	----------	na
δ^{15}N of nitrate	----------	na
δ^{18}O of nitrate	----------	na
δ^{34}S of sulfate	----------	na
δ^{18}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