ATTACHMENT 1 VOLUME I

TECHNICAL STUDY SUMMARIES

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Technical Study Summary

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Date	December 30, 2019
To:	Pacific Gas and Electric Company (Susan Kester)
From:	Cardno, Inc.
Project:	Potter Valley Project (FERC Project No. 77) Relicensing
RE:	**AQ 1 – Hydrology and Project Operations Modelling Study Data Memorialization**

1 Introduction

This Technical Study Summary (TSS) presents select data and information that was developed by the Cardno Team in association with the AQ 1 – Hydrology and Project Operations Modelling Study Technical Study Plan (AQ 1 – TSP) (PG&E 2018), which was one of the 21 approved technical studies initiated by Pacific Gas and Electric Company (PG&E) in association with the relicensing process for the Potter Valley Project.[1] The information presented herein is based on work that was completed prior to January 25, 2019, the date that Pacific, Gas and Electric Company (PG&E) filed a notice with the Federal Energy Regulatory Commission (FERC) stating they would no longer be relicensing the Project (PG&E 2019).

2 Study Status

Table AQ 1-1 summarizes the status of the AQ 1 – Hydrology and Project Operations modelling study when work ended on January 25, 2019.

3 Work Products

The following information developed as part of this study is included in this TSS, organized by the select study elements identified in the AQ 1 – TSP. Note that Attachment A – E11 Field Measurements and Attachment B – E2 Field Measurements identified in this TSS are included in the body of the TSS; data files for Attachment C – Unimpaired Flows and Attachment D – Watershed Inflows identified in this TSS will be uploaded to the Potter Valley Project SharePoint.

[1] PG&E filed a Proposed Study Plan (PSP) with the Federal Energy Regulatory Commission (FERC) that included 21 separate Technical Study Plans on September 14, 2017. After collaborating with the stakeholders, PG&E subsequently filed a Revised Study Plan (RSP) with the FERC on January 15, 2018. On February 15, 2018, the FERC issued its Study Plan Determination, approving 17 of the 21 studies included in the RSP and approving the remaining four studies with FERC staff recommended modifications.

3.1 Hydrology Characterization

Unimpaired hydrology was developed for the Eel River from Lake Pillsbury to the stream gage at Scotia. The development of the unimpaired hydrology included the development of flow pulse travel time relationships for each major stream reach.

3.1.1 Hydrology Datasets

The daily gage records used in the calculation of unimpaired inflows are listed in Table AQ 1-2. Figure AQ 1-1 illustrates the Periods of Record for the data sources used to develop the hydrology dataset. Where data gaps exist, statistical methods were used to estimate the missing data. The data analysis and methods used to estimate the missing data are discussed in this document.

Table AQ 2 – 1. AQ 2 – Water Temperature Technical Study Plan Status

Study Elements Completed / Data Collected	Resource Agency Consultation / Technical Working Group Updates	Technical Study Plan Variances	Outstanding Study Elements	Modifications to Ongoing Studies	Proposed New Studies
AQ 1 – Hydrology and Project Operations Modeling					
On-going Potter Valley Project Monitoring Studies (PG&E) • Collected reservoir, stream, and/or diversion gaging information (PG&E and USGS) at Lake Pillsbury and powerhouse release locations within the East Branch Russian River. This will continue through 2019. **Hydrology Characterization** *Hydrology Datasets* • Created a database of historical gage data. • Installed a temporary stage recorder and generate a rating curve in the Eel River and the Rice Fork above Lake Pillsbury and in Tomki Creek to collect flow data inform the development of unimpaired hydrology. This collection began in 2018 and will continue for two years. **Water Balance/Operations Model** *Develop Model* • A technical modeling group comprised of relicensing participants with modeling expertise was formed to collaborate on model development.	**Work Group Updates** • September 26, 2017: Conducted Aquatic Resources TWG meeting to discuss implementation of the AQ 1 – Hydrology and Project Operations Modeling TSP. (UVCC) • June 27, 2018: Conducted Aquatic Resources TWG meeting to discuss development of a HEC-ResSim Model and installation of temporary stage recorder. (WebEx) • October 15, 2018: Conducted Aquatic Resources TWG meeting to continue discussion of model development and evaluation. (WebEx)	**Water Balance/Operations Model** • Voluntarily enhanced spatial extent of the model to include the lower Eel River from the Middle Fork Eel to the Scotia Gage (USGS 11477000). • Voluntarily increased the period of record to include 1911 through 2016 (instead of 1975 – 2016).	**Hydrology Characterization** *Hydrology Datasets* • Develop an unimpaired hydrology daily flow dataset for the Project using historical gage data and/or mass balance or proration as necessary to generate data where gage data was missing. **(In Progress)** • Generate climate change inflow hydrology for approximately the year 2050 by adjusting the unimpaired hydrology using the climate change data products developed by the California Water Commission. • Develop an Existing Operations daily flow dataset using the Project Operations Model. **(In Progress)** *Indicators of Hydrological Alterations* • Analyze unimpaired hydrology and modeled Existing Operations hydrology at key locations in the Study Area using Indicators of Hydrological Alterations. *Flood Frequency* • Generate a flood frequency analysis for the unimpaired hydrology and modeled Existing Operations hydrology using annual peak daily average flow data at key locations in the Study area. A second flood frequency analysis was developed from the historical gage data along the Eel River and East Branch Russian River. *Lake Pillsbury Spills and Ramping Rates* • Characterize Lake Pillsbury spills, including antecedent reservoir storage conditions, for the historical gage dataset and modeled Existing Operations hydrology. • Ramping rates will be characterized for the unimpaired hydrology, historical dataset, and new hydrology data collected upstream of Lake Pillsbury, and modeled Existing Operations hydrology. • Biologically suitable stage change and flow ramping rates will be identified in coordination with Study AQ 5 – Instream Flow. **Water Balance/Operations Model** *Develop Model* • Using the USACE Reservoir Simulation Version 3.1 model (or latest version) the Project Operations model will be developed in collaboration with relicensing participants. (**In Progress**)		

Table AQ 2 – 1. AQ 2 – Water Temperature Technical Study Plan Status

Study Elements Completed / Data Collected	Resource Agency Consultation / Technical Working Group Updates	Technical Study Plan Variances	Outstanding Study Elements	Modifications to Ongoing Studies	Proposed New Studies
			Model Calibration and Validation • In coordination with the technical modeling group, PG&E will evaluate the model by comparing the model output simulation to the relevant historical record. A validated model will be produced and provided to the technical modeling group for review and comment prior to making final model simulation runs. (**In Progress**) *Development of Existing Operations Scenario* • The model will be configured to represent how the Project currently operates (existing operations), including all physical constraints, and regulatory and contractual requirements since the 2004 FERC License Amendment and implementation of the RPA. (**In Progress**) *Project Simulation Runs* • The validated model will be utilized to simulate existing operations and evaluating other operational alternatives, including climate change. Through coordination with Study AQ 4 – Fluvial Processes and Geomorphology potential future changes in Lake Pillsbury storage capacity was incorporated into the modeling, as appropriate. • Simulation outcomes will be provided to stakeholders and presented at meetings. *Coordination with Sonoma County Water Agency* • Coordinate with the Sonoma County Water Agency to provide modeling to the FERC proceeding to quantify how Project Existing Operations affect Lake Mendocino storage and Russian River flows downstream of Lake Mendocino. (**In Process**) *Lower Eel River Low Flow Hydrology Analysis* • Develop a method to characterize Project hydrology effects on the lower Eel River at the furthest downstream location. (**In Progress**)		

Table AQ 1-2. Gage Records used in the calculation of unimpaired flows.

Record Source	USGS ID	PG&E ID	Description	Period of Record		Missing Data?
				Date Begin	Date End	
USGS	11470000	E1	Lake Pillsbury Storage	10/1/1928	9/30/2017	None
PG&E	N/A	E3	Van Arsdale Reservoir Storage	10/1/1989	9/30/2017	None
USGS	11470500	E2	Eel River below Scott Dam	10/1/1922	9/30/2017	None
USGS	11471000	E16	Potter Valley Powerhouse Intake	12/1/1909	9/30/2017	None
USGS	11471500	E11	Eel River below Cape Horn Dam	12/1/1909	9/30/2017	3/1/1927 through 9/30/1927
USGS	11472150	N/A	Eel River near Dos Rios	10/1/1966	12/31/1994	None
USGS	11472200	N/A	Outlet Creek at mouth	10/1/1956	11/6/1994	None
USGS	11472500	N/A	Eel River above Dos Rios	4/1/1951	9/29/1965	None
USGS	11471800	N/A	Tomki Creek near Willits	10/1/1963	9/30/1970	None
USGS	11475000	N/A	Eel River at Fort Seward	10/1/1955	9/30/2017	None
USGS	11477000	N/A	Eel River at Scotia	10/1/1910	9/30/2017	None
USGS	11473000	N/A	Middle Fork Eel River near Covelo	10/1/1951	9/30/1967	None
USGS	11473900	N/A	Middle Fork Eel River near Dos Rios	10/1/1965	9/30/2017	None
USGS	11478000	N/A	Van Duzen River at Bridgeville	10/1/1939	9/30/1951	None
USGS	11478500	N/A	Van Duzen River near Bridgeville	10/1/1950	9/30/2017	None

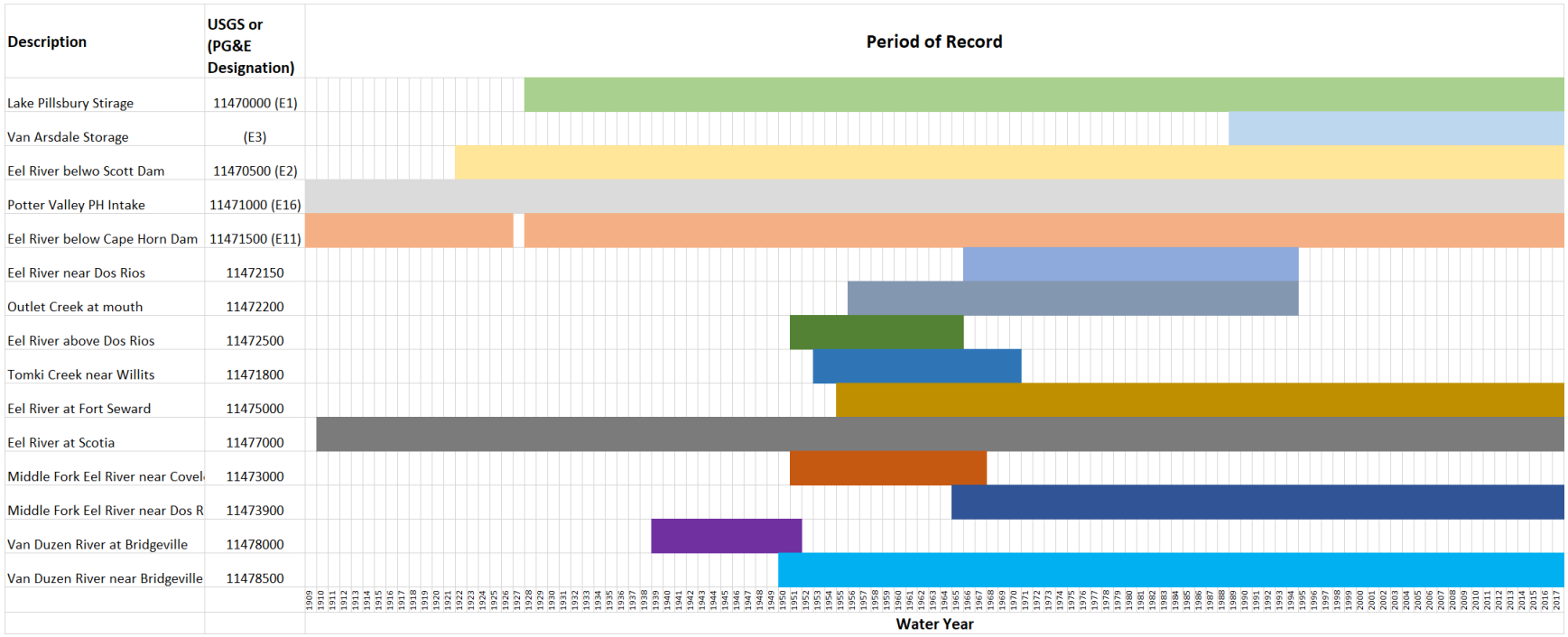


Figure AQ 1-1. Gage Records used in the calculation of unimpaired flows.

3.1.2 Watersheds

10 watersheds in the Eel River were identified for inclusion in the operations simulation model. These watersheds are listed in Table AQ 1-3 and shown in Figure AQ 1-2.

Table AQ 1-3. Eel River watersheds for unimpaired hydrology.

Watershed ID	Watershed Name	Watershed Area (Sq Mi)	Average Annual Precipitation (Inches)
1	Lake Pillsbury	288.8	53.2
2	Van Arsdale Reservoir	60.1	52.5
3	Eel River, Van Arsdale to Outlet Creek	115.6	55.0
4	Tomki Creek	63.7	56.9
5	Outlet Creek	161.1	60.3
6	Eel River, Outlet Creek to Middle Fork Eel	19.2	57.7
7	Middle Fork Eel River	752.8	59.1
8	Eel River, Middle Fork Eel to Fort Seward	643.9	63.3
9	Eel River, Fort Seward to Scotia	1006.6	69.7
10	Eel River, Scotia to Fernbridge	499	63.8

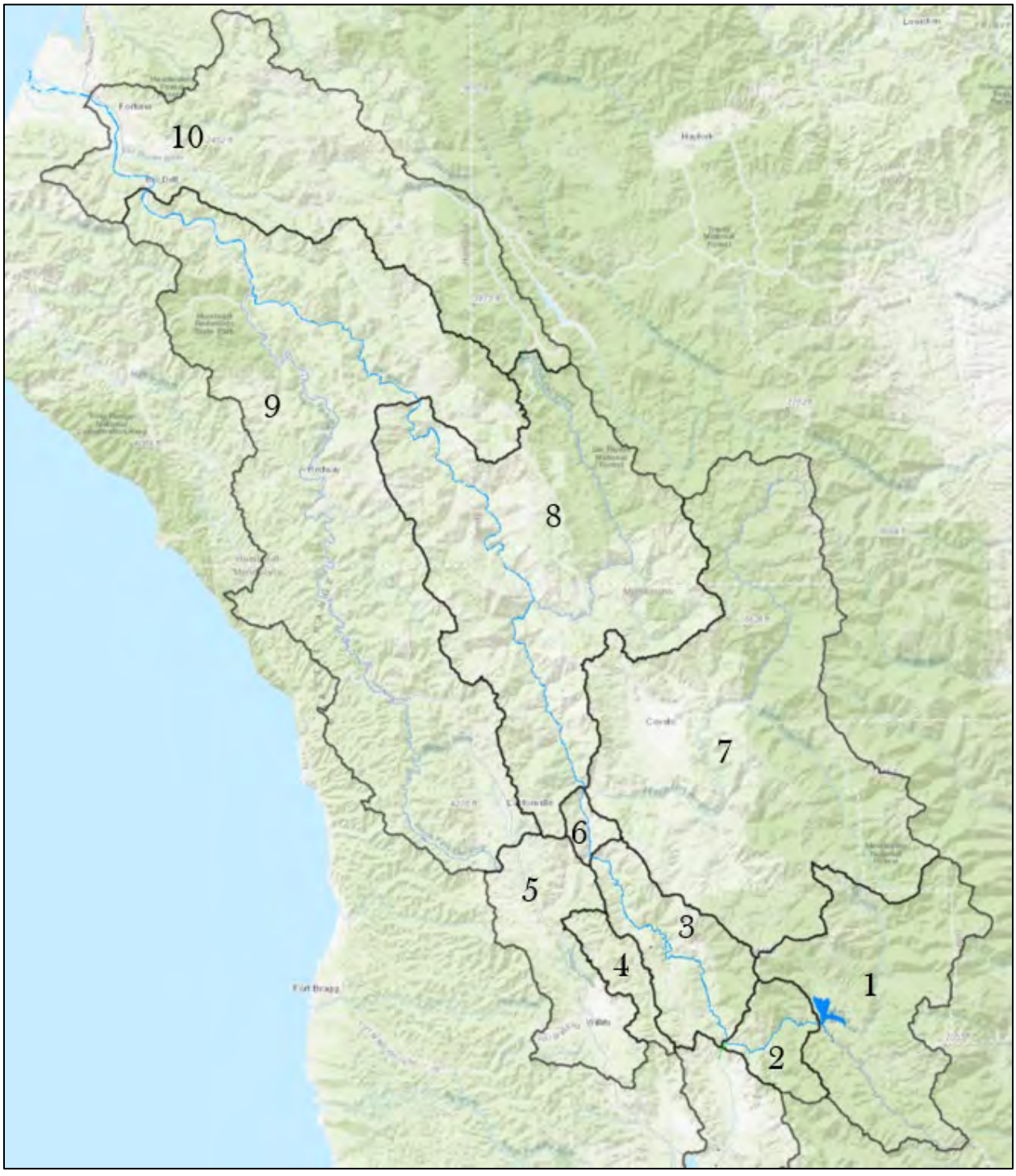


Figure AQ 1-2. Eel River watersheds for unimpaired hydrology.

3.1.3 Travel Time Estimations from stream gage data on the Eel River

3.1.3.1 Methods

The methods for identifying travel time for this hydrology data set were to identify flow events within the 15-minute dataset where a distinct flow pulse can be followed downstream. In instances where the flow in the upstream stream gage is substantially increased over a short period of time it can be compared to the next downstream stream gage to identify the travel time of that flow pulse. Both the travel time of the flow increase and the magnitude of the flow, once increased, are recorded. Once a collection of these distinct events are gathered, a travel time curve is fitted to the collected data points. This fitted curve is the estimate of the travel time relationship on that reach. Travel time curves were estimated using a power regression of the form:

$$Lag = C_0 \cdot Q^{C_1}$$

3.1.3.2 Estimated travel time Lake Pillsbury to Van Arsdale

The reach from the dam at Lake Pillsbury to Van Arsdale Reservoir is approximately 11.6 river miles. Because of the short reach length, travel times are less than 24 hours at all flow levels. The travel time curve for the Lake Pillsbury to Van Arsdale reach is shown in Figure AQ 1-3.

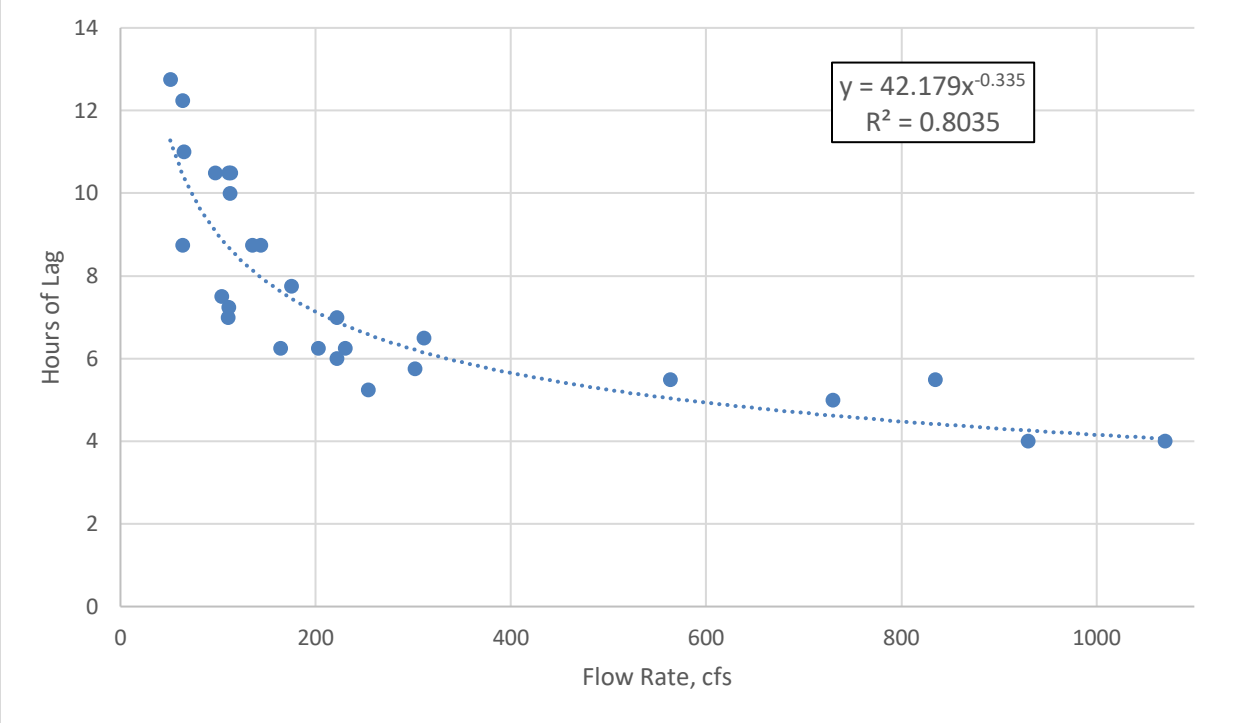


Figure AQ 1-3. Travel Time Curve for the Lake Pillsbury to Van Arsdale reach.

3.1.3.3 Estimated Travel Time on the Eel River from Van Arsdale Reservoir to confluence with Outlet Creek

The reach from Van Arsdale Reservoir to the confluence with Outlet Creek is approximately 30.4 miles. Travel times on this reach can exceed two days at low flows. The travel time curve for this reach is shown in Figure AQ 1-4.

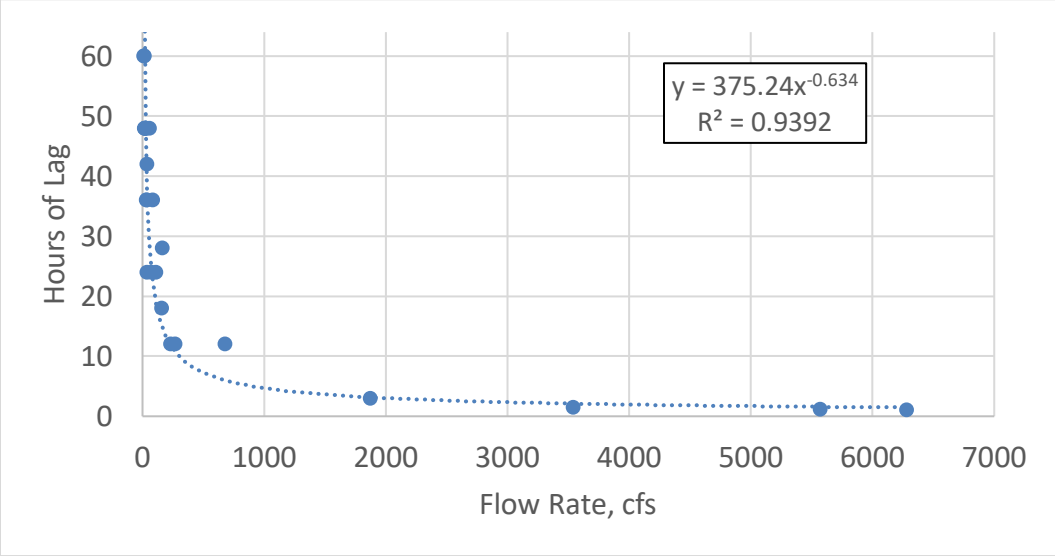


Figure AQ 1-4. Travel Time Curve for Van Arsdale to Outlet Creek reach.

3.1.3.4 Estimated Travel time on the Eel River from Van Arsdale Reservoir to Fort Seward

The reach on the Eel River from Van Arsdale Reservoir to the Fort Seward stream gage is approximately 81 miles. At lower flows, travel times in this reach can exceed 5 days. The travel time curve for this reach is shown in Figure AQ 1-5.

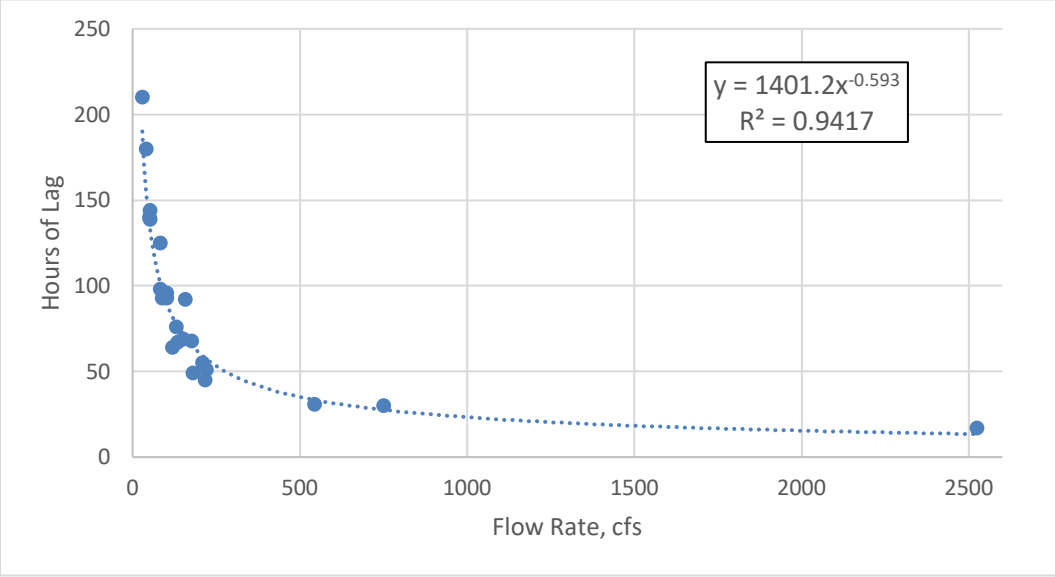


Figure AQ 1-5. Travel Time Curve for the Van Arsdale to Fort Seward Reach.

3.1.3.5 Estimated Travel time Van Arsdale Reservoir to Scotia

The reach on the Eel River from Van Arsdale Reservoir to the Scotia stream gage is approximately 119 miles. At lower flows, travel times in this reach can exceed 9 days. The travel time curve for this reach is shown in Figure AQ 1-6.

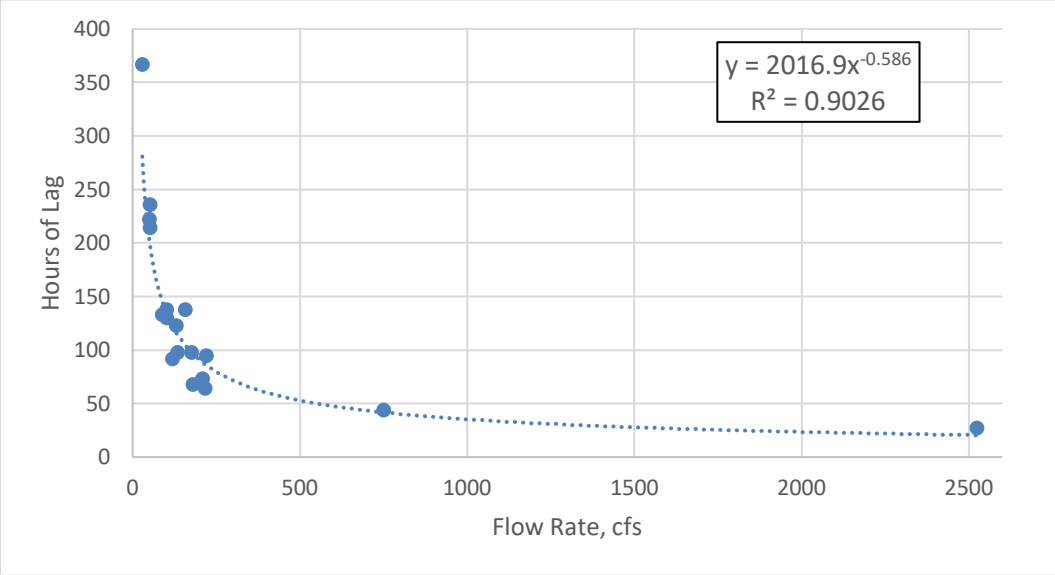


Figure AQ 1-6. Travel Time Curve for Van Arsdale to Scotia Reach.

3.1.3.6 Estimated Travel time Fort Seward to Scotia

The reach on the Eel River from the Fort Seward stream gage to the Scotia stream gage is approximately 38 miles. At lower flows, travel times in this reach can exceed 3 days. The travel time curve for this reach is shown in Figure AQ 1-7.

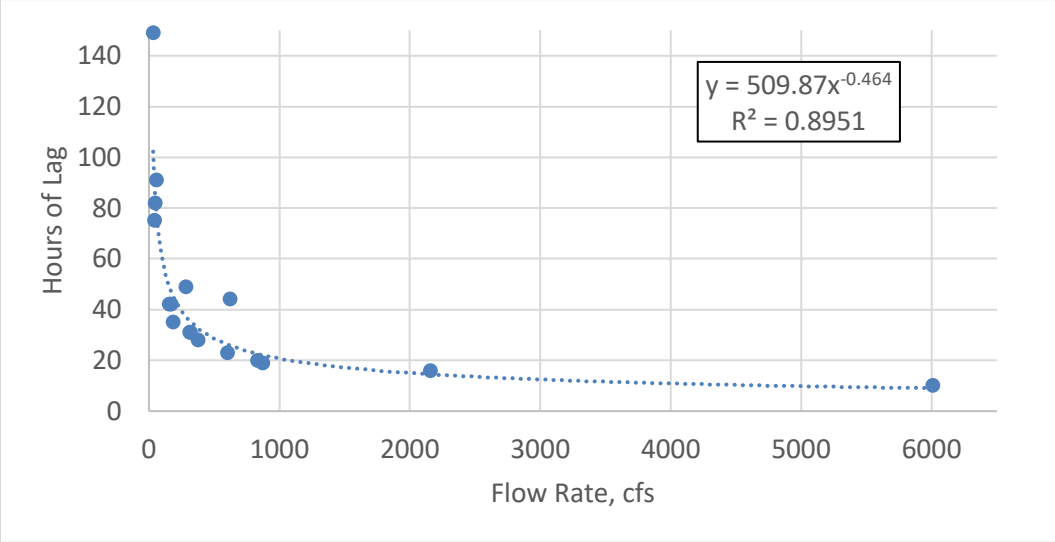


Figure AQ 1-7. Travel Time Curve for the Fort Seward to Scotia reach.

3.1.3.7 Flow Routing Methods

To account for travel time, the flows are routed using the Muskingum routing procedure, a method commonly used in hydrology routing. The modified Wilson Method is a simplification of the Muskingum procedure that predicts the basin outflow (routed flow) as shown the equation below. (Al-Humoud, et al. 2006)

$$Outflow_t = C_0 \cdot Inflow_t + C_1 \cdot Inflow_{t-1} + C_2 \cdot Outflow_{t-1}$$

Where:

$$C_0 = \frac{-k \cdot x + 0.5 \cdot \Delta t}{k(1-x) + 0.5 \cdot \Delta t}$$

$$C_1 = \frac{k \cdot x + 0.5 \cdot \Delta t}{k(1-x) + 0.5 \cdot \Delta t}$$

$$C_2 = \frac{k \cdot (1-x) - 0.5 \cdot \Delta t}{k \cdot (1-x) + 0.5 \cdot \Delta t}$$

k = travel time, Δt = routing interval, and x is a parameter representing physical features of the channel. For each reach, x has been calibrated for a best fit. The travel time, k, is taken from the travel time curves discussed in the previous section using the flow level at the upstream end of the watershed.

3.1.4 Evaporation Estimates

Evaporation rates at Scott Dam were measured from 1964 through 1970 and published in CDWR Bulletin 73 (CDWR 1979). A regression was developed between monthly evaporation rates and monthly average temperatures, and this regression was used to estimate evaporation rates for the period of record when evaporation measurements are not available. This regression is shown in Figure AQ 1-8. Monthly estimates of evaporation rates are disaggregated to daily evaporation rates using a simple interpolation technique. An example of daily interpolated evaporation rates is shown for water year 2012 in Figure AQ 1-9.

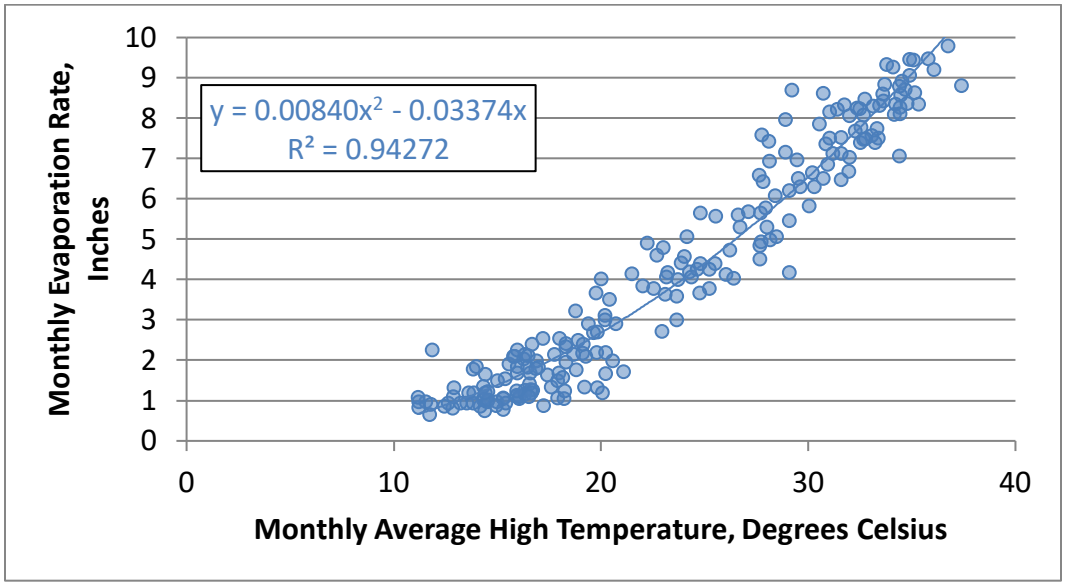


Figure AQ 1-8. Evaporation Rate Regression with Monthly Average High Temperature.

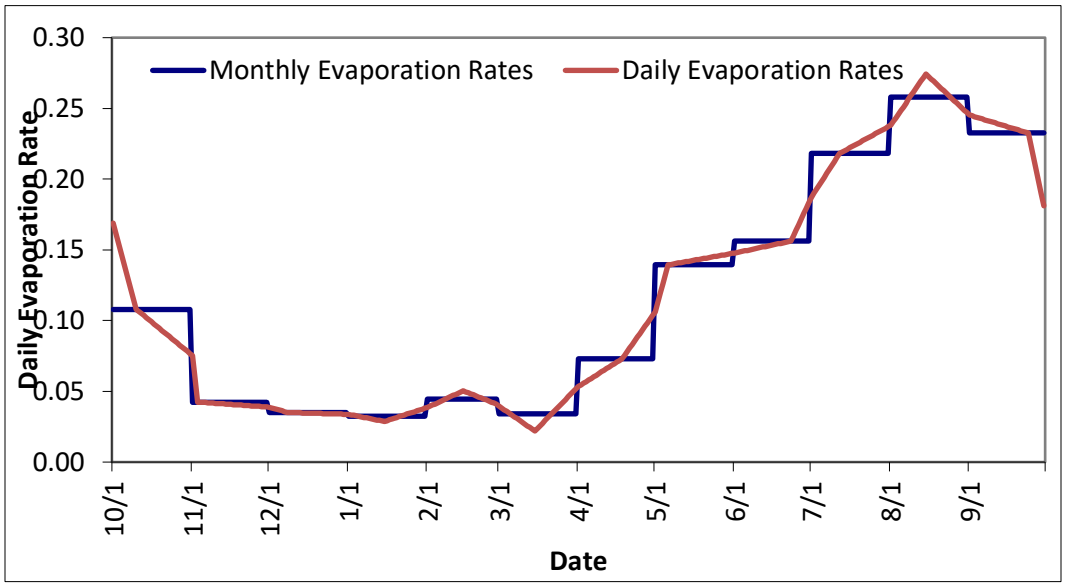


Figure AQ 1-9. Daily Evaporation Rates Interpolated from Monthly Evaporation Rates, water year 2012.

3.1.5 Unimpaired Hydrology

3.1.5.1 Approach for Developing Unimpaired Hydrology in the Project Vicinity

Unimpaired Inflow to Lake Pillsbury 1923-2017

Unimpaired Inflow to Lake Pillsbury is the inflow resulting from watershed 1 in Figure AQ 1-1. This is the runoff that can be stored in and controlled by Lake Pillsbury and includes the Eel River, Rice Fork, Salmon Creek and Smokehouse Creek. Development of unimpaired flows at Lake Pillsbury requires using a water balance calculation to account for inflow, outflow, reservoir storage and evaporation. Unimpaired flows can be reasonably estimated for the period of 1929-2017. The Mass balance inflow at Lake Pillsbury is calculated as shown in the equation below.

$$\begin{aligned} &Lake\ Pillsbury\ Mass\ Balance\ Inflow \\ &\quad = Release\ to\ Eel\ River\ (Eel\ River\ below\ Scott\ Dam\ stream\ gage) \\ &\quad + Change\ in\ Storage\ at\ Lake\ Pillsbury \qquad + Evaporation \end{aligned}$$

There are no attempts in the calculation of unimpaired inflow to Lake Pillsbury to account for travel time, as the travel time is less than the time step of the gage data for this reach.

Storage Interpolation. In water years 1937 through 1957, the USGS storage record at Lake Pillsbury has intermittent storage readings, with one or two consecutive missing values every five or six days. There are other larger blocks of missing data up to 6 days, but these are less frequent. Storage is interpolated across the missing values. The average number of interpolated storage values during the 1937-1959 period is shown in Table AQ 1-4.

Table AQ 1-4. Lake Pillsbury Number of Interpolated Storage Values, 1937-1959.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average number of storage readings	24	23	27	27	26	25	25	18	13	15	18	22
Average number of interpolated values	7	5	4	3	5	5	6	13	17	16	12	9

Lake Survey Updates. Bathymetric surveys have been used to produce updated storage-elevation lookup tables at Lake Pillsbury 5 times since the dam was built. These are usually updated in the USGS record on October 1st and will cause the reported storage to jump or drop 1,000s of Acre Feet from September 30 to October 1st. These changes are not representative of an actual change in storage and they are identified and ignored in the calculation of hydrology. These events are listed in Table AQ 1-5 and on each of these days the unimpaired hydrology is estimated to be the average of the two neighboring days.

Table AQ 1-5. Storage Elevation Lookup Table Updates in Lake Pillsbury Historic Storage Record.

Storage-Elevation Lookup Table Updates in the Historic Record
10/1/1959
10/1/1985
10/16/1999
10/1/2005

Storage Smoothing. The resulting mass balance calculation can be quite noisy due to many factors such as elevation reading accuracy, elevation to storage lookup table accuracy, and the magnitude of inflows compared to magnitude of flows being released from the reservoir. The simplest method of smoothing the calculated inflows into a reasonable hydrograph is to smooth out the storage readings themselves, as this seems to be the largest source of error. The storage smoothing algorithm uses an average of the storage of neighboring days when certain criteria are met, instead of the historic storage record. Criteria include decreasing storage levels, steady reservoir releases (within 15% of yesterday and tomorrow's flow), and a change in storage less than the 5-day running average change in storage. Table AQ 1-6 shows the average, minimum, and maximum number of days that are averaged, rather than using the historic record, in the 1975-2017 period.

Table AQ 1-6. Average, Minimum, and Maximum Number of Days per Month Storage Smoothing is Applied.

Month	Average Days	Minimum Days	Maximum Days
October	22	14	29
November	14	0	28
December	12	0	25
January	9	0	27
February	7	0	20

Month	Average Days	Minimum Days	Maximum Days
March	6	0	16
April	3	0	16
May	13	1	24
June	20	10	29
July	26	21	31
August	25	17	30
September	21	9	27

Flow Averaging. The resulting mass balance flows are averaged using a moving weighted average with five categories which are described in Table AQ 1-7.

Table AQ 1-7. Moving Weighted Average Flow Calculation Method.

Description	Definition	Averaging
Extreme low flows	30-day average less than 12 cfs	Centered 30-day average
Summer low flows	14-day average less than 40 cfs	Centered 14-day average
Low flows	7-day average less than 60 cfs	Centered 5-day average
Storm events	3-day average greater than 175 cfs	Raw calculated values are used
Normal flows	All other flows	Centered weighted 5-day

Unimpaired Local Inflow to Van Arsdale Reservoir 1923-2017

Unimpaired Local Inflow to Van Arsdale Reservoir is the inflow resulting from watershed 2 in Figure AQ 1-2. This runoff, in addition to releases from Lake Pillsbury, can be stored in and controlled by Van Arsdale Reservoir. The watershed includes Bucknell Creek and Soda Creek. Total Inflow to the Reservoir and the unimpaired local inflow are both calculated using a mass balance shown below.

$$
\begin{aligned}
&Van\ Arsdale\ Reservoir\ Mass\ Balance\ Inflow \\
&= Release\ to\ Eel\ River\ (Eel\ River\ below\ Cape\ Horn\ Dam\ Stream\ Gage) \\
&+ Flow\ at\ Potter\ Valley\ Powerhouse\ Intake\ Stream\ Gage \\
&+ Change\ in\ Storage\ at\ Van\ Arsdale\ Reservoir\ (when\ data\ is\ available) \\
&+ Evaporation
\end{aligned}
$$

$$
\begin{aligned}
&Van\ Arsdale\ Reservoir\ Local\ Inflow \\
&\qquad = Van\ Arsdale\ Reservoir\ Mass\ Balance\ Inflow\ - Release\ from\ Lake\ Pillsbury
\end{aligned}
$$

Flow Averaging. The Local Inflows to Van Arsdale Reservoir are subjected to the same flow averaging technique described for Lake Pillsbury.

Reference Stream Gage to Fill in Gaps. The calculation of local inflow to Van Arsdale Reservoir will sometimes result in large negative flows. These are often likely due to bad data. These negatives are replaced in the final local inflow record with flow derived from a reference stream gage.

Flows are estimated by scaling the referenced unimpaired stream gage by watershed area and annual precipitation to obtain an estimate of the local inflow. Three unimpaired stream gages with various period of record are used to obtain a long-term flow estimate.

Unimpaired inflow to Lake Pillsbury and Van Arsdale Reservoir 1910-1922

For water years 1910 through 1922, Eel River inflows to Cape Horn Dam are not impaired by storage at Lake Pillsbury. Unimpaired inflow at Cape Horn Dam is calculated as the sum of the Potter Valley Powerhouse and the Cape Horn Dam release to the Eel River. The resulting unimpaired flow is distributed to the Lake Pillsbury and Van Arsdale Reservoir watersheds using a regression between daily Lake Pillsbury inflow and daily total unimpaired Flow at Van Arsdale Reservoir. This regression suggests that Lake Pillsbury watershed receives 83.5% of the calculated total unimpaired flow at Van Arsdale Reservoir. Local Inflow to Van Arsdale Reservoir receives the other 16.5% of the total unimpaired flow in the basin.

3.1.5.2 Approach for Developing Unimpaired Hydrology on the Eel River from Van Arsdale Reservoir to Scotia, 1911 through 1951

Prior to water year 1952, the only stream gage on the mainstem Eel River below Van Arsdale was the Eel River at Scotia, approximately 119 miles below Van Arsdale Reservoir. This stream gage provides information on total production of the Eel River of these watersheds in these years, with no information about the distribution of this runoff from the individual subwatersheds. To estimate the runoff from individual subwatersheds many options are available, including using subwatershed area and precipitation to distribute total basin runoff. However, the total accretion area is very large and some subwatersheds in the basin have more snow influence than others, and correspondingly have different runoff patterns. In addition, lower elevation subwatersheds tend to have higher summertime base flows than higher elevation subwatersheds. To capture these different runoff patterns, annual hydrographs for each subwatershed were averaged across years 1955 through 1993 when gage data was available, and each hydrograph was calculated as a percentage of the total basin runoff. These 'Basin Split Hydrographs' are shown in Figure AQ 1-10 with solid lines representing the Basin Split Hydrograph from stream gage data and dotted lines representing the split calculated from watershed area and precipitation contributions.

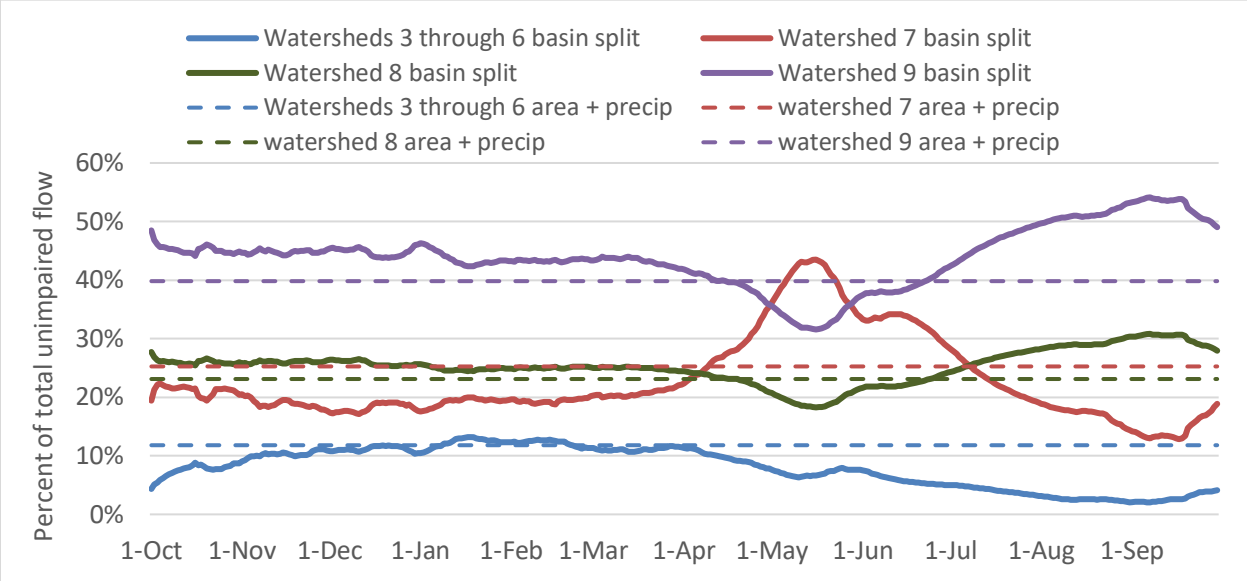


Figure AQ 1-10. Eel River Accretions below Van Arsdale average Basin Split, 1955-1993.

These seasonally varying basin splits are used to distribute the calculated daily accretions on the Eel River from Van Arsdale to Scotia for watersheds 3 through 9 for water years 1911 through 1951.

3.1.5.3 Approach for Developing Unimpaired Hydrology on the Eel River from Van Arsdale Reservoir to Scotia, 1952 through 2017

Accretions on Eel River from Van Arsdale Reservoir to Fort Seward

Accretions on the Eel River from Van Arsdale Reservoir to the Fort Seward stream gage includes contributions from watersheds 3 through 6 and 8. Depending on which gages are active, it is necessary to group watersheds for accretion calculation, and then the calculated accretions are split by watershed area and precipitation.

10/1/1951 through 10/11/1956. Watersheds 3, 4, 5, and 6 are calculated together using a mass balance, and the calculated accretions are split into sub-basins using the watershed split listed in Table AQ 1-8. Accretions on the Eel River from the confluence of the Middle Fork Eel to the Fort Seward stream gage (watershed 8) are calculated using a mass balance.

Table AQ 1-8. Eel River watershed split, 1951-1956.

Watershed	Watershed Area, Sq Mi	Average Annual Precipitation, Inches	Fraction of total calculated accretion
3 – Eel River from Van Arsdale to Outlet Creek	115.6	55.0	0.3055
4 – Tomki Creek	63.7	56.9	0.1744
5 – Outlet Creek	161.1	60.3	0.4668
6 – Eel River from Outlet Creek to Middle Fork Eel River	19.2	57.7	0.0533

10/12/1956 through 7/31/1963. Watersheds 3, 4, and 6 are calculated together, and the calculated accretions are split into sub-basins using the watershed split listed in Table AQ 1-9. Outlet Creek (watershed 5) is directly gaged during this time period and the gage data is used directly. Accretions on the Eel River from the confluence of the Middle Fork Eel to the Fort Seward stream gage (watershed 8) are calculated using a mass balance.

Table AQ 1-9. Eel River watershed split, 1956-1963.

Watershed	Watershed Area, Sq Mi	Average Annual Precipitation, Inches	Fraction of total calculated accretion
3 – Eel River from Van Arsdale to Outlet Creek	115.6	55.0	0.5730
4 – Tomki Creek	63.7	56.9	0.3271
6 – Eel River from Outlet Creek to Middle Fork Eel River	19.2	57.7	0.0999

8/1/1963 through 9/30/1965. Watersheds 3 and 6 are calculated together, and the calculated accretions are split into sub-basins using the watershed split listed in Table AQ 1-10. Tomki Creek (watershed 4) and Outlet Creek (watershed 5) are directly gaged during this time period and the gage data is used directly. Accretions on the Eel River from the confluence of the Middle Fork Eel to the Fort Seward stream gage (watershed 8) are calculated using a mass balance.

Table AQ 1-10. Eel River watershed split, 1963-1965.

Watershed	Watershed Area, Sq Mi	Average Annual Precipitation, Inches	Fraction of total calculated accretion
3 – Eel River from Van Arsdale to Outlet Creek	115.6	55.0	0.8515
6 – Eel River from Outlet Creek to Middle Fork Eel River	19.2	57.7	0.1485

10/1/1965 through 9/30/1970. Accretions are calculated directly for watersheds 3, 8, and 9. Tomki Creek (watershed 4) and Outlet Creek (watershed 5) are gaged during this time period and the gage data is used directly. Watershed 6 accretions are estimated using a regression with Outlet Creek.

10/1/1970 through 12/31/1994. Watersheds 3 and 4 are calculated together, and the calculated accretions are split into sub-basins using the watershed split listed in Table AQ 1-11. Outlet Creek (watershed 5) is directly gaged during this time period and the gage data is used directly. Watershed 6 accretions are estimated using a regression with Outlet Creek.

Table AQ 1-11. Eel River watershed split, 1970-1994.

Watershed	Watershed Area, Sq Mi	Average Annual Precipitation, Inches	Fraction of total calculated accretion
3 – Eel River from Van Arsdale to Outlet Creek	115.6	55.0	0.6366
4 – Tomki Creek	63.7	56.9	0.3634

1/1/1995 through 9/30/2017. In 1994 the stream gage near the confluence with the MF Eel River was taken out of service, and the next stream gage downstream from Van Arsdale is the Fort Seward stream gage stream gage. Watersheds 3, 4, 5, 6, and 8 are calculated together, and the calculated accretions are split into sub-basins using the seasonal watershed split shown in Figure AQ 1-11. Accretions are calculated directly for watershed 9. The Middle Fork Eel River (watershed 7) is gaged near the mouth during this time period and the gage data is used directly.

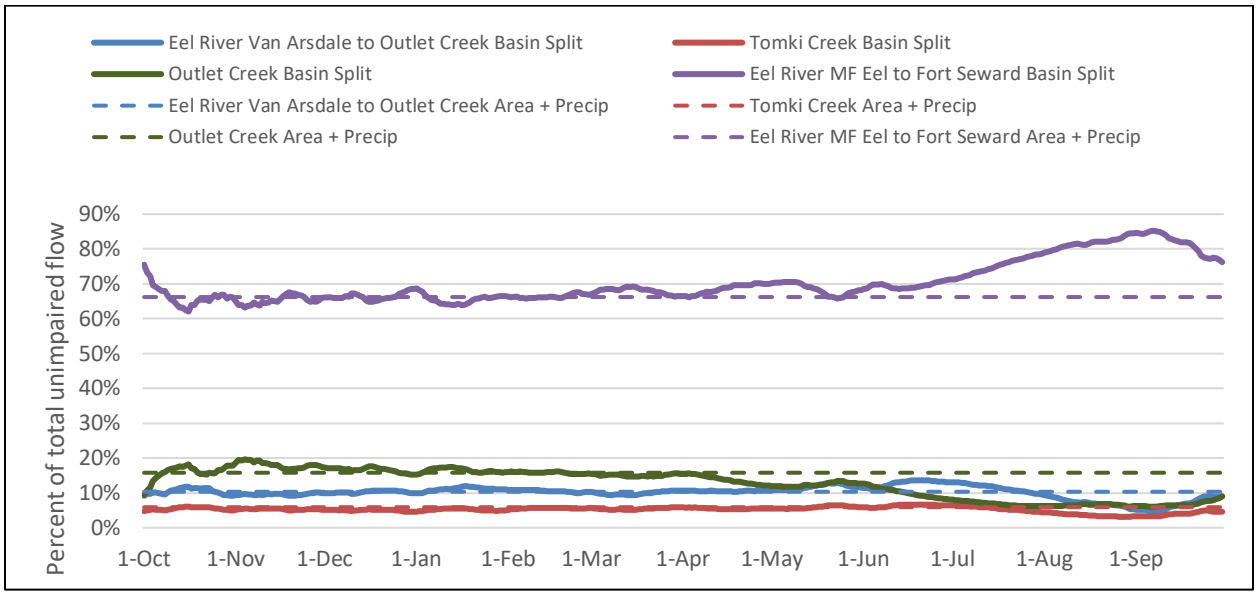


Figure AQ 1-11. Seasonal watershed split, 1995 – 2017.

Flows on the Middle Fork Eel River at the mouth (Watershed 7)

A stream gage on the Middle Fork Eel River approximately 1.75 river miles upstream of the mouth (USGS # 11473900, Middle Fork Eel River near Dos Rios) has been continuously measuring flows since water year 1966. For water years 1966 through 2017 these gaged flows are used directly as the flow in the Middle Fork Eel River at the mouth. For water years 1952 through 1965, the flow at the mouth of the Middle Fork Eel River is estimated by scaling up the Middle Fork Eel River below the confluence with the Black Butte River (USGS #11473000, Middle Fork Eel River below Black Butte R near Covelo CA) using the watershed scaling factor shown in Table AQ 1-12.

Table AQ 1-12. Watershed Scaling Factor for Middle Fork Eel River, water years 1952-1965.

	Watershed 7, Middle Fork Eel River at mouth	Middle Fork Eel River below Black Butte River	Scaling Factor
Watershed Area	745 Square Miles	367 Square Miles	2.030
Precipitation	59.1 Inches	68 Inches	0.869
Combined	N/A	N/A	1.764

3.1.5.4 Accretions on the Eel River from Fort Seward to Scotia (Watershed 9)

Accretions on the mainstem Eel River from the Fort Seward stream gage to the Scotia stream gage mostly consist of contributions from the South Fork Eel River and Larabee Creek. Accretions in this reach are calculated daily from 1955 through 2017 by subtracting flows at Fort Seward, which have been routed to Scotia using the methods described in Flow Routing Methods, from the Scotia stream gage.

3.1.5.5 Accretions on the Eel River from Scotia to Fernbridge (Watershed 10)

Water years 1911 through 1939. Prior to 1940 there are no stream gages on the Eel River below Scotia or on the Van Duzen River. In water years 1911 through 1939 accretions are estimated using a

regression with Watershed 9 on annual volumes over the period 1952 through 1993. The regression is shown in Figure AQ 1-12.

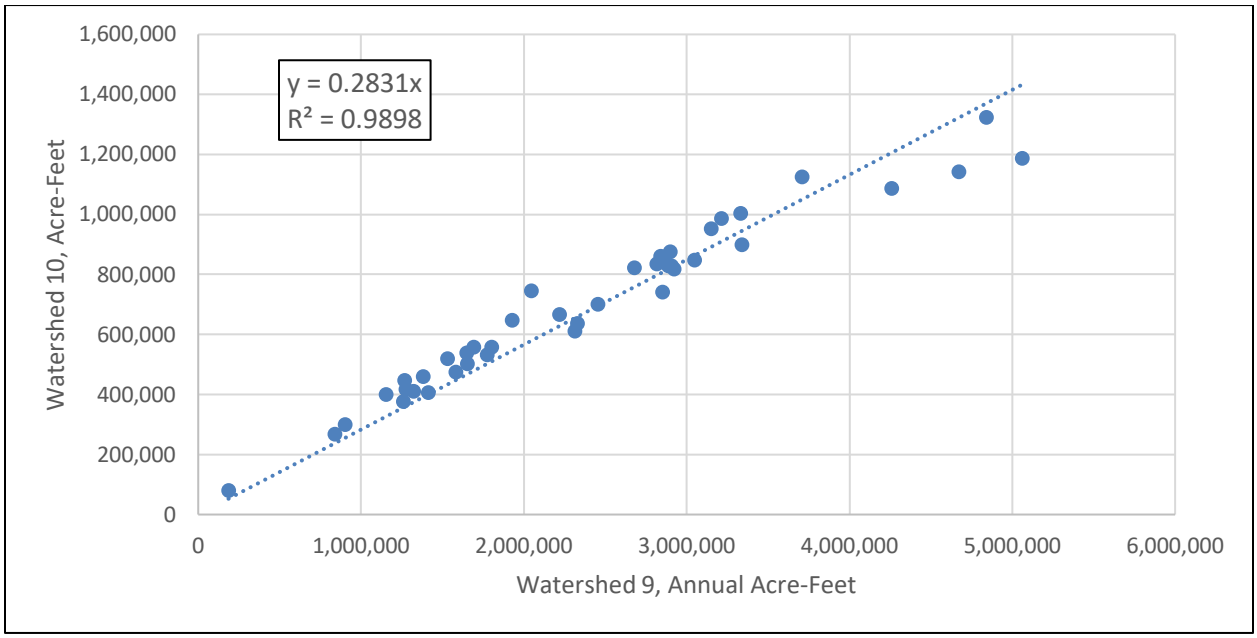


Figure AQ 1-12. Watershed 10 regression with watershed 9, annual volumes 1952 through 1993.

Water years 1940 through 2017. Accretions on the mainstem Eel River from the Scotia stream gage to the Fernbridge CDEC stage gage mostly consist of contributions from the Van Duzen River. The Fernbridge CDEC stage gage does not convert stage to flow and a direct calculation of accretions by a mass balance approach are not feasible with the data available. To estimate the contribution from this watershed, flows in the Van Duzen River are scaled up by watershed area to estimate the contribution from the entire watershed. There is no stream gage on the Van Duzen River that covers the entire period of record, so the accretions in this watershed are estimated using two different stream gages on the Van Duzen River, described in Table AQ 1-13. The scaling factors used for both stream gages to estimate accretions are outlined in Table AQ 1-13.

Table AQ 1-13. Stream gages used to estimate accretions in watershed 10.

USGS ID	Description	Period used in calculations	Scaling Factor to represent watershed 10
11478000	Van Duzen River at Bridgeville	1940-1950	1.2480
11478500	Van Duzen River near Bridgeville	1951-2017	1.1355

3.1.6 Stream gage accuracy analysis at Lake Pillsbury and Van Arsdale

3.1.6.1 Timeseries Data used in the analysis

The analysis used stream gage measurements on a 15-minute time step from 5 Project stream gages, listed in Table AQ 1-14.

Table AQ 1-14. 15-minute gage data used in the stream gage accuracy analysis.

Gage	Parameter	Date Range of Available Data
E1	Elevation	10/1/1992 – 9/30/2017
E2	Flow	10/1/1992 – 9/30/2017
E3	Elevation	10/1/2007 – 9/30/2017
E11	Flow	10/1/1992 – 9/30/2017
E16	Flow	10/1/1992 – 9/30/2017

The analysis utilized a calculated 15-minute inflow to Van Arsdale Reservoir. The 15-minute calculated inflow is used with caution due to travel time from Lake Pillsbury and is only used to determine long term trends in inflow, not instantaneous values. The inflow to Van Arsdale Reservoir is calculated as:

$$\begin{aligned} Inflow \quad & = Release\ to\ Eel\ River\ (E11) \\ & + Release\ to\ Potter\ Valley\ Powerhouse\ (E16) \\ & + change\ in\ storage\ at\ Van\ Arsdale\ (E3) \end{aligned}$$

The analysis also utilized a 15-minute timeseries of Lake Pillsbury Needle Valve opening readings with a precision of 0.01 inch which covers water years 2008 through 2017. The reported Needle valve openings range from 0 to 20 inches with most readings less than 10 inches, and an exceedance frequency is shown in Figure AQ 1-13.

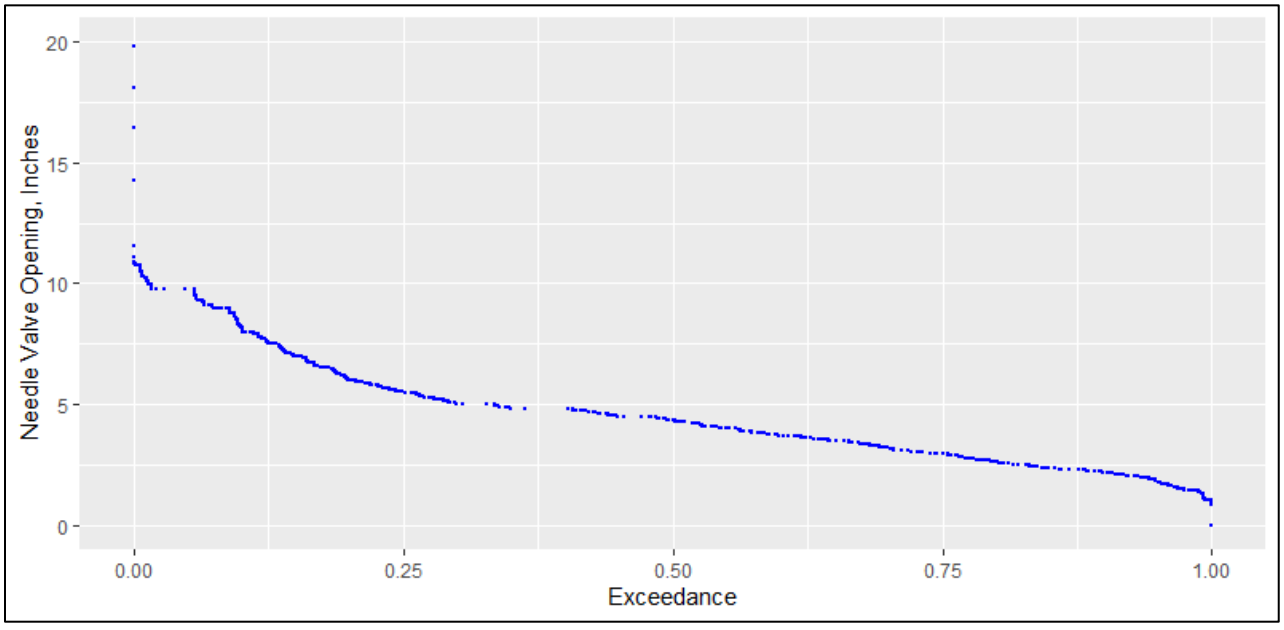


Figure AQ 1-13. Lake Pillsbury Needle Valve Opening Exceedance, 2008-2017.

3.1.6.2 Other Data Used in the Analysis

Stream Gage Field Measurements

Field measurements are taken at stream gage cross sections as a part of routine stream gage maintenance. These measurements are recorded and used for creating flow rating curves at that cross section. The stream gage accuracy analysis utilized the historic record of field measurements at E2 and E11 to verify flows from various other sources. The measurements are listed in Appendix X (E2 field measurements) and Appendix X (E11 field measurements). Measurements in the last 20 years are shown graphically in Figure AQ 1-14 (E2 field measurements) and Figure AQ 1-15 (E11 field measurements). These figures show that in recent years field measurements have only been performed at lower flows.

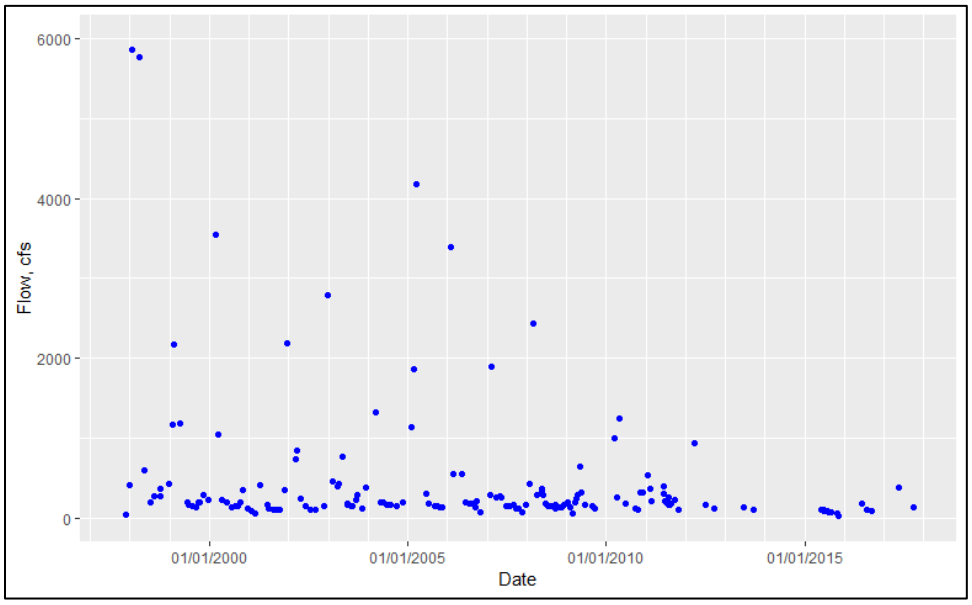


Figure AQ 1-14. E2 stream gage field measurements, 1998 – 2017.

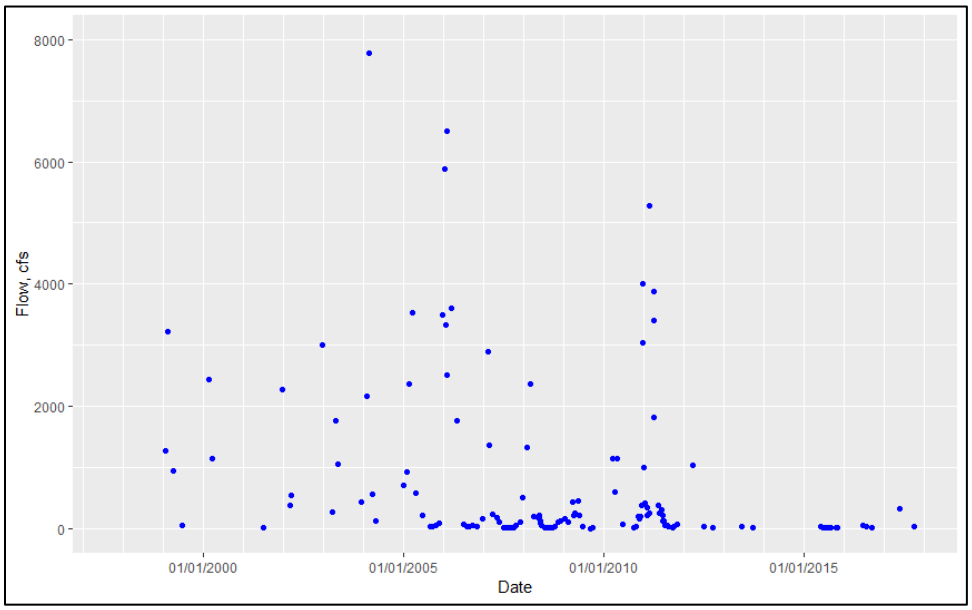


Figure AQ 1-15. E11 stream gage field measurements.

Lake Pillsbury Needle Valve Rating Curve

Lake Pillsbury releases through the needle valve are a function of two parameters: Lake Pillsbury water surface elevation (head) and needle valve opening. The needle valve rating table is shown graphically in Figure AQ 1-16. Historic combinations of needle valve openings and Lake Pillsbury water surface elevations are shown in Figure AQ 1-17 together with the needle valve rating table. The few points that fall outside of the rating table are calculated as a flow of the full capacity of the needle valve, 415 cfs.

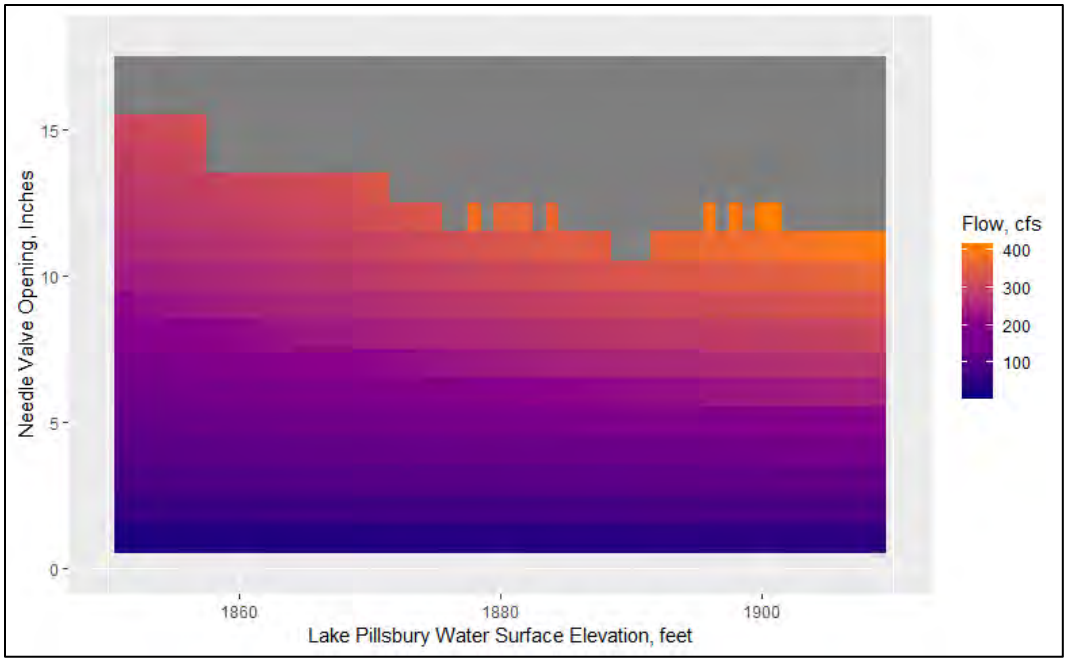


Figure AQ 1-16. Lake Pillsbury Needle Valve Rating Curve.

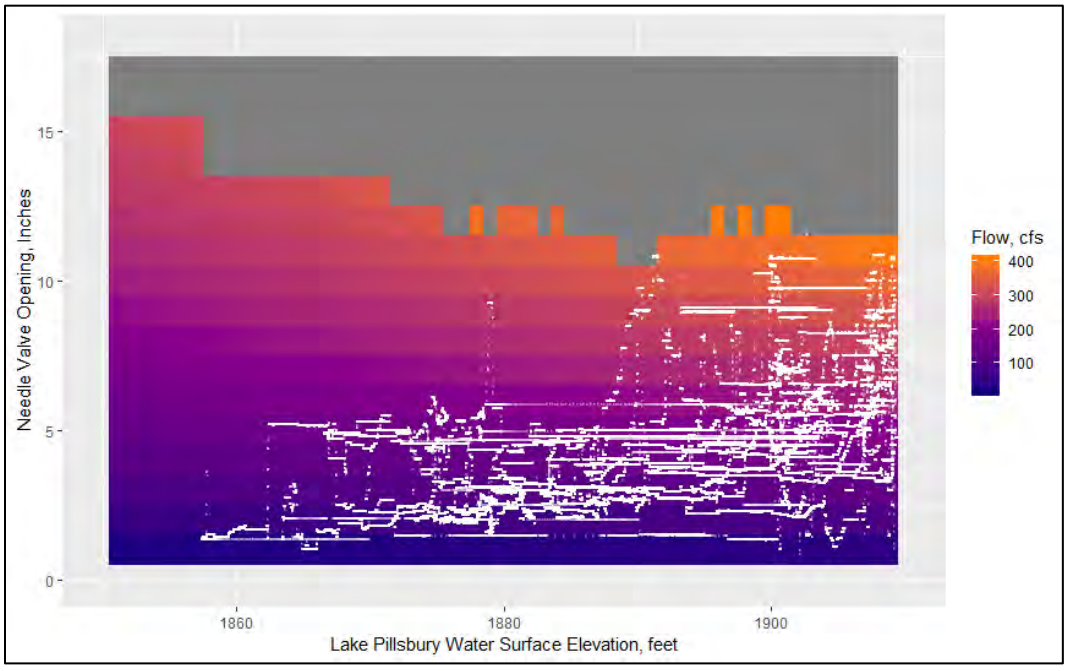


Figure AQ 1-17. Lake Pillsbury Needle Valve Rating Curve with historic needle valve opening values.

Lake Pillsbury Spillway Rating Curve

A spillway rating curve for Lake Pillsbury releases was provided by PG&E based on a 2014 modeling analysis of the Scott Dam Spillway. The 2014 spillway rating curve update is shown in Figure AQ 1-18.

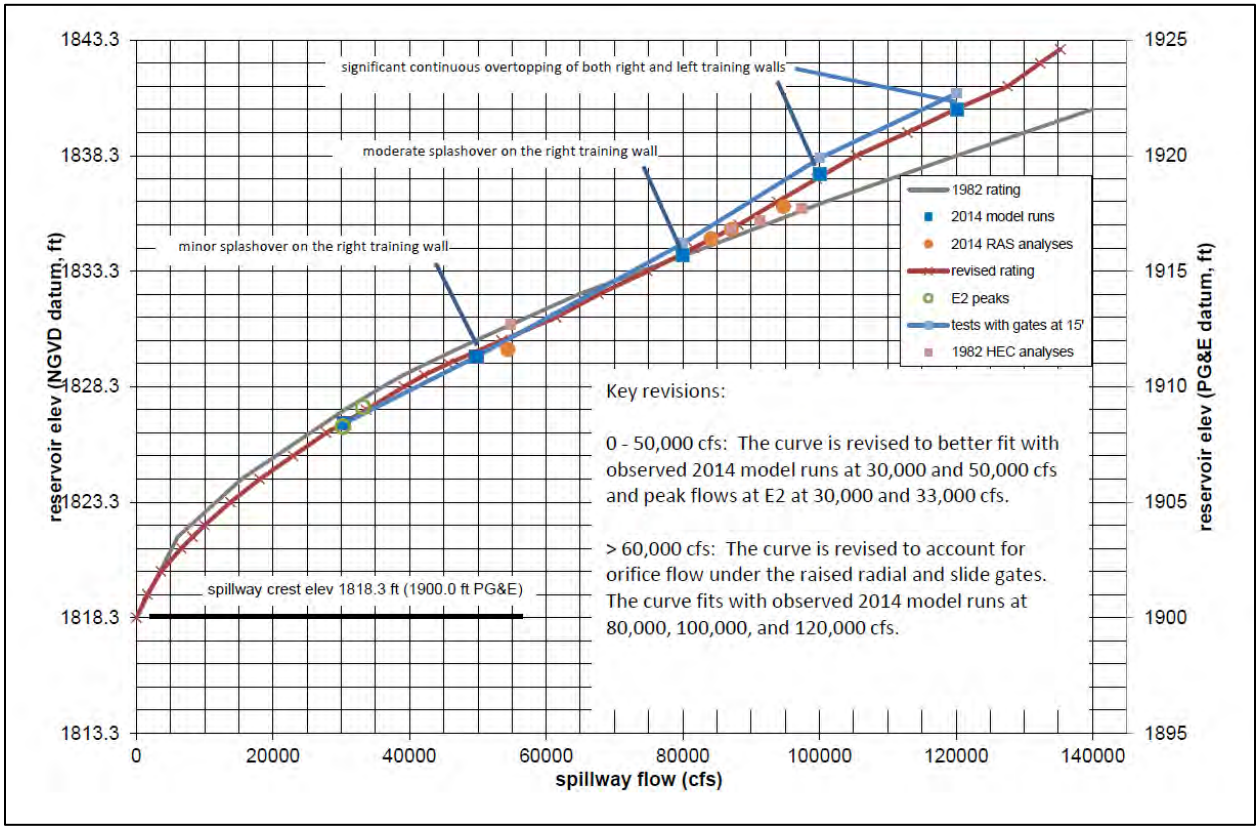


Figure AQ 1-18. Scott Dam Spillway Rating Curve, 2014 Update.

Van Arsdale Spillway Rating Curve

A spillway rating curve for releases from Van Arsdale Reservoir from 1983 was provided by PG&E, shown in Figure AQ 1-19.

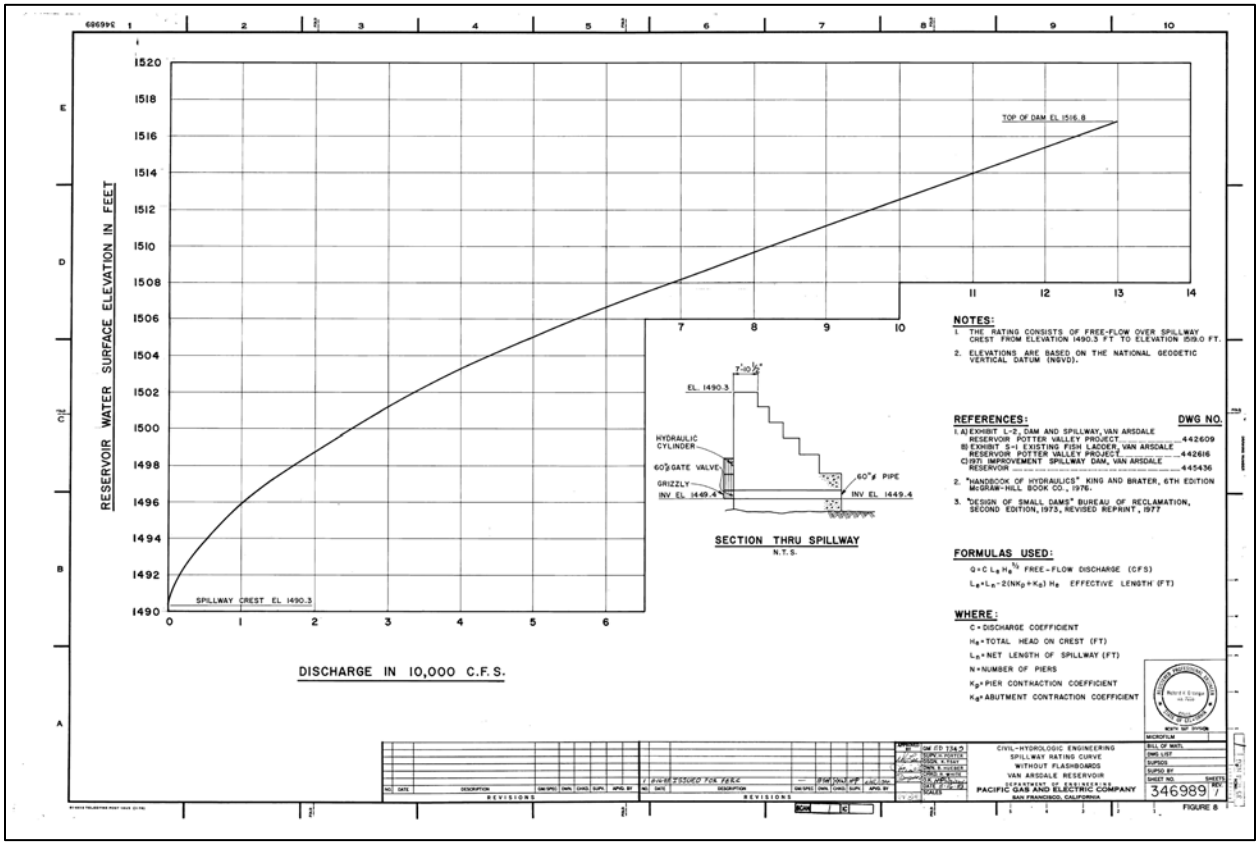


Figure AQ 1-19. Cape Horn Dam Spillway Rating Curve.

3.1.6.3 Lake Pillsbury Needle Valve releases

Needle Valve flows are calculated by interpolating the lookup table across reservoir elevation and opening amount. An exceedance of calculated needle valve flows are shown in Figure AQ 1-20.

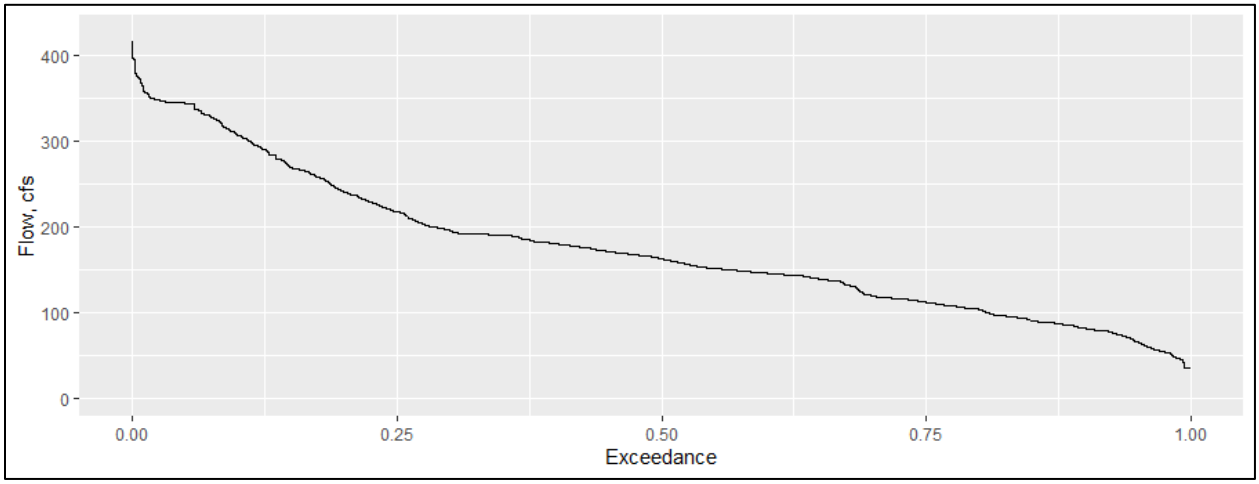


Figure AQ 1-20. Lake Pillsbury Calculated Needle Valve Flow Exceedance, 2008-2017.

The needle valve flows cannot be directly compared to flows at the E2 gage as the E2 stream gage will often capture spill events that are not passed through the needle valve. To ensure a comparison between E2 stream gage readings and calculated needle valve flows that does not contain Lake Pillsbury spill events, a dataset was created that contains time periods when Lake Pillsbury water surface elevation is less than 1895 feet. Calculated needle valve flows and E2 gaged flows at water surface elevations less than 1895 are plotted in Figure AQ 1-21. An exceedance curve for each is shown in Figure AQ 1-22.

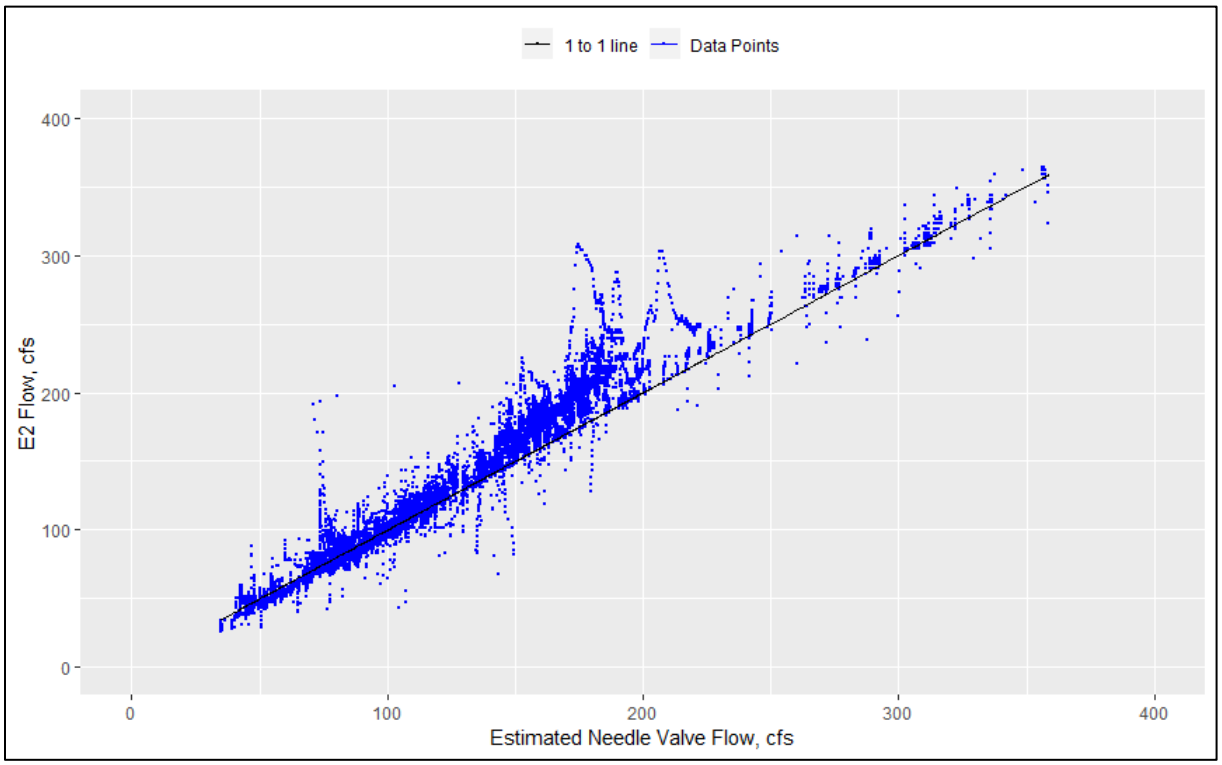


Figure AQ 1-21. E2 stream gage flows and Estimated Needle Valve Flows, Lake Pillsbury WSE less than 1895, 2008-2017.

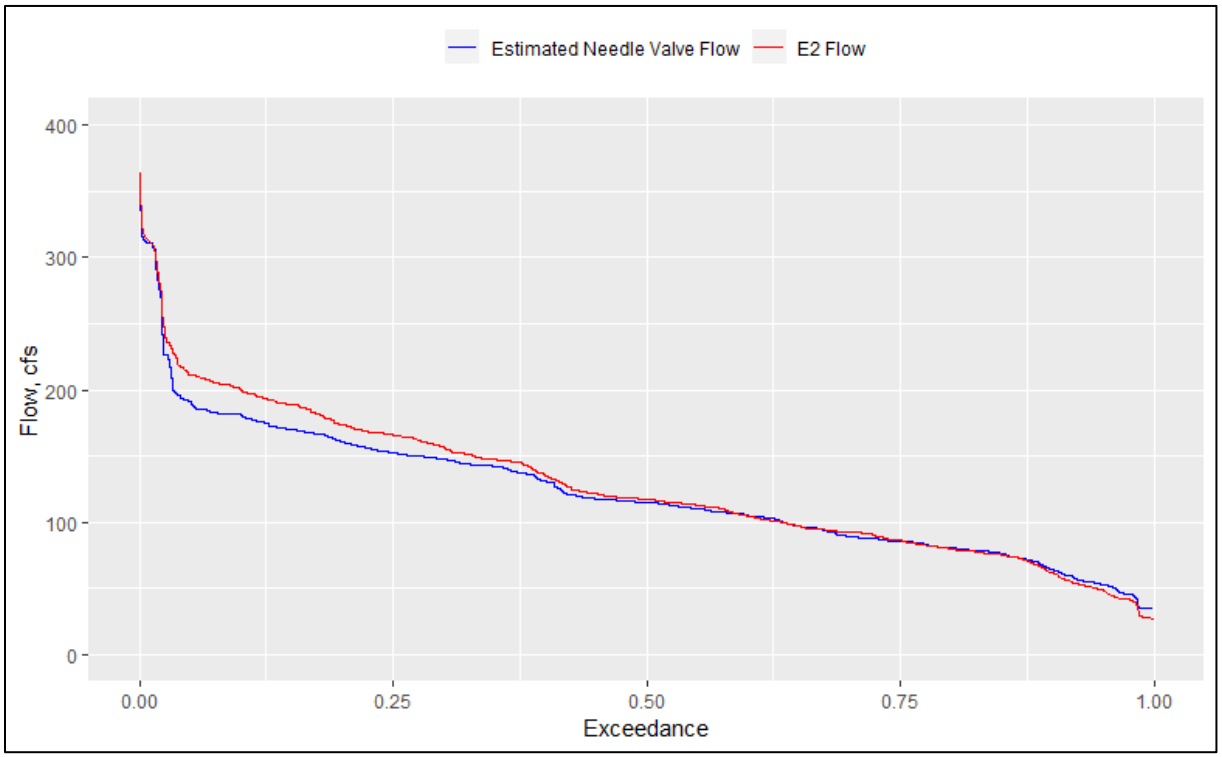


Figure AQ 1-22. E2 and Estimated Needle Valve Flow Exceedance, Lake Pillsbury WSE less than 1895, 2008-2018.

Field measurements are used to determine the accuracy of calculated needle valve flows and E2 stream gage flows. Calculated inflows to Van Arsdale can also be used in the summertime or other low inflow periods to estimate accuracy of release data streams. The following section examines the field measurements of the E2 stream gage station for various water years.

2008. In the summer of 2008, shown in Figure AQ 1-23, there were 6 field measurements. Five of these six measurements are closer in agreement with the E2 stream gage than the estimated needle valve flow. The measurement in late September is in closer agreement with the field measurements. The calculated inflow to Van Arsdale, which should be greater than or equal to the release from Lake Pillsbury, is closer to agreement with the estimated needle valve flow than the E2 stream gage.

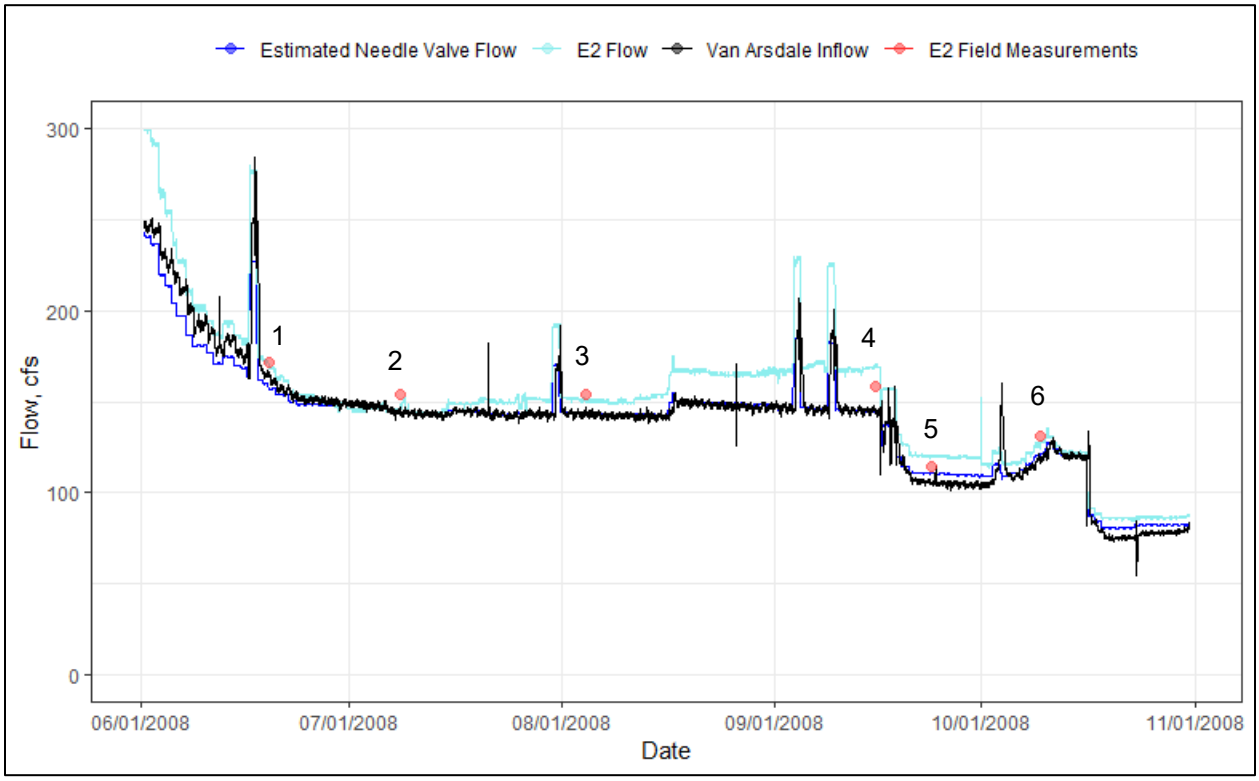


Figure AQ 1-23. Lake Pillsbury Release and field measurements, 2008.

2009. In the summer of 2009, shown in Figure AQ 1-24, there were 3 field measurements performed. Each field measurement was performed at a time when there was agreement between the E2 stream gage flow and the calculated needle valve flow. In mid-July the E2 flow starts trending up until mid-August when the E2 gaged flow drops down to match the estimated needle valve flow. During this time both the estimated needle valve flow and the calculated Van Arsdale Inflow were relatively constant, suggesting that the E2 gage was drifting during this time.

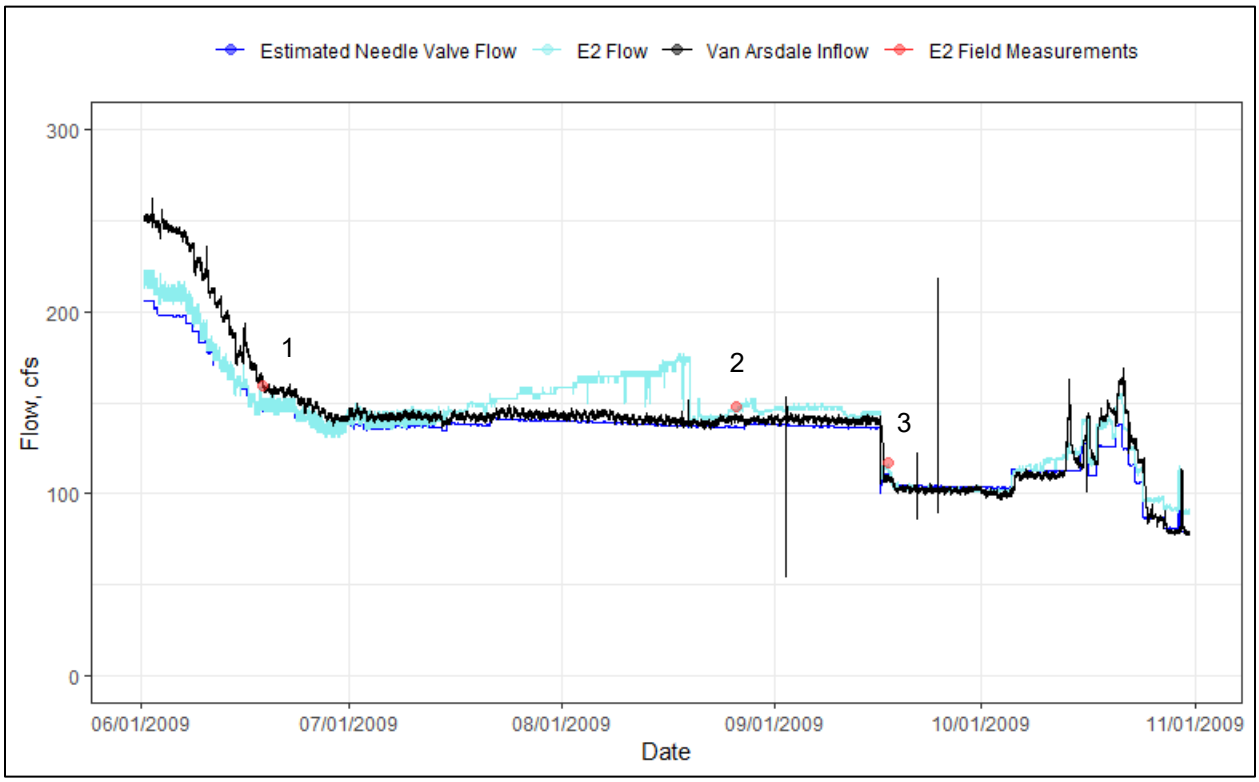


Figure AQ 1-24. Lake Pillsbury Release and field measurements, 2009.

2010. In the summer of 2010, shown in Figure AQ 1-25, there were 3 field measurements. During this time, there was general agreement between E2 gaged flows and estimated needle valve flows when flows are below 175 cfs. When flows are greater than 175 cfs, notably in September 2010, the flows diverge. The calculated Van Arsdale inflow corroborates the estimated needle valve flows during this period.

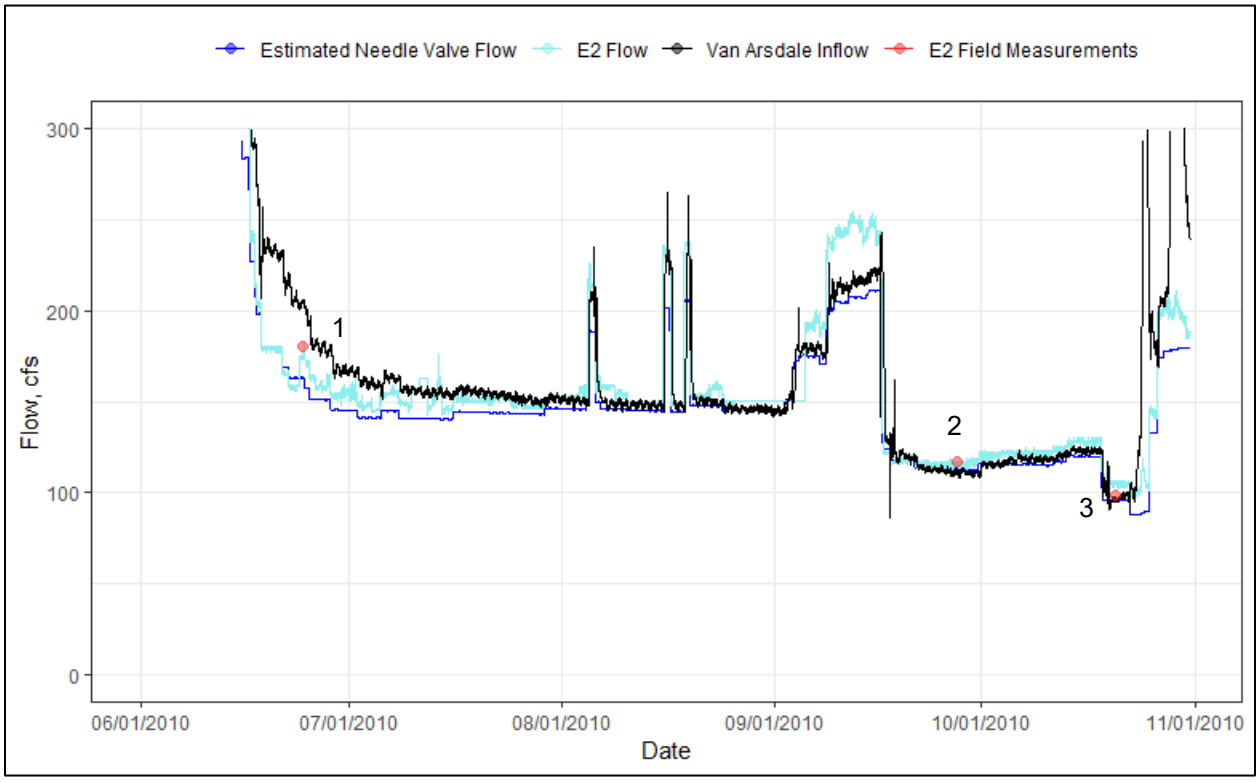


Figure AQ 1-25. Lake Pillsbury Release and field measurements, 2010.

2011. In the summer of 2011, shown in Figure AQ 1-26, there were 12 field measurements. The first two were during a time when lake Pillsbury was spilling, and the remaining 10 are in closer agreement with the E2 gaged flow than the estimated needle valve flow.

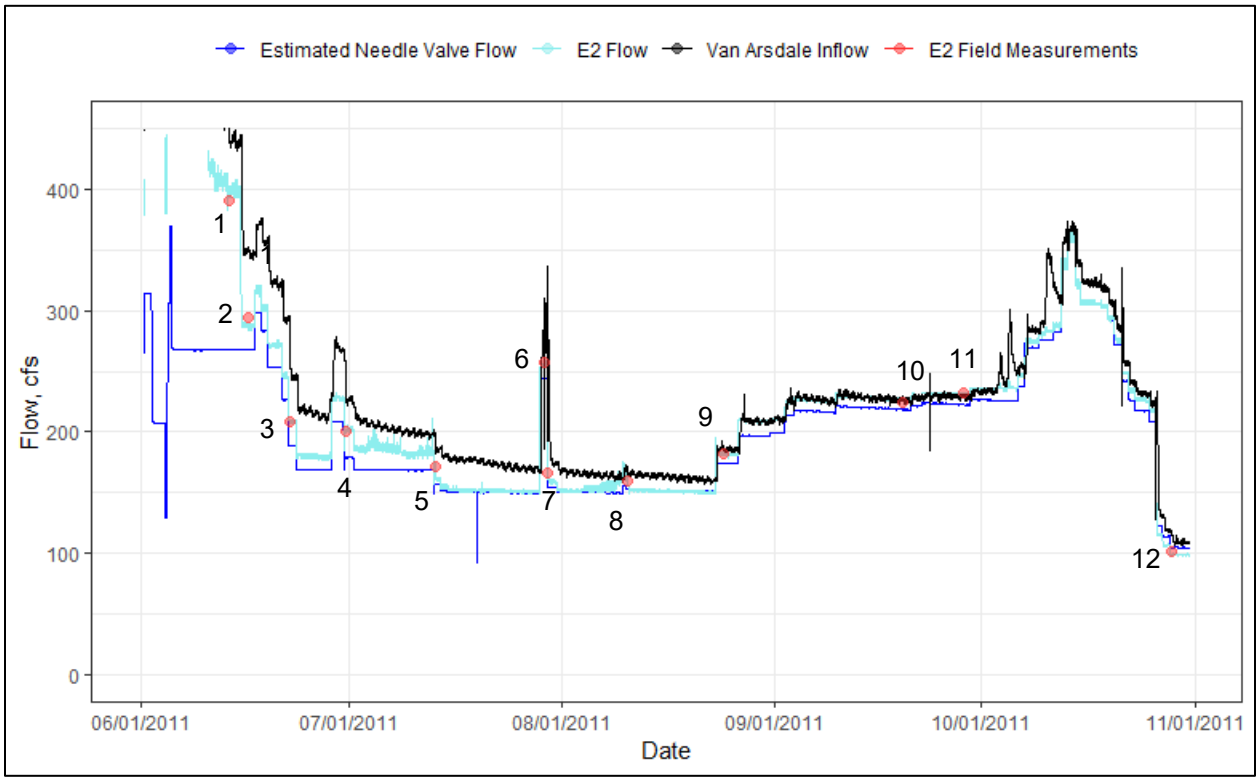


Figure AQ 1-26. Lake Pillsbury Release and field measurements, 2011.

2012. In the summer of 2012, shown in Figure AQ 1-27, there were two field measurements. Generally, in this year the E2 stream gage flow and the estimated needle valve flows are in agreement.

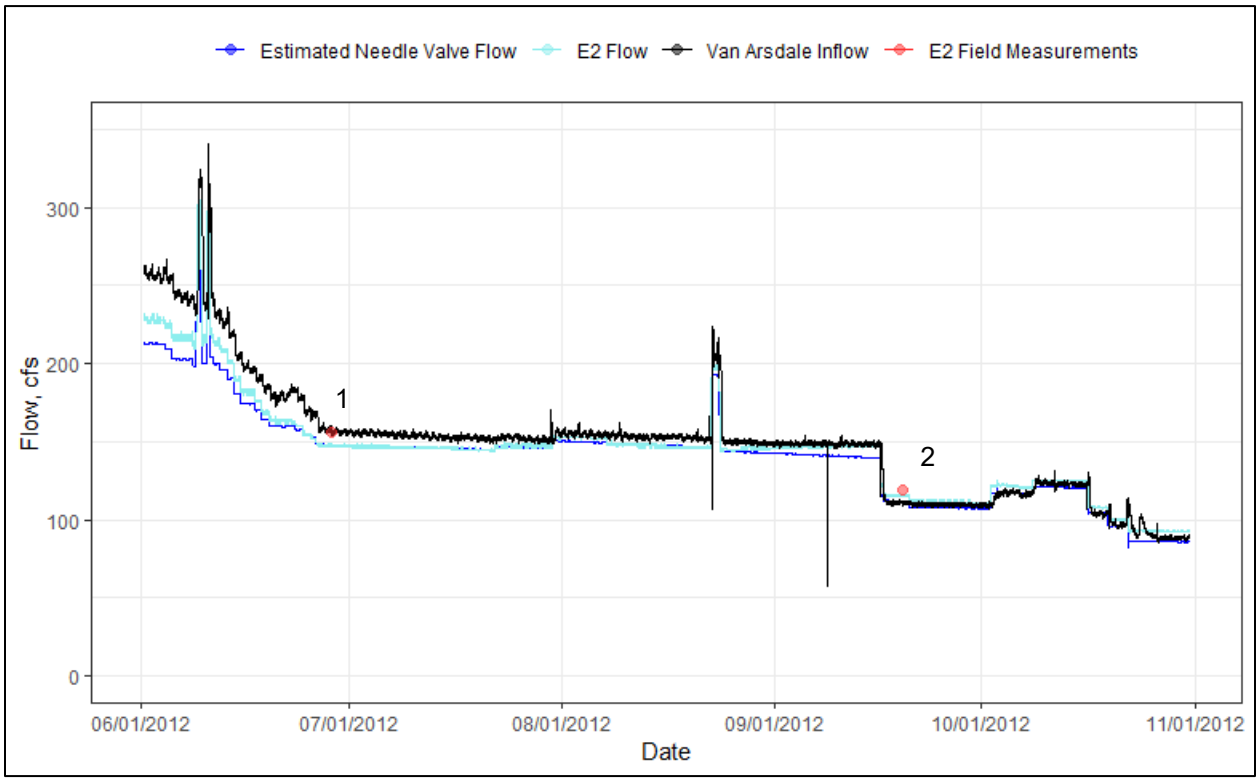


Figure AQ 1-27. Lake Pillsbury Release and field measurements, 2012.

2013. In the summer of 2013, shown in Figure AQ 1-28, there were two field measurements. Generally, in this year the E2 stream gage flow and the estimated needle valve flows are in agreement, with the exception of a 1-week period in mid-June.

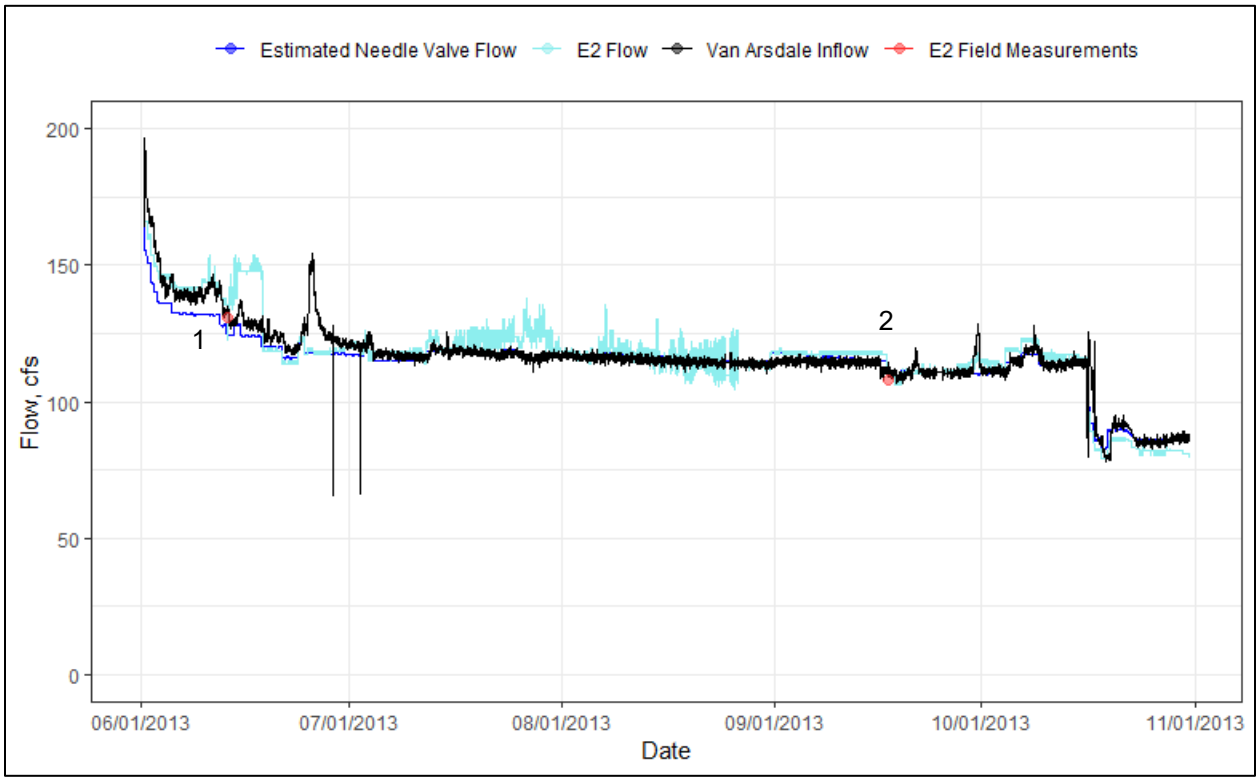


Figure AQ 1-28. Lake Pillsbury Release and field measurements, 2013.

2014. In the summer of 2014, shown in Figure AQ 1-29, there were no field measurements performed. Generally, in this year the E2 stream gage flow and the estimated needle valve flows are in agreement.

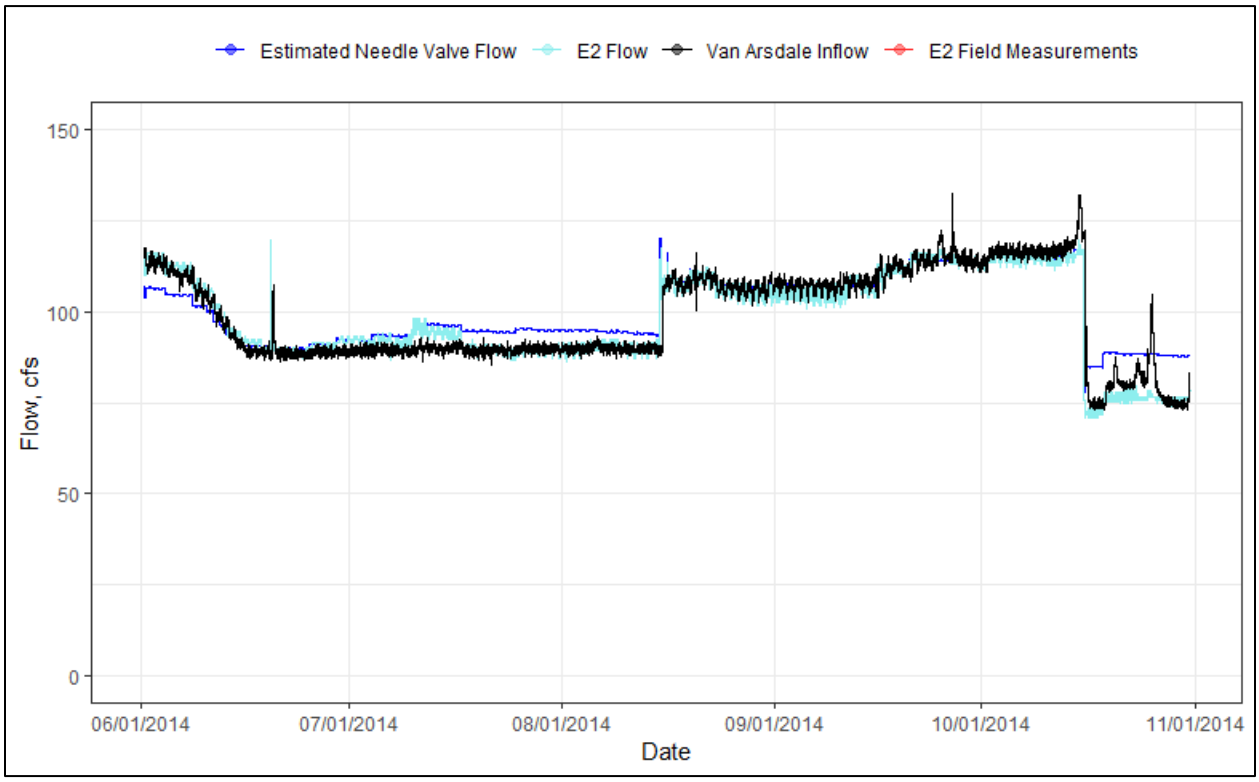


Figure AQ 1-29. Lake Pillsbury Release and field measurements, 2014.

2015. In the summer of 2015, shown in Figure AQ 1-30, there were ten field measurements performed. Generally, in this year the estimated needle valve flow is higher than the recorded E2 stream gage flow. In these instances, both the field measurements and the calculated inflow to Van Arsdale Reservoir seem to corroborate the E2 gage over the calculated needle valve flows.

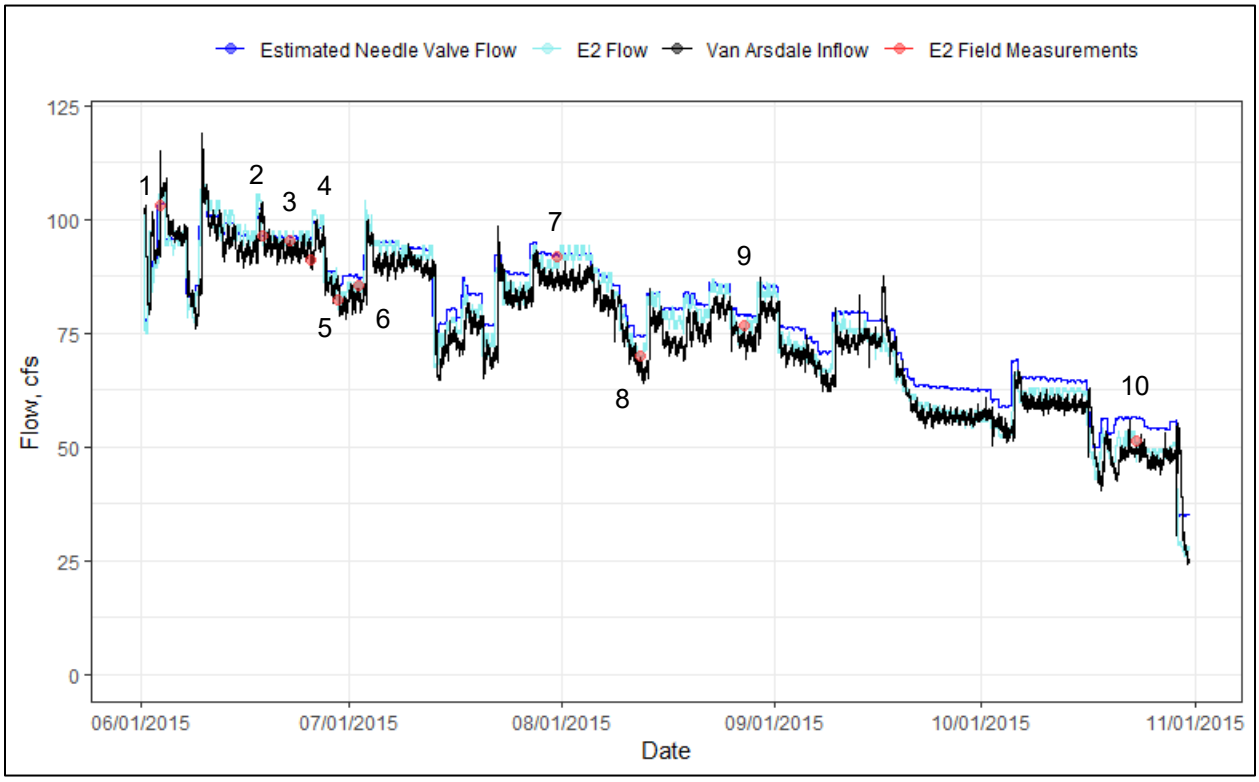


Figure AQ 1-30. Lake Pillsbury Release and field measurements, 2015.

2016. In the summer of 2016, shown in Figure AQ 1-31, there were three field measurements performed. Generally, in this year both the field measurements and the calculated inflow to Van Arsdale Reservoir seem to corroborate the E2 gage over the calculated needle valve flows.

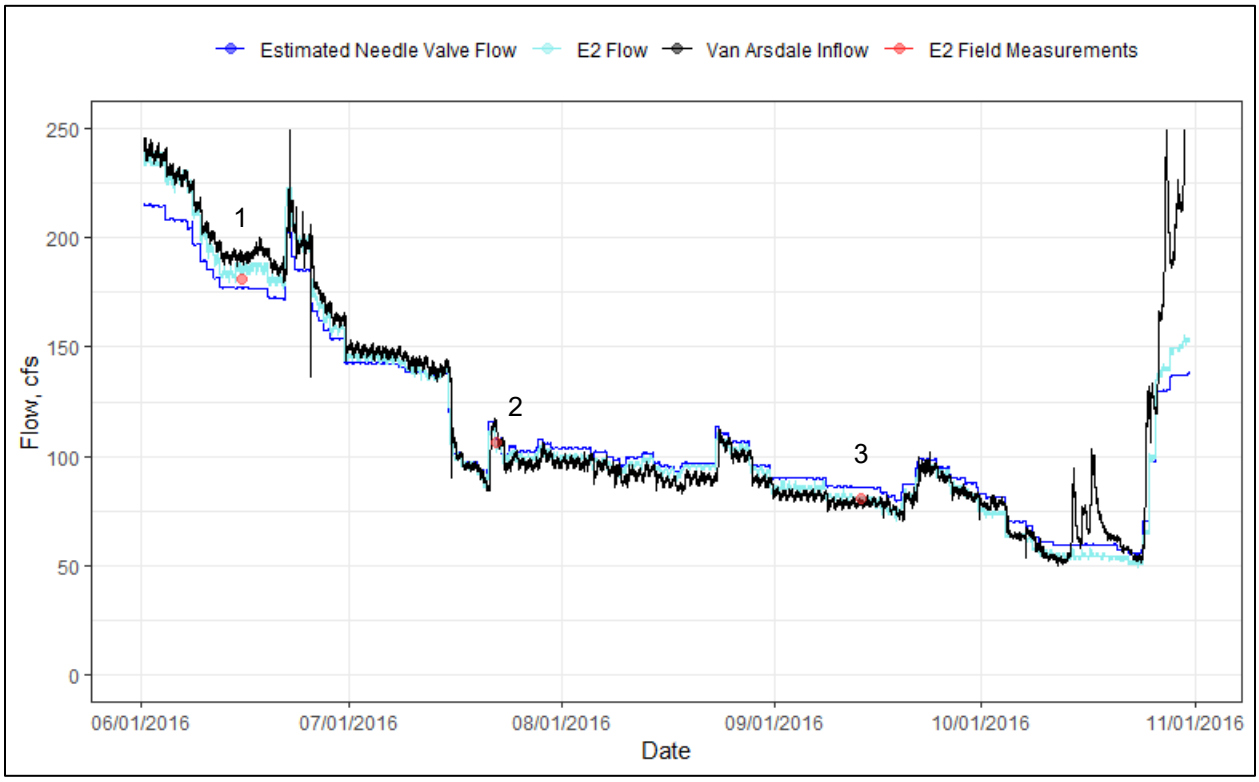


Figure AQ 1-31. Lake Pillsbury Release and field measurements, 2016.

2017. In the summer of 2017, shown in Figure AQ 1-32, there was one field measurement performed. Generally, in this year the estimated needle valve flow and the recorded E2 stream gage flow are in agreement.

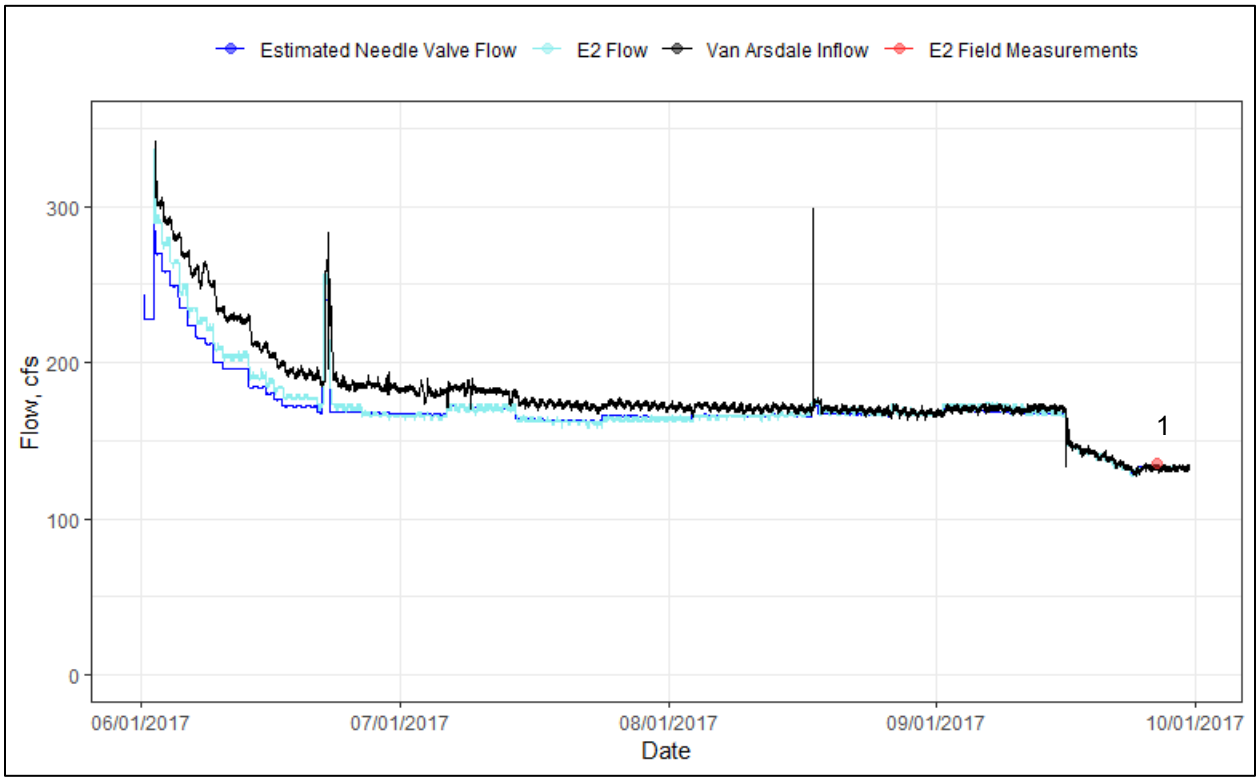


Figure AQ 1-32. Lake Pillsbury Release and field measurements, 2017

3.1.6.4 Lake Pillsbury Spills

High flows at E2 resulting from spills at Lake Pillsbury are analyzed using the spillway rating curve and field measurements. The spillway rating curve at Lake Pillsbury gives the spillway capacity at given water surface elevations with all 26 gates completely open. However, the reservoir is rarely operated with all gates completely open, and flows are usually less than the spillway rating curve would suggest. PG&E provided a gate configuration that they use for normal winter operations where 8 of the slide gates are closed while 17 slide gates and the 5 radial gates are left open. An alternate spillway rating curve was developed which corresponds to the spillway capacity with the gates left in this winter gate configuration. The spillway rating curve and the modified winter gate configuration spillway rating curve are both shown in Figure AQ 1-33.

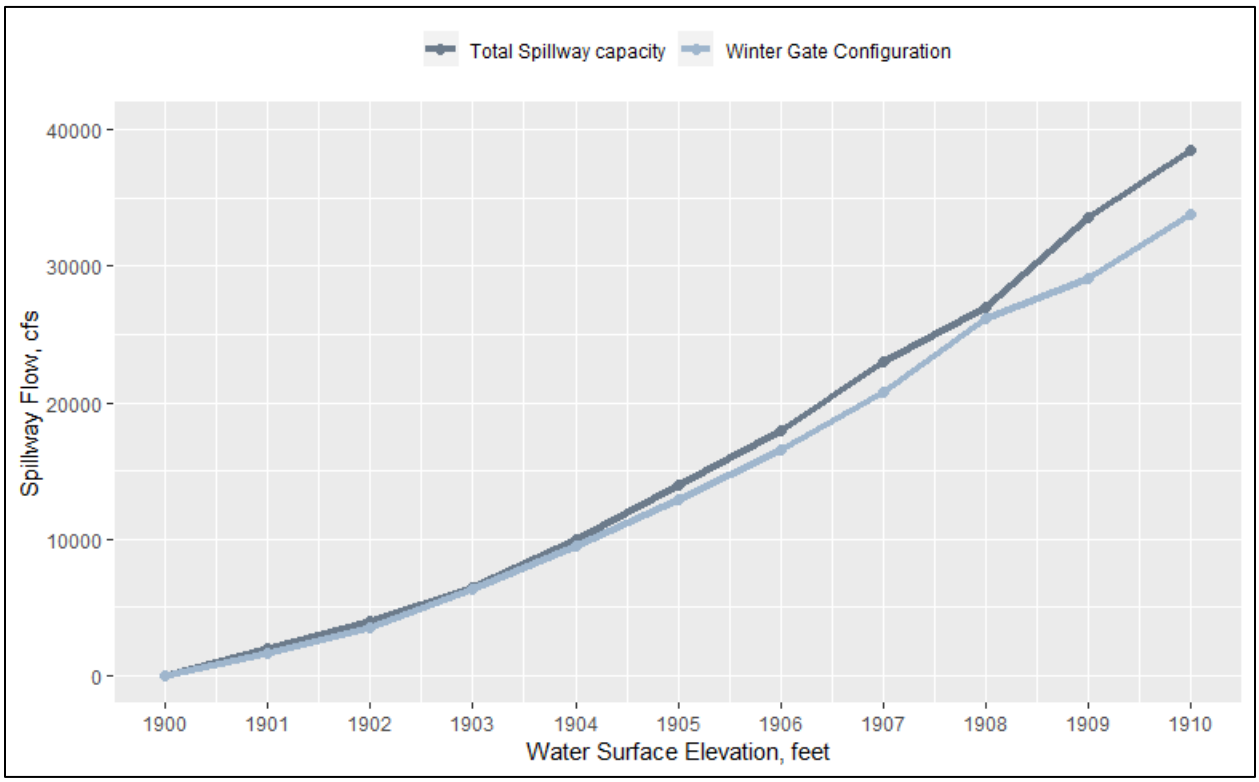


Figure AQ 1-33. Lake Pillsbury Spillway Rating Curve.

In late spring Lake Pillsbury is allowed to close the gates and store additional water. Plotting all E2 flows and corresponding E1 water surface elevations, as shown in Figure AQ 1-34, show many instances of Lake Pillsbury at water surface elevations above 1900 with little flow at E2. These correspond to summer months when the gates are closed or closing. To look at true spill events, a subset of E2 flows is developed containing only flows in November through February, when the gates can be assumed open in the winter gate configuration. This subset of E2 flows is shown with the spillway rating curve in Figure AQ 1-35. As shown in the figure, recorded flows at E2 match the spillway rating curve at flows less than 10,000 cfs. However, above 10,000 cfs the E2 record shows flows well above the potential of the spillway at those elevations.

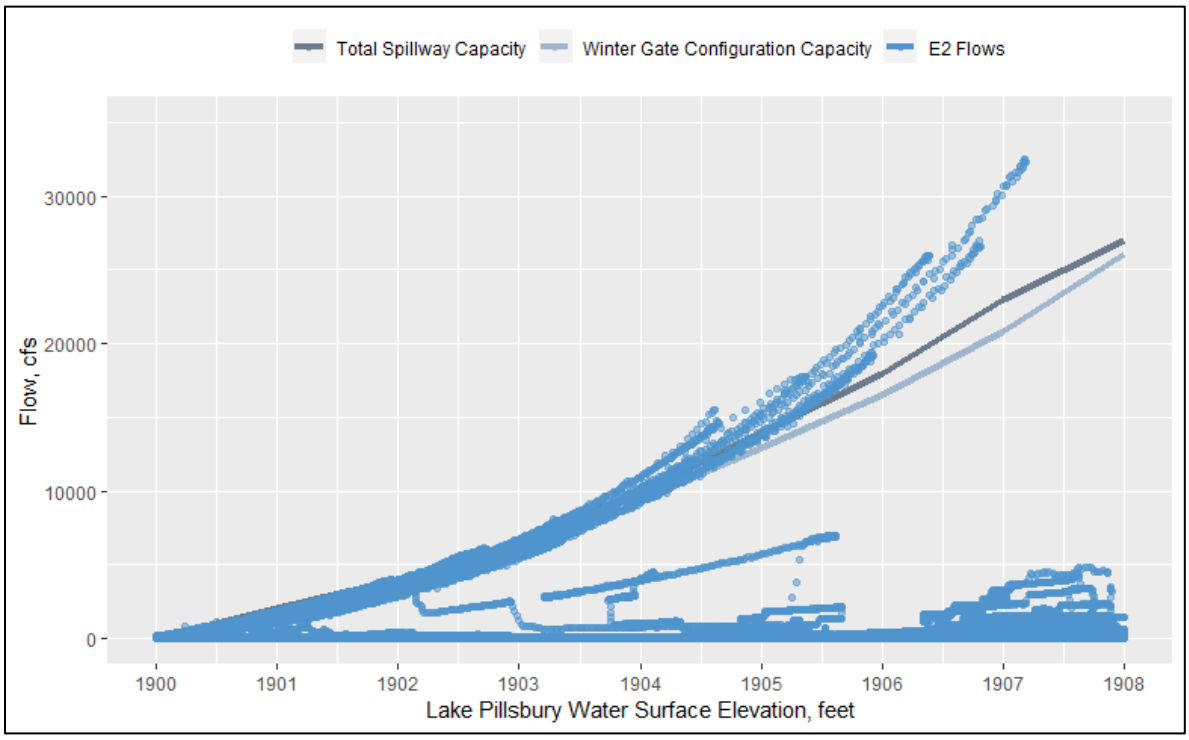


Figure AQ 1-34. Lake Pillsbury Spillway Rating Curve and E2 Flows, 2008-2017.

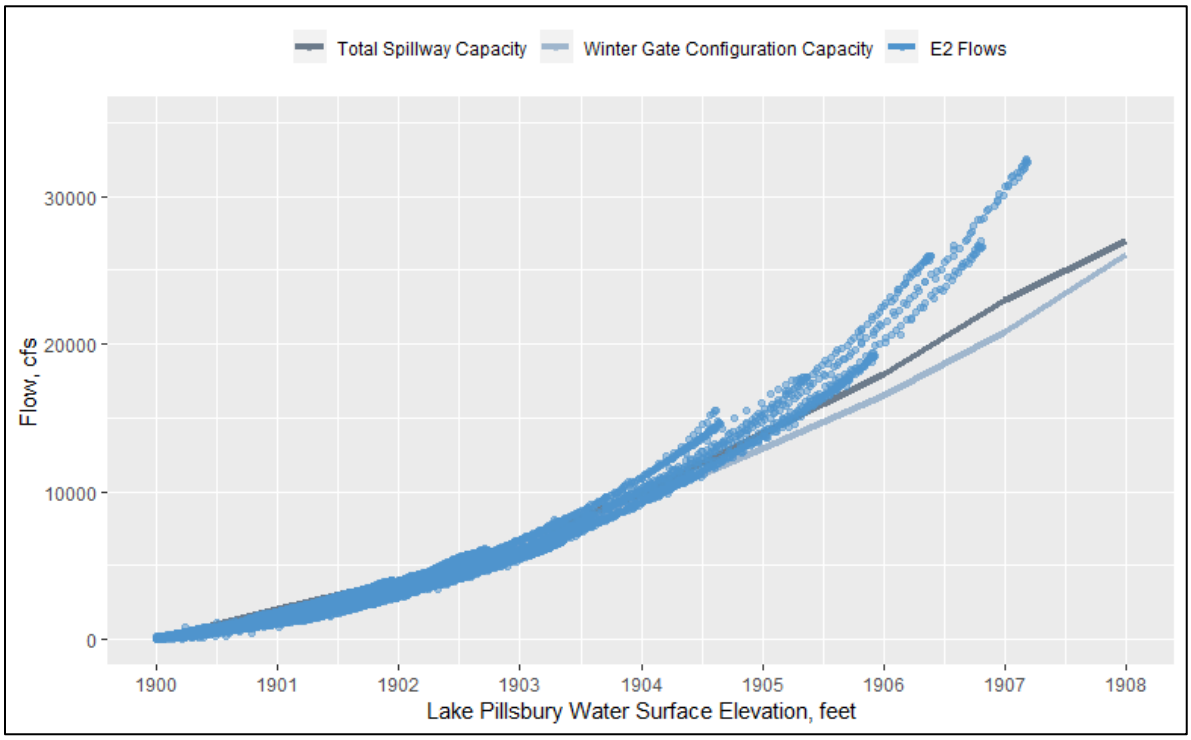


Figure AQ 1-35. Lake Pillsbury Spillway Rating Curve and E2 Flows, November through February, 2008-2017.

While recent field measurements at the E2 stream gage site are lower flow measurements, in the complete record there are a few high flow measurements. These measurements generally match the spillway capacity curve, as shown in Figure AQ 1-36. Figure AQ 1-37 adds the E2 stream gage record, which shows that E2 stream gage flows in the range near 24,000 cfs are refuted by the field measurements and the spillway curve. This figure suggests that the spillway capacity curve is still valid for releases from Lake Pillsbury, and the E2 rating curve at high flows should be revised.

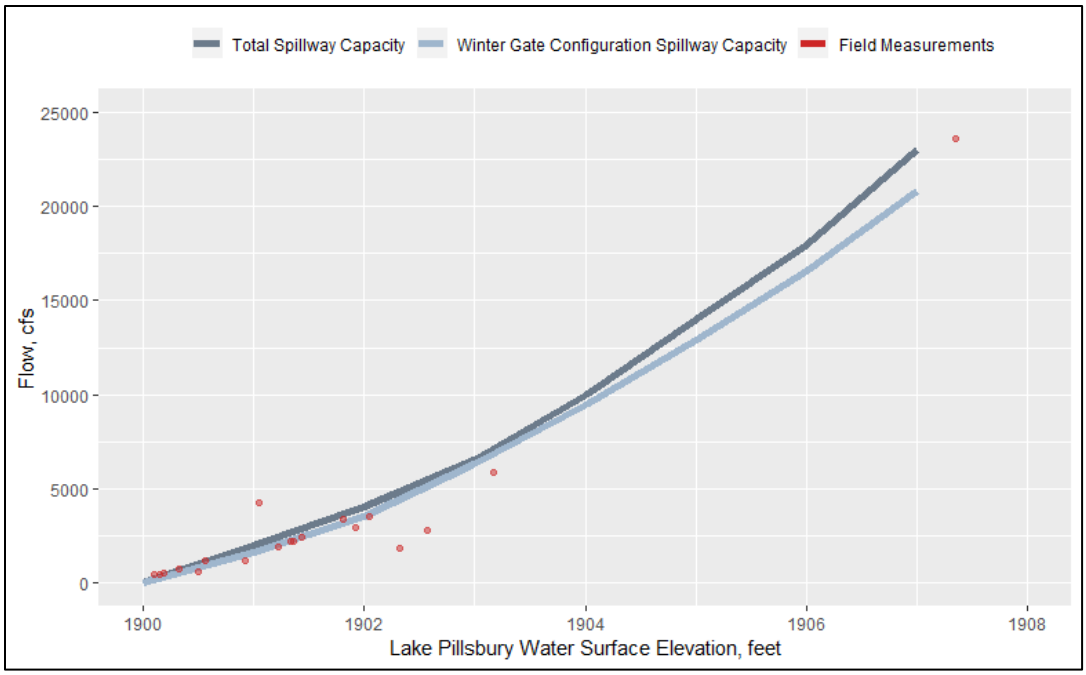


Figure AQ 1-36. E2 Field Measurements and Spillway Capacity Curve.

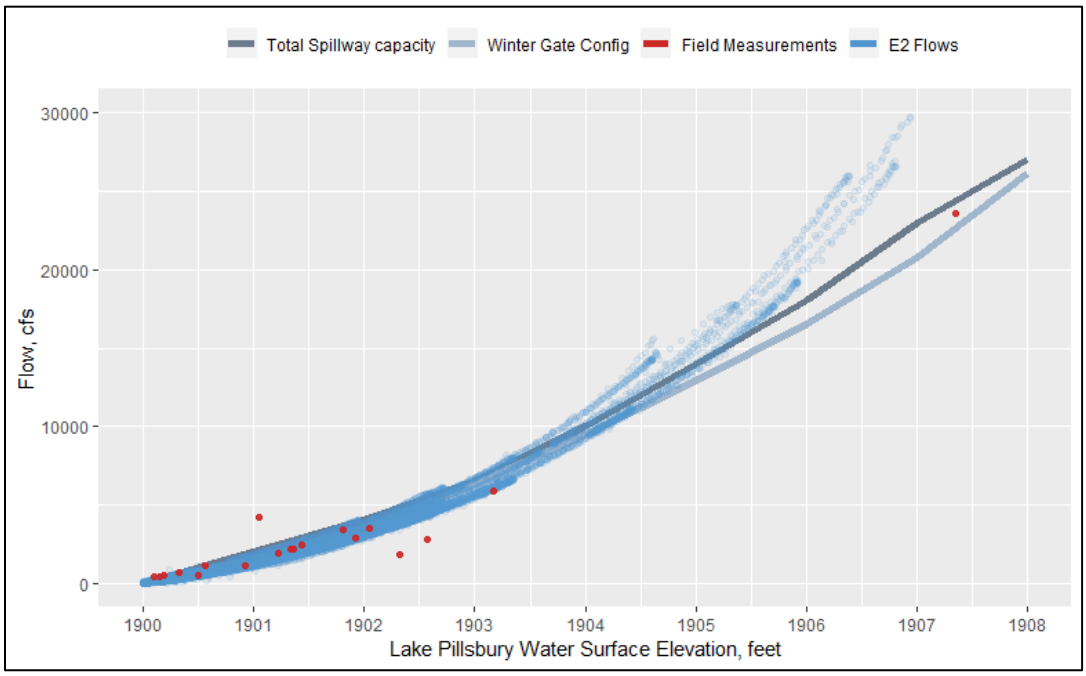


Figure AQ 1-37. E2 Field Measurements and Spillway Capacity Curve with E2 recorded flows.

3.1.6.5 Van Arsdale releases to the Eel River

Van Arsdale releases to the Eel River are measured by PG&E gage E11 and are checked against both E11 field measurements and the Van Arsdale Reservoir spillway rating curve. Field measurements have been performed at flow levels of up to 8,000 cfs. These field measurements are shown with recorded E11 flows in Figure AQ 1-38. As shown in the figure, field measurements line up with E11 flows fairly well. This is also true at lower flows, as shown in Figure AQ 1-39.

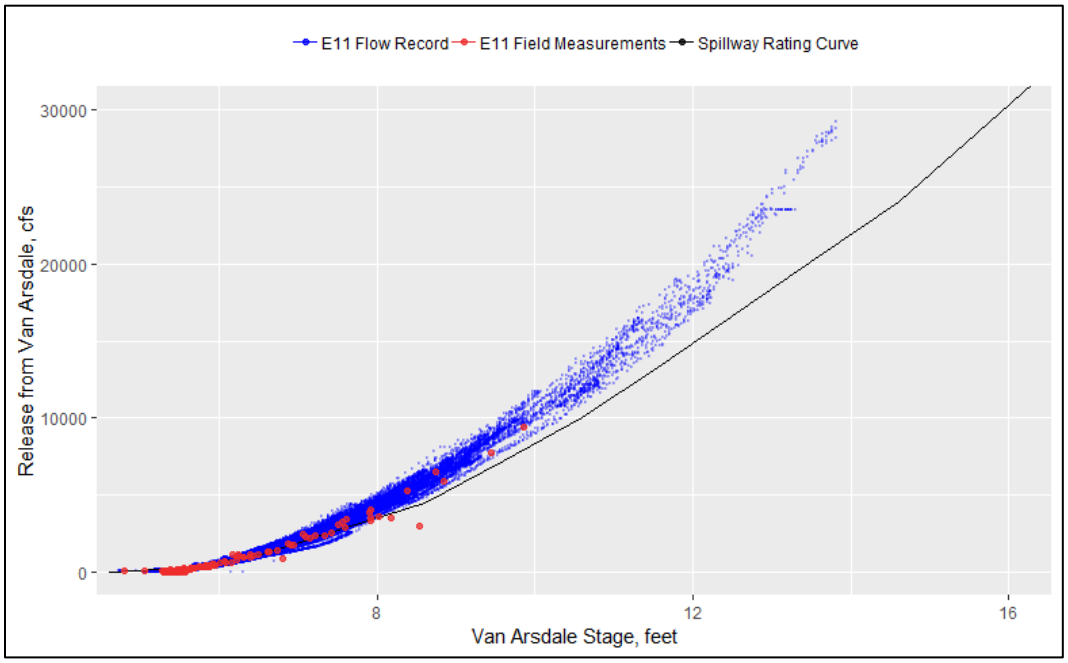


Figure AQ 1-38. E11 Field Measurements and E11 Recorded Flows.

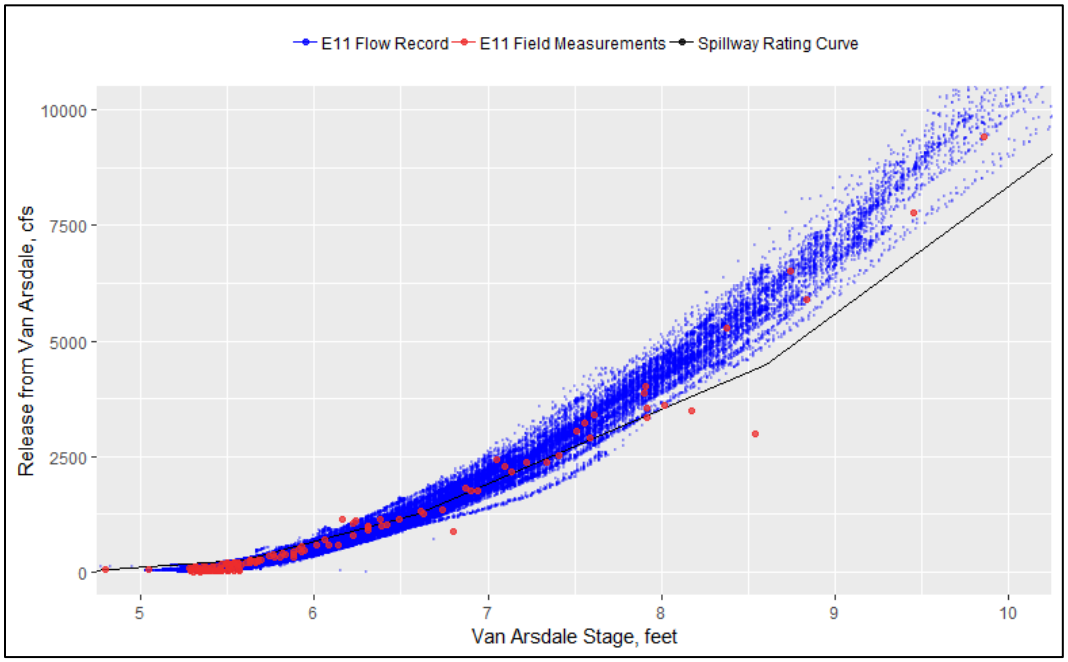


Figure AQ 1-39. E11 Field Measurements and E11 Recorded Flows, Flows less than 10,000 cfs.

3.1.6.6 Stream gage accuracy analysis conclusions

The largest source of error in E2 streamflow records is likely spills at Lake Pillsbury. Additionally, releases out of the low level outlet at Lake Pillsbury may have some stream gage bias in the 150-220 cfs range. Flow at the E11 stream gage appears to be well calibrated.

4 Important Outcomes

- Daily Unimpaired Hydrology was developed for the Eel River for 10 watersheds.
- Travel time estimates were developed for the Eel River, and these travel time estimations were used to develop the unimpaired hydrology.
- Unimpaired flows are provided in dss format in Attachment C – Unimpaired Flows. Attachment C contains:
    - Total unimpaired flow in every reach analyzed
    - Total impaired flow in every reach analyzed
    - Daily USGS gage data used in the analysis
- Calculated watershed accretions are provided in dss format in Attachment D – Watershed Inflows. Attachment D contains the flow originating from each watershed analyzed for use in the operations model.

5 References

Al-Humoud, et al. 2006. Approximate Methods for the Estimation of Muskingum Flood Routing Parameters.

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PG&E. 2018. AQ 1 – Hydrology and Project Operations Model Technical Study Plan, Potter Valley Project, Revised Study Plan. Filed with FERC on January 15, 2018.

PG&E. 2019. Notice of Withdrawal of Notice of Intent to File License Application and Pre-Application Document. Filed with FERC on January 25, 2019.

Attachment A

E2 Field Measurements

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Measurement No.	Date	Stage, ft	Discharge, cfs
257	12/20/1955	11.88	8080
258	12/22/1955	21.85	40000
259	1/10/1956	10.34	5370
267	2/25/1957	11.59	7700
273	2/11/1958	9.26	4250
298	2/8/1960	18.5	25000
318	2/13/1962	12.58	9340
330	4/1/1963	7.89	2390
338	1/21/1964	8	2310
362	1/5/1966	14.82	13200
398	1/14/1969	11.78	5770
413	1/16/1970	14.82	11
412	1/16/1970	14.98	12300
443	1/18/1973	13.06	8750
459A	1/16/1974	19.26	33
462	3/31/1974	11.57	7010
474	3/19/1975	12.08	8260
501	1/9/1978	12.24	8300
503	1/15/1978	12.59	9810
522	1/15/1980	11.65	7560
523	2/18/1980	12.93	11700
557	1/27/1983	13.3	13000
583A	2/17/1986	20.54	37200
583	2/18/1986	15.39	20000
654	1/14/1993	10.13	4220
674	1/9/1995 12:15	16.41	23600
681	8/28/1995 15:55	2.73	40.8
683B	9/21/1995 10:15	3.68	130
684	10/18/1995 10:05	3.63	127
685	11/27/1995 12:45	3.99	172
686	2/6/1996 12:45	8.95	2930
687	3/20/1996 11:00	8.32	2220
688	4/15/1996 11:45	6.01	666
689	6/19/1996 13:30	3.58	127

Measurement No.	Date	Stage, ft	Discharge, cfs
690	7/17/1996 11:25	3.91	166
691	3/11/1997	5.16	409
692	3/26/1997	4.27	205
693	4/16/1997	3.96	168
694	5/23/1997	3.58	121
696	5/30/1997	3.62	135
695	5/30/1997 13:45	3.62	135
697	8/27/1997	3.86	159
698	9/23/1997	4	177
699	11/18/1997 11:10	2.61	34.9
700	12/29/1997 13:45	5.12	409
701	1/16/1998 15:30	10.14	5870
703	3/24/1998 14:00	10.18	5770
704	5/14/1998 16:10	5.79	591
705	7/8/1998 9:45	4.06	190
707	10/1/1998 11:00	4.87	267
708	10/1/1998 13:30	4.87	360
709	12/22/1998 15:25	5.23	429
710	1/22/1999 12:25	7.05	1170
711	2/12/1999 10:00	7.88	2170
712	4/1/1999 11:50	7.02	1190
713	6/16/1999 14:00	4.07	200
714	6/23/1999 10:20	3.9	167
715	7/28/1999 11:35	3.71	150
716	8/31/1999 11:55	3.76	130
717	9/21/1999 13:05	4.21	192
718	9/30/1999 12:35	4.12	193
719	11/4/1999 12:35	4.56	291
720	12/21/1999 13:10	4.19	218
721	2/23/2000 12:50	8.88	3550
722	3/20/2000 10:30	6.9	1050
723	4/27/2000 12:15	4.45	227
724	6/8/2000 11:30	4.21	198
725	7/24/2000 9:55	3.8	134

Measurement No.	Date	Stage, ft	Discharge, cfs
726	8/29/2000 11:25	3.88	142
727	9/20/2000 12:05	3.99	153
728	10/11/2000 10:45	4.28	199
729	11/7/2000 11:10	5.21	345
730	12/19/2000 11:10	3.69	120
731	1/18/2001 15:20	3.51	92.4
732	3/1/2001 10:50	3.24	57.3
733	4/12/2001 10:25	5.23	410
734	6/13/2001 11:10	3.98	157
736	8/16/2001 14:15	3.57	104
737	9/18/2001 12:35	3.47	98.7
738	10/3/2001 11:15	3.58	97.5
739	11/28/2001 12:50	5.08	354
740	12/18/2001 10:10	8.11	2190
741	2/27/2002 11:45	6.18	731
742	3/13/2002 13:25	6.41	847
743	4/24/2002 14:45	4.35	240
744	6/5/2002 14:30	3.83	141
745	7/22/2002 16:20	3.57	105
746	8/27/2002 16:30	3.58	104
747	9/5/2002 11:00	3.58	98.9
748	11/20/2002 9:20	4	148
749	12/21/2002 10:20	8.44	2790
750	2/11/2003 11:00	5.54	459
751	3/20/2003 10:15	5.17	398
752	4/9/2003 11:05	5.34	419
753	5/14/2003 17:25	6.46	765
754	6/18/2003 15:10	4.05	169
755	6/24/2003 9:50	4.1	176
756	7/24/2003 10:10	3.95	150
757	8/12/2003	4.02	154
758	9/9/2003 11:30	4.5	222
759	9/22/2003 11:00	4.93	285
760	11/6/2003 11:50	3.77	124

Measurement No.	Date	Stage, ft	Discharge, cfs
761	12/10/2003 14:05	5.43	376
762	3/9/2004 11:35	7.41	1320
763	4/21/2004 10:30	4.31	189
764	5/18/2004 11:50	4.39	201
765	6/22/2004 11:05	4.07	158
766	7/28/2004 9:50	4.08	156
767	9/22/2004 9:20	4	147
768	9/24/2004 11:45	4	147
769	11/9/2004 12:28	4.48	191
770	2/1/2005 11:20	7.12	1140
771	2/23/2005 13:25	8.17	1860
772	3/23/2005 14:05	9.65	4180
774	6/22/2005 9:00	5.08	300
775	7/12/2005 11:45	4.17	177
776	9/1/2005 12:45	4.06	141
777	9/22/2005 10:55	4.01	148
778	10/17/2005 14:46	3.97	138
779	11/15/2005 14:10	3.95	138
780	2/1/2006 14:00	9.01	3390
781	2/22/2006 11:25	5.66	556
782	5/16/2006 12:10	5.9	546
783	6/20/2006 12:10	4.26	189
784	7/20/2006 13:00	4.27	182
785	7/26/2006 15:45	4.21	172
786	8/23/2006 13:35	4.2	174
787	9/19/2006 11:35	3.85	126
788	9/22/2006 11:35	4.4	202
789	11/2/2006 10:05	3.51	75
791	1/31/2007 10:10	4.69	284
792	2/13/2007 11:45	8.02	1900
793	3/20/2007 13:45	4.5	252
794	4/30/2007 11:00	4.74	275
795	5/10/2007 10:00	4.75	263
796	6/28/2007 11:45	4.75	154

Measurement No.	Date	Stage, ft	Discharge, cfs
797	7/31/2007 13:50	4.14	155
798	9/4/2007 11:50	4.18	167
799	9/24/2007 13:05	3.77	115
800	10/12/2007 11:30	3.83	116
801	11/15/2007 10:11	3.49	72.8
802	12/17/2007 13:45	4.24	170
803	1/23/2008 12:24	5.44	423
804	2/26/2008 11:18	8.39	2440
805	4/1/2008 12:11	4.78	288
806	5/6/2008 12:24	4.84	295
807	5/20/2008 16:54	5.25	364
808	5/22/2008 12:02	5.38	326
809	5/28/2008 11:30	4.92	280
810	6/19/2008 10:36	4.18	172
811	7/8/2008 12:54	4.08	154
812	8/4/2008 11:30	4.08	154
813	9/15/2008 12:21	4.26	158
814	9/23/2008 15:15	3.92	114
815	10/9/2008 14:39	4.02	131
816	11/13/2008 12:13	4.05	132
817	12/3/2008 9:26	4.32	170
818	1/13/2009 13:30	4.46	198
819	2/4/2009 11:30	4.05	135
820	2/25/2009 12:00	3.55	60.7
821	3/16/2009 13:15	4.45	195
822	4/1/2009 13:51	4.78	247
823	4/7/2009 9:53	5	283
824	5/8/2009 12:02	5.86	637
825	5/20/2009 11:57	5.17	314
826	6/18/2009 12:57	4.16	159
827	8/26/2009 11:20	4.12	148
828	9/17/2009 12:33	3.88	117
832	3/17/2010 13:29	6.99	1000
833	4/6/2010 11:43	4.83	249

Measurement No.	Date	Stage, ft	Discharge, cfs
834	4/26/2010 12:39	7.32	1240
836	6/24/2010 10:54	4.33	180
839	9/27/2010 12:07	3.91	117
840	10/20/2010 11:35	3.82	98.8
841	11/8/2010 12:25	5.4	322
842	11/30/2010 11:00	5.32	313
843	1/11/2011 11:40	6.02	540
844	2/3/2011 11:50	5.48	358
845	2/14/2011 10:25	4.56	206
846	6/13/2011 15:50	5.63	391
847	6/16/2011 10:30	5.16	295
848	6/22/2011 12:50	4.56	209
849	6/30/2011 13:30	4.48	200
850	7/13/2011 16:50	4.25	172
851	7/29/2011 11:20	4.92	257
852	7/30/2011	4.23	166
853	8/10/2011 16:20	4.2	160
854	8/24/2011 11:00	4.37	182
855	9/19/2011 14:00	4.7	224
856	9/28/2011 11:40	4.74	232
857	10/28/2011 13:15	3.76	102
875	3/20/2012 15:41	7	943
871	6/28/2012 13:54	4.15	156
874	9/19/2012 11:59	3.87	119
888	9/17/2013 11:36	3.86	108
914	6/3/2015 13:48	3.82	103
917	6/18/2015 15:02	3.76	96.3
918	6/22/2015 10:41	3.77	95.3
919	6/25/2015 12:10	3.76	91.2
920	6/29/2015 13:19	3.68	82.5
921	7/2/2015 10:45	3.69	85.5
924	7/31/2015 10:24	3.73	91.9
925	8/12/2015 10:45	3.58	70.2
926	8/27/2015 10:52	3.64	76.9

Measurement No.	Date	Stage, ft	Discharge, cfs
927	10/23/2015 10:27	3.43	51.3
930	11/3/2015 9:53	3.26	28.8
940	6/15/2016 13:10	4.35	181
941	7/22/2016 11:21	3.81	106
944	9/13/2016 12:29	3.67	80.3
961	5/16/2017 15:12	5.44	383
967	9/26/2017 11:30	3.95	135
968	6/19/2018 14:23	3.81	124
969	9/12/2018 13:55	3.59	93.8

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Attachment B

E11 Field Measurements

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Measurement No.	Date	Stage, ft	Flow, cfs
641	12/9/1992	10.95	867
642	1/13/1993	10.92	986
643	3/15/1993	10.98	1120
644	4/22/1993	10.46	783
645	1/3/1997	16.94	9430
646	2/24/1997	9.48	311
650	1/22/1999 13:00	11.32	1270
651	2/11/1999 13:50	13.05	3220
652	4/2/1999 11:01	10.82	953
653	6/23/1999 12:10	8.12	46.2
654	2/17/2000 11:50	12.4	2440
655	3/20/2000 14:20	10.95	1140
656	7/3/2001 10:21	7.87	21.3
657	12/20/2001 13:20	12.4	2280
658	2/28/2002 10:30	9.62	383
659	3/13/2002 9:15	10	555
660	12/21/2002 12:45	13.3	3000
661	3/19/2003 10:05	9.35	265
662	4/24/2003 13:50	11.89	1770
663	5/15/2003 10:10	10.93	1060
664	12/10/2003 8:15	10	440
665	2/3/2004 10:50	12.19	2160
666	2/19/2004 8:50	15.73	7780
667	3/17/2004 10:10	10.3	573
668	4/20/2004 15:20	8.83	119
669	12/30/2004 10:10	10.56	702
670	2/1/2005 15:20	10.93	922
671	2/22/2005 13:07	12.63	2360
672	3/24/2005 13:20	13.31	3540
673	4/19/2005 13:30	10.44	582
674	6/22/2005 13:55	9.41	210
675	8/30/2005 14:30	7.92	28.6
676	9/22/2005 13:10	7.97	29
677	10/20/2005 11:15	8.31	47.5

Measurement No.	Date	Stage, ft	Flow, cfs
678	11/16/2005 10:35	8.85	86.5
679	12/20/2005 11:40	13.55	3490
680	1/4/2006 11:10	13.44	5890
681	1/19/2006 10:35	11.73	3330
682	1/31/2006 15:35	12.66	2510
683	2/2/2006 9:30	15.2	6500
684	3/8/2006 13:30	13.42	3600
685	5/1/2006 14:20	11.9	1770
686	6/29/2006 8:35	8.57	69.7
687	7/27/2006 10:45	8.35	45
688	8/23/2006 10:30	8.27	42
689	9/21/2006 9:30	8.31	46.4
690	10/31/2006 11:45	8.28	37.8
691	12/21/2006 11:45	9.31	168
692	2/12/2007 15:15	13.16	2890
693	2/14/2007 15:30	11.53	1360
694	3/19/2007 15:30	9.47	245
696	4/30/2007 11:30	9.27	187
697	5/21/2007 9:00	8.8	106
698	6/28/2007 14:00	7.96	23
699	7/31/2007 9:40	7.94	22
700	9/4/2007 13:45	7.99	24
701	9/26/2007 11:00	7.93	23
702	10/23/2007 13:09	8.64	59
703	12/3/2007 8:09	9	102
704	12/18/2007 13:30	10.3	504
705	1/30/2008 11:39	11.52	1330
706	2/26/2008 15:09	12.54	2360
707	4/1/2008 15:47	9.35	203
708	5/6/2008 15:30	9.29	187
709	5/20/2008 10:57	9.26	174
710	5/20/2008 13:30	9.25	178
711	5/22/2008 14:32	9.38	213
712	5/28/2008 14:04	9	125

Measurement No.	Date	Stage, ft	Flow, cfs
713	6/3/2008 20:09	8.87	93
714	6/11/2008 21:09	8.27	48
715	7/10/2008 16:09	7.73	13
716	8/10/2008 16:09	7.7	11.4
717	9/2/2008 16:09	7.79	14.5
718	9/23/2008 12:49	7.8	16.5
719	10/9/2008 14:30	8.05	28
720	11/13/2008 14:00	8.91	106
721	12/3/2008 12:41	9.08	126
722	1/13/2009 16:11	9.23	163
723	2/4/2009 13:37	8.99	116
724	3/16/2009 11:02	10.04	434
725	4/2/2009 7:46	9.41	225
726	4/7/2009 13:10	9.47	251
727	5/8/2009 15:34	10.11	460
728	5/20/2009 14:10	9.42	221
729	6/18/2009 15:35	7.03	32.5
732	8/27/2009 13:27	7.52	8.29
731	9/18/2009 9:10	7.63	13.9
735	3/17/2010 16:00	11.02	1140
736	4/7/2010 11:22	10.22	594
737	4/26/2010 12:42	11.24	1140
739	6/24/2010 13:05	8.5	76.2
742	9/27/2010 15:10	7.94	20
743	10/19/2010 15:15	8.22	32.4
744	11/9/2010 12:00	9.49	198
745	11/17/2010 12:25	9.35	173
746	11/29/2010 12:00	9.5	205
747	12/8/2010 14:55	10.12	388
748	12/20/2010 15:45	14.17	4010
749	12/21/2010 14:40	13.28	3040
750	1/4/2011 12:30	10.98	1000
751	1/12/2011 9:55	10	420
752	1/26/2011 11:20	9.79	340

Measurement No.	Date	Stage, ft	Flow, cfs
753	2/2/2011 14:20	9.35	214
754	2/14/2011 13:45	9.52	249
755	2/16/2011 15:30	14.67	5290
756	3/28/2011 15:40	13.64	3880
757	3/29/2011 15:30	13.17	3400
758	4/5/2011 12:30	11.92	1820
759	5/10/2011 12:55	9.88	378
760	5/24/2011 15:45	9.5	256
761	6/13/2011 17:45	9.7	317
762	6/16/2011 13:15	9.37	217
763	6/22/2011 16:45	8.83	124
764	6/30/2011 10:15	8.94	130
765	7/14/2011 9:55	8.19	58
766	7/30/2011 13:30	8.02	45.7
767	8/11/2011 10:10	7.86	36.7
768	9/19/2011 17:15	7.66	26.6
769	9/28/2011 14:00	7.73	28.2
770	10/28/2011 9:05	8.43	75.4
789	3/20/2012 11:53	11.11	1030
784	6/28/2012 10:42	7.63	28.2
788	9/19/2012 14:04	7.45	20.8
801	6/13/2013 12:26	7.63	37
805	9/17/2013 14:22	7.36	22.8
837	6/3/2015 16:35	7.57	43.9
838	6/3/2015 16:51	7.57	44.9
842	6/18/2015 9:29	7.24	23.5
843	6/22/2015 14:00	7.09	17.9
844	6/25/2015 9:19	7.13	17.1
845	6/29/2015 10:20	7.18	21.9
846	7/2/2015 9:46	7.14	18.9
849	7/31/2015 13:25	7.06	15
850	8/12/2015 13:15	7.07	15.7
851	8/27/2015 13:27	7.11	17.6
853	10/23/2015 14:33	7.11	15.5

Measurement No.	Date	Stage, ft	Flow, cfs
854	11/3/2015 12:12	7.11	16.1
862	6/15/2016 15:53	7.76	62.2
864	7/22/2016 14:29	7.33	35
867	9/13/2016 15:08	7.15	21.7
883	5/16/2017 10:10	9.23	321
890	9/26/2017 15:38	7.25	41.1
891	6/20/2018 9:54	7.29	48.9
892	9/13/2018 13:50	6.77	13

Attachment C

Unimpaired Flows

Data files for Unimpaired Flows were provided by PG&E as .dss files and are available upon request.

Attachment D

Watershed Inflows

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Technical Study Summary

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Date December 30, 2019

To: Pacific Gas and Electric Company (Susan Kester)

From: Cardno, Inc.

Project: Potter Valley Project (FERC Project No. 77) Relicensing

RE: **AQ 2 – Water Temperature Study Data Memorialization**

1 Introduction

This Technical Study Summary presents select data and information that was developed by the Cardno Team in association with the AQ 2 – Water Temperature Technical Study Plan (AQ 2 – TSP) (PG&E 2018), which was one of 21 approved technical studies initiated by Pacific Gas and Electric Company (PG&E) in association with the relicensing process for the Potter Valley Project.[1] The information presented herein is based on work that was completed prior to January 25, 2019, the date that Pacific, Gas and Electric Company (PG&E) filed a notice with the Federal Energy Regulatory Commission (FERC) stating they would no longer be relicensing the Project (PG&E 2019).

2 Study Status

Table AQ 2-1 summarizes the status of the AQ 2 – Water Temperature Study when work ended on January 25, 2019.

3 Work Products

The following information developed as part of this study is attached to this TSS, organized by the primary study elements identified in the AQ 2 – TSP. Note that all data identified in this TSS as "Attachments" will be uploaded to the Potter Valley Project SharePoint.

3.1 On-going Potter Valley Project Monitoring Studies

On-going water temperature monitoring is the temperature data collected as part of the existing Potter Valley Project FERC license and/or NMFS Biological Opinion requirements. On-going data collection continued at 25 locations from above Lake Pillsbury to below the confluence with the Middle Fork Eel River (2005 to 2018). The data below are being provided as part of this TSS:

[1] PG&E filed a Proposed Study Plan (PSP) with the Federal Energy Regulatory Commission (FERC) that included 21 separate Technical Study Plans on September 14, 2017. After collaborating with the stakeholders, PG&E subsequently filed a Revised Study Plan (RSP) with the FERC on January 15, 2018. On February 15, 2018, the FERC issued its Study Plan Determination, approving 17 of the 21 studies included in the RSP and approving the remaining four studies with FERC staff recommended modifications.

- **Map AQ 2-1** - Shows the on-going water temperature monitoring locations.
- **Table AQ 2-2** – Provides a list of the names and river mile locations of all the on-going temperature monitoring locations shown on Map AQ 2-1.
- **Attachment A** – Includes all temperature data collected at the on-going temperature monitoring sites from 2005 through 2017 as provided by PG&E.

Data collected by GANDA May through October 2018 were not provided to Cardno but are available from PG&E.

3.2 Water Temperature Additional Data Collection

3.2.1 Additional Data Collection October 2018 to June 2019 at PG&E On-going data Collection Sites

As part of the relicensing efforts, additional data were collected at the on-going PG&E temperature collection sites from October 2018 through June 2019:

- **Map AQ 2-1** – Shows the additional data collection water temperature monitoring locations.
- **Table AQ 2-2** – Documents installation and removal dates of temperature probes at the additional data collection sites shown on Map AQ 2-1.
- **Attachment A** – Includes the additional water temperature data from October 2018 through June 2019. Data have not been quality controlled due to retrieval occurring after January 25, 2019 (date of relicensing cancelation).

3.2.2 Water temperature monitoring at Lake Pillsbury inflow locations (Eel River and Rice Fork), Lake Pillsbury (profiles), and the East Branch Russian River

Water temperature was also monitored year-round at Lake Pillsbury inflow locations (Eel River and Rice Fork), Lake Pillsbury (profiles) and the East Branch Russian River. Due to high flow events, however, the data loggers installed at the Eel River and Rice Fork inlets to Lake Pillsbury were buried in gravel bars and were not retrievable (see Table AQ 2-3). Additional Eel River and Rice Fork temperature data were collected at other locations in collaboration with other Technical Study Plans (Section 3.3.2.2).

Monthly profiling information was collected at four locations in Lake Pillsbury from approximately April to October and in January. These data were collected under the AQ-3 Water Quality Study Plan and the results will be provided as part of that technical study.

Water temperature was monitored continuously from April to October using a vertical array of thermographs in one location in Lake Pillsbury (near Scott Dam). Vertical array temperature data from this location are available for a total of 5 years from 2014 to 2018. Only 2018 data were collected as part of this relicensing effort. Temperature data loggers were deployed at three locations in the East Branch Russian River. These sites were also two of the sites monitored as part of Study AQ 7 – Fish Passage sites described in section 3.3.2.2. The Lake Pillsbury and East Branch Russian River water temperature data being provided as part of this TSS include:

- **Map AQ 2-1** - Shows the water temperature monitoring locations at Lake Pillsbury inflow locations, Lake Pillsbury and the East Branch Russian River.
- **Table AQ 2-3** – Documents all of the measurements that were taken at Lake Pillsbury inflow locations, Lake Pillsbury (profiles) and the East Branch Russian River.

- **Attachment B** – Includes the continuous temperature data collected in Lake Pillsbury at station L3. Monthly temperature profiles at stations L1, L2 and L4 are provided as part of the AQ-3 Water Quality study.
- **Attachment D** – Includes temperature data collected in the East Branch Russian River along with other temperature data collected as part of the AQ 7 and AQ 10 studies.

3.3 Water Temperature Data Synthesis

3.3.1 Eel River (Inflow to Lake Pillsbury to Middle Fork)

Existing water temperature monitoring data for the Eel River from above Lake Pillsbury to the Middle Fork Eel River were consolidated into excel files. These data were described in Sections 3.1 and 3.2 and provided in Attachments A and D.

3.3.2 Eel River and Rice Fork above Lake Pillsbury

3.3.2.1 Organization of Existing Data

Existing water temperature monitoring data collected by the Native Fish Society in 2016 and 2017 were provided to Cardno in Excel files. Additional Native Fish Society temperature data from 2015 were provided to Cardno in report form only. The water temperature data include the following:

- **Map AQ 2-2a and Map AQ 2-2b** - Show the existing Native Fish Society water temperature monitoring locations.
- **Table AQ 2-4** – Documents the names and locations of the Native Fish Society water temperature monitoring sites.
- **Attachment C** – Includes water temperature data collected by the Native Fish Society in 2015 (pdf), 2016 and 2017 (Excel files).

3.3.2.2 New data collection

A total of 31 different water temperature monitoring sites on the Eel River, Rice Fork, and associated tributaries above Lake Pillsbury where selected for monitoring in collaboration with Study AQ 7 – Fish Passage to assist in identification of potential anadromous species habitat. An additional 10 sites on the Eel River below Lake Pillsbury and on the East Fork Russian River were also selected for monitoring. Continuous water temperature data were collected at these sites during the summer of 2018. Fourteen of the water temperature sites were monitored in collaboration with Study AQ 10 - Special Status Amphibians and Aquatic Reptiles. The water temperature data provided include the following:

- **Map AQ 2-2a, Map AQ 2-2b, and Map AQ 2-2c**- Show 41 sites chosen for continuous water temperature monitoring in collaboration with the AQ 7 – Fish Passage and AQ 10 – Special-Status Amphibians and Aquatic Reptiles studies.
- **Table AQ 2-5** – Documents the names, installation dates and retrieval dates of the 41 temperature monitoring sites chosen in collaboration with the AQ 7 – Fish Passage and AQ 10 – Special-Status Amphibians and Aquatic Reptiles studies.
- **Attachment D** – Includes water temperature data collected in collaboration with the AQ-7 and AQ-10 studies.

3.3.3 Eel River and Lake Pillsbury Water Temperature Modeling

3.3.3.1 Meteorological Data

A MET data set was developed for 1999-2017 by combining meteorological data (air temperature, relative humidity, wind speed, wind direction, and cloud cover) from two local weather stations with theoretical solar radiation (calculated using the CE-QUAL-W2 algorithm). Soda Creek Station (CDEC-SOD) was used as the primary station because of its close proximity to Lake Pillsbury. Ukiah Airport (NOAA) station was used for cloud cover, wind speed (as it was determined that the SOD location was more sheltered than Lake Pillsbury itself), as well as to fill gaps in the SOD air temperature and relative humidity data. An air temperature regression relationship was developed between SOD and Ukiah in order to better reflect local conditions. These regression results were used when gaps in the SOD data set required use of air temperature from Ukiah.

Additional air temperature data were collected between November 2018 and May 2019 at: (1) a buoy on Lake Pillsbury; and (2) the Soda Creek Forest Service Station. These data were collected with the intention of comparing Soda Creek air temperatures with actual air temperatures on the lake surface and developing a relationship that would be applied to historical Soda Creek air temperature data.

- **Attachment E** – Includes the 1999-2017 Lake Pillsbury meteorological data set and associated analyses. It also contains the air temperatures collected on Lake Pillsbury and nearby at Soda Creek Forest Service Station.

3.3.3.2 Modeling

Water Temperature modeling of Lake Pillsbury and the Eel River was not completed prior to January 25, 2019, when PG&E filed a notice with the FERC stating they would no longer be relicensing the Project; therefore, no modeling data are provided in this summary.

4 Important Outcomes

The relicensing effort ended before the modelling report could be completed. Water temperature data were collected and are provided in csv and Excel files in Attachments A, B, C and D. A meteorological data set was also completed and provided in Attachment E.

5 References

PG&E. 2018. AQ 2 – Water Temperature Technical Study Plan, Potter Valley Project, Revised Study Plan. Filed with FERC on January 15, 2018.

PG&E. 2019. Notice of Withdrawal of Notice of Intent to File License Application and Pre-Application Document. Filed with FERC on January 25, 2019.

Tables

Table AQ 2 – 1. AQ 2 – Water Temperature Technical Study Plan Status

Study Elements Completed / Data Collected	Resource Agency Consultation / Technical Working Group Updates	Technical Study Plan Variances	Outstanding Study Elements	Modifications to Ongoing Studies	Proposed New Studies
On-going Potter Valley Project Monitoring Studies • Collected May to October water temperature data for the Eel River from above Lake Pillsbury to below the confluence with the Middle Fork Eel River at 25 locations. This monitoring will continue through the relicensing study period as part of the FERC license and/or NMFS Biological Opinion requirements. **Water Temperature Additional Data Collection** • Monitored water temperature at inflow locations to Lake Pillsbury (Eel River and Rice Fork), in Lake Pillsbury (profiles) and in the East Branch Russian River. Data will be collected year-round using thermographs. Monthly profiling information will be collected at four locations in Lake Pillsbury from approximately April to October and in January. In one location in Lake Pillsbury water temperature was monitored continuously from April to October using a vertical array of thermographs. Temperature data loggers were deployed at three locations in the East Branch Russian River. • Water temperature data was collected November to April at the Eel River monitoring sites located in riffle habitat. • Redundant temperature recording devices were installed at several locations near the dam and the river downstream of Lake Pillsbury. **Water Temperature Data Synthesis** *Eel River (Inflow Lake Pillsbury to Middle Fork)* • Consolidated existing water temperature monitoring data for the Eel River from above Lake Pillsbury to the Middle Fork Eel River into a database. *Eel River and Rice Fork above Lake Pillsbury* • Summarized existing water temperature monitoring data and potential collection of additional data in the Eel River, Rice Fork, and associated tributaries above Lake Pillsbury below anadromous fish barriers in collaboration with Study AQ 7 – Fish Passage to assist in identification of potential anadromous species habitat. *Lake Pillsbury Water Temperature Modeling* • Developed a MET data set for the 1975-2016 period or current period of record.	• September 26, 2017: Conducted Aquatic Resources TWG meeting to discuss implementation of the AQ 2 – Water Temperature TSP. (UVCC) • May 22, 2018: Conducted Aquatic Resources TWG meeting to establish technical modeling group; discuss development of a CE-QUAL-W2 hydrodynamic and water temperature model of Lake Pillsbury; and discuss development of an Eel River water temperature model. (WebEx) • October 15, 2018: Conducted Aquatic Resources TWG meeting to continue discussion of water temperature modeling development. (WebEx)	• None	**Water Temperature Data Synthesis** *Eel River (Inflow Lake Pillsbury to Middle Fork)* • Summarize the temperature data in relation to meteorological data, discharge data, and Lake Pillsbury storage. • Analyze Eel River pool stratification data with respect to timing of stratification and flow effects on stratification. Coordinate with studies AQ 1 – Hydrology and Operations Modeling, AQ 5 – Instream Flow, and AQ 9 – Fish Populations to evaluate the relationships between streamflow and pool stratification, and between pool stratification and fish populations. **Eel River Water Temperature Modeling** • Use empirical water temperature, streamflow, and meteorological data sets in combination with a multiple regression approach and physical model to characterize water temperature conditions in the affected river reaches under a wide range of existing streamflow and meteorological conditions. (In Progress) • Model Existing Operations water temperature scenario in combination with Study AQ 1 – Hydrology ad Project operations modeling. *Lake Pillsbury Water Temperature Modeling* • Developed a CE-QUAL-W2 hydrodynamic and water temperature model of Lake Pillsbury and established a technical modeling group to review and provide recommendations for model development. • Calibrated and validated the model using existing water temperature, reservoir storage, streamflow, and meteorological data. • Develop a climate change MET data set for approximately 2050. • Develop an Existing Operations water temperature scenario providing an analysis of Lake Pillsbury cold water pool and release water temperatures, in combination with Study AQ 1- Hydrology and Project Operations Modeling. • Provide water temperature simulations to stakeholders and also present them in stakeholder meetings.	• None	• None

Table AQ 2-2 On-going River Water Temperature Monitoring Locations and Additional Data Collection October 2018 through June 2019.

Site	River Mile	On-going (May to October 2005-2018)	Additional Data Collection (Fall/Winter/Spring 2018-2019)	Additional Data Collection Installation Date	Additional Data Collection Retrieval Date
Eel above L. Pillsbury (Bloody Rock)	181.0	Yes	Yes	10/9/2018	Unit A recovered 6/24/2019, Unit B not recovered*
Eel below Scott Dam (PG&E E2 gage site)	167.8	Yes	Yes	10/9/2018	All Units recovered 6/24/2019
Eel between the dams (Monkey Rock)	164.0	Yes	Yes	10/11/2018	Unit A recovered 6/28/2019, Unit B not recovered*
Eel above Cape Horn Dam	157.8	Yes	Yes	10/8/2018	Both units recovered 6/24/2019
Eel at VAFS pool	156.8	Yes	Yes	10/8/2018	Both units recovered 6/24/2019
Eel below Cape Horn Dam (pool/riffle) (2 sites)	155.7	Yes	Yes	10/8/2018	Both units recovered 6/24/2019
Eel above Whitney Cr.	154.2	Yes	No	-	-
Eel above Tomki Creek confluence (pool)	153.1	Yes	Yes	10/8/2018	Both units recovered 6/24/2019
Tomki Creek near mouth	0.05	Yes	Yes	10/5/2018	Both units recovered 6/24/2019
Eel Below Thomas Creek (riffle/pool) (2 sites)	148.8	Yes	Yes	10/5/2018	Unit A not recovered*, Unit B recovered 6/24/2019
Eel above Garcia Creek confluence	147.2	Yes	Yes	10/4/2018	Neither unit recovered*
Eel below Garcia Creek confluence	147.1	Yes	Yes	10/4/2018	Both units recovered 6/5/2019

Site	River Mile	On-going (May to October 2005-2018)	Additional Data Collection (Fall/Winter/Spring 2018-2019)	Additional Data Collection Installation Date	Additional Data Collection Retrieval Date
Eel below Emanual	145.9	Yes	Yes	10/4/2018	Unit A not recovered*, Unit B recovered 6/21/2019
Eel near Hearst Bridge (pool/riffle) (2 sites)	144.5	Yes	Yes	10/4/2018	Unit A not recovered*, Unit B recovered 6/21/2019
Eel at Ramsing Ranch	142.6	Yes	Yes	10/4/2018	Both units recovered 6/21/2019
Eel above Outlet Creek	126.1	Yes	Yes	10/3/2018	Both units recovered 6/25/2019
Outlet Creek near mouth	0.05	Yes	Yes	10/3/2018	Both units recovered 6/25/2019
Eel between Outlet Creek and Middle Fork (pool/riffle) (2 sites)	122.3	Yes	Yes	10/3/2018	Unit A not recovered*, Unit B recovered out of water 6/25/2019
Eel above Middle Fork Eel	119.1	Yes	Yes	10/3/2018	Unit A 6/25/2019, Unit B not recovered*
Middle Fork Eel mouth at Rowland Bar	0.05	Yes	Yes	10/3/2018	Neither unit recovered*
Eel below Middle Fork	118.9	Yes	Yes	10/3/2018	Unit A 6/25/2019, Unit B not recovered*

*Recovery of unit was attempted, but unit was vandalized or missing

Table AQ 2-3 New Data Collection Site Locations for the Water Temperature Study

Station ID	Station Description	Monthly Water Temperature Profiling (April to October)	Continuous Monitoring Installation Date	Continuous Monitoring Retrieval Date
Eel River Watershed				
ER-ABLP	Eel River above Lake Pillsbury		10/17/2018	Units buried in gravel bar (recovery attempted 6/20/2019)
RF-ABLP	Rice Fork above Lake Pillsbury		10/17/2018	Units buried in gravel bar (recovery attempted 6/20/2019)
LP1	Lake Pillsbury in the Eel River Arm	X		
LP2	Lake Pillsbury in the North Arm	X		
LP3	Lake Pillsbury near Scott Dam	X	4/26/2018	11/19/2018
LP4	Lake Pillsbury in the Rice Fork Arm	X		
East Branch Russian River Watershed				
EB-BLPH	East Branch Russian River below Potter Valley Powerhouse		4/30/2018	9/23/2018
EB-MID	East Branch Russian River mid-reach		4/30/2018	11/2/2018
EB-ABLM	East Branch Russian River above Lake Mendocino		4/30/2018	Unit stolen before data could be retrieved

Table AQ 2-4 Native Fish Society Collection Site Locations

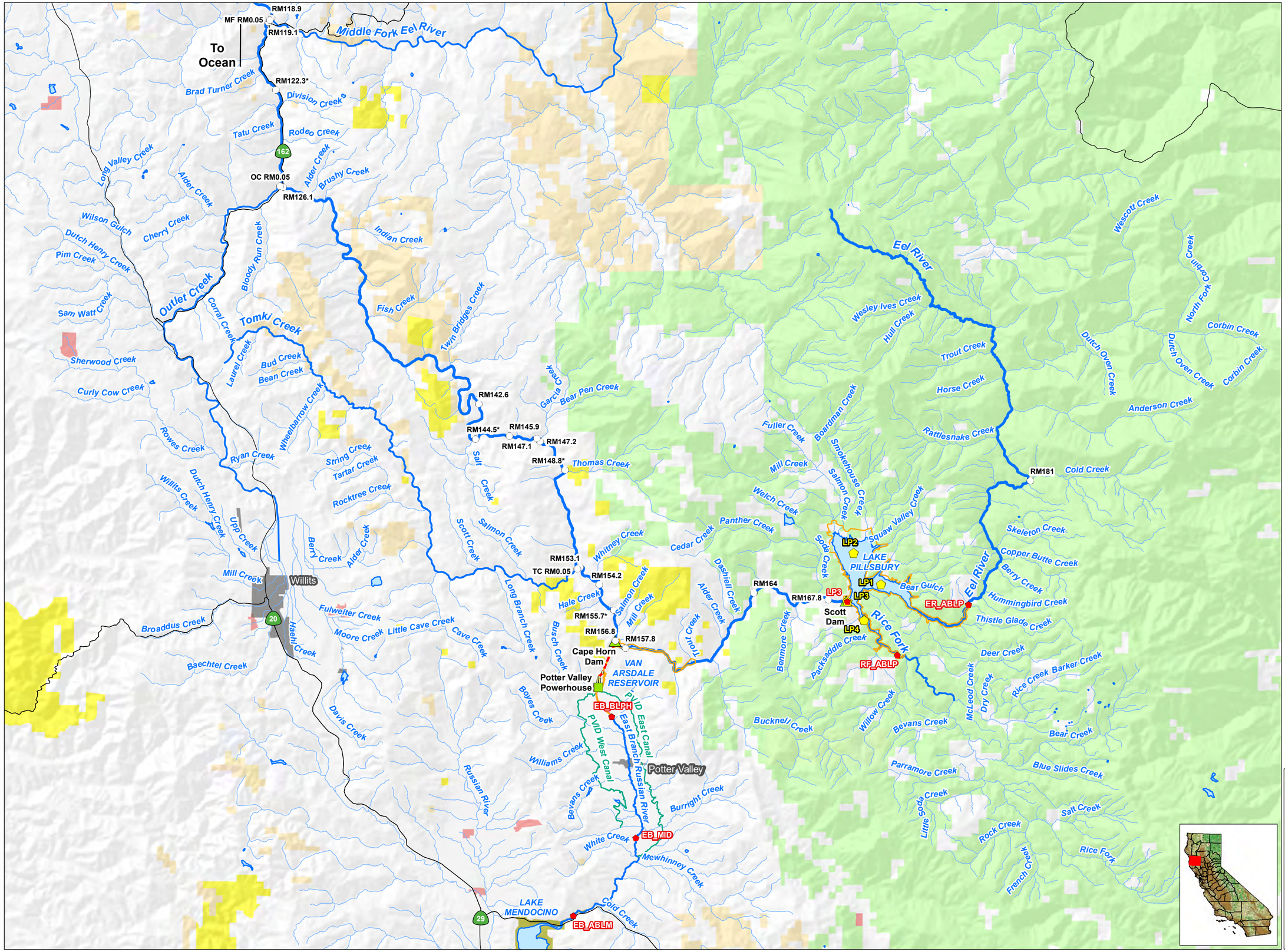
Collection Site Name	Coordinates
Corbin Creek	39.52921°, 122.84625°
Anderson Creek	39.50846°, 122.84487°
Rattlesnake Creek	39.49342°, 122.86435°
Mainstem Upper Eel, Bloody Rock	39.46752°, 122.84146°
Cold Creek	39.47141°, 122.83329°
Skeleton Creek	39.43782°, 122.83421°
Copper Butte Creek	39.42915°, 122.84574°
Berry Creek	39.42244°, 122.85342°
Hummingbird Creek	39.40386°, 122.86004°
Thistleglade Creek	39.39507°, 122.86592°
Deer Creek	39.37563°, 122.85963°
Rice Creek	39.34832°, 122.86965°
Bear Creek	39.32795°, 122.82928°
Blue Slides Creek	39.31910°, 122.84515°

Table AQ 2-5 Water Temperature Collection Site Locations in collaboration with AQ-7 and AQ-10

Site number	Main Eel River (upstream --> downstream)	Installation Date	Retrieval Date	Overwinter	Collected in Collaboration with:
1	Eel River - upstream of Corbin Creek	6/21/18	10/8/18	no	AQ-7
2	Eel River - downstream of Corbin Creek	6/21/18	10/8/18	no	AQ-7
3	Corbin Creek - mouth	6/21/18	10/8/18	no	AQ-7
4	Corbin Creek - downstream of work center	6/29/18	10/8/18	no	AQ-7
5	Main Eel River - upstream of Rattlesnake	6/26/18	10/8/18	no	AQ-7
6	Main Eel River - downstream of Rattlesnake	6/26/18	10/8/18	no	AQ-7
7	Rattlesnake Creek - near mouth	6/26/18	10/8/18	no	AQ-7
8	Eel River - upstream of Cold Creek	6/26/18	10/9/18	no	AQ-7
9	Cold Creek - near mouth	6/26/18	10/9/18	no	AQ-7
10	Eel River - downstream of Cold Creek AKA Bloody Rock	5/15/18	10/9/18	no	AQ-7
11	Eel River - upstream Skeleton	7/2/18	10/15/18	no	AQ-7
12	Eel River - downstream Skeleton	7/2/18	10/15/18	no	AQ-7
13	Skeleton Creek - upstream of mouth	5/3/18	11/14/18	yes	AQ-7
14	Skeleton Creek - mouth	7/2/18	10/15/18	no	AQ-7
15	Eel River - downstream of Thistle Glade Creek	5/17/18	9/22/18	yes	AQ-7 and AQ-10
Site number	**Rice Fork (upstream --> downstream)**	**Installation Date**	**Retrieval Date**	**Overwinter**	**Collected in Collaboration with:**
Missing	Rice Fork upstream of French Creek	7/2/2018	Missing	no	AQ-7
16	Rice Fork - downstream of French Creek	7/2/18	10/16/18	no	AQ-7
17	French Creek - mouth	7/2/18	10/16/18	no	AQ-7
18	Rice Fork - upstream Bear Creek	6/27/18	10/15/18	no	AQ-7
19	Rice Fork - downstream Bear Creek	5/3/18	11/3/18	yes	AQ-7
20	Rice Fork - downstream Bear Creek	5/3/18	11/14/18	no	AQ-7 and AQ-10
21	Bear Creek - mouth	6/27/18	10/15/18	no	AQ-7
22	Rice Fork - upstream Rice Creek	7/5/18	10/16/18	no	AQ-7
23 (duplicate site)	Rice Fork - upstream Rice Creek	5/14/18	11/3/18	yes	AQ-7

24	Rice Fork - upstream Rice Creek	5/14/18	11/3/18	yes	AQ-7 and AQ-10
25	Rice Fork - downstream Rice Creek	7/5/18	9/22/18	no	AQ-7
26	Rice Creek - mouth	7/5/18	10/16/18	no	AQ-7
27	Rice Fork - upstream of Deer Creek	6/28/18	10/17/18	no	AQ-7
28	Rice Fork - downstream of Deer Creek	6/28/18	10/17/18	no	AQ-7
29	Deer Creek - mouth	6/28/18	10/17/18	no	AQ-7
30	Deer Creek - at NF 18N17 Creek crossing	6/27/18	10/15/18	no	AQ-7
Site number	**Between Scott Dam and Cape Horn Dam (upstream --> downstream)**	**Installation Date**	**Retrieval Date**	**Overwinter**	**Collected in Collaboration with:**
31	Eel River - at Benmore Creek Confluence	5/4/18	11/2/18	no	AQ-10
32	Eel River - downstream of Bucknell Creek	5/1/18	11/2/18	no	AQ-10
33	Eel River - above CHD upstream of Van Arsdale Bridge	4/30/18	11/2/18	no	AQ-10
34	Eel River - above CHD downstream of Van Arsdale Bridge	4/30/18	7/11/18	no	AQ-10
Site number	**Below Cape Horn Dam (upstream --> downstream)**	**Installation Date**	**Retrieval Date**	**Overwinter**	**Collected in Collaboration with:**
35	Eel River - at Tomki Creek	4/30/18	11/2/18	no	AQ-10
36	Eel River - downstream of Tomki Creek	4/29/18	11/2/18	no	AQ-10
37	Eel River - downstream of Hearst Bridge, US of Salt Creek	7/11/18	10/21/18	no	AQ-10
38	Eel River - above Outlet Creek	5/4/18	11/2/18	no	AQ-10
39	Eel River - Middle Fork/Dos Rios	5/5/18	11/2/18	no	AQ-10
Site number	**East Branch Russian River (upstream --> downstream)**	**Installation Date**	**Retrieval Date**	**Overwinter**	**Collected in Collaboration with:**
40	East Branch Russian - below Power House	4/30/18	9/23/18	no	AQ-2 and AQ-10
41	East Branch Russian - at Mewhinney Creek	4/30/18	11/2/18	no	AQ-2 and AQ-10

Maps



PG&E Project Facilities

- Powerhouse
- Dam
- Water Conveyance Feature
- Water Conduit
- Penstock
- Powerhouse Discharge Canal
- FERC Project Boundary

Other Features

- Road
- Canal
- Watercourse
- Water Body

Land Ownership**

- U.S. Forest Service
- U.S. Army Corps of Engineers
- Bureau of Land Management
- Bureau of Indian Affairs
- State of California
- Private (Blank)

**SOURCE: BLM, 2016

Water Temperature Sampling Locations

- Monthly Water Temperature Profiling (May to October)
- Continuous Temperature Monitoring
- On-going Potter Valley Project Water Temperature Monitoring Sites (asterisk denotes two adjacent sites)

Pacific Gas and Electric Company

PG&E Potter Valley Project

Map AQ 2-1

Water Temperature Sampling Locations and Project Facilities

0 0.5 1 2 Miles

Projection: UTM Zone 10 N
Datum: NAD 83

Date: 11/12/2019

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EEL RIVER WATERSHED

Wesley Ives Creek
Hull Creek
Trout Creek
Horse Creek
Little Round Mountain Creek
Rattlesnake Creek
Smokehouse Creek
Fuller Creek
Boardman Creek
Wescott Creek
North Fork Corbin Creek
Corbin Creek
Dutch Oven Creek
Dutch Oven Creek
Anderson Creek
Cold Creek
Bloody Rock Rough
Skeleton Creek
Copper Butte Creek
Berry Creek
Grapevine Creek
Hummingbird Creek
Thistle Glade Creek
Mill Creek
Salmon Creek
Hull Mountain Rd
Forest Route 1
Squaw Valley Creek
Horsepasture Gulch
LAKE PILLSBURY
Salt Spring Creek
Bear Gulch
County Rd 301
Eel River
Scott Dam
Elk Mountain Rd
Rice Fork
Eel River

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

PG&E Project Facilities
- Dam
- FERC Project Boundary

Other Features
- General Access Road
- Watercourse
- Water Body

Water Temperature Monitoring
- 2018 Temperature Loggers
- NFS Temperature Loggers

Pacific Gas and Electric Company

PG&E Potter Valley Project (FERC No. 77)

Map AQ 2-2a

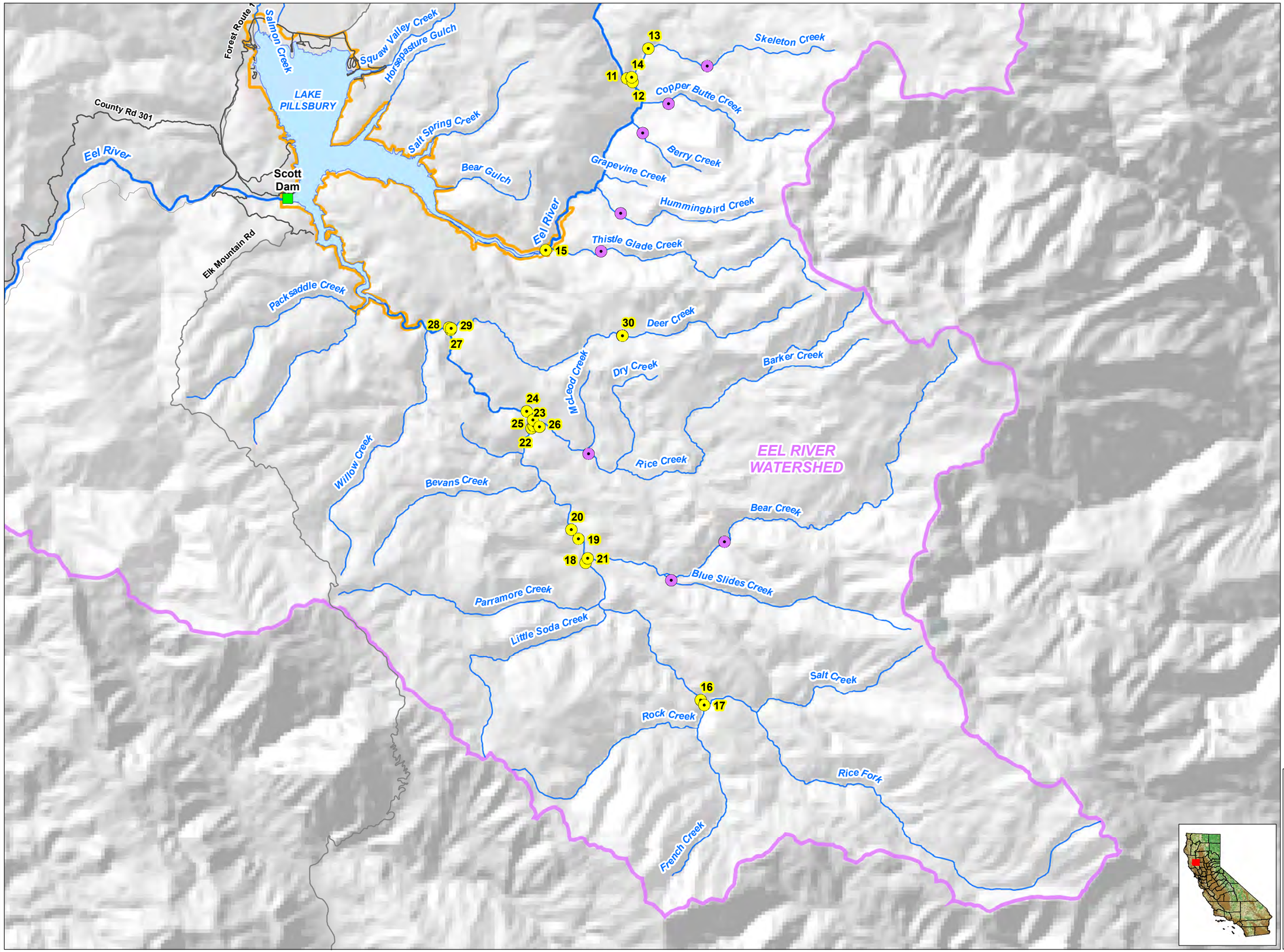
Water Temperature Monitoring Locations Upper Eel River

0 0.5 1 Miles

Projection: UTM Zone 10 N
Datum: NAD 83

Date: 11/12/2019

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PG&E Project Facilities

- Dam
- FERC Project Boundary

Other Features

- General Access Road
- Watercourse
- Water Body

Water Temperature Monitoring

- 2018 Temperature Loggers
- NFS Temperature Loggers

Pacific Gas and Electric Company

PG&E Potter Valley Project (FERC No. 77)

Map AQ 2-2b

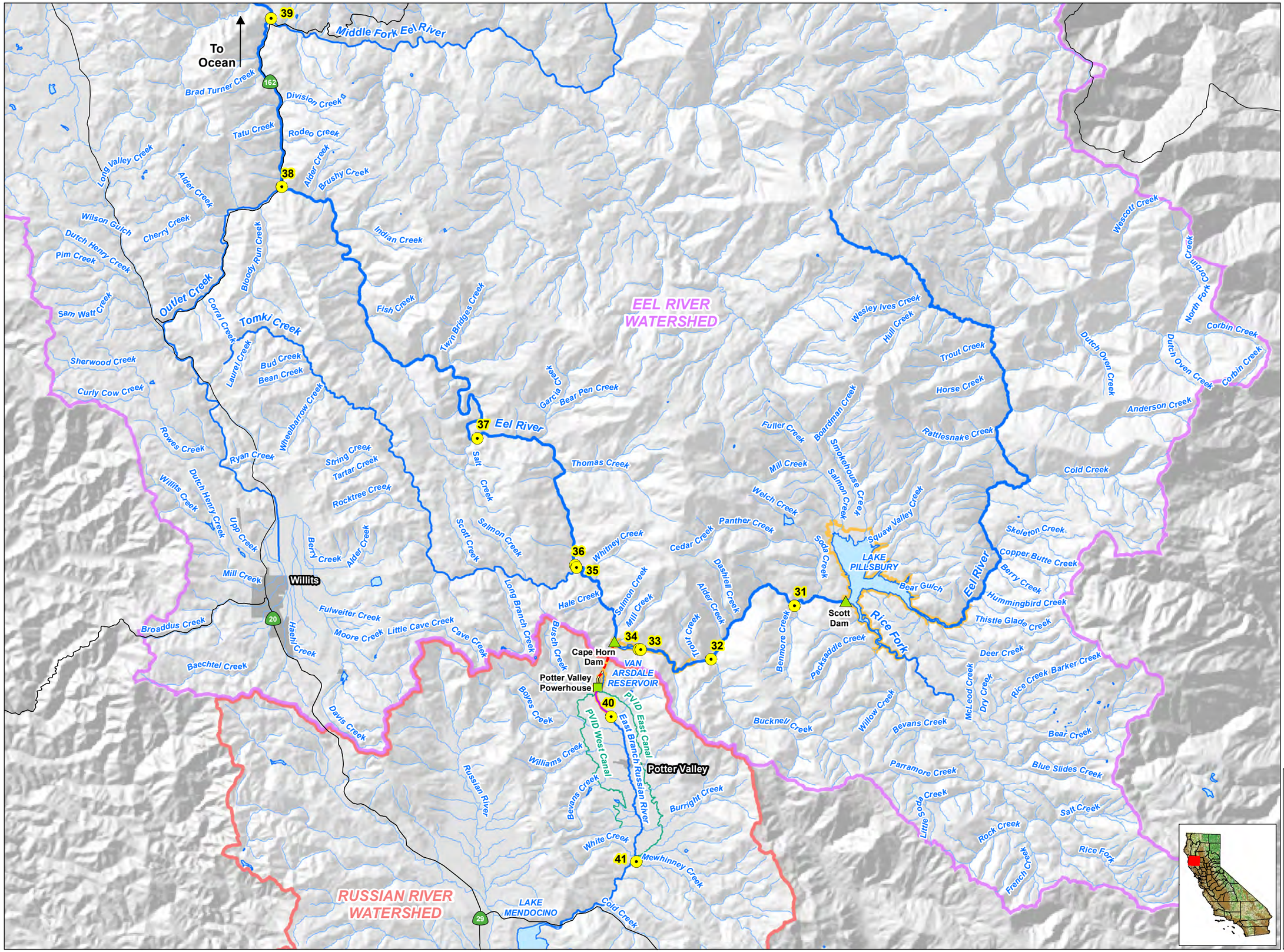
Water Temperature Monitoring Locations Rice Fork

0 0.5 1 Miles

Date: 11/12/2019

Projection: UTM Zone 10 N
Datum: NAD 83

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PG&E Project Facilities

- Powerhouse
- Dam
- Water Conveyance Feature
- Water Conduit
- Penstock
- Powerhouse Discharge Canal
- FERC Project Boundary

Other Features

- Road
- Canal
- Watercourse
- Water Body

Water Temperature Monitoring

- 2018 Temperature Loggers

Pacific Gas and Electric Company®

PG&E Potter Valley Project (FERC No. 77)

Map AQ 2-2c

Water Temperature Monitoring Locations below Lake Pillsbury

0 0.5 1 2 Miles

Date: 12/24/2019

Projection: UTM Zone 10 N
Datum: NAD 83

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Attachment A

Temperature Data from

On-going Temperature Monitoring Sites

Attachment B

Lake Pillsbury Vertical Array Temperature Data

Attachment C

Water Temperature Data Collected by the Native Fish Society

Attachment D

Water Temperature Data Collected in Collaboration with AQ-7 and AQ-10

Attachment E

Lake Pillsbury Meteorological Data

Technical Study Summary

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Date December 6, 2019

To: Pacific Gas and Electric Company (Susan Kester)

From: Stillwater Sciences (as subconsultant to Cardno, Inc.)

Project: Potter Valley Project (FERC Project No. 77) Relicensing

RE: **AQ 3 – Water Quality Study Data Memorialization**

1 Introduction

This Technical Study Summary (TSS) presents select data and information that was developed by the Cardno Team in association with the AQ 3 – Water Quality Technical Study Plan (AQ 3 – TSP) (PG&E 2018), which was one of 21 approved technical studies initiated by Pacific Gas and Electric Company (PG&E) in association with the relicensing process for the Potter Valley Project.[1] The information presented herein is based on work that was completed prior to January 25, 2019, the date that Pacific, Gas and Electric Company (PG&E) filed a notice with the Federal Energy Regulatory Commission (FERC) stating they would no longer be relicensing the Project (PG&E 2019). The work presented in this TSS was primarily completed by Stillwater Sciences as a subconsultant to Cardno.

2 Study Status

Table AQ 3-1 summarizes the status of the AQ 3 – Water Quality Study when work ended on January 25, 2019.

3 Work Products

The following information developed as part of this study is attached to this TSS, organized by the primary study elements identified in the AQ 3 - TSP. Note that all data identified in this TSS as “Attachments” will be uploaded to the Potter Valley Project SharePoint.

3.1 Seasonal Water Quality Sampling

Seasonal water quality sampling was performed at five reservoir and 15 riverine sites during the spring run-off period (May 15–24, 2018) and during the summer/fall low flow period (September 18–27, 2018).

[1] PG&E filed a Proposed Study Plan (PSP) with the Federal Energy Regulatory Commission (FERC) that included 21 separate Technical Study Plans on September 14, 2017. After collaborating with the stakeholders, PG&E subsequently filed a Revised Study Plan (RSP) with the FERC on January 15, 2018. On February 15, 2018, the FERC issued its Study Plan Determination, approving 17 of the 21 studies included in the RSP and approving the remaining four studies with FERC staff recommended modifications.

Water quality sampling included collection of *in-situ* measurements at each reservoir and riverine site. A pre-calibrated YSI EXO multiparameter datasonde (YSI Incorporated, Yellow Springs, Ohio) was used to collect water temperature, dissolved oxygen (DO) concentration and saturation, specific conductance (SpCond.), pH, turbidity, chlorophyll (chl.) and phycocyanin (BGA-PC) (Table AQ3-3). At stream sites *in situ* water quality measurements were collected approximately 0.2 meter below the water surface. At reservoir sites measurements were collected at one-meter sampling intervals throughout the water column. Secchi disk measurements of water clarity were collected in each reservoir. *In situ* parameters measured on the YSI EXO were checked for accuracy before and after each field day, re-calibrated if accuracy specifications were not met and data were flagged.

Water grab samples were collected and analyzed for general chemistry, nutrients, algae, total and dissolved metals, and hydrocarbons using standard laboratory methods by a California state-certified laboratory (Alpha Analytical Laboratory, Inc. Ukiah, California [ELAP 1551]; Basic Laboratory, Chico and Redding, California [ELAP 1677]; Brooks Applied Labs, Bothell, WA [NELAP E87982]; and Analytical Sciences, Petaluma, California [ELAP 2303]). Grab samples were collected at two or three water column depths (surface, middle, bottom) at reservoir sites and one depth (surface) at riverine sites. Field Quality Assurance/Quality Control (QA/QC) procedures (PG&E 2006) were followed, a preliminary review of laboratory and field QA/QC results was performed (i.e., field duplicates, field blanks, equipment blanks), and data were flagged for QA/QC issues.

Study site locations, dates, parameters and methods, *in situ* data, reservoir *in situ* profiles, analytical data, chains of custody and laboratory reports are provided in the following:

- **Map AQ 3-1** – Shows the seasonal water quality sampling locations.
- **Table AQ 3-2** – Summarizes seasonal and monthly water quality sampling locations and dates.
- **Table AQ 3-3** – Summarizes water quality parameters evaluated
- **Table AQ 3-4** – Summarizes seasonal and monthly *in situ* water quality and discharge data collected at riverine sites.
- **Table AQ 3-5** – Summarizes seasonal and monthly *in situ* water quality profiles and secchi depth collected at reservoir sites.
- **Tables AQ 3-6** – Summarizes seasonal general chemistry sampling results.
- **Table AQ 3-7** – Summarizes seasonal and monthly nutrients, chlorophyll-a, and biological oxygen demand results.
- **Table AQ 3-8** – Summarizes seasonal and monthly total iron, mercury, methylmercury, and manganese results.
- **Table AQ 3-9a** – Summarizes seasonal aluminum and CAM 17 (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper) results.
- **Table AQ 3-9b** – Summarizes seasonal CAM 17 (lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, zinc) results.
- **Table AQ 3-10a** – Summarizes seasonal dissolved aluminum and CAM 17 (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper) results.
- **Table AQ 3-10b** – Summarizes seasonal Dissolved CAM 17 (lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, zinc) results.
- **Table AQ 3-11a** – Summarizes seasonal hydrocarbon results.

- **Table AQ 3-11b** – Summarizes seasonal hydrocarbon results (continued).
- **Attachment A** – Includes profiles of *in situ* measurements taken in Lake Pillsbury and Van Arsdale Reservoir.
- **Attachment B** – Includes chains of custody and laboratory reports for seasonal and monthly Lake Pillsbury samples.

3.2 Monthly Lake Pillsbury Water Quality Sampling

Water quality data were collected at four Lake Pillsbury sites (sites LP1, LP2, LP3, LP4), two Lake Pillsbury inflow sites (Eel River [Site ER173.7] and Rice Fork [Site RF3.8]) and one Lake Pillsbury outflow site (Eel River [Site ER167.8]) to assist in understanding the limnology of Lake Pillsbury (Table AQ3-2 and Map AQ3-2). Inflow data were collected at the time of sampling in the Eel River (Site ER173.7) and Rice Fork (Site RF3.8) tributaries. *In situ* data were collected at one site below Van Arsdale Reservoir (Site ER156.7) to assist in understanding water quality issues in water diverted to the East Branch Russian River at the Van Arsdale Diversion. Water samples, *in situ* data (i.e., water temperature, DO, SpCond., pH, turbidity, chl., and BGA-PC), and inflow data were collected once monthly in May (15–24), June (26–28), September (20–26), October (23–24), and November (13–14), 2018. Monthly sampling was conducted at the same time as the seasonal sampling events during May and September. Monthly samples and *in situ* profiles were not collected in July and August due to the Ranch Fire. One of the fire-cancelled events was re-scheduled to November to capture the post-"overturn" water quality conditions in Lake Pillsbury.

Water grab samples were collected and analyzed for nutrients, algae, BOD, mercury, methylmercury, iron and sulfides. Monthly i*n situ* measurements and water quality grab samples were collected using the same methods outlined in the seasonal water quality sampling section above (e.g., multi-parameter water quality meter vertical profiles, grab samples, etc.). Inflow data were collected using a Marsh-McBurney Flo-Mate (Frederick, Maryland) and discharge (Q) was calculated.

Study site locations, sample dates, parameters and methods, *in situ* data, reservoir *in situ* profiles, analytical data, chains of custody and laboratory reports are provided in the following:

- **Map AQ 3-2** – Shows monthly Lake Pillsbury sampling locations.
- **Table AQ3-2** – Summarizes seasonal and monthly water quality sampling locations and dates.
- **Table AQ3-3** – Summarizes parameters for the water quality assessment.
- **Table AQ 3-4** – Summarizes seasonal and monthly *in situ* water quality and discharge data collected at riverine sites.
- **Table AQ 3-5** – Summarizes seasonal and monthly *in situ* water quality profiles and secchi depth collected at reservoir sites.
- **Table AQ 3-7** – Summarizes seasonal and monthly nutrients, chlorophyll-a, and biological oxygen demand results.
- **Table AQ 3-8** – Summarizes seasonal and monthly total iron, mercury, methylmercury, and manganese results.
- **Attachment A** – Includes profiles of *in situ* measurements taken in Lake Pillsbury and Van Arsdale Reservoir.

- **Attachment B** – Includes chains of custody and laboratory reports for seasonal and monthly Lake Pillsbury samples.

3.3 Bacteriological Monitoring

Five surface water grab samples were collected within a 30-day period surrounding the July 4th holiday at each of the bacteriological study locations (sites LP5, LP6, LP7, ER4, VA1). Water samples were analyzed for total coliforms and fecal coliforms by a state-certified laboratory (Alpha Analytical Laboratory, Inc. Ukiah, California) using standard laboratory methods (see Table AQ3-3).

Study site locations, sample dates, data, chains of custody and laboratory reports are provided in the following:

- **Map AQ 3-3** – Shows bacteriological sampling locations.
- **Table AQ 3-12** – Summarizes bacteriological sampling locations and dates.
- **Table AQ 3-13** – Summarizes bacteriological monitoring results.
- **Attachment C** – Includes chains of custody and laboratory reports for bacteriological samples

3.4 Cyanobacteria and Toxins (Harmful Algal Blooms)

Surface water samples were collected monthly in June, September and October at the five cyanobacteria study locations (sites LP5, LP6, LP7, ER4, VA1). Water samples were analyzed for total microcystins, anatoxin-a, and cylindrospermopsin by a state certified laboratory (McCampbell Analytical, Inc., Pittsburg, California [ELAP 1644]) using standard laboratory methods (see table AQ3-3). Water samples were not collected during July and August due to the Ranch Fire. In addition, phytoplankton samples were not analyzed for community composition, because toxins were not detected in the water samples collected during June, September, and October.

Study site locations, sample dates, data, chains of custody and laboratory reports are provided in the following:

- **Map AQ 3-4** – Shows cyanobacteria and toxins sampling locations.
- **Table AQ 3-14** – Summarizes cyanobacteria and toxins sampling locations and dates.
- **Table AQ 3-15** – Summarizes cyanobacteria toxins monitoring results.
- **Attachment D** – Includes chains of custody and laboratory reports for cyanobacteria and toxin samples.

3.5 Fish Tissue Mercury Sampling

Tissue samples from sportfish (including rainbow trout, largemouth bass, bluegill, and catfish) collected in Lake Pillsbury and pikeminnow collected in the Eel River downstream of Lake Pillsbury were sent to Moss Landing Marine Laboratory Marine Pollution Studies Laboratory (Moss Landing, California) and analyzed for total mercury using a modified Environmental Protection Agency (EPA) method 7473.

Thirty-two sportfish tissue samples were collected from Lake Pillsbury, including the following species: 10 bluegill (*Lepomis macrochirus*), 12 largemouth bass (*Micropterus salmoides*), and 10 Sacramento pikeminnow (*Ptychocheilus grandis*). All fish were captured in Lake Pillsbury during the fish population field effort (AQ 9) between September 24–27, 2018.

Twelve Sacramento pikeminnow were collected from the Eel River on October 10, 2018, including the following locations: Eel River upstream of Bucknell Creek and Eel River near Trout Creek. All fish were captured during an electrofishing effort on October 10, 2018.

Data, chains of custody and laboratory reports are provided in the following:

- **Table AQ 3-16** – Summarizes Lake Pillsbury sportfish tissue mercury results.
- **Table AQ 3-17** – Summarizes Eel River Sacramento pikeminnow tissue mercury results.
- **Attachment E** – Includes chains of custody and laboratory reports for sportfish tissue samples

3.6 Lake Pillsbury Water Quality Analysis

Hydrogen sulfide concentrations in Lake Pillsbury and in the reservoir outflow (Eel River [Site ER167.8]) were analyzed. Water quality grab samples were collected using the same methods outlined in the seasonal water quality sampling section above.

Data, chains of custody and laboratory reports are provided in the following:

- **Table AQ 3-18** – Summarizes Lake Pillsbury and Eel River below Lake Pillsbury sulfide and hydrogen sulfide gas (H2S) results.
- **Attachment B** – Includes chains of custody and laboratory reports for seasonal and monthly Lake Pillsbury samples.

4 Important Outcomes

Preliminary results for the AQ 3 – Water Quality Study include the following:

- Seasonal thermal stratification and hypoxia occurred in the Lake Pillsbury Arm (Site LP1) and Lake Pillsbury near Scott Dam (Site LP3) (Table AQ 3-5 and Attachment A). This may have implications for the productions of hydrogen sulfide, internal cycling of algal nutrients, as well as trace metals affected by oxidation-reduction conditions.
- Total hardness and total alkalinity were greater at the Rice Fork and Eel River sites above Lake Pillsbury compared to the Lake Pillsbury, Eel River between Scott Dam and Middle Fork Eel River, and the East Branch Russian River sites (Table AQ3-6).
- In Lake Pillsbury, nutrients and chlorophyll-a concentrations were highest during September and October and BOD was highest in September. Nutrient concentrations (i.e., ammonia, total Kjeldahl nitrogen, orthophosphate, and total phosphorus) were generally highest in the bottom waters at Lake Pillsbury near Scott Dam (Site LP3) (Table AQ3-7).
- Aluminum (total and dissolved), arsenic (total and dissolved), barium (total and dissolved), chromium (total), cobalt (total), copper (total and dissolved), iron (total), manganese (total), mercury (total and dissolved), molybdenum (total and dissolved), nickel (total and dissolved), and zinc (total and dissolved) were detected at one or more sites within the Project Area. Of the detected metals, the concentrations were generally highest in the bottom water at Lake Pillsbury near Scott Dam (Site LP3) and Lake Pillsbury in the Eel River Arm (Site LP1) (Tables AQ3-8, 9a, 9b, 10a, and 10b).
- Low levels of mercury and methylmercury concentrations were detected in all samples collected during seasonal and monthly sampling efforts. Concentrations were highest during October in the bottom waters at Lake Pillsbury near Scott Dam (Site LP3) (Table AQ3-8).
- Fecal coliforms concentrations were low (geometric mean<20 MPN/100ml) surrounding the July 4th holiday. The concentrations were highest at Van Arsdale beach below the bridge (Site VA1) (Table AQ3-13).
- Cyanobacteria toxins (i.e., total microcystins, anatoxin-a, and cylindrospermopsin) were not detected in Lake Pillsbury or in the Eel River downstream of Scott Dam to Van Arsdale Reservoir (Table AQ 3-15).

- Total mercury concentrations in Lake Pillsbury sportfish and Eel River Sacramento pikeminnow tissue were generally greater than 0.2 ug/g[2] (0.2mg/kg) wet weight (Tables AQ3-16 and 17).
- Hydrogen sulfide gas was detected (10.2 ppm) during September and sulfide was quantifiable (0.16 mg/L) during October 2018 in the hypolimnion (bottom) of Lake Pillsbury near Scott Dam (Site LP3) (Table AQ3-18).

5 References

State Water Resources Control Board (SWRCB). 2017. Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions. State of California Water Resources Control Board. January 3, 2017.

PG&E. 2006. Quality assurance program plan (QAPP) for projects requiring water quality and/or water temperature monitoring. QAPP Report No: 026.11.06.12. PG&E Environmental Services, Water Resources.

PG&E. 2018. AQ 3 – Water Quality Technical Study Plan, Potter Valley Project, Revised Study Plan. Filed with FERC on January 15, 2018.

PG&E. 2019. Notice of Withdrawal of Notice of Intent to File License Application and Pre-Application Document. Filed with FERC on January 25, 2019.

[2] California statewide water quality objective for methylmercury in sportfish is 0.2 mg/kg, wet weight (SWRCB 2017).

Tables

Table AQ 3-1. AQ 3 – Water Quality Technical Study Plan Status as of January 25, 2019

Study Elements Completed / Data Collected	Resource Agency Consultation / Technical Working Group Updates	Technical Study Plan Variances	Outstanding Study Elements	Modifications to Ongoing Studies	Proposed New Studies
Study Site Selection • Study sites for general sampling and bacteriological sampling were selected to represent water quality in the Study Area. **Seasonal Water Quality Sampling** • Conducted *in situ* water quality measurements and sampling at the selected sampling locations once during the spring runoff (May) and once during the summer (September) low-flow period. • Samples were analyzed by a state-certified water quality laboratory. **Monthly Lake Pillsbury Water Quality Sampling** • Conducted *in situ* water quality measurements and monthly sampling (May, June, September, October, November) to assist in understanding Lake Pillsbury limnology. • Obtained inflow data at the time of sampling in the Eel River and Rice Fork tributaries to Lake Pillsbury by measurement. • Coordinated with Study AQ 2 – Water Temperature to collect *in situ* water temperature profiles during the monthly sampling to support development of the CE-QUAL-W2 water temperature model. **In Situ River Water Quality Sampling** • Collected *in situ* turbidity, DO, pH, temperature, and specific conductance data at two key locations in the Eel River below Lake Pillsbury and below Van Arsdale Reservoir. • Turbidity meters were installed downstream of Lake Pillsbury and Van Arsdale Reservoir. • Turbidity meters were installed in the Eel River and Rice Fork above Lake Pillsbury. **Bacteriological Monitoring** • Conducted bacteriological sampling at selected site locations over a 30 day period surrounding the July 4th holiday for a total of five surface water grab samples. • Samples were immediately preserved and shipped to a state certified laboratory in a manner suitable for meeting restrictive time hold criteria and maintaining a chain of custody record.	**Study Site Selection** • September 26, 2017: Convened Aquatic Resources TWG meeting to discuss implementation of the AQ 3 – Water Quality TSP. (UVCC) • May 9, 2018: Convened Aquatic Resources TWG meeting to identify locations for bacteriological sampling sites. (WebEx)	**Seasonal Water Quality Sampling** • Low-flow sample collection was postponed to the late-summer/early fall (Sept. 18–27) due to the Ranch Fire. • Phytoplankton samples were not analyzed for community composition due to the stop work order and improper preservation by the laboratory. **Monthly Lake Pillsbury Water Quality Sampling** • Monthly samples and *in situ* profiles were not collected in July and August due to the Ranch Fire. • One of the fire-cancelled events was re-scheduled to November to capture the post-"overturn" water quality conditions in Lake Pillsbury. **Cyanobacteria and Toxins (Harmful Algal Blooms)** • Cyanotoxins were not collected during July and August due to the Ranch Fire. • Phytoplankton samples were not analyzed for community composition, because toxins were not detected in the water samples collected during June, September, and October. **In Situ River Water Quality Sampling** • Turbidity grab samples were not collected upstream of Lake Pillsbury in the Eel River and Rice Fork as part of the seasonal and monthly sampling to provide reference conditions for turbidity data collected downstream of Lake Pillsbury. Turbidity was collected using a pre-calibrated YSI EXO datasonde (YSI Incorporated, Yellow Springs, Ohio).	**Seasonal Water Quality Sampling** • Nutrient and *in situ* parameters collection and laboratory analysis in January 2019 in Lake Pillsbury and at the Lake Pillsbury inflows and outflows. • All water quality parameters will be compared to basin plan water quality objectives and the Aquatic Conservation Strategy Objectives of the Northwest Forest Plan. **Monthly Lake Pillsbury Water Quality Sampling** • If after Year One sampling, additional data is required to understand Lake Pillsbury dissolved oxygen (DO) dynamics and to model DO accurately, collect additional DO data in Year Two. This would be determined in coordination with stakeholders. • All water quality parameters will be compared to basin plan water quality objectives and the Aquatic Conservation Strategy Objectives of the Northwest Forest Plan. **Bacteriological Monitoring** • Compare measured water quality parameters to Basin Plan water quality objectives and the Aquatic Conservation Strategy Objectives of the Northwest Forest Plan. **Lake Pillsbury Water Quality Analysis** • Characterize nutrient balance of Lake Pillsbury by analyzing the inflow, outflow, and within Lake Pillsbury nutrient concentrations collected monthly/seasonally at selecting sampling stations. Analyzed seasonal variants. • Develop empirical relationships between observed water column DO, DO depletion rates, nutrient levels, and monthly changes in algal community indicators within Lake Pillsbury. • Analyze the turbidity of water released from Lake Pillsbury into the Eel River using turbidity data collected monthly/seasonally at selected sampling stations. Analyze seasonal variants and the source of turbidity, if present. • Characterize the hydrogen sulfide levels in relation to seasonal variation in reservoir stratification and oxygen dynamics (and other water quality parameters, as appropriate). • Characterize water quality dynamics in Lake Pillsbury and its outflow using empirical data		

Table AQ 3-1. AQ 3 – Water Quality Technical Study Plan Status as of January 25, 2019

Study Elements Completed / Data Collected	Resource Agency Consultation / Technical Working Group Updates	Technical Study Plan Variances	Outstanding Study Elements	Modifications to Ongoing Studies	Proposed New Studies
Cyanobacteria and Toxins (Harmful Algal Blooms) • Cyanobacteria study sites were visited monthly (June, Sept. Oct.) and samples were collected for toxins. • Samples were analyzed by a state certified laboratory. **Fish Tissue Mercury Sampling** • Collected fish tissue samples from Lake Pillsbury sportfish for total mercury using a modified EPA method 1638. • Analyzed pikeminnow fish tissue from the Eel River downstream of Lake Pillsbury for total mercury using modified EPA method 1638. • Laboratory analysis of tissue samples from Lake Pillsbury sportfish for total mercury using a modified EPA method 1638. **Lake Pillsbury Water Quality Analysis** • Hydrogen sulfide concentrations in the hypolimnion of Lake Pillsbury and in the reservoir outflow were analyzed.			collected monthly/seasonally at selected sampling stations. This analysis included issues listed above, and other important reservoir water quality processes and parameters, including thermal stratification, mercury methylation, algae dynamics, dissolved metals, pH, alkalinity, and organic carbon. **Contingency Benthic Macroinvertebrate Sampling** • Conduct BMI sampling at locations where river quality results exceeded Basin Plan standards and state or federal resource agencies with management responsibility related to water quality request benthic macroinvertebrate (BMI) sampling. **Data Analysis and Reporting** • Analyze data and prepare Draft AQ 3 – TSR. • Distribute Draft AQ 3 – TSR for stakeholder review, address comments, finalize, and distribute Final AQ 3 – TSR.		

Table AQ3-2. Seasonal and Monthly Water Quality Sampling Locations and Dates.

Site ID	Station Description	Location[a] (decimal degrees)		Water Quality Sampling Dates	
		Latitude (North)	Longitude (East)	Seasonal (2018)	Monthly[b] (2018)
EEL RIVER WATERSHED					
Inflow to Lake Pillsbury					
ER173.7[c]	Eel River above Lake Pillsbury	39.394373	-122.89136	5/24, 9/26	06/27, 10/24, 11/14
RF3.8[c]	Rice Fork above Lake Pillsbury	39.383125	-122.93106	5/23, 9/26	6/27, 10/24, 11/14
Lake Pillsbury					
LP1	Lake Pillsbury in the Eel River Arm	39.416224	-122.93547	5/23, 9/27	6/28, 10/23, 11/13
LP2[d]	Lake Pillsbury in the North Arm	39.428411	-122.95344	5/22, 9/25	6/28, 10/23, 11/13
LP3	Lake Pillsbury near Scott Dam	39.407338	-122.95779	5/23, 9/25	6/27, 10/23, 11/13,
LP4	Lake Pillsbury in the Rice Fork Arm	39.39721	-122.94719	5/23, 9/26	6/27, 10/24, 11/14
Eel River Scott Dam to Van Arsdale Reservoir					
ER167.8	Eel River below Scott Dam near USGS Gage	39.408183	-122.97177	5/15, 9/27	06/26, 10/25, 11/13
VA2	Van Arsdale Resevoir near Cape Horn Dam	39.385155	-123.11675	9/20, 5/24	-
Eel River Cape Horn Dam to Middle Fork Eel River					
ER156.7	Eel River below Cape Horn Dam (PG&E E11 gage site)	39.388277	-123.11623	5/17, 9/20	6/28[f], 10/25[f], 11/14[f]
ER153.1	Eel River above Tomki Creek confluence	39.425072	-123.1398	5/15, 9/18	-
TC0.1	Tomki Creek above Eel River confluence	39.423894	-123.14345	5/15, 9/18	
ER152.9	Eel River below Tomki Creek confluence	39.426104	-123.14292	5/15, 9/18	
ER126.1	Eel River above Outlet Creek confluence	39.626089	-123.34437	5/16, 9/19	-
OC0.1	Outlet Creek above Eel River confluence	39.625977	-123.34642	5/16, 9/19	
ER125.9	Eel River below Outlet Creek confluence	39.62894	-123.34451	5/16, 9/19	
ER119.4[e]	Eel River above Middle Fork confluence	39.712348	-123.35423	5/16, 9/19	-
MF0.1	Middle Fork Eel River above Eel River confluence	39.713321	-123.35127	5/16, 9/19	
ER119.2[e]	Eel River below Middle Fork Eel River confluence	39.71643	123.35146	5/16, 9/19	
EAST BRANCH RUSSIAN RIVER WATERSHED					
EB-BLPH	East Branch Russian River below Potter Valley Powerhouse	39.346206	-123.11858	09/20, 05/21	-

Table AQ3-2. Seasonal and Monthly Water Quality Sampling Locations and Dates.

Site ID	Station Description	Location[a] (decimal degrees)		Water Quality Sampling Dates	
		Latitude (North)	Longitude (East)	Seasonal (2018)	Monthly[b] (2018)
EB-ABLM	East Branch Russian River above Lake Mendocino	39.246246	-123.13044	05/21, 09/20	-

Notes:
[a] Datum: World Geodetic System (WGS) 84
[b] Monthly sampling was conducted during the May and September seasonal sampling events.
[c] Station location was relocated downstream during the September, October, and November sampling events. ER173.7 sample location 39.38618 N, -122.93867 E. RF3.8 Sample location 39.398282 N, -122.902734 E.
[d] Station location was relocated in October due to low reservoir levels. LP2 station location between May and Septebmer 39.430245 N, -122.953009 E.
[e] AQ-3 Study Plan and/or laboratory results reported with the following site codes: ER119.4=ER119.1 and ER119.2=ER118.9.
[f] *In situ* data only.

Table AQ 3-3. Parameters for the Water Quality Assessment.

Parameter/Constituent	Methods[a]	Seasonal Water Quality	Monthly Water Quality	Cyano-bacteria and Toxins	Bacteria
In Situ					
Temperature	EPA 170.1	X	X		
Dissolved oxygen	SM 4500-O	X	X		
pH	SM 4500-H	X	X		
Specific conductance	SM 2510A	X	X		
Chlorophyll-a, Phycocyanin	EPA 445.0	X	X		
Turbidity	SM 2130 B	X	X		
Secchi disk	USGS NFM	X	X		
General Chemistry					
Total alkalinity	SM2320B	X			
BOD (5-day, ultimate)	SM5210B	X	X		
TOC and DOC	SM5310C		X		
Hardness	SM2340B	X			
Total dissolved solids	SM2540C	X			
Total suspended solids	SM2540D	X			
Total sulfide	SM4500	X[b]	X[b]		
H_2S Gas	Handheld Meter[c]	X[b]	X[b]		
Nutrients					
Nitrate+Nitrite-N	EPA 300.0	X	X		
Total Ammonia-N	SM4500NH3C	X	X		
Total Kjeldahl Nitrogen	SM4500 - NoB	X	X		
Orthophosphate	EPA300.0	X	X		
Total Phosphorous	SM4500	X	X		
Algae and toxins					
Chlorophyll-a	SM 10200H	X	X		
Cylindrospermopsin	EPA 545			X	
Anatoxin-a	EPA 545			X	
Total Microcystins	EPA 546			X	
Bacteriological					
Total coliforms	SM 9223B	X			X
Fecal coliforms	SM 9221	X			X
Metals (Total except as noted)					
Iron	EPA 200.7	X	X		
Manganese	EPA 200.7	X			
Mercury[d]	EPA245.1	X[d]	X		
Methylmercury[d]	EPA1630E	X[d]	X		

Table AQ 3-3. Parameters for the Water Quality Assessment.

CAM 17 Metals (Title 22 Metals)[e] and Aluminum	EPA 200.8	X[e]			
Hydrocarbons					
TPH - Diesel & Motor Oil, Tetratetracontane	EPA8015	X			
Oil & Grease	EPA 1664A	X			
TPH - Gasoline	EPA8260GRO	X			
BTEX, MTBE, 5 Oxys[f]	EPA8260B	X			

Notes:

[a] Method sources: APHA (2012), USEPA (2017), and USGS National Field Manual (Wilde et al 2014).

[b] Total sulfide and H_2S gas will only be collected at Lake Pillsbury (sites LP1 – 4) and immediately downstream (site ER167.8).

[c] GC-P-H Single Gas Clip Plus H2S

[d] Mercury sampling is at lower detection limits with these methods than EPA 200.8 used for the CAM 17 metals below.

[e] CAM 17 metals includes total and dissolved metals: As, Hg, Sb, Ba, Be, Cd, Cr, Co, Cu, Pb, Mo, Ni, Se, Ag, TI, V, Zn

[f] BTEX, MTBE, 5 Oxys includes: Benzene, Bromofluorobenzene, Dibromofluoromethane,Toluene-d8, Toluene, Ethylbenzene,Methyl tert-butyl ether,Di-isopropyl ether, Ethyl tert-butyl ether, Tert-amyl methyl ether, Tert-butyl alcohol

Table AQ 3-4 – Seasonal and Monthly *In Situ* Water Quality and Discharge Data Collected at Riverine Sites.

Site ID	Date (2018)	Temp (°C)	DO (mg/L)	DO (% sat)	pH (s.u.)	SpCond (µS/cm)	Turbidity (NTU)	Chlorophyll		Phycocyanin		Flow (cfs)
								(RFU)	(ug/L)	(RFU)	(ug/L)	
MAY 15–24, 2018 (SEASONAL AND MONTHLY)												
EEL RIVER WATERSHED												
Inflow to Lake Pillsbury												
ER173.7	5/24	19.1	8.6	93	8.1	230	0.3	0.02	0.15	0.08	0.08	73
RF3.8	5/23	19.1	8.5	92	8.1	324	0.5[Q]	0.02	0.15	-0.01	-0.01	28
Eel River Scott Dam to Van Arsdale Reservoir												
ER167.8	5/15	17.1	9.6	99	8.0	146	3.1	0.01	-0.06	0.08	0.12	-
Eel River Cape Horn Dam to Middle Fork Eel River												
ER156.7	5/17	17.8	9.4	98	8.0	159	3.3	0.08	0.21	0.01	0.04	-
ER153.1	5/15	17.2	9.7	101	8.0	162	3.1	0.09	0.24	0.09	0.13	-
TC0.1	5/15	20.6	8.9	99	8.2	173	0.3	2.50	9.90	2.09	2.13	-
ER152.9	5/15	17.8	9.6	101	8.0	163	3.1	0.10	0.30	0.05	0.08	-
ER126.1	5/16	18.0	9.3	99	8.2	185	1.5	0.04	0.06	0.11	0.15	-
OC0.1	5/16	18.1	9.6	101	8.1	195	0.4	0.08	0.21	0.06	0.10	-
ER125.9	5/16	18.1	9.4	99	8.2	187	1.4	0.06	0.13	0.09	0.12	-
ER119.4[a]	5/16	18.3	9.3	99	8.2	190	0.9	0.03	0.01	-0.03	0.00	-
MF0.1	5/16	17.3	9.5	99	8.2	208	0.6	0.00	-0.10	0.05	0.09	-
ER119.2[a]	5/16	17.6	9.5	99	8.2	201	0.7	0.02	-0.01	0.02	0.06	-
EAST BRANCH RUSSIAN RIVER WATERSHED												
EB-BLPH	5/21	16.8	9.4	97	7.9	161	1.2	0.31	1.29	0.07	0.08	-
EB-ABLM	5/21	17.8	9.6	101	8.0	202	0.7	0.03	0.20	0.03	0.04	-
JUNE 26–28, 2018 (MONTHLY)												
EEL RIVER WATERSHED												
Inflow to Lake Pillsbury												
ER173.7	6/27	24.5	7.7	93	8.1	286	-0.2	6.64	26.53	6.19	6.19	17
RF3.8	6/27	22.7	8.9	103	8.0	374	-0.4	0.08	0.29	0.11	0.11	8
Eel River Scott Dam to Van Arsdale Reservoir												
ER167.8	6/26	13.6	11.0	106	8.0	148	6.2	0.18	0.68	0.20	0.21	-
Eel River Cape Horn Dam to Middle Fork Eel River												
ER156.7	6/28	20.8	9.0	101	8.1	166	2.3	0.05	-	0.05	-	-
SEPTEMBER 18–27, 2018 (SEASONAL AND MONTHLY)												
EEL RIVER WATERSHED												
Inflow to Lake Pillsbury												
ER173.7	9/26	18.0	7.5	79	7.8	335	0.1	0.90	3.64	1.84	1.85	3

Table AQ 3-4 – Seasonal and Monthly *In Situ* Water Quality and Discharge Data Collected at Riverine Sites.

Site ID	Date (2018)	Temp (°C)	DO (mg/L)	DO (% sat)	pH (s.u.)	SpCond (µS/cm)	Turbidity (NTU)	Chlorophyll		Phycocyanin		Flow (cfs)
								(RFU)	(ug/L)	(RFU)	(ug/L)	
RF3.8	9/26	21.8	8.3	94	7.9	489	0.5	4.25	4.25	4.25	4.25	2
Eel River Scott Dam to Van Arsdale Reservoir												
ER167.8	9/27	19.7	8.8	97	8.0	187	2.5	0.17	0.72	0.24	0.26	-
Eel River Cape Horn Dam to Middle Fork Eel River												
ER156.7	9/20	17.8	9.1	96	8.2	188	1.0	0.02	0.14	0.05	0.04	-
ER153.1	9/18	17.4	9.2	96	8.0	190	0.5	0.03	0.20	0.07	0.06	-
TC0.1	9/18	17.2	10.4	108	8.3	345	0.2	0.05	0.28	0.06	0.04	-
ER152.9	9/18	16.6	9.1	93	8.0	194	0.6	0.08	0.38	0.11	0.09	-
ER126.1	9/19	19.7	9.7	106	8.5	220	0.3	0.04	0.21	0.05	0.04	-
OC0.1	9/19	18.6	10.2	109	8.6	274	0.6	0.21	0.90	0.11	0.10	-
ER125.9	9/19	19.0	9.5	102	8.4	221	0.3	-0.02	-0.01	0.10	0.09	-
ER119.4[a]	9/19	19.1	9.8	106	8.5	228	0.5	0.00	0.06	0.09	0.07	-
MF0.1	9/19	19.0	9.7	105	8.4	359	0.1	0.01	0.11	0.01	-0.01	-
ER119.2[a]	9/19	17.8	8.5	89	8.2	273	0.3	-0.01	0.04	0.12	0.11	-
EAST BRANCH RUSSIAN RIVER WATERSHED												
EB-BLPH	9/20	17.6	9.4	99	7.9	193	2.0	0.18	0.80	0.29	0.27	-
EB-ABLM	9/20	17.0	9.7	100	8.0	205	2.4	0.15	0.68	0.24	0.22	-
OCTOBER 23–24, 2018 (MONTHLY)												
EEL RIVER WATERSHED												
Inflow to Lake Pillsbury												
ER173.7	10/24	14.4	9.2	91	7.9	384	2.1	0.02	0.04	0.14	0.16	6
RF3.8	9/26	16.1	9.7	98	7.9	514	0.3	0.06	0.18	0.14	0.16	4
Eel River Scott Dam to Van Arsdale Reservoir												
ER167.8	9/27	15.9	9.1	92	7.9	197	1.9	0.08	0.28	0.10	0.11	-
Eel River Cape Horn Dam to Middle Fork Eel River												
ER156.7	9/20	14.3	10.3	101	8.2	204	0.6	0.03	0.07	0.10	0.11	-
NOVEMBER 13–14, 2018 (MONTHLY)												
EEL RIVER WATERSHED												
Inflow to Lake Pillsbury												
ER173.7	11/14	7.0	10.9	90	7.8	375	1.0	0.02	0.03	0.20	0.23	7
RF3.8	11/14	9.6	10.9	96	7.8	507	0.2	-0.04	-0.19	0.19	0.22	5
Eel River Scott Dam to Van Arsdale Reservoir												
ER167.8	11/13	11.9	10.2	94	7.7	202	1.6	0.14	0.49	0.13	0.16	-
Eel River Cape Horn Dam to Middle Fork Eel River												

Table AQ 3-4 – Seasonal and Monthly *In Situ* Water Quality and Discharge Data Collected at Riverine Sites.

Site ID	Date (2018)	Temp (°C)	DO (mg/L)	DO (% sat)	pH (s.u.)	SpCond (µS/cm)	Turbidity (NTU)	Chlorophyll		Phycocyanin		Flow (cfs)
								(RFU)	(ug/L)	(RFU)	(ug/L)	
ER156.7	11/14	9.2	11.2	98	7.9	209	0.8	0.03	0.05	0.17	0.20	-

°C = degrees Celsius, DO=dissolved oxygen, mg/L = milligrams per liter, % sat= percent saturation, s.u. = standard unit, SpCond=specific conductivity, µS/cm = microsiemen per centimeter, NTU= Nephelometric Turbidity Units, RFU= relative fluorescence units, ug/L = microgram per liter, BGA-PC=Blue-Green Algae Phycocyanin, Q=discharge, cfs=cubic feet per second, - = no data collected

Notes:

[Q] Turbidity measurements are qualified on 05/23/2018 based on post-calibration results.

[a] AQ-3 Study Plan and/or laboratory results reported with the following site codes: ER119.4=ER119.1 and ER119.2=ER118.9.

Table AQ 3-5 – Seasonal and Monthly *In Situ* Water Quality Profiles and Secchi Depth Collected at Reservoir Sites.

Site ID	Date (2018)	Depth (m)	Temp (°C)	DO (mg/L)	DO (% sat)	pH (s.u.)	SpCond (µS/cm)	Turbidity (NTU)	Chlorophyll		Phycocyanin		Secchi depth (m)
									(RFU)	(ug/L)	(RFU)	(ug/L)	
MAY 15–24, 2018 (SEASONAL AND MONTHLY)													
EEL RIVER WATERSHED													
Eel River Scott Dam to Van Arsdale Reservoir													
LP1	5/23	0.2	20.9	8.7	98	8.1	157	-0.1[Q]	0.06	0.32	0.01	0.01	5.0
		1	20.8	8.7	98	8.1	157	-0.1[Q]	0.11	0.50	-0.03	-0.03	
		2	20.8	8.7	98	8.1	157	0.0[Q]	0.26	1.09	0.03	0.04	
		3	20.6	8.7	97	8.1	155	-0.2[Q]	0.16	0.70	0.04	0.05	
		4	19.5	8.4	92	7.9	156	0.0[Q]	0.09	0.42	0.02	0.03	
		5	18.6	8.3	88	7.8	150	-0.1[Q]	0.15	0.68	0.31	0.32	
		6	17.6	7.7	81	7.7	168	0.1[Q]	0.10	-[a]	0.05	-[a]	
		7	14.4	6.2	61	7.4	161	1.4[Q]	0.10	0.48	0.08	0.08	
		8	12.9	6.8	65	7.3	151	2.7[Q]	0.14	0.64	0.09	0.09	
		9	12.2	6.4	60	7.3	150	3.1[Q]	0.12	0.53	0.09	0.10	
		10	11.5	6.2	57	7.2	148	4.8[Q]	0.10	-[a]	0.10	-[a]	
		11	11.3	6.3	58	7.2	147	4.9[Q]	0.11	0.53	0.08	0.08	
		12	11.0	6.9	63	7.2	144	5.2[Q]	0.10	0.45	0.15	0.15	
		13	10.8	6.5	59	7.2	145	6.8[Q]	0.11	0.50	0.12	0.12	
		14	10.7	6.4	58	7.2	145	7.3[Q]	0.06	0.31	0.12	0.12	
		15	10.6	6.5	58	7.2	144	8.7[Q]	0.08	0.40	0.09	0.09	
		15.9	10.5	6.1	55	7.2	145	9.0[Q]	0.07	0.34	0.11	0.11	
LP2	5/22	0.2	21.3	8.7	98	8.1	145	0.5[R]	0.08	0.37	-0.01	0.00	4.3
		1	21.2	8.7	98	8.1	145	0.6[R]	0.11	0.50	0.02	0.03	
		2	20.3	8.7	96	8.0	146	0.5[R]	0.08	0.40	-0.01	-0.01	
		3	19.8	8.7	95	8.0	146	0.4[R]	0.13	0.59	0.17	0.17	
		4	19.6	8.7	95	8.0	147	0.4[R]	0.13	0.59	0.04	0.04	
		5	19.5	8.7	95	8.0	146	0.6[R]	0.15	0.69	-0.02	-0.01	
		6	16.5	7.3	75	7.4	152	1.3[R]	0.26	1.13	0.14	0.14	
		7	14.8	6.4	63	7.3	150	3.2[R]	0.23	1.01	0.11	0.11	
		7.5	13.3	5.5	52	7.2	148	-[R,a]	0.40	1.65	0.14	0.15	
LP3	5/23	0.2	20.8	8.8	98	8.0	150	-0.2	0.01	0.13	-0.01	0.00	4.7
		1	20.6	8.8	98	8.0	151	-0.2	0.05	0.26	0.04	0.04	
		2	20.3	8.8	98	8.0	151	-0.1	0.15	0.67	0.01	0.02	
		3	20.2	8.8	98	8.0	151	0.1	0.14	0.62	-0.02	-0.01	

Table AQ 3-5 – Seasonal and Monthly *In Situ* Water Quality Profiles and Secchi Depth Collected at Reservoir Sites.

Site ID	Date (2018)	Depth (m)	Temp (°C)	DO (mg/L)	DO (% sat)	pH (s.u.)	SpCond (µS/cm)	Turbidity (NTU)	Chlorophyll		Phycocyanin		Secchi depth (m)
									(RFU)	(ug/L)	(RFU)	(ug/L)	
		4	19.9	8.9	98	8.0	149	-0.1	0.15	0.65	0.21	0.21	
		5	19.5	8.8	96	8.0	148	0.0	0.16	0.70	0.09	0.10	
		6	16.9	7.4	77	7.5	167	0.3	0.23	0.97	0.02	0.02	
		7	14.6	6.7	66	7.4	165	1.4	0.22	0.93	-0.02	-0.02	
		8	14.0	6.3	61	7.3	179	1.7	0.09	0.44	0.10	0.11	
		9	13.0	6.7	63	7.3	157	2.6	0.11	0.52	0.04	0.05	
		10	12.1	6.6	62	7.3	159	3.6	0.11	0.50	0.08	0.08	
		11	11.9	6.3	58	7.3	164	4.4	0.09	0.45	0.06	0.07	
		12	11.5	6.7	61	7.3	155	4.8	0.07	0.35	0.08	0.08	
		13	11.2	6.7	61	7.2	153	5.1	0.06	0.30	0.10	0.10	
		14	11.0	6.8	62	7.3	151	5.1	0.06	0.29	0.16	0.16	
		15	10.8	7.0	63	7.3	147	6.9	0.09	0.41	0.09	0.09	
		16	10.6	7.0	63	7.3	144	6.8	0.04	0.24	0.04	0.04	
		17	10.4	7.1	64	7.3	144	8.6	0.06	0.31	0.11	0.12	
		18	10.3	7.1	63	7.3	142	7.7	0.11	0.51	0.08	0.09	
		19	10.2	6.8	61	7.2	143	8.7	0.05	0.25	0.13	0.14	
		20	10.1	6.7	59	7.2	143	10.4	0.10	-[a]	0.10	-[a]	
		21	10.1	6.6	59	7.2	144	10.3	0.10	0.47	0.09	0.10	
		22	10.1	6.7	60	7.2	143	9.7	0.12	0.56	0.12	0.13	
		23	10.0	6.7	60	7.2	143	9.3	0.07	0.34	0.10	0.11	
		24	9.9	6.4	56	7.2	144	14.1	0.09	0.44	0.15	0.15	
		25	9.9	6.0	53	7.2	144	12.6	0.08	0.38	0.14	0.14	
		26	9.8	5.3	46	7.2	146	17.6	0.12	0.56	0.12	0.13	
		26.5	9.8	5.1	45	7.2	146	22.3	0.13	0.59	0.29	0.29	
LP4	5/23	0.2	22.2	8.7	100	8.0	166	0.3	0.11	0.51	0.05	0.06	5.3
		1	20.8	8.8	99	8.0	158	0.1	0.16	0.72	0.09	0.09	
		2	20.7	8.9	99	8.0	157	0.1	0.12	0.56	-0.01	-0.01	
		3	20.4	8.8	98	8.0	154	0.2	0.15	0.66	0.01	0.02	
		4	20.1	8.9	98	8.0	157	0.1	0.14	0.65	-0.02	-0.01	
		5	19.6	8.8	96	8.0	150	0.0	0.17	0.74	0.08	0.08	
		6	19.3	8.5	92	7.9	185	0.1	0.23	0.98	0.00	0.01	
		7	18.6	7.7	82	7.8	250	0.6	0.11	0.50	0.03	0.04	
		8	14.4	4.4	43	7.3	215	3.6	0.05	0.28	0.01	0.01	

Table AQ 3-5 – Seasonal and Monthly *In Situ* Water Quality Profiles and Secchi Depth Collected at Reservoir Sites.

Site ID	Date (2018)	Depth (m)	Temp (°C)	DO (mg/L)	DO (% sat)	pH (s.u.)	SpCond (µS/cm)	Turbidity (NTU)	Chlorophyll		Phycocyanin		Secchi depth (m)
									(RFU)	(ug/L)	(RFU)	(ug/L)	
Eel River Cape Horn Dam to Middle Fork Eel River													
VA2	5/24	0.2	16.0	8.9	90	7.7	159	4.5	0.06	0.32	0.04	0.04	2.0
		1	15.8	8.9	90	7.7	158	4.5	0.05	0.26	0.03	0.03	
		2	15.6	8.9	90	7.7	158	4.9	0.07	0.33	0.05	0.05	
		3	15.7	8.9	90	7.7	158	4.7	0.09	0.45	0.13	0.13	
		4	15.6	8.9	90	7.7	158	5.2	0.06	0.32	0.06	0.07	
		4.5	15.7	8.9	90	7.7	158	4.6	0.08	0.38	0.09	0.10	
JUNE 26–28,2018 (MONTHLY)													
EEL RIVER WATERSHED													
Eel River Scott Dam to Van Arsdale Reservoir													
LP1	6/28	0.2	25.3	8.4	102	8.4	169	0.3	0.03	0.08	0.05	0.05	5.9
		1	25.0	8.4	102	8.4	169	0.2	0.09	0.32	0.00	0.01	
		2	24.7	8.5	102	8.4	167	0.2	0.17	0.65	-0.01	0.00	
		3	24.6	8.5	102	8.4	167	0.2	0.18	0.67	-0.02	-0.01	
		4	24.6	8.5	102	8.5	167	0.3	0.21	0.80	0.07	0.08	
		5	24.5	8.5	101	8.4	167	0.4	0.20	0.78	0.05	0.05	
		6	21.9	7.3	84	7.8	167	0.4	0.28	1.10	0.06	0.07	
		7	19.8	5.6	61	7.4	167	0.7	0.36	1.40	0.21	0.22	
		8	18.6	4.3	46	7.2	165	0.7	0.44	1.73	0.24	0.24	
		9	17.6	3.2	33	7.1	164	0.8	0.42	1.66	0.31	0.31	
		10	17.0	2.8	29	7.1	163	0.8	0.10	0.38	0.14	0.14	
		11	15.4	1.9	19	7.0	160	1.0	0.14	0.53	0.20	0.21	
		12	13.7	2.0	19	7.0	154	1.2	0.04	0.14	0.22	0.23	
		13	12.8	1.9	18	7.0	152	2.0	0.08	0.30	0.24	0.24	
		14	12.5	1.5	14	7.0	152	3.8	0.11	0.41	0.25	0.25	
		14.2	12.4	1.7	16	7.0	151	5.5	0.12	0.45	0.24	0.24	
LP2	6/28	0.2	23.9	8.8	104	8.5	161	0.1	0.07	0.23	0.00	0.01	5.5
		1	23.9	8.8	105	8.6	161	0.1	0.08	0.27	0.02	0.03	
		2	23.9	8.8	104	8.5	161	0.0	0.11	0.39	0.07	0.07	
		3	23.7	8.8	103	8.5	161	0.1	0.09	0.33	0.07	0.07	
		4	23.6	8.6	102	8.5	162	0.1	0.08	0.30	0.07	0.08	
		5	23.5	8.5	100	8.4	162	0.1	0.09	0.32	0.11	0.12	
		6	23.4	8.4	99	8.3	163	0.6	0.22	0.84	0.10	0.10	

Table AQ 3-5 – Seasonal and Monthly *In Situ* Water Quality Profiles and Secchi Depth Collected at Reservoir Sites.

Site ID	Date (2018)	Depth (m)	Temp (°C)	DO (mg/L)	DO (% sat)	pH (s.u.)	SpCond (µS/cm)	Turbidity (NTU)	Chlorophyll		Phycocyanin		Secchi depth (m)
									(RFU)	(ug/L)	(RFU)	(ug/L)	
LP3	6/27	0.2	24.1	8.6	103	8.4	167	0.2	0.07	0.23	0.14	0.14	5.3
		1	23.9	8.6	102	8.4	166	0.4	0.08	0.27	0.11	0.11	
		2	23.8	8.6	102	8.4	164	0.2	0.06	0.23	0.09	0.09	
		3	23.7	8.6	102	8.4	164	0.4	0.13	0.47	0.13	0.14	
		4	23.7	8.6	102	8.4	164	0.1	0.08	0.30	0.00	0.01	
		5	23.7	8.6	101	8.4	165	0.2	0.13	0.49	0.01	0.01	
		6	23.6	8.6	101	8.4	164	0.1	0.11	0.42	0.06	0.06	
		7	21.1	7.2	82	7.7	167	0.8	0.24	0.93	0.16	0.16	
		8	19.4	5.3	57	7.3	168	0.5	0.24	0.94	0.12	0.13	
		9	18.1	3.6	38	7.1	166	0.6	0.33	1.30	0.12	0.12	
		10	16.6	2.8	29	7.0	163	1.4	0.14	0.51	0.09	0.09	
		11	15.0	1.9	19	6.9	161	1.0	0.08	0.27	0.41	0.42	
		12	13.4	2.3	22	6.9	154	1.1	0.06	0.19	0.25	0.26	
		13	12.0	2.8	26	6.9	149	2.1	0.34	1.33	0.25	0.25	
		14	11.6	2.8	26	6.9	147	2.7	0.08	0.30	0.23	0.24	
		15	11.2	3.1	29	6.9	146	4.2	0.14	0.51	0.25	0.26	
		16	11.1	2.8	25	6.9	146	5.8	0.09	0.32	0.20	0.20	
		17	11.0	2.7	25	6.9	146	6.2	0.09	0.33	0.24	0.25	
		18	10.9	2.7	24	6.9	146	6.2	0.09	0.33	0.29	0.30	
		19	10.9	2.7	25	6.9	146	5.9	0.10	0.36	0.23	0.24	
		20	10.9	2.6	24	6.9	146	6.8	0.10	0.35	0.30	0.30	
		21	10.8	2.6	23	6.9	146	7.5	0.07	0.24	0.25	0.26	
		22	10.7	2.4	22	6.9	146	8.2	0.12	0.44	0.28	0.28	
		23	10.7	2.4	22	6.9	146	8.7	0.41	1.61	0.27	0.28	
		24.2	10.7	2.2	20	6.9	146	8.6	0.10	0.35	0.29	0.29	
		24.2	10.7	2.0	18	6.9	147	14.6	0.07	0.26	0.26	0.26	
LP4	6/27	0.2	24.9	8.6	104	8.3	179	0.7	0.11	0.42	0.05	0.06	3.2
		1	24.7	8.7	104	8.3	179	0.8	0.15	0.56	0.12	0.13	
		2	24.3	8.8	105	8.3	178	0.8	0.19	0.71	0.04	0.05	
		3	24.2	8.9	106	8.4	175	0.7	0.21	0.80	0.13	0.13	
		4	23.6	8.9	104	8.4	165	0.4	0.15	0.58	0.10	0.11	
		5	23.2	8.3	97	8.1	180	0.9	0.17	0.64	0.17	0.18	
		6	23.0	7.9	92	8.0	182	0.7	0.18	0.67	0.08	0.09	

Table AQ 3-5 – Seasonal and Monthly *In Situ* Water Quality Profiles and Secchi Depth Collected at Reservoir Sites.

Site ID	Date (2018)	Depth (m)	Temp (°C)	DO (mg/L)	DO (% sat)	pH (s.u.)	SpCond (µS/cm)	Turbidity (NTU)	Chlorophyll		Phycocyanin		Secchi depth (m)
									(RFU)	(ug/L)	(RFU)	(ug/L)	
		6.5	22.9	7.6	89	7.8	184	13.8	0.24	0.92	1.03	1.04	
SEPTEMBER 18–27, 2018 (SEASONAL AND MONTHLY)													
EEL RIVER WATERSHED													
Eel River Scott Dam to Van Arsdale Reservoir													
LP1	9/27	0.2	21.0	8.6	96	8.4	187	1.7	1.05	4.23	0.40	0.41	1.8
		1	20.9	8.6	97	8.4	186	1.4	1.59	6.39	0.61	0.62	
		2	20.6	8.2	91	8.4	186	1.7	0.85	3.44	0.44	0.46	
		3	20.4	6.7	74	8.0	187	1.1	0.54	2.20	0.13	0.15	
		4	20.0	5.0	55	7.7	185	0.8	0.40	1.64	0.25	0.27	
		5	19.9	5.2	57	7.7	185	1.9	0.40	1.63	0.20	0.22	
		6	19.9	5.8	63	7.8	185	1.6	0.50	2.05	0.32	0.34	
		7	19.8	5.6	61	7.8	185	1.1	0.27	1.10	0.20	0.22	
		8	19.8	5.9	65	7.8	185	1.9	0.48	1.94	0.22	0.24	
		9	19.8	5.4	59	7.7	185	1.2	0.49	2.01	0.04	0.06	
		10	19.8	4.5	50	7.6	186	1.2	0.46	1.86	0.05	0.06	
		10.9	19.8	4.3	47	7.6	186	1.8	0.41	1.68	0.23	0.24	
LP2	9/25	0.2	21.6	7.5	86	8.1	184	1.7[Q]	0.30	1.22	0.29	0.31	2.4
		1	20.6	8.0	89	8.2	183	1.3[Q]	0.55	2.24	0.31	0.33	
		2	20.2	8.1	90	8.3	183	1.7[Q]	0.82	3.32	0.50	0.52	
		3	20.1	7.4	82	8.1	184	1.7[Q]	1.02	4.12	0.44	0.45	
		4	20.0	8.5	93	8.3	183	1.6[Q]	1.07	4.30	0.51	0.53	
		5	19.8	8.6	94	8.4	183	2.0[Q]	1.01	4.08	0.44	0.46	
		5.7	19.6	8.0	87	8.2	184	1.6[Q]	0.87	3.51	0.33	0.34	
LP3	9/25	0.2	19.8	6.7	73	7.9	185	1.6[Q]	0.31	1.27	0.54	0.56	2.4
		1	19.8	6.7	73	8.0	185	1.7[Q]	0.44	1.78	0.48	0.50	
		2	19.8	6.6	72	7.9	185	1.2[Q]	0.53	2.17	0.82	0.84	
		3	19.8	6.5	72	7.9	185	1.6[Q]	0.50	2.03	0.49	0.50	
		4	19.8	6.4	70	7.9	185	2.0[Q]	0.46	1.88	0.46	0.48	
		5	19.8	6.4	70	7.9	185	1.4[Q]	0.52	2.13	0.68	0.70	
		6	19.8	6.4	70	7.9	185	1.0[Q]	0.54	2.18	0.58	0.59	
		7	19.8	6.4	70	7.9	185	1.7[Q]	0.53	2.14	0.53	0.55	
		8	19.8	6.4	70	7.9	185	2.1[Q]	0.39	1.61	0.56	0.58	
		9	19.8	6.4	70	7.9	185	1.6[Q]	0.22	0.90	0.46	0.48	

Table AQ 3-5 – Seasonal and Monthly *In Situ* Water Quality Profiles and Secchi Depth Collected at Reservoir Sites.

Site ID	Date (2018)	Depth (m)	Temp (°C)	DO (mg/L)	DO (% sat)	pH (s.u.)	SpCond (µS/cm)	Turbidity (NTU)	Chlorophyll		Phycocyanin		Secchi depth (m)
									(RFU)	(ug/L)	(RFU)	(ug/L)	
		10	19.8	6.4	70	7.9	185	1.2[Q]	0.34	1.41	0.58	0.60	
		11	19.8	6.4	70	7.9	185	1.4[Q]	0.34	1.39	0.21	0.23	
		12	19.8	6.4	70	7.9	185	1.4[Q]	0.56	2.26	0.64	0.66	
		13	19.8	6.4	70	7.9	185	1.4[Q]	0.28	1.14	0.70	0.72	
		14	19.8	6.3	69	7.9	185	1.3[Q]	0.52	2.11	0.49	0.51	
		15	19.8	6.2	68	7.8	185	1.6[Q]	0.37	1.51	0.41	0.43	
		16	19.7	6.2	67	7.8	185	1.6[Q]	0.76	3.07	0.49	0.51	
		17	19.7	6.0	66	7.8	185	1.9[Q]	0.95	3.82	0.67	0.69	
		18	19.4	2.6	29	7.3	187	1.4[Q]	0.17	0.73	0.09	0.11	
		19	17.1	0.2	2	7.1	193	1.8[Q]	0.13	0.56	0.10	0.12	
		20	13.0	0.2	2	6.9	182	3.0[Q]	0.09	0.40	0.13	0.15	
		21	12.5	0.2	2	6.8	188	1.8[Q]	0.13	0.55	0.07	0.09	
		21.6	12.3	0.2	1	6.8	195	2.0[Q]	0.15	0.64	0.19	0.21	
LP4	9/26	0.2	21.9	10.5	120	8.6	201	3.7	1.92	7.73	1.07	1.09	1.4
		1	21.4	10.3	116	8.5	197	3.7	1.97	7.92	1.10	1.12	
		2	20.9	9.6	107	8.4	197	4.0	1.56	6.27	1.04	1.06	
		3	20.4	9.9	110	8.4	206	5.9	1.67	6.71	1.66	1.68	
		3.7	20.0	8.5	94	8.0	230	5.1	1.82	7.31	0.74	0.76	
Eel River Cape Horn Dam to Middle Fork Eel River													
VA2	9/20	0.2	16.9	7.7	79	7.8	189	1.4	0.12	0.56	0.16	0.15	2.5
		1	16.8	7.7	79	7.8	189	1.5	0.09	0.44	0.17	0.15	
		2	16.9	7.5	78	7.8	189	1.5	0.09	0.42	0.12	0.10	
		3	16.8	7.6	78	7.8	189	1.5	0.10	0.45	0.10	0.08	
		4	16.8	7.6	79	7.8	185	1.2	0.06	0.32	0.10	0.08	
		4.2	16.7	7.5	77	7.8	189	1.4	0.10	0.46	0.13	0.11	
OCTOBER 23–24, 2018 (MONTHLY)													
EEL RIVER WATERSHED													
Eel River Scott Dam to Van Arsdale Reservoir													
LP1	10/23	0.2	17.4	6.8	71	7.6	194	1.6	0.14	0.50	0.17	0.18	3.7
		1	17.3	6.8	71	7.6	194	1.3	0.18	0.68	0.09	0.11	
		2	17.3	6.8	71	7.6	194	1.5	0.17	0.64	0.13	0.15	
		3	17.3	6.8	70	7.6	194	1.6	0.23	0.85	0.29	0.31	
		4	17.3	6.8	70	7.6	194	1.4	0.07	0.23	0.16	0.18	

Table AQ 3-5 – Seasonal and Monthly *In Situ* Water Quality Profiles and Secchi Depth Collected at Reservoir Sites.

Site ID	Date (2018)	Depth (m)	Temp (°C)	DO (mg/L)	DO (% sat)	pH (s.u.)	SpCond (µS/cm)	Turbidity (NTU)	Chlorophyll		Phycocyanin		Secchi depth (m)
									(RFU)	(ug/L)	(RFU)	(ug/L)	
		5	17.3	6.7	70	7.6	194	1.3	0.25	0.96	0.14	0.16	
		6	17.3	6.7	70	7.6	194	1.9	0.28	1.06	0.13	0.15	
		7	17.3	6.7	69	7.5	194	1.7	0.10	0.37	0.21	0.23	
		8	17.3	6.7	69	7.5	194	1.7	0.09	0.31	0.04	0.06	
		9	17.2	6.6	69	7.5	194	2.1	0.05	0.16	0.06	0.07	
		10	17.2	6.6	68	7.5	194	2.1	0.18	0.68	0.12	0.14	
		10.8	17.2	6.4	67	7.5	194	2.3	0.15	0.54	0.11	0.13	
LP2	10/23	0.2	17.5	9.1	95	8.1	191	0.9	0.10	0.37	0.20	0.22	4.1
		1	17.4	8.4	87	7.9	192	0.9	0.12	0.44	0.09	0.11	
		2	17.3	7.9	83	7.9	192	0.9	0.15	0.56	0.04	0.06	
		3	17.2	8.0	84	7.8	192	1.1	0.14	0.49	0.09	0.10	
		3.6	17.1	7.7	80	7.8	192	1.1	0.13	0.46	0.05	0.06	
LP3	10/23	0.2	17.1	6.7	69	7.6	193	0.8	0.14	0.50	0.19	0.20	6.2
		1	17.1	6.7	69	7.6	193	0.7	0.20	0.74	0.17	0.18	
		2	17.1	6.7	69	7.6	193	0.8	0.15	0.53	0.09	0.11	
		3	17.1	6.6	68	7.6	193	1.1	0.09	0.33	0.10	0.12	
		4	17.1	6.6	68	7.6	193	0.9	0.12	0.43	0.14	0.16	
		5	17.1	6.5	68	7.6	193	0.8	0.18	0.66	0.17	0.19	
		6	17.1	6.5	67	7.6	193	0.9	0.29	1.09	0.15	0.16	
		7	17.1	6.5	67	7.6	193	0.8	0.05	0.14	0.08	0.10	
		8	17.1	6.4	67	7.6	193	0.7	0.15	0.55	0.04	0.06	
		9	17.1	6.4	66	7.5	194	0.8	0.10	0.37	0.07	0.08	
		10	17.1	6.4	66	7.5	193	0.6	0.14	0.49	0.08	0.09	
		11	17.1	6.4	66	7.5	193	0.8	0.21	0.80	0.16	0.17	
		12	17.1	6.4	66	7.5	193	0.8	0.13	0.48	0.15	0.17	
		13	17.1	6.3	66	7.5	193	0.8	0.16	0.59	0.18	0.19	
		14	17.1	6.3	66	7.5	193	0.7	0.08	0.27	0.12	0.13	
		15	17.1	6.3	66	7.5	193	1.1	0.19	0.72	0.09	0.11	
		16	17.1	6.3	65	7.5	193	0.7	0.24	0.91	0.05	0.07	
		17	17.1	6.3	66	7.5	193	1.0	0.12	0.44	0.09	0.11	
		18	17.1	6.3	65	7.5	194	0.8	0.10	0.34	0.05	0.07	
		19	17.0	6.0	62	7.5	194	1.6	0.12	0.43	0.09	0.11	
		20	15.5	1.8	18	7.0	210	6.1	0.14	0.52	0.05	0.07	

Table AQ 3-5 – Seasonal and Monthly *In Situ* Water Quality Profiles and Secchi Depth Collected at Reservoir Sites.

Site ID	Date (2018)	Depth (m)	Temp (°C)	DO (mg/L)	DO (% sat)	pH (s.u.)	SpCond (µS/cm)	Turbidity (NTU)	Chlorophyll		Phycocyanin		Secchi depth (m)
									(RFU)	(ug/L)	(RFU)	(ug/L)	
		21	12.4	0.3	3	6.7	264	4.8	0.16	0.57	0.12	0.13	
LP4	10/24	0.2	16.3	6.9	70	7.6	206	0.9	0.11	0.38	0.07	0.09	3.4
		1	16.2	6.9	70	7.6	208	0.9	0.11	0.39	0.15	0.17	
		2	16.0	7.0	71	7.6	211	1.0	0.29	1.11	0.21	0.23	
		3	14.8	6.6	66	7.5	325	1.5	0.09	0.32	0.13	0.15	
NOVEMBER 13–14, 2018 (MONTHLY)													
EEL RIVER WATERSHED													
Eel River Scott Dam to Van Arsdale Reservoir													
LP1	11/13	0.2	12.8	8.0	76	7.6	200	0.7	0.11	0.37	0.25	0.28	5.2
		1	12.8	8.0	76	7.6	200	0.8	0.13	0.48	0.17	0.20	
		2	12.8	8.0	76	7.6	200	1.0	0.19	0.70	0.26	0.29	
		3	12.8	8.0	75	7.6	200	1.1	0.34	1.32	0.24	0.27	
		4	12.8	8.0	75	7.6	200	0.8	0.69	2.71	0.30	0.33	
		5	12.8	7.9	75	7.6	200	0.7	0.11	0.37	0.16	0.19	
		6	12.8	7.9	75	7.6	200	0.6	0.17	0.62	0.25	0.28	
		7	12.7	7.9	75	7.5	200	0.6	0.19	0.69	0.23	0.26	
		8	12.7	7.9	75	7.5	200	0.6	0.18	0.68	0.16	0.19	
		9	12.7	7.8	74	7.5	200	0.9	0.07	0.24	0.15	0.18	
		9.4	12.7	7.8	74	7.5	200	1.0	0.07	0.24	0.17	0.20	
LP2	11/13	0.2	12.8	8.8	83	7.7	198	0.8	0.17	0.64	0.22	0.25	1.8
		1	12.8	8.9	84	7.7	198	0.8	0.19	0.69	0.20	0.23	
		1.2	12.8	9.0	85	7.7	198	4.0	0.18	0.67	0.28	0.31	
LP3	11/13	0.2	12.8	8.0	75	7.6	200	1.3	0.10	0.36	0.13	0.16	4.6
		1	12.8	7.9	75	7.6	200	1.4	0.12	0.43	0.18	0.21	
		2	12.8	7.9	75	7.6	200	1.0	0.13	0.45	0.22	0.25	
		3	12.8	7.9	75	7.6	200	1.1	0.17	0.63	0.14	0.17	
		4	12.8	7.9	74	7.6	200	1.4	0.13	0.49	0.21	0.24	
		5	12.8	7.9	74	7.6	200	1.3	0.44	1.70	0.17	0.20	
		6	12.8	7.9	74	7.6	200	1.4	0.10	0.34	0.09	0.12	
		7	12.8	7.9	74	7.6	200	1.0	0.09	0.29	0.24	0.27	
		8	12.8	7.8	74	7.6	200	1.1	0.07	0.22	0.24	0.27	
		9	12.8	7.8	74	7.6	200	1.1	0.35	1.35	0.17	0.20	
		10	12.8	7.8	74	7.6	200	1.4	0.05	0.16	0.22	0.25	

Table AQ 3-5 – Seasonal and Monthly *In Situ* Water Quality Profiles and Secchi Depth Collected at Reservoir Sites.

Site ID	Date (2018)	Depth (m)	Temp (°C)	DO (mg/L)	DO (% sat)	pH (s.u.)	SpCond (µS/cm)	Turbidity (NTU)	Chlorophyll		Phycocyanin		Secchi depth (m)
									(RFU)	(ug/L)	(RFU)	(ug/L)	
		11	12.8	7.8	74	7.6	201	1.3	0.05	0.16	0.16	0.19	
		12	12.7	7.8	73	7.6	202	2.7	0.10	0.36	0.12	0.15	
		13	12.7	7.7	73	7.5	204	1.9	0.07	0.24	0.17	0.20	
		14	12.6	7.7	72	7.5	204	1.5	0.01	-0.01	0.16	0.19	
		15	12.6	7.6	71	7.5	206	2.1	0.12	0.42	0.18	0.21	
		16	12.6	7.6	71	7.5	206	2.1	0.12	0.42	0.20	0.23	
		17	12.5	7.5	70	7.5	208	2.5	0.13	0.48	0.16	0.19	
		18	12.5	7.4	69	7.5	209	2.8	0.01	0.00	0.12	0.15	
		19	12.5	7.3	69	7.5	210	3.5	0.09	0.29	0.21	0.24	
		19.8	12.4	7.1	67	7.4	212	6.0	0.06	0.17	0.18	0.21	
LP4	11/14	0.2	11.0	8.4	77	7.6	204	1.1	0.12	0.44	0.37	0.40	2.0
		1	11.0	8.4	76	7.6	204	1.3	0.12	0.42	0.24	0.27	
		1.9	10.4	8.6	77	7.6	210	1.6	0.07	0.21	0.16	0.19	

m=meters,°C = degrees Celsius, DO=dissolved oxygen, mg/L = milligrams per liter, % sat= percent saturation, s.u. = standard unit, SpCond=specific conductivity, µS/cm = microsiemen per centimeter, NTU= Nephelometric Turbidity Units, RFU= relative fluorescence units, ug/L = microgram per liter, BGA-PC=Blue-Green Algae Phycocyanin, - = no data collected

Notes:

[Q] Turbidity measurements are qualified on 5/23/2018 and 9/25/2018 based on post-calibration results.

[R] Turbidity measurements are rejected on 5/22/2018 based on post-calibration results. Data presented are from a duplicate profile collected at site LP2 on 5/24/2018.

[a] Measurement not recorded.

Table AQ3-6. Seasonal General Chemistry Sampling Results.

Site ID	Date (2018)	Depth (m)	Total Suspended Solids (mg/L)	Total Dissolved Solids (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Total Hardness (mg/L)	Alkalinity as $CaCO_3$			
								Bicarbonate (mg/L)	Carbonate (mg/L)	Hydroxide (mg/L)	Total (mg/L)
MAY 15–24, 2018 (SEASONAL)											
EEL RIVER WATERSHED											
Inflow to Lake Pillsbury											
ER173.7	5/24	0.2	0.3[J]	130	31	6.2	104	96	<1[U]	<1[U]	96
RF3.8	5/23	0.2	0.7[J, D]	150	32	13	133	220	<1[U]	<1[U]	220
Lake Pillsbury											
LP1-S	5/23	0.2	0.7[J, D]	70	19	5.1	68	65	<1[U]	<1[U]	65
LP1-M	5/23	8	1.8[D]	78	19	5.4	70	66	<1[U]	<1[U]	66
LP1-B	5/23	15.5	3.8[D]	86	18	5.4	68	61	<1[U]	<1[U]	61
LP2-S	5/22	0.2	0.9J	93	17	4.5	61	60	<1[U]	<1[U]	60
LP2-M	5/22	4	0.8J	95	17	4.5	60	62	<1[U]	<1[U]	62
LP2-B	5/22	7	1.7	88	18	5	66	64	<1[U]	<1[U]	64
LP3-S	5/23	0.2	1.2[D], 1[D]	85, 79	18, 18	5.1, 5.1	65, 65	62, 63	<1[U], <1[U]	<1[U], <1[U]	62, 63
LP3-M	5/23	13	2.8[D]	80	18	5.6	68	66	<1[U]	<1[U]	66
LP3-B	5/23	26	11[D]	89	18	5.4	67	61	<1[U]	<1[U]	61
LP4-S	5/23	0.2	1[D]	89	19	6.1	73	70	<1[U]	<1[U]	70
LP4-M	5/23	4	1.5[D]	83	19	5.8	71	68	<1[U]	<1[U]	68
LP4-B	5/23	8	3.3[D]	110	21	7.3	84	87	<1[U]	<1[U]	87
Eel River Scott Dam to Van Arsdale Reservoir											
ER167.8	5/15	0.2	2.3	86	17	5.1	64	62	<1[U]	<1[U]	62
VA2-S	5/24	0.2	3.2	100	19	5.4	70	66	<1[U]	<1[U]	66
VA2-B	5/24	4	2.9	98	17	5.5	65	65	<1[U]	<1[U]	65
Eel River Cape Horn Dam to Middle Fork Eel River											
ER156.7	5/17	0.2	4[D], 3.6[D]	96, 97	14, 15	4.9, 4.7	55, 56	65, 65	<1[U], <1[U]	<1[U], <1[U]	65, 65
ER153.1	5/15	0.2	2.5	87	19	5.6	70	68	<1[U]	<1[U]	68
TC0.1	5/15	0.2	0.4[J]	100	18	7.6	75	71	<1[U]	<1[U]	71
ER152.9	5/15	0.2	2.4	97	19	5.8	71	67	<1[U]	<1[U]	67
ER126.1	5/16	0.2	1.1	97	21	6.3	79	76	<1[U]	<1[U]	76
OC0.1	5/16	0.2	0.6[J]	110	20	6.8	78	81	<1[U]	<1[U]	81
ER125.9	5/16	0.2	1.3	100	22	6.4	80	76	<1[U]	<1[U]	76
ER119.4[a]	5/16	0.2	1.7	100	22	6.6	83	79	<1[U]	<1[U]	79
MF0.1	5/16	0.2	1.5	110	26	7.4	94	81	<1[U]	<1[U]	81
ER119.2[a]	5/16	0.2	1.3	100	21	6.9	81	80	<1[U]	<1[U]	80
EAST BRANCH RUSSIAN RIVER WATERSHED											
EB-BLPH	5/21	0.2	4.4, 4.4	93, 100	19, 19	5.8, 5.7	70, 70	68, 68	<1[U], <1[U]	<1[U], <1[U]	68, 68

Table AQ3-6. Seasonal General Chemistry Sampling Results.

Site ID	Date (2018)	Depth (m)	Total Suspended Solids (mg/L)	Total Dissolved Solids (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Total Hardness (mg/L)	Alkalinity as $CaCO_3$			
								Bicarbonate (mg/L)	Carbonate (mg/L)	Hydroxide (mg/L)	Total (mg/L)
EB-ABLM	5/21	0.2	2.6	120	22	8.4	90	89	<1[U]	<1[U]	89
Field Blank	*5/17*	-	*0.3[J, D]*	*<5[U]*	*<0.08[U]*	*<0.03[U]*	*<1[U]*	*2[J]*	<1[U]	<1[U]	*2*
	5/21	-	*<0.3[U]*	*<5[U]*	*<0.08[U]*	*<0.03[U]*	*<1[U]*	*1[J]*	<1[U]	<1[U]	*1*
	5/24	-	*<0.3[U]*	*<5[U]*	*<0.08[U]*	*<0.03[U]*	*<1[U]*	*2[J]*	<1[U]	<1[U]	*2*
Equipment Blank	*5/22*	-	*<0.3[U]*	*<5[U]*	*<0.08[U]*	*<0.03[U]*	*<1[U]*	*2[J]*	<1[U]	<1[U]	*2*
MDL		-	***0.3***	***5***	***0.08***	***0.03***	***1***	***1***	***1***	***1***	***1***
RL		-	***1***	***10***	***1***	***1***	***5***	***5***	***5***	***5***	***5***
SEPTEMBER 18–27, 2018 (SEASONAL)											
EEL RIVER WATERSHED											
Inflow to Lake Pillsbury											
ER173.7	9/26	0.2	<0.3[U]	190	47	9.9	159	150	<1[U]	<1[U]	150
RF3.8	9/26	0.2	1.7	280	44	17	181	170	10	<1[U]	180
Lake Pillsbury											
LP1-S	9/27	0.2	2.6, 2.2[D]	94, 100	22, 22	6.5, 6.6	81, 83	84, 81	<1[U], <1[U]	<1[U], <1[U]	84, 81
LP1-M	9/27	5.5	1.0	100	21	6.4	80	82[D]	<1[U]	<1[U]	82
LP1-B	9/27	11	2.3	100	22	6.5	81	80[D]	<1[U]	<1[U]	80
LP2-S	9/25	0.2	2.2	97	21	6.3	80	80	<1[U]	<1[U]	80
LP2-M	9/25	3	3.3	99	21	6.3	77	80	<1[U]	<1[U]	80
LP2-B	9/25	5.5	3.3	96	21	6.2	77	80	<1[U]	<1[U]	80
LP3-S	9/25	0.2	3.7	92	21	6.3	78	81	<1[U]	<1[U]	81
LP3-M	9/25	11	2.9	110	21	6.4	79	80	<1[U]	<1[U]	80
LP3-B	9/25	21.6	6.7	94	21	5.9	77	85	<1[U]	<1[U]	85
LP4-S	9/26	0.2	4.4	120	22	6.8	84	86	<1[U]	<1[U]	86
LP4-M	9/26	2	5.4	110	22	6.8	83	88	<1[U]	<1[U]	88
LP4-B	9/26	3.7	6.5	120	25	8.1	96	95	<1[U]	<1[U]	95
Eel River Scott Dam to Van Arsdale Reservoir											
ER167.8	9/27	0.2	3.9, 3.6	110, 100	22, 22	6.6, 6.5	82, 81	81[D], 82[D]	<1[U], <1[U]	<1[U], <1[U]	81, 82
VA2-S	9/20	0.2	1.4	100	25	7.3	92	79	<1[U]	<1[U]	79
VA2-B	9/20	4.2	1.7	100	24	7.0	90	80	<1[U]	<1[U]	80
Eel River Cape Horn Dam to Middle Fork Eel River											
ER156.7	9/20	0.2	1.3	110	24	7.0	89	81	<1[U]	<1[U]	81
ER153.1	9/18	0.2	0.90J	98	23	6.4	84	81	<1[U]	<1[U]	81
TC0.1	9/18	0.2	0.70J	190	40	18	176	170	<1[U]	<1[U]	170
ER152.9	9/18	0.2	0.70[J], 0.70[J]	100, 100	23, 23	6.6, 6.8	85, 86	84, 86	<1[U], <1[U]	<1[U], <1[U]	84, 86

Table AQ3-6. Seasonal General Chemistry Sampling Results.

Site ID	Date (2018)	Depth (m)	Total Suspended Solids (mg/L)	Total Dissolved Solids (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Total Hardness (mg/L)	Alkalinity as $CaCO_3$			
								Bicarbonate (mg/L)	Carbonate (mg/L)	Hydroxide (mg/L)	Total (mg/L)
ER126.1	9/19	0.2	0.60[J]	110	26	7.6	96	91	<1[U]	<1[U]	91
OC0.1	9/19	0.2	1.6	140	24	11	104	110	<1[U]	<1[U]	110
ER125.9	9/19	0.2	*<0.3[U]*	120	26	7.8	96	91	<1[U]	<1[U]	91
ER119.4[a]	9/19	0.2	0.50J	130	26	7.7	96	93	<1[U]	<1[U]	93
MF0.1	9/19	0.2	*<0.3[U]*	220	34	11	131	92	<1[U]	<1[U]	92
ER119.2[a]	9/19	0.2	0.30J	160	28	8.5	104	92	<1[U]	<1[U]	92
EAST BRANCH RUSSIAN RIVER WATERSHED											
EB-BLPH	9/20	0.2	3.0	110	25	7.9	95	84	<1[U]	<1[U]	84
EB-ABLM	9/20	0.2	3.9	120	25	9.1	100	87	<1[U]	<1[U]	87
QUALITY ASSURANCE AND QUALITY CONTROL											
Field Blank	*9/18*	-	*<0.3[U]*	*<10[U]*	*<0.08[U]*	*<0.03[U]*	*<1[U]*	*2.0[J]*	*<1[U]*	*<1[U]*	*2.0[J]*
	9/25	-	*<0.3[U]*	*<10[U]*	*<0.08[U]*	*<0.03[U]*	*<1[U]*	*3.0[J]*	*<1[U]*	*<1[U]*	*3.0[J]*
	9/26	-	*<0.3[U]*	*<10[U]*	*<0.08[U]*	*<0.03[U]*	*<1[U]*	*4.0[J]*	*<1[U]*	*<1[U]*	*4.0[J]*
Equipment Blank	*9/20*	-	*<0.3[U]*	*<10[U]*	*<0.08[U]*	*<0.03[U]*	*<1[U]*	*2.0[J]*	*<1[U]*	*<1[U]*	*2.0[J]*
	9/27		*<0.3[U]*	*<10[U]*	*0.10[J]*	*<0.03[U]*	*<1[U]*	*3.0[J]*	*<1[U]*	*<1[U]*	*3.0[J]*
DL		-	***0.3***	***5, 10***	***0.08***	***0.03***	***1***	***1***	***1***	***1***	***1***
RL		-	***1***	***10***	***1***	***1***	***5***	***5***	***5***	***5***	***5***

m=meters, mg/L=milligram per liter, CaCO3=calcium carbonate, S=surface, M=middle, B=bottom, DL= detection limit; RL=reporting limit

Notes:

[a] AQ-3 Study Plan and/or laboratory results reported with the following site codes: ER119.4=ER119.1 and ER119.2=ER118.9.

[D] Variation of quantifiable replicate samples greater than or equal to 10%.

[J] Detected but below the reporting limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).

[U] Analyte included in analysis, but not detected at or above minimum DL.

Table AQ3-7. Seasonal and Monthly Nutrients, Chlorophyll-a, and Biological Oxygen Demand Results.

Site ID	Date (2018)	Depth (m)	NH_4 as N (mg/L)	$NO_3 + NO_2$ as N (mg/L)	NO_3 as N (mg/L)	NO_2 as N (mg/L)	TKN (mg/L)	Ortho-P (mg/L)	TP (mg/L)	DOC (mg/L)	TOC (mg/L)	Chl.-a (mg/L)	BOD (mg/L)
MAY 15–24, 2018 (SEASONAL AND MONTHLY)													
EEL RIVER WATERSHED													
Inflow to Lake Pillsbury													
ER173.7	5/24	0.2	<0.1^{U}	0.03^{J}	<0.04^{U}	<0.05^{U}	<0.02^{U}	<0.1^{U}	0.02^{J}	0.9^{J}	0.9^{J}	<0.001^{U}	<2^{U}
RF3.8	5/23	0.2	<0.1^{U}	0.04^{J}	<0.04^{U}	<0.05^{U}	<0.02^{U}	<0.1^{U}	0.02^{J}	0.8^{J}	0.8^{J}	<0.001^{U}	<2^{U}
Lake Pillsbury													
LP1-S	5/23	0.2	<0.1^{U}	0.03^{J}	<0.04^{U}	<0.05^{U}	<0.02^{U}	<0.1^{U}	0.03^{J}	2.3	2.4	0.001^{J}	<2^{U}
LP1-M	5/23	8	<0.1^{U}	0.03^{J}	<0.04^{U}	<0.05^{U}	<0.02^{U}	<0.1^{U}	0.02^{J}	2.4	2.4	<0.001^{U}	<2^{U}
LP1-B	5/23	15.5	<0.1^{U}	0.04^{J}	<0.04^{U}	<0.05^{U}	<0.02^{U}	<0.1^{U}	0.03^{J}	2.2	2.5	-	<2^{U}
LP2-S	5/22	0.2	<0.1^{U}	0.03^{J}	<0.04^{U}	<0.05^{U}	<0.02^{U}	<0.1^{U}	0.05	2.4	2.7	<0.001^{U}	<2^{U}
LP2-M	5/22	4	<0.1^{U}	<0.0086^{U}	<0.04^{U}	<0.05^{U}	0.24^{J}	<0.1^{U}	0.04	2.2	2.6	0.001^{J}	3^{J}
LP2-B	5/22	7	<0.1^{U}	<0.0086^{U}	<0.04^{U}	<0.05^{U}	0.60^{J}	<0.1^{U}	0.02^{J}	2.1	2.5	-	2^{J}
LP3-S	5/23	0.2	<0.1^{U}, <0.1^{U}	0.03^{J}, 0.03^{J}	<0.04^{U}, <0.04^{U}	<0.05^{U}, <0.05^{U}	<0.02^{U}, <0.02^{U}	<0.1^{U}, <0.1^{U}	0.02^{J}, 0.02^{J}	2.4, 2.4	2.5, 2.5	<0.001^{U}, 0.001^{J}	<2^{U}, <2^{U}
LP3-M	5/23	13	<0.1^{U}	0.03^{J}	<0.04^{U}	<0.05^{U}	<0.02^{U}	<0.1^{U}	0.03^{J}	2.2	2.4	<0.001^{U}	<2^{U}
LP3-B	5/23	26	<0.1^{U}	0.06^{J}	0.06^{J}	<0.05^{U}	0.38^{J}	<0.1^{U}	0.04	2.3	2.6	-	<2^{U}
LP4-S	5/23	0.2	<0.1^{U}	0.04^{J}	<0.04^{U}	<0.05^{U}	0.21^{J}	<0.1^{U}	0.02^{J}	2.3	2.5	<0.001^{U}	<2^{U}
LP4-M	5/23	4	<0.1^{U}	0.03^{J}	<0.04^{U}	<0.05^{U}	<0.02^{U}	<0.1^{U}	0.02^{J}	2.3	2.5	0.002^{J}	<2^{U}
LP4-B	5/23	8	<0.1^{U}	0.03^{J}	<0.04^{U}	<0.05^{U}	<0.02^{U}	<0.1^{U}	0.03^{J}	2.0	2.4	-	2^{J}
Eel River Scott Dam to Van Arsdale Reservoir													
ER167.8	5/15	0.2	<0.1^{U}	0.03^{J}	<0.04^{U}	<0.05^{U}	<0.02^{U}	<0.1^{U}	0.03^{J}	2.5	2.7	0.001^{J}	<2^{U}
VA2-S	5/24	0.2	<0.1^{U}	0.03^{J}	<0.04^{U}	<0.05^{U}	<0.02^{U}	<0.1^{U}	0.03^{J}	2.1	2.4	<0.001^{U}	2^{J}
VA2-B	5/24	4	<0.1^{U}	0.03^{J}	<0.04^{U}	<0.05^{U}	<0.02^{U}	<0.1^{U}	0.02^{J}	2.1	2.4	-	3^{J}
Eel River Cape Horn Dam to Middle Fork Eel River													
ER156.7	5/17	0.2	<0.1^{U}, <0.1^{U}	0.03^{J}, 0.03^{J}	<0.04^{U}, <0.04^{U}	<0.05^{U}, <0.05^{U}	<0.02^{U}, <0.02^{U}	<0.1^{U}, <0.1^{U}	0.03^{J}, 0.02^{J}	2.3, 2.4	2.4, 2.3	<0.001^{U}, <0.001^{U}	<2^{U}, <2^{U}
ER153.1	5/15	0.2	<0.1^{U}	0.03^{J}	<0.04^{U}	<0.05^{U}	<0.02^{U}	<0.1^{U}	0.02^{J}	2.3	2.2	<0.001^{U}	<2^{U}
TC0.1	5/15	0.2	<0.1^{U}	0.03^{J}	<0.04^{U}	<0.05^{U}	<0.02^{U}	<0.1^{U}	0.02^{J}	1.1	1.3	<0.001^{U}	<2^{U}
ER152.9	5/15	0.2	<0.1^{U}	0.03^{J}	<0.04^{U}	<0.05^{U}	<0.02^{U}	<0.1^{U}	0.02^{J}	2.4	2.2	<0.001^{U}	<2^{U}
ER126.1	5/16	0.2	<0.1^{U}	0.03^{J}	<0.04^{U}	<0.05^{U}	<0.02^{U}	<0.1^{U}	0.02^{J}	1.9	1.8	<0.001^{U}	<2^{U}
OC0.1	5/16	0.2	<0.1^{U}	<0.0086^{U}	<0.04^{U}	<0.05^{U}	<0.02^{U}	<0.1^{U}	0.02^{J}	1.8	1.8	<0.001^{U}	<2^{U}
ER125.9	5/16	0.2	<0.1^{U}	0.03^{J}	<0.04^{U}	<0.05^{U}	<0.02^{U}	<0.1^{U}	0.02^{J}	1.8	1.8	<0.001^{U}	<2^{U}
ER119.4[a]	5/16	0.2	<0.1^{U}	0.03^{J}	<0.04^{U}	<0.05^{U}	<0.02^{U}	<0.1^{U}	0.02^{J}	1.9	1.7	<0.001^{U}	<2^{U}
MF0.1	5/16	0.2	<0.1^{U}	0.03^{J}	<0.04^{U}	<0.05^{U}	<0.02^{U}	<0.1^{U}	0.02^{J}	1.3	1.1	<0.001^{U}	<2^{U}
ER119.2[a]	5/16	0.2	<0.1^{U}	0.03^{J}	<0.04^{U}	<0.05^{U}	<0.02^{U}	0.37	0.02^{J}	1.5	1.3	<0.001^{U}	<2^{U}
EAST BRANCH RUSSIAN RIVER WATERSHED													

Table AQ3-7. Seasonal and Monthly Nutrients, Chlorophyll-a, and Biological Oxygen Demand Results.

Site ID	Date (2018)	Depth (m)	NH_4 as N (mg/L)	$NO_3 + NO_2$ as N (mg/L)	NO_3 as N (mg/L)	NO_2 as N (mg/L)	TKN (mg/L)	Ortho-P (mg/L)	TP (mg/L)	DOC (mg/L)	TOC (mg/L)	Chl.-a (mg/L)	BOD (mg/L)
EB-BLPH	5/21	0.2	<0.1[U]	0.05[J], 0.05[J]	0.05[J], 0.05[J]	<0.05[U], <0.05[U]	<0.02[U], <0.02[U]	<0.1[U], <0.1[U]	0.03[J], 0.03[J]	2.3, 2.2	2.3, 2.2	<0.001[U], <0.001[U]	<2[U], <2[U]
EB-ABLM	5/21	0.2	<0.1[U]	0.07[J]	0.07[J]	<0.05[U]	<0.02[U]	<0.1[U]	0.03[J]	1.9	1.9	<0.001[U]	<2[U]
QUALITY ASSURANCE / QUALITY CONTROL													
Field Blank	*5/17*	-	*<0.1[U]*	<0.0086[U]	<0.04[U]	*<0.05[U]*	<0.02[U]	*<0.1[U]*	*<0.01[U]*	*0.6[J]*	*0.4[J]*	*<0.001[U]*	*3[J]*
	5/21	-	*<0.1[U]*	0.03[J]	<0.04[U]	*<0.05[U]*	*0.28[J]*	*<0.1[U]*	*<0.01[U]*	*<0.6[U]*	*<0.3[U]*	*<0.001[U]*	*<2[U]*
	5/24	-	*<0.1[U]*	<0.0086[U]	<0.04[U]	*<0.05[U]*	<0.02[U]	*<0.1[U]*	*<0.01[U]*	*<0.6[U]*	*<0.3[U]*	*<0.001[U]*	*<2[U]*
Equipment Blank	*5/22*	-	*<0.1[U]*	0.03[J]	<0.04[U]	*<0.05[U]*	<0.02[U]	*<0.1[U]*	*<0.01[U]*	*<0.6[U]*	*<0.3[U]*	*<0.001[U]*	*<2[U]*
DL		-	***0.1***	***0.0086***	***0.04***	***0.05***	***0.02***	***0.1***	***0.01***	***0.6***	***0.3***	***0.001***	***2***
RL		-	***0.2***	***0.4***	***0.2***	***0.2***	***1.0***	***0.3, 0.15***	***0.04***	***1***	***1***	***0.01***	***5***
JUNE 26–28, 2018 (MONTHLY)													
EEL RIVER WATERSHED													
Inflow to Lake Pillsbury													
ER173.7	6/27	0.2	<0.1[U]	0.03[J]	<0.04[U]	<0.05[U]	-[f]	<0.1[U]	0.02[J], [BL]	0.7[J]	0.8[J]	<0.001[U]	<2[U]
RF3.8	6/27	0.2	<0.1[U]	0.03[J]	<0.04[U]	<0.05[U]	-[f]	<0.1[U]	0.03[J], [BL]	0.7[J]	0.8[J]	0.002[J]	2[J]
Lake Pillsbury													
LP1-S	6/28	0.2	<0.1[U], <0.1[U]	<0.0086[U]	<0.04[U]	<0.05[U]	0.12[J]	<0.1[U]	0.01[J]	2.3[D], 2.1[D]	2.4	0.002[J]	2[J]
LP1-M	6/28	7	<0.1[U]	<0.0086[U], <0.0086[U]	<0.04[U], <0.04[U]	<0.05[U], <0.05[U]	0.26[J], 0.26[J]	<0.1[U], 0.01[J]	0.02[J], 0.02[J]	2.1[D], 3.6[D]	2.4, 2.5	0.005[J], 0.005[J]	<2[U], 3[J]
LP1-B	6/28	14	<0.1[U]	0.03[J]	<0.04[U]	<0.05[U]	0.07[J]	<0.1[U]	0.03[J]	2.0[D]	2.4	-	<2[U]
LP2-S	6/28	0.2	<0.1[U]	<0.0086[U]	<0.04[U]	<0.05[U]	0.18[J]	<0.1[U]	0.01[J]	2.3[D]	2.5	<0.001[U]	2[J]
LP2-M	6/28	3	<0.1[U]	<0.0086[U]	<0.04[U]	<0.05[U]	0.10[J]	<0.1[U]	0.02[J]	2.3[D]	2.5	0.001[J]	2[J]
LP2-B	6/28	6	<0.1[U]	<0.0086[U]	<0.04[U]	<0.05[U]	0.10[J]	<0.1[U]	0.02[J]	2.2[D]	2.6	-	2[J]
LP3-S	6/27	0.2	<0.1[U]	<0.0086[U]	<0.04[U]	<0.05[U]	<0.5[U]	<0.1[U]	0.01[J], [BL]	2.3	2.4	0.002[J]	<2[U]
LP3-M	6/27	12	<0.1[U]	0.03[J]	<0.04[U]	<0.05[U]	<0.5[U]	<0.1[U]	0.02[J], [BL]	2.0	2.4[E]	0.002[J]	2[J]
LP3-B	6/27	24	<0.1[U]	0.05[J]	0.05[J]	<0.05[U]	0.14[J]	<0.1[U]	0.04[J], [BL]	1.7	2.4[E]	-	<2[U]
LP4-S	6/27	0.2	<0.1[U]	<0.0086[U]	<0.04[U]	<0.05[U]	-[f]	<0.1[U]	0.03[J], [BL]	2.1	2.4	0.004[J]	2[J]
LP4-M	6/27	3	<0.1[U]	<0.0086[U]	<0.04[U]	<0.05[U]	-[f]	<0.1[U]	0.02[J], [BL]	2.4	2.4[E]	0.004[J]	2[J]
LP4-B	6/27	6.2	<0.1[U]	<0.0086[U]	<0.04[U]	<0.05[U]	-[f]	<0.1[U]	0.02[J], [BL]	2.2	2.4[E]	-	3[J]

Table AQ3-7. Seasonal and Monthly Nutrients, Chlorophyll-a, and Biological Oxygen Demand Results.

Eel River Scott Dam to Van Arsdale Reservoir													
ER167.8	6/26	0.2	<0.1[U], <0.1[U]	0.04[J], 0.04[J]	0.04[J], 0.04[J]	<0.05[U], <0.05[U]	0.52[J], 0.38[J]	<0.1[U], <0.1[U]	0.03[J], 0.03[J]	2.2, 2.3	2.5, 2.5	0.002[J], 0.002[J]	3[J], 3[J]
QUALITY ASSURANCE AND QUALITY CONTROL													
Field Blank	*6/27*	-	*<0.1[U]*	<0.0086[U]	<0.04[U]	*<0.05[U]*	-	*<0.1[U]*	*0.30[BL]*	*<0.6[U]*	*<0.3[U]*	*<0.001[U]*	*<2[U]*
	6/28	-	*<0.1[U]*	<0.0086[U]	<0.04[U]	*<0.05[U]*	*<0.05, 0.2[U]*	*<0.1[U]*	*<0.01[U]*	*0.6[U]*	*<0.3[U]*	*<0.001[U]*	*<2[U]*
Equipment Blank	*6/27*	-	*<0.1[U]*	<0.0086[U]	<0.04[U]	*<0.05[U]*	*<0.05, 0.2[U]*	*<0.1[U]*	*<0.01[U, BL]*	*<0.6[U]*	*1.3[E]*	*<0.001[U]*	*<2[U]*
DL		-	***0.1***	***0.0086***	***0.04***	***0.05***	***0.05, 0.2***	***0.1***	***0.01***	***0.6***	***0.3***	***0.001***	***2***
RL		-	***0.2***	***0.4***	***0.2***	***0.2***	***1***	***0.3***	***0.04***	***1***	***1***	***0.010***	***5***
SEPTEMBER 18–27, 2018 (SEASONAL AND MONTHLY)													
EEL RIVER WATERSHED													
Inflow to Lake Pillsbury													
ER173.7	9/26	0.2	<0.1[U]	0.03[J]	<0.04[U]	<0.05[U]	0.14[J]	0.15[J]	0.03[J]	0.8[J]	0.8[J]	<0.005[U]	<2[U]
RF3.8	9/26	0.2	<0.1[U]	0.04[J]	<0.04[U]	<0.05[U]	0.18[J]	0.14[J]	0.03[J]	0.9[J]	0.7[J]	0.006[J]	<2[U]
Lake Pillsbury													
LP1-S	9/27	0.2	0.14[J], <0.1[U]	<0.0086[U], <0.0086[U]	<0.04[U], <0.04[U]	<0.05[U], <0.05[U]	0.38[J], 0.38[J]	<0.1[U], <0.1[U]	0.02[J], 0.02[J]	3.0, 3.2	3.0, 3.1	0.013, 0.018[D]	3[J], 3[J]
LP1-B	9/27	11	<0.1[U, D]	0.05[J]	0.05[J, D]	<0.05[U]	0.46[J]	<0.1[U]	0.03[J]	2.7	2.8	0.005[J]	<2[U]
LP2-S	9/25	0.2	<0.1[U]	0.10[J]	<0.04[U]	0.07[J]	0.42[J]	<0.1[U]	0.02[J]	2.9	3.2	0.010	2[J]
LP2-M	9/25	3	<0.1[U]	0.03[J],	<0.04[U]	<0.05[U]	0.35[J]	<0.1[U]	0.03[J]	2.9	3.2	0.011	2[J]
LP2-B	9/25	5.5	<0.1[U]	<0.0086[U]	<0.04[U]	<0.05[U]	0.42[J]	<0.1[U]	0.03[J]	3.1	3.4	0.009[J]	3[J]
LP3-S	9/25	0.2	<0.1[U]	0.04[J]	<0.04[U]	<0.05[U]	0.52[J]	<0.1[U]	0.06	2.8	3.1	0.022	2[J]
LP3-M	9/25	11	0.19[J]	0.03[J]	<0.04[U]	<0.05[U]	0.42[J]	<0.1[U]	0.02[J]	2.7	3.1	0.012	<2[U]
LP3-B	9/25	21.6	0.93	0.03[J]	<0.04[U]	<0.05[U]	1.10	0.23[J]	0.54	2.4	5.0	0.002[J]	6
LP4-S	9/26	0.2	<0.1[U]	<0.0086[U]	<0.04[U]	<0.05[U]	0.46[J]	<0.1[U]	0.03[J]	2.8	3.1	0.024	4[J]
LP4-M	9/26	2	<0.1[U]	0.04[J]	<0.04[U]	<0.05[U]	0.49[J]	<0.1[U]	0.04[J]	2.9	3.2	0.032	4[J]
LP4-B	9/26	3.7	<0.1[U]	<0.0086[U]	<0.04[U]	<0.05[U]	0.44[J]	<0.1[U]	0.05	3.6	3.1	0.019	4[J]
Eel River Scott Dam to Van Arsdale Reservoir													
ER167.8	9/27	0.2	<0.1[U,D], <0.1[U,D]	0.13[J], 0.14[J]	0.06[J,D], 0.07[J,D]	0.07[J], 0.07[J]	0.46[J], 0.42[J]	0.13[J], 0.13[J]	0.05, 0.05	2.9, 2.9	2.8, 2.9	0.006[J], 0.006[J]	3[J], 3[J]
VA2-S	9/20	0.2	<0.1[U]	0.16[J]	0.10[J]	0.07[J]	0.21[J]	0.46	0.05	2.4	2.8	0.002[J]	<2[U]
VA2-B	9/20	4.2	0.14[J,E]	0.16[J]	0.10[J]	0.07[J]	0.21[J]	0.15[J]	0.05	2.2	2.9	0.002[J]	<2[U]
Eel River Cape Horn Dam to Middle Fork Eel River													
ER156.7	9/20	0.2	<0.1[U]	0.15[J]	0.08[J]	0.07[J]	0.18[J]	0.15[J]	0.05	2.4	2.7	0.001[J]	<2[U]
ER153.1	9/18	0.2	<0.1[U]	<0.0086[U]	<0.04[U]	<0.05[U]	0.24[J]	<0.1[U]	0.02[J]	2.0[D]	2.3[D]	<0.001[U]	2[J]
TC0.1	9/18	0.2	<0.1[U]	<0.0086[U]	<0.04[U]	<0.05[U]	0.14[J]	0.12[J]	0.02[J]	1.2[D]	1.6	<0.001[U]	2[J]
ER152.9	9/18	0.2	<0.1[U], <0.1[U]	0.04[J] <0.0086[U]	0.04[J], <0.04[U]	<0.05[U], <0.05[U]	0.21[J], 0.18[J]	<0.1[U], <0.1[U]	0.02[J], 0.02[J]	1.5, 1.9[D]	2.4, 2.4	<0.001[U], <0.001[U]	3[J], 3[J]

Table AQ3-7. Seasonal and Monthly Nutrients, Chlorophyll-a, and Biological Oxygen Demand Results.

ER126.1	9/19	0.2	0.14[J]	0.09[J]	0.09[J]	<0.05[U]	0.21[J]	<0.1[U]	0.01[J]	1.7	1.9	<0.001[U]	<2[U]
OC0.1	9/19	0.2	<0.1[U]	0.03[J]	<0.04[U]	<0.05[U]	0.35[J]	<0.1[U]	0.02[J]	3.0	3.1	0.003[J]	<2[U]
ER125.9	9/19	0.2	<0.1[U]	0.03[J]	<0.04[U]	<0.05[U]	0.21[J]	<0.1[U]	0.01[J]	1.8	1.9	<0.001[U]	<2[U]
ER119.4[a]	9/19	0.2	0.33	0.03[J]	<0.04[U]	<0.05[U]	0.24[J]	<0.1[U]	0.01[J]	1.9	2.0	<0.001[U]	<2[U]
MF0.1	9/19	0.2	<0.1[U]	<0.0086[U]	<0.04[U]	<0.05[U]	0.21[J]	<0.1[U]	<0.01[U]	1.0	1.1	<0.001[U]	<2[U]
ER119.2[a]	9/19	0.2	<0.1[U]	0.03[J]	<0.04[U]	<0.05[U]	0.14[J]	<0.1[U]	0.01[J]	1.6	1.7	<0.001[U]	<2[U]
EAST BRANCH RUSSIAN RIVER WATERSHED													
EB-BLPH	9/20	0.2	0.14[J]	0.19[J]	0.12[J]	0.07[J]	0.21[J]	0.14[J]	0.06	2.6	3.0	0.004[J]	<2[U]
EB-ABLM	9/20	0.2	<0.1[U]	0.10[J]	0.10[J]	<0.05[U]	0.24[J]	0.15[J]	0.06	3.0	3.4	0.001[J]	<2[U]
QUALITY ASSURANCE AND QUALITY CONTROL													
Field Blank	*9/18*		*0.14[J]*	<0.0086[U]	<0.04[U]	*<0.05[U]*	*<0.05[U]*	*<0.1[U]*	*<0.01[U]*	*<0.6[U]*	*0.4[J]*	*<0.001[U]*	*<2[U]*
	9/25		*0.19[J]*	<0.0086[U]	<0.04[U]	*<0.05[U]*	*<0.05[U]*	*<0.1[U]*	*0.02[J]*	*<0.6[U]*	*0.4[J]*	*<0.005*	*<2[U]*
	9/26		*0.14[J]*	<0.0086[U]	<0.04[U]	*<0.05[U]*	*0.07[J]*	*<0.1[U]*	*<0.01[U]*	*<0.6[U]*	*<0.3[U]*	*<0.005*	*<2[U]*
Equipment Blank	*9/20*		*0.23[E]*	0.03[J]	<0.04[U]	*<0.05[U]*	*<0.05[U]*	*<0.1[U]*	*<0.01[U]*	*<0.6[U]*	*0.5[J]*	*<0.001[U]*	*<2[U]*
	9/27		<0.1[U]	<0.0086[U]	<0.04[U]	<0.05[U]	0.07[J]	<0.1[U]	<0.01[U]	*<0.6[U]*	0.3[J]	<0.005	<2[U]
DL		-	***0.1***	***0.0086***	***0.04***	***0.05***	***0.05***	***0.1***	***0.01, 0.05***	***0.6***	***0.3***	***0.001, 0.002, 0.005***	***2***
RL		-	***0.2***	***0.4***	***0.2***	***0.2***	***1.0***	***0.3***	***0.04, 0.2***	***1.0***	***1.0***	***0.01***	***5***
OCTOBER 23–24, 2018 (MONTHLY)													
EEL RIVER WATERSHED													
Inflow to Lake Pillsbury													
ER173.7	10/24	0.2	<0.1[U]	<0.0086	<0.04[U]	<0.05[U]	0.14[J]	0.15[J]	0.05	1.6	1.6[D]	<0.001[U]	<2[U]
RF3.8	10/24	0.2	<0.1[U]	0.03[J]	<0.04[U]	<0.05[U]	0.10[J]	0.15[J]	0.02[J]	0.8	0.8[D]	<0.001[U]	<2[U]
Lake Pillsbury													
LP1-S	10/23	0.2	<0.1[U]	<0.04[BL]	-[f]	-[f]	0.35[J]	<0.2[QB-06, T-16, U]	0.04	3.2	3.1	0.002[J]	<2[U]
LP1-M	10/23	5.5	<0.1[U]	<0.04[BL]	-[f]	-[f]	0.24[J]	<0.2[QB-06, T-16, U]	0.03[J]	3.1	3.0	0.002[J]	<2[U]
LP1-B	10/23	10.8	<0.1[U]	0.25[BL]	-[f]	-[f]	0.21[J]	<0.2[QB-06, T-16, U]	0.03[J]	3.1	3.0	0.001[J]	<2[U]
LP2-S	10/23	0.2	<0.1[U], <0.1[U]	<0.04[BL], <0.04[BL]	-[f]	-[f]	0.28[J], 0.28[J]	<0.2[QB-06, T-16, U]	0.03[J], 0.02[J]	3.2, 3.3	3.1, 3.1	0.002[J], 0.002[J]	<2[U], <2[U]
LP2-M	10/23	1.9	<0.1[U]	<0.04[BL]	-[f]	-[f]	0.28[J]	<0.2[QB-06, T-16, U]	0.03[J]	3.1	3.0	0.002[J]	<2[U]
LP2-B[b]	10/23	3.6	<0.1[U]	<0.04[BL]	-[f]	-[f]	0.28[J]	<0.2[QB-06, T-16, U]	0.03[J]	3.2	3.0	0.001[J]	<2[U]
LP3-S	10/23	0.2	<0.1[U]	<0.04[BL]	-[f]	-[f]	0.32[J]	<0.2[QB-06, T-16, U]	0.03[J]	3.2	2.9	0.002[J]	<2[U]

Table AQ3-7. Seasonal and Monthly Nutrients, Chlorophyll-a, and Biological Oxygen Demand Results.

LP3-M	10/23	10.5	0.15[J]	<0.04[BL]	-[f]	-[f]	0.35[J]	<0.2[QB-06, T-16, U]	0.03[J]	3.1	3.0	0.002[J]	<2[U]
LP3-B	10/23	21	1.6	<0.04[BL]	-[f]	-[f]	1.70	<0.2[QB-06, T-16, U]	0.76	3.6	6.8	<0.001[U]	5[BOD-4, J]
LP4-S	10/24	0.2	<0.1[U]	0.05[J]	0.05[J]	<0.05[U]	0.35[J]	0.13[J]	0.03[J]	3.1	2.9[D]	0.002[J]	<2[U]
LP4-M	10/24	2	<0.1[U]	0.04[J]	0.04[J]	<0.05[U]	0.35[J]	<0.1[U]	0.03[J]	3.1	3.0[D]	0.002[J]	<2[U]
LP4-B	10/24	2.9	<0.1[U], <0.1[U]	0.04[J], 0.04[J]	0.04[J], 0.04[J]	<0.05[U], <0.05[U]	0.32[J], 0.35[J]	0.11[J], <0.1[U]	0.04, 0.03[J]	3.0, 3.2	4.5[D], 3.0[D]	<0.001[U], <0.001[U]	<2[U], <2[U]
Eel River Scott Dam to Van Arsdale Reservoir													
ER167.8	10/25	0.2	<0.1[U]	0.03[J]	0.09[J]	0.06[J]	0.24[J]	<0.1[QB-03,U]	0.04[J]	2.9	3.1	<0.001[U]	<2[U]
QUALITY ASSURANCE AND QUALITY CONTROL													
Field Blank	*10/23*	-	<0.1[U]	*0.50[BL]*	-[f]	-[f]	*0.17[J]*	*<0.2[QB-06, T-16,U]*	*0.01[J]*	*<0.6[U]*	*<0.3, 0.5*	*<0.001[U]*	*<2[U]*
	10/24	-	<0.1[U]	0.03[J]	<0.04[U]	*<0.05[U]*	*0.07[J]*	*0.11[J]*	*<0.01[U]*	*<0.5[U]*	*<0.3, 0.5[D]*	*<0.001[U]*	*<2[U]*
Equipment Blank	*10/23*		<0.1[U]	*<0.04*	-[f]	-[f]	*0.09[J]*	*<0.2[QB-06, T-16,U]*	*<0.01[U]*	*<0.6[U]*	*<0.3, 0.5*	*<0.001[U]*	*<2[U]*
DL		-	***0.1***	***0.0086, 0.04***	***0.04***	***0.05***	***0.05***	***0.1, 0.2***	***0.01, 0.05***	***0.5, 0.6***	***0.3, 0.5***	***0.001***	***2***
RL		-	***0.2***	***0.4, 0.2***	***0.2***	***0.2***	***1***	***0.3***	***0.04, 0.2***	***1***	***1***	***0.01***	***5***
NOVEMBER 13–14, 2018 (MONTHLY)													
EEL RIVER WATERSHED													
Inflow to Lake Pillsbury													
ER173.7	11/14	0.2	<0.1[U]	<0.0086[U]	<0.04[U]	<0.05[U]	0.10[J]	<0.1[U]	0.03[J]	1.1	1.0	<0.001[U]	<2[U]
RF3.8	11/14	0.2	<0.1[U]	<0.0086[U]	<0.04[U]	<0.05[U]	0.07[J]	<0.1[U]	0.02[J]	0.8[J]	0.6[J]	<0.001[U]	<2[U]
Lake Pillsbury													
LP1-S	11/13	0.2	<0.1[U]	0.05[J]	0.05[J]	<0.05[U]	0.32[J]	<0.1[U]	0.03[J]	2.8	2.8	0.002[J]	<2[U]
LP1-M	11/13	4.7	<0.1[U]	0.05[J]	0.05[J]	<0.05[U]	0.28[J]	<0.1[U]	0.03[J]	2.7	2.8	0.002[J]	<2[U]
LP1-B	11/13	9.4	<0.1[U]	0.05[J]	0.05[J]	<0.05[U]	0.24[J]	<0.1[U]	0.02[J]	2.7	2.8	0.001[J]	<2[U]
LP2-S	11/13	0.2	<0.1[U]	0.06[J]	0.06[J]	<0.05[U]	0.32[J]	<0.1[U]	0.03[J]	2.7	2.9	0.003[J]	<2[U]
LP2-M	11/13	-[c]	-[c]	-[c]	-[c]	-[c]	-[c]	-[c]	-[c]	-[c]	-[c]	-[c]	-[c]
LP2-B	11/13	1.2	<0.1[U]	0.04[J]	0.04[J]	<0.05[U]	0.28[J]	<0.1[U]	0.03[J]	2.8	2.8	0.002[J]	<2[U]
LP3-S	11/13	0.2	<0.1[U]	0.05[J]	0.05[J]	<0.05[U]	0.28[J]	<0.1[U]	0.02[J]	2.8	2.8	0.002[J]	<2[U]
LP3-M	11/13	10	<0.1[U]	0.05[J]	0.05[J]	<0.05[U]	0.32[J]	<0.1[U]	0.03[J]	2.8	2.9	0.002[J]	<2[U]
LP3-B	11/13	19.8	<0.1[U]	0.05[J]	0.05[J]	<0.05[U]	0.28[J]	<0.1[U]	0.03[J]	2.6	2.7	<0.001[U]	<2[U]
LP4-S	11/14	0.2	<0.1[U], <0.1[U]	0.05[J], 0.05[J]	0.05[J], 0.05[J]	<0.05[U], <0.05[U]	0.35[J], 0.35[J]	<0.1[U], <0.1[U]	0.03[J], 0.03[J]	2.6	2.8	0.004[J]	<2[U]
LP4-M	11/14	-[c]	-[c]	-[c]	-[c]	-[c]	-[c]	-[c]	-[c]	-[c]	-[c]	-[c]	-[c]
LP4-B	11/14	1.8	<0.1[U]	0.05[J]	0.05[J]	<0.05[U]	0.32[J]	<0.1[U]	0.03[J], [E]	2.7	2.8	0.002[J]	<2[U]

Table AQ3-7. Seasonal and Monthly Nutrients, Chlorophyll-a, and Biological Oxygen Demand Results.

Eel River Scott Dam to Van Arsdale Reservoir													
ER167.8	11/13	0.2	<0.1^{U}, <0.1^{U}	0.07^{J}, 0.06^{J}	0.07^{J}, 0.06^{J}	<0.05^{U}, <0.05^{U}	0.28^{J}, 0.24^{J}	<0.1^{U}, <0.1^{U}	0.03^{J}, 0.03^{J}	2.7, 2.8	-	<0.001^{U}, <0.001^{U}	<2^{U}, <2^{U}
QUALITY ASSURANCE AND QUALITY CONTROL													
Field Blank	11/13		0.10^{J}	<0.0086^{U}	<0.04^{U}	<0.05^{U}	0.07^{J}	<0.1^{U}	<0.01^{U}	0.7^{J}	<0.3^{U}	<0.001^{U}	<2^{U}
	11/14	-	<0.1^{U}	<0.0086^{U}	<0.04^{U}	<0.05^{U}	0.07^{J}	<0.1^{U}	0.01^{J}	*<0.6^{U}*	<0.3^{U}	<0.001^{U}	2^{J}
Equipment Blank	11/14	-	<0.1^{U}	<0.0086^{U}	<0.04^{U}	<0.05^{U}	0.16^{J}	<0.1^{U}	0.15^{E}	*<0.6^{U}*	<0.3^{U}	<0.001^{U}	2^{J}
DL		-	***0.1***	***0.0086***	***0.04***	***0.05***	***0.05***	***0.1***	***0.01***	***0.6***	***0.3***	***0.001***	***2***
RL		-	***0.2***	***0.4***	***0.2***	***0.2***	***1***	***0.3***	***0.04***	***1***	***1***	***0.01***	***5***

m=meters, mg/L=milligram per liter, NH_4=ammonium, N=nitrogen, NO_3=Nitrate, NO_2=Nitrite, TKN=Total Kjeldahl Nitrogen, , Ortho-P=orthophosphate, TP=total phosphorus, DOC=dissolved organic carbon, TOC=total organic carbon, Chl.-a=chlorophyll-a, BOD=biological oxygen demand, S=surface, M=middle, B=bottom, DL= detection limit; RL=reporting limit,- =no data

Notes:

[a] AQ-3 Study Plan and/or laboratory results reported with the following site codes: ER119.4=ER119.1 and ER119.2=ER118.9.

[b] Laboratory results for Site LP2-B on 10/23/2018 reported with the following site code: LP2-BL.

[c] Middle grab samples were not collected for laboratory analysis due to shallow reservoir depth.

[f] sample not analyzed by the laboratory.

BL Quantifiable field blank value

D Variation of quantifiable replicate samples greater than or equal to 10%.

E Quantifiable equipment blank value

J Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).

U Analyte included in analysis, but not detected at or above minimum DL.

QB-06 The method blank contains analyte near but below the minimum RL; sample minimum DLs were raised accordingly.

T-16 Sample prepared outside of recommended hold time.

QB-03 The method blank contains analyte at a concentration above the minimum RL; sample reporting limits were raised as necessary.

BOD-4 Result is an estimate due to excessive oxygen depletion in all sample dilutions.

Table AQ3-8. Seasonal and Monthly Mercury, Methylmercury, Iron, and Manganese Results.

Site ID	Date (2018)	Depth (m)	Mercury (ng/l)	Methyl Mercury as Mercury (ng/l)	Iron (ug/L)	Manganese (ug/L)
MAY 15–24, 2018 (SEASONAL AND MONTHLY)						
EEL RIVER WATERSHED						
Inflow to Lake Pillsbury						
ER173.7	5/24	0.2	1.2	0.08	89[J,BL]	<8[U]
RF3.8	5/23	0.2	1.5	0.06	70[J]	<8[U]
Lake Pillsbury						
LP1-S	5/23	0.2	1.8	0.13	59[J]	<8[U]
LP1-M	5/23	8	4.1	0.13	160[J]	19[J]
LP1-B	5/23	15.5	5.9	0.11	410	20
LP2-S	5/22	0.2	2.1	0.13	78[J]	<8[U]
LP2-M	5/22	4	2.4	0.11	76[J]	<8[U]
LP2-B	5/22	7	3.5	0.13	120[J]	8.1[J]
LP3-S	5/23	0.2	1.8, 1.8	0.11, 0.11	54[J], 52[J]	<8[U], <8[U]
LP3-M	5/23	13	5.0	0.15	320	26
LP3-B	5/23	26	8.1	0.17	790	76
LP4-S	5/23	0.2	1.8	0.17	61[J]	<8[U]
LP4-M	5/23	4	2.0	0.19	61[J]	<8[U]
LP4-B	5/23	8	3.6	0.58	280	110
Eel River Scott Dam to Van Arsdale Reservoir						
ER167.8	5/15	0.2	4.1	0.14	750	17[J]
VA2-S	5/24	0.2	5.1	0.13	220[BL]	22
VA2-B	5/24	4	4.0	0.12	330[BL]	22
Eel River Cape Horn Dam to Middle Fork Eel River						
ER156.7	5/17	0.2	3.5, 3.5	0.13, 0.13	230[D], 200[D]	22, 22
ER153.1	5/15	0.2	3.7	0.13	240	14[J]
TC0.1	5/15	0.2	0.8	0.06	57[J]	<8[U]
ER152.9	5/15	0.2	3.6	0.12	210	13[J]
ER126.1	5/16	0.2	2.7	0.08	140[J]	<8[U]
OC0.1	5/16	0.2	1.0	0.11	130[J]	<8[U]
ER125.9	5/16	0.2	2.0	0.08	130[J]	<8[U]
ER119.4[a]	5/16	0.2	1.8	0.08	110[J]	<8[U]
MF0.1	5/16	0.2	1.5	0.02[J]	110[J]	<8[U]
ER119.2[a]	5/16	0.2	1.6	0.04[J]	120[J]	<8[U]
EAST BRANCH RUSSIAN RIVER WATERSHED						
EB-BLPH	5/21	0.2	3.5, 3.5	0.16, 0.15	280, 290	29, 29
EB-ABLM	5/21	0.2	2.1	0.08	210	12[J]
QUALITY ASSURANCE AND QUALITY CONTROL						
Field Blank	*5/17*	*0.0*	*0.5[J]*	*<0.02*	*<40[U]*	*<8[U]*
	5/21	*0.0*	*<0.2*	*<0.02*	*<40[U]*	*<8[U]*
	5/24	*0.0*	*<0.2*	*<0.02*	*330[BL]*	*<8[U]*
Equipment Blank	*5/22*	*0.0*	*<0.2*	*<0.02*	*<40[U]*	*<8[U]*
DL		-	***0.2***	***0.02***	***40***	***8***
RL		-	***0.5***	***0.05***	***200[R -Qt]***	***20[R -Qt]***
JUNE 26–28,2018 (MONTHLY)						
EEL RIVER WATERSHED						
Inflow to Lake Pillsbury						
ER173.7	6/27	0.2	1.1	0.04[J]	100	-
RF3.8	6/27	0.2	1.1	0.05[J]	93	-

Table AQ3-8. Seasonal and Monthly Mercury, Methylmercury, Iron, and Manganese Results.

Site ID	Date (2018)	Depth (m)	Mercury (ng/l)	Methyl Mercury as Mercury (ng/l)	Iron (ug/L)	Manganese (ug/L)
Lake Pillsbury						
LP1-S	6/28	0.2	1.3[D],	0.09	66	-
LP1-M	6/28	7	1.3[D], 1.6[D]	0.12, 0.12	75, 79	-
LP1-B	6/28	14	3.0[D]	0.10	220	-
LP2-S	6/28	0.2	1.1[D]	0.10	60	-
LP2-M	6/28	3	1.0[D]	0.09	59	-
LP2-B	6/28	6	1.2[D]	0.09	65	-
LP3-S	6/27	0.2	1.0	0.09	79	-
LP3-M	6/27	12	1.8	0.08	120	-
LP3-B	6/27	24	4.6	0.19	500	-
LP4-S	6/27	0.2	1.4	0.28	120	-
LP4-M	6/27	3	1.3	0.22	100	-
LP4-B	6/27	6.2	1.4	0.23	130	-
Eel River Scott Dam to Van Arsdale Reservoir						
ER167.8	6/26	0.2	3.7, 3.8	0.14, 0.13	360, 370	-
QUALITY ASSURANCE AND QUALITY CONTROL						
Field Blank	*6/27*	-	*<0.2*	*<0.02*	*<40 ,10[U]*	-
	6/28	-	*<0.2*	*<0.02*	*<40 ,10[U]*	-
Equipment Blank	*6/27*	-	*<0.2*	*<0.02*	*10[J]*	-
DL		-	***0.2***	***0.02***	***40 ,10***	***8***
RL		-	***0.5***	***0.05***	***200, 50***	***20***
SEPTEMBER 18–27, 2018 (SEASONAL AND MONTHLY)						
EEL RIVER WATERSHED						
Inflow to Lake Pillsbury						
ER173.7	9/26	0.2	1.0	0.07	150[J]	23
RF3.8	9/26	0.2	1.3	0.06	130[J]	<8[U]
Lake Pillsbury						
LP1-S	9/27	0.2	1.0, 0.9	0.12, 0.11	54[J,E], 53[J,E]	15[J], 14[J]
LP1-M	9/27	5.5	0.9	0.14	<40[U,E]	<8[U]
LP1-B	9/27	11	1.2	0.10	330[E]	100[E]
LP2-S	9/25	0.2	0.8	0.14	120[J]	8.0[J]
LP2-M	9/25	3	0.9	0.18	140[J]	11[J]
LP2-B	9/25	5.5	1.0	0.14	200	18[J]
LP3-S	9/25	0.2	0.8	0.20	140[J]	14[J]
LP3-M	9/25	11	0.9	0.11	140[J]	18[J]
LP3-B	9/25	21.6	3.7	2.73	1,900	1,100
LP4-S	9/26	0.2	1.6	0.21	190[J]	36
LP4-M	9/26	2	1.4	0.19	190[J]	34
LP4-B	9/26	3.7	2.7	0.27	410	94
Eel River Scott Dam to Van Arsdale Reservoir						
ER167.8	9/27	0.2	2.4, 2.5	0.72, 0.76	180[J,E], 170[J,E]	300, 280
VA2-S	9/20	0.2	3.0	0.47	130[J]	45
VA2-B	9/20	4.2	2.9	0.70	140[J]	46
Eel River Cape Horn Dam to Middle Fork Eel River						
ER156.7	9/20	0.2	2.5	0.46	130[J]	34
ER153.1	9/18	0.2	2.4	0.22	95[J]	14[J]
TC0.1	9/18	0.2	0.6	0.04[J]	93[J]	<8[U]
ER152.9	9/18	0.2	2.1, 2.3	0.20, 0.14	95[J], 97[J]	13[J]
ER126.1	9/19	0.2	1.5	0.08	64[J]	<8[U]

Table AQ3-8. Seasonal and Monthly Mercury, Methylmercury, Iron, and Manganese Results.

Site ID	Date (2018)	Depth (m)	Mercury (ng/l)	Methyl Mercury as Mercury (ng/l)	Iron (ug/L)	Manganese (ug/L)
OC0.1	9/19	0.2	1.6	0.09	79[J]	12[J]
ER125.9	9/19	0.2	1.8	0.03[J]	64[J]	<8[U]
ER119.4[a]	9/19	0.2	0.8	0.04[J]	64[J]	<8[U]
MF0.1	9/19	0.2	1.1	0.03[J]	100[J]	<8[U]
ER119.2[a]	9/19	0.2	1.0	0.07	79[J]	<8[U]
EAST BRANCH RUSSIAN RIVER WATERSHED						
EB-BLPH	9/20	0.2	2.6	0.23	220	27
EB-ABLM	9/20	0.2	1.7	0.09	260	18[J]
QUALITY ASSURANCE AND QUALITY CONTROL						
Field Blank	9/18	-	<0.2[U]	<0.02[U]	<40[U]	<8[U]
	9/25	-	<0.2[U]	<0.02[U]	<40[U]	<8[U]
	9/26	-	<0.2[U]	<0.02[U]	<40[U]	<8[U]
Equipment Blank	9/20	-	<0.2[U]	<0.02[U]	<40[U]	<8[U]
	9/27	-	<0.2[U]	<0.02[U]	250[E]	<8[U]
DL		-	***0.2***	***0.02***	***40***	***8***
RL		-	***0.5***	***0.05***	***200[R -0.1]***	***20[R -0.1]***
OCTOBER 23–24, 2018 (MONTHLY)						
EEL RIVER WATERSHED						
Inflow to Lake Pillsbury						
ER173.7	10/24	0.2	1.3	0.10	310	-
RF3.8	10/24	0.2	0.9	0.04[J]	180[J]	-
Lake Pillsbury						
LP1-S	10/23	0.2	0.9	0.12	110[J]	-
LP1-M	10/23	5.5	1.2	0.13	140[J]	-
LP1-B	10/23	10.8	1.5	0.10	180[J]	-
LP2-S	10/23	0.2	0.9, 0.8	0.14, 0.12	91[J], 97[J]	-
LP2-M	10/23	1.9	0.8	0.15	85[J]	-
LP2-B[b]	10/23	3.6	0.9	0.12	90[J]	-
LP3-S	10/23	0.2	0.8	0.13	100[J]	-
LP3-M	10/23	10.5	0.8	0.17	100[J]	-
LP3-B	10/23	21	6.9	6.96	2,000	-
LP4-S	10/24	0.2	0.9	0.17	190[J]	-
LP4-M	10/24	2	1.1	0.22	200	-
LP4-B	10/24	2.9	1.1, 1.1	0.23	240, 240	-
Eel River Scott Dam to Van Arsdale Reservoir						
ER167.8	10/25	0.2	1.1	0.29	180[J]	-
QUALITY ASSURANCE AND QUALITY CONTROL						
Field Blanks	*10/23*	-	*0.3[J]*	*<0.02*	*<40[U]*	-
	10/24	-	*<0.2[U]*	*<0.02*	*<40[U]*	-
Equipment Blank	*10/23*	-	*<0.2[U]*	*<0.02*	*<40[U]*	-
DL		-	***0.2***	***0.02***	***40***	***8***
RL		-	***0.5***	***0.05***	***200***	***20***
NOVEMBER 13–14, 2018 (MONTHLY)						
EEL RIVER WATERSHED						
Inflow to Lake Pillsbury						
ER173.7	11/14	0.2	0.7	0.05[J]	150[J]	-
RF3.8	11/14	0.2	2.2	<0.02[J]	96[J]	-
Lake Pillsbury						
LP1-S	11/13	0.2	1.3	0.11	<40[U,D]	-
LP1-M	11/13	4.7	1.9	0.10	<40[U,D]	-

Table AQ3-8. Seasonal and Monthly Mercury, Methylmercury, Iron, and Manganese Results.

Site ID	Date (2018)	Depth (m)	Mercury (ng/l)	Methyl Mercury as Mercury (ng/l)	Iron (ug/L)	Manganese (ug/L)
LP1-B	11/13	9.4	1.1	0.11	40[J,D]	-
LP2-S	11/13	0.2	0.8	0.10	<40[U,D]	-
LP2-M	11/13	-[c]	-[c]	-[c]	-[c]	-
LP2-B	11/13	1.2	1.4	0.11	<40[U,D]	-
LP3-S	11/13	0.2	1.1	0.11	66[U,D]	-
LP3-M	11/13	10	1.3	0.17	58[U,D]	-
LP3-B	11/13	19.8	1.3	0.17	120[U,D]	-
LP4-S	11/14	0.2	0.9, 1.0	0.15, 0.13	120[J], 130[J]	-
LP4-M	11/14	-[c]	-[c]	-[c]	-[c]	-
LP4-B	11/14	1.8	1.1	0.15	130[J]	-
Eel River Scott Dam to Van Arsdale Reservoir						
ER167.8	11/13	0.2	1.1, 1.0	0.16, 0.16	170[J], 97[J, D]	-
QUALITY ASSURANCE AND QUALITY CONTROL						
Field Blank	11/13	-	0.3[J]	<0.02	<40[U]	-
	11/14	-	0.3[J]	<0.02	<40[U]	-
Equipment Blank	11/14	-	<0.2[U]	<0.02	<40[U]	-
DL		-	***0.2***	***0.02***	***40***	***8***
RL		-	***0.5***	***0.05***	***200[R-01]***	***20***

m=meters, ng=nanograms per liter, ug/L=micrograms per liter, S=surface, M=middle, B=bottom, DL= detection limit; RL=reporting limit, - = no data

Notes:

[a] AQ-3 Study Plan and/or laboratory results reported with the following site codes: ER119.4=ER119.1 and ER119.2=ER118.9.

[b] Laboratory results for Site LP2-B on 10/23/2018 reported with the following site code: LP2-BL.

[c] Middle grab samples were not collected for laboratory analysis due to shallow reservoir depth.

[BL] Quantifiable field blank value

E Quantifiable equipment blank value

[D] Variation of quantifiable replicate samples greater than or equal to 10%.

[J] Detected but below the reporting limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).

[U] Analyte included in analysis, but not detected at or above minimum DL.

[R-01] The reporting limit for this analyte has been raised to account for matrix interference.

Table AQ3-9a. Seasonal Aluminum and CAM 17 (Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper) Results.

Site ID	Date (2018)	Depth (m)	Aluminum (ug/L)	Antimony (ug/L)	Arsenic (ug/L)	Barium (ug/L)	Beryllium (ug/L)	Cadmium (ug/L)	Chromium (ug/L)	Cobalt (ug/L)	Copper (ug/L)
MAY 15–24, 2018 (SEASONAL)											
EEL RIVER WATERSHED											
Inflow to Lake Pillsbury											
ER173.7	5/24	0.2	<20[U]	<0.8[U]	<0.8[U]	64	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
RF3.8	5/23	0.2	24[J]	<0.8[U]	3	78	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
Lake Pillsbury											
LP1-S	5/23	0.2	29[J]	<0.8[U]	<0.8[U]	51	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
LP1-M	5/23	8	110	<0.8[U]	1.1[J]	51	<0.2[U]	<0.24[U]	<1.6[U]	0.15[J]	<1.6[U]
LP1-B	5/23	15.5	420	<0.8[U]	1.3[J]	55	<0.2[U]	<0.24[U]	<1.6[U]	0.26[J]	2.1
LP2-S	5/22	0.2	31[J]	<0.8[U]	<0.8[U]	51	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
LP2-M	5/22	4	36[J]	<0.8[U]	<0.8[U]	51	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
LP2-B	5/22	7	76	<0.8[U]	1.3[J]	47	<0.2[U]	<0.24[U]	<1.6[U]	0.19[J]	<1.6[U]
LP3-S	5/23	0.2	33[J], 31[J]	<0.8[U], <0.8[U]	<0.8[U], <0.8[U]	48, 48	<0.2[U], <0.2[U]	<0.24[U], <0.24[U]	<1.6[U], <1.6[U]	<0.12[U], <0.12[U]	<1.6[U], <1.6[U]
LP3-M	5/23	13	350	<0.8[U]	1[J]	56	<0.2[U]	<0.24[U]	<1.6[U]	0.23[J]	1.8[J]
LP3-B	5/23	26	810	<0.8[U]	0.98[J]	59	<0.2[U]	<0.24[U]	3.2	0.5	2.5
LP4-S	5/23	0.2	32[J]	<0.8[U]	1.1[J]	52	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
LP4-M	5/23	4	39[J]	<0.8[U]	1.2[J]	50	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
LP4-B	5/23	8	140	<0.8[U]	3.7	64	<0.2[U]	<0.24[U]	<1.6[U]	0.34[J]	<1.6[U]
Eel River Scott Dam to Van Arsdale Reservoir											
ER167.8	5/15	0.2	150	<0.8[U]	<0.8[U]	49	<0.2[U]	<0.24[U]	<1.6[U]	0.18[J]	<1.6[U]
VA2-S	5/24	0.2	140	<0.8[U]	<0.8[U]	58	<0.2[U]	<0.24[U]	<1.6[U]	0.17[J]	1.6[J]
VA2-B	5/24	4	160	<0.8[U]	<0.8[U]	58	<0.2[U]	<0.24[U]	<1.6[U]	0.18[J]	2.8
Eel River Cape Horn Dam to Middle Fork Eel River											
ER156.7	5/17	0.2	150[D], 130[D]	<0.8[U], <0.8[U]	<0.8[U], <0.8[U]	57, 59	<0.2[U], <0.2[U]	<0.24[U], <0.24[U]	<1.6[U], <1.6[U]	0.18[J], 0.29[J]	1.8[J, BL], 1.6[J, BL]
ER153.1	5/15	0.2	160	<0.8[U]	<0.8[U]	53	<0.2[U]	<0.24[U]	<1.6[U]	0.16[J]	<1.6[U]
TC0.1	5/15	0.2	21[J]	<0.8[U]	<0.8[U]	56	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
ER152.9	5/15	0.2	140	<0.8[U]	1[J]	51	<0.2[U]	<0.24[U]	<1.6[U]	0.15[J]	<1.6[U]
ER126.1	5/16	0.2	67	<0.8[U]	<0.8[U]	71	<0.2[U]	<0.24[U]	<1.6[U]	0.17[J]	<1.6[U]
OC0.1	5/16	0.2	21[J]	<0.8[U]	<0.8[U]	60	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
ER125.9	5/16	0.2	56	<0.8[U]	<0.8[U]	73	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	1.6[J]
ER119.4[a]	5/16	0.2	46	<0.8[U]	<0.8[U]	67	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
MF0.1	5/16	0.2	43	<0.8[U]	<0.8[U]	69	<0.2[U]	<0.24[U]	1.7[J]	<0.12[U]	<1.6[U]
ER119.2[a]	5/16	0.2	50	<0.8[U]	<0.8[U]	69	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
EAST BRANCH RUSSIAN RIVER WATERSHED											
EB-BLPH	5/21	0.2	180, 180	<0.8[U], <0.8[U]	1.2[J], 1.3[J]	56, 56	<0.2[U], <0.2[U]	<0.24[U], <0.24[U]	<1.6[U], <1.6[U]	0.27[J], 0.22[J]	<1.6[U], 1.6[J]

Table AQ3-9a. Seasonal Aluminum and CAM 17 (Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper) Results.

Site ID	Date (2018)	Depth (m)	Aluminum (ug/L)	Antimony (ug/L)	Arsenic (ug/L)	Barium (ug/L)	Beryllium (ug/L)	Cadmium (ug/L)	Chromium (ug/L)	Cobalt (ug/L)	Copper (ug/L)
EB-ABLM	5/21	0.2	110	<0.8[U]	<0.8[U]	62	<0.2[U]	<0.24[U]	<1.6[U]	0.14[J]	<1.6[U]
QUALITY ASSURANCE AND QUALITY CONTROL											
Field Blank	5/17	-	*<20[U]*	<0.8[U]	<0.8[U]	*<0.8[U]*	*<0.2[U]*	*<0.24[U]*	*<1.6[U]*	*<0.12[U]*	*2[BL]*
	5/21	-	*<20[U]*	<0.8[U]	<0.8[U]	*<0.8[U]*	*<0.2[U]*	*<0.24[U]*	*<1.6[U]*	*<0.12[U]*	*<1.6[U]*
	5/24	-	<20[U]	<0.8[U]	<0.8[U]	*<0.8[U]*	*<0.2[U]*	*<0.24[U]*	*<1.6[U]*	*<0.12[U]*	*<1.6[U]*
Equipment Blank	5/22	-	*<20[U]*	<0.8[U]	<0.8[U]	*<0.8[U]*	*<0.2[U]*	*<0.24[U]*	*<1.6[U]*	*0.3[J]*	*<1.6[U]*
DL		-	***20***	***0.8***	***0.8***	***0.8***	***0.2***	***0.24***	***1.6***	***0.12***	***1.6***
RL		-	***40[R-or]***	***2[R-or]***	***2[R-or]***	***2[R-or]***	***0.4[R-or]***	***0.4[R-or]***	***2[R-or]***	***0.4[R-or]***	***2[R-or]***
SEPTEMBER 18–27, 2018 (SEASONAL)											
EEL RIVER WATERSHED											
Inflow to Lake Pillsbury											
ER173.7	9/26	0.2	39[J]	<0.8[U]	0.82[J]	110	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	2.9
RF3.8	9/26	0.2	27[J]	<0.8[U]	1.7[J]	130	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
Lake Pillsbury											
LP1-S	9/27	0.2	<20[U], <20[U]	<0.8[U], <0.8[U]	5.2, 3.7	70, 67	<0.2[U], <0.2[U]	<0.24[U], <0.24[U]	<2.0[U], <2.0[U]	<0.4[U], <0.4[U]	<1.6[U], <1.6[U]
LP1-M	9/27	5.5	*<20[U]*	<0.8[U]	3.7[D]	68	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
LP1-B	9/27	11	160	<0.8[U]	3.9[D]	72	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	67
LP2-S	9/25	0.2	34[J]	<0.8[U]	2.3	68	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
LP2-M	9/25	3	69	<0.8[U]	3.2	68	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
LP2-B	9/25	5.5	58	<0.8[U]	2.7	68	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
LP3-S	9/25	0.2	63	<0.8[U]	3.6	71	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
LP3-M	9/25	11	48	<0.8[U]	3.4	68	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
LP3-B	9/25	21.6	50	<0.8[U]	9.5	88	<0.2[U]	<0.24[U]	<2.0[U]	0.55	<1.6[U]
LP4-S	9/26	0.2	76	<0.8[U]	3.4	70	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	1.6[J]
LP4-M	9/26	2	77	<0.8[U]	3.7	67	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
LP4-B	9/26	3.7	160	<0.8[U]	4.7	75	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	1.7[J]
Eel River Scott Dam to Van Arsdale Reservoir											
ER167.8	9/27	0.2	78, 78	<0.8[U], <0.8[U]	4.5[D], 3.6[D]	72, 70	<0.2[U], <0.2[U]	<0.24[U], <0.24[U]	<2.0[U], <2.0[U]	<0.4[U], <0.4[U]	<1.6[U], <1.6[U]
VA2-S	9/20	0.2	42	<0.8[U]	3.6	63	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
VA2-B	9/20	4.2	42[E]	<0.8[U]	3.3	64	<0.2[U]	<0.24[U]	<2.0[U,E]	<0.4[U]	<1.6[U,E]
Eel River Cape Horn Dam to Middle Fork Eel River											
ER156.7	9/20	0.2	43	<0.8[U]	3.4	62	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	2.5
ER153.1	9/18	0.2	<20[U]	<0.8[U]	2.0	62	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
TC0.1	9/18	0.2	*<20[U]*	<0.8[U]	<0.8[U]	94	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]

Table AQ3-9a. Seasonal Aluminum and CAM 17 (Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper) Results.

Site ID	Date (2018)	Depth (m)	Aluminum (ug/L)	Antimony (ug/L)	Arsenic (ug/L)	Barium (ug/L)	Beryllium (ug/L)	Cadmium (ug/L)	Chromium (ug/L)	Cobalt (ug/L)	Copper (ug/L)
ER152.9	9/18	0.2	<20[U], <20[U]	<0.8[U], <0.8[U]	2.3, 1.9[J]	65, 64	<0.2[U], <0.2[U]	<0.24[U], <0.24[U]	<2.0[U], <2.0[U]	<0.4[U], <0.4[U]	<1.6[U], <1.6[U]
ER126.1	9/19	0.2	<20[U]	<0.8[U]	<0.8[U]	90	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
OC0.1	9/19	0.2	22[J]	<0.8[U]	<0.8[U]	77	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
ER125.9	9/19	0.2	*<20[U]*	<0.8[U]	<0.8[U]	88	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
ER119.4[a]	9/19	0.2	*<20[U]*	<0.8[U]	0.94[J]	87	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
MF0.1	9/19	0.2	<20[U]	<0.8[U]	<0.8[U]	100	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
ER119.2[a]	9/19	0.2	*<20[U]*	<0.8[U]	<0.8[U]	93	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
EAST BRANCH RUSSIAN RIVER WATERSHED											
EB-BLPH	9/20	0.2	97	<0.8[U]	2.7	64	<0.2[U]	<0.24[U]	<1.6[U]	<0.4[U]	<1.6[U]
EB-ABLM	9/20	0.2	140	<0.8[U]	3.5	64	<0.2[U]	<0.24[U]	<1.6[U]	<0.4[U]	1.6[J]
QUALITY ASSURANCE AND QUALITY CONTROL											
Field Blank	9/18	-	<20[U]	<0.8[U]	<0.8[U]	<0.8[U]	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
	9/25	-	*<20[U]*	<0.8[U]	<0.8[U]	<0.8[U]	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
	9/26	-	*<20[U]*	<0.8[U]	<0.8[U]	<0.8[U]	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
Equipment Blank	9/20	-	43[E]	<0.8[U]	<0.8[U]	<0.8[U]	<0.2[U]	<0.24[U]	2.1[E]	<0.4[U]	34[E]
	9/27	-	<20[U]	<0.8[U]	<0.8[U]	<0.8[U]	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
DL		-	***20***	***0.8***	***0.8***	***0.8***	***0.2***	***0.24***	***2.0***	***0.4***	***1.6***
RL		-	***40[R-01]***	***2[R-01]***	***2[R-01]***	***2[R-01]***	***0.4[R-01]***	***0.4[R-01]***	***2[R-01]***	***0.4[R-01]***	***2[R-01]***

m=meters, ug/L=microgram per liter, S=surface, M=middle, B=bottom, DL= detection limit; RL=reporting limit, - = no data

Notes:

[a] AQ-3 Study Plan and/or laboratory results reported with the following site codes: ER119.4=ER119.1 and ER119.2=ER118.9.

[E] Quantifiable equipment blank value

[D] Variation of replicate samples greater than or equal to 10%.

[J] Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).

[U] Analyte included in analysis, but not detected at or above MDL.

[R-01] The Reporting Limit for this analyte has been raised to account for matrix interference.

Table AQ3-9b. Seasonal CAM 17 (Lead, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc) Results.

Site ID	Date (2018)	Depth (m)	Lead (ug/L)	Mercury (ug/L)	Molybdenum (ug/L)	Nickel (ug/L)	Selenium (ug/L)	Silver (ug/L)	Thallium (ug/L)	Vanadium (ug/L)	Zinc (ug/L)
MAY 15–24, 2018 (SEASONAL)											
EEL RIVER WATERSHED											
Inflow to Lake Pillsbury											
ER173.7	5/24	0.2	<0.24^{U}	<0.06^{U}	0.46^{J}	<1.2^{U}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
RF3.8	5/23	0.2	<0.24^{U}	<0.06^{U}	0.44^{J}	<1.2^{U}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
Lake Pillsbury											
LP1-S	5/23	0.2	<0.24^{U}	<0.06^{U}	0.37^{J}	<1.2^{U}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
LP1-M	5/23	8	<0.24^{U}	<0.06^{U}	0.36^{J}	1.9^{J}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
LP1-B	5/23	15.5	0.28^{J}	<0.06^{U}	0.34^{J}	2.7	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
LP2-S	5/22	0.2	<0.24^{U}	<0.06^{U}	0.41^{J}	1.9^{J}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
LP2-M	5/22	4	<0.24^{U}	<0.06^{U}	0.33^{J}	1.8^{J}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
LP2-B	5/22	7	<0.24^{U}	<0.06^{U}	0.3^{J}	1.7^{J}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
LP3-S	5/23	0.2	<0.24^{U}, <0.24^{U}	<0.06^{U}, <0.06^{U}	0.32^{J}, 0.32^{J}	<1.2^{U}, 1.3^{J}	<0.8^{U}, <0.8^{U}	<0.2^{U}, <0.2^{U}	<0.2^{U}, <0.2^{U}	<2^{U}, <2^{U}	<8^{U}, <8^{U}
LP3-M	5/23	13	<0.24^{U}	<0.06^{U}	0.35^{J}	2.4	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
LP3-B	5/23	26	0.29^{J}	<0.06^{U}	0.37^{J}	4.9	<0.8^{U}	<0.2^{U}	<0.2^{U}	2.1^{J}	<8^{U}
LP4-S	5/23	0.2	<0.24^{U}	<0.06^{U}	0.31^{J}	1.2^{J}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
LP4-M	5/23	4	<0.24^{U}	<0.06^{U}	0.36^{J}	<1.2^{U}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
LP4-B	5/23	8	<0.24^{U}	<0.06^{U}	0.39^{J}	2.4	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
Eel River Scott Dam to Van Arsdale Reservoir											
ER167.8	5/15	0.2	<0.24^{U}	<0.06^{U}	0.36^{J}	2.8	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
VA2-S	5/24	0.2	<0.24^{U}	<0.06^{U}	0.3^{J}	2	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
VA2-B	5/24	4	<0.24^{U}	<0.06^{U}	0.34^{J}	2.5	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	15^{J}
Eel River Cape Horn Dam to Middle Fork Eel River											
ER156.7	5/17	0.2	<0.24^{U}, <0.24^{U}	<0.06^{U}, 0.067^{J}	0.34^{J}, 0.32^{J}	1.6^{J}, 1.9^{J}	<0.8^{U}, <0.8^{U}	<0.2^{U}, <0.2^{U}	<0.2^{U}, <0.2^{U}	<2^{U}, <2^{U}	<8^{U}, 11^{J}
ER153.1	5/15	0.2	<0.24^{U}	<0.06^{U}	0.36^{J}	2.2	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
TC0.1	5/15	0.2	<0.24^{U}	<0.06^{U}	<0.28^{U}	<1.2^{U}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
ER152.9	5/15	0.2	<0.24^{U}	<0.06^{U}	0.34^{J}	2.1	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
ER126.1	5/16	0.2	<0.24^{U}	<0.06^{U}	0.32^{J}	1.3^{J}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
OC0.1	5/16	0.2	<0.24^{U}	0.07^{J}	<0.28^{U}	1.6^{J}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
ER125.9	5/16	0.2	<0.24^{U}	<0.06^{U}	0.37^{J}	1.3^{J}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
ER119.4[a]	5/16	0.2	<0.24^{U}	0.068^{J}	0.36^{J}	<1.2^{U}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
MF0.1	5/16	0.2	<0.24^{U}	0.071^{J}	0.57^{J}	1.5^{J}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}

Site ID	Date (2018)	Depth (m)	Lead (ug/L)	Mercury (ug/L)	Molybdenum (ug/L)	Nickel (ug/L)	Selenium (ug/L)	Silver (ug/L)	Thallium (ug/L)	Vanadium (ug/L)	Zinc (ug/L)
ER119.2[a]	5/16	0.2	<0.24[U]	0.066[J]	0.48[J]	1.2[J]	<0.8[U]	<0.2[U]	<0.2[U]	<2[U]	<8[U]
EAST BRANCH RUSSIAN RIVER WATERSHED											
EB-BLPH	5/21	0.2	<0.24[U], <0.24[U]	<0.06[U], <0.06[U]	0.34[J], 0.34[J]	2.8, 2.6	<0.8[U], <0.8[U]	<0.2[U], <0.2[U]	<0.2[U], <0.2[U]	<2[U], <2[U]	<8[U], <8[U]
EB-ABLM	5/21	0.2	<0.24[U]	<0.06[U]	0.37[J]	1.8[J]	<0.8[U]	<0.2[U]	<0.2[U]	<2[U]	<8[U]
QUALITY ASSURANCE AND QUALITY CONTROL											
Field Blank	*5/17*	-	*<0.24[U]*	*0.068[J]*	*<0.28[U]*	*<1.2[U]*	*<0.8[U]*	*<0.2[U]*	*<0.2[U]*	*<2[U]*	*<8[U]*
	5/21	-	*<0.24[U]*	*<0.06[U]*	*<0.28[U]*	*<1.2[U]*	*<0.8[U]*	*<0.2[U]*	*<0.2[U]*	*<2[U]*	*<8[U]*
	5/24	-	*<0.24[U]*	*<0.06[U]*	*<0.28[U]*	*<1.2[U]*	*<0.8[U]*	*<0.2[U]*	*<0.2[U]*	*<2[U]*	*<8[U]*
Equipment Blank	*5/22*	-	*<0.24[U]*	*<0.06[U]*	*<0.28[U]*	*<1.2[U]*	*<0.8[U]*	*<0.2[U]*	*<0.2[U]*	*<2[U]*	*<8[U]*
DL		-	***0.24***	***0.06***	***0.28***	***1.2***	***0.8***	***0.2***	***0.2***	***2***	***8***
RL		-	***1[R -0]***	***0.2[R -0]***	***1[R -0]***	***2[R -0]***	***8[R -0]***	***0.4[R -0]***	***0.4[R -0]***	***4[R -0]***	***20[R -0]***
SEPTEMBER 18–27, 2018 (SEASONAL AND MONTHLY)											
EEL RIVER WATERSHED											
Inflow to Lake Pillsbury											
ER173.7	9/26	0.2	<0.24[U]	<0.06[U]	0.63[J]	2.2	<1.2[U]	<0.2[U]	<0.2[U]	<2[U]	<8[U]
RF3.8	9/26	0.2	<0.24[U]	<0.06[U]	0.61[J]	2.3	<1.2[U]	<0.2[U]	<0.2[U]	<2[U]	<8[U]
Lake Pillsbury											
LP1-S	9/27	0.2	<0.24[U], <0.24[U]	<0.06[U], <0.06[U]	0.60[J], 0.55[J]	1.5[J], 1.6[J]	<1.2[U], <1.2[U]	<0.2[U], <0.2[U]	<0.2[U], <0.2[U]	<2[U], <2[U]	<8[U], <8[U]
LP1-M	9/27	5.5	<0.24[U]	<0.06[U]	0.31[J]	<1.2[U]	<1.2[U]	<0.2[U]	<0.2[U]	<2[U]	<8[U]
LP1-B	9/27	11	<0.24[U]	<0.06[U]	0.60[J]	2.3	<1.2[U]	<0.2[U]	<0.2[U]	<2[U]	<8[U]
LP2-S	9/25	0.2	<0.24[U]	<0.06[U]	0.55[J]	1.3[J]	<1.2[U]	<0.2[U]	<0.2[U]	<2[U]	<8[U]
LP2-M	9/25	3	<0.24[U]	<0.06[U]	0.58[J]	1.5[J]	1.2[J]	<0.2[U]	<0.2[U]	<2[U]	<8[U]
LP2-B	9/25	5.5	<0.24[U]	<0.06[U]	0.54[J]	1.8[J]	1.3[J]	<0.2[U]	<0.2[U]	<2[U]	<8[U]
LP3-S	9/25	0.2	<0.24[U]	<0.06[U]	0.59[J]	1.5[J]	<1.2[U]	<0.2[U]	<0.2[U]	<2[U]	<8[U]
LP3-M	9/25	11	<0.24[U]	<0.06[U]	0.58[J]	1.6[J]	<1.2[U]	<0.2[U]	<0.2[U]	<2[U]	290
LP3-B	9/25	21.6	<0.24[U]	<0.06[U]	0.53[J]	2.4	<1.2[U]	<0.2[U]	<0.2[U]	<2[U]	<8[U]
LP4-S	9/26	0.2	<0.24[U]	<0.06[U]	0.57[J]	2.3	<1.2[U]	<0.2[U]	<0.2[U]	<2[U]	<8[U]
LP4-M	9/26	2	<0.24[U]	<0.06[U]	0.52[J]	2.2	<1.2[U]	<0.2[U]	<0.2[U]	<2[U]	13[J]
LP4-B	9/26	3.7	<0.24[U]	<0.06[U]	0.53[J]	3.1	<1.2[U]	<0.2[U]	<0.2[U]	<2[U]	<8[U]
Eel River Scott Dam to Van Arsdale Reservoir											
ER167.8	9/27	0.2	<0.24[U], <0.24[U]	<0.06[U], <0.06[U]	0.71[J], 0.52[J]	2.1, 2.2	<1.2[U], <1.2[U]	<0.2[U], <0.2[U]	<0.2[U], <0.2[U]	<2[U], <2[U]	<8[U], <8[U]

Site ID	Date (2018)	Depth (m)	Lead (ug/L)	Mercury (ug/L)	Molybdenum (ug/L)	Nickel (ug/L)	Selenium (ug/L)	Silver (ug/L)	Thallium (ug/L)	Vanadium (ug/L)	Zinc (ug/L)
VA2-S	9/20	0.2	<0.24^{U}	<0.06^{U}	0.58^{J}	1.9^{J}	<1.2^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
VA2-B	9/20	4.2	<0.24^{U}	<0.06^{U}	0.55^{J}	2.1^{E}	<1.2^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
Eel River Cape Horn Dam to Middle Fork Eel River											
ER156.7	9/20	0.2	<0.24^{U}	<0.06^{U}	0.57^{J}	2.0	<1.2^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
ER153.1	9/18	0.2	<0.24^{U}	<0.06^{U}	0.61^{J}	<1.2^{U}	<1.2^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
TC0.1	9/18	0.2	<0.24^{U}	<0.06^{U}	0.41^{J}	<1.2^{U}	<1.2^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
ER152.9	9/18	0.2	<0.24^{U}, <0.24^{U}	<0.06^{U}, <0.06^{U}	0.56^{J}, 0.55^{J}	<1.2^{U}, <1.2^{U}	<1.2^{U}, <1.2^{U}	<0.2^{U}, <0.2^{U}	<0.2^{U}, <0.2^{U}	<2^{U}, <2^{U}	<8^{U}, <8^{U}
ER126.1	9/19	0.2	<0.24^{U}	<0.06^{U}	0.84^{J}	<1.2^{U}	<1.2^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
OC0.1	9/19	0.2	<0.24^{U}	<0.06^{U}	1.1	<1.2^{U}	<1.2^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
ER125.9	9/19	0.2	<0.24^{U}	<0.06^{U}	0.85^{J}	<1.2^{U}	<1.2^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
ER119.4[a]	9/19	0.2	<0.24^{U}	<0.06^{U}	0.91^{J}	<1.2^{U}	<1.2^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
MF0.1	9/19	0.2	<0.24^{U}	<0.06^{U}	3.3	2.3	<1.2^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
ER119.2[a]	9/19	0.2	<0.24^{U}	<0.06^{U}	1.4	<1.2^{U}	<1.2^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
EAST BRANCH RUSSIAN RIVER WATERSHED											
EB-BLPH	9/20	0.2	<0.24^{U}	<0.06^{U}	0.53^{J}	2.9	<1.2^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
EB-ABLM	9/20	0.2	<0.24^{U}	<0.06^{U}	0.53^{J}	2.4	<1.2^{U}	<0.2^{U}	<0.2^{U}	2.0^{J}	<8^{U}
QUALITY ASSURANCE AND QUALITY CONTROL											
Field Blanks	*9/18*	-	*<0.24^{U}*	*<0.06^{U}*	*<0.28^{U}*	*<1.2^{U}*	*<1.2^{U}*	*<0.2^{U}*	*<0.2^{U}*	*<2^{U}*	*<8^{U}*
	9/25	-	*<0.24^{U}*	*<0.06^{U}*	*<0.28^{U}*	*<1.2^{U}*	*<1.2^{U}*	*<0.2^{U}*	*<0.2^{U}*	*<2^{U}*	*<8^{U}*
	9/26	-	*<0.24^{U}*	*<0.06^{U}*	*<0.28^{U}*	*<1.2^{U}*	*<1.2^{U}*	*<0.2^{U}*	*<0.2^{U}*	*<2^{U}*	*<8^{U}*
Equipment Blank	*9/20*	-	*<0.24^{U}*	*<0.06^{U}*	*<0.28^{U}*	*4.9^{E}*	*<1.2^{U}*	*<0.2^{U}*	*<0.2^{U}*	*<2^{U}*	*<8^{U}*
	9/27	-	*0.69^{J}*	*<0.06^{U}*	*<0.28^{U}*	*<1.2^{U}*	*<1.2^{U}*	*<0.2^{U}*	*<0.2^{U}*	*<2^{U}*	*<8^{U}*
DL		-	***0.24***	***0.06***	***0.28***	***1.2***	***1.2***	***0.2***	***0.2***	***2***	***8***
RL		-	***1^{R-01}***	***0.2^{R-01}***	***1^{R-01}***	***2^{R-01}***	***8^{R-01}***	***0.4^{R-01}***	***0.4^{R-01}***	***4^{R-01}***	***20^{R-01}***

m=meters, ug/L=microgram per liter, S=surface, M=middle, B=bottom, DL= detection limit; RL=reporting limit, - = no data

Notes:

[a] AQ-3 Study Plan and/or laboratory results reported with the following site codes: ER119.4=ER119.1 and ER119.2=ER118.9.

E Quantifiable equipment blank value

J Detected but below the reporting limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).

U Analyte included in analysis, but not detected at or above minimum DL.

R-01 The reporting limit for this analyte has been raised to account for matrix interference.

Table AQ3-10a. Seasonal Dissolved Aluminum and CAM 17 (Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper) Results.

Site ID	Date	Depth (m)	Dissolved								
			Aluminum (ug/L)	Antimony (ug/L)	Arsenic (ug/L)	Barium (ug/L)	Beryllium (ug/L)	Cadmium (ug/L)	Chromium (ug/L)	Cobalt (ug/L)	Copper (ug/L)
MAY 15–24, 2018 (SEASONAL)											
EEL RIVER WATERSHED											
Inflow to Lake Pillsbury											
ER173.7	5/24	0.2	<20[U]	<0.8[U]	<0.8[U]	60	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
RF3.8	5/23	0.2	<20[U]	<0.8[U]	2.8	87	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
Lake Pillsbury											
LP1-S	5/23	0.2	<20[U]	<0.8[U]	<0.8[U]	54	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
LP1-M	5/23	8	<20[U]	<0.8[U]	1.2[J]	52	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
LP1-B	5/23	15.5	35[J]	<0.8[U]	<0.8[U]	52	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	1.8[J]
LP2-S	5/22	0.2	<20[U]	<0.8[U]	<0.8[U]	51	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
LP2-M	5/22	4	<20[U]	<0.8[U]	<0.8[U]	52	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
LP2-B	5/22	7	<20[U]	<0.8[U]	<0.8[U]	54	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
LP3-S	5/23	0.2	<20[U], <20[U]	<0.8[U], <0.8[U]	<0.8[U], <0.8[U]	51, 52	<0.2[U], <0.2[U]	<0.24[U], <0.24[U]	<1.6[U], <1.6[U]	<0.12[U], <0.12[U]	<1.6[U], <1.6[U]
LP3-M	5/23	13	26[J]	<0.8[U]	<0.8[U]	55	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
LP3-B	5/23	26	39[J]	<0.8[U]	<0.8[U]	54	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	1.6[J]
LP4-S	5/23	0.2	<20[U]	<0.8[U]	1.1[J]	55	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	1.9[J]
LP4-M	5/23	4	<20[U]	<0.8[U]	<0.8[U]	54	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
LP4-B	5/23	8	<20[U]	<0.8[U]	2.4	67	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
Eel River Scott Dam to Van Arsdale Reservoir											
ER167.8	5/15	0.2	22[J]	<0.8[U]	<0.8[U]	52	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
VA2-S	5/24	0.2	<20[U]	<0.8[U]	<0.8[U]	55	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
VA2-B	5/24	4	<20[U]	<0.8[U]	<0.8[U]	54	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	3.1
Eel River Cape Horn Dam to Middle Fork Eel River											
ER156.7	5/17	0.2	20[J], <20[U]	<0.8[U], <0.8[U]	<0.8[U], <0.8[U]	56, 54	<0.2[U], <0.2[U]	<0.24[U], <0.24[U]	<1.6[U], <1.6[U]	0.27[J], <0.12[U]	<1.6[U], <1.6[U]
ER153.1	5/15	0.2	24[J]	<0.8[U]	<0.8[U]	55	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
TC0.1	5/15	0.2	<20[U]	<0.8[U]	<0.8[U]	59	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
ER152.9	5/15	0.2	140[R-01]	<0.8[U]	<0.8[U]	56	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
ER126.1	5/16	0.2	<20[U]	<0.8[U]	<0.8[U]	67	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
OC0.1	5/16	0.2	<20[U]	<0.8[U]	<0.8[U]	57	<0.2[U]	<0.24[U]	<1.6[U]	0.26[J]	<1.6[U]
ER125.9	5/16	0.2	<20[U]	<0.8[U]	<0.8[U]	67	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
ER119.4[a]	5/16	0.2	<20[U]	<0.8[U]	<0.8[U]	64	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	1.8[J]
MF0.1	5/16	0.2	<20[U]	<0.8[U]	<0.8[U]	65	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
ER119.2[a]	5/16	0.2	<20[U]	<0.8[U]	<0.8[U]	65	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
EAST BRANCH RUSSIAN RIVER WATERSHED											

Table AQ3-10a. Seasonal Dissolved Aluminum and CAM 17 (Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper) Results.

Site ID	Date	Depth (m)	Dissolved								
			Aluminum (ug/L)	Antimony (ug/L)	Arsenic (ug/L)	Barium (ug/L)	Beryllium (ug/L)	Cadmium (ug/L)	Chromium (ug/L)	Cobalt (ug/L)	Copper (ug/L)
EB-BLPH	5/21	0.2	<20[U], <20[U]	<0.8[U], <0.8[U]	<0.8[U], <0.8[U]	52, 52	<0.2[U], <0.2[U]	<0.24[U], <0.24[U]	<1.6[U], <1.6[U]	<0.12[U], <0.12[U]	<1.6[U], <1.6[U]
EB-ABLM	5/21	0.2	<20[U]	<0.8[U]	<0.8[U]	59	<0.2[U]	<0.24[U]	<1.6[U]	<0.12[U]	<1.6[U]
QUALITY ASSURANCE AND QUALITY CONTROL											
Field Blanks	*5/17*	-	*<20[U]*	<0.8[U]	<0.8[U]	*<0.8[U]*	*<0.2[U]*	*<0.24[U]*	*<1.6[U]*	*<0.12[U]*	*<1.6[U]*
	5/21	-	*<20[U]*	<0.8[U]	<0.8[U]	*<0.8[U]*	*<0.2[U]*	*<0.24[U]*	*<1.6[U]*	*<0.12[U]*	*<1.6[U]*
	5/24	-	<20[U]	<0.8[U]	<0.8[U]	*<0.8[U]*	*<0.2[U]*	*<0.24[U]*	*<1.6[U]*	*<0.12[U]*	*<1.6[U]*
Equipment Blank	*5/22*	-	*<20[U]*	<0.8[U]	<0.8[U]	*<0.8[U]*	*<0.2[U]*	*<0.24[U]*	*<1.6[U]*	*<0.12[U]*	*<1.6[U]*
DL		-	***20***	***0.8***	***0.8***	***0.8***	***0.2***	***0.24***	***1.6***	***0.12***	***1.6***
RL		-	***40***	***2[R -01]***	***2[R -01]***	***2***	***0.4[R -01]***	***0.4[R -01]***	***2[R -01]***	***0.4[R -01]***	***2[R -01]***
SEPTEMBER 18–27, 2018 (SEASONAL)											
EEL RIVER WATERSHED											
Inflow to Lake Pillsbury											
ER173.7	9/26	0.2	<20[U]	<0.8[U]	0.88[J]	100	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
RF3.8	9/26	0.2	<20[U]	<0.8[U]	1.7[J]	110	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
Lake Pillsbury											
LP1-S	9/27	0.2	<20[U], <20[U]	<0.8[U], <0.8[U]	3.2[D], 3.7[D]	66, 65	<0.2[U], <0.2[U]	<0.24[U], <0.24[U]	<2.0[U], <2.0[U]	<0.4[U], <0.4[U]	1.7[J], <1.6[U]
LP1-M	9/27	5.5	*<20[U]*	<0.8[U]	3.5[D]	68[D]	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
LP1-B	9/27	11	<20[U]	<0.8[U]	3.2[D]	65[D]	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
LP2-S	9/25	0.2	<20[U]	<0.8[U]	2.7	69	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
LP2-M	9/25	3	<20[U]	<0.8[U]	2.6	68	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
LP2-B	9/25	5.5	20[J]	<0.8[U]	3.2	67	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
LP3-S	9/25	0.2	<20[U]	<0.8[U]	3.0	68	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
LP3-M	9/25	11	<20[U]	<0.8[U]	3.2	66	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
LP3-B	9/25	21.6	27[J]	<0.8[U]	6.7	43	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
LP4-S	9/26	0.2	<20[U]	<0.8[U]	3.3[R−01]	65	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
LP4-M	9/26	2	<20[U]	<0.8[U]	3.2[R−01]	66	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	1.9[J]
LP4-B	9/26	3.7	<20[U]	<0.8[U]	3.6	70	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
Eel River Scott Dam to Van Arsdale Reservoir											
ER167.8	9/27	0.2	<20[U], <20[U]	<0.8[U], <0.8[U]	4.6[D], 3.9[D]	58[D], 58[D]	<0.2[U], <0.2[U]	<0.24[U], <0.24[U]	<2.0[U], <2.0[U]	<0.4[U], <0.4[U]	<1.6[U], <1.6[U]
VA2-S	9/20	0.2	<20[U]	<0.8[U]	4.2	64	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
VA2-B	9/20	4.2	<20[U]	<0.8[U]	3.8	63	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U,E]
Eel River Cape Horn Dam to Middle Fork Eel River											
ER156.7	9/20	0.2	<20[U]	<0.8[U]	2.8	38	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]

Table AQ3-10a. Seasonal Dissolved Aluminum and CAM 17 (Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper) Results.

Site ID	Date	Depth (m)	Dissolved								
			Aluminum (ug/L)	Antimony (ug/L)	Arsenic (ug/L)	Barium (ug/L)	Beryllium (ug/L)	Cadmium (ug/L)	Chromium (ug/L)	Cobalt (ug/L)	Copper (ug/L)
ER153.1	9/18	0.2	<20[U]	<0.8[U]	2.3	60	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
TC0.1	9/18	0.2	*<20[U]*	<0.8[U]	<0.8[U]	93	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
ER152.9	9/18	0.2	<20[U], 23[J]	<0.8[U], <0.8[U]	2.3, 1.9[J]	65, 63	<0.2[U], <0.2[U]	<0.24[U], <0.24[U]	<2.0[U], <2.0[U]	<0.4[U], <0.4[U]	<1.6[U], <1.6[U]
ER126.1	9/19	0.2	<20[U]	<0.8[U]	<0.8[U]	86	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
OC0.1	9/19	0.2	<20[U]	<0.8[U]	<0.8[U]	72	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	1.8[J]
ER125.9	9/19	0.2	*<20[U]*	<0.8[U]	1.2[J]	85	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
ER119.4[a]	9/19	0.2	*<20[U]*	<0.8[U]	1.1[J]	85	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
MF0.1	9/19	0.2	<20[U]	<0.8[U]	0.93[J]	97	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
ER119.2[a]	9/19	0.2	*<20[U]*	<0.8[U]	<0.8[U]	91	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
EAST BRANCH RUSSIAN RIVER WATERSHED											
EB-BLPH	9/20	0.2	<20[U]	<0.8[U]	3.1	60	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
EB-ABLM	9/20	0.2	<20[U]	<0.8[U]	3.3	62	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
QUALITY ASSURANCE AND QUALITY CONTROL											
Field Blanks	*9/18*	-	<20[U]	<0.8[U]	<0.8[U]	<0.8[U]	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
	9/25	-	*<20[U]*	<0.8[U]	<0.8[U]	<0.8[U]	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
	9/26	-	*<20[U]*	<0.8[U]	<0.8[U]	<0.8[U]	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
Equipment Blank	*9/20*	-	<20[U]	<0.8[U]	<0.8[U]	<0.8[U]	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	4.5[E]
	9/27	-	<20[U]	<0.8[U]	<0.8[U]	<0.8[U]	<0.2[U]	<0.24[U]	<2.0[U]	<0.4[U]	<1.6[U]
DL		-	***20***	***0.8***	***0.8***	***0.8***	***0.2***	***0.24***	***2.0***	***0.4***	***1.6***
RL		-	***40[R-01]***	***2[R-01]***	***2[R-01]***	***2***	***0.4[R-01]***	***0.4[R-01]***	***2[R-01]***	***0.4[R-01]***	***2[R-01]***

m=meters, ug/L=microgram per liter, S=surface, M=middle, B=bottom, DL= detection limit; RL=reporting limit, - = no data

Notes:

[a] AQ-3 Study Plan and/or laboratory results reported with the following site codes: ER119.4=ER119.1 and ER119.2=ER118.9.

[E] Quantifiable equipment blank value

[D] Variation of quantifiable replicate samples greater than or equal to 10%.

[J] Detected but below the reporting limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).

[U] Analyte included in analysis, but not detected at or above minimum DL.

[R-01] The reporting limit for this analyte has been raised to account for matrix interference.

Table AQ3-10b. Seasonal Dissolved CAM 17 (Lead, Mercury, Molybdenum, Nickle, Selenium, Silver, Thallium, Vanadium, Zinc) Results.

Site ID	Date (2018)	Depth (m)	Dissolved								
			Lead (ug/L)	Mercury (ug/L)	Molybdenum (ug/L)	Nickel (ug/L)	Selenium (ug/L)	Silver (ug/L)	Thallium (ug/L)	Vanadium (ug/L)	Zinc (ug/L)
MAY 15–24, 2018 (SEASONAL)											
EEL RIVER WATERSHED											
Inflow to Lake Pillsbury											
ER173.7	5/24	0.2	<0.24^{U}	<0.06^{U}	0.44^{J}	<1.2^{U}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
RF3.8	5/23	0.2	<0.24^{U}	<0.06^{U}	0.45^{J}	1.7^{J}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
Lake Pillsbury											
LP1-S	5/23	0.2	<0.24^{U}	<0.06^{U}	0.32^{J}	1.4^{J}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
LP1-M	5/23	8	<0.24^{U}	<0.06^{U}	0.34^{J}	1.8^{J}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
LP1-B	5/23	15.5	<0.24^{U}	<0.06^{U}	0.33^{J}	2	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
LP2-S	5/22	0.2	<0.24^{U}	<0.06^{U}	0.32^{J}	1.8^{J}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
LP2-M	5/22	4	<0.24^{U}	0.066^{J}	0.29^{J}	1.7^{J}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
LP2-B	5/22	7	<0.24^{U}	0.067^{J}	0.32^{J}	1.8^{J}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
LP3-S	5/23	0.2	<0.24^{U}, <0.24^{U}	<0.06^{U}, <0.06^{U}	0.30^{J}, 0.29^{J}	1.7^{J}, 1.6^{J}	<0.8^{U}, <0.8^{U}	<0.2^{U}, <0.2^{U}	<0.2^{U}, <0.2^{U}	<2^{U}, <2^{U}	<8^{U}, <8^{U}
ER156.7	5/17	0.2	<0.24^{U}, <0.24^{U}	0.067^{J}, 0.067^{J}	0.38^{J}, 0.33^{J}	1.2^{J}, <1.2^{U}	<0.8^{U}, <0.8^{U}	<0.2^{U}, <0.2^{U}	<0.2^{U}, <0.2^{U}	<2^{U}, <2^{U}	<8^{U}, <8^{U}
ER153.1	5/15	0.2	<0.24^{U}	0.065^{J}	0.38^{J}	1.8^{J}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
TC0.1	5/15	0.2	<0.24^{U}	0.063^{J}	<0.28^{U}	<1.2^{U}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
ER152.9	5/15	0.2	<0.24^{U}	0.065^{J}	0.35^{J}	1.3^{J}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
ER126.1	5/16	0.2	<0.24^{U}	0.067^{J}	0.4^{J}	<1.2^{U}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
OC0.1	5/16	0.2	<0.24^{U}	0.069^{J}	<0.28^{U}	<1.2^{U}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
ER125.9	5/16	0.2	<0.24^{U}	0.066^{J}	0.37^{J}	<1.2^{U}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
ER119.4[a]	5/16	0.2	<0.24^{U}	0.063^{J}	0.38^{J}	<1.2^{U}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
MF0.1	5/16	0.2	<0.24^{U}	0.064^{J}	0.58^{J}	<1.2^{U}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
ER119.2 [a]	5/16	0.2	<0.24^{U}	0.064^{J}	0.48^{J}	<1.2^{U}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
EAST BRANCH RUSSIAN RIVER WATERSHED											
EB-BLPH	5/21	0.2	<0.24^{U}, <0.24^{U}	0.067^{J}, 0.066^{J}	0.34^{J}, 0.32^{J}	1.7^{J}, <1.2^{U}	<0.8^{U}, <0.8^{U}	<0.2^{U}, <0.2^{U}	<0.2^{U}, <0.2^{U}	<2^{U}, <2^{U}	<8^{U}, <8^{U}
EB-ABLM	5/21	0.2	<0.24^{U}	0.067^{J}	0.6^{J}	1.4^{J}	<0.8^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
QUALITY ASSURANCE AND QUALITY CONTROL											
Field Blank	*5/17*	-	*<0.24^{U}*	*0.065^{J}*	*<0.28^{U}*	*<1.2^{U}*	*<0.8^{U}*	*<0.2^{U}*	*<0.2^{U}*	*<2^{U}*	*<8^{U}*
	5/21	-	*<0.24^{U}*	*0.065^{J}*	*<0.28^{U}*	*<1.2^{U}*	*<0.8^{U}*	*<0.2^{U}*	*<0.2^{U}*	*<2^{U}*	*<8^{U}*
	5/24	-	*<0.24^{U}*	*<0.06^{U}*	*<0.28^{U}*	*<1.2^{U}*	*<0.8^{U}*	*<0.2^{U}*	*<0.2^{U}*	*<2^{U}*	*<8^{U}*
Equipment Blank	*5/22*	-	*<0.24^{U}*	*0.065^{J}*	*<0.28^{U}*	*<1.2^{U}*	*<0.8^{U}*	*<0.2^{U}*	*<0.2^{U}*	*<2^{U}*	*<8^{U}*
DL		-	***0.24***	***0.06***	***0.28***	***1.2***	***0.8***	***0.2***	***0.2***	***2***	***8***

Table AQ3-10b. Seasonal Dissolved CAM 17 (Lead, Mercury, Molybdenum, Nickle, Selenium, Silver, Thallium, Vanadium, Zinc) Results.

Site ID *RL*	Date (2018)	Depth (m) -	Dissolved Lead (ug/L) *1 R-01*	Mercury (ug/L) *0.2*	Molybdenum (ug/L) *1 R-01*	Nickel (ug/L) *2 R-01*	Selenium (ug/L) *8 R-01*	Silver (ug/L) *0.4 R-01*	Thallium (ug/L) *0.4 R-01*	Vanadium (ug/L) *4 R-01*	Zinc (ug/L) *20 R-01*
SEPTEMBER 18–27, 2018 (SEASONAL)											
EEL RIVER WATERSHED											
Inflow to Lake Pillsbury											
ER173.7	9/26	0.2	<0.24U	<0.06U	0.53J	1.8J	<1.2U	<0.2U	<0.2U	<2U	<8U
RF3.8	9/26	0.2	<0.24U	<0.06U	0.56J	1.8J	<1.2U	<0.2U	<0.2U	<2U	<8U
Lake Pillsbury											
LP1-S	9/27	0.2	<0.24U, <0.24U	<0.06U, <0.06U	0.54J, 0.52J	1.6J, 1.6J	<1.2U, <1.2U	<0.2U, <0.2U	<0.2U, <0.2U	<2U, <2U	<8U, <8U
LP1-M	9/27	5.5	<0.24U	<0.06U	0.48J	1.2J	<1.2U	<0.2U	<0.2U	<2U	<8U
LP1-B	9/27	11	<0.24U	<0.06U	0.67J	1.6J	<1.2U	<0.2U	<0.2U	<2U	<8U
LP2-S	9/25	0.2	<0.24U	<0.06U	0.57J	<1.2U	<1.2U	<0.2U	<0.2U	<2U	<8U
LP2-M	9/25	3	<0.24U	<0.06U	0.63J	1.3J	<1.2U	<0.2U	<0.2U	<2U	8.2J
LP2-B	9/25	5.5	<0.24U	<0.06U	0.57J	1.6J	<1.2U	<0.2U	<0.2U	<2U	<8U
LP3-S	9/25	0.2	<0.24U	<0.06U	0.61J	1.3J	<1.2U	<0.2U	<0.2U	<2U	17J
LP3-M	9/25	11	<0.24U	<0.06U	0.71J	1.4J	<1.2U	<0.2U	<0.2U	<2U	11J
LP3-B	9/25	21.6	<0.24U	<0.06U	0.75J	2.2	<1.2U	<0.2U	<0.2U	<2U	<8U
LP4-S	9/26	0.2	<0.24U	<0.06U	0.49J	1.6J	<1.2U	<0.2U	<0.2U	<2U	<8U
LP4-M	9/26	2	<0.24U	<0.06U	0.54J	1.8J	<1.2U	<0.2U	<0.2U	<2U	<8U
LP4-B	9/26	3.7	<0.24U	<0.06U	0.51J	1.8J	<1.2U	<0.2U	<0.2U	<2U	<8U
Eel River Scott Dam to Van Arsdale Reservoir											
ER167.8	9/27	0.2	<0.24U, <0.24U	<0.06U, <0.06U	0.51J, 0.51J	1.7J, 2.0	<1.2U, <1.2U	<0.2U, <0.2U	<0.2U, <0.2U	<2U, <2U	<8U, <8U
VA2-S	9/20	0.2	<0.24U	<0.06U	0.62J	1.8J	<1.2U	<0.2U	<0.2U	<2U	<8U
VA2-B	9/20	4.2	<0.24U	<0.06U	0.59J	1.7J	<1.2U	<0.2U	<0.2U	<2U	<8U
Eel River Cape Horn Dam to Middle Fork Eel River											
ER156.7	9/20	0.2	<0.24U	<0.06U	0.37J	<1.2U	<1.2U	<0.2U	<0.2U	<2U	<8U
ER153.1	9/18	0.2	<0.24U	<0.06U	0.57J	<1.2U	<1.2U	<0.2U	<0.2U	<2U	<8U
TC0.1	9/18	0.2	<0.24U	<0.06U	0.37J	<1.2U	<1.2U	<0.2U	<0.2U	<2U	<8U
ER152.9	9/18	0.2	<0.24U, <0.24U	<0.06U, <0.06U	0.59J, 0.57J	<1.2U, <1.2U	<1.2U, <1.2U	<0.2U, <0.2U	<0.2U, <0.2U	<2U, <2U	<8U, <8U
ER126.1	9/19	0.2	<0.24U	<0.06U	0.84J	<1.2U	<1.2U	<0.2U	<0.2U	<2U	<8U
OC0.1	9/19	0.2	<0.24U	<0.06U	0.97J	1.4J	<1.2U	<0.2U	<0.2U	<2U	<8U
ER125.9	9/19	0.2	<0.24U	<0.06U	0.93J	<1.2U	<1.2U	<0.2U	<0.2U	<2U	<8U
ER119.4[a]	9/19	0.2	<0.24U	<0.06U	0.93J	<1.2U	<1.2U	<0.2U	<0.2U	<2U	<8U
MF0.1	9/19	0.2	<0.24U	<0.06U	2.3	1.4J	<1.2U	<0.2U	<0.2U	<2U	<8U
ER119.2[a]	9/19	0.2	<0.24U	<0.06U	1.5	<1.2U	<1.2U	<0.2U	<0.2U	<2U	<8U

Table AQ3-10b. Seasonal Dissolved CAM 17 (Lead, Mercury, Molybdenum, Nickle, Selenium, Silver, Thallium, Vanadium, Zinc) Results.

Site ID	Date (2018)	Depth (m)	Dissolved								
			Lead (ug/L)	Mercury (ug/L)	Molybdenum (ug/L)	Nickel (ug/L)	Selenium (ug/L)	Silver (ug/L)	Thallium (ug/L)	Vanadium (ug/L)	Zinc (ug/L)
EAST BRANCH RUSSIAN RIVER WATERSHED											
EB-BLPH	9/20	0.2	<0.24^{U}	<0.06^{U}	0.59^{J}	1.6^{J}	<1.2^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
EB-ABLM	9/20	0.2	<0.24^{U}	<0.06^{U}	0.61^{J}	1.6^{J}	<1.2^{U}	<0.2^{U}	<0.2^{U}	<2^{U}	<8^{U}
QUALITY ASSURANCE AND QUALITY CONTROL											
Field Blank	*9/18*	-	*<0.24^{U}*	*<0.06^{U}*	*<0.28^{U}*	*<1.2^{U}*	*<1.2^{U}*	*<0.2^{U}*	*<0.2^{U}*	*<2^{U}*	*<8^{U}*
	9/25	-	*<0.24^{U}*	*<0.06^{U}*	*<0.28^{U}*	*<1.2^{U}*	*<1.2^{U}*	*<0.2^{U}*	*<0.2^{U}*	*<2^{U}*	*11^{J}*
	9/26	-	*<0.24^{U}*	*<0.06^{U}*	*<0.28^{U}*	*<1.2^{U}*	*<1.2^{U}*	*<0.2^{U}*	*<0.2^{U}*	*<2^{U}*	*<8^{U}*
Equipment Blank	*9/20*	-	*<0.24^{U}*	*<0.06^{U}*	*<0.28^{U}*	*<1.2^{U}*	*<1.2^{U}*	*<0.2^{U}*	*<0.2^{U}*	*<2^{U}*	*<8^{U}*
	9/27	-	*<0.24^{U}*	*<0.06^{U}*	*<0.28^{U}*	*<1.2^{U}*	*<1.2^{U}*	*<0.2^{U}*	*<0.2^{U}*	*<2^{U}*	*<8^{U}*
DL		-	***0.24***	***0.06***	***0.28***	***1.2***	***1.2***	***0.2***	***0.2***	***2***	***8***
RL		-	***1^{R-01}***	***0.2***	***1^{R-01}***	***2^{R-01}***	***8^{R-01}***	***0.4^{R-01}***	***0.4^{R-01}***	***4^{R-01}***	***20^{R-01}***

m=meters, ug/L=microgram per liter, S=surface, M=middle, B=bottom, DL= detection limit; RL=reporting limit, - = no data

Notes:

[a] AQ-3 Study Plan and/or laboratory results reported with the following site codes: ER119.4=ER119.1 and ER119.2=ER118.9.

[J] Detected but below the reporting limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).

[U] Analyte included in analysis, but not detected at or above mimimum DL.

[R-01] The reporting limit for this analyte has been raised to account for matrix interference.

Table AQ3-11a. Seasonal Hydrocarbon Results.

Site ID	Date (2018)	Depth (m)	Benzene (ug/L)	Methyl tert-butyl ether (ug/L)	Oil & Grease (HeM) (ug/L)	TPH as diesel (ug/L)	TPH as Gasoline (ug/L)	TPH as Motor Oil (ug/L)	Toluene (ug/L)	Toluene-d8 (ug/L)	Tert-amyl methyl ether (ug/L)
MAY 15–24, 2018 (SEASONAL)											
EEL RIVER WATERSHED											
Inflow to Lake Pillsbury											
ER173.7	5/24	0.2	<0.3[U]	<0.5[U]	1.9[J]	<50[U]	<50[U]	<100[U]	<0.3[U,BL]	24.7[BL]	<0.4[U]
RF3.8	5/23	0.2	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.8[BL]	<0.4[U]
Lake Pillsbury											
LP1-S	5/23	0.2	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	24[BL]	<0.4[U]
LP1-M	5/23	8	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.4[E]	<0.4[U]
LP1-B	5/23	15.5	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.6[E]	<0.4[U]
LP2-S	5/22	0.2	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	24[BL]	<0.4[U]
LP2-M	5/22	4	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U,E]	25[E]	<0.4[U]
LP2-B	5/22	7	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U,E]	24[E]	<0.4[U]
LP3-S	5/23	0.2	<0.3[U], <0.3[U]	<0.5[U], <0.5[U]	3[J], <1.4[U]	<50[U], <50[U]	<50[U], <50[U]	<100[U], <100[U]	<0.3[U], <0.3[U]	23.9[BL], 24.5[BL]	<0.4[U], <0.4[U]
LP3-M	5/23	13	<0.3[U]	<0.5[U]	2.1[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.7[E]	<0.4[U]
LP3-B	5/23	26	<0.3[U]	<0.5[U]	2[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.5[E]	<0.4[U]
LP4-S	5/23	0.2	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.4[BL]	<0.4[U]
LP4-M	5/23	4	<0.3[U]	<0.5[U]	1.6[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.8[E]	<0.4[U]
LP4-B	5/23	8	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.8[E]	<0.4[U]
Eel River Scott Dam to Van Arsdale Reservoir											
ER167.8	5/15[a]	0.2	<0.3[U]	<0.5[U]	4[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24[BL]	<0.4[U]
VA2-S	5/24	0.2	<0.3[U]	<0.5[U]	2[J]	<50[U]	<50[U]	<100[U]	<0.3[U,BL]	24.1[E]	<0.4[U]
VA2-B	5/24	4	<0.3[U]	<0.5[U]	1.8[J]	<50[U]	<50[U]	<100[U]	<0.3[U,BL]	24.1[E]	<0.4[U]
Eel River Cape Horn Dam to Middle Fork Eel River											
ER156.7	5/17	0.2	<0.3[U], <0.3[U]	<0.5[U], <0.5[U]	1.5[J], <1.4[U]	<50[U], <50[U]	<50[U], <50[U]	<100[U], <100[U]	<0.3[U], <0.3[U]	25[BL], 24[BL]	<0.4[U], <0.4[U]
ER153.1	5/15[a]	0.2	<0.3[U]	<0.5[U]	3.9[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24[BL]	<0.4[U]
TC0.1	5/15[a]	0.2	<0.3[U]	<0.5[U]	4.4[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	23[BL]	<0.4[U]
ER152.9	5/15[a]	0.2	<0.3[U]	<0.5[U]	1.6[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	25[BL]	<0.4[U]
ER126.1	5/16	0.2	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	24[BL]	<0.4[U]
OC0.1	5/16	0.2	<0.3[U]	<0.5[U]	2.1[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24[BL]	<0.4[U]
ER125.9	5/16	0.2	<0.3[U]	<0.5[U]	1.7[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24[BL]	<0.4[U]
ER119.4[b]	5/16	0.2	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	25[BL]	<0.4[U]
MF0.1	5/16	0.2	<0.3[U]	<0.5[U]	2.1[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24[BL]	<0.4[U]
ER119.2[b]	5/16	0.2	<0.3[U]	<0.5[U]	2.7[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	25[BL]	<0.4[U]

Table AQ3-11a. Seasonal Hydrocarbon Results.

Site ID	Date (2018)	Depth (m)	Benzene (ug/L)	Methyl tert-butyl ether (ug/L)	Oil & Grease (HeM) (ug/L)	TPH as diesel (ug/L)	TPH as Gasoline (ug/L)	TPH as Motor Oil (ug/L)	Toluene (ug/L)	Toluene-d8 (ug/L)	Tert-amyl methyl ether (ug/L)
EAST BRANCH RUSSIAN RIVER WATERSHED											
EB-BLPH	5/21	0.2	<0.3[U], <0.3[U]	<0.5[U], <0.5[U]	1.6[J], 1.4[U]	<50[U], <50[U]	<50[U], <50[U]	<100[U], <100[U]	<0.3[U,BL] <0.3[U,BL]	24[BL], 23[BL]	<0.4[U], <0.4[U]
EB-ABLM	5/21	0.2	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U,BL]	24[BL]	<0.4[U]
QUALITY ASSURANCE AND QUALITY CONTROL											
Field Blanks	*5/17*	-	*<0.3[U]*	*<0.5[U]*	*<1.4[U]*	*<50[U]*	*<50[U]*	*<100[U]*	*<0.3[U]*	*25[BL]*	*<0.4[U]*
	5/21	-	*<0.3[U]*	*<0.5[U]*	*<1.4[U]*	*<50[U]*	*<50[U]*	*<100[U]*	*0.59[BL]*	*25[BL]*	*<0.4[U]*
	5/24	-	*<0.3[U]*	*<0.5[U]*	*<1.4[U]*	*<50[U]*	*<50[U]*	*<100[U]*	*0.4[BL]*	*24.9[BL]*	*<0.4[U]*
Equipment Blank	*5/22*	-	*<0.3[U]*	*<0.5[U]*	*1.7[J]*	*<50[U]*	*<50[U]*	*<100[U]*	*0.61[E]*	*24[E]*	*<0.4[U]*
DL		-	***0.3***	***0.5***	***1.4***	***50***	***50***	***100***	***0.3***	***-[c]***	***0.4***
RL		-	***0.3***	***0.5***	***5***	***250***	***50***	***250***	***0.3***	***-[c]***	***0.5***
SEPTEMBER 18–27, 2018 (SEASONAL AND MONTHLY)											
EEL RIVER WATERSHED											
Inflow to Lake Pillsbury											
ER173.7	9/26	0.2	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	23.7[BL]	<0.4[U]
RF3.8	9/26	0.2	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	23.7[BL]	<0.4[U]
Lake Pillsbury											
LP1-S	9/27	0.2	<0.3[U], <0.3[U]	<0.5[U], <0.5[U]	<1.4[U], <1.4[U]	<50[U], <50[U]	<50[U], <50[U]	<100[U], <100[U]	<0.3[U], <0.3[U]	25.1[BL], 24.5[BL]	<0.4[U], <0.4[U]
LP1-M	9/27	5.5	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.6[E]	<0.4[U]
LP1-B	9/27	11	<0.3[U]	<0.5[U]	1.7[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.6[E]	<0.4[U]
LP2-S	9/25	0.2	<0.3[U]	<0.5[U]	1.8[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.2[BL]	<0.4[U]
LP2-M	9/25	3	<0.3[U]	<0.5[U]	1.7[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.4[E]	<0.4[U]
LP2-B	9/25	5.5	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.2[E]	<0.4[U]
LP3-S	9/25	0.2	<0.3[U]	<0.5[U]	2.8[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.6[BL]	<0.4[U]
LP3-M	9/25	11	<0.3[U]	<0.5[U]	2.3[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.2[E]	<0.4[U]
LP3-B	9/25	21.6	<0.3[U]	<0.5[U]	1.5[J]	<50[U]	<50[U]	<100[U]	0.89	24.0[E]	<0.4[U]
LP4-S	9/26	0.2	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	23.5[BL]	<0.4[U]
LP4-M	9/26	2	<0.3[U]	<0.5[U]	3.2[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	23.5[E]	<0.4[U]
LP4-B	9/26	3.7	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	23.4[E]	<0.4[U]
Eel River Scott Dam to Van Arsdale Reservoir											
ER167.8	9/27	0.2	<0.3[U], <0.3[U]	<0.5[U], <0.5[U]	<1.4[U] 1.4[J]	<50[U], <50[U]	<50[U], <50[U]	<100[U], <100[U]	<0.3[U], <0.3[U]	24.6[BL], 24.5[BL]	<0.4[U], <0.4[U]
VA2-S	9/20	0.2	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.6[E]	<0.4[U]
VA2-B	9/20	4.2	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.4[E]	<0.4[U]

Table AQ3-11a. Seasonal Hydrocarbon Results.

Site ID	Date (2018)	Depth (m)	Benzene (ug/L)	Methyl tert-butyl ether (ug/L)	Oil & Grease (HeM) (ug/L)	TPH as diesel (ug/L)	TPH as Gasoline (ug/L)	TPH as Motor Oil (ug/L)	Toluene (ug/L)	Toluene-d8 (ug/L)	Tert-amyl methyl ether (ug/L)
Eel River Cape Horn Dam to Middle Fork Eel River											
ER156.7	9/20	0.2	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.4[BL]	<0.4[U]
ER153.1	9/18	0.2	<0.3[U]	<0.5[U]	2.2[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.9[BL]	<0.4[U]
TC0.1	9/18	0.2	<0.3[U]	<0.5[U]	1.8[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	25.1[BL]	<0.4[U]
ER152.9	9/18	0.2	<0.3[U], <0.3[U]	<0.5[U], <0.5[U]	1.5[J], 1.5[J]	<50[U], <50[U]	<50[U], <50[U],	<100[U], <100[U]	<0.3[U], <0.3[U]	24.8[BL]	<0.4[U], <0.4[U]
ER126.1	9/19	0.2	<0.3[U]	<0.5[U]	2.3[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.3[BL]	<0.4[U]
OC0.1	9/19	0.2	<0.3[U]	<0.5[U]	1.8[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.2[BL]	<0.4[U]
ER125.9	9/19	0.2	<0.3[U]	<0.5[U]	1.7[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.6[BL]	<0.4[U]
ER119.4[b]	9/19	0.2	<0.3[U]	<0.5[U]	1.7[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.4[BL]	<0.4[U]
MF0.1	9/19	0.2	<0.3[U]	<0.5[U]	1.6[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.1[BL]	<0.4[U]
ER119.2[b]	9/19	0.2	<0.3[U]	<0.5[U]	2.5[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.3[BL]	<0.4[U]
EAST BRANCH RUSSIAN RIVER WATERSHED											
EB-BLPH	9/20	0.2	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.1[BL]	<0.4[U]
EB-ABLM	9/20	0.2	<0.3[U]	<0.5[U]	4.2[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.0[BL]	<0.4[U]
QUALITY ASSURANCE AND QUALITY CONTROL											
Field Blanks	9/18	-	<0.3[U]	<0.5[U]	1.4[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.6[BL]	<0.4[U]
	9/25	-	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.2[BL]	<0.4[U]
	9/26	-	<0.3[U]	<0.5[U]	1.7[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	23.7[BL]	<0.4[U]
Equipment Blank	9/20	-	<0.3[U]	<0.5[U]	4.9[J]	<50[U]	<50[U]	<100[U]	<0.3[U]	24.3[E]	<0.4[U]
	9/27	-	<0.3[U]	<0.5[U]	<1.4[U]	<50[U]	<50[U]	<100[U]	<0.3[U]	25.0[E]	<0.4[U]
DL		-	***0.3***	***0.5***	***1.4***	***50***	***50***	***100***	***0.3***	***-[b]***	***0.4***
RL		-	***0.3***	***0.5***	***5***	***250***	***50***	***250***	***0.3***	***-[b]***	***0.5***

m=meters, ug/L=microgram per liter, S=surface, M=middle, B=bottom, DL= detection limit; RL=reporting limit, - = no data

Notes:

[a] Hydrocarbons were sampled on 5/15/2017 and 5/17/2017.

[b] AQ-3 Study Plan and/or laboratory results reported with the following site codes: ER119.4=ER119.1 and ER119.2=ER118.9.

[c] Laboratory detection and reporting limits were not reported.

[BL] Quantifiable field blank value

[E] Quantifiable equipment blank value

[J] Detected but below the reporting limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).

[U] Analyte included in analysis, but not detected at or above minimum DL.

[R-01] The reporting limit for this analyte has been raised to account for matrix interference.

Table AQ3-11b. Seasonal Hydrocarbon Results (continued).

Site ID	Date (2018)	Depth (m)	Tert-butyl alcohol (ug/L)	Tetratetra-contane (ug/L)	Xylenes (total) (ug/L)	Dibromo-fluoro-methane (ug/L)	Di-isopropyl ether (ug/L)	Bromo-fluoro-benzene (ug/L)	Ethyl tert-butyl ether (ug/L)	Ethyl-benzene (ug/L)
MAY 15–24, 2018 (SEASONAL)										
EEL RIVER WATERSHED										
Inflow to Lake Pillsbury										
ER173.7	5/24	0.2	<6[U]	47.5[BL]	<0.5[U]	25.5[BL]	<0.4[U]	24.5[BL]	<0.4[U]	<0.4[U]
RF3.8	5/23	0.2	<6[U]	49.2[BL,D]	<0.5[U]	25.6[BL]	<0.4[U]	24.4[BL]	<0.4[U]	<0.4[U]
Lake Pillsbury										
LP1-S	5/23	0.2	<6[U]	44.4[BL,D]	<0.5[U]	25[BL]	<0.4[U]	23.7[BL]	<0.4[U]	<0.4[U]
LP1-M	5/23	8	<6[U]	28.4[E,D]	<0.5[U]	25.9[E]	<0.4[U]	24[E]	<0.4[U]	<0.4[U]
LP1-B	5/23	15.5	<6[U]	44[E,D]	<0.5[U]	25.5[E]	<0.4[U]	23.8[E]	<0.4[U]	<0.4[U]
LP2-S	5/22	0.2	<6[U]	48.2[BL]	<0.5[U]	26[BL]	<0.4[U]	25.7[BL]	<0.4[U]	<0.4[U]
LP2-M	5/22	4	<6[U]	40.5[E]	<0.5[U]	26.5[E]	<0.4[U]	25.7[E]	<0.4[U]	<0.4[U]
LP2-B	5/22	7	<6[U]	50.6[E]	<0.5[U]	26.4[E]	<0.4[U]	25.5[E]	<0.4[U]	<0.4[U]
LP3-S	5/23	0.2	<6[U], <6[U]	34.3[BL,D], 28.8[BL,D]	<0.5[U], <0.5[U]	25.3[BL], 25.6[BL]	<0.4[U], <0.4[U]	23.6[BL], 24.1[BL]	<0.4[U], <0.4[U]	<0.4[U], <0.4[U]
LP3-M	5/23	13	<6[U]	37.5[E,D]	<0.5[U]	25.3[E]	<0.4[U]	23.7[E]	<0.4[U]	<0.4[U]
LP3-B	5/23	26	<6[U]	38.3[E,D]	<0.5[U]	26.6[E]	<0.4[U]	24.3[E]	<0.4[U]	<0.4[U]
LP4-S	5/23	0.2	<6[U]	23[BL,D]	<0.5[U]	25.9[BL]	<0.4[U]	23.7[BL]	<0.4[U]	<0.4[U]
LP4-M	5/23	4	<6[U]	39.7[E,D]	<0.5[U]	26[E]	<0.4[U]	24[E]	<0.4[U]	<0.4[U]
LP4-B	5/23	8	<6[U]	36.5[E,D]	<0.5[U]	26.2[E]	<0.4[U]	24.4[E]	<0.4[U]	<0.4[U]
Eel River Scott Dam to Van Arsdale Reservoir										
ER167.8	5/15[b]	0.2	<6[U]	38.2[BL]	<0.5[U]	26.6[BL]	<0.4[U]	26[BL]	<0.4[U]	<0.4[U]
VA2-S	5/24	0.2	<6[U]	48.2[E]	<0.5[U]	25.2[E]	<0.4[U]	24.1[E]	<0.4[U]	<0.4[U]
VA2-B	5/24	4	<6[U]	46.9[E]	<0.5[U]	26.6[E]	<0.4[U]	24[E]	<0.4[U]	<0.4[U]
Eel River Cape Horn Dam to Middle Fork Eel River										
ER156.7	5/17	0.2	<6[U], <6[U]	48.9[BL], 50.1[BL]	<0.5[U], <0.5[U]	26.6[BL], 26.9[BL]	<0.4[U], <0.4[U]	26.2[BL], 25.2[BL]	<0.4[U], <0.4[U]	<0.4[U], <0.4[U]
ER153.1	5/15[b]	0.2	<6[U]	53.2[BL]	<0.5[U]	26.6[BL]	<0.4[U]	25.4[BL]	<0.4[U]	<0.4[U]
TC0.1	5/15[b]	0.2	<6[U]	60.8[BL]	<0.5[U]	24.9[BL]	<0.4[U]	24.9[BL]	<0.4[U]	<0.4[U]
ER152.9	5/15[b]	0.2	<6[U]	53.8[BL]	<0.5[U]	26.5[BL]	<0.4[U]	25.8[BL]	<0.4[U]	<0.4[U]
ER126.1	5/16	0.2	<6[U]	28.9[BL]	<0.5[U]	26.4[BL]	<0.4[U]	25.9[BL]	<0.4[U]	<0.4[U]
OC0.1	5/16	0.2	<6[U]	41.3[BL]	<0.5[U]	25.5[BL]	<0.4[U]	25.6[BL]	<0.4[U]	<0.4[U]
ER125.9	5/16	0.2	<6[U]	44.9[BL]	<0.5[U]	25.9[BL]	<0.4[U]	24.7[BL]	<0.4[U]	<0.4[U]
ER119.4[a]	5/16	0.2	<6[U]	44.8[BL]	<0.5[U]	26.8[BL]	<0.4[U]	26.2[BL]	<0.4[U]	<0.4[U]
MF0.1	5/16	0.2	<6[U]	32.5[BL]	<0.5[U]	25.9[BL]	<0.4[U]	25[BL]	<0.4[U]	<0.4[U]
ER119.2[a]	5/16	0.2	<6[U]	40.4[BL]	<0.5[U]	26.8[BL]	<0.4[U]	26.2[BL]	<0.4[U]	<0.4[U]

Table AQ3-11b. Seasonal Hydrocarbon Results (continued).

Site ID	Date (2018)	Depth (m)	Tert-butyl alcohol (ug/L)	Tetratetra-contane (ug/L)	Xylenes (total) (ug/L)	Dibromo-fluoro-methane (ug/L)	Di-isopropyl ether (ug/L)	Bromo-fluoro-benzene (ug/L)	Ethyl tert-butyl ether (ug/L)	Ethyl-benzene (ug/L)
EAST BRANCH RUSSIAN RIVER WATERSHED										
EB-BLPH	5/21	0.2	<6[U], <6[U]	40.9[BL], 41.9[BL]	<0.5[U], <0.5[U]	26.6[BL], 25.5[BL]	<0.4[U], <0.4[U]	25.6[BL], 24.9[BL]	<0.4[U], <0.4[U]	<0.4[U], <0.4[U]
EB-ABLM	5/21	0.2	<6[U]	34.2[BL]	<0.5[U]	26.5[BL]	<0.4[U]	25.3[BL]	<0.4[U]	<0.4[U]
QUALITY ASSURANCE AND QUALITY CONTROL										
Field Blanks	*5/17*	-	*<6[U]*	*53.2[BL]*	*<0.5[U]*	*26.6[BL]*	*<0.4[U]*	*26.3[BL]*	*<0.4[U]*	*<0.4[U]*
	5/21	-	*<6[U]*	*43.7[BL]*	*<0.5[U]*	*26.7[BL]*	*<0.4[U]*	*25.7[BL]*	*<0.4[U]*	*<0.4[U]*
	5/24	-	*<6[U]*	*38.2[BL]*	*<0.5[U]*	*25.9[BL]*	*<0.4[U]*	*24.6[BL]*	*<0.4[U]*	*<0.4[U]*
Equipment Blank	*5/22*	-	*<6[U]*	*45.2[E]*	*<0.5[U]*	*27.2[E]*	*<0.4[U]*	*25.4[E]*	*<0.4[U]*	*<0.4[U]*
DL		-	***6***	***-[c]***	***0.5***	***-[c]***	***0.4***	***-[c]***	***0.4***	***0.4***
RL		-	***10***	***-[c]***	***0.5***	***-[c]***	***0.5***	***-[c]***	***0.5***	***0.5***
SEPTEMBER 18–27, 2018 (SEASONAL)										
EEL RIVER WATERSHED										
Inflow to Lake Pillsbury										
ER173.7	9/26	0.2	<6[U]	52.9[BL,D]	<0.5[U]	26.2[BL]	<0.4[U]	29.8[BL]	<0.4[U]	<0.4[U]
RF3.8	9/26	0.2	<6[U]	55.5[BL,D]	<0.5[U]	25.5[BL]	<0.4[U]	30.0[BL]	<0.4[U]	<0.4[U]
Lake Pillsbury										
LP1-S	9/27	0.2	<6[U], <6[U]	45.2[BL,D], 60.4	<0.5[U], <0.5[U]	25.1[BL], 25.1[BL]	<0.4[U], <0.4[U]	27.1[BL], 26.1[BL]	<0.4[U], <0.4[U]	<0.4[U], <0.4[U]
LP1-M	9/27	5.5	<6[U]	27.7[E,D]	<0.5[U]	25.2[E]	<0.4[U]	26.7[E]	<0.4[U]	<0.4[U]
LP1-B	9/27	11	<6[U]	56.6[E,D]	<0.5[U]	25.4[E]	<0.4[U]	26.7[E]	<0.4[U]	<0.4[U]
LP2-S	9/25	0.2	<6[U]	56.3[BL,D]	<0.5[U]	26.0[BL]	<0.4[U]	29.3[BL]	<0.4[U]	<0.4[U]
LP2-M	9/25	3	<6[U]	58.8[E,D]	<0.5[U]	26.3[BL]	<0.4[U]	30.1[E]	<0.4[U]	<0.4[U]
LP2-B	9/25	5.5	<6[U]	50.7[E,D]	<0.5[U]	26.6[BL]	<0.4[U]	30.3[E]	<0.4[U]	<0.4[U]
LP3-S	9/25	0.2	<6[U]	61.3[BL,D]	<0.5[U]	26.5[BL]	<0.4[U]	30.2[BL]	<0.4[U]	<0.4[U]
LP3-M	9/25	11	<6[U]	51.3[E,D]	<0.5[U]	26.2[BL]	<0.4[U]	29.7[E]	<0.4[U]	<0.4[U]
LP3-B	9/25	21.6	<6[U]	49.4[E,D]	<0.5[U]	26.3[BL]	<0.4[U]	29.6[E]	<0.4[U]	<0.4[U]
LP4-S	9/26	0.2	<6[U]	59.1[BL,D]	<0.5[U]	25.8[BL]	<0.4[U]	29.9[BL]	<0.4[U]	<0.4[U]
LP4-M	9/26	2	<6[U]	54.4[E,D]	<0.5[U]	25.6[BL]	<0.4[U]	30.0[E]	<0.4[U]	<0.4[U]
LP4-B	9/26	3.7	<6[U]	64.1[E,D]	<0.5[U]	26.3[BL]	<0.4[U]	29.6[E]	<0.4[U]	<0.4[U]
Eel River Scott Dam to Van Arsdale Reservoir										
ER167.8	9/27	0.2	<6[U], <6[U]	62.5[BL,D], 50.1	<0.5[U], <0.5[U]	25.4[BL], 24.9[BL]	<0.4[U], <0.4[U]	26.6[BL], 26.1[BL]	<0.4[U], <0.4[U]	<0.4[U], <0.4[U]
VA2-S	9/20	0.2	<6[U]	59.6[E,D]	<0.5[U]	25.7	<0.4[U]	30.2[E]	<0.4[U]	<0.4[U]

Table AQ3-11b. Seasonal Hydrocarbon Results (continued).

Site ID	Date (2018)	Depth (m)	Tert-butyl alcohol (ug/L)	Tetratetra-contane (ug/L)	Xylenes (total) (ug/L)	Dibromo-fluoro-methane (ug/L)	Di-isopropyl ether (ug/L)	Bromo-fluoro-benzene (ug/L)	Ethyl tert-butyl ether (ug/L)	Ethyl-benzene (ug/L)
VA2-B	9/20	4.2	<6[U]	57.7[E,D]	<0.5[U]	25.3	<0.4[U]	30.1[E]	<0.4[U]	<0.4[U]
Eel River Cape Horn Dam to Middle Fork Eel River										
ER156.7	9/20	0.2	<6[U]	62.7[BL,D]	<0.5[U]	25.5[BL]	<0.4[U]	29.9[BL]	<0.4[U]	<0.4[U]
ER153.1	9/18	0.2	<6[U]	57.6[BL,D]	<0.5[U]	22.9[BL]	<0.4[U]	24.8[BL]	<0.4[U]	<0.4[U]
TC0.1	9/18	0.2	<6[U]	55.1[BL,D]	<0.5[U]	22.6[BL]	<0.4[U]	24.8[BL]	<0.4[U]	<0.4[U]
ER152.9	9/18	0.2	<6[U], <6[U]	49.4[BL,D], 42.8[BL,D]	<0.5[U], <0.5[U]	23.5[BL], 23.0[BL]	<0.4[U], <0.4[U]	25.0[BL], 24.7[BL]	<0.4[U], <0.4[U]	<0.4[U], <0.4[U]
ER126.1	9/19	0.2	<6[U]	60.8[BL,D]	<0.5[U]	22.9[BL]	<0.4[U]	25.1[BL]	<0.4[U]	<0.4[U]
OC0.1	9/19	0.2	<6[U]	56.9[BL,D]	<0.5[U]	22.9[BL]	<0.4[U]	24.6[BL]	<0.4[U]	<0.4[U]
ER125.9	9/19	0.2	<6[U]	56.1[BL,D]	<0.5[U]	23.1[BL]	<0.4[U]	25.0[BL]	<0.4[U]	<0.4[U]
ER119.4[a]	9/19	0.2	<6[U]	49.3[BL,D]	<0.5[U]	23.1[BL]	<0.4[U]	24.9[BL]	<0.4[U]	<0.4[U]
MF0.1	9/19	0.2	<6[U]	62.1[BL,D]	<0.5[U]	22.9[BL]	<0.4[U]	24.8[BL]	<0.4[U]	<0.4[U]
ER119.2[a]	9/19	0.2	<6[U]	56.0[BL,D]	<0.5[U]	22.9[BL]	<0.4[U]	25.1[BL]	<0.4[U]	<0.4[U]
EAST BRANCH RUSSIAN RIVER WATERSHED										
EB-BLPH	9/20	0.2	<6[U]	51.9[BL,D]	<0.5[U]	26.0[BL]	<0.4[U]	29.9[BL]	<0.4[U]	<0.4[U]
EB-ABLM	9/20	0.2	<6[U]	61.1[BL,D]	<0.5[U]	25.7[BL]	<0.4[U]	29.5[BL]	<0.4[U]	<0.4[U]
QUALITY ASSURANCE AND QUALITY CONTROL										
Field Blanks	*9/18*	-	*<6[U]*	*30.6[BL]*	*<0.5[U]*	*23.0[BL]*	*<0.4[U]*	*24.7[BL]*	*<0.4[U]*	*<0.4[U]*
	9/25	-	*<6[U]*	*56.6[BL]*	*<0.5[U]*	*25.8[BL]*	*<0.4[U]*	*29.9[BL]*	*<0.4[U]*	*<0.4[U]*
	9/26	-	*<6[U]*	*53.6[BL]*	*<0.5[U]*	*26.4[BL]*	*<0.4[U]*	*30.4[BL]*	*<0.4[U]*	*<0.4[U]*
Equipment Blank	*9/20*	-	*<6[U]*	*56.5[E]*	*<0.5[U]*	*25.3[E]*	*<0.4[U]*	*29.7[E]*	*<0.4[U]*	*<0.4[U]*
	9/27	-	*<6[U]*	*52.7[E]*	*<0.5[U]*	*25.3[E]*	*<0.4[U]*	*26.9[E]*	*<0.4[U]*	*<0.4[U]*
DL		-	***6***	***-[c]***	***0.5***	***-[c]***	***0.4***	***-[c]***	***0.4***	***0.4***
RL		-	***10***	***-[c]***	***0.5***	***-[c]***	***0.5***	***-[c]***	***0.5***	***0.5***

m=meters, ug/L=microgram per liter, S=surface, M=middle, B=bottom, DL= detection limit; RL=reporting limit, - = no data

Notes:

[a] AQ-3 Study Plan and/or laboratory results reported with the following site codes: ER119.4=ER119.1 and ER119.2=ER118.9.

[b] Hydrocarbons were sampled on 5/15/2017 and 5/17/2017.

[c] Laboratory detection and reporting limits were not reported.

[BL] Quantifiable field blank value

[E] Quantifiable equipment blank value

[D] Variation of quantifiable replicate samples greater than or equal to 10%.

[U] Analyte included in analysis, but not detected at or above minimum DL.

[R-01] The reporting limit for this analyte has been raised to account for matrix interference.

Table AQ3-11b. Seasonal Hydrocarbon Results (continued).

Table AQ3-12. Bacteriological Sampling Locations and Dates.

Site ID	Station Description	Location[a] (decimal degrees)		Sampling Dates (2018)
		Latitude (North)	Longitude (East)	
EEL RIVER WATERSHED				
Lake Pillsbury				
LP5	Lake Pillsbury near Pillsbury Pines Boat Ramp	39.436152	-122.94183	6/18, 6/26, 7/5, 7/13, 7/16
LP6	Lake Pillsbury near Fuller Grove Boat Ramp	39.438162	-122.96846	6/18, 6/26, 7/5, 7/13, 7/16
LP7	Lake Pillsbury Resort Boat Ramp/Swimming Area	39.421514	-122.95797	6/18, 6/26, 7/5, 7/13, 7/16
Eel River Scott Dam to Van Arsdale Reservoir				
ER4[b]	Eel River below Trout Creek Campground	39.374406	-123.067	6/18, 6/26, 7/5, 7/13, 7/16
VA1	Van Arsdale beach below the bridge	39.381882	-123.09976	6/18, 6/26, 7/5, 7/13, 7/16

Notes:
[a] Datum: World Geodetic System (WGS) 84
[b] AQ-3 Study Plan (PG&E 2018) reported with the following site code: ER4=ER160.2.

Table AQ3-13. Bacteriological Monitoring Results.

Site ID	Fecal Coliforms (MPN/100 ml)						Total Coliforms (MPN/100 ml)					
	2018						2018					
	6/18	6/26	7/5	7/13	7/16	Geometric Mean[a]	6/18	6/26	7/5	7/13	7/16	Geometric Mean[a]
EEL RIVER WATERSHED												
Lake Pillsbury												
LP5	<1.8[U], <1.8[U]	<1.8[U]	<1.8	2[D]	4[D]	2.1	11, 13	14	540[D]	240	130[D]	122
LP6	<1.8[U]	<1.8[U]	<1.8[U], <1.8[U]	4.5[D]	<1.8[U,D]	2.7	14	280	25, 130[D]	110	130[D]	83
LP7	<1.8[U]	<1.8[U], 7.8	<1.8[U]	<1.8[U,D]	<1.8[U,D]	1.8	2	240, 350	49[D]	220	9.2[D]	54
Eel River Scott Dam to Van Arsdale Reservoir												
ER4[b]	4.5	7.8	7.8	7.8, 13[D]	7.8[D]	9.2	540	350	540[D]	>1,600, >1,600	>1,600[D]	1,220
VA1	13	33	33	23[D]	13, 23 [D]	19	540	350	920[D]	540	240, 920[D]	588
QUALITY ASSURANCE AND QUALITY CONTROL												
Field Blank	<1.8[U]	<1.8[U]	<1.8[U]	<1.8[U]	<1.8[U]	-	<1.8[U]	<1.8[U]	<1.8[U]	<1.8[U]	<1.8[U]	-
DL	***1.8***	***1.8***	***1.8***	***1.8***	***1.8***	***-***	***1.8***	***1.8***	***1.8***	***1.8***	***1.8***	***-***
RL	***1.8***	***1.8***	***1.8***	***1.8***	***1.8***	***-***	***1.8***	***1.8***	***1.8***	***1.8***	***1.8***	***-***

MPN= most probable number; ml= milliliter; DL= detection limit; RL= reporting limit

Notes:
[D] Variation of quantifiable replicate samples greater than or equal to 50%.
[U] Analyte included in analysis, but not detected at or above minimum DL.
[a] Geometric mean calculated using five samples in a 30-day period.
[b] AQ-3 Study Plan (PG&E 2018) reported with the following site code: ER4=ER160.2.

Table AQ3-14. Cyanobacteria and Toxins Sampling Locations and Dates.

Site ID	Station Description	Location[a] (decimal degrees)		Cyanobacteria and Toxins Sampling Dates (2018)
		Latitude (North)	Longitude (East)	
EEL RIVER WATERSHED				
Lake Pillsbury				
LP5	Lake Pillsbury near Pillsbury Pines Boat Ramp	39.436152	-122.94183	6/8, 9/18, 10/25
LP6	Lake Pillsbury near Fuller Grove Boat Ramp	39.438162	-122.96846	6/8, 9/18, 10/25
LP7	Lake Pillsbury Resort Boat Ramp/Swimming Area	39.421514	-122.95797	6/8, 9/18, 10/25
Eel River Scott Dam to Van Arsdale Reservoir				
ER4[b]	Eel River below Trout Creek Campground	39.374406	-123.067	6/8, 9/18, 10/25
VA1	Van Arsdale beach below the bridge	39.381882	-123.09976	6/8, 9/18, 10/25

Notes:
[a] Datum: World Geodetic System (WGS) 84
[b] AQ-3 Study Plan (PG&E 2018) reported with the following site code: ER4=ER160.2.

Table AQ3-15. Cyanobacteria Toxins Monitoring Results.

Parameter:	Total Microcystin (µg/L)			Anatoxin-a (µg/L)			Cylindrospermopsin (µg/L)		
Site ID	2018			2018			2018		
	6/8	9/18	10/25	6/8	10/25	9/18	6/8	9/18	10/25
EEL RIVER WATERSHED									
Lake Pillsbury									
LP5	<0.15, <0.15	<0.3	<0.3	<0.1, <0.1	<0.3	<0.3	<0.03, <0.03	<0.09	<0.09
LP6	<0.15	<0.3, <0.3	<0.3	<0.1	<0.3	<0.3, <0.3	<0.03	<0.09, <0.09	<0.09
LP7	<0.15	<0.3	<0.3	<0.1	<0.3	<0.3	<0.03	<0.09	<0.09
Eel River Scott Dam to Van Arsdale Reservoir									
ER4[a]	<0.15	<0.3	<0.3, <0.3	<0.1	<0.3, <0.3	<0.3	<0.03	<0.09	<0.09, <0.09
VA1	<0.15	<0.3	<0.3	<0.1	<0.3	<0.3	<0.03	<0.09	<0.09
QUALITY ASSURANCE AND QUALITY CONTROL									
Field Blank	*<0.15*	*<0.3*	*<0.3*	*<0.1*	*<0.3*	*<0.3*	*<0.03*	*<0.09*	*<0.09*
DL	***0.15***	***0.3***	***0.3***	***0.01***	***0.3***	***0.3***	***0.03***	***0.09***	***0.09***
PQL	***0.3***	***-[b]***	***-[b]***	***0.03***	***-[b]***	***-[b]***	***0.09***	***-[b]***	***-[b]***

µg/L -microgram per liter, DL= detection limit, PQL = practical quantitation limit

Notes:
[a] AQ-3 Study Plan (PG&E 2018) reported with the following site code: ER4=ER160.2.
[b] PQL value not reported in laboratory reports.

Table AQ3-16. Lake Pillsbury Sportfish Tissue Mercury Results.

Species	Sample Date (2018)	Site ID[a]	Total Mercury (ug/g [wet weight])	Moisture (percent)	Sex	Fish Length (mm)			Fish Weight (g)
						SL	FL	TL	
Bluegill (*Lepomis macrochirus*)	9/24	GLP-3	0.42	78	M	191	217	226	295
	9/25	GLP-1	0.49	78	M	199	225	236	370
			0.48	79	F	186	209	221	320
			0.43	80	F	191	215	231	335
			0.55	80	M	191	215	231	360
			0.40	80	M	207	236	244	390
	9/26	GLP-2	0.62	85	M	198	219	230	320
	9/27	LPM-3	0.25	-[b]	U	36	44	46	1.2
			0.36	-[b]	U	39	48	50	1.7
			0.37	-[b]	U	30	37	39	0.7
Largemouth Bass (*Micropterus salmoides*)	9/25	GLP-1	0.97	82	F	304	340	350	555
			0.91	78	M	339	369	387	860
			0.40	77	F	153	170	179	72
			0.80	80	M	297	330	346	690
			0.87	80	M	281	309	320	430
			1.08	79	F	409	449	463	1520
	9/26	GLP-2	1.19	79	M	392	433	450	1505
			0.99	78	M	277	304	319	470
			0.73	80	F	182	201	210	155
			0.73	83	M	205	228	237	200
	9/27	LPM-3	0.42	-[b]	U	55	64	67	3.6
			0.47	-[b]	U	54	62	65	3.5
Sacramento Pikeminnow (*Ptychocheilus grandis*)	9/24	GLP-3	1.48	76	F	321	354	384	395
			1.29	78	F	395	428	460	770
			1.22	79	F	322	358	386	430
			1.33	78	F	335	365	387	430
	9/25	GLP-1	1.58	79	F	395	424	452	680
			2.08	80	F	414	450	481	745
			0.52	72	F	253	275	299	205
			1.90	79	F	382	417	451	665
	9/26	GLP-2	1.55	75	F	377	407	439	660
			1.92	78	F	388	417	452	760
MDL			***0.003***	**-**	**-**	**-**	**-**	**-**	**-**
RL			***0.009***	**-**	**-**	**-**	**-**	**-**	**-**

ug/g=microgram per gram, mm=millimeter, SL=standard length, FL=fork length, TL=total length, M=male, F=female, U=unknown, g=grams, MDL=method detection limit, RL=reporting limit

Notes:

[a] GLP-3 sample location 39.411691 N, -122.954639 E.; GLP-1 sample location 39.409465 N, -122.920595 E; GLP-2 sample location 39.400101 N, -122.949281 E; and LPM-3 sample location 39.419147 N, -122.942855 E. Datum: World Geodetic System (WGS) 84.

[b] Not analyzed by laboratory.

Table AQ3-17. Eel River Sacramento Pikeminnow Tissue Mercury Results.

Species	Sample Date (2018)	Station	Total mercury (ug/g [wet weight])	Moisture (percent)	Sex	Fish Length (mm)			Fish Weight (g)
						SL	FL	TL	
Sacramento Pikeminnow (*Ptychocheilus grandis*)	10/10	Eel River - Upstream of Bucknell Creek	0.80	78	F	305	341	364	380
			2.15	81	F	280	421	459	701
			0.94	79	F	349	333	419	559
			0.65	78	F	251	284	304	222
			0.74	79	F	269	306	331	282
			0.42	78	F	274	301	324	272
			0.71	79	M	265	294	319	235
			0.29	78	F	240	272	294	191
			1.60	78	F	377	415	448	657
		Eel River - near Trout Creek	0.88	79	M	268	305	325	255
			0.70	79	F	261	299	320	245
			1.46	79	F	310	350	373	379
MDL			***0.003***	**-**	**-**	**-**	**-**	**-**	**-**
RL			***0.009***	**-**	**-**	**-**	**-**	**-**	**-**

ug/g=microgram per gram, mm=millimeter, SL=standard length, FL=fork length, TL=total length Sex: M=male, F=female, g=grams, MDL=method detection limit, RL=reporting limit

Table AQ3-18. Lake Pillsbury and Eel River below Lake Pillsbury Sulfide and Hydrogen Sulfide Gas Results.

Site ID	Depth (m)	Sulfide (mg/L)	H_2S Gas (ppm)	Depth (m)	Sulfide (mg/L)	H_2S Gas (ppm)	Depth (m)	Sulfide (mg/L)	H2S Gas (ppm)	Depth (m)	Sulfide (mg/L)	H_2S Gas (ppm)	Depth (m)	Sulfide (mg/L)	H_2S Gas (ppm)
Date	**May 15–23, 2018**			**June 26–28, 2018**			**September 25–27, 2018**			**October 23–25, 2018**			**November 13–14, 2018**		
EEL RIVER WATERSHED															
Lake Pillsbury															
LP1-S	0.2	<0.02[U]	<10	0.2	<0.02[U]	<10	0.2	<0.02[U]	<10	0.2	<0.02[U]	<10	0.2	0.025[J]	<10
LP1-M	8	<0.02[U]	<10	7	<0.02[U], <0.02[U]	<10	5.5	<0.02[U]	<10	5.5	<0.02[U]	<10	4.7	0.021[J]	<10
LP1-B	15.5	<0.02[U]	<10	14	<0.02[U]	<10	11	<0.02[U]	<10	10.8	<0.02[U]	<10	9.4	0.020[J]	<10
LP2-S	0.2	<0.02[U]	<10	0.2	<0.02[U]	<10	0.2	<0.02[U]	<10	0.2	<0.02[U], <0.02[U]	<10	0.2	0.024[J]	<10
LP2-M	4	<0.02[U]	<10	3	<0.02[U]	<10	3	<0.02[U]	<10	1.9	<0.02[U]	<10	-[a]	-[a]	-[a]
LP2-B[b]	7	<0.02[U]	<10	6	<0.02[U]	<10	5.5	<0.02[U]	<10	3.6	<0.02[U]	<10	1.2	0.024[J]	<10
LP3-S	0.2	<0.02[U]	<10	0.2	<0.02[U]	<10	0.2	<0.02[U]	<10	0.2	<0.02[U]	<10	0.2	0.030[J]	<10
LP3-M	13	<0.02[U]	<10	12	<0.02[U]	<10	11	<0.02[U]	<10	10.5	<0.02[U]	<10	10	0.024[J]	<10
LP3-B	26	0.03[J]	<10	24	<0.02[U]	<10	21.6	<0.02[U]	**10.3**	21	**0.16**	<10	19.8	0.025[J]	<10
LP4-S	0.2	<0.02[U]	<10	0.2	<0.02[U]	<10	0.2	<0.02[U]	<10	0.2	<0.02[U]	<10	0.2	<0.02[J], <0.02[J]	<10
LP4-M	4	<0.02[U]	<10	3	<0.02[U]	<10	2	<0.02[U]	<10	2	<0.02[U]	<10	-[a]	-[a]	-[a]
LP4-B	8	<0.02[U]	<10	6.2	<0.02[U]	<10	3.7	<0.02[U]	<10	2.9	<0.02[U], <0.02[U]	<10	1.8	<0.02[J]	<10
Eel River below Scott Dam															
ER167.8	0.2	<0.02[U]	<10	0.2	<0.02[U], <0.02[U]	<10	0.2	<0.02[U], <0.02[U]	<10	0.2	<0.02[U]	<10	0.2	0.024[J], 0.027[J]	<10
QUALITY ASSURANCE AND QUALITY CONTROL															
Field Blank	-	*<0.02[U]*	-	-	*<0.02[U]*	-	-	*<0.02[U]*	-	-	*<0.02[U]*	-	-	*0.020[J]*	-
	-	*<0.02[U]*	-	-	*<0.02[U]*	-	-	*<0.02[U]*	-	-	*<0.02[U]*	-	-	*<0.02[J]*	-
Equipment Blank	-	*<0.02[U]*	-	-	*<0.02[U]*	-	-	*<0.02[U]*	-	-	*<0.02[U]*	-	-	*<0.02[J]*	-
DL	-	***0.02***	***10***	-	***0.02***	***10***	-	***0.02***	***10***	-	***0.02***	***10***	-	***0.02***	-
RL	-	***0.1***	***-***	-	***0.1***	***-***	-	***0.1***	***-***	-	***0.1***	***-***	-	***0.1***	-

m=meter, mg/L=milligram per liter, H_2S=hydrogen sulfide, ppm=parts per million, S=surface, M=middle, B=bottom, DL=detection limit, RL=reporting limit

Notes:

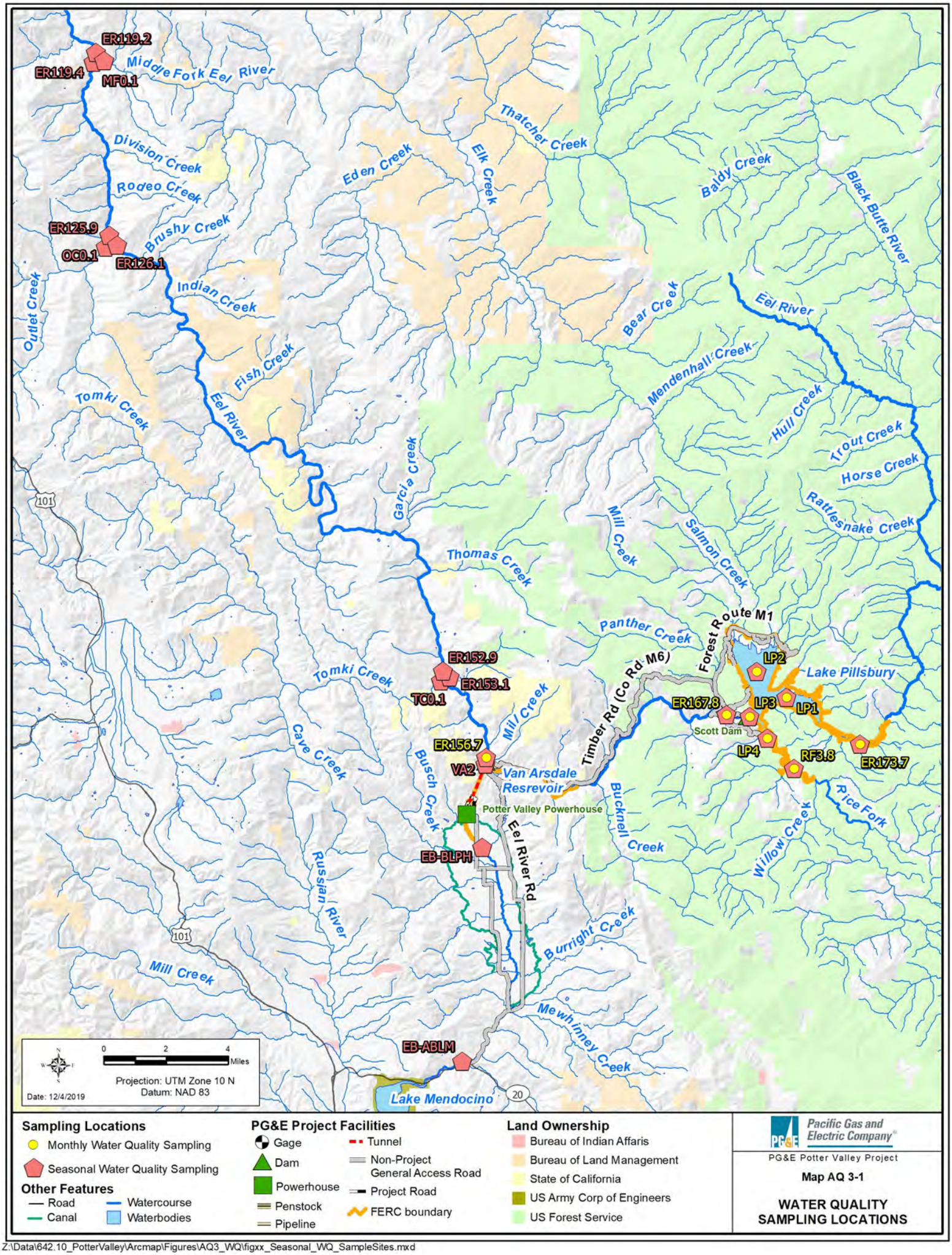
[a] Middle grab samples were not collected for laboratory analysis due to shallow reservoir depth.

[b] Laboratory results for Site LP2-B on 10/23/2018 reported with the following site code: LP2-BL.

[J] Detected but below the reporting limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).

[U] Analyte included in analysis, but not detected at or above minimum DL.

Maps



Z:\Data\642.10_PotterValley\Arcmap\Figures\AQ3_WQ\figxx_Seasonal_WQ_SampleSites.mxd



Sampling Locations
- Monthly Water Quality Sampling

Land Ownership
- US Forest Service

PG&E Project Facilities
- Dam
- Gage
- FERC boundary
- Non-Project General Access Road
- Project Road

Other Features
- River
- Waterbody

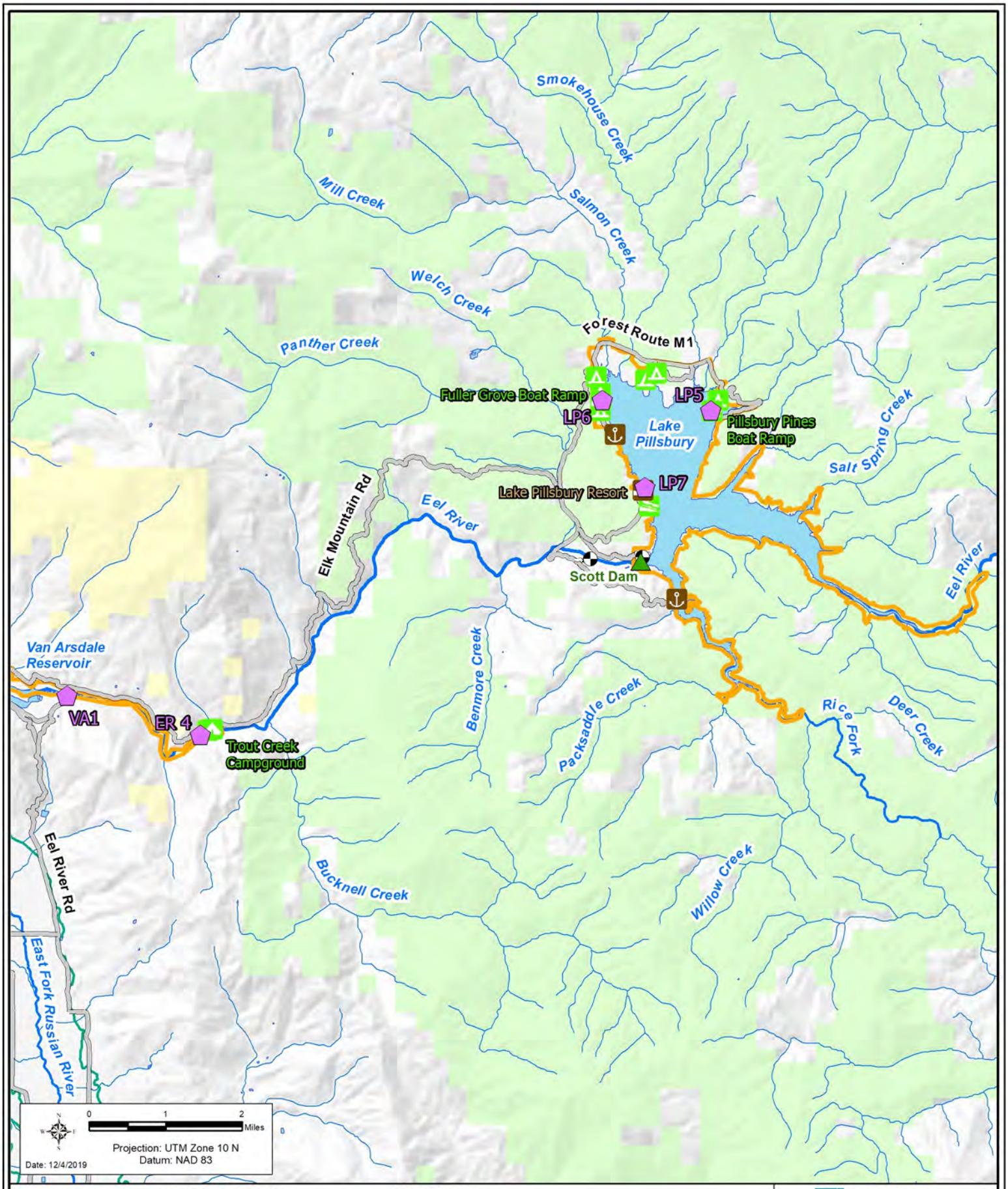
Pacific Gas and Electric Company®

PG&E Potter Valley Project

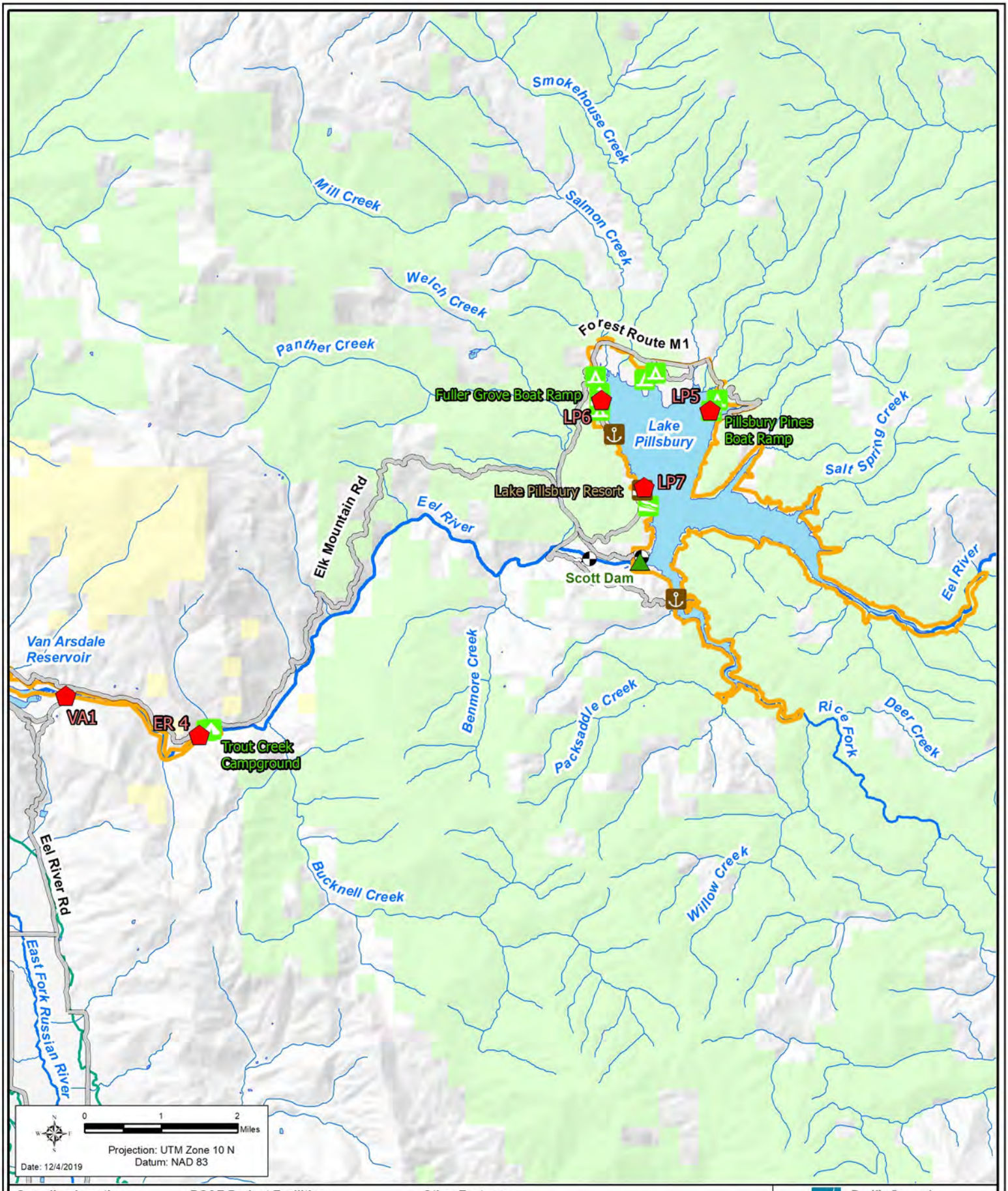
Map AQ 3-2

MONTHLY LAKE PILLSBURY SAMPLING LOCATIONS

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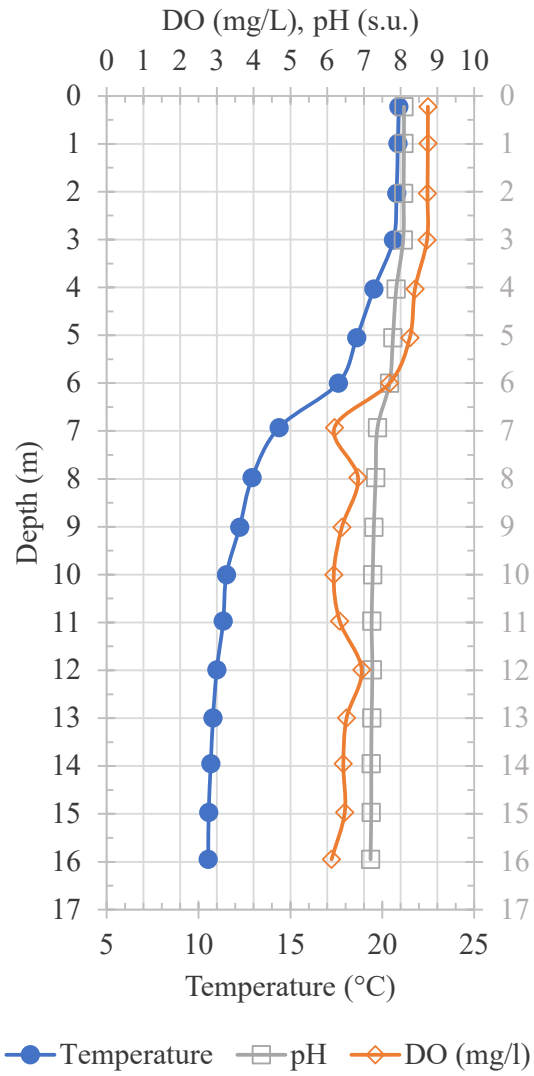


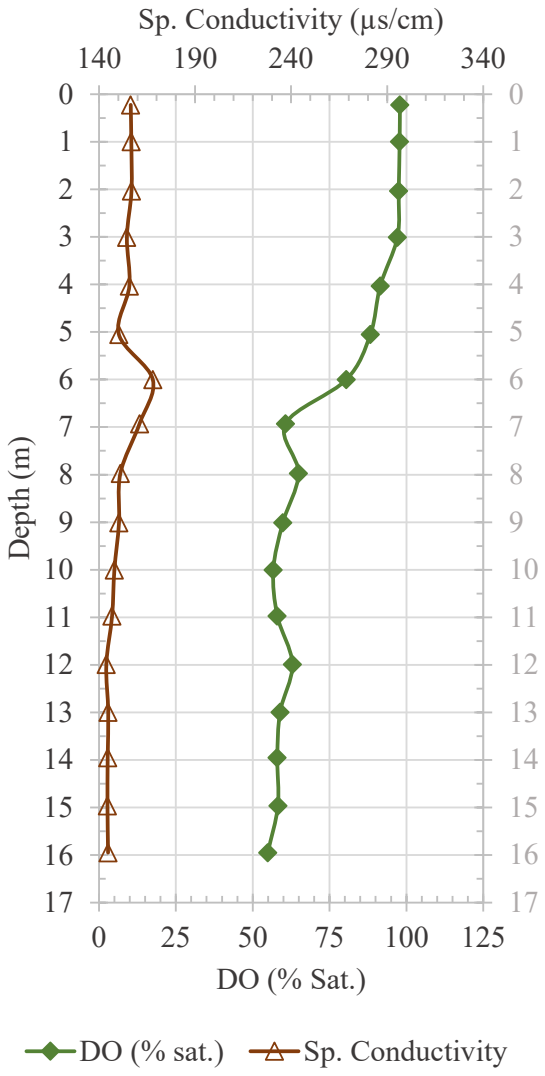
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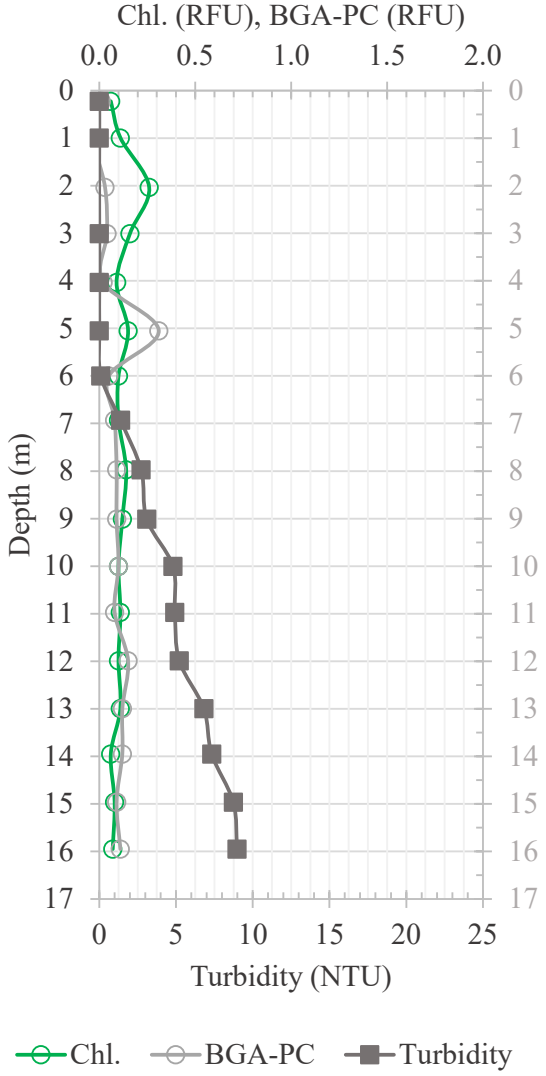
Attachment A

Profiles of *In Situ* Measurements taken in Lake Pillsbury and Van Arsdale Reservoir

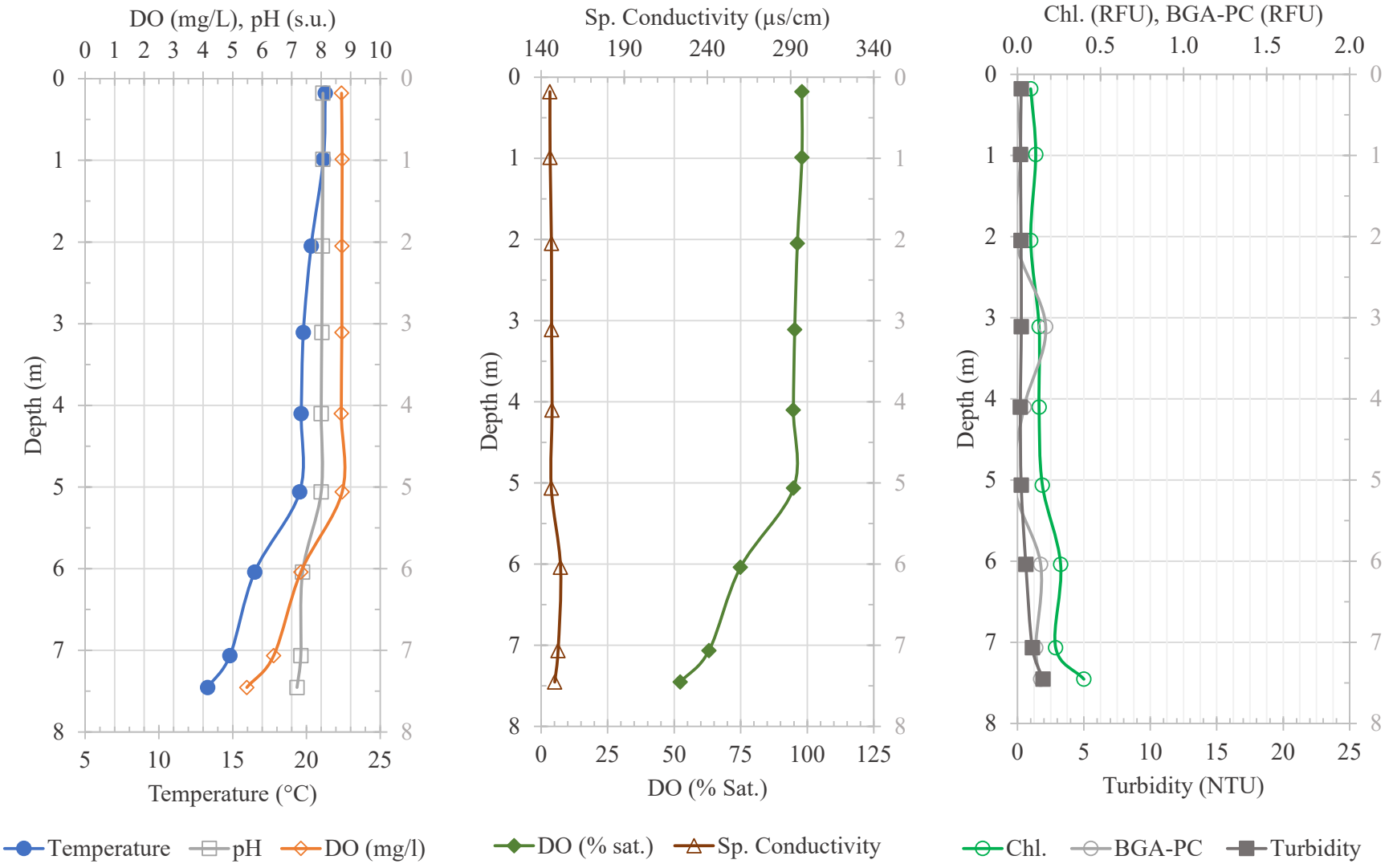
Lake Pillsbury in the Eel River Arm (LP1) - 5/23/2018



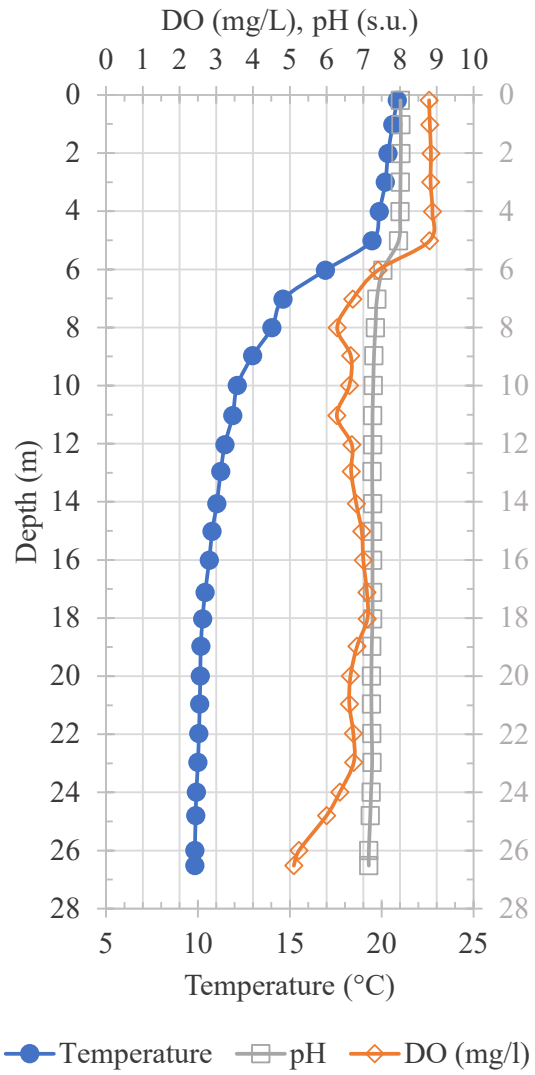


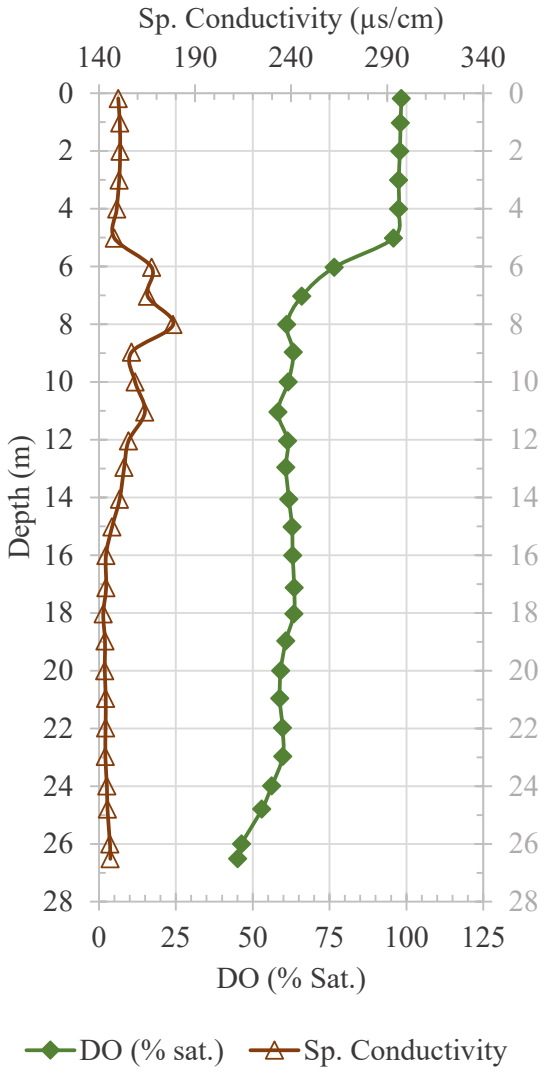


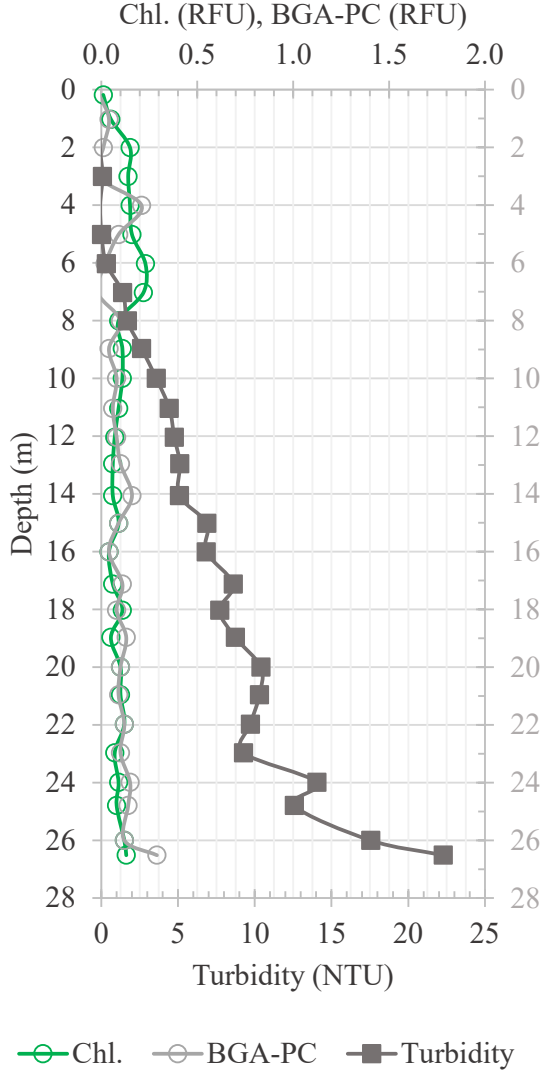
Lake Pillsbury in the North Arm (LP2) - 5/22/2018



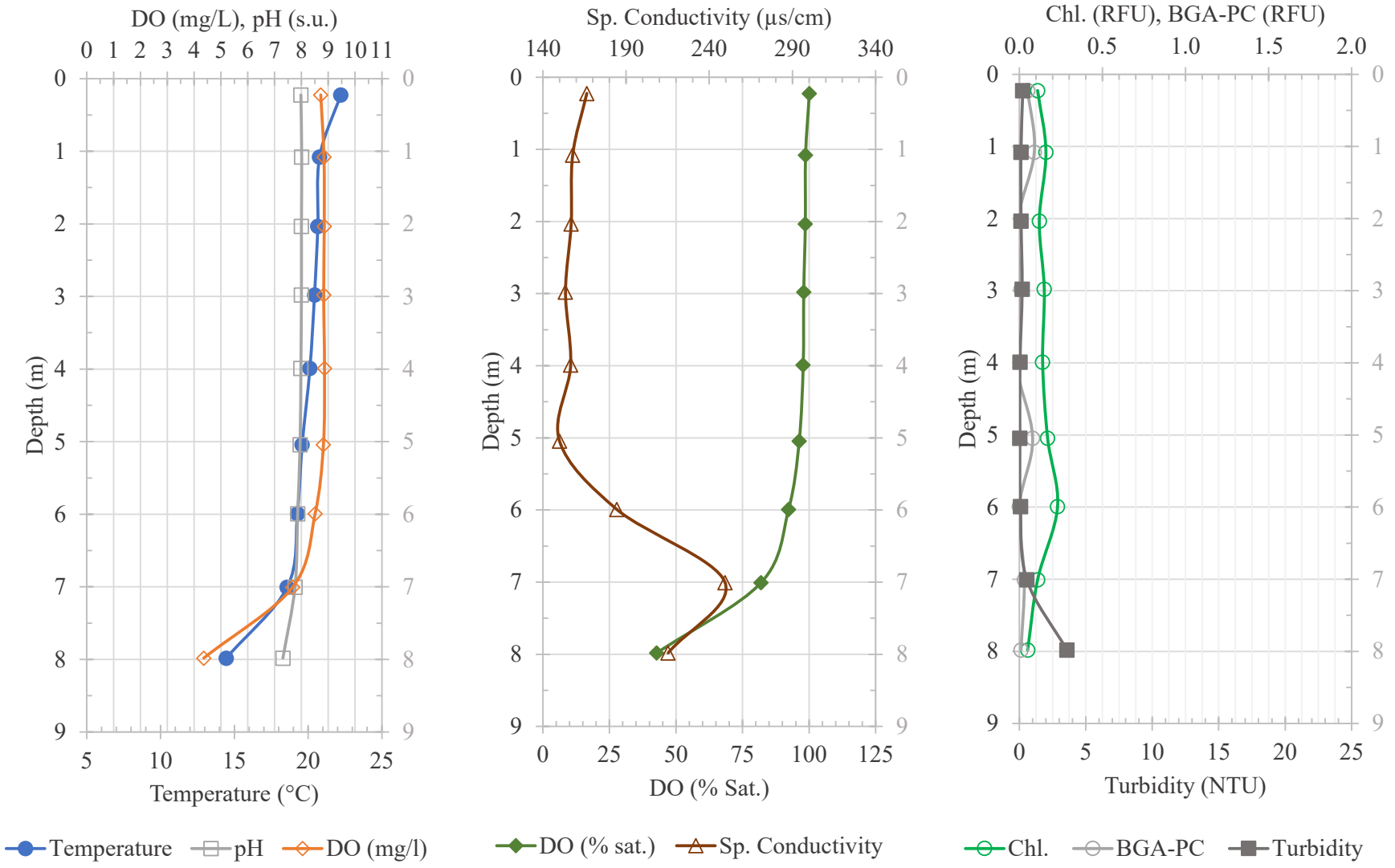
Lake Pillsbury near Scott Dam (LP3) - 5/23/2018



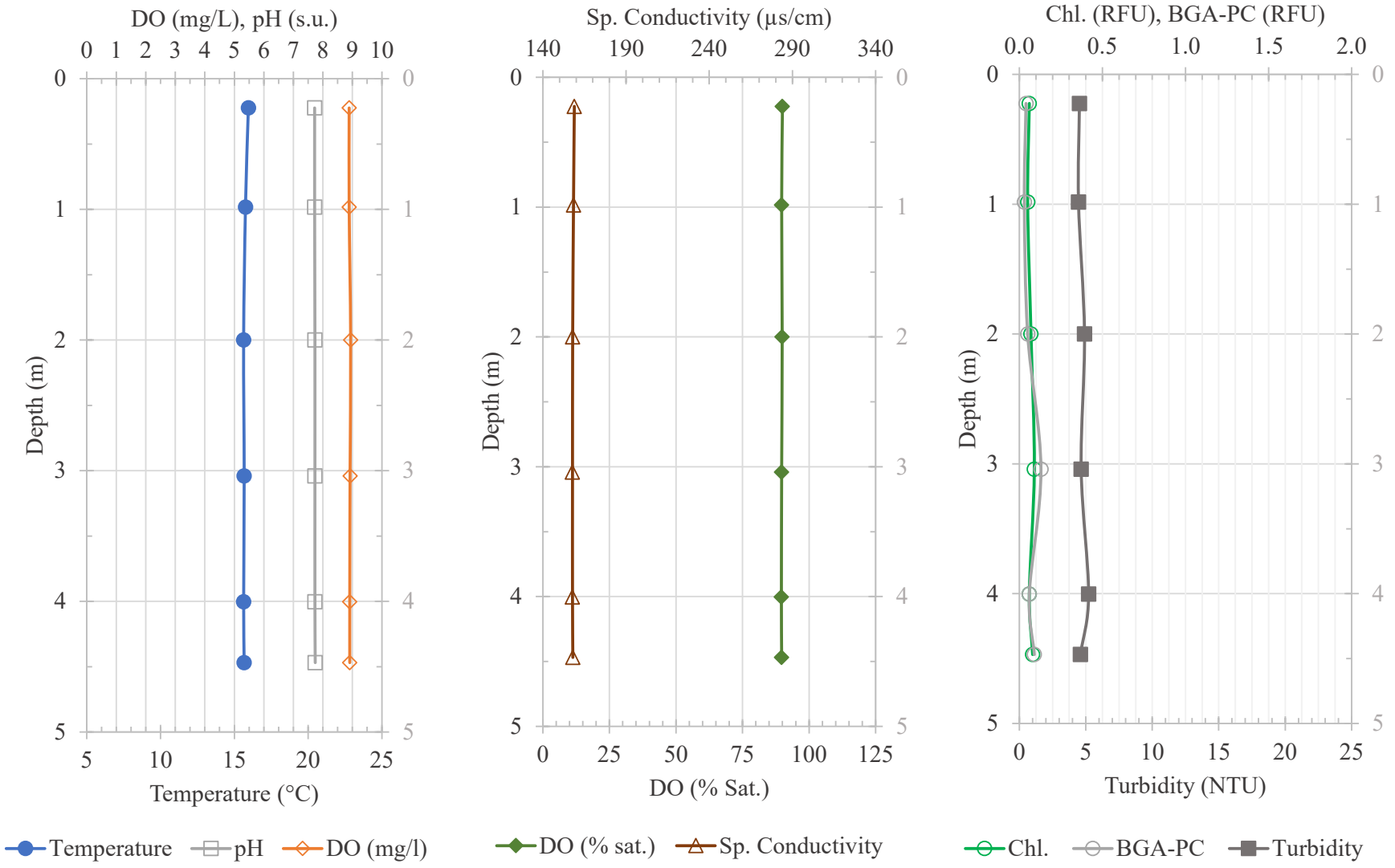




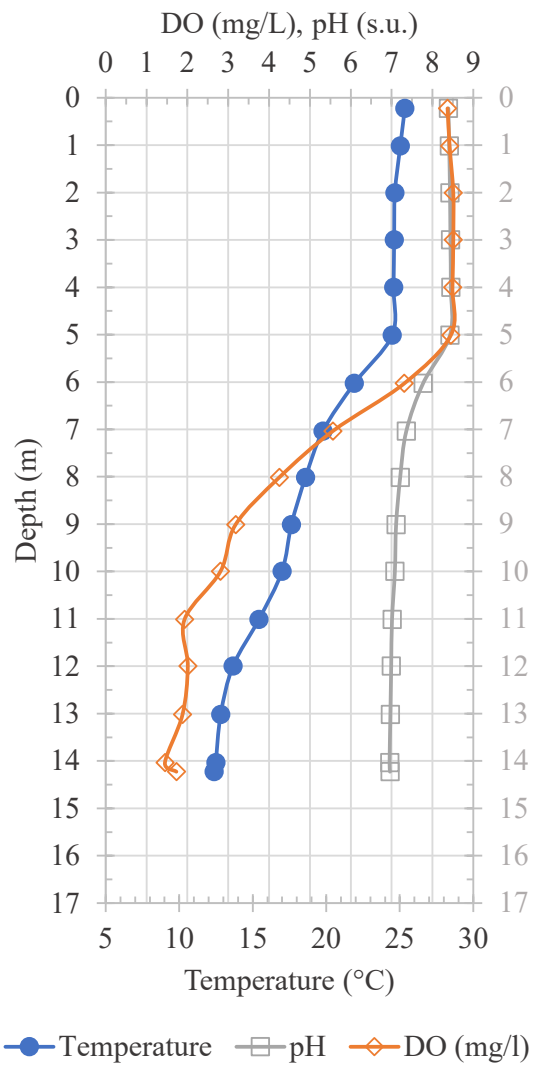
Lake Pillsbury in the Rice Fork Arm (LP4) - 5/23/2018

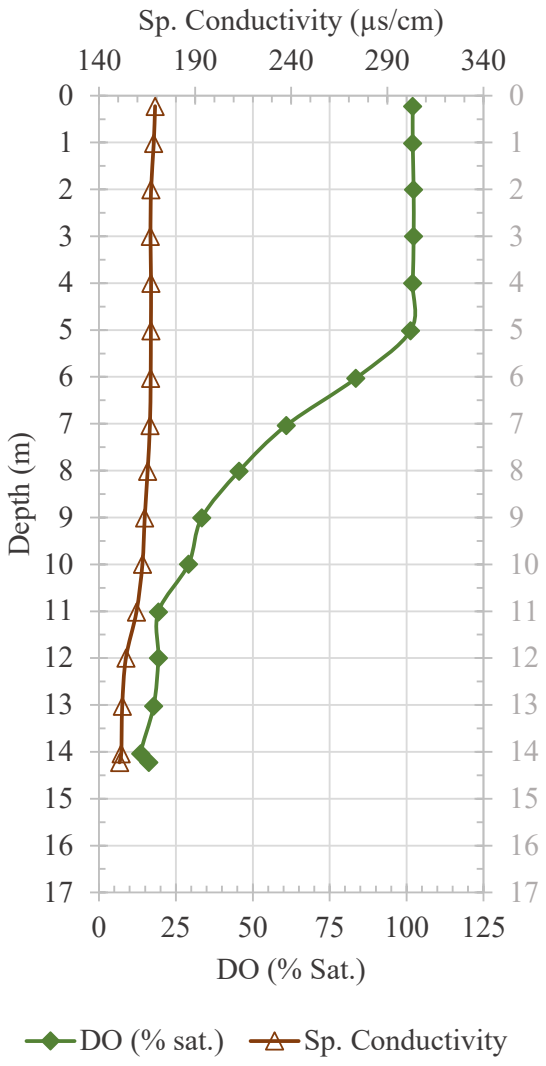


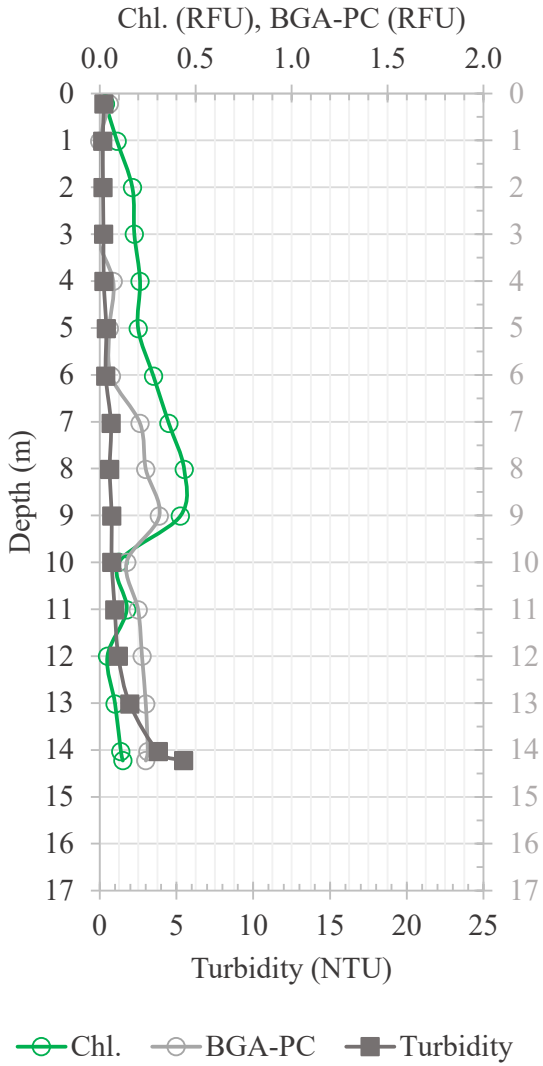
Van Arsdale Resevoir near Cape Horn Dam (VA2) - 5/24/2018



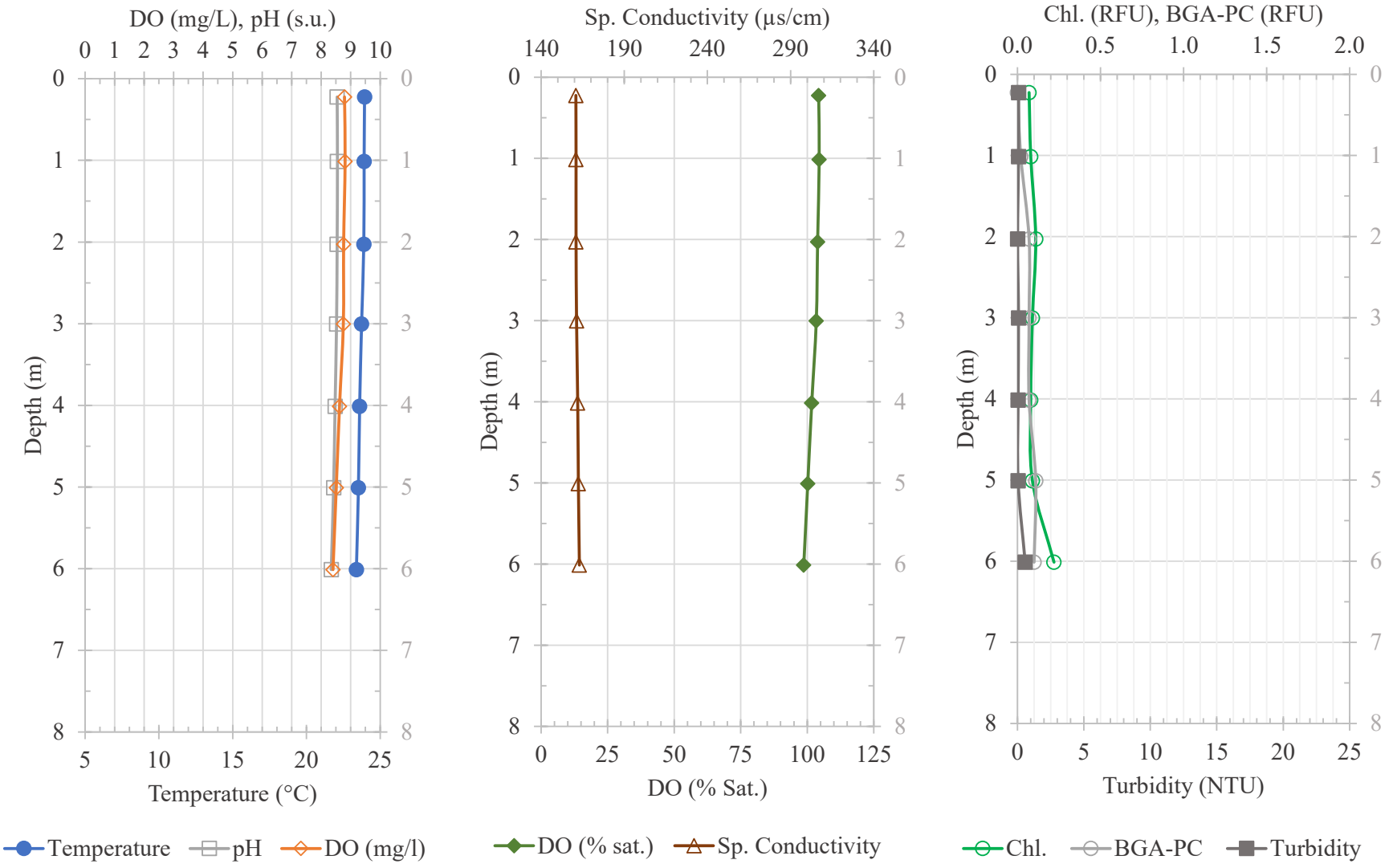
Lake Pillsbury in the Eel River Arm (LP1) - 6/28/2018



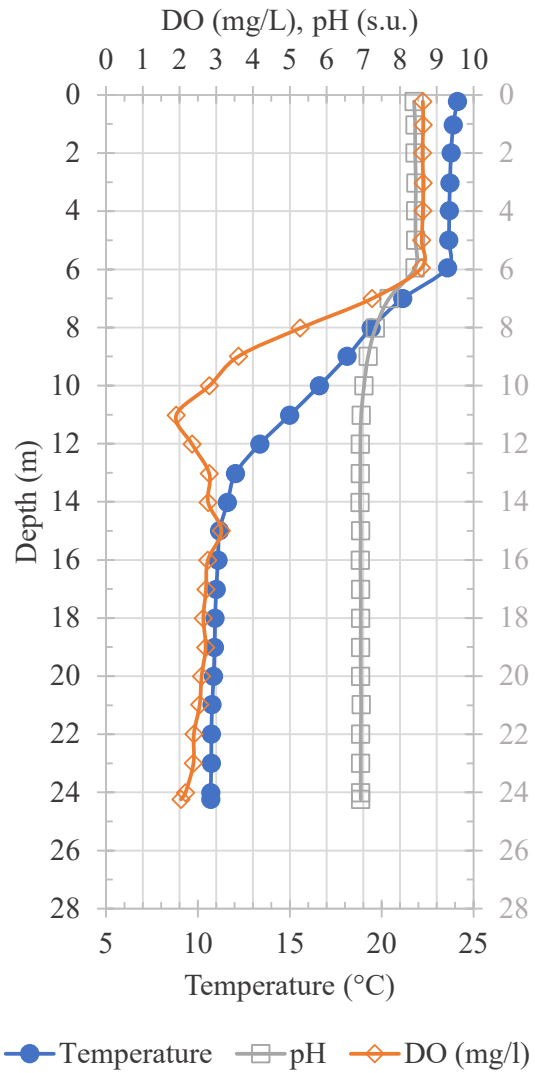


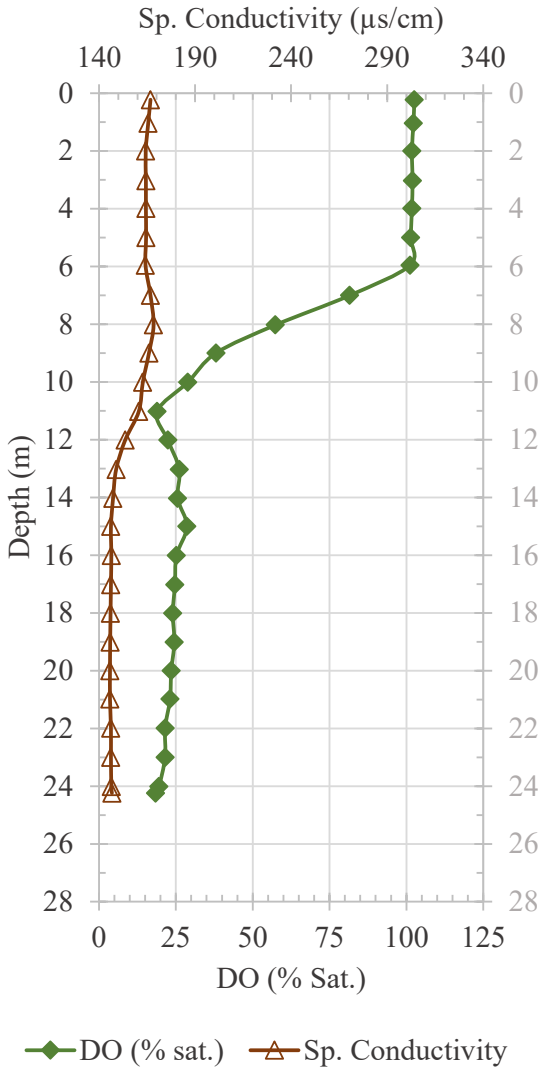


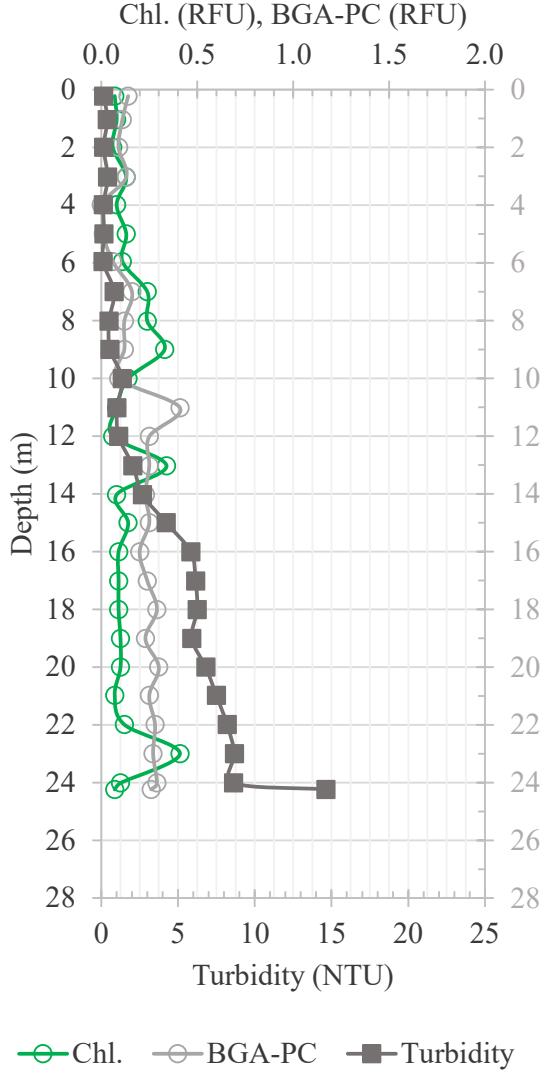
Lake Pillsbury in the North Arm (LP2) - 6/28/2018



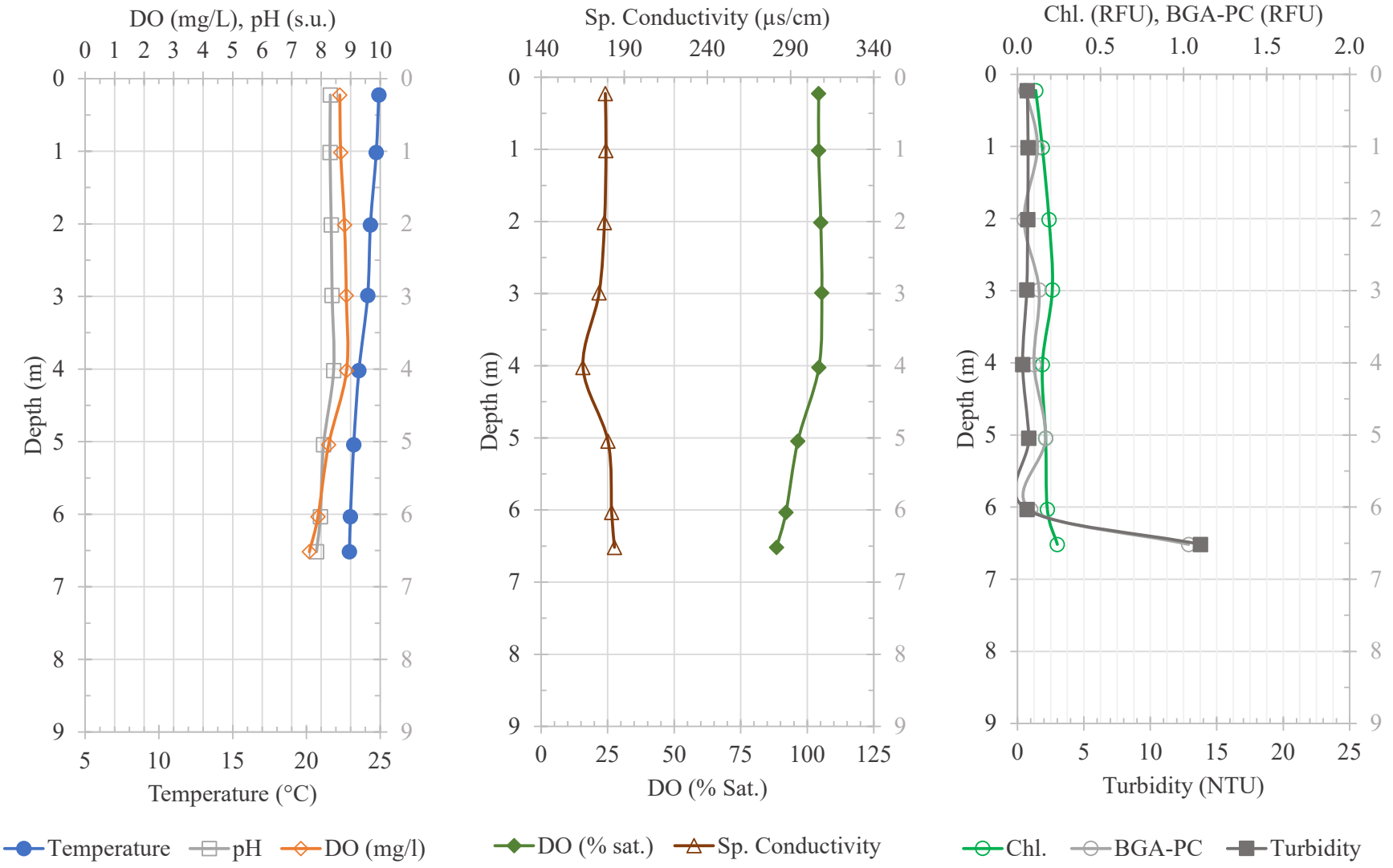
Lake Pillsbury near Scott Dam (LP3) - 6/27/2018



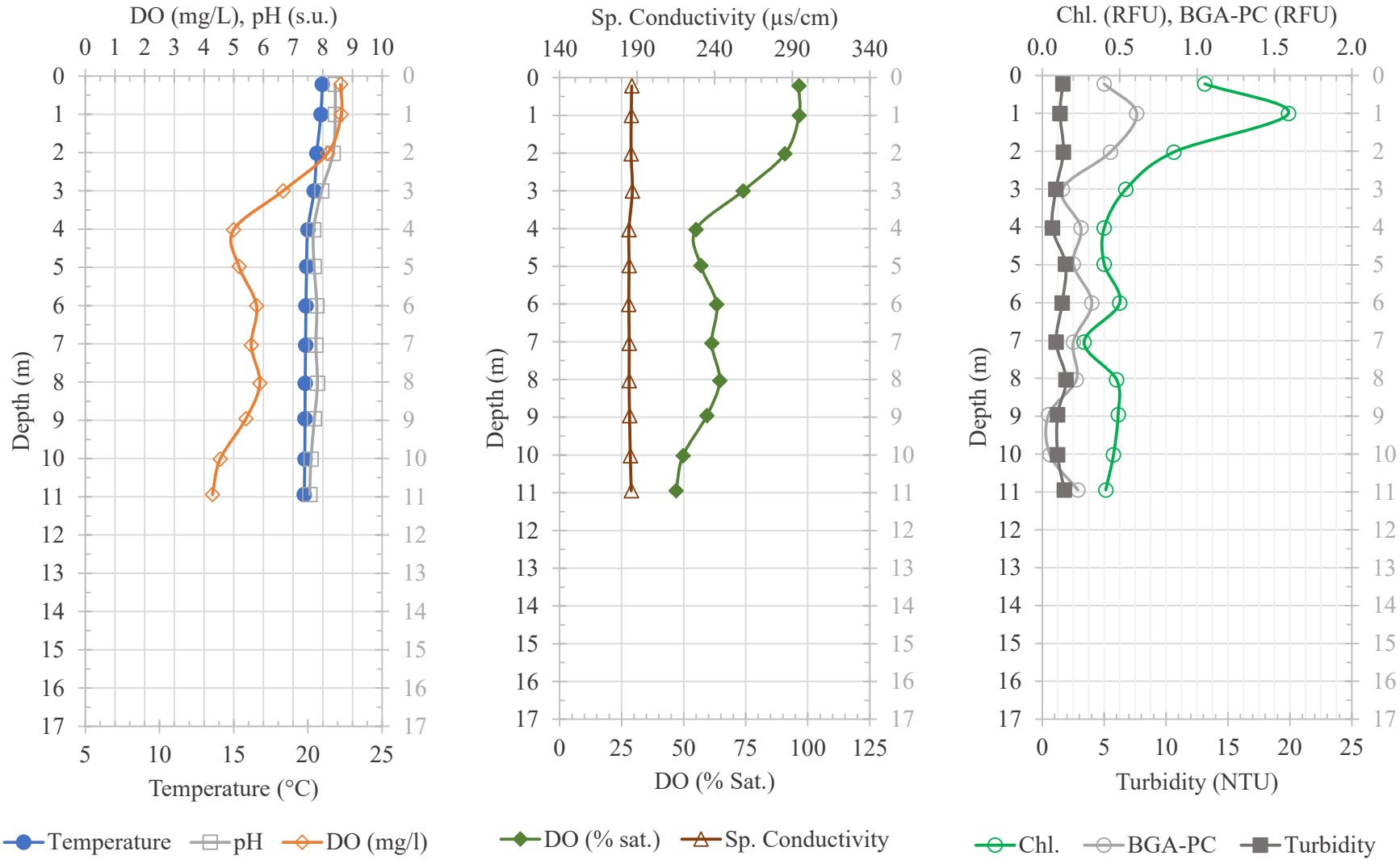




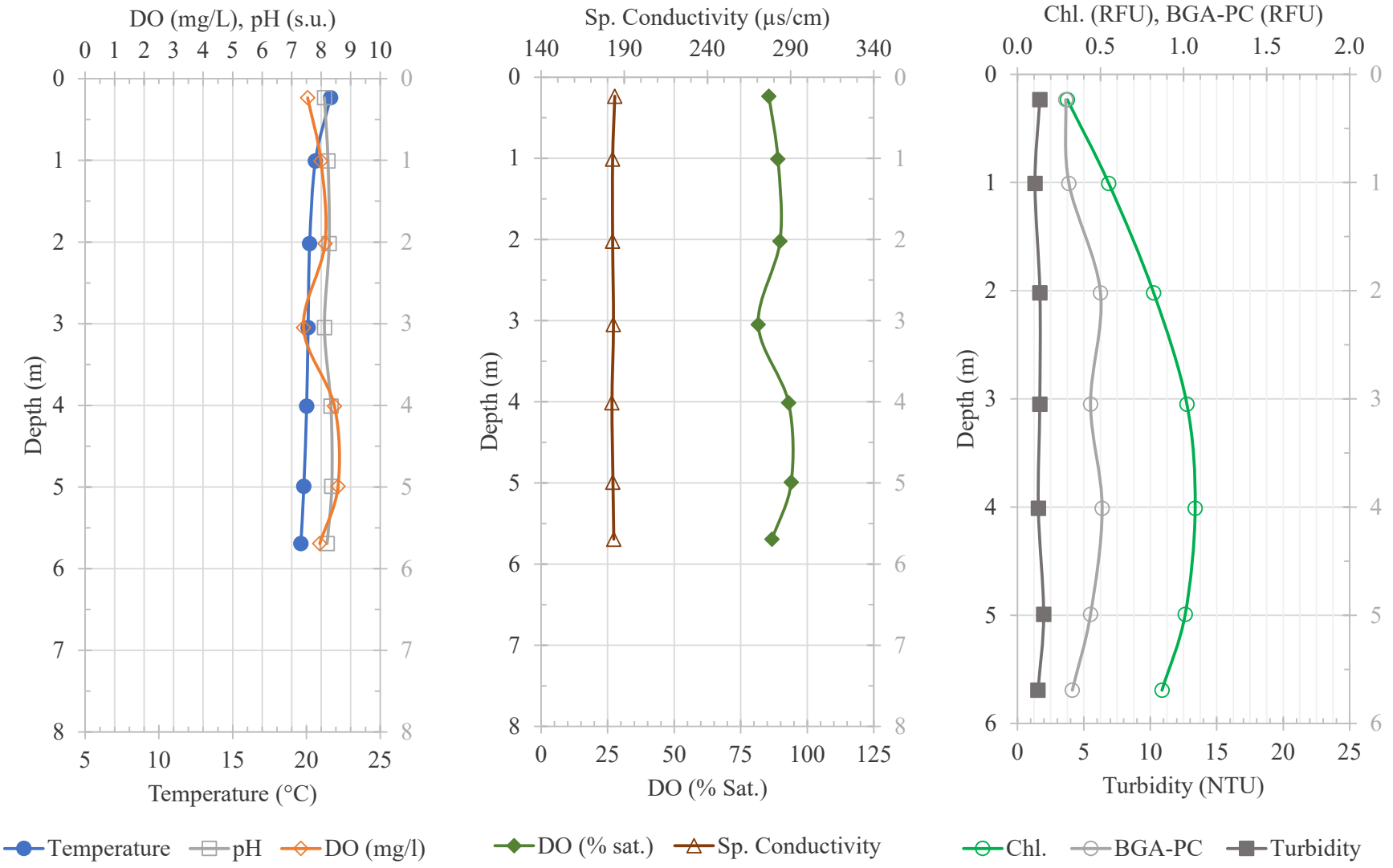
Lake Pillsbury in the Rice Fork Arm (LP4) - 6/27/2018



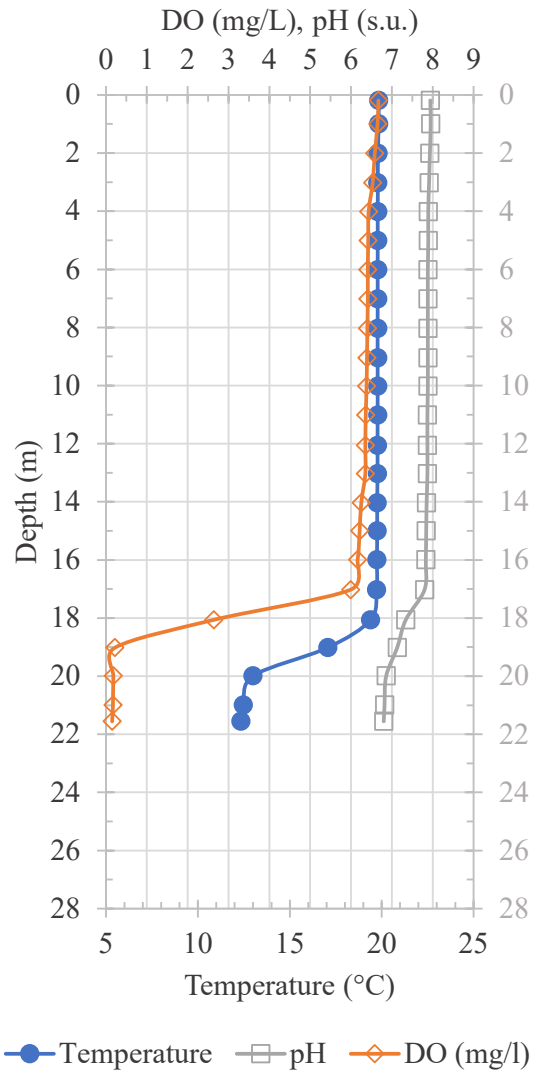
Lake Pillsbury in the Eel River Arm (LP1) - 9/27/2018

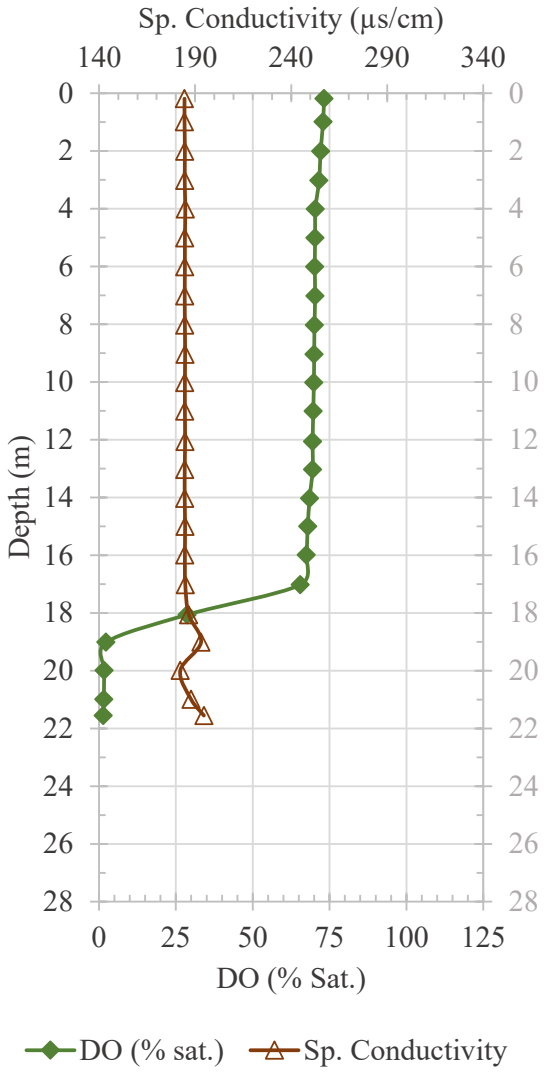


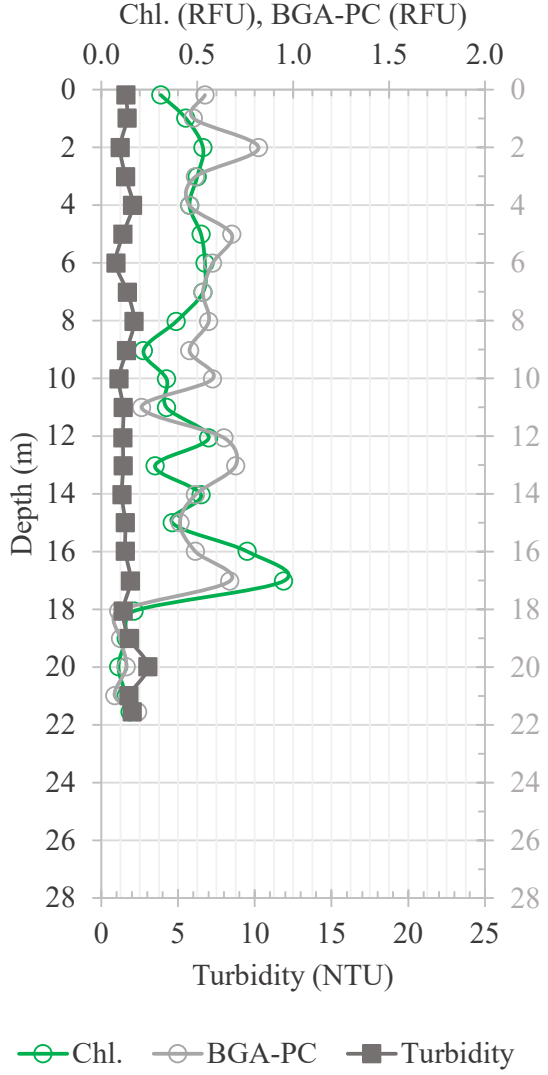
Lake Pillsbury in the North Arm (LP2) - 9/25/2018



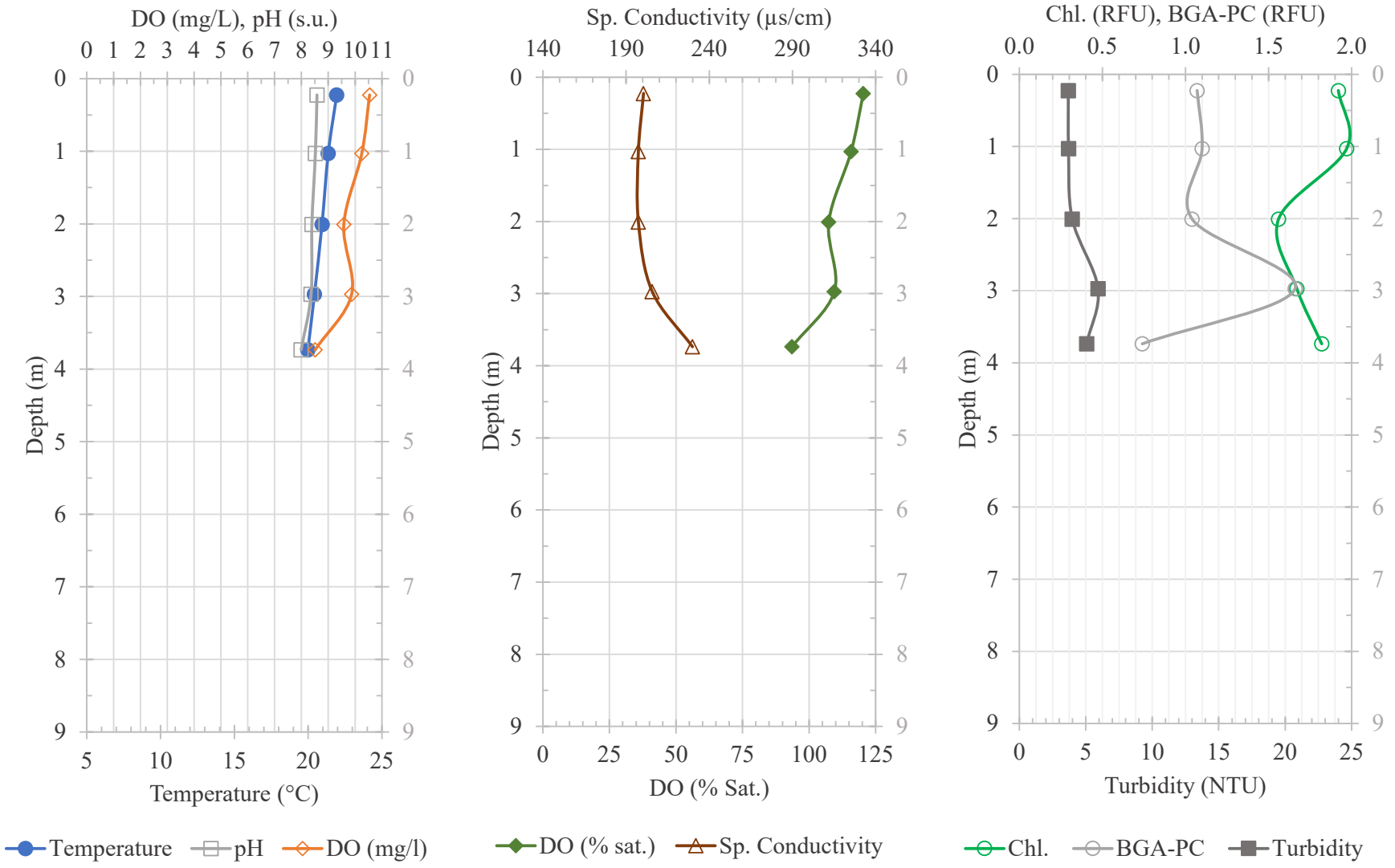
Lake Pillsbury near Scott Dam (LP3) - 9/25/2018



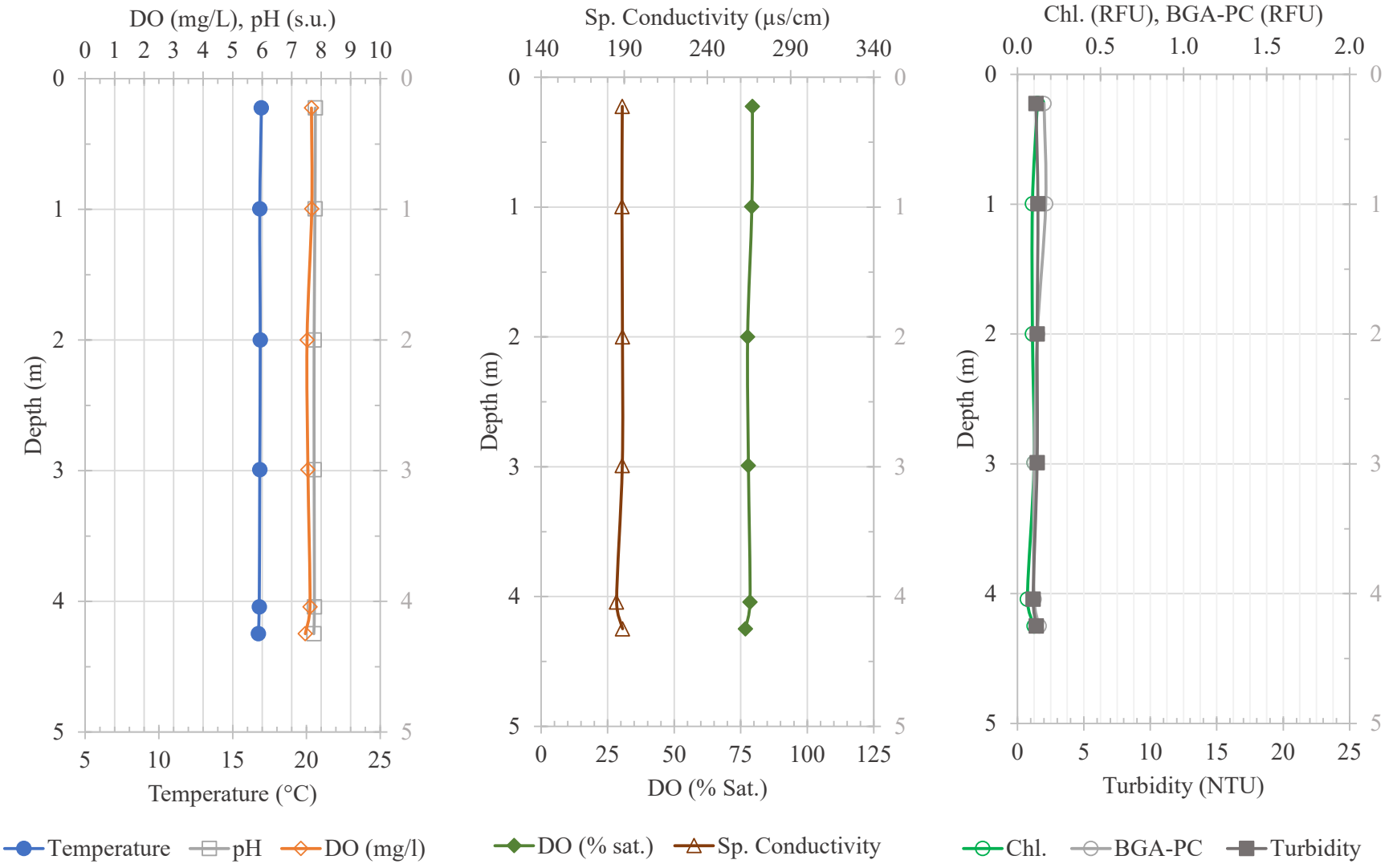




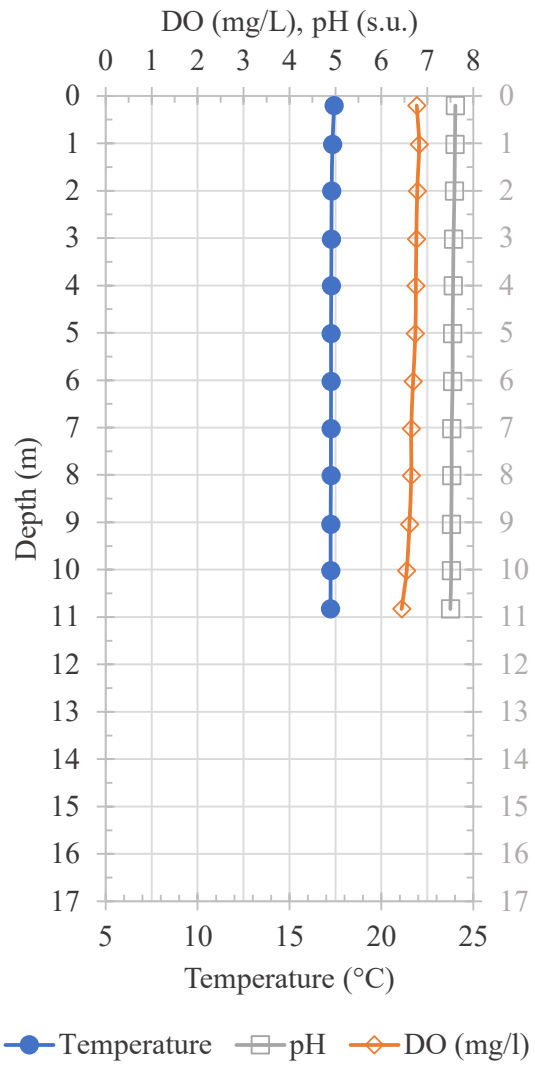
Lake Pillsbury in the Rice Fork Arm (LP4) - 9/26/2018

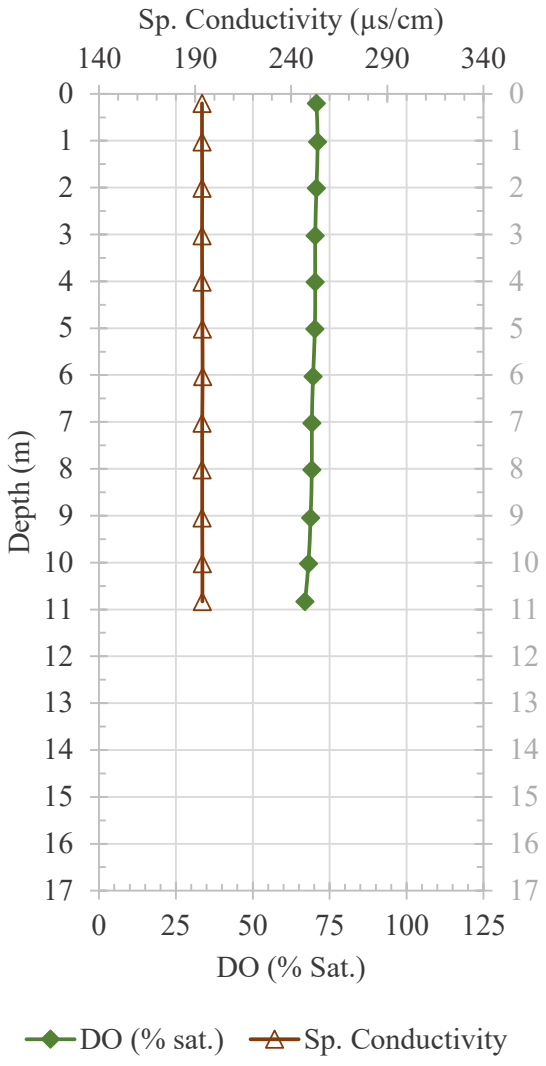


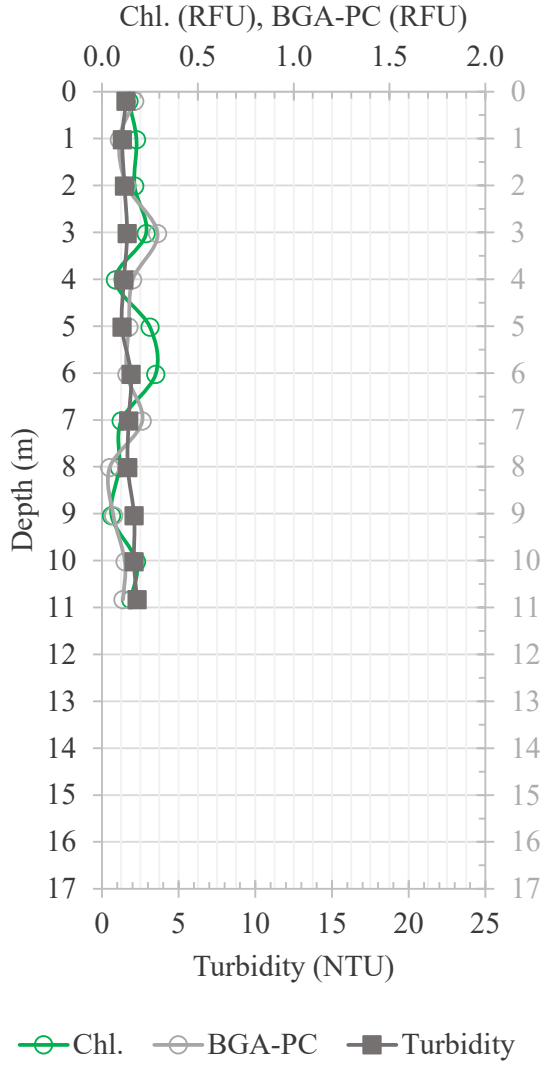
Van Arsdale Resevoir near Cape Horn Dam (VA2) - 9/20/2018



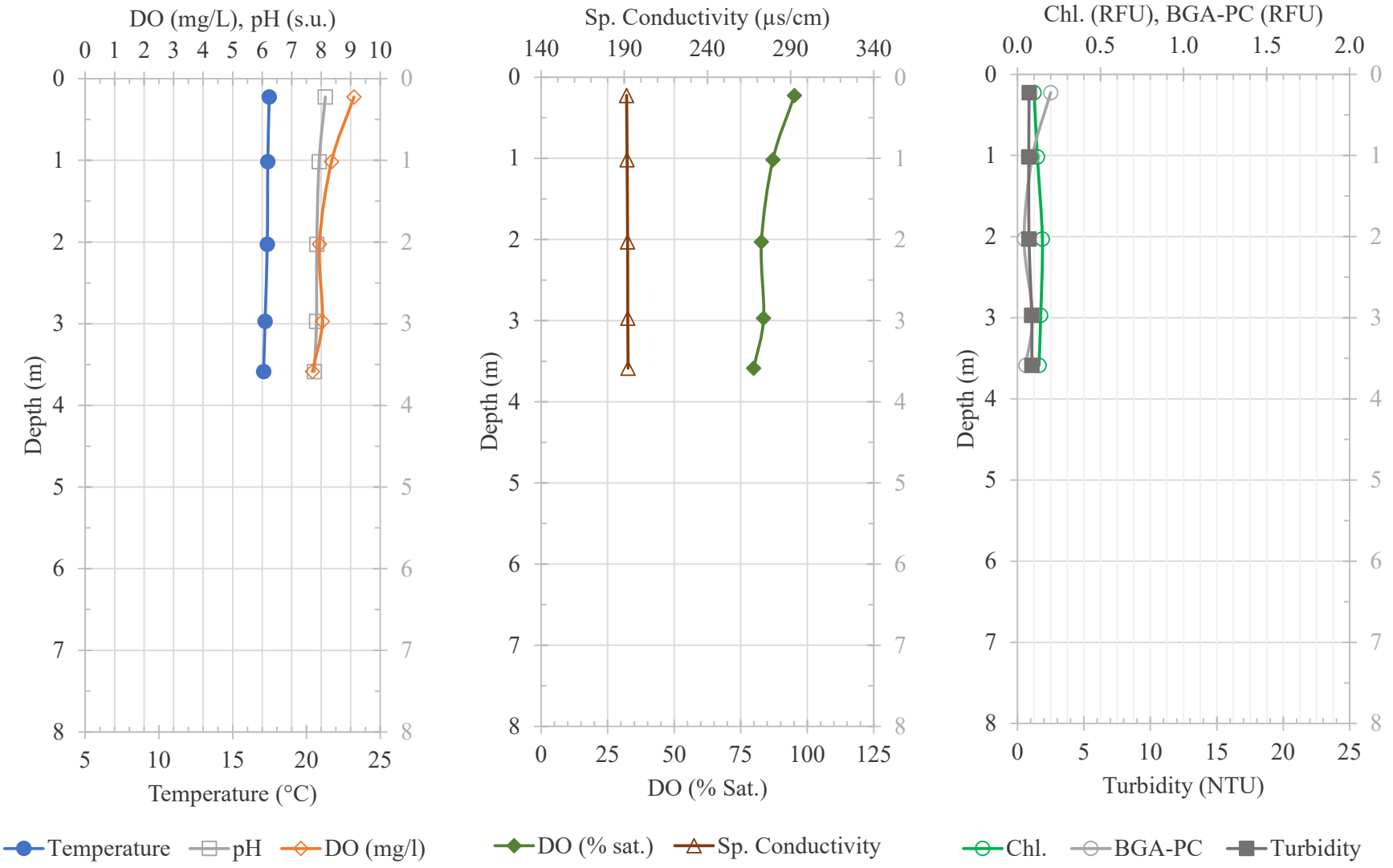
Lake Pillsbury in the Eel River Arm (LP1) - 10/23/2018



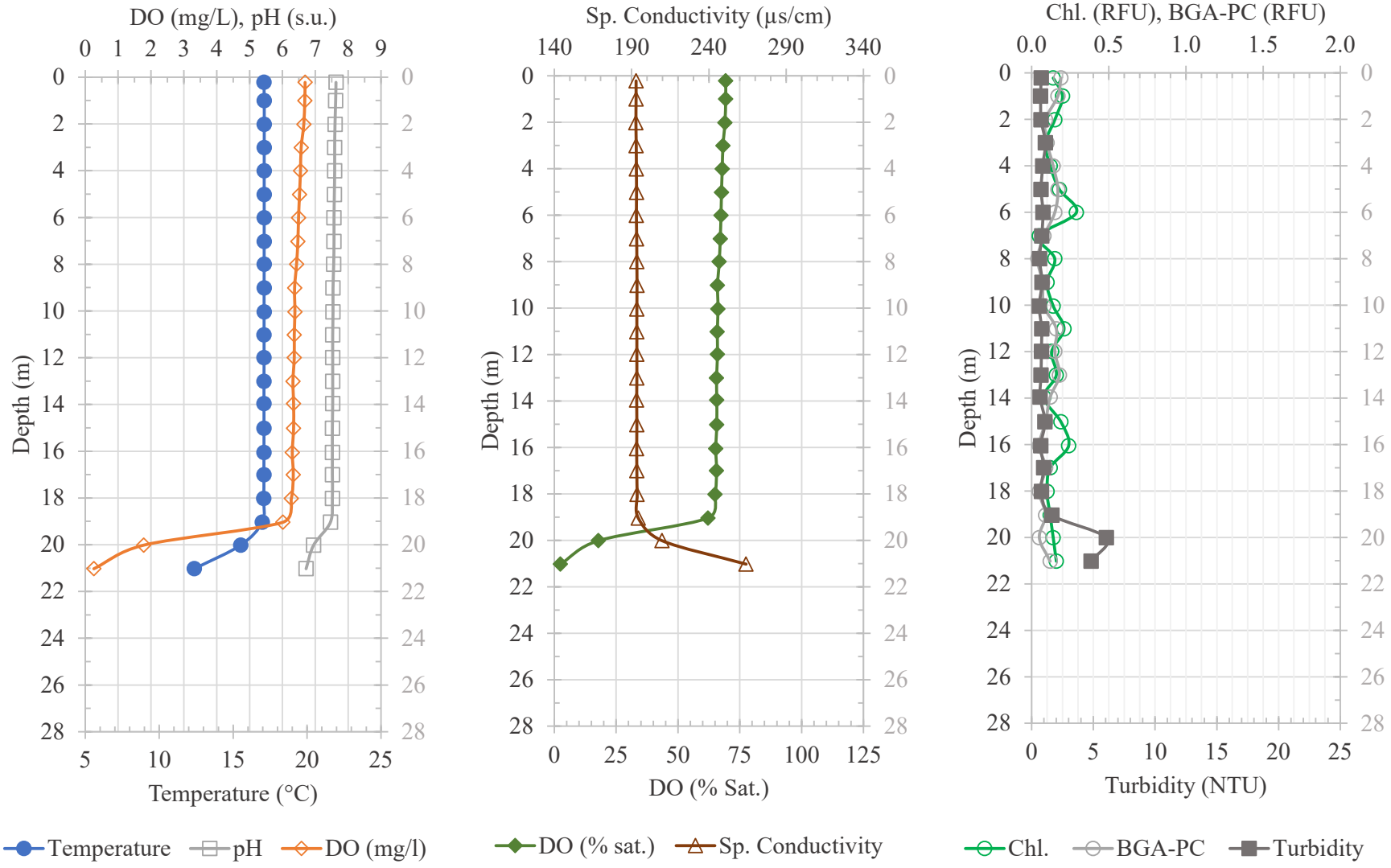




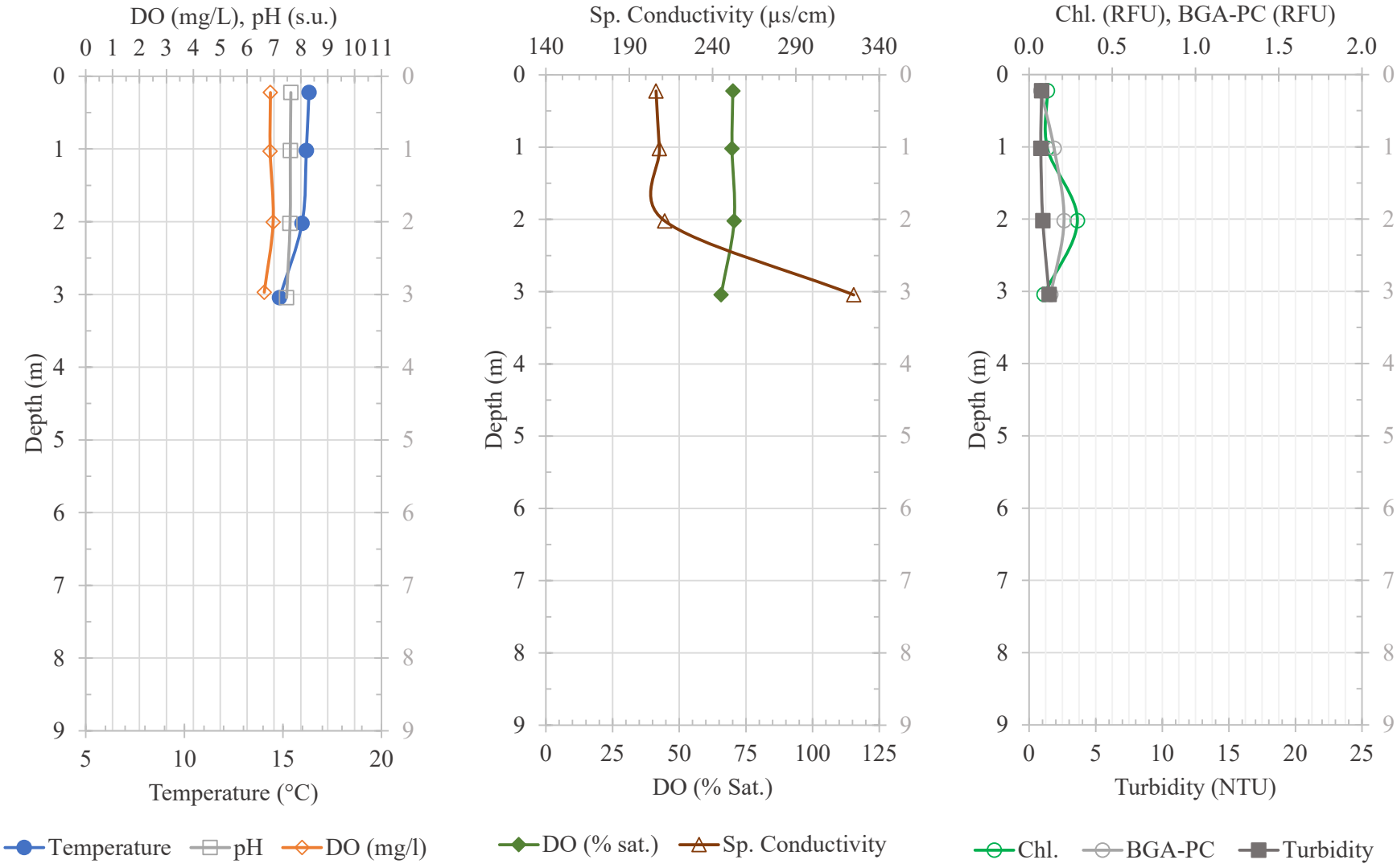
Lake Pillsbury in the North Arm (LP2) - 10/23/2018



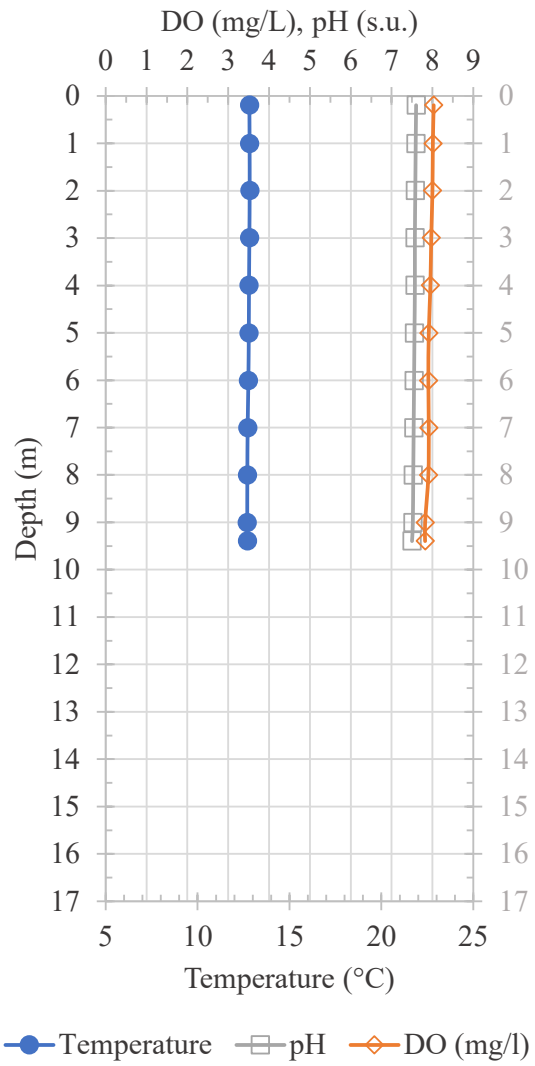
Lake Pillsbury near Scott Dam (LP3) - 10/23/2018

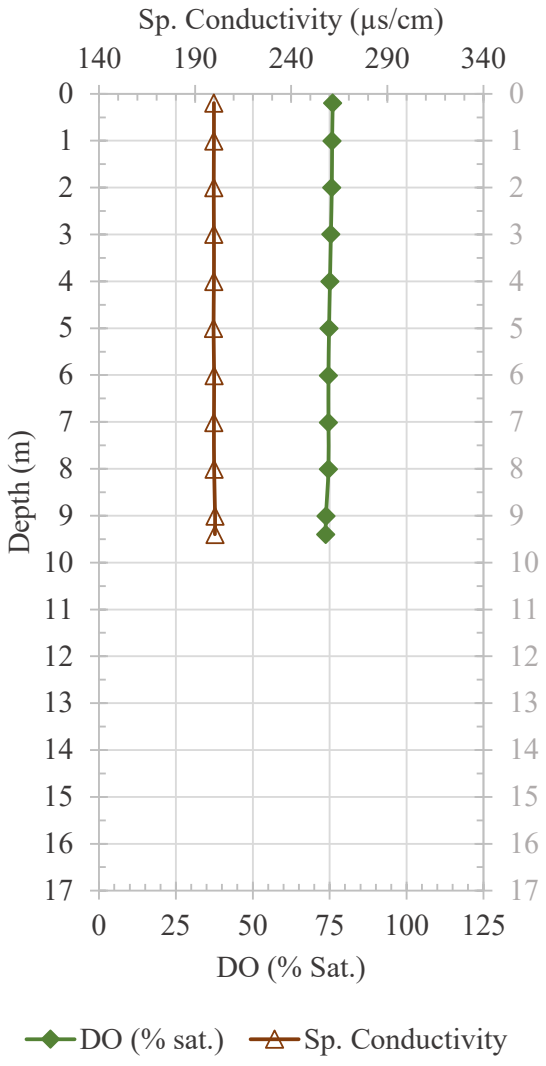


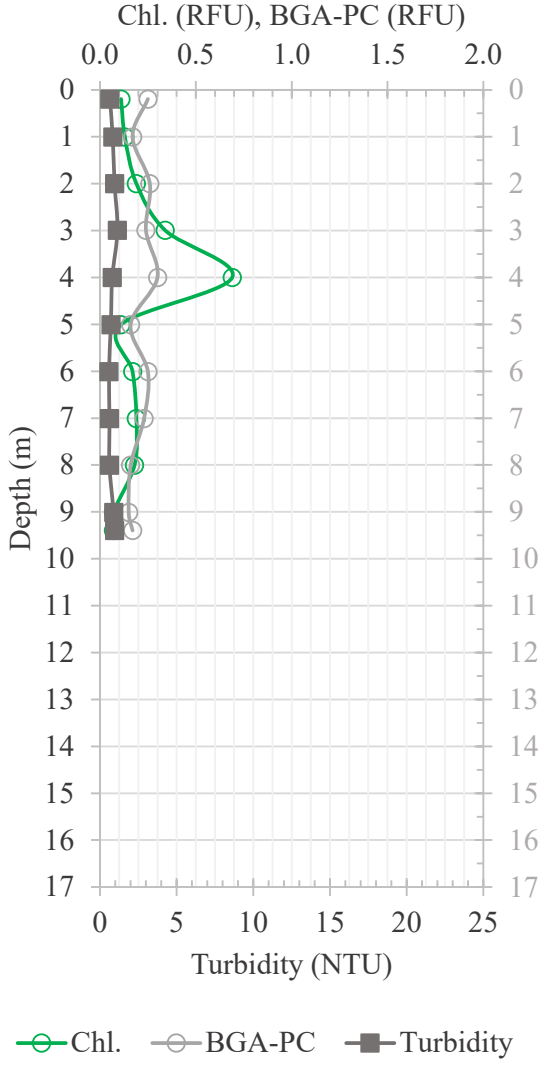
Lake Pillsbury in the Rice Fork Arm (LP4) - 10/24/2018



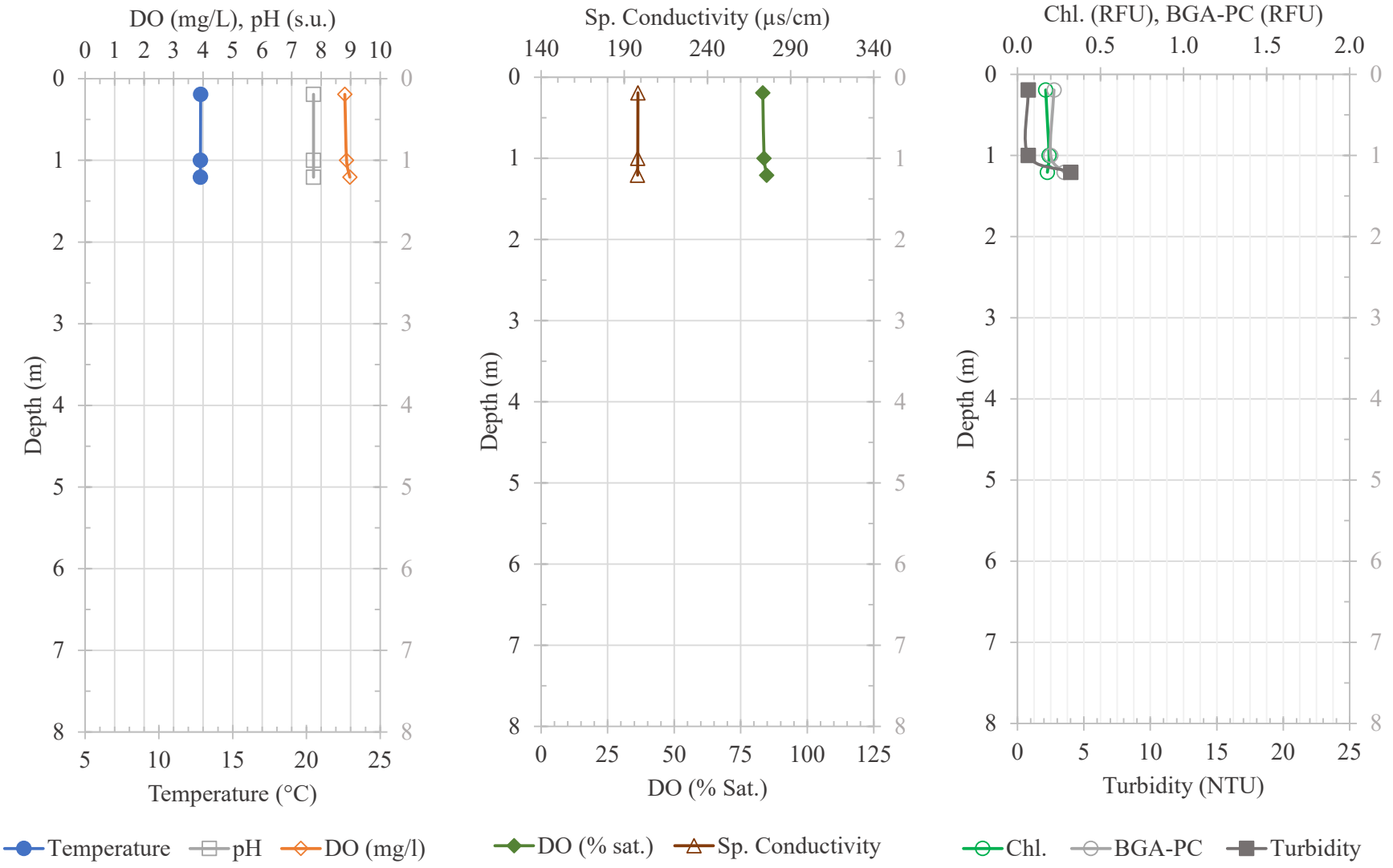
Lake Pillsbury in the Eel River Arm (LP1) - 11/13/2018



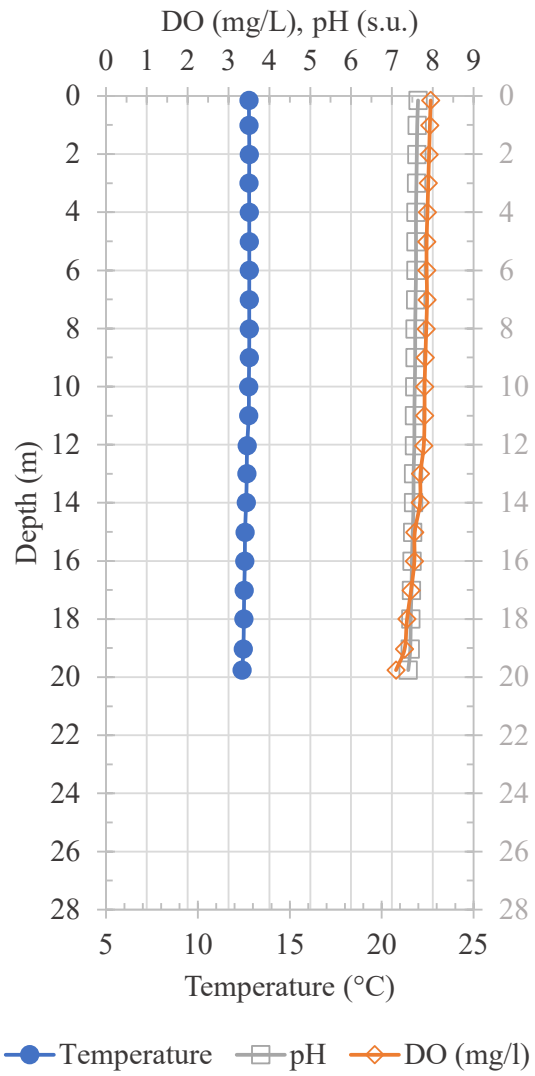


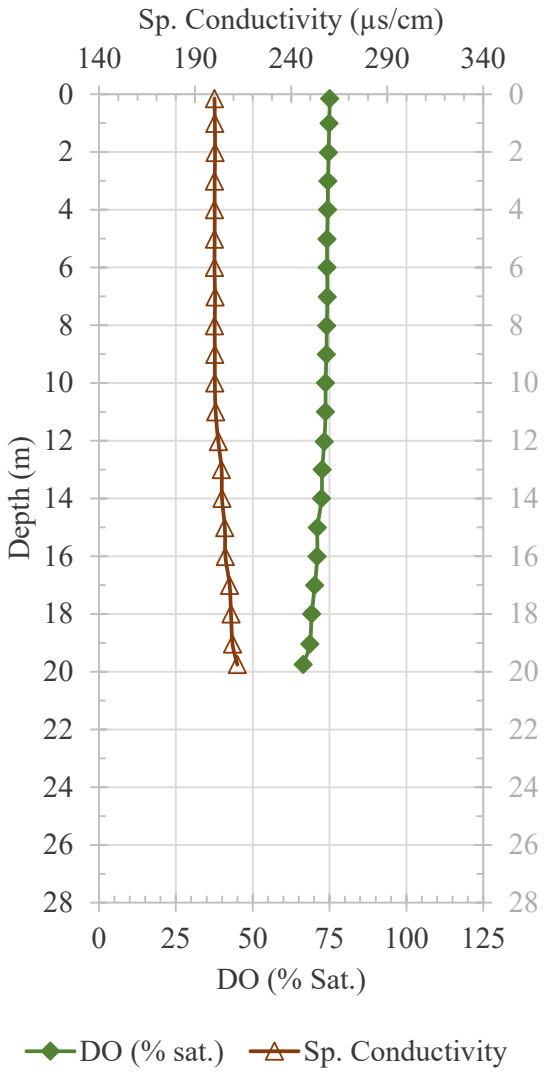


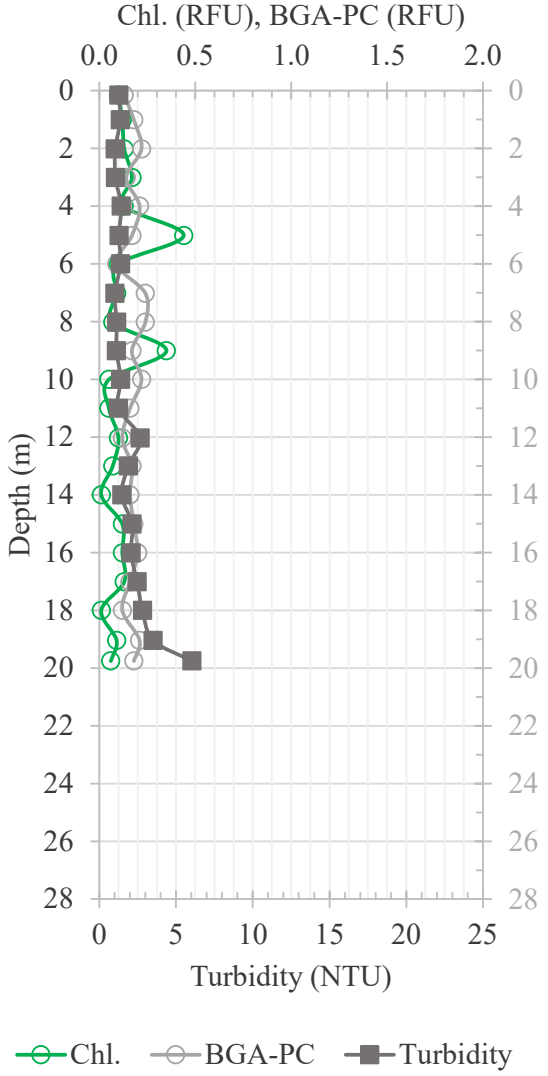
Lake Pillsbury in the North Arm (LP2) - 11/13/2018



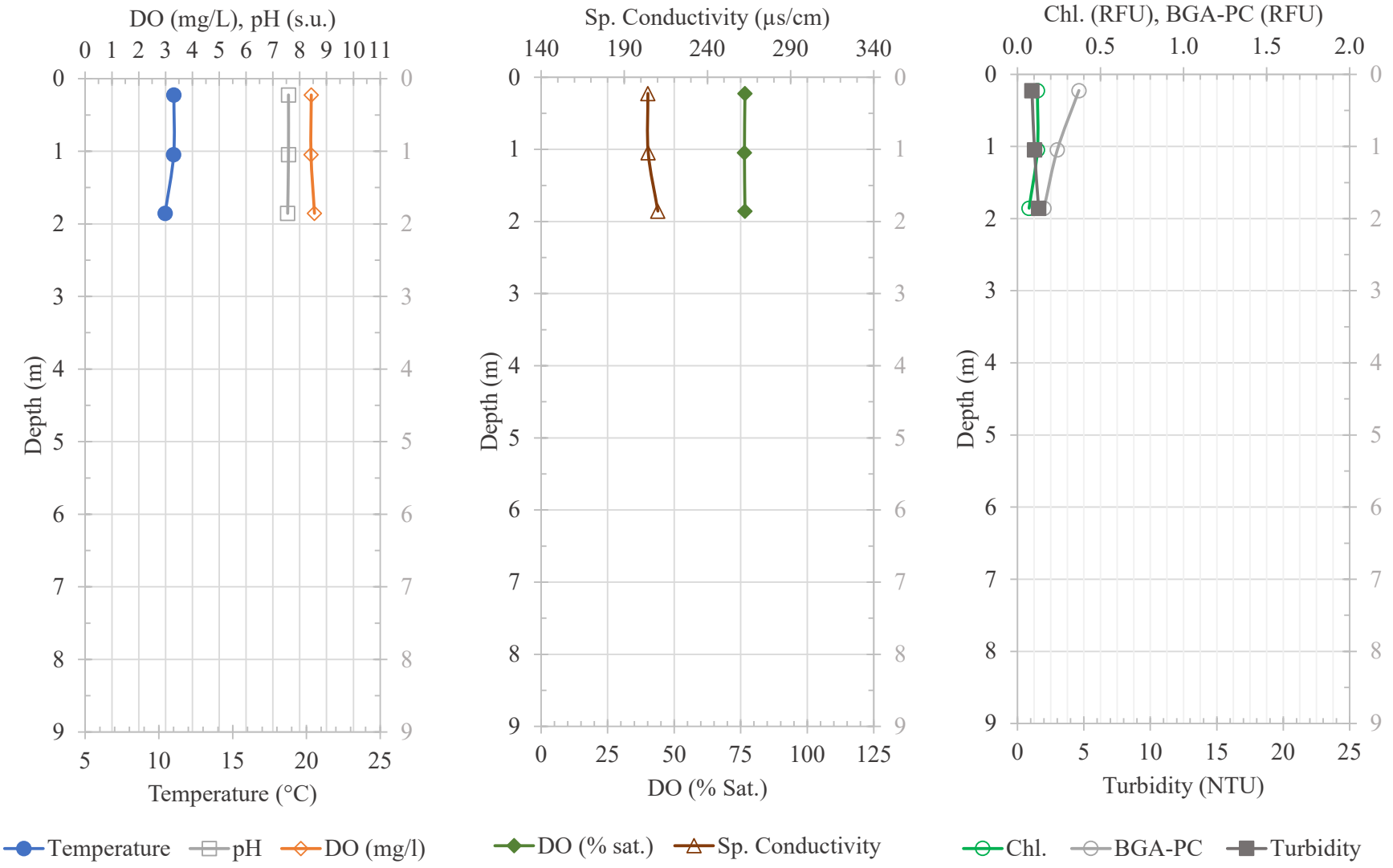
Lake Pillsbury near Scott Dam (LP3) - 11/13/2018







Lake Pillsbury in the Rice Fork Arm (LP4) - 11/14/2018



Attachment B

Chains of Custody and Laboratory Reports - Seasonal and Monthly Water Quality Samples

Alpha Analytical Laboratories Inc.
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ELAP Certificates 1551, 2728, and 2922

06 June 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18E1576

Enclosed are the results of analyses for samples received by the laboratory on 05/15/18 17:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ER 167.8	18E1576-01	Water	05/15/18 11:15	05/15/18 17:00
TC 0.1	18E1576-02	Water	05/15/18 14:15	05/15/18 17:00
ER 153.1	18E1576-03	Water	05/15/18 15:15	05/15/18 17:00
ER 152.9	18E1576-04	Water	05/15/18 15:45	05/15/18 17:00

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.

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 167.8 (18E1576-01) Water Sampled: 05/15/18 11:15 Received: 05/15/18 17:00											
Calcium	**17**	**0.080**	**1.0**	**mg/L**	1	AE83733	05/18/18 08:00	05/30/18 15:10	EPA 200.7	MAM	
Magnesium	**5.1**	**0.030**	**1.0**	**mg/L**	1	AE83733	05/18/18 08:00	05/30/18 15:10	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AE84278	05/30/18 11:36	05/30/18 16:33	EPA 245.1	EL	U
TC 0.1 (18E1576-02) Water Sampled: 05/15/18 14:15 Received: 05/15/18 17:00											
Calcium	**18**	**0.080**	**1.0**	**mg/L**	1	AE83733	05/18/18 08:00	05/30/18 15:15	EPA 200.7	MAM	
Magnesium	**7.6**	**0.030**	**1.0**	**mg/L**	1	AE83733	05/18/18 08:00	05/30/18 15:15	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AE84278	05/30/18 11:36	05/30/18 16:36	EPA 245.1	EL	U
ER 153.1 (18E1576-03) Water Sampled: 05/15/18 15:15 Received: 05/15/18 17:00											
Calcium	**19**	**0.080**	**1.0**	**mg/L**	1	AE83733	05/18/18 08:00	05/30/18 15:20	EPA 200.7	MAM	
Magnesium	**5.6**	**0.030**	**1.0**	**mg/L**	1	AE83733	05/18/18 08:00	05/30/18 15:20	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AE84278	05/30/18 11:36	05/30/18 16:38	EPA 245.1	EL	U
ER 152.9 (18E1576-04) Water Sampled: 05/15/18 15:45 Received: 05/15/18 17:00											
Calcium	**19**	**0.080**	**1.0**	**mg/L**	1	AE83733	05/18/18 08:00	05/30/18 15:24	EPA 200.7	MAM	
Magnesium	**5.8**	**0.030**	**1.0**	**mg/L**	1	AE83733	05/18/18 08:00	05/30/18 15:24	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AE84278	05/30/18 11:36	05/30/18 16:41	EPA 245.1	EL	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 167.8 (18E1576-01) Water Sampled: 05/15/18 11:15 Received: 05/15/18 17:00											
Aluminum	**150**	**20**	**40**	**ug/L**	4	AE83700	05/16/18 12:15	05/21/18 15:09	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:42	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:42	EPA 200.8	MMY	R-01, U
Barium	**49**	**0.80**	**2.0**	**ug/L**	4	AE83700	05/16/18 12:15	05/17/18 20:42	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:42	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:42	EPA 200.8	MMY	R-01, U
Chromium	ND	1.6	2.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:42	EPA 200.8	MMY	R-01, U
Cobalt	**0.18**	**0.12**	**0.40**	**ug/L**	4	AE83700	05/16/18 12:15	05/17/18 20:42	EPA 200.8	MMY	R-01, J
Copper	ND	1.6	2.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:42	EPA 200.8	MMY	R-01, U
Iron	**750**	**40**	**200**	**ug/L**	4	AE83700	05/16/18 12:15	05/17/18 20:42	EPA 200.8	MMY	
Lead	ND	0.24	1.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:42	EPA 200.8	MMY	R-01, U
Manganese	**17**	**8.0**	**20**	**ug/L**	4	AE83700	05/16/18 12:15	05/17/18 20:42	EPA 200.8	MMY	R-01, J
Molybdenum	**0.36**	**0.28**	**1.0**	**ug/L**	4	AE83700	05/16/18 12:15	05/17/18 20:42	EPA 200.8	MMY	R-01, J
Nickel	**2.8**	**1.2**	**2.0**	**ug/L**	4	AE83700	05/16/18 12:15	05/21/18 15:09	EPA 200.8	MMY	
Selenium	ND	0.80	8.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:42	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:42	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:42	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:42	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:42	EPA 200.8	MMY	R-01, U
TC 0.1 (18E1576-02) Water Sampled: 05/15/18 14:15 Received: 05/15/18 17:00											**R-01**
Aluminum	**21**	**20**	**40**	**ug/L**	4	AE83700	05/16/18 12:15	05/21/18 15:16	EPA 200.8	MMY	J
Antimony	ND	0.80	2.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:56	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:56	EPA 200.8	MMY	R-01, U
Barium	**56**	**0.80**	**2.0**	**ug/L**	4	AE83700	05/16/18 12:15	05/17/18 20:56	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:56	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:56	EPA 200.8	MMY	R-01, U
Chromium	ND	1.6	2.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:56	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.12	0.40	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:56	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:56	EPA 200.8	MMY	R-01, U
Iron	**57**	**40**	**200**	**ug/L**	4	AE83700	05/16/18 12:15	05/17/18 20:56	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:56	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:56	EPA 200.8	MMY	R-01, U
Molybdenum	ND	0.28	1.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:56	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
TC 0.1 (18E1576-02) Water Sampled: 05/15/18 14:15 Received: 05/15/18 17:00											
Nickel	ND	1.2	2.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:56	EPA 200.8	MMY	R-01, U
Selenium	ND	0.80	8.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:56	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:56	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:56	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:56	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE83700	05/16/18 12:15	05/17/18 20:56	EPA 200.8	MMY	R-01, U
ER 153.1 (18E1576-03) Water Sampled: 05/15/18 15:15 Received: 05/15/18 17:00											
Aluminum	**160**	**20**	**40**	**ug/L**	4	AE83700	05/16/18 12:15	05/21/18 15:23	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:09	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:09	EPA 200.8	MMY	R-01, U
Barium	**53**	**0.80**	**2.0**	**ug/L**	4	AE83700	05/16/18 12:15	05/17/18 21:09	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:09	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:09	EPA 200.8	MMY	R-01, U
Chromium	ND	1.6	2.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:09	EPA 200.8	MMY	R-01, U
Cobalt	**0.16**	**0.12**	**0.40**	**ug/L**	4	AE83700	05/16/18 12:15	05/17/18 21:09	EPA 200.8	MMY	R-01, J
Copper	ND	1.6	2.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:09	EPA 200.8	MMY	R-01, U
Iron	**240**	**40**	**200**	**ug/L**	4	AE83700	05/16/18 12:15	05/17/18 21:09	EPA 200.8	MMY	
Lead	ND	0.24	1.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:09	EPA 200.8	MMY	R-01, U
Manganese	**14**	**8.0**	**20**	**ug/L**	4	AE83700	05/16/18 12:15	05/17/18 21:09	EPA 200.8	MMY	R-01, J
Molybdenum	**0.36**	**0.28**	**1.0**	**ug/L**	4	AE83700	05/16/18 12:15	05/17/18 21:09	EPA 200.8	MMY	R-01, J
Nickel	**2.2**	**1.2**	**2.0**	**ug/L**	4	AE83700	05/16/18 12:15	05/17/18 21:09	EPA 200.8	MMY	
Selenium	ND	0.80	8.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:09	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:09	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:09	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:09	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:09	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 152.9 (18E1576-04) Water Sampled: 05/15/18 15:45 Received: 05/15/18 17:00											
Aluminum	**140**	**20**	**40**	**ug/L**	4	AE83700	05/16/18 12:15	05/21/18 15:30	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:22	EPA 200.8	MMY	R-01, U
Arsenic	**1.0**	**0.80**	**2.0**	**ug/L**	4	AE83700	05/16/18 12:15	05/17/18 21:22	EPA 200.8	MMY	R-01, J
Barium	**51**	**0.80**	**2.0**	**ug/L**	4	AE83700	05/16/18 12:15	05/17/18 21:22	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:22	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:22	EPA 200.8	MMY	R-01, U
Chromium	ND	1.6	2.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:22	EPA 200.8	MMY	R-01, U
Cobalt	**0.15**	**0.12**	**0.40**	**ug/L**	4	AE83700	05/16/18 12:15	05/17/18 21:22	EPA 200.8	MMY	R-01, J
Copper	ND	1.6	2.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:22	EPA 200.8	MMY	R-01, U
Iron	**210**	**40**	**200**	**ug/L**	4	AE83700	05/16/18 12:15	05/17/18 21:22	EPA 200.8	MMY	
Lead	ND	0.24	1.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:22	EPA 200.8	MMY	R-01, U
Manganese	**13**	**8.0**	**20**	**ug/L**	4	AE83700	05/16/18 12:15	05/17/18 21:22	EPA 200.8	MMY	R-01, J
Molybdenum	**0.34**	**0.28**	**1.0**	**ug/L**	4	AE83700	05/16/18 12:15	05/17/18 21:22	EPA 200.8	MMY	R-01, J
Nickel	**2.1**	**1.2**	**2.0**	**ug/L**	4	AE83700	05/16/18 12:15	05/17/18 21:22	EPA 200.8	MMY	
Selenium	ND	0.80	8.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:22	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:22	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:22	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:22	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE83700	05/16/18 12:15	05/17/18 21:22	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 167.8 (18E1576-01) Water Sampled: 05/15/18 11:15 Received: 05/15/18 17:00											
Mercury, dissolved	**0.065**	**0.060**	**0.20**	**ug/L**	1	AE84314	05/31/18 08:46	05/31/18 15:00	EPA 245.1	EL	J
TC 0.1 (18E1576-02) Water Sampled: 05/15/18 14:15 Received: 05/15/18 17:00											
Mercury, dissolved	**0.063**	**0.060**	**0.20**	**ug/L**	1	AE84314	05/31/18 08:46	05/31/18 15:16	EPA 245.1	EL	J
ER 153.1 (18E1576-03) Water Sampled: 05/15/18 15:15 Received: 05/15/18 17:00											
Mercury, dissolved	**0.065**	**0.060**	**0.20**	**ug/L**	1	AE84314	05/31/18 08:46	05/31/18 15:24	EPA 245.1	EL	J
ER 152.9 (18E1576-04) Water Sampled: 05/15/18 15:45 Received: 05/15/18 17:00											
Mercury, dissolved	**0.065**	**0.060**	**0.20**	**ug/L**	1	AE84314	05/31/18 08:46	05/31/18 15:26	EPA 245.1	EL	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 167.8 (18E1576-01) Water Sampled: 05/15/18 11:15 Received: 05/15/18 17:00											**FILT**
Aluminum, dissolved	**22**	**20**	**40**	**ug/L**	4	AE83651	05/17/18 12:15	05/21/18 11:13	EPA 200.8	MMY	R-01, J
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:13	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:13	EPA 200.8	MMY	R-01, U
Barium, dissolved	**52**	**0.80**	**2.0**	**ug/L**	4	AE83651	05/17/18 12:15	05/21/18 11:13	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:13	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:13	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	1.6	2.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:13	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:13	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:13	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:13	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.38**	**0.28**	**1.0**	**ug/L**	4	AE83651	05/17/18 12:15	05/21/18 11:13	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**3.4**	**1.2**	**2.0**	**ug/L**	4	AE83651	05/17/18 12:15	05/21/18 11:13	EPA 200.8	MMY	
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:13	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:13	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:13	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:13	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:13	EPA 200.8	MMY	R-01, U
TC 0.1 (18E1576-02) Water Sampled: 05/15/18 14:15 Received: 05/15/18 17:00											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:20	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:00	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:20	EPA 200.8	MMY	R-01, U
Barium, dissolved	**59**	**0.80**	**2.0**	**ug/L**	4	AE83651	05/17/18 12:15	05/21/18 13:00	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:20	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:00	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	1.6	2.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:00	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:00	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:00	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:20	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	ND	0.28	1.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:00	EPA 200.8	MMY	R-01, U
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:00	EPA 200.8	MMY	R-01, U
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:00	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:00	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:20	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
TC 0.1 (18E1576-02) Water Sampled: 05/15/18 14:15 Received: 05/15/18 17:00											**FILT**
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:00	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:00	EPA 200.8	MMY	R-01, U
ER 153.1 (18E1576-03) Water Sampled: 05/15/18 15:15 Received: 05/15/18 17:00											**FILT**
Aluminum, dissolved	**24**	**20**	**40**	**ug/L**	4	AE83651	05/17/18 12:15	05/21/18 11:26	EPA 200.8	MMY	R-01, J
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:26	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:26	EPA 200.8	MMY	R-01, U
Barium, dissolved	**55**	**0.80**	**2.0**	**ug/L**	4	AE83651	05/17/18 12:15	05/21/18 11:26	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:26	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:07	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	1.6	2.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:26	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:26	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:07	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:26	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.38**	**0.28**	**1.0**	**ug/L**	4	AE83651	05/17/18 12:15	05/21/18 11:26	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.8**	**1.2**	**2.0**	**ug/L**	4	AE83651	05/17/18 12:15	05/21/18 11:26	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:07	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:07	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:26	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:26	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:26	EPA 200.8	MMY	R-01, U
ER 152.9 (18E1576-04) Water Sampled: 05/15/18 15:45 Received: 05/15/18 17:00											**FILT**
Aluminum, dissolved	**140**	**20**	**40**	**ug/L**	4	AE83651	05/17/18 12:15	05/21/18 13:13	EPA 200.8	MMY	R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:13	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:33	EPA 200.8	MMY	R-01, U
Barium, dissolved	**56**	**0.80**	**2.0**	**ug/L**	4	AE83651	05/17/18 12:15	05/21/18 13:13	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:13	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:13	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	1.6	2.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:13	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:33	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:13	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:13	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.35**	**0.28**	**1.0**	**ug/L**	4	AE83651	05/17/18 12:15	05/21/18 11:33	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.3**	**1.2**	**2.0**	**ug/L**	4	AE83651	05/17/18 12:15	05/21/18 11:33	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 152.9 (18E1576-04) Water Sampled: 05/15/18 15:45 Received: 05/15/18 17:00											**FILT**
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:33	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:33	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AE83651	05/17/18 12:15	05/21/18 11:33	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:13	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AE83651	05/17/18 12:15	05/21/18 13:13	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 167.8 (18E1576-01) Water Sampled: 05/15/18 11:15 Received: 05/15/18 17:00											
Ammonia as N	ND	0.10	0.20	mg/L	1	AE84010	05/24/18 09:00	05/24/18 16:30	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE83751	05/17/18 08:00	05/22/18 09:15	SM5210B	EF	U
Chlorophyll-a	**0.0011**	**0.0010**	**0.010**	**mg/L**	1	AE84187	05/17/18 08:30	05/31/18 09:56	SM10200H	PBM	J
Dissolved Organic Carbon	**2.46**	**0.600**	**1.00**	**mg/L**	1	AE84143	05/25/18 08:47	05/25/18 14:05	SM5310C	JIM	
Oil & Grease (HEM)	**4.0**	**1.4**	**5.0**	**mg/L**	1	AE84080	05/24/18 07:58	05/24/18 14:24	EPA 1664A	STS	J
Sulfide	ND	0.020	0.10	mg/L	1	AE83776	05/17/18 14:30	05/17/18 16:30	SM4500-S2 D	EV	U
Total Dissolved Solids	**86**	**5.0**	**10**	**mg/L**	1	AE83889	05/21/18 08:06	05/31/18 11:38	SM2540C	PBM	
Total Suspended Solids	**2.3**	**0.30**	**1.0**	**mg/L**	1	AE83755	05/18/18 09:00	05/18/18 16:20	SM2540D	MRL	
Bicarbonate Alkalinity as CaCO3	**62**	**1.0**	**5.0**	**mg/L**	1	AE83770	05/22/18 08:00	05/22/18 16:18	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE83770	05/22/18 08:00	05/22/18 16:18	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE83770	05/22/18 08:00	05/22/18 16:18	SM2320B	CEF	U
Total Alkalinity as CaCO3	**62**	**1.0**	**5.0**	**mg/L**	1	AE83770	05/22/18 08:00	05/22/18 16:18	SM2320B	CEF	
Nitrate + Nitrite as N	**0.028**	**0.0086**	**0.40**	**mg/L**	1	AE83912	05/21/18 11:45	05/31/18 11:20	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AE83938	05/23/18 06:38	05/24/18 13:17	SM4500-Norg B	SMS	U
Hardness, Total	**64**	**1**	**5**	**mg/L**	1	AE83733	05/18/18 08:00	05/30/18 15:10	SM2340B	MAM	
Phosphorus, total	**0.027**	**0.011**	**0.040**	**mg/L**	1	AE84258	05/30/18 08:15	05/30/18 13:46	SM4500-P E	SMS	J
Total Organic Carbon	**2.67**	**0.300**	**1.00**	**mg/L**	1	AE84144	05/28/18 08:48	05/28/18 15:02	SM5310C	JIM	
TC 0.1 (18E1576-02) Water Sampled: 05/15/18 14:15 Received: 05/15/18 17:00											
Ammonia as N	ND	0.10	0.20	mg/L	1	AE84010	05/24/18 09:00	05/24/18 16:30	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE83751	05/17/18 08:00	05/22/18 09:15	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AE84187	05/17/18 08:30	05/31/18 09:56	SM10200H	PBM	U
Dissolved Organic Carbon	**1.08**	**0.600**	**1.00**	**mg/L**	1	AE84143	05/25/18 08:47	05/25/18 14:30	SM5310C	JIM	
Oil & Grease (HEM)	**4.4**	**1.4**	**5.0**	**mg/L**	1	AE84080	05/24/18 07:58	05/24/18 14:24	EPA 1664A	STS	J
Total Dissolved Solids	**100**	**5.0**	**10**	**mg/L**	1	AE83889	05/21/18 08:06	05/31/18 11:38	SM2540C	PBM	
Total Suspended Solids	**0.40**	**0.30**	**1.0**	**mg/L**	1	AE83755	05/18/18 09:00	05/18/18 16:20	SM2540D	MRL	J
Bicarbonate Alkalinity as CaCO3	**71**	**1.0**	**5.0**	**mg/L**	1	AE83770	05/22/18 08:00	05/22/18 16:18	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE83770	05/22/18 08:00	05/22/18 16:18	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE83770	05/22/18 08:00	05/22/18 16:18	SM2320B	CEF	U
Total Alkalinity as CaCO3	**71**	**1.0**	**5.0**	**mg/L**	1	AE83770	05/22/18 08:00	05/22/18 16:18	SM2320B	CEF	
Nitrate + Nitrite as N	**0.028**	**0.0086**	**0.40**	**mg/L**	1	AE83912	05/21/18 11:45	05/31/18 11:20	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AE83938	05/23/18 06:38	05/24/18 13:17	SM4500-Norg B	SMS	U
Hardness, Total	**75**	**1**	**5**	**mg/L**	1	AE83733	05/18/18 08:00	05/30/18 15:15	SM2340B	MAM	
Phosphorus, total	**0.020**	**0.011**	**0.040**	**mg/L**	1	AE84258	05/30/18 08:15	05/30/18 13:46	SM4500-P E	SMS	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
TC 0.1 (18E1576-02) Water Sampled: 05/15/18 14:15 Received: 05/15/18 17:00											
Total Organic Carbon	**1.25**	**0.300**	**1.00**	**mg/L**	1	AE84144	05/28/18 08:48	05/28/18 15:15	SM5310C	JIM	
ER 153.1 (18E1576-03) Water Sampled: 05/15/18 15:15 Received: 05/15/18 17:00											
Ammonia as N	ND	0.10	0.20	mg/L	1	AE84010	05/24/18 09:00	05/24/18 16:30	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE83751	05/17/18 08:00	05/22/18 09:15	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AE84187	05/17/18 08:30	05/31/18 09:56	SM10200H	PBM	U
Dissolved Organic Carbon	**2.30**	**0.600**	**1.00**	**mg/L**	1	AE84143	05/25/18 08:47	05/25/18 15:35	SM5310C	JIM	
Oil & Grease (HEM)	**3.9**	**1.4**	**5.0**	**mg/L**	1	AE84080	05/24/18 07:58	05/24/18 14:24	EPA 1664A	STS	J
Total Dissolved Solids	**87**	**5.0**	**10**	**mg/L**	1	AE83889	05/21/18 08:06	05/31/18 11:38	SM2540C	PBM	
Total Suspended Solids	**2.5**	**0.30**	**1.0**	**mg/L**	1	AE83755	05/18/18 09:00	05/18/18 16:20	SM2540D	MRL	
Bicarbonate Alkalinity as CaCO3	**68**	**1.0**	**5.0**	**mg/L**	1	AE83770	05/22/18 08:00	05/22/18 16:18	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE83770	05/22/18 08:00	05/22/18 16:18	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE83770	05/22/18 08:00	05/22/18 16:18	SM2320B	CEF	U
Total Alkalinity as CaCO3	**68**	**1.0**	**5.0**	**mg/L**	1	AE83770	05/22/18 08:00	05/22/18 16:18	SM2320B	CEF	
Nitrate + Nitrite as N	**0.029**	**0.0086**	**0.40**	**mg/L**	1	AE83912	05/21/18 11:45	05/31/18 11:20	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AE83938	05/23/18 06:38	05/24/18 13:17	SM4500-Norg B	SMS	U
Hardness, Total	**70**	**1**	**5**	**mg/L**	1	AE83733	05/18/18 08:00	05/30/18 15:20	SM2340B	MAM	
Phosphorus, total	**0.023**	**0.011**	**0.040**	**mg/L**	1	AE84258	05/30/18 08:15	05/30/18 13:46	SM4500-P E	SMS	J
Total Organic Carbon	**2.22**	**0.300**	**1.00**	**mg/L**	1	AE84144	05/28/18 08:48	05/28/18 13:32	SM5310C	JIM	
ER 152.9 (18E1576-04) Water Sampled: 05/15/18 15:45 Received: 05/15/18 17:00											
Ammonia as N	ND	0.10	0.20	mg/L	1	AE84010	05/24/18 09:00	05/24/18 16:30	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE83751	05/17/18 08:00	05/22/18 09:15	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AE84187	05/17/18 08:30	05/31/18 09:56	SM10200H	PBM	U
Dissolved Organic Carbon	**2.36**	**0.600**	**1.00**	**mg/L**	1	AE84143	05/25/18 08:47	05/25/18 15:48	SM5310C	JIM	
Oil & Grease (HEM)	**1.6**	**1.4**	**5.0**	**mg/L**	1	AE84080	05/24/18 07:58	05/24/18 14:24	EPA 1664A	STS	J
Total Dissolved Solids	**97**	**5.0**	**10**	**mg/L**	1	AE83889	05/21/18 08:06	05/31/18 11:38	SM2540C	PBM	
Total Suspended Solids	**2.4**	**0.30**	**1.0**	**mg/L**	1	AE83755	05/18/18 09:00	05/18/18 16:20	SM2540D	MRL	
Bicarbonate Alkalinity as CaCO3	**67**	**1.0**	**5.0**	**mg/L**	1	AE83770	05/22/18 08:00	05/22/18 16:18	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE83770	05/22/18 08:00	05/22/18 16:18	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE83770	05/22/18 08:00	05/22/18 16:18	SM2320B	CEF	U
Total Alkalinity as CaCO3	**67**	**1.0**	**5.0**	**mg/L**	1	AE83770	05/22/18 08:00	05/22/18 16:18	SM2320B	CEF	
Nitrate + Nitrite as N	**0.028**	**0.0086**	**0.40**	**mg/L**	1	AE83912	05/21/18 11:45	05/31/18 11:20	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AE83938	05/23/18 06:38	05/24/18 13:17	SM4500-Norg B	SMS	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 152.9 (18E1576-04) Water Sampled: 05/15/18 15:45 Received: 05/15/18 17:00											
Hardness, Total	**71**	**1**	**5**	**mg/L**	1	AE83733	05/18/18 08:00	05/30/18 15:24	SM2340B	MAM	
Phosphorus, total	**0.024**	**0.011**	**0.040**	**mg/L**	1	AE84258	05/30/18 08:15	05/30/18 13:46	SM4500-P E	SMS	J
Total Organic Carbon	**2.19**	**0.300**	**1.00**	**mg/L**	1	AE84144	05/28/18 08:48	05/28/18 13:58	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 167.8 (18E1576-01) Water Sampled: 05/15/18 11:15 Received: 05/15/18 17:00											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE83739	05/16/18 23:23	05/16/18 23:23	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE83739	05/16/18 23:23	05/16/18 23:23	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE83739	05/16/18 23:23	05/16/18 23:23	EPA 300.0	SMP	U
TC 0.1 (18E1576-02) Water Sampled: 05/15/18 14:15 Received: 05/15/18 17:00											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE83739	05/16/18 23:39	05/16/18 23:39	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE83739	05/16/18 23:39	05/16/18 23:39	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE83739	05/16/18 23:39	05/16/18 23:39	EPA 300.0	SMP	U
ER 153.1 (18E1576-03) Water Sampled: 05/15/18 15:15 Received: 05/15/18 17:00											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE83739	05/17/18 00:29	05/17/18 00:29	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE83739	05/17/18 00:29	05/17/18 00:29	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE83739	05/17/18 00:29	05/17/18 00:29	EPA 300.0	SMP	U
ER 152.9 (18E1576-04) Water Sampled: 05/15/18 15:45 Received: 05/15/18 17:00											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE83739	05/17/18 00:45	05/17/18 00:45	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE83739	05/17/18 00:45	05/17/18 00:45	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE83739	05/17/18 00:45	05/17/18 00:45	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

TPH by EPA/LUFT GC Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 167.8 (18E1576-01) Water Sampled: 05/15/18 11:15 Received: 05/15/18 17:00											
TPH as Diesel	ND	50	250	ug/L	1	AE83742	05/16/18 16:34	05/18/18 21:04	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE83742	05/16/18 16:34	05/18/18 21:04	8015DRO	DLD	U
Surrogate: Tetratetracontane		*68.2 %*	*39-120*			*AE83742*	*05/16/18 16:34*	*05/18/18 21:04*	*8015DRO*	*DLD*	
TC 0.1 (18E1576-02) Water Sampled: 05/15/18 14:15 Received: 05/15/18 17:00											
TPH as Diesel	ND	50	250	ug/L	1	AE83742	05/16/18 16:34	05/18/18 21:39	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE83742	05/16/18 16:34	05/18/18 21:39	8015DRO	DLD	U
Surrogate: Tetratetracontane		*109 %*	*39-120*			*AE83742*	*05/16/18 16:34*	*05/18/18 21:39*	*8015DRO*	*DLD*	
ER 153.1 (18E1576-03) Water Sampled: 05/15/18 15:15 Received: 05/15/18 17:00											
TPH as Diesel	ND	50	250	ug/L	1	AE83742	05/16/18 16:34	05/18/18 22:13	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE83742	05/16/18 16:34	05/18/18 22:13	8015DRO	DLD	U
Surrogate: Tetratetracontane		*95.0 %*	*39-120*			*AE83742*	*05/16/18 16:34*	*05/18/18 22:13*	*8015DRO*	*DLD*	
ER 152.9 (18E1576-04) Water Sampled: 05/15/18 15:45 Received: 05/15/18 17:00											
TPH as Diesel	ND	50	250	ug/L	1	AE83742	05/16/18 16:34	05/18/18 22:48	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE83742	05/16/18 16:34	05/18/18 22:48	8015DRO	DLD	U
Surrogate: Tetratetracontane		*96.0 %*	*39-120*			*AE83742*	*05/16/18 16:34*	*05/18/18 22:48*	*8015DRO*	*DLD*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83733 - Metals Digest											
Blank (AE83733-BLK1)					Prepared: 05/18/18 Analyzed: 05/22/18						
Calcium	ND	0.080	1.0	mg/L							U
Magnesium	ND	0.030	1.0	mg/L							U
LCS (AE83733-BS1)					Prepared: 05/18/18 Analyzed: 05/22/18						
Calcium	7.79	0.080	1.0	mg/L	8.00		97.4	85-115			
Magnesium	7.95	0.030	1.0	mg/L	8.00		99.4	85-115			
Duplicate (AE83733-DUP1)		**Source: 18E1432-01**			Prepared: 05/18/18 Analyzed: 05/22/18						
Calcium	0.0930	0.080	1.0	mg/L		0.0819			12.7	20	J
Magnesium	0.0336	0.030	1.0	mg/L		0.0354			5.44	20	J
Matrix Spike (AE83733-MS1)		**Source: 18E1432-01**			Prepared: 05/18/18 Analyzed: 05/22/18						
Calcium	7.95	0.080	1.0	mg/L	8.00	0.0819	98.3	70-130			
Magnesium	8.21	0.030	1.0	mg/L	8.00	0.0354	102	70-130			
Matrix Spike (AE83733-MS2)		**Source: 18E1620-02**			Prepared: 05/18/18 Analyzed: 05/22/18						
Calcium	35.7	0.080	1.0	mg/L	8.00	27.6	101	70-130			
Magnesium	17.4	0.030	1.0	mg/L	8.00	9.85	94.1	70-130			
Matrix Spike Dup (AE83733-MSD1)		**Source: 18E1432-01**			Prepared: 05/18/18 Analyzed: 05/22/18						
Calcium	8.03	0.080	1.0	mg/L	8.00	0.0819	99.4	70-130	1.06	20	
Magnesium	8.09	0.030	1.0	mg/L	8.00	0.0354	101	70-130	1.43	20	
Batch AE84278 - EPA 245.1 Hg Water											
Blank (AE84278-BLK1)					Prepared & Analyzed: 05/30/18						
Mercury	ND	0.060	0.20	ug/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84278 - EPA 245.1 Hg Water											
LCS (AE84278-BS1)					Prepared & Analyzed: 05/30/18						
Mercury	2.59	0.060	0.20	ug/L	2.50		104	85-115			
Duplicate (AE84278-DUP1)		**Source: 18E2667-01**			Prepared & Analyzed: 05/30/18						
Mercury	ND	0.060	0.20	ug/L		ND				20	U
MRL Check (AE84278-MRL1)					Prepared & Analyzed: 05/30/18						
Mercury	0.499	0.060	0.20	ug/L	0.500		99.8	0-200			
Matrix Spike (AE84278-MS1)		**Source: 18E2667-01**			Prepared & Analyzed: 05/30/18						
Mercury	2.60	0.060	0.20	ug/L	2.50	ND	104	70-130			
Matrix Spike (AE84278-MS2)		**Source: 18E1705-01**			Prepared & Analyzed: 05/30/18						
Mercury	4.61	0.060	0.20	ug/L	2.50	2.01	104	70-130			
Matrix Spike Dup (AE84278-MSD1)		**Source: 18E2667-01**			Prepared & Analyzed: 05/30/18						
Mercury	2.63	0.060	0.20	ug/L	2.50	ND	105	70-130	1.19	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83700 - EPA 200.8											
Blank (AE83700-BLK1)					Prepared: 05/16/18 Analyzed: 05/17/18						
Aluminum	ND	5.0	10	ug/L							U
Antimony	ND	0.20	0.50	ug/L							U
Arsenic	ND	0.20	0.50	ug/L							U
Barium	ND	0.20	0.50	ug/L							U
Beryllium	ND	0.050	0.10	ug/L							U
Cadmium	ND	0.060	0.10	ug/L							U
Chromium	ND	0.40	0.50	ug/L							U
Cobalt	ND	0.030	0.10	ug/L							U
Copper	ND	0.40	0.50	ug/L							U
Iron	ND	10	50	ug/L							U
Lead	ND	0.060	0.25	ug/L							U
Manganese	ND	2.0	5.0	ug/L							U
Molybdenum	ND	0.070	0.25	ug/L							U
Nickel	ND	0.30	0.50	ug/L							U
Selenium	ND	0.20	2.0	ug/L							U
Silver	ND	0.050	0.10	ug/L							U
Thallium	ND	0.050	0.10	ug/L							U
Vanadium	ND	0.50	1.0	ug/L							U
Zinc	ND	2.0	5.0	ug/L							U
LCS (AE83700-BS1)					Prepared: 05/16/18 Analyzed: 05/17/18						
Aluminum	465	5.0	10	ug/L	520		89.5	85-115			
Antimony	20.3	0.20	0.50	ug/L	20.0		102	85-115			
Arsenic	20.4	0.20	0.50	ug/L	20.0		102	85-115			
Barium	20.4	0.20	0.50	ug/L	20.0		102	85-115			
Beryllium	20.4	0.050	0.10	ug/L	20.0		102	85-115			
Cadmium	20.0	0.060	0.10	ug/L	20.0		99.9	85-115			
Chromium	20.2	0.40	0.50	ug/L	20.0		101	85-115			
Cobalt	20.2	0.030	0.10	ug/L	20.0		101	85-115			
Copper	20.0	0.40	0.50	ug/L	20.0		100	85-115			
Iron	517	10	50	ug/L	520		99.5	85-115			
Lead	19.6	0.060	0.25	ug/L	20.0		98.0	85-115			
Manganese	19.6	2.0	5.0	ug/L	20.0		97.8	85-115			
Molybdenum	20.8	0.070	0.25	ug/L	20.0		104	85-115			
Nickel	20.2	0.30	0.50	ug/L	20.0		101	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83700 - EPA 200.8											
LCS (AE83700-BS1)					Prepared: 05/16/18 Analyzed: 05/17/18						
Selenium	20.0	0.20	2.0	ug/L	20.0		100	85-115			
Silver	20.2	0.050	0.10	ug/L	20.0		101	85-115			
Thallium	19.9	0.050	0.10	ug/L	20.0		99.3	85-115			
Vanadium	20.1	0.50	1.0	ug/L	20.0		100	85-115			
Zinc	99.7	2.0	5.0	ug/L	100		99.7	85-115			
Duplicate (AE83700-DUP1)		**Source: 18E1367-01**			Prepared: 05/16/18 Analyzed: 05/17/18						
Aluminum	ND	20	40	ug/L		ND				20	R-01, U
Antimony	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic	ND	0.80	2.0	ug/L		ND				20	R-01, U
Barium	122	0.80	2.0	ug/L		128			5.11	20	
Beryllium	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium	ND	0.24	0.40	ug/L		ND				20	R-01, U
Chromium	ND	1.6	2.0	ug/L		ND				20	U
Cobalt	ND	0.12	0.40	ug/L		ND				20	R-01, U
Copper	152	1.6	2.0	ug/L		160			5.20	20	
Iron	104	40	200	ug/L		109			5.19	20	R-01, J
Lead	0.373	0.24	1.0	ug/L		0.243			41.9	20	R-01, J
Manganese	ND	8.0	20	ug/L		ND				20	R-01, U
Molybdenum	3.37	0.28	1.0	ug/L		3.66			8.24	20	
Nickel	1.41	1.2	2.0	ug/L		1.51			7.09	20	R-01, J
Selenium	1.11	0.80	8.0	ug/L		1.02			9.06	20	R-01, J
Silver	ND	0.20	0.40	ug/L		ND				20	R-01, U
Thallium	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium	4.29	2.0	4.0	ug/L		4.42			2.97	20	
Zinc	ND	8.0	20	ug/L		ND				20	R-01, U
Matrix Spike (AE83700-MS1)		**Source: 18E1367-01**			Prepared: 05/16/18 Analyzed: 05/17/18						
Aluminum	557	20	40	ug/L	520	ND	107	70-130			
Antimony	20.1	0.80	2.0	ug/L	20.0	ND	101	70-130			
Arsenic	21.8	0.80	2.0	ug/L	20.0	ND	109	70-130			
Barium	133	0.80	2.0	ug/L	20.0	128	20.8	70-130			
Beryllium	18.8	0.20	0.40	ug/L	20.0	ND	93.8	70-130			
Cadmium	20.1	0.24	0.40	ug/L	20.0	ND	101	70-130			
Chromium	18.8	1.6	2.0	ug/L	20.0	ND	93.8	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83700 - EPA 200.8											
Matrix Spike (AE83700-MS1)		**Source: 18E1367-01**			Prepared: 05/16/18 Analyzed: 05/17/18						
Cobalt	19.0	0.12	0.40	ug/L	20.0	ND	95.1	70-130			
Copper	164	1.6	2.0	ug/L	20.0	160	19.8	70-130			QM-01
Iron	620	40	200	ug/L	520	109	98.2	70-130			
Lead	22.8	0.24	1.0	ug/L	20.0	0.243	113	70-130			
Manganese	22.3	8.0	20	ug/L	20.0	ND	111	70-130			
Molybdenum	25.0	0.28	1.0	ug/L	20.0	3.66	107	70-130			
Nickel	21.7	1.2	2.0	ug/L	20.0	1.51	101	70-130			
Selenium	21.4	0.80	8.0	ug/L	20.0	1.02	102	70-130			
Silver	20.2	0.20	0.40	ug/L	20.0	ND	101	70-130			
Thallium	22.7	0.20	0.40	ug/L	20.0	ND	113	70-130			
Vanadium	23.6	2.0	4.0	ug/L	20.0	4.42	96.1	70-130			
Zinc	114	8.0	20	ug/L	100	ND	114	70-130			
Matrix Spike (AE83700-MS2)		**Source: 18E1613-02**			Prepared: 05/16/18 Analyzed: 05/17/18						
Aluminum	847	20	40	ug/L	520	275	110	70-130			
Antimony	19.6	0.80	2.0	ug/L	20.0	ND	98.1	70-130			
Arsenic	29.1	0.80	2.0	ug/L	20.0	7.78	106	70-130			
Barium	60.4	0.80	2.0	ug/L	20.0	43.9	82.9	70-130			
Beryllium	17.5	0.20	0.40	ug/L	20.0	ND	87.7	70-130			
Cadmium	19.7	0.24	0.40	ug/L	20.0	ND	98.3	70-130			
Chromium	22.3	1.6	2.0	ug/L	20.0	2.90	97.2	70-130			
Cobalt	21.1	0.12	0.40	ug/L	20.0	0.317	104	70-130			
Copper	162	1.6	2.0	ug/L	20.0	138	118	70-130			
Iron	1540	40	200	ug/L	520	1010	102	70-130			
Lead	23.2	0.24	1.0	ug/L	20.0	2.13	105	70-130			
Manganese	70.3	8.0	20	ug/L	20.0	49.1	106	70-130			
Molybdenum	1190	0.28	1.0	ug/L	20.0	1130	303	70-130			QM-4X
Nickel	25.2	1.2	2.0	ug/L	20.0	6.72	92.6	70-130			
Selenium	43.7	0.80	8.0	ug/L	20.0	25.6	90.8	70-130			
Silver	19.6	0.20	0.40	ug/L	20.0	ND	98.0	70-130			
Thallium	20.9	0.20	0.40	ug/L	20.0	ND	104	70-130			
Vanadium	22.4	2.0	4.0	ug/L	20.0	ND	112	70-130			
Zinc	350	8.0	20	ug/L	100	255	94.9	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83700 - EPA 200.8											
Matrix Spike Dup (AE83700-MSD1)		**Source: 18E1367-01**			Prepared: 05/16/18 Analyzed: 05/17/18						
Aluminum	552	20	40	ug/L	520	ND	106	70-130	0.990	20	
Antimony	19.1	0.80	2.0	ug/L	20.0	ND	95.7	70-130	5.05	20	
Arsenic	21.6	0.80	2.0	ug/L	20.0	ND	108	70-130	1.06	20	
Barium	129	0.80	2.0	ug/L	20.0	128	4.60	70-130	2.47	20	
Beryllium	18.1	0.20	0.40	ug/L	20.0	ND	90.6	70-130	3.53	20	
Cadmium	19.2	0.24	0.40	ug/L	20.0	ND	95.8	70-130	4.81	20	
Chromium	18.3	1.6	2.0	ug/L	20.0	ND	91.3	70-130	2.67	20	
Cobalt	19.2	0.12	0.40	ug/L	20.0	ND	96.1	70-130	1.05	20	
Copper	162	1.6	2.0	ug/L	20.0	160	12.8	70-130	0.855	20	QM-01
Iron	612	40	200	ug/L	520	109	96.8	70-130	1.24	20	
Lead	22.9	0.24	1.0	ug/L	20.0	0.243	113	70-130	0.669	20	
Manganese	22.0	8.0	20	ug/L	20.0	ND	110	70-130	1.27	20	
Molybdenum	24.4	0.28	1.0	ug/L	20.0	3.66	104	70-130	2.51	20	
Nickel	19.7	1.2	2.0	ug/L	20.0	1.51	91.0	70-130	9.60	20	
Selenium	21.8	0.80	8.0	ug/L	20.0	1.02	104	70-130	1.86	20	
Silver	19.6	0.20	0.40	ug/L	20.0	ND	98.0	70-130	3.01	20	
Thallium	23.1	0.20	0.40	ug/L	20.0	ND	116	70-130	1.95	20	
Vanadium	23.4	2.0	4.0	ug/L	20.0	4.42	95.0	70-130	0.957	20	
Zinc	103	8.0	20	ug/L	100	ND	103	70-130	10.1	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84314 - EPA 245.1 Hg Water											
Blank (AE84314-BLK1)					Prepared & Analyzed: 05/31/18						
Mercury, dissolved	0.0630	0.060	0.20	ug/L							J
LCS (AE84314-BS1)					Prepared & Analyzed: 05/31/18						
Mercury, dissolved	2.61	0.060	0.20	ug/L	2.50		104	85-115			
Duplicate (AE84314-DUP1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/31/18						
Mercury, dissolved	0.0680	0.060	0.20	ug/L		0.0650			4.51	20	J
MRL Check (AE84314-MRL1)					Prepared & Analyzed: 05/31/18						
Mercury, dissolved	0.550	0.060	0.20	ug/L	0.500		110	0-200			
Matrix Spike (AE84314-MS1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/31/18						
Mercury, dissolved	2.64	0.060	0.20	ug/L	2.50	0.0650	103	70-130			
Matrix Spike (AE84314-MS2)		**Source: 18E1751-01**			Prepared & Analyzed: 05/31/18						
Mercury, dissolved	2.60	0.060	0.20	ug/L	2.50	0.0630	101	70-130			
Matrix Spike Dup (AE84314-MSD1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/31/18						
Mercury, dissolved	2.62	0.060	0.20	ug/L	2.50	0.0650	102	70-130	0.685	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83651 - EPA 200.8 (D)											
Blank (AE83651-BLK1)					Prepared: 05/17/18 Analyzed: 05/18/18						
Aluminum, dissolved	ND	5.0	10	ug/L							U
Antimony, dissolved	ND	0.20	0.50	ug/L							U
Arsenic, dissolved	ND	0.20	0.50	ug/L							U
Barium, dissolved	ND	0.20	0.50	ug/L							U
Beryllium, dissolved	ND	0.050	0.10	ug/L							U
Cadmium, dissolved	ND	0.060	0.10	ug/L							U
Chromium, dissolved	ND	0.40	0.50	ug/L							U
Cobalt, dissolved	ND	0.030	0.10	ug/L							U
Copper, dissolved	ND	0.40	0.50	ug/L							U
Lead, dissolved	ND	0.060	0.25	ug/L							U
Molybdenum, dissolved	ND	0.070	0.25	ug/L							U
Nickel, dissolved	ND	0.30	0.50	ug/L							U
Selenium, dissolved	ND	0.20	2.0	ug/L							U
Silver, dissolved	ND	0.050	0.10	ug/L							U
Thallium, dissolved	ND	0.050	0.10	ug/L							U
Vanadium, dissolved	ND	0.50	1.0	ug/L							U
Zinc, dissolved	ND	2.0	5.0	ug/L							U
LCS (AE83651-BS1)					Prepared: 05/17/18 Analyzed: 05/18/18						
Aluminum, dissolved	476	5.0	10	ug/L	520		91.5	85-115			
Antimony, dissolved	19.4	0.20	0.50	ug/L	20.0		97.2	85-115			
Arsenic, dissolved	20.2	0.20	0.50	ug/L	20.0		101	85-115			
Barium, dissolved	21.3	0.20	0.50	ug/L	20.0		106	85-115			
Beryllium, dissolved	19.0	0.050	0.10	ug/L	20.0		94.9	85-115			
Cadmium, dissolved	19.4	0.060	0.10	ug/L	20.0		97.2	85-115			
Chromium, dissolved	19.2	0.40	0.50	ug/L	20.0		96.0	85-115			
Cobalt, dissolved	18.5	0.030	0.10	ug/L	20.0		92.3	85-115			
Copper, dissolved	20.0	0.40	0.50	ug/L	20.0		99.9	85-115			
Lead, dissolved	19.1	0.060	0.25	ug/L	20.0		95.3	85-115			
Molybdenum, dissolved	21.6	0.070	0.25	ug/L	20.0		108	85-115			
Nickel, dissolved	18.6	0.30	0.50	ug/L	20.0		92.8	85-115			
Selenium, dissolved	19.1	0.20	2.0	ug/L	20.0		95.5	85-115			
Silver, dissolved	20.5	0.050	0.10	ug/L	20.0		103	85-115			
Thallium, dissolved	19.4	0.050	0.10	ug/L	20.0		97.1	85-115			
Vanadium, dissolved	19.4	0.50	1.0	ug/L	20.0		97.2	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83651 - EPA 200.8 (D)											
LCS (AE83651-BS1)					Prepared: 05/17/18 Analyzed: 05/18/18						
Zinc, dissolved	89.2	2.0	5.0	ug/L	100		89.2	85-115			
Duplicate (AE83651-DUP1)			**Source: 18E1655-02**		Prepared: 05/17/18 Analyzed: 05/18/18						
Aluminum, dissolved	8.36	5.0	10	ug/L		8.31			0.522	20	J
Antimony, dissolved	0.290	0.20	0.50	ug/L		0.267			7.91	20	J
Arsenic, dissolved	1.20	0.20	0.50	ug/L		1.33			9.77	20	
Barium, dissolved	52.2	0.20	0.50	ug/L		53.8			3.02	20	
Beryllium, dissolved	ND	0.050	0.10	ug/L		ND				20	U
Cadmium, dissolved	ND	0.060	0.10	ug/L		ND				20	U
Chromium, dissolved	ND	0.40	0.50	ug/L		ND				20	U
Cobalt, dissolved	0.131	0.030	0.10	ug/L		0.155			16.5	20	
Copper, dissolved	2.55	0.40	0.50	ug/L		2.55			0.0253	20	
Lead, dissolved	0.0957	0.060	0.25	ug/L		0.0884			7.92	20	J
Molybdenum, dissolved	0.377	0.070	0.25	ug/L		0.367			2.76	20	
Nickel, dissolved	3.02	0.30	0.50	ug/L		3.08			2.02	20	
Selenium, dissolved	ND	0.20	2.0	ug/L		ND				20	U
Silver, dissolved	ND	0.050	0.10	ug/L		ND				20	U
Thallium, dissolved	ND	0.050	0.10	ug/L		ND				20	U
Vanadium, dissolved	2.39	0.50	1.0	ug/L		2.31			3.42	20	
Zinc, dissolved	47.4	2.0	5.0	ug/L		47.3			0.170	20	
Matrix Spike (AE83651-MS1)			**Source: 18E1655-02**		Prepared: 05/17/18 Analyzed: 05/21/18						
Aluminum, dissolved	447	5.0	10	ug/L	520	8.31	84.3	70-130			
Antimony, dissolved	20.8	0.20	0.50	ug/L	20.0	0.267	103	70-130			
Arsenic, dissolved	22.0	0.20	0.50	ug/L	20.0	1.33	103	70-130			
Barium, dissolved	70.8	0.20	0.50	ug/L	20.0	53.8	85.0	70-130			
Beryllium, dissolved	18.5	0.050	0.10	ug/L	20.0	ND	92.6	70-130			
Cadmium, dissolved	18.9	0.060	0.10	ug/L	20.0	ND	94.3	70-130			
Chromium, dissolved	19.3	0.40	0.50	ug/L	20.0	ND	96.6	70-130			
Cobalt, dissolved	19.6	0.030	0.10	ug/L	20.0	0.155	97.0	70-130			
Copper, dissolved	21.2	0.40	0.50	ug/L	20.0	2.55	93.0	70-130			
Lead, dissolved	17.2	0.060	0.25	ug/L	20.0	0.0884	85.3	70-130			
Molybdenum, dissolved	22.9	0.070	0.25	ug/L	20.0	0.367	113	70-130			
Nickel, dissolved	21.8	0.30	0.50	ug/L	20.0	3.08	93.7	70-130			
Selenium, dissolved	18.5	0.20	2.0	ug/L	20.0	ND	92.7	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83651 - EPA 200.8 (D)											
Matrix Spike (AE83651-MS1)		**Source: 18E1655-02**			Prepared: 05/17/18 Analyzed: 05/21/18						
Silver, dissolved	19.2	0.050	0.10	ug/L	20.0	ND	96.2	70-130			
Thallium, dissolved	17.4	0.050	0.10	ug/L	20.0	ND	86.8	70-130			
Vanadium, dissolved	22.2	0.50	1.0	ug/L	20.0	2.31	99.3	70-130			
Zinc, dissolved	137	2.0	5.0	ug/L	100	47.3	90.2	70-130			
Matrix Spike (AE83651-MS2)		**Source: 18E1178-01**			Prepared: 05/17/18 Analyzed: 05/21/18						
Aluminum, dissolved	510	20	40	ug/L	520	ND	98.1	70-130			
Antimony, dissolved	21.2	0.80	2.0	ug/L	20.0	ND	106	70-130			
Arsenic, dissolved	28.9	0.80	2.0	ug/L	20.0	5.91	115	70-130			
Barium, dissolved	111	0.80	2.0	ug/L	20.0	93.4	88.3	70-130			
Beryllium, dissolved	19.9	0.20	0.40	ug/L	20.0	ND	99.6	70-130			
Cadmium, dissolved	19.3	0.24	0.40	ug/L	20.0	ND	96.6	70-130			
Chromium, dissolved	21.6	1.6	2.0	ug/L	20.0	ND	108	70-130			
Cobalt, dissolved	20.1	0.12	0.40	ug/L	20.0	0.294	99.2	70-130			
Copper, dissolved	38.8	1.6	2.0	ug/L	20.0	19.4	97.0	70-130			
Lead, dissolved	17.8	0.24	1.0	ug/L	20.0	ND	89.0	70-130			
Molybdenum, dissolved	27.3	0.28	1.0	ug/L	20.0	6.76	103	70-130			
Nickel, dissolved	25.8	1.2	2.0	ug/L	20.0	4.67	106	70-130			
Selenium, dissolved	20.3	0.80	8.0	ug/L	20.0	ND	101	70-130			
Silver, dissolved	20.0	0.20	0.40	ug/L	20.0	ND	100	70-130			
Thallium, dissolved	18.1	0.20	0.40	ug/L	20.0	ND	90.4	70-130			
Vanadium, dissolved	26.5	2.0	4.0	ug/L	20.0	5.10	107	70-130			
Zinc, dissolved	663	8.0	20	ug/L	100	546	116	70-130			
Matrix Spike Dup (AE83651-MSD1)		**Source: 18E1655-02**			Prepared: 05/17/18 Analyzed: 05/21/18						
Aluminum, dissolved	439	5.0	10	ug/L	520	8.31	82.8	70-130	1.73	20	
Antimony, dissolved	20.3	0.20	0.50	ug/L	20.0	0.267	100	70-130	2.47	20	
Arsenic, dissolved	22.1	0.20	0.50	ug/L	20.0	1.33	104	70-130	0.479	20	
Barium, dissolved	72.2	0.20	0.50	ug/L	20.0	53.8	91.6	70-130	1.86	20	
Beryllium, dissolved	18.0	0.050	0.10	ug/L	20.0	ND	90.2	70-130	2.65	20	
Cadmium, dissolved	18.4	0.060	0.10	ug/L	20.0	ND	91.9	70-130	2.65	20	
Chromium, dissolved	18.9	0.40	0.50	ug/L	20.0	ND	94.3	70-130	2.49	20	
Cobalt, dissolved	18.9	0.030	0.10	ug/L	20.0	0.155	93.9	70-130	3.25	20	
Copper, dissolved	20.6	0.40	0.50	ug/L	20.0	2.55	90.3	70-130	2.57	20	
Lead, dissolved	17.5	0.060	0.25	ug/L	20.0	0.0884	87.2	70-130	2.11	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83651 - EPA 200.8 (D)											
Matrix Spike Dup (AE83651-MSD1)		**Source: 18E1655-02**			Prepared: 05/17/18 Analyzed: 05/21/18						
Molybdenum, dissolved	22.5	0.070	0.25	ug/L	20.0	0.367	111	70-130	2.12	20	
Nickel, dissolved	21.0	0.30	0.50	ug/L	20.0	3.08	89.6	70-130	3.84	20	
Selenium, dissolved	18.1	0.20	2.0	ug/L	20.0	ND	90.6	70-130	2.28	20	
Silver, dissolved	19.0	0.050	0.10	ug/L	20.0	ND	95.0	70-130	1.26	20	
Thallium, dissolved	17.8	0.050	0.10	ug/L	20.0	ND	88.8	70-130	2.37	20	
Vanadium, dissolved	21.7	0.50	1.0	ug/L	20.0	2.31	97.1	70-130	2.04	20	
Zinc, dissolved	134	2.0	5.0	ug/L	100	47.3	86.6	70-130	2.65	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83733 - Metals Digest											
Blank (AE83733-BLK1)					Prepared: 05/18/18 Analyzed: 05/22/18						
Hardness, Total	ND	1	5	mg/L							U
Duplicate (AE83733-DUP1)		**Source: 18E1432-01**			Prepared: 05/18/18 Analyzed: 05/22/18						
Hardness, Total	ND	1	5	mg/L		ND				20	U
Batch AE83751 - General Preparation											
Blank (AE83751-BLK1)					Prepared: 05/17/18 Analyzed: 05/22/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
Blank (AE83751-BLK2)					Prepared: 05/17/18 Analyzed: 05/22/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
LCS (AE83751-BS1)					Prepared: 05/17/18 Analyzed: 05/22/18						
Biochemical Oxygen Demand	220	2.0	5.0	mg/L	200		110	84-115			
Duplicate (AE83751-DUP1)		**Source: 18E1644-01**			Prepared: 05/17/18 Analyzed: 05/22/18						
Biochemical Oxygen Demand	191	2.0	5.0	mg/L		170			11.5	30	
Batch AE83755 - General Preparation											
Blank (AE83755-BLK1)					Prepared & Analyzed: 05/18/18						
Total Suspended Solids	ND	0.30	1.0	mg/L							U
Duplicate (AE83755-DUP1)		**Source: 18E1677-01**			Prepared & Analyzed: 05/18/18						
Total Suspended Solids	94.1	0.30	1.0	mg/L		90.8			3.62	30	

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Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83755 - General Preparation											
Duplicate (AE83755-DUP2)		**Source: 18E1720-02**			Prepared & Analyzed: 05/18/18						
Total Suspended Solids	188	0.30	1.0	mg/L		192			2.63	30	
Batch AE83770 - General Preparation											
Duplicate (AE83770-DUP1)		**Source: 18E1754-01**			Prepared & Analyzed: 05/22/18						
Bicarbonate Alkalinity as CaCO3	22.0	1.0	5.0	mg/L		22.0			0.00	20	
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Total Alkalinity as CaCO3	22.0	1.0	5.0	mg/L		22.0			0.00	20	
Batch AE83776 - General Preparation											
Blank (AE83776-BLK1)					Prepared & Analyzed: 05/17/18						
Sulfide	ND	0.020	0.10	mg/L							U
LCS (AE83776-BS1)					Prepared & Analyzed: 05/17/18						
Sulfide	0.231	0.020	0.10	mg/L	0.208		111	85-115			
Duplicate (AE83776-DUP1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/17/18						
Sulfide	ND	0.020	0.10	mg/L		ND				15	U
Matrix Spike (AE83776-MS1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/17/18						
Sulfide	0.233	0.020	0.10	mg/L	0.208	ND	112	80-120			
Matrix Spike Dup (AE83776-MSD1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/17/18						
Sulfide	0.236	0.020	0.10	mg/L	0.208	ND	113	80-120	1.28	15	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83889 - General Preparation											
Blank (AE83889-BLK1)					Prepared: 05/21/18 Analyzed: 05/31/18						
Total Dissolved Solids	ND	5.0	10	mg/L							U
Duplicate (AE83889-DUP1)		**Source: 18E1576-02**			Prepared: 05/21/18 Analyzed: 05/31/18						
Total Dissolved Solids	108	5.0	10	mg/L		102			5.71	15	
Duplicate (AE83889-DUP2)		**Source: 18E1927-01**			Prepared: 05/21/18 Analyzed: 05/31/18						
Total Dissolved Solids	142	5.0	10	mg/L		142			0.00	15	
Batch AE83938 - General Prep											
LCS (AE83938-BS1)					Prepared: 05/22/18 Analyzed: 05/23/18						
Total Kjeldahl Nitrogen	2.95	0.20	1.0	mg/L	2.98		99.0	80-120			
LCS Dup (AE83938-BSD1)					Prepared: 05/22/18 Analyzed: 05/23/18						
Total Kjeldahl Nitrogen	2.95	0.20	1.0	mg/L	2.98		99.0	80-120	0.00	20	
Matrix Spike (AE83938-MS1)		**Source: 18E1309-02**			Prepared & Analyzed: 05/23/18						
Total Kjeldahl Nitrogen	8.48	0.20	1.0	mg/L	2.98	4.90	120	75-125			
Matrix Spike Dup (AE83938-MSD1)		**Source: 18E1309-02**			Prepared & Analyzed: 05/23/18						
Total Kjeldahl Nitrogen	8.48	0.20	1.0	mg/L	2.98	4.90	120	75-125	0.00	20	
Batch AE84010 - General Preparation											
LCS (AE84010-BS1)					Prepared & Analyzed: 05/24/18						
Ammonia as N	5.08	0.10	0.20	mg/L	5.00		102	90-110			

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Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84010 - General Preparation											
LCS Dup (AE84010-BSD1)					Prepared & Analyzed: 05/24/18						
Ammonia as N	4.90	0.10	0.20	mg/L	5.00		98.1	90-110	3.51	10	
Matrix Spike (AE84010-MS1)		**Source: 18E2075-01**			Prepared & Analyzed: 05/24/18						
Ammonia as N	9.46	0.10	0.20	mg/L	10.0	ND	94.6	85-115			
Matrix Spike Dup (AE84010-MSD1)		**Source: 18E2075-01**			Prepared & Analyzed: 05/24/18						
Ammonia as N	9.63	0.10	0.20	mg/L	10.0	ND	96.3	85-115	1.83	20	
Batch AE84080 - General Preparation											
Blank (AE84080-BLK1)					Prepared & Analyzed: 05/24/18						
Oil & Grease (HEM)	ND	1.4	5.0	mg/L							U
LCS (AE84080-BS1)					Prepared & Analyzed: 05/24/18						
Oil & Grease (HEM)	39.6	1.4	5.0	mg/L	40.0		99.0	78-114			
LCS Dup (AE84080-BSD1)					Prepared & Analyzed: 05/24/18						
Oil & Grease (HEM)	39.8	1.4	5.0	mg/L	40.0		99.5	78-114	0.504	18	
Matrix Spike (AE84080-MS1)		**Source: 18E1892-03**			Prepared & Analyzed: 05/24/18						
Oil & Grease (HEM)	37.4	1.4	5.0	mg/L	40.0	2.60	87.0	78-114			
Batch AE84143 - General Prep											
Blank (AE84143-BLK1)					Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	ND	0.600	1.00	mg/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84143 - General Prep											
LCS (AE84143-BS1)					Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	10.0	0.600	1.00	mg/L	10.0		100	85-115			
LCS Dup (AE84143-BSD1)					Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	8.89	0.600	1.00	mg/L	10.0		88.9	85-115	11.8	20	
Duplicate (AE84143-DUP1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	2.34	0.600	1.00	mg/L		2.46			4.86	20	
MRL Check (AE84143-MRL1)					Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	1.57	0.600	1.00	mg/L	2.50		62.9	0-200			
Matrix Spike (AE84143-MS1)		**Source: 18E1576-02**			Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	21.6	1.20	2.00	mg/L	20.0	ND	108	70-130			
Matrix Spike Dup (AE84143-MSD1)		**Source: 18E1576-02**			Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	21.4	1.20	2.00	mg/L	20.0	ND	107	70-130	0.866	20	
Batch AE84144 - General Prep											
Blank (AE84144-BLK1)					Prepared & Analyzed: 05/28/18						
Total Organic Carbon	ND	0.300	1.00	mg/L							U
LCS (AE84144-BS1)					Prepared & Analyzed: 05/28/18						
Total Organic Carbon	10.2	0.300	1.00	mg/L	10.0		102	85-115			
LCS Dup (AE84144-BSD1)					Prepared & Analyzed: 05/28/18						
Total Organic Carbon	10.0	0.300	1.00	mg/L	10.0		100	85-115	2.30	20	

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Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84144 - General Prep											
Duplicate (AE84144-DUP1)		**Source: 18E1576-03**			Prepared & Analyzed: 05/28/18						
Total Organic Carbon	2.20	0.300	1.00	mg/L		2.22			0.947	20	
MRL Check (AE84144-MRL1)					Prepared: 05/25/18 Analyzed: 05/28/18						
Total Organic Carbon	1.28	0.300	1.00	mg/L	2.50		51.1	0-200			
Matrix Spike (AE84144-MS1)		**Source: 18E1576-04**			Prepared & Analyzed: 05/28/18						
Total Organic Carbon	21.2	0.600	2.00	mg/L	20.0	2.19	95.3	70-130			
Matrix Spike Dup (AE84144-MSD1)		**Source: 18E1576-04**			Prepared & Analyzed: 05/28/18						
Total Organic Carbon	22.4	0.600	2.00	mg/L	20.0	2.19	101	70-130	5.07	20	
Batch AE84187 - General Preparation											
Blank (AE84187-BLK1)					Prepared: 05/17/18 Analyzed: 05/31/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L							U
Duplicate (AE84187-DUP1)		**Source: 18E1510-03**			Prepared: 05/17/18 Analyzed: 05/31/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Duplicate (AE84187-DUP2)		**Source: 18E1872-02**			Prepared & Analyzed: 05/31/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Batch AE84258 - General Prep											
Blank (AE84258-BLK1)					Prepared & Analyzed: 05/30/18						
Phosphorus, total	ND	0.011	0.040	mg/L							U

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Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84258 - General Prep											
LCS (AE84258-BS1)					Prepared & Analyzed: 05/30/18						
Phosphorus, total	0.192	0.011	0.040	mg/L	0.200		95.9	85-115			
Duplicate (AE84258-DUP1)		**Source: 18E2108-01**			Prepared & Analyzed: 05/30/18						
Phosphorus, total	0.0256	0.011	0.040	mg/L		0.0230			10.8	20	J
Matrix Spike (AE84258-MS1)		**Source: 18E2108-01**			Prepared & Analyzed: 05/30/18						
Phosphorus, total	0.200	0.011	0.040	mg/L	0.200	0.0230	88.4	70-130			
Matrix Spike (AE84258-MS2)		**Source: 18E1576-01**			Prepared & Analyzed: 05/30/18						
Phosphorus, total	0.193	0.011	0.040	mg/L	0.200	0.0270	83.1	70-130			
Matrix Spike Dup (AE84258-MSD1)		**Source: 18E2108-01**			Prepared & Analyzed: 05/30/18						
Phosphorus, total	0.200	0.011	0.040	mg/L	0.200	0.0230	88.4	70-130	0.00	20	

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.

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267
Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 •Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83739 - General Preparation											
Blank (AE83739-BLK1)					Prepared & Analyzed: 05/16/18						
Orthophosphate	ND	0.10	0.30	mg/L							U
Nitrate as N	ND	0.040	0.20	mg/L							U
Nitrite as N	ND	0.050	0.20	mg/L							U
LCS (AE83739-BS1)					Prepared & Analyzed: 05/16/18						
Orthophosphate	18.1	0.10	0.30	mg/L	16.7		109	90-110			
Nitrate as N	5.81	0.040	0.20	mg/L	5.56		105	90-110			
Nitrite as N	5.65	0.050	0.20	mg/L	5.56		102	90-110			
Duplicate (AE83739-DUP1)		**Source: 18E1507-01**			Prepared & Analyzed: 05/16/18						
Orthophosphate	ND	0.10	0.30	mg/L		ND				20	U
Nitrate as N	0.102	0.040	0.20	mg/L		0.103			0.660	20	J
Nitrite as N	ND	0.050	0.20	mg/L		ND				20	U
Matrix Spike (AE83739-MS1)		**Source: 18E1507-01**			Prepared & Analyzed: 05/16/18						
Orthophosphate	16.6	0.50	1.5	mg/L	16.7	ND	99.3	80-120			
Nitrite as N	5.12	0.25	1.0	mg/L	5.56	ND	92.1	80-120			
Nitrate as N	5.71	0.20	1.0	mg/L	5.56	ND	103	80-120			
Matrix Spike (AE83739-MS2)		**Source: 18E1479-01**			Prepared & Analyzed: 05/17/18						
Nitrate as N	6.25	0.20	1.0	mg/L	5.56	0.646	101	80-120			
Orthophosphate	16.0	0.50	1.5	mg/L	16.7	ND	95.7	80-120			
Nitrite as N	5.21	0.25	1.0	mg/L	5.56	ND	93.8	80-120			
Matrix Spike Dup (AE83739-MSD1)		**Source: 18E1507-01**			Prepared & Analyzed: 05/16/18						
Nitrate as N	5.76	0.20	1.0	mg/L	5.56	ND	104	80-120	1.01	20	
Nitrite as N	5.18	0.25	1.0	mg/L	5.56	ND	93.3	80-120	1.29	20	
Orthophosphate	16.8	0.50	1.5	mg/L	16.7	ND	101	80-120	1.73	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:18

TPH by EPA/LUFT GC Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83742 - SVOAs in Water GC											
Blank (AE83742-BLK1)					Prepared: 05/16/18 Analyzed: 05/18/18						
TPH as Diesel	ND	50	250	ug/L							U
TPH as Motor Oil	ND	100	250	ug/L							U
Surrogate: Tetratetracontane	*50.8*			*ug/L*	*56.0*		*90.7*	*39-120*			
LCS (AE83742-BS1)					Prepared: 05/16/18 Analyzed: 05/18/18						
TPH as Diesel	2020	50	250	ug/L	2070		97.8	61-120			
Surrogate: Tetratetracontane	*54.1*			*ug/L*	*56.0*		*96.7*	*39-120*			
LCS (AE83742-BS2)					Prepared: 05/16/18 Analyzed: 05/18/18						
TPH as Motor Oil	1770	100	250	ug/L	1990		89.1	71-125			
Surrogate: Tetratetracontane	*54.3*			*ug/L*	*56.0*		*97.0*	*39-120*			
LCS Dup (AE83742-BSD1)					Prepared: 05/16/18 Analyzed: 05/18/18						
TPH as Diesel	2080	50	250	ug/L	2070		101	61-120	2.83	25	
Surrogate: Tetratetracontane	*58.7*			*ug/L*	*56.0*		*105*	*39-120*			
LCS Dup (AE83742-BSD2)					Prepared: 05/16/18 Analyzed: 05/18/18						
TPH as Motor Oil	1760	100	250	ug/L	1990		88.4	71-125	0.844	25	
Surrogate: Tetratetracontane	*56.1*			*ug/L*	*56.0*		*100*	*39-120*			
Matrix Spike (AE83742-MS1)		**Source: 18E1178-02**			Prepared: 05/16/18 Analyzed: 05/18/18						
TPH as Diesel	2030	50	250	ug/L	2070	ND	98.0	61-120			
Surrogate: Tetratetracontane	*47.4*			*ug/L*	*56.0*		*84.6*	*39-120*			

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Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	06/06/18 16:18

Notes and Definitions

FILT	The sample was filtered in the lab prior to analysis.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QM-01	The spike recovery for this QC sample is outside of established control limits possibly due to a sample matrix interference.
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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basic laboratory

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May 31, 2018

Lab ID: 18E0958

SHERI L. SPEAKS
ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
RE: LOW LEVEL METALS 18E1576

Dear SHERI L. SPEAKS ,

Enclosed are the analysis results for Work Order number 18E0958. All analyses were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

Ricky D. Jensen
Laboratory Director
California ELAP Certification Number 1677

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18E1576

Lab No: 18E0958
Reported: 05/31/18
Phone: (707) 468-0401
P.O. #

Metals - Total

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
18E1576-01 ER 167.8 - Grab Water (18E0958-01) Sampled:05/15/18 11:15 Received:05/18/18 12:52									
Mercury	ng/l	**4.10**		0.20	0.50	EPA 1631E	05/23/18	05/23/18	B8E1412
Methyl Mercury as Mercury	"	**0.139**		0.020	0.050	EPA 1630	05/25/18	05/24/18	B8E1457
18E1576-02 TC 0.1 - Grab Water (18E0958-02) Sampled:05/15/18 14:15 Received:05/18/18 12:52									
Mercury	ng/l	**0.79**		0.20	0.50	EPA 1631E	05/23/18	05/23/18	B8E1412
Methyl Mercury as Mercury	"	**0.055**		0.020	0.050	EPA 1630	05/25/18	05/24/18	B8E1457
18E1576-03 ER 153.1 - Grab Water (18E0958-03) Sampled:05/15/18 15:15 Received:05/18/18 12:52									
Mercury	ng/l	**3.67**		0.20	0.50	EPA 1631E	05/23/18	05/23/18	B8E1412
Methyl Mercury as Mercury	"	**0.129**		0.020	0.050	EPA 1630	05/25/18	05/24/18	B8E1457
18E1576-04 ER 152.9 - Grab Water (18E0958-04) Sampled:05/15/18 15:45 Received:05/18/18 12:52									
Mercury	ng/l	**3.64**		0.20	0.50	EPA 1631E	05/23/18	05/23/18	B8E1412
Methyl Mercury as Mercury	"	**0.118**		0.020	0.050	EPA 1630	05/25/18	05/24/18	B8E1457

Approved By

Basic Laboratory Inc
California ELAP Cert #1677 and #2718

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18E1576

Lab No: 18E0958
Reported: 05/31/18
Phone: (707) 468-0401
P.O. #

Quality Control Data

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Metals - Total										
Batch B8E1412 - BrCl Digestion										
Blank										
Mercury	ND	0.50	ng/l							
Blank										
Mercury	ND	0.50	ng/l							QB-06
Blank										
Mercury	ND	0.50	ng/l							
LCS										
Mercury	9.16	0.50	ng/l	10.0		91.6	77-123			
Matrix Spike Source: 18E0899-01										
Mercury	13.2	0.50	ng/l	10.0	2.73	104	71-125			
Matrix Spike Source: 18E0955-04										
Mercury	10.1	0.50	ng/l	10.0	ND	101	71-125			
Matrix Spike Dup Source: 18E0899-01										
Mercury	13.2	0.50	ng/l	10.0	2.73	105	71-125	0.220	24	
Matrix Spike Dup Source: 18E0955-04										
Mercury	9.63	0.50	ng/l	10.0	ND	96.3	71-125	4.39	24	
Batch B8E1457 - Draft EPA Method 1630 Distillation (Modified)										
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
LCS										
Methyl Mercury as Mercury	2.17	0.050	ng/l	2.00		109	67-133			
Matrix Spike Source: 18E0805-01										
Methyl Mercury as Mercury	1.18	0.050	ng/l	1.00	0.044	114	65-135			
Matrix Spike Source: 18E0899-01										
Methyl Mercury as Mercury	1.15	0.050	ng/l	1.00	0.028	112	65-135			
Matrix Spike Dup Source: 18E0805-01										
Methyl Mercury as Mercury	1.21	0.050	ng/l	1.00	0.044	116	65-135	1.82	35	
Matrix Spike Dup Source: 18E0899-01										
Methyl Mercury as Mercury	1.12	0.050	ng/l	1.00	0.028	110	65-135	2.26	35	

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18E1576

Lab No: 18E0958
Reported: 05/31/18
Phone: (707) 468-0401
P.O. #

Notes and Definitions

QB-06	Some samples in this batch required an additional amount of BrCl to fully oxidize the sample. Per EPA method 1631E requirements, this Method Blank contains an increased concentration of BrCl to match the sample matrix.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
<	Less than reporting limit
≤	Less than or equal to reporting limit
>	Greater than reporting limit
≥	Greater than or equal to reporting limit
MDL	Method Detection Limit
RL/ML	Minimum Level of Quantitation
MCL/AL	Maxium Contaminant Level/Action Level
mg/kg	Results reported as wet weight
TTLC	Total Threshold Limit Concentration
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leachate Procedure
Note 1	Received Temperature - according to EPA guidelines, samples for most chemistry methods should be held at ≤6 degrees C after collection, including during transportation, unless the time from sampling to delivery is <2 hours. Regulating agencies may invalidate results if temperature requirements are not met.
Note 2	According to 40 CFR Part 136 Table II, the following tests should be analyzed in the field within 15 minutes of sampling: pH, chlorine, dissolved oxygen, and sulfite.

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18E1576

18E-0958

5.31.18

18E0958 1

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

Basic Laboratory
2218 Railroad Ave
Redding, CA 96001
Phone :530-243-7234
Fax: 530-243-7494
Terms: Net 30

Analysis	Due	Expires	Comments
18E1576-01 ER 167.8 [Water] Sampled 05/15/18 11:15			-1 6.2°
BAL Hg 1631	05/30/18 12:00	06/12/18 11:15	
BAL Hg Methyl	05/30/18 12:00	11/11/18 11:15	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E1576-02 TC 0.1 [Water] Sampled 05/15/18 14:15			-2 8.1°
BAL Hg 1631	05/30/18 12:00	06/12/18 14:15	
BAL Hg Methyl	05/30/18 12:00	11/11/18 14:15	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E1576-03 ER 153.1 [Water] Sampled 05/15/18 15:15			-3 10.9°
BAL Hg 1631	05/30/18 12:00	06/12/18 15:15	
BAL Hg Methyl	05/30/18 12:00	11/11/18 15:15	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E1576-04 ER 152.9 [Water] Sampled 05/15/18 15:45			-4 4.6°
BAL Hg 1631	05/30/18 12:00	06/12/18 15:45	
BAL Hg Methyl	05/30/18 12:00	11/11/18 15:45	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			

Released By	Date	Received By	Date
	5-16-18	TWilhelmson	5/18/18 1252
		TW	5.18.18 ~~1500~~ 1540 TW

Page 1 of 2

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18E1576

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+2C
+MDL

[signature]	5-16-18	T Wilhelmsen	5-18-18 1252
Released By	Date	Received By	Date
		TLW	5-18-18 1540
Released By	Date	Received By	Date

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Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18E1576 Pg 1 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098 / 415-609-6983	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	TPH-D/MO	~~TPH-Gas/BTEX/Oxys~~	Oil and Grease	TOC	DOC	CAM17 200.8 total + Al/Mn	Fe 200.8 Total	Hardness, total	Ammonia-N	Phosphorus, Total	TKN	Sample Notes or DDW Source Numbers:
ER167.8	5/15	1115											X			16	X	X	X	X	X	X	X	X	X	X	X	
TC 80.1	5/15	1415														15												Cancel TPH G/Btex/5 days
ER153.1	5/15	1515														15												on all samples. 5-17-18
ER152.9	5/15	1545														15												Client will re-sample

TAT: Standard 10 days (X); RUSH: 5 days ( ) 48 hours ( ) Other: ___days ( ) Lab preapproval required

Temp upon Receipt °C: Ukiah temp: 1.2; Livermore temp:; Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		5-15-18	1700

DDW Write On EDT Transmission? ( ) Yes ( ) No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ( ) Yes ( ) No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time:	Mileage:	Misc. Supplies:

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Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18E1576 Pg 2 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	CAM17 200.8 dissolved / lab filter	Al dissolved 200.8	Alkalinity	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	TDS	TSS	Chlorophyll-A	Sulfide	Hg 1631	MeHg 1630
ER167.8	5/15	1115														16	X	X	X	X	X	X	X	X	X	X	X	X
TC0.1	↓	1415														15										NO		
~~ER~~ ER153.1		1515														15										NO		
ER152.9	↓	7548														15	↓	↓	↓	↓	↓	↓	↓	↓	↓	NO	↓	↓
																										N		

TAT
Standard 10 days: Ø
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.2
Livermore temp:
Elk Grove temp:

Sample Notes or DDW Source Numbers:
Sulfide ~~on~~ this sample only

Relinquished by	Received by	Date	Time
Christina Buck		5-15-18	1700

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number:
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID:
EDF to (Email Address):
Sampling Company Log Code:

Travel and Site Time:	Mileage:	Misc. Supplies:

Alpha Analytical Laboratories Inc.
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ELAP Certificates 1551, 2728, and 2922

06 June 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18E1751

Enclosed are the results of analyses for samples received by the laboratory on 05/16/18 16:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

Alpha Analytical Laboratories Inc.
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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ER 119.1	18E1751-01	Water	05/16/18 10:25	05/16/18 16:50
ER 118.9	18E1751-02	Water	05/16/18 11:45	05/16/18 16:50
MF 0.1	18E1751-03	Water	05/16/18 12:40	05/16/18 16:50
OC 0.1	18E1751-04	Water	05/16/18 14:00	05/16/18 16:50
ER 125.9	18E1751-05	Water	05/16/18 14:45	05/16/18 16:50
ER 126.1	18E1751-06	Water	05/16/18 15:20	05/16/18 16:50

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 119.1 (18E1751-01) Water Sampled: 05/16/18 10:25 Received: 05/16/18 16:50											
Calcium	**22**	**0.080**	**1.0**	**mg/L**	1	AE83883	05/21/18 10:30	05/31/18 16:04	EPA 200.7	MAM	
Magnesium	**6.6**	**0.030**	**1.0**	**mg/L**	1	AE83883	05/21/18 10:30	05/31/18 16:04	EPA 200.7	MAM	
Mercury	**0.068**	**0.060**	**0.20**	**ug/L**	1	AE84279	05/30/18 11:48	05/31/18 11:54	EPA 245.1	EL	J
ER 118.9 (18E1751-02) Water Sampled: 05/16/18 11:45 Received: 05/16/18 16:50											
Calcium	**21**	**0.080**	**1.0**	**mg/L**	1	AE83883	05/21/18 10:30	05/31/18 16:09	EPA 200.7	MAM	
Magnesium	**6.9**	**0.030**	**1.0**	**mg/L**	1	AE83883	05/21/18 10:30	05/31/18 16:09	EPA 200.7	MAM	
Mercury	**0.066**	**0.060**	**0.20**	**ug/L**	1	AE84279	05/30/18 11:48	05/31/18 11:57	EPA 245.1	EL	J
MF 0.1 (18E1751-03) Water Sampled: 05/16/18 12:40 Received: 05/16/18 16:50											
Calcium	**26**	**0.080**	**1.0**	**mg/L**	1	AE83883	05/21/18 10:30	05/31/18 16:14	EPA 200.7	MAM	
Magnesium	**7.4**	**0.030**	**1.0**	**mg/L**	1	AE83883	05/21/18 10:30	05/31/18 16:14	EPA 200.7	MAM	
Mercury	**0.071**	**0.060**	**0.20**	**ug/L**	1	AE84279	05/30/18 11:48	05/31/18 11:59	EPA 245.1	EL	J
OC 0.1 (18E1751-04) Water Sampled: 05/16/18 14:00 Received: 05/16/18 16:50											
Calcium	**20**	**0.080**	**1.0**	**mg/L**	1	AE83883	05/21/18 10:30	05/31/18 16:19	EPA 200.7	MAM	
Magnesium	**6.8**	**0.030**	**1.0**	**mg/L**	1	AE83883	05/21/18 10:30	05/31/18 16:19	EPA 200.7	MAM	
Mercury	**0.070**	**0.060**	**0.20**	**ug/L**	1	AE84279	05/30/18 11:48	05/31/18 12:02	EPA 245.1	EL	J
ER 125.9 (18E1751-05) Water Sampled: 05/16/18 14:45 Received: 05/16/18 16:50											
Calcium	**22**	**0.080**	**1.0**	**mg/L**	1	AE83883	05/21/18 10:30	05/31/18 16:32	EPA 200.7	MAM	
Magnesium	**6.4**	**0.030**	**1.0**	**mg/L**	1	AE83883	05/21/18 10:30	05/31/18 16:32	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AE84278	05/30/18 11:36	05/30/18 16:46	EPA 245.1	EL	U
ER 126.1 (18E1751-06) Water Sampled: 05/16/18 15:20 Received: 05/16/18 16:50											
Calcium	**21**	**0.080**	**1.0**	**mg/L**	1	AE83883	05/21/18 10:30	05/31/18 16:37	EPA 200.7	MAM	
Magnesium	**6.3**	**0.030**	**1.0**	**mg/L**	1	AE83883	05/21/18 10:30	05/31/18 16:37	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AE84278	05/30/18 11:36	05/30/18 16:49	EPA 245.1	EL	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 119.1 (18E1751-01) Water Sampled: 05/16/18 10:25 Received: 05/16/18 16:50											
Aluminum	**46**	**20**	**40**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:18	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:18	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:18	EPA 200.8	MMY	R-01, U
Barium	**67**	**0.80**	**2.0**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:18	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:18	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:18	EPA 200.8	MMY	R-01, U
Chromium	ND	1.6	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:18	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.12	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:18	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:18	EPA 200.8	MMY	R-01, U
Iron	**110**	**40**	**200**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:18	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:18	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:18	EPA 200.8	MMY	R-01, U
Molybdenum	**0.36**	**0.28**	**1.0**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:18	EPA 200.8	MMY	R-01, J
Nickel	ND	1.2	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:18	EPA 200.8	MMY	R-01, U
Selenium	ND	0.80	8.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:18	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:18	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:18	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:18	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:18	EPA 200.8	MMY	R-01, U
ER 118.9 (18E1751-02) Water Sampled: 05/16/18 11:45 Received: 05/16/18 16:50											
Aluminum	**50**	**20**	**40**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:25	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:25	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:25	EPA 200.8	MMY	R-01, U
Barium	**69**	**0.80**	**2.0**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:25	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:25	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:25	EPA 200.8	MMY	R-01, U
Chromium	ND	1.6	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:25	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.12	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:25	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:25	EPA 200.8	MMY	R-01, U
Iron	**120**	**40**	**200**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:25	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:25	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:25	EPA 200.8	MMY	R-01, U
Molybdenum	**0.48**	**0.28**	**1.0**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:25	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 118.9 (18E1751-02) Water Sampled: 05/16/18 11:45 Received: 05/16/18 16:50											
Nickel	**1.2**	**1.2**	**2.0**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:25	EPA 200.8	MMY	R-01, J
Selenium	ND	0.80	8.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:25	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:25	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:25	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:25	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:25	EPA 200.8	MMY	R-01, U
MF 0.1 (18E1751-03) Water Sampled: 05/16/18 12:40 Received: 05/16/18 16:50											
Aluminum	**43**	**20**	**40**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:32	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:32	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:32	EPA 200.8	MMY	R-01, U
Barium	**69**	**0.80**	**2.0**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:32	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:32	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:32	EPA 200.8	MMY	R-01, U
Chromium	**1.7**	**1.6**	**2.0**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:32	EPA 200.8	MMY	R-01, J
Cobalt	ND	0.12	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:32	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:32	EPA 200.8	MMY	R-01, U
Iron	**110**	**40**	**200**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:32	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:32	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:32	EPA 200.8	MMY	R-01, U
Molybdenum	**0.57**	**0.28**	**1.0**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:32	EPA 200.8	MMY	R-01, J
Nickel	**1.5**	**1.2**	**2.0**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:32	EPA 200.8	MMY	R-01, J
Selenium	ND	0.80	8.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:32	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:32	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:32	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:32	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:32	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
OC 0.1 (18E1751-04) Water Sampled: 05/16/18 14:00 Received: 05/16/18 16:50											
Aluminum	**21**	**20**	**40**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:38	EPA 200.8	MMY	R-01, J
Antimony	ND	0.80	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:38	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:38	EPA 200.8	MMY	R-01, U
Barium	**60**	**0.80**	**2.0**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:38	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:38	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:38	EPA 200.8	MMY	R-01, U
Chromium	ND	1.6	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:38	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.12	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:38	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:38	EPA 200.8	MMY	R-01, U
Iron	**130**	**40**	**200**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:38	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:38	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:38	EPA 200.8	MMY	R-01, U
Molybdenum	ND	0.28	1.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:38	EPA 200.8	MMY	R-01, U
Nickel	**1.6**	**1.2**	**2.0**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:38	EPA 200.8	MMY	R-01, J
Selenium	ND	0.80	8.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:38	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:38	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:38	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:38	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:38	EPA 200.8	MMY	R-01, U
ER 125.9 (18E1751-05) Water Sampled: 05/16/18 14:45 Received: 05/16/18 16:50											
Aluminum	**56**	**20**	**40**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:45	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:45	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:45	EPA 200.8	MMY	R-01, U
Barium	**73**	**0.80**	**2.0**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:45	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:45	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:45	EPA 200.8	MMY	R-01, U
Chromium	ND	1.6	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:45	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.12	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:45	EPA 200.8	MMY	R-01, U
Copper	**1.6**	**1.6**	**2.0**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:45	EPA 200.8	MMY	R-01, J
Iron	**130**	**40**	**200**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:45	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:45	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:45	EPA 200.8	MMY	R-01, U
Molybdenum	**0.37**	**0.28**	**1.0**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:45	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 125.9 (18E1751-05) Water Sampled: 05/16/18 14:45 Received: 05/16/18 16:50											
Nickel	**1.3**	**1.2**	**2.0**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:45	EPA 200.8	MMY	R-01, J
Selenium	ND	0.80	8.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:45	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:45	EPA 200.8	MMY	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:45	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:45	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:45	EPA 200.8	MMY	R-01, U
ER 126.1 (18E1751-06) Water Sampled: 05/16/18 15:20 Received: 05/16/18 16:50											
Aluminum	**67**	**20**	**40**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:52	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:52	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:52	EPA 200.8	MMY	R-01, U
Barium	**71**	**0.80**	**2.0**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:52	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:52	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:52	EPA 200.8	MMY	R-01, U
Chromium	ND	1.6	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:52	EPA 200.8	MMY	R-01, U
Cobalt	**0.17**	**0.12**	**0.40**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:52	EPA 200.8	MMY	R-01, J
Copper	ND	1.6	2.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:52	EPA 200.8	MMY	R-01, U
Iron	**140**	**40**	**200**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:52	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:52	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:52	EPA 200.8	MMY	R-01, U
Molybdenum	**0.32**	**0.28**	**1.0**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:52	EPA 200.8	MMY	R-01, J
Nickel	**1.3**	**1.2**	**2.0**	**ug/L**	4	AE83884	05/21/18 08:00	05/22/18 14:52	EPA 200.8	MMY	R-01, J
Selenium	ND	0.80	8.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:52	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:52	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:52	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:52	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE83884	05/21/18 08:00	05/22/18 14:52	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 119.1 (18E1751-01) Water Sampled: 05/16/18 10:25 Received: 05/16/18 16:50											
Mercury, dissolved	**0.063**	**0.060**	**0.20**	**ug/L**	1	AE84314	05/31/18 08:46	05/31/18 15:11	EPA 245.1	EL	J
ER 118.9 (18E1751-02) Water Sampled: 05/16/18 11:45 Received: 05/16/18 16:50											
Mercury, dissolved	**0.064**	**0.060**	**0.20**	**ug/L**	1	AE84314	05/31/18 08:46	05/31/18 15:29	EPA 245.1	EL	J
MF 0.1 (18E1751-03) Water Sampled: 05/16/18 12:40 Received: 05/16/18 16:50											
Mercury, dissolved	**0.064**	**0.060**	**0.20**	**ug/L**	1	AE84314	05/31/18 08:46	05/31/18 15:32	EPA 245.1	EL	J
OC 0.1 (18E1751-04) Water Sampled: 05/16/18 14:00 Received: 05/16/18 16:50											
Mercury, dissolved	**0.069**	**0.060**	**0.20**	**ug/L**	1	AE84314	05/31/18 08:46	05/31/18 15:34	EPA 245.1	EL	J
ER 125.9 (18E1751-05) Water Sampled: 05/16/18 14:45 Received: 05/16/18 16:50											
Mercury, dissolved	**0.066**	**0.060**	**0.20**	**ug/L**	1	AE84314	05/31/18 08:46	05/31/18 15:37	EPA 245.1	EL	J
ER 126.1 (18E1751-06) Water Sampled: 05/16/18 15:20 Received: 05/16/18 16:50											
Mercury, dissolved	**0.067**	**0.060**	**0.20**	**ug/L**	1	AE84314	05/31/18 08:46	05/31/18 15:40	EPA 245.1	EL	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 119.1 (18E1751-01) Water Sampled: 05/16/18 10:25 Received: 05/16/18 16:50											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 11:37	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 11:37	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 11:37	EPA 200.8	MMY	R-01, U
Barium, dissolved	**64**	**0.80**	**2.0**	**ug/L**	4	AE83882	05/22/18 08:00	05/23/18 11:37	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 11:37	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 11:37	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	1.6	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 11:37	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 11:37	EPA 200.8	MMY	R-01, U
Copper, dissolved	**1.8**	**1.6**	**2.0**	**ug/L**	4	AE83882	05/22/18 08:00	05/23/18 11:37	EPA 200.8	MMY	R-01, J
Lead, dissolved	ND	0.24	1.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 11:37	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.38**	**0.28**	**1.0**	**ug/L**	4	AE83882	05/22/18 08:00	05/23/18 11:37	EPA 200.8	MMY	R-01, J
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 11:37	EPA 200.8	MMY	R-01, U
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 11:37	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 11:37	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 11:37	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 11:37	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AE83882	05/22/18 08:00	05/23/18 11:37	EPA 200.8	MMY	R-01, U
ER 118.9 (18E1751-02) Water Sampled: 05/16/18 11:45 Received: 05/16/18 16:50											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:04	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:04	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:04	EPA 200.8	MMY	R-01, U
Barium, dissolved	**65**	**0.80**	**2.0**	**ug/L**	4	AE83882	05/22/18 08:00	05/23/18 14:04	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:04	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:04	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	1.6	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:04	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:04	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:04	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:04	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.48**	**0.28**	**1.0**	**ug/L**	4	AE83882	05/22/18 08:00	05/23/18 14:04	EPA 200.8	MMY	R-01, J
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:04	EPA 200.8	MMY	R-01, U
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:04	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:04	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:04	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 118.9 (18E1751-02) Water Sampled: 05/16/18 11:45 Received: 05/16/18 16:50											**FILT**
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:04	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:04	EPA 200.8	MMY	R-01, U
MF 0.1 (18E1751-03) Water Sampled: 05/16/18 12:40 Received: 05/16/18 16:50											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:11	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:11	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:11	EPA 200.8	MMY	R-01, U
Barium, dissolved	**65**	**0.80**	**2.0**	**ug/L**	4	AE83882	05/22/18 08:00	05/23/18 14:11	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:11	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:11	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	1.6	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:11	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:11	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:11	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:11	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.58**	**0.28**	**1.0**	**ug/L**	4	AE83882	05/22/18 08:00	05/23/18 14:11	EPA 200.8	MMY	R-01, J
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:11	EPA 200.8	MMY	R-01, U
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:11	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:11	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:11	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:11	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AE83882	05/22/18 08:00	05/24/18 14:58	EPA 200.8	MMY	R-01, U
OC 0.1 (18E1751-04) Water Sampled: 05/16/18 14:00 Received: 05/16/18 16:50											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:18	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:18	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:18	EPA 200.8	MMY	R-01, U
Barium, dissolved	**57**	**0.80**	**2.0**	**ug/L**	4	AE83882	05/22/18 08:00	05/23/18 14:18	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:18	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:18	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	1.6	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:18	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	**0.26**	**0.12**	**0.40**	**ug/L**	4	AE83882	05/22/18 08:00	05/23/18 14:18	EPA 200.8	MMY	R-01, J
Copper, dissolved	ND	1.6	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:18	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:18	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	ND	0.28	1.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:18	EPA 200.8	MMY	R-01, U
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:18	EPA 200.8	MMY	R-01, U

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
OC 0.1 (18E1751-04) Water Sampled: 05/16/18 14:00 Received: 05/16/18 16:50											**FILT**
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:18	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:18	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:18	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:18	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:18	EPA 200.8	MMY	R-01, U
ER 125.9 (18E1751-05) Water Sampled: 05/16/18 14:45 Received: 05/16/18 16:50											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:24	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:24	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:24	EPA 200.8	MMY	R-01, U
Barium, dissolved	**67**	**0.80**	**2.0**	**ug/L**	4	AE83882	05/22/18 08:00	05/23/18 14:24	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:24	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:24	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	1.6	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:24	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:24	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:24	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:24	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.37**	**0.28**	**1.0**	**ug/L**	4	AE83882	05/22/18 08:00	05/23/18 14:24	EPA 200.8	MMY	R-01, J
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:24	EPA 200.8	MMY	R-01, U
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:24	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:24	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:24	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:24	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:24	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 126.1 (18E1751-06) Water Sampled: 05/16/18 15:20 Received: 05/16/18 16:50											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:31	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:31	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AE83882	05/22/18 08:00	05/24/18 15:12	EPA 200.8	MMY	R-01, U
Barium, dissolved	**67**	**0.80**	**2.0**	**ug/L**	4	AE83882	05/22/18 08:00	05/23/18 14:31	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:31	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:31	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	1.6	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:31	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:31	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:31	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:31	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.40**	**0.28**	**1.0**	**ug/L**	4	AE83882	05/22/18 08:00	05/23/18 14:31	EPA 200.8	MMY	R-01, J
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:31	EPA 200.8	MMY	R-01, U
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:31	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:31	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:31	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:31	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:31	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 119.1 (18E1751-01) Water Sampled: 05/16/18 10:25 Received: 05/16/18 16:50											
Ammonia as N	ND	0.10	0.20	mg/L	1	AE84137	05/25/18 09:00	05/25/18 16:45	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE83808	05/18/18 08:00	05/23/18 11:00	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AE84187	05/17/18 08:30	05/31/18 09:56	SM10200H	PBM	U
Dissolved Organic Carbon	**1.87**	**0.600**	**1.00**	**mg/L**	1	AE84143	05/25/18 08:47	05/25/18 16:01	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AE84184	05/29/18 07:31	05/30/18 15:00	EPA 1664A	STS	U
Total Dissolved Solids	**100**	**5.0**	**10**	**mg/L**	1	AE83807	05/18/18 08:01	05/24/18 13:53	SM2540C	PBM	
Total Suspended Solids	**1.7**	**0.30**	**1.0**	**mg/L**	1	AE83942	05/23/18 08:30	05/23/18 14:00	SM2540D	MRL	
Bicarbonate Alkalinity as CaCO3	**79**	**1.0**	**5.0**	**mg/L**	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	U
Total Alkalinity as CaCO3	**79**	**1.0**	**5.0**	**mg/L**	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	
Nitrate + Nitrite as N	**0.029**	**0.0086**	**0.40**	**mg/L**	1	AE83912	05/21/18 11:45	05/31/18 11:20	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AE84176	05/29/18 06:14	05/30/18 12:39	SM4500-Norg B	SMS	U
Hardness, Total	**83**	**1**	**5**	**mg/L**	1	AE83883	05/21/18 10:30	05/31/18 16:04	SM2340B	MAM	
Phosphorus, total	**0.016**	**0.011**	**0.040**	**mg/L**	1	AF83084	06/02/18 09:30	06/02/18 12:08	SM4500-P E	SMS	J
Total Organic Carbon	**1.72**	**0.300**	**1.00**	**mg/L**	1	AE84144	05/28/18 08:48	05/28/18 15:28	SM5310C	JIM	
ER 118.9 (18E1751-02) Water Sampled: 05/16/18 11:45 Received: 05/16/18 16:50											
Ammonia as N	ND	0.10	0.20	mg/L	1	AE84137	05/25/18 09:00	05/25/18 16:45	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE83808	05/18/18 08:00	05/23/18 11:00	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AE84187	05/17/18 08:30	05/31/18 09:56	SM10200H	PBM	U
Dissolved Organic Carbon	**1.46**	**0.600**	**1.00**	**mg/L**	1	AE84143	05/25/18 08:47	05/25/18 16:14	SM5310C	JIM	
Oil & Grease (HEM)	**2.7**	**1.4**	**5.0**	**mg/L**	1	AE84184	05/29/18 07:31	05/30/18 15:00	EPA 1664A	STS	J
Total Dissolved Solids	**100**	**5.0**	**10**	**mg/L**	1	AE83807	05/18/18 08:01	05/24/18 13:53	SM2540C	PBM	
Total Suspended Solids	**1.3**	**0.30**	**1.0**	**mg/L**	1	AE83942	05/23/18 08:30	05/23/18 14:00	SM2540D	MRL	
Bicarbonate Alkalinity as CaCO3	**80**	**1.0**	**5.0**	**mg/L**	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	U
Total Alkalinity as CaCO3	**80**	**1.0**	**5.0**	**mg/L**	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	
Nitrate + Nitrite as N	**0.026**	**0.0086**	**0.40**	**mg/L**	1	AE83912	05/21/18 11:45	05/31/18 11:20	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AE84176	05/29/18 06:14	05/30/18 12:39	SM4500-Norg B	SMS	U
Hardness, Total	**81**	**1**	**5**	**mg/L**	1	AE83883	05/21/18 10:30	05/31/18 16:09	SM2340B	MAM	
Phosphorus, total	**0.016**	**0.011**	**0.040**	**mg/L**	1	AF83084	06/02/18 09:30	06/02/18 12:08	SM4500-P E	SMS	J
Total Organic Carbon	**1.29**	**0.300**	**1.00**	**mg/L**	1	AE84144	05/28/18 08:48	05/28/18 15:41	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
MF 0.1 (18E1751-03) Water Sampled: 05/16/18 12:40 Received: 05/16/18 16:50											
Ammonia as N	ND	0.10	0.20	mg/L	1	AE84137	05/25/18 09:00	05/25/18 16:45	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE83808	05/18/18 08:00	05/23/18 11:00	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AE84187	05/17/18 08:30	05/31/18 09:56	SM10200H	PBM	U
Dissolved Organic Carbon	**1.28**	**0.600**	**1.00**	**mg/L**	1	AE84143	05/25/18 08:47	05/25/18 16:26	SM5310C	JIM	
Oil & Grease (HEM)	**2.1**	**1.4**	**5.0**	**mg/L**	1	AE84184	05/29/18 07:31	05/30/18 15:00	EPA 1664A	STS	J
Total Dissolved Solids	**110**	**5.0**	**10**	**mg/L**	1	AE83807	05/18/18 08:01	05/24/18 13:53	SM2540C	PBM	
Total Suspended Solids	**1.5**	**0.30**	**1.0**	**mg/L**	1	AE83942	05/23/18 08:30	05/23/18 14:00	SM2540D	MRL	
Bicarbonate Alkalinity as CaCO3	**81**	**1.0**	**5.0**	**mg/L**	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	U
Total Alkalinity as CaCO3	**81**	**1.0**	**5.0**	**mg/L**	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	
Nitrate + Nitrite as N	**0.026**	**0.0086**	**0.40**	**mg/L**	1	AE83912	05/21/18 11:45	05/31/18 11:20	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AE84176	05/30/18 06:14	05/31/18 11:56	SM4500-Norg B	SMS	U
Hardness, Total	**94**	**1**	**5**	**mg/L**	1	AE83883	05/21/18 10:30	05/31/18 16:14	SM2340B	MAM	
Phosphorus, total	**0.015**	**0.011**	**0.040**	**mg/L**	1	AF83084	06/02/18 09:30	06/02/18 12:08	SM4500-P E	SMS	J
Total Organic Carbon	**1.06**	**0.300**	**1.00**	**mg/L**	1	AE84144	05/28/18 08:48	05/28/18 15:54	SM5310C	JIM	
OC 0.1 (18E1751-04) Water Sampled: 05/16/18 14:00 Received: 05/16/18 16:50											
Ammonia as N	ND	0.10	0.20	mg/L	1	AE84137	05/25/18 09:00	05/25/18 16:45	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE83808	05/18/18 08:00	05/23/18 11:00	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AE84187	05/17/18 08:30	05/31/18 09:56	SM10200H	PBM	U
Dissolved Organic Carbon	**1.77**	**0.600**	**1.00**	**mg/L**	1	AE84143	05/25/18 08:47	05/25/18 16:39	SM5310C	JIM	
Oil & Grease (HEM)	**2.1**	**1.4**	**5.0**	**mg/L**	1	AE84184	05/29/18 07:31	05/30/18 15:00	EPA 1664A	STS	J
Total Dissolved Solids	**110**	**5.0**	**10**	**mg/L**	1	AE83807	05/18/18 08:01	05/24/18 13:53	SM2540C	PBM	
Total Suspended Solids	**0.60**	**0.30**	**1.0**	**mg/L**	1	AE83942	05/23/18 08:30	05/23/18 14:00	SM2540D	MRL	J
Bicarbonate Alkalinity as CaCO3	**81**	**1.0**	**5.0**	**mg/L**	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	U
Total Alkalinity as CaCO3	**81**	**1.0**	**5.0**	**mg/L**	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AE83912	05/21/18 11:45	05/31/18 11:20	Calculation	ZMH	U
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AE84176	05/30/18 06:14	05/31/18 11:56	SM4500-Norg B	SMS	U
Hardness, Total	**78**	**1**	**5**	**mg/L**	1	AE83883	05/21/18 10:30	05/31/18 16:19	SM2340B	MAM	
Phosphorus, total	**0.019**	**0.011**	**0.040**	**mg/L**	1	AF83084	06/02/18 09:30	06/02/18 12:08	SM4500-P E	SMS	J
Total Organic Carbon	**1.80**	**0.300**	**1.00**	**mg/L**	1	AE84144	05/28/18 08:48	05/28/18 16:07	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 125.9 (18E1751-05) Water Sampled: 05/16/18 14:45 Received: 05/16/18 16:50											
Ammonia as N	ND	0.10	0.20	mg/L	1	AE84137	05/25/18 09:00	05/25/18 16:45	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE83808	05/18/18 08:00	05/23/18 11:00	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AE84187	05/17/18 08:30	05/31/18 09:56	SM10200H	PBM	U
Dissolved Organic Carbon	**1.82**	**0.600**	**1.00**	**mg/L**	1	AE84143	05/25/18 08:47	05/25/18 16:52	SM5310C	JIM	
Oil & Grease (HEM)	**1.7**	**1.4**	**5.0**	**mg/L**	1	AE84184	05/29/18 07:31	05/30/18 15:00	EPA 1664A	STS	J
Total Dissolved Solids	**100**	**5.0**	**10**	**mg/L**	1	AE83807	05/18/18 08:01	05/24/18 13:53	SM2540C	PBM	
Total Suspended Solids	**1.3**	**0.30**	**1.0**	**mg/L**	1	AE83942	05/23/18 08:30	05/23/18 14:00	SM2540D	MRL	
Bicarbonate Alkalinity as CaCO3	**76**	**1.0**	**5.0**	**mg/L**	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	U
Total Alkalinity as CaCO3	**76**	**1.0**	**5.0**	**mg/L**	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	
Nitrate + Nitrite as N	**0.025**	**0.0086**	**0.40**	**mg/L**	1	AE83912	05/21/18 11:45	05/31/18 11:20	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AE84176	05/30/18 06:14	05/31/18 11:56	SM4500-Norg B	SMS	U
Hardness, Total	**80**	**1**	**5**	**mg/L**	1	AE83883	05/21/18 10:30	05/31/18 16:32	SM2340B	MAM	
Phosphorus, total	**0.020**	**0.011**	**0.040**	**mg/L**	1	AF83084	06/02/18 09:30	06/02/18 12:08	SM4500-P E	SMS	J
Total Organic Carbon	**1.77**	**0.300**	**1.00**	**mg/L**	1	AE84144	05/28/18 08:48	05/28/18 16:19	SM5310C	JIM	
ER 126.1 (18E1751-06) Water Sampled: 05/16/18 15:20 Received: 05/16/18 16:50											
Ammonia as N	ND	0.10	0.20	mg/L	1	AE84137	05/25/18 09:00	05/25/18 16:45	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE83808	05/18/18 08:00	05/23/18 11:00	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AE84187	05/17/18 08:30	05/31/18 09:56	SM10200H	PBM	U
Dissolved Organic Carbon	**1.86**	**0.600**	**1.00**	**mg/L**	1	AE84143	05/25/18 08:47	05/25/18 17:05	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AE84184	05/29/18 07:31	05/30/18 15:00	EPA 1664A	STS	U
Total Dissolved Solids	**97**	**5.0**	**10**	**mg/L**	1	AE83807	05/18/18 08:01	05/24/18 13:53	SM2540C	PBM	
Total Suspended Solids	**1.1**	**0.30**	**1.0**	**mg/L**	1	AE83942	05/23/18 08:30	05/23/18 14:00	SM2540D	MRL	
Bicarbonate Alkalinity as CaCO3	**76**	**1.0**	**5.0**	**mg/L**	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	U
Total Alkalinity as CaCO3	**76**	**1.0**	**5.0**	**mg/L**	1	AE83773	05/29/18 08:00	05/29/18 16:06	SM2320B	CEF	
Nitrate + Nitrite as N	**0.025**	**0.0086**	**0.40**	**mg/L**	1	AE83912	05/21/18 11:45	05/31/18 11:20	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AE84176	05/30/18 06:14	05/31/18 11:56	SM4500-Norg B	SMS	U
Hardness, Total	**79**	**1**	**5**	**mg/L**	1	AE83883	05/21/18 10:30	05/31/18 16:37	SM2340B	MAM	
Phosphorus, total	**0.019**	**0.011**	**0.040**	**mg/L**	1	AF83084	06/02/18 09:30	06/02/18 12:08	SM4500-P E	SMS	J
Total Organic Carbon	**1.80**	**0.300**	**1.00**	**mg/L**	1	AE84144	05/28/18 08:48	05/28/18 16:32	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 119.1 (18E1751-01) Water Sampled: 05/16/18 10:25 Received: 05/16/18 16:50											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE83783	05/17/18 20:08	05/17/18 20:08	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE83783	05/17/18 20:08	05/17/18 20:08	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE83783	05/17/18 20:08	05/17/18 20:08	EPA 300.0	SMP	U
ER 118.9 (18E1751-02) Water Sampled: 05/16/18 11:45 Received: 05/16/18 16:50											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE83783	05/17/18 20:25	05/17/18 20:25	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE83783	05/17/18 20:25	05/17/18 20:25	EPA 300.0	SMP	U
Orthophosphate	**0.37**	**0.10**	**0.30**	**mg/L**	1	AE83783	05/17/18 20:25	05/17/18 20:25	EPA 300.0	SMP	
MF 0.1 (18E1751-03) Water Sampled: 05/16/18 12:40 Received: 05/16/18 16:50											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE83783	05/17/18 20:41	05/17/18 20:41	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE83783	05/17/18 20:41	05/17/18 20:41	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE83783	05/17/18 20:41	05/17/18 20:41	EPA 300.0	SMP	U
OC 0.1 (18E1751-04) Water Sampled: 05/16/18 14:00 Received: 05/16/18 16:50											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE83783	05/17/18 20:58	05/17/18 20:58	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE83783	05/17/18 20:58	05/17/18 20:58	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE83783	05/17/18 20:58	05/17/18 20:58	EPA 300.0	SMP	U
ER 125.9 (18E1751-05) Water Sampled: 05/16/18 14:45 Received: 05/16/18 16:50											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE83783	05/17/18 21:14	05/17/18 21:14	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE83783	05/17/18 21:14	05/17/18 21:14	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE83783	05/17/18 21:14	05/17/18 21:14	EPA 300.0	SMP	U
ER 126.1 (18E1751-06) Water Sampled: 05/16/18 15:20 Received: 05/16/18 16:50											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE83783	05/17/18 21:31	05/17/18 21:31	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE83783	05/17/18 21:31	05/17/18 21:31	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE83783	05/17/18 21:31	05/17/18 21:31	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

TPH by EPA/LUFT GC Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 119.1 (18E1751-01) Water Sampled: 05/16/18 10:25 Received: 05/16/18 16:50											
TPH as Diesel	ND	50	250	ug/L	1	AE83911	05/21/18 10:07	05/22/18 14:50	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE83911	05/21/18 10:07	05/22/18 14:50	8015DRO	DLD	U
Surrogate: Tetratetracontane		*79.9 %*	*39-120*			*AE83911*	*05/21/18 10:07*	*05/22/18 14:50*	*8015DRO*	*DLD*	
ER 118.9 (18E1751-02) Water Sampled: 05/16/18 11:45 Received: 05/16/18 16:50											
TPH as Diesel	ND	50	250	ug/L	1	AE83911	05/21/18 10:07	05/22/18 15:25	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE83911	05/21/18 10:07	05/22/18 15:25	8015DRO	DLD	U
Surrogate: Tetratetracontane		*72.2 %*	*39-120*			*AE83911*	*05/21/18 10:07*	*05/22/18 15:25*	*8015DRO*	*DLD*	
MF 0.1 (18E1751-03) Water Sampled: 05/16/18 12:40 Received: 05/16/18 16:50											
TPH as Diesel	ND	50	250	ug/L	1	AE83911	05/21/18 10:07	05/22/18 16:00	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE83911	05/21/18 10:07	05/22/18 16:00	8015DRO	DLD	U
Surrogate: Tetratetracontane		*58.1 %*	*39-120*			*AE83911*	*05/21/18 10:07*	*05/22/18 16:00*	*8015DRO*	*DLD*	
OC 0.1 (18E1751-04) Water Sampled: 05/16/18 14:00 Received: 05/16/18 16:50											
TPH as Diesel	ND	50	250	ug/L	1	AE83911	05/21/18 10:07	05/22/18 16:34	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE83911	05/21/18 10:07	05/22/18 16:34	8015DRO	DLD	U
Surrogate: Tetratetracontane		*73.8 %*	*39-120*			*AE83911*	*05/21/18 10:07*	*05/22/18 16:34*	*8015DRO*	*DLD*	
ER 125.9 (18E1751-05) Water Sampled: 05/16/18 14:45 Received: 05/16/18 16:50											
TPH as Diesel	ND	50	250	ug/L	1	AE83911	05/21/18 10:07	05/22/18 17:09	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE83911	05/21/18 10:07	05/22/18 17:09	8015DRO	DLD	U
Surrogate: Tetratetracontane		*80.2 %*	*39-120*			*AE83911*	*05/21/18 10:07*	*05/22/18 17:09*	*8015DRO*	*DLD*	
ER 126.1 (18E1751-06) Water Sampled: 05/16/18 15:20 Received: 05/16/18 16:50											
TPH as Diesel	ND	50	250	ug/L	1	AE83911	05/21/18 10:07	05/22/18 17:44	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE83911	05/21/18 10:07	05/22/18 17:44	8015DRO	DLD	U
Surrogate: Tetratetracontane		*51.7 %*	*39-120*			*AE83911*	*05/21/18 10:07*	*05/22/18 17:44*	*8015DRO*	*DLD*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

TPH by EPA/LUFT GCMS Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 119.1 (18E1751-01) Water Sampled: 05/16/18 10:25 Received: 05/16/18 16:50											
TPH as Gasoline	ND	50	50	ug/L	1	AE83959	05/22/18 11:00	05/22/18 11:57	8260GRO	MM	U
Surrogate: Toluene-d8		*100 %*	*76-129*			*AE83959*	*05/22/18 11:00*	*05/22/18 11:57*	*8260GRO*	*MM*	
ER 118.9 (18E1751-02) Water Sampled: 05/16/18 11:45 Received: 05/16/18 16:50											
TPH as Gasoline	ND	50	50	ug/L	1	AE83959	05/22/18 11:00	05/22/18 12:32	8260GRO	MM	U
Surrogate: Toluene-d8		*100 %*	*76-129*			*AE83959*	*05/22/18 11:00*	*05/22/18 12:32*	*8260GRO*	*MM*	
MF 0.1 (18E1751-03) Water Sampled: 05/16/18 12:40 Received: 05/16/18 16:50											
TPH as Gasoline	ND	50	50	ug/L	1	AE83959	05/22/18 11:00	05/22/18 13:07	8260GRO	MM	U
Surrogate: Toluene-d8		*96.0 %*	*76-129*			*AE83959*	*05/22/18 11:00*	*05/22/18 13:07*	*8260GRO*	*MM*	
OC 0.1 (18E1751-04) Water Sampled: 05/16/18 14:00 Received: 05/16/18 16:50											
TPH as Gasoline	ND	50	50	ug/L	1	AE83959	05/22/18 11:00	05/22/18 13:42	8260GRO	MM	U
Surrogate: Toluene-d8		*96.0 %*	*76-129*			*AE83959*	*05/22/18 11:00*	*05/22/18 13:42*	*8260GRO*	*MM*	
ER 125.9 (18E1751-05) Water Sampled: 05/16/18 14:45 Received: 05/16/18 16:50											
TPH as Gasoline	ND	50	50	ug/L	1	AE83959	05/22/18 11:00	05/22/18 14:18	8260GRO	MM	U
Surrogate: Toluene-d8		*96.0 %*	*76-129*			*AE83959*	*05/22/18 11:00*	*05/22/18 14:18*	*8260GRO*	*MM*	
ER 126.1 (18E1751-06) Water Sampled: 05/16/18 15:20 Received: 05/16/18 16:50											
TPH as Gasoline	ND	50	50	ug/L	1	AE83959	05/22/18 11:00	05/22/18 14:54	8260GRO	MM	U
Surrogate: Toluene-d8		*96.0 %*	*76-129*			*AE83959*	*05/22/18 11:00*	*05/22/18 14:54*	*8260GRO*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 119.1 (18E1751-01) Water Sampled: 05/16/18 10:25 Received: 05/16/18 16:50											
Benzene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 11:57	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 11:57	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 11:57	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 11:57	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 11:57	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 11:57	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 11:57	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 11:57	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE83958	05/22/18 11:00	05/22/18 11:57	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*105 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 11:57*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*107 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 11:57*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*116 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 11:57*	*EPA 8260B*	*MM*	
ER 118.9 (18E1751-02) Water Sampled: 05/16/18 11:45 Received: 05/16/18 16:50											
Benzene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 12:32	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 12:32	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 12:32	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 12:32	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 12:32	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 12:32	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 12:32	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 12:32	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE83958	05/22/18 11:00	05/22/18 12:32	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*105 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 12:32*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*107 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 12:32*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*117 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 12:32*	*EPA 8260B*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
MF 0.1 (18E1751-03) Water Sampled: 05/16/18 12:40 Received: 05/16/18 16:50											
Benzene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 13:07	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 13:07	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 13:07	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 13:07	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 13:07	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 13:07	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 13:07	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 13:07	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE83958	05/22/18 11:00	05/22/18 13:07	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*99.9 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 13:07*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*104 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 13:07*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*111 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 13:07*	*EPA 8260B*	*MM*	
OC 0.1 (18E1751-04) Water Sampled: 05/16/18 14:00 Received: 05/16/18 16:50											
Benzene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 13:42	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 13:42	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 13:42	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 13:42	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 13:42	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 13:42	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 13:42	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 13:42	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE83958	05/22/18 11:00	05/22/18 13:42	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*102 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 13:42*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*102 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 13:42*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*113 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 13:42*	*EPA 8260B*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 125.9 (18E1751-05) Water Sampled: 05/16/18 14:45 Received: 05/16/18 16:50											
Benzene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 14:18	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 14:18	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 14:18	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 14:18	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 14:18	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 14:18	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 14:18	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 14:18	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE83958	05/22/18 11:00	05/22/18 14:18	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*98.8 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 14:18*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*104 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 14:18*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*112 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 14:18*	*EPA 8260B*	*MM*	
ER 126.1 (18E1751-06) Water Sampled: 05/16/18 15:20 Received: 05/16/18 16:50											
Benzene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 14:54	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 14:54	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 14:54	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 14:54	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 14:54	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 14:54	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 14:54	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 14:54	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE83958	05/22/18 11:00	05/22/18 14:54	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*104 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 14:54*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*105 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 14:54*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*115 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 14:54*	*EPA 8260B*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83883 - Metals Digest											
Blank (AE83883-BLK1)					Prepared: 05/21/18 Analyzed: 05/23/18						
Calcium	ND	0.080	1.0	mg/L							U
Magnesium	ND	0.030	1.0	mg/L							U
LCS (AE83883-BS1)					Prepared: 05/21/18 Analyzed: 05/23/18						
Calcium	8.15	0.080	1.0	mg/L	8.00		102	85-115			
Magnesium	7.88	0.030	1.0	mg/L	8.00		98.6	85-115			
Duplicate (AE83883-DUP1)		**Source: 18E1791-01**			Prepared: 05/21/18 Analyzed: 05/23/18						
Calcium	25.5	0.080	1.0	mg/L		23.7			7.11	20	
Magnesium	10.8	0.030	1.0	mg/L		9.93			8.46	20	
Matrix Spike (AE83883-MS1)		**Source: 18E1791-01**			Prepared: 05/21/18 Analyzed: 05/23/18						
Calcium	37.0	0.080	1.0	mg/L	8.00	23.7	166	70-130			QM-01
Magnesium	18.0	0.030	1.0	mg/L	8.00	9.93	101	70-130			
Matrix Spike (AE83883-MS2)		**Source: 18E1899-02**			Prepared: 05/21/18 Analyzed: 05/23/18						
Calcium	48.1	0.080	1.0	mg/L	8.00	35.5	157	70-130			QM-4X
Magnesium	21.0	0.030	1.0	mg/L	8.00	11.1	123	70-130			
Matrix Spike Dup (AE83883-MSD1)		**Source: 18E1791-01**			Prepared: 05/21/18 Analyzed: 05/23/18						
Calcium	38.0	0.080	1.0	mg/L	8.00	23.7	178	70-130	2.56	20	QM-01
Magnesium	18.5	0.030	1.0	mg/L	8.00	9.93	107	70-130	2.66	20	
Batch AE84278 - EPA 245.1 Hg Water											
Blank (AE84278-BLK1)					Prepared & Analyzed: 05/30/18						
Mercury	ND	0.060	0.20	ug/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84278 - EPA 245.1 Hg Water											
LCS (AE84278-BS1)					Prepared & Analyzed: 05/30/18						
Mercury	2.59	0.060	0.20	ug/L	2.50		104	85-115			
Duplicate (AE84278-DUP1)		**Source: 18E2667-01**			Prepared & Analyzed: 05/30/18						
Mercury	ND	0.060	0.20	ug/L		ND				20	U
MRL Check (AE84278-MRL1)					Prepared & Analyzed: 05/30/18						
Mercury	0.499	0.060	0.20	ug/L	0.500		99.8	0-200			
Matrix Spike (AE84278-MS1)		**Source: 18E2667-01**			Prepared & Analyzed: 05/30/18						
Mercury	2.60	0.060	0.20	ug/L	2.50	ND	104	70-130			
Matrix Spike (AE84278-MS2)		**Source: 18E1705-01**			Prepared & Analyzed: 05/30/18						
Mercury	4.61	0.060	0.20	ug/L	2.50	2.01	104	70-130			
Matrix Spike Dup (AE84278-MSD1)		**Source: 18E2667-01**			Prepared & Analyzed: 05/30/18						
Mercury	2.63	0.060	0.20	ug/L	2.50	ND	105	70-130	1.19	20	
Batch AE84279 - EPA 245.1 Hg Water											
Blank (AE84279-BLK1)					Prepared: 05/30/18 Analyzed: 05/31/18						
Mercury	0.0650	0.060	0.20	ug/L							J
LCS (AE84279-BS1)					Prepared: 05/30/18 Analyzed: 05/31/18						
Mercury	2.49	0.060	0.20	ug/L	2.50		99.7	85-115			
Duplicate (AE84279-DUP1)		**Source: 18E1566-01**			Prepared: 05/30/18 Analyzed: 05/31/18						
Mercury	0.0730	0.060	0.20	ug/L		0.0700			4.20	20	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84279 - EPA 245.1 Hg Water											
MRL Check (AE84279-MRL1)					Prepared: 05/30/18 Analyzed: 05/31/18						
Mercury	0.560	0.060	0.20	ug/L	0.500		112	0-200			
Matrix Spike (AE84279-MS1)		**Source: 18E1566-01**			Prepared: 05/30/18 Analyzed: 05/31/18						
Mercury	2.54	0.060	0.20	ug/L	2.50	0.0700	98.6	70-130			
Matrix Spike (AE84279-MS2)		**Source: 18E1577-01**			Prepared: 05/30/18 Analyzed: 05/31/18						
Mercury	2.54	0.060	0.20	ug/L	2.50	0.0730	98.5	70-130			
Matrix Spike Dup (AE84279-MSD1)		**Source: 18E1566-01**			Prepared: 05/30/18 Analyzed: 05/31/18						
Mercury	2.51	0.060	0.20	ug/L	2.50	0.0700	97.5	70-130	1.11	20	

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83884 - EPA 200.8											
Blank (AE83884-BLK1)					Prepared: 05/21/18 Analyzed: 05/22/18						
Aluminum	ND	5.0	10	ug/L							U
Antimony	ND	0.20	0.50	ug/L							U
Arsenic	ND	0.20	0.50	ug/L							U
Barium	ND	0.20	0.50	ug/L							U
Beryllium	ND	0.050	0.10	ug/L							U
Cadmium	ND	0.060	0.10	ug/L							U
Chromium	ND	0.40	0.50	ug/L							U
Cobalt	ND	0.030	0.10	ug/L							U
Copper	ND	0.40	0.50	ug/L							U
Iron	ND	10	50	ug/L							U
Lead	ND	0.060	0.25	ug/L							U
Manganese	ND	2.0	5.0	ug/L							U
Molybdenum	ND	0.070	0.25	ug/L							U
Nickel	ND	0.30	0.50	ug/L							U
Selenium	ND	0.20	2.0	ug/L							U
Silver	0.0506	0.050	0.10	ug/L							J
Thallium	ND	0.050	0.10	ug/L							U
Vanadium	ND	0.50	1.0	ug/L							U
Zinc	ND	2.0	5.0	ug/L							U
LCS (AE83884-BS1)					Prepared: 05/21/18 Analyzed: 05/22/18						
Aluminum	459	5.0	10	ug/L	520		88.3	85-115			
Antimony	20.5	0.20	0.50	ug/L	20.0		102	85-115			
Arsenic	21.1	0.20	0.50	ug/L	20.0		105	85-115			
Barium	21.6	0.20	0.50	ug/L	20.0		108	85-115			
Beryllium	21.0	0.050	0.10	ug/L	20.0		105	85-115			
Cadmium	20.3	0.060	0.10	ug/L	20.0		101	85-115			
Chromium	20.9	0.40	0.50	ug/L	20.0		105	85-115			
Cobalt	20.8	0.030	0.10	ug/L	20.0		104	85-115			
Copper	20.7	0.40	0.50	ug/L	20.0		103	85-115			
Iron	547	10	50	ug/L	520		105	85-115			
Lead	20.1	0.060	0.25	ug/L	20.0		100	85-115			
Manganese	20.2	2.0	5.0	ug/L	20.0		101	85-115			
Molybdenum	21.0	0.070	0.25	ug/L	20.0		105	85-115			
Nickel	20.9	0.30	0.50	ug/L	20.0		105	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83884 - EPA 200.8											
LCS (AE83884-BS1)					Prepared: 05/21/18 Analyzed: 05/22/18						
Selenium	20.7	0.20	2.0	ug/L	20.0		103	85-115			
Silver	20.7	0.050	0.10	ug/L	20.0		104	85-115			
Thallium	20.1	0.050	0.10	ug/L	20.0		100	85-115			
Vanadium	20.9	0.50	1.0	ug/L	20.0		104	85-115			
Zinc	101	2.0	5.0	ug/L	100		101	85-115			
Duplicate (AE83884-DUP1)		**Source: 18E1893-01**			Prepared: 05/21/18 Analyzed: 05/22/18						
Aluminum	76.2	20	40	ug/L		75.7			0.718	20	
Antimony	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic	26.6	0.80	2.0	ug/L		27.5			3.32	20	
Barium	11.8	0.80	2.0	ug/L		12.0			1.39	20	
Beryllium	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium	0.407	0.24	0.40	ug/L		0.417			2.37	20	
Chromium	28.3	1.6	2.0	ug/L		28.9			2.09	20	
Cobalt	0.437	0.12	0.40	ug/L		0.437			0.0389	20	
Copper	698	1.6	2.0	ug/L		709			1.55	20	
Iron	174	40	200	ug/L		181			3.75	20	R-01, J
Lead	7.52	0.24	1.0	ug/L		7.91			5.04	20	
Manganese	12.6	8.0	20	ug/L		13.0			3.15	20	R-01, J
Molybdenum	ND	0.28	1.0	ug/L		ND				20	R-01, U
Nickel	ND	1.2	2.0	ug/L		ND				20	R-01, U
Selenium	ND	0.80	8.0	ug/L		ND				20	R-01, U
Silver	0.255	0.20	0.40	ug/L		ND				20	R-01, J
Thallium	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium	ND	2.0	4.0	ug/L		ND				20	R-01, U
Zinc	195	8.0	20	ug/L		193			1.38	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84314 - EPA 245.1 Hg Water											
Blank (AE84314-BLK1)					Prepared & Analyzed: 05/31/18						
Mercury, dissolved	0.0630	0.060	0.20	ug/L							J
LCS (AE84314-BS1)					Prepared & Analyzed: 05/31/18						
Mercury, dissolved	2.61	0.060	0.20	ug/L	2.50		104	85-115			
Duplicate (AE84314-DUP1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/31/18						
Mercury, dissolved	0.0680	0.060	0.20	ug/L		0.0650			4.51	20	J
MRL Check (AE84314-MRL1)					Prepared & Analyzed: 05/31/18						
Mercury, dissolved	0.550	0.060	0.20	ug/L	0.500		110	0-200			
Matrix Spike (AE84314-MS1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/31/18						
Mercury, dissolved	2.64	0.060	0.20	ug/L	2.50	0.0650	103	70-130			
Matrix Spike (AE84314-MS2)		**Source: 18E1751-01**			Prepared & Analyzed: 05/31/18						
Mercury, dissolved	2.60	0.060	0.20	ug/L	2.50	0.0630	101	70-130			
Matrix Spike Dup (AE84314-MSD1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/31/18						
Mercury, dissolved	2.62	0.060	0.20	ug/L	2.50	0.0650	102	70-130	0.685	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83882 - EPA 200.8 (D)											
Blank (AE83882-BLK1)					Prepared: 05/22/18 Analyzed: 05/23/18						
Aluminum, dissolved	ND	5.0	10	ug/L							U
Antimony, dissolved	ND	0.20	0.50	ug/L							U
Arsenic, dissolved	ND	0.20	0.50	ug/L							U
Barium, dissolved	ND	0.20	0.50	ug/L							U
Beryllium, dissolved	ND	0.050	0.10	ug/L							U
Cadmium, dissolved	ND	0.060	0.10	ug/L							U
Chromium, dissolved	ND	0.40	0.50	ug/L							U
Cobalt, dissolved	ND	0.030	0.10	ug/L							U
Copper, dissolved	ND	0.40	0.50	ug/L							U
Lead, dissolved	ND	0.060	0.25	ug/L							U
Molybdenum, dissolved	ND	0.070	0.25	ug/L							U
Nickel, dissolved	ND	0.30	0.50	ug/L							U
Selenium, dissolved	ND	0.20	2.0	ug/L							U
Silver, dissolved	ND	0.050	0.10	ug/L							U
Thallium, dissolved	ND	0.050	0.10	ug/L							U
Vanadium, dissolved	ND	0.50	1.0	ug/L							U
Zinc, dissolved	2.09	2.0	5.0	ug/L							J
LCS (AE83882-BS1)					Prepared: 05/22/18 Analyzed: 05/23/18						
Aluminum, dissolved	449	5.0	10	ug/L	520		86.4	85-115			
Antimony, dissolved	19.9	0.20	0.50	ug/L	20.0		99.5	85-115			
Arsenic, dissolved	20.2	0.20	0.50	ug/L	20.0		101	85-115			
Barium, dissolved	20.5	0.20	0.50	ug/L	20.0		102	85-115			
Beryllium, dissolved	20.1	0.050	0.10	ug/L	20.0		101	85-115			
Cadmium, dissolved	19.2	0.060	0.10	ug/L	20.0		95.9	85-115			
Chromium, dissolved	20.9	0.40	0.50	ug/L	20.0		105	85-115			
Cobalt, dissolved	20.7	0.030	0.10	ug/L	20.0		104	85-115			
Copper, dissolved	21.5	0.40	0.50	ug/L	20.0		108	85-115			
Lead, dissolved	19.7	0.060	0.25	ug/L	20.0		98.7	85-115			
Molybdenum, dissolved	20.5	0.070	0.25	ug/L	20.0		103	85-115			
Nickel, dissolved	20.5	0.30	0.50	ug/L	20.0		103	85-115			
Selenium, dissolved	18.6	0.20	2.0	ug/L	20.0		92.8	85-115			
Silver, dissolved	20.2	0.050	0.10	ug/L	20.0		101	85-115			
Thallium, dissolved	19.7	0.050	0.10	ug/L	20.0		98.4	85-115			
Vanadium, dissolved	20.8	0.50	1.0	ug/L	20.0		104	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83882 - EPA 200.8 (D)											
LCS (AE83882-BS1)					Prepared: 05/22/18 Analyzed: 05/23/18						
Zinc, dissolved	95.6	2.0	5.0	ug/L	100		95.6	85-115			
Duplicate (AE83882-DUP1)			**Source: 18E1751-01**		Prepared: 05/22/18 Analyzed: 05/23/18						
Aluminum, dissolved	ND	20	40	ug/L		ND				20	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L		ND				20	R-01, U
Barium, dissolved	62.8	0.80	2.0	ug/L		63.7			1.48	20	
Beryllium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L		ND				20	R-01, U
Chromium, dissolved	ND	1.6	2.0	ug/L		ND				20	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L		ND				20	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L		1.84				20	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L		ND				20	R-01, U
Molybdenum, dissolved	0.377	0.28	1.0	ug/L		0.377			0.121	20	R-01, J
Nickel, dissolved	1.65	1.2	2.0	ug/L		ND				20	R-01, J
Selenium, dissolved	ND	0.80	8.0	ug/L		ND				20	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L		ND				20	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L		ND				20	R-01, U
Matrix Spike (AE83882-MS1)			**Source: 18E1751-01**		Prepared: 05/22/18 Analyzed: 05/23/18						
Aluminum, dissolved	530	20	40	ug/L	520	ND	102	70-130			
Antimony, dissolved	20.3	0.80	2.0	ug/L	20.0	ND	101	70-130			
Arsenic, dissolved	20.8	0.80	2.0	ug/L	20.0	ND	104	70-130			
Barium, dissolved	86.9	0.80	2.0	ug/L	20.0	63.7	116	70-130			
Beryllium, dissolved	21.6	0.20	0.40	ug/L	20.0	ND	108	70-130			
Cadmium, dissolved	19.6	0.24	0.40	ug/L	20.0	ND	97.8	70-130			
Chromium, dissolved	22.0	1.6	2.0	ug/L	20.0	ND	110	70-130			
Cobalt, dissolved	21.1	0.12	0.40	ug/L	20.0	ND	105	70-130			
Copper, dissolved	22.0	1.6	2.0	ug/L	20.0	1.84	101	70-130			
Lead, dissolved	20.3	0.24	1.0	ug/L	20.0	ND	101	70-130			
Molybdenum, dissolved	21.2	0.28	1.0	ug/L	20.0	0.377	104	70-130			
Nickel, dissolved	22.1	1.2	2.0	ug/L	20.0	ND	111	70-130			
Selenium, dissolved	18.7	0.80	8.0	ug/L	20.0	ND	93.5	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83882 - EPA 200.8 (D)											
Matrix Spike (AE83882-MS1)		**Source: 18E1751-01**			Prepared: 05/22/18 Analyzed: 05/23/18						
Silver, dissolved	20.7	0.20	0.40	ug/L	20.0	ND	103	70-130			
Thallium, dissolved	20.5	0.20	0.40	ug/L	20.0	ND	103	70-130			
Vanadium, dissolved	21.8	2.0	4.0	ug/L	20.0	ND	109	70-130			
Zinc, dissolved	101	8.0	20	ug/L	100	ND	101	70-130			
Matrix Spike (AE83882-MS2)		**Source: 18E1892-04**			Prepared: 05/22/18 Analyzed: 05/23/18						
Aluminum, dissolved	524	20	40	ug/L	520	ND	101	70-130			
Antimony, dissolved	20.9	0.80	2.0	ug/L	20.0	ND	105	70-130			
Arsenic, dissolved	24.0	0.80	2.0	ug/L	20.0	2.59	107	70-130			
Barium, dissolved	192	0.80	2.0	ug/L	20.0	174	89.1	70-130			
Beryllium, dissolved	21.0	0.20	0.40	ug/L	20.0	ND	105	70-130			
Cadmium, dissolved	19.3	0.24	0.40	ug/L	20.0	ND	96.4	70-130			
Chromium, dissolved	27.3	1.6	2.0	ug/L	20.0	6.66	103	70-130			
Cobalt, dissolved	20.5	0.12	0.40	ug/L	20.0	0.199	102	70-130			
Copper, dissolved	24.4	1.6	2.0	ug/L	20.0	3.11	107	70-130			
Lead, dissolved	19.6	0.24	1.0	ug/L	20.0	ND	98.0	70-130			
Molybdenum, dissolved	28.6	0.28	1.0	ug/L	20.0	7.48	106	70-130			
Nickel, dissolved	22.2	1.2	2.0	ug/L	20.0	ND	111	70-130			
Selenium, dissolved	22.1	0.80	8.0	ug/L	20.0	2.89	96.3	70-130			
Silver, dissolved	20.0	0.20	0.40	ug/L	20.0	ND	99.9	70-130			
Thallium, dissolved	19.8	0.20	0.40	ug/L	20.0	ND	98.9	70-130			
Vanadium, dissolved	29.2	2.0	4.0	ug/L	20.0	7.67	108	70-130			
Zinc, dissolved	119	8.0	20	ug/L	100	23.0	96.3	70-130			
Matrix Spike Dup (AE83882-MSD1)		**Source: 18E1751-01**			Prepared: 05/22/18 Analyzed: 05/23/18						
Aluminum, dissolved	530	20	40	ug/L	520	ND	102	70-130	0.0669	20	
Antimony, dissolved	20.5	0.80	2.0	ug/L	20.0	ND	103	70-130	1.35	20	
Arsenic, dissolved	21.1	0.80	2.0	ug/L	20.0	ND	106	70-130	1.70	20	
Barium, dissolved	88.2	0.80	2.0	ug/L	20.0	63.7	122	70-130	1.42	20	
Beryllium, dissolved	21.6	0.20	0.40	ug/L	20.0	ND	108	70-130	0.150	20	
Cadmium, dissolved	19.8	0.24	0.40	ug/L	20.0	ND	98.9	70-130	1.12	20	
Chromium, dissolved	21.9	1.6	2.0	ug/L	20.0	ND	110	70-130	0.105	20	
Cobalt, dissolved	21.2	0.12	0.40	ug/L	20.0	ND	106	70-130	0.721	20	
Copper, dissolved	22.5	1.6	2.0	ug/L	20.0	1.84	103	70-130	2.19	20	
Lead, dissolved	20.6	0.24	1.0	ug/L	20.0	ND	103	70-130	1.32	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83882 - EPA 200.8 (D)											
Matrix Spike Dup (AE83882-MSD1)		**Source: 18E1751-01**			Prepared: 05/22/18 Analyzed: 05/23/18						
Molybdenum, dissolved	21.4	0.28	1.0	ug/L	20.0	0.377	105	70-130	1.02	20	
Nickel, dissolved	21.9	1.2	2.0	ug/L	20.0	ND	109	70-130	1.12	20	
Selenium, dissolved	19.7	0.80	8.0	ug/L	20.0	ND	98.4	70-130	5.11	20	
Silver, dissolved	20.4	0.20	0.40	ug/L	20.0	ND	102	70-130	1.29	20	
Thallium, dissolved	20.8	0.20	0.40	ug/L	20.0	ND	104	70-130	1.59	20	
Vanadium, dissolved	22.0	2.0	4.0	ug/L	20.0	ND	110	70-130	0.842	20	
Zinc, dissolved	100	8.0	20	ug/L	100	ND	100	70-130	0.709	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83773 - General Preparation											
Duplicate (AE83773-DUP1)		**Source: 18E1751-01**			Prepared & Analyzed: 05/29/18						
Total Alkalinity as CaCO3	80.0	1.0	5.0	mg/L		79.0			1.26	20	
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Bicarbonate Alkalinity as CaCO3	80.0	1.0	5.0	mg/L		79.0			1.26	20	
Batch AE83807 - General Preparation											
Blank (AE83807-BLK1)					Prepared: 05/18/18 Analyzed: 05/24/18						
Total Dissolved Solids	ND	5.0	10	mg/L							U
Duplicate (AE83807-DUP1)		**Source: 18E1754-02**			Prepared: 05/18/18 Analyzed: 05/24/18						
Total Dissolved Solids	58.0	5.0	10	mg/L		58.0			0.00	15	
Duplicate (AE83807-DUP2)		**Source: 18E1892-03**			Prepared: 05/18/18 Analyzed: 05/24/18						
Total Dissolved Solids	194	5.0	10	mg/L		194			0.00	15	
Batch AE83808 - General Preparation											
Blank (AE83808-BLK1)					Prepared: 05/18/18 Analyzed: 05/23/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
Blank (AE83808-BLK2)					Prepared: 05/18/18 Analyzed: 05/23/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
LCS (AE83808-BS1)					Prepared: 05/18/18 Analyzed: 05/23/18						
Biochemical Oxygen Demand	209	2.0	5.0	mg/L	200		104	84-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83808 - General Preparation											
Duplicate (AE83808-DUP1)		**Source: 18E1822-01**			Prepared: 05/18/18 Analyzed: 05/23/18						
Biochemical Oxygen Demand	315	2.0	5.0	mg/L		316			0.285	30	
Batch AE83883 - Metals Digest											
Blank (AE83883-BLK1)					Prepared: 05/21/18 Analyzed: 05/23/18						
Hardness, Total	ND	1	5	mg/L							U
Duplicate (AE83883-DUP1)		**Source: 18E1791-01**			Prepared: 05/21/18 Analyzed: 05/23/18						
Hardness, Total	108	1	5	mg/L		100			7.67	20	
Batch AE83942 - General Preparation											
Blank (AE83942-BLK1)					Prepared & Analyzed: 05/23/18						
Total Suspended Solids	ND	0.30	1.0	mg/L							U
Duplicate (AE83942-DUP1)		**Source: 18E1644-01**			Prepared & Analyzed: 05/23/18						
Total Suspended Solids	132	0.30	1.0	mg/L		178			29.7	30	
Duplicate (AE83942-DUP2)		**Source: 18E1823-01**			Prepared & Analyzed: 05/23/18						
Total Suspended Solids	267	0.30	1.0	mg/L		244			8.88	30	
Batch AE84137 - General Preparation											
LCS (AE84137-BS1)					Prepared & Analyzed: 05/25/18						
Ammonia as N	4.99	0.10	0.20	mg/L	5.00		99.8	90-110			

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84137 - General Preparation											
LCS Dup (AE84137-BSD1)					Prepared & Analyzed: 05/25/18						
Ammonia as N	4.82	0.10	0.20	mg/L	5.00		96.3	90-110	3.57	10	
Matrix Spike (AE84137-MS1)		**Source: 18E1411-01**			Prepared & Analyzed: 05/25/18						
Ammonia as N	9.40	0.10	0.20	mg/L	10.0	ND	94.0	85-115			
Matrix Spike Dup (AE84137-MSD1)		**Source: 18E1411-01**			Prepared & Analyzed: 05/25/18						
Ammonia as N	9.63	0.10	0.20	mg/L	10.0	ND	96.3	85-115	2.40	20	
Batch AE84143 - General Prep											
Blank (AE84143-BLK1)					Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	ND	0.600	1.00	mg/L							U
LCS (AE84143-BS1)					Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	10.0	0.600	1.00	mg/L	10.0		100	85-115			
LCS Dup (AE84143-BSD1)					Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	8.89	0.600	1.00	mg/L	10.0		88.9	85-115	11.8	20	
Duplicate (AE84143-DUP1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	2.34	0.600	1.00	mg/L		2.46			4.86	20	
MRL Check (AE84143-MRL1)					Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	1.57	0.600	1.00	mg/L	2.50		62.9	0-200			
Matrix Spike (AE84143-MS1)		**Source: 18E1576-02**			Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	21.6	1.20	2.00	mg/L	20.0	ND	108	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84143 - General Prep											
Matrix Spike Dup (AE84143-MSD1)		**Source: 18E1576-02**			Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	21.4	1.20	2.00	mg/L	20.0	ND	107	70-130	0.866	20	
Batch AE84144 - General Prep											
Blank (AE84144-BLK1)					Prepared & Analyzed: 05/28/18						
Total Organic Carbon	ND	0.300	1.00	mg/L							U
LCS (AE84144-BS1)					Prepared & Analyzed: 05/28/18						
Total Organic Carbon	10.2	0.300	1.00	mg/L	10.0		102	85-115			
LCS Dup (AE84144-BSD1)					Prepared & Analyzed: 05/28/18						
Total Organic Carbon	10.0	0.300	1.00	mg/L	10.0		100	85-115	2.30	20	
Duplicate (AE84144-DUP1)		**Source: 18E1576-03**			Prepared & Analyzed: 05/28/18						
Total Organic Carbon	2.20	0.300	1.00	mg/L		2.22			0.947	20	
MRL Check (AE84144-MRL1)					Prepared: 05/25/18 Analyzed: 05/28/18						
Total Organic Carbon	1.28	0.300	1.00	mg/L	2.50		51.1	0-200			
Matrix Spike (AE84144-MS1)		**Source: 18E1576-04**			Prepared & Analyzed: 05/28/18						
Total Organic Carbon	21.2	0.600	2.00	mg/L	20.0	2.19	95.3	70-130			
Matrix Spike Dup (AE84144-MSD1)		**Source: 18E1576-04**			Prepared & Analyzed: 05/28/18						
Total Organic Carbon	22.4	0.600	2.00	mg/L	20.0	2.19	101	70-130	5.07	20	
Batch AE84176 - General Prep											
LCS (AE84176-BS1)					Prepared: 05/29/18 Analyzed: 05/30/18						
Total Kjeldahl Nitrogen	2.95	0.20	1.0	mg/L	2.98		99.0	80-120			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84176 - General Prep											
LCS Dup (AE84176-BSD1)					Prepared: 05/29/18 Analyzed: 05/30/18						
Total Kjeldahl Nitrogen	2.95	0.20	1.0	mg/L	2.98		99.0	80-120	0.00	20	
Matrix Spike (AE84176-MS1)		**Source: 18E1509-02**			Prepared: 05/29/18 Analyzed: 05/30/18						
Total Kjeldahl Nitrogen	3.13	0.20	1.0	mg/L	2.98	0.210	98.2	75-125			
Matrix Spike Dup (AE84176-MSD1)		**Source: 18E1509-02**			Prepared: 05/29/18 Analyzed: 05/30/18						
Total Kjeldahl Nitrogen	3.13	0.20	1.0	mg/L	2.98	0.210	98.2	75-125	0.00	20	
Batch AE84184 - General Preparation											
Blank (AE84184-BLK1)					Prepared: 05/29/18 Analyzed: 05/30/18						
Oil & Grease (HEM)	ND	1.4	5.0	mg/L							U
LCS (AE84184-BS1)					Prepared: 05/29/18 Analyzed: 05/30/18						
Oil & Grease (HEM)	39.8	1.4	5.0	mg/L	40.0		99.5	78-114			
LCS Dup (AE84184-BSD1)					Prepared: 05/29/18 Analyzed: 05/30/18						
Oil & Grease (HEM)	39.2	1.4	5.0	mg/L	40.0		98.0	78-114	1.52	18	
Matrix Spike (AE84184-MS1)		**Source: 18E1791-01**			Prepared: 05/29/18 Analyzed: 05/30/18						
Oil & Grease (HEM)	38.9	1.4	5.0	mg/L	40.0	1.60	93.2	78-114			
Batch AE84187 - General Preparation											
Blank (AE84187-BLK1)					Prepared: 05/17/18 Analyzed: 05/31/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84187 - General Preparation											
Duplicate (AE84187-DUP1)		**Source: 18E1510-03**			Prepared: 05/17/18 Analyzed: 05/31/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Duplicate (AE84187-DUP2)		**Source: 18E1872-02**			Prepared & Analyzed: 05/31/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Batch AF83084 - General Prep											
Blank (AF83084-BLK1)					Prepared & Analyzed: 06/02/18						
Phosphorus, total	ND	0.011	0.040	mg/L							U
LCS (AF83084-BS1)					Prepared & Analyzed: 06/02/18						
Phosphorus, total	0.190	0.011	0.040	mg/L	0.200		94.9	85-115			
Duplicate (AF83084-DUP1)		**Source: 18E2230-01**			Prepared & Analyzed: 06/02/18						
Phosphorus, total	0.0299	0.011	0.040	mg/L		0.0313			4.44	20	J
Matrix Spike (AF83084-MS1)		**Source: 18E2230-01**			Prepared & Analyzed: 06/02/18						
Phosphorus, total	0.206	0.011	0.040	mg/L	0.200	0.0313	87.4	70-130			
Matrix Spike (AF83084-MS2)		**Source: 18E1751-04**			Prepared & Analyzed: 06/02/18						
Phosphorus, total	0.205	0.011	0.040	mg/L	0.200	0.0191	92.8	70-130			
Matrix Spike Dup (AF83084-MSD1)		**Source: 18E2230-01**			Prepared & Analyzed: 06/02/18						
Phosphorus, total	0.206	0.011	0.040	mg/L	0.200	0.0313	87.4	70-130	0.00	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83783 - General Preparation											
Blank (AE83783-BLK1)					Prepared & Analyzed: 05/17/18						
Nitrite as N	ND	0.050	0.20	mg/L							U
Orthophosphate	ND	0.10	0.30	mg/L							U
Nitrate as N	ND	0.040	0.20	mg/L							U
LCS (AE83783-BS1)					Prepared & Analyzed: 05/17/18						
Nitrate as N	5.80	0.040	0.20	mg/L	5.56		104	90-110			
Orthophosphate	17.9	0.10	0.30	mg/L	16.7		107	90-110			
Nitrite as N	5.58	0.050	0.20	mg/L	5.56		100	90-110			
Duplicate (AE83783-DUP1)		**Source: 18E1751-06**			Prepared & Analyzed: 05/17/18						
Nitrate as N	ND	0.040	0.20	mg/L		ND				20	U
Orthophosphate	ND	0.10	0.30	mg/L		ND				20	U
Nitrite as N	ND	0.050	0.20	mg/L		ND				20	U
Matrix Spike (AE83783-MS1)		**Source: 18E1751-06**			Prepared & Analyzed: 05/17/18						
Orthophosphate	18.5	0.10	0.30	mg/L	16.7	ND	111	80-120			
Nitrate as N	6.04	0.040	0.20	mg/L	5.56	ND	109	80-120			
Nitrite as N	5.95	0.050	0.20	mg/L	5.56	ND	107	80-120			
Matrix Spike Dup (AE83783-MSD1)		**Source: 18E1751-06**			Prepared & Analyzed: 05/17/18						
Orthophosphate	18.2	0.10	0.30	mg/L	16.7	ND	109	80-120	1.63	20	
Nitrite as N	5.84	0.050	0.20	mg/L	5.56	ND	105	80-120	1.89	20	
Nitrate as N	5.90	0.040	0.20	mg/L	5.56	ND	106	80-120	2.27	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

TPH by EPA/LUFT GC Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83911 - SVOAs in Water GC											
Blank (AE83911-BLK1)					Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Diesel	ND	50	250	ug/L							U
TPH as Motor Oil	ND	100	250	ug/L							U
Surrogate: Tetratetracontane	*49.0*			*ug/L*	*56.0*		*87.6*	*39-120*			
LCS (AE83911-BS1)					Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Diesel	1580	50	250	ug/L	2070		76.4	61-120			
Surrogate: Tetratetracontane	*47.1*			*ug/L*	*56.0*		*84.1*	*39-120*			
LCS (AE83911-BS2)					Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Motor Oil	1610	100	250	ug/L	1990		80.8	71-125			
Surrogate: Tetratetracontane	*48.6*			*ug/L*	*56.0*		*86.8*	*39-120*			
LCS Dup (AE83911-BSD1)					Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Diesel	1720	50	250	ug/L	2070		82.9	61-120	8.22	25	
Surrogate: Tetratetracontane	*49.7*			*ug/L*	*56.0*		*88.8*	*39-120*			
LCS Dup (AE83911-BSD2)					Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Motor Oil	1820	100	250	ug/L	1990		91.2	71-125	12.1	25	
Surrogate: Tetratetracontane	*51.6*			*ug/L*	*56.0*		*92.2*	*39-120*			

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Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

TPH by EPA/LUFT GCMS Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83959 - VOAs in Water GCMS											
Blank (AE83959-BLK1)					Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Gasoline	ND	50	50	ug/L							U
Surrogate: Toluene-d8	*24.0*			*ug/L*	*25.0*		*96.0*	*76-129*			
LCS (AE83959-BS1)					Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Gasoline	197	50	50	ug/L	200		98.5	67-132			
Surrogate: Toluene-d8	*24.0*			*ug/L*	*25.0*		*96.0*	*76-129*			
LCS Dup (AE83959-BSD1)					Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Gasoline	197	50	50	ug/L	200		98.5	67-132	0.00	25	
Surrogate: Toluene-d8	*24.0*			*ug/L*	*25.0*		*96.0*	*76-129*			
Matrix Spike (AE83959-MS1)		**Source: 18E1751-03**			Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Gasoline	198	50	50	ug/L	200	ND	99.0	37-156			
Surrogate: Toluene-d8	*25.0*			*ug/L*	*25.0*		*100*	*76-129*			
Matrix Spike (AE83959-MS2)		**Source: 18E1751-04**			Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Gasoline	201	50	50	ug/L	200	ND	100	37-156			
Surrogate: Toluene-d8	*25.0*			*ug/L*	*25.0*		*100*	*76-129*			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83958 - VOAs in Water GCMS											
Blank (AE83958-BLK1)					Prepared: 05/21/18 Analyzed: 05/22/18						
Benzene	ND	0.30	0.30	ug/L							U
Toluene	ND	0.30	0.30	ug/L							U
Ethylbenzene	ND	0.40	0.50	ug/L							U
Xylenes (total)	ND	0.50	0.50	ug/L							U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L							U
Di-isopropyl ether	ND	0.40	0.50	ug/L							U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L							U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L							U
Tert-butyl alcohol	ND	6.0	10	ug/L							U
Surrogate: Bromofluorobenzene	*26.4*			*ug/L*	*25.0*		*105*	*70-130*			
Surrogate: Dibromofluoromethane	*26.2*			*ug/L*	*25.0*		*105*	*70-130*			
Surrogate: Toluene-d8	*28.7*			*ug/L*	*25.0*		*115*	*70-130*			
LCS (AE83958-BS1)					Prepared: 05/21/18 Analyzed: 05/22/18						
Benzene	20.8	0.30	0.30	ug/L	20.0		104	82-122			
Toluene	22.9	0.30	0.30	ug/L	20.0		115	75-134			
Ethylbenzene	22.5	0.40	0.50	ug/L	20.0		112	84-124			
Xylenes (total)	63.1	0.50	0.50	ug/L	60.0		105	81-126			
Methyl tert-butyl ether	19.3	0.50	0.50	ug/L	20.0		96.7	84-119			
Di-isopropyl ether	22.5	0.40	0.50	ug/L	20.0		112	83-132			
Ethyl tert-butyl ether	21.8	0.40	0.50	ug/L	20.0		109	74-127			
Tert-amyl methyl ether	18.7	0.40	0.50	ug/L	20.0		93.6	74-120			
Tert-butyl alcohol	370	6.0	10	ug/L	400		92.4	66-147			
Surrogate: Bromofluorobenzene	*28.5*			*ug/L*	*25.0*		*114*	*70-130*			
Surrogate: Dibromofluoromethane	*26.3*			*ug/L*	*25.0*		*105*	*70-130*			
Surrogate: Toluene-d8	*28.4*			*ug/L*	*25.0*		*114*	*70-130*			
LCS Dup (AE83958-BSD1)					Prepared: 05/21/18 Analyzed: 05/22/18						
Benzene	21.0	0.30	0.30	ug/L	20.0		105	82-122	0.958	25	
Toluene	23.5	0.30	0.30	ug/L	20.0		118	75-134	2.63	25	
Ethylbenzene	22.6	0.40	0.50	ug/L	20.0		113	84-124	0.355	25	
Xylenes (total)	63.9	0.50	0.50	ug/L	60.0		106	81-126	1.17	25	
Methyl tert-butyl ether	19.7	0.50	0.50	ug/L	20.0		98.6	84-119	2.00	25	
Di-isopropyl ether	22.7	0.40	0.50	ug/L	20.0		113	83-132	0.930	25	
Ethyl tert-butyl ether	21.8	0.40	0.50	ug/L	20.0		109	74-127	0.00	25	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/06/18 16:17

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83958 - VOAs in Water GCMS											
LCS Dup (AE83958-BSD1)					Prepared: 05/21/18 Analyzed: 05/22/18						
Tert-amyl methyl ether	19.2	0.40	0.50	ug/L	20.0		95.9	74-120	2.37	25	
Tert-butyl alcohol	380	6.0	10	ug/L	400		94.9	66-147	2.66	25	
Surrogate: Bromofluorobenzene	*28.5*			*ug/L*	*25.0*		*114*	*70-130*			
Surrogate: Dibromofluoromethane	*26.1*			*ug/L*	*25.0*		*105*	*70-130*			
Surrogate: Toluene-d8	*28.4*			*ug/L*	*25.0*		*114*	*70-130*			
Matrix Spike (AE83958-MS1)		**Source: 18E1751-01**			Prepared: 05/21/18 Analyzed: 05/22/18						
Benzene	21.2	0.30	0.30	ug/L	20.0	ND	106	58-139			
Toluene	23.9	0.30	0.30	ug/L	20.0	ND	120	59-147			
Ethylbenzene	23.4	0.40	0.50	ug/L	20.0	ND	117	59-147			
Xylenes (total)	65.8	0.50	0.50	ug/L	60.0	ND	110	49-153			
Methyl tert-butyl ether	18.4	0.50	0.50	ug/L	20.0	ND	92.2	55-144			
Di-isopropyl ether	22.3	0.40	0.50	ug/L	20.0	ND	112	49-143			
Ethyl tert-butyl ether	21.8	0.40	0.50	ug/L	20.0	ND	109	44-143			
Tert-amyl methyl ether	18.8	0.40	0.50	ug/L	20.0	ND	94.0	41-136			
Tert-butyl alcohol	452	6.0	10	ug/L	400	ND	113	38-175			
Surrogate: Bromofluorobenzene	*28.0*			*ug/L*	*25.0*		*112*	*70-130*			
Surrogate: Dibromofluoromethane	*25.5*			*ug/L*	*25.0*		*102*	*70-130*			
Surrogate: Toluene-d8	*27.8*			*ug/L*	*25.0*		*111*	*70-130*			
Matrix Spike (AE83958-MS2)		**Source: 18E1751-02**			Prepared: 05/21/18 Analyzed: 05/22/18						
Benzene	22.5	0.30	0.30	ug/L	20.0	ND	112	58-139			
Toluene	24.6	0.30	0.30	ug/L	20.0	ND	123	59-147			
Ethylbenzene	24.4	0.40	0.50	ug/L	20.0	ND	122	59-147			
Xylenes (total)	68.3	0.50	0.50	ug/L	60.0	ND	114	49-153			
Methyl tert-butyl ether	20.0	0.50	0.50	ug/L	20.0	ND	100	55-144			
Di-isopropyl ether	23.8	0.40	0.50	ug/L	20.0	ND	119	49-143			
Ethyl tert-butyl ether	23.1	0.40	0.50	ug/L	20.0	ND	115	44-143			
Tert-amyl methyl ether	19.8	0.40	0.50	ug/L	20.0	ND	99.0	41-136			
Tert-butyl alcohol	477	6.0	10	ug/L	400	ND	119	38-175			
Surrogate: Bromofluorobenzene	*28.5*			*ug/L*	*25.0*		*114*	*70-130*			
Surrogate: Dibromofluoromethane	*26.8*			*ug/L*	*25.0*		*107*	*70-130*			
Surrogate: Toluene-d8	*28.4*			*ug/L*	*25.0*		*113*	*70-130*			

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.

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
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Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 •Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	06/06/18 16:17

Notes and Definitions

FILT	The sample was filtered in the lab prior to analysis.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QM-01	The spike recovery for this QC sample is outside of established control limits possibly due to a sample matrix interference.
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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.

basic laboratory

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Redding, California 96001
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fax 530.243.7494

3860 Morrow Lane, Suite F
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voice 530.894.8966
fax 530.894.5143

June 01, 2018

Lab ID: 18E0975

SHERI L. SPEAKS
ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
RE: LOW LEVEL METALS 18E1751

Dear SHERI L. SPEAKS ,

Enclosed are the analysis results for Work Order number 18E0975. All analyses were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

Ricky D. Jensen
Laboratory Director
California ELAP Certification Number 1677

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3860 Morrow Lane, Suite F voice 530.894.8966
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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18E1751

Lab No: 18E0975
Reported: 06/01/18
Phone: (707) 468-0401
P.O. #

Metals - Total

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
18E1751-01 ER 119.1 - Grab Water (18E0975-01) Sampled:05/16/18 10:25 Received:05/18/18 14:18									
Mercury	ng/l	**1.84**		0.20	0.50	EPA 1631E	05/23/18	05/23/18	B8E1414
Methyl Mercury as Mercury	"	**0.081**		0.020	0.050	EPA 1630	05/30/18	05/29/18	B8E1552
18E1751-02 ER 118.9 - Grab Water (18E0975-02) Sampled:05/16/18 11:45 Received:05/18/18 14:18									
Mercury	ng/l	**1.62**		0.20	0.50	EPA 1631E	05/23/18	05/23/18	B8E1414
Methyl Mercury as Mercury	"	**0.041**	J	0.020	0.050	EPA 1630	05/30/18	05/29/18	B8E1552
18E1751-03 MF 0.1 - Grab Water (18E0975-03) Sampled:05/16/18 12:40 Received:05/18/18 14:18									
Mercury	ng/l	**1.51**		0.20	0.50	EPA 1631E	05/23/18	05/23/18	B8E1414
Methyl Mercury as Mercury	"	**0.023**	J	0.020	0.050	EPA 1630	05/30/18	05/29/18	B8E1552
18E1751-04 OC 0.1 - Grab Water (18E0975-04) Sampled:05/16/18 14:00 Received:05/18/18 14:18									
Mercury	ng/l	**1.02**		0.20	0.50	EPA 1631E	05/23/18	05/23/18	B8E1414
Methyl Mercury as Mercury	"	**0.106**		0.020	0.050	EPA 1630	05/30/18	05/29/18	B8E1552
18E1751-05 ER 125.9 - Grab Water (18E0975-05) Sampled:05/16/18 14:45 Received:05/18/18 14:18									
Mercury	ng/l	**2.04**		0.20	0.50	EPA 1631E	05/23/18	05/23/18	B8E1414
Methyl Mercury as Mercury	"	**0.078**		0.020	0.050	EPA 1630	05/30/18	05/29/18	B8E1552
18E1751-06 ER 126.1 - Grab Water (18E0975-06) Sampled:05/16/18 15:20 Received:05/18/18 14:18									
Mercury	ng/l	**2.67**		0.20	0.50	EPA 1631E	05/23/18	05/23/18	B8E1414
Methyl Mercury as Mercury	"	**0.080**		0.020	0.050	EPA 1630	05/30/18	05/29/18	B8E1552

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

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Chico, California 95928 fax 530.894.5143

Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18E1751

Lab No: 18E0975
Reported: 06/01/18
Phone: (707) 468-0401
P.O. #

Quality Control Data

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Metals - Total										
Batch B8E1414 - BrCl Digestion										
Blank										
Mercury	ND	0.50	ng/l							
Blank										
Mercury	ND	0.50	ng/l							QB-06
Blank										
Mercury	ND	0.50	ng/l							
LCS										
Mercury	9.76	0.50	ng/l	10.0		97.6	77-123			
Matrix Spike Source: 18E0959-01										
Mercury	11.8	0.50	ng/l	10.0	1.55	102	71-125			
Matrix Spike Source: 18E0977-01										
Mercury	10.8	0.50	ng/l	10.0	0.347	105	71-125			
Matrix Spike Dup Source: 18E0959-01										
Mercury	11.9	0.50	ng/l	10.0	1.55	103	71-125	0.980	24	
Matrix Spike Dup Source: 18E0977-01										
Mercury	10.7	0.50	ng/l	10.0	0.347	104	71-125	0.734	24	
Batch B8E1552 - Draft EPA Method 1630 Distillation (Modified)										
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
LCS										
Methyl Mercury as Mercury	2.15	0.050	ng/l	2.00		107	67-133			
Matrix Spike Source: 18E0975-01										
Methyl Mercury as Mercury	1.22	0.050	ng/l	1.00	0.081	114	65-135			
Matrix Spike Source: 18E0979-01										
Methyl Mercury as Mercury	1.15	0.050	ng/l	1.00	ND	115	65-135			
Matrix Spike Dup Source: 18E0975-01										
Methyl Mercury as Mercury	1.22	0.050	ng/l	1.00	0.081	114	65-135	0.123	35	
Matrix Spike Dup Source: 18E0979-01										
Methyl Mercury as Mercury	1.17	0.050	ng/l	1.00	ND	117	65-135	1.44	35	

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18E1751

Lab No: 18E0975
Reported: 06/01/18
Phone: (707) 468-0401
P.O. #

Notes and Definitions

QB-06	Some samples in this batch required an additional amount of BrCl to fully oxidize the sample. Per EPA method 1631E requirements, this Method Blank contains an increased concentration of BrCl to match the sample matrix.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). The J flag is equivalent to the DNQ Estimated Concentration flag.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
<	Less than reporting limit
≤	Less than or equal to reporting limit
>	Greater than reporting limit
≥	Greater than or equal to reporting limit
MDL	Method Detection Limit
RL/ML	Minimum Level of Quantitation
MCL/AL	Maxium Contaminant Level/Action Level
mg/kg	Results reported as wet weight
TTLC	Total Threshold Limit Concentration
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leachate Procedure
Note 1	Received Temperature - according to EPA guidelines, samples for most chemistry methods should be held at ≤6 degrees C after collection, including during transportation, unless the time from sampling to delivery is <2 hours. Regulating agencies may invalidate results if temperature requirements are not met.
Note 2	According to 40 CFR Part 136 Table II, the following tests should be analyzed in the field within 15 minutes of sampling: pH, chlorine, dissolved oxygen, and sulfite.

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18E1751

18E.0975

5.31.18

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

Basic Laboratory
2218 Railroad Ave
Redding, CA 96001
Phone :530-243-7234
Fax: 530-243-7494
Terms: Net 30

18E0975 1

Analysis	Due	Expires	Comments
18E1751-01 ER 119.1 [Water] Sampled 05/16/18 10:25			-1 4.4°
BAL Hg 1631	05/31/18 12:00	06/13/18 10:25	
BAL Hg Methyl	05/31/18 12:00	11/12/18 10:25	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E1751-02 ER 118.9 [Water] Sampled 05/16/18 11:45			-2 3.8°
BAL Hg 1631	05/31/18 12:00	06/13/18 11:45	
BAL Hg Methyl	05/31/18 12:00	11/12/18 11:45	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E1751-03 MF 0.1 [Water] Sampled 05/16/18 12:40			-3 5.9°
BAL Hg 1631	05/31/18 12:00	06/13/18 12:40	
BAL Hg Methyl	05/31/18 12:00	11/12/18 12:40	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E1751-04 OC 0.1 [Water] Sampled 05/16/18 14:00			-4 4.7°
BAL Hg 1631	05/31/18 12:00	06/13/18 14:00	
BAL Hg Methyl	05/31/18 12:00	11/12/18 14:00	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			

Released By	Date	Received By	Date
	5-17-18	T Williamson	5/18/18 14:18
		TW	5/18/18 15:53

18E0975

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18E1751

Analysis	Due	Expires	Comments
18E1751-05 ER 125.9 [Water] Sampled 05/16/18 14:45			-5 5.8°
BAL Hg 1631	05/31/18 12:00	06/13/18 14:45	
BAL Hg Methyl	05/31/18 12:00	11/12/18 14:45	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E1751-06 ER 126.1 [Water] Sampled 05/16/18 15:20			-6 5.7°
BAL Hg 1631	05/31/18 12:00	06/13/18 15:20	
BAL Hg Methyl	05/31/18 12:00	11/12/18 15:20	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+QC
+MDL

Released By	Date	Received By	Date
	5-17-18	T Wilhelmson	5-18-18 1415
Released By	Date	Received By	Date
		TLW	5-18-18 1553

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WATERS, SEDIMENTS, SOLIDS

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Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18E1751 Pg ____ of ____

Signature below authorizes work under terms stated on reverse side.

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Analysis Request: TPH-D/MO	TPH-Gas/BTEX/Oxys	Oil and Grease	TOC	DOC	CAM17 200.8 total + Al/Mn	Fe 200.8 Total	Hardness, total	Ammonia-N	Phosphorus, Total	TKN	Sample Notes or DDW Source Numbers:
ER119.1	5/16/17	1025															X	X	X	X	X	X	X	X	X	X	X	
ER118.9	↓	1145															↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MF0.1	↓	1240																										
OC0.1	↓	1400																										
ER125.9	↓	1445																										
ER126.1	↓	1520																										

TAT
Standard 10 days (X)
RUSH: 5 days ( ) 48 hours ( ) Other: ____days ( )
Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.8
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		5/16/18	1650

DDW Write On EDT Transmission? ( ) Yes ( ) No
State System Number: ____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ( ) Yes ( ) No
Global ID: Sampling Company Log Code:
EDF to (Email Address):

Travel and Site Time:	Mileage:	Misc. Supplies:

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
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ELAP Certifications
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925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18E1751 Pg ____ of ____

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature:

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	CAM17 200.8 dissolved / lab filter	Al dissolved 200.8	Alkalinity	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	TDS	TSS	Chlorophyll-A	~~Sulfide~~	Hg 1631	MeHg 1630	Sample Notes or DDW Source Numbers:
ER119.1	5/10/17	1025															X	X	X	X	X	X	X	X	X		X	X	
ER118.9		1145																											
MPO.1		1240																											
OCO.1		1400																											
ER125.9		1445																											
ER126.1		1520																											

TAT
Standard 10 days (X)
RUSH: 5 days ( ) 48 hours ( ) Other: ____days ( ) Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.8
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		5-16-18	1650

DDW Write On EDT Transmission? ( ) Yes ( ) No
State System Number: ____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ( ) Yes ( ) No
Global ID:
EDF to (Email Address):
Sampling Company Log Code:

Travel and Site Time:	Mileage:	Misc. Supplies:

Alpha Analytical Laboratories Inc.
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Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 •Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

ELAP Certificates 1551, 2728, and 2922

11 June 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18E1872

Enclosed are the results of analyses for samples received by the laboratory on 05/18/18 08:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267
Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 •Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ER 156.7	18E1872-01	Water	05/17/18 17:15	05/18/18 08:20
ER-D	18E1872-02	Water	05/17/18 17:45	05/18/18 08:20
ER-BL	18E1872-03	Water	05/17/18 10:25	05/18/18 08:20
ER 167.8	18E1872-04	Water	05/17/18 14:00	05/18/18 08:20
ER 152.9	18E1872-05	Water	05/17/18 16:15	05/18/18 08:20
ER 153.1	18E1872-06	Water	05/17/18 16:20	05/18/18 08:20
TC 0.1	18E1872-07	Water	05/17/18 16:10	05/18/18 08:20

This represents an amended copy of the original report.

Subcontracted results added.

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 156.7 (18E1872-01) Water Sampled: 05/17/18 17:15 Received: 05/18/18 08:20											
Calcium	**14**	**0.080**	**1.0**	**mg/L**	1	AE84303	05/31/18 11:15	06/04/18 13:46	EPA 200.7	MAM	
Magnesium	**4.9**	**0.030**	**1.0**	**mg/L**	1	AE84303	05/31/18 11:15	06/04/18 13:46	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AE84316	05/31/18 13:50	06/01/18 14:31	EPA 245.1	EL	U
ER-D (18E1872-02) Water Sampled: 05/17/18 17:45 Received: 05/18/18 08:20											
Calcium	**15**	**0.080**	**1.0**	**mg/L**	1	AE84303	05/31/18 11:15	06/04/18 13:51	EPA 200.7	MAM	
Magnesium	**4.7**	**0.030**	**1.0**	**mg/L**	1	AE84303	05/31/18 11:15	06/04/18 13:51	EPA 200.7	MAM	
Mercury	**0.067**	**0.060**	**0.20**	**ug/L**	1	AE84279	05/30/18 11:48	05/31/18 12:10	EPA 245.1	EL	J
ER-BL (18E1872-03) Water Sampled: 05/17/18 10:25 Received: 05/18/18 08:20											
Calcium	ND	0.080	1.0	mg/L	1	AE84303	05/31/18 11:15	06/04/18 13:56	EPA 200.7	MAM	U
Magnesium	ND	0.030	1.0	mg/L	1	AE84303	05/31/18 11:15	06/04/18 13:56	EPA 200.7	MAM	U
Mercury	**0.068**	**0.060**	**0.20**	**ug/L**	1	AE84279	05/30/18 11:48	05/31/18 12:12	EPA 245.1	EL	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 156.7 (18E1872-01) Water Sampled: 05/17/18 17:15 Received: 05/18/18 08:20											
Aluminum	**150**	**20**	**40**	**ug/L**	4	AE84000	05/23/18 08:45	05/24/18 14:34	EPA 200.8	JRA	
Antimony	ND	0.80	2.0	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:34	EPA 200.8	JRA	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:34	EPA 200.8	JRA	R-01, U
Barium	**57**	**0.80**	**2.0**	**ug/L**	4	AE84000	05/23/18 08:45	05/24/18 14:34	EPA 200.8	JRA	
Beryllium	ND	0.20	0.40	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:34	EPA 200.8	JRA	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:34	EPA 200.8	JRA	R-01, U
Chromium	ND	1.6	2.0	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:34	EPA 200.8	JRA	R-01, U
Cobalt	**0.18**	**0.12**	**0.40**	**ug/L**	4	AE84000	05/23/18 08:45	05/24/18 14:34	EPA 200.8	JRA	R-01, J
Copper	**1.8**	**1.6**	**2.0**	**ug/L**	4	AE84000	05/23/18 08:45	05/24/18 14:34	EPA 200.8	JRA	R-01, J
Iron	**230**	**40**	**200**	**ug/L**	4	AE84000	05/23/18 08:45	05/24/18 14:34	EPA 200.8	JRA	
Lead	ND	0.24	1.0	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:34	EPA 200.8	JRA	R-01, U
Manganese	**22**	**8.0**	**20**	**ug/L**	4	AE84000	05/23/18 08:45	05/24/18 14:34	EPA 200.8	JRA	
Molybdenum	**0.34**	**0.28**	**1.0**	**ug/L**	4	AE84000	05/23/18 08:45	05/24/18 14:34	EPA 200.8	JRA	R-01, J
Nickel	**1.6**	**1.2**	**2.0**	**ug/L**	4	AE84000	05/23/18 08:45	05/24/18 14:34	EPA 200.8	JRA	R-01, J
Selenium	ND	0.80	8.0	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:34	EPA 200.8	JRA	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:34	EPA 200.8	JRA	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:34	EPA 200.8	JRA	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84000	05/23/18 08:45	05/25/18 10:00	EPA 200.8	JRA	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:34	EPA 200.8	JRA	R-01, U
ER-D (18E1872-02) Water Sampled: 05/17/18 17:45 Received: 05/18/18 08:20											
Aluminum	**130**	**20**	**40**	**ug/L**	4	AE84000	05/23/18 08:45	05/24/18 14:46	EPA 200.8	JRA	
Antimony	ND	0.80	2.0	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:46	EPA 200.8	JRA	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:46	EPA 200.8	JRA	R-01, U
Barium	**59**	**0.80**	**2.0**	**ug/L**	4	AE84000	05/23/18 08:45	05/24/18 14:46	EPA 200.8	JRA	
Beryllium	ND	0.20	0.40	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:46	EPA 200.8	JRA	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:46	EPA 200.8	JRA	R-01, U
Chromium	ND	1.6	2.0	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:46	EPA 200.8	JRA	R-01, U
Cobalt	**0.29**	**0.12**	**0.40**	**ug/L**	4	AE84000	05/23/18 08:45	05/24/18 14:46	EPA 200.8	JRA	R-01, J
Copper	**1.6**	**1.6**	**2.0**	**ug/L**	4	AE84000	05/23/18 08:45	05/24/18 14:46	EPA 200.8	JRA	R-01, J
Iron	**200**	**40**	**200**	**ug/L**	4	AE84000	05/23/18 08:45	05/24/18 14:46	EPA 200.8	JRA	
Lead	ND	0.24	1.0	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:46	EPA 200.8	JRA	R-01, U
Manganese	**22**	**8.0**	**20**	**ug/L**	4	AE84000	05/23/18 08:45	05/24/18 14:46	EPA 200.8	JRA	
Molybdenum	**0.32**	**0.28**	**1.0**	**ug/L**	4	AE84000	05/23/18 08:45	05/24/18 14:46	EPA 200.8	JRA	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER-D (18E1872-02) Water Sampled: 05/17/18 17:45 Received: 05/18/18 08:20											
Nickel	**1.9**	**1.2**	**2.0**	**ug/L**	4	AE84000	05/23/18 08:45	05/24/18 14:46	EPA 200.8	JRA	R-01, J
Selenium	ND	0.80	8.0	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:46	EPA 200.8	JRA	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:46	EPA 200.8	JRA	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:46	EPA 200.8	JRA	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84000	05/23/18 08:45	05/25/18 10:06	EPA 200.8	JRA	R-01, U
Zinc	**11**	**8.0**	**20**	**ug/L**	4	AE84000	05/23/18 08:45	05/24/18 14:46	EPA 200.8	JRA	R-01, J
ER-BL (18E1872-03) Water Sampled: 05/17/18 10:25 Received: 05/18/18 08:20											
Aluminum	ND	20	40	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:58	EPA 200.8	JRA	R-01, U
Antimony	ND	0.80	2.0	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:58	EPA 200.8	JRA	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE84000	05/23/18 08:45	05/25/18 10:13	EPA 200.8	JRA	R-01, U
Barium	ND	0.80	2.0	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:58	EPA 200.8	JRA	R-01, U
Beryllium	ND	0.20	0.40	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:58	EPA 200.8	JRA	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:58	EPA 200.8	JRA	R-01, U
Chromium	ND	1.6	2.0	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:58	EPA 200.8	JRA	R-01, U
Cobalt	ND	0.12	0.40	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:58	EPA 200.8	JRA	R-01, U
Copper	**2.0**	**1.6**	**2.0**	**ug/L**	4	AE84000	05/23/18 08:45	05/24/18 14:58	EPA 200.8	JRA	
Iron	ND	40	200	ug/L	4	AE84000	05/23/18 08:45	05/31/18 11:52	EPA 200.8	JRA	R-01, U
Lead	ND	0.24	1.0	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:58	EPA 200.8	JRA	R-01, U
Manganese	ND	8.0	20	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:58	EPA 200.8	JRA	R-01, U
Molybdenum	ND	0.28	1.0	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:58	EPA 200.8	JRA	R-01, U
Nickel	ND	1.2	2.0	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:58	EPA 200.8	JRA	R-01, U
Selenium	ND	0.80	8.0	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:58	EPA 200.8	JRA	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:58	EPA 200.8	JRA	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:58	EPA 200.8	JRA	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84000	05/23/18 08:45	05/30/18 11:46	EPA 200.8	JRA	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84000	05/23/18 08:45	05/24/18 14:58	EPA 200.8	JRA	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 156.7 (18E1872-01) Water Sampled: 05/17/18 17:15 Received: 05/18/18 08:20											
Mercury, dissolved	**0.067**	**0.060**	**0.20**	**ug/L**	1	AE84314	05/31/18 08:46	05/31/18 15:42	EPA 245.1	EL	J
ER-D (18E1872-02) Water Sampled: 05/17/18 17:45 Received: 05/18/18 08:20											
Mercury, dissolved	**0.067**	**0.060**	**0.20**	**ug/L**	1	AE84314	05/31/18 08:46	05/31/18 15:45	EPA 245.1	EL	J
ER-BL (18E1872-03) Water Sampled: 05/17/18 10:25 Received: 05/18/18 08:20											
Mercury, dissolved	**0.065**	**0.060**	**0.20**	**ug/L**	1	AE84314	05/31/18 08:46	05/31/18 15:47	EPA 245.1	EL	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 156.7 (18E1872-01) Water Sampled: 05/17/18 17:15 Received: 05/18/18 08:20											**FILT**
Aluminum, dissolved	**20**	**20**	**40**	**ug/L**	4	AE83882	05/22/18 08:00	05/23/18 14:38	EPA 200.8	MMY	R-01, J
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:38	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:38	EPA 200.8	MMY	R-01, U
Barium, dissolved	**56**	**0.80**	**2.0**	**ug/L**	4	AE83882	05/22/18 08:00	05/23/18 14:38	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:38	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:38	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	1.6	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:38	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	**0.27**	**0.12**	**0.40**	**ug/L**	4	AE83882	05/22/18 08:00	05/23/18 14:38	EPA 200.8	MMY	R-01, J
Copper, dissolved	ND	1.6	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:38	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:38	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.38**	**0.28**	**1.0**	**ug/L**	4	AE83882	05/22/18 08:00	05/23/18 14:38	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.2**	**1.2**	**2.0**	**ug/L**	4	AE83882	05/22/18 08:00	05/23/18 14:38	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:38	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:38	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:38	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:38	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:38	EPA 200.8	MMY	R-01, U
ER-D (18E1872-02) Water Sampled: 05/17/18 17:45 Received: 05/18/18 08:20											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:44	EPA 200.8	MMY	U, R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:44	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:44	EPA 200.8	MMY	R-01, U
Barium, dissolved	**54**	**0.80**	**2.0**	**ug/L**	4	AE83882	05/22/18 08:00	05/23/18 14:44	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:44	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:44	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	1.6	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:44	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:44	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:44	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:44	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.33**	**0.28**	**1.0**	**ug/L**	4	AE83882	05/22/18 08:00	05/23/18 14:44	EPA 200.8	MMY	R-01, J
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:44	EPA 200.8	MMY	R-01, U
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:44	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:44	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:44	EPA 200.8	MMY	R-01, U

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER-D (18E1872-02) Water Sampled: 05/17/18 17:45 Received: 05/18/18 08:20											**FILT**
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:44	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:44	EPA 200.8	MMY	R-01, U
ER-BL (18E1872-03) Water Sampled: 05/17/18 10:25 Received: 05/18/18 08:20											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:51	EPA 200.8	MMY	U, R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:51	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:51	EPA 200.8	MMY	R-01, U
Barium, dissolved	ND	0.80	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:51	EPA 200.8	MMY	R-01, U
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:51	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:51	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	1.6	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:51	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:51	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:51	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:51	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	ND	0.28	1.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:51	EPA 200.8	MMY	R-01, U
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:51	EPA 200.8	MMY	R-01, U
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:51	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:51	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:51	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:51	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AE83882	05/22/18 08:00	05/23/18 14:51	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 156.7 (18E1872-01) Water Sampled: 05/17/18 17:15 Received: 05/18/18 08:20											
Ammonia as N	ND	0.10	0.20	mg/L	1	AE84185	05/29/18 09:00	05/29/18 16:45	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE83808	05/18/18 13:45	05/23/18 15:30	SM5210B	RDM	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AE84187	05/18/18 11:00	05/31/18 09:56	SM10200H	PBM	U
Dissolved Organic Carbon	**2.34**	**0.600**	**1.00**	**mg/L**	1	AE84143	05/25/18 08:47	05/25/18 17:44	SM5310C	JIM	
Oil & Grease (HEM)	**1.5**	**1.4**	**5.0**	**mg/L**	1	AE84302	05/31/18 07:46	06/01/18 13:58	EPA 1664A	STS	J
Total Dissolved Solids	**96**	**5.0**	**10**	**mg/L**	1	AE83889	05/21/18 08:06	05/31/18 11:38	SM2540C	PBM	
Total Suspended Solids	**4.0**	**0.30**	**1.0**	**mg/L**	1	AE84084	05/24/18 10:15	05/24/18 15:45	SM2540D	MRL	
Bicarbonate Alkalinity as CaCO3	**65**	**1.0**	**5.0**	**mg/L**	1	AE84119	05/29/18 08:00	05/29/18 15:58	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84119	05/29/18 08:00	05/29/18 15:58	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84119	05/29/18 08:00	05/29/18 15:58	SM2320B	CEF	U
Total Alkalinity as CaCO3	**65**	**1.0**	**5.0**	**mg/L**	1	AE84119	05/29/18 08:00	05/29/18 15:58	SM2320B	CEF	
Nitrate + Nitrite as N	**0.032**	**0.0086**	**0.40**	**mg/L**	1	AE83912	05/21/18 11:45	05/31/18 11:20	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AE84290	05/31/18 06:28	06/01/18 12:35	SM4500-Norg B	SMS	U
Hardness, Total	**55**	**1**	**5**	**mg/L**	1	AE84303	05/31/18 11:15	06/04/18 13:46	SM2340B	MAM	
Phosphorus, total	**0.026**	**0.011**	**0.040**	**mg/L**	1	AF83098	06/04/18 08:00	06/04/18 13:07	SM4500-P E	SMS	J
Total Organic Carbon	**2.35**	**0.300**	**1.00**	**mg/L**	1	AE84144	05/28/18 08:48	05/28/18 17:11	SM5310C	JIM	
ER-D (18E1872-02) Water Sampled: 05/17/18 17:45 Received: 05/18/18 08:20											
Ammonia as N	ND	0.10	0.20	mg/L	1	AE84185	05/29/18 09:00	05/29/18 16:45	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE83808	05/18/18 13:45	05/23/18 15:30	SM5210B	RDM	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AE84187	05/18/18 11:00	05/31/18 09:56	SM10200H	PBM	U
Dissolved Organic Carbon	**2.36**	**0.600**	**1.00**	**mg/L**	1	AE84143	05/25/18 08:47	05/25/18 17:57	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AE84302	05/31/18 07:46	06/01/18 13:58	EPA 1664A	STS	U
Total Dissolved Solids	**97**	**5.0**	**10**	**mg/L**	1	AE83889	05/21/18 08:06	05/31/18 11:38	SM2540C	PBM	
Total Suspended Solids	**3.6**	**0.30**	**1.0**	**mg/L**	1	AE84084	05/24/18 10:15	05/24/18 15:45	SM2540D	MRL	
Bicarbonate Alkalinity as CaCO3	**65**	**1.0**	**5.0**	**mg/L**	1	AE84119	05/29/18 08:00	05/29/18 15:58	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84119	05/29/18 08:00	05/29/18 15:58	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84119	05/29/18 08:00	05/29/18 15:58	SM2320B	CEF	U
Total Alkalinity as CaCO3	**65**	**1.0**	**5.0**	**mg/L**	1	AE84119	05/29/18 08:00	05/29/18 15:58	SM2320B	CEF	
Nitrate + Nitrite as N	**0.028**	**0.0086**	**0.40**	**mg/L**	1	AE83912	05/21/18 11:45	05/31/18 11:20	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AE84290	05/31/18 06:28	06/01/18 12:35	SM4500-Norg B	SMS	U
Hardness, Total	**56**	**1**	**5**	**mg/L**	1	AE84303	05/31/18 11:15	06/04/18 13:51	SM2340B	MAM	
Phosphorus, total	**0.023**	**0.011**	**0.040**	**mg/L**	1	AF83098	06/04/18 08:00	06/04/18 13:07	SM4500-P E	SMS	J
Total Organic Carbon	**2.31**	**0.300**	**1.00**	**mg/L**	1	AE84144	05/28/18 08:48	05/28/18 17:24	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER-BL (18E1872-03) Water Sampled: 05/17/18 10:25 Received: 05/18/18 08:20											
Ammonia as N	ND	0.10	0.20	mg/L	1	AE84185	05/29/18 09:00	05/29/18 16:45	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	**2.5**	**2.0**	**5.0**	**mg/L**	1	AE83808	05/18/18 13:45	05/23/18 15:30	SM5210B	RDM	J
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AE84187	05/18/18 11:00	05/31/18 09:56	SM10200H	PBM	U
Dissolved Organic Carbon	**0.608**	**0.600**	**1.00**	**mg/L**	1	AE84143	05/25/18 08:47	05/25/18 18:10	SM5310C	JIM	J
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AE84302	05/31/18 07:46	06/01/18 13:58	EPA 1664A	STS	U
Sulfide	ND	0.020	0.10	mg/L	1	AE84041	05/23/18 15:00	05/23/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	ND	5.0	10	mg/L	1	AE83889	05/21/18 08:06	05/31/18 11:38	SM2540C	PBM	U
Total Suspended Solids	**0.30**	**0.30**	**1.0**	**mg/L**	1	AE84084	05/24/18 10:15	05/24/18 15:45	SM2540D	MRL	J
Bicarbonate Alkalinity as CaCO3	**2.0**	**1.0**	**5.0**	**mg/L**	1	AE84119	05/29/18 08:00	05/29/18 15:58	SM2320B	CEF	J
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84119	05/29/18 08:00	05/29/18 15:58	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84119	05/29/18 08:00	05/29/18 15:58	SM2320B	CEF	U
Total Alkalinity as CaCO3	**2.0**	**1.0**	**5.0**	**mg/L**	1	AE84119	05/29/18 08:00	05/29/18 15:58	SM2320B	CEF	J
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AE83912	05/21/18 11:45	05/31/18 11:20	Calculation	ZMH	U
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AE84290	05/31/18 06:28	06/01/18 12:35	SM4500-Norg B	SMS	U
Hardness, Total	ND	1	5	mg/L	1	AE84303	05/31/18 11:15	06/04/18 13:56	SM2340B	MAM	U
Phosphorus, total	ND	0.011	0.040	mg/L	1	AF83098	06/04/18 08:00	06/04/18 13:07	SM4500-P E	SMS	U
Total Organic Carbon	**0.400**	**0.300**	**1.00**	**mg/L**	1	AE84144	05/28/18 08:48	05/28/18 17:37	SM5310C	JIM	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 156.7 (18E1872-01) Water Sampled: 05/17/18 17:15 Received: 05/18/18 08:20											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE83788	05/18/18 11:21	05/18/18 11:21	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE83788	05/18/18 11:21	05/18/18 11:21	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE83788	05/18/18 11:21	05/18/18 11:21	EPA 300.0	SMP	U
ER-D (18E1872-02) Water Sampled: 05/17/18 17:45 Received: 05/18/18 08:20											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE83788	05/18/18 11:37	05/18/18 11:37	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE83788	05/18/18 11:37	05/18/18 11:37	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE83788	05/18/18 11:37	05/18/18 11:37	EPA 300.0	SMP	U
ER-BL (18E1872-03) Water Sampled: 05/17/18 10:25 Received: 05/18/18 08:20											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE83788	05/18/18 11:54	05/18/18 11:54	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE83788	05/18/18 11:54	05/18/18 11:54	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE83788	05/18/18 11:54	05/18/18 11:54	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

TPH by EPA/LUFT GC Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 156.7 (18E1872-01) Water Sampled: 05/17/18 17:15 Received: 05/18/18 08:20											
TPH as Diesel	ND	50	250	ug/L	1	AE83911	05/21/18 10:07	05/22/18 22:22	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE83911	05/21/18 10:07	05/22/18 22:22	8015DRO	DLD	U
Surrogate: Tetratetracontane		*87.4 %*	*39-120*			*AE83911*	*05/21/18 10:07*	*05/22/18 22:22*	*8015DRO*	*DLD*	
ER-D (18E1872-02) Water Sampled: 05/17/18 17:45 Received: 05/18/18 08:20											
TPH as Diesel	ND	50	250	ug/L	1	AE83911	05/21/18 10:07	05/22/18 22:57	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE83911	05/21/18 10:07	05/22/18 22:57	8015DRO	DLD	U
Surrogate: Tetratetracontane		*89.5 %*	*39-120*			*AE83911*	*05/21/18 10:07*	*05/22/18 22:57*	*8015DRO*	*DLD*	
ER-BL (18E1872-03) Water Sampled: 05/17/18 10:25 Received: 05/18/18 08:20											
TPH as Diesel	ND	50	250	ug/L	1	AE83911	05/21/18 10:07	05/22/18 23:31	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE83911	05/21/18 10:07	05/22/18 23:31	8015DRO	DLD	U
Surrogate: Tetratetracontane		*95.0 %*	*39-120*			*AE83911*	*05/21/18 10:07*	*05/22/18 23:31*	*8015DRO*	*DLD*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

TPH by EPA/LUFT GCMS Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 156.7 (18E1872-01) Water Sampled: 05/17/18 17:15 Received: 05/18/18 08:20											
TPH as Gasoline	ND	50	50	ug/L	1	AE83959	05/22/18 11:00	05/22/18 15:30	8260GRO	MM	U
Surrogate: Toluene-d8		*100 %*	*76-129*			*AE83959*	*05/22/18 11:00*	*05/22/18 15:30*	*8260GRO*	*MM*	
ER-D (18E1872-02) Water Sampled: 05/17/18 17:45 Received: 05/18/18 08:20											
TPH as Gasoline	ND	50	50	ug/L	1	AE83959	05/22/18 11:00	05/22/18 16:06	8260GRO	MM	U
Surrogate: Toluene-d8		*96.0 %*	*76-129*			*AE83959*	*05/22/18 11:00*	*05/22/18 16:06*	*8260GRO*	*MM*	
ER-BL (18E1872-03) Water Sampled: 05/17/18 10:25 Received: 05/18/18 08:20											
TPH as Gasoline	ND	50	50	ug/L	1	AE83959	05/22/18 11:00	05/22/18 16:41	8260GRO	MM	U
Surrogate: Toluene-d8		*100 %*	*76-129*			*AE83959*	*05/22/18 11:00*	*05/22/18 16:41*	*8260GRO*	*MM*	
ER 167.8 (18E1872-04) Water Sampled: 05/17/18 14:00 Received: 05/18/18 08:20											
TPH as Gasoline	ND	50	50	ug/L	1	AE83959	05/22/18 11:00	05/22/18 17:17	8260GRO	MM	U
Surrogate: Toluene-d8		*96.0 %*	*76-129*			*AE83959*	*05/22/18 11:00*	*05/22/18 17:17*	*8260GRO*	*MM*	
ER 152.9 (18E1872-05) Water Sampled: 05/17/18 16:15 Received: 05/18/18 08:20											
TPH as Gasoline	ND	50	50	ug/L	1	AE83959	05/22/18 11:00	05/22/18 23:00	8260GRO	MM	U
Surrogate: Toluene-d8		*100 %*	*76-129*			*AE83959*	*05/22/18 11:00*	*05/22/18 23:00*	*8260GRO*	*MM*	
ER 153.1 (18E1872-06) Water Sampled: 05/17/18 16:20 Received: 05/18/18 08:20											
TPH as Gasoline	ND	50	50	ug/L	1	AE83959	05/22/18 11:00	05/22/18 23:35	8260GRO	MM	U
Surrogate: Toluene-d8		*96.0 %*	*76-129*			*AE83959*	*05/22/18 11:00*	*05/22/18 23:35*	*8260GRO*	*MM*	
TC 0.1 (18E1872-07) Water Sampled: 05/17/18 16:10 Received: 05/18/18 08:20											
TPH as Gasoline	ND	50	50	ug/L	1	AE83959	05/22/18 11:00	05/23/18 00:09	8260GRO	MM	U
Surrogate: Toluene-d8		*92.0 %*	*76-129*			*AE83959*	*05/22/18 11:00*	*05/23/18 00:09*	*8260GRO*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 156.7 (18E1872-01) Water Sampled: 05/17/18 17:15 Received: 05/18/18 08:20											
Benzene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 15:30	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 15:30	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 15:30	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 15:30	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 15:30	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 15:30	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 15:30	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 15:30	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE83958	05/22/18 11:00	05/22/18 15:30	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*105 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 15:30*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*106 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 15:30*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*117 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 15:30*	*EPA 8260B*	*MM*	
ER-D (18E1872-02) Water Sampled: 05/17/18 17:45 Received: 05/18/18 08:20											
Benzene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 16:06	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 16:06	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 16:06	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 16:06	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 16:06	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 16:06	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 16:06	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 16:06	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE83958	05/22/18 11:00	05/22/18 16:06	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*101 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 16:06*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*108 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 16:06*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*114 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 16:06*	*EPA 8260B*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER-BL (18E1872-03) Water Sampled: 05/17/18 10:25 Received: 05/18/18 08:20											
Benzene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 16:41	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 16:41	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 16:41	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 16:41	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 16:41	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 16:41	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 16:41	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 16:41	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE83958	05/22/18 11:00	05/22/18 16:41	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*105 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 16:41*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*106 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 16:41*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*117 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 16:41*	*EPA 8260B*	*MM*	
ER 167.8 (18E1872-04) Water Sampled: 05/17/18 14:00 Received: 05/18/18 08:20											
Benzene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 17:17	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 17:17	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 17:17	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 17:17	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 17:17	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 17:17	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 17:17	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 17:17	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE83958	05/22/18 11:00	05/22/18 17:17	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*104 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 17:17*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*106 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 17:17*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*115 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 17:17*	*EPA 8260B*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 152.9 (18E1872-05) Water Sampled: 05/17/18 16:15 Received: 05/18/18 08:20											
Benzene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 23:00	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 23:00	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 23:00	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 23:00	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 23:00	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 23:00	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 23:00	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 23:00	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE83958	05/22/18 11:00	05/22/18 23:00	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*103 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 23:00*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*106 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 23:00*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*116 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 23:00*	*EPA 8260B*	*MM*	
ER 153.1 (18E1872-06) Water Sampled: 05/17/18 16:20 Received: 05/18/18 08:20											
Benzene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 23:35	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/22/18 23:35	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 23:35	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 23:35	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 23:35	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 23:35	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 23:35	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/22/18 23:35	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE83958	05/22/18 11:00	05/22/18 23:35	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*101 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 23:35*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*106 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 23:35*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*114 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/22/18 23:35*	*EPA 8260B*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
TC 0.1 (18E1872-07) Water Sampled: 05/17/18 16:10 Received: 05/18/18 08:20											
Benzene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/23/18 00:09	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/23/18 00:09	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 00:09	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 00:09	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 00:09	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 00:09	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 00:09	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 00:09	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE83958	05/22/18 11:00	05/23/18 00:09	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*99.6 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/23/18 00:09*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*99.7 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/23/18 00:09*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*110 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/23/18 00:09*	*EPA 8260B*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84279 - EPA 245.1 Hg Water											
Blank (AE84279-BLK1)					Prepared: 05/30/18 Analyzed: 05/31/18						
Mercury	0.0650	0.060	0.20	ug/L							J
LCS (AE84279-BS1)					Prepared: 05/30/18 Analyzed: 05/31/18						
Mercury	2.49	0.060	0.20	ug/L	2.50		99.7	85-115			
Duplicate (AE84279-DUP1)		**Source: 18E1566-01**			Prepared: 05/30/18 Analyzed: 05/31/18						
Mercury	0.0730	0.060	0.20	ug/L		0.0700			4.20	20	J
MRL Check (AE84279-MRL1)					Prepared: 05/30/18 Analyzed: 05/31/18						
Mercury	0.560	0.060	0.20	ug/L	0.500		112	0-200			
Matrix Spike (AE84279-MS1)		**Source: 18E1566-01**			Prepared: 05/30/18 Analyzed: 05/31/18						
Mercury	2.54	0.060	0.20	ug/L	2.50	0.0700	98.6	70-130			
Matrix Spike (AE84279-MS2)		**Source: 18E1577-01**			Prepared: 05/30/18 Analyzed: 05/31/18						
Mercury	2.54	0.060	0.20	ug/L	2.50	0.0730	98.5	70-130			
Matrix Spike Dup (AE84279-MSD1)		**Source: 18E1566-01**			Prepared: 05/30/18 Analyzed: 05/31/18						
Mercury	2.51	0.060	0.20	ug/L	2.50	0.0700	97.5	70-130	1.11	20	
Batch AE84303 - Metals Digest											
Blank (AE84303-BLK1)					Prepared: 05/31/18 Analyzed: 06/01/18						
Calcium	0.155	0.080	1.0	mg/L							J
Magnesium	0.396	0.030	1.0	mg/L							J
LCS (AE84303-BS1)					Prepared: 05/31/18 Analyzed: 06/01/18						
Calcium	7.24	0.080	1.0	mg/L	8.00		90.5	85-115			
Magnesium	7.12	0.030	1.0	mg/L	8.00		89.0	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84303 - Metals Digest											
Duplicate (AE84303-DUP1)		**Source: 18E1927-01**			Prepared: 05/31/18 Analyzed: 06/01/18						
Calcium	0.172	0.080	1.0	mg/L		0.169			1.72	20	J
Magnesium	ND	0.030	1.0	mg/L		ND				20	U
Matrix Spike (AE84303-MS1)		**Source: 18E1927-01**			Prepared: 05/31/18 Analyzed: 06/01/18						
Calcium	7.70	0.080	1.0	mg/L	8.00	0.169	94.1	70-130			
Magnesium	7.60	0.030	1.0	mg/L	8.00	ND	95.1	70-130			
Matrix Spike (AE84303-MS2)		**Source: 18E2614-01**			Prepared: 05/31/18 Analyzed: 06/01/18						
Calcium	90.3	0.080	1.0	mg/L	8.00	81.4	112	70-130			
Magnesium	53.6	0.030	1.0	mg/L	8.00	45.9	96.4	70-130			
Matrix Spike Dup (AE84303-MSD1)		**Source: 18E1927-01**			Prepared: 05/31/18 Analyzed: 06/01/18						
Calcium	8.02	0.080	1.0	mg/L	8.00	0.169	98.1	70-130	4.01	20	
Magnesium	8.02	0.030	1.0	mg/L	8.00	ND	100	70-130	5.26	20	
Batch AE84316 - EPA 245.1 Hg Water											
Blank (AE84316-BLK1)					Prepared: 05/31/18 Analyzed: 06/01/18						
Mercury	ND	0.060	0.20	ug/L							U
LCS (AE84316-BS1)					Prepared: 05/31/18 Analyzed: 06/01/18						
Mercury	2.51	0.060	0.20	ug/L	2.50		100	85-115			
Duplicate (AE84316-DUP1)		**Source: 18F0003-01**			Prepared: 05/31/18 Analyzed: 06/01/18						
Mercury	ND	0.060	0.20	ug/L		ND				20	U
MRL Check (AE84316-MRL1)					Prepared: 05/31/18 Analyzed: 06/01/18						
Mercury	0.508	0.060	0.20	ug/L	0.500		102	0-200			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84316 - EPA 245.1 Hg Water											
Matrix Spike (AE84316-MS1)		**Source: 18F0003-01**			Prepared: 05/31/18 Analyzed: 06/01/18						
Mercury	2.54	0.060	0.20	ug/L	2.50	ND	102	70-130			
Matrix Spike (AE84316-MS2)		**Source: 18E1625-02**			Prepared: 05/31/18 Analyzed: 06/01/18						
Mercury	2.47	0.060	0.20	ug/L	2.50	ND	98.7	70-130			
Matrix Spike Dup (AE84316-MSD1)		**Source: 18F0003-01**			Prepared: 05/31/18 Analyzed: 06/01/18						
Mercury	2.51	0.060	0.20	ug/L	2.50	ND	100	70-130	1.27	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84000 - EPA 200.8											
Blank (AE84000-BLK1)					Prepared: 05/23/18 Analyzed: 05/24/18						
Aluminum	ND	5.0	10	ug/L							U
Antimony	ND	0.20	0.50	ug/L							U
Arsenic	ND	0.20	0.50	ug/L							U
Barium	ND	0.20	0.50	ug/L							U
Beryllium	ND	0.050	0.10	ug/L							U
Cadmium	ND	0.060	0.10	ug/L							U
Chromium	ND	0.40	0.50	ug/L							U
Cobalt	ND	0.030	0.10	ug/L							U
Copper	ND	0.40	0.50	ug/L							U
Iron	ND	10	50	ug/L							U
Lead	ND	0.060	0.25	ug/L							U
Manganese	ND	2.0	5.0	ug/L							U
Molybdenum	ND	0.070	0.25	ug/L							U
Nickel	ND	0.30	0.50	ug/L							U
Selenium	ND	0.20	2.0	ug/L							U
Silver	ND	0.050	0.10	ug/L							U
Thallium	ND	0.050	0.10	ug/L							U
Vanadium	ND	0.50	1.0	ug/L							U
Zinc	ND	2.0	5.0	ug/L							U
LCS (AE84000-BS1)					Prepared: 05/23/18 Analyzed: 05/24/18						
Aluminum	539	5.0	10	ug/L	520		104	85-115			
Antimony	22.2	0.20	0.50	ug/L	20.0		111	85-115			
Arsenic	21.8	0.20	0.50	ug/L	20.0		109	85-115			
Barium	22.2	0.20	0.50	ug/L	20.0		111	85-115			
Beryllium	23.1	0.050	0.10	ug/L	20.0		115	85-115			
Cadmium	22.1	0.060	0.10	ug/L	20.0		111	85-115			
Chromium	22.6	0.40	0.50	ug/L	20.0		113	85-115			
Cobalt	22.7	0.030	0.10	ug/L	20.0		113	85-115			
Copper	20.5	0.40	0.50	ug/L	20.0		102	85-115			
Iron	562	10	50	ug/L	520		108	85-115			
Lead	21.1	0.060	0.25	ug/L	20.0		105	85-115			
Manganese	21.1	2.0	5.0	ug/L	20.0		105	85-115			
Molybdenum	22.3	0.070	0.25	ug/L	20.0		112	85-115			
Nickel	22.3	0.30	0.50	ug/L	20.0		112	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84000 - EPA 200.8											
LCS (AE84000-BS1)					Prepared: 05/23/18 Analyzed: 05/24/18						
Selenium	21.7	0.20	2.0	ug/L	20.0		109	85-115			
Silver	21.9	0.050	0.10	ug/L	20.0		110	85-115			
Thallium	21.1	0.050	0.10	ug/L	20.0		106	85-115			
Vanadium	22.5	0.50	1.0	ug/L	20.0		113	85-115			
Zinc	102	2.0	5.0	ug/L	100		102	85-115			
Duplicate (AE84000-DUP1)		**Source: 18E2099-03**			Prepared: 05/23/18 Analyzed: 05/24/18						
Aluminum	ND	20	40	ug/L		ND				20	R-01, U
Antimony	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic	ND	0.80	2.0	ug/L		ND				20	R-01, U
Barium	13.4	0.80	2.0	ug/L		14.5			8.37	20	
Beryllium	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium	ND	0.24	0.40	ug/L		ND				20	R-01, U
Chromium	ND	1.6	2.0	ug/L		ND				20	R-01, U
Cobalt	ND	0.12	0.40	ug/L		ND				20	R-01, U
Copper	404	1.6	2.0	ug/L		442			8.85	20	
Iron	ND	40	200	ug/L		45.3				20	R-01, U
Lead	ND	0.24	1.0	ug/L		ND				20	R-01, U
Manganese	ND	8.0	20	ug/L		ND				20	R-01, U
Molybdenum	ND	0.28	1.0	ug/L		ND				20	R-01, U
Nickel	5.62	1.2	2.0	ug/L		5.86			4.12	20	
Selenium	ND	0.80	8.0	ug/L		ND				20	R-01, U
Silver	0.211	0.20	0.40	ug/L		ND				20	R-01, J
Thallium	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium	ND	2.0	4.0	ug/L		ND				20	R-01, U
Zinc	303	8.0	20	ug/L		338			10.9	20	
Matrix Spike (AE84000-MS1)		**Source: 18E2099-03**			Prepared: 05/23/18 Analyzed: 05/24/18						
Aluminum	550	20	40	ug/L	520	ND	106	70-130			
Antimony	22.3	0.80	2.0	ug/L	20.0	ND	111	70-130			
Arsenic	21.4	0.80	2.0	ug/L	20.0	ND	107	70-130			
Barium	36.9	0.80	2.0	ug/L	20.0	14.5	112	70-130			
Beryllium	24.1	0.20	0.40	ug/L	20.0	ND	120	70-130			
Cadmium	21.5	0.24	0.40	ug/L	20.0	ND	107	70-130			
Chromium	21.0	1.6	2.0	ug/L	20.0	ND	105	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84000 - EPA 200.8											
Matrix Spike (AE84000-MS1)		**Source: 18E2099-03**			Prepared: 05/23/18 Analyzed: 05/24/18						
Cobalt	21.8	0.12	0.40	ug/L	20.0	ND	109	70-130			
Copper	450	1.6	2.0	ug/L	20.0	442	40.6	70-130			QM-4X
Iron	590	40	200	ug/L	520	45.3	105	70-130			
Lead	20.9	0.24	1.0	ug/L	20.0	ND	104	70-130			
Manganese	21.9	8.0	20	ug/L	20.0	ND	110	70-130			
Molybdenum	22.2	0.28	1.0	ug/L	20.0	ND	111	70-130			
Nickel	27.9	1.2	2.0	ug/L	20.0	5.86	110	70-130			
Selenium	22.0	0.80	8.0	ug/L	20.0	ND	110	70-130			
Silver	21.6	0.20	0.40	ug/L	20.0	ND	108	70-130			
Thallium	20.9	0.20	0.40	ug/L	20.0	ND	104	70-130			
Vanadium	22.8	2.0	4.0	ug/L	20.0	ND	114	70-130			
Zinc	433	8.0	20	ug/L	100	338	95.2	70-130			
Matrix Spike (AE84000-MS2)		**Source: 18E1840-02**			Prepared: 05/23/18 Analyzed: 05/24/18						
Aluminum	578	20	40	ug/L	520	33.7	105	70-130			
Antimony	22.4	0.80	2.0	ug/L	20.0	ND	112	70-130			
Arsenic	22.3	0.80	2.0	ug/L	20.0	ND	111	70-130			
Barium	179	0.80	2.0	ug/L	20.0	154	124	70-130			
Beryllium	23.1	0.20	0.40	ug/L	20.0	ND	115	70-130			
Cadmium	21.7	0.24	0.40	ug/L	20.0	ND	109	70-130			
Chromium	21.4	1.6	2.0	ug/L	20.0	ND	107	70-130			
Cobalt	22.1	0.12	0.40	ug/L	20.0	0.279	109	70-130			
Copper	21.4	1.6	2.0	ug/L	20.0	1.74	98.2	70-130			
Iron	702	40	200	ug/L	520	155	105	70-130			
Lead	21.1	0.24	1.0	ug/L	20.0	ND	105	70-130			
Manganese	37.8	8.0	20	ug/L	20.0	16.8	105	70-130			
Molybdenum	27.3	0.28	1.0	ug/L	20.0	5.46	109	70-130			
Nickel	23.6	1.2	2.0	ug/L	20.0	2.26	107	70-130			
Selenium	21.5	0.80	8.0	ug/L	20.0	ND	107	70-130			
Silver	20.7	0.20	0.40	ug/L	20.0	ND	104	70-130			
Thallium	21.1	0.20	0.40	ug/L	20.0	ND	105	70-130			
Vanadium	28.1	2.0	4.0	ug/L	20.0	3.99	121	70-130			
Zinc	108	8.0	20	ug/L	100	ND	108	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84000 - EPA 200.8											
Matrix Spike Dup (AE84000-MSD1)		**Source: 18E2099-03**			Prepared: 05/23/18 Analyzed: 05/24/18						
Aluminum	543	20	40	ug/L	520	ND	104	70-130	1.34	20	
Antimony	22.3	0.80	2.0	ug/L	20.0	ND	111	70-130	0.0454	20	
Arsenic	22.2	0.80	2.0	ug/L	20.0	ND	111	70-130	3.95	20	
Barium	36.7	0.80	2.0	ug/L	20.0	14.5	111	70-130	0.592	20	
Beryllium	23.1	0.20	0.40	ug/L	20.0	ND	115	70-130	4.23	20	
Cadmium	21.7	0.24	0.40	ug/L	20.0	ND	109	70-130	1.07	20	
Chromium	20.8	1.6	2.0	ug/L	20.0	ND	104	70-130	0.919	20	
Cobalt	22.0	0.12	0.40	ug/L	20.0	ND	110	70-130	0.759	20	
Copper	452	1.6	2.0	ug/L	20.0	442	52.8	70-130	0.542	20	QM-4X
Iron	590	40	200	ug/L	520	45.3	105	70-130	0.0183	20	
Lead	20.9	0.24	1.0	ug/L	20.0	ND	104	70-130	0.0733	20	
Manganese	21.7	8.0	20	ug/L	20.0	ND	109	70-130	0.893	20	
Molybdenum	22.5	0.28	1.0	ug/L	20.0	ND	113	70-130	1.62	20	
Nickel	27.4	1.2	2.0	ug/L	20.0	5.86	108	70-130	1.85	20	
Selenium	21.9	0.80	8.0	ug/L	20.0	ND	110	70-130	0.294	20	
Silver	21.8	0.20	0.40	ug/L	20.0	ND	109	70-130	0.627	20	
Thallium	20.7	0.20	0.40	ug/L	20.0	ND	104	70-130	0.828	20	
Vanadium	23.4	2.0	4.0	ug/L	20.0	ND	117	70-130	3.00	20	
Zinc	428	8.0	20	ug/L	100	338	90.8	70-130	1.03	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84314 - EPA 245.1 Hg Water											
Blank (AE84314-BLK1)					Prepared & Analyzed: 05/31/18						
Mercury, dissolved	0.0630	0.060	0.20	ug/L							J
LCS (AE84314-BS1)					Prepared & Analyzed: 05/31/18						
Mercury, dissolved	2.61	0.060	0.20	ug/L	2.50		104	85-115			
Duplicate (AE84314-DUP1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/31/18						
Mercury, dissolved	0.0680	0.060	0.20	ug/L		0.0650			4.51	20	J
MRL Check (AE84314-MRL1)					Prepared & Analyzed: 05/31/18						
Mercury, dissolved	0.550	0.060	0.20	ug/L	0.500		110	0-200			
Matrix Spike (AE84314-MS1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/31/18						
Mercury, dissolved	2.64	0.060	0.20	ug/L	2.50	0.0650	103	70-130			
Matrix Spike (AE84314-MS2)		**Source: 18E1751-01**			Prepared & Analyzed: 05/31/18						
Mercury, dissolved	2.60	0.060	0.20	ug/L	2.50	0.0630	101	70-130			
Matrix Spike Dup (AE84314-MSD1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/31/18						
Mercury, dissolved	2.62	0.060	0.20	ug/L	2.50	0.0650	102	70-130	0.685	20	

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83882 - EPA 200.8 (D)											
Blank (AE83882-BLK1)					Prepared: 05/22/18 Analyzed: 05/23/18						
Aluminum, dissolved	ND	5.0	10	ug/L							U
Antimony, dissolved	ND	0.20	0.50	ug/L							U
Arsenic, dissolved	ND	0.20	0.50	ug/L							U
Barium, dissolved	ND	0.20	0.50	ug/L							U
Beryllium, dissolved	ND	0.050	0.10	ug/L							U
Cadmium, dissolved	ND	0.060	0.10	ug/L							U
Chromium, dissolved	ND	0.40	0.50	ug/L							U
Cobalt, dissolved	ND	0.030	0.10	ug/L							U
Copper, dissolved	ND	0.40	0.50	ug/L							U
Lead, dissolved	ND	0.060	0.25	ug/L							U
Molybdenum, dissolved	ND	0.070	0.25	ug/L							U
Nickel, dissolved	ND	0.30	0.50	ug/L							U
Selenium, dissolved	ND	0.20	2.0	ug/L							U
Silver, dissolved	ND	0.050	0.10	ug/L							U
Thallium, dissolved	ND	0.050	0.10	ug/L							U
Vanadium, dissolved	ND	0.50	1.0	ug/L							U
Zinc, dissolved	2.09	2.0	5.0	ug/L							J
LCS (AE83882-BS1)					Prepared: 05/22/18 Analyzed: 05/23/18						
Aluminum, dissolved	449	5.0	10	ug/L	520		86.4	85-115			
Antimony, dissolved	19.9	0.20	0.50	ug/L	20.0		99.5	85-115			
Arsenic, dissolved	20.2	0.20	0.50	ug/L	20.0		101	85-115			
Barium, dissolved	20.5	0.20	0.50	ug/L	20.0		102	85-115			
Beryllium, dissolved	20.1	0.050	0.10	ug/L	20.0		101	85-115			
Cadmium, dissolved	19.2	0.060	0.10	ug/L	20.0		95.9	85-115			
Chromium, dissolved	20.9	0.40	0.50	ug/L	20.0		105	85-115			
Cobalt, dissolved	20.7	0.030	0.10	ug/L	20.0		104	85-115			
Copper, dissolved	21.5	0.40	0.50	ug/L	20.0		108	85-115			
Lead, dissolved	19.7	0.060	0.25	ug/L	20.0		98.7	85-115			
Molybdenum, dissolved	20.5	0.070	0.25	ug/L	20.0		103	85-115			
Nickel, dissolved	20.5	0.30	0.50	ug/L	20.0		103	85-115			
Selenium, dissolved	18.6	0.20	2.0	ug/L	20.0		92.8	85-115			
Silver, dissolved	20.2	0.050	0.10	ug/L	20.0		101	85-115			
Thallium, dissolved	19.7	0.050	0.10	ug/L	20.0		98.4	85-115			
Vanadium, dissolved	20.8	0.50	1.0	ug/L	20.0		104	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83882 - EPA 200.8 (D)											
LCS (AE83882-BS1)					Prepared: 05/22/18 Analyzed: 05/23/18						
Zinc, dissolved	95.6	2.0	5.0	ug/L	100		95.6	85-115			
Duplicate (AE83882-DUP1)			**Source: 18E1751-01**		Prepared: 05/22/18 Analyzed: 05/23/18						
Aluminum, dissolved	ND	20	40	ug/L		ND				20	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L		ND				20	R-01, U
Barium, dissolved	62.8	0.80	2.0	ug/L		63.7			1.48	20	
Beryllium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L		ND				20	R-01, U
Chromium, dissolved	ND	1.6	2.0	ug/L		ND				20	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L		ND				20	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L		1.84				20	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L		ND				20	R-01, U
Molybdenum, dissolved	0.377	0.28	1.0	ug/L		0.377			0.121	20	R-01, J
Nickel, dissolved	1.65	1.2	2.0	ug/L		ND				20	R-01, J
Selenium, dissolved	ND	0.80	8.0	ug/L		ND				20	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L		ND				20	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L		ND				20	R-01, U
Matrix Spike (AE83882-MS1)			**Source: 18E1751-01**		Prepared: 05/22/18 Analyzed: 05/23/18						
Aluminum, dissolved	530	20	40	ug/L	520	ND	102	70-130			
Antimony, dissolved	20.3	0.80	2.0	ug/L	20.0	ND	101	70-130			
Arsenic, dissolved	20.8	0.80	2.0	ug/L	20.0	ND	104	70-130			
Barium, dissolved	86.9	0.80	2.0	ug/L	20.0	63.7	116	70-130			
Beryllium, dissolved	21.6	0.20	0.40	ug/L	20.0	ND	108	70-130			
Cadmium, dissolved	19.6	0.24	0.40	ug/L	20.0	ND	97.8	70-130			
Chromium, dissolved	22.0	1.6	2.0	ug/L	20.0	ND	110	70-130			
Cobalt, dissolved	21.1	0.12	0.40	ug/L	20.0	ND	105	70-130			
Copper, dissolved	22.0	1.6	2.0	ug/L	20.0	1.84	101	70-130			
Lead, dissolved	20.3	0.24	1.0	ug/L	20.0	ND	101	70-130			
Molybdenum, dissolved	21.2	0.28	1.0	ug/L	20.0	0.377	104	70-130			
Nickel, dissolved	22.1	1.2	2.0	ug/L	20.0	ND	111	70-130			
Selenium, dissolved	18.7	0.80	8.0	ug/L	20.0	ND	93.5	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83882 - EPA 200.8 (D)											
Matrix Spike (AE83882-MS1)		**Source: 18E1751-01**			Prepared: 05/22/18 Analyzed: 05/23/18						
Silver, dissolved	20.7	0.20	0.40	ug/L	20.0	ND	103	70-130			
Thallium, dissolved	20.5	0.20	0.40	ug/L	20.0	ND	103	70-130			
Vanadium, dissolved	21.8	2.0	4.0	ug/L	20.0	ND	109	70-130			
Zinc, dissolved	101	8.0	20	ug/L	100	ND	101	70-130			
Matrix Spike (AE83882-MS2)		**Source: 18E1892-04**			Prepared: 05/22/18 Analyzed: 05/23/18						
Aluminum, dissolved	524	20	40	ug/L	520	ND	101	70-130			
Antimony, dissolved	20.9	0.80	2.0	ug/L	20.0	ND	105	70-130			
Arsenic, dissolved	24.0	0.80	2.0	ug/L	20.0	2.59	107	70-130			
Barium, dissolved	192	0.80	2.0	ug/L	20.0	174	89.1	70-130			
Beryllium, dissolved	21.0	0.20	0.40	ug/L	20.0	ND	105	70-130			
Cadmium, dissolved	19.3	0.24	0.40	ug/L	20.0	ND	96.4	70-130			
Chromium, dissolved	27.3	1.6	2.0	ug/L	20.0	6.66	103	70-130			
Cobalt, dissolved	20.5	0.12	0.40	ug/L	20.0	0.199	102	70-130			
Copper, dissolved	24.4	1.6	2.0	ug/L	20.0	3.11	107	70-130			
Lead, dissolved	19.6	0.24	1.0	ug/L	20.0	ND	98.0	70-130			
Molybdenum, dissolved	28.6	0.28	1.0	ug/L	20.0	7.48	106	70-130			
Nickel, dissolved	22.2	1.2	2.0	ug/L	20.0	ND	111	70-130			
Selenium, dissolved	22.1	0.80	8.0	ug/L	20.0	2.89	96.3	70-130			
Silver, dissolved	20.0	0.20	0.40	ug/L	20.0	ND	99.9	70-130			
Thallium, dissolved	19.8	0.20	0.40	ug/L	20.0	ND	98.9	70-130			
Vanadium, dissolved	29.2	2.0	4.0	ug/L	20.0	7.67	108	70-130			
Zinc, dissolved	119	8.0	20	ug/L	100	23.0	96.3	70-130			
Matrix Spike Dup (AE83882-MSD1)		**Source: 18E1751-01**			Prepared: 05/22/18 Analyzed: 05/23/18						
Aluminum, dissolved	530	20	40	ug/L	520	ND	102	70-130	0.0669	20	
Antimony, dissolved	20.5	0.80	2.0	ug/L	20.0	ND	103	70-130	1.35	20	
Arsenic, dissolved	21.1	0.80	2.0	ug/L	20.0	ND	106	70-130	1.70	20	
Barium, dissolved	88.2	0.80	2.0	ug/L	20.0	63.7	122	70-130	1.42	20	
Beryllium, dissolved	21.6	0.20	0.40	ug/L	20.0	ND	108	70-130	0.150	20	
Cadmium, dissolved	19.8	0.24	0.40	ug/L	20.0	ND	98.9	70-130	1.12	20	
Chromium, dissolved	21.9	1.6	2.0	ug/L	20.0	ND	110	70-130	0.105	20	
Cobalt, dissolved	21.2	0.12	0.40	ug/L	20.0	ND	106	70-130	0.721	20	
Copper, dissolved	22.5	1.6	2.0	ug/L	20.0	1.84	103	70-130	2.19	20	
Lead, dissolved	20.6	0.24	1.0	ug/L	20.0	ND	103	70-130	1.32	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83882 - EPA 200.8 (D)											
Matrix Spike Dup (AE83882-MSD1)		**Source: 18E1751-01**			Prepared: 05/22/18 Analyzed: 05/23/18						
Molybdenum, dissolved	21.4	0.28	1.0	ug/L	20.0	0.377	105	70-130	1.02	20	
Nickel, dissolved	21.9	1.2	2.0	ug/L	20.0	ND	109	70-130	1.12	20	
Selenium, dissolved	19.7	0.80	8.0	ug/L	20.0	ND	98.4	70-130	5.11	20	
Silver, dissolved	20.4	0.20	0.40	ug/L	20.0	ND	102	70-130	1.29	20	
Thallium, dissolved	20.8	0.20	0.40	ug/L	20.0	ND	104	70-130	1.59	20	
Vanadium, dissolved	22.0	2.0	4.0	ug/L	20.0	ND	110	70-130	0.842	20	
Zinc, dissolved	100	8.0	20	ug/L	100	ND	100	70-130	0.709	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83808 - General Preparation											
Blank (AE83808-BLK1)					Prepared: 05/18/18 Analyzed: 05/23/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
Blank (AE83808-BLK2)					Prepared: 05/18/18 Analyzed: 05/23/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
LCS (AE83808-BS1)					Prepared: 05/18/18 Analyzed: 05/23/18						
Biochemical Oxygen Demand	209	2.0	5.0	mg/L	200		104	84-115			
Duplicate (AE83808-DUP1)		**Source: 18E1822-01**			Prepared: 05/18/18 Analyzed: 05/23/18						
Biochemical Oxygen Demand	315	2.0	5.0	mg/L		316			0.285	30	
Batch AE83889 - General Preparation											
Blank (AE83889-BLK1)					Prepared: 05/21/18 Analyzed: 05/31/18						
Total Dissolved Solids	ND	5.0	10	mg/L							U
Duplicate (AE83889-DUP1)		**Source: 18E1576-02**			Prepared: 05/21/18 Analyzed: 05/31/18						
Total Dissolved Solids	108	5.0	10	mg/L		102			5.71	15	
Duplicate (AE83889-DUP2)		**Source: 18E1927-01**			Prepared: 05/21/18 Analyzed: 05/31/18						
Total Dissolved Solids	142	5.0	10	mg/L		142			0.00	15	
Batch AE84041 - General Preparation											
Blank (AE84041-BLK1)					Prepared & Analyzed: 05/23/18						
Sulfide	ND	0.020	0.10	mg/L							U

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Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84041 - General Preparation											
LCS (AE84041-BS1)					Prepared & Analyzed: 05/23/18						
Sulfide	0.218	0.020	0.10	mg/L	0.201		108	85-115			
Duplicate (AE84041-DUP1)		**Source: 18E1872-03**			Prepared & Analyzed: 05/23/18						
Sulfide	ND	0.020	0.10	mg/L		ND				15	U
Matrix Spike (AE84041-MS1)		**Source: 18E1872-03**			Prepared & Analyzed: 05/23/18						
Sulfide	0.229	0.020	0.10	mg/L	0.201	ND	114	80-120			
Matrix Spike Dup (AE84041-MSD1)		**Source: 18E1872-03**			Prepared & Analyzed: 05/23/18						
Sulfide	0.232	0.020	0.10	mg/L	0.201	ND	115	80-120	1.30	15	
Batch AE84084 - General Preparation											
Blank (AE84084-BLK1)					Prepared & Analyzed: 05/24/18						
Total Suspended Solids	ND	0.30	1.0	mg/L							U
Duplicate (AE84084-DUP1)		**Source: 18E2096-03**			Prepared & Analyzed: 05/24/18						
Total Suspended Solids	1.07	0.30	1.0	mg/L		1.10			2.76	30	
Duplicate (AE84084-DUP2)		**Source: 18E2036-01**			Prepared & Analyzed: 05/24/18						
Total Suspended Solids	545	0.30	1.0	mg/L		537			1.46	30	
Batch AE84119 - General Preparation											
Duplicate (AE84119-DUP1)		**Source: 18E1825-01**			Prepared & Analyzed: 05/29/18						
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Total Alkalinity as CaCO3	67.0	1.0	5.0	mg/L		67.0			0.00	20	
Bicarbonate Alkalinity as CaCO3	67.0	1.0	5.0	mg/L		67.0			0.00	20	

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Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84143 - General Prep											
Blank (AE84143-BLK1)					Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	ND	0.600	1.00	mg/L							U
LCS (AE84143-BS1)					Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	10.0	0.600	1.00	mg/L	10.0		100	85-115			
LCS Dup (AE84143-BSD1)					Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	8.89	0.600	1.00	mg/L	10.0		88.9	85-115	11.8	20	
Duplicate (AE84143-DUP1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	2.34	0.600	1.00	mg/L		2.46			4.86	20	
MRL Check (AE84143-MRL1)					Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	1.57	0.600	1.00	mg/L	2.50		62.9	0-200			
Matrix Spike (AE84143-MS1)		**Source: 18E1576-02**			Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	21.6	1.20	2.00	mg/L	20.0	ND	108	70-130			
Matrix Spike Dup (AE84143-MSD1)		**Source: 18E1576-02**			Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	21.4	1.20	2.00	mg/L	20.0	ND	107	70-130	0.866	20	
Batch AE84144 - General Prep											
Blank (AE84144-BLK1)					Prepared & Analyzed: 05/28/18						
Total Organic Carbon	ND	0.300	1.00	mg/L							U
LCS (AE84144-BS1)					Prepared & Analyzed: 05/28/18						
Total Organic Carbon	10.2	0.300	1.00	mg/L	10.0		102	85-115			

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Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84144 - General Prep											
LCS Dup (AE84144-BSD1)					Prepared & Analyzed: 05/28/18						
Total Organic Carbon	10.0	0.300	1.00	mg/L	10.0		100	85-115	2.30	20	
Duplicate (AE84144-DUP1)		**Source: 18E1576-03**			Prepared & Analyzed: 05/28/18						
Total Organic Carbon	2.20	0.300	1.00	mg/L		2.22			0.947	20	
MRL Check (AE84144-MRL1)					Prepared: 05/25/18 Analyzed: 05/28/18						
Total Organic Carbon	1.28	0.300	1.00	mg/L	2.50		51.1	0-200			
Matrix Spike (AE84144-MS1)		**Source: 18E1576-04**			Prepared & Analyzed: 05/28/18						
Total Organic Carbon	21.2	0.600	2.00	mg/L	20.0	2.19	95.3	70-130			
Matrix Spike Dup (AE84144-MSD1)		**Source: 18E1576-04**			Prepared & Analyzed: 05/28/18						
Total Organic Carbon	22.4	0.600	2.00	mg/L	20.0	2.19	101	70-130	5.07	20	
Batch AE84185 - General Preparation											
LCS (AE84185-BS1)					Prepared & Analyzed: 05/29/18						
Ammonia as N	4.82	0.10	0.20	mg/L	5.00		96.3	90-110			
LCS Dup (AE84185-BSD1)					Prepared & Analyzed: 05/29/18						
Ammonia as N	4.82	0.10	0.20	mg/L	5.00		96.3	90-110	0.00	10	
Matrix Spike (AE84185-MS1)		**Source: 18E2345-01**			Prepared & Analyzed: 05/29/18						
Ammonia as N	9.98	0.10	0.20	mg/L	10.0	ND	99.8	85-115			
Matrix Spike Dup (AE84185-MSD1)		**Source: 18E2345-01**			Prepared & Analyzed: 05/29/18						
Ammonia as N	10.2	0.10	0.20	mg/L	10.0	ND	102	85-115	1.74	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84187 - General Preparation											
Blank (AE84187-BLK1)					Prepared: 05/17/18 Analyzed: 05/31/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L							U
Duplicate (AE84187-DUP1)		**Source: 18E1510-03**			Prepared: 05/17/18 Analyzed: 05/31/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Duplicate (AE84187-DUP2)		**Source: 18E1872-02**			Prepared & Analyzed: 05/31/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Batch AE84290 - General Prep											
LCS (AE84290-BS1)					Prepared: 05/30/18 Analyzed: 05/31/18						
Total Kjeldahl Nitrogen	2.95	0.20	1.0	mg/L	2.98		99.0	80-120			
LCS Dup (AE84290-BSD1)					Prepared: 05/30/18 Analyzed: 05/31/18						
Total Kjeldahl Nitrogen	2.95	0.20	1.0	mg/L	2.98		99.0	80-120	0.00	20	
Matrix Spike (AE84290-MS1)		**Source: 18E1864-02**			Prepared & Analyzed: 05/31/18						
Total Kjeldahl Nitrogen	4.24	0.20	1.0	mg/L	2.98	1.05	107	75-125			
Matrix Spike Dup (AE84290-MSD1)		**Source: 18E1864-02**			Prepared & Analyzed: 05/31/18						
Total Kjeldahl Nitrogen	4.24	0.20	1.0	mg/L	2.98	1.05	107	75-125	0.00	20	
Batch AE84302 - General Preparation											
Blank (AE84302-BLK1)					Prepared: 05/31/18 Analyzed: 06/01/18						
Oil & Grease (HEM)	ND	1.4	5.0	mg/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84302 - General Preparation											
LCS (AE84302-BS1)					Prepared: 05/31/18 Analyzed: 06/01/18						
Oil & Grease (HEM)	39.6	1.4	5.0	mg/L	40.0		99.0	78-114			
LCS Dup (AE84302-BSD1)					Prepared: 05/31/18 Analyzed: 06/01/18						
Oil & Grease (HEM)	39.3	1.4	5.0	mg/L	40.0		98.2	78-114	0.760	18	
Matrix Spike (AE84302-MS1)		**Source: 18E2342-02**			Prepared: 05/31/18 Analyzed: 06/01/18						
Oil & Grease (HEM)	31.8	1.4	5.0	mg/L	40.0	1.40	76.0	78-114			QM-05
Batch AE84303 - Metals Digest											
Blank (AE84303-BLK1)					Prepared: 05/31/18 Analyzed: 06/01/18						
Hardness, Total	2	1	5	mg/L							J
Duplicate (AE84303-DUP1)		**Source: 18E1927-01**			Prepared: 05/31/18 Analyzed: 06/01/18						
Hardness, Total	ND	1	5	mg/L		ND				20	U
Batch AF83098 - General Prep											
Blank (AF83098-BLK1)					Prepared & Analyzed: 06/04/18						
Phosphorus, total	ND	0.011	0.040	mg/L							U
LCS (AF83098-BS1)					Prepared & Analyzed: 06/04/18						
Phosphorus, total	0.199	0.011	0.040	mg/L	0.200		99.6	85-115			
Duplicate (AF83098-DUP1)		**Source: 18E1853-01**			Prepared & Analyzed: 06/04/18						
Phosphorus, total	9.83	0.55	2.0	mg/L		9.76			0.669	20	

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Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83098 - General Prep											
Matrix Spike (AF83098-MS1)		**Source: 18E1853-01**			Prepared & Analyzed: 06/04/18						
Phosphorus, total	10.0	0.55	2.0	mg/L	2.00	9.76	13.1	70-130			QM-4X
Matrix Spike (AF83098-MS2)		**Source: 18E1872-01**			Prepared & Analyzed: 06/04/18						
Phosphorus, total	0.201	0.011	0.040	mg/L	0.200	0.0259	87.3	70-130			
Matrix Spike Dup (AF83098-MSD1)		**Source: 18E1853-01**			Prepared & Analyzed: 06/04/18						
Phosphorus, total	10.2	0.55	2.0	mg/L	2.00	9.76	19.7	70-130	1.30	20	QM-4X

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Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83788 - General Preparation											
Blank (AE83788-BLK1)					Prepared & Analyzed: 05/18/18						
Nitrite as N	ND	0.050	0.20	mg/L							U
Nitrate as N	ND	0.040	0.20	mg/L							U
Orthophosphate	ND	0.10	0.30	mg/L							U
LCS (AE83788-BS1)					Prepared & Analyzed: 05/18/18						
Nitrate as N	5.77	0.040	0.20	mg/L	5.56		104	90-110			
Orthophosphate	17.8	0.10	0.30	mg/L	16.7		107	90-110			
Nitrite as N	5.55	0.050	0.20	mg/L	5.56		99.8	90-110			
Duplicate (AE83788-DUP1)		**Source: 18E1872-01**			Prepared & Analyzed: 05/18/18						
Nitrate as N	ND	0.040	0.20	mg/L		ND				20	U
Nitrite as N	ND	0.050	0.20	mg/L		ND				20	U
Orthophosphate	ND	0.10	0.30	mg/L		ND				20	U
Matrix Spike (AE83788-MS1)		**Source: 18E1872-01**			Prepared & Analyzed: 05/18/18						
Nitrate as N	6.13	0.040	0.20	mg/L	5.56	ND	110	80-120			
Nitrite as N	6.05	0.050	0.20	mg/L	5.56	ND	109	80-120			
Orthophosphate	18.6	0.10	0.30	mg/L	16.7	ND	112	80-120			
Matrix Spike (AE83788-MS2)		**Source: 18E1193-01**			Prepared & Analyzed: 05/18/18						
Nitrite as N	5.29	0.25	1.0	mg/L	5.56	ND	95.3	80-120			
Orthophosphate	15.3	0.50	1.5	mg/L	16.7	ND	92.1	80-120			
Nitrate as N	6.43	0.20	1.0	mg/L	5.56	0.846	101	80-120			
Matrix Spike Dup (AE83788-MSD1)		**Source: 18E1872-01**			Prepared & Analyzed: 05/18/18						
Nitrite as N	5.82	0.050	0.20	mg/L	5.56	ND	105	80-120	3.93	20	
Orthophosphate	18.0	0.10	0.30	mg/L	16.7	ND	108	80-120	3.37	20	
Nitrate as N	5.88	0.040	0.20	mg/L	5.56	ND	106	80-120	4.21	20	

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TPH by EPA/LUFT GC Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83911 - SVOAs in Water GC											
Blank (AE83911-BLK1)					Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Diesel	ND	50	250	ug/L							U
TPH as Motor Oil	ND	100	250	ug/L							U
Surrogate: Tetratetracontane	*49.0*			*ug/L*	*56.0*		*87.6*	*39-120*			
LCS (AE83911-BS1)					Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Diesel	1580	50	250	ug/L	2070		76.4	61-120			
Surrogate: Tetratetracontane	*47.1*			*ug/L*	*56.0*		*84.1*	*39-120*			
LCS (AE83911-BS2)					Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Motor Oil	1610	100	250	ug/L	1990		80.8	71-125			
Surrogate: Tetratetracontane	*48.6*			*ug/L*	*56.0*		*86.8*	*39-120*			
LCS Dup (AE83911-BSD1)					Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Diesel	1720	50	250	ug/L	2070		82.9	61-120	8.22	25	
Surrogate: Tetratetracontane	*49.7*			*ug/L*	*56.0*		*88.8*	*39-120*			
LCS Dup (AE83911-BSD2)					Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Motor Oil	1820	100	250	ug/L	1990		91.2	71-125	12.1	25	
Surrogate: Tetratetracontane	*51.6*			*ug/L*	*56.0*		*92.2*	*39-120*			

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TPH by EPA/LUFT GCMS Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83959 - VOAs in Water GCMS											
Blank (AE83959-BLK1)					Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Gasoline	ND	50	50	ug/L							U
Surrogate: Toluene-d8	*24.0*			*ug/L*	*25.0*		*96.0*	*76-129*			
LCS (AE83959-BS1)					Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Gasoline	197	50	50	ug/L	200		98.5	67-132			
Surrogate: Toluene-d8	*24.0*			*ug/L*	*25.0*		*96.0*	*76-129*			
LCS Dup (AE83959-BSD1)					Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Gasoline	197	50	50	ug/L	200		98.5	67-132	0.00	25	
Surrogate: Toluene-d8	*24.0*			*ug/L*	*25.0*		*96.0*	*76-129*			
Matrix Spike (AE83959-MS1)		**Source: 18E1751-03**			Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Gasoline	198	50	50	ug/L	200	ND	99.0	37-156			
Surrogate: Toluene-d8	*25.0*			*ug/L*	*25.0*		*100*	*76-129*			
Matrix Spike (AE83959-MS2)		**Source: 18E1751-04**			Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Gasoline	201	50	50	ug/L	200	ND	100	37-156			
Surrogate: Toluene-d8	*25.0*			*ug/L*	*25.0*		*100*	*76-129*			

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83958 - VOAs in Water GCMS											
Blank (AE83958-BLK1)					Prepared: 05/21/18 Analyzed: 05/22/18						
Benzene	ND	0.30	0.30	ug/L							U
Toluene	ND	0.30	0.30	ug/L							U
Ethylbenzene	ND	0.40	0.50	ug/L							U
Xylenes (total)	ND	0.50	0.50	ug/L							U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L							U
Di-isopropyl ether	ND	0.40	0.50	ug/L							U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L							U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L							U
Tert-butyl alcohol	ND	6.0	10	ug/L							U
Surrogate: Bromofluorobenzene	*26.4*			*ug/L*	*25.0*		*105*	*70-130*			
Surrogate: Dibromofluoromethane	*26.2*			*ug/L*	*25.0*		*105*	*70-130*			
Surrogate: Toluene-d8	*28.7*			*ug/L*	*25.0*		*115*	*70-130*			
LCS (AE83958-BS1)					Prepared: 05/21/18 Analyzed: 05/22/18						
Benzene	20.8	0.30	0.30	ug/L	20.0		104	82-122			
Toluene	22.9	0.30	0.30	ug/L	20.0		115	75-134			
Ethylbenzene	22.5	0.40	0.50	ug/L	20.0		112	84-124			
Xylenes (total)	63.1	0.50	0.50	ug/L	60.0		105	81-126			
Methyl tert-butyl ether	19.3	0.50	0.50	ug/L	20.0		96.7	84-119			
Di-isopropyl ether	22.5	0.40	0.50	ug/L	20.0		112	83-132			
Ethyl tert-butyl ether	21.8	0.40	0.50	ug/L	20.0		109	74-127			
Tert-amyl methyl ether	18.7	0.40	0.50	ug/L	20.0		93.6	74-120			
Tert-butyl alcohol	370	6.0	10	ug/L	400		92.4	66-147			
Surrogate: Bromofluorobenzene	*28.5*			*ug/L*	*25.0*		*114*	*70-130*			
Surrogate: Dibromofluoromethane	*26.3*			*ug/L*	*25.0*		*105*	*70-130*			
Surrogate: Toluene-d8	*28.4*			*ug/L*	*25.0*		*114*	*70-130*			
LCS Dup (AE83958-BSD1)					Prepared: 05/21/18 Analyzed: 05/22/18						
Benzene	21.0	0.30	0.30	ug/L	20.0		105	82-122	0.958	25	
Toluene	23.5	0.30	0.30	ug/L	20.0		118	75-134	2.63	25	
Ethylbenzene	22.6	0.40	0.50	ug/L	20.0		113	84-124	0.355	25	
Xylenes (total)	63.9	0.50	0.50	ug/L	60.0		106	81-126	1.17	25	
Methyl tert-butyl ether	19.7	0.50	0.50	ug/L	20.0		98.6	84-119	2.00	25	
Di-isopropyl ether	22.7	0.40	0.50	ug/L	20.0		113	83-132	0.930	25	
Ethyl tert-butyl ether	21.8	0.40	0.50	ug/L	20.0		109	74-127	0.00	25	

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Berkeley CA, 94705	Project Number: 642.1	06/11/18 11:45

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83958 - VOAs in Water GCMS											
LCS Dup (AE83958-BSD1)					Prepared: 05/21/18 Analyzed: 05/22/18						
Tert-amyl methyl ether	19.2	0.40	0.50	ug/L	20.0		95.9	74-120	2.37	25	
Tert-butyl alcohol	380	6.0	10	ug/L	400		94.9	66-147	2.66	25	
Surrogate: Bromofluorobenzene	*28.5*			*ug/L*	*25.0*		*114*	*70-130*			
Surrogate: Dibromofluoromethane	*26.1*			*ug/L*	*25.0*		*105*	*70-130*			
Surrogate: Toluene-d8	*28.4*			*ug/L*	*25.0*		*114*	*70-130*			
Matrix Spike (AE83958-MS1)		**Source: 18E1751-01**			Prepared: 05/21/18 Analyzed: 05/22/18						
Benzene	21.2	0.30	0.30	ug/L	20.0	ND	106	58-139			
Toluene	23.9	0.30	0.30	ug/L	20.0	ND	120	59-147			
Ethylbenzene	23.4	0.40	0.50	ug/L	20.0	ND	117	59-147			
Xylenes (total)	65.8	0.50	0.50	ug/L	60.0	ND	110	49-153			
Methyl tert-butyl ether	18.4	0.50	0.50	ug/L	20.0	ND	92.2	55-144			
Di-isopropyl ether	22.3	0.40	0.50	ug/L	20.0	ND	112	49-143			
Ethyl tert-butyl ether	21.8	0.40	0.50	ug/L	20.0	ND	109	44-143			
Tert-amyl methyl ether	18.8	0.40	0.50	ug/L	20.0	ND	94.0	41-136			
Tert-butyl alcohol	452	6.0	10	ug/L	400	ND	113	38-175			
Surrogate: Bromofluorobenzene	*28.0*			*ug/L*	*25.0*		*112*	*70-130*			
Surrogate: Dibromofluoromethane	*25.5*			*ug/L*	*25.0*		*102*	*70-130*			
Surrogate: Toluene-d8	*27.8*			*ug/L*	*25.0*		*111*	*70-130*			
Matrix Spike (AE83958-MS2)		**Source: 18E1751-02**			Prepared: 05/21/18 Analyzed: 05/22/18						
Benzene	22.5	0.30	0.30	ug/L	20.0	ND	112	58-139			
Toluene	24.6	0.30	0.30	ug/L	20.0	ND	123	59-147			
Ethylbenzene	24.4	0.40	0.50	ug/L	20.0	ND	122	59-147			
Xylenes (total)	68.3	0.50	0.50	ug/L	60.0	ND	114	49-153			
Methyl tert-butyl ether	20.0	0.50	0.50	ug/L	20.0	ND	100	55-144			
Di-isopropyl ether	23.8	0.40	0.50	ug/L	20.0	ND	119	49-143			
Ethyl tert-butyl ether	23.1	0.40	0.50	ug/L	20.0	ND	115	44-143			
Tert-amyl methyl ether	19.8	0.40	0.50	ug/L	20.0	ND	99.0	41-136			
Tert-butyl alcohol	477	6.0	10	ug/L	400	ND	119	38-175			
Surrogate: Bromofluorobenzene	*28.5*			*ug/L*	*25.0*		*114*	*70-130*			
Surrogate: Dibromofluoromethane	*26.8*			*ug/L*	*25.0*		*107*	*70-130*			
Surrogate: Toluene-d8	*28.4*			*ug/L*	*25.0*		*113*	*70-130*			

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Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	06/11/18 11:45

Notes and Definitions

FILT	The sample was filtered in the lab prior to analysis.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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.

basic laboratory

www.basiclab.com

2218 Railroad Avenue
Redding, California 96001
voice 530.243.7234
fax 530.243.7494

3860 Morrow Lane, Suite F
Chico, California 95928
voice 530.894.8966
fax 530.894.5143

June 06, 2018

Lab ID: 18E1166

SHERI L. SPEAKS
ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
RE: LOW LEVEL METALS 18E1872

Dear SHERI L. SPEAKS ,

Enclosed are the analysis results for Work Order number 18E1166. All analyses were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

Ricky D. Jensen
Laboratory Director
California ELAP Certification Number 1677

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Redding, California 96001 fax 530.243.7494
3860 Morrow Lane, Suite F voice 530.894.8966
Chico, California 95928 fax 530.894.5143

Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18E1872

Lab No: 18E1166
Reported: 06/06/18
Phone: (707) 468-0401
P.O. #

Metals - Total

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
18E1872-01 ER 156.7 - Grab Water (18E1166-01) Sampled:05/17/18 17:15 Received:05/23/18 12:34									
Mercury	ng/l	**3.50**		0.20	0.50	EPA 1631E	05/30/18	05/30/18	B8E1589
Methyl Mercury as Mercury	"	**0.134**		0.020	0.050	EPA 1630	06/05/18	06/04/18	B8F0885
18E1872-02 ER-D - Grab Water (18E1166-02) Sampled:05/17/18 17:45 Received:05/23/18 12:34									
Mercury	ng/l	**3.46**		0.20	0.50	EPA 1631E	05/30/18	05/30/18	B8E1589
Methyl Mercury as Mercury	"	**0.128**		0.020	0.050	EPA 1630	06/05/18	06/04/18	B8F0885
18E1872-03 ER-BL - Grab Water (18E1166-03) Sampled:05/17/18 10:25 Received:05/23/18 12:34									
Mercury	ng/l	**0.46**	J	0.20	0.50	EPA 1631E	05/30/18	05/30/18	B8E1589
Methyl Mercury as Mercury	"	ND		0.020	0.050	EPA 1630	06/05/18	06/04/18	B8F0885

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18E1872

Lab No: 18E1166
Reported: 06/06/18
Phone: (707) 468-0401
P.O. #

Quality Control Data

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Metals - Total										
Batch B8E1589 - BrCl Digestion										
Blank										
Mercury	ND	0.50	ng/l							
Blank										
Mercury	ND	0.50	ng/l							QB-06
Blank										
Mercury	ND	0.50	ng/l							
LCS										
Mercury	9.97	0.50	ng/l	10.0		99.7	77-123			
Matrix Spike Source: 18E1166-01										
Mercury	14.6	0.50	ng/l	10.0	3.50	111	71-125			
Matrix Spike Source: 18E1276-01										
Mercury	13.9	0.50	ng/l	10.0	2.09	118	71-125			
Matrix Spike Dup Source: 18E1166-01										
Mercury	14.2	0.50	ng/l	10.0	3.50	107	71-125	2.78	24	
Matrix Spike Dup Source: 18E1276-01										
Mercury	13.8	0.50	ng/l	10.0	2.09	117	71-125	1.05	24	
Batch B8F0885 - Draft EPA Method 1630 Distillation (Modified)										
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
LCS										
Methyl Mercury as Mercury	2.22	0.050	ng/l	2.00		111	67-133			
Matrix Spike Source: 18E0981-01										
Methyl Mercury as Mercury	1.19	0.050	ng/l	1.00	0.021	117	65-135			
Matrix Spike Source: 18E1166-03										
Methyl Mercury as Mercury	1.13	0.050	ng/l	1.00	ND	113	65-135			
Matrix Spike Dup Source: 18E0981-01										
Methyl Mercury as Mercury	1.22	0.050	ng/l	1.00	0.021	120	65-135	2.13	35	
Matrix Spike Dup Source: 18E1166-03										
Methyl Mercury as Mercury	1.13	0.050	ng/l	1.00	ND	113	65-135	0.0531	35	

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

basic laboratory
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Chico, California 95928 fax 530.894.5143

Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18E1872

Lab No: 18E1166
Reported: 06/06/18
Phone: (707) 468-0401
P.O. #

Notes and Definitions

QB-06	Some samples in this batch required an additional amount of BrCl to fully oxidize the sample. Per EPA method 1631E requirements, this Method Blank contains an increased concentration of BrCl to match the sample matrix.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). The J flag is equivalent to the DNQ Estimated Concentration flag.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
<	Less than reporting limit
≤	Less than or equal to reporting limit
>	Greater than reporting limit
≥	Greater than or equal to reporting limit
MDL	Method Detection Limit
RL/ML	Minimum Level of Quantitation
MCL/AL	Maxium Contaminant Level/Action Level
mg/kg	Results reported as wet weight
TTLC	Total Threshold Limit Concentration
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leachate Procedure
Note 1	Received Temperature - according to EPA guidelines, samples for most chemistry methods should be held at ≤6 degrees C after collection, including during transportation, unless the time from sampling to delivery is <2 hours. Regulating agencies may invalidate results if temperature requirements are not met.
Note 2	According to 40 CFR Part 136 Table II, the following tests should be analyzed in the field within 15 minutes of sampling: pH, chlorine, dissolved oxygen, and sulfite.

Approved By

Basic Laboratory Inc
California ELAP Cert #1677 and #2718

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18E1872

18E1166
1

18E1166
6-5-18

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

Basic Laboratory
2218 Railroad Ave
Redding, CA 96001
Phone :530-243-7234
Fax: 530-243-7494
Terms: Net 30

Analysis	Due	Expires	Comments
18E1872-01 ER 156.7 [Water] Sampled 05/17/18 17:15			-1 3.2°
BAL Hg 1631	06/04/18 12:00	06/14/18 17:15	
BAL Hg Methyl	06/04/18 12:00	11/13/18 17:15	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E1872-02 ER-D [Water] Sampled 05/17/18 17:45			-2 4.6°
BAL Hg 1631	06/04/18 12:00	06/14/18 17:45	
BAL Hg Methyl	06/04/18 12:00	11/13/18 17:45	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E1872-03 ER-BL [Water] Sampled 05/17/18 10:25			-3 4.4°
BAL Hg 1631	06/04/18 12:00	06/14/18 10:25	
BAL Hg Methyl	06/04/18 12:00	11/13/18 10:25	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+QC
+MDL

Released By	5-21-18 Date	T Wilhelmson Received By	5-23-18 Date	1234
Released By	Date	TLW Received By	5-23-18 Date	1247

alpha
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Bay Area Laboratory
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925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18E1872 Pg 1 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck 298

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	TPH-D/MO	TPH-Gas/BTEX/Oxys	Oil and Grease	TOC	DOC	CAM17 200.8 total + Al/Mn	Fe 200.8 Total	Hardness, total	Ammonia-N	Phosphorus, Total	TKN	Sample Notes or DDW Source Numbers:
ER156.7	5/17	1715														15	X	X	X	X	X	X	X	X	X	X	X	
ER-D	5/17	1745														15	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
ER-B2	5/17	1025														16	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
ER167.8	5/17	1400														3		X										
ER152.9	5/17	1615														3		X										
ER153.1	5/17	1620														3		X										
TC0.1	5/17	1610														3		X										

TAT	Temp upon Receipt °C
Standard 10 days ⊗	Ukiah temp: 1.8
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required	Livermore temp:
	Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		5-18-18	0820

DDW Write On EDT Transmission? ○ Yes ○ No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

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Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18E1872 Pg 2 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature:
CHRISTINA Buck
Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	CAM17 200.8 dissolved / lab filter	Al dissolved 200.8	Alkalinity	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	TDS	TSS	Chlorophyll-A	Sulfide	Hg 1631	MeHg 1630	Sample Notes or DDW Source Numbers:
ER1S6.7	5/17	1715															X	X	X	X	X	X	X	X	X		X	X	no sulfide
ER-D	5/17	1745															↓	↓	↓	↓	↑	↓	↓	↓	↓		↓	↓	no sulfide
ER-BL	5/17	1025															↓	↓	↓	↓	↓	↓	↓	↓	↓	X	↓	↓	

TAT
Standard 10 days ☒
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.8
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		5-18-18	0820

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID:
EDF to (Email Address):
Sampling Company Log Code:

Travel and Site Time:	Mileage:	Misc. Supplies:

Alpha Analytical Laboratories Inc.
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Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 •Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

ELAP Certificates 1551, 2728, and 2922

25 June 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18E2022

Enclosed are the results of analyses for samples received by the laboratory on 05/21/18 16:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267
Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 •Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BL-R	18E2022-01	Water	05/21/18 13:10	05/21/18 16:40
R-DUP	18E2022-02	Water	05/21/18 14:55	05/21/18 16:40
EB-BLPH	18E2022-03	Water	05/21/18 14:30	05/21/18 16:40
EB-ABLM	18E2022-04	Water	05/21/18 15:45	05/21/18 16:40

This represents an amended copy of the original report.

Subcontracted results added.

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.

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e-mail: clientservices@alpha-labs.com
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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
BL-R (18E2022-01) Water Sampled: 05/21/18 13:10 Received: 05/21/18 16:40											
Calcium	ND	0.080	1.0	mg/L	1	AF83041	06/01/18 09:00	06/05/18 13:30	EPA 200.7	MAM	U
Magnesium	ND	0.030	1.0	mg/L	1	AF83041	06/01/18 09:00	06/05/18 13:30	EPA 200.7	MAM	U
Mercury	ND	0.060	0.20	ug/L	1	AF83221	06/06/18 08:06	06/06/18 15:56	EPA 245.1	EL	U
R-DUP (18E2022-02) Water Sampled: 05/21/18 14:55 Received: 05/21/18 16:40											
Calcium	**19**	**0.080**	**1.0**	**mg/L**	1	AF83041	06/01/18 09:00	06/05/18 13:35	EPA 200.7	MAM	
Magnesium	**5.7**	**0.030**	**1.0**	**mg/L**	1	AF83041	06/01/18 09:00	06/05/18 13:35	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AF83221	06/06/18 08:06	06/06/18 15:59	EPA 245.1	EL	U
EB-BLPH (18E2022-03) Water Sampled: 05/21/18 14:30 Received: 05/21/18 16:40											
Calcium	**19**	**0.080**	**1.0**	**mg/L**	1	AF83041	06/01/18 09:00	06/05/18 13:40	EPA 200.7	MAM	
Magnesium	**5.8**	**0.030**	**1.0**	**mg/L**	1	AF83041	06/01/18 09:00	06/05/18 13:40	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AF83221	06/06/18 08:06	06/06/18 16:01	EPA 245.1	EL	U
EB-ABLM (18E2022-04) Water Sampled: 05/21/18 15:45 Received: 05/21/18 16:40											
Calcium	**22**	**0.080**	**1.0**	**mg/L**	1	AF83041	06/01/18 09:00	06/05/18 13:53	EPA 200.7	MAM	
Magnesium	**8.4**	**0.030**	**1.0**	**mg/L**	1	AF83041	06/01/18 09:00	06/05/18 13:53	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AF83221	06/06/18 08:06	06/06/18 16:04	EPA 245.1	EL	U

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.

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
BL-R (18E2022-01) Water Sampled: 05/21/18 13:10 Received: 05/21/18 16:40											
Aluminum	ND	20	40	ug/L	4	AE84021	05/23/18 11:45	05/24/18 13:31	EPA 200.8	MMY	R-01, U
Antimony	ND	0.80	2.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 13:31	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 13:31	EPA 200.8	MMY	R-01, U
Barium	ND	0.80	2.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 13:31	EPA 200.8	MMY	R-01, U
Beryllium	ND	0.20	0.40	ug/L	4	AE84021	05/23/18 11:45	05/24/18 13:31	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84021	05/23/18 11:45	05/24/18 13:31	EPA 200.8	MMY	R-01, U
Chromium	ND	1.6	2.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 13:31	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.12	0.40	ug/L	4	AE84021	05/23/18 11:45	05/24/18 13:31	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 13:31	EPA 200.8	MMY	R-01, U
Iron	ND	40	200	ug/L	4	AE84021	05/23/18 11:45	05/24/18 13:31	EPA 200.8	MMY	R-01, U
Lead	ND	0.24	1.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 13:31	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AE84021	05/23/18 11:45	05/24/18 13:31	EPA 200.8	MMY	R-01, U
Molybdenum	ND	0.28	1.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 13:31	EPA 200.8	MMY	R-01, U
Nickel	ND	1.2	2.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 13:31	EPA 200.8	MMY	R-01, U
Selenium	ND	0.80	8.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 13:31	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84021	05/23/18 11:45	05/24/18 13:31	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE84021	05/23/18 11:45	05/24/18 13:31	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 13:31	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84021	05/23/18 11:45	05/24/18 13:31	EPA 200.8	MMY	R-01, U
R-DUP (18E2022-02) Water Sampled: 05/21/18 14:55 Received: 05/21/18 16:40											
Aluminum	**180**	**20**	**40**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:18	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:18	EPA 200.8	MMY	R-01, U
Arsenic	**1.3**	**0.80**	**2.0**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:18	EPA 200.8	MMY	R-01, J
Barium	**56**	**0.80**	**2.0**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:18	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:18	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:18	EPA 200.8	MMY	R-01, U
Chromium	ND	1.6	2.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:18	EPA 200.8	MMY	R-01, U
Cobalt	**0.22**	**0.12**	**0.40**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:18	EPA 200.8	MMY	R-01, J
Copper	**1.6**	**1.6**	**2.0**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:18	EPA 200.8	MMY	R-01, J
Iron	**290**	**40**	**200**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:18	EPA 200.8	MMY	
Lead	ND	0.24	1.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:18	EPA 200.8	MMY	R-01, U
Manganese	**29**	**8.0**	**20**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:18	EPA 200.8	MMY	
Molybdenum	**0.34**	**0.28**	**1.0**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:18	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
R-DUP (18E2022-02) Water Sampled: 05/21/18 14:55 Received: 05/21/18 16:40											
Nickel	**2.6**	**1.2**	**2.0**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:18	EPA 200.8	MMY	
Selenium	ND	0.80	8.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:18	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:18	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:18	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:18	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:18	EPA 200.8	MMY	R-01, U
EB-BLPH (18E2022-03) Water Sampled: 05/21/18 14:30 Received: 05/21/18 16:40											
Aluminum	**180**	**20**	**40**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:24	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:24	EPA 200.8	MMY	R-01, U
Arsenic	**1.2**	**0.80**	**2.0**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:24	EPA 200.8	MMY	J
Barium	**56**	**0.80**	**2.0**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:24	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:24	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:24	EPA 200.8	MMY	R-01, U
Chromium	ND	1.6	2.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:24	EPA 200.8	MMY	R-01, U
Cobalt	**0.27**	**0.12**	**0.40**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:24	EPA 200.8	MMY	R-01, J
Copper	ND	1.6	2.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:24	EPA 200.8	MMY	R-01, U
Iron	**280**	**40**	**200**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:24	EPA 200.8	MMY	
Lead	ND	0.24	1.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:24	EPA 200.8	MMY	R-01, U
Manganese	**29**	**8.0**	**20**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:24	EPA 200.8	MMY	
Molybdenum	**0.34**	**0.28**	**1.0**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:24	EPA 200.8	MMY	J
Nickel	**2.8**	**1.2**	**2.0**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:24	EPA 200.8	MMY	
Selenium	ND	0.80	8.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:24	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:24	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:24	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:24	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:24	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
EB-ABLM (18E2022-04) Water Sampled: 05/21/18 15:45 Received: 05/21/18 16:40											
Aluminum	**110**	**20**	**40**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:31	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:31	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:31	EPA 200.8	MMY	R-01, U
Barium	**62**	**0.80**	**2.0**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:31	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:31	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:31	EPA 200.8	MMY	R-01, U
Chromium	ND	1.6	2.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:31	EPA 200.8	MMY	R-01, U
Cobalt	**0.14**	**0.12**	**0.40**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:31	EPA 200.8	MMY	R-01, J
Copper	ND	1.6	2.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:31	EPA 200.8	MMY	R-01, U
Iron	**210**	**40**	**200**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:31	EPA 200.8	MMY	
Lead	ND	0.24	1.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:31	EPA 200.8	MMY	R-01, U
Manganese	**12**	**8.0**	**20**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:31	EPA 200.8	MMY	R-01, J
Molybdenum	**0.37**	**0.28**	**1.0**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:31	EPA 200.8	MMY	R-01, J
Nickel	**1.8**	**1.2**	**2.0**	**ug/L**	4	AE84021	05/23/18 11:45	05/24/18 11:31	EPA 200.8	MMY	R-01, J
Selenium	ND	0.80	8.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:31	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:31	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:31	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:31	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84021	05/23/18 11:45	05/24/18 11:31	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
BL-R (18E2022-01) Water Sampled: 05/21/18 13:10 Received: 05/21/18 16:40											
Mercury, dissolved	**0.065**	**0.060**	**0.20**	**ug/L**	1	AE84314	05/31/18 08:46	05/31/18 15:55	EPA 245.1	EL	J
R-DUP (18E2022-02) Water Sampled: 05/21/18 14:55 Received: 05/21/18 16:40											
Mercury, dissolved	**0.066**	**0.060**	**0.20**	**ug/L**	1	AE84314	05/31/18 08:46	05/31/18 15:58	EPA 245.1	EL	J
EB-BLPH (18E2022-03) Water Sampled: 05/21/18 14:30 Received: 05/21/18 16:40											
Mercury, dissolved	**0.067**	**0.060**	**0.20**	**ug/L**	1	AE84314	05/31/18 08:46	05/31/18 16:01	EPA 245.1	EL	J
EB-ABLM (18E2022-04) Water Sampled: 05/21/18 15:45 Received: 05/21/18 16:40											
Mercury, dissolved	**0.067**	**0.060**	**0.20**	**ug/L**	1	AE84314	05/31/18 08:46	05/31/18 16:03	EPA 245.1	EL	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
BL-R (18E2022-01) Water Sampled: 05/21/18 13:10 Received: 05/21/18 16:40											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:31	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:31	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:31	EPA 200.8	MMY	R-01, U
Barium, dissolved	ND	0.80	2.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:31	EPA 200.8	MMY	R-01, U
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:31	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:31	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	1.6	2.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:31	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:31	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:31	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:31	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	ND	0.28	1.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:31	EPA 200.8	MMY	R-01, U
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:31	EPA 200.8	MMY	R-01, U
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:31	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:31	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:31	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:31	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:31	EPA 200.8	MMY	R-01, U
R-DUP (18E2022-02) Water Sampled: 05/21/18 14:55 Received: 05/21/18 16:40											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:38	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:38	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:38	EPA 200.8	MMY	R-01, U
Barium, dissolved	**52**	**0.80**	**2.0**	**ug/L**	4	AE84179	05/29/18 14:10	05/30/18 13:38	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:38	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:38	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	1.6	2.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:38	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:38	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:38	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:38	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.32**	**0.28**	**1.0**	**ug/L**	4	AE84179	05/29/18 14:10	05/30/18 13:38	EPA 200.8	MMY	R-01, J
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:38	EPA 200.8	MMY	R-01, U
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:38	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:38	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:38	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:38	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
R-DUP (18E2022-02) Water Sampled: 05/21/18 14:55 Received: 05/21/18 16:40											**FILT**
Zinc, dissolved	ND	8.0	20	ug/L	4	AE84179	05/29/18 14:10	05/30/18 13:38	EPA 200.8	MMY	R-01, U
EB-BLPH (18E2022-03) Water Sampled: 05/21/18 14:30 Received: 05/21/18 16:40											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:25	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:25	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:25	EPA 200.8	MMY	R-01, U
Barium, dissolved	**52**	**0.80**	**2.0**	**ug/L**	4	AE84179	05/29/18 14:10	05/30/18 14:25	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:25	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:25	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	1.6	2.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:25	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:25	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:25	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:25	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.34**	**0.28**	**1.0**	**ug/L**	4	AE84179	05/29/18 14:10	05/30/18 14:25	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.7**	**1.2**	**2.0**	**ug/L**	4	AE84179	05/29/18 14:10	05/30/18 14:25	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:25	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:25	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:25	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:25	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:25	EPA 200.8	MMY	R-01, U
EB-ABLM (18E2022-04) Water Sampled: 05/21/18 15:45 Received: 05/21/18 16:40											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:31	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:31	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:31	EPA 200.8	MMY	R-01, U
Barium, dissolved	**59**	**0.80**	**2.0**	**ug/L**	4	AE84179	05/29/18 14:10	05/30/18 14:31	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:31	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:31	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	1.6	2.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:31	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:31	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:31	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:31	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.60**	**0.28**	**1.0**	**ug/L**	4	AE84179	05/29/18 14:10	05/30/18 14:31	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.4**	**1.2**	**2.0**	**ug/L**	4	AE84179	05/29/18 14:10	05/30/18 14:31	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:31	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
EB-ABLM (18E2022-04) Water Sampled: 05/21/18 15:45 Received: 05/21/18 16:40											**FILT**
Silver, dissolved	ND	0.20	0.40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:31	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:31	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:31	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AE84179	05/29/18 14:10	05/30/18 14:31	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
BL-R (18E2022-01) Water Sampled: 05/21/18 13:10 Received: 05/21/18 16:40											
Ammonia as N	ND	0.10	0.20	mg/L	1	AE84260	05/30/18 09:00	05/30/18 15:30	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE84007	05/23/18 08:00	05/28/18 16:00	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AF83117	05/22/18 09:20	06/05/18 10:52	SM10200H	PBM	U
Dissolved Organic Carbon	ND	0.600	1.00	mg/L	1	AE84143	05/25/18 08:47	05/25/18 18:23	SM5310C	JIM	U
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AE84302	05/31/18 07:46	06/01/18 13:58	EPA 1664A	STS	U
Total Dissolved Solids	ND	5.0	10	mg/L	1	AE83973	05/22/18 12:53	05/31/18 11:34	SM2540C	PBM	U
Total Suspended Solids	ND	0.30	1.0	mg/L	1	AE84139	05/25/18 16:00	05/29/18 12:50	SM2540D	MRL	U
Bicarbonate Alkalinity as CaCO3	**1.0**	**1.0**	**5.0**	**mg/L**	1	AE84121	05/31/18 08:00	05/31/18 11:38	SM2320B	CEF	J
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84121	05/31/18 08:00	05/31/18 11:38	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84121	05/31/18 08:00	05/31/18 11:38	SM2320B	CEF	U
Total Alkalinity as CaCO3	**1.0**	**1.0**	**5.0**	**mg/L**	1	AE84121	05/31/18 08:00	05/31/18 11:38	SM2320B	CEF	J
Nitrate + Nitrite as N	**0.026**	**0.0086**	**0.40**	**mg/L**	1	AE84336	06/05/18 12:20	06/05/18 12:41	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.28**	**0.20**	**1.0**	**mg/L**	1	AF83032	06/01/18 05:52	06/02/18 09:56	SM4500-Norg B	SMS	J
Hardness, Total	ND	1	5	mg/L	1	AF83041	06/01/18 09:00	06/05/18 13:30	SM2340B	MAM	U
Phosphorus, total	ND	0.011	0.040	mg/L	1	AF83148	06/05/18 09:30	06/05/18 13:25	SM4500-P E	SMS	U
Total Organic Carbon	ND	0.300	1.00	mg/L	1	AE84144	05/28/18 08:48	05/28/18 17:50	SM5310C	JIM	U
R-DUP (18E2022-02) Water Sampled: 05/21/18 14:55 Received: 05/21/18 16:40											
Ammonia as N	ND	0.10	0.20	mg/L	1	AE84260	05/30/18 09:00	05/30/18 15:30	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE84007	05/23/18 08:00	05/28/18 16:00	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AF83117	05/22/18 09:20	06/05/18 10:52	SM10200H	PBM	U
Dissolved Organic Carbon	**2.24**	**0.600**	**1.00**	**mg/L**	1	AE84143	05/25/18 08:47	05/25/18 18:35	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AE84302	05/31/18 07:46	06/01/18 13:58	EPA 1664A	STS	U
Total Dissolved Solids	**100**	**5.0**	**10**	**mg/L**	1	AE83973	05/22/18 12:53	05/31/18 11:34	SM2540C	PBM	
Total Suspended Solids	**4.4**	**0.30**	**1.0**	**mg/L**	1	AE84139	05/25/18 16:00	05/29/18 12:50	SM2540D	MRL	
Bicarbonate Alkalinity as CaCO3	**68**	**1.0**	**5.0**	**mg/L**	1	AE84121	05/31/18 08:00	05/31/18 11:38	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84121	05/31/18 08:00	05/31/18 11:38	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84121	05/31/18 08:00	05/31/18 11:38	SM2320B	CEF	U
Total Alkalinity as CaCO3	**68**	**1.0**	**5.0**	**mg/L**	1	AE84121	05/31/18 08:00	05/31/18 11:38	SM2320B	CEF	
Nitrate + Nitrite as N	**0.047**	**0.0086**	**0.40**	**mg/L**	1	AE84336	06/05/18 12:20	06/05/18 12:41	Calculation	RLG	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AF83032	06/01/18 05:52	06/02/18 09:56	SM4500-Norg B	SMS	U
Hardness, Total	**70**	**1**	**5**	**mg/L**	1	AF83041	06/01/18 09:00	06/05/18 13:35	SM2340B	MAM	
Phosphorus, total	**0.026**	**0.011**	**0.040**	**mg/L**	1	AF83148	06/05/18 09:30	06/05/18 13:25	SM4500-P E	SMS	J
Total Organic Carbon	**2.24**	**0.300**	**1.00**	**mg/L**	1	AE84144	05/28/18 08:48	05/28/18 18:03	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
EB-BLPH (18E2022-03) Water Sampled: 05/21/18 14:30 Received: 05/21/18 16:40											
Ammonia as N	ND	0.10	0.20	mg/L	1	AE84260	05/30/18 09:00	05/30/18 15:30	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE84007	05/23/18 08:00	05/28/18 16:00	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AF83117	05/22/18 09:20	06/05/18 10:52	SM10200H	PBM	U
Dissolved Organic Carbon	**2.29**	**0.600**	**1.00**	**mg/L**	1	AE84143	05/25/18 08:47	05/25/18 18:48	SM5310C	JIM	
Oil & Grease (HEM)	**1.6**	**1.4**	**5.0**	**mg/L**	1	AE84302	05/31/18 07:46	06/01/18 13:58	EPA 1664A	STS	J
Total Dissolved Solids	**93**	**5.0**	**10**	**mg/L**	1	AE83973	05/22/18 12:53	05/31/18 11:34	SM2540C	PBM	
Total Suspended Solids	**4.4**	**0.30**	**1.0**	**mg/L**	1	AE84139	05/25/18 16:00	05/29/18 12:50	SM2540D	MRL	
Bicarbonate Alkalinity as CaCO3	**68**	**1.0**	**5.0**	**mg/L**	1	AE84121	05/31/18 08:00	05/31/18 11:38	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84121	05/31/18 08:00	05/31/18 11:38	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84121	05/31/18 08:00	05/31/18 11:38	SM2320B	CEF	U
Total Alkalinity as CaCO3	**68**	**1.0**	**5.0**	**mg/L**	1	AE84121	05/31/18 08:00	05/31/18 11:38	SM2320B	CEF	
Nitrate + Nitrite as N	**0.047**	**0.0086**	**0.40**	**mg/L**	1	AE84336	06/05/18 12:20	06/05/18 12:41	Calculation	RLG	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AF83032	06/01/18 05:52	06/02/18 09:56	SM4500-Norg B	SMS	U
Hardness, Total	**70**	**1**	**5**	**mg/L**	1	AF83041	06/01/18 09:00	06/05/18 13:40	SM2340B	MAM	
Phosphorus, total	**0.026**	**0.011**	**0.040**	**mg/L**	1	AF83148	06/05/18 09:30	06/05/18 13:25	SM4500-P E	SMS	J
Total Organic Carbon	**2.31**	**0.300**	**1.00**	**mg/L**	1	AE84144	05/28/18 08:48	05/28/18 18:15	SM5310C	JIM	
EB-ABLM (18E2022-04) Water Sampled: 05/21/18 15:45 Received: 05/21/18 16:40											
Ammonia as N	ND	0.10	0.20	mg/L	1	AE84260	05/30/18 09:00	05/30/18 15:30	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE84007	05/23/18 08:00	05/28/18 16:00	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AF83117	05/22/18 09:20	06/05/18 10:52	SM10200H	PBM	U
Dissolved Organic Carbon	**1.94**	**0.600**	**1.00**	**mg/L**	1	AE84143	05/25/18 08:47	05/25/18 19:01	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AE84302	05/31/18 07:46	06/01/18 13:58	EPA 1664A	STS	U
Total Dissolved Solids	**120**	**5.0**	**10**	**mg/L**	1	AE83973	05/22/18 12:53	05/31/18 11:34	SM2540C	PBM	
Total Suspended Solids	**2.6**	**0.30**	**1.0**	**mg/L**	1	AE84139	05/25/18 16:00	05/29/18 12:50	SM2540D	MRL	
Bicarbonate Alkalinity as CaCO3	**89**	**1.0**	**5.0**	**mg/L**	1	AE84121	05/31/18 08:00	05/31/18 11:38	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84121	05/31/18 08:00	05/31/18 11:38	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84121	05/31/18 08:00	05/31/18 11:38	SM2320B	CEF	U
Total Alkalinity as CaCO3	**89**	**1.0**	**5.0**	**mg/L**	1	AE84121	05/31/18 08:00	05/31/18 11:38	SM2320B	CEF	
Nitrate + Nitrite as N	**0.069**	**0.0086**	**0.40**	**mg/L**	1	AE84336	06/05/18 12:20	06/05/18 12:41	Calculation	RLG	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AF83032	06/01/18 05:52	06/02/18 09:56	SM4500-Norg B	SMS	U
Hardness, Total	**90**	**1**	**5**	**mg/L**	1	AF83041	06/01/18 09:00	06/05/18 13:53	SM2340B	MAM	
Phosphorus, total	**0.025**	**0.011**	**0.040**	**mg/L**	1	AF83148	06/05/18 09:30	06/05/18 13:25	SM4500-P E	SMS	J
Total Organic Carbon	**1.91**	**0.300**	**1.00**	**mg/L**	1	AE84144	05/28/18 08:48	05/28/18 18:28	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
BL-R (18E2022-01) Water Sampled: 05/21/18 13:10 Received: 05/21/18 16:40											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE83979	05/22/18 11:08	05/22/18 11:08	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE83979	05/22/18 11:08	05/22/18 11:08	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE83979	05/22/18 11:08	05/22/18 11:08	EPA 300.0	SMP	U
R-DUP (18E2022-02) Water Sampled: 05/21/18 14:55 Received: 05/21/18 16:40											
Nitrate as N	**0.047**	**0.040**	**0.20**	**mg/L**	1	AE83979	05/22/18 11:24	05/22/18 11:24	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AE83979	05/22/18 11:24	05/22/18 11:24	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE83979	05/22/18 11:24	05/22/18 11:24	EPA 300.0	SMP	U
EB-BLPH (18E2022-03) Water Sampled: 05/21/18 14:30 Received: 05/21/18 16:40											
Nitrate as N	**0.047**	**0.040**	**0.20**	**mg/L**	1	AE83979	05/22/18 11:40	05/22/18 11:40	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AE83979	05/22/18 11:40	05/22/18 11:40	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE83979	05/22/18 11:40	05/22/18 11:40	EPA 300.0	SMP	U
EB-ABLM (18E2022-04) Water Sampled: 05/21/18 15:45 Received: 05/21/18 16:40											
Nitrate as N	**0.069**	**0.040**	**0.20**	**mg/L**	1	AE83979	05/22/18 11:57	05/22/18 11:57	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AE83979	05/22/18 11:57	05/22/18 11:57	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE83979	05/22/18 11:57	05/22/18 11:57	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

TPH by EPA/LUFT GC Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
BL-R (18E2022-01) Water Sampled: 05/21/18 13:10 Received: 05/21/18 16:40											
TPH as Diesel	ND	50	250	ug/L	1	AE84026	05/23/18 10:11	05/24/18 20:15	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84026	05/23/18 10:11	05/24/18 20:15	8015DRO	DLD	U
Surrogate: Tetratetracontane		*78.0 %*	*39-120*			*AE84026*	*05/23/18 10:11*	*05/24/18 20:15*	*8015DRO*	*DLD*	
R-DUP (18E2022-02) Water Sampled: 05/21/18 14:55 Received: 05/21/18 16:40											
TPH as Diesel	ND	50	250	ug/L	1	AE84026	05/23/18 10:11	05/24/18 20:49	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84026	05/23/18 10:11	05/24/18 20:49	8015DRO	DLD	U
Surrogate: Tetratetracontane		*74.8 %*	*39-120*			*AE84026*	*05/23/18 10:11*	*05/24/18 20:49*	*8015DRO*	*DLD*	
EB-BLPH (18E2022-03) Water Sampled: 05/21/18 14:30 Received: 05/21/18 16:40											
TPH as Diesel	ND	50	250	ug/L	1	AE84026	05/23/18 10:11	05/24/18 21:24	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84026	05/23/18 10:11	05/24/18 21:24	8015DRO	DLD	U
Surrogate: Tetratetracontane		*73.1 %*	*39-120*			*AE84026*	*05/23/18 10:11*	*05/24/18 21:24*	*8015DRO*	*DLD*	
EB-ABLM (18E2022-04) Water Sampled: 05/21/18 15:45 Received: 05/21/18 16:40											
TPH as Diesel	ND	50	250	ug/L	1	AE84026	05/23/18 10:11	05/24/18 21:58	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84026	05/23/18 10:11	05/24/18 21:58	8015DRO	DLD	U
Surrogate: Tetratetracontane		*61.1 %*	*39-120*			*AE84026*	*05/23/18 10:11*	*05/24/18 21:58*	*8015DRO*	*DLD*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

TPH by EPA/LUFT GCMS Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
BL-R (18E2022-01) Water Sampled: 05/21/18 13:10 Received: 05/21/18 16:40											
TPH as Gasoline	ND	50	50	ug/L	1	AE83959	05/22/18 11:00	05/23/18 00:43	8260GRO	MM	U
Surrogate: Toluene-d8		*100 %*	*76-129*			*AE83959*	*05/22/18 11:00*	*05/23/18 00:43*	*8260GRO*	*MM*	
R-DUP (18E2022-02) Water Sampled: 05/21/18 14:55 Received: 05/21/18 16:40											
TPH as Gasoline	ND	50	50	ug/L	1	AE83959	05/22/18 11:00	05/23/18 01:17	8260GRO	MM	U
Surrogate: Toluene-d8		*92.0 %*	*76-129*			*AE83959*	*05/22/18 11:00*	*05/23/18 01:17*	*8260GRO*	*MM*	
EB-BLPH (18E2022-03) Water Sampled: 05/21/18 14:30 Received: 05/21/18 16:40											
TPH as Gasoline	ND	50	50	ug/L	1	AE83959	05/22/18 11:00	05/23/18 01:50	8260GRO	MM	U
Surrogate: Toluene-d8		*96.0 %*	*76-129*			*AE83959*	*05/22/18 11:00*	*05/23/18 01:50*	*8260GRO*	*MM*	
EB-ABLM (18E2022-04) Water Sampled: 05/21/18 15:45 Received: 05/21/18 16:40											
TPH as Gasoline	ND	50	50	ug/L	1	AE83959	05/22/18 11:00	05/23/18 02:24	8260GRO	MM	U
Surrogate: Toluene-d8		*96.0 %*	*76-129*			*AE83959*	*05/22/18 11:00*	*05/23/18 02:24*	*8260GRO*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
BL-R (18E2022-01) Water Sampled: 05/21/18 13:10 Received: 05/21/18 16:40											
Benzene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/23/18 00:43	EPA 8260B	MM	U
Toluene	**0.59**	**0.30**	**0.30**	**ug/L**	1	AE83958	05/22/18 11:00	05/23/18 00:43	EPA 8260B	MM	
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 00:43	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 00:43	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 00:43	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 00:43	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 00:43	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 00:43	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE83958	05/22/18 11:00	05/23/18 00:43	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*103 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/23/18 00:43*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*107 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/23/18 00:43*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*115 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/23/18 00:43*	*EPA 8260B*	*MM*	
R-DUP (18E2022-02) Water Sampled: 05/21/18 14:55 Received: 05/21/18 16:40											
Benzene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/23/18 01:17	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/23/18 01:17	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 01:17	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 01:17	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 01:17	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 01:17	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 01:17	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 01:17	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE83958	05/22/18 11:00	05/23/18 01:17	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*99.5 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/23/18 01:17*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*102 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/23/18 01:17*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*110 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/23/18 01:17*	*EPA 8260B*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
EB-BLPH (18E2022-03) Water Sampled: 05/21/18 14:30 Received: 05/21/18 16:40											
Benzene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/23/18 01:50	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/23/18 01:50	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 01:50	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 01:50	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 01:50	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 01:50	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 01:50	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 01:50	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE83958	05/22/18 11:00	05/23/18 01:50	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*102 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/23/18 01:50*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*106 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/23/18 01:50*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*115 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/23/18 01:50*	*EPA 8260B*	*MM*	
EB-ABLM (18E2022-04) Water Sampled: 05/21/18 15:45 Received: 05/21/18 16:40											
Benzene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/23/18 02:24	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE83958	05/22/18 11:00	05/23/18 02:24	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 02:24	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 02:24	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 02:24	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 02:24	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 02:24	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE83958	05/22/18 11:00	05/23/18 02:24	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE83958	05/22/18 11:00	05/23/18 02:24	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*101 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/23/18 02:24*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*106 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/23/18 02:24*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*114 %*	*70-130*			*AE83958*	*05/22/18 11:00*	*05/23/18 02:24*	*EPA 8260B*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83041 - Metals Digest											
Blank (AF83041-BLK1)					Prepared: 06/01/18 Analyzed: 06/05/18						
Calcium	ND	0.080	1.0	mg/L							U
Magnesium	ND	0.030	1.0	mg/L							U
LCS (AF83041-BS1)					Prepared: 06/01/18 Analyzed: 06/05/18						
Calcium	7.79	0.080	1.0	mg/L	8.00		97.4	85-115			
Magnesium	7.56	0.030	1.0	mg/L	8.00		94.5	85-115			
Duplicate (AF83041-DUP1)		**Source: 18E1999-01**			Prepared: 06/01/18 Analyzed: 06/05/18						
Calcium	7.47	0.080	1.0	mg/L		6.77			9.78	20	
Magnesium	13.8	0.030	1.0	mg/L		11.9			14.8	20	
Matrix Spike (AF83041-MS1)		**Source: 18E1999-01**			Prepared: 06/01/18 Analyzed: 06/05/18						
Calcium	15.5	0.080	1.0	mg/L	8.00	6.77	109	70-130			
Magnesium	21.7	0.030	1.0	mg/L	8.00	11.9	123	70-130			
Matrix Spike (AF83041-MS2)		**Source: 18E2707-02**			Prepared: 06/01/18 Analyzed: 06/05/18						
Calcium	43.1	0.080	1.0	mg/L	8.00	31.9	141	70-130			QM-4X
Magnesium	19.9	0.030	1.0	mg/L	8.00	10.4	119	70-130			
Matrix Spike Dup (AF83041-MSD1)		**Source: 18E1999-01**			Prepared: 06/01/18 Analyzed: 06/05/18						
Calcium	15.0	0.080	1.0	mg/L	8.00	6.77	103	70-130	3.25	20	
Magnesium	21.0	0.030	1.0	mg/L	8.00	11.9	114	70-130	3.09	20	
Batch AF83221 - EPA 245.1 Hg Water											
Blank (AF83221-BLK1)					Prepared & Analyzed: 06/06/18						
Mercury	ND	0.060	0.20	ug/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83221 - EPA 245.1 Hg Water											
LCS (AF83221-BS1)					Prepared & Analyzed: 06/06/18						
Mercury	2.52	0.060	0.20	ug/L	2.50		101	85-115			
Duplicate (AF83221-DUP1)		**Source: 18F0401-01**			Prepared & Analyzed: 06/06/18						
Mercury	ND	0.060	0.20	ug/L		ND				20	U
Matrix Spike (AF83221-MS1)		**Source: 18F0401-01**			Prepared & Analyzed: 06/06/18						
Mercury	2.61	0.060	0.20	ug/L	2.50	ND	104	70-130			
Matrix Spike (AF83221-MS2)		**Source: 18F0401-02**			Prepared & Analyzed: 06/06/18						
Mercury	2.53	0.060	0.20	ug/L	2.50	ND	101	70-130			
Matrix Spike Dup (AF83221-MSD1)		**Source: 18F0401-01**			Prepared & Analyzed: 06/06/18						
Mercury	2.61	0.060	0.20	ug/L	2.50	ND	104	70-130	0.153	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84021 - EPA 200.8											
Blank (AE84021-BLK1)					Prepared: 05/23/18 Analyzed: 05/24/18						
Aluminum	ND	5.0	10	ug/L							U
Antimony	ND	0.20	0.50	ug/L							U
Arsenic	ND	0.20	0.50	ug/L							U
Barium	ND	0.20	0.50	ug/L							U
Beryllium	ND	0.050	0.10	ug/L							U
Cadmium	ND	0.060	0.10	ug/L							U
Chromium	ND	0.40	0.50	ug/L							U
Cobalt	ND	0.030	0.10	ug/L							U
Copper	ND	0.40	0.50	ug/L							U
Iron	ND	10	50	ug/L							U
Lead	ND	0.060	0.25	ug/L							U
Manganese	ND	2.0	5.0	ug/L							U
Molybdenum	ND	0.070	0.25	ug/L							U
Nickel	ND	0.30	0.50	ug/L							U
Selenium	ND	0.20	2.0	ug/L							U
Silver	0.0579	0.050	0.10	ug/L							J
Thallium	ND	0.050	0.10	ug/L							U
Vanadium	ND	0.50	1.0	ug/L							U
Zinc	ND	2.0	5.0	ug/L							U
LCS (AE84021-BS1)					Prepared: 05/23/18 Analyzed: 05/24/18						
Aluminum	444	5.0	10	ug/L	520		85.3	85-115			
Antimony	20.2	0.20	0.50	ug/L	20.0		101	85-115			
Arsenic	20.2	0.20	0.50	ug/L	20.0		101	85-115			
Barium	20.0	0.20	0.50	ug/L	20.0		100	85-115			
Beryllium	20.5	0.050	0.10	ug/L	20.0		103	85-115			
Cadmium	19.7	0.060	0.10	ug/L	20.0		98.6	85-115			
Chromium	19.9	0.40	0.50	ug/L	20.0		99.3	85-115			
Cobalt	20.4	0.030	0.10	ug/L	20.0		102	85-115			
Copper	20.2	0.40	0.50	ug/L	20.0		101	85-115			
Iron	509	10	50	ug/L	520		97.9	85-115			
Lead	19.7	0.060	0.25	ug/L	20.0		98.3	85-115			
Manganese	19.3	2.0	5.0	ug/L	20.0		96.7	85-115			
Molybdenum	20.7	0.070	0.25	ug/L	20.0		104	85-115			
Nickel	20.3	0.30	0.50	ug/L	20.0		101	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84021 - EPA 200.8											
LCS (AE84021-BS1)					Prepared: 05/23/18 Analyzed: 05/24/18						
Selenium	19.6	0.20	2.0	ug/L	20.0		97.9	85-115			
Silver	20.5	0.050	0.10	ug/L	20.0		102	85-115			
Thallium	19.8	0.050	0.10	ug/L	20.0		99.2	85-115			
Vanadium	20.1	0.50	1.0	ug/L	20.0		101	85-115			
Zinc	99.8	2.0	5.0	ug/L	100		99.8	85-115			
Duplicate (AE84021-DUP1)		**Source: 18E1994-01**			Prepared: 05/23/18 Analyzed: 05/24/18						
Aluminum	303	50	100	ug/L		292			3.67	20	
Antimony	ND	2.0	5.0	ug/L		ND				20	R-01, U
Arsenic	ND	2.0	5.0	ug/L		ND				20	R-01, U
Barium	64.7	2.0	5.0	ug/L		62.6			3.29	20	
Beryllium	ND	0.50	1.0	ug/L		ND				20	R-01, U
Cadmium	ND	0.60	1.0	ug/L		ND				20	R-01, U
Chromium	ND	4.0	5.0	ug/L		ND				20	R-01, U
Cobalt	0.410	0.30	1.0	ug/L		0.354			14.7	20	R-01, J
Copper	22.7	4.0	5.0	ug/L		21.2			6.43	20	
Iron	27000	1000	5000	ug/L		27000			0.0251	20	
Lead	10.8	0.60	2.5	ug/L		10.6			1.54	20	
Manganese	380	20	50	ug/L		374			1.42	20	
Molybdenum	ND	0.70	2.5	ug/L		ND				20	R-01, U
Nickel	7.89	3.0	5.0	ug/L		7.22			8.98	20	
Selenium	ND	2.0	20	ug/L		ND				20	R-01, U
Silver	1.11	0.50	1.0	ug/L		ND				20	
Thallium	ND	0.50	1.0	ug/L		ND				20	R-01, U
Vanadium	ND	5.0	10	ug/L		ND				20	R-01, U
Zinc	985	20	50	ug/L		956			2.99	20	
Matrix Spike (AE84021-MS1)		**Source: 18E1994-01**			Prepared: 05/23/18 Analyzed: 05/24/18						
Aluminum	856	50	100	ug/L	520	292	109	70-130			
Antimony	20.9	2.0	5.0	ug/L	20.0	ND	104	70-130			
Arsenic	22.6	2.0	5.0	ug/L	20.0	ND	113	70-130			
Barium	85.2	2.0	5.0	ug/L	20.0	62.6	113	70-130			
Beryllium	21.6	0.50	1.0	ug/L	20.0	ND	108	70-130			
Cadmium	21.4	0.60	1.0	ug/L	20.0	ND	107	70-130			
Chromium	23.9	4.0	5.0	ug/L	20.0	ND	119	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84021 - EPA 200.8											
Matrix Spike (AE84021-MS1)		**Source: 18E1994-01**			Prepared: 05/23/18 Analyzed: 05/24/18						
Cobalt	21.7	0.30	1.0	ug/L	20.0	0.354	107	70-130			
Copper	42.0	4.0	5.0	ug/L	20.0	21.2	104	70-130			
Iron	28200	1000	5000	ug/L	520	27000	238	70-130			QM-4X
Lead	31.8	0.60	2.5	ug/L	20.0	10.6	106	70-130			
Manganese	407	20	50	ug/L	20.0	374	162	70-130			QM-01
Molybdenum	22.6	0.70	2.5	ug/L	20.0	ND	113	70-130			
Nickel	28.4	3.0	5.0	ug/L	20.0	7.22	106	70-130			
Selenium	20.0	2.0	20	ug/L	20.0	ND	100	70-130			
Silver	21.9	0.50	1.0	ug/L	20.0	ND	109	70-130			
Thallium	21.1	0.50	1.0	ug/L	20.0	ND	106	70-130			
Vanadium	21.7	5.0	10	ug/L	20.0	ND	109	70-130			
Zinc	1070	20	50	ug/L	100	956	112	70-130			
Matrix Spike (AE84021-MS2)		**Source: 18E2207-01**			Prepared: 05/23/18 Analyzed: 05/24/18						
Aluminum	677	20	40	ug/L	520	161	99.2	70-130			
Antimony	20.6	0.80	2.0	ug/L	20.0	ND	103	70-130			
Arsenic	22.4	0.80	2.0	ug/L	20.0	1.26	106	70-130			
Barium	59.8	0.80	2.0	ug/L	20.0	38.3	108	70-130			
Beryllium	20.7	0.20	0.40	ug/L	20.0	ND	103	70-130			
Cadmium	20.7	0.24	0.40	ug/L	20.0	0.554	101	70-130			
Chromium	22.3	1.6	2.0	ug/L	20.0	ND	112	70-130			
Cobalt	21.4	0.12	0.40	ug/L	20.0	0.562	104	70-130			
Copper	131	1.6	2.0	ug/L	20.0	110	104	70-130			
Iron	5480	40	200	ug/L	520	4940	103	70-130			
Lead	23.2	0.24	1.0	ug/L	20.0	2.73	102	70-130			
Manganese	110	8.0	20	ug/L	20.0	89.1	103	70-130			
Molybdenum	105	0.28	1.0	ug/L	20.0	80.5	121	70-130			
Nickel	25.4	1.2	2.0	ug/L	20.0	4.83	103	70-130			
Selenium	21.8	0.80	8.0	ug/L	20.0	2.41	96.8	70-130			
Silver	20.8	0.20	0.40	ug/L	20.0	0.285	102	70-130			
Thallium	20.1	0.20	0.40	ug/L	20.0	ND	100	70-130			
Vanadium	21.4	2.0	4.0	ug/L	20.0	ND	107	70-130			
Zinc	234	8.0	20	ug/L	100	134	100	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84021 - EPA 200.8											
Matrix Spike Dup (AE84021-MSD1)		**Source: 18E1994-01**			Prepared: 05/23/18 Analyzed: 05/24/18						
Aluminum	870	50	100	ug/L	520	292	111	70-130	1.63	20	
Antimony	22.1	2.0	5.0	ug/L	20.0	ND	110	70-130	5.51	20	
Arsenic	22.3	2.0	5.0	ug/L	20.0	ND	112	70-130	1.18	20	
Barium	86.0	2.0	5.0	ug/L	20.0	62.6	117	70-130	1.03	20	
Beryllium	21.3	0.50	1.0	ug/L	20.0	ND	106	70-130	1.61	20	
Cadmium	21.2	0.60	1.0	ug/L	20.0	ND	106	70-130	0.679	20	
Chromium	24.3	4.0	5.0	ug/L	20.0	ND	121	70-130	1.73	20	
Cobalt	22.3	0.30	1.0	ug/L	20.0	0.354	110	70-130	2.77	20	
Copper	42.6	4.0	5.0	ug/L	20.0	21.2	107	70-130	1.36	20	
Iron	28500	1000	5000	ug/L	520	27000	289	70-130	0.929	20	QM-4X
Lead	32.4	0.60	2.5	ug/L	20.0	10.6	109	70-130	2.01	20	
Manganese	416	20	50	ug/L	20.0	374	206	70-130	2.15	20	QM-01
Molybdenum	22.5	0.70	2.5	ug/L	20.0	ND	113	70-130	0.0849	20	
Nickel	28.9	3.0	5.0	ug/L	20.0	7.22	109	70-130	1.81	20	
Selenium	20.2	2.0	20	ug/L	20.0	ND	101	70-130	1.01	20	
Silver	22.2	0.50	1.0	ug/L	20.0	ND	111	70-130	1.21	20	
Thallium	21.7	0.50	1.0	ug/L	20.0	ND	109	70-130	2.63	20	
Vanadium	22.8	5.0	10	ug/L	20.0	ND	114	70-130	4.54	20	
Zinc	1090	20	50	ug/L	100	956	138	70-130	2.40	20	QM-4X

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84314 - EPA 245.1 Hg Water											
Blank (AE84314-BLK1)					Prepared & Analyzed: 05/31/18						
Mercury, dissolved	0.0630	0.060	0.20	ug/L							J
LCS (AE84314-BS1)					Prepared & Analyzed: 05/31/18						
Mercury, dissolved	2.61	0.060	0.20	ug/L	2.50		104	85-115			
Duplicate (AE84314-DUP1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/31/18						
Mercury, dissolved	0.0680	0.060	0.20	ug/L		0.0650			4.51	20	J
MRL Check (AE84314-MRL1)					Prepared & Analyzed: 05/31/18						
Mercury, dissolved	0.550	0.060	0.20	ug/L	0.500		110	0-200			
Matrix Spike (AE84314-MS1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/31/18						
Mercury, dissolved	2.64	0.060	0.20	ug/L	2.50	0.0650	103	70-130			
Matrix Spike (AE84314-MS2)		**Source: 18E1751-01**			Prepared & Analyzed: 05/31/18						
Mercury, dissolved	2.60	0.060	0.20	ug/L	2.50	0.0630	101	70-130			
Matrix Spike Dup (AE84314-MSD1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/31/18						
Mercury, dissolved	2.62	0.060	0.20	ug/L	2.50	0.0650	102	70-130	0.685	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84179 - EPA 200.8 (D)											
Blank (AE84179-BLK1)					Prepared: 05/29/18 Analyzed: 05/30/18						
Aluminum, dissolved	ND	5.0	10	ug/L							U
Antimony, dissolved	ND	0.20	0.50	ug/L							U
Arsenic, dissolved	ND	0.20	0.50	ug/L							U
Barium, dissolved	ND	0.20	0.50	ug/L							U
Beryllium, dissolved	ND	0.050	0.10	ug/L							U
Cadmium, dissolved	ND	0.060	0.10	ug/L							U
Chromium, dissolved	ND	0.40	0.50	ug/L							U
Cobalt, dissolved	ND	0.030	0.10	ug/L							U
Copper, dissolved	ND	0.40	0.50	ug/L							U
Lead, dissolved	ND	0.060	0.25	ug/L							U
Molybdenum, dissolved	ND	0.070	0.25	ug/L							U
Nickel, dissolved	ND	0.30	0.50	ug/L							U
Selenium, dissolved	ND	0.20	2.0	ug/L							U
Silver, dissolved	ND	0.050	0.10	ug/L							U
Thallium, dissolved	ND	0.050	0.10	ug/L							U
Vanadium, dissolved	ND	0.50	1.0	ug/L							U
Zinc, dissolved	ND	2.0	5.0	ug/L							U
LCS (AE84179-BS1)					Prepared: 05/29/18 Analyzed: 05/30/18						
Aluminum, dissolved	472	5.0	10	ug/L	520		90.8	85-115			
Antimony, dissolved	21.1	0.20	0.50	ug/L	20.0		105	85-115			
Arsenic, dissolved	20.5	0.20	0.50	ug/L	20.0		103	85-115			
Barium, dissolved	19.8	0.20	0.50	ug/L	20.0		98.8	85-115			
Beryllium, dissolved	19.0	0.050	0.10	ug/L	20.0		94.8	85-115			
Cadmium, dissolved	20.0	0.060	0.10	ug/L	20.0		99.9	85-115			
Chromium, dissolved	20.3	0.40	0.50	ug/L	20.0		102	85-115			
Cobalt, dissolved	19.8	0.030	0.10	ug/L	20.0		99.0	85-115			
Copper, dissolved	18.8	0.40	0.50	ug/L	20.0		94.2	85-115			
Lead, dissolved	19.5	0.060	0.25	ug/L	20.0		97.7	85-115			
Molybdenum, dissolved	22.7	0.070	0.25	ug/L	20.0		114	85-115			
Nickel, dissolved	19.7	0.30	0.50	ug/L	20.0		98.3	85-115			
Selenium, dissolved	18.5	0.20	2.0	ug/L	20.0		92.6	85-115			
Silver, dissolved	21.3	0.050	0.10	ug/L	20.0		106	85-115			
Thallium, dissolved	19.8	0.050	0.10	ug/L	20.0		98.9	85-115			
Vanadium, dissolved	20.4	0.50	1.0	ug/L	20.0		102	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84179 - EPA 200.8 (D)											
LCS (AE84179-BS1)					Prepared: 05/29/18 Analyzed: 05/30/18						
Zinc, dissolved	91.8	2.0	5.0	ug/L	100		91.8	85-115			
Duplicate (AE84179-DUP1)		**Source: 18E2022-01**			Prepared: 05/29/18 Analyzed: 05/30/18						
Aluminum, dissolved	ND	20	40	ug/L		ND				20	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L		ND				20	R-01, U
Barium, dissolved	ND	0.80	2.0	ug/L		ND				20	R-01, U
Beryllium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L		ND				20	R-01, U
Chromium, dissolved	ND	1.6	2.0	ug/L		ND				20	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L		ND				20	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L		ND				20	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L		ND				20	R-01, U
Molybdenum, dissolved	ND	0.28	1.0	ug/L		ND				20	R-01, U
Nickel, dissolved	ND	1.2	2.0	ug/L		ND				20	R-01, U
Selenium, dissolved	ND	0.80	8.0	ug/L		ND				20	R-01, U
Silver, dissolved	0.267	0.20	0.40	ug/L		ND				20	R-01, J
Thallium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L		ND				20	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L		ND				20	R-01, U
Matrix Spike (AE84179-MS1)		**Source: 18E2022-01**			Prepared: 05/29/18 Analyzed: 05/30/18						
Aluminum, dissolved	549	20	40	ug/L	520	ND	106	70-130			
Antimony, dissolved	21.6	0.80	2.0	ug/L	20.0	ND	108	70-130			
Arsenic, dissolved	21.1	0.80	2.0	ug/L	20.0	ND	106	70-130			
Barium, dissolved	19.7	0.80	2.0	ug/L	20.0	ND	98.3	70-130			
Beryllium, dissolved	19.5	0.20	0.40	ug/L	20.0	ND	97.5	70-130			
Cadmium, dissolved	20.5	0.24	0.40	ug/L	20.0	ND	102	70-130			
Chromium, dissolved	21.1	1.6	2.0	ug/L	20.0	ND	105	70-130			
Cobalt, dissolved	19.5	0.12	0.40	ug/L	20.0	ND	97.7	70-130			
Copper, dissolved	18.8	1.6	2.0	ug/L	20.0	ND	94.1	70-130			
Lead, dissolved	19.7	0.24	1.0	ug/L	20.0	ND	98.5	70-130			
Molybdenum, dissolved	22.7	0.28	1.0	ug/L	20.0	ND	113	70-130			
Nickel, dissolved	19.2	1.2	2.0	ug/L	20.0	ND	95.8	70-130			
Selenium, dissolved	20.7	0.80	8.0	ug/L	20.0	ND	103	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84179 - EPA 200.8 (D)											
Matrix Spike (AE84179-MS1)		**Source: 18E2022-01**			Prepared: 05/29/18 Analyzed: 05/30/18						
Silver, dissolved	21.7	0.20	0.40	ug/L	20.0	ND	108	70-130			
Thallium, dissolved	19.8	0.20	0.40	ug/L	20.0	ND	98.8	70-130			
Vanadium, dissolved	20.8	2.0	4.0	ug/L	20.0	ND	104	70-130			
Zinc, dissolved	94.0	8.0	20	ug/L	100	ND	94.0	70-130			
Matrix Spike Dup (AE84179-MSD1)		**Source: 18E2022-01**			Prepared: 05/29/18 Analyzed: 05/30/18						
Aluminum, dissolved	543	20	40	ug/L	520	ND	104	70-130	1.13	20	
Antimony, dissolved	21.2	0.80	2.0	ug/L	20.0	ND	106	70-130	1.90	20	
Arsenic, dissolved	21.5	0.80	2.0	ug/L	20.0	ND	107	70-130	1.68	20	
Barium, dissolved	19.3	0.80	2.0	ug/L	20.0	ND	96.4	70-130	1.90	20	
Beryllium, dissolved	19.3	0.20	0.40	ug/L	20.0	ND	96.5	70-130	0.999	20	
Cadmium, dissolved	20.0	0.24	0.40	ug/L	20.0	ND	100	70-130	2.37	20	
Chromium, dissolved	21.0	1.6	2.0	ug/L	20.0	ND	105	70-130	0.194	20	
Cobalt, dissolved	19.6	0.12	0.40	ug/L	20.0	ND	97.8	70-130	0.0301	20	
Copper, dissolved	18.6	1.6	2.0	ug/L	20.0	ND	93.2	70-130	0.937	20	
Lead, dissolved	19.5	0.24	1.0	ug/L	20.0	ND	97.7	70-130	0.769	20	
Molybdenum, dissolved	22.5	0.28	1.0	ug/L	20.0	ND	113	70-130	0.702	20	
Nickel, dissolved	19.4	1.2	2.0	ug/L	20.0	ND	97.0	70-130	1.31	20	
Selenium, dissolved	18.6	0.80	8.0	ug/L	20.0	ND	93.0	70-130	10.7	20	
Silver, dissolved	21.3	0.20	0.40	ug/L	20.0	ND	106	70-130	1.94	20	
Thallium, dissolved	19.8	0.20	0.40	ug/L	20.0	ND	98.9	70-130	0.121	20	
Vanadium, dissolved	21.3	2.0	4.0	ug/L	20.0	ND	106	70-130	2.05	20	
Zinc, dissolved	94.1	8.0	20	ug/L	100	ND	94.1	70-130	0.128	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83973 - General Preparation											
Blank (AE83973-BLK1)					Prepared: 05/22/18 Analyzed: 05/31/18						
Total Dissolved Solids	ND	5.0	10	mg/L							U
Duplicate (AE83973-DUP1)		**Source: 18E2022-02**			Prepared: 05/22/18 Analyzed: 05/31/18						
Total Dissolved Solids	106	5.0	10	mg/L		104			1.90	15	
Duplicate (AE83973-DUP2)		**Source: 18E2096-03**			Prepared: 05/22/18 Analyzed: 05/31/18						
Total Dissolved Solids	192	5.0	10	mg/L		188			2.11	15	
Batch AE84007 - General Preparation											
Blank (AE84007-BLK1)					Prepared: 05/23/18 Analyzed: 05/28/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
Blank (AE84007-BLK2)					Prepared: 05/23/18 Analyzed: 05/28/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
LCS (AE84007-BS1)					Prepared: 05/23/18 Analyzed: 05/28/18						
Biochemical Oxygen Demand	202	2.0	5.0	mg/L	200		101	84-115			
Duplicate (AE84007-DUP1)		**Source: 18E2149-02**			Prepared: 05/23/18 Analyzed: 05/28/18						
Biochemical Oxygen Demand	272	2.0	5.0	mg/L		274			0.806	30	
Batch AE84121 - General Preparation											
Duplicate (AE84121-DUP1)		**Source: 18E2083-09**			Prepared & Analyzed: 05/31/18						
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Bicarbonate Alkalinity as CaCO3	132	1.0	5.0	mg/L		132			0.00	20	
Total Alkalinity as CaCO3	132	1.0	5.0	mg/L		132			0.00	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84139 - General Preparation											
Blank (AE84139-BLK1)					Prepared: 05/25/18 Analyzed: 05/29/18						
Total Suspended Solids	ND	0.30	1.0	mg/L							U
Duplicate (AE84139-DUP1)		**Source: 18E2167-01**			Prepared: 05/25/18 Analyzed: 05/29/18						
Total Suspended Solids	143	0.30	1.0	mg/L		152			6.02	30	
Duplicate (AE84139-DUP2)		**Source: 18E2322-01**			Prepared: 05/25/18 Analyzed: 05/29/18						
Total Suspended Solids	731	0.30	1.0	mg/L		657			10.6	30	
Batch AE84143 - General Prep											
Blank (AE84143-BLK1)					Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	ND	0.600	1.00	mg/L							U
LCS (AE84143-BS1)					Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	10.0	0.600	1.00	mg/L	10.0		100	85-115			
LCS Dup (AE84143-BSD1)					Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	8.89	0.600	1.00	mg/L	10.0		88.9	85-115	11.8	20	
Duplicate (AE84143-DUP1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	2.34	0.600	1.00	mg/L		2.46			4.86	20	
MRL Check (AE84143-MRL1)					Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	1.57	0.600	1.00	mg/L	2.50		62.9	0-200			
Matrix Spike (AE84143-MS1)		**Source: 18E1576-02**			Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	21.6	1.20	2.00	mg/L	20.0	ND	108	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84143 - General Prep											
Matrix Spike Dup (AE84143-MSD1)		**Source: 18E1576-02**			Prepared & Analyzed: 05/25/18						
Dissolved Organic Carbon	21.4	1.20	2.00	mg/L	20.0	ND	107	70-130	0.866	20	
Batch AE84144 - General Prep											
Blank (AE84144-BLK1)					Prepared & Analyzed: 05/28/18						
Total Organic Carbon	ND	0.300	1.00	mg/L							U
LCS (AE84144-BS1)					Prepared & Analyzed: 05/28/18						
Total Organic Carbon	10.2	0.300	1.00	mg/L	10.0		102	85-115			
LCS Dup (AE84144-BSD1)					Prepared & Analyzed: 05/28/18						
Total Organic Carbon	10.0	0.300	1.00	mg/L	10.0		100	85-115	2.30	20	
Duplicate (AE84144-DUP1)		**Source: 18E1576-03**			Prepared & Analyzed: 05/28/18						
Total Organic Carbon	2.20	0.300	1.00	mg/L		2.22			0.947	20	
MRL Check (AE84144-MRL1)					Prepared: 05/25/18 Analyzed: 05/28/18						
Total Organic Carbon	1.28	0.300	1.00	mg/L	2.50		51.1	0-200			
Matrix Spike (AE84144-MS1)		**Source: 18E1576-04**			Prepared & Analyzed: 05/28/18						
Total Organic Carbon	21.2	0.600	2.00	mg/L	20.0	2.19	95.3	70-130			
Matrix Spike Dup (AE84144-MSD1)		**Source: 18E1576-04**			Prepared & Analyzed: 05/28/18						
Total Organic Carbon	22.4	0.600	2.00	mg/L	20.0	2.19	101	70-130	5.07	20	
Batch AE84260 - General Preparation											
LCS (AE84260-BS1)					Prepared & Analyzed: 05/30/18						
Ammonia as N	4.82	0.10	0.20	mg/L	5.00		96.3	90-110			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84260 - General Preparation											
LCS Dup (AE84260-BSD1)					Prepared & Analyzed: 05/30/18						
Ammonia as N	4.99	0.10	0.20	mg/L	5.00		99.8	90-110	3.57	10	
Matrix Spike (AE84260-MS1)		**Source: 18E2100-01**			Prepared & Analyzed: 05/30/18						
Ammonia as N	9.28	0.10	0.20	mg/L	10.0	ND	92.8	85-115			
Matrix Spike Dup (AE84260-MSD1)		**Source: 18E2100-01**			Prepared & Analyzed: 05/30/18						
Ammonia as N	9.46	0.10	0.20	mg/L	10.0	ND	94.6	85-115	1.87	20	
Batch AE84302 - General Preparation											
Blank (AE84302-BLK1)					Prepared: 05/31/18 Analyzed: 06/01/18						
Oil & Grease (HEM)	ND	1.4	5.0	mg/L							U
LCS (AE84302-BS1)					Prepared: 05/31/18 Analyzed: 06/01/18						
Oil & Grease (HEM)	39.6	1.4	5.0	mg/L	40.0		99.0	78-114			
LCS Dup (AE84302-BSD1)					Prepared: 05/31/18 Analyzed: 06/01/18						
Oil & Grease (HEM)	39.3	1.4	5.0	mg/L	40.0		98.2	78-114	0.760	18	
Matrix Spike (AE84302-MS1)		**Source: 18E2342-02**			Prepared: 05/31/18 Analyzed: 06/01/18						
Oil & Grease (HEM)	31.8	1.4	5.0	mg/L	40.0	1.40	76.0	78-114			QM-05
Batch AF83032 - General Prep											
LCS (AF83032-BS1)					Prepared: 06/01/18 Analyzed: 06/02/18						
Total Kjeldahl Nitrogen	3.04	0.20	1.0	mg/L	2.98		102	80-120			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83032 - General Prep											
LCS Dup (AF83032-BSD1)					Prepared: 06/01/18 Analyzed: 06/02/18						
Total Kjeldahl Nitrogen	3.04	0.20	1.0	mg/L	2.98		102	80-120	0.00	20	
Matrix Spike (AF83032-MS1)		**Source: 18E2103-01**			Prepared: 06/01/18 Analyzed: 06/02/18						
Total Kjeldahl Nitrogen	56.8	0.20	1.0	mg/L	2.98	52.0	160	75-125			QM-4X
Matrix Spike Dup (AF83032-MSD1)		**Source: 18E2103-01**			Prepared: 06/01/18 Analyzed: 06/02/18						
Total Kjeldahl Nitrogen	56.8	0.20	1.0	mg/L	2.98	52.0	160	75-125	0.00	20	QM-4X
Batch AF83041 - Metals Digest											
Blank (AF83041-BLK1)					Prepared: 06/01/18 Analyzed: 06/05/18						
Hardness, Total	ND	1	5	mg/L							U
Duplicate (AF83041-DUP1)		**Source: 18E1999-01**			Prepared: 06/01/18 Analyzed: 06/05/18						
Hardness, Total	75	1	5	mg/L		66			13.5	20	
Batch AF83117 - General Preparation											
Blank (AF83117-BLK1)					Prepared: 05/22/18 Analyzed: 06/05/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L							U
Duplicate (AF83117-DUP1)		**Source: 18E2022-01**			Prepared: 05/22/18 Analyzed: 06/05/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Batch AF83148 - General Prep											
Blank (AF83148-BLK1)					Prepared & Analyzed: 06/05/18						
Phosphorus, total	ND	0.011	0.040	mg/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83148 - General Prep											
LCS (AF83148-BS1)					Prepared & Analyzed: 06/05/18						
Phosphorus, total	0.200	0.011	0.040	mg/L	0.200		100	85-115			
Duplicate (AF83148-DUP1)		**Source: 18E2103-01**			Prepared & Analyzed: 06/05/18						
Phosphorus, total	6.21	0.55	2.0	mg/L		6.14			1.12	20	
Matrix Spike (AF83148-MS1)		**Source: 18E2103-01**			Prepared & Analyzed: 06/05/18						
Phosphorus, total	6.48	0.55	2.0	mg/L	2.00	6.14	17.3	70-130			QM-4X
Matrix Spike (AF83148-MS2)		**Source: 18E2022-01**			Prepared & Analyzed: 06/05/18						
Phosphorus, total	0.195	0.011	0.040	mg/L	0.200	ND	97.3	70-130			
Matrix Spike Dup (AF83148-MSD1)		**Source: 18E2103-01**			Prepared & Analyzed: 06/05/18						
Phosphorus, total	6.42	0.55	2.0	mg/L	2.00	6.14	13.8	70-130	1.07	20	QM-4X

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83979 - General Preparation											
Blank (AE83979-BLK1)					Prepared & Analyzed: 05/22/18						
Orthophosphate	0.114	0.10	0.30	mg/L							J
Nitrite as N	ND	0.050	0.20	mg/L							U
Nitrate as N	ND	0.040	0.20	mg/L							U
LCS (AE83979-BS1)					Prepared & Analyzed: 05/22/18						
Nitrate as N	6.01	0.040	0.20	mg/L	5.56		108	90-110			
Nitrite as N	5.75	0.050	0.20	mg/L	5.56		104	90-110			
Orthophosphate	18.2	0.10	0.30	mg/L	16.7		109	90-110			
Duplicate (AE83979-DUP1)		**Source: 18E2022-02**			Prepared & Analyzed: 05/22/18						
Nitrate as N	0.0463	0.040	0.20	mg/L		0.0469			1.45	20	J
Orthophosphate	ND	0.10	0.30	mg/L		ND				20	U
Nitrite as N	ND	0.050	0.20	mg/L		ND				20	U
Matrix Spike (AE83979-MS1)		**Source: 18E2022-02**			Prepared & Analyzed: 05/22/18						
Orthophosphate	17.8	0.10	0.30	mg/L	16.7	ND	107	80-120			
Nitrate as N	5.88	0.040	0.20	mg/L	5.56	0.0469	105	80-120			
Nitrite as N	5.72	0.050	0.20	mg/L	5.56	ND	103	80-120			
Matrix Spike (AE83979-MS2)		**Source: 18E2096-03**			Prepared & Analyzed: 05/22/18						
Nitrite as N	5.42	0.25	1.0	mg/L	5.56	ND	97.6	80-120			
Orthophosphate	15.9	0.50	1.5	mg/L	16.7	ND	95.6	80-120			
Nitrate as N	5.75	0.20	1.0	mg/L	5.56	ND	104	80-120			
Matrix Spike Dup (AE83979-MSD1)		**Source: 18E2022-02**			Prepared & Analyzed: 05/22/18						
Nitrate as N	5.88	0.040	0.20	mg/L	5.56	0.0469	105	80-120	0.00	20	
Orthophosphate	17.8	0.10	0.30	mg/L	16.7	ND	107	80-120	0.150	20	
Nitrite as N	5.71	0.050	0.20	mg/L	5.56	ND	103	80-120	0.156	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

TPH by EPA/LUFT GC Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84026 - SVOAs in Water GC											
Blank (AE84026-BLK1)					Prepared: 05/23/18 Analyzed: 05/24/18						
TPH as Diesel	ND	50	250	ug/L							U
TPH as Motor Oil	ND	100	250	ug/L							U
Surrogate: Tetratetracontane	*45.8*			*ug/L*	*56.0*		*81.9*	*39-120*			
LCS (AE84026-BS1)					Prepared: 05/23/18 Analyzed: 05/24/18						
TPH as Diesel	1850	50	250	ug/L	2070		89.6	61-120			
Surrogate: Tetratetracontane	*45.5*			*ug/L*	*56.0*		*81.3*	*39-120*			
LCS (AE84026-BS2)					Prepared: 05/23/18 Analyzed: 05/24/18						
TPH as Motor Oil	1630	100	250	ug/L	1990		82.1	71-125			
Surrogate: Tetratetracontane	*42.4*			*ug/L*	*56.0*		*75.7*	*39-120*			
LCS Dup (AE84026-BSD1)					Prepared: 05/23/18 Analyzed: 05/24/18						
TPH as Diesel	1720	50	250	ug/L	2070		83.1	61-120	7.53	25	
Surrogate: Tetratetracontane	*47.4*			*ug/L*	*56.0*		*84.7*	*39-120*			
LCS Dup (AE84026-BSD2)					Prepared: 05/23/18 Analyzed: 05/24/18						
TPH as Motor Oil	1500	100	250	ug/L	1990		75.2	71-125	8.74	25	
Surrogate: Tetratetracontane	*32.2*			*ug/L*	*56.0*		*57.5*	*39-120*			
Matrix Spike (AE84026-MS1)		**Source: 18E1972-01**			Prepared: 05/23/18 Analyzed: 05/24/18						
TPH as Diesel	1470	50	250	ug/L	2070	ND	71.1	61-120			
Surrogate: Tetratetracontane	*34.3*			*ug/L*	*56.0*		*61.3*	*39-120*			
Matrix Spike (AE84026-MS2)		**Source: 18E2044-01**			Prepared: 05/23/18 Analyzed: 05/24/18						
TPH as Diesel	1570	50	250	ug/L	2070	ND	75.6	61-120			
Surrogate: Tetratetracontane	*32.8*			*ug/L*	*56.0*		*58.6*	*39-120*			

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

TPH by EPA/LUFT GCMS Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83959 - VOAs in Water GCMS											
Blank (AE83959-BLK1)					Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Gasoline	ND	50	50	ug/L							U
Surrogate: Toluene-d8	*24.0*			*ug/L*	*25.0*		*96.0*	*76-129*			
LCS (AE83959-BS1)					Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Gasoline	197	50	50	ug/L	200		98.5	67-132			
Surrogate: Toluene-d8	*24.0*			*ug/L*	*25.0*		*96.0*	*76-129*			
LCS Dup (AE83959-BSD1)					Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Gasoline	197	50	50	ug/L	200		98.5	67-132	0.00	25	
Surrogate: Toluene-d8	*24.0*			*ug/L*	*25.0*		*96.0*	*76-129*			
Matrix Spike (AE83959-MS1)		**Source: 18E1751-03**			Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Gasoline	198	50	50	ug/L	200	ND	99.0	37-156			
Surrogate: Toluene-d8	*25.0*			*ug/L*	*25.0*		*100*	*76-129*			
Matrix Spike (AE83959-MS2)		**Source: 18E1751-04**			Prepared: 05/21/18 Analyzed: 05/22/18						
TPH as Gasoline	201	50	50	ug/L	200	ND	100	37-156			
Surrogate: Toluene-d8	*25.0*			*ug/L*	*25.0*		*100*	*76-129*			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83958 - VOAs in Water GCMS											
Blank (AE83958-BLK1)					Prepared: 05/21/18 Analyzed: 05/22/18						
Benzene	ND	0.30	0.30	ug/L							U
Toluene	ND	0.30	0.30	ug/L							U
Ethylbenzene	ND	0.40	0.50	ug/L							U
Xylenes (total)	ND	0.50	0.50	ug/L							U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L							U
Di-isopropyl ether	ND	0.40	0.50	ug/L							U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L							U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L							U
Tert-butyl alcohol	ND	6.0	10	ug/L							U
Surrogate: Bromofluorobenzene	*26.4*			*ug/L*	*25.0*		*105*	*70-130*			
Surrogate: Dibromofluoromethane	*26.2*			*ug/L*	*25.0*		*105*	*70-130*			
Surrogate: Toluene-d8	*28.7*			*ug/L*	*25.0*		*115*	*70-130*			
LCS (AE83958-BS1)					Prepared: 05/21/18 Analyzed: 05/22/18						
Benzene	20.8	0.30	0.30	ug/L	20.0		104	82-122			
Toluene	22.9	0.30	0.30	ug/L	20.0		115	75-134			
Ethylbenzene	22.5	0.40	0.50	ug/L	20.0		112	84-124			
Xylenes (total)	63.1	0.50	0.50	ug/L	60.0		105	81-126			
Methyl tert-butyl ether	19.3	0.50	0.50	ug/L	20.0		96.7	84-119			
Di-isopropyl ether	22.5	0.40	0.50	ug/L	20.0		112	83-132			
Ethyl tert-butyl ether	21.8	0.40	0.50	ug/L	20.0		109	74-127			
Tert-amyl methyl ether	18.7	0.40	0.50	ug/L	20.0		93.6	74-120			
Tert-butyl alcohol	370	6.0	10	ug/L	400		92.4	66-147			
Surrogate: Bromofluorobenzene	*28.5*			*ug/L*	*25.0*		*114*	*70-130*			
Surrogate: Dibromofluoromethane	*26.3*			*ug/L*	*25.0*		*105*	*70-130*			
Surrogate: Toluene-d8	*28.4*			*ug/L*	*25.0*		*114*	*70-130*			
LCS Dup (AE83958-BSD1)					Prepared: 05/21/18 Analyzed: 05/22/18						
Benzene	21.0	0.30	0.30	ug/L	20.0		105	82-122	0.958	25	
Toluene	23.5	0.30	0.30	ug/L	20.0		118	75-134	2.63	25	
Ethylbenzene	22.6	0.40	0.50	ug/L	20.0		113	84-124	0.355	25	
Xylenes (total)	63.9	0.50	0.50	ug/L	60.0		106	81-126	1.17	25	
Methyl tert-butyl ether	19.7	0.50	0.50	ug/L	20.0		98.6	84-119	2.00	25	
Di-isopropyl ether	22.7	0.40	0.50	ug/L	20.0		113	83-132	0.930	25	
Ethyl tert-butyl ether	21.8	0.40	0.50	ug/L	20.0		109	74-127	0.00	25	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:22

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE83958 - VOAs in Water GCMS											
LCS Dup (AE83958-BSD1)					Prepared: 05/21/18 Analyzed: 05/22/18						
Tert-amyl methyl ether	19.2	0.40	0.50	ug/L	20.0		95.9	74-120	2.37	25	
Tert-butyl alcohol	380	6.0	10	ug/L	400		94.9	66-147	2.66	25	
Surrogate: Bromofluorobenzene	*28.5*			*ug/L*	*25.0*		*114*	*70-130*			
Surrogate: Dibromofluoromethane	*26.1*			*ug/L*	*25.0*		*105*	*70-130*			
Surrogate: Toluene-d8	*28.4*			*ug/L*	*25.0*		*114*	*70-130*			
Matrix Spike (AE83958-MS1)		**Source: 18E1751-01**			Prepared: 05/21/18 Analyzed: 05/22/18						
Benzene	21.2	0.30	0.30	ug/L	20.0	ND	106	58-139			
Toluene	23.9	0.30	0.30	ug/L	20.0	ND	120	59-147			
Ethylbenzene	23.4	0.40	0.50	ug/L	20.0	ND	117	59-147			
Xylenes (total)	65.8	0.50	0.50	ug/L	60.0	ND	110	49-153			
Methyl tert-butyl ether	18.4	0.50	0.50	ug/L	20.0	ND	92.2	55-144			
Di-isopropyl ether	22.3	0.40	0.50	ug/L	20.0	ND	112	49-143			
Ethyl tert-butyl ether	21.8	0.40	0.50	ug/L	20.0	ND	109	44-143			
Tert-amyl methyl ether	18.8	0.40	0.50	ug/L	20.0	ND	94.0	41-136			
Tert-butyl alcohol	452	6.0	10	ug/L	400	ND	113	38-175			
Surrogate: Bromofluorobenzene	*28.0*			*ug/L*	*25.0*		*112*	*70-130*			
Surrogate: Dibromofluoromethane	*25.5*			*ug/L*	*25.0*		*102*	*70-130*			
Surrogate: Toluene-d8	*27.8*			*ug/L*	*25.0*		*111*	*70-130*			
Matrix Spike (AE83958-MS2)		**Source: 18E1751-02**			Prepared: 05/21/18 Analyzed: 05/22/18						
Benzene	22.5	0.30	0.30	ug/L	20.0	ND	112	58-139			
Toluene	24.6	0.30	0.30	ug/L	20.0	ND	123	59-147			
Ethylbenzene	24.4	0.40	0.50	ug/L	20.0	ND	122	59-147			
Xylenes (total)	68.3	0.50	0.50	ug/L	60.0	ND	114	49-153			
Methyl tert-butyl ether	20.0	0.50	0.50	ug/L	20.0	ND	100	55-144			
Di-isopropyl ether	23.8	0.40	0.50	ug/L	20.0	ND	119	49-143			
Ethyl tert-butyl ether	23.1	0.40	0.50	ug/L	20.0	ND	115	44-143			
Tert-amyl methyl ether	19.8	0.40	0.50	ug/L	20.0	ND	99.0	41-136			
Tert-butyl alcohol	477	6.0	10	ug/L	400	ND	119	38-175			
Surrogate: Bromofluorobenzene	*28.5*			*ug/L*	*25.0*		*114*	*70-130*			
Surrogate: Dibromofluoromethane	*26.8*			*ug/L*	*25.0*		*107*	*70-130*			
Surrogate: Toluene-d8	*28.4*			*ug/L*	*25.0*		*113*	*70-130*			

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Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	06/25/18 13:22

Notes and Definitions

FILT	The sample was filtered in the lab prior to analysis.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QM-01	The spike recovery for this QC sample is outside of established control limits possibly due to a sample matrix interference.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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June 11, 2018

Lab ID: 18E1169

SHERI L. SPEAKS
ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
RE: LOW LEVEL METALS 18E2022

Dear SHERI L. SPEAKS ,

Enclosed are the analysis results for Work Order number 18E1169. All analyses were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

Ricky D. Jensen
Laboratory Director
California ELAP Certification Number 1677

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18E2022

Lab No: 18E1169
Reported: 06/11/18
Phone: (707) 468-0401
P.O. #

Metals - Total

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
18E2022-01 BL-R - Grab Water (18E1169-01) Sampled:05/21/18 13:10 Received:05/23/18 12:37									
Mercury	ng/l	ND		0.20	0.50	EPA 1631E	05/30/18	05/30/18	B8E1589
Methyl Mercury as Mercury	"	ND		0.020	0.050	EPA 1630	06/05/18	06/04/18	B8F0885
18E2022-02 R-DUP - Grab Water (18E1169-02) Sampled:05/21/18 14:55 Received:05/23/18 12:37									
Mercury	ng/l	**3.45**		0.20	0.50	EPA 1631E	05/30/18	05/30/18	B8E1589
Methyl Mercury as Mercury	"	**0.150**		0.020	0.050	EPA 1630	06/08/18	06/07/18	B8F0980
18E2022-03 EB-BLPH - Grab Water (18E1169-03) Sampled:05/21/18 14:30 Received:05/23/18 12:37									
Mercury	ng/l	**3.51**		0.20	0.50	EPA 1631E	05/30/18	05/30/18	B8E1589
Methyl Mercury as Mercury	"	**0.155**		0.020	0.050	EPA 1630	06/08/18	06/07/18	B8F0980
18E2022-04 EB-ABLM - Grab Water (18E1169-04) Sampled:05/21/18 15:45 Received:05/23/18 12:37									
Mercury	ng/l	**2.09**		0.20	0.50	EPA 1631E	05/30/18	05/30/18	B8E1589
Methyl Mercury as Mercury	"	**0.079**		0.020	0.050	EPA 1630	06/08/18	06/07/18	B8F0980

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18E2022

Lab No: 18E1169
Reported: 06/11/18
Phone: (707) 468-0401
P.O. #

Quality Control Data

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Metals - Total										
Batch B8E1589 - BrCl Digestion										
Blank										
Mercury	ND	0.50	ng/l							
Blank										
Mercury	ND	0.50	ng/l							QB-06
Blank										
Mercury	ND	0.50	ng/l							
LCS										
Mercury	9.97	0.50	ng/l	10.0		99.7	77-123			
Matrix Spike Source: 18E1166-01										
Mercury	14.6	0.50	ng/l	10.0	3.50	111	71-125			
Matrix Spike Source: 18E1276-01										
Mercury	13.9	0.50	ng/l	10.0	2.09	118	71-125			
Matrix Spike Dup Source: 18E1166-01										
Mercury	14.2	0.50	ng/l	10.0	3.50	107	71-125	2.78	24	
Matrix Spike Dup Source: 18E1276-01										
Mercury	13.8	0.50	ng/l	10.0	2.09	117	71-125	1.05	24	
Batch B8F0885 - Draft EPA Method 1630 Distillation (Modified)										
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
LCS										
Methyl Mercury as Mercury	2.22	0.050	ng/l	2.00		111	67-133			
Matrix Spike Source: 18E0981-01										
Methyl Mercury as Mercury	1.19	0.050	ng/l	1.00	0.021	117	65-135			
Matrix Spike Source: 18E1166-03										
Methyl Mercury as Mercury	1.13	0.050	ng/l	1.00	ND	113	65-135			
Matrix Spike Dup Source: 18E0981-01										
Methyl Mercury as Mercury	1.22	0.050	ng/l	1.00	0.021	120	65-135	2.13	35	
Matrix Spike Dup Source: 18E1166-03										
Methyl Mercury as Mercury	1.13	0.050	ng/l	1.00	ND	113	65-135	0.0531	35	
Batch B8F0980 - Draft EPA Method 1630 Distillation (Modified)										
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18E2022

Lab No: 18E1169
Reported: 06/11/18
Phone: (707) 468-0401
P.O. #

Quality Control Data

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Metals - Total										
Batch B8F0980 - Draft EPA Method 1630 Distillation (Modified)										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
LCS										
Methyl Mercury as Mercury	1.60	0.050	ng/l	2.00		79.8	67-133			
Matrix Spike Source: 18E1169-03										
Methyl Mercury as Mercury	1.25	0.050	ng/l	1.00	0.155	110	65-135			
Matrix Spike Dup Source: 18E1169-03										
Methyl Mercury as Mercury	1.24	0.050	ng/l	1.00	0.155	108	65-135	1.26	35	

Notes and Definitions

QB-06	Some samples in this batch required an additional amount of BrCl to fully oxidize the sample. Per EPA method 1631E requirements, this Method Blank contains an increased concentration of BrCl to match the sample matrix.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
<	Less than reporting limit
≤	Less than or equal to reporting limit
>	Greater than reporting limit
≥	Greater than or equal to reporting limit
MDL	Method Detection Limit
RL/ML	Minimum Level of Quantitation
MCL/AL	Maxium Contaminant Level/Action Level
mg/kg	Results reported as wet weight
TTLC	Total Threshold Limit Concentration
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leachate Procedure

Note 1 Received Temperature - according to EPA guidelines, samples for most chemistry methods should be held at ≤6 degrees C after collection, including during transportation, unless the time from sampling to delivery is <2 hours. Regulating agencies may invalidate results if temperature requirements are not met.

Note 2 According to 40 CFR Part 136 Table II, the following tests should be analyzed in the field within 15 minutes of sampling: pH, chlorine, dissolved oxygen, and sulfite.

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Basic Laboratory Inc
California ELAP Cert #1677 and #2718

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18E2022

18E1169
6-5-18

18E1169
1

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

Basic Laboratory
2218 Railroad Ave
Redding, CA 96001
Phone :530-243-7234
Fax: 530-243-7494
Terms: Net 30

Analysis	Due	Expires	Comments
18E2022-01 BL-R [Water] Sampled 05/21/18 13:10			-1 4.9°
BAL Hg 1631	06/05/18 12:00	06/18/18 13:10	
BAL Hg Methyl	06/05/18 12:00	11/17/18 13:10	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E2022-02 R-DUP [Water] Sampled 05/21/18 14:55			-2 3.4°
BAL Hg 1631	06/05/18 12:00	06/18/18 14:55	
BAL Hg Methyl	06/05/18 12:00	11/17/18 14:55	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E2022-03 EB-BLPH [Water] Sampled 05/21/18 14:30			-3 6.1°
BAL Hg 1631	06/05/18 12:00	06/18/18 14:30	
BAL Hg Methyl	06/05/18 12:00	11/17/18 14:30	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E2022-04 EB-ABLM [Water] Sampled 05/21/18 15:45			-4 3.5°
BAL Hg 1631	06/05/18 12:00	06/18/18 15:45	
BAL Hg Methyl	06/05/18 12:00	11/17/18 15:45	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			

Released By	5-22-18 Date	T Wilhelmson Received By	5-23-18 Date	1237
Released By	Date	TW Received By	5-23-18 Date	1407

SUBCONTRACT ORDER

18 E 1169

Alpha Analytical Laboratories, Inc.

18E2022

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+QC
+MDL

Released By | Date | Received By | Date

5-22-18

Released By | Date | Received By | Date

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email: clientservices@alpha-labs.com

ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

Bay Area Laboratory
262 Rickenbacker Circle, Livermore CA 94551
925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18E2022 Pg ____ of ____

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

TAT
Standard 10 days ☒
RUSH: 5 days ○ 48 hours ○ Other: ____days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 3.0
Livermore temp:
Elk Grove temp:

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck PDF

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	CAM17 200.8 dissolved / lab filter	Al dissolved 200.8	Alkalinity	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	TDS	TSS	Chlorophyll-A	~~Sulfide~~	Hg 1631	MeHg 1630	Sample Notes or DDW Source Numbers:
BE-R	5/21	1310															X	X	X	X	X	X	X	X	X		X	X	
R-DUP	↓	1455															↓	↓	↓	↓	↓	↓	X	↓	X		↓	↓	
FB-BUPH	↓	1430															↓	↓	↓	↓	↓	↓	↓	↓	↓		↓	↓	
FB-ABLM	↓	1545															↓	↓	↓	↓	↓	↓	↓	↓	↓		↓	↓	

Relinquished by	Received by	Date	Time
Christina Buck		5-21-18	1648

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID:
EDF to (Email Address):
Sampling Company Log Code:

Travel and Site Time:	Mileage:	Misc. Supplies:

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Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18E2022 Pg _____ of _____

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK ChristinaBuck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	TPH-DMO	TPH-Gas/BTEX/Oxys	Oil and Grease	TOC	DOC	CAM17 200.8 total + Al/Mn	Fe 200.8 Total	Hardness, total	Ammonia-N	Phosphorus, Total	TKN	Sample Notes or DDW Source Numbers:
BL-R	5/21/18	1310															X	X	X	X	X	X	X	X	X	X	X	
R-DUP	5/21/18	1455																										
EB-BLPH	↓	1430																										
EB-ABLM	↓	1515															↓	↓	↓		↓	↓	↓	↓	↓	↓	↓	

TAT
Standard 10 days: X
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 3.0
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
ChristinaBuck		5-21-18	1640

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):
Travel and Site Time: Mileage: Misc. Supplies:

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

ELAP Certificates 1551, 2728, and 2922

25 June 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18E2239

Enclosed are the results of analyses for samples received by the laboratory on 05/22/18 16:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LP2-S	18E2239-01	Water	05/22/18 12:05	05/22/18 16:50
LP2-M	18E2239-02	Water	05/22/18 12:40	05/22/18 16:50
LP2-B	18E2239-03	Water	05/22/18 13:10	05/22/18 16:50
LP-EQB	18E2239-04	Water	05/22/18 15:15	05/22/18 16:50

This represents an amended copy of the original report.

Subcontracted results added.

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.

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-S (18E2239-01) Water Sampled: 05/22/18 12:05 Received: 05/22/18 16:50											
Calcium	**17**	**0.080**	**1.0**	**mg/L**	1	AF83043	06/01/18 12:00	06/05/18 17:07	EPA 200.7	MAM	
Magnesium	**4.5**	**0.030**	**1.0**	**mg/L**	1	AF83043	06/01/18 12:00	06/05/18 17:07	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AF83225	06/06/18 08:19	06/07/18 11:09	EPA 245.1	EL	U
LP2-M (18E2239-02) Water Sampled: 05/22/18 12:40 Received: 05/22/18 16:50											
Calcium	**17**	**0.080**	**1.0**	**mg/L**	1	AF83043	06/01/18 12:00	06/05/18 17:12	EPA 200.7	MAM	
Magnesium	**4.5**	**0.030**	**1.0**	**mg/L**	1	AF83043	06/01/18 12:00	06/05/18 17:12	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AF83225	06/06/18 08:19	06/07/18 11:12	EPA 245.1	EL	U
LP2-B (18E2239-03) Water Sampled: 05/22/18 13:10 Received: 05/22/18 16:50											
Calcium	**18**	**0.080**	**1.0**	**mg/L**	1	AF83043	06/01/18 12:00	06/05/18 17:16	EPA 200.7	MAM	
Magnesium	**5.0**	**0.030**	**1.0**	**mg/L**	1	AF83043	06/01/18 12:00	06/05/18 17:16	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AF83225	06/06/18 08:19	06/07/18 11:14	EPA 245.1	EL	U
LP-EQB (18E2239-04) Water Sampled: 05/22/18 15:15 Received: 05/22/18 16:50											
Calcium	ND	0.080	1.0	mg/L	1	AF83043	06/01/18 12:00	06/05/18 17:21	EPA 200.7	MAM	U
Magnesium	ND	0.030	1.0	mg/L	1	AF83043	06/01/18 12:00	06/05/18 17:21	EPA 200.7	MAM	U
Mercury	ND	0.060	0.20	ug/L	1	AF83221	06/06/18 08:06	06/06/18 16:07	EPA 245.1	EL	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-S (18E2239-01) Water Sampled: 05/22/18 12:05 Received: 05/22/18 16:50											
Aluminum	**31**	**20**	**40**	**ug/L**	4	AE84104	05/24/18 13:15	05/25/18 18:51	EPA 200.8	MMY	R-01, J
Antimony	ND	0.80	2.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:51	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:51	EPA 200.8	MMY	R-01, U
Barium	**51**	**0.80**	**2.0**	**ug/L**	4	AE84104	05/24/18 13:15	05/25/18 18:51	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:51	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:51	EPA 200.8	MMY	R-01, U
Chromium	ND	1.6	2.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:51	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.12	0.40	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:51	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:51	EPA 200.8	MMY	R-01, U
Iron	**78**	**40**	**200**	**ug/L**	4	AE84104	05/24/18 13:15	05/25/18 18:51	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:51	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:51	EPA 200.8	MMY	R-01, U
Molybdenum	**0.41**	**0.28**	**1.0**	**ug/L**	4	AE84104	05/24/18 13:15	05/25/18 18:51	EPA 200.8	MMY	R-01, J
Nickel	**1.9**	**1.2**	**2.0**	**ug/L**	4	AE84104	05/24/18 13:15	05/25/18 18:51	EPA 200.8	MMY	R-01, J
Selenium	ND	0.80	8.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:51	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:51	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:51	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:51	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:51	EPA 200.8	MMY	R-01, U
LP2-M (18E2239-02) Water Sampled: 05/22/18 12:40 Received: 05/22/18 16:50											
Aluminum	**36**	**20**	**40**	**ug/L**	4	AE84104	05/24/18 13:15	05/25/18 18:58	EPA 200.8	MMY	R-01, J
Antimony	ND	0.80	2.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:58	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:58	EPA 200.8	MMY	R-01, U
Barium	**51**	**0.80**	**2.0**	**ug/L**	4	AE84104	05/24/18 13:15	05/25/18 18:58	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:58	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:58	EPA 200.8	MMY	R-01, U
Chromium	ND	1.6	2.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:58	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.12	0.40	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:58	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:58	EPA 200.8	MMY	R-01, U
Iron	**76**	**40**	**200**	**ug/L**	4	AE84104	05/24/18 13:15	05/25/18 18:58	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:58	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:58	EPA 200.8	MMY	R-01, U
Molybdenum	**0.33**	**0.28**	**1.0**	**ug/L**	4	AE84104	05/24/18 13:15	05/25/18 18:58	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-M (18E2239-02) Water Sampled: 05/22/18 12:40 Received: 05/22/18 16:50											
Nickel	**1.8**	**1.2**	**2.0**	**ug/L**	4	AE84104	05/24/18 13:15	05/25/18 18:58	EPA 200.8	MMY	R-01, J
Selenium	ND	0.80	8.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:58	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:58	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:58	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:58	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84104	05/24/18 13:15	05/25/18 18:58	EPA 200.8	MMY	R-01, U
LP2-B (18E2239-03) Water Sampled: 05/22/18 13:10 Received: 05/22/18 16:50											
Aluminum	**76**	**20**	**40**	**ug/L**	4	AE84104	05/24/18 13:15	05/25/18 19:05	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:05	EPA 200.8	MMY	R-01, U
Arsenic	**1.3**	**0.80**	**2.0**	**ug/L**	4	AE84104	05/24/18 13:15	05/25/18 19:05	EPA 200.8	MMY	R-01, J
Barium	**47**	**0.80**	**2.0**	**ug/L**	4	AE84104	05/24/18 13:15	05/25/18 19:05	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:05	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:05	EPA 200.8	MMY	R-01, U
Chromium	ND	1.6	2.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:05	EPA 200.8	MMY	R-01, U
Cobalt	**0.19**	**0.12**	**0.40**	**ug/L**	4	AE84104	05/24/18 13:15	05/25/18 19:05	EPA 200.8	MMY	R-01, J
Copper	ND	1.6	2.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:05	EPA 200.8	MMY	R-01, U
Iron	**120**	**40**	**200**	**ug/L**	4	AE84104	05/24/18 13:15	05/25/18 19:05	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:05	EPA 200.8	MMY	R-01, U
Manganese	**8.1**	**8.0**	**20**	**ug/L**	4	AE84104	05/24/18 13:15	05/25/18 19:05	EPA 200.8	MMY	R-01, J
Molybdenum	**0.30**	**0.28**	**1.0**	**ug/L**	4	AE84104	05/24/18 13:15	05/25/18 19:05	EPA 200.8	MMY	R-01, J
Nickel	**1.7**	**1.2**	**2.0**	**ug/L**	4	AE84104	05/24/18 13:15	05/25/18 19:05	EPA 200.8	MMY	R-01, J
Selenium	ND	0.80	8.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:05	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:05	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:05	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:05	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:05	EPA 200.8	MMY	R-01, U

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-EQB (18E2239-04) Water Sampled: 05/22/18 15:15 Received: 05/22/18 16:50											
Aluminum	ND	20	40	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:11	EPA 200.8	MMY	R-01, U
Antimony	ND	0.80	2.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:11	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:11	EPA 200.8	MMY	R-01, U
Barium	ND	0.80	2.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:11	EPA 200.8	MMY	R-01, U
Beryllium	ND	0.20	0.40	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:11	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:11	EPA 200.8	MMY	R-01, U
Chromium	ND	1.6	2.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:11	EPA 200.8	MMY	R-01, U
Cobalt	**0.30**	**0.12**	**0.40**	**ug/L**	4	AE84104	05/24/18 13:15	05/25/18 19:11	EPA 200.8	MMY	R-01, J
Copper	ND	1.6	2.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:11	EPA 200.8	MMY	R-01, U
Iron	ND	40	200	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:11	EPA 200.8	MMY	R-01, U
Lead	ND	0.24	1.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:11	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:11	EPA 200.8	MMY	R-01, U
Molybdenum	ND	0.28	1.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:11	EPA 200.8	MMY	R-01, U
Nickel	ND	1.2	2.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:11	EPA 200.8	MMY	R-01, U
Selenium	ND	0.80	8.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:11	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:11	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:11	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:11	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84104	05/24/18 13:15	05/25/18 19:11	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-S (18E2239-01) Water Sampled: 05/22/18 12:05 Received: 05/22/18 16:50											**FILT**
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AF83272	06/07/18 08:19	06/08/18 09:17	EPA 245.1	EL	U
LP2-M (18E2239-02) Water Sampled: 05/22/18 12:40 Received: 05/22/18 16:50											
Mercury, dissolved	**0.066**	**0.060**	**0.20**	**ug/L**	1	AE84314	05/31/18 08:46	05/31/18 16:06	EPA 245.1	EL	J
LP2-B (18E2239-03) Water Sampled: 05/22/18 13:10 Received: 05/22/18 16:50											
Mercury, dissolved	**0.067**	**0.060**	**0.20**	**ug/L**	1	AE84314	05/31/18 08:46	05/31/18 16:08	EPA 245.1	EL	J
LP-EQB (18E2239-04) Water Sampled: 05/22/18 15:15 Received: 05/22/18 16:50											
Mercury, dissolved	**0.065**	**0.060**	**0.20**	**ug/L**	1	AE84314	05/31/18 08:46	05/31/18 16:11	EPA 245.1	EL	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-S (18E2239-01) Water Sampled: 05/22/18 12:05 Received: 05/22/18 16:50											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:45	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:45	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:45	EPA 200.8	MMY	R-01, U
Barium, dissolved	**51**	**0.80**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 11:45	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:45	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:45	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:45	EPA 200.8	MMY	U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:45	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:45	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:45	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.32**	**0.28**	**1.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 11:45	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.8**	**1.2**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 11:45	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:45	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:45	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:45	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:45	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:45	EPA 200.8	MMY	R-01, U
LP2-M (18E2239-02) Water Sampled: 05/22/18 12:40 Received: 05/22/18 16:50											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:52	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:52	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:52	EPA 200.8	MMY	R-01, U
Barium, dissolved	**52**	**0.80**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 11:52	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:52	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:52	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:52	EPA 200.8	MMY	U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:52	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:52	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:52	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.29**	**0.28**	**1.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 11:52	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.7**	**1.2**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 11:52	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:52	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:52	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:52	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-M (18E2239-02) Water Sampled: 05/22/18 12:40 Received: 05/22/18 16:50											**FILT**
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:52	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:52	EPA 200.8	MMY	R-01, U
LP2-B (18E2239-03) Water Sampled: 05/22/18 13:10 Received: 05/22/18 16:50											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:59	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:59	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:59	EPA 200.8	MMY	R-01, U
Barium, dissolved	**54**	**0.80**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 11:59	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:59	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:59	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:59	EPA 200.8	MMY	U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:59	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:59	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:59	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.32**	**0.28**	**1.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 11:59	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.8**	**1.2**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 11:59	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:59	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:59	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:59	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:59	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:59	EPA 200.8	MMY	R-01, U
LP-EQB (18E2239-04) Water Sampled: 05/22/18 15:15 Received: 05/22/18 16:50											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:06	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:06	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:06	EPA 200.8	MMY	R-01, U
Barium, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:06	EPA 200.8	MMY	R-01, U
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:06	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:06	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:06	EPA 200.8	MMY	U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:06	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:06	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:06	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	ND	0.28	1.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:06	EPA 200.8	MMY	R-01, U
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:06	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-EQB (18E2239-04) Water Sampled: 05/22/18 15:15 Received: 05/22/18 16:50											**FILT**
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:06	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:06	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:06	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:06	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:06	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-S (18E2239-01) Water Sampled: 05/22/18 12:05 Received: 05/22/18 16:50											
Ammonia as N	ND	0.10	0.20	mg/L	1	AF83037	06/01/18 09:00	06/01/18 16:30	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE84082	05/24/18 08:00	05/29/18 08:30	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AF83117	05/24/18 08:30	06/05/18 10:52	SM10200H	PBM	U
Dissolved Organic Carbon	**2.39**	**0.600**	**1.00**	**mg/L**	1	AF83039	06/01/18 07:50	06/04/18 13:17	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AF83156	06/05/18 07:47	06/06/18 13:23	EPA 1664A	STS	U
Sulfide	ND	0.020	0.10	mg/L	1	AE84247	05/29/18 15:00	05/29/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**93**	**5.0**	**10**	**mg/L**	1	AE84117	05/24/18 16:00	05/31/18 11:59	SM2540C	PBM	
Total Suspended Solids	**0.90**	**0.30**	**1.0**	**mg/L**	1	AE84139	05/25/18 16:00	05/29/18 12:50	SM2540D	MRL	J
Bicarbonate Alkalinity as CaCO3	**60**	**1.0**	**5.0**	**mg/L**	1	AE84122	05/31/18 08:00	05/31/18 16:01	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84122	05/31/18 08:00	05/31/18 16:01	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84122	05/31/18 08:00	05/31/18 16:01	SM2320B	CEF	U
Total Alkalinity as CaCO3	**60**	**1.0**	**5.0**	**mg/L**	1	AE84122	05/31/18 08:00	05/31/18 16:01	SM2320B	CEF	
Nitrate + Nitrite as N	**0.025**	**0.0086**	**0.40**	**mg/L**	1	AE84336	06/05/18 12:20	06/05/18 12:41	Calculation	RLG	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AF83107	06/04/18 07:31	06/05/18 12:00	SM4500-Norg B	SMS	U
Hardness, Total	**61**	**1**	**5**	**mg/L**	1	AF83043	06/01/18 12:00	06/05/18 17:07	SM2340B	MAM	
Phosphorus, total	**0.045**	**0.011**	**0.040**	**mg/L**	1	AF83148	06/05/18 09:30	06/05/18 13:25	SM4500-P E	SMS	
Total Organic Carbon	**2.65**	**0.300**	**1.00**	**mg/L**	1	AF83042	06/01/18 07:52	06/01/18 15:23	SM5310C	JIM	
LP2-M (18E2239-02) Water Sampled: 05/22/18 12:40 Received: 05/22/18 16:50											
Ammonia as N	ND	0.10	0.20	mg/L	1	AF83037	06/01/18 09:00	06/01/18 16:30	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	**2.6**	**2.0**	**5.0**	**mg/L**	1	AE84082	05/24/18 08:00	05/29/18 08:30	SM5210B	EF	J
Chlorophyll-a	**0.0011**	**0.0010**	**0.010**	**mg/L**	1	AF83117	05/24/18 08:30	06/05/18 10:52	SM10200H	PBM	J
Dissolved Organic Carbon	**2.24**	**0.600**	**1.00**	**mg/L**	1	AF83039	06/01/18 07:50	06/04/18 13:30	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AF83156	06/05/18 07:47	06/06/18 13:23	EPA 1664A	STS	U
Sulfide	ND	0.020	0.10	mg/L	1	AE84247	05/29/18 15:00	05/29/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**95**	**5.0**	**10**	**mg/L**	1	AE84117	05/24/18 16:00	05/31/18 11:59	SM2540C	PBM	
Total Suspended Solids	**0.80**	**0.30**	**1.0**	**mg/L**	1	AE84139	05/25/18 16:00	05/29/18 12:50	SM2540D	MRL	J
Bicarbonate Alkalinity as CaCO3	**62**	**1.0**	**5.0**	**mg/L**	1	AE84122	05/31/18 08:00	05/31/18 16:01	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84122	05/31/18 08:00	05/31/18 16:01	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84122	05/31/18 08:00	05/31/18 16:01	SM2320B	CEF	U
Total Alkalinity as CaCO3	**62**	**1.0**	**5.0**	**mg/L**	1	AE84122	05/31/18 08:00	05/31/18 16:01	SM2320B	CEF	
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AE84336	06/05/18 12:20	06/05/18 12:41	Calculation	RLG	U
Total Kjeldahl Nitrogen	**0.24**	**0.20**	**1.0**	**mg/L**	1	AF83107	06/04/18 07:31	06/05/18 12:00	SM4500-Norg B	SMS	J
Hardness, Total	**60**	**1**	**5**	**mg/L**	1	AF83043	06/01/18 12:00	06/05/18 17:12	SM2340B	MAM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-M (18E2239-02) Water Sampled: 05/22/18 12:40 Received: 05/22/18 16:50											
Phosphorus, total	**0.040**	**0.011**	**0.040**	**mg/L**	1	AF83148	06/05/18 09:30	06/05/18 13:25	SM4500-P E	SMS	
Total Organic Carbon	**2.62**	**0.300**	**1.00**	**mg/L**	1	AF83042	06/01/18 07:52	06/01/18 15:36	SM5310C	JIM	
LP2-B (18E2239-03) Water Sampled: 05/22/18 13:10 Received: 05/22/18 16:50											
Ammonia as N	ND	0.10	0.20	mg/L	1	AF83037	06/01/18 09:00	06/01/18 16:30	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	**2.4**	**2.0**	**5.0**	**mg/L**	1	AE84082	05/24/18 08:00	05/29/18 08:30	SM5210B	EF	J
Dissolved Organic Carbon	**2.05**	**0.600**	**1.00**	**mg/L**	1	AF83039	06/01/18 07:50	06/04/18 13:43	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AF83156	06/05/18 07:47	06/06/18 13:23	EPA 1664A	STS	U
Sulfide	ND	0.020	0.10	mg/L	1	AE84247	05/29/18 15:00	05/29/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**88**	**5.0**	**10**	**mg/L**	1	AE84117	05/24/18 16:00	05/31/18 11:59	SM2540C	PBM	
Total Suspended Solids	**1.7**	**0.30**	**1.0**	**mg/L**	1	AE84139	05/25/18 16:00	05/29/18 12:50	SM2540D	MRL	
Bicarbonate Alkalinity as CaCO3	**64**	**1.0**	**5.0**	**mg/L**	1	AE84122	05/31/18 08:00	05/31/18 16:01	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84122	05/31/18 08:00	05/31/18 16:01	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84122	05/31/18 08:00	05/31/18 16:01	SM2320B	CEF	U
Total Alkalinity as CaCO3	**64**	**1.0**	**5.0**	**mg/L**	1	AE84122	05/31/18 08:00	05/31/18 16:01	SM2320B	CEF	
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AE84336	06/05/18 12:20	06/05/18 12:41	Calculation	RLG	U
Total Kjeldahl Nitrogen	**0.60**	**0.20**	**1.0**	**mg/L**	1	AF83107	06/04/18 07:31	06/05/18 12:00	SM4500-Norg B	SMS	J
Hardness, Total	**66**	**1**	**5**	**mg/L**	1	AF83043	06/01/18 12:00	06/05/18 17:16	SM2340B	MAM	
Phosphorus, total	**0.019**	**0.011**	**0.040**	**mg/L**	1	AF83148	06/05/18 09:30	06/05/18 13:25	SM4500-P E	SMS	J
Total Organic Carbon	**2.45**	**0.300**	**1.00**	**mg/L**	1	AF83042	06/01/18 07:52	06/01/18 15:49	SM5310C	JIM	
LP-EQB (18E2239-04) Water Sampled: 05/22/18 15:15 Received: 05/22/18 16:50											
Ammonia as N	ND	0.10	0.20	mg/L	1	AF83037	06/01/18 09:00	06/01/18 16:30	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE84082	05/24/18 08:00	05/29/18 08:30	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AF83117	05/24/18 08:30	06/05/18 10:52	SM10200H	PBM	U
Dissolved Organic Carbon	ND	0.600	1.00	mg/L	1	AF83039	06/01/18 07:50	06/04/18 13:56	SM5310C	JIM	U
Oil & Grease (HEM)	**1.7**	**1.4**	**5.0**	**mg/L**	1	AF83156	06/05/18 07:47	06/06/18 13:23	EPA 1664A	STS	J
Sulfide	ND	0.020	0.10	mg/L	1	AE84247	05/29/18 15:00	05/29/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	ND	5.0	10	mg/L	1	AE84117	05/24/18 16:00	05/31/18 11:59	SM2540C	PBM	U
Total Suspended Solids	ND	0.30	1.0	mg/L	1	AE84139	05/25/18 16:00	05/29/18 12:50	SM2540D	MRL	U
Bicarbonate Alkalinity as CaCO3	**2.0**	**1.0**	**5.0**	**mg/L**	1	AE84122	05/31/18 08:00	05/31/18 16:01	SM2320B	CEF	J
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84122	05/31/18 08:00	05/31/18 16:01	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84122	05/31/18 08:00	05/31/18 16:01	SM2320B	CEF	U
Total Alkalinity as CaCO3	**2.0**	**1.0**	**5.0**	**mg/L**	1	AE84122	05/31/18 08:00	05/31/18 16:01	SM2320B	CEF	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-EQB (18E2239-04) Water Sampled: 05/22/18 15:15 Received: 05/22/18 16:50											
Nitrate + Nitrite as N	**0.028**	**0.0086**	**0.40**	**mg/L**	1	AE84336	06/05/18 12:20	06/05/18 12:41	Calculation	RLG	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AF83107	06/04/18 07:31	06/05/18 12:00	SM4500-Norg B	SMS	U
Hardness, Total	ND	1	5	mg/L	1	AF83043	06/01/18 12:00	06/05/18 17:21	SM2340B	MAM	U
Phosphorus, total	ND	0.011	0.040	mg/L	1	AF83148	06/05/18 09:30	06/05/18 13:25	SM4500-P E	SMS	U
Total Organic Carbon	ND	0.300	1.00	mg/L	1	AF83042	06/01/18 07:52	06/01/18 16:01	SM5310C	JIM	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-S (18E2239-01) Water Sampled: 05/22/18 12:05 Received: 05/22/18 16:50											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE84060	05/24/18 11:04	05/24/18 11:04	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE84060	05/24/18 11:04	05/24/18 11:04	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE84060	05/24/18 11:04	05/24/18 11:04	EPA 300.0	SMP	U
LP2-M (18E2239-02) Water Sampled: 05/22/18 12:40 Received: 05/22/18 16:50											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE84060	05/24/18 11:21	05/24/18 11:21	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE84060	05/24/18 11:21	05/24/18 11:21	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE84060	05/24/18 11:21	05/24/18 11:21	EPA 300.0	SMP	U
LP2-B (18E2239-03) Water Sampled: 05/22/18 13:10 Received: 05/22/18 16:50											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE84060	05/24/18 11:37	05/24/18 11:37	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE84060	05/24/18 11:37	05/24/18 11:37	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE84060	05/24/18 11:37	05/24/18 11:37	EPA 300.0	SMP	U
LP-EQB (18E2239-04) Water Sampled: 05/22/18 15:15 Received: 05/22/18 16:50											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE84060	05/24/18 11:53	05/24/18 11:53	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE84060	05/24/18 11:53	05/24/18 11:53	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE84060	05/24/18 11:53	05/24/18 11:53	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

TPH by EPA/LUFT GC Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-S (18E2239-01) Water Sampled: 05/22/18 12:05 Received: 05/22/18 16:50											
TPH as Diesel	ND	50	250	ug/L	1	AE84026	05/23/18 10:11	05/25/18 04:54	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84026	05/23/18 10:11	05/25/18 04:54	8015DRO	DLD	U
Surrogate: Tetratetracontane		*86.2 %*	*39-120*			*AE84026*	*05/23/18 10:11*	*05/25/18 04:54*	*8015DRO*	*DLD*	
LP2-M (18E2239-02) Water Sampled: 05/22/18 12:40 Received: 05/22/18 16:50											
TPH as Diesel	ND	50	250	ug/L	1	AE84026	05/23/18 10:11	05/25/18 05:28	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84026	05/23/18 10:11	05/25/18 05:28	8015DRO	DLD	U
Surrogate: Tetratetracontane		*72.4 %*	*39-120*			*AE84026*	*05/23/18 10:11*	*05/25/18 05:28*	*8015DRO*	*DLD*	
LP2-B (18E2239-03) Water Sampled: 05/22/18 13:10 Received: 05/22/18 16:50											
TPH as Diesel	ND	50	250	ug/L	1	AE84026	05/23/18 10:11	05/25/18 06:03	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84026	05/23/18 10:11	05/25/18 06:03	8015DRO	DLD	U
Surrogate: Tetratetracontane		*90.4 %*	*39-120*			*AE84026*	*05/23/18 10:11*	*05/25/18 06:03*	*8015DRO*	*DLD*	
LP-EQB (18E2239-04) Water Sampled: 05/22/18 15:15 Received: 05/22/18 16:50											
TPH as Diesel	ND	50	250	ug/L	1	AE84026	05/23/18 10:11	05/25/18 06:37	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84026	05/23/18 10:11	05/25/18 06:37	8015DRO	DLD	U
Surrogate: Tetratetracontane		*80.8 %*	*39-120*			*AE84026*	*05/23/18 10:11*	*05/25/18 06:37*	*8015DRO*	*DLD*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

TPH by EPA/LUFT GCMS Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-S (18E2239-01) Water Sampled: 05/22/18 12:05 Received: 05/22/18 16:50											
TPH as Gasoline	ND		50	ug/L	1	AE84045	05/23/18 11:50	05/23/18 12:58	8260GRO	MM	U
Surrogate: Toluene-d8		*96.0 %*	*76-129*			*AE84045*	*05/23/18 11:50*	*05/23/18 12:58*	*8260GRO*	*MM*	
LP2-M (18E2239-02) Water Sampled: 05/22/18 12:40 Received: 05/22/18 16:50											
TPH as Gasoline	ND		50	ug/L	1	AE84045	05/23/18 11:50	05/23/18 13:33	8260GRO	MM	U
Surrogate: Toluene-d8		*100 %*	*76-129*			*AE84045*	*05/23/18 11:50*	*05/23/18 13:33*	*8260GRO*	*MM*	
LP2-B (18E2239-03) Water Sampled: 05/22/18 13:10 Received: 05/22/18 16:50											
TPH as Gasoline	ND		50	ug/L	1	AE84045	05/23/18 11:50	05/23/18 14:08	8260GRO	MM	U
Surrogate: Toluene-d8		*96.0 %*	*76-129*			*AE84045*	*05/23/18 11:50*	*05/23/18 14:08*	*8260GRO*	*MM*	
LP-EQB (18E2239-04) Water Sampled: 05/22/18 15:15 Received: 05/22/18 16:50											
TPH as Gasoline	ND		50	ug/L	1	AE84045	05/23/18 11:50	05/23/18 14:43	8260GRO	MM	U
Surrogate: Toluene-d8		*96.0 %*	*76-129*			*AE84045*	*05/23/18 11:50*	*05/23/18 14:43*	*8260GRO*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-S (18E2239-01) Water Sampled: 05/22/18 12:05 Received: 05/22/18 16:50											
Benzene	ND	0.30	0.30	ug/L	1	AE84044	05/23/18 11:50	05/23/18 12:58	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE84044	05/23/18 11:50	05/23/18 12:58	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 12:58	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 12:58	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 12:58	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 12:58	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 12:58	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 12:58	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE84044	05/23/18 11:50	05/23/18 12:58	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*103 %*	*70-130*			*AE84044*	*05/23/18 11:50*	*05/23/18 12:58*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*104 %*	*70-130*			*AE84044*	*05/23/18 11:50*	*05/23/18 12:58*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*115 %*	*70-130*			*AE84044*	*05/23/18 11:50*	*05/23/18 12:58*	*EPA 8260B*	*MM*	
LP2-M (18E2239-02) Water Sampled: 05/22/18 12:40 Received: 05/22/18 16:50											
Benzene	ND	0.30	0.30	ug/L	1	AE84044	05/23/18 11:50	05/23/18 13:33	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE84044	05/23/18 11:50	05/23/18 13:33	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 13:33	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 13:33	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 13:33	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 13:33	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 13:33	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 13:33	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE84044	05/23/18 11:50	05/23/18 13:33	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*103 %*	*70-130*			*AE84044*	*05/23/18 11:50*	*05/23/18 13:33*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*106 %*	*70-130*			*AE84044*	*05/23/18 11:50*	*05/23/18 13:33*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*115 %*	*70-130*			*AE84044*	*05/23/18 11:50*	*05/23/18 13:33*	*EPA 8260B*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-B (18E2239-03) Water Sampled: 05/22/18 13:10 Received: 05/22/18 16:50											
Benzene	ND	0.30	0.30	ug/L	1	AE84044	05/23/18 11:50	05/23/18 14:08	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE84044	05/23/18 11:50	05/23/18 14:08	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 14:08	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 14:08	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 14:08	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 14:08	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 14:08	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 14:08	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE84044	05/23/18 11:50	05/23/18 14:08	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*102 %*	*70-130*			*AE84044*	*05/23/18 11:50*	*05/23/18 14:08*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*105 %*	*70-130*			*AE84044*	*05/23/18 11:50*	*05/23/18 14:08*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*113 %*	*70-130*			*AE84044*	*05/23/18 11:50*	*05/23/18 14:08*	*EPA 8260B*	*MM*	
LP-EQB (18E2239-04) Water Sampled: 05/22/18 15:15 Received: 05/22/18 16:50											
Benzene	ND	0.30	0.30	ug/L	1	AE84044	05/23/18 11:50	05/23/18 14:43	EPA 8260B	MM	U
Toluene	**0.61**	**0.30**	**0.30**	**ug/L**	1	AE84044	05/23/18 11:50	05/23/18 14:43	EPA 8260B	MM	
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 14:43	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 14:43	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 14:43	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 14:43	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 14:43	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE84044	05/23/18 11:50	05/23/18 14:43	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE84044	05/23/18 11:50	05/23/18 14:43	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*102 %*	*70-130*			*AE84044*	*05/23/18 11:50*	*05/23/18 14:43*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*109 %*	*70-130*			*AE84044*	*05/23/18 11:50*	*05/23/18 14:43*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*112 %*	*70-130*			*AE84044*	*05/23/18 11:50*	*05/23/18 14:43*	*EPA 8260B*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83043 - Metals Digest											
Blank (AF83043-BLK1)					Prepared: 06/01/18 Analyzed: 06/05/18						
Calcium	ND	0.080	1.0	mg/L							U
Magnesium	ND	0.030	1.0	mg/L							U
LCS (AF83043-BS1)					Prepared: 06/01/18 Analyzed: 06/05/18						
Calcium	7.34	0.080	1.0	mg/L	8.00		91.7	85-115			
Magnesium	7.30	0.030	1.0	mg/L	8.00		91.3	85-115			
Duplicate (AF83043-DUP1)		**Source: 18E2571-02**			Prepared: 06/01/18 Analyzed: 06/05/18						
Calcium	9.86	0.080	1.0	mg/L		11.1			12.1	20	
Magnesium	5.02	0.030	1.0	mg/L		5.38			7.01	20	
Matrix Spike (AF83043-MS1)		**Source: 18E2571-02**			Prepared: 06/01/18 Analyzed: 06/05/18						
Calcium	18.3	0.080	1.0	mg/L	8.00	11.1	89.6	70-130			
Magnesium	13.2	0.030	1.0	mg/L	8.00	5.38	97.9	70-130			
Matrix Spike (AF83043-MS2)		**Source: 18E2036-01**			Prepared: 06/01/18 Analyzed: 06/05/18						
Calcium	16.7	0.080	1.0	mg/L	8.00	7.97	109	70-130			
Magnesium	9.08	0.030	1.0	mg/L	8.00	1.38	96.3	70-130			
Matrix Spike Dup (AF83043-MSD1)		**Source: 18E2571-02**			Prepared: 06/01/18 Analyzed: 06/05/18						
Calcium	18.4	0.080	1.0	mg/L	8.00	11.1	90.3	70-130	0.316	20	
Magnesium	13.3	0.030	1.0	mg/L	8.00	5.38	98.4	70-130	0.309	20	
Batch AF83221 - EPA 245.1 Hg Water											
Blank (AF83221-BLK1)					Prepared & Analyzed: 06/06/18						
Mercury	ND	0.060	0.20	ug/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83221 - EPA 245.1 Hg Water											
LCS (AF83221-BS1)					Prepared & Analyzed: 06/06/18						
Mercury	2.52	0.060	0.20	ug/L	2.50		101	85-115			
Duplicate (AF83221-DUP1)		**Source: 18F0401-01**			Prepared & Analyzed: 06/06/18						
Mercury	ND	0.060	0.20	ug/L		ND				20	U
Matrix Spike (AF83221-MS1)		**Source: 18F0401-01**			Prepared & Analyzed: 06/06/18						
Mercury	2.61	0.060	0.20	ug/L	2.50	ND	104	70-130			
Matrix Spike (AF83221-MS2)		**Source: 18F0401-02**			Prepared & Analyzed: 06/06/18						
Mercury	2.53	0.060	0.20	ug/L	2.50	ND	101	70-130			
Matrix Spike Dup (AF83221-MSD1)		**Source: 18F0401-01**			Prepared & Analyzed: 06/06/18						
Mercury	2.61	0.060	0.20	ug/L	2.50	ND	104	70-130	0.153	20	
Batch AF83225 - EPA 245.1 Hg Water											
Blank (AF83225-BLK1)					Prepared: 06/06/18 Analyzed: 06/07/18						
Mercury	ND	0.060	0.20	ug/L							U
LCS (AF83225-BS1)					Prepared: 06/06/18 Analyzed: 06/07/18						
Mercury	2.49	0.060	0.20	ug/L	2.50		99.8	85-115			
Duplicate (AF83225-DUP1)		**Source: 18E2095-01**			Prepared: 06/06/18 Analyzed: 06/07/18						
Mercury	ND	0.060	0.20	ug/L		ND				20	U
MRL Check (AF83225-MRL1)					Prepared: 06/06/18 Analyzed: 06/07/18						
Mercury	0.491	0.060	0.20	ug/L	0.500		98.2	0-200			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83225 - EPA 245.1 Hg Water											
Matrix Spike (AF83225-MS1)		**Source: 18E2095-01**			Prepared: 06/06/18 Analyzed: 06/07/18						
Mercury	2.40	0.060	0.20	ug/L	2.50	ND	95.8	70-130			
Matrix Spike (AF83225-MS2)		**Source: 18E2289-01**			Prepared: 06/06/18 Analyzed: 06/07/18						
Mercury	2.40	0.060	0.20	ug/L	2.50	ND	96.0	70-130			
Matrix Spike Dup (AF83225-MSD1)		**Source: 18E2095-01**			Prepared: 06/06/18 Analyzed: 06/07/18						
Mercury	2.39	0.060	0.20	ug/L	2.50	ND	95.7	70-130	0.167	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84104 - EPA 200.8											
Blank (AE84104-BLK1)					Prepared: 05/24/18 Analyzed: 05/25/18						
Aluminum	ND	5.0	10	ug/L							U
Antimony	ND	0.20	0.50	ug/L							U
Arsenic	ND	0.20	0.50	ug/L							U
Barium	ND	0.20	0.50	ug/L							U
Beryllium	ND	0.050	0.10	ug/L							U
Cadmium	ND	0.060	0.10	ug/L							U
Chromium	ND	0.40	0.50	ug/L							U
Cobalt	ND	0.030	0.10	ug/L							U
Copper	ND	0.40	0.50	ug/L							U
Iron	ND	10	50	ug/L							U
Lead	ND	0.060	0.25	ug/L							U
Manganese	ND	2.0	5.0	ug/L							U
Molybdenum	ND	0.070	0.25	ug/L							U
Nickel	ND	0.30	0.50	ug/L							U
Selenium	ND	0.20	2.0	ug/L							U
Silver	ND	0.050	0.10	ug/L							U
Thallium	ND	0.050	0.10	ug/L							U
Vanadium	ND	0.50	1.0	ug/L							U
Zinc	ND	2.0	5.0	ug/L							U
LCS (AE84104-BS1)					Prepared: 05/24/18 Analyzed: 05/30/18						
Aluminum	471	5.0	10	ug/L	520		90.6	85-115			
Antimony	21.6	0.20	0.50	ug/L	20.0		108	85-115			
Arsenic	21.2	0.20	0.50	ug/L	20.0		106	85-115			
Barium	21.2	0.20	0.50	ug/L	20.0		106	85-115			
Beryllium	21.0	0.050	0.10	ug/L	20.0		105	85-115			
Cadmium	20.7	0.060	0.10	ug/L	20.0		103	85-115			
Chromium	21.0	0.40	0.50	ug/L	20.0		105	85-115			
Cobalt	20.7	0.030	0.10	ug/L	20.0		103	85-115			
Copper	20.5	0.40	0.50	ug/L	20.0		103	85-115			
Iron	531	10	50	ug/L	520		102	85-115			
Lead	20.1	0.060	0.25	ug/L	20.0		101	85-115			
Manganese	20.2	2.0	5.0	ug/L	20.0		101	85-115			
Molybdenum	21.1	0.070	0.25	ug/L	20.0		106	85-115			
Nickel	20.8	0.30	0.50	ug/L	20.0		104	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84104 - EPA 200.8											
LCS (AE84104-BS1)					Prepared: 05/24/18 Analyzed: 05/25/18						
Selenium	21.0	0.20	2.0	ug/L	20.0		105	85-115			
Silver	20.8	0.050	0.10	ug/L	20.0		104	85-115			
Thallium	20.2	0.050	0.10	ug/L	20.0		101	85-115			
Vanadium	21.1	0.50	1.0	ug/L	20.0		105	85-115			
Zinc	102	2.0	5.0	ug/L	100		102	85-115			
Duplicate (AE84104-DUP1)		**Source: 18E2396-01**			Prepared: 05/24/18 Analyzed: 05/25/18						
Aluminum	ND	20	40	ug/L		ND				20	U
Antimony	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic	1.31	0.80	2.0	ug/L		ND				20	R-01, J
Barium	29.6	0.80	2.0	ug/L		29.3			1.00	20	
Beryllium	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium	ND	0.24	0.40	ug/L		ND				20	R-01, U
Chromium	7.95	1.6	2.0	ug/L		7.81			1.74	20	
Cobalt	0.595	0.12	0.40	ug/L		ND				20	
Copper	ND	1.6	2.0	ug/L		ND				20	R-01, U
Iron	114	40	200	ug/L		114			0.693	20	R-01, J
Lead	ND	0.24	1.0	ug/L		ND				20	R-01, U
Manganese	ND	8.0	20	ug/L		ND				20	R-01, U
Molybdenum	3.22	0.28	1.0	ug/L		3.39			5.18	20	
Nickel	2.19	1.2	2.0	ug/L		2.45			10.9	20	
Selenium	2.58	0.80	8.0	ug/L		2.42			6.29	20	R-01, J
Silver	0.508	0.20	0.40	ug/L		ND				20	
Thallium	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium	2.21	2.0	4.0	ug/L		ND				20	R-01, J
Zinc	ND	8.0	20	ug/L		ND				20	R-01, U
Matrix Spike (AE84104-MS1)		**Source: 18E2396-01**			Prepared: 05/24/18 Analyzed: 05/29/18						
Aluminum	521	20	40	ug/L	520	ND	100	70-130			
Antimony	20.9	0.80	2.0	ug/L	20.0	ND	105	70-130			
Arsenic	21.5	0.80	2.0	ug/L	20.0	ND	108	70-130			
Barium	51.6	0.80	2.0	ug/L	20.0	29.3	112	70-130			
Beryllium	19.9	0.20	0.40	ug/L	20.0	ND	99.6	70-130			
Cadmium	19.7	0.24	0.40	ug/L	20.0	ND	98.3	70-130			
Chromium	27.4	1.6	2.0	ug/L	20.0	7.81	98.1	70-130			

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84104 - EPA 200.8											
Matrix Spike (AE84104-MS1)		**Source: 18E2396-01**			Prepared: 05/24/18 Analyzed: 05/29/18						
Cobalt	19.4	0.12	0.40	ug/L	20.0	ND	96.8	70-130			
Copper	21.0	1.6	2.0	ug/L	20.0	ND	105	70-130			
Iron	626	40	200	ug/L	520	114	98.6	70-130			
Lead	17.3	0.24	1.0	ug/L	20.0	ND	86.7	70-130			
Manganese	18.6	8.0	20	ug/L	20.0	ND	93.2	70-130			J
Molybdenum	25.1	0.28	1.0	ug/L	20.0	3.39	109	70-130			
Nickel	20.7	1.2	2.0	ug/L	20.0	2.45	91.2	70-130			
Selenium	21.9	0.80	8.0	ug/L	20.0	2.42	97.2	70-130			
Silver	19.7	0.20	0.40	ug/L	20.0	ND	98.5	70-130			
Thallium	17.3	0.20	0.40	ug/L	20.0	ND	86.7	70-130			
Vanadium	22.3	2.0	4.0	ug/L	20.0	ND	111	70-130			
Zinc	99.9	8.0	20	ug/L	100	ND	99.9	70-130			
Matrix Spike (AE84104-MS2)		**Source: 18E2239-01**			Prepared: 05/24/18 Analyzed: 05/29/18						
Aluminum	554	20	40	ug/L	520	31.3	101	70-130			
Antimony	20.1	0.80	2.0	ug/L	20.0	ND	100	70-130			
Arsenic	20.3	0.80	2.0	ug/L	20.0	ND	102	70-130			
Barium	74.2	0.80	2.0	ug/L	20.0	51.0	116	70-130			
Beryllium	19.5	0.20	0.40	ug/L	20.0	ND	97.4	70-130			
Cadmium	20.2	0.24	0.40	ug/L	20.0	ND	101	70-130			
Chromium	20.5	1.6	2.0	ug/L	20.0	ND	102	70-130			
Cobalt	19.9	0.12	0.40	ug/L	20.0	ND	99.4	70-130			
Copper	20.5	1.6	2.0	ug/L	20.0	ND	103	70-130			
Iron	590	40	200	ug/L	520	78.5	98.3	70-130			
Lead	18.9	0.24	1.0	ug/L	20.0	ND	94.4	70-130			
Manganese	22.2	8.0	20	ug/L	20.0	ND	111	70-130			
Molybdenum	22.2	0.28	1.0	ug/L	20.0	0.406	109	70-130			
Nickel	21.4	1.2	2.0	ug/L	20.0	1.90	97.5	70-130			
Selenium	19.7	0.80	8.0	ug/L	20.0	ND	98.5	70-130			
Silver	21.0	0.20	0.40	ug/L	20.0	ND	105	70-130			
Thallium	19.3	0.20	0.40	ug/L	20.0	ND	96.6	70-130			
Vanadium	20.1	2.0	4.0	ug/L	20.0	ND	100	70-130			
Zinc	108	8.0	20	ug/L	100	ND	108	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84104 - EPA 200.8											
Matrix Spike Dup (AE84104-MSD1)		**Source: 18E2396-01**			Prepared: 05/24/18 Analyzed: 05/29/18						
Aluminum	514	20	40	ug/L	520	ND	98.9	70-130	1.28	20	
Antimony	19.2	0.80	2.0	ug/L	20.0	ND	95.9	70-130	8.69	20	
Arsenic	21.7	0.80	2.0	ug/L	20.0	ND	109	70-130	0.948	20	
Barium	52.0	0.80	2.0	ug/L	20.0	29.3	113	70-130	0.678	20	
Beryllium	19.4	0.20	0.40	ug/L	20.0	ND	97.2	70-130	2.41	20	
Cadmium	18.6	0.24	0.40	ug/L	20.0	ND	93.0	70-130	5.45	20	
Chromium	26.6	1.6	2.0	ug/L	20.0	7.81	93.7	70-130	3.20	20	
Cobalt	19.2	0.12	0.40	ug/L	20.0	ND	96.2	70-130	0.618	20	
Copper	20.3	1.6	2.0	ug/L	20.0	ND	101	70-130	3.65	20	
Iron	614	40	200	ug/L	520	114	96.3	70-130	1.95	20	
Lead	17.8	0.24	1.0	ug/L	20.0	ND	88.9	70-130	2.55	20	
Manganese	18.5	8.0	20	ug/L	20.0	ND	92.4	70-130	0.932	20	J
Molybdenum	24.3	0.28	1.0	ug/L	20.0	3.39	105	70-130	3.11	20	
Nickel	21.0	1.2	2.0	ug/L	20.0	2.45	92.8	70-130	1.55	20	
Selenium	21.4	0.80	8.0	ug/L	20.0	2.42	95.1	70-130	1.93	20	
Silver	18.9	0.20	0.40	ug/L	20.0	ND	94.6	70-130	4.06	20	
Thallium	17.9	0.20	0.40	ug/L	20.0	ND	89.7	70-130	3.34	20	
Vanadium	21.5	2.0	4.0	ug/L	20.0	ND	107	70-130	3.54	20	
Zinc	98.4	8.0	20	ug/L	100	ND	98.4	70-130	1.44	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84314 - EPA 245.1 Hg Water											
Blank (AE84314-BLK1)					Prepared & Analyzed: 05/31/18						
Mercury, dissolved	0.0630	0.060	0.20	ug/L							J
LCS (AE84314-BS1)					Prepared & Analyzed: 05/31/18						
Mercury, dissolved	2.61	0.060	0.20	ug/L	2.50		104	85-115			
Duplicate (AE84314-DUP1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/31/18						
Mercury, dissolved	0.0680	0.060	0.20	ug/L		0.0650			4.51	20	J
MRL Check (AE84314-MRL1)					Prepared & Analyzed: 05/31/18						
Mercury, dissolved	0.550	0.060	0.20	ug/L	0.500		110	0-200			
Matrix Spike (AE84314-MS1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/31/18						
Mercury, dissolved	2.64	0.060	0.20	ug/L	2.50	0.0650	103	70-130			
Matrix Spike (AE84314-MS2)		**Source: 18E1751-01**			Prepared & Analyzed: 05/31/18						
Mercury, dissolved	2.60	0.060	0.20	ug/L	2.50	0.0630	101	70-130			
Matrix Spike Dup (AE84314-MSD1)		**Source: 18E1576-01**			Prepared & Analyzed: 05/31/18						
Mercury, dissolved	2.62	0.060	0.20	ug/L	2.50	0.0650	102	70-130	0.685	20	
Batch AF83272 - EPA 245.1 Hg Water											
Blank (AF83272-BLK1)					Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	ND	0.060	0.20	ug/L							U
LCS (AF83272-BS1)					Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	2.44	0.060	0.20	ug/L	2.50		97.5	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83272 - EPA 245.1 Hg Water											
Duplicate (AF83272-DUP1)		**Source: 18E2239-01**			Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	ND	0.060	0.20	ug/L		ND				20	U
MRL Check (AF83272-MRL1)					Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	0.514	0.060	0.20	ug/L	0.500		103	0-200			
Matrix Spike (AF83272-MS1)		**Source: 18E2239-01**			Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	2.45	0.060	0.20	ug/L	2.50	ND	98.0	70-130			
Matrix Spike (AF83272-MS2)		**Source: 18E2418-01**			Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	2.41	0.060	0.20	ug/L	2.50	ND	96.2	70-130			
Matrix Spike Dup (AF83272-MSD1)		**Source: 18E2239-01**			Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	2.48	0.060	0.20	ug/L	2.50	ND	99.1	70-130	1.10	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83108 - EPA 200.8 (D)											
Blank (AF83108-BLK1)					Prepared: 06/05/18 Analyzed: 06/06/18						
Aluminum, dissolved	ND	5.0	10	ug/L							U
Antimony, dissolved	ND	0.20	0.50	ug/L							U
Arsenic, dissolved	ND	0.20	0.50	ug/L							U
Barium, dissolved	ND	0.20	0.50	ug/L							U
Beryllium, dissolved	ND	0.050	0.10	ug/L							U
Cadmium, dissolved	ND	0.060	0.10	ug/L							U
Chromium, dissolved	ND	0.50	0.50	ug/L							U
Cobalt, dissolved	ND	0.030	0.10	ug/L							U
Copper, dissolved	ND	0.40	0.50	ug/L							U
Lead, dissolved	ND	0.060	0.25	ug/L							U
Molybdenum, dissolved	ND	0.070	0.25	ug/L							R-01, U
Nickel, dissolved	ND	0.30	0.50	ug/L							U
Selenium, dissolved	ND	0.20	2.0	ug/L							U
Silver, dissolved	0.0572	0.050	0.10	ug/L							J
Thallium, dissolved	ND	0.050	0.10	ug/L							U
Vanadium, dissolved	ND	0.50	1.0	ug/L							U
Zinc, dissolved	ND	2.0	5.0	ug/L							U
LCS (AF83108-BS1)					Prepared: 06/05/18 Analyzed: 06/06/18						
Aluminum, dissolved	453	5.0	10	ug/L	520		87.1	85-115			
Antimony, dissolved	21.4	0.20	0.50	ug/L	20.0		107	85-115			
Arsenic, dissolved	21.8	0.20	0.50	ug/L	20.0		109	85-115			
Barium, dissolved	22.1	0.20	0.50	ug/L	20.0		110	85-115			
Beryllium, dissolved	21.1	0.050	0.10	ug/L	20.0		105	85-115			
Cadmium, dissolved	20.1	0.060	0.10	ug/L	20.0		101	85-115			
Chromium, dissolved	21.5	0.50	0.50	ug/L	20.0		107	85-115			
Cobalt, dissolved	21.7	0.030	0.10	ug/L	20.0		108	85-115			
Copper, dissolved	21.4	0.40	0.50	ug/L	20.0		107	85-115			
Lead, dissolved	20.0	0.060	0.25	ug/L	20.0		99.8	85-115			
Molybdenum, dissolved	21.3	0.070	0.25	ug/L	20.0		107	85-115			
Nickel, dissolved	21.4	0.30	0.50	ug/L	20.0		107	85-115			
Selenium, dissolved	20.1	0.20	2.0	ug/L	20.0		101	85-115			
Silver, dissolved	21.4	0.050	0.10	ug/L	20.0		107	85-115			
Thallium, dissolved	20.0	0.050	0.10	ug/L	20.0		100	85-115			
Vanadium, dissolved	21.2	0.50	1.0	ug/L	20.0		106	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83108 - EPA 200.8 (D)											
LCS (AF83108-BS1)					Prepared: 06/05/18 Analyzed: 06/06/18						
Zinc, dissolved	100	2.0	5.0	ug/L	100		100	85-115			
Duplicate (AF83108-DUP1)		**Source: 18E2418-01**			Prepared: 06/05/18 Analyzed: 06/06/18						
Aluminum, dissolved	ND	20	40	ug/L		ND				20	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L		ND				20	R-01, U
Barium, dissolved	53.3	0.80	2.0	ug/L		54.0			1.38	20	
Beryllium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L		ND				20	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L		ND				20	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L		ND				20	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L		ND				20	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L		ND				20	R-01, U
Molybdenum, dissolved	0.331	0.28	1.0	ug/L		0.322			2.77	20	R-01, J
Nickel, dissolved	1.51	1.2	2.0	ug/L		1.41			6.97	20	R-01, J
Selenium, dissolved	ND	0.80	8.0	ug/L		ND				20	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L		ND				20	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L		ND				20	U
Matrix Spike (AF83108-MS1)		**Source: 18E2418-01**			Prepared: 06/05/18 Analyzed: 06/06/18						
Aluminum, dissolved	555	20	40	ug/L	520	ND	107	70-130			
Antimony, dissolved	21.8	0.80	2.0	ug/L	20.0	ND	109	70-130			
Arsenic, dissolved	22.9	0.80	2.0	ug/L	20.0	ND	114	70-130			
Barium, dissolved	75.4	0.80	2.0	ug/L	20.0	54.0	107	70-130			
Beryllium, dissolved	22.2	0.20	0.40	ug/L	20.0	ND	111	70-130			
Cadmium, dissolved	20.5	0.24	0.40	ug/L	20.0	ND	103	70-130			
Chromium, dissolved	22.2	2.0	2.0	ug/L	20.0	ND	111	70-130			
Cobalt, dissolved	21.7	0.12	0.40	ug/L	20.0	ND	109	70-130			
Copper, dissolved	22.3	1.6	2.0	ug/L	20.0	ND	111	70-130			
Lead, dissolved	20.1	0.24	1.0	ug/L	20.0	ND	101	70-130			
Molybdenum, dissolved	21.6	0.28	1.0	ug/L	20.0	0.322	106	70-130			
Nickel, dissolved	23.2	1.2	2.0	ug/L	20.0	1.41	109	70-130			
Selenium, dissolved	20.7	0.80	8.0	ug/L	20.0	ND	103	70-130			

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Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83108 - EPA 200.8 (D)											
Matrix Spike (AF83108-MS1)		**Source: 18E2418-01**			Prepared: 06/05/18 Analyzed: 06/06/18						
Silver, dissolved	21.3	0.20	0.40	ug/L	20.0	ND	106	70-130			
Thallium, dissolved	20.3	0.20	0.40	ug/L	20.0	ND	101	70-130			
Vanadium, dissolved	21.7	2.0	4.0	ug/L	20.0	ND	109	70-130			
Zinc, dissolved	106	8.0	20	ug/L	100	ND	106	70-130			
Matrix Spike (AF83108-MS2)		**Source: 18E2418-11**			Prepared: 06/05/18 Analyzed: 06/06/18						
Aluminum, dissolved	548	20	40	ug/L	520	ND	105	70-130			
Antimony, dissolved	21.5	0.80	2.0	ug/L	20.0	ND	108	70-130			
Arsenic, dissolved	24.0	0.80	2.0	ug/L	20.0	2.79	106	70-130			
Barium, dissolved	110	0.80	2.0	ug/L	20.0	86.5	115	70-130			
Beryllium, dissolved	21.2	0.20	0.40	ug/L	20.0	ND	106	70-130			
Cadmium, dissolved	20.2	0.24	0.40	ug/L	20.0	ND	101	70-130			
Chromium, dissolved	21.6	2.0	2.0	ug/L	20.0	ND	108	70-130			
Cobalt, dissolved	21.1	0.12	0.40	ug/L	20.0	ND	105	70-130			
Copper, dissolved	21.0	1.6	2.0	ug/L	20.0	ND	105	70-130			
Lead, dissolved	18.8	0.24	1.0	ug/L	20.0	ND	94.2	70-130			
Molybdenum, dissolved	21.2	0.28	1.0	ug/L	20.0	0.454	104	70-130			
Nickel, dissolved	22.7	1.2	2.0	ug/L	20.0	1.71	105	70-130			
Selenium, dissolved	21.5	0.80	8.0	ug/L	20.0	ND	107	70-130			
Silver, dissolved	20.2	0.20	0.40	ug/L	20.0	ND	101	70-130			
Thallium, dissolved	19.0	0.20	0.40	ug/L	20.0	ND	95.1	70-130			
Vanadium, dissolved	22.0	2.0	4.0	ug/L	20.0	ND	110	70-130			
Zinc, dissolved	104	8.0	20	ug/L	100	ND	104	70-130			
Matrix Spike Dup (AF83108-MSD1)		**Source: 18E2418-01**			Prepared: 06/05/18 Analyzed: 06/06/18						
Aluminum, dissolved	557	20	40	ug/L	520	ND	107	70-130	0.295	20	
Antimony, dissolved	21.6	0.80	2.0	ug/L	20.0	ND	108	70-130	0.781	20	
Arsenic, dissolved	23.2	0.80	2.0	ug/L	20.0	ND	116	70-130	1.49	20	
Barium, dissolved	75.3	0.80	2.0	ug/L	20.0	54.0	106	70-130	0.220	20	
Beryllium, dissolved	21.7	0.20	0.40	ug/L	20.0	ND	108	70-130	2.60	20	
Cadmium, dissolved	20.6	0.24	0.40	ug/L	20.0	ND	103	70-130	0.241	20	
Chromium, dissolved	21.9	2.0	2.0	ug/L	20.0	ND	109	70-130	1.77	20	
Cobalt, dissolved	21.6	0.12	0.40	ug/L	20.0	ND	108	70-130	0.525	20	
Copper, dissolved	22.6	1.6	2.0	ug/L	20.0	ND	113	70-130	1.39	20	
Lead, dissolved	19.5	0.24	1.0	ug/L	20.0	ND	97.6	70-130	3.18	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83108 - EPA 200.8 (D)											
Matrix Spike Dup (AF83108-MSD1)		**Source: 18E2418-01**			Prepared: 06/05/18 Analyzed: 06/06/18						
Molybdenum, dissolved	21.0	0.28	1.0	ug/L	20.0	0.322	103	70-130	3.12	20	
Nickel, dissolved	23.3	1.2	2.0	ug/L	20.0	1.41	109	70-130	0.340	20	
Selenium, dissolved	21.7	0.80	8.0	ug/L	20.0	ND	108	70-130	4.69	20	
Silver, dissolved	21.1	0.20	0.40	ug/L	20.0	ND	105	70-130	0.952	20	
Thallium, dissolved	19.8	0.20	0.40	ug/L	20.0	ND	99.0	70-130	2.48	20	
Vanadium, dissolved	21.7	2.0	4.0	ug/L	20.0	ND	109	70-130	0.0120	20	
Zinc, dissolved	108	8.0	20	ug/L	100	ND	108	70-130	1.53	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84082 - General Preparation											
Blank (AE84082-BLK1)					Prepared: 05/24/18 Analyzed: 05/29/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
Blank (AE84082-BLK2)					Prepared: 05/24/18 Analyzed: 05/29/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
LCS (AE84082-BS1)					Prepared: 05/24/18 Analyzed: 05/29/18						
Biochemical Oxygen Demand	197	2.0	5.0	mg/L	200		98.5	84-115			
Duplicate (AE84082-DUP1)		**Source: 18E2170-01**			Prepared: 05/24/18 Analyzed: 05/29/18						
Biochemical Oxygen Demand	518	2.0	5.0	mg/L		415			22.1	30	
Batch AE84117 - General Preparation											
Blank (AE84117-BLK1)					Prepared: 05/24/18 Analyzed: 05/31/18						
Total Dissolved Solids	ND	5.0	10	mg/L							U
Duplicate (AE84117-DUP1)		**Source: 18E2083-01**			Prepared: 05/24/18 Analyzed: 05/31/18						
Total Dissolved Solids	196	5.0	10	mg/L		192			2.06	15	
Duplicate (AE84117-DUP2)		**Source: 18E2230-03**			Prepared: 05/24/18 Analyzed: 05/31/18						
Total Dissolved Solids	174	5.0	10	mg/L		172			1.16	15	
Batch AE84122 - General Preparation											
Duplicate (AE84122-DUP1)		**Source: 18E2239-01**			Prepared & Analyzed: 05/31/18						
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Total Alkalinity as CaCO3	60.0	1.0	5.0	mg/L		60.0			0.00	20	
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Bicarbonate Alkalinity as CaCO3	60.0	1.0	5.0	mg/L		60.0			0.00	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84139 - General Preparation											
Blank (AE84139-BLK1)					Prepared: 05/25/18 Analyzed: 05/29/18						
Total Suspended Solids	ND	0.30	1.0	mg/L							U
Duplicate (AE84139-DUP1)		**Source: 18E2167-01**			Prepared: 05/25/18 Analyzed: 05/29/18						
Total Suspended Solids	143	0.30	1.0	mg/L		152			6.02	30	
Duplicate (AE84139-DUP2)		**Source: 18E2322-01**			Prepared: 05/25/18 Analyzed: 05/29/18						
Total Suspended Solids	731	0.30	1.0	mg/L		657			10.6	30	
Batch AE84247 - General Preparation											
Blank (AE84247-BLK1)					Prepared & Analyzed: 05/29/18						
Sulfide	ND	0.020	0.10	mg/L							U
LCS (AE84247-BS1)					Prepared & Analyzed: 05/29/18						
Sulfide	0.208	0.020	0.10	mg/L	0.195		107	85-115			
Duplicate (AE84247-DUP1)		**Source: 18E2239-01**			Prepared & Analyzed: 05/29/18						
Sulfide	ND	0.020	0.10	mg/L		ND				15	U
Matrix Spike (AE84247-MS1)		**Source: 18E2239-01**			Prepared & Analyzed: 05/29/18						
Sulfide	0.195	0.020	0.10	mg/L	0.195	ND	100	80-120			
Matrix Spike Dup (AE84247-MSD1)		**Source: 18E2239-01**			Prepared & Analyzed: 05/29/18						
Sulfide	0.195	0.020	0.10	mg/L	0.195	ND	100	80-120	0.00	15	
Batch AF83037 - General Preparation											
LCS (AF83037-BS1)					Prepared & Analyzed: 06/01/18						
Ammonia as N	4.82	0.10	0.20	mg/L	5.00		96.3	90-110			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83037 - General Preparation											
LCS Dup (AF83037-BSD1)					Prepared & Analyzed: 06/01/18						
Ammonia as N	4.90	0.10	0.20	mg/L	5.00		98.1	90-110	1.81	10	
Matrix Spike (AF83037-MS1)		**Source: 18E2419-02**			Prepared & Analyzed: 06/01/18						
Ammonia as N	4.90	0.10	0.20	mg/L	5.00	ND	98.1	85-115			
Matrix Spike Dup (AF83037-MSD1)		**Source: 18E2419-02**			Prepared & Analyzed: 06/01/18						
Ammonia as N	4.73	0.10	0.20	mg/L	5.00	ND	94.6	85-115	3.65	20	
Batch AF83039 - General Prep											
Blank (AF83039-BLK1)					Prepared: 06/01/18 Analyzed: 06/04/18						
Dissolved Organic Carbon	ND	0.600	1.00	mg/L							U
LCS (AF83039-BS1)					Prepared: 06/01/18 Analyzed: 06/04/18						
Dissolved Organic Carbon	9.49	0.600	1.00	mg/L	10.0		94.9	85-115			
LCS Dup (AF83039-BSD1)					Prepared: 06/01/18 Analyzed: 06/04/18						
Dissolved Organic Carbon	9.18	0.600	1.00	mg/L	10.0		91.8	85-115	3.31	20	
Duplicate (AF83039-DUP1)		**Source: 18E2230-02**			Prepared: 06/01/18 Analyzed: 06/04/18						
Dissolved Organic Carbon	1.54	0.600	1.00	mg/L		1.48			4.02	20	
MRL Check (AF83039-MRL1)					Prepared: 06/01/18 Analyzed: 06/04/18						
Dissolved Organic Carbon	1.36	0.600	1.00	mg/L	1.25		109	0-200			
Matrix Spike (AF83039-MS1)		**Source: 18E2230-03**			Prepared: 06/01/18 Analyzed: 06/04/18						
Dissolved Organic Carbon	11.7	0.600	1.00	mg/L	10.0	1.54	102	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83039 - General Prep											
Matrix Spike Dup (AF83039-MSD1)		**Source: 18E2230-03**			Prepared: 06/01/18 Analyzed: 06/04/18						
Dissolved Organic Carbon	11.2	0.600	1.00	mg/L	10.0	1.54	96.7	70-130	4.24	20	
Batch AF83042 - General Prep											
Blank (AF83042-BLK1)					Prepared & Analyzed: 06/01/18						
Total Organic Carbon	ND	0.300	1.00	mg/L							U
LCS (AF83042-BS1)					Prepared & Analyzed: 06/01/18						
Total Organic Carbon	9.18	0.300	1.00	mg/L	10.0		91.8	85-115			
LCS Dup (AF83042-BSD1)					Prepared & Analyzed: 06/01/18						
Total Organic Carbon	8.79	0.300	1.00	mg/L	10.0		87.9	85-115	4.33	20	
Duplicate (AF83042-DUP1)		**Source: 18E2230-01**			Prepared & Analyzed: 06/01/18						
Total Organic Carbon	1.83	0.300	1.00	mg/L		1.67			8.92	20	
MRL Check (AF83042-MRL1)					Prepared & Analyzed: 06/01/18						
Total Organic Carbon	1.15	0.300	1.00	mg/L	1.25		92.2	0-200			
Matrix Spike (AF83042-MS1)		**Source: 18E2230-02**			Prepared & Analyzed: 06/01/18						
Total Organic Carbon	21.3	0.600	2.00	mg/L	20.0	1.69	98.0	70-130			
Matrix Spike Dup (AF83042-MSD1)		**Source: 18E2230-02**			Prepared & Analyzed: 06/01/18						
Total Organic Carbon	21.9	0.600	2.00	mg/L	20.0	1.69	101	70-130	2.71	20	
Batch AF83043 - Metals Digest											
Blank (AF83043-BLK1)					Prepared: 06/01/18 Analyzed: 06/05/18						
Hardness, Total	ND	1	5	mg/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83043 - Metals Digest											
Duplicate (AF83043-DUP1)		**Source: 18E2571-02**			Prepared: 06/01/18 Analyzed: 06/05/18						
Hardness, Total	45	1	5	mg/L		50			9.80	20	
Batch AF83107 - General Prep											
LCS (AF83107-BS1)					Prepared & Analyzed: 06/04/18						
Total Kjeldahl Nitrogen	3.04	0.20	1.0	mg/L	2.98		102	80-120			
LCS Dup (AF83107-BSD1)					Prepared & Analyzed: 06/04/18						
Total Kjeldahl Nitrogen	3.04	0.20	1.0	mg/L	2.98		102	80-120	0.00	20	
Matrix Spike (AF83107-MS1)		**Source: 18E2230-03**			Prepared: 06/04/18 Analyzed: 06/05/18						
Total Kjeldahl Nitrogen	3.13	0.20	1.0	mg/L	2.98	ND	105	75-125			
Matrix Spike Dup (AF83107-MSD1)		**Source: 18E2230-03**			Prepared: 06/04/18 Analyzed: 06/05/18						
Total Kjeldahl Nitrogen	3.13	0.20	1.0	mg/L	2.98	ND	105	75-125	0.00	20	
Batch AF83117 - General Preparation											
Blank (AF83117-BLK1)					Prepared: 05/22/18 Analyzed: 06/05/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L							U
Duplicate (AF83117-DUP1)		**Source: 18E2022-01**			Prepared: 05/22/18 Analyzed: 06/05/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Batch AF83148 - General Prep											
Blank (AF83148-BLK1)					Prepared & Analyzed: 06/05/18						
Phosphorus, total	ND	0.011	0.040	mg/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83148 - General Prep											
LCS (AF83148-BS1)					Prepared & Analyzed: 06/05/18						
Phosphorus, total	0.200	0.011	0.040	mg/L	0.200		100	85-115			
Duplicate (AF83148-DUP1)		**Source: 18E2103-01**			Prepared & Analyzed: 06/05/18						
Phosphorus, total	6.21	0.55	2.0	mg/L		6.14			1.12	20	
Matrix Spike (AF83148-MS1)		**Source: 18E2103-01**			Prepared & Analyzed: 06/05/18						
Phosphorus, total	6.48	0.55	2.0	mg/L	2.00	6.14	17.3	70-130			QM-4X
Matrix Spike (AF83148-MS2)		**Source: 18E2022-01**			Prepared & Analyzed: 06/05/18						
Phosphorus, total	0.195	0.011	0.040	mg/L	0.200	ND	97.3	70-130			
Matrix Spike Dup (AF83148-MSD1)		**Source: 18E2103-01**			Prepared & Analyzed: 06/05/18						
Phosphorus, total	6.42	0.55	2.0	mg/L	2.00	6.14	13.8	70-130	1.07	20	QM-4X
Batch AF83156 - General Preparation											
Blank (AF83156-BLK1)					Prepared: 06/05/18 Analyzed: 06/06/18						
Oil & Grease (HEM)	ND	1.4	5.0	mg/L							U
LCS (AF83156-BS1)					Prepared: 06/05/18 Analyzed: 06/06/18						
Oil & Grease (HEM)	39.6	1.4	5.0	mg/L	40.0		99.0	78-114			
LCS Dup (AF83156-BSD1)					Prepared: 06/05/18 Analyzed: 06/06/18						
Oil & Grease (HEM)	39.2	1.4	5.0	mg/L	40.0		98.0	78-114	1.02	18	
Matrix Spike (AF83156-MS1)		**Source: 18E2275-01**			Prepared: 06/05/18 Analyzed: 06/06/18						
Oil & Grease (HEM)	34.6	1.4	5.0	mg/L	40.0	2.90	79.2	78-114			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84060 - General Preparation											
Blank (AE84060-BLK1)					Prepared & Analyzed: 05/23/18						
Orthophosphate	ND	0.10	0.30	mg/L							U
Nitrite as N	ND	0.050	0.20	mg/L							U
Nitrate as N	ND	0.040	0.20	mg/L							U
LCS (AE84060-BS1)					Prepared & Analyzed: 05/23/18						
Orthophosphate	18.4	0.10	0.30	mg/L	16.7		110	90-110			
Nitrate as N	5.87	0.040	0.20	mg/L	5.56		106	90-110			
Nitrite as N	5.76	0.050	0.20	mg/L	5.56		104	90-110			
Duplicate (AE84060-DUP1)		**Source: 18E2162-01**			Prepared & Analyzed: 05/23/18						
Orthophosphate	ND	0.10	0.30	mg/L		ND				20	U
Nitrite as N	ND	0.050	0.20	mg/L		ND				20	U
Nitrate as N	0.295	0.040	0.20	mg/L		0.296			0.153	20	
Matrix Spike (AE84060-MS1)		**Source: 18E2162-01**			Prepared & Analyzed: 05/23/18						
Orthophosphate	16.9	0.50	1.5	mg/L	16.7	ND	102	80-120			
Nitrate as N	5.87	0.20	1.0	mg/L	5.56	0.296	100	80-120			
Nitrite as N	5.32	0.25	1.0	mg/L	5.56	ND	95.7	80-120			
Matrix Spike (AE84060-MS2)		**Source: 18E2178-01**			Prepared & Analyzed: 05/24/18						
Nitrate as N	6.03	0.040	0.20	mg/L	5.56	0.0616	107	80-120			
Nitrite as N	5.21	0.050	0.20	mg/L	5.56	ND	93.8	80-120			
Orthophosphate	18.0	0.10	0.30	mg/L	16.7	ND	108	80-120			
Matrix Spike Dup (AE84060-MSD1)		**Source: 18E2162-01**			Prepared & Analyzed: 05/23/18						
Nitrate as N	5.93	0.20	1.0	mg/L	5.56	0.296	102	80-120	1.15	20	
Orthophosphate	17.3	0.50	1.5	mg/L	16.7	ND	104	80-120	1.89	20	
Nitrite as N	5.36	0.25	1.0	mg/L	5.56	ND	96.4	80-120	0.729	20	

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

TPH by EPA/LUFT GC Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84026 - SVOAs in Water GC											
Blank (AE84026-BLK1)					Prepared: 05/23/18 Analyzed: 05/24/18						
TPH as Diesel	ND	50	250	ug/L							U
TPH as Motor Oil	ND	100	250	ug/L							U
Surrogate: Tetratetracontane	*45.8*			*ug/L*	*56.0*		*81.9*	*39-120*			
LCS (AE84026-BS1)					Prepared: 05/23/18 Analyzed: 05/24/18						
TPH as Diesel	1850	50	250	ug/L	2070		89.6	61-120			
Surrogate: Tetratetracontane	*45.5*			*ug/L*	*56.0*		*81.3*	*39-120*			
LCS (AE84026-BS2)					Prepared: 05/23/18 Analyzed: 05/24/18						
TPH as Motor Oil	1630	100	250	ug/L	1990		82.1	71-125			
Surrogate: Tetratetracontane	*42.4*			*ug/L*	*56.0*		*75.7*	*39-120*			
LCS Dup (AE84026-BSD1)					Prepared: 05/23/18 Analyzed: 05/24/18						
TPH as Diesel	1720	50	250	ug/L	2070		83.1	61-120	7.53	25	
Surrogate: Tetratetracontane	*47.4*			*ug/L*	*56.0*		*84.7*	*39-120*			
LCS Dup (AE84026-BSD2)					Prepared: 05/23/18 Analyzed: 05/24/18						
TPH as Motor Oil	1500	100	250	ug/L	1990		75.2	71-125	8.74	25	
Surrogate: Tetratetracontane	*32.2*			*ug/L*	*56.0*		*57.5*	*39-120*			
Matrix Spike (AE84026-MS1)		**Source: 18E1972-01**			Prepared: 05/23/18 Analyzed: 05/24/18						
TPH as Diesel	1470	50	250	ug/L	2070	ND	71.1	61-120			
Surrogate: Tetratetracontane	*34.3*			*ug/L*	*56.0*		*61.3*	*39-120*			
Matrix Spike (AE84026-MS2)		**Source: 18E2044-01**			Prepared: 05/23/18 Analyzed: 05/24/18						
TPH as Diesel	1570	50	250	ug/L	2070	ND	75.6	61-120			
Surrogate: Tetratetracontane	*32.8*			*ug/L*	*56.0*		*58.6*	*39-120*			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

TPH by EPA/LUFT GCMS Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84045 - VOAs in Water GCMS											
Blank (AE84045-BLK1)					Prepared & Analyzed: 05/23/18						
TPH as Gasoline	ND	50	50	ug/L							U
Surrogate: Toluene-d8	*24.0*			*ug/L*	*25.0*		*96.0*	*76-129*			
LCS (AE84045-BS1)					Prepared & Analyzed: 05/23/18						
TPH as Gasoline	189	50	50	ug/L	200		94.5	67-132			
Surrogate: Toluene-d8	*24.0*			*ug/L*	*25.0*		*96.0*	*76-129*			
LCS Dup (AE84045-BSD1)					Prepared & Analyzed: 05/23/18						
TPH as Gasoline	195	50	50	ug/L	200		97.5	67-132	3.12	25	
Surrogate: Toluene-d8	*24.0*			*ug/L*	*25.0*		*96.0*	*76-129*			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84044 - VOAs in Water GCMS											
Blank (AE84044-BLK1)				Prepared & Analyzed: 05/23/18							
Benzene	ND	0.30	0.30	ug/L							U
Toluene	ND	0.30	0.30	ug/L							U
Ethylbenzene	ND	0.40	0.50	ug/L							U
Xylenes (total)	ND	0.50	0.50	ug/L							U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L							U
Di-isopropyl ether	ND	0.40	0.50	ug/L							U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L							U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L							U
Tert-butyl alcohol	ND	6.0	10	ug/L							U
Surrogate: Bromofluorobenzene	*25.8*			*ug/L*	*25.0*		*103*	*70-130*			
Surrogate: Dibromofluoromethane	*26.0*			*ug/L*	*25.0*		*104*	*70-130*			
Surrogate: Toluene-d8	*28.5*			*ug/L*	*25.0*		*114*	*70-130*			
LCS (AE84044-BS1)				Prepared & Analyzed: 05/23/18							
Benzene	20.6	0.30	0.30	ug/L	20.0		103	82-122			
Toluene	23.4	0.30	0.30	ug/L	20.0		117	75-134			
Ethylbenzene	22.7	0.40	0.50	ug/L	20.0		114	84-124			
Xylenes (total)	63.7	0.50	0.50	ug/L	60.0		106	81-126			
Methyl tert-butyl ether	18.9	0.50	0.50	ug/L	20.0		94.4	84-119			
Di-isopropyl ether	21.9	0.40	0.50	ug/L	20.0		109	83-132			
Ethyl tert-butyl ether	21.4	0.40	0.50	ug/L	20.0		107	74-127			
Tert-amyl methyl ether	18.2	0.40	0.50	ug/L	20.0		91.0	74-120			
Tert-butyl alcohol	424	6.0	10	ug/L	400		106	66-147			
Surrogate: Bromofluorobenzene	*29.4*			*ug/L*	*25.0*		*117*	*70-130*			
Surrogate: Dibromofluoromethane	*26.5*			*ug/L*	*25.0*		*106*	*70-130*			
Surrogate: Toluene-d8	*29.0*			*ug/L*	*25.0*		*116*	*70-130*			
LCS Dup (AE84044-BSD1)				Prepared & Analyzed: 05/23/18							
Benzene	20.9	0.30	0.30	ug/L	20.0		105	82-122	1.35	25	
Toluene	23.2	0.30	0.30	ug/L	20.0		116	75-134	0.644	25	
Ethylbenzene	22.7	0.40	0.50	ug/L	20.0		113	84-124	0.308	25	
Xylenes (total)	63.2	0.50	0.50	ug/L	60.0		105	81-126	0.678	25	
Methyl tert-butyl ether	19.6	0.50	0.50	ug/L	20.0		98.2	84-119	3.90	25	
Di-isopropyl ether	22.1	0.40	0.50	ug/L	20.0		110	83-132	0.956	25	
Ethyl tert-butyl ether	21.7	0.40	0.50	ug/L	20.0		109	74-127	1.48	25	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:23

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84044 - VOAs in Water GCMS											
LCS Dup (AE84044-BSD1)					Prepared & Analyzed: 05/23/18						
Tert-amyl methyl ether	18.7	0.40	0.50	ug/L	20.0		93.6	74-120	2.71	25	
Tert-butyl alcohol	428	6.0	10	ug/L	400		107	66-147	0.954	25	
Surrogate: Bromofluorobenzene	*29.0*			*ug/L*	*25.0*		*116*	*70-130*			
Surrogate: Dibromofluoromethane	*26.2*			*ug/L*	*25.0*		*105*	*70-130*			
Surrogate: Toluene-d8	*28.4*			*ug/L*	*25.0*		*114*	*70-130*			

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Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	06/25/18 13:23

Notes and Definitions

FILT	The sample was filtered in the lab prior to analysis.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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basic laboratory

www.basiclab.com

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Redding, California 96001
voice 530.243.7234
fax 530.243.7494

3860 Morrow Lane, Suite F
Chico, California 95928
voice 530.894.8966
fax 530.894.5143

June 11, 2018

Lab ID: 18E1277

DAVID PINGATORE
ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
RE: LOW LEVEL METALS 18E2239

Dear DAVID PINGATORE ,

Enclosed are the analysis results for Work Order number 18E1277. All analyses were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

Ricky D. Jensen
Laboratory Director
California ELAP Certification Number 1677

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www.basiclab.com
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Redding, California 96001 fax 530.243.7494
3860 Morrow Lane, Suite F voice 530.894.8966
Chico, California 95928 fax 530.894.5143

Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: DAVID PINGATORE
Project: LOW LEVEL METALS 18E2239

Lab No: 18E1277
Reported: 06/11/18
Phone: (707) 468-0401
P.O. #

Metals - Total

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
18E2239-01 LP2-S - Grab Water (18E1277-01) Sampled:05/22/18 12:05 Received:05/25/18 14:46									
Mercury	ng/l	**2.12**		0.20	0.50	EPA 1631E	05/30/18	05/30/18	B8E1589
Methyl Mercury as Mercury	"	**0.126**		0.020	0.050	EPA 1630	06/08/18	06/07/18	B8F0980
18E2239-02 LP2-M - Grab Water (18E1277-02) Sampled:05/22/18 12:40 Received:05/25/18 14:46									
Mercury	ng/l	**2.41**		0.20	0.50	EPA 1631E	05/30/18	05/30/18	B8E1589
Methyl Mercury as Mercury	"	**0.109**		0.020	0.050	EPA 1630	06/08/18	06/07/18	B8F0980
18E2239-03 LP2-B - Grab Water (18E1277-03) Sampled:05/22/18 13:10 Received:05/25/18 14:46									
Mercury	ng/l	**3.46**		0.20	0.50	EPA 1631E	05/30/18	05/30/18	B8E1589
Methyl Mercury as Mercury	"	**0.132**		0.020	0.050	EPA 1630	06/08/18	06/07/18	B8F0980
18E2239-04 LP-EQB - Grab Water (18E1277-04) Sampled:05/22/18 15:15 Received:05/25/18 14:46									
Mercury	ng/l	ND		0.20	0.50	EPA 1631E	05/30/18	05/30/18	B8E1589
Methyl Mercury as Mercury	"	ND		0.020	0.050	EPA 1630	06/08/18	06/07/18	B8F0980

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: DAVID PINGATORE
Project: LOW LEVEL METALS 18E2239

Lab No: 18E1277
Reported: 06/11/18
Phone: (707) 468-0401
P.O. #

Quality Control Data

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Metals - Total										
Batch B8E1589 - BrCl Digestion										
Blank										
Mercury	ND	0.50	ng/l							
Blank										
Mercury	ND	0.50	ng/l							QB-06
Blank										
Mercury	ND	0.50	ng/l							
LCS										
Mercury	9.97	0.50	ng/l	10.0		99.7	77-123			
Matrix Spike Source: 18E1166-01										
Mercury	14.6	0.50	ng/l	10.0	3.50	111	71-125			
Matrix Spike Source: 18E1276-01										
Mercury	13.9	0.50	ng/l	10.0	2.09	118	71-125			
Matrix Spike Dup Source: 18E1166-01										
Mercury	14.2	0.50	ng/l	10.0	3.50	107	71-125	2.78	24	
Matrix Spike Dup Source: 18E1276-01										
Mercury	13.8	0.50	ng/l	10.0	2.09	117	71-125	1.05	24	
Batch B8F0980 - Draft EPA Method 1630 Distillation (Modified)										
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
LCS										
Methyl Mercury as Mercury	1.60	0.050	ng/l	2.00		79.8	67-133			
Matrix Spike Source: 18E1169-03										
Methyl Mercury as Mercury	1.25	0.050	ng/l	1.00	0.155	110	65-135			
Matrix Spike Dup Source: 18E1169-03										
Methyl Mercury as Mercury	1.24	0.050	ng/l	1.00	0.155	108	65-135	1.26	35	

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Basic Laboratory Inc
California ELAP Cert #1677 and #2718

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: DAVID PINGATORE
Project: LOW LEVEL METALS 18E2239

Lab No: 18E1277
Reported: 06/11/18
Phone: (707) 468-0401
P.O. #

Notes and Definitions

QB-06	Some samples in this batch required an additional amount of BrCl to fully oxidize the sample. Per EPA method 1631E requirements, this Method Blank contains an increased concentration of BrCl to match the sample matrix.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
<	Less than reporting limit
≤	Less than or equal to reporting limit
>	Greater than reporting limit
≥	Greater than or equal to reporting limit
MDL	Method Detection Limit
RL/ML	Minimum Level of Quantitation
MCL/AL	Maxium Contaminant Level/Action Level
mg/kg	Results reported as wet weight
TTLC	Total Threshold Limit Concentration
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leachate Procedure
Note 1	Received Temperature - according to EPA guidelines, samples for most chemistry methods should be held at ≤6 degrees C after collection, including during transportation, unless the time from sampling to delivery is <2 hours. Regulating agencies may invalidate results if temperature requirements are not met.
Note 2	According to 40 CFR Part 136 Table II, the following tests should be analyzed in the field within 15 minutes of sampling: pH, chlorine, dissolved oxygen, and sulfite.

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18E2239

18E1277

6-7-18

18E1277

SENDING LABORATORY:	RECEIVING LABORATORY:
Alpha Analytical Laboratories, Inc.	Basic Laboratory
208 Mason St.	2218 Railroad Ave
Ukiah, CA 95482	Redding, CA 96001
Phone: (707)468-0401	Phone :530-243-7234
Fax: (707)468-5267	Fax: 530-243-7494
Project Manager: David S. Pingatore	**Terms: Net 30**

Analysis	Due	Expires	Comments
18E2239-01 LP2-S [Water] Sampled 05/22/18 12:05			-1 5.7°
BAL Hg 1631	06/06/18 12:00	06/19/18 12:05	
BAL Hg Methyl	06/06/18 12:00	11/18/18 12:05	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E2239-02 LP2-M [Water] Sampled 05/22/18 12:40			-2 5.3°
BAL Hg 1631	06/06/18 12:00	06/19/18 12:40	
BAL Hg Methyl	06/06/18 12:00	11/18/18 12:40	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E2239-03 LP2-B [Water] Sampled 05/22/18 13:10			-3 6.1°
BAL Hg 1631	06/06/18 12:00	06/19/18 13:10	
BAL Hg Methyl	06/06/18 12:00	11/18/18 13:10	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E2239-04 LP-EQB [Water] Sampled 05/22/18 15:15			-4 7.6°
BAL Hg 1631	06/06/18 12:00	06/19/18 15:15	
BAL Hg Methyl	06/06/18 12:00	11/18/18 15:15	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			

Released By	Date	Received By	Date
[signature]	5-23-18	TWilhelmson	5.25.18 1446
Released By	Date	Received By	Date
		TW	5.25.18 1525

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18E2239

18E-1277

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+QC
+MDL

Released By | Date | Received By | Date

5-23-18

Released By | Date | Received By | Date

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www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

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Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18E2239 Pg 1 of 3

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	Analysis Request: CAM17 200.8 dissolved / lab filter	Al dissolved 200.8	Alkalinity	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	TDS	TSS	Chlorophyll-A	Sulfide	Hg 1631	MeHg 1630	Sample Notes or DDW Source Numbers:
LP2-S	5/22	1205															X	X	X	X	X	X	X	X	X	X	X	X	
LP2-M	↓	1240															↓	↓	↓	↓	↓	↓	↓	↓	X	↓	↓	↓	
LP2-B	↓	1310																											No Chl
LP-EQB	↓	1515															↓	↓	↓	↓	↓	↓	↓	↓	X	↓	↓	↓	

TAT
Standard 10 days ○
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.2
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		5/22/18	1650

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number:
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID:
EDF to (Email Address):
Sampling Company Log Code:

Travel and Site Time:	Mileage:	Misc. Supplies:

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ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

Bay Area Laboratory
262 Rickenbacker Circle, Livermore CA 94551
925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18E2239 Pg 2 of 3

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	

Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Signature below authorizes work under terms stated on reverse side.

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Analysis Request: TPH-D/MO	TPH-Gas/BTEX/Oxys	Oil and Grease	TOC	DOC	CAM17 200.8 total + Al/Mn	Fe 200.8 Total	Hardness, total	Ammonia-N	Phosphorus, Total	TKN	Sample Notes or DDW Source Numbers:
LP2-S	5/22	1205															X	X	X	X	X	X	X	X	X	X	X	
LP2-M	↓	1240															↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
LP2-B		1310																										
LP-EQB	↓	1515																										

TAT
Standard 10 days ⊘
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.2
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		5/22/18	1650

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number:
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):

Travel and Site Time:	Mileage:	Misc. Supplies:

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Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18E2239 Pg 3 of 3

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Algal ID & E (sub to Greenwater)	Analysis Request	Sample Notes or DDW Source Numbers:
LP-2-S	5/22	1205															X	Please hold phytoplankton sample analysis until further notice.	
LP2-M	"	1240															X		
LP2-B	"	1310																	no id
LP-EQB	↓	1515																	no id

TAT
Standard 10 days ○
RUSH: 5 days ○ 48 hours ○ Other: ___days ○
Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.2
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		5/22/18	1650

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):

Travel and Site Time:	Mileage:	Misc. Supplies:

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ELAP Certificates 1551, 2728, and 2922

25 June 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18E2418

Enclosed are the results of analyses for samples received by the laboratory on 05/24/18 08:15. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

Alpha Analytical Laboratories Inc.
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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LP1-S	18E2418-01	Water	05/23/18 09:00	05/24/18 08:15
LP1-M	18E2418-02	Water	05/23/18 09:30	05/24/18 08:15
LP1-B	18E2418-03	Water	05/23/18 09:45	05/24/18 08:15
LP3-S	18E2418-04	Water	05/23/18 11:15	05/24/18 08:15
LP3-M	18E2418-05	Water	05/23/18 11:45	05/24/18 08:15
LP3-B	18E2418-06	Water	05/23/18 12:00	05/24/18 08:15
LP-DUP	18E2418-07	Water	05/23/18 11:30	05/24/18 08:15
LP4-S	18E2418-08	Water	05/23/18 15:00	05/24/18 08:15
LP4-M	18E2418-09	Water	05/23/18 15:30	05/24/18 08:15
LP4-B	18E2418-10	Water	05/23/18 16:00	05/24/18 08:15
RF3.8	18E2418-11	Water	05/23/18 17:10	05/24/18 08:15

This represents an amended copy of the original report.

Subcontracted results added.

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.

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-S (18E2418-01) Water Sampled: 05/23/18 09:00 Received: 05/24/18 08:15											
Calcium	**19**	**0.080**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:28	EPA 200.7	MAM	
Magnesium	**5.1**	**0.030**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:28	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AF83265	06/07/18 08:06	06/07/18 13:53	EPA 245.1	EL	U
LP1-M (18E2418-02) Water Sampled: 05/23/18 09:30 Received: 05/24/18 08:15											
Calcium	**19**	**0.080**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:33	EPA 200.7	MAM	
Magnesium	**5.4**	**0.030**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:33	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AF83265	06/07/18 08:06	06/07/18 13:56	EPA 245.1	EL	U
LP1-B (18E2418-03) Water Sampled: 05/23/18 09:45 Received: 05/24/18 08:15											
Calcium	**18**	**0.080**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:37	EPA 200.7	MAM	
Magnesium	**5.4**	**0.030**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:37	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AF83265	06/07/18 08:06	06/07/18 13:59	EPA 245.1	EL	U
LP3-S (18E2418-04) Water Sampled: 05/23/18 11:15 Received: 05/24/18 08:15											
Calcium	**18**	**0.080**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:42	EPA 200.7	MAM	
Magnesium	**5.1**	**0.030**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:42	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AF83265	06/07/18 08:06	06/07/18 14:01	EPA 245.1	EL	U
LP3-M (18E2418-05) Water Sampled: 05/23/18 11:45 Received: 05/24/18 08:15											
Calcium	**18**	**0.080**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:47	EPA 200.7	MAM	
Magnesium	**5.6**	**0.030**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:47	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AF83265	06/07/18 08:06	06/07/18 14:09	EPA 245.1	EL	U
LP3-B (18E2418-06) Water Sampled: 05/23/18 12:00 Received: 05/24/18 08:15											
Calcium	**18**	**0.080**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:52	EPA 200.7	MAM	
Magnesium	**5.4**	**0.030**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:52	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AF83265	06/07/18 08:06	06/07/18 14:12	EPA 245.1	EL	U

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-DUP (18E2418-07) Water Sampled: 05/23/18 11:30 Received: 05/24/18 08:15											
Calcium	**18**	**0.080**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:55	EPA 200.7	MAM	
Magnesium	**5.1**	**0.030**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:55	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AF83265	06/07/18 08:06	06/07/18 14:14	EPA 245.1	EL	U
LP4-S (18E2418-08) Water Sampled: 05/23/18 15:00 Received: 05/24/18 08:15											
Calcium	**19**	**0.080**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 18:00	EPA 200.7	MAM	
Magnesium	**6.1**	**0.030**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 18:00	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AF83225	06/06/18 08:19	06/07/18 11:17	EPA 245.1	EL	U
LP4-M (18E2418-09) Water Sampled: 05/23/18 15:30 Received: 05/24/18 08:15											
Calcium	**19**	**0.080**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 18:14	EPA 200.7	MAM	
Magnesium	**5.8**	**0.030**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 18:14	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AF83225	06/06/18 08:19	06/07/18 11:19	EPA 245.1	EL	U
LP4-B (18E2418-10) Water Sampled: 05/23/18 16:00 Received: 05/24/18 08:15											
Calcium	**21**	**0.080**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 18:18	EPA 200.7	MAM	
Magnesium	**7.3**	**0.030**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 18:18	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AF83225	06/06/18 08:19	06/07/18 11:22	EPA 245.1	EL	U
RF3.8 (18E2418-11) Water Sampled: 05/23/18 17:10 Received: 05/24/18 08:15											
Calcium	**32**	**0.080**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/08/18 13:33	EPA 200.7	MAM	
Magnesium	**13**	**0.030**	**1.0**	**mg/L**	1	AF83104	06/04/18 09:10	06/08/18 13:33	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AF83225	06/06/18 08:19	06/07/18 11:25	EPA 245.1	EL	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-S (18E2418-01) Water Sampled: 05/23/18 09:00 Received: 05/24/18 08:15											
Aluminum	**29**	**20**	**40**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 16:34	EPA 200.8	MMY	R-01, J
Antimony	ND	0.80	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 16:34	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 16:34	EPA 200.8	MMY	R-01, U
Barium	**51**	**0.80**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 16:34	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 16:34	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 16:34	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 16:34	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.12	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 16:34	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 16:34	EPA 200.8	MMY	R-01, U
Iron	**59**	**40**	**200**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 16:34	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 16:34	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AE84266	05/30/18 10:30	05/31/18 16:34	EPA 200.8	MMY	R-01, U
Molybdenum	**0.37**	**0.28**	**1.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 16:34	EPA 200.8	MMY	R-01, J
Nickel	ND	1.2	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 16:34	EPA 200.8	MMY	R-01, U
Selenium	ND	0.80	8.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 16:34	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 16:34	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 16:34	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 16:34	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84266	05/30/18 10:30	05/31/18 16:34	EPA 200.8	MMY	R-01, U
LP1-M (18E2418-02) Water Sampled: 05/23/18 09:30 Received: 05/24/18 08:15											
Aluminum	**110**	**20**	**40**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:41	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:41	EPA 200.8	MMY	R-01, U
Arsenic	**1.1**	**0.80**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:41	EPA 200.8	MMY	R-01, J
Barium	**51**	**0.80**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:41	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:41	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:41	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:41	EPA 200.8	MMY	R-01, U
Cobalt	**0.15**	**0.12**	**0.40**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:41	EPA 200.8	MMY	R-01, J
Copper	ND	1.6	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:41	EPA 200.8	MMY	R-01, U
Iron	**160**	**40**	**200**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:41	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:41	EPA 200.8	MMY	R-01, U
Manganese	**19**	**8.0**	**20**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:41	EPA 200.8	MMY	R-01, J
Molybdenum	**0.36**	**0.28**	**1.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:41	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-M (18E2418-02) Water Sampled: 05/23/18 09:30 Received: 05/24/18 08:15											
Nickel	**1.9**	**1.2**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:41	EPA 200.8	MMY	R-01, J
Selenium	ND	0.80	8.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:41	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:41	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:41	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:41	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:41	EPA 200.8	MMY	R-01, U
LP1-B (18E2418-03) Water Sampled: 05/23/18 09:45 Received: 05/24/18 08:15											
Aluminum	**420**	**20**	**40**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:47	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:47	EPA 200.8	MMY	R-01, U
Arsenic	**1.3**	**0.80**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:47	EPA 200.8	MMY	R-01, J
Barium	**55**	**0.80**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:47	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:47	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:47	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AE84266	05/30/18 10:30	06/01/18 12:24	EPA 200.8	MMY	R-01, U
Cobalt	**0.26**	**0.12**	**0.40**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:47	EPA 200.8	MMY	R-01, J
Copper	**2.1**	**1.6**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:47	EPA 200.8	MMY	
Iron	**410**	**40**	**200**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:47	EPA 200.8	MMY	
Lead	**0.28**	**0.24**	**1.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:47	EPA 200.8	MMY	R-01, J
Manganese	**20**	**8.0**	**20**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:47	EPA 200.8	MMY	
Molybdenum	**0.34**	**0.28**	**1.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:47	EPA 200.8	MMY	R-01, J
Nickel	**2.7**	**1.2**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:47	EPA 200.8	MMY	
Selenium	ND	0.80	8.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:47	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:47	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:47	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:47	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:47	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-S (18E2418-04) Water Sampled: 05/23/18 11:15 Received: 05/24/18 08:15											
Aluminum	**33**	**20**	**40**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:54	EPA 200.8	MMY	R-01, J
Antimony	ND	0.80	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:54	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:54	EPA 200.8	MMY	R-01, U
Barium	**48**	**0.80**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:54	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:54	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:54	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:54	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.12	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:54	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:54	EPA 200.8	MMY	R-01, U
Iron	**54**	**40**	**200**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:54	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:54	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:54	EPA 200.8	MMY	R-01, U
Molybdenum	**0.32**	**0.28**	**1.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 18:54	EPA 200.8	MMY	R-01, J
Nickel	ND	1.2	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:54	EPA 200.8	MMY	R-01, U
Selenium	ND	0.80	8.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:54	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:54	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:54	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:54	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84266	05/30/18 10:30	05/31/18 18:54	EPA 200.8	MMY	R-01, U
LP3-M (18E2418-05) Water Sampled: 05/23/18 11:45 Received: 05/24/18 08:15											
Aluminum	**350**	**20**	**40**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:01	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:01	EPA 200.8	MMY	R-01, U
Arsenic	**1.0**	**0.80**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:01	EPA 200.8	MMY	R-01, J
Barium	**56**	**0.80**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:01	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:01	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:01	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AE84266	05/30/18 10:30	06/01/18 12:30	EPA 200.8	MMY	R-01, U
Cobalt	**0.23**	**0.12**	**0.40**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:01	EPA 200.8	MMY	R-01, J
Copper	**1.8**	**1.6**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:01	EPA 200.8	MMY	R-01, J
Iron	**320**	**40**	**200**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:01	EPA 200.8	MMY	
Lead	ND	0.24	1.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:01	EPA 200.8	MMY	R-01, U
Manganese	**26**	**8.0**	**20**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:01	EPA 200.8	MMY	
Molybdenum	**0.35**	**0.28**	**1.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:01	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-M (18E2418-05) Water Sampled: 05/23/18 11:45 Received: 05/24/18 08:15											
Nickel	**2.4**	**1.2**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:01	EPA 200.8	MMY	
Selenium	ND	0.80	8.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:01	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:01	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:01	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:01	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:01	EPA 200.8	MMY	R-01, U
LP3-B (18E2418-06) Water Sampled: 05/23/18 12:00 Received: 05/24/18 08:15											
Aluminum	**810**	**20**	**40**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:07	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:07	EPA 200.8	MMY	R-01, U
Arsenic	**0.98**	**0.80**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:07	EPA 200.8	MMY	R-01, J
Barium	**59**	**0.80**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:07	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:07	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:07	EPA 200.8	MMY	R-01, U
Chromium	**3.2**	**2.0**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	06/01/18 12:44	EPA 200.8	MMY	
Cobalt	**0.50**	**0.12**	**0.40**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:07	EPA 200.8	MMY	
Copper	**2.5**	**1.6**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:07	EPA 200.8	MMY	
Iron	**790**	**40**	**200**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:07	EPA 200.8	MMY	
Lead	**0.29**	**0.24**	**1.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:07	EPA 200.8	MMY	R-01, J
Manganese	**76**	**8.0**	**20**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:07	EPA 200.8	MMY	
Molybdenum	**0.37**	**0.28**	**1.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:07	EPA 200.8	MMY	R-01, J
Nickel	**4.9**	**1.2**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:07	EPA 200.8	MMY	
Selenium	ND	0.80	8.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:07	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:07	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:07	EPA 200.8	MMY	R-01, U
Vanadium	**2.1**	**2.0**	**4.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:07	EPA 200.8	MMY	R-01, J
Zinc	ND	8.0	20	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:07	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-DUP (18E2418-07) Water Sampled: 05/23/18 11:30 Received: 05/24/18 08:15											
Aluminum	**31**	**20**	**40**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:14	EPA 200.8	MMY	R-01, J
Antimony	ND	0.80	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:14	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:14	EPA 200.8	MMY	R-01, U
Barium	**48**	**0.80**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:14	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:14	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:14	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:14	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.12	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:14	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:14	EPA 200.8	MMY	R-01, U
Iron	**52**	**40**	**200**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:14	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:14	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:14	EPA 200.8	MMY	R-01, U
Molybdenum	**0.32**	**0.28**	**1.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:14	EPA 200.8	MMY	R-01, J
Nickel	**1.3**	**1.2**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:14	EPA 200.8	MMY	R-01, J
Selenium	ND	0.80	8.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:14	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:14	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:14	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:14	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:14	EPA 200.8	MMY	R-01, U
LP4-S (18E2418-08) Water Sampled: 05/23/18 15:00 Received: 05/24/18 08:15											
Aluminum	**32**	**20**	**40**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:21	EPA 200.8	MMY	R-01, J
Antimony	ND	0.80	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:21	EPA 200.8	MMY	R-01, U
Arsenic	**1.1**	**0.80**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:21	EPA 200.8	MMY	R-01, J
Barium	**52**	**0.80**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:21	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:21	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:21	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:21	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.12	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:21	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:21	EPA 200.8	MMY	R-01, U
Iron	**61**	**40**	**200**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:21	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:21	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:21	EPA 200.8	MMY	R-01, U
Molybdenum	**0.31**	**0.28**	**1.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:21	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-S (18E2418-08) Water Sampled: 05/23/18 15:00 Received: 05/24/18 08:15											
Nickel	**1.2**	**1.2**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:21	EPA 200.8	MMY	R-01, J
Selenium	ND	0.80	8.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:21	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:21	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:21	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:21	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:21	EPA 200.8	MMY	R-01, U
LP4-M (18E2418-09) Water Sampled: 05/23/18 15:30 Received: 05/24/18 08:15											
Aluminum	**39**	**20**	**40**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:27	EPA 200.8	MMY	R-01, J
Antimony	ND	0.80	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:27	EPA 200.8	MMY	R-01, U
Arsenic	**1.2**	**0.80**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:27	EPA 200.8	MMY	R-01, J
Barium	**50**	**0.80**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:27	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:27	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:27	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:27	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.12	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:27	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:27	EPA 200.8	MMY	R-01, U
Iron	**61**	**40**	**200**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:27	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:27	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:27	EPA 200.8	MMY	R-01, U
Molybdenum	**0.36**	**0.28**	**1.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:27	EPA 200.8	MMY	R-01, J
Nickel	ND	1.2	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:27	EPA 200.8	MMY	R-01, U
Selenium	ND	0.80	8.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:27	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:27	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:27	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:27	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:27	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-B (18E2418-10) Water Sampled: 05/23/18 16:00 Received: 05/24/18 08:15											
Aluminum	**140**	**20**	**40**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:34	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:34	EPA 200.8	MMY	R-01, U
Arsenic	**3.7**	**0.80**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:34	EPA 200.8	MMY	
Barium	**64**	**0.80**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:34	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:34	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:34	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:34	EPA 200.8	MMY	R-01, U
Cobalt	**0.34**	**0.12**	**0.40**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:34	EPA 200.8	MMY	R-01, J
Copper	ND	1.6	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:34	EPA 200.8	MMY	R-01, U
Iron	**280**	**40**	**200**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:34	EPA 200.8	MMY	
Lead	ND	0.24	1.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:34	EPA 200.8	MMY	R-01, U
Manganese	**110**	**8.0**	**20**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:34	EPA 200.8	MMY	
Molybdenum	**0.39**	**0.28**	**1.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:34	EPA 200.8	MMY	J
Nickel	**2.4**	**1.2**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:34	EPA 200.8	MMY	
Selenium	ND	0.80	8.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:34	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:34	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:34	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:34	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:34	EPA 200.8	MMY	R-01, U
RF3.8 (18E2418-11) Water Sampled: 05/23/18 17:10 Received: 05/24/18 08:15											
Aluminum	**24**	**20**	**40**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:41	EPA 200.8	MMY	R-01, J
Antimony	ND	0.80	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:41	EPA 200.8	MMY	R-01, U
Arsenic	**3.0**	**0.80**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:41	EPA 200.8	MMY	
Barium	**78**	**0.80**	**2.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:41	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:41	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:41	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:41	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.12	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:41	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:41	EPA 200.8	MMY	R-01, U
Iron	**70**	**40**	**200**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:41	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:41	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:41	EPA 200.8	MMY	R-01, U
Molybdenum	**0.44**	**0.28**	**1.0**	**ug/L**	4	AE84266	05/30/18 10:30	05/31/18 19:41	EPA 200.8	MMY	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
RF3.8 (18E2418-11) Water Sampled: 05/23/18 17:10 Received: 05/24/18 08:15											
Nickel	ND	1.2	2.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:41	EPA 200.8	MMY	R-01, U
Selenium	ND	0.80	8.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:41	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:41	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:41	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:41	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84266	05/30/18 10:30	05/31/18 19:41	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-S (18E2418-01) Water Sampled: 05/23/18 09:00 Received: 05/24/18 08:15											**FILT**
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AF83272	06/07/18 08:19	06/08/18 09:28	EPA 245.1	EL	U
LP1-M (18E2418-02) Water Sampled: 05/23/18 09:30 Received: 05/24/18 08:15											**FILT**
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AF83272	06/07/18 08:19	06/08/18 09:38	EPA 245.1	EL	U
LP1-B (18E2418-03) Water Sampled: 05/23/18 09:45 Received: 05/24/18 08:15											**FILT**
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AF83272	06/07/18 08:19	06/08/18 09:41	EPA 245.1	EL	U
LP3-S (18E2418-04) Water Sampled: 05/23/18 11:15 Received: 05/24/18 08:15											**FILT**
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AF83272	06/07/18 08:19	06/08/18 09:43	EPA 245.1	EL	U
LP3-M (18E2418-05) Water Sampled: 05/23/18 11:45 Received: 05/24/18 08:15											**FILT**
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AF83272	06/07/18 08:19	06/08/18 09:46	EPA 245.1	EL	U
LP3-B (18E2418-06) Water Sampled: 05/23/18 12:00 Received: 05/24/18 08:15											**FILT**
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AF83272	06/07/18 08:19	06/08/18 09:49	EPA 245.1	EL	U
LP-DUP (18E2418-07) Water Sampled: 05/23/18 11:30 Received: 05/24/18 08:15											**FILT**
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AF83272	06/07/18 08:19	06/08/18 09:51	EPA 245.1	EL	U
LP4-S (18E2418-08) Water Sampled: 05/23/18 15:00 Received: 05/24/18 08:15											**FILT**
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AF83272	06/07/18 08:19	06/08/18 09:54	EPA 245.1	EL	U
LP4-M (18E2418-09) Water Sampled: 05/23/18 15:30 Received: 05/24/18 08:15											**FILT**
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AF83272	06/07/18 08:19	06/08/18 09:56	EPA 245.1	EL	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-B (18E2418-10) Water Sampled: 05/23/18 16:00 Received: 05/24/18 08:15											**FILT**
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AF83272	06/07/18 08:19	06/08/18 09:59	EPA 245.1	EL	U
RF3.8 (18E2418-11) Water Sampled: 05/23/18 17:10 Received: 05/24/18 08:15											**FILT**
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AF83272	06/07/18 08:19	06/08/18 10:02	EPA 245.1	EL	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-S (18E2418-01) Water Sampled: 05/23/18 09:00 Received: 05/24/18 08:15											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 10:01	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 10:01	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 10:01	EPA 200.8	MMY	R-01, U
Barium, dissolved	**54**	**0.80**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 10:01	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 10:01	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 10:01	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 10:01	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 10:01	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 10:01	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 10:01	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.32**	**0.28**	**1.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 10:01	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.4**	**1.2**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 10:01	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 10:01	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 10:01	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 10:01	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 10:01	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AF83108	06/05/18 13:50	06/06/18 10:01	EPA 200.8	MMY	R-01, U
LP1-M (18E2418-02) Water Sampled: 05/23/18 09:30 Received: 05/24/18 08:15											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:52	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:52	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**1.2**	**0.80**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 12:52	EPA 200.8	MMY	R-01, J
Barium, dissolved	**52**	**0.80**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 12:52	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:52	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:52	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:52	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:52	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:52	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:52	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.34**	**0.28**	**1.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 12:52	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.8**	**1.2**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 12:52	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:52	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:52	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:52	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-M (18E2418-02) Water Sampled: 05/23/18 09:30 Received: 05/24/18 08:15											**FILT**
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:52	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:52	EPA 200.8	MMY	R-01, U
LP1-B (18E2418-03) Water Sampled: 05/23/18 09:45 Received: 05/24/18 08:15											**FILT**
Aluminum, dissolved	**35**	**20**	**40**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 12:59	EPA 200.8	MMY	R-01, J
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:59	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:59	EPA 200.8	MMY	R-01, U
Barium, dissolved	**52**	**0.80**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 12:59	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:59	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:59	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:59	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:59	EPA 200.8	MMY	R-01, U
Copper, dissolved	**1.8**	**1.6**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 12:59	EPA 200.8	MMY	R-01, J
Lead, dissolved	ND	0.24	1.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:59	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.33**	**0.28**	**1.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 12:59	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**2.0**	**1.2**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 12:59	EPA 200.8	MMY	
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:59	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:59	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:59	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:59	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AF83108	06/05/18 13:50	06/06/18 12:59	EPA 200.8	MMY	R-01, U
LP3-S (18E2418-04) Water Sampled: 05/23/18 11:15 Received: 05/24/18 08:15											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:06	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:06	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:06	EPA 200.8	MMY	R-01, U
Barium, dissolved	**51**	**0.80**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:06	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:06	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:06	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:06	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:06	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:06	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:06	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.30**	**0.28**	**1.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:06	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.7**	**1.2**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:06	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-S (18E2418-04) Water Sampled: 05/23/18 11:15 Received: 05/24/18 08:15											**FILT**
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:06	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:06	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:06	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:06	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:06	EPA 200.8	MMY	R-01, U
LP3-M (18E2418-05) Water Sampled: 05/23/18 11:45 Received: 05/24/18 08:15											**FILT**
Aluminum, dissolved	**26**	**20**	**40**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:12	EPA 200.8	MMY	R-01, J
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:12	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:12	EPA 200.8	MMY	R-01, U
Barium, dissolved	**55**	**0.80**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:12	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:12	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:12	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:12	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:12	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:12	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:12	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.31**	**0.28**	**1.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:12	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**2.1**	**1.2**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:12	EPA 200.8	MMY	
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:12	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:12	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:12	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:12	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:12	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-B (18E2418-06) Water Sampled: 05/23/18 12:00 Received: 05/24/18 08:15											**FILT**
Aluminum, dissolved	**39**	**20**	**40**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:19	EPA 200.8	MMY	R-01, J
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:19	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:19	EPA 200.8	MMY	R-01, U
Barium, dissolved	**54**	**0.80**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:19	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:19	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:19	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:19	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:19	EPA 200.8	MMY	R-01, U
Copper, dissolved	**1.6**	**1.6**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:19	EPA 200.8	MMY	R-01, J
Lead, dissolved	ND	0.24	1.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:19	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.32**	**0.28**	**1.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:19	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**2.8**	**1.2**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:19	EPA 200.8	MMY	
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:19	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:19	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:19	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:19	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:19	EPA 200.8	MMY	R-01, U
LP-DUP (18E2418-07) Water Sampled: 05/23/18 11:30 Received: 05/24/18 08:15											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:26	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:26	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:26	EPA 200.8	MMY	R-01, U
Barium, dissolved	**52**	**0.80**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:26	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:26	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:26	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:26	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:26	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AF83108	06/05/18 13:50	06/07/18 14:50	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:26	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.29**	**0.28**	**1.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:26	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.6**	**1.2**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:26	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:26	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:26	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:26	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-DUP (18E2418-07) Water Sampled: 05/23/18 11:30 Received: 05/24/18 08:15											**FILT**
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:26	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:26	EPA 200.8	MMY	R-01, U
LP4-S (18E2418-08) Water Sampled: 05/23/18 15:00 Received: 05/24/18 08:15											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:32	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:32	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**1.1**	**0.80**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:32	EPA 200.8	MMY	R-01, J
Barium, dissolved	**55**	**0.80**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:32	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:32	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:32	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:32	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:32	EPA 200.8	MMY	R-01, U
Copper, dissolved	**1.9**	**1.6**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:32	EPA 200.8	MMY	R-01, J
Lead, dissolved	ND	0.24	1.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:32	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.32**	**0.28**	**1.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:32	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.9**	**1.2**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:32	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:32	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:32	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:32	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:32	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:32	EPA 200.8	MMY	R-01, U
LP4-M (18E2418-09) Water Sampled: 05/23/18 15:30 Received: 05/24/18 08:15											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:39	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:39	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:39	EPA 200.8	MMY	R-01, U
Barium, dissolved	**54**	**0.80**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:39	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:39	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:39	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:39	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:39	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:39	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:39	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.30**	**0.28**	**1.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:39	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.7**	**1.2**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:39	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-M (18E2418-09) Water Sampled: 05/23/18 15:30 Received: 05/24/18 08:15											**FILT**
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:39	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:39	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:39	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:39	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:39	EPA 200.8	MMY	R-01, U
LP4-B (18E2418-10) Water Sampled: 05/23/18 16:00 Received: 05/24/18 08:15											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:46	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:46	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**2.4**	**0.80**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:46	EPA 200.8	MMY	
Barium, dissolved	**67**	**0.80**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:46	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:46	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:46	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:46	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:46	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:46	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:46	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.40**	**0.28**	**1.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:46	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**2.3**	**1.2**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 13:46	EPA 200.8	MMY	
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:46	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:46	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:46	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:46	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AF83108	06/05/18 13:50	06/06/18 13:46	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
RF3.8 (18E2418-11) Water Sampled: 05/23/18 17:10 Received: 05/24/18 08:15											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:32	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:32	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**2.8**	**0.80**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 11:32	EPA 200.8	MMY	
Barium, dissolved	**87**	**0.80**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 11:32	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:32	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:32	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:32	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:32	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:32	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:32	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.45**	**0.28**	**1.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 11:32	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.7**	**1.2**	**2.0**	**ug/L**	4	AF83108	06/05/18 13:50	06/06/18 11:32	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:32	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:32	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:32	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:32	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AF83108	06/05/18 13:50	06/06/18 11:32	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-S (18E2418-01) Water Sampled: 05/23/18 09:00 Received: 05/24/18 08:15											
Ammonia as N	ND	0.10	0.20	mg/L	1	AF83157	06/05/18 09:00	06/05/18 16:00	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE84136	05/25/18 08:00	05/30/18 15:45	SM5210B	EF	U
Chlorophyll-a	**0.0013**	**0.0010**	**0.010**	**mg/L**	1	AF83183	05/24/18 16:00	06/07/18 10:46	SM10200H	PBM	J
Dissolved Organic Carbon	**2.31**	**0.600**	**1.00**	**mg/L**	1	AF83264	06/07/18 07:08	06/07/18 17:31	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AF83219	06/06/18 07:54	06/06/18 13:30	EPA 1664A	STS	U
Sulfide	ND	0.020	0.10	mg/L	1	AE84247	05/29/18 15:00	05/29/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**70**	**5.0**	**10**	**mg/L**	1	AE84252	05/29/18 15:58	06/05/18 09:15	SM2540C	PBM	
Total Suspended Solids	**0.70**	**0.30**	**1.0**	**mg/L**	1	AE84188	05/29/18 13:00	05/30/18 10:45	SM2540D	EV	J
Bicarbonate Alkalinity as CaCO3	**65**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Total Alkalinity as CaCO3	**65**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	
Nitrate + Nitrite as N	**0.028**	**0.0086**	**0.40**	**mg/L**	1	AE84336	06/05/18 12:20	06/08/18 16:02	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AF83248	06/07/18 11:29	06/08/18 12:07	SM4500-Norg B	SMS	U
Hardness, Total	**68**	**1**	**5**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:28	SM2340B	MAM	
Phosphorus, total	**0.026**	**0.011**	**0.040**	**mg/L**	1	AF83380	06/09/18 12:00	06/09/18 14:14	SM4500-P E	SMS	J
Total Organic Carbon	**2.43**	**0.300**	**1.00**	**mg/L**	1	AF83214	06/06/18 05:59	06/06/18 12:54	SM5310C	JIM	
LP1-M (18E2418-02) Water Sampled: 05/23/18 09:30 Received: 05/24/18 08:15											
Ammonia as N	ND	0.10	0.20	mg/L	1	AF83157	06/05/18 09:00	06/05/18 16:00	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE84136	05/25/18 08:00	05/30/18 15:45	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AF83183	05/24/18 16:00	06/07/18 10:46	SM10200H	PBM	U
Dissolved Organic Carbon	**2.42**	**0.600**	**1.00**	**mg/L**	1	AF83264	06/07/18 07:08	06/07/18 17:44	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AF83219	06/06/18 07:54	06/06/18 13:30	EPA 1664A	STS	U
Sulfide	ND	0.020	0.10	mg/L	1	AE84247	05/29/18 15:00	05/29/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**78**	**5.0**	**10**	**mg/L**	1	AE84252	05/29/18 15:58	06/05/18 09:15	SM2540C	PBM	
Total Suspended Solids	**1.8**	**0.30**	**1.0**	**mg/L**	1	AE84188	05/29/18 13:00	05/30/18 10:45	SM2540D	EV	
Bicarbonate Alkalinity as CaCO3	**66**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Total Alkalinity as CaCO3	**66**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	
Nitrate + Nitrite as N	**0.030**	**0.0086**	**0.40**	**mg/L**	1	AE84336	06/05/18 12:20	06/08/18 16:02	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AF83248	06/07/18 11:29	06/08/18 12:07	SM4500-Norg B	SMS	U
Hardness, Total	**70**	**1**	**5**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:33	SM2340B	MAM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-M (18E2418-02) Water Sampled: 05/23/18 09:30 Received: 05/24/18 08:15											
Phosphorus, total	**0.024**	**0.011**	**0.040**	**mg/L**	1	AF83380	06/09/18 12:00	06/09/18 14:14	SM4500-P E	SMS	J
Total Organic Carbon	**2.35**	**0.300**	**1.00**	**mg/L**	1	AF83214	06/06/18 05:59	06/06/18 13:06	SM5310C	JIM	
LP1-B (18E2418-03) Water Sampled: 05/23/18 09:45 Received: 05/24/18 08:15											
Ammonia as N	ND	0.10	0.20	mg/L	1	AF83157	06/05/18 09:00	06/05/18 16:00	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE84136	05/25/18 08:00	05/30/18 15:45	SM5210B	EF	U
Dissolved Organic Carbon	**2.23**	**0.600**	**1.00**	**mg/L**	1	AF83264	06/07/18 07:08	06/07/18 18:48	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AF83219	06/06/18 07:54	06/06/18 13:30	EPA 1664A	STS	U
Sulfide	ND	0.020	0.10	mg/L	1	AE84247	05/29/18 15:00	05/29/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**86**	**5.0**	**10**	**mg/L**	1	AE84252	05/29/18 15:58	06/05/18 09:15	SM2540C	PBM	
Total Suspended Solids	**3.8**	**0.30**	**1.0**	**mg/L**	1	AE84188	05/29/18 13:00	05/30/18 10:45	SM2540D	EV	
Bicarbonate Alkalinity as CaCO3	**61**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Total Alkalinity as CaCO3	**61**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	
Nitrate + Nitrite as N	**0.038**	**0.0086**	**0.40**	**mg/L**	1	AE84336	06/05/18 12:20	06/08/18 16:02	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AF83248	06/07/18 11:29	06/08/18 12:07	SM4500-Norg B	SMS	U
Hardness, Total	**68**	**1**	**5**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:37	SM2340B	MAM	
Phosphorus, total	**0.030**	**0.011**	**0.040**	**mg/L**	1	AF83380	06/09/18 12:00	06/09/18 14:14	SM4500-P E	SMS	J
Total Organic Carbon	**2.54**	**0.300**	**1.00**	**mg/L**	1	AF83214	06/06/18 05:59	06/06/18 14:11	SM5310C	JIM	
LP3-S (18E2418-04) Water Sampled: 05/23/18 11:15 Received: 05/24/18 08:15											
Ammonia as N	ND	0.10	0.20	mg/L	1	AF83157	06/05/18 09:00	06/05/18 16:00	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE84136	05/25/18 08:00	05/30/18 15:45	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AF83183	05/24/18 16:00	06/07/18 10:46	SM10200H	PBM	U
Dissolved Organic Carbon	**2.35**	**0.600**	**1.00**	**mg/L**	1	AF83264	06/07/18 07:08	06/07/18 19:01	SM5310C	JIM	
Oil & Grease (HEM)	**3.0**	**1.4**	**5.0**	**mg/L**	1	AF83219	06/06/18 07:54	06/06/18 13:30	EPA 1664A	STS	J
Sulfide	ND	0.020	0.10	mg/L	1	AE84247	05/29/18 15:00	05/29/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**85**	**5.0**	**10**	**mg/L**	1	AE84252	05/29/18 15:58	06/05/18 09:15	SM2540C	PBM	
Total Suspended Solids	**1.2**	**0.30**	**1.0**	**mg/L**	1	AE84188	05/29/18 13:00	05/30/18 10:45	SM2540D	EV	
Bicarbonate Alkalinity as CaCO3	**62**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Total Alkalinity as CaCO3	**62**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-S (18E2418-04) Water Sampled: 05/23/18 11:15 Received: 05/24/18 08:15											
Nitrate + Nitrite as N	**0.026**	**0.0086**	**0.40**	**mg/L**	1	AE84336	06/05/18 12:20	06/08/18 16:02	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AF83248	06/07/18 11:29	06/08/18 12:07	SM4500-Norg B	SMS	U
Hardness, Total	**65**	**1**	**5**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:42	SM2340B	MAM	
Phosphorus, total	**0.016**	**0.011**	**0.040**	**mg/L**	1	AF83380	06/09/18 12:00	06/09/18 14:14	SM4500-P E	SMS	J
Total Organic Carbon	**2.53**	**0.300**	**1.00**	**mg/L**	1	AF83214	06/06/18 05:59	06/06/18 14:24	SM5310C	JIM	
LP3-M (18E2418-05) Water Sampled: 05/23/18 11:45 Received: 05/24/18 08:15											
Ammonia as N	ND	0.10	0.20	mg/L	1	AF83157	06/05/18 09:00	06/05/18 16:00	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE84136	05/25/18 08:00	05/30/18 15:45	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AF83183	05/24/18 16:00	06/07/18 10:46	SM10200H	PBM	U
Dissolved Organic Carbon	**2.23**	**0.600**	**1.00**	**mg/L**	1	AF83264	06/07/18 07:08	06/07/18 19:14	SM5310C	JIM	
Oil & Grease (HEM)	**2.1**	**1.4**	**5.0**	**mg/L**	1	AF83219	06/06/18 07:54	06/06/18 13:30	EPA 1664A	STS	J
Sulfide	ND	0.020	0.10	mg/L	1	AE84247	05/29/18 15:00	05/29/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**80**	**5.0**	**10**	**mg/L**	1	AE84252	05/29/18 15:58	06/05/18 09:15	SM2540C	PBM	
Total Suspended Solids	**2.8**	**0.30**	**1.0**	**mg/L**	1	AE84188	05/29/18 13:00	05/30/18 10:45	SM2540D	EV	
Bicarbonate Alkalinity as CaCO3	**66**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Total Alkalinity as CaCO3	**66**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	
Nitrate + Nitrite as N	**0.033**	**0.0086**	**0.40**	**mg/L**	1	AE84336	06/05/18 12:20	06/08/18 16:02	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AF83248	06/07/18 11:29	06/08/18 12:07	SM4500-Norg B	SMS	U
Hardness, Total	**68**	**1**	**5**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:47	SM2340B	MAM	
Phosphorus, total	**0.031**	**0.011**	**0.040**	**mg/L**	1	AF83380	06/09/18 12:00	06/09/18 14:14	SM4500-P E	SMS	J
Total Organic Carbon	**2.42**	**0.300**	**1.00**	**mg/L**	1	AF83214	06/06/18 05:59	06/06/18 14:37	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-B (18E2418-06) Water Sampled: 05/23/18 12:00 Received: 05/24/18 08:15											
Ammonia as N	ND	0.10	0.20	mg/L	1	AF83157	06/05/18 09:00	06/05/18 16:00	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE84136	05/25/18 08:00	05/30/18 15:45	SM5210B	EF	U
Dissolved Organic Carbon	**2.26**	**0.600**	**1.00**	**mg/L**	1	AF83264	06/07/18 07:08	06/07/18 19:27	SM5310C	JIM	
Oil & Grease (HEM)	**2.0**	**1.4**	**5.0**	**mg/L**	1	AF83219	06/06/18 07:54	06/06/18 13:30	EPA 1664A	STS	J
Sulfide	**0.030**	**0.020**	**0.10**	**mg/L**	1	AE84247	05/29/18 15:00	05/29/18 17:00	SM4500-S2 D	EV	J
Total Dissolved Solids	**89**	**5.0**	**10**	**mg/L**	1	AE84252	05/29/18 15:58	06/05/18 09:15	SM2540C	PBM	
Total Suspended Solids	**11**	**0.30**	**1.0**	**mg/L**	1	AE84188	05/29/18 13:00	05/30/18 10:45	SM2540D	EV	
Bicarbonate Alkalinity as CaCO3	**61**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Total Alkalinity as CaCO3	**61**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	
Nitrate + Nitrite as N	**0.058**	**0.0086**	**0.40**	**mg/L**	1	AE84336	06/05/18 12:20	06/08/18 16:02	Calculation	ZMH	J
Total Kjeldahl Nitrogen	**0.38**	**0.20**	**1.0**	**mg/L**	1	AF83248	06/07/18 11:29	06/08/18 12:07	SM4500-Norg B	SMS	J
Hardness, Total	**67**	**1**	**5**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:52	SM2340B	MAM	
Phosphorus, total	**0.042**	**0.011**	**0.040**	**mg/L**	1	AF83380	06/09/18 12:00	06/09/18 14:14	SM4500-P E	SMS	
Total Organic Carbon	**2.58**	**0.300**	**1.00**	**mg/L**	1	AF83214	06/06/18 05:59	06/06/18 14:50	SM5310C	JIM	
LP-DUP (18E2418-07) Water Sampled: 05/23/18 11:30 Received: 05/24/18 08:15											
Ammonia as N	ND	0.10	0.20	mg/L	1	AF83157	06/05/18 09:00	06/05/18 16:00	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE84136	05/25/18 08:00	05/30/18 15:45	SM5210B	EF	U
Chlorophyll-a	**0.0011**	**0.0010**	**0.010**	**mg/L**	1	AF83183	05/24/18 16:00	06/07/18 10:46	SM10200H	PBM	J
Dissolved Organic Carbon	**2.42**	**0.600**	**1.00**	**mg/L**	1	AF83264	06/07/18 07:08	06/07/18 19:40	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AF83219	06/06/18 07:54	06/06/18 13:30	EPA 1664A	STS	U
Sulfide	ND	0.020	0.10	mg/L	1	AE84247	05/29/18 15:00	05/29/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**79**	**5.0**	**10**	**mg/L**	1	AE84252	05/29/18 15:58	06/05/18 09:15	SM2540C	PBM	
Total Suspended Solids	**1.0**	**0.30**	**1.0**	**mg/L**	1	AE84188	05/29/18 13:00	05/30/18 10:45	SM2540D	EV	
Bicarbonate Alkalinity as CaCO3	**63**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Total Alkalinity as CaCO3	**63**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	
Nitrate + Nitrite as N	**0.026**	**0.0086**	**0.40**	**mg/L**	1	AE84336	06/05/18 12:20	06/08/18 16:02	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AF83248	06/07/18 11:29	06/08/18 12:07	SM4500-Norg B	SMS	U
Hardness, Total	**65**	**1**	**5**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 17:55	SM2340B	MAM	
Phosphorus, total	**0.017**	**0.011**	**0.040**	**mg/L**	1	AF83380	06/09/18 12:00	06/09/18 14:14	SM4500-P E	SMS	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-DUP (18E2418-07) Water Sampled: 05/23/18 11:30 Received: 05/24/18 08:15											
Total Organic Carbon	**2.53**	**0.300**	**1.00**	**mg/L**	1	AF83214	06/06/18 05:59	06/06/18 15:03	SM5310C	JIM	
LP4-S (18E2418-08) Water Sampled: 05/23/18 15:00 Received: 05/24/18 08:15											
Ammonia as N	ND	0.10	0.20	mg/L	1	AF83157	06/05/18 09:00	06/05/18 16:00	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE84136	05/25/18 08:00	05/30/18 15:45	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AF83183	05/24/18 16:00	06/07/18 10:46	SM10200H	PBM	U
Dissolved Organic Carbon	**2.25**	**0.600**	**1.00**	**mg/L**	1	AF83264	06/07/18 07:08	06/07/18 19:53	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AF83219	06/06/18 07:54	06/06/18 13:30	EPA 1664A	STS	U
Sulfide	ND	0.020	0.10	mg/L	1	AE84247	05/29/18 15:00	05/29/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**89**	**5.0**	**10**	**mg/L**	1	AE84252	05/29/18 15:58	06/05/18 09:15	SM2540C	PBM	
Total Suspended Solids	**1.0**	**0.30**	**1.0**	**mg/L**	1	AE84188	05/29/18 13:00	05/30/18 10:45	SM2540D	EV	
Bicarbonate Alkalinity as CaCO3	**70**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Total Alkalinity as CaCO3	**70**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	
Nitrate + Nitrite as N	**0.035**	**0.0086**	**0.40**	**mg/L**	1	AE84336	06/05/18 12:20	06/08/18 16:02	Calculation	ZMH	J
Total Kjeldahl Nitrogen	**0.21**	**0.20**	**1.0**	**mg/L**	1	AF83248	06/07/18 11:29	06/08/18 12:07	SM4500-Norg B	SMS	J
Hardness, Total	**73**	**1**	**5**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 18:00	SM2340B	MAM	
Phosphorus, total	**0.015**	**0.011**	**0.040**	**mg/L**	1	AF83380	06/09/18 12:00	06/09/18 14:14	SM4500-P E	SMS	J
Total Organic Carbon	**2.49**	**0.300**	**1.00**	**mg/L**	1	AF83214	06/06/18 05:59	06/06/18 15:16	SM5310C	JIM	
LP4-M (18E2418-09) Water Sampled: 05/23/18 15:30 Received: 05/24/18 08:15											
Ammonia as N	ND	0.10	0.20	mg/L	1	AF83157	06/05/18 09:00	06/05/18 16:00	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE84136	05/25/18 08:00	05/30/18 15:45	SM5210B	EF	U
Chlorophyll-a	**0.0021**	**0.0010**	**0.010**	**mg/L**	1	AF83183	05/24/18 16:00	06/07/18 10:46	SM10200H	PBM	J
Dissolved Organic Carbon	**2.26**	**0.600**	**1.00**	**mg/L**	1	AF83264	06/07/18 07:08	06/07/18 20:06	SM5310C	JIM	
Oil & Grease (HEM)	**1.6**	**1.4**	**5.0**	**mg/L**	1	AF83219	06/06/18 07:54	06/06/18 13:30	EPA 1664A	STS	J
Sulfide	ND	0.020	0.10	mg/L	1	AE84247	05/29/18 15:00	05/29/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**83**	**5.0**	**10**	**mg/L**	1	AE84252	05/29/18 15:58	06/05/18 09:15	SM2540C	PBM	
Total Suspended Solids	**1.5**	**0.30**	**1.0**	**mg/L**	1	AE84188	05/29/18 13:00	05/30/18 10:45	SM2540D	EV	
Bicarbonate Alkalinity as CaCO3	**68**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Total Alkalinity as CaCO3	**68**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-M (18E2418-09) Water Sampled: 05/23/18 15:30 Received: 05/24/18 08:15											
Nitrate + Nitrite as N	**0.028**	**0.0086**	**0.40**	**mg/L**	1	AE84336	06/05/18 12:20	06/08/18 16:02	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AF83248	06/07/18 11:29	06/08/18 12:07	SM4500-Norg B	SMS	U
Hardness, Total	**71**	**1**	**5**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 18:14	SM2340B	MAM	
Phosphorus, total	**0.016**	**0.011**	**0.040**	**mg/L**	1	AF83380	06/09/18 12:00	06/09/18 14:14	SM4500-P E	SMS	J
Total Organic Carbon	**2.45**	**0.300**	**1.00**	**mg/L**	1	AF83214	06/06/18 05:59	06/06/18 15:29	SM5310C	JIM	
LP4-B (18E2418-10) Water Sampled: 05/23/18 16:00 Received: 05/24/18 08:15											
Ammonia as N	ND	0.10	0.20	mg/L	1	AF83157	06/05/18 09:00	06/05/18 16:00	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	**2.0**	**2.0**	**5.0**	**mg/L**	1	AE84136	05/25/18 08:00	05/30/18 15:45	SM5210B	EF	J
Dissolved Organic Carbon	**2.03**	**0.600**	**1.00**	**mg/L**	1	AF83264	06/07/18 07:08	06/07/18 20:19	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AF83219	06/06/18 07:54	06/06/18 13:30	EPA 1664A	STS	U
Sulfide	ND	0.020	0.10	mg/L	1	AE84247	05/29/18 15:00	05/29/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**110**	**5.0**	**10**	**mg/L**	1	AE84252	05/29/18 15:58	06/05/18 09:15	SM2540C	PBM	
Total Suspended Solids	**3.3**	**0.30**	**1.0**	**mg/L**	1	AE84188	05/29/18 13:00	05/30/18 10:45	SM2540D	EV	
Bicarbonate Alkalinity as CaCO3	**87**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Total Alkalinity as CaCO3	**87**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	
Nitrate + Nitrite as N	**0.029**	**0.0086**	**0.40**	**mg/L**	1	AE84336	06/05/18 12:20	06/08/18 16:02	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AF83248	06/07/18 11:29	06/08/18 12:07	SM4500-Norg B	SMS	U
Hardness, Total	**84**	**1**	**5**	**mg/L**	1	AF83104	06/04/18 09:10	06/07/18 18:18	SM2340B	MAM	
Phosphorus, total	**0.034**	**0.011**	**0.040**	**mg/L**	1	AF83380	06/09/18 12:00	06/09/18 14:14	SM4500-P E	SMS	J
Total Organic Carbon	**2.38**	**0.300**	**1.00**	**mg/L**	1	AF83214	06/06/18 05:59	06/06/18 15:42	SM5310C	JIM	
RF3.8 (18E2418-11) Water Sampled: 05/23/18 17:10 Received: 05/24/18 08:15											
Ammonia as N	ND	0.10	0.20	mg/L	1	AF83157	06/05/18 09:00	06/05/18 16:00	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE84136	05/25/18 08:00	05/30/18 15:45	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AF83183	05/24/18 16:00	06/07/18 10:46	SM10200H	PBM	U
Dissolved Organic Carbon	**0.757**	**0.600**	**1.00**	**mg/L**	1	AF83264	06/07/18 07:08	06/07/18 20:32	SM5310C	JIM	J
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AF83219	06/06/18 07:54	06/06/18 13:30	EPA 1664A	STS	U
Total Dissolved Solids	**150**	**5.0**	**10**	**mg/L**	1	AE84252	05/29/18 15:58	06/05/18 09:15	SM2540C	PBM	
Total Suspended Solids	**0.70**	**0.30**	**1.0**	**mg/L**	1	AE84188	05/29/18 13:00	05/30/18 10:45	SM2540D	EV	J
Bicarbonate Alkalinity as CaCO3	**220**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
RF3.8 (18E2418-11) Water Sampled: 05/23/18 17:10 Received: 05/24/18 08:15											
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	U
Total Alkalinity as CaCO3	**220**	**1.0**	**5.0**	**mg/L**	1	AE84123	06/01/18 08:00	06/01/18 16:50	SM2320B	CEF	
Nitrate + Nitrite as N	**0.037**	**0.0086**	**0.40**	**mg/L**	1	AE84336	06/05/18 12:20	06/08/18 16:02	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AF83248	06/08/18 11:29	06/09/18 13:25	SM4500-Norg B	SMS	U
Hardness, Total	**133**	**1**	**5**	**mg/L**	1	AF83104	06/04/18 09:10	06/08/18 13:33	SM2340B	MAM	
Phosphorus, total	**0.019**	**0.011**	**0.040**	**mg/L**	1	AF83380	06/09/18 12:00	06/09/18 14:14	SM4500-P E	SMS	J
Total Organic Carbon	**0.840**	**0.300**	**1.00**	**mg/L**	1	AF83214	06/06/18 05:59	06/06/18 17:12	SM5310C	JIM	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-S (18E2418-01) Water Sampled: 05/23/18 09:00 Received: 05/24/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE84125	05/24/18 20:55	05/24/18 20:55	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE84125	05/24/18 20:55	05/24/18 20:55	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE84125	05/24/18 20:55	05/24/18 20:55	EPA 300.0	SMP	U
LP1-M (18E2418-02) Water Sampled: 05/23/18 09:30 Received: 05/24/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE84125	05/24/18 21:28	05/24/18 21:28	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE84125	05/24/18 21:28	05/24/18 21:28	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE84125	05/24/18 21:28	05/24/18 21:28	EPA 300.0	SMP	U
LP1-B (18E2418-03) Water Sampled: 05/23/18 09:45 Received: 05/24/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE84125	05/24/18 22:33	05/24/18 22:33	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE84125	05/24/18 22:33	05/24/18 22:33	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE84125	05/24/18 22:33	05/24/18 22:33	EPA 300.0	SMP	U
LP3-S (18E2418-04) Water Sampled: 05/23/18 11:15 Received: 05/24/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE84125	05/24/18 23:06	05/24/18 23:06	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE84125	05/24/18 23:06	05/24/18 23:06	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE84125	05/24/18 23:06	05/24/18 23:06	EPA 300.0	SMP	U
LP3-M (18E2418-05) Water Sampled: 05/23/18 11:45 Received: 05/24/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE84125	05/24/18 23:39	05/24/18 23:39	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE84125	05/24/18 23:39	05/24/18 23:39	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE84125	05/24/18 23:39	05/24/18 23:39	EPA 300.0	SMP	U
LP3-B (18E2418-06) Water Sampled: 05/23/18 12:00 Received: 05/24/18 08:15											
Nitrate as N	**0.058**	**0.040**	**0.20**	**mg/L**	1	AE84125	05/25/18 00:11	05/25/18 00:11	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AE84125	05/25/18 00:11	05/25/18 00:11	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE84125	05/25/18 00:11	05/25/18 00:11	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-DUP (18E2418-07) Water Sampled: 05/23/18 11:30 Received: 05/24/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE84125	05/25/18 00:44	05/25/18 00:44	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE84125	05/25/18 00:44	05/25/18 00:44	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE84125	05/25/18 00:44	05/25/18 00:44	EPA 300.0	SMP	U
LP4-S (18E2418-08) Water Sampled: 05/23/18 15:00 Received: 05/24/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE84125	05/25/18 01:50	05/25/18 01:50	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE84125	05/25/18 01:50	05/25/18 01:50	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE84125	05/25/18 01:50	05/25/18 01:50	EPA 300.0	SMP	U
LP4-M (18E2418-09) Water Sampled: 05/23/18 15:30 Received: 05/24/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE84125	05/25/18 02:22	05/25/18 02:22	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE84125	05/25/18 02:22	05/25/18 02:22	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE84125	05/25/18 02:22	05/25/18 02:22	EPA 300.0	SMP	U
LP4-B (18E2418-10) Water Sampled: 05/23/18 16:00 Received: 05/24/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE84125	05/25/18 02:55	05/25/18 02:55	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE84125	05/25/18 02:55	05/25/18 02:55	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE84125	05/25/18 02:55	05/25/18 02:55	EPA 300.0	SMP	U
RF3.8 (18E2418-11) Water Sampled: 05/23/18 17:10 Received: 05/24/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE84125	05/25/18 03:28	05/25/18 03:28	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE84125	05/25/18 03:28	05/25/18 03:28	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE84125	05/25/18 03:28	05/25/18 03:28	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

TPH by EPA/LUFT GC Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-S (18E2418-01) Water Sampled: 05/23/18 09:00 Received: 05/24/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AE84257	05/30/18 06:10	05/31/18 18:29	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84257	05/30/18 06:10	05/31/18 18:29	8015DRO	DLD	U
Surrogate: Tetratetracontane		*79.3 %*	*39-120*			*AE84257*	*05/30/18 06:10*	*05/31/18 18:29*	*8015DRO*	*DLD*	
LP1-M (18E2418-02) Water Sampled: 05/23/18 09:30 Received: 05/24/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AE84257	05/30/18 06:10	05/31/18 19:03	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84257	05/30/18 06:10	05/31/18 19:03	8015DRO	DLD	U
Surrogate: Tetratetracontane		*50.8 %*	*39-120*			*AE84257*	*05/30/18 06:10*	*05/31/18 19:03*	*8015DRO*	*DLD*	
LP1-B (18E2418-03) Water Sampled: 05/23/18 09:45 Received: 05/24/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AE84257	05/30/18 06:10	05/31/18 19:38	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84257	05/30/18 06:10	05/31/18 19:38	8015DRO	DLD	U
Surrogate: Tetratetracontane		*78.5 %*	*39-120*			*AE84257*	*05/30/18 06:10*	*05/31/18 19:38*	*8015DRO*	*DLD*	
LP3-S (18E2418-04) Water Sampled: 05/23/18 11:15 Received: 05/24/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AE84257	05/30/18 06:10	05/31/18 20:13	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84257	05/30/18 06:10	05/31/18 20:13	8015DRO	DLD	U
Surrogate: Tetratetracontane		*61.2 %*	*39-120*			*AE84257*	*05/30/18 06:10*	*05/31/18 20:13*	*8015DRO*	*DLD*	
LP3-M (18E2418-05) Water Sampled: 05/23/18 11:45 Received: 05/24/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AE84257	05/30/18 06:10	05/31/18 20:47	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84257	05/30/18 06:10	05/31/18 20:47	8015DRO	DLD	U
Surrogate: Tetratetracontane		*66.9 %*	*39-120*			*AE84257*	*05/30/18 06:10*	*05/31/18 20:47*	*8015DRO*	*DLD*	
LP3-B (18E2418-06) Water Sampled: 05/23/18 12:00 Received: 05/24/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AE84257	05/30/18 06:10	05/31/18 21:22	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84257	05/30/18 06:10	05/31/18 21:22	8015DRO	DLD	U
Surrogate: Tetratetracontane		*68.3 %*	*39-120*			*AE84257*	*05/30/18 06:10*	*05/31/18 21:22*	*8015DRO*	*DLD*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

TPH by EPA/LUFT GC Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-DUP (18E2418-07) Water Sampled: 05/23/18 11:30 Received: 05/24/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AE84257	05/30/18 06:10	05/31/18 21:57	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84257	05/30/18 06:10	05/31/18 21:57	8015DRO	DLD	U
Surrogate: Tetratetracontane		*51.4 %*	*39-120*			*AE84257*	*05/30/18 06:10*	*05/31/18 21:57*	*8015DRO*	*DLD*	
LP4-S (18E2418-08) Water Sampled: 05/23/18 15:00 Received: 05/24/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AE84257	05/30/18 06:10	05/31/18 22:31	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84257	05/30/18 06:10	05/31/18 22:31	8015DRO	DLD	U
Surrogate: Tetratetracontane		*41.1 %*	*39-120*			*AE84257*	*05/30/18 06:10*	*05/31/18 22:31*	*8015DRO*	*DLD*	
LP4-M (18E2418-09) Water Sampled: 05/23/18 15:30 Received: 05/24/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AE84257	05/30/18 06:10	05/31/18 23:06	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84257	05/30/18 06:10	05/31/18 23:06	8015DRO	DLD	U
Surrogate: Tetratetracontane		*70.9 %*	*39-120*			*AE84257*	*05/30/18 06:10*	*05/31/18 23:06*	*8015DRO*	*DLD*	
LP4-B (18E2418-10) Water Sampled: 05/23/18 16:00 Received: 05/24/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AE84257	05/30/18 06:10	05/31/18 23:41	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84257	05/30/18 06:10	05/31/18 23:41	8015DRO	DLD	U
Surrogate: Tetratetracontane		*65.2 %*	*39-120*			*AE84257*	*05/30/18 06:10*	*05/31/18 23:41*	*8015DRO*	*DLD*	
RF3.8 (18E2418-11) Water Sampled: 05/23/18 17:10 Received: 05/24/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AE84257	05/30/18 06:10	06/01/18 01:59	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84257	05/30/18 06:10	06/01/18 01:59	8015DRO	DLD	U
Surrogate: Tetratetracontane		*87.8 %*	*39-120*			*AE84257*	*05/30/18 06:10*	*06/01/18 01:59*	*8015DRO*	*DLD*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

TPH by EPA/LUFT GCMS Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-S (18E2418-01) Water Sampled: 05/23/18 09:00 Received: 05/24/18 08:15											
TPH as Gasoline	ND		50	ug/L	1	AE84272	05/30/18 10:00	05/30/18 10:31	8260GRO	MM	U
Surrogate: Toluene-d8	*96.2 %*		*76-129*			*AE84272*	*05/30/18 10:00*	*05/30/18 10:31*	*8260GRO*	*MM*	
LP1-M (18E2418-02) Water Sampled: 05/23/18 09:30 Received: 05/24/18 08:15											
TPH as Gasoline	ND		50	ug/L	1	AE84272	05/30/18 10:00	05/30/18 11:06	8260GRO	MM	U
Surrogate: Toluene-d8	*97.8 %*		*76-129*			*AE84272*	*05/30/18 10:00*	*05/30/18 11:06*	*8260GRO*	*MM*	
LP1-B (18E2418-03) Water Sampled: 05/23/18 09:45 Received: 05/24/18 08:15											
TPH as Gasoline	ND		50	ug/L	1	AE84272	05/30/18 10:00	05/30/18 11:42	8260GRO	MM	U
Surrogate: Toluene-d8	*98.6 %*		*76-129*			*AE84272*	*05/30/18 10:00*	*05/30/18 11:42*	*8260GRO*	*MM*	
LP3-S (18E2418-04) Water Sampled: 05/23/18 11:15 Received: 05/24/18 08:15											
TPH as Gasoline	ND		50	ug/L	1	AE84272	05/30/18 10:00	05/30/18 12:16	8260GRO	MM	U
Surrogate: Toluene-d8	*95.7 %*		*76-129*			*AE84272*	*05/30/18 10:00*	*05/30/18 12:16*	*8260GRO*	*MM*	
LP3-M (18E2418-05) Water Sampled: 05/23/18 11:45 Received: 05/24/18 08:15											
TPH as Gasoline	ND		50	ug/L	1	AE84272	05/30/18 10:00	05/30/18 12:51	8260GRO	MM	U
Surrogate: Toluene-d8	*98.6 %*		*76-129*			*AE84272*	*05/30/18 10:00*	*05/30/18 12:51*	*8260GRO*	*MM*	
LP3-B (18E2418-06) Water Sampled: 05/23/18 12:00 Received: 05/24/18 08:15											
TPH as Gasoline	ND		50	ug/L	1	AE84272	05/30/18 10:00	05/30/18 13:26	8260GRO	MM	U
Surrogate: Toluene-d8	*98.1 %*		*76-129*			*AE84272*	*05/30/18 10:00*	*05/30/18 13:26*	*8260GRO*	*MM*	
LP-DUP (18E2418-07) Water Sampled: 05/23/18 11:30 Received: 05/24/18 08:15											
TPH as Gasoline	ND		50	ug/L	1	AE84272	05/30/18 10:00	05/30/18 14:02	8260GRO	MM	U
Surrogate: Toluene-d8	*98.0 %*		*76-129*			*AE84272*	*05/30/18 10:00*	*05/30/18 14:02*	*8260GRO*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

TPH by EPA/LUFT GCMS Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-S (18E2418-08) Water Sampled: 05/23/18 15:00 Received: 05/24/18 08:15											
TPH as Gasoline	ND	50	50	ug/L	1	AE84272	05/30/18 10:00	05/30/18 14:38	8260GRO	MM	U
Surrogate: Toluene-d8		*97.4 %*	*76-129*			*AE84272*	*05/30/18 10:00*	*05/30/18 14:38*	*8260GRO*	*MM*	
LP4-M (18E2418-09) Water Sampled: 05/23/18 15:30 Received: 05/24/18 08:15											
TPH as Gasoline	ND	50	50	ug/L	1	AE84272	05/30/18 10:00	05/30/18 15:13	8260GRO	MM	U
Surrogate: Toluene-d8		*99.0 %*	*76-129*			*AE84272*	*05/30/18 10:00*	*05/30/18 15:13*	*8260GRO*	*MM*	
LP4-B (18E2418-10) Water Sampled: 05/23/18 16:00 Received: 05/24/18 08:15											
TPH as Gasoline	ND	50	50	ug/L	1	AE84272	05/30/18 10:00	05/30/18 15:49	8260GRO	MM	U
Surrogate: Toluene-d8		*99.2 %*	*76-129*			*AE84272*	*05/30/18 10:00*	*05/30/18 15:49*	*8260GRO*	*MM*	
RF3.8 (18E2418-11) Water Sampled: 05/23/18 17:10 Received: 05/24/18 08:15											
TPH as Gasoline	ND	50	50	ug/L	1	AE84272	05/30/18 10:00	05/30/18 21:31	8260GRO	MM	U
Surrogate: Toluene-d8		*99.0 %*	*76-129*			*AE84272*	*05/30/18 10:00*	*05/30/18 21:31*	*8260GRO*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-S (18E2418-01) Water Sampled: 05/23/18 09:00 Received: 05/24/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 10:31	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 10:31	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 10:31	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 10:31	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 10:31	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 10:31	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 10:31	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 10:31	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE84271	05/30/18 10:00	05/30/18 10:31	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*94.8 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 10:31*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*99.8 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 10:31*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*104 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 10:31*	*EPA 8260B*	*MM*	
LP1-M (18E2418-02) Water Sampled: 05/23/18 09:30 Received: 05/24/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 11:06	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 11:06	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 11:06	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 11:06	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 11:06	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 11:06	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 11:06	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 11:06	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE84271	05/30/18 10:00	05/30/18 11:06	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*96.1 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 11:06*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*104 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 11:06*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*106 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 11:06*	*EPA 8260B*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-B (18E2418-03) Water Sampled: 05/23/18 09:45 Received: 05/24/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 11:42	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 11:42	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 11:42	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 11:42	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 11:42	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 11:42	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 11:42	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 11:42	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE84271	05/30/18 10:00	05/30/18 11:42	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*95.4 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 11:42*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*102 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 11:42*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*106 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 11:42*	*EPA 8260B*	*MM*	
LP3-S (18E2418-04) Water Sampled: 05/23/18 11:15 Received: 05/24/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 12:16	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 12:16	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 12:16	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 12:16	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 12:16	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 12:16	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 12:16	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 12:16	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE84271	05/30/18 10:00	05/30/18 12:16	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*94.6 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 12:16*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*101 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 12:16*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*104 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 12:16*	*EPA 8260B*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-M (18E2418-05) Water Sampled: 05/23/18 11:45 Received: 05/24/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 12:51	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 12:51	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 12:51	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 12:51	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 12:51	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 12:51	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 12:51	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 12:51	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE84271	05/30/18 10:00	05/30/18 12:51	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*94.7 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 12:51*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*101 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 12:51*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*107 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 12:51*	*EPA 8260B*	*MM*	
LP3-B (18E2418-06) Water Sampled: 05/23/18 12:00 Received: 05/24/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 13:26	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 13:26	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 13:26	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 13:26	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 13:26	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 13:26	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 13:26	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 13:26	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE84271	05/30/18 10:00	05/30/18 13:26	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*97.2 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 13:26*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*107 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 13:26*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*106 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 13:26*	*EPA 8260B*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-DUP (18E2418-07) Water Sampled: 05/23/18 11:30 Received: 05/24/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 14:02	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 14:02	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 14:02	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 14:02	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 14:02	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 14:02	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 14:02	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 14:02	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE84271	05/30/18 10:00	05/30/18 14:02	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*96.4 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 14:02*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*102 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 14:02*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*106 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 14:02*	*EPA 8260B*	*MM*	
LP4-S (18E2418-08) Water Sampled: 05/23/18 15:00 Received: 05/24/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 14:38	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 14:38	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 14:38	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 14:38	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 14:38	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 14:38	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 14:38	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 14:38	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE84271	05/30/18 10:00	05/30/18 14:38	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*94.7 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 14:38*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*104 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 14:38*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*105 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 14:38*	*EPA 8260B*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-M (18E2418-09) Water Sampled: 05/23/18 15:30 Received: 05/24/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 15:13	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 15:13	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 15:13	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 15:13	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 15:13	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 15:13	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 15:13	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 15:13	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE84271	05/30/18 10:00	05/30/18 15:13	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*95.9 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 15:13*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*104 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 15:13*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*107 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 15:13*	*EPA 8260B*	*MM*	
LP4-B (18E2418-10) Water Sampled: 05/23/18 16:00 Received: 05/24/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 15:49	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 15:49	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 15:49	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 15:49	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 15:49	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 15:49	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 15:49	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 15:49	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE84271	05/30/18 10:00	05/30/18 15:49	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*97.4 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 15:49*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*105 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 15:49*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*107 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 15:49*	*EPA 8260B*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
RF3.8 (18E2418-11) Water Sampled: 05/23/18 17:10 Received: 05/24/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 21:31	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 21:31	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 21:31	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 21:31	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 21:31	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 21:31	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 21:31	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 21:31	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE84271	05/30/18 10:00	05/30/18 21:31	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*97.7 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 21:31*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*103 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 21:31*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*107 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 21:31*	*EPA 8260B*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83104 - Metals Digest											
Blank (AF83104-BLK1)					Prepared: 06/04/18 Analyzed: 06/08/18						
Calcium	0.133	0.080	1.0	mg/L							J
Magnesium	ND	0.030	1.0	mg/L							U
LCS (AF83104-BS1)					Prepared: 06/04/18 Analyzed: 06/08/18						
Calcium	8.08	0.080	1.0	mg/L	8.00		101	85-115			
Magnesium	7.80	0.030	1.0	mg/L	8.00		97.4	85-115			
Duplicate (AF83104-DUP1)		**Source: 18E2396-01**			Prepared: 06/04/18 Analyzed: 06/08/18						
Calcium	61.9	0.080	1.0	mg/L		59.2			4.53	20	
Magnesium	74.7	0.030	1.0	mg/L		71.3			4.65	20	
Matrix Spike (AF83104-MS1)		**Source: 18E2396-01**			Prepared: 06/04/18 Analyzed: 06/08/18						
Calcium	70.2	0.080	1.0	mg/L	8.00	59.2	138	70-130			QM-4X
Magnesium	84.3	0.030	1.0	mg/L	8.00	71.3	162	70-130			QM-4X
Matrix Spike (AF83104-MS2)		**Source: 18E2418-11**			Prepared: 06/04/18 Analyzed: 06/08/18						
Calcium	40.3	0.080	1.0	mg/L	8.00	32.3	99.1	70-130			
Magnesium	20.9	0.030	1.0	mg/L	8.00	12.8	101	70-130			
Matrix Spike Dup (AF83104-MSD1)		**Source: 18E2396-01**			Prepared: 06/04/18 Analyzed: 06/08/18						
Calcium	67.5	0.080	1.0	mg/L	8.00	59.2	104	70-130	3.96	20	
Magnesium	82.2	0.030	1.0	mg/L	8.00	71.3	137	70-130	2.47	20	QM-4X
Batch AF83225 - EPA 245.1 Hg Water											
Blank (AF83225-BLK1)					Prepared: 06/06/18 Analyzed: 06/07/18						
Mercury	ND	0.060	0.20	ug/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83225 - EPA 245.1 Hg Water											
LCS (AF83225-BS1)					Prepared: 06/06/18 Analyzed: 06/07/18						
Mercury	2.49	0.060	0.20	ug/L	2.50		99.8	85-115			
Duplicate (AF83225-DUP1)		**Source: 18E2095-01**			Prepared: 06/06/18 Analyzed: 06/07/18						
Mercury	ND	0.060	0.20	ug/L		ND				20	U
MRL Check (AF83225-MRL1)					Prepared: 06/06/18 Analyzed: 06/07/18						
Mercury	0.491	0.060	0.20	ug/L	0.500		98.2	0-200			
Matrix Spike (AF83225-MS1)		**Source: 18E2095-01**			Prepared: 06/06/18 Analyzed: 06/07/18						
Mercury	2.40	0.060	0.20	ug/L	2.50	ND	95.8	70-130			
Matrix Spike (AF83225-MS2)		**Source: 18E2289-01**			Prepared: 06/06/18 Analyzed: 06/07/18						
Mercury	2.40	0.060	0.20	ug/L	2.50	ND	96.0	70-130			
Matrix Spike Dup (AF83225-MSD1)		**Source: 18E2095-01**			Prepared: 06/06/18 Analyzed: 06/07/18						
Mercury	2.39	0.060	0.20	ug/L	2.50	ND	95.7	70-130	0.167	20	
Batch AF83265 - EPA 245.1 Hg Water											
Blank (AF83265-BLK1)					Prepared & Analyzed: 06/07/18						
Mercury	ND	0.060	0.20	ug/L							U
LCS (AF83265-BS1)					Prepared & Analyzed: 06/07/18						
Mercury	2.54	0.060	0.20	ug/L	2.50		102	85-115			
Duplicate (AF83265-DUP1)		**Source: 18E2341-01**			Prepared & Analyzed: 06/07/18						
Mercury	ND	0.060	0.20	ug/L		ND				20	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83265 - EPA 245.1 Hg Water											
MRL Check (AF83265-MRL1)					Prepared & Analyzed: 06/07/18						
Mercury	0.509	0.060	0.20	ug/L	0.500		102	0-200			
Matrix Spike (AF83265-MS1)		**Source: 18E2341-01**			Prepared & Analyzed: 06/07/18						
Mercury	2.47	0.060	0.20	ug/L	2.50	ND	98.9	70-130			
Matrix Spike (AF83265-MS2)		**Source: 18E2341-02**			Prepared & Analyzed: 06/07/18						
Mercury	2.47	0.060	0.20	ug/L	2.50	ND	98.7	70-130			
Matrix Spike Dup (AF83265-MSD1)		**Source: 18E2341-01**			Prepared & Analyzed: 06/07/18						
Mercury	2.46	0.060	0.20	ug/L	2.50	ND	98.6	70-130	0.365	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84266 - EPA 200.8											
Blank (AE84266-BLK1)					Prepared: 05/30/18 Analyzed: 05/31/18						
Aluminum	ND	5.0	10	ug/L							U
Antimony	ND	0.20	0.50	ug/L							U
Arsenic	ND	0.20	0.50	ug/L							U
Barium	ND	0.20	0.50	ug/L							U
Beryllium	ND	0.050	0.10	ug/L							U
Cadmium	ND	0.060	0.10	ug/L							U
Chromium	ND	0.40	0.50	ug/L							U
Cobalt	ND	0.030	0.10	ug/L							U
Copper	ND	0.40	0.50	ug/L							U
Iron	ND	10	50	ug/L							U
Lead	ND	0.060	0.25	ug/L							U
Manganese	ND	2.0	5.0	ug/L							U
Molybdenum	ND	0.070	0.25	ug/L							U
Nickel	ND	0.30	0.50	ug/L							U
Selenium	ND	0.20	2.0	ug/L							U
Silver	ND	0.050	0.10	ug/L							U
Thallium	ND	0.050	0.10	ug/L							U
Vanadium	ND	0.50	1.0	ug/L							U
Zinc	ND	2.0	5.0	ug/L							U
LCS (AE84266-BS1)					Prepared: 05/30/18 Analyzed: 05/31/18						
Aluminum	446	5.0	10	ug/L	520		85.7	85-115			
Antimony	21.6	0.20	0.50	ug/L	20.0		108	85-115			
Arsenic	21.7	0.20	0.50	ug/L	20.0		109	85-115			
Barium	19.7	0.20	0.50	ug/L	20.0		98.3	85-115			
Beryllium	21.2	0.050	0.10	ug/L	20.0		106	85-115			
Cadmium	21.5	0.060	0.10	ug/L	20.0		107	85-115			
Chromium	21.7	0.40	0.50	ug/L	20.0		108	85-115			
Cobalt	21.3	0.030	0.10	ug/L	20.0		107	85-115			
Copper	20.9	0.40	0.50	ug/L	20.0		104	85-115			
Iron	524	10	50	ug/L	520		101	85-115			
Lead	22.0	0.060	0.25	ug/L	20.0		110	85-115			
Manganese	20.1	2.0	5.0	ug/L	20.0		100	85-115			
Molybdenum	21.7	0.070	0.25	ug/L	20.0		109	85-115			
Nickel	21.1	0.30	0.50	ug/L	20.0		106	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84266 - EPA 200.8											
LCS (AE84266-BS1)					Prepared: 05/30/18 Analyzed: 05/31/18						
Selenium	20.3	0.20	2.0	ug/L	20.0		101	85-115			
Silver	21.5	0.050	0.10	ug/L	20.0		107	85-115			
Thallium	20.3	0.050	0.10	ug/L	20.0		102	85-115			
Vanadium	21.3	0.50	1.0	ug/L	20.0		107	85-115			
Zinc	103	2.0	5.0	ug/L	100		103	85-115			
Duplicate (AE84266-DUP1)		**Source: 18E2670-02**			Prepared: 05/30/18 Analyzed: 05/31/18						
Aluminum	60.6	20	40	ug/L		60.9			0.463	20	
Antimony	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic	1.59	0.80	2.0	ug/L		1.25			24.0	20	R-01, J
Barium	35.5	0.80	2.0	ug/L		35.2			0.880	20	
Beryllium	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium	0.246	0.24	0.40	ug/L		ND				20	R-01, J
Chromium	1.92	1.6	2.0	ug/L		1.97			2.12	20	R-01, J
Cobalt	0.152	0.12	0.40	ug/L		0.145			4.56	20	R-01, J
Copper	77.3	1.6	2.0	ug/L		77.5			0.273	20	
Iron	305	40	200	ug/L		296			2.92	20	
Lead	1.17	0.24	1.0	ug/L		1.17			0.135	20	
Manganese	22.0	8.0	20	ug/L		21.7			1.57	20	
Molybdenum	161	0.28	1.0	ug/L		161			0.190	20	
Nickel	3.44	1.2	2.0	ug/L		3.38			1.60	20	
Selenium	3.63	0.80	8.0	ug/L		3.74			2.99	20	R-01, J
Silver	0.556	0.20	0.40	ug/L		ND				20	
Thallium	ND	0.20	0.40	ug/L		ND				20	U
Vanadium	ND	2.0	4.0	ug/L		ND				20	R-01, U
Zinc	62.5	8.0	20	ug/L		62.5			0.0316	20	
MRL Check (AE84266-MRL1)					Prepared: 05/30/18 Analyzed: 05/31/18						
Lead	0.383	0.060	0.25	ug/L	0.400		95.7	0-200			
Thallium	0.150	0.050	0.10	ug/L	0.160		93.5	0-200			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84266 - EPA 200.8											
Matrix Spike (AE84266-MS1)		**Source: 18E2670-02**			Prepared: 05/30/18 Analyzed: 05/31/18						
Aluminum	564	20	40	ug/L	520	60.9	96.7	70-130			
Antimony	20.5	0.80	2.0	ug/L	20.0	ND	103	70-130			
Arsenic	21.2	0.80	2.0	ug/L	20.0	1.25	99.6	70-130			
Barium	54.1	0.80	2.0	ug/L	20.0	35.2	94.7	70-130			
Beryllium	19.8	0.20	0.40	ug/L	20.0	ND	99.1	70-130			
Cadmium	19.7	0.24	0.40	ug/L	20.0	ND	98.4	70-130			
Chromium	22.0	2.0	2.0	ug/L	20.0	ND	110	70-130			
Cobalt	19.7	0.12	0.40	ug/L	20.0	0.145	97.8	70-130			
Copper	87.0	1.6	2.0	ug/L	20.0	77.5	47.4	70-130			QM-01
Iron	758	40	200	ug/L	520	296	88.7	70-130			
Lead	19.5	0.24	1.0	ug/L	20.0	1.17	91.8	70-130			
Manganese	39.6	8.0	20	ug/L	20.0	21.7	89.5	70-130			
Molybdenum	186	0.28	1.0	ug/L	20.0	161	121	70-130			
Nickel	22.0	1.2	2.0	ug/L	20.0	3.38	93.0	70-130			
Selenium	23.3	0.80	8.0	ug/L	20.0	3.74	97.7	70-130			
Silver	19.8	0.20	0.40	ug/L	20.0	ND	98.9	70-130			
Thallium	18.8	0.20	0.40	ug/L	20.0	ND	93.8	70-130			
Vanadium	20.7	2.0	4.0	ug/L	20.0	ND	104	70-130			
Zinc	154	8.0	20	ug/L	100	62.5	91.4	70-130			
Matrix Spike (AE84266-MS2)		**Source: 18E2418-01**			Prepared: 05/30/18 Analyzed: 05/31/18						
Aluminum	539	20	40	ug/L	520	28.9	98.0	70-130			
Antimony	20.4	0.80	2.0	ug/L	20.0	ND	102	70-130			
Arsenic	20.9	0.80	2.0	ug/L	20.0	ND	104	70-130			
Barium	68.7	0.80	2.0	ug/L	20.0	50.9	89.0	70-130			
Beryllium	20.2	0.20	0.40	ug/L	20.0	ND	101	70-130			
Cadmium	19.3	0.24	0.40	ug/L	20.0	ND	96.3	70-130			
Chromium	20.8	2.0	2.0	ug/L	20.0	ND	104	70-130			
Cobalt	19.4	0.12	0.40	ug/L	20.0	ND	96.8	70-130			
Copper	19.4	1.6	2.0	ug/L	20.0	ND	97.0	70-130			
Iron	537	40	200	ug/L	520	59.0	91.9	70-130			
Lead	18.0	0.24	1.0	ug/L	20.0	ND	89.8	70-130			
Manganese	21.8	8.0	20	ug/L	20.0	ND	109	70-130			
Molybdenum	20.5	0.28	1.0	ug/L	20.0	0.367	101	70-130			
Nickel	20.7	1.2	2.0	ug/L	20.0	ND	104	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84266 - EPA 200.8											
Matrix Spike (AE84266-MS2)		**Source: 18E2418-01**			Prepared: 05/30/18 Analyzed: 05/31/18						
Selenium	18.9	0.80	8.0	ug/L	20.0	ND	94.7	70-130			
Silver	19.7	0.20	0.40	ug/L	20.0	ND	98.4	70-130			
Thallium	17.9	0.20	0.40	ug/L	20.0	ND	89.7	70-130			
Vanadium	19.7	2.0	4.0	ug/L	20.0	ND	98.3	70-130			
Zinc	99.1	8.0	20	ug/L	100	ND	99.1	70-130			
Matrix Spike Dup (AE84266-MSD1)		**Source: 18E2670-02**			Prepared: 05/30/18 Analyzed: 05/31/18						
Aluminum	579	20	40	ug/L	520	60.9	99.6	70-130	2.70	20	
Antimony	20.6	0.80	2.0	ug/L	20.0	ND	103	70-130	0.559	20	
Arsenic	22.5	0.80	2.0	ug/L	20.0	1.25	106	70-130	6.22	20	
Barium	55.0	0.80	2.0	ug/L	20.0	35.2	99.1	70-130	1.61	20	
Beryllium	20.6	0.20	0.40	ug/L	20.0	ND	103	70-130	3.70	20	
Cadmium	19.6	0.24	0.40	ug/L	20.0	ND	98.1	70-130	0.327	20	
Chromium	22.5	2.0	2.0	ug/L	20.0	ND	113	70-130	2.65	20	
Cobalt	20.2	0.12	0.40	ug/L	20.0	0.145	100	70-130	2.21	20	
Copper	89.9	1.6	2.0	ug/L	20.0	77.5	61.8	70-130	3.27	20	QM-01
Iron	764	40	200	ug/L	520	296	89.9	70-130	0.784	20	
Lead	19.5	0.24	1.0	ug/L	20.0	1.17	91.4	70-130	0.363	20	
Manganese	40.0	8.0	20	ug/L	20.0	21.7	91.5	70-130	1.02	20	
Molybdenum	184	0.28	1.0	ug/L	20.0	161	114	70-130	0.766	20	
Nickel	22.3	1.2	2.0	ug/L	20.0	3.38	94.6	70-130	1.37	20	
Selenium	22.8	0.80	8.0	ug/L	20.0	3.74	95.1	70-130	2.25	20	
Silver	19.4	0.20	0.40	ug/L	20.0	ND	97.2	70-130	1.66	20	
Thallium	18.8	0.20	0.40	ug/L	20.0	ND	94.2	70-130	0.391	20	
Vanadium	21.2	2.0	4.0	ug/L	20.0	ND	106	70-130	1.99	20	
Zinc	157	8.0	20	ug/L	100	62.5	94.9	70-130	2.22	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83272 - EPA 245.1 Hg Water											
Blank (AF83272-BLK1)					Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	ND	0.060	0.20	ug/L							U
LCS (AF83272-BS1)					Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	2.44	0.060	0.20	ug/L	2.50		97.5	85-115			
Duplicate (AF83272-DUP1)		**Source: 18E2239-01**			Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	ND	0.060	0.20	ug/L		ND				20	U
MRL Check (AF83272-MRL1)					Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	0.514	0.060	0.20	ug/L	0.500		103	0-200			
Matrix Spike (AF83272-MS1)		**Source: 18E2239-01**			Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	2.45	0.060	0.20	ug/L	2.50	ND	98.0	70-130			
Matrix Spike (AF83272-MS2)		**Source: 18E2418-01**			Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	2.41	0.060	0.20	ug/L	2.50	ND	96.2	70-130			
Matrix Spike Dup (AF83272-MSD1)		**Source: 18E2239-01**			Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	2.48	0.060	0.20	ug/L	2.50	ND	99.1	70-130	1.10	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83108 - EPA 200.8 (D)											
Blank (AF83108-BLK1)					Prepared: 06/05/18 Analyzed: 06/06/18						
Aluminum, dissolved	ND	5.0	10	ug/L							U
Antimony, dissolved	ND	0.20	0.50	ug/L							U
Arsenic, dissolved	ND	0.20	0.50	ug/L							U
Barium, dissolved	ND	0.20	0.50	ug/L							U
Beryllium, dissolved	ND	0.050	0.10	ug/L							U
Cadmium, dissolved	ND	0.060	0.10	ug/L							U
Chromium, dissolved	ND	0.50	0.50	ug/L							U
Cobalt, dissolved	ND	0.030	0.10	ug/L							U
Copper, dissolved	ND	0.40	0.50	ug/L							U
Lead, dissolved	ND	0.060	0.25	ug/L							U
Molybdenum, dissolved	ND	0.070	0.25	ug/L							R-01, U
Nickel, dissolved	ND	0.30	0.50	ug/L							U
Selenium, dissolved	ND	0.20	2.0	ug/L							U
Silver, dissolved	0.0572	0.050	0.10	ug/L							J
Thallium, dissolved	ND	0.050	0.10	ug/L							U
Vanadium, dissolved	ND	0.50	1.0	ug/L							U
Zinc, dissolved	ND	2.0	5.0	ug/L							U
LCS (AF83108-BS1)					Prepared: 06/05/18 Analyzed: 06/06/18						
Aluminum, dissolved	453	5.0	10	ug/L	520		87.1	85-115			
Antimony, dissolved	21.4	0.20	0.50	ug/L	20.0		107	85-115			
Arsenic, dissolved	21.8	0.20	0.50	ug/L	20.0		109	85-115			
Barium, dissolved	22.1	0.20	0.50	ug/L	20.0		110	85-115			
Beryllium, dissolved	21.1	0.050	0.10	ug/L	20.0		105	85-115			
Cadmium, dissolved	20.1	0.060	0.10	ug/L	20.0		101	85-115			
Chromium, dissolved	21.5	0.50	0.50	ug/L	20.0		107	85-115			
Cobalt, dissolved	21.7	0.030	0.10	ug/L	20.0		108	85-115			
Copper, dissolved	21.4	0.40	0.50	ug/L	20.0		107	85-115			
Lead, dissolved	20.0	0.060	0.25	ug/L	20.0		99.8	85-115			
Molybdenum, dissolved	21.3	0.070	0.25	ug/L	20.0		107	85-115			
Nickel, dissolved	21.4	0.30	0.50	ug/L	20.0		107	85-115			
Selenium, dissolved	20.1	0.20	2.0	ug/L	20.0		101	85-115			
Silver, dissolved	21.4	0.050	0.10	ug/L	20.0		107	85-115			
Thallium, dissolved	20.0	0.050	0.10	ug/L	20.0		100	85-115			
Vanadium, dissolved	21.2	0.50	1.0	ug/L	20.0		106	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83108 - EPA 200.8 (D)											
LCS (AF83108-BS1)					Prepared: 06/05/18 Analyzed: 06/06/18						
Zinc, dissolved	100	2.0	5.0	ug/L	100		100	85-115			
Duplicate (AF83108-DUP1)		**Source: 18E2418-01**			Prepared: 06/05/18 Analyzed: 06/06/18						
Aluminum, dissolved	ND	20	40	ug/L		ND				20	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L		ND				20	R-01, U
Barium, dissolved	53.3	0.80	2.0	ug/L		54.0			1.38	20	
Beryllium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L		ND				20	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L		ND				20	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L		ND				20	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L		ND				20	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L		ND				20	R-01, U
Molybdenum, dissolved	0.331	0.28	1.0	ug/L		0.322			2.77	20	R-01, J
Nickel, dissolved	1.51	1.2	2.0	ug/L		1.41			6.97	20	R-01, J
Selenium, dissolved	ND	0.80	8.0	ug/L		ND				20	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L		ND				20	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L		ND				20	U
Matrix Spike (AF83108-MS1)		**Source: 18E2418-01**			Prepared: 06/05/18 Analyzed: 06/06/18						
Aluminum, dissolved	555	20	40	ug/L	520	ND	107	70-130			
Antimony, dissolved	21.8	0.80	2.0	ug/L	20.0	ND	109	70-130			
Arsenic, dissolved	22.9	0.80	2.0	ug/L	20.0	ND	114	70-130			
Barium, dissolved	75.4	0.80	2.0	ug/L	20.0	54.0	107	70-130			
Beryllium, dissolved	22.2	0.20	0.40	ug/L	20.0	ND	111	70-130			
Cadmium, dissolved	20.5	0.24	0.40	ug/L	20.0	ND	103	70-130			
Chromium, dissolved	22.2	2.0	2.0	ug/L	20.0	ND	111	70-130			
Cobalt, dissolved	21.7	0.12	0.40	ug/L	20.0	ND	109	70-130			
Copper, dissolved	22.3	1.6	2.0	ug/L	20.0	ND	111	70-130			
Lead, dissolved	20.1	0.24	1.0	ug/L	20.0	ND	101	70-130			
Molybdenum, dissolved	21.6	0.28	1.0	ug/L	20.0	0.322	106	70-130			
Nickel, dissolved	23.2	1.2	2.0	ug/L	20.0	1.41	109	70-130			
Selenium, dissolved	20.7	0.80	8.0	ug/L	20.0	ND	103	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83108 - EPA 200.8 (D)											
Matrix Spike (AF83108-MS1)		**Source: 18E2418-01**			Prepared: 06/05/18 Analyzed: 06/06/18						
Silver, dissolved	21.3	0.20	0.40	ug/L	20.0	ND	106	70-130			
Thallium, dissolved	20.3	0.20	0.40	ug/L	20.0	ND	101	70-130			
Vanadium, dissolved	21.7	2.0	4.0	ug/L	20.0	ND	109	70-130			
Zinc, dissolved	106	8.0	20	ug/L	100	ND	106	70-130			
Matrix Spike (AF83108-MS2)		**Source: 18E2418-11**			Prepared: 06/05/18 Analyzed: 06/06/18						
Aluminum, dissolved	548	20	40	ug/L	520	ND	105	70-130			
Antimony, dissolved	21.5	0.80	2.0	ug/L	20.0	ND	108	70-130			
Arsenic, dissolved	24.0	0.80	2.0	ug/L	20.0	2.79	106	70-130			
Barium, dissolved	110	0.80	2.0	ug/L	20.0	86.5	115	70-130			
Beryllium, dissolved	21.2	0.20	0.40	ug/L	20.0	ND	106	70-130			
Cadmium, dissolved	20.2	0.24	0.40	ug/L	20.0	ND	101	70-130			
Chromium, dissolved	21.6	2.0	2.0	ug/L	20.0	ND	108	70-130			
Cobalt, dissolved	21.1	0.12	0.40	ug/L	20.0	ND	105	70-130			
Copper, dissolved	21.0	1.6	2.0	ug/L	20.0	ND	105	70-130			
Lead, dissolved	18.8	0.24	1.0	ug/L	20.0	ND	94.2	70-130			
Molybdenum, dissolved	21.2	0.28	1.0	ug/L	20.0	0.454	104	70-130			
Nickel, dissolved	22.7	1.2	2.0	ug/L	20.0	1.71	105	70-130			
Selenium, dissolved	21.5	0.80	8.0	ug/L	20.0	ND	107	70-130			
Silver, dissolved	20.2	0.20	0.40	ug/L	20.0	ND	101	70-130			
Thallium, dissolved	19.0	0.20	0.40	ug/L	20.0	ND	95.1	70-130			
Vanadium, dissolved	22.0	2.0	4.0	ug/L	20.0	ND	110	70-130			
Zinc, dissolved	104	8.0	20	ug/L	100	ND	104	70-130			
Matrix Spike Dup (AF83108-MSD1)		**Source: 18E2418-01**			Prepared: 06/05/18 Analyzed: 06/06/18						
Aluminum, dissolved	557	20	40	ug/L	520	ND	107	70-130	0.295	20	
Antimony, dissolved	21.6	0.80	2.0	ug/L	20.0	ND	108	70-130	0.781	20	
Arsenic, dissolved	23.2	0.80	2.0	ug/L	20.0	ND	116	70-130	1.49	20	
Barium, dissolved	75.3	0.80	2.0	ug/L	20.0	54.0	106	70-130	0.220	20	
Beryllium, dissolved	21.7	0.20	0.40	ug/L	20.0	ND	108	70-130	2.60	20	
Cadmium, dissolved	20.6	0.24	0.40	ug/L	20.0	ND	103	70-130	0.241	20	
Chromium, dissolved	21.9	2.0	2.0	ug/L	20.0	ND	109	70-130	1.77	20	
Cobalt, dissolved	21.6	0.12	0.40	ug/L	20.0	ND	108	70-130	0.525	20	
Copper, dissolved	22.6	1.6	2.0	ug/L	20.0	ND	113	70-130	1.39	20	
Lead, dissolved	19.5	0.24	1.0	ug/L	20.0	ND	97.6	70-130	3.18	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83108 - EPA 200.8 (D)											
Matrix Spike Dup (AF83108-MSD1)		**Source: 18E2418-01**			Prepared: 06/05/18 Analyzed: 06/06/18						
Molybdenum, dissolved	21.0	0.28	1.0	ug/L	20.0	0.322	103	70-130	3.12	20	
Nickel, dissolved	23.3	1.2	2.0	ug/L	20.0	1.41	109	70-130	0.340	20	
Selenium, dissolved	21.7	0.80	8.0	ug/L	20.0	ND	108	70-130	4.69	20	
Silver, dissolved	21.1	0.20	0.40	ug/L	20.0	ND	105	70-130	0.952	20	
Thallium, dissolved	19.8	0.20	0.40	ug/L	20.0	ND	99.0	70-130	2.48	20	
Vanadium, dissolved	21.7	2.0	4.0	ug/L	20.0	ND	109	70-130	0.0120	20	
Zinc, dissolved	108	8.0	20	ug/L	100	ND	108	70-130	1.53	20	

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84123 - General Preparation											
Duplicate (AE84123-DUP1)		**Source: 18E2418-01**			Prepared & Analyzed: 06/01/18						
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Bicarbonate Alkalinity as CaCO3	65.0	1.0	5.0	mg/L		65.0			0.00	20	
Total Alkalinity as CaCO3	65.0	1.0	5.0	mg/L		65.0			0.00	20	
Batch AE84136 - General Preparation											
Blank (AE84136-BLK1)					Prepared: 05/25/18 Analyzed: 05/30/18						
Biochemical Oxygen Demand	ND	2.0	2.0	mg/L							U
Blank (AE84136-BLK2)					Prepared: 05/25/18 Analyzed: 05/30/18						
Biochemical Oxygen Demand	ND	2.0	2.0	mg/L							U
LCS (AE84136-BS1)					Prepared: 05/25/18 Analyzed: 05/30/18						
Biochemical Oxygen Demand	213	2.0	2.0	mg/L	200		106	84-115			
Duplicate (AE84136-DUP1)		**Source: 18E2419-01**			Prepared: 05/25/18 Analyzed: 05/30/18						
Biochemical Oxygen Demand	332	2.0	2.0	mg/L		346			3.95	30	
Batch AE84188 - General Preparation											
Blank (AE84188-BLK1)					Prepared: 05/29/18 Analyzed: 05/30/18						
Total Suspended Solids	ND	0.30	1.0	mg/L							U
Duplicate (AE84188-DUP1)		**Source: 18E2318-01**			Prepared: 05/29/18 Analyzed: 05/30/18						
Total Suspended Solids	188	0.30	1.0	mg/L		184			2.20	30	

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84188 - General Preparation											
Duplicate (AE84188-DUP2)		**Source: 18E2419-01**			Prepared: 05/29/18 Analyzed: 05/30/18						
Total Suspended Solids	173	0.30	1.0	mg/L		175			1.14	30	
Batch AE84247 - General Preparation											
Blank (AE84247-BLK1)					Prepared & Analyzed: 05/29/18						
Sulfide	ND	0.020	0.10	mg/L							U
LCS (AE84247-BS1)					Prepared & Analyzed: 05/29/18						
Sulfide	0.208	0.020	0.10	mg/L	0.195		107	85-115			
Duplicate (AE84247-DUP1)		**Source: 18E2239-01**			Prepared & Analyzed: 05/29/18						
Sulfide	ND	0.020	0.10	mg/L		ND				15	U
Matrix Spike (AE84247-MS1)		**Source: 18E2239-01**			Prepared & Analyzed: 05/29/18						
Sulfide	0.195	0.020	0.10	mg/L	0.195	ND	100	80-120			
Matrix Spike Dup (AE84247-MSD1)		**Source: 18E2239-01**			Prepared & Analyzed: 05/29/18						
Sulfide	0.195	0.020	0.10	mg/L	0.195	ND	100	80-120	0.00	15	
Batch AE84252 - General Preparation											
Blank (AE84252-BLK1)					Prepared: 05/29/18 Analyzed: 06/05/18						
Total Dissolved Solids	ND	5.0	10	mg/L							U
Duplicate (AE84252-DUP1)		**Source: 18E2418-05**			Prepared: 05/29/18 Analyzed: 06/05/18						
Total Dissolved Solids	84.0	5.0	10	mg/L		80.0			4.88	15	

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84252 - General Preparation											
Duplicate (AE84252-DUP2)		**Source: 18E2418-11**			Prepared: 05/29/18 Analyzed: 06/05/18						
Total Dissolved Solids	142	5.0	10	mg/L		154			8.11	15	
Batch AF83104 - Metals Digest											
Blank (AF83104-BLK1)					Prepared: 06/04/18 Analyzed: 06/08/18						
Hardness, Total	ND	1	5	mg/L							U
Duplicate (AF83104-DUP1)		**Source: 18E2396-01**			Prepared: 06/04/18 Analyzed: 06/08/18						
Hardness, Total	462	1	5	mg/L		441			4.61	20	
Batch AF83157 - General Preparation											
LCS (AF83157-BS1)					Prepared & Analyzed: 06/05/18						
Ammonia as N	4.99	0.10	0.20	mg/L	5.00		99.8	90-110			
LCS Dup (AF83157-BSD1)					Prepared & Analyzed: 06/05/18						
Ammonia as N	4.90	0.10	0.20	mg/L	5.00		98.1	90-110	1.76	10	
Matrix Spike (AF83157-MS1)		**Source: 18E2422-02**			Prepared & Analyzed: 06/05/18						
Ammonia as N	9.63	0.10	0.20	mg/L	10.0	ND	96.3	85-115			
Matrix Spike Dup (AF83157-MSD1)		**Source: 18E2422-02**			Prepared & Analyzed: 06/05/18						
Ammonia as N	9.46	0.10	0.20	mg/L	10.0	ND	94.6	85-115	1.83	20	
Batch AF83183 - General Preparation											
Blank (AF83183-BLK1)					Prepared: 05/24/18 Analyzed: 06/07/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L							U

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Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83183 - General Preparation											
Duplicate (AF83183-DUP1)		**Source: 18E2418-07**			Prepared: 05/24/18 Analyzed: 06/07/18						
Chlorophyll-a	0.00142	0.0010	0.010	mg/L		0.00114			22.2	50	J
Duplicate (AF83183-DUP2)		**Source: 18E2531-04**			Prepared: 05/25/18 Analyzed: 06/07/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Batch AF83214 - General Prep											
Blank (AF83214-BLK1)					Prepared & Analyzed: 06/06/18						
Total Organic Carbon	ND	0.300	1.00	mg/L							U
LCS (AF83214-BS1)					Prepared & Analyzed: 06/06/18						
Total Organic Carbon	9.84	0.300	1.00	mg/L	10.0		98.4	85-115			
LCS Dup (AF83214-BSD1)					Prepared & Analyzed: 06/06/18						
Total Organic Carbon	9.03	0.300	1.00	mg/L	10.0		90.3	85-115	8.58	20	
Duplicate (AF83214-DUP1)		**Source: 18E2418-01**			Prepared & Analyzed: 06/06/18						
Total Organic Carbon	2.60	0.300	1.00	mg/L		2.43			6.94	20	
MRL Check (AF83214-MRL1)					Prepared & Analyzed: 06/06/18						
Total Organic Carbon	1.34	0.300	1.00	mg/L	1.25		107	0-200			
Matrix Spike (AF83214-MS1)		**Source: 18E2531-02**			Prepared & Analyzed: 06/06/18						
Total Organic Carbon	22.9	0.600	2.00	mg/L	20.0	2.36	103	70-130			
Matrix Spike Dup (AF83214-MSD1)		**Source: 18E2531-02**			Prepared & Analyzed: 06/06/18						
Total Organic Carbon	22.8	0.600	2.00	mg/L	20.0	2.36	102	70-130	0.588	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83219 - General Preparation											
Blank (AF83219-BLK1)					Prepared & Analyzed: 06/06/18						
Oil & Grease (HEM)	ND	1.4	5.0	mg/L							U
LCS (AF83219-BS1)					Prepared & Analyzed: 06/06/18						
Oil & Grease (HEM)	39.1	1.4	5.0	mg/L	40.0		97.8	78-114			
LCS Dup (AF83219-BSD1)					Prepared & Analyzed: 06/06/18						
Oil & Grease (HEM)	39.7	1.4	5.0	mg/L	40.0		99.2	78-114	1.52	18	
Matrix Spike (AF83219-MS1)		**Source: 18E2893-01**			Prepared & Analyzed: 06/06/18						
Oil & Grease (HEM)	38.9	1.4	5.0	mg/L	40.0	1.40	93.8	78-114			
Batch AF83248 - General Prep											
LCS (AF83248-BS1)					Prepared: 06/06/18 Analyzed: 06/07/18						
Total Kjeldahl Nitrogen	3.04	0.20	1.0	mg/L	2.98		102	80-120			
LCS Dup (AF83248-BSD1)					Prepared: 06/06/18 Analyzed: 06/07/18						
Total Kjeldahl Nitrogen	3.04	0.20	1.0	mg/L	2.98		102	80-120	0.00	20	
Matrix Spike (AF83248-MS1)		**Source: 18E2431-03**			Prepared: 06/06/18 Analyzed: 06/07/18						
Total Kjeldahl Nitrogen	3.60	0.20	1.0	mg/L	2.98	ND	121	75-125			
Matrix Spike Dup (AF83248-MSD1)		**Source: 18E2431-03**			Prepared: 06/06/18 Analyzed: 06/07/18						
Total Kjeldahl Nitrogen	3.60	0.20	1.0	mg/L	2.98	ND	121	75-125	0.00	20	
Batch AF83264 - General Prep											
Blank (AF83264-BLK1)					Prepared & Analyzed: 06/07/18						
Dissolved Organic Carbon	ND	0.600	1.00	mg/L							U

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Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83264 - General Prep											
LCS (AF83264-BS1)					Prepared & Analyzed: 06/07/18						
Dissolved Organic Carbon	10.1	0.600	1.00	mg/L	10.0		101	85-115			
LCS Dup (AF83264-BSD1)					Prepared & Analyzed: 06/07/18						
Dissolved Organic Carbon	10.1	0.600	1.00	mg/L	10.0		101	85-115	0.492	20	
Duplicate (AF83264-DUP1)		**Source: 18E2418-01**			Prepared & Analyzed: 06/07/18						
Dissolved Organic Carbon	2.02	0.600	1.00	mg/L		2.31			13.4	20	
MRL Check (AF83264-MRL1)					Prepared & Analyzed: 06/07/18						
Dissolved Organic Carbon	1.72	0.600	1.00	mg/L	1.25		138	0-200			
Matrix Spike (AF83264-MS1)		**Source: 18E2531-02**			Prepared & Analyzed: 06/07/18						
Dissolved Organic Carbon	23.0	1.20	2.00	mg/L	20.0	2.06	105	70-130			
Matrix Spike Dup (AF83264-MSD1)		**Source: 18E2531-02**			Prepared & Analyzed: 06/07/18						
Dissolved Organic Carbon	22.8	1.20	2.00	mg/L	20.0	2.06	104	70-130	0.746	20	
Batch AF83380 - General Prep											
Blank (AF83380-BLK1)					Prepared & Analyzed: 06/09/18						
Phosphorus, total	ND	0.011	0.040	mg/L							U
LCS (AF83380-BS1)					Prepared & Analyzed: 06/09/18						
Phosphorus, total	0.195	0.011	0.040	mg/L	0.200		97.3	85-115			
Duplicate (AF83380-DUP1)		**Source: 18E2401-01**			Prepared & Analyzed: 06/09/18						
Phosphorus, total	4.85	0.55	2.0	mg/L		4.85			0.00	20	

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Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83380 - General Prep											
Matrix Spike (AF83380-MS1)		**Source: 18E2401-01**			Prepared & Analyzed: 06/09/18						
Phosphorus, total	6.33	0.55	2.0	mg/L	2.00	4.85	73.9	70-130			
Matrix Spike (AF83380-MS2)		**Source: 18E2418-01**			Prepared & Analyzed: 06/09/18						
Phosphorus, total	0.184	0.011	0.040	mg/L	0.200	0.0263	79.0	70-130			
Matrix Spike Dup (AF83380-MSD1)		**Source: 18E2401-01**			Prepared & Analyzed: 06/09/18						
Phosphorus, total	6.39	0.55	2.0	mg/L	2.00	4.85	77.1	70-130	1.01	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84125 - General Preparation											
Blank (AE84125-BLK1)					Prepared & Analyzed: 05/24/18						
Nitrate as N	ND	0.040	0.20	mg/L							U
Nitrite as N	ND	0.050	0.20	mg/L							U
Orthophosphate	ND	0.10	0.30	mg/L							U
LCS (AE84125-BS1)					Prepared & Analyzed: 05/24/18						
Nitrate as N	5.79	0.040	0.20	mg/L	5.56		104	90-110			
Orthophosphate	18.3	0.10	0.30	mg/L	16.7		110	90-110			
Nitrite as N	5.60	0.050	0.20	mg/L	5.56		101	90-110			
Duplicate (AE84125-DUP1)		**Source: 18E2341-01**			Prepared & Analyzed: 06/07/18						
Nitrite as N	0.137	0.050	0.20	mg/L		0.178			26.0	20	J
Nitrate as N	0.181	0.040	0.20	mg/L		0.214			16.9	20	J
Orthophosphate	0.683	0.10	0.30	mg/L		0.598			13.4	20	
Matrix Spike (AE84125-MS1)		**Source: 18E2341-01**			Prepared & Analyzed: 06/07/18						
Orthophosphate	19.1	0.10	0.30	mg/L	16.7	0.598	111	80-120			
Nitrite as N	6.20	0.050	0.20	mg/L	5.56	0.178	108	80-120			
Nitrate as N	6.01	0.040	0.20	mg/L	5.56	0.214	104	80-120			
Matrix Spike (AE84125-MS2)		**Source: 18E2418-01**			Prepared & Analyzed: 06/07/18						
Nitrate as N	5.80	0.040	0.20	mg/L	5.56	ND	104	80-120			
Orthophosphate	18.5	0.10	0.30	mg/L	16.7	ND	111	80-120			
Nitrite as N	5.93	0.050	0.20	mg/L	5.56	ND	107	80-120			
Matrix Spike Dup (AE84125-MSD1)		**Source: 18E2341-01**			Prepared & Analyzed: 06/07/18						
Nitrite as N	6.37	0.050	0.20	mg/L	5.56	0.178	111	80-120	2.69	20	
Nitrate as N	6.18	0.040	0.20	mg/L	5.56	0.214	107	80-120	2.79	20	
Orthophosphate	19.7	0.10	0.30	mg/L	16.7	0.598	115	80-120	2.84	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

TPH by EPA/LUFT GC Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84257 - SVOAs in Water GC											
Blank (AE84257-BLK1)					Prepared: 05/30/18 Analyzed: 05/31/18						
TPH as Diesel	ND	50	250	ug/L							U
TPH as Motor Oil	ND	100	250	ug/L							U
Surrogate: Tetratetracontane	*49.1*			*ug/L*	*56.0*		*87.7*	*39-120*			
LCS (AE84257-BS1)					Prepared: 05/30/18 Analyzed: 05/31/18						
TPH as Diesel	2080	50	250	ug/L	2070		101	61-120			
Surrogate: Tetratetracontane	*60.8*			*ug/L*	*56.0*		*109*	*39-120*			
LCS (AE84257-BS2)					Prepared: 05/30/18 Analyzed: 05/31/18						
TPH as Motor Oil	1710	100	250	ug/L	1990		85.9	71-125			
Surrogate: Tetratetracontane	*46.7*			*ug/L*	*56.0*		*83.4*	*39-120*			
LCS Dup (AE84257-BSD1)					Prepared: 05/30/18 Analyzed: 05/31/18						
TPH as Diesel	2030	50	250	ug/L	2070		98.1	61-120	2.56	25	
Surrogate: Tetratetracontane	*57.4*			*ug/L*	*56.0*		*102*	*39-120*			
LCS Dup (AE84257-BSD2)					Prepared: 05/30/18 Analyzed: 05/31/18						
TPH as Motor Oil	1660	100	250	ug/L	1990		83.6	71-125	2.72	25	
Surrogate: Tetratetracontane	*47.3*			*ug/L*	*56.0*		*84.4*	*39-120*			
Matrix Spike (AE84257-MS1)		**Source: 18E2469-02**			Prepared: 05/30/18 Analyzed: 05/31/18						
TPH as Diesel	2050	50	250	ug/L	2070	ND	99.2	61-120			
Surrogate: Tetratetracontane	*44.4*			*ug/L*	*56.0*		*79.3*	*39-120*			
Matrix Spike (AE84257-MS2)		**Source: 18E2342-01**			Prepared: 05/30/18 Analyzed: 05/31/18						
TPH as Diesel	2040	50	250	ug/L	2070	ND	98.7	61-120			
Surrogate: Tetratetracontane	*41.1*			*ug/L*	*56.0*		*73.4*	*39-120*			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

TPH by EPA/LUFT GCMS Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84272 - VOAs in Water GCMS											
Blank (AE84272-BLK1)					Prepared: 05/29/18 Analyzed: 05/30/18						
TPH as Gasoline	ND	50	50	ug/L							U
Surrogate: Toluene-d8	*24.2*			*ug/L*	*25.0*		*96.6*	*76-129*			
LCS (AE84272-BS1)					Prepared: 05/29/18 Analyzed: 05/30/18						
TPH as Gasoline	201	50	50	ug/L	200		100	67-132			
Surrogate: Toluene-d8	*24.8*			*ug/L*	*25.0*		*99.2*	*76-129*			
LCS Dup (AE84272-BSD1)					Prepared: 05/29/18 Analyzed: 05/30/18						
TPH as Gasoline	192	50	50	ug/L	200		96.0	67-132	4.58	25	
Surrogate: Toluene-d8	*24.2*			*ug/L*	*25.0*		*96.8*	*76-129*			
Matrix Spike (AE84272-MS1)		**Source: 18E2418-03**			Prepared: 05/29/18 Analyzed: 05/30/18						
TPH as Gasoline	193	50	50	ug/L	200	ND	96.5	37-156			
Surrogate: Toluene-d8	*25.2*			*ug/L*	*25.0*		*101*	*76-129*			
Matrix Spike (AE84272-MS2)		**Source: 18E2418-04**			Prepared: 05/29/18 Analyzed: 05/30/18						
TPH as Gasoline	190	50	50	ug/L	200	ND	95.0	37-156			
Surrogate: Toluene-d8	*25.2*			*ug/L*	*25.0*		*101*	*76-129*			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84271 - VOAs in Water GCMS											
Blank (AE84271-BLK1)					Prepared: 05/29/18 Analyzed: 05/30/18						
Benzene	ND	0.30	0.30	ug/L							U
Toluene	ND	0.30	0.30	ug/L							U
Ethylbenzene	ND	0.40	0.50	ug/L							U
Xylenes (total)	ND	0.50	0.50	ug/L							U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L							U
Di-isopropyl ether	ND	0.40	0.50	ug/L							U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L							U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L							U
Tert-butyl alcohol	ND	6.0	10	ug/L							U
Surrogate: Bromofluorobenzene	*23.7*			*ug/L*	*25.0*		*94.6*	*70-130*			
Surrogate: Dibromofluoromethane	*26.0*			*ug/L*	*25.0*		*104*	*70-130*			
Surrogate: Toluene-d8	*26.0*			*ug/L*	*25.0*		*104*	*70-130*			
LCS (AE84271-BS1)					Prepared: 05/29/18 Analyzed: 05/30/18						
Benzene	19.2	0.30	0.30	ug/L	20.0		95.8	82-122			
Toluene	21.4	0.30	0.30	ug/L	20.0		107	75-134			
Ethylbenzene	21.3	0.40	0.50	ug/L	20.0		107	84-124			
Xylenes (total)	66.6	0.50	0.50	ug/L	60.0		111	81-126			
Methyl tert-butyl ether	18.0	0.50	0.50	ug/L	20.0		89.8	84-119			
Di-isopropyl ether	21.0	0.40	0.50	ug/L	20.0		105	83-132			
Ethyl tert-butyl ether	22.7	0.40	0.50	ug/L	20.0		114	74-127			
Tert-amyl methyl ether	18.1	0.40	0.50	ug/L	20.0		90.6	74-120			
Tert-butyl alcohol	355	6.0	10	ug/L	400		88.6	66-147			
Surrogate: Bromofluorobenzene	*27.3*			*ug/L*	*25.0*		*109*	*70-130*			
Surrogate: Dibromofluoromethane	*25.3*			*ug/L*	*25.0*		*101*	*70-130*			
Surrogate: Toluene-d8	*26.3*			*ug/L*	*25.0*		*105*	*70-130*			
LCS Dup (AE84271-BSD1)					Prepared: 05/29/18 Analyzed: 05/30/18						
Benzene	19.8	0.30	0.30	ug/L	20.0		98.8	82-122	2.98	25	
Toluene	21.8	0.30	0.30	ug/L	20.0		109	75-134	1.67	25	
Ethylbenzene	21.7	0.40	0.50	ug/L	20.0		108	84-124	1.63	25	
Xylenes (total)	67.5	0.50	0.50	ug/L	60.0		113	81-126	1.33	25	
Methyl tert-butyl ether	19.1	0.50	0.50	ug/L	20.0		95.6	84-119	6.36	25	
Di-isopropyl ether	21.8	0.40	0.50	ug/L	20.0		109	83-132	3.83	25	
Ethyl tert-butyl ether	23.8	0.40	0.50	ug/L	20.0		119	74-127	4.94	25	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:26

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84271 - VOAs in Water GCMS											
LCS Dup (AE84271-BSD1)					Prepared: 05/29/18 Analyzed: 05/30/18						
Tert-amyl methyl ether	19.1	0.40	0.50	ug/L	20.0		95.4	74-120	5.11	25	
Tert-butyl alcohol	385	6.0	10	ug/L	400		96.2	66-147	8.22	25	
Surrogate: Bromofluorobenzene	*26.5*			*ug/L*	*25.0*		*106*	*70-130*			
Surrogate: Dibromofluoromethane	*25.0*			*ug/L*	*25.0*		*100*	*70-130*			
Surrogate: Toluene-d8	*25.4*			*ug/L*	*25.0*		*102*	*70-130*			
Matrix Spike (AE84271-MS1)		**Source: 18E2418-01**			Prepared: 05/29/18 Analyzed: 05/30/18						
Benzene	20.3	0.30	0.30	ug/L	20.0	ND	102	58-139			
Toluene	22.4	0.30	0.30	ug/L	20.0	ND	112	59-147			
Ethylbenzene	22.5	0.40	0.50	ug/L	20.0	ND	113	59-147			
Xylenes (total)	69.2	0.50	0.50	ug/L	60.0	ND	115	49-153			
Methyl tert-butyl ether	17.0	0.50	0.50	ug/L	20.0	ND	85.2	55-144			
Di-isopropyl ether	21.2	0.40	0.50	ug/L	20.0	ND	106	49-143			
Ethyl tert-butyl ether	22.5	0.40	0.50	ug/L	20.0	ND	112	44-143			
Tert-amyl methyl ether	17.6	0.40	0.50	ug/L	20.0	ND	87.8	41-136			
Tert-butyl alcohol	324	6.0	10	ug/L	400	ND	80.9	38-175			
Surrogate: Bromofluorobenzene	*26.8*			*ug/L*	*25.0*		*107*	*70-130*			
Surrogate: Dibromofluoromethane	*25.1*			*ug/L*	*25.0*		*100*	*70-130*			
Surrogate: Toluene-d8	*25.8*			*ug/L*	*25.0*		*103*	*70-130*			
Matrix Spike (AE84271-MS2)		**Source: 18E2418-02**			Prepared: 05/29/18 Analyzed: 05/30/18						
Benzene	20.2	0.30	0.30	ug/L	20.0	ND	101	58-139			
Toluene	22.1	0.30	0.30	ug/L	20.0	ND	111	59-147			
Ethylbenzene	22.3	0.40	0.50	ug/L	20.0	ND	112	59-147			
Xylenes (total)	68.5	0.50	0.50	ug/L	60.0	ND	114	49-153			
Methyl tert-butyl ether	17.6	0.50	0.50	ug/L	20.0	ND	88.0	55-144			
Di-isopropyl ether	21.4	0.40	0.50	ug/L	20.0	ND	107	49-143			
Ethyl tert-butyl ether	23.0	0.40	0.50	ug/L	20.0	ND	115	44-143			
Tert-amyl methyl ether	17.7	0.40	0.50	ug/L	20.0	ND	88.5	41-136			
Tert-butyl alcohol	330	6.0	10	ug/L	400	ND	82.5	38-175			
Surrogate: Bromofluorobenzene	*26.8*			*ug/L*	*25.0*		*107*	*70-130*			
Surrogate: Dibromofluoromethane	*25.2*			*ug/L*	*25.0*		*101*	*70-130*			
Surrogate: Toluene-d8	*25.8*			*ug/L*	*25.0*		*103*	*70-130*			

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Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	06/25/18 13:26

Notes and Definitions

FILT	The sample was filtered in the lab prior to analysis.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QM-01	The spike recovery for this QC sample is outside of established control limits possibly due to a sample matrix interference.
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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June 20, 2018

Lab ID: 18E1386

SHERI L. SPEAKS
ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
RE: LOW LEVEL METALS 18E2418

Dear SHERI L. SPEAKS ,

Enclosed are the analysis results for Work Order number 18E1386. All analyses were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For Ricky Jensen

Ricky D. Jensen
Laboratory Director
California ELAP Certification Number 1677

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18E2418

Lab No: 18E1386
Reported: 06/20/18
Phone: (707) 468-0401
P.O. #

Metals - Total

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
18E2418-01 LP1-S - Grab Water (18E1386-01) Sampled:05/23/18 09:00 Received:05/30/18 15:40									
Mercury	ng/l	**1.78**		0.20	0.50	EPA 1631E	06/06/18	06/06/18	B8F0930
Methyl Mercury as Mercury	"	**0.128**		0.020	0.050	EPA 1630	06/19/18	06/18/18	B8F1252
18E2418-02 LP1-M - Grab Water (18E1386-02) Sampled:05/23/18 09:30 Received:05/30/18 15:40									
Mercury	ng/l	**4.10**		0.20	0.50	EPA 1631E	06/06/18	06/06/18	B8F0930
Methyl Mercury as Mercury	"	**0.130**		0.020	0.050	EPA 1630	06/19/18	06/18/18	B8F1252
18E2418-03 LP1-B - Grab Water (18E1386-03) Sampled:05/23/18 09:45 Received:05/30/18 15:40									
Mercury	ng/l	**5.94**		0.20	0.50	EPA 1631E	06/06/18	06/06/18	B8F0930
Methyl Mercury as Mercury	"	**0.112**		0.020	0.050	EPA 1630	06/19/18	06/18/18	B8F1252
18E2418-04 LP3-S - Grab Water (18E1386-04) Sampled:05/23/18 11:15 Received:05/30/18 15:40									
Mercury	ng/l	**1.78**		0.20	0.50	EPA 1631E	06/06/18	06/06/18	B8F0930
Methyl Mercury as Mercury	"	**0.113**		0.020	0.050	EPA 1630	06/19/18	06/18/18	B8F1252
18E2418-05 LP3-M - Grab Water (18E1386-05) Sampled:05/23/18 11:45 Received:05/30/18 15:40									
Mercury	ng/l	**5.04**		0.20	0.50	EPA 1631E	06/06/18	06/06/18	B8F0930
Methyl Mercury as Mercury	"	**0.151**		0.020	0.050	EPA 1630	06/19/18	06/18/18	B8F1252
18E2418-06 LP3-B - Grab Water (18E1386-06) Sampled:05/23/18 12:00 Received:05/30/18 15:40									
Mercury	ng/l	**8.14**		0.20	0.50	EPA 1631E	06/06/18	06/06/18	B8F0930
Methyl Mercury as Mercury	"	**0.170**		0.020	0.050	EPA 1630	06/19/18	06/18/18	B8F1252
18E2418-07 LP-DUP - Grab Water (18E1386-07) Sampled:05/23/18 11:30 Received:05/30/18 15:40									
Mercury	ng/l	**1.78**		0.20	0.50	EPA 1631E	06/06/18	06/06/18	B8F0930
Methyl Mercury as Mercury	"	**0.114**		0.020	0.050	EPA 1630	06/19/18	06/18/18	B8F1252
18E2418-08 LP4-S - Grab Water (18E1386-08) Sampled:05/23/18 15:00 Received:05/30/18 15:40									
Mercury	ng/l	**1.79**		0.20	0.50	EPA 1631E	06/06/18	06/06/18	B8F0930
Methyl Mercury as Mercury	"	**0.168**		0.020	0.050	EPA 1630	06/19/18	06/18/18	B8F1252
18E2418-09 LP4-M - Grab Water (18E1386-09) Sampled:05/23/18 15:30 Received:05/30/18 15:40									
Mercury	ng/l	**1.98**		0.20	0.50	EPA 1631E	06/06/18	06/06/18	B8F0930
Methyl Mercury as Mercury	"	**0.185**		0.020	0.050	EPA 1630	06/19/18	06/18/18	B8F1252
18E2418-10 LP4-B - Grab Water (18E1386-10) Sampled:05/23/18 16:00 Received:05/30/18 15:40									
Mercury	ng/l	**3.64**		0.20	0.50	EPA 1631E	06/06/18	06/06/18	B8F0930
Methyl Mercury as Mercury	"	**0.579**		0.020	0.050	EPA 1630	06/19/18	06/18/18	B8F1252
18E2418-11 RF3.8 - Grab Water (18E1386-11) Sampled:05/23/18 17:10 Received:05/30/18 15:40									
Mercury	ng/l	**1.47**		0.20	0.50	EPA 1631E	06/06/18	06/06/18	B8F0930
Methyl Mercury as Mercury	"	**0.063**		0.020	0.050	EPA 1630	06/19/18	06/18/18	B8F1252

Approved By

Basic Laboratory Inc
California ELAP Cert #1677 and #2718

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www.basiclab.com
2218 Railroad Avenue voice 530.243.7234
Redding, California 96001 fax 530.243.7494
3860 Morrow Lane, Suite F voice 530.894.8966
Chico, California 95928 fax 530.894.5143

Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18E2418

Lab No: 18E1386
Reported: 06/20/18
Phone: (707) 468-0401
P.O. #

Quality Control Data

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Metals - Total										
Batch B8F0930 - BrCl Digestion										
Blank										
Mercury	ND	0.50	ng/l							
Blank										
Mercury	ND	0.50	ng/l							
Blank										
Mercury	ND	0.50	ng/l							
LCS										
Mercury	9.50	0.50	ng/l	10.0		95.0	77-123			
Matrix Spike Source: 18E1386-01										
Mercury	12.2	0.50	ng/l	10.0	1.78	104	71-125			
Matrix Spike Source: 18E1386-09										
Mercury	12.8	0.50	ng/l	10.0	1.98	109	71-125			
Matrix Spike Dup Source: 18E1386-01										
Mercury	12.1	0.50	ng/l	10.0	1.78	103	71-125	0.987	24	
Matrix Spike Dup Source: 18E1386-09										
Mercury	12.7	0.50	ng/l	10.0	1.98	107	71-125	1.38	24	
Batch B8F1252 - Draft EPA Method 1630 Distillation (Modified)										
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
LCS										
Methyl Mercury as Mercury	1.71	0.050	ng/l	2.00		85.6	67-133			
Duplicate Source: 18F0405-01										
Methyl Mercury as Mercury	0.031	0.050	ng/l		0.031			0.321	35	J
Matrix Spike Source: 18E1386-01										
Methyl Mercury as Mercury	1.32	0.050	ng/l	1.00	0.128	119	65-135			
Matrix Spike Source: 18E1386-09										
Methyl Mercury as Mercury	1.29	0.050	ng/l	1.00	0.185	110	65-135			
Matrix Spike Dup Source: 18E1386-01										
Methyl Mercury as Mercury	1.31	0.050	ng/l	1.00	0.128	118	65-135	1.01	35	
Matrix Spike Dup Source: 18E1386-09										
Methyl Mercury as Mercury	1.33	0.050	ng/l	1.00	0.185	114	65-135	3.32	35	

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18E2418

Lab No: 18E1386
Reported: 06/20/18
Phone: (707) 468-0401
P.O. #

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). The J flag is equivalent to the DNQ Estimated Concentration flag.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
<	Less than reporting limit
≤	Less than or equal to reporting limit
>	Greater than reporting limit
≥	Greater than or equal to reporting limit
MDL	Method Detection Limit
RL/ML	Minimum Level of Quantitation
MCL/AL	Maxium Contaminant Level/Action Level
mg/kg	Results reported as wet weight
TTLC	Total Threshold Limit Concentration
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leachate Procedure
Note 1	Received Temperature - according to EPA guidelines, samples for most chemistry methods should be held at ≤6 degrees C after collection, including during transportation, unless the time from sampling to delivery is <2 hours. Regulating agencies may invalidate results if temperature requirements are not met.
Note 2	According to 40 CFR Part 136 Table II, the following tests should be analyzed in the field within 15 minutes of sampling: pH, chlorine, dissolved oxygen, and sulfite.

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Basic Laboratory Inc
California ELAP Cert #1677 and #2718

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18E2418

18E.1386

6-12-18

18E1386 1

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

Basic Laboratory
2218 Railroad Ave
Redding, CA 96001
Phone :530-243-7234
Fax: 530-243-7494
Terms: Net 30

Analysis	Due	Expires	Comments
18E2418-01 LP1-S [Water] Sampled 05/23/18 09:00			-1 8.4°
BAL Hg 1631	06/08/18 12:00	06/20/18 09:00	
BAL Hg Methyl	06/08/18 12:00	11/19/18 09:00	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E2418-02 LP1-M [Water] Sampled 05/23/18 09:30			-2 8.6°
BAL Hg 1631	06/08/18 12:00	06/20/18 09:30	
BAL Hg Methyl	06/08/18 12:00	11/19/18 09:30	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E2418-03 LP1-B [Water] Sampled 05/23/18 09:45			-3 7.1°
BAL Hg 1631	06/08/18 12:00	06/20/18 09:45	
BAL Hg Methyl	06/08/18 12:00	11/19/18 09:45	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E2418-04 LP3-S [Water] Sampled 05/23/18 11:15			-4 8.4°
BAL Hg 1631	06/08/18 12:00	06/20/18 11:15	
BAL Hg Methyl	06/08/18 12:00	11/19/18 11:15	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			

Released By	5-24-18 Date	T Wilhelmson Received By	5-30-18 1540 Date
Released By	Date	Received By	5-30-18 1752 Date

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18E2418 18E1386

Analysis	Due	Expires	Comments	
18E2418-05 LP3-M [Water] Sampled 05/23/18 11:45			-5	9.4°
BAL Hg 1631	06/08/18 12:00	06/20/18 11:45		
BAL Hg Methyl	06/08/18 12:00	11/19/18 11:45		
Containers Supplied:				
500ml Glass - HCl (H) 500ml Glass - Unpreserve				
18E2418-06 LP3-B [Water] Sampled 05/23/18 12:00			-6	9.8°
BAL Hg 1631	06/08/18 12:00	06/20/18 12:00		
BAL Hg Methyl	06/08/18 12:00	11/19/18 12:00		
Containers Supplied:				
500ml Glass - HCl (H) 500ml Glass - Unpreserve				
18E2418-07 LP-DUP [Water] Sampled 05/23/18 11:30			-7	9.1°
BAL Hg 1631	06/08/18 12:00	06/20/18 11:30		
BAL Hg Methyl	06/08/18 12:00	11/19/18 11:30		
Containers Supplied:				
500ml Glass - HCl (H) 500ml Glass - Unpreserve				
18E2418-08 LP4-S [Water] Sampled 05/23/18 15:00			-8	9.8°
BAL Hg 1631	06/08/18 12:00	06/20/18 15:00		
BAL Hg Methyl	06/08/18 12:00	11/19/18 15:00		
Containers Supplied:				
500ml Glass - HCl (H) 500ml Glass - Unpreserve				
18E2418-09 LP4-M [Water] Sampled 05/23/18 15:30			-9	7.6°
BAL Hg 1631	06/08/18 12:00	06/20/18 15:30		
BAL Hg Methyl	06/08/18 12:00	11/19/18 15:30		
Containers Supplied:				
500ml Glass - HCl (H) 500ml Glass - Unpreserve				

Released By	Date	Received By	Date	
	5-24-18	T Wilhelmson	5.30.18	1540
		TW	5.30.18	1752

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18E2418

18E1386

Analysis	Due	Expires	Comments
18E2418-10 LP4-B [Water] Sampled 05/23/18 16:00			-10 7.5°
BAL Hg 1631	06/08/18 12:00	06/20/18 16:00	
BAL Hg Methyl	06/08/18 12:00	11/19/18 16:00	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E2418-11 RF3.8 [Water] Sampled 05/23/18 17:10			-11 9.0°
BAL Hg 1631	06/08/18 12:00	06/20/18 17:10	
BAL Hg Methyl	06/08/18 12:00	11/19/18 17:10	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+QC
+MCL

Released By	Date	Received By	Date
	5-24-18	T Wilhelmson	5-30-18 1540
Released By	Date	Received By	Date
		TW	5-30-18 1752

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Central Valley Laboratory
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Chain of Custody - Work Order

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Lab No 18E2418 Pg 1 of 6

Report to	Invoice to (If different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA Buck Christina Buck

TAT: Standard 10 days (X); RUSH: 5 days ( ) 48 hours ( ) Other: ___days ( ) Lab preapproval required

Temp upon Receipt °C: Ukiah temp: 1.2; Livermore temp: ; Elk Grove temp:

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	CAM17 200.8 dissolved / lab filter	Al dissolved 200.8	Alkalinity	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	TDS	TSS	Chlorophyll-A	Sulfide	Hg 1631	MeHg 1630	Sample Notes or DDW Source Numbers:
LP1-S	5/23	900															X	X	X	X	X	X	X	X	X	X	X	X	
LP1-M		930																							X				
LP1-B		945																											no chl
LP3-S		1115																							X				
LP3-M		1145																							X				
LP3-B		1200																											no chl
LP-DUP		1130																							X				
LP4-S		1500																							X				
LP4-M		1530																							X				
LP4-B		1600																											nochl

Relinquished by	Received by	Date	Time
Christina Buck		5.24.18	0815

DDW Write On EDT Transmission? ( ) Yes ( ) No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ( ) Yes ( ) No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: Mileage: Misc. Supplies:

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Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
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Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18E2418 Pg 2 of 6

Signature below authorizes work under terms stated on reverse side.

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Field Sampler - Printed Name & Signature:
CHRISTINA BUCK
Christina Buck

TAT: Standard 10 days (2); RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C: Ukiah temp: 1.2° Livermore temp: Elk Grove temp:

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Analysis Request: TPH-D/MO	TPH-Gas/BTEX/Oxys	Oil and Grease	TOC	DOC	CAM17 200.8 total + Al/Mn	Fe 200.8 Total	Hardness, total	Ammonia-N	Phosphorus, Total	TKN	Sample Notes or DDW Source Numbers:
LP1-S	5/23	900															X	X	X	X	X	X	X	X	X	X	X	
LP1-M		930																										
LP1-B		945																										
LP3-S		1115																										
LP3-M		1145																										
LP3-B		1200																										
LP-DUP		1130																										
LP4-S		1500																										
LP4-M		1530																										
LP4-B		1600																										

Relinquished by	Received by	Date	Time
Christina Buck	[signature]	5.24.18	0915

DDW Write On EDT Transmission? ○ Yes ○ No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

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Chain of Custody - Work Order

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Lab No 18E2418 Pg 3 of 6

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature:

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	Algal ID & E (sub to Greenwater)	Analysis Request
~~LP1-S~~	5/24	900																
~~LP1-M~~		930																
~~LP1-B~~		945																
~~LP3-S~~		1115																
~~LP3-M~~		1145																
~~LP3-B~~		1200																
~~LP-DUP~~		1130																
~~LP4-S~~		1500																
~~LP4-M~~		1530																
~~LP4-B~~		1600																

Please hold phytoplankton sample analysis until further notice.

TAT
Standard 10 days ⊘
RUSH:
5 days ○
48 hours ○
Other: ___days ○
Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.2°
Livermore temp:
Elk Grove temp:

Sample Notes or DDW Source Numbers:

Relinquished by	Received by	Date	Time
Christina Buck		5.24.18	0815

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):

Travel and Site Time:	Mileage:	Misc. Supplies:

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Chain of Custody - Work Order

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Lab No 18E2418 Pg 4 of 6

Signature below authorizes work under terms stated on reverse side.

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Field Sampler - Printed Name & Signature: CHRISTINA Buck Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Analysis Request: Algal ID & E (sub to Greenwater)
LPP1-S	5/23	900															X
LP1-M	↓	930															X
LP3-S		1115															X
LP3-M		1145															X
LP4-S		1500															X
LP4-M	↓	1530															X

Please hold phytoplankton sample analysis until further notice.

TAT
Standard 10 days: ⊗
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ (Lab preapproval required)

Temp upon Receipt °C
Ukiah temp: 1.2
Livermore temp:
Elk Grove temp:

Sample Notes or DDW Source Numbers:

Relinquished by	Received by	Date	Time
Christina Buck	[signature]	5.24.18	0815

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):
Travel and Site Time: | Mileage: | Misc. Supplies:

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Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18E2418 Pg 5 of 6

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	TPH-D/MO	TPH-Gas/BTEX/Oxys	Oil and Grease	TOC	DOC	CAM17 200.8 total + Al/Mn	Fe 200.8 Total	Hardness, total	Ammonia-N	Phosphorus, Total	TKN	Sample Notes or DDW Source Numbers:
RF3.8 CMS	5/24/23	1710															X	X	X	X	X	X	X	X	X	X	X	

TAT: Standard 10 days 6 | RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C: Ukiah temp: 1.2' | Livermore temp: | Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck			
		5.24.19	0815

DDW Write On EDT Transmission? ○ Yes ○ No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

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ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

Bay Area Laboratory
262 Rickenbacker Circle, Livermore CA 94551
925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18E2418 Pg 6 of 6

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: Christina Buck / Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	CAM17 200.8 dissolved / lab filter	Al dissolved 200.8	Alkalinity	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	TDS	TSS	Chlorophyll-A	~~Sulfide~~	Hg 1631	MeHg 1630	Sample Notes or DDW Source Numbers:
RF3.8	05/24/23	1710															X	X	X	X	X	X	X	X	X		X	X	

Relinquished by	Received by	Date	Time
Christina Buck	[illegible]	5.24.18	0815

TAT
- Standard 10 days: ⊘
- RUSH: 5 days ○ / 48 hours ○ / Other: ___days ○ — Lab preapproval required

Temp upon Receipt °C
- Ukiah temp: 1.2°
- Livermore temp:
- Elk Grove temp:

DDW Write On EDT Transmission? ○ Yes ○ No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No

Global ID:

Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time:	Mileage:	Misc. Supplies:

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ELAP Certificates 1551, 2728, and 2922

25 June 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18E2531

Enclosed are the results of analyses for samples received by the laboratory on 05/25/18 08:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
VA2-S	18E2531-01	Water	05/24/18 11:15	05/25/18 08:40
VA2-B	18E2531-02	Water	05/24/18 12:00	05/25/18 08:40
ER173.7	18E2531-03	Water	05/24/18 15:50	05/25/18 08:40
BL-B	18E2531-04	Water	05/24/18 17:00	05/25/18 08:40

This represents an amended copy of the original report.

Subcontracted results added.

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-S (18E2531-01) Water Sampled: 05/24/18 11:15 Received: 05/25/18 08:40											
Calcium	**19**	**0.080**	**1.0**	**mg/L**	1	AF83140	06/05/18 09:15	06/08/18 15:21	EPA 200.7	MAM	
Magnesium	**5.4**	**0.030**	**1.0**	**mg/L**	1	AF83140	06/05/18 09:15	06/08/18 15:21	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AF83265	06/07/18 08:06	06/07/18 14:17	EPA 245.1	EL	U
VA2-B (18E2531-02) Water Sampled: 05/24/18 12:00 Received: 05/25/18 08:40											
Calcium	**17**	**0.080**	**1.0**	**mg/L**	1	AF83140	06/05/18 09:15	06/08/18 15:26	EPA 200.7	MAM	
Magnesium	**5.5**	**0.030**	**1.0**	**mg/L**	1	AF83140	06/05/18 09:15	06/08/18 15:26	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AF83265	06/07/18 08:06	06/07/18 14:20	EPA 245.1	EL	U
ER173.7 (18E2531-03) Water Sampled: 05/24/18 15:50 Received: 05/25/18 08:40											
Calcium	**31**	**0.080**	**1.0**	**mg/L**	1	AF83140	06/05/18 09:15	06/08/18 15:31	EPA 200.7	MAM	
Magnesium	**6.2**	**0.030**	**1.0**	**mg/L**	1	AF83140	06/05/18 09:15	06/08/18 15:31	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AF83265	06/07/18 08:06	06/07/18 14:22	EPA 245.1	EL	U
BL-B (18E2531-04) Water Sampled: 05/24/18 17:00 Received: 05/25/18 08:40											
Calcium	ND	0.080	1.0	mg/L	1	AF83140	06/05/18 09:15	06/08/18 15:35	EPA 200.7	MAM	U
Magnesium	ND	0.030	1.0	mg/L	1	AF83140	06/05/18 09:15	06/08/18 15:35	EPA 200.7	MAM	U
Mercury	ND	0.060	0.20	ug/L	1	AF83265	06/07/18 08:06	06/07/18 14:25	EPA 245.1	EL	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-S (18E2531-01) Water Sampled: 05/24/18 11:15 Received: 05/25/18 08:40											
Aluminum	**140**	**20**	**40**	**ug/L**	4	AE84178	05/29/18 08:45	05/31/18 16:38	EPA 200.8	JRA	
Antimony	ND	0.80	2.0	ug/L	4	AE84178	05/29/18 08:45	05/30/18 16:19	EPA 200.8	JRA	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE84178	05/29/18 08:45	06/01/18 13:43	EPA 200.8	JRA	R-01, U
Barium	**58**	**0.80**	**2.0**	**ug/L**	4	AE84178	05/29/18 08:45	05/30/18 16:19	EPA 200.8	JRA	
Beryllium	ND	0.20	0.40	ug/L	4	AE84178	05/29/18 08:45	05/30/18 16:19	EPA 200.8	JRA	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84178	05/29/18 08:45	05/30/18 16:19	EPA 200.8	JRA	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AE84178	05/29/18 08:45	05/31/18 16:38	EPA 200.8	JRA	R-01, U
Cobalt	**0.17**	**0.12**	**0.40**	**ug/L**	4	AE84178	05/29/18 08:45	05/30/18 16:19	EPA 200.8	JRA	R-01, J
Copper	**1.6**	**1.6**	**2.0**	**ug/L**	4	AE84178	05/29/18 08:45	05/30/18 16:19	EPA 200.8	JRA	R-01, J
Iron	**220**	**40**	**200**	**ug/L**	4	AE84178	05/29/18 08:45	05/31/18 16:38	EPA 200.8	JRA	
Lead	ND	0.24	1.0	ug/L	4	AE84178	05/29/18 08:45	05/30/18 16:19	EPA 200.8	JRA	R-01, U
Manganese	**22**	**8.0**	**20**	**ug/L**	4	AE84178	05/29/18 08:45	05/30/18 16:19	EPA 200.8	JRA	
Molybdenum	**0.30**	**0.28**	**1.0**	**ug/L**	4	AE84178	05/29/18 08:45	05/30/18 16:19	EPA 200.8	JRA	R-01, J
Nickel	**2.0**	**1.2**	**2.0**	**ug/L**	4	AE84178	05/29/18 08:45	05/30/18 16:19	EPA 200.8	JRA	
Selenium	ND	0.80	8.0	ug/L	4	AE84178	05/29/18 08:45	05/30/18 16:19	EPA 200.8	JRA	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84178	05/29/18 08:45	05/30/18 16:19	EPA 200.8	JRA	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AE84178	05/29/18 08:45	05/30/18 16:19	EPA 200.8	JRA	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84178	05/29/18 08:45	05/31/18 16:38	EPA 200.8	JRA	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84178	05/29/18 08:45	05/30/18 16:19	EPA 200.8	JRA	R-01, U
VA2-B (18E2531-02) Water Sampled: 05/24/18 12:00 Received: 05/25/18 08:40											
Aluminum	**160**	**20**	**40**	**ug/L**	4	AE84178	05/29/18 08:45	05/31/18 16:44	EPA 200.8	JRA	
Antimony	ND	0.80	2.0	ug/L	4	AE84178	05/29/18 08:45	05/30/18 16:31	EPA 200.8	JRA	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE84178	05/29/18 08:45	06/01/18 13:48	EPA 200.8	JRA	R-01, U
Barium	**58**	**0.80**	**2.0**	**ug/L**	4	AE84178	05/29/18 08:45	05/30/18 16:31	EPA 200.8	JRA	
Beryllium	ND	0.20	0.40	ug/L	4	AE84178	05/29/18 08:45	05/30/18 16:31	EPA 200.8	JRA	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84178	05/29/18 08:45	05/30/18 16:31	EPA 200.8	JRA	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AE84178	05/29/18 08:45	05/31/18 16:44	EPA 200.8	JRA	R-01, U
Cobalt	**0.18**	**0.12**	**0.40**	**ug/L**	4	AE84178	05/29/18 08:45	05/30/18 16:31	EPA 200.8	JRA	R-01, J
Copper	**2.8**	**1.6**	**2.0**	**ug/L**	4	AE84178	05/29/18 08:45	05/30/18 16:31	EPA 200.8	JRA	
Iron	**330**	**40**	**200**	**ug/L**	4	AE84178	05/29/18 08:45	05/31/18 16:44	EPA 200.8	JRA	
Lead	ND	0.24	1.0	ug/L	4	AE84178	05/29/18 08:45	05/30/18 16:31	EPA 200.8	JRA	R-01, U
Manganese	**22**	**8.0**	**20**	**ug/L**	4	AE84178	05/29/18 08:45	05/30/18 16:31	EPA 200.8	JRA	
Molybdenum	**0.34**	**0.28**	**1.0**	**ug/L**	4	AE84178	05/29/18 08:45	05/30/18 16:31	EPA 200.8	JRA	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-B (18E2531-02) Water Sampled: 05/24/18 12:00 Received: 05/25/18 08:40											
Nickel	**2.5**	**1.2**	**2.0**	**ug/L**	4	AE84178	05/29/18 08:45	05/30/18 16:31	EPA 200.8	JRA	
Selenium	ND	0.80	8.0	ug/L	4	AE84178	05/29/18 08:45	05/30/18 16:31	EPA 200.8	JRA	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84178	05/29/18 08:45	05/30/18 16:31	EPA 200.8	JRA	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AE84178	05/29/18 08:45	05/30/18 16:31	EPA 200.8	JRA	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84178	05/29/18 08:45	05/31/18 16:44	EPA 200.8	JRA	R-01, U
Zinc	**15**	**8.0**	**20**	**ug/L**	4	AE84178	05/29/18 08:45	05/30/18 16:31	EPA 200.8	JRA	R-01, J
ER173.7 (18E2531-03) Water Sampled: 05/24/18 15:50 Received: 05/25/18 08:40											
Aluminum	ND	20	40	ug/L	4	AE84178	05/29/18 08:45	05/30/18 17:13	EPA 200.8	JRA	U, R-01
Antimony	ND	0.80	2.0	ug/L	4	AE84178	05/29/18 08:45	05/30/18 17:13	EPA 200.8	JRA	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE84178	05/29/18 08:45	06/01/18 14:39	EPA 200.8	JRA	R-01, U
Barium	**64**	**0.80**	**2.0**	**ug/L**	4	AE84178	05/29/18 08:45	05/30/18 17:13	EPA 200.8	JRA	
Beryllium	ND	0.20	0.40	ug/L	4	AE84178	05/29/18 08:45	05/30/18 17:13	EPA 200.8	JRA	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84178	05/29/18 08:45	05/30/18 17:13	EPA 200.8	JRA	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AE84178	05/29/18 08:45	05/31/18 16:50	EPA 200.8	JRA	R-01, U
Cobalt	ND	0.12	0.40	ug/L	4	AE84178	05/29/18 08:45	05/30/18 17:13	EPA 200.8	JRA	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AE84178	05/29/18 08:45	05/30/18 17:13	EPA 200.8	JRA	R-01, U
Iron	**89**	**40**	**200**	**ug/L**	4	AE84178	05/29/18 08:45	05/31/18 16:50	EPA 200.8	JRA	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AE84178	05/29/18 08:45	05/30/18 17:13	EPA 200.8	JRA	R-01, U
Manganese	ND	8.0	20	ug/L	4	AE84178	05/29/18 08:45	05/30/18 17:13	EPA 200.8	JRA	R-01, U
Molybdenum	**0.46**	**0.28**	**1.0**	**ug/L**	4	AE84178	05/29/18 08:45	05/30/18 17:13	EPA 200.8	JRA	R-01, J
Nickel	ND	1.2	2.0	ug/L	4	AE84178	05/29/18 08:45	05/30/18 17:13	EPA 200.8	JRA	R-01, U
Selenium	ND	0.80	8.0	ug/L	4	AE84178	05/29/18 08:45	05/30/18 17:13	EPA 200.8	JRA	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84178	05/29/18 08:45	05/30/18 17:13	EPA 200.8	JRA	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AE84178	05/29/18 08:45	05/30/18 17:13	EPA 200.8	JRA	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84178	05/29/18 08:45	05/31/18 16:50	EPA 200.8	JRA	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84178	05/29/18 08:45	05/30/18 17:13	EPA 200.8	JRA	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
BL-B (18E2531-04) Water Sampled: 05/24/18 17:00 Received: 05/25/18 08:40											
Aluminum	ND	20	40	ug/L	4	AE84178	05/29/18 08:45	05/30/18 13:48	EPA 200.8	JRA	U, R-01
Antimony	ND	0.80	2.0	ug/L	4	AE84178	05/29/18 08:45	05/30/18 13:48	EPA 200.8	JRA	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AE84178	05/29/18 08:45	06/01/18 12:45	EPA 200.8	JRA	R-01, U
Barium	ND	0.80	2.0	ug/L	4	AE84178	05/29/18 08:45	05/30/18 13:48	EPA 200.8	JRA	R-01, U
Beryllium	ND	0.20	0.40	ug/L	4	AE84178	05/29/18 08:45	05/30/18 13:48	EPA 200.8	JRA	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AE84178	05/29/18 08:45	05/30/18 13:48	EPA 200.8	JRA	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AE84178	05/29/18 08:45	05/31/18 15:25	EPA 200.8	JRA	R-01, U
Cobalt	ND	0.12	0.40	ug/L	4	AE84178	05/29/18 08:45	05/30/18 13:48	EPA 200.8	JRA	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AE84178	05/29/18 08:45	05/30/18 13:48	EPA 200.8	JRA	R-01, U
Iron	**330**	**40**	**200**	**ug/L**	4	AE84178	05/29/18 08:45	05/31/18 15:25	EPA 200.8	JRA	
Lead	ND	0.24	1.0	ug/L	4	AE84178	05/29/18 08:45	05/30/18 13:48	EPA 200.8	JRA	R-01, U
Manganese	ND	8.0	20	ug/L	4	AE84178	05/29/18 08:45	05/30/18 13:48	EPA 200.8	JRA	R-01, U
Molybdenum	ND	0.28	1.0	ug/L	4	AE84178	05/29/18 08:45	05/30/18 13:48	EPA 200.8	JRA	R-01, U
Nickel	ND	1.2	2.0	ug/L	4	AE84178	05/29/18 08:45	05/30/18 13:48	EPA 200.8	JRA	R-01, U
Selenium	ND	0.80	8.0	ug/L	4	AE84178	05/29/18 08:45	05/30/18 13:48	EPA 200.8	JRA	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AE84178	05/29/18 08:45	05/30/18 13:48	EPA 200.8	JRA	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AE84178	05/29/18 08:45	05/30/18 13:48	EPA 200.8	JRA	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AE84178	05/29/18 08:45	05/31/18 15:25	EPA 200.8	JRA	R-01, U
Zinc	ND	8.0	20	ug/L	4	AE84178	05/29/18 08:45	05/30/18 13:48	EPA 200.8	JRA	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-S (18E2531-01) Water Sampled: 05/24/18 11:15 Received: 05/25/18 08:40											**FILT**
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AF83272	06/07/18 08:19	06/08/18 10:09	EPA 245.1	EL	U
VA2-B (18E2531-02) Water Sampled: 05/24/18 12:00 Received: 05/25/18 08:40											**FILT**
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AF83272	06/07/18 08:19	06/08/18 10:12	EPA 245.1	EL	U
ER173.7 (18E2531-03) Water Sampled: 05/24/18 15:50 Received: 05/25/18 08:40											**FILT**
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AF83272	06/07/18 08:19	06/08/18 10:15	EPA 245.1	EL	U
BL-B (18E2531-04) Water Sampled: 05/24/18 17:00 Received: 05/25/18 08:40											**FILT**
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AF83272	06/07/18 08:19	06/08/18 10:17	EPA 245.1	EL	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-S (18E2531-01) Water Sampled: 05/24/18 11:15 Received: 05/25/18 08:40											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 10:13	EPA 200.8	MMY	U, R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 10:13	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 10:13	EPA 200.8	MMY	R-01, U
Barium, dissolved	**55**	**0.80**	**2.0**	**ug/L**	4	AF83230	06/07/18 14:15	06/08/18 10:13	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 10:13	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 10:13	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 10:13	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 10:13	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 10:13	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 10:13	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.32**	**0.28**	**1.0**	**ug/L**	4	AF83230	06/07/18 14:15	06/08/18 10:13	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.6**	**1.2**	**2.0**	**ug/L**	4	AF83230	06/07/18 14:15	06/08/18 10:13	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 10:13	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 10:13	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 10:13	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 10:13	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AF83230	06/07/18 14:15	06/08/18 10:13	EPA 200.8	MMY	R-01, U
VA2-B (18E2531-02) Water Sampled: 05/24/18 12:00 Received: 05/25/18 08:40											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:13	EPA 200.8	MMY	U, R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:13	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:13	EPA 200.8	MMY	R-01, U
Barium, dissolved	**54**	**0.80**	**2.0**	**ug/L**	4	AF83230	06/07/18 14:15	06/08/18 13:13	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:13	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:13	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:13	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:13	EPA 200.8	MMY	R-01, U
Copper, dissolved	**3.1**	**1.6**	**2.0**	**ug/L**	4	AF83230	06/07/18 14:15	06/08/18 13:13	EPA 200.8	MMY	
Lead, dissolved	ND	0.24	1.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:13	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.35**	**0.28**	**1.0**	**ug/L**	4	AF83230	06/07/18 14:15	06/08/18 13:13	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.5**	**1.2**	**2.0**	**ug/L**	4	AF83230	06/07/18 14:15	06/08/18 13:13	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:13	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:13	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:13	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-B (18E2531-02) Water Sampled: 05/24/18 12:00 Received: 05/25/18 08:40											**FILT**
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:13	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:13	EPA 200.8	MMY	R-01, U
ER173.7 (18E2531-03) Water Sampled: 05/24/18 15:50 Received: 05/25/18 08:40											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:20	EPA 200.8	MMY	U, R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:20	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:20	EPA 200.8	MMY	R-01, U
Barium, dissolved	**60**	**0.80**	**2.0**	**ug/L**	4	AF83230	06/07/18 14:15	06/08/18 13:20	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:20	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:20	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:20	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:20	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:20	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:20	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.44**	**0.28**	**1.0**	**ug/L**	4	AF83230	06/07/18 14:15	06/08/18 13:20	EPA 200.8	MMY	R-01, J
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:20	EPA 200.8	MMY	R-01, U
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:20	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:20	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:20	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:20	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:20	EPA 200.8	MMY	R-01, U
BL-B (18E2531-04) Water Sampled: 05/24/18 17:00 Received: 05/25/18 08:40											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:26	EPA 200.8	MMY	U, R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:26	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:26	EPA 200.8	MMY	R-01, U
Barium, dissolved	ND	0.80	2.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:26	EPA 200.8	MMY	R-01, U
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:26	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:26	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:26	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:26	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:26	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:26	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	ND	0.28	1.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:26	EPA 200.8	MMY	R-01, U
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:26	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
BL-B (18E2531-04) Water Sampled: 05/24/18 17:00 Received: 05/25/18 08:40											**FILT**
Selenium, dissolved	ND	0.80	8.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:26	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:26	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:26	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:26	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AF83230	06/07/18 14:15	06/08/18 13:26	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-S (18E2531-01) Water Sampled: 05/24/18 11:15 Received: 05/25/18 08:40											
Ammonia as N	ND	0.10	0.20	mg/L	1	AF83226	06/06/18 09:00	06/06/18 16:20	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	**2.3**	**2.0**	**5.0**	**mg/L**	1	AE84136	05/25/18 12:30	05/30/18 15:45	SM5210B	EF	J
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AF83183	05/25/18 12:00	06/07/18 10:46	SM10200H	PBM	U
Dissolved Organic Carbon	**2.13**	**0.600**	**1.00**	**mg/L**	1	AF83264	06/07/18 07:08	06/07/18 21:05	SM5310C	JIM	
Oil & Grease (HEM)	**2.0**	**1.4**	**5.0**	**mg/L**	1	AF83337	06/08/18 07:51	06/11/18 13:22	EPA 1664A	STS	J
Total Dissolved Solids	**100**	**5.0**	**10**	**mg/L**	1	AE84309	05/31/18 08:05	06/07/18 16:02	SM2540C	PBM	
Total Suspended Solids	**3.2**	**0.30**	**1.0**	**mg/L**	1	AE84263	05/30/18 15:50	05/31/18 10:10	SM2540D	EV	
Bicarbonate Alkalinity as CaCO3	**66**	**1.0**	**5.0**	**mg/L**	1	AE84328	06/04/18 08:00	06/04/18 12:29	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84328	06/04/18 08:00	06/04/18 12:29	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84328	06/04/18 08:00	06/04/18 12:29	SM2320B	CEF	U
Total Alkalinity as CaCO3	**66**	**1.0**	**5.0**	**mg/L**	1	AE84328	06/04/18 08:00	06/04/18 12:29	SM2320B	CEF	
Nitrate + Nitrite as N	**0.029**	**0.0086**	**0.40**	**mg/L**	1	AE84336	06/05/18 12:20	06/12/18 11:06	Calculation	RLG	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AF83328	06/09/18 06:25	06/11/18 08:41	SM4500-Norg B	SMS	U
Hardness, Total	**70**	**1**	**5**	**mg/L**	1	AF83140	06/05/18 09:15	06/08/18 15:21	SM2340B	MAM	
Phosphorus, total	**0.025**	**0.011**	**0.040**	**mg/L**	1	AF83391	06/11/18 08:00	06/11/18 12:18	SM4500-P E	SMS	J
Total Organic Carbon	**2.41**	**0.300**	**1.00**	**mg/L**	1	AF83214	06/06/18 05:59	06/06/18 16:21	SM5310C	JIM	
VA2-B (18E2531-02) Water Sampled: 05/24/18 12:00 Received: 05/25/18 08:40											
Ammonia as N	ND	0.10	0.20	mg/L	1	AF83226	06/06/18 09:00	06/06/18 16:20	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	**2.6**	**2.0**	**5.0**	**mg/L**	1	AE84136	05/25/18 12:30	05/30/18 15:45	SM5210B	EF	J
Dissolved Organic Carbon	**2.06**	**0.600**	**1.00**	**mg/L**	1	AF83264	06/07/18 07:08	06/07/18 21:18	SM5310C	JIM	
Oil & Grease (HEM)	**1.8**	**1.4**	**5.0**	**mg/L**	1	AF83337	06/08/18 07:51	06/11/18 13:22	EPA 1664A	STS	J
Total Dissolved Solids	**98**	**5.0**	**10**	**mg/L**	1	AE84309	05/31/18 08:05	06/07/18 16:02	SM2540C	PBM	
Total Suspended Solids	**2.9**	**0.30**	**1.0**	**mg/L**	1	AE84263	05/30/18 15:50	05/31/18 10:10	SM2540D	EV	
Bicarbonate Alkalinity as CaCO3	**65**	**1.0**	**5.0**	**mg/L**	1	AE84328	06/04/18 08:00	06/04/18 12:29	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84328	06/04/18 08:00	06/04/18 12:29	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84328	06/04/18 08:00	06/04/18 12:29	SM2320B	CEF	U
Total Alkalinity as CaCO3	**65**	**1.0**	**5.0**	**mg/L**	1	AE84328	06/04/18 08:00	06/04/18 12:29	SM2320B	CEF	
Nitrate + Nitrite as N	**0.029**	**0.0086**	**0.40**	**mg/L**	1	AE84336	06/05/18 12:20	06/12/18 11:06	Calculation	RLG	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AF83328	06/11/18 06:25	06/12/18 10:26	SM4500-Norg B	SMS	U
Hardness, Total	**65**	**1**	**5**	**mg/L**	1	AF83140	06/05/18 09:15	06/08/18 15:26	SM2340B	MAM	
Phosphorus, total	**0.021**	**0.011**	**0.040**	**mg/L**	1	AF83391	06/11/18 08:00	06/11/18 12:18	SM4500-P E	SMS	J
Total Organic Carbon	**2.36**	**0.300**	**1.00**	**mg/L**	1	AF83214	06/06/18 05:59	06/06/18 16:33	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER173.7 (18E2531-03) Water Sampled: 05/24/18 15:50 Received: 05/25/18 08:40											
Ammonia as N	ND	0.10	0.20	mg/L	1	AF83226	06/06/18 09:00	06/06/18 16:20	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE84136	05/25/18 12:30	05/30/18 15:45	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AF83183	05/25/18 12:00	06/07/18 10:46	SM10200H	PBM	U
Dissolved Organic Carbon	**0.901**	**0.600**	**1.00**	**mg/L**	1	AF83264	06/07/18 07:08	06/07/18 21:31	SM5310C	JIM	J
Oil & Grease (HEM)	**1.9**	**1.4**	**5.0**	**mg/L**	1	AF83337	06/08/18 07:51	06/11/18 13:22	EPA 1664A	STS	J
Total Dissolved Solids	**130**	**5.0**	**10**	**mg/L**	1	AE84309	05/31/18 08:05	06/07/18 16:02	SM2540C	PBM	
Total Suspended Solids	**0.30**	**0.30**	**1.0**	**mg/L**	1	AE84263	05/30/18 15:50	05/31/18 10:10	SM2540D	EV	J
Bicarbonate Alkalinity as CaCO3	**96**	**1.0**	**5.0**	**mg/L**	1	AE84328	06/04/18 08:00	06/04/18 12:29	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84328	06/04/18 08:00	06/04/18 12:29	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84328	06/04/18 08:00	06/04/18 12:29	SM2320B	CEF	U
Total Alkalinity as CaCO3	**96**	**1.0**	**5.0**	**mg/L**	1	AE84328	06/04/18 08:00	06/04/18 12:29	SM2320B	CEF	
Nitrate + Nitrite as N	**0.026**	**0.0086**	**0.40**	**mg/L**	1	AE84336	06/05/18 12:20	06/12/18 11:06	Calculation	RLG	J
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AF83328	06/11/18 06:25	06/12/18 10:26	SM4500-Norg B	SMS	U
Hardness, Total	**104**	**1**	**5**	**mg/L**	1	AF83140	06/05/18 09:15	06/08/18 15:31	SM2340B	MAM	
Phosphorus, total	**0.015**	**0.011**	**0.040**	**mg/L**	1	AF83391	06/11/18 08:00	06/11/18 12:18	SM4500-P E	SMS	J
Total Organic Carbon	**0.937**	**0.300**	**1.00**	**mg/L**	1	AF83214	06/06/18 05:59	06/06/18 16:46	SM5310C	JIM	J
BL-B (18E2531-04) Water Sampled: 05/24/18 17:00 Received: 05/25/18 08:40											
Ammonia as N	ND	0.10	0.20	mg/L	1	AF83226	06/06/18 09:00	06/06/18 16:20	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AE84136	05/25/18 12:30	05/30/18 15:45	SM5210B	EF	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AF83183	05/25/18 12:00	06/07/18 10:46	SM10200H	PBM	U
Dissolved Organic Carbon	ND	0.600	1.00	mg/L	1	AF83264	06/07/18 07:08	06/07/18 21:44	SM5310C	JIM	U
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AF83337	06/08/18 07:51	06/11/18 13:22	EPA 1664A	STS	U
Sulfide	ND	0.020	0.10	mg/L	1	AE84247	05/29/18 15:00	05/29/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	ND	5.0	10	mg/L	1	AE84309	05/31/18 08:05	06/07/18 16:02	SM2540C	PBM	U
Total Suspended Solids	ND	0.30	1.0	mg/L	1	AE84263	05/30/18 15:50	05/31/18 10:10	SM2540D	EV	U
Bicarbonate Alkalinity as CaCO3	**2.0**	**1.0**	**5.0**	**mg/L**	1	AE84328	06/04/18 08:00	06/04/18 12:29	SM2320B	CEF	J
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84328	06/04/18 08:00	06/04/18 12:29	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AE84328	06/04/18 08:00	06/04/18 12:29	SM2320B	CEF	U
Total Alkalinity as CaCO3	**2.0**	**1.0**	**5.0**	**mg/L**	1	AE84328	06/04/18 08:00	06/04/18 12:29	SM2320B	CEF	J
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AE84336	06/05/18 12:20	06/12/18 11:06	Calculation	RLG	U
Total Kjeldahl Nitrogen	ND	0.20	1.0	mg/L	1	AF83328	06/11/18 06:25	06/12/18 10:26	SM4500-Norg B	SMS	U
Hardness, Total	ND	1	5	mg/L	1	AF83140	06/05/18 09:15	06/08/18 15:35	SM2340B	MAM	U
Phosphorus, total	ND	0.011	0.040	mg/L	1	AF83391	06/11/18 08:00	06/11/18 12:18	SM4500-P E	SMS	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
BL-B (18E2531-04) Water Sampled: 05/24/18 17:00 Received: 05/25/18 08:40											
Total Organic Carbon	ND	0.300	1.00	mg/L	1	AF83214	06/06/18 05:59	06/06/18 16:59	SM5310C	JIM	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-S (18E2531-01) Water Sampled: 05/24/18 11:15 Received: 05/25/18 08:40											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE84159	05/26/18 02:57	05/26/18 02:57	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE84159	05/26/18 02:57	05/26/18 02:57	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE84159	05/26/18 02:57	05/26/18 02:57	EPA 300.0	SMP	U
VA2-B (18E2531-02) Water Sampled: 05/24/18 12:00 Received: 05/25/18 08:40											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE84159	05/26/18 03:30	05/26/18 03:30	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE84159	05/26/18 03:30	05/26/18 03:30	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE84159	05/26/18 03:30	05/26/18 03:30	EPA 300.0	SMP	U
ER173.7 (18E2531-03) Water Sampled: 05/24/18 15:50 Received: 05/25/18 08:40											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE84159	05/26/18 04:02	05/26/18 04:02	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE84159	05/26/18 04:02	05/26/18 04:02	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE84159	05/26/18 04:02	05/26/18 04:02	EPA 300.0	SMP	U
BL-B (18E2531-04) Water Sampled: 05/24/18 17:00 Received: 05/25/18 08:40											
Nitrate as N	ND	0.040	0.20	mg/L	1	AE84159	05/26/18 05:08	05/26/18 05:08	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AE84159	05/26/18 05:08	05/26/18 05:08	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AE84159	05/26/18 05:08	05/26/18 05:08	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

TPH by EPA/LUFT GC Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-S (18E2531-01) Water Sampled: 05/24/18 11:15 Received: 05/25/18 08:40											
TPH as Diesel	ND	50	250	ug/L	1	AE84257	05/30/18 06:10	06/01/18 03:43	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84257	05/30/18 06:10	06/01/18 03:43	8015DRO	DLD	U
Surrogate: Tetratetracontane		*86.2 %*	*39-120*			*AE84257*	*05/30/18 06:10*	*06/01/18 03:43*	*8015DRO*	*DLD*	
VA2-B (18E2531-02) Water Sampled: 05/24/18 12:00 Received: 05/25/18 08:40											
TPH as Diesel	ND	50	250	ug/L	1	AE84257	05/30/18 06:10	06/01/18 04:18	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84257	05/30/18 06:10	06/01/18 04:18	8015DRO	DLD	U
Surrogate: Tetratetracontane		*83.7 %*	*39-120*			*AE84257*	*05/30/18 06:10*	*06/01/18 04:18*	*8015DRO*	*DLD*	
ER173.7 (18E2531-03) Water Sampled: 05/24/18 15:50 Received: 05/25/18 08:40											
TPH as Diesel	ND	50	250	ug/L	1	AE84257	05/30/18 06:10	06/01/18 04:53	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84257	05/30/18 06:10	06/01/18 04:53	8015DRO	DLD	U
Surrogate: Tetratetracontane		*84.8 %*	*39-120*			*AE84257*	*05/30/18 06:10*	*06/01/18 04:53*	*8015DRO*	*DLD*	
BL-B (18E2531-04) Water Sampled: 05/24/18 17:00 Received: 05/25/18 08:40											
TPH as Diesel	ND	50	250	ug/L	1	AE84257	05/30/18 06:10	06/01/18 05:27	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AE84257	05/30/18 06:10	06/01/18 05:27	8015DRO	DLD	U
Surrogate: Tetratetracontane		*68.2 %*	*39-120*			*AE84257*	*05/30/18 06:10*	*06/01/18 05:27*	*8015DRO*	*DLD*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

TPH by EPA/LUFT GCMS Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-S (18E2531-01) Water Sampled: 05/24/18 11:15 Received: 05/25/18 08:40											
TPH as Gasoline	ND	50	50	ug/L	1	AE84272	05/30/18 10:00	05/30/18 22:05	8260GRO	MM	U
Surrogate: Toluene-d8		*96.5 %*	*76-129*			*AE84272*	*05/30/18 10:00*	*05/30/18 22:05*	*8260GRO*	*MM*	
VA2-B (18E2531-02) Water Sampled: 05/24/18 12:00 Received: 05/25/18 08:40											
TPH as Gasoline	ND	50	50	ug/L	1	AE84272	05/30/18 10:00	05/30/18 22:39	8260GRO	MM	U
Surrogate: Toluene-d8		*96.5 %*	*76-129*			*AE84272*	*05/30/18 10:00*	*05/30/18 22:39*	*8260GRO*	*MM*	
ER173.7 (18E2531-03) Water Sampled: 05/24/18 15:50 Received: 05/25/18 08:40											
TPH as Gasoline	ND	50	50	ug/L	1	AE84272	05/30/18 10:00	05/30/18 23:13	8260GRO	MM	U
Surrogate: Toluene-d8		*98.7 %*	*76-129*			*AE84272*	*05/30/18 10:00*	*05/30/18 23:13*	*8260GRO*	*MM*	
BL-B (18E2531-04) Water Sampled: 05/24/18 17:00 Received: 05/25/18 08:40											
TPH as Gasoline	ND	50	50	ug/L	1	AE84272	05/30/18 10:00	05/30/18 23:48	8260GRO	MM	U
Surrogate: Toluene-d8		*99.7 %*	*76-129*			*AE84272*	*05/30/18 10:00*	*05/30/18 23:48*	*8260GRO*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-S (18E2531-01) Water Sampled: 05/24/18 11:15 Received: 05/25/18 08:40											
Benzene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 22:05	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 22:05	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 22:05	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 22:05	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 22:05	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 22:05	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 22:05	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 22:05	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE84271	05/30/18 10:00	05/30/18 22:05	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*96.3 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 22:05*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*101 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 22:05*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*104 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 22:05*	*EPA 8260B*	*MM*	
VA2-B (18E2531-02) Water Sampled: 05/24/18 12:00 Received: 05/25/18 08:40											
Benzene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 22:39	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 22:39	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 22:39	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 22:39	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 22:39	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 22:39	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 22:39	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 22:39	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE84271	05/30/18 10:00	05/30/18 22:39	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*96.2 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 22:39*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*106 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 22:39*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*104 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 22:39*	*EPA 8260B*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER173.7 (18E2531-03) Water Sampled: 05/24/18 15:50 Received: 05/25/18 08:40											
Benzene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 23:13	EPA 8260B	MM	U
Toluene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 23:13	EPA 8260B	MM	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 23:13	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 23:13	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 23:13	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 23:13	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 23:13	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 23:13	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE84271	05/30/18 10:00	05/30/18 23:13	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*98.0 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 23:13*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*102 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 23:13*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*106 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 23:13*	*EPA 8260B*	*MM*	
BL-B (18E2531-04) Water Sampled: 05/24/18 17:00 Received: 05/25/18 08:40											
Benzene	ND	0.30	0.30	ug/L	1	AE84271	05/30/18 10:00	05/30/18 23:48	EPA 8260B	MM	U
Toluene	**0.40**	**0.30**	**0.30**	**ug/L**	1	AE84271	05/30/18 10:00	05/30/18 23:48	EPA 8260B	MM	
Ethylbenzene	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 23:48	EPA 8260B	MM	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 23:48	EPA 8260B	MM	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 23:48	EPA 8260B	MM	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 23:48	EPA 8260B	MM	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 23:48	EPA 8260B	MM	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AE84271	05/30/18 10:00	05/30/18 23:48	EPA 8260B	MM	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AE84271	05/30/18 10:00	05/30/18 23:48	EPA 8260B	MM	U
Surrogate: Bromofluorobenzene		*98.6 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 23:48*	*EPA 8260B*	*MM*	
Surrogate: Dibromofluoromethane		*104 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 23:48*	*EPA 8260B*	*MM*	
Surrogate: Toluene-d8		*108 %*	*70-130*			*AE84271*	*05/30/18 10:00*	*05/30/18 23:48*	*EPA 8260B*	*MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83140 - Metals Digest											
Blank (AF83140-BLK1)					Prepared: 06/05/18 Analyzed: 06/08/18						
Calcium	0.120	0.080	1.0	mg/L							J
Magnesium	ND	0.030	1.0	mg/L							U
LCS (AF83140-BS1)					Prepared: 06/05/18 Analyzed: 06/08/18						
Calcium	7.73	0.080	1.0	mg/L	8.00		96.6	85-115			
Magnesium	7.56	0.030	1.0	mg/L	8.00		94.5	85-115			
Duplicate (AF83140-DUP1)		**Source: 18E2509-01**			Prepared: 06/05/18 Analyzed: 06/08/18						
Calcium	2.25	0.080	1.0	mg/L		2.22			1.45	20	
Magnesium	0.525	0.030	1.0	mg/L		0.527			0.445	20	J
Matrix Spike (AF83140-MS1)		**Source: 18E2509-01**			Prepared: 06/05/18 Analyzed: 06/08/18						
Calcium	9.78	0.080	1.0	mg/L	8.00	2.22	94.5	70-130			
Magnesium	8.20	0.030	1.0	mg/L	8.00	0.527	95.9	70-130			
Matrix Spike (AF83140-MS2)		**Source: 18E2902-02**			Prepared: 06/05/18 Analyzed: 06/08/18						
Calcium	11.3	0.080	1.0	mg/L	8.00	3.40	98.3	70-130			
Magnesium	8.53	0.030	1.0	mg/L	8.00	0.730	97.4	70-130			
Matrix Spike Dup (AF83140-MSD1)		**Source: 18E2509-01**			Prepared: 06/05/18 Analyzed: 06/08/18						
Calcium	9.92	0.080	1.0	mg/L	8.00	2.22	96.3	70-130	1.48	20	
Magnesium	8.18	0.030	1.0	mg/L	8.00	0.527	95.7	70-130	0.229	20	
Batch AF83265 - EPA 245.1 Hg Water											
Blank (AF83265-BLK1)					Prepared & Analyzed: 06/07/18						
Mercury	ND	0.060	0.20	ug/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83265 - EPA 245.1 Hg Water											
LCS (AF83265-BS1)					Prepared & Analyzed: 06/07/18						
Mercury	2.54	0.060	0.20	ug/L	2.50		102	85-115			
Duplicate (AF83265-DUP1)		**Source: 18E2341-01**			Prepared & Analyzed: 06/07/18						
Mercury	ND	0.060	0.20	ug/L		ND				20	U
MRL Check (AF83265-MRL1)					Prepared & Analyzed: 06/07/18						
Mercury	0.509	0.060	0.20	ug/L	0.500		102	0-200			
Matrix Spike (AF83265-MS1)		**Source: 18E2341-01**			Prepared & Analyzed: 06/07/18						
Mercury	2.47	0.060	0.20	ug/L	2.50	ND	98.9	70-130			
Matrix Spike (AF83265-MS2)		**Source: 18E2341-02**			Prepared & Analyzed: 06/07/18						
Mercury	2.47	0.060	0.20	ug/L	2.50	ND	98.7	70-130			
Matrix Spike Dup (AF83265-MSD1)		**Source: 18E2341-01**			Prepared & Analyzed: 06/07/18						
Mercury	2.46	0.060	0.20	ug/L	2.50	ND	98.6	70-130	0.365	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84178 - EPA 200.8											
Blank (AE84178-BLK1)					Prepared: 05/29/18 Analyzed: 05/30/18						
Aluminum	ND	5.0	10	ug/L							U
Antimony	ND	0.20	0.50	ug/L							U
Arsenic	ND	0.20	0.50	ug/L							U
Barium	ND	0.20	0.50	ug/L							U
Beryllium	ND	0.050	0.10	ug/L							U
Cadmium	ND	0.060	0.10	ug/L							U
Chromium	ND	0.50	0.50	ug/L							U
Cobalt	ND	0.030	0.10	ug/L							U
Copper	ND	0.40	0.50	ug/L							U
Iron	ND	10	50	ug/L							U
Lead	ND	0.060	0.25	ug/L							U
Manganese	ND	2.0	5.0	ug/L							U
Molybdenum	ND	0.070	0.25	ug/L							U
Nickel	ND	0.30	0.50	ug/L							U
Selenium	ND	0.20	2.0	ug/L							U
Silver	ND	0.050	0.10	ug/L							U
Thallium	ND	0.050	0.10	ug/L							U
Vanadium	ND	0.50	1.0	ug/L							U
Zinc	ND	2.0	5.0	ug/L							U
LCS (AE84178-BS1)					Prepared: 05/29/18 Analyzed: 05/30/18						
Aluminum	517	5.0	10	ug/L	520		99.4	85-115			
Antimony	21.4	0.20	0.50	ug/L	20.0		107	85-115			
Arsenic	20.5	0.20	0.50	ug/L	20.0		102	85-115			
Barium	20.9	0.20	0.50	ug/L	20.0		105	85-115			
Beryllium	20.9	0.050	0.10	ug/L	20.0		104	85-115			
Cadmium	20.8	0.060	0.10	ug/L	20.0		104	85-115			
Chromium	20.5	0.50	0.50	ug/L	20.0		103	85-115			
Cobalt	21.2	0.030	0.10	ug/L	20.0		106	85-115			
Copper	21.3	0.40	0.50	ug/L	20.0		106	85-115			
Iron	506	10	50	ug/L	520		97.3	85-115			
Lead	20.3	0.060	0.25	ug/L	20.0		102	85-115			
Manganese	20.5	2.0	5.0	ug/L	20.0		102	85-115			
Molybdenum	20.7	0.070	0.25	ug/L	20.0		103	85-115			
Nickel	21.1	0.30	0.50	ug/L	20.0		106	85-115			

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Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84178 - EPA 200.8											
LCS (AE84178-BS1)					Prepared: 05/29/18 Analyzed: 05/30/18						
Selenium	20.8	0.20	2.0	ug/L	20.0		104	85-115			
Silver	20.7	0.050	0.10	ug/L	20.0		104	85-115			
Thallium	20.4	0.050	0.10	ug/L	20.0		102	85-115			
Vanadium	20.4	0.50	1.0	ug/L	20.0		102	85-115			
Zinc	103	2.0	5.0	ug/L	100		103	85-115			
Duplicate (AE84178-DUP1)		**Source: 18E2260-04**			Prepared: 05/29/18 Analyzed: 05/30/18						
Aluminum	ND	20	40	ug/L		ND				20	R-01, U
Antimony	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic	ND	0.80	2.0	ug/L		ND				20	R-01, U
Barium	4.87	0.80	2.0	ug/L		4.68			4.01	20	
Beryllium	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium	ND	0.24	0.40	ug/L		ND				20	R-01, U
Chromium	ND	2.0	2.0	ug/L		ND				20	R-01, U
Cobalt	ND	0.12	0.40	ug/L		ND				20	R-01, U
Copper	7.03	1.6	2.0	ug/L		6.70			4.87	20	
Iron	1280	40	200	ug/L		1240			3.51	20	
Lead	0.641	0.24	1.0	ug/L		0.633			1.26	20	R-01, J
Manganese	ND	8.0	20	ug/L		ND				20	R-01, U
Molybdenum	ND	0.28	1.0	ug/L		ND				20	R-01, U
Nickel	1.66	1.2	2.0	ug/L		1.56			6.16	20	R-01, J
Selenium	ND	0.80	8.0	ug/L		ND				20	R-01, U
Silver	0.243	0.20	0.40	ug/L		ND				20	R-01, J
Thallium	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium	ND	2.0	4.0	ug/L		ND				20	R-01, U
Zinc	94.4	8.0	20	ug/L		89.8			4.96	20	
Matrix Spike (AE84178-MS1)		**Source: 18E2260-04**			Prepared: 05/29/18 Analyzed: 05/30/18						
Aluminum	539	20	40	ug/L	520	ND	104	70-130			
Antimony	21.5	0.80	2.0	ug/L	20.0	ND	107	70-130			
Arsenic	20.8	0.80	2.0	ug/L	20.0	ND	104	70-130			
Barium	25.4	0.80	2.0	ug/L	20.0	4.68	104	70-130			
Beryllium	21.7	0.20	0.40	ug/L	20.0	ND	109	70-130			
Cadmium	20.4	0.24	0.40	ug/L	20.0	ND	102	70-130			
Chromium	21.2	2.0	2.0	ug/L	20.0	ND	106	70-130			

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2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84178 - EPA 200.8											
Matrix Spike (AE84178-MS1)		**Source: 18E2260-04**			Prepared: 05/29/18 Analyzed: 05/30/18						
Cobalt	21.0	0.12	0.40	ug/L	20.0	ND	105	70-130			
Copper	27.8	1.6	2.0	ug/L	20.0	6.70	106	70-130			
Iron	1740	40	200	ug/L	520	1240	97.2	70-130			
Lead	20.6	0.24	1.0	ug/L	20.0	0.633	100	70-130			
Manganese	23.0	8.0	20	ug/L	20.0	ND	115	70-130			
Molybdenum	20.9	0.28	1.0	ug/L	20.0	ND	104	70-130			
Nickel	22.4	1.2	2.0	ug/L	20.0	1.56	104	70-130			
Selenium	20.7	0.80	8.0	ug/L	20.0	ND	104	70-130			
Silver	20.7	0.20	0.40	ug/L	20.0	ND	104	70-130			
Thallium	20.0	0.20	0.40	ug/L	20.0	ND	100	70-130			
Vanadium	20.5	2.0	4.0	ug/L	20.0	ND	102	70-130			
Zinc	191	8.0	20	ug/L	100	89.8	101	70-130			
Matrix Spike (AE84178-MS2)		**Source: 18E2531-04**			Prepared: 05/29/18 Analyzed: 05/30/18						
Aluminum	534	20	40	ug/L	520	ND	103	70-130			
Antimony	21.2	0.80	2.0	ug/L	20.0	ND	106	70-130			
Arsenic	19.9	0.80	2.0	ug/L	20.0	ND	99.4	70-130			
Barium	21.3	0.80	2.0	ug/L	20.0	ND	107	70-130			
Beryllium	21.0	0.20	0.40	ug/L	20.0	ND	105	70-130			
Cadmium	21.0	0.24	0.40	ug/L	20.0	ND	105	70-130			
Chromium	21.1	2.0	2.0	ug/L	20.0	ND	106	70-130			
Cobalt	21.5	0.12	0.40	ug/L	20.0	ND	107	70-130			
Copper	21.8	1.6	2.0	ug/L	20.0	ND	109	70-130			
Iron	844	40	200	ug/L	520	330	98.8	70-130			
Lead	20.2	0.24	1.0	ug/L	20.0	ND	101	70-130			
Manganese	22.4	8.0	20	ug/L	20.0	ND	112	70-130			
Molybdenum	20.7	0.28	1.0	ug/L	20.0	ND	104	70-130			
Nickel	21.9	1.2	2.0	ug/L	20.0	ND	109	70-130			
Selenium	21.0	0.80	8.0	ug/L	20.0	ND	105	70-130			
Silver	21.1	0.20	0.40	ug/L	20.0	ND	105	70-130			
Thallium	20.5	0.20	0.40	ug/L	20.0	ND	102	70-130			
Vanadium	19.9	2.0	4.0	ug/L	20.0	ND	99.7	70-130			
Zinc	103	8.0	20	ug/L	100	ND	103	70-130			

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Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84178 - EPA 200.8											
Matrix Spike Dup (AE84178-MSD1)		**Source: 18E2260-04**			Prepared: 05/29/18 Analyzed: 05/30/18						
Aluminum	545	20	40	ug/L	520	ND	105	70-130	1.06	20	
Antimony	21.3	0.80	2.0	ug/L	20.0	ND	107	70-130	0.599	20	
Arsenic	20.7	0.80	2.0	ug/L	20.0	ND	103	70-130	0.765	20	
Barium	25.5	0.80	2.0	ug/L	20.0	4.68	104	70-130	0.622	20	
Beryllium	21.3	0.20	0.40	ug/L	20.0	ND	107	70-130	2.04	20	
Cadmium	20.7	0.24	0.40	ug/L	20.0	ND	103	70-130	1.59	20	
Chromium	21.1	2.0	2.0	ug/L	20.0	ND	106	70-130	0.249	20	
Cobalt	21.3	0.12	0.40	ug/L	20.0	ND	106	70-130	1.19	20	
Copper	27.9	1.6	2.0	ug/L	20.0	6.70	106	70-130	0.0749	20	
Iron	1750	40	200	ug/L	520	1240	98.5	70-130	0.371	20	
Lead	20.7	0.24	1.0	ug/L	20.0	0.633	100	70-130	0.452	20	
Manganese	22.9	8.0	20	ug/L	20.0	ND	114	70-130	0.400	20	
Molybdenum	20.8	0.28	1.0	ug/L	20.0	ND	104	70-130	0.216	20	
Nickel	22.8	1.2	2.0	ug/L	20.0	1.56	106	70-130	1.67	20	
Selenium	20.3	0.80	8.0	ug/L	20.0	ND	101	70-130	2.12	20	
Silver	20.4	0.20	0.40	ug/L	20.0	ND	102	70-130	1.62	20	
Thallium	20.1	0.20	0.40	ug/L	20.0	ND	101	70-130	0.603	20	
Vanadium	20.3	2.0	4.0	ug/L	20.0	ND	101	70-130	0.989	20	
Zinc	191	8.0	20	ug/L	100	89.8	102	70-130	0.255	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83272 - EPA 245.1 Hg Water											
Blank (AF83272-BLK1)					Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	ND	0.060	0.20	ug/L							U
LCS (AF83272-BS1)					Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	2.44	0.060	0.20	ug/L	2.50		97.5	85-115			
Duplicate (AF83272-DUP1)		**Source: 18E2239-01**			Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	ND	0.060	0.20	ug/L		ND				20	U
MRL Check (AF83272-MRL1)					Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	0.514	0.060	0.20	ug/L	0.500		103	0-200			
Matrix Spike (AF83272-MS1)		**Source: 18E2239-01**			Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	2.45	0.060	0.20	ug/L	2.50	ND	98.0	70-130			
Matrix Spike (AF83272-MS2)		**Source: 18E2418-01**			Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	2.41	0.060	0.20	ug/L	2.50	ND	96.2	70-130			
Matrix Spike Dup (AF83272-MSD1)		**Source: 18E2239-01**			Prepared: 06/07/18 Analyzed: 06/08/18						
Mercury, dissolved	2.48	0.060	0.20	ug/L	2.50	ND	99.1	70-130	1.10	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83230 - EPA 200.8 (D)											
Blank (AF83230-BLK1)					Prepared: 06/07/18 Analyzed: 06/08/18						
Aluminum, dissolved	ND	5.0	10	ug/L							U
Antimony, dissolved	ND	0.20	0.50	ug/L							U
Arsenic, dissolved	0.361	0.20	0.50	ug/L							J
Barium, dissolved	ND	0.20	0.50	ug/L							U
Beryllium, dissolved	ND	0.050	0.10	ug/L							U
Cadmium, dissolved	ND	0.060	0.10	ug/L							U
Chromium, dissolved	ND	0.50	0.50	ug/L							U
Cobalt, dissolved	ND	0.030	0.10	ug/L							U
Copper, dissolved	ND	0.40	0.50	ug/L							U
Lead, dissolved	ND	0.060	0.25	ug/L							U
Molybdenum, dissolved	ND	0.070	0.25	ug/L							U
Nickel, dissolved	ND	0.30	0.50	ug/L							U
Selenium, dissolved	ND	0.20	2.0	ug/L							U
Silver, dissolved	ND	0.050	0.10	ug/L							U
Thallium, dissolved	ND	0.050	0.10	ug/L							U
Vanadium, dissolved	ND	0.50	1.0	ug/L							U
Zinc, dissolved	ND	2.0	5.0	ug/L							U
LCS (AF83230-BS1)					Prepared: 06/07/18 Analyzed: 06/08/18						
Aluminum, dissolved	452	5.0	10	ug/L	520		87.0	85-115			
Antimony, dissolved	21.5	0.20	0.50	ug/L	20.0		108	85-115			
Arsenic, dissolved	21.6	0.20	0.50	ug/L	20.0		108	85-115			
Barium, dissolved	21.4	0.20	0.50	ug/L	20.0		107	85-115			
Beryllium, dissolved	21.4	0.050	0.10	ug/L	20.0		107	85-115			
Cadmium, dissolved	20.5	0.060	0.10	ug/L	20.0		102	85-115			
Chromium, dissolved	21.7	0.50	0.50	ug/L	20.0		108	85-115			
Cobalt, dissolved	21.5	0.030	0.10	ug/L	20.0		107	85-115			
Copper, dissolved	21.1	0.40	0.50	ug/L	20.0		106	85-115			
Lead, dissolved	21.0	0.060	0.25	ug/L	20.0		105	85-115			
Molybdenum, dissolved	21.5	0.070	0.25	ug/L	20.0		107	85-115			
Nickel, dissolved	21.6	0.30	0.50	ug/L	20.0		108	85-115			
Selenium, dissolved	20.1	0.20	2.0	ug/L	20.0		101	85-115			
Silver, dissolved	21.3	0.050	0.10	ug/L	20.0		106	85-115			
Thallium, dissolved	21.1	0.050	0.10	ug/L	20.0		105	85-115			
Vanadium, dissolved	21.3	0.50	1.0	ug/L	20.0		106	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83230 - EPA 200.8 (D)											
LCS (AF83230-BS1)					Prepared: 06/07/18 Analyzed: 06/08/18						
Zinc, dissolved	98.4	2.0	5.0	ug/L	100		98.4	85-115			
Duplicate (AF83230-DUP1)		**Source: 18E2531-01**			Prepared: 06/07/18 Analyzed: 06/08/18						
Aluminum, dissolved	ND	20	40	ug/L		ND				20	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L		ND				20	R-01, U
Barium, dissolved	55.3	0.80	2.0	ug/L		54.9			0.768	20	
Beryllium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L		ND				20	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L		ND				20	R-01, U
Cobalt, dissolved	ND	0.12	0.40	ug/L		ND				20	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L		ND				20	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L		ND				20	R-01, U
Molybdenum, dissolved	0.329	0.28	1.0	ug/L		0.322			2.27	20	R-01, J
Nickel, dissolved	ND	1.2	2.0	ug/L		1.63				20	R-01, U
Selenium, dissolved	ND	0.80	8.0	ug/L		ND				20	R-01, U
Silver, dissolved	0.236	0.20	0.40	ug/L		ND				20	R-01, J
Thallium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L		ND				20	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L		ND				20	R-01, U
Matrix Spike (AF83230-MS1)		**Source: 18E2531-01**			Prepared: 06/07/18 Analyzed: 06/08/18						
Aluminum, dissolved	552	20	40	ug/L	520	ND	106	70-130			
Antimony, dissolved	22.2	0.80	2.0	ug/L	20.0	ND	111	70-130			
Arsenic, dissolved	22.7	0.80	2.0	ug/L	20.0	ND	114	70-130			
Barium, dissolved	79.0	0.80	2.0	ug/L	20.0	54.9	120	70-130			
Beryllium, dissolved	22.0	0.20	0.40	ug/L	20.0	ND	110	70-130			
Cadmium, dissolved	20.9	0.24	0.40	ug/L	20.0	ND	104	70-130			
Chromium, dissolved	22.1	2.0	2.0	ug/L	20.0	ND	111	70-130			
Cobalt, dissolved	21.9	0.12	0.40	ug/L	20.0	ND	109	70-130			
Copper, dissolved	22.0	1.6	2.0	ug/L	20.0	ND	110	70-130			
Lead, dissolved	21.0	0.24	1.0	ug/L	20.0	ND	105	70-130			
Molybdenum, dissolved	21.9	0.28	1.0	ug/L	20.0	0.322	108	70-130			
Nickel, dissolved	23.5	1.2	2.0	ug/L	20.0	1.63	109	70-130			
Selenium, dissolved	20.8	0.80	8.0	ug/L	20.0	ND	104	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83230 - EPA 200.8 (D)											
Matrix Spike (AF83230-MS1)		**Source: 18E2531-01**			Prepared: 06/07/18 Analyzed: 06/08/18						
Silver, dissolved	21.7	0.20	0.40	ug/L	20.0	ND	109	70-130			
Thallium, dissolved	21.4	0.20	0.40	ug/L	20.0	ND	107	70-130			
Vanadium, dissolved	22.1	2.0	4.0	ug/L	20.0	ND	111	70-130			
Zinc, dissolved	103	8.0	20	ug/L	100	ND	103	70-130			
Matrix Spike (AF83230-MS2)		**Source: 18F0415-02**			Prepared: 06/07/18 Analyzed: 06/08/18						
Aluminum, dissolved	553	20	40	ug/L	520	ND	106	70-130			
Antimony, dissolved	22.2	0.80	2.0	ug/L	20.0	0.856	107	70-130			
Arsenic, dissolved	28.8	0.80	2.0	ug/L	20.0	7.11	108	70-130			
Barium, dissolved	102	0.80	2.0	ug/L	20.0	83.2	94.4	70-130			
Beryllium, dissolved	21.6	0.20	0.40	ug/L	20.0	ND	108	70-130			
Cadmium, dissolved	19.9	0.24	0.40	ug/L	20.0	ND	99.3	70-130			
Chromium, dissolved	22.4	2.0	2.0	ug/L	20.0	ND	112	70-130			
Cobalt, dissolved	21.8	0.12	0.40	ug/L	20.0	0.361	107	70-130			
Lead, dissolved	19.4	0.24	1.0	ug/L	20.0	ND	96.8	70-130			
Molybdenum, dissolved	26.4	0.28	1.0	ug/L	20.0	6.01	102	70-130			
Nickel, dissolved	27.2	1.2	2.0	ug/L	20.0	4.40	114	70-130			
Selenium, dissolved	20.9	0.80	8.0	ug/L	20.0	ND	104	70-130			
Silver, dissolved	19.7	0.20	0.40	ug/L	20.0	ND	98.4	70-130			
Thallium, dissolved	19.7	0.20	0.40	ug/L	20.0	ND	98.3	70-130			
Vanadium, dissolved	28.2	2.0	4.0	ug/L	20.0	7.34	104	70-130			
Zinc, dissolved	456	8.0	20	ug/L	100	364	92.0	70-130			
Matrix Spike Dup (AF83230-MSD1)		**Source: 18E2531-01**			Prepared: 06/07/18 Analyzed: 06/08/18						
Aluminum, dissolved	552	20	40	ug/L	520	ND	106	70-130	0.0599	20	
Antimony, dissolved	22.2	0.80	2.0	ug/L	20.0	ND	111	70-130	0.240	20	
Arsenic, dissolved	21.8	0.80	2.0	ug/L	20.0	ND	109	70-130	3.98	20	
Barium, dissolved	78.0	0.80	2.0	ug/L	20.0	54.9	116	70-130	1.16	20	
Beryllium, dissolved	21.7	0.20	0.40	ug/L	20.0	ND	109	70-130	1.14	20	
Cadmium, dissolved	21.1	0.24	0.40	ug/L	20.0	ND	106	70-130	1.31	20	
Chromium, dissolved	22.4	2.0	2.0	ug/L	20.0	ND	112	70-130	1.12	20	
Cobalt, dissolved	21.8	0.12	0.40	ug/L	20.0	ND	109	70-130	0.603	20	
Copper, dissolved	22.2	1.6	2.0	ug/L	20.0	ND	111	70-130	1.11	20	
Lead, dissolved	20.8	0.24	1.0	ug/L	20.0	ND	104	70-130	1.18	20	
Molybdenum, dissolved	21.8	0.28	1.0	ug/L	20.0	0.322	107	70-130	0.283	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83230 - EPA 200.8 (D)											
Matrix Spike Dup (AF83230-MSD1)		**Source: 18E2531-01**			Prepared: 06/07/18 Analyzed: 06/08/18						
Nickel, dissolved	23.4	1.2	2.0	ug/L	20.0	1.63	109	70-130	0.277	20	
Selenium, dissolved	20.5	0.80	8.0	ug/L	20.0	ND	103	70-130	1.20	20	
Silver, dissolved	21.4	0.20	0.40	ug/L	20.0	ND	107	70-130	1.43	20	
Thallium, dissolved	20.9	0.20	0.40	ug/L	20.0	ND	105	70-130	2.29	20	
Vanadium, dissolved	22.0	2.0	4.0	ug/L	20.0	ND	110	70-130	0.634	20	
Zinc, dissolved	103	8.0	20	ug/L	100	ND	103	70-130	0.0737	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84136 - General Preparation											
Blank (AE84136-BLK1)					Prepared: 05/25/18 Analyzed: 05/30/18						
Biochemical Oxygen Demand	ND	2.0	2.0	mg/L							U
Blank (AE84136-BLK2)					Prepared: 05/25/18 Analyzed: 05/30/18						
Biochemical Oxygen Demand	ND	2.0	2.0	mg/L							U
LCS (AE84136-BS1)					Prepared: 05/25/18 Analyzed: 05/30/18						
Biochemical Oxygen Demand	213	2.0	2.0	mg/L	200		106	84-115			
Duplicate (AE84136-DUP1)		**Source: 18E2419-01**			Prepared: 05/25/18 Analyzed: 05/30/18						
Biochemical Oxygen Demand	332	2.0	2.0	mg/L		346			3.95	30	
Batch AE84247 - General Preparation											
Blank (AE84247-BLK1)					Prepared & Analyzed: 05/29/18						
Sulfide	ND	0.020	0.10	mg/L							U
LCS (AE84247-BS1)					Prepared & Analyzed: 05/29/18						
Sulfide	0.208	0.020	0.10	mg/L	0.195		107	85-115			
Duplicate (AE84247-DUP1)		**Source: 18E2239-01**			Prepared & Analyzed: 05/29/18						
Sulfide	ND	0.020	0.10	mg/L		ND				15	U
Matrix Spike (AE84247-MS1)		**Source: 18E2239-01**			Prepared & Analyzed: 05/29/18						
Sulfide	0.195	0.020	0.10	mg/L	0.195	ND	100	80-120			
Matrix Spike Dup (AE84247-MSD1)		**Source: 18E2239-01**			Prepared & Analyzed: 05/29/18						
Sulfide	0.195	0.020	0.10	mg/L	0.195	ND	100	80-120	0.00	15	

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84263 - General Preparation											
Blank (AE84263-BLK1)					Prepared: 05/30/18 Analyzed: 05/31/18						
Total Suspended Solids	ND	0.30	1.0	mg/L							U
Duplicate (AE84263-DUP1)		**Source: 18E2295-01**			Prepared: 05/30/18 Analyzed: 05/31/18						
Total Suspended Solids	83.1	0.30	1.0	mg/L		76.5			8.29	30	
Duplicate (AE84263-DUP2)		**Source: 18E2292-02**			Prepared: 05/30/18 Analyzed: 05/31/18						
Total Suspended Solids	140	0.30	1.0	mg/L		127			10.0	30	
Batch AE84309 - General Preparation											
Blank (AE84309-BLK1)					Prepared: 05/31/18 Analyzed: 06/07/18						
Total Dissolved Solids	ND	5.0	10	mg/L							U
Duplicate (AE84309-DUP1)		**Source: 18E2531-03**			Prepared: 05/31/18 Analyzed: 06/07/18						
Total Dissolved Solids	144	5.0	10	mg/L		132			8.70	15	
Duplicate (AE84309-DUP2)		**Source: 18E2713-03**			Prepared: 05/31/18 Analyzed: 06/07/18						
Total Dissolved Solids	164	5.0	10	mg/L		176			7.06	15	
Batch AE84328 - General Preparation											
Duplicate (AE84328-DUP1)		**Source: 18E2431-03**			Prepared & Analyzed: 06/04/18						
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Total Alkalinity as CaCO3	270	1.0	5.0	mg/L		270			0.00	20	
Bicarbonate Alkalinity as CaCO3	270	1.0	5.0	mg/L		270			0.00	20	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83140 - Metals Digest											
Blank (AF83140-BLK1)					Prepared: 06/05/18 Analyzed: 06/08/18						
Hardness, Total	ND	1	5	mg/L							U
Duplicate (AF83140-DUP1)		**Source: 18E2509-01**			Prepared: 06/05/18 Analyzed: 06/08/18						
Hardness, Total	8	1	5	mg/L		8			0.920	20	
Batch AF83183 - General Preparation											
Blank (AF83183-BLK1)					Prepared: 05/24/18 Analyzed: 06/07/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L							U
Duplicate (AF83183-DUP1)		**Source: 18E2418-07**			Prepared: 05/24/18 Analyzed: 06/07/18						
Chlorophyll-a	0.00142	0.0010	0.010	mg/L		0.00114			22.2	50	J
Duplicate (AF83183-DUP2)		**Source: 18E2531-04**			Prepared: 05/25/18 Analyzed: 06/07/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Batch AF83214 - General Prep											
Blank (AF83214-BLK1)					Prepared & Analyzed: 06/06/18						
Total Organic Carbon	ND	0.300	1.00	mg/L							U
LCS (AF83214-BS1)					Prepared & Analyzed: 06/06/18						
Total Organic Carbon	9.84	0.300	1.00	mg/L	10.0		98.4	85-115			
LCS Dup (AF83214-BSD1)					Prepared & Analyzed: 06/06/18						
Total Organic Carbon	9.03	0.300	1.00	mg/L	10.0		90.3	85-115	8.58	20	

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83214 - General Prep											
Duplicate (AF83214-DUP1)		**Source: 18E2418-01**			Prepared & Analyzed: 06/06/18						
Total Organic Carbon	2.60	0.300	1.00	mg/L		2.43			6.94	20	
MRL Check (AF83214-MRL1)					Prepared & Analyzed: 06/06/18						
Total Organic Carbon	1.34	0.300	1.00	mg/L	1.25		107	0-200			
Matrix Spike (AF83214-MS1)		**Source: 18E2531-02**			Prepared & Analyzed: 06/06/18						
Total Organic Carbon	22.9	0.600	2.00	mg/L	20.0	2.36	103	70-130			
Matrix Spike Dup (AF83214-MSD1)		**Source: 18E2531-02**			Prepared & Analyzed: 06/06/18						
Total Organic Carbon	22.8	0.600	2.00	mg/L	20.0	2.36	102	70-130	0.588	20	
Batch AF83226 - General Preparation											
LCS (AF83226-BS1)					Prepared & Analyzed: 06/06/18						
Ammonia as N	4.90	0.10	0.20	mg/L	5.00		98.1	90-110			
LCS Dup (AF83226-BSD1)					Prepared & Analyzed: 06/06/18						
Ammonia as N	4.82	0.10	0.20	mg/L	5.00		96.3	90-110	1.81	10	
Matrix Spike (AF83226-MS1)		**Source: 18F0166-01**			Prepared & Analyzed: 06/06/18						
Ammonia as N	9.63	0.10	0.20	mg/L	10.0	ND	96.3	85-115			
Matrix Spike Dup (AF83226-MSD1)		**Source: 18F0166-01**			Prepared & Analyzed: 06/06/18						
Ammonia as N	9.11	0.10	0.20	mg/L	10.0	ND	91.1	85-115	5.60	20	
Batch AF83264 - General Prep											
Blank (AF83264-BLK1)					Prepared & Analyzed: 06/07/18						
Dissolved Organic Carbon	ND	0.600	1.00	mg/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83264 - General Prep											
LCS (AF83264-BS1)					Prepared & Analyzed: 06/07/18						
Dissolved Organic Carbon	10.1	0.600	1.00	mg/L	10.0		101	85-115			
LCS Dup (AF83264-BSD1)					Prepared & Analyzed: 06/07/18						
Dissolved Organic Carbon	10.1	0.600	1.00	mg/L	10.0		101	85-115	0.492	20	
Duplicate (AF83264-DUP1)		**Source: 18E2418-01**			Prepared & Analyzed: 06/07/18						
Dissolved Organic Carbon	2.02	0.600	1.00	mg/L		2.31			13.4	20	
MRL Check (AF83264-MRL1)					Prepared & Analyzed: 06/07/18						
Dissolved Organic Carbon	1.72	0.600	1.00	mg/L	1.25		138	0-200			
Matrix Spike (AF83264-MS1)		**Source: 18E2531-02**			Prepared & Analyzed: 06/07/18						
Dissolved Organic Carbon	23.0	1.20	2.00	mg/L	20.0	2.06	105	70-130			
Matrix Spike Dup (AF83264-MSD1)		**Source: 18E2531-02**			Prepared & Analyzed: 06/07/18						
Dissolved Organic Carbon	22.8	1.20	2.00	mg/L	20.0	2.06	104	70-130	0.746	20	
Batch AF83328 - General Prep											
LCS (AF83328-BS1)					Prepared: 06/08/18 Analyzed: 06/09/18						
Total Kjeldahl Nitrogen	3.04	0.20	1.0	mg/L	2.98		102	80-120			
LCS Dup (AF83328-BSD1)					Prepared: 06/08/18 Analyzed: 06/09/18						
Total Kjeldahl Nitrogen	3.04	0.20	1.0	mg/L	2.98		102	80-120	0.00	20	
Matrix Spike (AF83328-MS1)		**Source: 18F0525-01**			Prepared: 06/08/18 Analyzed: 06/09/18						
Total Kjeldahl Nitrogen	4.79	0.20	1.0	mg/L	2.98	1.49	111	75-125			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83328 - General Prep											
Matrix Spike Dup (AF83328-MSD1)		**Source: 18F0525-01**			Prepared: 06/08/18 Analyzed: 06/09/18						
Total Kjeldahl Nitrogen	4.79	0.20	1.0	mg/L	2.98	1.49	111	75-125	0.00	20	
Batch AF83337 - General Preparation											
Blank (AF83337-BLK1)					Prepared: 06/08/18 Analyzed: 06/11/18						
Oil & Grease (HEM)	ND	1.4	5.0	mg/L							U
LCS (AF83337-BS1)					Prepared: 06/08/18 Analyzed: 06/11/18						
Oil & Grease (HEM)	39.8	1.4	5.0	mg/L	40.0		99.5	78-114			
LCS Dup (AF83337-BSD1)					Prepared: 06/08/18 Analyzed: 06/11/18						
Oil & Grease (HEM)	39.8	1.4	5.0	mg/L	40.0		99.5	78-114	0.00	18	
Matrix Spike (AF83337-MS1)		**Source: 18E2548-01**			Prepared: 06/08/18 Analyzed: 06/11/18						
Oil & Grease (HEM)	38.4	1.4	5.0	mg/L	40.0	1.50	92.2	78-114			
Batch AF83391 - General Prep											
Blank (AF83391-BLK1)					Prepared & Analyzed: 06/11/18						
Phosphorus, total	ND	0.011	0.040	mg/L							U
LCS (AF83391-BS1)					Prepared & Analyzed: 06/11/18						
Phosphorus, total	0.193	0.011	0.040	mg/L	0.200		96.6	85-115			
Duplicate (AF83391-DUP1)		**Source: 18E2473-01**			Prepared & Analyzed: 06/11/18						
Phosphorus, total	0.0254	0.011	0.040	mg/L		0.0254			0.00	20	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF83391 - General Prep											
Matrix Spike (AF83391-MS1)		**Source: 18E2473-01**			Prepared & Analyzed: 06/11/18						
Phosphorus, total	0.209	0.011	0.040	mg/L	0.200	0.0254	92.0	70-130			
Matrix Spike (AF83391-MS2)		**Source: 18E2531-01**			Prepared & Analyzed: 06/11/18						
Phosphorus, total	0.201	0.011	0.040	mg/L	0.200	0.0254	88.0	70-130			
Matrix Spike Dup (AF83391-MSD1)		**Source: 18E2473-01**			Prepared & Analyzed: 06/11/18						
Phosphorus, total	0.211	0.011	0.040	mg/L	0.200	0.0254	92.6	70-130	0.638	20	

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Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84159 - General Preparation											
Blank (AE84159-BLK1)					Prepared & Analyzed: 05/25/18						
Orthophosphate	ND	0.10	0.30	mg/L							U
Nitrate as N	ND	0.040	0.20	mg/L							U
Nitrite as N	ND	0.050	0.20	mg/L							U
LCS (AE84159-BS1)					Prepared & Analyzed: 05/25/18						
Orthophosphate	17.9	0.10	0.30	mg/L	16.7		108	90-110			
Nitrite as N	5.54	0.050	0.20	mg/L	5.56		99.7	90-110			
Nitrate as N	5.74	0.040	0.20	mg/L	5.56		103	90-110			
Duplicate (AE84159-DUP1)		**Source: 18E2421-01**			Prepared & Analyzed: 05/26/18						
Orthophosphate	0.211	0.10	0.30	mg/L		0.208			1.46	20	J
Nitrite as N	ND	0.050	0.20	mg/L		ND				20	U
Nitrate as N	0.313	0.040	0.20	mg/L		0.315			0.863	20	
Matrix Spike (AE84159-MS1)		**Source: 18E2421-01**			Prepared & Analyzed: 05/26/18						
Orthophosphate	17.3	0.50	1.5	mg/L	16.7	ND	104	80-120			
Nitrite as N	5.45	0.25	1.0	mg/L	5.56	ND	98.1	80-120			
Nitrate as N	6.03	0.20	1.0	mg/L	5.56	0.315	103	80-120			
Matrix Spike (AE84159-MS2)		**Source: 18E2531-01**			Prepared & Analyzed: 05/26/18						
Orthophosphate	17.2	0.50	1.5	mg/L	16.7	ND	103	80-120			
Nitrate as N	5.61	0.20	1.0	mg/L	5.56	ND	101	80-120			
Nitrite as N	5.36	0.25	1.0	mg/L	5.56	ND	96.4	80-120			
Matrix Spike Dup (AE84159-MSD1)		**Source: 18E2421-01**			Prepared & Analyzed: 05/26/18						
Orthophosphate	17.7	0.50	1.5	mg/L	16.7	ND	106	80-120	1.95	20	
Nitrite as N	5.42	0.25	1.0	mg/L	5.56	ND	97.5	80-120	0.613	20	
Nitrate as N	6.03	0.20	1.0	mg/L	5.56	0.315	103	80-120	0.0208	20	

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TPH by EPA/LUFT GC Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84257 - SVOAs in Water GC											
Blank (AE84257-BLK1)					Prepared: 05/30/18 Analyzed: 05/31/18						
TPH as Diesel	ND	50	250	ug/L							U
TPH as Motor Oil	ND	100	250	ug/L							U
Surrogate: Tetratetracontane	*49.1*			*ug/L*	*56.0*		*87.7*	*39-120*			
LCS (AE84257-BS1)					Prepared: 05/30/18 Analyzed: 05/31/18						
TPH as Diesel	2080	50	250	ug/L	2070		101	61-120			
Surrogate: Tetratetracontane	*60.8*			*ug/L*	*56.0*		*109*	*39-120*			
LCS (AE84257-BS2)					Prepared: 05/30/18 Analyzed: 05/31/18						
TPH as Motor Oil	1710	100	250	ug/L	1990		85.9	71-125			
Surrogate: Tetratetracontane	*46.7*			*ug/L*	*56.0*		*83.4*	*39-120*			
LCS Dup (AE84257-BSD1)					Prepared: 05/30/18 Analyzed: 05/31/18						
TPH as Diesel	2030	50	250	ug/L	2070		98.1	61-120	2.56	25	
Surrogate: Tetratetracontane	*57.4*			*ug/L*	*56.0*		*102*	*39-120*			
LCS Dup (AE84257-BSD2)					Prepared: 05/30/18 Analyzed: 05/31/18						
TPH as Motor Oil	1660	100	250	ug/L	1990		83.6	71-125	2.72	25	
Surrogate: Tetratetracontane	*47.3*			*ug/L*	*56.0*		*84.4*	*39-120*			
Matrix Spike (AE84257-MS1)		**Source: 18E2469-02**			Prepared: 05/30/18 Analyzed: 05/31/18						
TPH as Diesel	2050	50	250	ug/L	2070	ND	99.2	61-120			
Surrogate: Tetratetracontane	*44.4*			*ug/L*	*56.0*		*79.3*	*39-120*			
Matrix Spike (AE84257-MS2)		**Source: 18E2342-01**			Prepared: 05/30/18 Analyzed: 05/31/18						
TPH as Diesel	2040	50	250	ug/L	2070	ND	98.7	61-120			
Surrogate: Tetratetracontane	*41.1*			*ug/L*	*56.0*		*73.4*	*39-120*			

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TPH by EPA/LUFT GCMS Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84272 - VOAs in Water GCMS											
Blank (AE84272-BLK1)					Prepared: 05/29/18 Analyzed: 05/30/18						
TPH as Gasoline	ND	50	50	ug/L							U
Surrogate: Toluene-d8	*24.2*			*ug/L*	*25.0*		*96.6*	*76-129*			
LCS (AE84272-BS1)					Prepared: 05/29/18 Analyzed: 05/30/18						
TPH as Gasoline	201	50	50	ug/L	200		100	67-132			
Surrogate: Toluene-d8	*24.8*			*ug/L*	*25.0*		*99.2*	*76-129*			
LCS Dup (AE84272-BSD1)					Prepared: 05/29/18 Analyzed: 05/30/18						
TPH as Gasoline	192	50	50	ug/L	200		96.0	67-132	4.58	25	
Surrogate: Toluene-d8	*24.2*			*ug/L*	*25.0*		*96.8*	*76-129*			
Matrix Spike (AE84272-MS1)		**Source: 18E2418-03**			Prepared: 05/29/18 Analyzed: 05/30/18						
TPH as Gasoline	193	50	50	ug/L	200	ND	96.5	37-156			
Surrogate: Toluene-d8	*25.2*			*ug/L*	*25.0*		*101*	*76-129*			
Matrix Spike (AE84272-MS2)		**Source: 18E2418-04**			Prepared: 05/29/18 Analyzed: 05/30/18						
TPH as Gasoline	190	50	50	ug/L	200	ND	95.0	37-156			
Surrogate: Toluene-d8	*25.2*			*ug/L*	*25.0*		*101*	*76-129*			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84271 - VOAs in Water GCMS											
Blank (AE84271-BLK1)					Prepared: 05/29/18 Analyzed: 05/30/18						
Benzene	ND	0.30	0.30	ug/L							U
Toluene	ND	0.30	0.30	ug/L							U
Ethylbenzene	ND	0.40	0.50	ug/L							U
Xylenes (total)	ND	0.50	0.50	ug/L							U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L							U
Di-isopropyl ether	ND	0.40	0.50	ug/L							U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L							U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L							U
Tert-butyl alcohol	ND	6.0	10	ug/L							U
Surrogate: Bromofluorobenzene	*23.7*			*ug/L*	*25.0*		*94.6*	*70-130*			
Surrogate: Dibromofluoromethane	*26.0*			*ug/L*	*25.0*		*104*	*70-130*			
Surrogate: Toluene-d8	*26.0*			*ug/L*	*25.0*		*104*	*70-130*			
LCS (AE84271-BS1)					Prepared: 05/29/18 Analyzed: 05/30/18						
Benzene	19.2	0.30	0.30	ug/L	20.0		95.8	82-122			
Toluene	21.4	0.30	0.30	ug/L	20.0		107	75-134			
Ethylbenzene	21.3	0.40	0.50	ug/L	20.0		107	84-124			
Xylenes (total)	66.6	0.50	0.50	ug/L	60.0		111	81-126			
Methyl tert-butyl ether	18.0	0.50	0.50	ug/L	20.0		89.8	84-119			
Di-isopropyl ether	21.0	0.40	0.50	ug/L	20.0		105	83-132			
Ethyl tert-butyl ether	22.7	0.40	0.50	ug/L	20.0		114	74-127			
Tert-amyl methyl ether	18.1	0.40	0.50	ug/L	20.0		90.6	74-120			
Tert-butyl alcohol	355	6.0	10	ug/L	400		88.6	66-147			
Surrogate: Bromofluorobenzene	*27.3*			*ug/L*	*25.0*		*109*	*70-130*			
Surrogate: Dibromofluoromethane	*25.3*			*ug/L*	*25.0*		*101*	*70-130*			
Surrogate: Toluene-d8	*26.3*			*ug/L*	*25.0*		*105*	*70-130*			
LCS Dup (AE84271-BSD1)					Prepared: 05/29/18 Analyzed: 05/30/18						
Benzene	19.8	0.30	0.30	ug/L	20.0		98.8	82-122	2.98	25	
Toluene	21.8	0.30	0.30	ug/L	20.0		109	75-134	1.67	25	
Ethylbenzene	21.7	0.40	0.50	ug/L	20.0		108	84-124	1.63	25	
Xylenes (total)	67.5	0.50	0.50	ug/L	60.0		113	81-126	1.33	25	
Methyl tert-butyl ether	19.1	0.50	0.50	ug/L	20.0		95.6	84-119	6.36	25	
Di-isopropyl ether	21.8	0.40	0.50	ug/L	20.0		109	83-132	3.83	25	
Ethyl tert-butyl ether	23.8	0.40	0.50	ug/L	20.0		119	74-127	4.94	25	

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.

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Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 •Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/25/18 13:28

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE84271 - VOAs in Water GCMS											
LCS Dup (AE84271-BSD1)					Prepared: 05/29/18 Analyzed: 05/30/18						
Tert-amyl methyl ether	19.1	0.40	0.50	ug/L	20.0		95.4	74-120	5.11	25	
Tert-butyl alcohol	385	6.0	10	ug/L	400		96.2	66-147	8.22	25	
Surrogate: Bromofluorobenzene	*26.5*			*ug/L*	*25.0*		*106*	*70-130*			
Surrogate: Dibromofluoromethane	*25.0*			*ug/L*	*25.0*		*100*	*70-130*			
Surrogate: Toluene-d8	*25.4*			*ug/L*	*25.0*		*102*	*70-130*			
Matrix Spike (AE84271-MS1)		**Source: 18E2418-01**			Prepared: 05/29/18 Analyzed: 05/30/18						
Benzene	20.3	0.30	0.30	ug/L	20.0	ND	102	58-139			
Toluene	22.4	0.30	0.30	ug/L	20.0	ND	112	59-147			
Ethylbenzene	22.5	0.40	0.50	ug/L	20.0	ND	113	59-147			
Xylenes (total)	69.2	0.50	0.50	ug/L	60.0	ND	115	49-153			
Methyl tert-butyl ether	17.0	0.50	0.50	ug/L	20.0	ND	85.2	55-144			
Di-isopropyl ether	21.2	0.40	0.50	ug/L	20.0	ND	106	49-143			
Ethyl tert-butyl ether	22.5	0.40	0.50	ug/L	20.0	ND	112	44-143			
Tert-amyl methyl ether	17.6	0.40	0.50	ug/L	20.0	ND	87.8	41-136			
Tert-butyl alcohol	324	6.0	10	ug/L	400	ND	80.9	38-175			
Surrogate: Bromofluorobenzene	*26.8*			*ug/L*	*25.0*		*107*	*70-130*			
Surrogate: Dibromofluoromethane	*25.1*			*ug/L*	*25.0*		*100*	*70-130*			
Surrogate: Toluene-d8	*25.8*			*ug/L*	*25.0*		*103*	*70-130*			
Matrix Spike (AE84271-MS2)		**Source: 18E2418-02**			Prepared: 05/29/18 Analyzed: 05/30/18						
Benzene	20.2	0.30	0.30	ug/L	20.0	ND	101	58-139			
Toluene	22.1	0.30	0.30	ug/L	20.0	ND	111	59-147			
Ethylbenzene	22.3	0.40	0.50	ug/L	20.0	ND	112	59-147			
Xylenes (total)	68.5	0.50	0.50	ug/L	60.0	ND	114	49-153			
Methyl tert-butyl ether	17.6	0.50	0.50	ug/L	20.0	ND	88.0	55-144			
Di-isopropyl ether	21.4	0.40	0.50	ug/L	20.0	ND	107	49-143			
Ethyl tert-butyl ether	23.0	0.40	0.50	ug/L	20.0	ND	115	44-143			
Tert-amyl methyl ether	17.7	0.40	0.50	ug/L	20.0	ND	88.5	41-136			
Tert-butyl alcohol	330	6.0	10	ug/L	400	ND	82.5	38-175			
Surrogate: Bromofluorobenzene	*26.8*			*ug/L*	*25.0*		*107*	*70-130*			
Surrogate: Dibromofluoromethane	*25.2*			*ug/L*	*25.0*		*101*	*70-130*			
Surrogate: Toluene-d8	*25.8*			*ug/L*	*25.0*		*103*	*70-130*			

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	06/25/18 13:28

Notes and Definitions

FILT	The sample was filtered in the lab prior to analysis.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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fax 530.243.7494
3860 Morrow Lane, Suite F
Chico, California 95928
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fax 530.894.5143

June 20, 2018

Lab ID: 18E1387

SHERI L. SPEAKS
ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
RE: LOW LEVEL METALS 18E2531

Dear SHERI L. SPEAKS ,

Enclosed are the analysis results for Work Order number 18E1387. All analyses were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

Ricky D. Jensen
Laboratory Director
California ELAP Certification Number 1677

basic laboratory
www.basiclab.com
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Redding, California 96001 fax 530.243.7494
3860 Morrow Lane, Suite F voice 530.894.8966
Chico, California 95928 fax 530.894.5143

Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18E2531

Lab No: 18E1387
Reported: 06/20/18
Phone: (707) 468-0401
P.O. #

Metals - Total

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
18E2531-01 VA2-S - Grab Water (18E1387-01) Sampled:05/24/18 11:15 Received:05/30/18 15:53									
Mercury	ng/l	**5.14**		0.20	0.50	EPA 1631E	06/06/18	06/06/18	B8F0930
Methyl Mercury as Mercury	"	**0.128**		0.020	0.050	EPA 1630	06/19/18	06/18/18	B8F1252
18E2531-02 VA2-B - Grab Water (18E1387-02) Sampled:05/24/18 12:00 Received:05/30/18 15:53									
Mercury	ng/l	**4.00**		0.20	0.50	EPA 1631E	06/06/18	06/06/18	B8F0930
Methyl Mercury as Mercury	"	**0.118**		0.020	0.050	EPA 1630	06/19/18	06/18/18	B8F1252
18E2531-03 ER173.7 - Grab Water (18E1387-03) Sampled:05/24/18 15:50 Received:05/30/18 15:53									
Mercury	ng/l	**1.23**		0.20	0.50	EPA 1631E	06/06/18	06/06/18	B8F0930
Methyl Mercury as Mercury	"	**0.079**		0.020	0.050	EPA 1630	06/19/18	06/18/18	B8F1252
18E2531-04 BL-B - Grab Water (18E1387-04) Sampled:05/24/18 17:00 Received:05/30/18 15:53									
Mercury	ng/l	ND		0.20	0.50	EPA 1631E	06/06/18	06/06/18	B8F0930
Methyl Mercury as Mercury	"	ND		0.020	0.050	EPA 1630	06/19/18	06/18/18	B8F1252

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18E2531

Lab No: 18E1387
Reported: 06/20/18
Phone: (707) 468-0401
P.O. #

Quality Control Data

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Metals - Total										
Batch B8F0930 - BrCl Digestion										
Blank										
Mercury	ND	0.50	ng/l							
Blank										
Mercury	ND	0.50	ng/l							
Blank										
Mercury	ND	0.50	ng/l							
LCS										
Mercury	9.50	0.50	ng/l	10.0		95.0	77-123			
Matrix Spike Source: 18E1386-01										
Mercury	12.2	0.50	ng/l	10.0	1.78	104	71-125			
Matrix Spike Source: 18E1386-09										
Mercury	12.8	0.50	ng/l	10.0	1.98	109	71-125			
Matrix Spike Dup Source: 18E1386-01										
Mercury	12.1	0.50	ng/l	10.0	1.78	103	71-125	0.987	24	
Matrix Spike Dup Source: 18E1386-09										
Mercury	12.7	0.50	ng/l	10.0	1.98	107	71-125	1.38	24	
Batch B8F1252 - Draft EPA Method 1630 Distillation (Modified)										
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
LCS										
Methyl Mercury as Mercury	1.71	0.050	ng/l	2.00		85.6	67-133			
Duplicate Source: 18F0405-01										
Methyl Mercury as Mercury	0.031	0.050	ng/l		0.031			0.321	35	J
Matrix Spike Source: 18E1386-01										
Methyl Mercury as Mercury	1.32	0.050	ng/l	1.00	0.128	119	65-135			
Matrix Spike Source: 18E1386-09										
Methyl Mercury as Mercury	1.29	0.050	ng/l	1.00	0.185	110	65-135			
Matrix Spike Dup Source: 18E1386-01										
Methyl Mercury as Mercury	1.31	0.050	ng/l	1.00	0.128	118	65-135	1.01	35	
Matrix Spike Dup Source: 18E1386-09										
Methyl Mercury as Mercury	1.33	0.050	ng/l	1.00	0.185	114	65-135	3.32	35	

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18E2531

Lab No: 18E1387
Reported: 06/20/18
Phone: (707) 468-0401
P.O. #

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). The J flag is equivalent to the DNQ Estimated Concentration flag.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
<	Less than reporting limit
≤	Less than or equal to reporting limit
>	Greater than reporting limit
≥	Greater than or equal to reporting limit
MDL	Method Detection Limit
RL/ML	Minimum Level of Quantitation
MCL/AL	Maxium Contaminant Level/Action Level
mg/kg	Results reported as wet weight
TTLC	Total Threshold Limit Concentration
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leachate Procedure
Note 1	Received Temperature - according to EPA guidelines, samples for most chemistry methods should be held at ≤6 degrees C after collection, including during transportation, unless the time from sampling to delivery is <2 hours. Regulating agencies may invalidate results if temperature requirements are not met.
Note 2	According to 40 CFR Part 136 Table II, the following tests should be analyzed in the field within 15 minutes of sampling: pH, chlorine, dissolved oxygen, and sulfite.

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18E2531

18E-1387
6-12-18

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

Basic Laboratory
2218 Railroad Ave
Redding, CA 96001
Phone :530-243-7234
Fax: 530-243-7494
Terms: Net 30

18E1387
1

Analysis	Due	Expires	Comments
18E2531-01 VA2-S [Water] Sampled 05/24/18 11:15			-1 8.2°
BAL Hg 1631	06/11/18 12:00	06/21/18 11:15	
BAL Hg Methyl	06/11/18 12:00	11/20/18 11:15	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E2531-02 VA2-B [Water] Sampled 05/24/18 12:00			-2 8.3°
BAL Hg 1631	06/11/18 12:00	06/21/18 12:00	
BAL Hg Methyl	06/11/18 12:00	11/20/18 12:00	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E2531-03 ER173.7 [Water] Sampled 05/24/18 15:50			-3 8.9°
BAL Hg 1631	06/11/18 12:00	06/21/18 15:50	
BAL Hg Methyl	06/11/18 12:00	11/20/18 15:50	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			
18E2531-04 BL-B [Water] Sampled 05/24/18 17:00			-4 8.6°
BAL Hg 1631	06/11/18 12:00	06/21/18 17:00	
BAL Hg Methyl	06/11/18 12:00	11/20/18 17:00	
Containers Supplied:			
500ml Glass - HCl (H) 500ml Glass - Unpreserve			

Released By	Date	Received By	Date
	5-25-18	T Williamson	53018 1553
Released By	Date	Received By	Date
		TW	5-30-18 1758

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18E2531

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+QC
+MDL

	5-25-18	TWilhelmsen	5-30-18	1553
Released By	Date	Received By	Date	
		TW	530-18	1758
Released By	Date	Received By	Date	

alpha Alpha Analytical Laboratories Inc.
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WATERS, SEDIMENTS, SOLIDS

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Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18E2531 Pg 1 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	TPH-D/MO	TPH-Gas/BTEX/Oxys	Oil and Grease	TOC	DOC	CAM17 200.8 total + Al/Mn	Fe 200.8 Total	Hardness, total	Ammonia-N	Phosphorus, Total	TKN	Sample Notes or DDW Source Numbers:
~~VA1-S~~ VA2-S	5/24	1115															X	X	X	X	X	X	X	X	X	X	X	
~~VA1-B~~ VA2-B	↓	1200															↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
ER173.7		1550																										
BL-B	↓	1700																										

TAT
Standard 10 days ∅
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.2
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		5-25-18	0840

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number:
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):
Travel and Site Time: Mileage: Misc. Supplies:

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www.alpha-labs.com
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Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18E2531 Pg 2 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

TAT: Standard 10 days (2); RUSH: 5 days ( ) 48 hours ( ) Other: ___days ( ) Lab preapproval required

Temp upon Receipt °C: Ukiah temp: 1.2; Livermore temp:; Elk Grove temp:

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Analysis Request: CAM17 200.8 dissolved / lab filter	Al dissolved 200.8	Alkalinity	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	TDS	TSS	Chlorophyll-A	Sulfide	Hg 1631	MeHg 1630	Sample Notes or DDW Source Numbers:
SF ~~VA1-S~~ VA2-S	5/24	1115															X	X	X	X	X	X	X	X	X	·	X	X	no sulfide
SF ~~VA1-B~~ VA2-B	↓	1200															↓	↓	↓	↓	↓	↓	↓	↓	/		↓	↓	no sulfide
ER 173.7		1550																											no sulfide
BL-B	↓	1700															↓	↓	↓	↓	↓	↓	↓	↓	X	X	↓	↓	
																													Chlorophyll sample not
																													received for VA2-B.
																													Client notified. (SF)
																													5-25-18

Relinquished by	Received by	Date	Time
Christina Buck		5-25-18	0840

DDW Write On EDT Transmission? ( ) Yes ( ) No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ( ) Yes ( ) No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: Mileage: Misc. Supplies:

Alpha Analytical Laboratories Inc.
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Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 •Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

ELAP Certificates 1551, 2728, and 2922

20 July 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18F2537

Enclosed are the results of analyses for samples received by the laboratory on 06/26/18 15:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Sheri Speaks

Sheri L. Speaks For David S. Pingatore
Project Manager

Alpha Analytical Laboratories Inc.
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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/20/18 09:46

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ER 167.8	18F2537-01	Water	06/26/18 12:50	06/26/18 15:10
ER-DUP	18F2537-02	Water	06/26/18 13:10	06/26/18 15:10

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/20/18 09:46

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 167.8 (18F2537-01) Water Sampled: 06/26/18 12:50 Received: 06/26/18 15:10											
Iron	**360**	**40**	**200**	**ug/L**	4	AG83242	07/05/18 09:50	07/06/18 16:39	EPA 200.8	MMY	
ER-DUP (18F2537-02) Water Sampled: 06/26/18 13:10 Received: 06/26/18 15:10											
Iron	**370**	**40**	**200**	**ug/L**	4	AG83242	07/05/18 09:50	07/06/18 16:45	EPA 200.8	MMY	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/20/18 09:46

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 167.8 (18F2537-01) Water Sampled: 06/26/18 12:50 Received: 06/26/18 15:10											
Ammonia as N	ND	0.10	0.20	mg/L	1	AG83570	07/12/18 09:00	07/12/18 16:20	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	**2.6**	**2.0**	**5.0**	**mg/L**	1	AF84222	06/28/18 08:00	07/03/18 10:00	SM5210B	RDM	J
Chlorophyll-a	**0.0016**	**0.0010**	**0.010**	**mg/L**	1	AG83411	06/27/18 16:30	07/12/18 14:30	SM10200H	EV	J
Dissolved Organic Carbon	**2.24**	**0.600**	**1.00**	**mg/L**	1	AG83435	07/10/18 06:17	07/11/18 17:50	SM5310C	JIM	
Sulfide	ND	0.020	0.10	mg/L	1	AF84301	06/29/18 14:00	06/29/18 16:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	**0.042**	**0.0086**	**0.40**	**mg/L**	1	AG83761	07/17/18 07:40	07/17/18 08:11	Calculation	ZMH	J
Total Kjeldahl Nitrogen	**0.52**	**0.20**	**1.0**	**mg/L**	1	AG83364	07/10/18 06:10	07/11/18 12:32	SM4500-Norg B	JVO	J
Phosphorus, total	**0.033**	**0.010**	**0.040**	**mg/L**	1	AG83368	07/09/18 08:30	07/09/18 15:11	SM4500-P E	SMS	J
Total Organic Carbon	**2.54**	**0.300**	**1.00**	**mg/L**	1	AG83177	07/03/18 07:49	07/03/18 12:24	SM5310C	JIM	
ER-DUP (18F2537-02) Water Sampled: 06/26/18 13:10 Received: 06/26/18 15:10											
Ammonia as N	ND	0.10	0.20	mg/L	1	AG83570	07/12/18 09:00	07/12/18 16:20	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	**2.9**	**2.0**	**5.0**	**mg/L**	1	AF84222	06/28/18 08:00	07/03/18 10:00	SM5210B	RDM	J
Chlorophyll-a	**0.0016**	**0.0010**	**0.010**	**mg/L**	1	AG83411	06/27/18 16:30	07/12/18 14:30	SM10200H	EV	J
Dissolved Organic Carbon	**2.32**	**0.600**	**1.00**	**mg/L**	1	AG83435	07/10/18 06:17	07/11/18 18:10	SM5310C	JIM	
Sulfide	ND	0.020	0.10	mg/L	1	AF84301	06/29/18 14:00	06/29/18 16:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	**0.041**	**0.0086**	**0.40**	**mg/L**	1	AG83761	07/17/18 07:40	07/17/18 08:11	Calculation	ZMH	J
Total Kjeldahl Nitrogen	**0.38**	**0.20**	**1.0**	**mg/L**	1	AG83364	07/10/18 06:10	07/11/18 12:32	SM4500-Norg B	JVO	J
Phosphorus, total	**0.031**	**0.010**	**0.040**	**mg/L**	1	AG83368	07/09/18 08:30	07/09/18 15:11	SM4500-P E	SMS	J
Total Organic Carbon	**2.52**	**0.300**	**1.00**	**mg/L**	1	AG83177	07/03/18 07:49	07/03/18 12:43	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/20/18 09:46

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 167.8 (18F2537-01) Water Sampled: 06/26/18 12:50 Received: 06/26/18 15:10											
Nitrate as N	**0.042**	**0.040**	**0.20**	**mg/L**	1	AF84161	06/27/18 15:45	06/27/18 15:45	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AF84161	06/27/18 15:45	06/27/18 15:45	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AF84161	06/27/18 15:45	06/27/18 15:45	EPA 300.0	SMP	U
ER-DUP (18F2537-02) Water Sampled: 06/26/18 13:10 Received: 06/26/18 15:10											
Nitrate as N	**0.041**	**0.040**	**0.20**	**mg/L**	1	AF84161	06/27/18 16:02	06/27/18 16:02	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AF84161	06/27/18 16:02	06/27/18 16:02	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AF84161	06/27/18 16:02	06/27/18 16:02	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	07/20/18 09:46

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AG83242 - EPA 200.8											
Blank (AG83242-BLK1)					Prepared: 07/05/18 Analyzed: 07/06/18						
Iron	ND	10	50	ug/L							U
LCS (AG83242-BS1)					Prepared: 07/05/18 Analyzed: 07/06/18						
Iron	559	10	50	ug/L	520		108	85-115			
Duplicate (AG83242-DUP1)		**Source: 18G0321-02**			Prepared: 07/05/18 Analyzed: 07/06/18						
Iron	394	40	200	ug/L		397			0.880	20	
Matrix Spike (AG83242-MS2)		**Source: 18F2278-01**			Prepared: 07/05/18 Analyzed: 07/06/18						
Iron	2800	40	200	ug/L	520	1680	217	70-130			QM-4X

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	07/20/18 09:46

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF84222 - General Preparation											
Blank (AF84222-BLK1)					Prepared: 06/28/18 Analyzed: 07/03/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
Blank (AF84222-BLK2)					Prepared: 06/28/18 Analyzed: 07/03/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
LCS (AF84222-BS1)					Prepared: 06/28/18 Analyzed: 07/03/18						
Biochemical Oxygen Demand	214	2.0	5.0	mg/L	200		107	84-115			
Duplicate (AF84222-DUP1)		**Source: 18F2644-01**			Prepared: 06/28/18 Analyzed: 07/03/18						
Biochemical Oxygen Demand	298	2.0	5.0	mg/L		302			1.37	30	
Batch AF84301 - General Preparation											
Blank (AF84301-BLK1)					Prepared & Analyzed: 06/29/18						
Sulfide	ND	0.020	0.10	mg/L							U
LCS (AF84301-BS1)					Prepared & Analyzed: 06/29/18						
Sulfide	0.218	0.020	0.10	mg/L	0.202		108	85-115			
Duplicate (AF84301-DUP1)		**Source: 18F2386-01**			Prepared & Analyzed: 06/29/18						
Sulfide	ND	0.020	0.10	mg/L		ND				15	U
Matrix Spike (AF84301-MS1)		**Source: 18F2386-01**			Prepared & Analyzed: 06/29/18						
Sulfide	0.218	0.020	0.10	mg/L	0.202	ND	108	80-120			
Matrix Spike Dup (AF84301-MSD1)		**Source: 18F2386-01**			Prepared & Analyzed: 06/29/18						
Sulfide	0.220	0.020	0.10	mg/L	0.202	ND	109	80-120	0.913	15	

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Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AG83177 - General Prep											
Blank (AG83177-BLK1)					Prepared & Analyzed: 07/03/18						
Total Organic Carbon	ND	0.300	1.00	mg/L							U
LCS (AG83177-BS1)					Prepared & Analyzed: 07/03/18						
Total Organic Carbon	9.41	0.300	1.00	mg/L	10.0		94.1	85-115			
LCS Dup (AG83177-BSD1)					Prepared & Analyzed: 07/03/18						
Total Organic Carbon	10.0	0.300	1.00	mg/L	10.0		100	85-115	6.07	20	
Duplicate (AG83177-DUP1)		**Source: 18F2537-01**			Prepared & Analyzed: 07/03/18						
Total Organic Carbon	2.51	0.300	1.00	mg/L		2.54			1.14	20	
MRL Check (AG83177-MRL1)					Prepared & Analyzed: 07/03/18						
Total Organic Carbon	1.44	0.300	1.00	mg/L	1.25		115	0-200			
Matrix Spike (AG83177-MS1)		**Source: 18F2537-01**			Prepared & Analyzed: 07/03/18						
Total Organic Carbon	11.6	0.300	1.00	mg/L	10.0	2.54	90.4	70-130			
Matrix Spike Dup (AG83177-MSD1)		**Source: 18F2537-01**			Prepared & Analyzed: 07/03/18						
Total Organic Carbon	11.0	0.300	1.00	mg/L	10.0	2.54	84.3	70-130	5.41	20	
Batch AG83364 - General Prep											
LCS (AG83364-BS1)					Prepared & Analyzed: 07/09/18						
Total Kjeldahl Nitrogen	3.13	0.20	1.0	mg/L	2.98		105	80-120			
LCS Dup (AG83364-BSD1)					Prepared & Analyzed: 07/09/18						
Total Kjeldahl Nitrogen	3.32	0.20	1.0	mg/L	2.98		111	80-120	5.70	20	

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Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AG83364 - General Prep											
Matrix Spike (AG83364-MS1)		**Source: 18F2189-01**			Prepared & Analyzed: 07/09/18						
Total Kjeldahl Nitrogen	85.5	0.20	1.0	mg/L	22.6	72.9	55.7	75-125			QM-4X
Matrix Spike Dup (AG83364-MSD1)		**Source: 18F2189-01**			Prepared & Analyzed: 07/09/18						
Total Kjeldahl Nitrogen	86.9	0.20	1.0	mg/L	22.6	72.9	61.9	75-125	1.63	20	QM-4X
Batch AG83368 - General Prep											
Blank (AG83368-BLK1)					Prepared & Analyzed: 07/09/18						
Phosphorus, total	ND	0.010	0.040	mg/L							U
LCS (AG83368-BS1)					Prepared & Analyzed: 07/09/18						
Phosphorus, total	0.195	0.010	0.040	mg/L	0.200		97.6	85-115			
Duplicate (AG83368-DUP1)		**Source: 18F2626-01**			Prepared & Analyzed: 07/09/18						
Phosphorus, total	0.0261	0.010	0.040	mg/L		0.0235			10.6	20	J
Matrix Spike (AG83368-MS1)		**Source: 18F2626-01**			Prepared & Analyzed: 07/09/18						
Phosphorus, total	0.205	0.010	0.040	mg/L	0.200	0.0235	90.5	70-130			
Matrix Spike (AG83368-MS2)		**Source: 18F2537-01**			Prepared & Analyzed: 07/09/18						
Phosphorus, total	0.194	0.010	0.040	mg/L	0.200	0.0328	80.6	70-130			
Matrix Spike Dup (AG83368-MSD1)		**Source: 18F2626-01**			Prepared & Analyzed: 07/09/18						
Phosphorus, total	0.203	0.010	0.040	mg/L	0.200	0.0235	89.8	70-130	0.648	20	
Batch AG83411 - General Preparation											
Blank (AG83411-BLK1)					Prepared: 06/26/18 Analyzed: 07/12/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L							U

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Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AG83411 - General Preparation											
Duplicate (AG83411-DUP1)		**Source: 18F2346-01**			Prepared: 06/26/18 Analyzed: 07/12/18						
Chlorophyll-a	0.00211	0.0010	0.010	mg/L		0.00227			7.40	50	J
Duplicate (AG83411-DUP2)		**Source: 18F2712-01**			Prepared: 06/29/18 Analyzed: 07/12/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Batch AG83435 - General Prep											
Blank (AG83435-BLK1)					Prepared: 07/10/18 Analyzed: 07/11/18						
Dissolved Organic Carbon	ND	0.600	1.00	mg/L							U
LCS (AG83435-BS1)					Prepared: 07/10/18 Analyzed: 07/11/18						
Dissolved Organic Carbon	9.37	0.600	1.00	mg/L	10.0		93.7	85-115			
LCS Dup (AG83435-BSD1)					Prepared: 07/10/18 Analyzed: 07/11/18						
Dissolved Organic Carbon	9.67	0.600	1.00	mg/L	10.0		96.7	85-115	3.15	20	
Duplicate (AG83435-DUP1)		**Source: 18F2537-01**			Prepared: 07/10/18 Analyzed: 07/11/18						
Dissolved Organic Carbon	2.21	0.600	1.00	mg/L		2.24			1.27	20	
MRL Check (AG83435-MRL1)					Prepared: 07/10/18 Analyzed: 07/11/18						
Dissolved Organic Carbon	1.47	0.600	1.00	mg/L	1.25		118	0-200			
Matrix Spike (AG83435-MS1)		**Source: 18F2537-02**			Prepared: 07/10/18 Analyzed: 07/11/18						
Dissolved Organic Carbon	12.2	0.600	1.00	mg/L	10.0	2.32	98.3	70-130			
Matrix Spike Dup (AG83435-MSD1)		**Source: 18F2537-02**			Prepared: 07/10/18 Analyzed: 07/11/18						
Dissolved Organic Carbon	13.3	0.600	1.00	mg/L	10.0	2.32	110	70-130	9.37	20	

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Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AG83570 - General Preparation											
LCS (AG83570-BS1)					Prepared & Analyzed: 07/12/18						
Ammonia as N	5.08	0.10	0.20	mg/L	5.00		102	90-110			
LCS Dup (AG83570-BSD1)					Prepared & Analyzed: 07/12/18						
Ammonia as N	4.82	0.10	0.20	mg/L	5.00		96.3	90-110	5.32	10	
Matrix Spike (AG83570-MS1)		**Source: 18G0804-01**			Prepared & Analyzed: 07/12/18						
Ammonia as N	9.81	0.10	0.20	mg/L	10.0	ND	98.1	85-115			
Matrix Spike Dup (AG83570-MSD1)		**Source: 18G0804-01**			Prepared & Analyzed: 07/12/18						
Ammonia as N	9.63	0.10	0.20	mg/L	10.0	ND	96.3	85-115	1.80	20	

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/20/18 09:46

Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF84161 - General Preparation											
Blank (AF84161-BLK1)					Prepared & Analyzed: 06/27/18						
Nitrate as N	ND	0.040	0.20	mg/L							U
Orthophosphate	ND	0.10	0.30	mg/L							U
Nitrite as N	ND	0.050	0.20	mg/L							U
LCS (AF84161-BS1)					Prepared & Analyzed: 06/27/18						
Nitrate as N	5.77	0.040	0.20	mg/L	5.56		104	90-110			
Orthophosphate	17.3	0.10	0.30	mg/L	16.7		104	90-110			
Nitrite as N	5.45	0.050	0.20	mg/L	5.56		98.1	90-110			
Duplicate (AF84161-DUP1)		**Source: 18F2470-01**			Prepared & Analyzed: 06/27/18						
Nitrite as N	ND	0.050	0.20	mg/L		ND				20	U
Orthophosphate	0.141	0.10	0.30	mg/L		0.162			14.1	20	J
Nitrate as N	0.138	0.040	0.20	mg/L		0.139			0.976	20	J
Matrix Spike (AF84161-MS1)		**Source: 18F2470-01**			Prepared & Analyzed: 06/27/18						
Nitrate as N	5.51	0.20	1.0	mg/L	5.56	ND	99.1	80-120			
Nitrite as N	5.11	0.25	1.0	mg/L	5.56	ND	91.9	80-120			
Orthophosphate	14.9	0.50	1.5	mg/L	16.7	ND	89.4	80-120			
Matrix Spike (AF84161-MS2)		**Source: 18F2473-01**			Prepared & Analyzed: 06/27/18						
Nitrate as N	5.78	0.040	0.20	mg/L	5.56	0.0790	103	80-120			
Orthophosphate	17.2	0.10	0.30	mg/L	16.7	ND	103	80-120			
Nitrite as N	2.40	0.050	0.20	mg/L	5.56	ND	43.1	80-120			QM-05
Matrix Spike Dup (AF84161-MSD1)		**Source: 18F2470-01**			Prepared & Analyzed: 06/27/18						
Nitrate as N	5.51	0.20	1.0	mg/L	5.56	ND	99.2	80-120	0.114	20	
Nitrite as N	5.14	0.25	1.0	mg/L	5.56	ND	92.6	80-120	0.759	20	
Orthophosphate	15.2	0.50	1.5	mg/L	16.7	ND	91.2	80-120	2.04	20	

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.

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Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	07/20/18 09:46

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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July 12, 2018

Lab ID: 18F1353

SHERI L. SPEAKS
ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
RE: LOW LEVEL METALS 18F2537

Dear SHERI L. SPEAKS ,

Enclosed are the analysis results for Work Order number 18F1353. All analyses were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

Ricky D. Jensen
Laboratory Director
California ELAP Certification Number 1677

basic laboratory

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fax 530.894.5143

Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18F2537

Lab No: 18F1353
Reported: 07/12/18
Phone: (707) 468-0401
P.O. #

Metals - Total

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
18F2537-01 ER 167.8 - Grab Water (18F1353-01) Sampled:06/26/18 12:50 Received:06/28/18 12:12									
Mercury	ng/l	**3.72**		0.20	0.50	EPA 1631E	07/05/18	07/05/18	B8G0897
Methyl Mercury as Mercury	"	**0.140**		0.020	0.050	EPA 1630	07/11/18	07/10/18	B8G1041
18F2537-02 ER-DUP - Grab Water (18F1353-02) Sampled:06/26/18 13:10 Received:06/28/18 12:12									
Mercury	ng/l	**3.78**		0.20	0.50	EPA 1631E	07/05/18	07/05/18	B8G0897
Methyl Mercury as Mercury	"	**0.131**		0.020	0.050	EPA 1630	07/11/18	07/10/18	B8G1041

Approved By

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California ELAP Cert #1677 and #2718

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18F2537

Lab No: 18F1353
Reported: 07/12/18
Phone: (707) 468-0401
P.O. #

Quality Control Data

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Metals - Total										
Batch B8G0897 - BrCl Digestion										
Blank										
Mercury	ND	0.50	ng/l							
Blank										
Mercury	ND	0.50	ng/l							QB-06
Blank										
Mercury	ND	0.50	ng/l							
LCS										
Mercury	10.1	0.50	ng/l	10.0		101	77-123			
Matrix Spike Source: 18F1238-01										
Mercury	13.6	0.50	ng/l	10.0	2.71	108	71-125			
Matrix Spike Source: 18F1353-01										
Mercury	14.0	0.50	ng/l	10.0	3.72	103	71-125			
Matrix Spike Dup Source: 18F1238-01										
Mercury	13.8	0.50	ng/l	10.0	2.71	111	71-125	1.65	24	
Matrix Spike Dup Source: 18F1353-01										
Mercury	14.4	0.50	ng/l	10.0	3.72	107	71-125	2.92	24	
Batch B8G1041 - Draft EPA Method 1630 Distillation (Modified)										
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
LCS										
Methyl Mercury as Mercury	2.31	0.050	ng/l	2.00		115	67-133			
Duplicate Source: 18F1434-09										
Methyl Mercury as Mercury	0.047	0.050	ng/l		0.042			11.6	35	J
Matrix Spike Source: 18F1124-01										
Methyl Mercury as Mercury	1.13	0.050	ng/l	1.00	ND	113	65-135			
Matrix Spike Source: 18F1355-01										
Methyl Mercury as Mercury	1.11	0.050	ng/l	1.00	ND	111	65-135			
Matrix Spike Dup Source: 18F1124-01										
Methyl Mercury as Mercury	1.14	0.050	ng/l	1.00	ND	114	65-135	0.229	35	
Matrix Spike Dup Source: 18F1355-01										
Methyl Mercury as Mercury	1.26	0.050	ng/l	1.00	ND	126	65-135	12.7	35	

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18F2537

Lab No: 18F1353
Reported: 07/12/18
Phone: (707) 468-0401
P.O. #

Notes and Definitions

QB-06	Some samples in this batch required an additional amount of BrCl to fully oxidize the sample. Per EPA method 1631E requirements, this Method Blank contains an increased concentration of BrCl to match the sample matrix.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). The J flag is equivalent to the DNQ Estimated Concentration flag.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
<	Less than reporting limit
≤	Less than or equal to reporting limit
>	Greater than reporting limit
≥	Greater than or equal to reporting limit
MDL	Method Detection Limit
RL/ML	Minimum Level of Quantitation
MCL/AL	Maxium Contaminant Level/Action Level
mg/kg	Results reported as wet weight
TTLC	Total Threshold Limit Concentration
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leachate Procedure
Note 1	Received Temperature - according to EPA guidelines, samples for most chemistry methods should be held at ≤6 degrees C after collection, including during transportation, unless the time from sampling to delivery is <2 hours. Regulating agencies may invalidate results if temperature requirements are not met.
Note 2	According to 40 CFR Part 136 Table II, the following tests should be analyzed in the field within 15 minutes of sampling: pH, chlorine, dissolved oxygen, and sulfite.

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SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18F2537

18F1353
7-11-18

SENDING LABORATORY:	**RECEIVING LABORATORY:**
Alpha Analytical Laboratories, Inc.	Basic Laboratory
208 Mason St.	2218 Railroad Ave
Ukiah, CA 95482	Redding, CA 96001
Phone: (707)468-0401	Phone :530-243-7234
Fax: (707)468-5267	Fax: 530-243-7494
Project Manager: David S. Pingatore	**Terms: Net 30**

18F1353
1

Analysis	Due	Expires	Comments
18F2537-01 ER 167.8 [Water] Sampled 06/26/18 12:50			7.5°C
BAL Hg 1631	07/11/18 12:00	07/24/18 12:50	
BAL Hg Methyl	07/11/18 12:00	12/23/18 12:50	
Containers Supplied: AG 500ml Glass - HCl (I) TW 500ml Glass - Unpreserve TW			
18F2537-02 ER-DUP [Water] Sampled 06/26/18 13:10			7.3°C
BAL Hg 1631	07/11/18 12:00	07/24/18 13:10	
BAL Hg Methyl	07/11/18 12:00	12/23/18 13:10	
Containers Supplied: AG 500ml Glass - HCl (I) TW 500ml Glass - Unpreserve TW			

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+QC
+ MX

Released By	Date	Received By	Date
	6-27-18	T Winkelman	6-28-18 1212
Released By	Date	Received By	Date
		TW	6-28-18 1448

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Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18F2537 Pg 1 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	TOC	DOC	Fe 200.8 Total	Ammonia-N	Phosphorus, Total	TKN	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	Chlorophyll-A	Sulfide	Sample Notes or DDW Source Numbers:
ER167.8	6/26	1250											X				X	X	X	X	X	X	X	X	X	X	X	
GR-DUP	6/26	1310											X				X	X	X	X	X	X	X	X	X	X	X	

TAT: Standard 10 days ○ | RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C: Ukiah temp: 1.4 | Livermore temp: | Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		6-26-18	1510

DDW Write On EDT Transmission? ○ Yes ○ No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

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Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18F2537 Pg 2 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: Christina Buck Christine Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Analysis Request: Hg 1631	MeHg 1630	Sample Notes or DDW Source Numbers:
ER1167.8	6/26	1250											X				X	X	
ER-DUP	6/26	1310											X				X	X	

TAT
Standard 10 days ○
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.4
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		6-26-18	1510

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID:
EDF to (Email Address):
Sampling Company Log Code:

Travel and Site Time: | Mileage: | Misc. Supplies:

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ELAP Certificates 1551, 2728, and 2922

25 July 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18F2712

Enclosed are the results of analyses for samples received by the laboratory on 06/28/18 08:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/25/18 13:49

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LP-EB	18F2712-01	Water	06/27/18 08:45	06/28/18 08:05
LP3-S	18F2712-02	Water	06/27/18 11:00	06/28/18 08:05
LP3-M	18F2712-03	Water	06/27/18 11:20	06/28/18 08:05
LP3-B	18F2712-04	Water	06/27/18 11:50	06/28/18 08:05
LP4-S	18F2712-05	Water	06/27/18 12:40	06/28/18 08:05
LP4-M	18F2712-06	Water	06/27/18 13:00	06/28/18 08:05
LP4-B	18F2712-07	Water	06/27/18 13:30	06/28/18 08:05
RF 3.8	18F2712-08	Water	06/27/18 14:35	06/28/18 08:05
ER 173.7	18F2712-09	Water	06/27/18 17:10	06/28/18 08:05
RF-BL	18F2712-10	Water	06/27/18 18:55	06/28/18 08:05

This represents an amended copy of the original report.

Subcontracted results added.

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.

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e-mail: clientservices@alpha-labs.com
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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/25/18 13:49

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-EB (18F2712-01) Water Sampled: 06/27/18 08:45 Received: 06/28/18 08:05											
Iron	**10**	**10**	**50**	**ug/L**	1	AG83380	07/10/18 08:30	07/13/18 13:21	EPA 200.8	JRA	J
LP3-S (18F2712-02) Water Sampled: 06/27/18 11:00 Received: 06/28/18 08:05											
Iron	**79**	**10**	**50**	**ug/L**	1	AG83380	07/10/18 08:30	07/11/18 17:46	EPA 200.8	JRA	
LP3-M (18F2712-03) Water Sampled: 06/27/18 11:20 Received: 06/28/18 08:05											
Iron	**120**	**10**	**50**	**ug/L**	1	AG83380	07/10/18 08:30	07/11/18 17:58	EPA 200.8	JRA	
LP3-B (18F2712-04) Water Sampled: 06/27/18 11:50 Received: 06/28/18 08:05											
Iron	**500**	**10**	**50**	**ug/L**	1	AG83380	07/10/18 08:30	07/11/18 18:10	EPA 200.8	JRA	
LP4-S (18F2712-05) Water Sampled: 06/27/18 12:40 Received: 06/28/18 08:05											
Iron	**120**	**10**	**50**	**ug/L**	1	AG83380	07/10/18 08:30	07/11/18 18:22	EPA 200.8	JRA	
LP4-M (18F2712-06) Water Sampled: 06/27/18 13:00 Received: 06/28/18 08:05											
Iron	**100**	**10**	**50**	**ug/L**	1	AG83380	07/10/18 08:30	07/11/18 18:34	EPA 200.8	JRA	
LP4-B (18F2712-07) Water Sampled: 06/27/18 13:30 Received: 06/28/18 08:05											
Iron	**130**	**10**	**50**	**ug/L**	1	AG83380	07/10/18 08:30	07/11/18 18:46	EPA 200.8	JRA	
RF 3.8 (18F2712-08) Water Sampled: 06/27/18 14:35 Received: 06/28/18 08:05											
Iron	**93**	**10**	**50**	**ug/L**	1	AG83380	07/10/18 08:30	07/11/18 18:58	EPA 200.8	JRA	
ER 173.7 (18F2712-09) Water Sampled: 06/27/18 17:10 Received: 06/28/18 08:05											
Iron	**100**	**10**	**50**	**ug/L**	1	AG83380	07/10/18 08:30	07/11/18 19:10	EPA 200.8	JRA	

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.

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/25/18 13:49

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
RF-BL (18F2712-10) Water Sampled: 06/27/18 18:55 Received: 06/28/18 08:05											
Iron	ND	10	50	ug/L	1	AG83380	07/10/18 08:30	07/11/18 16:46	EPA 200.8	JRA	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/25/18 13:49

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-EB (18F2712-01) Water Sampled: 06/27/18 08:45 Received: 06/28/18 08:05											
Ammonia as N	ND	0.10	0.20	mg/L	1	AG83622	07/13/18 09:00	07/13/18 16:20	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AF84222	06/28/18 15:30	07/03/18 10:00	SM5210B	RDM	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AG83411	06/29/18 08:30	07/12/18 14:30	SM10200H	EV	U
Dissolved Organic Carbon	ND	0.600	1.00	mg/L	1	AG83435	07/10/18 06:17	07/12/18 07:45	SM5310C	JIM	U
Sulfide	ND	0.020	0.10	mg/L	1	AG83148	07/02/18 11:00	07/02/18 13:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AG83761	07/17/18 07:40	07/17/18 08:11	Calculation	ZMH	U
Total Kjeldahl Nitrogen	ND	0.050	1.0	mg/L	1	AG83564	07/13/18 06:05	07/14/18 10:30	SM4500-Norg B	SMS	U
Phosphorus, total	ND	0.010	0.040	mg/L	1	AG83434	07/10/18 08:15	07/10/18 13:12	SM4500-P E	SMS	U
Total Organic Carbon	**1.31**	**0.300**	**1.00**	**mg/L**	1	AG83177	07/03/18 07:49	07/03/18 14:20	SM5310C	JIM	
LP3-S (18F2712-02) Water Sampled: 06/27/18 11:00 Received: 06/28/18 08:05											
Ammonia as N	ND	0.10	0.20	mg/L	1	AG83622	07/13/18 09:00	07/13/18 16:20	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AF84222	06/28/18 15:30	07/03/18 10:00	SM5210B	RDM	U
Chlorophyll-a	**0.0018**	**0.0010**	**0.010**	**mg/L**	1	AG83411	06/29/18 08:30	07/12/18 14:30	SM10200H	EV	J
Dissolved Organic Carbon	**2.26**	**0.600**	**1.00**	**mg/L**	1	AG83435	07/10/18 06:17	07/12/18 07:56	SM5310C	JIM	
Sulfide	ND	0.020	0.10	mg/L	1	AG83148	07/02/18 11:00	07/02/18 13:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AG83761	07/17/18 07:40	07/17/18 08:11	Calculation	ZMH	U
Total Kjeldahl Nitrogen	ND	0.050	1.0	mg/L	1	AG83564	07/13/18 06:05	07/14/18 10:30	SM4500-Norg B	SMS	U
Phosphorus, total	**0.011**	**0.010**	**0.040**	**mg/L**	1	AG83434	07/10/18 08:15	07/10/18 13:12	SM4500-P E	SMS	J
Total Organic Carbon	**2.44**	**0.300**	**1.00**	**mg/L**	1	AG83177	07/03/18 07:49	07/03/18 14:40	SM5310C	JIM	
LP3-M (18F2712-03) Water Sampled: 06/27/18 11:20 Received: 06/28/18 08:05											
Ammonia as N	ND	0.10	0.20	mg/L	1	AG83622	07/13/18 09:00	07/13/18 16:20	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	**2.1**	**2.0**	**5.0**	**mg/L**	1	AF84222	06/28/18 15:30	07/03/18 10:00	SM5210B	RDM	J
Chlorophyll-a	**0.0023**	**0.0010**	**0.010**	**mg/L**	1	AG83411	06/29/18 08:30	07/12/18 14:30	SM10200H	EV	J
Dissolved Organic Carbon	**2.02**	**0.600**	**1.00**	**mg/L**	1	AG83435	07/10/18 06:17	07/12/18 08:08	SM5310C	JIM	
Sulfide	ND	0.020	0.10	mg/L	1	AG83148	07/02/18 11:00	07/02/18 13:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	**0.026**	**0.0086**	**0.40**	**mg/L**	1	AG83761	07/17/18 07:40	07/17/18 08:11	Calculation	ZMH	J
Total Kjeldahl Nitrogen	ND	0.050	1.0	mg/L	1	AG83564	07/13/18 06:05	07/14/18 10:30	SM4500-Norg B	SMS	U
Phosphorus, total	**0.015**	**0.010**	**0.040**	**mg/L**	1	AG83434	07/10/18 08:15	07/10/18 13:12	SM4500-P E	SMS	J
Total Organic Carbon	**2.42**	**0.300**	**1.00**	**mg/L**	1	AG83177	07/03/18 07:49	07/03/18 15:00	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/25/18 13:49

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-B (18F2712-04) Water Sampled: 06/27/18 11:50 Received: 06/28/18 08:05											
Ammonia as N	ND	0.10	0.20	mg/L	1	AG83622	07/13/18 09:00	07/13/18 16:20	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AF84222	06/28/18 15:30	07/03/18 10:00	SM5210B	RDM	U
Dissolved Organic Carbon	**1.73**	**0.600**	**1.00**	**mg/L**	1	AG83435	07/10/18 06:17	07/12/18 08:19	SM5310C	JIM	
Sulfide	ND	0.020	0.10	mg/L	1	AG83148	07/02/18 11:00	07/02/18 13:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	**0.052**	**0.0086**	**0.40**	**mg/L**	1	AG83761	07/17/18 07:40	07/17/18 08:11	Calculation	ZMH	J
Total Kjeldahl Nitrogen	**0.14**	**0.050**	**1.0**	**mg/L**	1	AG83564	07/13/18 06:05	07/14/18 10:30	SM4500-Norg B	SMS	J
Phosphorus, total	**0.035**	**0.010**	**0.040**	**mg/L**	1	AG83434	07/10/18 08:15	07/10/18 13:12	SM4500-P E	SMS	J
Total Organic Carbon	**2.44**	**0.300**	**1.00**	**mg/L**	1	AG83177	07/03/18 07:49	07/03/18 15:19	SM5310C	JIM	
LP4-S (18F2712-05) Water Sampled: 06/27/18 12:40 Received: 06/28/18 08:05											
Ammonia as N	ND	0.10	0.20	mg/L	1	AG83622	07/13/18 09:00	07/13/18 16:20	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	**2.2**	**2.0**	**5.0**	**mg/L**	1	AF84222	06/28/18 15:30	07/03/18 10:00	SM5210B	RDM	J
Chlorophyll-a	**0.0036**	**0.0010**	**0.010**	**mg/L**	1	AG83411	06/29/18 08:30	07/12/18 14:30	SM10200H	EV	J
Dissolved Organic Carbon	**2.11**	**0.600**	**1.00**	**mg/L**	1	AG83435	07/10/18 06:17	07/12/18 08:30	SM5310C	JIM	
Sulfide	ND	0.020	0.10	mg/L	1	AG83148	07/02/18 11:00	07/02/18 13:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AG83761	07/17/18 07:40	07/17/18 08:11	Calculation	ZMH	U
Phosphorus, total	**0.025**	**0.010**	**0.040**	**mg/L**	1	AG83434	07/10/18 08:15	07/10/18 13:12	SM4500-P E	SMS	J
Total Organic Carbon	**2.39**	**0.300**	**1.00**	**mg/L**	1	AG83177	07/03/18 07:49	07/03/18 15:39	SM5310C	JIM	
LP4-M (18F2712-06) Water Sampled: 06/27/18 13:00 Received: 06/28/18 08:05											
Ammonia as N	ND	0.10	0.20	mg/L	1	AG83622	07/13/18 09:00	07/13/18 16:20	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	**2.0**	**2.0**	**5.0**	**mg/L**	1	AF84222	06/28/18 15:30	07/03/18 10:00	SM5210B	RDM	J
Chlorophyll-a	**0.0039**	**0.0010**	**0.010**	**mg/L**	1	AG83411	06/29/18 08:30	07/12/18 14:30	SM10200H	EV	J
Dissolved Organic Carbon	**2.36**	**0.600**	**1.00**	**mg/L**	1	AG83435	07/10/18 06:17	07/12/18 08:41	SM5310C	JIM	
Sulfide	ND	0.020	0.10	mg/L	1	AG83148	07/02/18 11:00	07/02/18 13:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AG83761	07/17/18 07:40	07/17/18 08:11	Calculation	ZMH	U
Phosphorus, total	**0.015**	**0.010**	**0.040**	**mg/L**	1	AG83434	07/10/18 08:15	07/10/18 13:12	SM4500-P E	SMS	J
Total Organic Carbon	**2.44**	**0.300**	**1.00**	**mg/L**	1	AG83177	07/03/18 07:49	07/03/18 15:58	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/25/18 13:49

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-B (18F2712-07) Water Sampled: 06/27/18 13:30 Received: 06/28/18 08:05											
Ammonia as N	ND	0.10	0.20	mg/L	1	AG83622	07/13/18 09:00	07/13/18 16:20	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	**2.6**	**2.0**	**5.0**	**mg/L**	1	AF84222	06/28/18 15:30	07/03/18 10:00	SM5210B	RDM	J
Dissolved Organic Carbon	**2.16**	**0.600**	**1.00**	**mg/L**	1	AG83435	07/10/18 06:17	07/12/18 08:52	SM5310C	JIM	
Sulfide	ND	0.020	0.10	mg/L	1	AG83148	07/02/18 11:00	07/02/18 13:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AG83761	07/17/18 07:40	07/17/18 08:11	Calculation	ZMH	U
Phosphorus, total	**0.016**	**0.010**	**0.040**	**mg/L**	1	AG83434	07/10/18 08:15	07/10/18 13:12	SM4500-P E	SMS	J
Total Organic Carbon	**2.38**	**0.300**	**1.00**	**mg/L**	1	AG83177	07/03/18 07:49	07/03/18 16:17	SM5310C	JIM	
RF 3.8 (18F2712-08) Water Sampled: 06/27/18 14:35 Received: 06/28/18 08:05											
Ammonia as N	ND	0.10	0.20	mg/L	1	AG83622	07/13/18 09:00	07/13/18 16:20	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	**2.4**	**2.0**	**5.0**	**mg/L**	1	AF84222	06/28/18 15:30	07/03/18 10:00	SM5210B	RDM	J
Chlorophyll-a	**0.0023**	**0.0010**	**0.010**	**mg/L**	1	AG83411	06/29/18 08:30	07/12/18 14:30	SM10200H	EV	J
Dissolved Organic Carbon	**0.665**	**0.600**	**1.00**	**mg/L**	1	AG83435	07/10/18 06:17	07/12/18 09:04	SM5310C	JIM	J
Nitrate + Nitrite as N	**0.026**	**0.0086**	**0.40**	**mg/L**	1	AG83761	07/17/18 07:40	07/17/18 08:11	Calculation	ZMH	J
Phosphorus, total	**0.025**	**0.010**	**0.040**	**mg/L**	1	AG83434	07/10/18 08:15	07/10/18 13:12	SM4500-P E	SMS	J
Total Organic Carbon	**0.760**	**0.300**	**1.00**	**mg/L**	1	AG83177	07/03/18 07:49	07/03/18 16:37	SM5310C	JIM	J
ER 173.7 (18F2712-09) Water Sampled: 06/27/18 17:10 Received: 06/28/18 08:05											
Ammonia as N	ND	0.10	0.20	mg/L	1	AG83622	07/13/18 09:00	07/13/18 16:20	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AF84222	06/28/18 15:30	07/03/18 10:00	SM5210B	RDM	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AG83411	06/29/18 08:30	07/12/18 14:30	SM10200H	EV	U
Dissolved Organic Carbon	**0.724**	**0.600**	**1.00**	**mg/L**	1	AG83435	07/10/18 06:17	07/12/18 09:15	SM5310C	JIM	J
Nitrate + Nitrite as N	**0.029**	**0.0086**	**0.40**	**mg/L**	1	AG83761	07/17/18 07:40	07/17/18 08:11	Calculation	ZMH	J
Phosphorus, total	**0.021**	**0.010**	**0.040**	**mg/L**	1	AG83434	07/10/18 08:15	07/10/18 13:12	SM4500-P E	SMS	J
Total Organic Carbon	**0.780**	**0.300**	**1.00**	**mg/L**	1	AG83177	07/03/18 07:49	07/03/18 16:56	SM5310C	JIM	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/25/18 13:49

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
RF-BL (18F2712-10) Water Sampled: 06/27/18 18:55 Received: 06/28/18 08:05											
Ammonia as N	ND	0.10	0.20	mg/L	1	AG83622	07/13/18 09:00	07/13/18 16:20	SM4500NH3C	MNV	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AF84222	06/28/18 15:30	07/03/18 10:00	SM5210B	RDM	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AG83411	06/29/18 08:30	07/12/18 14:30	SM10200H	EV	U
Dissolved Organic Carbon	ND	0.600	1.00	mg/L	1	AG83435	07/10/18 06:17	07/12/18 09:26	SM5310C	JIM	U
Sulfide	ND	0.020	0.10	mg/L	1	AG83148	07/02/18 11:00	07/02/18 13:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AG83761	07/17/18 07:40	07/17/18 08:11	Calculation	ZMH	U
Phosphorus, total	**0.30**	**0.010**	**0.040**	**mg/L**	1	AG83434	07/10/18 08:15	07/10/18 13:12	SM4500-P E	SMS	
Total Organic Carbon	ND	0.300	1.00	mg/L	1	AG83177	07/03/18 07:49	07/03/18 17:16	SM5310C	JIM	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/25/18 13:49

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-EB (18F2712-01) Water Sampled: 06/27/18 08:45 Received: 06/28/18 08:05											
Nitrate as N	ND	0.040	0.20	mg/L	1	AF84307	06/29/18 05:28	06/29/18 05:28	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AF84307	06/29/18 05:28	06/29/18 05:28	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AF84307	06/29/18 05:28	06/29/18 05:28	EPA 300.0	SMP	U
LP3-S (18F2712-02) Water Sampled: 06/27/18 11:00 Received: 06/28/18 08:05											
Nitrate as N	ND	0.040	0.20	mg/L	1	AF84307	06/29/18 06:50	06/29/18 06:50	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AF84307	06/29/18 06:50	06/29/18 06:50	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AF84307	06/29/18 06:50	06/29/18 06:50	EPA 300.0	SMP	U
LP3-M (18F2712-03) Water Sampled: 06/27/18 11:20 Received: 06/28/18 08:05											
Nitrate as N	ND	0.040	0.20	mg/L	1	AF84307	06/29/18 07:06	06/29/18 07:06	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AF84307	06/29/18 07:06	06/29/18 07:06	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AF84307	06/29/18 07:06	06/29/18 07:06	EPA 300.0	SMP	U
LP3-B (18F2712-04) Water Sampled: 06/27/18 11:50 Received: 06/28/18 08:05											
Nitrate as N	**0.052**	**0.040**	**0.20**	**mg/L**	1	AF84307	06/29/18 07:23	06/29/18 07:23	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AF84307	06/29/18 07:23	06/29/18 07:23	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AF84307	06/29/18 07:23	06/29/18 07:23	EPA 300.0	SMP	U
LP4-S (18F2712-05) Water Sampled: 06/27/18 12:40 Received: 06/28/18 08:05											
Nitrate as N	ND	0.040	0.20	mg/L	1	AF84307	06/29/18 07:39	06/29/18 07:39	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AF84307	06/29/18 07:39	06/29/18 07:39	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AF84307	06/29/18 07:39	06/29/18 07:39	EPA 300.0	SMP	U
LP4-M (18F2712-06) Water Sampled: 06/27/18 13:00 Received: 06/28/18 08:05											
Nitrate as N	ND	0.040	0.20	mg/L	1	AF84307	06/29/18 08:28	06/29/18 08:28	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AF84307	06/29/18 08:28	06/29/18 08:28	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AF84307	06/29/18 08:28	06/29/18 08:28	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/25/18 13:49

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-B (18F2712-07) Water Sampled: 06/27/18 13:30 Received: 06/28/18 08:05											
Nitrate as N	ND	0.040	0.20	mg/L	1	AF84307	06/29/18 08:45	06/29/18 08:45	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AF84307	06/29/18 08:45	06/29/18 08:45	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AF84307	06/29/18 08:45	06/29/18 08:45	EPA 300.0	SMP	U
RF 3.8 (18F2712-08) Water Sampled: 06/27/18 14:35 Received: 06/28/18 08:05											
Nitrate as N	ND	0.040	0.20	mg/L	1	AF84307	06/29/18 09:01	06/29/18 09:01	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AF84307	06/29/18 09:01	06/29/18 09:01	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AF84307	06/29/18 09:01	06/29/18 09:01	EPA 300.0	SMP	U
ER 173.7 (18F2712-09) Water Sampled: 06/27/18 17:10 Received: 06/28/18 08:05											
Nitrate as N	ND	0.040	0.20	mg/L	1	AF84307	06/29/18 09:18	06/29/18 09:18	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AF84307	06/29/18 09:18	06/29/18 09:18	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AF84307	06/29/18 09:18	06/29/18 09:18	EPA 300.0	SMP	U
RF-BL (18F2712-10) Water Sampled: 06/27/18 18:55 Received: 06/28/18 08:05											
Nitrate as N	ND	0.040	0.20	mg/L	1	AF84307	06/29/18 09:34	06/29/18 09:34	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AF84307	06/29/18 09:34	06/29/18 09:34	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AF84307	06/29/18 09:34	06/29/18 09:34	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/25/18 13:49

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AG83380 - EPA 200.8											
Blank (AG83380-BLK1)					Prepared: 07/10/18 Analyzed: 07/11/18						
Iron	ND	10	50	ug/L							U
LCS (AG83380-BS1)					Prepared: 07/10/18 Analyzed: 07/11/18						
Iron	515	10	50	ug/L	520		99.0	85-115			
Duplicate (AG83380-DUP1)		**Source: 18F2695-01**			Prepared: 07/10/18 Analyzed: 07/11/18						
Iron	53.7	40	200	ug/L		55.7			3.66	20	R-01, J
Matrix Spike (AG83380-MS1)		**Source: 18F2695-01**			Prepared: 07/10/18 Analyzed: 07/11/18						
Iron	575	40	200	ug/L	520	55.7	99.9	70-130			
Matrix Spike (AG83380-MS2)		**Source: 18F2712-10**			Prepared: 07/10/18 Analyzed: 07/11/18						
Iron	532	10	50	ug/L	520	ND	102	70-130			
Matrix Spike Dup (AG83380-MSD1)		**Source: 18F2695-01**			Prepared: 07/10/18 Analyzed: 07/11/18						
Iron	618	40	200	ug/L	520	55.7	108	70-130	7.15	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/25/18 13:49

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF84222 - General Preparation											
Blank (AF84222-BLK1)					Prepared: 06/28/18 Analyzed: 07/03/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
Blank (AF84222-BLK2)					Prepared: 06/28/18 Analyzed: 07/03/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
LCS (AF84222-BS1)					Prepared: 06/28/18 Analyzed: 07/03/18						
Biochemical Oxygen Demand	214	2.0	5.0	mg/L	200		107	84-115			
Duplicate (AF84222-DUP1)		**Source: 18F2644-01**			Prepared: 06/28/18 Analyzed: 07/03/18						
Biochemical Oxygen Demand	298	2.0	5.0	mg/L		302			1.37	30	
Batch AG83148 - General Preparation											
Blank (AG83148-BLK1)					Prepared & Analyzed: 07/02/18						
Sulfide	ND	0.020	0.10	mg/L							U
LCS (AG83148-BS1)					Prepared & Analyzed: 07/02/18						
Sulfide	0.218	0.020	0.10	mg/L	0.198		110	85-115			
Duplicate (AG83148-DUP1)		**Source: 18F2712-01**			Prepared & Analyzed: 07/02/18						
Sulfide	ND	0.020	0.10	mg/L		ND				15	U
Matrix Spike (AG83148-MS1)		**Source: 18F2712-01**			Prepared & Analyzed: 07/02/18						
Sulfide	0.225	0.020	0.10	mg/L	0.198	ND	114	80-120			
Matrix Spike Dup (AG83148-MSD1)		**Source: 18F2712-01**			Prepared & Analyzed: 07/02/18						
Sulfide	0.227	0.020	0.10	mg/L	0.198	ND	115	80-120	0.885	15	

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Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AG83177 - General Prep											
Blank (AG83177-BLK1)					Prepared & Analyzed: 07/03/18						
Total Organic Carbon	ND	0.300	1.00	mg/L							U
LCS (AG83177-BS1)					Prepared & Analyzed: 07/03/18						
Total Organic Carbon	9.41	0.300	1.00	mg/L	10.0		94.1	85-115			
LCS Dup (AG83177-BSD1)					Prepared & Analyzed: 07/03/18						
Total Organic Carbon	10.0	0.300	1.00	mg/L	10.0		100	85-115	6.07	20	
Duplicate (AG83177-DUP1)		**Source: 18F2537-01**			Prepared & Analyzed: 07/03/18						
Total Organic Carbon	2.51	0.300	1.00	mg/L		2.54			1.14	20	
MRL Check (AG83177-MRL1)					Prepared & Analyzed: 07/03/18						
Total Organic Carbon	1.44	0.300	1.00	mg/L	1.25		115	0-200			
Matrix Spike (AG83177-MS1)		**Source: 18F2537-01**			Prepared & Analyzed: 07/03/18						
Total Organic Carbon	11.6	0.300	1.00	mg/L	10.0	2.54	90.4	70-130			
Matrix Spike Dup (AG83177-MSD1)		**Source: 18F2537-01**			Prepared & Analyzed: 07/03/18						
Total Organic Carbon	11.0	0.300	1.00	mg/L	10.0	2.54	84.3	70-130	5.41	20	
Batch AG83411 - General Preparation											
Blank (AG83411-BLK1)					Prepared: 06/26/18 Analyzed: 07/12/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L							U
Duplicate (AG83411-DUP1)		**Source: 18F2346-01**			Prepared: 06/26/18 Analyzed: 07/12/18						
Chlorophyll-a	0.00211	0.0010	0.010	mg/L		0.00227			7.40	50	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/25/18 13:49

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AG83411 - General Preparation											
Duplicate (AG83411-DUP2)		**Source: 18F2712-01**			Prepared: 06/29/18 Analyzed: 07/12/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Batch AG83434 - General Prep											
Blank (AG83434-BLK1)					Prepared & Analyzed: 07/10/18						
Phosphorus, total	ND	0.010	0.040	mg/L							U
LCS (AG83434-BS1)					Prepared & Analyzed: 07/10/18						
Phosphorus, total	0.196	0.010	0.040	mg/L	0.200		98.2	85-115			
Duplicate (AG83434-DUP1)		**Source: 18F2712-01**			Prepared & Analyzed: 07/10/18						
Phosphorus, total	ND	0.010	0.040	mg/L		ND				20	U
Matrix Spike (AG83434-MS1)		**Source: 18F2712-01**			Prepared & Analyzed: 07/10/18						
Phosphorus, total	0.191	0.010	0.040	mg/L	0.200	ND	95.6	70-130			
Matrix Spike (AG83434-MS2)		**Source: 18F2754-02**			Prepared & Analyzed: 07/10/18						
Phosphorus, total	0.956	0.050	0.20	mg/L	0.200	0.839	58.5	70-130			QM-4X
Matrix Spike Dup (AG83434-MSD1)		**Source: 18F2712-01**			Prepared & Analyzed: 07/10/18						
Phosphorus, total	0.189	0.010	0.040	mg/L	0.200	ND	94.3	70-130	1.37	20	
Batch AG83435 - General Prep											
Blank (AG83435-BLK1)					Prepared: 07/10/18 Analyzed: 07/11/18						
Dissolved Organic Carbon	ND	0.600	1.00	mg/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	07/25/18 13:49

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AG83435 - General Prep											
LCS (AG83435-BS1)					Prepared: 07/10/18 Analyzed: 07/11/18						
Dissolved Organic Carbon	9.37	0.600	1.00	mg/L	10.0		93.7	85-115			
LCS Dup (AG83435-BSD1)					Prepared: 07/10/18 Analyzed: 07/11/18						
Dissolved Organic Carbon	9.67	0.600	1.00	mg/L	10.0		96.7	85-115	3.15	20	
Duplicate (AG83435-DUP1)		**Source: 18F2537-01**			Prepared: 07/10/18 Analyzed: 07/11/18						
Dissolved Organic Carbon	2.21	0.600	1.00	mg/L		2.24			1.27	20	
MRL Check (AG83435-MRL1)					Prepared: 07/10/18 Analyzed: 07/11/18						
Dissolved Organic Carbon	1.47	0.600	1.00	mg/L	1.25		118	0-200			
Matrix Spike (AG83435-MS1)		**Source: 18F2537-02**			Prepared: 07/10/18 Analyzed: 07/11/18						
Dissolved Organic Carbon	12.2	0.600	1.00	mg/L	10.0	2.32	98.3	70-130			
Matrix Spike Dup (AG83435-MSD1)		**Source: 18F2537-02**			Prepared: 07/10/18 Analyzed: 07/11/18						
Dissolved Organic Carbon	13.3	0.600	1.00	mg/L	10.0	2.32	110	70-130	9.37	20	
Batch AG83564 - General Prep											
LCS (AG83564-BS1)					Prepared: 07/12/18 Analyzed: 07/13/18						
Total Kjeldahl Nitrogen	3.04	0.20	1.0	mg/L	2.98		102	80-120			
LCS Dup (AG83564-BSD1)					Prepared: 07/12/18 Analyzed: 07/13/18						
Total Kjeldahl Nitrogen	3.13	0.20	1.0	mg/L	2.98		105	80-120	2.98	20	
Matrix Spike (AG83564-MS1)		**Source: 18F2626-02**			Prepared: 07/12/18 Analyzed: 07/13/18						
Total Kjeldahl Nitrogen	3.23	0.20	1.0	mg/L	2.98	ND	108	75-125			

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	07/25/18 13:49

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AG83564 - General Prep											
Matrix Spike Dup (AG83564-MSD1)		**Source: 18F2626-02**			Prepared: 07/12/18 Analyzed: 07/13/18						
Total Kjeldahl Nitrogen	3.13	0.20	1.0	mg/L	2.98	ND	105	75-125	2.89	20	
Batch AG83622 - General Preparation											
LCS (AG83622-BS1)					Prepared & Analyzed: 07/13/18						
Ammonia as N	5.08	0.10	0.20	mg/L	5.00		102	90-110			
LCS Dup (AG83622-BSD1)					Prepared & Analyzed: 07/13/18						
Ammonia as N	4.90	0.10	0.20	mg/L	5.00		98.1	90-110	3.51	10	
Matrix Spike (AG83622-MS1)		**Source: 18G0536-02**			Prepared & Analyzed: 07/13/18						
Ammonia as N	9.28	0.10	0.20	mg/L	10.0	ND	92.8	85-115			
Matrix Spike Dup (AG83622-MSD1)		**Source: 18G0536-02**			Prepared & Analyzed: 07/13/18						
Ammonia as N	9.46	0.10	0.20	mg/L	10.0	ND	94.6	85-115	1.87	20	

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	07/25/18 13:49

Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AF84307 - General Preparation											
Blank (AF84307-BLK1)					Prepared & Analyzed: 06/29/18						
Nitrate as N	ND	0.040	0.20	mg/L							U
Orthophosphate	ND	0.10	0.30	mg/L							U
Nitrite as N	ND	0.050	0.20	mg/L							U
LCS (AF84307-BS1)					Prepared & Analyzed: 06/29/18						
Nitrate as N	5.71	0.040	0.20	mg/L	5.56		103	90-110			
Orthophosphate	17.1	0.10	0.30	mg/L	16.7		103	90-110			
Nitrite as N	5.42	0.050	0.20	mg/L	5.56		97.5	90-110			
Duplicate (AF84307-DUP1)		**Source: 18F2712-01**			Prepared & Analyzed: 06/29/18						
Nitrate as N	ND	0.040	0.20	mg/L		ND				20	U
Nitrite as N	ND	0.050	0.20	mg/L		ND				20	U
Orthophosphate	ND	0.10	0.30	mg/L		ND				20	U
Matrix Spike (AF84307-MS1)		**Source: 18F2712-01**			Prepared & Analyzed: 06/29/18						
Nitrate as N	5.22	0.20	1.0	mg/L	5.56	ND	94.0	80-120			
Orthophosphate	14.1	0.50	1.5	mg/L	16.7	ND	84.5	80-120			
Nitrite as N	4.31	0.25	1.0	mg/L	5.56	ND	77.5	80-120			QM-05
Matrix Spike (AF84307-MS2)		**Source: 18F2809-01**			Prepared & Analyzed: 06/29/18						
Nitrate as N	5.88	0.040	0.20	mg/L	5.56	ND	106	80-120			
Nitrite as N	5.79	0.050	0.20	mg/L	5.56	ND	104	80-120			
Orthophosphate	17.2	0.10	0.30	mg/L	16.7	ND	103	80-120			
Matrix Spike Dup (AF84307-MSD1)		**Source: 18F2712-01**			Prepared & Analyzed: 06/29/18						
Nitrate as N	5.22	0.20	1.0	mg/L	5.56	ND	94.0	80-120	0.0960	20	
Nitrite as N	4.37	0.25	1.0	mg/L	5.56	ND	78.7	80-120	1.54	20	QM-05
Orthophosphate	14.3	0.50	1.5	mg/L	16.7	ND	85.5	80-120	1.20	20	

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Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	07/25/18 13:49

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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fax 530.243.7494

3860 Morrow Lane, Suite F
Chico, California 95928
voice 530.894.8966
fax 530.894.5143

July 20, 2018

Lab ID: 18F1434

SHERI L. SPEAKS
ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
RE: LOW LEVEL METALS 18F2712

Dear SHERI L. SPEAKS ,

Enclosed are the analysis results for Work Order number 18F1434. All analyses were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

Ricky D. Jensen
Laboratory Director
California ELAP Certification Number 1677

basic laboratory
www.basiclab.com
2218 Railroad Avenue voice 530.243.7234
Redding, California 96001 fax 530.243.7494
3860 Morrow Lane, Suite F voice 530.894.8966
Chico, California 95928 fax 530.894.5143

Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18F2712

Lab No: 18F1434
Reported: 07/20/18
Phone: (707) 468-0401
P.O. #

Metals - Total

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
18F2712-01 LP-EB - Grab Water (18F1434-01) Sampled:06/27/18 08:45 Received:06/29/18 15:18									
Mercury	ng/l	ND		0.20	0.50	EPA 1631E	07/05/18	07/05/18	B8G0898
Methyl Mercury as Mercury	"	ND		0.020	0.050	EPA 1630	07/11/18	07/10/18	B8G1041
18F2712-02 LP3-S - Grab Water (18F1434-02) Sampled:06/27/18 11:00 Received:06/29/18 15:18									
Mercury	ng/l	**0.95**		0.20	0.50	EPA 1631E	07/05/18	07/05/18	B8G0898
Methyl Mercury as Mercury	"	**0.086**		0.020	0.050	EPA 1630	07/11/18	07/10/18	B8G1041
18F2712-03 LP3-M - Grab Water (18F1434-03) Sampled:06/27/18 11:20 Received:06/29/18 15:18									
Mercury	ng/l	**1.82**		0.20	0.50	EPA 1631E	07/05/18	07/05/18	B8G0898
Methyl Mercury as Mercury	"	**0.078**		0.020	0.050	EPA 1630	07/11/18	07/10/18	B8G1041
18F2712-04 LP3-B - Grab Water (18F1434-04) Sampled:06/27/18 11:50 Received:06/29/18 15:18									
Mercury	ng/l	**4.59**		0.20	0.50	EPA 1631E	07/05/18	07/05/18	B8G0898
Methyl Mercury as Mercury	"	**0.187**		0.020	0.050	EPA 1630	07/11/18	07/10/18	B8G1041
18F2712-05 LP4-S - Grab Water (18F1434-05) Sampled:06/27/18 12:40 Received:06/29/18 15:18									
Mercury	ng/l	**1.41**		0.20	0.50	EPA 1631E	07/05/18	07/05/18	B8G0898
Methyl Mercury as Mercury	"	**0.282**		0.020	0.050	EPA 1630	07/11/18	07/10/18	B8G1041
18F2712-06 LP4-M - Grab Water (18F1434-06) Sampled:06/27/18 13:00 Received:06/29/18 15:18									
Mercury	ng/l	**1.26**		0.20	0.50	EPA 1631E	07/05/18	07/05/18	B8G0898
Methyl Mercury as Mercury	"	**0.222**		0.020	0.050	EPA 1630	07/11/18	07/10/18	B8G1041
18F2712-07 LP4-B - Grab Water (18F1434-07) Sampled:06/27/18 13:30 Received:06/29/18 15:18									
Mercury	ng/l	**1.40**		0.20	0.50	EPA 1631E	07/05/18	07/05/18	B8G0898
Methyl Mercury as Mercury	"	**0.229**		0.020	0.050	EPA 1630	07/11/18	07/10/18	B8G1041
18F2712-08 RF 3.8 - Grab Water (18F1434-08) Sampled:06/27/18 14:35 Received:06/29/18 15:18									
Mercury	ng/l	**1.07**		0.20	0.50	EPA 1631E	07/05/18	07/05/18	B8G0898
Methyl Mercury as Mercury	"	**0.045**	J	0.020	0.050	EPA 1630	07/11/18	07/10/18	B8G1041
18F2712-09 EF 173.7 - Grab Water (18F1434-09) Sampled:06/27/18 17:10 Received:06/29/18 15:18									
Mercury	ng/l	**1.12**		0.20	0.50	EPA 1631E	07/05/18	07/05/18	B8G0898
Methyl Mercury as Mercury	"	**0.042**	J	0.020	0.050	EPA 1630	07/11/18	07/10/18	B8G1041
18F2712-10 RF-BL - Grab Water (18F1434-10) Sampled:06/27/18 18:55 Received:06/29/18 15:18									
Mercury	ng/l	ND		0.20	0.50	EPA 1631E	07/05/18	07/05/18	B8G0898
Methyl Mercury as Mercury	"	ND		0.020	0.050	EPA 1630	07/18/18	07/17/18	B8G1267

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

basic laboratory
www.basiclab.com
2218 Railroad Avenue voice 530.243.7234
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3860 Morrow Lane, Suite F voice 530.894.8966
Chico, California 95928 fax 530.894.5143

Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18F2712

Lab No: 18F1434
Reported: 07/20/18
Phone: (707) 468-0401
P.O. #

Quality Control Data

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Metals - Total										
Batch B8G0898 - BrCl Digestion										
Blank										
Mercury	ND	0.50	ng/l							
Blank										
Mercury	ND	0.50	ng/l							
Blank										
Mercury	ND	0.50	ng/l							
LCS										
Mercury	10.4	0.50	ng/l	10.0		104	77-123			
Matrix Spike Source: 18F1434-01										
Mercury	10.6	0.50	ng/l	10.0	ND	106	71-125			
Matrix Spike Dup Source: 18F1434-01										
Mercury	10.9	0.50	ng/l	10.0	ND	109	71-125	3.52	24	
Batch B8G1041 - Draft EPA Method 1630 Distillation (Modified)										
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
LCS										
Methyl Mercury as Mercury	2.31	0.050	ng/l	2.00		115	67-133			
Duplicate Source: 18F1434-09										
Methyl Mercury as Mercury	0.047	0.050	ng/l		0.042			11.6	35	J
Matrix Spike Source: 18F1124-01										
Methyl Mercury as Mercury	1.13	0.050	ng/l	1.00	ND	113	65-135			
Matrix Spike Source: 18F1355-01										
Methyl Mercury as Mercury	1.11	0.050	ng/l	1.00	ND	111	65-135			
Matrix Spike Dup Source: 18F1124-01										
Methyl Mercury as Mercury	1.14	0.050	ng/l	1.00	ND	114	65-135	0.229	35	
Matrix Spike Dup Source: 18F1355-01										
Methyl Mercury as Mercury	1.26	0.050	ng/l	1.00	ND	126	65-135	12.7	35	
Batch B8G1267 - Draft EPA Method 1630 Distillation (Modified)										
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18F2712

Lab No: 18F1434
Reported: 07/20/18
Phone: (707) 468-0401
P.O. #

Quality Control Data

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Metals - Total										
Batch B8G1267 - Draft EPA Method 1630 Distillation (Modified)										
Methyl Mercury as Mercury	ND	0.050	ng/l							
LCS										
Methyl Mercury as Mercury	2.05	0.050	ng/l	2.00		102	67-133			
Duplicate Source: 18G0581-01										
Methyl Mercury as Mercury	ND	0.050	ng/l		ND				35	
Matrix Spike Source: 18F1434-10										
Methyl Mercury as Mercury	1.10	0.050	ng/l	1.00	ND	110	65-135			
Matrix Spike Source: 18G0416-01										
Methyl Mercury as Mercury	1.15	0.050	ng/l	1.00	ND	115	65-135			
Matrix Spike Dup Source: 18F1434-10										
Methyl Mercury as Mercury	1.12	0.050	ng/l	1.00	ND	112	65-135	1.77	35	
Matrix Spike Dup Source: 18G0416-01										
Methyl Mercury as Mercury	1.23	0.050	ng/l	1.00	ND	123	65-135	6.61	35	

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). The J flag is equivalent to the DNQ Estimated Concentration flag.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
<	Less than reporting limit
≤	Less than or equal to reporting limit
>	Greater than reporting limit
≥	Greater than or equal to reporting limit
MDL	Method Detection Limit
RL/ML	Minimum Level of Quantitation
MCL/AL	Maxium Contaminant Level/Action Level
mg/kg	Results reported as wet weight
TTLC	Total Threshold Limit Concentration
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leachate Procedure
Note 1	Received Temperature - according to EPA guidelines, samples for most chemistry methods should be held at ≤6 degrees C after collection, including during transportation, unless the time from sampling to delivery is <2 hours. Regulating agencies may invalidate results if temperature requirements are not met.
Note 2	According to 40 CFR Part 136 Table II, the following tests should be analyzed in the field within 15 minutes of sampling: pH, chlorine, dissolved oxygen, and sulfite.

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18F2712

18F1434

7-13-18

18F1434

1

SENDING LABORATORY:	**RECEIVING LABORATORY:**
Alpha Analytical Laboratories, Inc.	Basic Laboratory
208 Mason St.	2218 Railroad Ave
Ukiah, CA 95482	Redding, CA 96001
Phone: (707)468-0401	Phone :530-243-7234
Fax: (707)468-5267	Fax: 530-243-7494
Project Manager: David S. Pingatore	**Terms: Net 30**

Analysis	Due	Expires	Comments
18F2712-01 LP-EB [Water] Sampled 06/27/18 08:45			-1 11.3c
BAL Hg 1631	07/13/18 12:00	07/25/18 08:45	
BAL Hg Methyl	07/13/18 12:00	12/24/18 08:45	
Containers Supplied: 500ml Glass - HCl (I) AG 500ml Glass - Unpreserve TW			
18F2712-02 LP3-S [Water] Sampled 06/27/18 11:00			-2 12.4c
BAL Hg 1631	07/13/18 12:00	07/25/18 11:00	
BAL Hg Methyl	07/13/18 12:00	12/24/18 11:00	
Containers Supplied: 500ml Glass - HCl (I) AG 500ml Glass - Unpreserve TW			
18F2712-03 LP3-M [Water] Sampled 06/27/18 11:20			-3 10.4c
BAL Hg 1631	07/13/18 12:00	07/25/18 11:20	
BAL Hg Methyl	07/13/18 12:00	12/24/18 11:20	
Containers Supplied: 500ml Glass - HCl (I) AG 500ml Glass - Unpreserve TW			
18F2712-04 LP3-B [Water] Sampled 06/27/18 11:50			-4 11.0c
BAL Hg 1631	07/13/18 12:00	07/25/18 11:50	
BAL Hg Methyl	07/13/18 12:00	12/24/18 11:50	
Containers Supplied: 500ml Glass - HCl (I) AG 500ml Glass - Unpreserve TW			

Released By	Date	Received By	Date
	6-28-18	T Williamson	6-29-18 1518
		TCW	6-29-18 16:00

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18F2712

18F1434

Analysis	Due	Expires	Comments
18F2712-05 LP4-S [Water] Sampled 06/27/18 12:40			-5 10.8°
BAL Hg 1631	07/13/18 12:00	07/25/18 12:40	
BAL Hg Methyl	07/13/18 12:00	12/24/18 12:40	
Containers Supplied: AG			
500ml Glass - HCl (I) 500ml Glass - Unpreserve TW			
18F2712-06 LP4-M [Water] Sampled 06/27/18 13:00			-6 11.9°
BAL Hg 1631	07/13/18 12:00	07/25/18 13:00	
BAL Hg Methyl	07/13/18 12:00	12/24/18 13:00	
Containers Supplied: AG			
500ml Glass - HCl (I) 500ml Glass - Unpreserve TW			
18F2712-07 LP4-B [Water] Sampled 06/27/18 13:30			-7 10.8°
BAL Hg 1631	07/13/18 12:00	07/25/18 13:30	
BAL Hg Methyl	07/13/18 12:00	12/24/18 13:30	
Containers Supplied: AG			
500ml Glass - HCl (I) 500ml Glass - Unpreserve TW			
18F2712-08 RF 3.8 [Water] Sampled 06/27/18 14:35			-8 11.1°
BAL Hg 1631	07/13/18 12:00	07/25/18 14:35	
BAL Hg Methyl	07/13/18 12:00	12/24/18 14:35	
Containers Supplied: AG			
500ml Glass - HCl (I) 500ml Glass - Unpreserve TW			
18F2712-09 ER 173.7 [Water] Sampled 06/27/18 17:10			-9 9.9°
BAL Hg 1631	07/13/18 12:00	07/25/18 17:10	
BAL Hg Methyl	07/13/18 12:00	12/24/18 17:10	
Containers Supplied: AG			
500ml Glass - HCl (I) 500ml Glass - Unpreserve TW			

Released By	Date	Received By	Date
	6-28-18	TW Whelmon	6-29-18 1518
Released By	Date	Received By	Date
		TW	6-29-18 1600

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18F2712

18F1434

Analysis	Due	Expires	Comments
18F2712-10 RF-BL [Water] Sampled 06/27/18 18:55			-10 10.3°
BAL Hg 1631	07/13/18 12:00	07/25/18 18:55	
BAL Hg Methyl	07/13/18 12:00	12/24/18 18:55	

Containers Supplied:

500ml Glass - HCl (I) AE 500ml Glass - Unpreserve TW

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+QC
+MDL

Released By	6-28-18 Date	TWilkerson Received By	6-29-18 1518 Date
Released By	Date	TW Received By	6-29-18 1600 Date

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

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208 Mason Street, Ukiah CA 95482
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email: clientservices@alpha-labs.com

ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

Bay Area Laboratory
262 Rickenbacker Circle, Livermore CA 94551
925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18F2712 Pg 1 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Analysis Request: TOC	DOC	Fe 200.8 Total	Ammonia-N	Phosphorus, Total	TKN	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	Chlorophyll-A	Sulfide	Sample Notes or DDW Source Numbers:
LP-EB	6/27	845											X			10	X	X	X	X	X	X	X	X	X	X	X	
LP3-S		1100														10	X	X	X	X	X	X	X	X	X	X	X	
LP3-M		1120														10	X	X	X	X	X	X	X	X	X	X	X	
LP3-B		1150														9	X	X	X	X	X	X	X	X	X	.	X	no chl-a analysis
LP4-S		1240														10	X	X	X	X	X	X	X	X	X	X	X	
LP4-M		1300														10	X	X	X	X	X	X	X	X	X	X	X	
LP4-B		1330														9	X	X	X	X	X	X	X	X	X		X	no chl-a analysis
RF3.8		1435														9	X	X	X	X	X	X	X	X	X	X		No sulfide analysis
ER173.7		1710														9	X	X	X	X	X	X	X	X	X	X		no sulfide analysis
RF-BL		1855														10	X	X	X	X	X	X	X	X	X	X	X	

TAT
Standard 10 days: X
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ (Lab preapproval required)

Temp upon Receipt °C
Ukiah temp: 1.0
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		6-28-18	0805

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):

Travel and Site Time:	Mileage:	Misc. Supplies:

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

Corporate Laboratory
208 Mason Street, Ukiah CA 95482
707-468-0401 F) 707-468-5267
email: clientservices@alpha-labs.com

ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

Bay Area Laboratory
262 Rickenbacker Circle, Livermore CA 94551
925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18E2712 Pg 2 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	Analysis Request: Hg 1631	Analysis Request: MeHg 1630	Sample Notes or DDW Source Numbers:
LP-EB	6/27	845											X				X	X	
LP3-S		1100															X	X	
LP3-M		1120	6														X	X	
LP3-B		1150															X	X	
LP4-S		1240															X	X	
LP4-M		1300														1	X	X	
LP4-B		1330														PO	X	X	
RF3.8		1435															X	X	
ER173.7		1710														See	X	X	
RF-BL		1855															X	X	

TAT
Standard 10 days: ⊘
RUSH: 5 days ○ 48 hours ○ Other: ___ days ○ (Lab preapproval required)

Temp upon Receipt °C
Ukiah temp: 1.8
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		6/28/18	0815

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID:
EDF to (Email Address):
Sampling Company Log Code:

Travel and Site Time: | Mileage: | Misc. Supplies:

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267
Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 •Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

ELAP Certificates 1551, 2728, and 2922

30 July 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18F2839

Enclosed are the results of analyses for samples received by the laboratory on 06/29/18 09:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Chelsea L. Sandelin For David S. Pingatore
Project Manager

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267
Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 •Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley, CA 94705	Project Number: 642.1	07/30/18 14:49

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LP1-S	18F2839-01	Water	06/28/18 13:05	06/29/18 09:00
LP1-M	18F2839-02	Water	06/28/18 13:25	06/29/18 09:00
LP1-B	18F2839-03	Water	06/28/18 14:00	06/29/18 09:00
LP2-S	18F2839-04	Water	06/28/18 11:25	06/29/18 09:00
LP2-M	18F2839-05	Water	06/28/18 11:45	06/29/18 09:00
LP2-B	18F2839-06	Water	06/28/18 12:10	06/29/18 09:00
LP-DUP	18F2839-07	Water	06/28/18 13:45	06/29/18 09:00
LP-BL	18F2839-08	Water	06/28/18 10:00	06/29/18 09:00

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.

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley, CA 94705	Project Number: 642.1	07/30/18 14:49

	Result	Reporting Limit	Dilution	Batch	Prepared	Analyzed	Method	Note
LP1-S (18F2839-01)		**Sample Type: Water**				**Sampled: 06/28/18 13:05**		
Metals by EPA Method 200.8 ICP/MS								
Iron	**66 ug/L**	**50**	1	AG83507	07/13/18 06:15	07/16/18 14:08	EPA 200.8	
Conventional Chemistry Parameters by APHA/EPA Methods								
Ammonia as N	ND mg/L	0.20	1	AG83684	07/16/18 09:00	07/16/18 16:30	SM4500NH3C	U
Biochemical Oxygen Demand	**2.0 mg/L**	**5.0**	1	AF84272	06/29/18 14:00	07/04/18 08:00	SM5210B	J
Chlorophyll-a	**0.0016 mg/L**	**0.010**	1	AG83944	06/29/18 16:45	07/26/18 15:00	SM10200H	J
Dissolved Organic Carbon	**2.28 mg/L**	**1.00**	1	AG83435	07/10/18 06:17	07/12/18 10:16	SM5310C	
Sulfide	ND mg/L	0.10	1	AG83148	07/02/18 11:00	07/02/18 13:00	SM4500-S2 D	U
Nitrate + Nitrite as N	ND mg/L	0.40	1	AG83761	07/17/18 07:40	07/17/18 08:11	Calculation	U
Total Kjeldahl Nitrogen	**0.12 mg/L**	**1.0**	1	AG83681	07/17/18 07:55	07/18/18 09:55	SM4500-Norg B	J
Phosphorus, total	**0.012 mg/L**	**0.040**	1	AG83503	07/11/18 08:30	07/11/18 10:39	SM4500-P E	J
Total Organic Carbon	**2.47 mg/L**	**1.00**	1	AG83177	07/03/18 07:49	07/03/18 18:14	SM5310C	
Anions by EPA Method 300.0								
Nitrate as N	ND mg/L	0.20	1	AF84309	06/29/18 15:35	06/29/18 15:35	EPA 300.0	U
Nitrite as N	ND mg/L	0.20	1	AF84309	06/29/18 15:35	06/29/18 15:35	EPA 300.0	U
Orthophosphate	ND mg/L	0.30	1	AF84309	06/29/18 15:35	06/29/18 15:35	EPA 300.0	U
LP1-M (18F2839-02)		**Sample Type: Water**				**Sampled: 06/28/18 13:25**		
Metals by EPA Method 200.8 ICP/MS								
Iron	**75 ug/L**	**50**	1	AG83507	07/13/18 06:15	07/16/18 15:08	EPA 200.8	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley, CA 94705	Project Number: 642.1	07/30/18 14:49

	Result	Reporting Limit	Dilution	Batch	Prepared	Analyzed	Method	Note
LP1-M (18F2839-02)		**Sample Type: Water**				**Sampled: 06/28/18 13:25**		
Conventional Chemistry Parameters by APHA/EPA Methods								
Ammonia as N	ND mg/L	0.20	1	AG83684	07/16/18 09:00	07/16/18 16:30	SM4500NH3C	U
Biochemical Oxygen Demand	**2.5 mg/L**	**5.0**	1	AF84272	06/29/18 14:00	07/04/18 08:00	SM5210B	J
Chlorophyll-a	**0.0053 mg/L**	**0.010**	1	AG83944	06/29/18 16:45	07/26/18 15:00	SM10200H	J
Dissolved Organic Carbon	**2.13 mg/L**	**1.00**	1	AG83435	07/10/18 06:17	07/12/18 10:28	SM5310C	
Sulfide	ND mg/L	0.10	1	AG83148	07/02/18 11:00	07/02/18 13:00	SM4500-S2 D	U
Nitrate + Nitrite as N	ND mg/L	0.40	1	AG83761	07/17/18 07:40	07/17/18 08:11	Calculation	U
Total Kjeldahl Nitrogen	**0.26 mg/L**	**1.0**	1	AG83681	07/17/18 07:55	07/18/18 09:55	SM4500-Norg B	J
Phosphorus, total	**0.020 mg/L**	**0.040**	1	AG83503	07/11/18 08:30	07/11/18 10:39	SM4500-P E	J
Total Organic Carbon	**2.44 mg/L**	**1.00**	1	AG83177	07/03/18 07:49	07/03/18 18:34	SM5310C	
Anions by EPA Method 300.0								
Nitrate as N	ND mg/L	0.20	1	AF84309	06/29/18 15:51	06/29/18 15:51	EPA 300.0	U
Nitrite as N	ND mg/L	0.20	1	AF84309	06/29/18 15:51	06/29/18 15:51	EPA 300.0	U
Orthophosphate	ND mg/L	0.30	1	AF84309	06/29/18 15:51	06/29/18 15:51	EPA 300.0	U
LP1-B (18F2839-03)		**Sample Type: Water**				**Sampled: 06/28/18 14:00**		
Metals by EPA Method 200.8 ICP/MS								
Iron	**220 ug/L**	**50**	1	AG83507	07/13/18 06:15	07/16/18 15:15	EPA 200.8	
Conventional Chemistry Parameters by APHA/EPA Methods								
Ammonia as N	ND mg/L	0.20	1	AG83684	07/16/18 09:00	07/16/18 16:30	SM4500NH3C	U
Biochemical Oxygen Demand	ND mg/L	5.0	1	AF84272	06/29/18 14:00	07/04/18 08:00	SM5210B	U
Dissolved Organic Carbon	**2.01 mg/L**	**1.00**	1	AG83435	07/10/18 06:17	07/12/18 10:39	SM5310C	
Sulfide	ND mg/L	0.10	1	AG83148	07/02/18 11:00	07/02/18 13:00	SM4500-S2 D	U
Nitrate + Nitrite as N	**0.034 mg/L**	**0.40**	1	AG83761	07/17/18 07:40	07/17/18 08:11	Calculation	J
Total Kjeldahl Nitrogen	**0.070 mg/L**	**1.0**	1	AG83681	07/18/18 07:55	07/18/18 12:36	SM4500-Norg B	J
Phosphorus, total	**0.026 mg/L**	**0.040**	1	AG83503	07/11/18 08:30	07/11/18 10:39	SM4500-P E	J
Total Organic Carbon	**2.39 mg/L**	**1.00**	1	AG83177	07/03/18 07:49	07/03/18 18:53	SM5310C	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley, CA 94705	Project Number: 642.1	07/30/18 14:49

	Result	Reporting Limit	Dilution	Batch	Prepared	Analyzed	Method	Note
LP1-B (18F2839-03)		**Sample Type: Water**				**Sampled: 06/28/18 14:00**		
Anions by EPA Method 300.0								
Nitrate as N	ND mg/L	0.20	1	AF84309	06/29/18 16:08	06/29/18 16:08	EPA 300.0	U
Nitrite as N	ND mg/L	0.20	1	AF84309	06/29/18 16:08	06/29/18 16:08	EPA 300.0	U
Orthophosphate	ND mg/L	0.30	1	AF84309	06/29/18 16:08	06/29/18 16:08	EPA 300.0	U
LP2-S (18F2839-04)		**Sample Type: Water**				**Sampled: 06/28/18 11:25**		
Metals by EPA Method 200.8 ICP/MS								
Iron	**60 ug/L**	**50**	1	AG83507	07/13/18 06:15	07/16/18 15:22	EPA 200.8	
Conventional Chemistry Parameters by APHA/EPA Methods								
Ammonia as N	ND mg/L	0.20	1	AG83684	07/16/18 09:00	07/16/18 16:30	SM4500NH3C	U
Biochemical Oxygen Demand	**2.2 mg/L**	**5.0**	1	AF84272	06/29/18 14:00	07/04/18 08:00	SM5210B	J
Chlorophyll-a	ND mg/L	0.010	1	AG83944	06/29/18 16:45	07/26/18 15:00	SM10200H	U
Dissolved Organic Carbon	**2.26 mg/L**	**1.00**	1	AG83435	07/10/18 06:17	07/12/18 10:50	SM5310C	
Sulfide	ND mg/L	0.10	1	AG83148	07/02/18 11:00	07/02/18 13:00	SM4500-S2 D	U
Nitrate + Nitrite as N	ND mg/L	0.40	1	AG83761	07/17/18 07:40	07/17/18 08:11	Calculation	U
Total Kjeldahl Nitrogen	**0.18 mg/L**	**1.0**	1	AG83681	07/18/18 07:55	07/18/18 12:36	SM4500-Norg B	J
Phosphorus, total	**0.013 mg/L**	**0.040**	1	AG83503	07/11/18 08:30	07/11/18 10:39	SM4500-P E	J
Total Organic Carbon	**2.51 mg/L**	**1.00**	1	AG83177	07/03/18 07:49	07/03/18 19:12	SM5310C	
Anions by EPA Method 300.0								
Nitrate as N	ND mg/L	0.20	1	AF84309	06/29/18 16:24	06/29/18 16:24	EPA 300.0	U
Nitrite as N	ND mg/L	0.20	1	AF84309	06/29/18 16:24	06/29/18 16:24	EPA 300.0	U
Orthophosphate	ND mg/L	0.30	1	AF84309	06/29/18 16:24	06/29/18 16:24	EPA 300.0	U
LP2-M (18F2839-05)		**Sample Type: Water**				**Sampled: 06/28/18 11:45**		
Metals by EPA Method 200.8 ICP/MS								
Iron	**59 ug/L**	**50**	1	AG83507	07/13/18 06:15	07/16/18 15:28	EPA 200.8	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley, CA 94705	Project Number: 642.1	07/30/18 14:49

	Result	Reporting Limit	Dilution	Batch	Prepared	Analyzed	Method	Note
LP2-M (18F2839-05)		**Sample Type: Water**				**Sampled: 06/28/18 11:45**		
Conventional Chemistry Parameters by APHA/EPA Methods								
Ammonia as N	ND mg/L	0.20	1	AG83684	07/16/18 09:00	07/16/18 16:30	SM4500NH3C	U
Biochemical Oxygen Demand	**2.0 mg/L**	**5.0**	1	AF84272	06/29/18 14:00	07/04/18 08:00	SM5210B	J
Chlorophyll-a	**0.0011 mg/L**	**0.010**	1	AG83944	06/29/18 16:45	07/26/18 15:00	SM10200H	J
Dissolved Organic Carbon	**2.29 mg/L**	**1.00**	1	AG83435	07/10/18 06:17	07/12/18 11:02	SM5310C	
Sulfide	ND mg/L	0.10	1	AG83148	07/02/18 11:00	07/02/18 13:00	SM4500-S2 D	U
Nitrate + Nitrite as N	ND mg/L	0.40	1	AG83761	07/17/18 07:40	07/17/18 08:11	Calculation	U
Total Kjeldahl Nitrogen	**0.10 mg/L**	**1.0**	1	AG83681	07/18/18 07:55	07/18/18 12:36	SM4500-Norg B	J
Phosphorus, total	**0.016 mg/L**	**0.040**	1	AG83503	07/11/18 08:30	07/11/18 10:39	SM4500-P E	J
Total Organic Carbon	**2.48 mg/L**	**1.00**	1	AG83177	07/03/18 07:49	07/03/18 19:32	SM5310C	
Anions by EPA Method 300.0								
Nitrate as N	ND mg/L	0.20	1	AF84309	06/29/18 16:40	06/29/18 16:40	EPA 300.0	U
Nitrite as N	ND mg/L	0.20	1	AF84309	06/29/18 16:40	06/29/18 16:40	EPA 300.0	U
Orthophosphate	ND mg/L	0.30	1	AF84309	06/29/18 16:40	06/29/18 16:40	EPA 300.0	U
LP2-B (18F2839-06)		**Sample Type: Water**				**Sampled: 06/28/18 12:10**		
Metals by EPA Method 200.8 ICP/MS								
Iron	**65 ug/L**	**50**	1	AG83507	07/13/18 06:15	07/16/18 15:36	EPA 200.8	
Conventional Chemistry Parameters by APHA/EPA Methods								
Ammonia as N	ND mg/L	0.20	1	AG83684	07/16/18 09:00	07/16/18 16:30	SM4500NH3C	U
Biochemical Oxygen Demand	**2.4 mg/L**	**5.0**	1	AF84272	06/29/18 14:00	07/04/18 08:00	SM5210B	J
Dissolved Organic Carbon	**2.22 mg/L**	**1.00**	1	AG83435	07/10/18 06:17	07/12/18 11:13	SM5310C	
Sulfide	ND mg/L	0.10	1	AG83148	07/02/18 11:00	07/02/18 13:00	SM4500-S2 D	U
Nitrate + Nitrite as N	ND mg/L	0.40	1	AG83761	07/17/18 07:40	07/17/18 08:11	Calculation	U
Total Kjeldahl Nitrogen	**0.10 mg/L**	**1.0**	1	AG83681	07/18/18 07:55	07/18/18 12:36	SM4500-Norg B	J
Phosphorus, total	**0.015 mg/L**	**0.040**	1	AG83503	07/11/18 08:30	07/11/18 10:39	SM4500-P E	J
Total Organic Carbon	**2.59 mg/L**	**1.00**	1	AG83177	07/03/18 07:49	07/03/18 19:51	SM5310C	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley, CA 94705	Project Number: 642.1	07/30/18 14:49

	Result	Reporting Limit	Dilution	Batch	Prepared	Analyzed	Method	Note
LP2-B (18F2839-06)		**Sample Type: Water**				**Sampled: 06/28/18 12:10**		
Anions by EPA Method 300.0								
Nitrate as N	ND mg/L	0.20	1	AF84309	06/29/18 16:57	06/29/18 16:57	EPA 300.0	U
Nitrite as N	ND mg/L	0.20	1	AF84309	06/29/18 16:57	06/29/18 16:57	EPA 300.0	U
Orthophosphate	ND mg/L	0.30	1	AF84309	06/29/18 16:57	06/29/18 16:57	EPA 300.0	U
LP-DUP (18F2839-07)		**Sample Type: Water**				**Sampled: 06/28/18 13:45**		
Metals by EPA Method 200.8 ICP/MS								
Iron	**79 ug/L**	**50**	1	AG83507	07/13/18 06:15	07/16/18 15:44	EPA 200.8	
Conventional Chemistry Parameters by APHA/EPA Methods								
Ammonia as N	ND mg/L	0.20	1	AG83684	07/16/18 09:00	07/16/18 16:30	SM4500NH3C	U
Biochemical Oxygen Demand	ND mg/L	5.0	1	AF84272	06/29/18 14:00	07/04/18 08:00	SM5210B	U
Chlorophyll-a	**0.0047 mg/L**	**0.010**	1	AG83944	06/29/18 16:45	07/26/18 15:00	SM10200H	J
Dissolved Organic Carbon	**3.55 mg/L**	**1.00**	1	AG83435	07/10/18 06:17	07/12/18 11:24	SM5310C	
Sulfide	ND mg/L	0.10	1	AG83148	07/02/18 11:00	07/02/18 13:00	SM4500-S2 D	U
Nitrate + Nitrite as N	ND mg/L	0.40	1	AG83761	07/17/18 07:40	07/17/18 08:11	Calculation	U
Total Kjeldahl Nitrogen	**0.18 mg/L**	**1.0**	1	AG83681	07/18/18 07:55	07/18/18 12:36	SM4500-Norg B	J
Phosphorus, total	**0.020 mg/L**	**0.040**	1	AG83503	07/11/18 08:30	07/11/18 10:39	SM4500-P E	J
Total Organic Carbon	**2.50 mg/L**	**1.00**	1	AG83177	07/03/18 07:49	07/03/18 20:11	SM5310C	
Anions by EPA Method 300.0								
Nitrate as N	ND mg/L	0.20	1	AF84309	06/29/18 17:13	06/29/18 17:13	EPA 300.0	U
Nitrite as N	ND mg/L	0.20	1	AF84309	06/29/18 17:13	06/29/18 17:13	EPA 300.0	U
Orthophosphate	ND mg/L	0.30	1	AF84309	06/29/18 17:13	06/29/18 17:13	EPA 300.0	U
LP-BL (18F2839-08)		**Sample Type: Water**				**Sampled: 06/28/18 10:00**		
Metals by EPA Method 200.8 ICP/MS								
Iron	ND ug/L	50	1	AG83507	07/13/18 06:15	07/16/18 15:50	EPA 200.8	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley, CA 94705	Project Number: 642.1	07/30/18 14:49

	Result	Reporting Limit	Dilution	Batch	Prepared	Analyzed	Method	Note
LP-BL (18F2839-08)		**Sample Type: Water**			**Sampled: 06/28/18 10:00**			
Conventional Chemistry Parameters by APHA/EPA Methods								
Ammonia as N	ND mg/L	0.20	1	AG83684	07/16/18 09:00	07/16/18 16:30	SM4500NH3C	U
Biochemical Oxygen Demand	ND mg/L	5.0	1	AF84272	06/29/18 14:00	07/04/18 08:00	SM5210B	U
Chlorophyll-a	ND mg/L	0.010	1	AG83944	06/29/18 16:45	07/26/18 15:00	SM10200H	U
Dissolved Organic Carbon	ND mg/L	1.00	1	AG83435	07/10/18 06:17	07/12/18 11:36	SM5310C	U
Sulfide	ND mg/L	0.10	1	AG83148	07/02/18 11:00	07/02/18 13:00	SM4500-S2 D	U
Nitrate + Nitrite as N	ND mg/L	0.40	1	AG83761	07/17/18 07:40	07/17/18 08:11	Calculation	U
Total Kjeldahl Nitrogen	ND mg/L	1.0	1	AG83681	07/18/18 07:55	07/18/18 12:36	SM4500-Norg B	U
Phosphorus, total	ND mg/L	0.040	1	AG83503	07/11/18 08:30	07/11/18 10:39	SM4500-P E	U
Total Organic Carbon	ND mg/L	1.00	1	AG83177	07/03/18 07:49	07/03/18 20:30	SM5310C	U
Anions by EPA Method 300.0								
Nitrate as N	ND mg/L	0.20	1	AF84309	06/29/18 17:29	06/29/18 17:29	EPA 300.0	U
Nitrite as N	ND mg/L	0.20	1	AF84309	06/29/18 17:29	06/29/18 17:29	EPA 300.0	U
Orthophosphate	ND mg/L	0.30	1	AF84309	06/29/18 17:29	06/29/18 17:29	EPA 300.0	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley, CA 94705	Project Number: 642.1	07/30/18 14:49

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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July 20, 2018

Lab ID: 18G0115

SHERI L. SPEAKS
ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
RE: LOW LEVEL METALS 18F2839

Dear SHERI L. SPEAKS ,

Enclosed are the analysis results for Work Order number 18G0115. All analyses were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

Ricky D. Jensen
Laboratory Director
California ELAP Certification Number 1677

basic laboratory
www.basiclab.com
2218 Railroad Avenue voice 530.243.7234
Redding, California 96001 fax 530.243.7494
3860 Morrow Lane, Suite F voice 530.894.8966
Chico, California 95928 fax 530.894.5143

Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18F2839

Lab No: 18G0115
Reported: 07/20/18
Phone: (707) 468-0401
P.O. #

Metals - Total

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
18F2839-01 LP1-S - Grab Water (18G0115-01) Sampled:06/28/18 13:05 Received:07/03/18 13:04									
Mercury	ng/l	1.27		0.20	0.50	EPA 1631E	07/11/18	07/11/18	B8G1073
Methyl Mercury as Mercury	"	0.089		0.020	0.050	EPA 1630	07/18/18	07/17/18	B8G1267
18F2839-02 LP1-M - Grab Water (18G0115-02) Sampled:06/28/18 13:25 Received:07/03/18 13:04									
Mercury	ng/l	1.31		0.20	0.50	EPA 1631E	07/11/18	07/11/18	B8G1073
Methyl Mercury as Mercury	"	0.123		0.020	0.050	EPA 1630	07/18/18	07/17/18	B8G1267
18F2839-03 LP1-B - Grab Water (18G0115-03) Sampled:06/28/18 14:00 Received:07/03/18 13:04									
Mercury	ng/l	3.03		0.20	0.50	EPA 1631E	07/11/18	07/11/18	B8G1073
Methyl Mercury as Mercury	"	0.099		0.020	0.050	EPA 1630	07/18/18	07/17/18	B8G1267
18F2839-04 LP2-S - Grab Water (18G0115-04) Sampled:06/28/18 11:25 Received:07/03/18 13:04									
Mercury	ng/l	1.06		0.20	0.50	EPA 1631E	07/11/18	07/11/18	B8G1073
Methyl Mercury as Mercury	"	0.098		0.020	0.050	EPA 1630	07/18/18	07/17/18	B8G1267
18F2839-05 LP2-M - Grab Water (18G0115-05) Sampled:06/28/18 11:45 Received:07/03/18 13:04									
Mercury	ng/l	0.99		0.20	0.50	EPA 1631E	07/11/18	07/11/18	B8G1073
Methyl Mercury as Mercury	"	0.088		0.020	0.050	EPA 1630	07/18/18	07/17/18	B8G1267
18F2839-06 LP2-B - Grab Water (18G0115-06) Sampled:06/28/18 12:10 Received:07/03/18 13:04									
Mercury	ng/l	1.21		0.20	0.50	EPA 1631E	07/11/18	07/11/18	B8G1073
Methyl Mercury as Mercury	"	0.089		0.020	0.050	EPA 1630	07/18/18	07/17/18	B8G1267
18F2839-07 LP-DUP - Grab Water (18G0115-07) Sampled:06/28/18 13:45 Received:07/03/18 13:04									
Mercury	ng/l	1.55		0.20	0.50	EPA 1631E	07/11/18	07/11/18	B8G1073
Methyl Mercury as Mercury	"	0.116		0.020	0.050	EPA 1630	07/18/18	07/17/18	B8G1267
18F2839-08 LP-BL - Grab Water (18G0115-08) Sampled:06/28/18 10:00 Received:07/03/18 13:04									
Mercury	ng/l	ND		0.20	0.50	EPA 1631E	07/11/18	07/11/18	B8G1073
Methyl Mercury as Mercury	"	ND		0.020	0.050	EPA 1630	07/18/18	07/17/18	B8G1267

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18F2839

Lab No: 18G0115
Reported: 07/20/18
Phone: (707) 468-0401
P.O. #

Quality Control Data

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Metals - Total										
Batch B8G1073 - BrCl Digestion										
Blank										
Mercury	ND	0.50	ng/l							
Blank										
Mercury	ND	0.50	ng/l							QB-06
Blank										
Mercury	ND	0.50	ng/l							
LCS										
Mercury	10.5	0.50	ng/l	10.0		105	77-123			
Matrix Spike Source: 18G0114-01										
Mercury	120	2.50	ng/l	50.0	65.1	110	71-125			
Matrix Spike Source: 18G0250-01										
Mercury	13.9	0.50	ng/l	10.0	2.20	117	71-125			
Matrix Spike Dup Source: 18G0114-01										
Mercury	116	2.50	ng/l	50.0	65.1	102	71-125	3.38	24	
Matrix Spike Dup Source: 18G0250-01										
Mercury	13.7	0.50	ng/l	10.0	2.20	115	71-125	1.72	24	
Batch B8G1267 - Draft EPA Method 1630 Distillation (Modified)										
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
LCS										
Methyl Mercury as Mercury	2.05	0.050	ng/l	2.00		102	67-133			
Duplicate Source: 18G0581-01										
Methyl Mercury as Mercury	ND	0.050	ng/l		ND				35	
Matrix Spike Source: 18F1434-10										
Methyl Mercury as Mercury	1.10	0.050	ng/l	1.00	ND	110	65-135			
Matrix Spike Source: 18G0416-01										
Methyl Mercury as Mercury	1.15	0.050	ng/l	1.00	ND	115	65-135			
Matrix Spike Dup Source: 18F1434-10										
Methyl Mercury as Mercury	1.12	0.050	ng/l	1.00	ND	112	65-135	1.77	35	
Matrix Spike Dup Source: 18G0416-01										
Methyl Mercury as Mercury	1.23	0.050	ng/l	1.00	ND	123	65-135	6.61	35	

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18F2839

Lab No: 18G0115
Reported: 07/20/18
Phone: (707) 468-0401
P.O. #

Notes and Definitions

QB-06	Some samples in this batch required an additional amount of BrCl to fully oxidize the sample. Per EPA method 1631E requirements, this Method Blank contains an increased concentration of BrCl to match the sample matrix.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). The J flag is equivalent to the DNQ Estimated Concentration flag.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
<	Less than reporting limit
≤	Less than or equal to reporting limit
>	Greater than reporting limit
≥	Greater than or equal to reporting limit
MDL	Method Detection Limit
RL/ML	Minimum Level of Quantitation
MCL/AL	Maxium Contaminant Level/Action Level
mg/kg	Results reported as wet weight
TTLC	Total Threshold Limit Concentration
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leachate Procedure
Note 1	Received Temperature - according to EPA guidelines, samples for most chemistry methods should be held at ≤6 degrees C after collection, including during transportation, unless the time from sampling to delivery is <2 hours. Regulating agencies may invalidate results if temperature requirements are not met.
Note 2	According to 40 CFR Part 136 Table II, the following tests should be analyzed in the field within 15 minutes of sampling: pH, chlorine, dissolved oxygen, and sulfite.

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

18G0115

1

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18F2839

18G0115

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

Basic Laboratory
2218 Railroad Ave
Redding, CA 96001
Phone :530-243-7234
Fax: 530-243-7494
Terms: Net 30

Analysis	Due	Expires	Comments
18F2839-01 LP1-S [Water] Sampled 06/28/18 13:05			-1 8.2°
BAL Hg 1631	07/16/18 12:00	07/26/18 13:05	
BAL Hg Methyl	07/16/18 12:00	12/25/18 13:05	
Containers Supplied: AG 500ml Glass - HCl (I) 500ml Glass - Unpreserve ✓			-2 9.4°
18F2839-02 LP1-M [Water] Sampled 06/28/18 13:25			
BAL Hg 1631	07/16/18 12:00	07/26/18 13:25	
BAL Hg Methyl	07/16/18 12:00	12/25/18 13:25	
Containers Supplied: AG 500ml Glass - HCl (I) 500ml Glass - Unpreserve ✓			-3 7.9°
18F2839-03 LP1-B [Water] Sampled 06/28/18 14:00			
BAL Hg 1631	07/16/18 12:00	07/26/18 14:00	
BAL Hg Methyl	07/16/18 12:00	12/25/18 14:00	
Containers Supplied: AG 500ml Glass - HCl (I) 500ml Glass - Unpreserve ✓			-4 7.8°
18F2839-04 LP2-S [Water] Sampled 06/28/18 11:25			
BAL Hg 1631	07/16/18 12:00	07/26/18 11:25	
BAL Hg Methyl	07/16/18 12:00	12/25/18 11:25	
Containers Supplied: AG 500ml Glass - HCl (I) 500ml Glass - Unpreserve ✓			

Released By	Date	Received By	Date	
	6-29-18	T Wilhelman	7-3-18	1304
Released By	Date	Received By	Date	
		DLJ	7-3-18	1442

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18F2839

18C-0115

Analysis	Due	Expires	Comments
18F2839-05 LP2-M [Water] Sampled 06/28/18 11:45			-5 7.2°
BAL Hg 1631	07/16/18 12:00	07/26/18 11:45	
BAL Hg Methyl	07/16/18 12:00	12/25/18 11:45	
Containers Supplied: A6			
500ml Glass - HCl (I) 500ml Glass - Unpreserve ✓			
18F2839-06 LP2-B [Water] Sampled 06/28/18 12:10			-4 6.8°
BAL Hg 1631	07/16/18 12:00	07/26/18 12:10	
BAL Hg Methyl	07/16/18 12:00	12/25/18 12:10	
Containers Supplied: A6			
500ml Glass - HCl (I) 500ml Glass - Unpreserve ✓			
18F2839-07 LP-DUP [Water] Sampled 06/28/18 13:45			-7 8.9°
BAL Hg 1631	07/16/18 12:00	07/26/18 13:45	
BAL Hg Methyl	07/16/18 12:00	12/25/18 13:45	
Containers Supplied: A6			
500ml Glass - HCl (I) 500ml Glass - Unpreserve ✓			
18F2839-08 LP-BL [Water] Sampled 06/28/18 10:00			-8 8.8°
BAL Hg 1631	07/16/18 12:00	07/26/18 10:00	
BAL Hg Methyl	07/16/18 12:00	12/25/18 10:00	
Containers Supplied:			
500ml Glass - HCl (I) 500ml Glass - Unpreserve ✓			

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+QC
+MDL

Released By	Date	Received By	Date	
	6-29-18	TWilhelmson	7-3-18	1304
Released By	Date	Received By	Date	
		TWilhelmson	7-3-18	1442

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ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

Bay Area Laboratory
262 Rickenbacker Circle, Livermore CA 94551
925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18F2839 Pg 1 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	~~Coliform, TOFC 15 Tube~~	TOC	DOC	Fe Total	BOD	NO2+NO3	Ortho-P	Ammonia N	Total Phosphorus	TKN	Chl-a	Sulfide	Sample Notes or DDW Source Numbers:
~~LP5~~ LP1-S	6/28	1305														10	x	x	x	x	x	x	x	x	x	x	x	x	
~~LP6~~ LP1-M		1325														10	x										x		
~~LPT~~ LP1-B		1400														9	x												no chl-a
~~EB4~~ LP2-S		1125														10	x										x		
~~VAT~~ LP2-M		1145														10	x										x		
~~LPER-BL~~ LP2-B		1210														9	x										~~x~~		no chl-a
~~LPER-Dup~~ LP-DUP		1345														10	x										x		
LP-BL		1000														10	X										x		

TAT
Standard 10 days (●)
RUSH: 5 days ( ) 48 hours ( ) Other: ___ days ( ) Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.2
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		6/28-18	0900

DDW Write On EDT Transmission? ( ) Yes ( ) No
State System Number:
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ( ) Yes ( ) No
Global ID: Sampling Company Log Code:
EDF to (Email Address):
Travel and Site Time: Mileage: Misc. Supplies:

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ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

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925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18F2839 Pg 1 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	

Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature:
CHRISTINA BUCK
Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Coliform, TCEC 15 Tube	Methg 1630	Hg 1631
~~LP5~~ LP1-S	6/28	1305															x	x	
~~LP6~~ LP1-M		1325															x		
~~LP7~~ LP1-B		1400															x		
~~ER4~~ LP2-S		~~1425~~														1	x		
~~VA1~~ LP2-M		~~1445~~ 1440														2	x		
~~LPER-BL~~ LP2-B		1210															x		
~~LPER-Dup~~ LP-DUP		1315														2	x		
LP-BL		1000															x		

(6 CLP)

Relinquished by	Received by	Date	Time
Christina Buck		6/29/18	0900

Analysis Request

TAT
Standard 10 days ◉
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.2
Livermore temp:
Elk Grove temp:

Sample Notes or DDW Source Numbers:

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number:
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):
Travel and Site Time: Mileage: Misc. Supplies:

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
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Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 •Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

ELAP Certificates 1551, 2728, and 2922

22 October 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18I1764

Enclosed are the results of analyses for samples received by the laboratory on 09/19/18 08:15. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ER152.9	18I1764-01	Water	09/18/18 10:30	09/19/18 08:15
TC0.1	18I1764-02	Water	09/18/18 11:45	09/19/18 08:15
ER153.1	18I1764-03	Water	09/18/18 12:40	09/19/18 08:15
ER-DUP	18I1764-04	Water	09/18/18 10:45	09/19/18 08:15
TC-BLANK	18I1764-05	Water	09/18/18 09:25	09/19/18 08:15

This represents an amended copy of the original report.

Subcontracted results added.

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.

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e-mail: clientservices@alpha-labs.com
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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER152.9 (18I1764-01) Water Sampled: 09/18/18 10:30 Received: 09/19/18 08:15											
Calcium	**23**	**0.080**	**1.0**	**mg/L**	1	AI83937	09/24/18 07:45	10/03/18 17:38	EPA 200.7	MAM	
Magnesium	**6.6**	**0.030**	**1.0**	**mg/L**	1	AI83937	09/24/18 07:45	10/03/18 17:38	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AI84085	09/26/18 08:07	09/26/18 14:22	EPA 245.1	LMR	U
TC0.1 (18I1764-02) Water Sampled: 09/18/18 11:45 Received: 09/19/18 08:15											
Calcium	**40**	**0.080**	**1.0**	**mg/L**	1	AI83937	09/24/18 07:45	10/03/18 17:43	EPA 200.7	MAM	
Magnesium	**18**	**0.030**	**1.0**	**mg/L**	1	AI83937	09/24/18 07:45	10/03/18 17:43	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AI84085	09/26/18 08:07	09/26/18 14:33	EPA 245.1	LMR	U
ER153.1 (18I1764-03) Water Sampled: 09/18/18 12:40 Received: 09/19/18 08:15											
Calcium	**23**	**0.080**	**1.0**	**mg/L**	1	AI83937	09/24/18 07:45	10/03/18 17:47	EPA 200.7	MAM	
Magnesium	**6.4**	**0.030**	**1.0**	**mg/L**	1	AI83937	09/24/18 07:45	10/03/18 17:47	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AI84085	09/26/18 08:07	09/26/18 14:43	EPA 245.1	LMR	U
ER-DUP (18I1764-04) Water Sampled: 09/18/18 10:45 Received: 09/19/18 08:15											
Calcium	**23**	**0.080**	**1.0**	**mg/L**	1	AI83937	09/24/18 07:45	10/03/18 17:52	EPA 200.7	MAM	
Magnesium	**6.8**	**0.030**	**1.0**	**mg/L**	1	AI83937	09/24/18 07:45	10/03/18 17:52	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AI84085	09/26/18 08:07	09/26/18 14:46	EPA 245.1	LMR	U
TC-BLANK (18I1764-05) Water Sampled: 09/18/18 09:25 Received: 09/19/18 08:15											
Calcium	ND	0.080	1.0	mg/L	1	AI83937	09/24/18 07:45	10/03/18 17:57	EPA 200.7	MAM	U
Magnesium	ND	0.030	1.0	mg/L	1	AI83937	09/24/18 07:45	10/03/18 17:57	EPA 200.7	MAM	U
Mercury	ND	0.060	0.20	ug/L	1	AI84085	09/26/18 08:07	09/26/18 14:48	EPA 245.1	LMR	U

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.

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Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267
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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER152.9 (18I1764-01) Water Sampled: 09/18/18 10:30 Received: 09/19/18 08:15											
Aluminum	ND	20	40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:48	EPA 200.8	MMY	R-01, U
Antimony	ND	0.80	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:48	EPA 200.8	MMY	R-01, U
Arsenic	**2.3**	**0.80**	**2.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 14:48	EPA 200.8	MMY	
Barium	**65**	**0.80**	**2.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 14:48	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:48	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:48	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:48	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:48	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:48	EPA 200.8	MMY	R-01, U
Iron	**95**	**40**	**200**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 14:48	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:48	EPA 200.8	MMY	R-01, U
Manganese	**13**	**8.0**	**20**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 14:48	EPA 200.8	MMY	R-01, J
Molybdenum	**0.56**	**0.28**	**1.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 14:48	EPA 200.8	MMY	R-01, J
Nickel	ND	1.2	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:48	EPA 200.8	MMY	R-01, U
Selenium	ND	1.2	8.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:48	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:48	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:48	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:48	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:48	EPA 200.8	MMY	R-01, U
TC0.1 (18I1764-02) Water Sampled: 09/18/18 11:45 Received: 09/19/18 08:15											
Aluminum	ND	20	40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:55	EPA 200.8	MMY	R-01, U
Antimony	ND	0.80	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:55	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:55	EPA 200.8	MMY	R-01, U
Barium	**94**	**0.80**	**2.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 14:55	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:55	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:55	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:55	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:55	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:55	EPA 200.8	MMY	R-01, U
Iron	**93**	**40**	**200**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 14:55	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:55	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:55	EPA 200.8	MMY	R-01, U
Molybdenum	**0.41**	**0.28**	**1.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 14:55	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
TC0.1 (18I1764-02) Water Sampled: 09/18/18 11:45 Received: 09/19/18 08:15											
Nickel	ND	1.2	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:55	EPA 200.8	MMY	R-01, U
Selenium	ND	1.2	8.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:55	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:55	EPA 200.8	MMY	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:55	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:55	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI83891	09/24/18 06:45	09/25/18 14:55	EPA 200.8	MMY	R-01, U
ER153.1 (18I1764-03) Water Sampled: 09/18/18 12:40 Received: 09/19/18 08:15											
Aluminum	ND	20	40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:02	EPA 200.8	MMY	U, R-01
Antimony	ND	0.80	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:02	EPA 200.8	MMY	R-01, U
Arsenic	**2.0**	**0.80**	**2.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 15:02	EPA 200.8	MMY	
Barium	**62**	**0.80**	**2.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 15:02	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:02	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:02	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:02	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:02	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:02	EPA 200.8	MMY	R-01, U
Iron	**95**	**40**	**200**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 15:02	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:02	EPA 200.8	MMY	R-01, U
Manganese	**14**	**8.0**	**20**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 15:02	EPA 200.8	MMY	R-01, J
Molybdenum	**0.61**	**0.28**	**1.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 15:02	EPA 200.8	MMY	R-01, J
Nickel	ND	1.2	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:02	EPA 200.8	MMY	R-01, U
Selenium	ND	1.2	8.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:02	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:02	EPA 200.8	MMY	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:02	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:02	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:02	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER-DUP (18I1764-04) Water Sampled: 09/18/18 10:45 Received: 09/19/18 08:15											
Aluminum	ND	20	40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:08	EPA 200.8	MMY	U, R-01
Antimony	ND	0.80	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:08	EPA 200.8	MMY	R-01, U
Arsenic	**1.9**	**0.80**	**2.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 15:08	EPA 200.8	MMY	R-01, J
Barium	**64**	**0.80**	**2.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 15:08	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:08	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:08	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:08	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:08	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:08	EPA 200.8	MMY	R-01, U
Iron	**97**	**40**	**200**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 15:08	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:08	EPA 200.8	MMY	R-01, U
Manganese	**13**	**8.0**	**20**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 15:08	EPA 200.8	MMY	R-01, J
Molybdenum	**0.55**	**0.28**	**1.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 15:08	EPA 200.8	MMY	R-01, J
Nickel	ND	1.2	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:08	EPA 200.8	MMY	R-01, U
Selenium	ND	1.2	8.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:08	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:08	EPA 200.8	MMY	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:08	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:08	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:08	EPA 200.8	MMY	R-01, U
TC-BLANK (18I1764-05) Water Sampled: 09/18/18 09:25 Received: 09/19/18 08:15											
Aluminum	ND	20	40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:15	EPA 200.8	MMY	U, R-01
Antimony	ND	0.80	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:15	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:15	EPA 200.8	MMY	R-01, U
Barium	ND	0.80	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:15	EPA 200.8	MMY	R-01, U
Beryllium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:15	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:15	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:15	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:15	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:15	EPA 200.8	MMY	R-01, U
Iron	ND	40	200	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:15	EPA 200.8	MMY	R-01, U
Lead	ND	0.24	1.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:15	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:15	EPA 200.8	MMY	R-01, U
Molybdenum	ND	0.28	1.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:15	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
TC-BLANK (18I1764-05) Water Sampled: 09/18/18 09:25 Received: 09/19/18 08:15											
Nickel	ND	1.2	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:15	EPA 200.8	MMY	R-01, U
Selenium	ND	1.2	8.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:15	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:15	EPA 200.8	MMY	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:15	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:15	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI83891	09/24/18 06:45	09/25/18 15:15	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER152.9 (18I1764-01) Water Sampled: 09/18/18 10:30 Received: 09/19/18 08:15											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AI84164	09/27/18 09:49	10/01/18 17:06	EPA 245.1	LMR	U
TC0.1 (18I1764-02) Water Sampled: 09/18/18 11:45 Received: 09/19/18 08:15											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AI84164	09/27/18 09:49	10/01/18 16:45	EPA 245.1	LMR	U
ER153.1 (18I1764-03) Water Sampled: 09/18/18 12:40 Received: 09/19/18 08:15											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AI84164	09/27/18 09:49	10/01/18 16:56	EPA 245.1	LMR	U
ER-DUP (18I1764-04) Water Sampled: 09/18/18 10:45 Received: 09/19/18 08:15											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AI84164	09/27/18 09:49	10/01/18 17:09	EPA 245.1	LMR	U
TC-BLANK (18I1764-05) Water Sampled: 09/18/18 09:25 Received: 09/19/18 08:15											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AI84164	09/27/18 09:49	10/01/18 17:12	EPA 245.1	LMR	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER152.9 (18I1764-01) Water Sampled: 09/18/18 10:30 Received: 09/19/18 08:15											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 15:24	EPA 200.8	MMY	U, R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 15:24	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**2.3**	**0.80**	**2.0**	**ug/L**	4	AI84051	09/27/18 10:40	09/28/18 15:24	EPA 200.8	MMY	
Barium, dissolved	**65**	**0.80**	**2.0**	**ug/L**	4	AI84051	09/27/18 10:40	09/28/18 15:24	EPA 200.8	MMY	R-01
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 15:24	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 15:24	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 15:24	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 15:24	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 15:24	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 15:24	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.59**	**0.28**	**1.0**	**ug/L**	4	AI84051	09/27/18 10:40	09/28/18 15:24	EPA 200.8	MMY	R-01, J
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 15:24	EPA 200.8	MMY	R-01, U
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 15:24	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 15:24	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 15:24	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 15:24	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AI84051	09/27/18 10:40	09/28/18 15:24	EPA 200.8	MMY	R-01, U
TC0.1 (18I1764-02) Water Sampled: 09/18/18 11:45 Received: 09/19/18 08:15											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:38	EPA 200.8	MMY	U, R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:38	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:38	EPA 200.8	MMY	R-01, U
Barium, dissolved	**93**	**0.80**	**2.0**	**ug/L**	4	AI84051	09/27/18 10:40	09/28/18 18:38	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:38	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:38	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:38	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:38	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:38	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:38	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.37**	**0.28**	**1.0**	**ug/L**	4	AI84051	09/27/18 10:40	09/28/18 18:38	EPA 200.8	MMY	R-01, J
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:38	EPA 200.8	MMY	R-01, U
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:38	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:38	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:38	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
TC0.1 (18I1764-02) Water Sampled: 09/18/18 11:45 Received: 09/19/18 08:15											**FILT**
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:38	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:38	EPA 200.8	MMY	R-01, U
ER153.1 (18I1764-03) Water Sampled: 09/18/18 12:40 Received: 09/19/18 08:15											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:45	EPA 200.8	MMY	U, R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:45	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**2.3**	**0.80**	**2.0**	**ug/L**	4	AI84051	09/27/18 10:40	09/28/18 18:45	EPA 200.8	MMY	
Barium, dissolved	**60**	**0.80**	**2.0**	**ug/L**	4	AI84051	09/27/18 10:40	09/28/18 18:45	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:45	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:45	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:45	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:45	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:45	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:45	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.57**	**0.28**	**1.0**	**ug/L**	4	AI84051	09/27/18 10:40	09/28/18 18:45	EPA 200.8	MMY	R-01, J
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:45	EPA 200.8	MMY	R-01, U
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:45	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:45	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:45	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:45	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:45	EPA 200.8	MMY	R-01, U
ER-DUP (18I1764-04) Water Sampled: 09/18/18 10:45 Received: 09/19/18 08:15											**FILT**
Aluminum, dissolved	**23**	**20**	**40**	**ug/L**	4	AI84051	09/27/18 10:40	09/28/18 18:51	EPA 200.8	MMY	R-01, J
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:51	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**1.9**	**0.80**	**2.0**	**ug/L**	4	AI84051	09/27/18 10:40	09/28/18 18:51	EPA 200.8	MMY	J
Barium, dissolved	**63**	**0.80**	**2.0**	**ug/L**	4	AI84051	09/27/18 10:40	09/28/18 18:51	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:51	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:51	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:51	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:51	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AI84051	09/27/18 10:40	10/02/18 17:50	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:51	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.57**	**0.28**	**1.0**	**ug/L**	4	AI84051	09/27/18 10:40	09/28/18 18:51	EPA 200.8	MMY	R-01, J
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:51	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER-DUP (18I1764-04) Water Sampled: 09/18/18 10:45 Received: 09/19/18 08:15											**FILT**
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:51	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:51	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:51	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:51	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:51	EPA 200.8	MMY	R-01, U
TC-BLANK (18I1764-05) Water Sampled: 09/18/18 09:25 Received: 09/19/18 08:15											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:58	EPA 200.8	MMY	U, R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:58	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:58	EPA 200.8	MMY	R-01, U
Barium, dissolved	ND	0.80	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:58	EPA 200.8	MMY	R-01, U
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:58	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:58	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:58	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:58	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:58	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:58	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	ND	0.28	1.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:58	EPA 200.8	MMY	R-01, U
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:58	EPA 200.8	MMY	R-01, U
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:58	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:58	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:58	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:58	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AI84051	09/27/18 10:40	09/28/18 18:58	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER152.9 (18I1764-01) Water Sampled: 09/18/18 10:30 Received: 09/19/18 08:15											
Mercury	**2.13**	**0.200**	**0.500**	**ng/l**	1	AI83981	09/24/18 14:00	09/25/18 15:52	EPA 1631E	AJC	
TC0.1 (18I1764-02) Water Sampled: 09/18/18 11:45 Received: 09/19/18 08:15											
Mercury	**0.583**	**0.200**	**0.500**	**ng/l**	1	AI83981	09/24/18 14:00	09/25/18 16:16	EPA 1631E	AJC	
ER153.1 (18I1764-03) Water Sampled: 09/18/18 12:40 Received: 09/19/18 08:15											
Mercury	**2.38**	**0.200**	**0.500**	**ng/l**	1	AI83981	09/24/18 14:00	09/25/18 16:24	EPA 1631E	AJC	
ER-DUP (18I1764-04) Water Sampled: 09/18/18 10:45 Received: 09/19/18 08:15											
Mercury	**2.31**	**0.200**	**0.500**	**ng/l**	1	AI83981	09/24/18 14:00	09/25/18 16:32	EPA 1631E	AJC	
TC-BLANK (18I1764-05) Water Sampled: 09/18/18 09:25 Received: 09/19/18 08:15											
Mercury	ND	0.200	0.500	ng/l	1	AI83981	09/24/18 14:00	09/25/18 16:40	EPA 1631E	AJC	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER152.9 (18I1764-01) Water Sampled: 09/18/18 10:30 Received: 09/19/18 08:15											
Ammonia as N	ND	0.10	0.20	mg/L	1	AI84088	09/26/18 10:30	09/26/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	**2.5**	**2.0**	**5.0**	**mg/L**	1	AI83809	09/20/18 08:00	09/25/18 08:30	SM5210B	WCS	J
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AI84058	09/20/18 08:30	10/03/18 12:00	SM10200H	EV	U
Dissolved Organic Carbon	**1.53**	**0.600**	**1.00**	**mg/L**	1	AJ83224	10/02/18 13:50	10/03/18 10:25	SM5310C	JIM	
Oil & Grease (HEM)	**1.5**	**1.4**	**5.0**	**mg/L**	1	AI84221	09/28/18 08:41	10/03/18 13:49	EPA 1664A	STS	J
Total Dissolved Solids	**100**	**5.0**	**10**	**mg/L**	1	AI83951	09/24/18 08:19	10/01/18 15:43	SM2540C	PBM	
Total Suspended Solids	**0.70**	**0.30**	**1.0**	**mg/L**	1	AI83888	09/21/18 15:30	09/25/18 16:00	SM2540D	MNV	J
Bicarbonate Alkalinity as CaCO3	**84**	**1.0**	**5.0**	**mg/L**	1	AI84084	09/26/18 08:00	09/26/18 17:00	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84084	09/26/18 08:00	09/26/18 17:00	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84084	09/26/18 08:00	09/26/18 17:00	SM2320B	CEF	U
Total Alkalinity as CaCO3	**84**	**1.0**	**5.0**	**mg/L**	1	AI84084	09/26/18 08:00	09/26/18 17:00	SM2320B	CEF	
Nitrate + Nitrite as N	**0.040**	**0.0086**	**0.40**	**mg/L**	1	AI83825	09/20/18 08:50	09/21/18 11:23	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.21**	**0.050**	**1.0**	**mg/L**	1	AJ83123	10/02/18 08:50	10/03/18 11:11	SM4500-Norg B	JVO	J
Hardness, Total	**85**	**1**	**5**	**mg/L**	1	AI83937	09/24/18 07:45	10/03/18 17:38	SM2340B	MAM	
Phosphorus, total	**0.020**	**0.010**	**0.040**	**mg/L**	1	AJ83186	10/02/18 09:00	10/02/18 12:03	SM4500-P E	SMS	J
Total Organic Carbon	**2.41**	**0.300**	**1.00**	**mg/L**	1	AI84167	09/27/18 10:25	09/27/18 19:17	SM5310C	JIM	
TC0.1 (18I1764-02) Water Sampled: 09/18/18 11:45 Received: 09/19/18 08:15											
Ammonia as N	ND	0.10	0.20	mg/L	1	AI84088	09/26/18 10:30	09/26/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	**2.4**	**2.0**	**5.0**	**mg/L**	1	AI83809	09/20/18 08:00	09/25/18 08:30	SM5210B	WCS	J
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AI84058	09/20/18 08:30	10/03/18 12:00	SM10200H	EV	U
Dissolved Organic Carbon	**1.22**	**0.600**	**1.00**	**mg/L**	1	AJ83224	10/02/18 13:50	10/03/18 10:45	SM5310C	JIM	
Oil & Grease (HEM)	**1.8**	**1.4**	**5.0**	**mg/L**	1	AI84221	09/28/18 08:41	10/03/18 13:49	EPA 1664A	STS	J
Total Dissolved Solids	**190**	**5.0**	**10**	**mg/L**	1	AI83951	09/24/18 08:19	10/01/18 15:43	SM2540C	PBM	
Total Suspended Solids	**0.70**	**0.30**	**1.0**	**mg/L**	1	AI83888	09/21/18 15:30	09/25/18 16:00	SM2540D	MNV	J
Bicarbonate Alkalinity as CaCO3	**170**	**1.0**	**5.0**	**mg/L**	1	AI84084	09/26/18 08:00	09/26/18 17:00	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84084	09/26/18 08:00	09/26/18 17:00	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84084	09/26/18 08:00	09/26/18 17:00	SM2320B	CEF	U
Total Alkalinity as CaCO3	**170**	**1.0**	**5.0**	**mg/L**	1	AI84084	09/26/18 08:00	09/26/18 17:00	SM2320B	CEF	
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AI83825	09/20/18 08:50	09/21/18 11:23	Calculation	RLG	U
Total Kjeldahl Nitrogen	**0.14**	**0.050**	**1.0**	**mg/L**	1	AJ83123	10/02/18 08:50	10/03/18 11:11	SM4500-Norg B	JVO	J
Hardness, Total	**176**	**1**	**5**	**mg/L**	1	AI83937	09/24/18 07:45	10/03/18 17:43	SM2340B	MAM	
Phosphorus, total	**0.015**	**0.010**	**0.040**	**mg/L**	1	AJ83186	10/02/18 09:00	10/02/18 12:03	SM4500-P E	SMS	J
Total Organic Carbon	**1.58**	**0.300**	**1.00**	**mg/L**	1	AI84167	09/27/18 10:25	09/27/18 19:37	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER153.1 (18I1764-03) Water Sampled: 09/18/18 12:40 Received: 09/19/18 08:15											
Ammonia as N	ND	0.10	0.20	mg/L	1	AI84088	09/26/18 10:30	09/26/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	**2.0**	**2.0**	**5.0**	**mg/L**	1	AI83809	09/20/18 08:00	09/25/18 08:30	SM5210B	WCS	J
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AI84058	09/20/18 08:30	10/03/18 12:00	SM10200H	EV	U
Dissolved Organic Carbon	**1.99**	**0.600**	**1.00**	**mg/L**	1	AJ83224	10/02/18 13:50	10/03/18 11:04	SM5310C	JIM	
Oil & Grease (HEM)	**2.2**	**1.4**	**5.0**	**mg/L**	1	AI84221	09/28/18 08:41	10/03/18 13:49	EPA 1664A	STS	J
Total Dissolved Solids	**98**	**5.0**	**10**	**mg/L**	1	AI83951	09/24/18 08:19	10/01/18 15:43	SM2540C	PBM	
Total Suspended Solids	**0.90**	**0.30**	**1.0**	**mg/L**	1	AI83888	09/21/18 15:30	09/25/18 16:00	SM2540D	MNV	J
Bicarbonate Alkalinity as CaCO3	**81**	**1.0**	**5.0**	**mg/L**	1	AI84084	09/26/18 08:00	09/26/18 17:00	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84084	09/26/18 08:00	09/26/18 17:00	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84084	09/26/18 08:00	09/26/18 17:00	SM2320B	CEF	U
Total Alkalinity as CaCO3	**81**	**1.0**	**5.0**	**mg/L**	1	AI84084	09/26/18 08:00	09/26/18 17:00	SM2320B	CEF	
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AI83825	09/20/18 08:50	09/21/18 11:23	Calculation	RLG	U
Total Kjeldahl Nitrogen	**0.24**	**0.050**	**1.0**	**mg/L**	1	AJ83123	10/02/18 08:50	10/03/18 11:11	SM4500-Norg B	JVO	J
Hardness, Total	**84**	**1**	**5**	**mg/L**	1	AI83937	09/24/18 07:45	10/03/18 17:47	SM2340B	MAM	
Phosphorus, total	**0.020**	**0.010**	**0.040**	**mg/L**	1	AJ83186	10/02/18 09:00	10/02/18 12:03	SM4500-P E	SMS	J
Total Organic Carbon	**2.28**	**0.300**	**1.00**	**mg/L**	1	AI84167	09/27/18 10:25	09/27/18 20:35	SM5310C	JIM	
ER-DUP (18I1764-04) Water Sampled: 09/18/18 10:45 Received: 09/19/18 08:15											
Ammonia as N	ND	0.10	0.20	mg/L	1	AI84088	09/26/18 10:30	09/26/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	**2.5**	**2.0**	**5.0**	**mg/L**	1	AI83809	09/20/18 08:00	09/25/18 08:30	SM5210B	WCS	J
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AI84058	09/20/18 08:30	10/03/18 12:00	SM10200H	EV	U
Dissolved Organic Carbon	**1.93**	**0.600**	**1.00**	**mg/L**	1	AJ83224	10/02/18 13:50	10/03/18 11:24	SM5310C	JIM	
Oil & Grease (HEM)	**1.5**	**1.4**	**5.0**	**mg/L**	1	AI84221	09/28/18 08:41	10/03/18 13:49	EPA 1664A	STS	J
Total Dissolved Solids	**100**	**5.0**	**10**	**mg/L**	1	AI83951	09/24/18 08:19	10/01/18 15:43	SM2540C	PBM	
Total Suspended Solids	**0.70**	**0.30**	**1.0**	**mg/L**	1	AI83888	09/21/18 15:30	09/25/18 16:00	SM2540D	MNV	J
Bicarbonate Alkalinity as CaCO3	**86**	**1.0**	**5.0**	**mg/L**	1	AI84084	09/26/18 08:00	09/26/18 17:00	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84084	09/26/18 08:00	09/26/18 17:00	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84084	09/26/18 08:00	09/26/18 17:00	SM2320B	CEF	U
Total Alkalinity as CaCO3	**86**	**1.0**	**5.0**	**mg/L**	1	AI84084	09/26/18 08:00	09/26/18 17:00	SM2320B	CEF	
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AI83825	09/20/18 08:50	09/21/18 11:23	Calculation	RLG	U
Total Kjeldahl Nitrogen	**0.18**	**0.050**	**1.0**	**mg/L**	1	AJ83123	10/02/18 08:50	10/03/18 11:11	SM4500-Norg B	JVO	J
Hardness, Total	**86**	**1**	**5**	**mg/L**	1	AI83937	09/24/18 07:45	10/03/18 17:52	SM2340B	MAM	
Phosphorus, total	**0.021**	**0.010**	**0.040**	**mg/L**	1	AJ83186	10/02/18 09:00	10/02/18 12:03	SM4500-P E	SMS	J
Total Organic Carbon	**2.37**	**0.300**	**1.00**	**mg/L**	1	AI84167	09/27/18 10:25	09/27/18 20:55	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
TC-BLANK (18I1764-05) Water Sampled: 09/18/18 09:25 Received: 09/19/18 08:15											
Ammonia as N	**0.14**	**0.10**	**0.20**	**mg/L**	1	AI84088	09/26/18 10:30	09/26/18 16:00	SM4500NH3C	FCM	J
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI83809	09/20/18 08:00	09/25/18 08:30	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AI84058	09/20/18 08:30	10/03/18 12:00	SM10200H	EV	U
Dissolved Organic Carbon	ND	0.600	1.00	mg/L	1	AJ83224	10/02/18 13:50	10/03/18 11:43	SM5310C	JIM	U
Oil & Grease (HEM)	**1.4**	**1.4**	**5.0**	**mg/L**	1	AI84221	09/28/18 08:41	10/03/18 13:49	EPA 1664A	STS	J
Total Dissolved Solids	ND	5.0	10	mg/L	1	AI83951	09/24/18 08:19	10/01/18 15:43	SM2540C	PBM	U
Total Suspended Solids	ND	0.30	1.0	mg/L	1	AI83888	09/21/18 15:30	09/25/18 16:00	SM2540D	MNV	U
Bicarbonate Alkalinity as CaCO3	**2.0**	**1.0**	**5.0**	**mg/L**	1	AI84084	09/26/18 08:00	09/26/18 17:00	SM2320B	CEF	J
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84084	09/26/18 08:00	09/26/18 17:00	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84084	09/26/18 08:00	09/26/18 17:00	SM2320B	CEF	U
Total Alkalinity as CaCO3	**2.0**	**1.0**	**5.0**	**mg/L**	1	AI84084	09/26/18 08:00	09/26/18 17:00	SM2320B	CEF	J
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AI83825	09/20/18 08:50	09/21/18 11:23	Calculation	RLG	U
Total Kjeldahl Nitrogen	ND	0.050	1.0	mg/L	1	AJ83123	10/02/18 08:50	10/03/18 11:11	SM4500-Norg B	JVO	U
Hardness, Total	ND	1	5	mg/L	1	AI83937	09/24/18 07:45	10/03/18 17:57	SM2340B	MAM	U
Phosphorus, total	ND	0.010	0.040	mg/L	1	AJ83186	10/02/18 09:00	10/02/18 12:03	SM4500-P E	SMS	U
Total Organic Carbon	**0.407**	**0.300**	**1.00**	**mg/L**	1	AI84167	09/27/18 10:25	09/27/18 21:14	SM5310C	JIM	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER152.9 (18I1764-01) Water Sampled: 09/18/18 10:30 Received: 09/19/18 08:15											
Nitrate as N	**0.040**	**0.040**	**0.20**	**mg/L**	1	AI83783	09/19/18 22:35	09/19/18 22:35	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AI83783	09/19/18 22:35	09/19/18 22:35	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI83783	09/19/18 22:35	09/19/18 22:35	EPA 300.0	SMP	U
TC0.1 (18I1764-02) Water Sampled: 09/18/18 11:45 Received: 09/19/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI83783	09/19/18 23:40	09/19/18 23:40	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI83783	09/19/18 23:40	09/19/18 23:40	EPA 300.0	SMP	U
Orthophosphate	**0.12**	**0.10**	**0.30**	**mg/L**	1	AI83783	09/19/18 23:40	09/19/18 23:40	EPA 300.0	SMP	J
ER153.1 (18I1764-03) Water Sampled: 09/18/18 12:40 Received: 09/19/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI83783	09/20/18 00:13	09/20/18 00:13	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI83783	09/20/18 00:13	09/20/18 00:13	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI83783	09/20/18 00:13	09/20/18 00:13	EPA 300.0	SMP	U
ER-DUP (18I1764-04) Water Sampled: 09/18/18 10:45 Received: 09/19/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI83783	09/20/18 00:46	09/20/18 00:46	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI83783	09/20/18 00:46	09/20/18 00:46	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI83783	09/20/18 00:46	09/20/18 00:46	EPA 300.0	SMP	U
TC-BLANK (18I1764-05) Water Sampled: 09/18/18 09:25 Received: 09/19/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI83783	09/20/18 01:18	09/20/18 01:18	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI83783	09/20/18 01:18	09/20/18 01:18	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI83783	09/20/18 01:18	09/20/18 01:18	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

TPH by EPA/LUFT GC Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER152.9 (18I1764-01) Water Sampled: 09/18/18 10:30 Received: 09/19/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AI83944	09/24/18 07:39	09/26/18 19:12	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AI83944	09/24/18 07:39	09/26/18 19:12	8015DRO	DLD	U
Surrogate: Tetratetracontane		*84.1 %*	*39-120*			*AI83944*	*09/24/18 07:39*	*09/26/18 19:12*	*8015DRO*	*DLD*	
TC0.1 (18I1764-02) Water Sampled: 09/18/18 11:45 Received: 09/19/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AI83944	09/24/18 07:39	09/26/18 19:47	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AI83944	09/24/18 07:39	09/26/18 19:47	8015DRO	DLD	U
Surrogate: Tetratetracontane		*93.7 %*	*39-120*			*AI83944*	*09/24/18 07:39*	*09/26/18 19:47*	*8015DRO*	*DLD*	
ER153.1 (18I1764-03) Water Sampled: 09/18/18 12:40 Received: 09/19/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AI83944	09/24/18 07:39	09/26/18 20:22	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AI83944	09/24/18 07:39	09/26/18 20:22	8015DRO	DLD	U
Surrogate: Tetratetracontane		*97.9 %*	*39-120*			*AI83944*	*09/24/18 07:39*	*09/26/18 20:22*	*8015DRO*	*DLD*	
ER-DUP (18I1764-04) Water Sampled: 09/18/18 10:45 Received: 09/19/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AI83944	09/24/18 07:39	09/26/18 20:56	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AI83944	09/24/18 07:39	09/26/18 20:56	8015DRO	DLD	U
Surrogate: Tetratetracontane		*72.9 %*	*39-120*			*AI83944*	*09/24/18 07:39*	*09/26/18 20:56*	*8015DRO*	*DLD*	
TC-BLANK (18I1764-05) Water Sampled: 09/18/18 09:25 Received: 09/19/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AI83944	09/24/18 07:39	09/26/18 21:31	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AI83944	09/24/18 07:39	09/26/18 21:31	8015DRO	DLD	U
Surrogate: Tetratetracontane		*52.0 %*	*39-120*			*AI83944*	*09/24/18 07:39*	*09/26/18 21:31*	*8015DRO*	*DLD*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

TPH by EPA/LUFT GCMS Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER152.9 (18I1764-01) Water Sampled: 09/18/18 10:30 Received: 09/19/18 08:15											
TPH as Gasoline	ND		50	ug/L	1	AI84029	09/25/18 10:00	09/25/18 23:11	8260GRO	JV	U
Surrogate: Toluene-d8		*99.4 %*	*76-129*			*AI84029*	*09/25/18 10:00*	*09/25/18 23:11*	*8260GRO*	*JV*	
TC0.1 (18I1764-02) Water Sampled: 09/18/18 11:45 Received: 09/19/18 08:15											
TPH as Gasoline	ND		50	ug/L	1	AI84029	09/25/18 10:00	09/25/18 23:43	8260GRO	JV	U
Surrogate: Toluene-d8		*100 %*	*76-129*			*AI84029*	*09/25/18 10:00*	*09/25/18 23:43*	*8260GRO*	*JV*	
ER153.1 (18I1764-03) Water Sampled: 09/18/18 12:40 Received: 09/19/18 08:15											
TPH as Gasoline	ND		50	ug/L	1	AI84029	09/25/18 10:00	09/26/18 00:15	8260GRO	JV	U
Surrogate: Toluene-d8		*99.6 %*	*76-129*			*AI84029*	*09/25/18 10:00*	*09/26/18 00:15*	*8260GRO*	*JV*	
ER-DUP (18I1764-04) Water Sampled: 09/18/18 10:45 Received: 09/19/18 08:15											
TPH as Gasoline	ND		50	ug/L	1	AI84029	09/25/18 10:00	09/26/18 00:47	8260GRO	JV	U
Surrogate: Toluene-d8		*99.2 %*	*76-129*			*AI84029*	*09/25/18 10:00*	*09/26/18 00:47*	*8260GRO*	*JV*	
TC-BLANK (18I1764-05) Water Sampled: 09/18/18 09:25 Received: 09/19/18 08:15											
TPH as Gasoline	ND		50	ug/L	1	AI84029	09/25/18 10:00	09/26/18 01:19	8260GRO	JV	U
Surrogate: Toluene-d8		*98.5 %*	*76-129*			*AI84029*	*09/25/18 10:00*	*09/26/18 01:19*	*8260GRO*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER152.9 (18I1764-01) Water Sampled: 09/18/18 10:30 Received: 09/19/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AI84030	09/25/18 08:00	09/25/18 23:11	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AI84030	09/25/18 08:00	09/25/18 23:11	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AI84030	09/25/18 08:00	09/25/18 23:11	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AI84030	09/25/18 08:00	09/25/18 23:11	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AI84030	09/25/18 08:00	09/25/18 23:11	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AI84030	09/25/18 08:00	09/25/18 23:11	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AI84030	09/25/18 08:00	09/25/18 23:11	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AI84030	09/25/18 08:00	09/25/18 23:11	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AI84030	09/25/18 08:00	09/25/18 23:11	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*100 %*	*70-130*			*AI84030*	*09/25/18 08:00*	*09/25/18 23:11*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*94.2 %*	*70-130*			*AI84030*	*09/25/18 08:00*	*09/25/18 23:11*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*101 %*	*70-130*			*AI84030*	*09/25/18 08:00*	*09/25/18 23:11*	*EPA 8260B*	*JV*	
TC0.1 (18I1764-02) Water Sampled: 09/18/18 11:45 Received: 09/19/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AI84030	09/25/18 08:00	09/25/18 23:43	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AI84030	09/25/18 08:00	09/25/18 23:43	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AI84030	09/25/18 08:00	09/25/18 23:43	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AI84030	09/25/18 08:00	09/25/18 23:43	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AI84030	09/25/18 08:00	09/25/18 23:43	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AI84030	09/25/18 08:00	09/25/18 23:43	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AI84030	09/25/18 08:00	09/25/18 23:43	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AI84030	09/25/18 08:00	09/25/18 23:43	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AI84030	09/25/18 08:00	09/25/18 23:43	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*99.4 %*	*70-130*			*AI84030*	*09/25/18 08:00*	*09/25/18 23:43*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*90.5 %*	*70-130*			*AI84030*	*09/25/18 08:00*	*09/25/18 23:43*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*102 %*	*70-130*			*AI84030*	*09/25/18 08:00*	*09/25/18 23:43*	*EPA 8260B*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER153.1 (18I1764-03) Water Sampled: 09/18/18 12:40 Received: 09/19/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AI84030	09/25/18 08:00	09/26/18 00:15	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AI84030	09/25/18 08:00	09/26/18 00:15	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AI84030	09/25/18 08:00	09/26/18 00:15	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AI84030	09/25/18 08:00	09/26/18 00:15	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AI84030	09/25/18 08:00	09/26/18 00:15	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AI84030	09/25/18 08:00	09/26/18 00:15	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AI84030	09/25/18 08:00	09/26/18 00:15	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AI84030	09/25/18 08:00	09/26/18 00:15	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AI84030	09/25/18 08:00	09/26/18 00:15	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*99.2 %*	*70-130*			*AI84030*	*09/25/18 08:00*	*09/26/18 00:15*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*91.6 %*	*70-130*			*AI84030*	*09/25/18 08:00*	*09/26/18 00:15*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*102 %*	*70-130*			*AI84030*	*09/25/18 08:00*	*09/26/18 00:15*	*EPA 8260B*	*JV*	
ER-DUP (18I1764-04) Water Sampled: 09/18/18 10:45 Received: 09/19/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AI84030	09/25/18 08:00	09/26/18 00:47	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AI84030	09/25/18 08:00	09/26/18 00:47	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AI84030	09/25/18 08:00	09/26/18 00:47	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AI84030	09/25/18 08:00	09/26/18 00:47	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AI84030	09/25/18 08:00	09/26/18 00:47	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AI84030	09/25/18 08:00	09/26/18 00:47	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AI84030	09/25/18 08:00	09/26/18 00:47	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AI84030	09/25/18 08:00	09/26/18 00:47	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AI84030	09/25/18 08:00	09/26/18 00:47	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*98.8 %*	*70-130*			*AI84030*	*09/25/18 08:00*	*09/26/18 00:47*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*92.1 %*	*70-130*			*AI84030*	*09/25/18 08:00*	*09/26/18 00:47*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*101 %*	*70-130*			*AI84030*	*09/25/18 08:00*	*09/26/18 00:47*	*EPA 8260B*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
TC-BLANK (18I1764-05) Water Sampled: 09/18/18 09:25 Received: 09/19/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AI84030	09/25/18 08:00	09/26/18 01:19	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AI84030	09/25/18 08:00	09/26/18 01:19	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AI84030	09/25/18 08:00	09/26/18 01:19	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AI84030	09/25/18 08:00	09/26/18 01:19	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AI84030	09/25/18 08:00	09/26/18 01:19	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AI84030	09/25/18 08:00	09/26/18 01:19	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AI84030	09/25/18 08:00	09/26/18 01:19	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AI84030	09/25/18 08:00	09/26/18 01:19	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AI84030	09/25/18 08:00	09/26/18 01:19	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*98.8 %*	*70-130*			*AI84030*	*09/25/18 08:00*	*09/26/18 01:19*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*91.9 %*	*70-130*			*AI84030*	*09/25/18 08:00*	*09/26/18 01:19*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*100 %*	*70-130*			*AI84030*	*09/25/18 08:00*	*09/26/18 01:19*	*EPA 8260B*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83937 - Metals Digest											
Blank (AI83937-BLK1)					Prepared: 09/24/18 Analyzed: 10/03/18						
Calcium	ND	0.080	1.0	mg/L							U
Magnesium	ND	0.030	1.0	mg/L							U
Duplicate (AI83937-DUP1)		**Source: 18I1969-01**			Prepared: 09/24/18 Analyzed: 10/03/18						
Calcium	30.5	0.080	1.0	mg/L		30.4			0.592	20	
Magnesium	22.9	0.030	1.0	mg/L		22.8			0.569	20	
Matrix Spike (AI83937-MS1)		**Source: 18I1969-01**			Prepared: 09/24/18 Analyzed: 10/03/18						
Calcium	38.2	0.080	1.0	mg/L	8.00	30.4	98.4	70-130			
Magnesium	30.9	0.030	1.0	mg/L	8.00	22.8	101	70-130			
Matrix Spike (AI83937-MS2)		**Source: 18I2062-01**			Prepared: 09/24/18 Analyzed: 10/03/18						
Calcium	17.8	0.080	1.0	mg/L	8.00	9.42	105	70-130			
Magnesium	11.4	0.030	1.0	mg/L	8.00	3.24	102	70-130			
Matrix Spike Dup (AI83937-MSD1)		**Source: 18I1969-01**			Prepared: 09/24/18 Analyzed: 10/03/18						
Calcium	37.7	0.080	1.0	mg/L	8.00	30.4	91.9	70-130	1.37	20	
Magnesium	31.2	0.030	1.0	mg/L	8.00	22.8	105	70-130	0.900	20	
Batch AI84085 - EPA 245.1 Hg Water											
Blank (AI84085-BLK1)					Prepared & Analyzed: 09/26/18						
Mercury	ND	0.060	0.20	ug/L							U
LCS (AI84085-BS1)					Prepared & Analyzed: 09/26/18						
Mercury	2.71	0.060	0.20	ug/L	2.50		108	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84085 - EPA 245.1 Hg Water											
Duplicate (AI84085-DUP1)		**Source: 18I1764-01**			Prepared & Analyzed: 09/26/18						
Mercury	ND	0.060	0.20	ug/L		ND				20	U
Matrix Spike (AI84085-MS1)		**Source: 18I1764-01**			Prepared & Analyzed: 09/26/18						
Mercury	2.54	0.060	0.20	ug/L	2.50	ND	102	70-130			
Matrix Spike (AI84085-MS2)		**Source: 18I1764-02**			Prepared & Analyzed: 09/26/18						
Mercury	2.55	0.060	0.20	ug/L	2.50	ND	102	70-130			
Matrix Spike Dup (AI84085-MSD1)		**Source: 18I1764-01**			Prepared & Analyzed: 09/26/18						
Mercury	2.60	0.060	0.20	ug/L	2.50	ND	104	70-130	2.18	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83891 - EPA 200.8											
Blank (AI83891-BLK1)					Prepared: 09/24/18 Analyzed: 09/25/18						
Aluminum	ND	5.0	10	ug/L							U
Antimony	ND	0.20	0.50	ug/L							U
Arsenic	ND	0.20	0.50	ug/L							U
Barium	ND	0.20	0.50	ug/L							U
Beryllium	ND	0.050	0.10	ug/L							U
Cadmium	ND	0.060	0.10	ug/L							U
Chromium	ND	0.50	0.50	ug/L							U
Cobalt	ND	0.10	0.10	ug/L							U
Copper	ND	0.40	0.50	ug/L							U
Iron	ND	10	50	ug/L							U
Lead	ND	0.060	0.25	ug/L							U
Manganese	ND	2.0	5.0	ug/L							U
Molybdenum	ND	0.070	0.25	ug/L							U
Nickel	ND	0.30	0.50	ug/L							U
Selenium	ND	0.30	2.0	ug/L							U
Silver	ND	0.050	0.10	ug/L							U
Thallium	ND	0.050	0.10	ug/L							U
Vanadium	ND	0.50	1.0	ug/L							U
Zinc	ND	2.0	5.0	ug/L							U
LCS (AI83891-BS1)					Prepared: 09/24/18 Analyzed: 09/25/18						
Aluminum	525	5.0	10	ug/L	520		101	85-115			
Antimony	21.2	0.20	0.50	ug/L	20.0		106	85-115			
Arsenic	21.2	0.20	0.50	ug/L	20.0		106	85-115			
Barium	20.6	0.20	0.50	ug/L	20.0		103	85-115			
Beryllium	22.0	0.050	0.10	ug/L	20.0		110	85-115			
Cadmium	21.5	0.060	0.10	ug/L	20.0		107	85-115			
Chromium	21.0	0.50	0.50	ug/L	20.0		105	85-115			
Cobalt	20.5	0.10	0.10	ug/L	20.0		103	85-115			
Copper	19.2	0.40	0.50	ug/L	20.0		96.2	85-115			
Iron	527	10	50	ug/L	520		101	85-115			
Lead	20.3	0.060	0.25	ug/L	20.0		102	85-115			
Manganese	20.3	2.0	5.0	ug/L	20.0		101	85-115			
Molybdenum	21.7	0.070	0.25	ug/L	20.0		108	85-115			
Nickel	20.8	0.30	0.50	ug/L	20.0		104	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83891 - EPA 200.8											
LCS (AI83891-BS1)					Prepared: 09/24/18 Analyzed: 09/25/18						
Selenium	22.3	0.30	2.0	ug/L	20.0		112	85-115			
Silver	21.1	0.050	0.10	ug/L	20.0		106	85-115			
Thallium	20.3	0.050	0.10	ug/L	20.0		101	85-115			
Vanadium	20.7	0.50	1.0	ug/L	20.0		104	85-115			
Zinc	108	2.0	5.0	ug/L	100		108	85-115			
Duplicate (AI83891-DUP1)		**Source: 18I1713-01**			Prepared: 09/24/18 Analyzed: 09/25/18						
Aluminum	ND	20	40	ug/L		ND				20	R-01, U
Antimony	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic	0.938	0.80	2.0	ug/L		0.900			4.05	20	R-01, J
Barium	135	0.80	2.0	ug/L		135			0.359	20	
Beryllium	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium	ND	0.24	0.40	ug/L		ND				20	R-01, U
Chromium	ND	2.0	2.0	ug/L		ND				20	R-01, U
Cobalt	ND	0.40	0.40	ug/L		ND				20	R-01, U
Copper	2.63	1.6	2.0	ug/L		2.64			0.586	20	
Iron	116	40	200	ug/L		113			2.49	20	R-01, J
Lead	ND	0.24	1.0	ug/L		ND				20	R-01, U
Manganese	ND	8.0	20	ug/L		ND				20	R-01, U
Molybdenum	2.55	0.28	1.0	ug/L		2.44			4.50	20	
Nickel	1.64	1.2	2.0	ug/L		1.65			1.09	20	R-01, J
Selenium	ND	1.2	8.0	ug/L		ND				20	R-01, U
Silver	0.224	0.20	0.40	ug/L		ND			200	20	R-01, J
Thallium	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium	ND	2.0	4.0	ug/L		ND				20	R-01, U
Zinc	ND	8.0	20	ug/L		ND				20	R-01, U
Matrix Spike (AI83891-MS1)		**Source: 18I1713-01**			Prepared: 09/24/18 Analyzed: 09/25/18						
Aluminum	512	20	40	ug/L	520	ND	98.4	70-130			
Antimony	21.2	0.80	2.0	ug/L	20.0	ND	106	70-130			
Arsenic	22.1	0.80	2.0	ug/L	20.0	0.900	106	70-130			
Barium	156	0.80	2.0	ug/L	20.0	135	103	70-130			
Beryllium	20.3	0.20	0.40	ug/L	20.0	ND	101	70-130			
Cadmium	21.7	0.24	0.40	ug/L	20.0	ND	109	70-130			
Chromium	20.2	2.0	2.0	ug/L	20.0	ND	101	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83891 - EPA 200.8											
Matrix Spike (AI83891-MS1)		**Source: 18I1713-01**			Prepared: 09/24/18 Analyzed: 09/25/18						
Cobalt	19.7	0.40	0.40	ug/L	20.0	ND	98.6	70-130			
Copper	19.8	1.6	2.0	ug/L	20.0	2.64	85.7	70-130			
Iron	619	40	200	ug/L	520	113	97.2	70-130			
Lead	19.0	0.24	1.0	ug/L	20.0	ND	95.0	70-130			
Manganese	21.9	8.0	20	ug/L	20.0	ND	109	70-130			
Molybdenum	23.8	0.28	1.0	ug/L	20.0	2.44	107	70-130			
Nickel	21.5	1.2	2.0	ug/L	20.0	1.65	99.1	70-130			
Selenium	24.3	1.2	8.0	ug/L	20.0	ND	122	70-130			
Silver	19.4	0.20	0.40	ug/L	20.0	ND	96.8	70-130			
Thallium	19.0	0.20	0.40	ug/L	20.0	ND	95.1	70-130			
Vanadium	22.0	2.0	4.0	ug/L	20.0	ND	110	70-130			
Zinc	113	8.0	20	ug/L	100	ND	113	70-130			
Matrix Spike (AI83891-MS2)		**Source: 18I1913-01**			Prepared: 09/24/18 Analyzed: 09/25/18						
Antimony	20.4	0.80	2.0	ug/L	20.0	ND	102	70-130			
Arsenic	22.3	0.80	2.0	ug/L	20.0	1.95	102	70-130			
Barium	70.8	0.80	2.0	ug/L	20.0	55.3	77.7	70-130			
Beryllium	18.8	0.20	0.40	ug/L	20.0	ND	94.1	70-130			
Cadmium	20.8	0.24	0.40	ug/L	20.0	0.401	102	70-130			
Chromium	33.4	2.0	2.0	ug/L	20.0	15.9	87.7	70-130			
Cobalt	22.5	0.40	0.40	ug/L	20.0	4.14	92.0	70-130			
Copper	56.5	1.6	2.0	ug/L	20.0	41.5	75.0	70-130			
Lead	21.2	0.24	1.0	ug/L	20.0	2.97	91.2	70-130			
Manganese	88.9	8.0	20	ug/L	20.0	71.9	85.0	70-130			
Molybdenum	24.3	0.28	1.0	ug/L	20.0	3.97	102	70-130			
Nickel	48.5	1.2	2.0	ug/L	20.0	29.6	94.3	70-130			
Selenium	23.6	1.2	8.0	ug/L	20.0	1.94	108	70-130			
Silver	19.4	0.20	0.40	ug/L	20.0	ND	96.9	70-130			
Thallium	19.1	0.20	0.40	ug/L	20.0	ND	95.7	70-130			
Vanadium	23.2	2.0	4.0	ug/L	20.0	4.04	95.7	70-130			
Zinc	208	8.0	20	ug/L	100	90.2	117	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83891 - EPA 200.8											
Matrix Spike Dup (AI83891-MSD1)		**Source: 18I1713-01**			Prepared: 09/24/18 Analyzed: 09/25/18						
Aluminum	513	20	40	ug/L	520	ND	98.6	70-130	0.213	20	
Antimony	21.4	0.80	2.0	ug/L	20.0	ND	107	70-130	0.663	20	
Arsenic	22.8	0.80	2.0	ug/L	20.0	0.900	110	70-130	3.20	20	
Barium	156	0.80	2.0	ug/L	20.0	135	105	70-130	0.283	20	
Beryllium	20.6	0.20	0.40	ug/L	20.0	ND	103	70-130	1.58	20	
Cadmium	21.4	0.24	0.40	ug/L	20.0	ND	107	70-130	1.67	20	
Chromium	19.6	2.0	2.0	ug/L	20.0	ND	97.8	70-130	3.29	20	
Cobalt	19.5	0.40	0.40	ug/L	20.0	ND	97.6	70-130	1.07	20	
Copper	19.6	1.6	2.0	ug/L	20.0	2.64	84.9	70-130	0.770	20	
Iron	613	40	200	ug/L	520	113	96.0	70-130	0.991	20	
Lead	18.6	0.24	1.0	ug/L	20.0	ND	93.0	70-130	2.06	20	
Manganese	24.2	8.0	20	ug/L	20.0	ND	121	70-130	10.1	20	
Molybdenum	23.5	0.28	1.0	ug/L	20.0	2.44	106	70-130	1.25	20	
Nickel	21.0	1.2	2.0	ug/L	20.0	1.65	96.6	70-130	2.31	20	
Selenium	24.8	1.2	8.0	ug/L	20.0	ND	124	70-130	1.95	20	
Silver	19.9	0.20	0.40	ug/L	20.0	ND	99.3	70-130	2.63	20	
Thallium	18.3	0.20	0.40	ug/L	20.0	ND	91.6	70-130	3.74	20	
Vanadium	21.2	2.0	4.0	ug/L	20.0	ND	106	70-130	3.56	20	
Zinc	114	8.0	20	ug/L	100	ND	114	70-130	0.959	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84164 - EPA 245.1 Hg Water											
Blank (AI84164-BLK1)					Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	ND	0.060	0.20	ug/L							U
LCS (AI84164-BS1)					Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	2.41	0.060	0.20	ug/L	2.50		96.5	85-115			
Duplicate (AI84164-DUP1)		**Source: 18I1764-02**			Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	ND	0.060	0.20	ug/L		ND				20	U
MRL Check (AI84164-MRL1)					Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	0.591	0.060	0.20	ug/L				0-200			
Matrix Spike (AI84164-MS1)		**Source: 18I1764-02**			Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	2.48	0.060	0.20	ug/L	2.50	ND	99.4	70-130			
Matrix Spike (AI84164-MS2)		**Source: 18I1764-03**			Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	2.56	0.060	0.20	ug/L	2.50	ND	102	70-130			
Matrix Spike Dup (AI84164-MSD1)		**Source: 18I1764-02**			Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	2.93	0.060	0.20	ug/L	2.50	ND	117	70-130	16.5	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84051 - EPA 200.8 (D)											
Blank (AI84051-BLK1)					Prepared: 09/27/18 Analyzed: 09/28/18						
Aluminum, dissolved	ND	5.0	10	ug/L							U
Antimony, dissolved	ND	0.20	0.50	ug/L							U
Arsenic, dissolved	ND	0.20	0.50	ug/L							U
Barium, dissolved	ND	0.20	0.50	ug/L							U
Beryllium, dissolved	ND	0.050	0.10	ug/L							U
Cadmium, dissolved	ND	0.060	0.10	ug/L							U
Chromium, dissolved	ND	0.50	0.50	ug/L							U
Cobalt, dissolved	ND	0.10	0.10	ug/L							U
Copper, dissolved	ND	0.40	0.50	ug/L							U
Lead, dissolved	ND	0.060	0.25	ug/L							U
Molybdenum, dissolved	ND	0.070	0.25	ug/L							U
Nickel, dissolved	ND	0.30	0.50	ug/L							U
Selenium, dissolved	ND	0.30	2.0	ug/L							U
Silver, dissolved	ND	0.050	0.10	ug/L							U
Thallium, dissolved	ND	0.050	0.10	ug/L							U
Vanadium, dissolved	ND	0.50	1.0	ug/L							U
Zinc, dissolved	ND	2.0	5.0	ug/L							U
LCS (AI84051-BS1)					Prepared: 09/27/18 Analyzed: 09/28/18						
Aluminum, dissolved	527	5.0	10	ug/L	520		101	85-115			
Antimony, dissolved	21.0	0.20	0.50	ug/L	20.0		105	85-115			
Arsenic, dissolved	21.1	0.20	0.50	ug/L	20.0		106	85-115			
Barium, dissolved	21.5	0.20	0.50	ug/L	20.0		108	85-115			
Beryllium, dissolved	21.3	0.050	0.10	ug/L	20.0		106	85-115			
Cadmium, dissolved	21.0	0.060	0.10	ug/L	20.0		105	85-115			
Chromium, dissolved	21.0	0.50	0.50	ug/L	20.0		105	85-115			
Cobalt, dissolved	20.4	0.10	0.10	ug/L	20.0		102	85-115			
Copper, dissolved	21.1	0.40	0.50	ug/L	20.0		105	85-115			
Lead, dissolved	20.5	0.060	0.25	ug/L	20.0		102	85-115			
Molybdenum, dissolved	22.5	0.070	0.25	ug/L	20.0		112	85-115			
Nickel, dissolved	21.1	0.30	0.50	ug/L	20.0		105	85-115			
Selenium, dissolved	20.2	0.30	2.0	ug/L	20.0		101	85-115			
Silver, dissolved	21.9	0.050	0.10	ug/L	20.0		109	85-115			
Thallium, dissolved	20.6	0.050	0.10	ug/L	20.0		103	85-115			
Vanadium, dissolved	21.2	0.50	1.0	ug/L	20.0		106	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84051 - EPA 200.8 (D)											
LCS (AI84051-BS1)					Prepared: 09/27/18 Analyzed: 09/28/18						
Zinc, dissolved	101	2.0	5.0	ug/L	100		101	85-115			
Duplicate (AI84051-DUP1)		**Source: 18I1764-01**			Prepared: 09/27/18 Analyzed: 09/28/18						
Aluminum, dissolved	ND	20	40	ug/L		ND				20	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic, dissolved	1.98	0.80	2.0	ug/L		2.29			14.8	20	J
Barium, dissolved	63.8	0.80	2.0	ug/L		64.7			1.46	20	
Beryllium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L		ND				20	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L		ND				20	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L		ND				20	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L		ND				20	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L		ND				20	R-01, U
Molybdenum, dissolved	0.616	0.28	1.0	ug/L		0.588			4.67	20	R-01, J
Nickel, dissolved	ND	1.2	2.0	ug/L		ND				20	R-01, U
Selenium, dissolved	ND	1.2	8.0	ug/L		ND				20	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L		ND				20	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L		ND				20	R-01, U
Matrix Spike (AI84051-MS1)		**Source: 18I1764-01**			Prepared: 09/27/18 Analyzed: 09/28/18						
Aluminum, dissolved	551	20	40	ug/L	520	ND	106	70-130			
Antimony, dissolved	21.7	0.80	2.0	ug/L	20.0	ND	108	70-130			
Arsenic, dissolved	24.1	0.80	2.0	ug/L	20.0	2.29	109	70-130			
Barium, dissolved	84.8	0.80	2.0	ug/L	20.0	64.7	100	70-130			
Beryllium, dissolved	22.2	0.20	0.40	ug/L	20.0	ND	111	70-130			
Cadmium, dissolved	21.2	0.24	0.40	ug/L	20.0	ND	106	70-130			
Chromium, dissolved	21.1	2.0	2.0	ug/L	20.0	ND	106	70-130			
Cobalt, dissolved	20.5	0.40	0.40	ug/L	20.0	ND	103	70-130			
Copper, dissolved	21.2	1.6	2.0	ug/L	20.0	ND	106	70-130			
Lead, dissolved	20.2	0.24	1.0	ug/L	20.0	ND	101	70-130			
Molybdenum, dissolved	23.3	0.28	1.0	ug/L	20.0	0.588	114	70-130			
Nickel, dissolved	22.0	1.2	2.0	ug/L	20.0	ND	110	70-130			
Selenium, dissolved	22.8	1.2	8.0	ug/L	20.0	ND	114	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84051 - EPA 200.8 (D)											
Matrix Spike (AI84051-MS1)		**Source: 18I1764-01**			Prepared: 09/27/18 Analyzed: 09/28/18						
Silver, dissolved	22.3	0.20	0.40	ug/L	20.0	ND	111	70-130			
Thallium, dissolved	20.5	0.20	0.40	ug/L	20.0	ND	102	70-130			
Vanadium, dissolved	22.8	2.0	4.0	ug/L	20.0	ND	114	70-130			
Zinc, dissolved	108	8.0	20	ug/L	100	ND	108	70-130			
Matrix Spike (AI84051-MS2)		**Source: 18I2176-02**			Prepared: 09/27/18 Analyzed: 09/28/18						
Aluminum, dissolved	575	20	40	ug/L	520	38.3	103	70-130			
Antimony, dissolved	21.2	0.80	2.0	ug/L	20.0	ND	106	70-130			
Arsenic, dissolved	24.1	0.80	2.0	ug/L	20.0	2.36	109	70-130			
Barium, dissolved	40.1	0.80	2.0	ug/L	20.0	18.5	108	70-130			
Beryllium, dissolved	22.2	0.20	0.40	ug/L	20.0	ND	111	70-130			
Cadmium, dissolved	21.5	0.24	0.40	ug/L	20.0	ND	108	70-130			
Chromium, dissolved	21.6	2.0	2.0	ug/L	20.0	ND	108	70-130			
Cobalt, dissolved	20.4	0.40	0.40	ug/L	20.0	ND	102	70-130			
Copper, dissolved	26.7	1.6	2.0	ug/L	20.0	6.36	102	70-130			
Lead, dissolved	20.2	0.24	1.0	ug/L	20.0	ND	101	70-130			
Molybdenum, dissolved	22.8	0.28	1.0	ug/L	20.0	0.716	111	70-130			
Nickel, dissolved	24.0	1.2	2.0	ug/L	20.0	2.45	108	70-130			
Selenium, dissolved	22.0	1.2	8.0	ug/L	20.0	ND	110	70-130			
Silver, dissolved	21.9	0.20	0.40	ug/L	20.0	ND	109	70-130			
Thallium, dissolved	20.3	0.20	0.40	ug/L	20.0	ND	101	70-130			
Vanadium, dissolved	25.2	2.0	4.0	ug/L	20.0	4.14	106	70-130			
Zinc, dissolved	135	8.0	20	ug/L	100	28.2	107	70-130			
Matrix Spike Dup (AI84051-MSD1)		**Source: 18I1764-01**			Prepared: 09/27/18 Analyzed: 09/28/18						
Aluminum, dissolved	545	20	40	ug/L	520	ND	105	70-130	1.17	20	
Antimony, dissolved	21.9	0.80	2.0	ug/L	20.0	ND	110	70-130	1.03	20	
Arsenic, dissolved	25.1	0.80	2.0	ug/L	20.0	2.29	114	70-130	3.96	20	
Barium, dissolved	85.2	0.80	2.0	ug/L	20.0	64.7	102	70-130	0.508	20	
Beryllium, dissolved	21.7	0.20	0.40	ug/L	20.0	ND	108	70-130	2.37	20	
Cadmium, dissolved	21.2	0.24	0.40	ug/L	20.0	ND	106	70-130	0.262	20	
Chromium, dissolved	21.0	2.0	2.0	ug/L	20.0	ND	105	70-130	0.575	20	
Cobalt, dissolved	20.7	0.40	0.40	ug/L	20.0	ND	104	70-130	0.806	20	
Copper, dissolved	21.5	1.6	2.0	ug/L	20.0	ND	108	70-130	1.56	20	
Lead, dissolved	20.3	0.24	1.0	ug/L	20.0	ND	102	70-130	0.383	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84051 - EPA 200.8 (D)											
Matrix Spike Dup (AI84051-MSD1)		**Source: 18I1764-01**			Prepared: 09/27/18 Analyzed: 09/28/18						
Molybdenum, dissolved	23.1	0.28	1.0	ug/L	20.0	0.588	112	70-130	0.966	20	
Nickel, dissolved	22.3	1.2	2.0	ug/L	20.0	ND	112	70-130	1.36	20	
Selenium, dissolved	23.5	1.2	8.0	ug/L	20.0	ND	117	70-130	2.89	20	
Silver, dissolved	22.1	0.20	0.40	ug/L	20.0	ND	110	70-130	0.791	20	
Thallium, dissolved	20.4	0.20	0.40	ug/L	20.0	ND	102	70-130	0.492	20	
Vanadium, dissolved	21.7	2.0	4.0	ug/L	20.0	ND	108	70-130	4.95	20	
Zinc, dissolved	108	8.0	20	ug/L	100	ND	108	70-130	0.211	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Metals by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83981 - EPA 1631											
Blank (AI83981-BLK1)					Prepared: 09/24/18 Analyzed: 09/25/18						
Mercury	ND	0.200	0.500	ng/l							U
LCS (AI83981-BS1)					Prepared: 09/24/18 Analyzed: 09/25/18						
Mercury	5.29	0.200	0.500	ng/l	5.00		106	77-123			
Matrix Spike (AI83981-MS1)		**Source: 18I1402-01**			Prepared: 09/24/18 Analyzed: 09/25/18						
Mercury	40.2	0.200	0.500	ng/l	25.0	14.5	103	71-125			
Matrix Spike (AI83981-MS2)		**Source: 18I1764-01**			Prepared: 09/24/18 Analyzed: 09/25/18						
Mercury	29.5	0.200	0.500	ng/l	25.0	2.13	110	71-125			
Matrix Spike Dup (AI83981-MSD1)		**Source: 18I1402-01**			Prepared: 09/24/18 Analyzed: 09/25/18						
Mercury	41.0	0.200	0.500	ng/l	25.0	14.5	106	71-125	1.92	24	
Matrix Spike Dup (AI83981-MSD2)		**Source: 18I1764-01**			Prepared: 09/24/18 Analyzed: 09/25/18						
Mercury	29.6	0.200	0.500	ng/l	25.0	2.13	110	71-125	0.169	24	
Reference (AI83981-SRM1)					Prepared: 09/24/18 Analyzed: 09/25/18						
Mercury	52.6	0.200	0.500	ng/l	50.0		105	68-125			

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Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83809 - General Preparation											
Blank (AI83809-BLK1)					Prepared: 09/20/18 Analyzed: 09/25/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
Blank (AI83809-BLK2)					Prepared: 09/20/18 Analyzed: 09/25/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
LCS (AI83809-BS2)					Prepared: 09/20/18 Analyzed: 09/25/18						
Biochemical Oxygen Demand	196	2.0	5.0	mg/L	200		97.9	84-115			
Duplicate (AI83809-DUP1)		**Source: 18I1737-01**			Prepared: 09/20/18 Analyzed: 09/25/18						
Biochemical Oxygen Demand	248	2.0	5.0	mg/L		242			2.63	30	
Batch AI83888 - General Preparation											
Blank (AI83888-BLK1)					Prepared: 09/21/18 Analyzed: 09/25/18						
Total Suspended Solids	ND	0.30	1.0	mg/L							U
Duplicate (AI83888-DUP1)		**Source: 18I1565-02**			Prepared: 09/21/18 Analyzed: 09/25/18						
Total Suspended Solids	180	0.30	1.0	mg/L		159			12.9	30	
Duplicate (AI83888-DUP2)		**Source: 18I1681-01**			Prepared: 09/21/18 Analyzed: 09/25/18						
Total Suspended Solids	1280	0.30	1.0	mg/L		829			42.8	30	QD-02
Batch AI83937 - Metals Digest											
Blank (AI83937-BLK1)					Prepared: 09/24/18 Analyzed: 10/03/18						
Hardness, Total	ND	1	5	mg/L							U

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Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83937 - Metals Digest											
Duplicate (AI83937-DUP1)		**Source: 18I1969-01**			Prepared: 09/24/18 Analyzed: 10/03/18						
Hardness, Total	171	1	5	mg/L		170			0.579	20	
Batch AI83951 - General Preparation											
Blank (AI83951-BLK1)					Prepared: 09/24/18 Analyzed: 10/01/18						
Total Dissolved Solids	ND	5.0	10	mg/L							U
Duplicate (AI83951-DUP1)		**Source: 18I1522-01**			Prepared: 09/24/18 Analyzed: 10/01/18						
Total Dissolved Solids	148	5.0	10	mg/L		144			2.74	15	
Duplicate (AI83951-DUP2)		**Source: 18I1522-07**			Prepared: 09/24/18 Analyzed: 10/01/18						
Total Dissolved Solids	182	5.0	10	mg/L		176			3.35	15	
Batch AI84058 - General Preparation											
Blank (AI84058-BLK1)					Prepared: 09/20/18 Analyzed: 10/03/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L							U
Duplicate (AI84058-DUP1)		**Source: 18I1662-01**			Prepared: 09/20/18 Analyzed: 10/03/18						
Chlorophyll-a	0.0266	0.0050	0.010	mg/L		0.0250			5.87	50	
Duplicate (AI84058-DUP2)		**Source: 18I1764-01**			Prepared: 09/20/18 Analyzed: 10/03/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Batch AI84084 - General Preparation											
Duplicate (AI84084-DUP1)		**Source: 18I1655-01**			Prepared & Analyzed: 09/26/18						
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Bicarbonate Alkalinity as CaCO3	16.0	1.0	5.0	mg/L		16.0			0.00	20	
Total Alkalinity as CaCO3	16.0	1.0	5.0	mg/L		16.0			0.00	20	
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84088 - General Preparation											
LCS (AI84088-BS1)					Prepared & Analyzed: 09/26/18						
Ammonia as N	5.08	0.10	0.20	mg/L	5.00		102	90-110			
LCS Dup (AI84088-BSD1)					Prepared & Analyzed: 09/26/18						
Ammonia as N	4.90	0.10	0.20	mg/L	5.00		98.1	90-110	3.51	20	
Matrix Spike (AI84088-MS1)		**Source: 18I2193-01**			Prepared & Analyzed: 09/26/18						
Ammonia as N	8.93	0.10	0.20	mg/L	10.0	ND	89.3	85-115			
Matrix Spike Dup (AI84088-MSD1)		**Source: 18I2193-01**			Prepared & Analyzed: 09/26/18						
Ammonia as N	9.11	0.10	0.20	mg/L	10.0	ND	91.1	85-115	1.95	20	
Batch AI84167 - General Prep											
Blank (AI84167-BLK1)					Prepared & Analyzed: 09/27/18						
Total Organic Carbon	ND	0.300	1.00	mg/L							U
LCS (AI84167-BS1)					Prepared & Analyzed: 09/27/18						
Total Organic Carbon	10.4	0.300	1.00	mg/L	10.0		104	85-115			
LCS Dup (AI84167-BSD1)					Prepared & Analyzed: 09/27/18						
Total Organic Carbon	10.2	0.300	1.00	mg/L	10.0		102	85-115	1.23	20	
Duplicate (AI84167-DUP1)		**Source: 18I1402-01**			Prepared & Analyzed: 09/27/18						
Total Organic Carbon	2.92	0.300	1.00	mg/L		3.01			2.99	20	
Matrix Spike (AI84167-MS1)		**Source: 18I1402-02**			Prepared & Analyzed: 09/27/18						
Total Organic Carbon	25.3	0.600	2.00	mg/L	20.0	4.39	104	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84167 - General Prep											
Matrix Spike Dup (AI84167-MSD1)		**Source: 18I1402-02**			Prepared & Analyzed: 09/27/18						
Total Organic Carbon	25.9	0.600	2.00	mg/L	20.0	4.39	107	70-130	2.46	20	
Batch AI84221 - General Preparation											
Blank (AI84221-BLK1)					Prepared: 09/28/18 Analyzed: 10/03/18						
Oil & Grease (HEM)	ND	1.4	5.0	mg/L							U
LCS (AI84221-BS1)					Prepared: 09/28/18 Analyzed: 10/03/18						
Oil & Grease (HEM)	39.7	1.4	5.0	mg/L	40.0		99.2	78-114			
LCS Dup (AI84221-BSD1)					Prepared: 09/28/18 Analyzed: 10/03/18						
Oil & Grease (HEM)	39.4	1.4	5.0	mg/L	40.0		98.5	78-114	0.759	18	
Matrix Spike (AI84221-MS1)		**Source: 18I2327-01**			Prepared: 09/28/18 Analyzed: 10/03/18						
Oil & Grease (HEM)	14.4	1.4	5.0	mg/L	40.0	1.40	32.5	78-114			QM-05
Batch AJ83123 - General Prep											
LCS (AJ83123-BS1)					Prepared: 10/01/18 Analyzed: 10/02/18						
Total Kjeldahl Nitrogen	3.04	0.050	1.0	mg/L	2.98		102	80-120			
LCS Dup (AJ83123-BSD1)					Prepared: 10/01/18 Analyzed: 10/02/18						
Total Kjeldahl Nitrogen	2.86	0.050	1.0	mg/L	2.98		95.9	80-120	6.27	20	
Matrix Spike (AJ83123-MS1)		**Source: 18I1768-01**			Prepared: 10/01/18 Analyzed: 10/02/18						
Total Kjeldahl Nitrogen	3.13	0.050	1.0	mg/L	2.98	0.175	99.3	75-125			

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83123 - General Prep											
Matrix Spike Dup (AJ83123-MSD1)		**Source: 18I1768-01**			Prepared: 10/01/18 Analyzed: 10/02/18						
Total Kjeldahl Nitrogen	3.04	0.050	1.0	mg/L	2.98	0.175	96.2	75-125	2.98	20	
Batch AJ83186 - General Prep											
Blank (AJ83186-BLK1)					Prepared & Analyzed: 10/02/18						
Phosphorus, total	ND	0.010	0.040	mg/L							U
LCS (AJ83186-BS1)					Prepared & Analyzed: 10/02/18						
Phosphorus, total	0.200	0.010	0.040	mg/L	0.200		100	85-115			
Duplicate (AJ83186-DUP1)		**Source: 18I1764-01**			Prepared & Analyzed: 10/02/18						
Phosphorus, total	0.0201	0.010	0.040	mg/L		0.0201			0.00	20	J
Matrix Spike (AJ83186-MS1)		**Source: 18I1764-01**			Prepared & Analyzed: 10/02/18						
Phosphorus, total	0.200	0.010	0.040	mg/L	0.200	0.0201	90.0	70-130			
Matrix Spike (AJ83186-MS2)		**Source: 18I1864-01**			Prepared & Analyzed: 10/02/18						
Phosphorus, total	0.185	0.010	0.040	mg/L	0.200	0.0120	86.6	70-130			
Matrix Spike Dup (AJ83186-MSD1)		**Source: 18I1764-01**			Prepared & Analyzed: 10/02/18						
Phosphorus, total	0.201	0.010	0.040	mg/L	0.200	0.0201	90.7	70-130	0.672	20	
Batch AJ83224 - General Prep											
Blank (AJ83224-BLK1)					Prepared & Analyzed: 10/02/18						
Dissolved Organic Carbon	ND	0.600	1.00	mg/L							U

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Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83224 - General Prep											
LCS (AJ83224-BS1)					Prepared & Analyzed: 10/02/18						
Dissolved Organic Carbon	10.5	0.600	1.00	mg/L	10.0		105	85-115			
LCS Dup (AJ83224-BSD1)					Prepared & Analyzed: 10/02/18						
Dissolved Organic Carbon	11.0	0.600	1.00	mg/L	10.0		110	85-115	4.25	20	
Duplicate (AJ83224-DUP1)		**Source: 18I1625-03**			Prepared & Analyzed: 10/02/18						
Dissolved Organic Carbon	1.41	0.600	1.00	mg/L		1.44			1.99	20	
MRL Check (AJ83224-MRL1)					Prepared & Analyzed: 10/02/18						
Dissolved Organic Carbon	1.38	0.600	1.00	mg/L	1.25		111	0-200			
Matrix Spike (AJ83224-MS1)		**Source: 18I1625-03**			Prepared & Analyzed: 10/02/18						
Dissolved Organic Carbon	22.7	1.20	2.00	mg/L	20.0	1.44	106	70-130			
Matrix Spike Dup (AJ83224-MSD1)		**Source: 18I1625-03**			Prepared & Analyzed: 10/02/18						
Dissolved Organic Carbon	21.0	1.20	2.00	mg/L	20.0	1.44	97.9	70-130	7.67	20	

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Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83783 - General Preparation											
Blank (AI83783-BLK1)					Prepared & Analyzed: 09/19/18						
Nitrate as N	ND	0.040	0.20	mg/L							U
Orthophosphate	ND	0.10	0.30	mg/L							U
Nitrite as N	ND	0.050	0.20	mg/L							U
LCS (AI83783-BS1)					Prepared & Analyzed: 09/19/18						
Nitrite as N	5.50	0.050	0.20	mg/L	5.56		99.0	90-110			
Nitrate as N	5.74	0.040	0.20	mg/L	5.56		103	90-110			
Orthophosphate	17.2	0.10	0.30	mg/L	16.7		103	90-110			
Duplicate (AI83783-DUP1)		**Source: 18I1768-04**			Prepared & Analyzed: 09/20/18						
Orthophosphate	0.129	0.10	0.30	mg/L		0.129			0.00	20	J
Nitrite as N	0.0680	0.050	0.20	mg/L		0.0680			0.00	20	J
Nitrate as N	0.100	0.040	0.20	mg/L		0.101			0.895	20	J
Matrix Spike (AI83783-MS1)		**Source: 18I1768-04**			Prepared & Analyzed: 09/20/18						
Orthophosphate	13.1	0.50	1.5	mg/L	16.7	ND	78.5	80-120			QM-05
Nitrate as N	5.44	0.20	1.0	mg/L	5.56	ND	97.9	80-120			
Nitrite as N	5.37	0.25	1.0	mg/L	5.56	ND	96.6	80-120			
Matrix Spike (AI83783-MS2)		**Source: 18I1771-01**			Prepared & Analyzed: 09/20/18						
Nitrite as N	5.22	0.25	1.0	mg/L	5.56	ND	94.0	80-120			
Nitrate as N	5.78	0.20	1.0	mg/L	5.56	0.243	99.7	80-120			
Orthophosphate	14.0	0.50	1.5	mg/L	16.7	ND	83.8	80-120			
Matrix Spike Dup (AI83783-MSD1)		**Source: 18I1768-04**			Prepared & Analyzed: 09/20/18						
Nitrate as N	5.49	0.20	1.0	mg/L	5.56	ND	98.7	80-120	0.826	20	
Nitrite as N	5.55	0.25	1.0	mg/L	5.56	ND	99.9	80-120	3.36	20	
Orthophosphate	13.5	0.50	1.5	mg/L	16.7	ND	80.8	80-120	2.95	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

TPH by EPA/LUFT GC Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83944 - SVOAs in Water GC											
Blank (AI83944-BLK1)					Prepared: 09/24/18 Analyzed: 09/26/18						
TPH as Diesel	ND	50	250	ug/L							U
TPH as Motor Oil	ND	100	250	ug/L							U
Surrogate: Tetratetracontane	*32.7*			*ug/L*	*58.8*		*55.6*	*39-120*			
LCS (AI83944-BS1)					Prepared: 09/24/18 Analyzed: 09/27/18						
TPH as Diesel	2320	50	250	ug/L	2020		115	61-120			
Surrogate: Tetratetracontane	*66.4*			*ug/L*	*58.8*		*113*	*39-120*			
LCS (AI83944-BS2)					Prepared: 09/24/18 Analyzed: 09/26/18						
TPH as Motor Oil	2220	100	250	ug/L	2010		110	71-125			
Surrogate: Tetratetracontane	*64.9*			*ug/L*	*58.8*		*110*	*39-120*			
LCS Dup (AI83944-BSD1)					Prepared: 09/24/18 Analyzed: 09/26/18						
TPH as Diesel	2180	50	250	ug/L	2020		108	61-120	6.52	25	
Surrogate: Tetratetracontane	*62.4*			*ug/L*	*58.8*		*106*	*39-120*			
LCS Dup (AI83944-BSD2)					Prepared: 09/24/18 Analyzed: 09/26/18						
TPH as Motor Oil	2050	100	250	ug/L	2010		102	71-125	7.99	25	
Surrogate: Tetratetracontane	*62.9*			*ug/L*	*58.8*		*107*	*39-120*			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

TPH by EPA/LUFT GCMS Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84029 - VOAs in Water GCMS											
Blank (AI84029-BLK1)					Prepared: 09/24/18 Analyzed: 09/25/18						
TPH as Gasoline	ND	50	50	ug/L							U
Surrogate: Toluene-d8	*24.8*			*ug/L*	*25.0*		*99.3*	*76-129*			
LCS (AI84029-BS1)					Prepared: 09/24/18 Analyzed: 09/25/18						
TPH as Gasoline	209	50	50	ug/L	200		105	67-132			
Surrogate: Toluene-d8	*24.8*			*ug/L*	*25.0*		*99.2*	*76-129*			
LCS Dup (AI84029-BSD1)					Prepared: 09/24/18 Analyzed: 09/25/18						
TPH as Gasoline	205	50	50	ug/L	200		103	67-132	2.07	25	
Surrogate: Toluene-d8	*24.6*			*ug/L*	*25.0*		*98.4*	*76-129*			
Matrix Spike (AI84029-MS1)		**Source: 18I1549-01**			Prepared: 09/24/18 Analyzed: 09/25/18						
TPH as Gasoline	255	50	50	ug/L	200	ND	127	37-156			
Surrogate: Toluene-d8	*25.0*			*ug/L*	*25.0*		*99.8*	*76-129*			
Matrix Spike (AI84029-MS2)		**Source: 18I1549-02**			Prepared: 09/24/18 Analyzed: 09/26/18						
TPH as Gasoline	205	50	50	ug/L	200	ND	103	37-156			
Surrogate: Toluene-d8	*25.0*			*ug/L*	*25.0*		*100*	*76-129*			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84030 - VOAs in Water GCMS											
Blank (AI84030-BLK1)					Prepared: 09/24/18 Analyzed: 09/25/18						
Benzene	ND	0.30	0.30	ug/L							U
Toluene	ND	0.30	0.30	ug/L							U
Ethylbenzene	ND	0.40	0.50	ug/L							U
Xylenes (total)	ND	0.50	0.50	ug/L							U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L							U
Di-isopropyl ether	ND	0.40	0.50	ug/L							U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L							U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L							U
Tert-butyl alcohol	ND	6.0	10	ug/L							U
Surrogate: Bromofluorobenzene	*25.1*			*ug/L*	*25.0*		*100*	*70-130*			
Surrogate: Dibromofluoromethane	*22.8*			*ug/L*	*25.0*		*91.2*	*70-130*			
Surrogate: Toluene-d8	*25.3*			*ug/L*	*25.0*		*101*	*70-130*			
LCS (AI84030-BS1)					Prepared: 09/24/18 Analyzed: 09/25/18						
Benzene	20.4	0.30	0.30	ug/L	20.0		102	82-122			
Toluene	20.6	0.30	0.30	ug/L	20.0		103	75-134			
Ethylbenzene	21.6	0.40	0.50	ug/L	20.0		108	84-124			
Xylenes (total)	63.6	0.50	0.50	ug/L	60.0		106	81-126			
Methyl tert-butyl ether	19.6	0.50	0.50	ug/L	20.0		98.2	84-119			
Di-isopropyl ether	22.3	0.40	0.50	ug/L	20.0		111	83-132			
Ethyl tert-butyl ether	23.3	0.40	0.50	ug/L	20.0		116	74-127			
Tert-amyl methyl ether	20.0	0.40	0.50	ug/L	20.0		100	74-120			
Tert-butyl alcohol	407	6.0	10	ug/L	400		102	66-147			
Surrogate: Bromofluorobenzene	*25.6*			*ug/L*	*25.0*		*103*	*70-130*			
Surrogate: Dibromofluoromethane	*24.0*			*ug/L*	*25.0*		*96.2*	*70-130*			
Surrogate: Toluene-d8	*24.5*			*ug/L*	*25.0*		*98.2*	*70-130*			
LCS Dup (AI84030-BSD1)					Prepared: 09/24/18 Analyzed: 09/25/18						
Benzene	20.3	0.30	0.30	ug/L	20.0		102	82-122	0.295	25	
Toluene	20.4	0.30	0.30	ug/L	20.0		102	75-134	0.828	25	
Ethylbenzene	21.4	0.40	0.50	ug/L	20.0		107	84-124	0.745	25	
Xylenes (total)	62.8	0.50	0.50	ug/L	60.0		105	81-126	1.15	25	
Methyl tert-butyl ether	19.6	0.50	0.50	ug/L	20.0		98.0	84-119	0.153	25	
Di-isopropyl ether	21.8	0.40	0.50	ug/L	20.0		109	83-132	2.00	25	
Ethyl tert-butyl ether	23.1	0.40	0.50	ug/L	20.0		115	74-127	0.864	25	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:04

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84030 - VOAs in Water GCMS											
LCS Dup (AI84030-BSD1)					Prepared: 09/24/18 Analyzed: 09/25/18						
Tert-amyl methyl ether	20.0	0.40	0.50	ug/L	20.0		100	74-120	0.00	25	
Tert-butyl alcohol	401	6.0	10	ug/L	400		100	66-147	1.62	25	
Surrogate: Bromofluorobenzene	*25.2*			*ug/L*	*25.0*		*101*	*70-130*			
Surrogate: Dibromofluoromethane	*24.0*			*ug/L*	*25.0*		*95.8*	*70-130*			
Surrogate: Toluene-d8	*24.3*			*ug/L*	*25.0*		*97.2*	*70-130*			
Matrix Spike (AI84030-MS1)		**Source: 18I1678-01**			Prepared: 09/24/18 Analyzed: 09/26/18						
Benzene	21.8	0.30	0.30	ug/L	20.0	ND	109	58-139			
Toluene	22.1	0.30	0.30	ug/L	20.0	ND	110	59-147			
Ethylbenzene	23.0	0.40	0.50	ug/L	20.0	ND	115	59-147			
Xylenes (total)	67.0	0.50	0.50	ug/L	60.0	ND	112	49-153			
Methyl tert-butyl ether	20.4	0.50	0.50	ug/L	20.0	ND	102	55-144			
Di-isopropyl ether	23.3	0.40	0.50	ug/L	20.0	ND	117	49-143			
Ethyl tert-butyl ether	26.5	0.40	0.50	ug/L	20.0	ND	132	44-143			
Tert-amyl methyl ether	21.4	0.40	0.50	ug/L	20.0	ND	107	41-136			
Tert-butyl alcohol	910	6.0	10	ug/L	400	ND	227	38-175			QM-05
Surrogate: Bromofluorobenzene	*25.2*			*ug/L*	*25.0*		*101*	*70-130*			
Surrogate: Dibromofluoromethane	*24.4*			*ug/L*	*25.0*		*97.6*	*70-130*			
Surrogate: Toluene-d8	*24.2*			*ug/L*	*25.0*		*96.8*	*70-130*			
Matrix Spike (AI84030-MS2)		**Source: 18I1678-02**			Prepared: 09/24/18 Analyzed: 09/26/18						
Benzene	22.0	0.30	0.30	ug/L	20.0	ND	110	58-139			
Toluene	22.1	0.30	0.30	ug/L	20.0	ND	110	59-147			
Ethylbenzene	23.2	0.40	0.50	ug/L	20.0	ND	116	59-147			
Xylenes (total)	67.2	0.50	0.50	ug/L	60.0	ND	112	49-153			
Methyl tert-butyl ether	20.9	0.50	0.50	ug/L	20.0	ND	104	55-144			
Di-isopropyl ether	23.6	0.40	0.50	ug/L	20.0	ND	118	49-143			
Ethyl tert-butyl ether	26.8	0.40	0.50	ug/L	20.0	ND	134	44-143			
Tert-amyl methyl ether	22.0	0.40	0.50	ug/L	20.0	ND	110	41-136			
Tert-butyl alcohol	852	6.0	10	ug/L	400	ND	213	38-175			QM-05
Surrogate: Bromofluorobenzene	*25.6*			*ug/L*	*25.0*		*102*	*70-130*			
Surrogate: Dibromofluoromethane	*24.8*			*ug/L*	*25.0*		*99.2*	*70-130*			
Surrogate: Toluene-d8	*24.6*			*ug/L*	*25.0*		*98.5*	*70-130*			

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Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	10/22/18 10:04

Notes and Definitions

FILT	The sample was filtered in the lab prior to analysis.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QD-02	High duplicate RPD due to sample non-homogeneity.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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BROOKS APPLIED LABS
18804 North Creek Parkway, Ste 100, Bothell, WA 98011 • USA • T: 206 632 6206 F: 206 632 6017 • info@brooksapplied.com

October 18, 2018

Basic Laboratory, Inc.
ATTN: Jen McCurdy
2218 Railroad Avenue
Redding, CA 96001
jmccurdy@basiclab.com

RE: Project BSL-RE1801 Client Project: 18I1244

Dear Jen McCurdy,

On October 10, 2018, Brooks Applied Labs (BAL) received five (5) water samples. The samples were logged-in for the analyses of methyl mercury (MeHg) according to the chain-of-custody form. All samples were received and stored according to BAL SOPs and EPA methodology. Samples were preserved with hydrochloric acid by the client.

Water samples were distilled via EPA Method 1630.

The results were method blank corrected as described in the calculations section of the relevant BAL SOP(s) and were evaluated using reporting limits adjusted to account for sample aliquot size. Please refer to the *Sample Results* page for sample-specific MDLs, MRLs, and other details.

The method blank (BLK) BLK4 did not ethylate properly during analysis. It was re-analyzed as BLK5, which met all acceptance criteria. Only BLK5 was reported.

All data was reported without qualification (aside from concentration qualifiers) and all associated quality control sample results met the acceptance criteria.

BAL, an accredited laboratory, certifies that the reported results of all analyses for which BAL is NELAP accredited meet all NELAP requirements. For more information please see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Sincerely,

Lydia Greaves

Lydia Greaves
Client Services Manager
lydia@brooksapplied.com

Report Information

Laboratory Accreditation

BAL is accredited by the *National Environmental Laboratory Accreditation Program* (NELAP) through the State of Florida Department of Health, Bureau of Laboratories (E87982) and is certified to perform many environmental analyses. BAL is also certified by many other states to perform environmental analyses. For a current list of our accreditations/certifications, please visit our website at <http://www.brooksapplied.com/resources/certificates-permits/>. Results reported relate only to the samples listed in the report.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

AR	as received	**MS**	matrix spike
BAL	Brooks Applied Labs	**MSD**	matrix spike duplicate
BLK	method blank	**ND**	non-detect
BS	blank spike	**NR**	non-reportable
CAL	calibration standard	**N/C**	not calculated
CCB	continuing calibration blank	**PS**	post preparation spike
CCV	continuing calibration verification	**REC**	percent recovery
COC	chain of custody record	**RPD**	relative percent difference
D	dissolved fraction	**SCV**	secondary calibration verification
DUP	duplicate	**SOP**	standard operating procedure
IBL	instrument blank	**SRM**	standard reference material
ICV	initial calibration verification	**T**	total fraction
MDL	method detection limit	**TR**	total recoverable fraction
MRL	method reporting limit		

Definition of Data Qualifiers

(Effective 9/23/09)

E	An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H	Holding time and/or preservation requirements not met. Please see narrative for explanation.
J	Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
J-1	Estimated value. A full explanation is presented in the narrative.
M	Duplicate precision (RPD) was not within acceptance criteria. Please see narrative for explanation.
N	Spike recovery was not within acceptance criteria. Please see narrative for explanation.
R	Rejected, unusable value. A full explanation is presented in the narrative.
U	Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
X	Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.

These qualifiers are based on those previously utilized by Brooks Applied Labs, those found in the EPA SOW ILM03.0, Exhibit B, Section III, pg. B-18, and the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review; USEPA; January 2010. These supersede all previous qualifiers ever employed by BAL.

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Project ID: BSL-RE1801
PM: Lydia Greaves

Client PM: Jen McCurdy
Client Project: 18I1244

Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
18I1244-01 18I1764-01 ER 152.9	1841017-01	Water	Sample	09/18/2018	10/10/2018
18I1244-02 18I1764-02 TC0.1	1841017-02	Water	Sample	09/18/2018	10/10/2018
18I1244-03 18I1764-03 ER153.1	1841017-03	Water	Sample	09/18/2018	10/10/2018
18I1244-04 18I1764-04 ER-DUP	1841017-04	Water	Sample	09/18/2018	10/10/2018
18I1244-05 18I1764-05 TC-BLANK	1841017-05	Water	Field Blank	09/18/2018	10/10/2018

Batch Summary

Analyte	Lab Matrix	Method	Prepared	Analyzed	Batch	Sequence
MeHg	Water	EPA 1630	10/12/2018	10/13/2018	B182746	1801394

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Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
18I1244-01 18I1764-01 ER 152.9										
1841017-01	MeHg	Water	TR	0.200		0.023	0.050	ng/L	B182746	1801394
18I1244-02 18I1764-02 TC0.1										
1841017-02	MeHg	Water	TR	0.038	J	0.023	0.050	ng/L	B182746	1801394
18I1244-03 18I1764-03 ER153.1										
1841017-03	MeHg	Water	TR	0.223		0.023	0.050	ng/L	B182746	1801394
18I1244-04 18I1764-04 ER-DUP										
1841017-04	MeHg	Water	TR	0.142		0.023	0.050	ng/L	B182746	1801394
18I1244-05 18I1764-05 TC-BLANK										
1841017-05	MeHg	Water	TR	≤ 0.023	U	0.023	0.050	ng/L	B182746	1801394

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Project ID: BSL-RE1801
PM: Lydia Greaves

Client PM: Jen McCurdy
Client Project: 18I1244

Accuracy & Precision Summary

Batch: B182746
Lab Matrix: Water
Method: EPA 1630

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B182746-BS1	**Blank Spike, (1839004)**						
	MeHg		1.000	1.016	ng/L	102% 67-133	
B182746-MS1	**Matrix Spike (1841017-02)**						
	MeHg	0.038	1.000	1.031	ng/L	99% 65-135	
B182746-MSD1	**Matrix Spike Duplicate (1841017-02)**						
	MeHg	0.038	1.000	1.047	ng/L	101% 65-135	2% 35
B182746-MS2	**Matrix Spike (1841020-01)**						
	MeHg	0.467	1.000	1.684	ng/L	122% 65-135	
B182746-MSD2	**Matrix Spike Duplicate (1841020-01)**						
	MeHg	0.467	1.000	1.441	ng/L	97% 65-135	16% 35

Method Blanks & Reporting Limits

Batch: B182746
Matrix: Water
Method: EPA 1630
Analyte: MeHg

Sample	Result	Units
B182746-BLK1	0.006	ng/L
B182746-BLK2	0.003	ng/L
B182746-BLK3	-0.0004	ng/L
B182746-BLK5	0.014	ng/L

Average: 0.006 **Standard Deviation:** 0.006 **MDL:** 0.027
Limit: 0.045 **Limit:** 0.015 **MRL:** 0.058

18804 North Creek Parkway, Suite 100, Bothell, WA 98011 · P(206) 632-6206 · F(206) 632-6017 · info@brooksapplied.com · www.brooksapplied.com

Project ID: BSL-RE1801
PM: Lydia Greaves

Client PM: Jen McCurdy
Client Project: 18I1244

Sample Containers

Lab ID: 1841017-01
Sample: 18I1244-01 18I1764-01 ER 152.9
Report Matrix: Water
Sample Type: Sample
Collected: 09/18/2018
Received: 10/10/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	500mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841017

Lab ID: 1841017-02
Sample: 18I1244-02 18I1764-02 TC0.1
Report Matrix: Water
Sample Type: Sample
Collected: 09/18/2018
Received: 10/10/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	500mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841017

Lab ID: 1841017-03
Sample: 18I1244-03 18I1764-03 ER153.1
Report Matrix: Water
Sample Type: Sample
Collected: 09/18/2018
Received: 10/10/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	500mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841017

Lab ID: 1841017-04
Sample: 18I1244-04 18I1764-04 ER-DUP
Report Matrix: Water
Sample Type: Sample
Collected: 09/18/2018
Received: 10/10/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	500mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841017

Lab ID: 1841017-05
Sample: 18I1244-05 18I1764-05 TC-BLANK
Report Matrix: Water
Sample Type: Field Blank
Collected: 09/18/2018
Received: 10/10/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	500mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841017

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Project ID: BSL-RE1801
PM: Lydia Greaves

Client PM: Jen McCurdy
Client Project: 18I1244

Shipping Containers

Cooler - 1841017

Received: October 10, 2018 15:00
Tracking No: 1Z8336E31378214118 via UPS
Coolant Type: Ice
Temperature: 2.0 °C

Description: Cooler
Damaged in transit? No
Returned to client? No
Comments: IR#18

Custody seals present? No
Custody seals intact? No
COC present? Yes

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SUBCONTRACT ORDER

BAL Report 1841017

Basic Laboratory Inc

18I1244

SENDING LABORATORY:
Basic Laboratory Inc
2218 Railroad Avenue
Redding, CA 96001-2504
Phone: (530) 243-7234
Fax: (530) 243-6204
Project Manager: Jen McCurdy

RECEIVING LABORATORY: Brooks Applied
BROOKS RAND LIMITED LAB
3958 6TH AVENUE NORTHWEST
SEATTLE, WA 981075056
Phone :(206) 632-6206
Fax: (206) 632-6017
E-Mail: jmccurdy@basiclab.com

Attn: Lydia Greares

Please use standard TAT unless specific due date is requested. Email results & Element transfer file to reporting@basiclab.com.

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 18I1244-01	18I1764-01 ER 152.9	Water	Sampled: 09/18/18 10:30	
Methyl Mercury 1630	~~10/05/18 15:00~~	~~03/17/19 10:30~~		
Containers Supplied:				
Sample ID: 18I1244-02	18I1764-02 TC0.1	Water	Sampled: 09/18/18 11:45	
Methyl Mercury 1630	~~10/05/18 15:00~~	~~03/17/19 11:45~~		
Containers Supplied:				
Sample ID: 18I1244-03	18I1764-03 ER153.1	Water	Sampled: 09/18/18 12:40	
Methyl Mercury 1630	~~10/05/18 15:00~~	~~03/17/19 12:40~~		
Containers Supplied:				
Sample ID: 18I1244-04	18I1764-04 ER-DUP	Water	Sampled: 09/18/18 10:45	
Methyl Mercury 1630	~~10/05/18 15:00~~	~~03/17/19 10:45~~		
Containers Supplied:				
Sample ID: 18I1244-05	18I1764-05 TC-BLANK	Water	Sampled: 09/18/18 09:25	
Methyl Mercury 1630	~~10/05/18 15:00~~	~~03/17/19 09:25~~		
Containers Supplied:				

Released By	Date	Received By	Date
[signature]	10.9.18	[signature]	10/10/18 15:00
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18I1764

18I1244
10-5-18

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

Basic Laboratory
2218 Railroad Ave
Redding, CA 96001
Phone :530-243-7234
Fax: 530-243-7494
Terms: Net 30

1811244
1

Analysis	Due	Expires	Comments
18I1764-01 ER152.9 [Water] Sampled 09/18/18 10:30			-1 9.5°
BAL Hg Methyl	10/03/18 12:00	03/17/19 10:30	
Containers Supplied: 500ml Glass - HCl (H) AG			
18I1764-02 TC0.1 [Water] Sampled 09/18/18 11:45			-2 12.6°
BAL Hg Methyl	10/03/18 12:00	03/17/19 11:45	
Containers Supplied: 500ml Glass - HCl (H) AG			
18I1764-03 ER153.1 [Water] Sampled 09/18/18 12:40			-3 9.3°
BAL Hg Methyl	10/03/18 12:00	03/17/19 12:40	
Containers Supplied: 500ml Glass - HCl (H) AG			
18I1764-04 ER-DUP [Water] Sampled 09/18/18 10:45			-4 10.8°
BAL Hg Methyl	10/03/18 12:00	03/17/19 10:45	
Containers Supplied: 500ml Glass - HCl (H) AG			
18I1764-05 TC-BLANK [Water] Sampled 09/18/18 09:25			-5 9.6°
BAL Hg Methyl	10/03/18 12:00	03/17/19 09:25	
Containers Supplied: 500ml Glass - HCl (H) AG			

Released By	Date	Received By	Date
	9-24-18	T Wilhelmson	9-25-18 1440
Released By	Date	Received By	Date
		TW	9-25-18 1510

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18I1764

18I1244

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+QC

Released By	Date	Received By	Date
	9-24-18		
Released By	Date	Received By	Date

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email: clientservices@alpha-labs.com

ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

Bay Area Laboratory
262 Rickenbacker Circle, Livermore CA 94551
925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18I1764 Pg 1 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	TPH-D/MO	TPH-Gas/BTEX/Oxys	Oil and Grease	TOC	DOC	CAM17 200.8 total + Al/Mn	Fe 200.8 Total	Hardness, total	Ammonia-N	Phosphorus, Total	TKN	Sample Notes or DDW Source Numbers:
ER152.9	9/18	1030											X			15	X	X	X	X	X	X	X	X	X	X	X	
TZ0.1	↓	1145											↓			↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓	
ER153.1		1240																										
FR-DUP		1045																										
FB-BLANK		925											↓			↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓	

TAT
Standard 10 days ○
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1-2
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		9-19-18	0815

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):
Travel and Site Time: Mileage: Misc. Supplies:

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email: clientservices@alpha-labs.com

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925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18I1764 Pg 2 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	CAM17 200.8 dissolved / lab filter	Al dissolved 200.8	Alkalinity	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	TDS	TSS	Chlorophyll-A	~~Sulfide~~	Hg 1631	MeHg 1630	Sample Notes or DDW Source Numbers:
ER152.9	9/18	1030											X			—	X	X	X	X	X	X	X	X	X	X	X	X	NO Sulfides
TC0.1		1145														—													
ER153.1		1240														—													
ER-DUP		1045														—													
TC-BLANK		925														—													
																see pg 1													

TAT
Standard 10 days ○
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.2
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
CHRISTINA BUCK		9-19-18	0815

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID:
EDF to (Email Address):
Sampling Company Log Code:

Travel and Site Time:	Mileage:	Misc. Supplies:

Alpha Analytical Laboratories Inc.
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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

ELAP Certificates 1551, 2728, and 2922

22 October 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18I1864

Enclosed are the results of analyses for samples received by the laboratory on 09/19/18 16:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

Alpha Analytical Laboratories Inc.
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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ER118.9	18I1864-01	Water	09/19/18 10:45	09/19/18 16:40
ER119.1	18I1864-02	Water	09/19/18 11:45	09/19/18 16:40
MF0.1	18I1864-03	Water	09/19/18 12:20	09/19/18 16:40
OC0.1	18I1864-04	Water	09/19/18 14:05	09/19/18 16:40
ER125.9	18I1864-05	Water	09/19/18 15:00	09/19/18 16:40
ER126.1	18I1864-06	Water	09/19/18 15:25	09/19/18 16:40

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.

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e-mail: clientservices@alpha-labs.com
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Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 •Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER118.9 (18I1864-01) Water Sampled: 09/19/18 10:45 Received: 09/19/18 16:40											
Calcium	**28**	**0.080**	**1.0**	**mg/L**	1	AI83890	09/24/18 09:10	10/03/18 13:55	EPA 200.7	MAM	
Magnesium	**8.5**	**0.030**	**1.0**	**mg/L**	1	AI83890	09/24/18 09:10	10/03/18 13:55	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AI84085	09/26/18 08:07	09/26/18 14:51	EPA 245.1	LMR	U
ER119.1 (18I1864-02) Water Sampled: 09/19/18 11:45 Received: 09/19/18 16:40											
Calcium	**26**	**0.080**	**1.0**	**mg/L**	1	AI83890	09/24/18 09:10	10/03/18 14:00	EPA 200.7	MAM	
Magnesium	**7.7**	**0.030**	**1.0**	**mg/L**	1	AI83890	09/24/18 09:10	10/03/18 14:00	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AI84085	09/26/18 08:07	09/26/18 14:54	EPA 245.1	LMR	U
MF0.1 (18I1864-03) Water Sampled: 09/19/18 12:20 Received: 09/19/18 16:40											
Calcium	**34**	**0.080**	**1.0**	**mg/L**	1	AI83890	09/24/18 09:10	10/03/18 14:04	EPA 200.7	MAM	
Magnesium	**11**	**0.030**	**1.0**	**mg/L**	1	AI83890	09/24/18 09:10	10/03/18 14:04	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AI84085	09/26/18 08:07	09/26/18 14:56	EPA 245.1	LMR	U
OC0.1 (18I1864-04) Water Sampled: 09/19/18 14:05 Received: 09/19/18 16:40											
Calcium	**24**	**0.080**	**1.0**	**mg/L**	1	AI83890	09/24/18 09:10	10/03/18 14:09	EPA 200.7	MAM	
Magnesium	**11**	**0.030**	**1.0**	**mg/L**	1	AI83890	09/24/18 09:10	10/03/18 14:09	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AI84085	09/26/18 08:07	09/26/18 14:59	EPA 245.1	LMR	U
ER125.9 (18I1864-05) Water Sampled: 09/19/18 15:00 Received: 09/19/18 16:40											
Calcium	**26**	**0.080**	**1.0**	**mg/L**	1	AI83890	09/24/18 09:10	10/03/18 14:14	EPA 200.7	MAM	
Magnesium	**7.8**	**0.030**	**1.0**	**mg/L**	1	AI83890	09/24/18 09:10	10/03/18 14:14	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AI84085	09/26/18 08:07	09/26/18 15:01	EPA 245.1	LMR	U
ER126.1 (18I1864-06) Water Sampled: 09/19/18 15:25 Received: 09/19/18 16:40											
Calcium	**26**	**0.080**	**1.0**	**mg/L**	1	AI83890	09/24/18 09:10	10/03/18 14:19	EPA 200.7	MAM	
Magnesium	**7.6**	**0.030**	**1.0**	**mg/L**	1	AI83890	09/24/18 09:10	10/03/18 14:19	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AI84085	09/26/18 08:07	09/26/18 15:04	EPA 245.1	LMR	U

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.

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER118.9 (18I1864-01) Water Sampled: 09/19/18 10:45 Received: 09/19/18 16:40											
Aluminum	ND	20	40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:08	EPA 200.8	MMY	R-01, U
Antimony	ND	0.80	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:08	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:08	EPA 200.8	MMY	R-01, U
Barium	**93**	**0.80**	**2.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:08	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:08	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:08	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:08	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:08	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:08	EPA 200.8	MMY	R-01, U
Iron	**79**	**40**	**200**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:08	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:08	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:08	EPA 200.8	MMY	R-01, U
Molybdenum	**1.4**	**0.28**	**1.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:08	EPA 200.8	MMY	
Nickel	ND	1.2	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:08	EPA 200.8	MMY	R-01, U
Selenium	ND	1.2	8.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:08	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:08	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:08	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:08	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:08	EPA 200.8	MMY	R-01, U
ER119.1 (18I1864-02) Water Sampled: 09/19/18 11:45 Received: 09/19/18 16:40											
Aluminum	ND	20	40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:15	EPA 200.8	MMY	R-01, U
Antimony	ND	0.80	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:15	EPA 200.8	MMY	R-01, U
Arsenic	**0.94**	**0.80**	**2.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:15	EPA 200.8	MMY	R-01, J
Barium	**87**	**0.80**	**2.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:15	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:15	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:15	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:15	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:15	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:15	EPA 200.8	MMY	R-01, U
Iron	**64**	**40**	**200**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:15	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:15	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:15	EPA 200.8	MMY	R-01, U
Molybdenum	**0.91**	**0.28**	**1.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:15	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER119.1 (18I1864-02) Water Sampled: 09/19/18 11:45 Received: 09/19/18 16:40											
Nickel	ND	1.2	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:15	EPA 200.8	MMY	R-01, U
Selenium	ND	1.2	8.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:15	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:15	EPA 200.8	MMY	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:15	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:15	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:15	EPA 200.8	MMY	R-01, U
MF0.1 (18I1864-03) Water Sampled: 09/19/18 12:20 Received: 09/19/18 16:40											
Aluminum	ND	20	40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:22	EPA 200.8	MMY	U, R-01
Antimony	ND	0.80	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:22	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:22	EPA 200.8	MMY	R-01, U
Barium	**100**	**0.80**	**2.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:22	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:22	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:22	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:22	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:22	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:22	EPA 200.8	MMY	R-01, U
Iron	**100**	**40**	**200**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:22	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:22	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:22	EPA 200.8	MMY	R-01, U
Molybdenum	**3.3**	**0.28**	**1.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:22	EPA 200.8	MMY	
Nickel	**2.3**	**1.2**	**2.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:22	EPA 200.8	MMY	
Selenium	ND	1.2	8.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:22	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:22	EPA 200.8	MMY	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:22	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:22	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:22	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
OC0.1 (18I1864-04) Water Sampled: 09/19/18 14:05 Received: 09/19/18 16:40											
Aluminum	**22**	**20**	**40**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:29	EPA 200.8	MMY	R-01, J
Antimony	ND	0.80	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:29	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:29	EPA 200.8	MMY	R-01, U
Barium	**77**	**0.80**	**2.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:29	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:29	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:29	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:29	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:29	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:29	EPA 200.8	MMY	R-01, U
Iron	**79**	**40**	**200**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:29	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:29	EPA 200.8	MMY	R-01, U
Manganese	**12**	**8.0**	**20**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:29	EPA 200.8	MMY	R-01, J
Molybdenum	**1.1**	**0.28**	**1.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:29	EPA 200.8	MMY	
Nickel	ND	1.2	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:29	EPA 200.8	MMY	R-01, U
Selenium	ND	1.2	8.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:29	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:29	EPA 200.8	MMY	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:29	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:29	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:29	EPA 200.8	MMY	R-01, U
ER125.9 (18I1864-05) Water Sampled: 09/19/18 15:00 Received: 09/19/18 16:40											
Aluminum	ND	20	40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:35	EPA 200.8	MMY	R-01, U
Antimony	ND	0.80	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:35	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:35	EPA 200.8	MMY	R-01, U
Barium	**88**	**0.80**	**2.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:35	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:35	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:35	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:35	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:35	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:35	EPA 200.8	MMY	R-01, U
Iron	**64**	**40**	**200**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:35	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:35	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:35	EPA 200.8	MMY	R-01, U
Molybdenum	**0.85**	**0.28**	**1.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:35	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER125.9 (18I1864-05) Water Sampled: 09/19/18 15:00 Received: 09/19/18 16:40											
Nickel	ND	1.2	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:35	EPA 200.8	MMY	R-01, U
Selenium	ND	1.2	8.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:35	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:35	EPA 200.8	MMY	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:35	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:35	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:35	EPA 200.8	MMY	R-01, U
ER126.1 (18I1864-06) Water Sampled: 09/19/18 15:25 Received: 09/19/18 16:40											
Aluminum	ND	20	40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:42	EPA 200.8	MMY	U, R-01
Antimony	ND	0.80	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:42	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:42	EPA 200.8	MMY	R-01, U
Barium	**90**	**0.80**	**2.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:42	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:42	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:42	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:42	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:42	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:42	EPA 200.8	MMY	R-01, U
Iron	**64**	**40**	**200**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:42	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:42	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:42	EPA 200.8	MMY	R-01, U
Molybdenum	**0.84**	**0.28**	**1.0**	**ug/L**	4	AI83891	09/24/18 06:45	09/25/18 16:42	EPA 200.8	MMY	R-01, J
Nickel	ND	1.2	2.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:42	EPA 200.8	MMY	R-01, U
Selenium	ND	1.2	8.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:42	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:42	EPA 200.8	MMY	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:42	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:42	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI83891	09/24/18 06:45	09/25/18 16:42	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER118.9 (18I1864-01) Water Sampled: 09/19/18 10:45 Received: 09/19/18 16:40											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AI84164	09/27/18 09:49	10/01/18 17:14	EPA 245.1	LMR	U
ER119.1 (18I1864-02) Water Sampled: 09/19/18 11:45 Received: 09/19/18 16:40											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AI84164	09/27/18 09:49	10/01/18 17:17	EPA 245.1	LMR	U
MF0.1 (18I1864-03) Water Sampled: 09/19/18 12:20 Received: 09/19/18 16:40											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AI84164	09/27/18 09:49	10/01/18 17:20	EPA 245.1	LMR	U
OC0.1 (18I1864-04) Water Sampled: 09/19/18 14:05 Received: 09/19/18 16:40											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AI84164	09/27/18 09:49	10/01/18 17:22	EPA 245.1	LMR	U
ER125.9 (18I1864-05) Water Sampled: 09/19/18 15:00 Received: 09/19/18 16:40											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AI84164	09/27/18 09:49	10/01/18 17:25	EPA 245.1	LMR	U
ER126.1 (18I1864-06) Water Sampled: 09/19/18 15:25 Received: 09/19/18 16:40											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AI84164	09/27/18 09:49	10/01/18 17:27	EPA 245.1	LMR	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER118.9 (18I1864-01) Water Sampled: 09/19/18 10:45 Received: 09/19/18 16:40											**P-02**
Aluminum, dissolved	ND	20	40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:34	EPA 200.8	JRA	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:34	EPA 200.8	JRA	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:34	EPA 200.8	MMY	R-01, U
Barium, dissolved	**91**	**0.80**	**2.0**	**ug/L**	4	AI83933	09/25/18 11:40	10/03/18 10:34	EPA 200.8	JRA	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:34	EPA 200.8	JRA	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:34	EPA 200.8	JRA	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 22:40	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:34	EPA 200.8	JRA	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:34	EPA 200.8	JRA	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:34	EPA 200.8	JRA	R-01, U
Molybdenum, dissolved	**1.5**	**0.28**	**1.0**	**ug/L**	4	AI83933	09/25/18 11:40	10/03/18 10:34	EPA 200.8	JRA	
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:34	EPA 200.8	JRA	R-01, U
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 22:40	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:34	EPA 200.8	JRA	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:34	EPA 200.8	JRA	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:34	EPA 200.8	JRA	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:34	EPA 200.8	JRA	R-01, U
ER119.1 (18I1864-02) Water Sampled: 09/19/18 11:45 Received: 09/19/18 16:40											**P-02**
Aluminum, dissolved	ND	20	40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:48	EPA 200.8	JRA	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:48	EPA 200.8	JRA	R-01, U
Arsenic, dissolved	**1.1**	**0.80**	**2.0**	**ug/L**	4	AI83933	09/25/18 11:40	10/03/18 10:48	EPA 200.8	MMY	R-01, J
Barium, dissolved	**85**	**0.80**	**2.0**	**ug/L**	4	AI83933	09/25/18 11:40	10/03/18 10:48	EPA 200.8	JRA	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:48	EPA 200.8	JRA	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:48	EPA 200.8	JRA	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 22:53	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:48	EPA 200.8	JRA	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:48	EPA 200.8	JRA	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:48	EPA 200.8	JRA	R-01, U
Molybdenum, dissolved	**0.93**	**0.28**	**1.0**	**ug/L**	4	AI83933	09/25/18 11:40	10/03/18 10:48	EPA 200.8	JRA	R-01, J
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:48	EPA 200.8	JRA	R-01, U
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 22:53	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:48	EPA 200.8	JRA	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:48	EPA 200.8	JRA	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER119.1 (18I1864-02) Water Sampled: 09/19/18 11:45 Received: 09/19/18 16:40											**P-02**
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:48	EPA 200.8	JRA	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AI83933	09/25/18 11:40	10/03/18 10:48	EPA 200.8	JRA	R-01, U
MF0.1 (18I1864-03) Water Sampled: 09/19/18 12:20 Received: 09/19/18 16:40											**P-02**
Aluminum, dissolved	ND	20	40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:01	EPA 200.8	JRA	U, R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:01	EPA 200.8	JRA	R-01, U
Arsenic, dissolved	**0.93**	**0.80**	**2.0**	**ug/L**	4	AI83933	09/25/18 11:40	10/03/18 11:01	EPA 200.8	MMY	R-01, J
Barium, dissolved	**97**	**0.80**	**2.0**	**ug/L**	4	AI83933	09/25/18 11:40	10/03/18 11:01	EPA 200.8	JRA	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:01	EPA 200.8	JRA	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:01	EPA 200.8	JRA	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 23:06	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:01	EPA 200.8	JRA	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:01	EPA 200.8	JRA	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:01	EPA 200.8	JRA	R-01, U
Molybdenum, dissolved	**2.3**	**0.28**	**1.0**	**ug/L**	4	AI83933	09/25/18 11:40	10/03/18 11:01	EPA 200.8	JRA	
Nickel, dissolved	**1.4**	**1.2**	**2.0**	**ug/L**	4	AI83933	09/25/18 11:40	10/03/18 11:01	EPA 200.8	JRA	R-01, J
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 23:06	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:01	EPA 200.8	JRA	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:01	EPA 200.8	JRA	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:01	EPA 200.8	JRA	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:01	EPA 200.8	JRA	R-01, U
OC0.1 (18I1864-04) Water Sampled: 09/19/18 14:05 Received: 09/19/18 16:40											**P-02**
Aluminum, dissolved	ND	20	40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:08	EPA 200.8	JRA	U, R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:08	EPA 200.8	JRA	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:08	EPA 200.8	MMY	R-01, U
Barium, dissolved	**72**	**0.80**	**2.0**	**ug/L**	4	AI83933	09/25/18 11:40	10/03/18 11:08	EPA 200.8	JRA	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:08	EPA 200.8	JRA	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:08	EPA 200.8	JRA	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 23:13	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:08	EPA 200.8	JRA	R-01, U
Copper, dissolved	**1.8**	**1.6**	**2.0**	**ug/L**	4	AI83933	09/25/18 11:40	10/03/18 23:13	EPA 200.8	MMY	R-01, J
Lead, dissolved	ND	0.24	1.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:08	EPA 200.8	JRA	R-01, U
Molybdenum, dissolved	**0.97**	**0.28**	**1.0**	**ug/L**	4	AI83933	09/25/18 11:40	10/03/18 11:08	EPA 200.8	JRA	R-01, J
Nickel, dissolved	**1.4**	**1.2**	**2.0**	**ug/L**	4	AI83933	09/25/18 11:40	10/03/18 11:08	EPA 200.8	JRA	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
OC0.1 (18I1864-04) Water Sampled: 09/19/18 14:05 Received: 09/19/18 16:40											**P-02**
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 23:13	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:08	EPA 200.8	JRA	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:08	EPA 200.8	JRA	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:08	EPA 200.8	JRA	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:08	EPA 200.8	JRA	R-01, U
ER125.9 (18I1864-05) Water Sampled: 09/19/18 15:00 Received: 09/19/18 16:40											**P-02**
Aluminum, dissolved	ND	20	40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:15	EPA 200.8	JRA	U, R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:15	EPA 200.8	JRA	R-01, U
Arsenic, dissolved	**1.2**	**0.80**	**2.0**	**ug/L**	4	AI83933	09/25/18 11:40	10/03/18 11:15	EPA 200.8	MMY	R-01, J
Barium, dissolved	**85**	**0.80**	**2.0**	**ug/L**	4	AI83933	09/25/18 11:40	10/03/18 11:15	EPA 200.8	JRA	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:15	EPA 200.8	JRA	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:15	EPA 200.8	JRA	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 23:20	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:15	EPA 200.8	JRA	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:15	EPA 200.8	JRA	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:15	EPA 200.8	JRA	R-01, U
Molybdenum, dissolved	**0.93**	**0.28**	**1.0**	**ug/L**	4	AI83933	09/25/18 11:40	10/03/18 11:15	EPA 200.8	JRA	R-01, J
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:15	EPA 200.8	JRA	R-01, U
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 23:20	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:15	EPA 200.8	JRA	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:15	EPA 200.8	JRA	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:15	EPA 200.8	JRA	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:15	EPA 200.8	JRA	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER126.1 (18I1864-06) Water Sampled: 09/19/18 15:25 Received: 09/19/18 16:40											**P-02**
Aluminum, dissolved	ND	20	40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:25	EPA 200.8	JRA	U, R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:25	EPA 200.8	JRA	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:25	EPA 200.8	MMY	R-01, U
Barium, dissolved	**86**	**0.80**	**2.0**	**ug/L**	4	AI83933	09/25/18 11:40	10/03/18 11:25	EPA 200.8	JRA	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:25	EPA 200.8	JRA	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:25	EPA 200.8	JRA	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 23:27	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:25	EPA 200.8	JRA	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:25	EPA 200.8	JRA	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:25	EPA 200.8	JRA	R-01, U
Molybdenum, dissolved	**0.84**	**0.28**	**1.0**	**ug/L**	4	AI83933	09/25/18 11:40	10/03/18 11:25	EPA 200.8	JRA	R-01, J
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:25	EPA 200.8	JRA	R-01, U
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 23:27	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:25	EPA 200.8	JRA	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:25	EPA 200.8	JRA	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:25	EPA 200.8	JRA	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AI83933	09/25/18 11:40	10/03/18 11:25	EPA 200.8	JRA	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER118.9 (18I1864-01) Water Sampled: 09/19/18 10:45 Received: 09/19/18 16:40											
Mercury	**0.969**	**0.200**	**0.500**	**ng/l**	1	AI83981	09/24/18 14:00	09/25/18 16:48	EPA 1631E	AJC	
ER119.1 (18I1864-02) Water Sampled: 09/19/18 11:45 Received: 09/19/18 16:40											
Mercury	**0.829**	**0.200**	**0.500**	**ng/l**	1	AI83981	09/24/18 14:00	09/25/18 16:57	EPA 1631E	AJC	
MF0.1 (18I1864-03) Water Sampled: 09/19/18 12:20 Received: 09/19/18 16:40											
Mercury	**1.07**	**0.200**	**0.500**	**ng/l**	1	AI83981	09/24/18 14:00	09/25/18 17:05	EPA 1631E	AJC	
OC0.1 (18I1864-04) Water Sampled: 09/19/18 14:05 Received: 09/19/18 16:40											
Mercury	**1.62**	**0.200**	**0.500**	**ng/l**	1	AI83981	09/24/18 14:00	09/25/18 17:13	EPA 1631E	AJC	
ER125.9 (18I1864-05) Water Sampled: 09/19/18 15:00 Received: 09/19/18 16:40											
Mercury	**1.77**	**0.200**	**0.500**	**ng/l**	1	AI83981	09/24/18 14:00	09/25/18 17:21	EPA 1631E	AJC	
ER126.1 (18I1864-06) Water Sampled: 09/19/18 15:25 Received: 09/19/18 16:40											
Mercury	**1.45**	**0.200**	**0.500**	**ng/l**	1	AJ83141	10/01/18 12:08	10/02/18 14:15	EPA 1631E	AJC	

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.

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER118.9 (18I1864-01) Water Sampled: 09/19/18 10:45 Received: 09/19/18 16:40											
Ammonia as N	ND	0.10	0.20	mg/L	1	AI84026	09/25/18 11:30	09/25/18 17:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI83883	09/21/18 08:00	09/26/18 14:30	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AJ83376	09/21/18 10:00	10/11/18 10:00	SM10200H	EV	U
Dissolved Organic Carbon	**1.64**	**0.600**	**1.00**	**mg/L**	1	AJ83224	10/02/18 13:50	10/03/18 12:02	SM5310C	JIM	
Oil & Grease (HEM)	**2.5**	**1.4**	**5.0**	**mg/L**	1	AI84221	09/28/18 08:41	10/03/18 13:49	EPA 1664A	STS	J
Total Dissolved Solids	**160**	**10**	**10**	**mg/L**	1	AI84077	09/26/18 07:20	10/05/18 10:05	SM2540C	PBM	
Total Suspended Solids	**0.30**	**0.30**	**1.0**	**mg/L**	1	AI84086	09/26/18 10:15	09/26/18 17:00	SM2540D	SEF	J
Bicarbonate Alkalinity as CaCO3	**92**	**1.0**	**5.0**	**mg/L**	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	U
Total Alkalinity as CaCO3	**92**	**1.0**	**5.0**	**mg/L**	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	
Nitrate + Nitrite as N	**0.029**	**0.0086**	**0.40**	**mg/L**	1	AI83825	09/20/18 08:50	10/07/18 16:02	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.14**	**0.050**	**1.0**	**mg/L**	1	AJ83123	10/02/18 08:50	10/03/18 11:11	SM4500-Norg B	JVO	J
Hardness, Total	**104**	**1**	**5**	**mg/L**	1	AI83890	09/24/18 09:10	10/03/18 13:55	SM2340B	MAM	
Phosphorus, total	**0.012**	**0.010**	**0.040**	**mg/L**	1	AJ83186	10/02/18 09:00	10/02/18 12:03	SM4500-P E	SMS	J
Total Organic Carbon	**1.71**	**0.300**	**1.00**	**mg/L**	1	AI84167	09/27/18 10:25	09/27/18 22:12	SM5310C	JIM	
ER119.1 (18I1864-02) Water Sampled: 09/19/18 11:45 Received: 09/19/18 16:40											
Ammonia as N	**0.33**	**0.10**	**0.20**	**mg/L**	1	AI84026	09/25/18 11:30	09/25/18 17:00	SM4500NH3C	FCM	
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI83883	09/21/18 08:00	09/26/18 14:30	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AJ83376	09/21/18 10:00	10/11/18 10:00	SM10200H	EV	U
Dissolved Organic Carbon	**1.91**	**0.600**	**1.00**	**mg/L**	1	AJ83224	10/02/18 13:50	10/03/18 12:22	SM5310C	JIM	
Oil & Grease (HEM)	**1.7**	**1.4**	**5.0**	**mg/L**	1	AI84221	09/28/18 08:41	10/03/18 13:49	EPA 1664A	STS	J
Total Dissolved Solids	**130**	**10**	**10**	**mg/L**	1	AI84077	09/26/18 07:20	10/05/18 10:05	SM2540C	PBM	
Total Suspended Solids	**0.50**	**0.30**	**1.0**	**mg/L**	1	AI84086	09/26/18 10:15	09/26/18 17:00	SM2540D	SEF	J
Bicarbonate Alkalinity as CaCO3	**93**	**1.0**	**5.0**	**mg/L**	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	U
Total Alkalinity as CaCO3	**93**	**1.0**	**5.0**	**mg/L**	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	
Nitrate + Nitrite as N	**0.027**	**0.0086**	**0.40**	**mg/L**	1	AI83825	09/20/18 08:50	10/07/18 16:02	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.24**	**0.050**	**1.0**	**mg/L**	1	AJ83123	10/02/18 08:50	10/03/18 11:11	SM4500-Norg B	JVO	J
Hardness, Total	**96**	**1**	**5**	**mg/L**	1	AI83890	09/24/18 09:10	10/03/18 14:00	SM2340B	MAM	
Phosphorus, total	**0.011**	**0.010**	**0.040**	**mg/L**	1	AJ83186	10/02/18 09:00	10/02/18 12:03	SM4500-P E	SMS	J
Total Organic Carbon	**1.97**	**0.300**	**1.00**	**mg/L**	1	AI84167	09/27/18 10:25	09/27/18 22:32	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
MF0.1 (18I1864-03) Water Sampled: 09/19/18 12:20 Received: 09/19/18 16:40											
Ammonia as N	ND	0.10	0.20	mg/L	1	AI84026	09/25/18 11:30	09/25/18 17:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI83883	09/21/18 08:00	09/26/18 14:30	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AJ83376	09/21/18 10:00	10/11/18 10:00	SM10200H	EV	U
Dissolved Organic Carbon	**1.02**	**0.600**	**1.00**	**mg/L**	1	AJ83224	10/02/18 13:50	10/04/18 17:12	SM5310C	JIM	
Oil & Grease (HEM)	**1.6**	**1.4**	**5.0**	**mg/L**	1	AI84221	09/28/18 08:41	10/03/18 13:49	EPA 1664A	STS	J
Total Dissolved Solids	**220**	**10**	**10**	**mg/L**	1	AI84077	09/26/18 07:20	10/05/18 10:05	SM2540C	PBM	
Total Suspended Solids	ND	0.30	1.0	mg/L	1	AI84086	09/26/18 10:15	09/26/18 17:00	SM2540D	SEF	U
Bicarbonate Alkalinity as CaCO3	**92**	**1.0**	**5.0**	**mg/L**	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	U
Total Alkalinity as CaCO3	**92**	**1.0**	**5.0**	**mg/L**	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AI83825	09/20/18 08:50	10/07/18 16:02	Calculation	RLG	U
Total Kjeldahl Nitrogen	**0.21**	**0.050**	**1.0**	**mg/L**	1	AJ83123	10/02/18 08:50	10/03/18 11:11	SM4500-Norg B	JVO	J
Hardness, Total	**131**	**1**	**5**	**mg/L**	1	AI83890	09/24/18 09:10	10/03/18 14:04	SM2340B	MAM	
Phosphorus, total	ND	0.010	0.040	mg/L	1	AJ83186	10/02/18 09:00	10/02/18 12:03	SM4500-P E	SMS	U
Total Organic Carbon	**1.13**	**0.300**	**1.00**	**mg/L**	1	AI84167	09/27/18 10:25	09/27/18 22:51	SM5310C	JIM	
OC0.1 (18I1864-04) Water Sampled: 09/19/18 14:05 Received: 09/19/18 16:40											
Ammonia as N	ND	0.10	0.20	mg/L	1	AI84026	09/25/18 11:30	09/25/18 17:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI83883	09/21/18 08:00	09/26/18 14:30	SM5210B	WCS	U
Chlorophyll-a	**0.0025**	**0.0010**	**0.010**	**mg/L**	1	AJ83376	09/21/18 10:00	10/11/18 10:00	SM10200H	EV	J
Dissolved Organic Carbon	**3.04**	**0.600**	**1.00**	**mg/L**	1	AJ83224	10/02/18 13:50	10/03/18 13:01	SM5310C	JIM	
Oil & Grease (HEM)	**1.8**	**1.4**	**5.0**	**mg/L**	1	AI84221	09/28/18 08:41	10/03/18 13:49	EPA 1664A	STS	J
Total Dissolved Solids	**140**	**10**	**10**	**mg/L**	1	AI84077	09/26/18 07:20	10/05/18 10:05	SM2540C	PBM	
Total Suspended Solids	**1.6**	**0.30**	**1.0**	**mg/L**	1	AI84086	09/26/18 10:15	09/26/18 17:00	SM2540D	SEF	
Bicarbonate Alkalinity as CaCO3	**110**	**1.0**	**5.0**	**mg/L**	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	U
Total Alkalinity as CaCO3	**110**	**1.0**	**5.0**	**mg/L**	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	
Nitrate + Nitrite as N	**0.028**	**0.0086**	**0.40**	**mg/L**	1	AI83825	09/20/18 08:50	10/07/18 16:02	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.35**	**0.050**	**1.0**	**mg/L**	1	AJ83123	10/02/18 08:50	10/03/18 11:11	SM4500-Norg B	JVO	J
Hardness, Total	**104**	**1**	**5**	**mg/L**	1	AI83890	09/24/18 09:10	10/03/18 14:09	SM2340B	MAM	
Phosphorus, total	**0.016**	**0.010**	**0.040**	**mg/L**	1	AJ83186	10/02/18 09:00	10/02/18 12:03	SM4500-P E	SMS	J
Total Organic Carbon	**3.09**	**0.300**	**1.00**	**mg/L**	1	AI84167	09/27/18 10:25	09/27/18 23:10	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER125.9 (18I1864-05) Water Sampled: 09/19/18 15:00 Received: 09/19/18 16:40											
Ammonia as N	ND	0.10	0.20	mg/L	1	AI84026	09/25/18 11:30	09/25/18 17:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI83883	09/21/18 08:00	09/26/18 14:30	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AJ83376	09/21/18 10:00	10/11/18 10:00	SM10200H	EV	U
Dissolved Organic Carbon	**1.77**	**0.600**	**1.00**	**mg/L**	1	AJ83224	10/02/18 13:50	10/03/18 13:20	SM5310C	JIM	
Oil & Grease (HEM)	**1.7**	**1.4**	**5.0**	**mg/L**	1	AI84221	09/28/18 08:41	10/03/18 13:49	EPA 1664A	STS	J
Total Dissolved Solids	**120**	**10**	**10**	**mg/L**	1	AI84077	09/26/18 07:20	10/05/18 10:05	SM2540C	PBM	
Total Suspended Solids	ND	0.30	1.0	mg/L	1	AI84086	09/26/18 10:15	09/26/18 17:00	SM2540D	SEF	U
Bicarbonate Alkalinity as CaCO3	**91**	**1.0**	**5.0**	**mg/L**	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	U
Total Alkalinity as CaCO3	**91**	**1.0**	**5.0**	**mg/L**	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	
Nitrate + Nitrite as N	**0.028**	**0.0086**	**0.40**	**mg/L**	1	AI83825	09/20/18 08:50	10/07/18 16:02	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.21**	**0.050**	**1.0**	**mg/L**	1	AJ83123	10/02/18 08:50	10/03/18 11:11	SM4500-Norg B	JVO	J
Hardness, Total	**96**	**1**	**5**	**mg/L**	1	AI83890	09/24/18 09:10	10/03/18 14:14	SM2340B	MAM	
Phosphorus, total	**0.011**	**0.010**	**0.040**	**mg/L**	1	AJ83186	10/02/18 09:00	10/02/18 12:03	SM4500-P E	SMS	J
Total Organic Carbon	**1.94**	**0.300**	**1.00**	**mg/L**	1	AI84167	09/27/18 10:25	09/27/18 23:30	SM5310C	JIM	
ER126.1 (18I1864-06) Water Sampled: 09/19/18 15:25 Received: 09/19/18 16:40											
Ammonia as N	**0.14**	**0.10**	**0.20**	**mg/L**	1	AI84026	09/25/18 11:30	09/25/18 17:00	SM4500NH3C	FCM	J
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI83883	09/21/18 08:00	09/26/18 14:30	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AJ83376	09/21/18 10:00	10/11/18 10:00	SM10200H	EV	U
Dissolved Organic Carbon	**1.72**	**0.600**	**1.00**	**mg/L**	1	AJ83224	10/02/18 13:50	10/03/18 13:40	SM5310C	JIM	
Oil & Grease (HEM)	**2.3**	**1.4**	**5.0**	**mg/L**	1	AI84221	09/28/18 08:41	10/03/18 13:49	EPA 1664A	STS	J
Total Dissolved Solids	**110**	**10**	**10**	**mg/L**	1	AI84077	09/26/18 07:20	10/05/18 10:05	SM2540C	PBM	
Total Suspended Solids	**0.60**	**0.30**	**1.0**	**mg/L**	1	AI84086	09/26/18 10:15	09/26/18 17:00	SM2540D	SEF	J
Bicarbonate Alkalinity as CaCO3	**91**	**1.0**	**5.0**	**mg/L**	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	U
Total Alkalinity as CaCO3	**91**	**1.0**	**5.0**	**mg/L**	1	AI84122	09/27/18 08:00	09/27/18 15:34	SM2320B	CEF	
Nitrate + Nitrite as N	**0.094**	**0.0086**	**0.40**	**mg/L**	1	AI83825	09/20/18 08:50	10/07/18 16:02	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.21**	**0.050**	**1.0**	**mg/L**	1	AJ83123	10/02/18 08:50	10/03/18 11:11	SM4500-Norg B	JVO	J
Hardness, Total	**96**	**1**	**5**	**mg/L**	1	AI83890	09/24/18 09:10	10/03/18 14:19	SM2340B	MAM	
Phosphorus, total	**0.011**	**0.010**	**0.040**	**mg/L**	1	AJ83186	10/02/18 09:00	10/02/18 12:03	SM4500-P E	SMS	J
Total Organic Carbon	**1.90**	**0.300**	**1.00**	**mg/L**	1	AI84167	09/27/18 10:25	09/27/18 23:50	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER118.9 (18I1864-01) Water Sampled: 09/19/18 10:45 Received: 09/19/18 16:40											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI83837	09/20/18 10:59	09/20/18 10:59	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI83837	09/20/18 10:59	09/20/18 10:59	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI83837	09/20/18 10:59	09/20/18 10:59	EPA 300.0	SMP	U
ER119.1 (18I1864-02) Water Sampled: 09/19/18 11:45 Received: 09/19/18 16:40											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI83837	09/20/18 11:15	09/20/18 11:15	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI83837	09/20/18 11:15	09/20/18 11:15	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI83837	09/20/18 11:15	09/20/18 11:15	EPA 300.0	SMP	U
MF0.1 (18I1864-03) Water Sampled: 09/19/18 12:20 Received: 09/19/18 16:40											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI83837	09/20/18 11:31	09/20/18 11:31	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI83837	09/20/18 11:31	09/20/18 11:31	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI83837	09/20/18 11:31	09/20/18 11:31	EPA 300.0	SMP	U
OC0.1 (18I1864-04) Water Sampled: 09/19/18 14:05 Received: 09/19/18 16:40											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI83837	09/20/18 11:48	09/20/18 11:48	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI83837	09/20/18 11:48	09/20/18 11:48	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI83837	09/20/18 11:48	09/20/18 11:48	EPA 300.0	SMP	U
ER125.9 (18I1864-05) Water Sampled: 09/19/18 15:00 Received: 09/19/18 16:40											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI83837	09/20/18 12:04	09/20/18 12:04	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI83837	09/20/18 12:04	09/20/18 12:04	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI83837	09/20/18 12:04	09/20/18 12:04	EPA 300.0	SMP	U
ER126.1 (18I1864-06) Water Sampled: 09/19/18 15:25 Received: 09/19/18 16:40											
Nitrate as N	**0.094**	**0.040**	**0.20**	**mg/L**	1	AI83837	09/20/18 12:20	09/20/18 12:20	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AI83837	09/20/18 12:20	09/20/18 12:20	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI83837	09/20/18 12:20	09/20/18 12:20	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

TPH by EPA/LUFT GC Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER118.9 (18I1864-01) Water Sampled: 09/19/18 10:45 Received: 09/19/18 16:40											
TPH as Diesel	ND	50	250	ug/L	1	AI84014	09/25/18 06:26	10/01/18 20:10	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AI84014	09/25/18 06:26	10/01/18 20:10	8015DRO	DLD	U
Surrogate: Tetratetracontane		*95.3 %*	*39-120*			*AI84014*	*09/25/18 06:26*	*10/01/18 20:10*	*8015DRO*	*DLD*	
ER119.1 (18I1864-02) Water Sampled: 09/19/18 11:45 Received: 09/19/18 16:40											
TPH as Diesel	ND	50	250	ug/L	1	AI84014	09/25/18 06:26	10/01/18 20:45	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AI84014	09/25/18 06:26	10/01/18 20:45	8015DRO	DLD	U
Surrogate: Tetratetracontane		*83.9 %*	*39-120*			*AI84014*	*09/25/18 06:26*	*10/01/18 20:45*	*8015DRO*	*DLD*	
MF0.1 (18I1864-03) Water Sampled: 09/19/18 12:20 Received: 09/19/18 16:40											
TPH as Diesel	ND	50	250	ug/L	1	AI84014	09/25/18 06:26	10/01/18 21:19	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AI84014	09/25/18 06:26	10/01/18 21:19	8015DRO	DLD	U
Surrogate: Tetratetracontane		*106 %*	*39-120*			*AI84014*	*09/25/18 06:26*	*10/01/18 21:19*	*8015DRO*	*DLD*	
OC0.1 (18I1864-04) Water Sampled: 09/19/18 14:05 Received: 09/19/18 16:40											
TPH as Diesel	ND	50	250	ug/L	1	AI84014	09/25/18 06:26	10/01/18 21:54	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AI84014	09/25/18 06:26	10/01/18 21:54	8015DRO	DLD	U
Surrogate: Tetratetracontane		*96.8 %*	*39-120*			*AI84014*	*09/25/18 06:26*	*10/01/18 21:54*	*8015DRO*	*DLD*	
ER125.9 (18I1864-05) Water Sampled: 09/19/18 15:00 Received: 09/19/18 16:40											
TPH as Diesel	ND	50	250	ug/L	1	AI84014	09/25/18 06:26	10/01/18 22:29	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AI84014	09/25/18 06:26	10/01/18 22:29	8015DRO	DLD	U
Surrogate: Tetratetracontane		*95.4 %*	*39-120*			*AI84014*	*09/25/18 06:26*	*10/01/18 22:29*	*8015DRO*	*DLD*	
ER126.1 (18I1864-06) Water Sampled: 09/19/18 15:25 Received: 09/19/18 16:40											
TPH as Diesel	ND	50	250	ug/L	1	AI84014	09/25/18 06:26	10/01/18 23:04	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AI84014	09/25/18 06:26	10/01/18 23:04	8015DRO	DLD	U
Surrogate: Tetratetracontane		*103 %*	*39-120*			*AI84014*	*09/25/18 06:26*	*10/01/18 23:04*	*8015DRO*	*DLD*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

TPH by EPA/LUFT GCMS Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER118.9 (18I1864-01) Water Sampled: 09/19/18 10:45 Received: 09/19/18 16:40											
TPH as Gasoline	ND	50	50	ug/L	1	AI84174	09/27/18 11:00	09/27/18 12:43	8260GRO	JV	U
Surrogate: Toluene-d8		*97.0 %*	*76-129*			*AI84174*	*09/27/18 11:00*	*09/27/18 12:43*	*8260GRO*	*JV*	
ER119.1 (18I1864-02) Water Sampled: 09/19/18 11:45 Received: 09/19/18 16:40											
TPH as Gasoline	ND	50	50	ug/L	1	AI84174	09/27/18 11:00	09/27/18 13:15	8260GRO	JV	U
Surrogate: Toluene-d8		*97.4 %*	*76-129*			*AI84174*	*09/27/18 11:00*	*09/27/18 13:15*	*8260GRO*	*JV*	
MF0.1 (18I1864-03) Water Sampled: 09/19/18 12:20 Received: 09/19/18 16:40											
TPH as Gasoline	ND	50	50	ug/L	1	AI84174	09/27/18 11:00	09/27/18 13:48	8260GRO	JV	U
Surrogate: Toluene-d8		*96.4 %*	*76-129*			*AI84174*	*09/27/18 11:00*	*09/27/18 13:48*	*8260GRO*	*JV*	
OC0.1 (18I1864-04) Water Sampled: 09/19/18 14:05 Received: 09/19/18 16:40											
TPH as Gasoline	ND	50	50	ug/L	1	AI84174	09/27/18 11:00	09/27/18 14:20	8260GRO	JV	U
Surrogate: Toluene-d8		*96.7 %*	*76-129*			*AI84174*	*09/27/18 11:00*	*09/27/18 14:20*	*8260GRO*	*JV*	
ER125.9 (18I1864-05) Water Sampled: 09/19/18 15:00 Received: 09/19/18 16:40											
TPH as Gasoline	ND	50	50	ug/L	1	AI84174	09/27/18 11:00	09/27/18 14:52	8260GRO	JV	U
Surrogate: Toluene-d8		*98.3 %*	*76-129*			*AI84174*	*09/27/18 11:00*	*09/27/18 14:52*	*8260GRO*	*JV*	
ER126.1 (18I1864-06) Water Sampled: 09/19/18 15:25 Received: 09/19/18 16:40											
TPH as Gasoline	ND	50	50	ug/L	1	AI84174	09/27/18 11:00	09/27/18 15:24	8260GRO	JV	U
Surrogate: Toluene-d8		*97.4 %*	*76-129*			*AI84174*	*09/27/18 11:00*	*09/27/18 15:24*	*8260GRO*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER118.9 (18I1864-01) Water Sampled: 09/19/18 10:45 Received: 09/19/18 16:40											
Benzene	ND	0.30	0.30	ug/L	1	AI84176	09/27/18 11:00	09/27/18 12:43	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AI84176	09/27/18 11:00	09/27/18 12:43	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 12:43	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 12:43	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 12:43	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 12:43	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 12:43	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 12:43	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AI84176	09/27/18 11:00	09/27/18 12:43	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*100 %*	*70-130*			*AI84176*	*09/27/18 11:00*	*09/27/18 12:43*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*91.7 %*	*70-130*			*AI84176*	*09/27/18 11:00*	*09/27/18 12:43*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*99.1 %*	*70-130*			*AI84176*	*09/27/18 11:00*	*09/27/18 12:43*	*EPA 8260B*	*JV*	
ER119.1 (18I1864-02) Water Sampled: 09/19/18 11:45 Received: 09/19/18 16:40											
Benzene	ND	0.30	0.30	ug/L	1	AI84176	09/27/18 11:00	09/27/18 13:15	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AI84176	09/27/18 11:00	09/27/18 13:15	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 13:15	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 13:15	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 13:15	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 13:15	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 13:15	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 13:15	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AI84176	09/27/18 11:00	09/27/18 13:15	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*99.6 %*	*70-130*			*AI84176*	*09/27/18 11:00*	*09/27/18 13:15*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*92.3 %*	*70-130*			*AI84176*	*09/27/18 11:00*	*09/27/18 13:15*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*99.3 %*	*70-130*			*AI84176*	*09/27/18 11:00*	*09/27/18 13:15*	*EPA 8260B*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
MF0.1 (18I1864-03) Water Sampled: 09/19/18 12:20 Received: 09/19/18 16:40											
Benzene	ND	0.30	0.30	ug/L	1	AI84176	09/27/18 11:00	09/27/18 13:48	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AI84176	09/27/18 11:00	09/27/18 13:48	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 13:48	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 13:48	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 13:48	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 13:48	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 13:48	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 13:48	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AI84176	09/27/18 11:00	09/27/18 13:48	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*99.1 %*	*70-130*			*AI84176*	*09/27/18 11:00*	*09/27/18 13:48*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*91.7 %*	*70-130*			*AI84176*	*09/27/18 11:00*	*09/27/18 13:48*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*98.7 %*	*70-130*			*AI84176*	*09/27/18 11:00*	*09/27/18 13:48*	*EPA 8260B*	*JV*	
OC0.1 (18I1864-04) Water Sampled: 09/19/18 14:05 Received: 09/19/18 16:40											
Benzene	ND	0.30	0.30	ug/L	1	AI84176	09/27/18 11:00	09/27/18 14:20	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AI84176	09/27/18 11:00	09/27/18 14:20	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 14:20	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 14:20	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 14:20	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 14:20	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 14:20	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 14:20	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AI84176	09/27/18 11:00	09/27/18 14:20	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*98.4 %*	*70-130*			*AI84176*	*09/27/18 11:00*	*09/27/18 14:20*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*91.5 %*	*70-130*			*AI84176*	*09/27/18 11:00*	*09/27/18 14:20*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*98.5 %*	*70-130*			*AI84176*	*09/27/18 11:00*	*09/27/18 14:20*	*EPA 8260B*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER125.9 (18I1864-05) Water Sampled: 09/19/18 15:00 Received: 09/19/18 16:40											
Benzene	ND	0.30	0.30	ug/L	1	AI84176	09/27/18 11:00	09/27/18 14:52	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AI84176	09/27/18 11:00	09/27/18 14:52	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 14:52	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 14:52	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 14:52	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 14:52	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 14:52	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 14:52	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AI84176	09/27/18 11:00	09/27/18 14:52	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*100 %*	*70-130*			*AI84176*	*09/27/18 11:00*	*09/27/18 14:52*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*92.2 %*	*70-130*			*AI84176*	*09/27/18 11:00*	*09/27/18 14:52*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*99.9 %*	*70-130*			*AI84176*	*09/27/18 11:00*	*09/27/18 14:52*	*EPA 8260B*	*JV*	
ER126.1 (18I1864-06) Water Sampled: 09/19/18 15:25 Received: 09/19/18 16:40											
Benzene	ND	0.30	0.30	ug/L	1	AI84176	09/27/18 11:00	09/27/18 15:24	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AI84176	09/27/18 11:00	09/27/18 15:24	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 15:24	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 15:24	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 15:24	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 15:24	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 15:24	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AI84176	09/27/18 11:00	09/27/18 15:24	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AI84176	09/27/18 11:00	09/27/18 15:24	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*100 %*	*70-130*			*AI84176*	*09/27/18 11:00*	*09/27/18 15:24*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*91.6 %*	*70-130*			*AI84176*	*09/27/18 11:00*	*09/27/18 15:24*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*101 %*	*70-130*			*AI84176*	*09/27/18 11:00*	*09/27/18 15:24*	*EPA 8260B*	*JV*	

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83890 - Metals Digest											
Blank (AI83890-BLK1)					Prepared: 09/24/18 Analyzed: 10/03/18						
Calcium	ND	0.080	1.0	mg/L							U
Magnesium	ND	0.030	1.0	mg/L							U
LCS (AI83890-BS1)					Prepared: 09/24/18 Analyzed: 10/03/18						
Calcium	7.90	0.080	1.0	mg/L	8.00		98.7	85-115			
Magnesium	7.92	0.030	1.0	mg/L	8.00		99.0	85-115			
Duplicate (AI83890-DUP1)		**Source: 18I1503-01**			Prepared: 09/24/18 Analyzed: 10/03/18						
Calcium	68.6	0.080	1.0	mg/L		68.0			0.813	20	
Magnesium	14.9	0.030	1.0	mg/L		15.1			1.03	20	
Matrix Spike (AI83890-MS1)		**Source: 18I1503-01**			Prepared: 09/24/18 Analyzed: 10/03/18						
Calcium	78.8	0.080	1.0	mg/L	8.00	68.0	135	70-130			QM-4X
Magnesium	23.6	0.030	1.0	mg/L	8.00	15.1	107	70-130			
Matrix Spike (AI83890-MS2)		**Source: 18I1961-01**			Prepared: 09/24/18 Analyzed: 10/03/18						
Calcium	82.3	0.080	1.0	mg/L	8.00	83.2	NR	70-130			QM-4X
Magnesium	61.5	0.030	1.0	mg/L	8.00	60.2	16.0	70-130			QM-4X
Matrix Spike Dup (AI83890-MSD1)		**Source: 18I1503-01**			Prepared: 09/24/18 Analyzed: 10/03/18						
Calcium	73.7	0.080	1.0	mg/L	8.00	68.0	71.6	70-130	6.66	20	
Magnesium	22.2	0.030	1.0	mg/L	8.00	15.1	89.4	70-130	6.08	20	
Batch AI84085 - EPA 245.1 Hg Water											
Blank (AI84085-BLK1)					Prepared & Analyzed: 09/26/18						
Mercury	ND	0.060	0.20	ug/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84085 - EPA 245.1 Hg Water											
LCS (AI84085-BS1)					Prepared & Analyzed: 09/26/18						
Mercury	2.71	0.060	0.20	ug/L	2.50		108	85-115			
Duplicate (AI84085-DUP1)		**Source: 18I1764-01**			Prepared & Analyzed: 09/26/18						
Mercury	ND	0.060	0.20	ug/L		ND				20	U
Matrix Spike (AI84085-MS1)		**Source: 18I1764-01**			Prepared & Analyzed: 09/26/18						
Mercury	2.54	0.060	0.20	ug/L	2.50	ND	102	70-130			
Matrix Spike (AI84085-MS2)		**Source: 18I1764-02**			Prepared & Analyzed: 09/26/18						
Mercury	2.55	0.060	0.20	ug/L	2.50	ND	102	70-130			
Matrix Spike Dup (AI84085-MSD1)		**Source: 18I1764-01**			Prepared & Analyzed: 09/26/18						
Mercury	2.60	0.060	0.20	ug/L	2.50	ND	104	70-130	2.18	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83891 - EPA 200.8											
Blank (AI83891-BLK1)					Prepared: 09/24/18 Analyzed: 09/25/18						
Aluminum	ND	5.0	10	ug/L							U
Antimony	ND	0.20	0.50	ug/L							U
Arsenic	ND	0.20	0.50	ug/L							U
Barium	ND	0.20	0.50	ug/L							U
Beryllium	ND	0.050	0.10	ug/L							U
Cadmium	ND	0.060	0.10	ug/L							U
Chromium	ND	0.50	0.50	ug/L							U
Cobalt	ND	0.10	0.10	ug/L							U
Copper	ND	0.40	0.50	ug/L							U
Iron	ND	10	50	ug/L							U
Lead	ND	0.060	0.25	ug/L							U
Manganese	ND	2.0	5.0	ug/L							U
Molybdenum	ND	0.070	0.25	ug/L							U
Nickel	ND	0.30	0.50	ug/L							U
Selenium	ND	0.30	2.0	ug/L							U
Silver	ND	0.050	0.10	ug/L							U
Thallium	ND	0.050	0.10	ug/L							U
Vanadium	ND	0.50	1.0	ug/L							U
Zinc	ND	2.0	5.0	ug/L							U
LCS (AI83891-BS1)					Prepared: 09/24/18 Analyzed: 09/25/18						
Aluminum	525	5.0	10	ug/L	520		101	85-115			
Antimony	21.2	0.20	0.50	ug/L	20.0		106	85-115			
Arsenic	21.2	0.20	0.50	ug/L	20.0		106	85-115			
Barium	20.6	0.20	0.50	ug/L	20.0		103	85-115			
Beryllium	22.0	0.050	0.10	ug/L	20.0		110	85-115			
Cadmium	21.5	0.060	0.10	ug/L	20.0		107	85-115			
Chromium	21.0	0.50	0.50	ug/L	20.0		105	85-115			
Cobalt	20.5	0.10	0.10	ug/L	20.0		103	85-115			
Copper	19.2	0.40	0.50	ug/L	20.0		96.2	85-115			
Iron	527	10	50	ug/L	520		101	85-115			
Lead	20.3	0.060	0.25	ug/L	20.0		102	85-115			
Manganese	20.3	2.0	5.0	ug/L	20.0		101	85-115			
Molybdenum	21.7	0.070	0.25	ug/L	20.0		108	85-115			
Nickel	20.8	0.30	0.50	ug/L	20.0		104	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83891 - EPA 200.8											
LCS (AI83891-BS1)					Prepared: 09/24/18 Analyzed: 09/25/18						
Selenium	22.3	0.30	2.0	ug/L	20.0		112	85-115			
Silver	21.1	0.050	0.10	ug/L	20.0		106	85-115			
Thallium	20.3	0.050	0.10	ug/L	20.0		101	85-115			
Vanadium	20.7	0.50	1.0	ug/L	20.0		104	85-115			
Zinc	108	2.0	5.0	ug/L	100		108	85-115			
Duplicate (AI83891-DUP1)		**Source: 18I1713-01**			Prepared: 09/24/18 Analyzed: 09/25/18						
Aluminum	ND	20	40	ug/L		ND				20	R-01, U
Antimony	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic	0.938	0.80	2.0	ug/L		0.900			4.05	20	R-01, J
Barium	135	0.80	2.0	ug/L		135			0.359	20	
Beryllium	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium	ND	0.24	0.40	ug/L		ND				20	R-01, U
Chromium	ND	2.0	2.0	ug/L		ND				20	R-01, U
Cobalt	ND	0.40	0.40	ug/L		ND				20	R-01, U
Copper	2.63	1.6	2.0	ug/L		2.64			0.586	20	
Iron	116	40	200	ug/L		113			2.49	20	R-01, J
Lead	ND	0.24	1.0	ug/L		ND				20	R-01, U
Manganese	ND	8.0	20	ug/L		ND				20	R-01, U
Molybdenum	2.55	0.28	1.0	ug/L		2.44			4.50	20	
Nickel	1.64	1.2	2.0	ug/L		1.65			1.09	20	R-01, J
Selenium	ND	1.2	8.0	ug/L		ND				20	R-01, U
Silver	0.224	0.20	0.40	ug/L		ND			200	20	R-01, J
Thallium	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium	ND	2.0	4.0	ug/L		ND				20	R-01, U
Zinc	ND	8.0	20	ug/L		ND				20	R-01, U
Matrix Spike (AI83891-MS1)		**Source: 18I1713-01**			Prepared: 09/24/18 Analyzed: 09/25/18						
Aluminum	512	20	40	ug/L	520	ND	98.4	70-130			
Antimony	21.2	0.80	2.0	ug/L	20.0	ND	106	70-130			
Arsenic	22.1	0.80	2.0	ug/L	20.0	0.900	106	70-130			
Barium	156	0.80	2.0	ug/L	20.0	135	103	70-130			
Beryllium	20.3	0.20	0.40	ug/L	20.0	ND	101	70-130			
Cadmium	21.7	0.24	0.40	ug/L	20.0	ND	109	70-130			
Chromium	20.2	2.0	2.0	ug/L	20.0	ND	101	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83891 - EPA 200.8											
Matrix Spike (AI83891-MS1)		**Source: 18I1713-01**			Prepared: 09/24/18 Analyzed: 09/25/18						
Cobalt	19.7	0.40	0.40	ug/L	20.0	ND	98.6	70-130			
Copper	19.8	1.6	2.0	ug/L	20.0	2.64	85.7	70-130			
Iron	619	40	200	ug/L	520	113	97.2	70-130			
Lead	19.0	0.24	1.0	ug/L	20.0	ND	95.0	70-130			
Manganese	21.9	8.0	20	ug/L	20.0	ND	109	70-130			
Molybdenum	23.8	0.28	1.0	ug/L	20.0	2.44	107	70-130			
Nickel	21.5	1.2	2.0	ug/L	20.0	1.65	99.1	70-130			
Selenium	24.3	1.2	8.0	ug/L	20.0	ND	122	70-130			
Silver	19.4	0.20	0.40	ug/L	20.0	ND	96.8	70-130			
Thallium	19.0	0.20	0.40	ug/L	20.0	ND	95.1	70-130			
Vanadium	22.0	2.0	4.0	ug/L	20.0	ND	110	70-130			
Zinc	113	8.0	20	ug/L	100	ND	113	70-130			
Matrix Spike (AI83891-MS2)		**Source: 18I1913-01**			Prepared: 09/24/18 Analyzed: 09/25/18						
Antimony	20.4	0.80	2.0	ug/L	20.0	ND	102	70-130			
Arsenic	22.3	0.80	2.0	ug/L	20.0	1.95	102	70-130			
Barium	70.8	0.80	2.0	ug/L	20.0	55.3	77.7	70-130			
Beryllium	18.8	0.20	0.40	ug/L	20.0	ND	94.1	70-130			
Cadmium	20.8	0.24	0.40	ug/L	20.0	0.401	102	70-130			
Chromium	33.4	2.0	2.0	ug/L	20.0	15.9	87.7	70-130			
Cobalt	22.5	0.40	0.40	ug/L	20.0	4.14	92.0	70-130			
Copper	56.5	1.6	2.0	ug/L	20.0	41.5	75.0	70-130			
Lead	21.2	0.24	1.0	ug/L	20.0	2.97	91.2	70-130			
Manganese	88.9	8.0	20	ug/L	20.0	71.9	85.0	70-130			
Molybdenum	24.3	0.28	1.0	ug/L	20.0	3.97	102	70-130			
Nickel	48.5	1.2	2.0	ug/L	20.0	29.6	94.3	70-130			
Selenium	23.6	1.2	8.0	ug/L	20.0	1.94	108	70-130			
Silver	19.4	0.20	0.40	ug/L	20.0	ND	96.9	70-130			
Thallium	19.1	0.20	0.40	ug/L	20.0	ND	95.7	70-130			
Vanadium	23.2	2.0	4.0	ug/L	20.0	4.04	95.7	70-130			
Zinc	208	8.0	20	ug/L	100	90.2	117	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83891 - EPA 200.8											
Matrix Spike Dup (AI83891-MSD1)		**Source: 18I1713-01**			Prepared: 09/24/18 Analyzed: 09/25/18						
Aluminum	513	20	40	ug/L	520	ND	98.6	70-130	0.213	20	
Antimony	21.4	0.80	2.0	ug/L	20.0	ND	107	70-130	0.663	20	
Arsenic	22.8	0.80	2.0	ug/L	20.0	0.900	110	70-130	3.20	20	
Barium	156	0.80	2.0	ug/L	20.0	135	105	70-130	0.283	20	
Beryllium	20.6	0.20	0.40	ug/L	20.0	ND	103	70-130	1.58	20	
Cadmium	21.4	0.24	0.40	ug/L	20.0	ND	107	70-130	1.67	20	
Chromium	19.6	2.0	2.0	ug/L	20.0	ND	97.8	70-130	3.29	20	
Cobalt	19.5	0.40	0.40	ug/L	20.0	ND	97.6	70-130	1.07	20	
Copper	19.6	1.6	2.0	ug/L	20.0	2.64	84.9	70-130	0.770	20	
Iron	613	40	200	ug/L	520	113	96.0	70-130	0.991	20	
Lead	18.6	0.24	1.0	ug/L	20.0	ND	93.0	70-130	2.06	20	
Manganese	24.2	8.0	20	ug/L	20.0	ND	121	70-130	10.1	20	
Molybdenum	23.5	0.28	1.0	ug/L	20.0	2.44	106	70-130	1.25	20	
Nickel	21.0	1.2	2.0	ug/L	20.0	1.65	96.6	70-130	2.31	20	
Selenium	24.8	1.2	8.0	ug/L	20.0	ND	124	70-130	1.95	20	
Silver	19.9	0.20	0.40	ug/L	20.0	ND	99.3	70-130	2.63	20	
Thallium	18.3	0.20	0.40	ug/L	20.0	ND	91.6	70-130	3.74	20	
Vanadium	21.2	2.0	4.0	ug/L	20.0	ND	106	70-130	3.56	20	
Zinc	114	8.0	20	ug/L	100	ND	114	70-130	0.959	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84164 - EPA 245.1 Hg Water											
Blank (AI84164-BLK1)					Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	ND	0.060	0.20	ug/L							U
LCS (AI84164-BS1)					Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	2.41	0.060	0.20	ug/L	2.50		96.5	85-115			
Duplicate (AI84164-DUP1)		**Source: 18I1764-02**			Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	ND	0.060	0.20	ug/L		ND				20	U
MRL Check (AI84164-MRL1)					Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	0.591	0.060	0.20	ug/L				0-200			
Matrix Spike (AI84164-MS1)		**Source: 18I1764-02**			Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	2.48	0.060	0.20	ug/L	2.50	ND	99.4	70-130			
Matrix Spike (AI84164-MS2)		**Source: 18I1764-03**			Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	2.56	0.060	0.20	ug/L	2.50	ND	102	70-130			
Matrix Spike Dup (AI84164-MSD1)		**Source: 18I1764-02**			Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	2.93	0.060	0.20	ug/L	2.50	ND	117	70-130	16.5	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83933 - EPA 200.8 (D)											
Blank (AI83933-BLK1)					Prepared: 09/25/18 Analyzed: 09/26/18						
Aluminum, dissolved	ND	5.0	10	ug/L							U
Antimony, dissolved	ND	0.20	0.50	ug/L							U
Arsenic, dissolved	ND	0.20	0.50	ug/L							U
Barium, dissolved	ND	0.20	0.50	ug/L							U
Beryllium, dissolved	ND	0.050	0.10	ug/L							U
Cadmium, dissolved	ND	0.060	0.10	ug/L							U
Chromium, dissolved	ND	0.50	0.50	ug/L							U
Cobalt, dissolved	ND	0.10	0.10	ug/L							U
Copper, dissolved	ND	0.40	0.50	ug/L							U
Lead, dissolved	ND	0.060	0.25	ug/L							U
Molybdenum, dissolved	ND	0.070	0.25	ug/L							U
Nickel, dissolved	ND	0.30	0.50	ug/L							U
Selenium, dissolved	ND	0.30	2.0	ug/L							U
Silver, dissolved	ND	0.050	0.10	ug/L							U
Thallium, dissolved	ND	0.050	0.10	ug/L							U
Vanadium, dissolved	ND	0.50	1.0	ug/L							U
Zinc, dissolved	ND	2.0	5.0	ug/L							U
LCS (AI83933-BS1)					Prepared: 09/25/18 Analyzed: 09/26/18						
Aluminum, dissolved	556	5.0	10	ug/L	520		107	85-115			
Antimony, dissolved	21.9	0.20	0.50	ug/L	20.0		110	85-115			
Arsenic, dissolved	22.0	0.20	0.50	ug/L	20.0		110	85-115			
Barium, dissolved	22.0	0.20	0.50	ug/L	20.0		110	85-115			
Beryllium, dissolved	22.0	0.050	0.10	ug/L	20.0		110	85-115			
Cadmium, dissolved	21.8	0.060	0.10	ug/L	20.0		109	85-115			
Chromium, dissolved	21.9	0.50	0.50	ug/L	20.0		109	85-115			
Cobalt, dissolved	21.2	0.10	0.10	ug/L	20.0		106	85-115			
Copper, dissolved	21.9	0.40	0.50	ug/L	20.0		109	85-115			
Lead, dissolved	22.0	0.060	0.25	ug/L	20.0		110	85-115			
Molybdenum, dissolved	22.6	0.070	0.25	ug/L	20.0		113	85-115			
Nickel, dissolved	21.4	0.30	0.50	ug/L	20.0		107	85-115			
Selenium, dissolved	21.7	0.30	2.0	ug/L	20.0		108	85-115			
Silver, dissolved	22.5	0.050	0.10	ug/L	20.0		113	85-115			
Thallium, dissolved	21.7	0.050	0.10	ug/L	20.0		109	85-115			
Vanadium, dissolved	21.8	0.50	1.0	ug/L	20.0		109	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83933 - EPA 200.8 (D)											
LCS (AI83933-BS1)					Prepared: 09/25/18 Analyzed: 09/26/18						
Zinc, dissolved	104	2.0	5.0	ug/L	100		104	85-115			
Duplicate (AI83933-DUP1)		**Source: 18I1740-01**			Prepared: 09/25/18 Analyzed: 09/26/18						
Aluminum, dissolved	8.55	5.0	10	ug/L		8.60			0.656	20	J
Antimony, dissolved	0.441	0.20	0.50	ug/L		0.444			0.689	20	J
Arsenic, dissolved	1.76	0.20	0.50	ug/L		1.98			11.9	20	
Barium, dissolved	43.3	0.20	0.50	ug/L		43.3			0.200	20	
Beryllium, dissolved	ND	0.050	0.10	ug/L		ND				20	U
Cadmium, dissolved	ND	0.060	0.10	ug/L		ND				20	U
Chromium, dissolved	0.731	0.50	0.50	ug/L		0.709			3.05	20	
Cobalt, dissolved	0.177	0.10	0.10	ug/L		0.171			3.38	20	
Copper, dissolved	4.58	0.40	0.50	ug/L		4.53			0.939	20	
Lead, dissolved	ND	0.060	0.25	ug/L		ND				20	U
Molybdenum, dissolved	0.113	0.070	0.25	ug/L		0.106			6.22	20	J
Nickel, dissolved	2.80	0.30	0.50	ug/L		2.88			2.86	20	
Selenium, dissolved	ND	0.30	2.0	ug/L		ND				20	U
Silver, dissolved	0.0783	0.050	0.10	ug/L		ND			200	20	QM-01, J
Thallium, dissolved	ND	0.050	0.10	ug/L		ND				20	U
Vanadium, dissolved	2.57	0.50	1.0	ug/L		2.64			2.84	20	
Zinc, dissolved	56.7	2.0	5.0	ug/L		57.6			1.68	20	
MRL Check (AI83933-MRL1)					Prepared: 09/25/18 Analyzed: 09/26/18						
Zinc, dissolved	8.18	2.0	5.0	ug/L	8.00		102	0-200			
Matrix Spike (AI83933-MS1)		**Source: 18I1740-01**			Prepared: 09/25/18 Analyzed: 09/26/18						
Aluminum, dissolved	541	5.0	10	ug/L	520	8.60	102	70-130			
Antimony, dissolved	23.2	0.20	0.50	ug/L	20.0	0.444	114	70-130			
Arsenic, dissolved	24.5	0.20	0.50	ug/L	20.0	1.98	113	70-130			
Barium, dissolved	66.5	0.20	0.50	ug/L	20.0	43.3	116	70-130			
Beryllium, dissolved	21.2	0.050	0.10	ug/L	20.0	ND	106	70-130			
Cadmium, dissolved	21.5	0.060	0.10	ug/L	20.0	ND	108	70-130			
Chromium, dissolved	21.1	0.50	0.50	ug/L	20.0	0.709	102	70-130			
Cobalt, dissolved	20.3	0.10	0.10	ug/L	20.0	0.171	100	70-130			
Copper, dissolved	25.3	0.40	0.50	ug/L	20.0	4.53	104	70-130			
Lead, dissolved	20.3	0.060	0.25	ug/L	20.0	ND	102	70-130			
Molybdenum, dissolved	24.6	0.070	0.25	ug/L	20.0	0.106	122	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83933 - EPA 200.8 (D)											
Matrix Spike (AI83933-MS1)		**Source: 18I1740-01**			Prepared: 09/25/18 Analyzed: 09/26/18						
Nickel, dissolved	22.7	0.30	0.50	ug/L	20.0	2.88	98.9	70-130			
Selenium, dissolved	21.3	0.30	2.0	ug/L	20.0	ND	106	70-130			
Silver, dissolved	21.2	0.050	0.10	ug/L	20.0	ND	106	70-130			
Thallium, dissolved	20.2	0.050	0.10	ug/L	20.0	ND	101	70-130			
Vanadium, dissolved	23.7	0.50	1.0	ug/L	20.0	2.64	105	70-130			
Zinc, dissolved	160	2.0	5.0	ug/L	100	57.6	103	70-130			
Matrix Spike (AI83933-MS2)		**Source: 18I2000-02**			Prepared: 09/25/18 Analyzed: 09/26/18						
Aluminum, dissolved	580	20	40	ug/L	520	41.0	104	70-130			
Antimony, dissolved	22.9	0.80	2.0	ug/L	20.0	ND	115	70-130			
Arsenic, dissolved	32.2	0.80	2.0	ug/L	20.0	10.1	111	70-130			
Barium, dissolved	64.1	0.80	2.0	ug/L	20.0	41.4	114	70-130			
Beryllium, dissolved	21.2	0.20	0.40	ug/L	20.0	ND	106	70-130			
Cadmium, dissolved	21.9	0.24	0.40	ug/L	20.0	ND	110	70-130			
Chromium, dissolved	23.1	2.0	2.0	ug/L	20.0	ND	115	70-130			
Cobalt, dissolved	21.2	0.40	0.40	ug/L	20.0	ND	106	70-130			
Copper, dissolved	38.6	1.6	2.0	ug/L	20.0	21.5	85.9	70-130			
Lead, dissolved	20.8	0.24	1.0	ug/L	20.0	ND	104	70-130			
Molybdenum, dissolved	26.0	0.28	1.0	ug/L	20.0	3.19	114	70-130			
Nickel, dissolved	26.1	1.2	2.0	ug/L	20.0	4.59	108	70-130			
Selenium, dissolved	23.4	1.2	8.0	ug/L	20.0	ND	117	70-130			
Silver, dissolved	22.6	0.20	0.40	ug/L	20.0	ND	113	70-130			
Thallium, dissolved	20.5	0.20	0.40	ug/L	20.0	ND	103	70-130			
Vanadium, dissolved	28.4	2.0	4.0	ug/L	20.0	6.74	109	70-130			
Zinc, dissolved	159	8.0	20	ug/L	100	42.6	117	70-130			
Matrix Spike Dup (AI83933-MSD1)		**Source: 18I1740-01**			Prepared: 09/25/18 Analyzed: 09/26/18						
Aluminum, dissolved	537	5.0	10	ug/L	520	8.60	102	70-130	0.835	20	
Antimony, dissolved	23.1	0.20	0.50	ug/L	20.0	0.444	113	70-130	0.497	20	
Arsenic, dissolved	24.4	0.20	0.50	ug/L	20.0	1.98	112	70-130	0.425	20	
Barium, dissolved	66.2	0.20	0.50	ug/L	20.0	43.3	114	70-130	0.444	20	
Beryllium, dissolved	20.8	0.050	0.10	ug/L	20.0	ND	104	70-130	1.74	20	
Cadmium, dissolved	21.2	0.060	0.10	ug/L	20.0	ND	106	70-130	1.68	20	
Chromium, dissolved	20.9	0.50	0.50	ug/L	20.0	0.709	101	70-130	1.24	20	
Cobalt, dissolved	19.9	0.10	0.10	ug/L	20.0	0.171	98.9	70-130	1.56	20	

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2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83933 - EPA 200.8 (D)											
Matrix Spike Dup (AI83933-MSD1)		**Source: 18I1740-01**			Prepared: 09/25/18 Analyzed: 09/26/18						
Copper, dissolved	24.4	0.40	0.50	ug/L	20.0	4.53	99.5	70-130	3.53	20	
Lead, dissolved	20.2	0.060	0.25	ug/L	20.0	ND	101	70-130	0.823	20	
Molybdenum, dissolved	24.6	0.070	0.25	ug/L	20.0	0.106	122	70-130	0.0839	20	
Nickel, dissolved	22.2	0.30	0.50	ug/L	20.0	2.88	96.5	70-130	2.11	20	
Selenium, dissolved	21.4	0.30	2.0	ug/L	20.0	ND	107	70-130	0.547	20	
Silver, dissolved	21.4	0.050	0.10	ug/L	20.0	ND	107	70-130	1.03	20	
Thallium, dissolved	20.1	0.050	0.10	ug/L	20.0	ND	100	70-130	0.873	20	
Vanadium, dissolved	23.5	0.50	1.0	ug/L	20.0	2.64	104	70-130	1.05	20	
Zinc, dissolved	157	2.0	5.0	ug/L	100	57.6	99.6	70-130	1.88	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83981 - EPA 1631											
Blank (AI83981-BLK1)					Prepared: 09/24/18 Analyzed: 09/25/18						
Mercury	ND	0.200	0.500	ng/l							U
LCS (AI83981-BS1)					Prepared: 09/24/18 Analyzed: 09/25/18						
Mercury	5.29	0.200	0.500	ng/l	5.00		106	77-123			
Matrix Spike (AI83981-MS1)		**Source: 18I1402-01**			Prepared: 09/24/18 Analyzed: 09/25/18						
Mercury	40.2	0.200	0.500	ng/l	25.0	14.5	103	71-125			
Matrix Spike (AI83981-MS2)		**Source: 18I1764-01**			Prepared: 09/24/18 Analyzed: 09/25/18						
Mercury	29.5	0.200	0.500	ng/l	25.0	2.13	110	71-125			
Matrix Spike Dup (AI83981-MSD1)		**Source: 18I1402-01**			Prepared: 09/24/18 Analyzed: 09/25/18						
Mercury	41.0	0.200	0.500	ng/l	25.0	14.5	106	71-125	1.92	24	
Matrix Spike Dup (AI83981-MSD2)		**Source: 18I1764-01**			Prepared: 09/24/18 Analyzed: 09/25/18						
Mercury	29.6	0.200	0.500	ng/l	25.0	2.13	110	71-125	0.169	24	
Reference (AI83981-SRM1)					Prepared: 09/24/18 Analyzed: 09/25/18						
Mercury	52.6	0.200	0.500	ng/l	50.0		105	68-125			
Batch AJ83141 - EPA 1631											
Blank (AJ83141-BLK1)					Prepared: 10/01/18 Analyzed: 10/02/18						
Mercury	ND	0.200	0.500	ng/l							U
LCS (AJ83141-BS1)					Prepared: 10/01/18 Analyzed: 10/02/18						
Mercury	4.84	0.200	0.500	ng/l	5.00		96.9	77-123			

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2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Metals by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83141 - EPA 1631											
Matrix Spike (AJ83141-MS1)		**Source: 18I1864-06**			Prepared: 10/01/18 Analyzed: 10/02/18						
Mercury	26.4	0.200	0.500	ng/l	25.0	1.45	99.9	71-125			
Matrix Spike (AJ83141-MS2)		**Source: 18I1898-04**			Prepared: 10/01/18 Analyzed: 10/02/18						
Mercury	37.8	0.200	0.500	ng/l	25.0	15.2	90.2	71-125			
Matrix Spike Dup (AJ83141-MSD1)		**Source: 18I1864-06**			Prepared: 10/01/18 Analyzed: 10/02/18						
Mercury	26.4	0.200	0.500	ng/l	25.0	1.45	100	71-125	0.113	24	
Matrix Spike Dup (AJ83141-MSD2)		**Source: 18I1898-04**			Prepared: 10/01/18 Analyzed: 10/02/18						
Mercury	38.0	0.200	0.500	ng/l	25.0	15.2	91.2	71-125	0.686	24	
Reference (AJ83141-SRM1)					Prepared: 10/01/18 Analyzed: 10/02/18						
Mercury	47.8	0.200	0.500	ng/l	50.0		95.7	68-125			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83883 - General Preparation											
Blank (AI83883-BLK1)					Prepared: 09/21/18 Analyzed: 09/26/18						
Biochemical Oxygen Demand	ND	2.0	2.0	mg/L							U
Blank (AI83883-BLK2)					Prepared: 09/21/18 Analyzed: 09/26/18						
Biochemical Oxygen Demand	ND	2.0	2.0	mg/L							U
LCS (AI83883-BS1)					Prepared: 09/21/18 Analyzed: 09/26/18						
Biochemical Oxygen Demand	206	2.0	2.0	mg/L	200		103	84-115			
Duplicate (AI83883-DUP1)		**Source: 18I1978-01**			Prepared: 09/21/18 Analyzed: 09/26/18						
Biochemical Oxygen Demand	172	2.0	2.0	mg/L		186			7.64	30	
Batch AI83890 - Metals Digest											
Blank (AI83890-BLK1)					Prepared: 09/24/18 Analyzed: 10/03/18						
Hardness, Total	ND	1	5	mg/L							U
Duplicate (AI83890-DUP1)		**Source: 18I1503-01**			Prepared: 09/24/18 Analyzed: 10/03/18						
Hardness, Total	233	1	5	mg/L		232			0.323	20	
Batch AI84026 - General Preparation											
LCS (AI84026-BS1)					Prepared & Analyzed: 09/25/18						
Ammonia as N	4.99	0.10	0.20	mg/L	5.00		99.8	90-110			
LCS Dup (AI84026-BSD1)					Prepared & Analyzed: 09/25/18						
Ammonia as N	4.90	0.10	0.20	mg/L	5.00		98.1	90-110	1.76	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84026 - General Preparation											
Matrix Spike (AI84026-MS1)		**Source: 18I2030-01**			Prepared & Analyzed: 09/25/18						
Ammonia as N	9.11	0.10	0.20	mg/L	10.0	ND	91.1	85-115			
Matrix Spike Dup (AI84026-MSD1)		**Source: 18I2030-01**			Prepared & Analyzed: 09/25/18						
Ammonia as N	9.46	0.10	0.20	mg/L	10.0	ND	94.6	85-115	3.77	20	
Batch AI84077 - General Preparation											
Blank (AI84077-BLK1)					Prepared: 09/26/18 Analyzed: 10/05/18						
Total Dissolved Solids	ND	10	10	mg/L							U
Duplicate (AI84077-DUP1)		**Source: 18I1768-01**			Prepared: 09/26/18 Analyzed: 10/05/18						
Total Dissolved Solids	154	10	10	mg/L		144			6.71	15	
Duplicate (AI84077-DUP2)		**Source: 18I1864-06**			Prepared: 09/26/18 Analyzed: 10/05/18						
Total Dissolved Solids	108	10	10	mg/L		112			3.64	15	
Batch AI84086 - General Preparation											
Blank (AI84086-BLK1)					Prepared & Analyzed: 09/26/18						
Total Suspended Solids	ND	0.30	1.0	mg/L							U
Duplicate (AI84086-DUP1)		**Source: 18I1948-01**			Prepared & Analyzed: 09/26/18						
Total Suspended Solids	514	0.30	1.0	mg/L		973			61.8	30	QD-02
Duplicate (AI84086-DUP2)		**Source: 18I2021-01**			Prepared & Analyzed: 09/26/18						
Total Suspended Solids	1180	0.30	1.0	mg/L		1270			7.35	30	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84122 - General Preparation											
Duplicate (AI84122-DUP1)		**Source: 18I2327-02**			Prepared & Analyzed: 09/27/18						
Bicarbonate Alkalinity as CaCO3	78.0	1.0	5.0	mg/L		79.0			1.27	20	
Total Alkalinity as CaCO3	78.0	1.0	5.0	mg/L		79.0			1.27	20	
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Batch AI84167 - General Prep											
Blank (AI84167-BLK1)					Prepared & Analyzed: 09/27/18						
Total Organic Carbon	ND	0.300	1.00	mg/L							U
LCS (AI84167-BS1)					Prepared & Analyzed: 09/27/18						
Total Organic Carbon	10.4	0.300	1.00	mg/L	10.0		104	85-115			
LCS Dup (AI84167-BSD1)					Prepared & Analyzed: 09/27/18						
Total Organic Carbon	10.2	0.300	1.00	mg/L	10.0		102	85-115	1.23	20	
Duplicate (AI84167-DUP1)		**Source: 18I1402-01**			Prepared & Analyzed: 09/27/18						
Total Organic Carbon	2.92	0.300	1.00	mg/L		3.01			2.99	20	
Matrix Spike (AI84167-MS1)		**Source: 18I1402-02**			Prepared & Analyzed: 09/27/18						
Total Organic Carbon	25.3	0.600	2.00	mg/L	20.0	4.39	104	70-130			
Matrix Spike Dup (AI84167-MSD1)		**Source: 18I1402-02**			Prepared & Analyzed: 09/27/18						
Total Organic Carbon	25.9	0.600	2.00	mg/L	20.0	4.39	107	70-130	2.46	20	
Batch AI84221 - General Preparation											
Blank (AI84221-BLK1)					Prepared: 09/28/18 Analyzed: 10/03/18						
Oil & Grease (HEM)	ND	1.4	5.0	mg/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84221 - General Preparation											
LCS (AI84221-BS1)					Prepared: 09/28/18 Analyzed: 10/03/18						
Oil & Grease (HEM)	39.7	1.4	5.0	mg/L	40.0		99.2	78-114			
LCS Dup (AI84221-BSD1)					Prepared: 09/28/18 Analyzed: 10/03/18						
Oil & Grease (HEM)	39.4	1.4	5.0	mg/L	40.0		98.5	78-114	0.759	18	
Matrix Spike (AI84221-MS1)		**Source: 18I2327-01**			Prepared: 09/28/18 Analyzed: 10/03/18						
Oil & Grease (HEM)	14.4	1.4	5.0	mg/L	40.0	1.40	32.5	78-114			QM-05
Batch AJ83123 - General Prep											
LCS (AJ83123-BS1)					Prepared: 10/01/18 Analyzed: 10/02/18						
Total Kjeldahl Nitrogen	3.04	0.050	1.0	mg/L	2.98		102	80-120			
LCS Dup (AJ83123-BSD1)					Prepared: 10/01/18 Analyzed: 10/02/18						
Total Kjeldahl Nitrogen	2.86	0.050	1.0	mg/L	2.98		95.9	80-120	6.27	20	
Matrix Spike (AJ83123-MS1)		**Source: 18I1768-01**			Prepared: 10/01/18 Analyzed: 10/02/18						
Total Kjeldahl Nitrogen	3.13	0.050	1.0	mg/L	2.98	0.175	99.3	75-125			
Matrix Spike Dup (AJ83123-MSD1)		**Source: 18I1768-01**			Prepared: 10/01/18 Analyzed: 10/02/18						
Total Kjeldahl Nitrogen	3.04	0.050	1.0	mg/L	2.98	0.175	96.2	75-125	2.98	20	
Batch AJ83186 - General Prep											
Blank (AJ83186-BLK1)					Prepared & Analyzed: 10/02/18						
Phosphorus, total	ND	0.010	0.040	mg/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83186 - General Prep											
LCS (AJ83186-BS1)					Prepared & Analyzed: 10/02/18						
Phosphorus, total	0.200	0.010	0.040	mg/L	0.200		100	85-115			
Duplicate (AJ83186-DUP1)		**Source: 18I1764-01**			Prepared & Analyzed: 10/02/18						
Phosphorus, total	0.0201	0.010	0.040	mg/L		0.0201			0.00	20	J
Matrix Spike (AJ83186-MS1)		**Source: 18I1764-01**			Prepared & Analyzed: 10/02/18						
Phosphorus, total	0.200	0.010	0.040	mg/L	0.200	0.0201	90.0	70-130			
Matrix Spike (AJ83186-MS2)		**Source: 18I1864-01**			Prepared & Analyzed: 10/02/18						
Phosphorus, total	0.185	0.010	0.040	mg/L	0.200	0.0120	86.6	70-130			
Matrix Spike Dup (AJ83186-MSD1)		**Source: 18I1764-01**			Prepared & Analyzed: 10/02/18						
Phosphorus, total	0.201	0.010	0.040	mg/L	0.200	0.0201	90.7	70-130	0.672	20	
Batch AJ83224 - General Prep											
Blank (AJ83224-BLK1)					Prepared & Analyzed: 10/02/18						
Dissolved Organic Carbon	ND	0.600	1.00	mg/L							U
LCS (AJ83224-BS1)					Prepared & Analyzed: 10/02/18						
Dissolved Organic Carbon	10.5	0.600	1.00	mg/L	10.0		105	85-115			
LCS Dup (AJ83224-BSD1)					Prepared & Analyzed: 10/02/18						
Dissolved Organic Carbon	11.0	0.600	1.00	mg/L	10.0		110	85-115	4.25	20	
Duplicate (AJ83224-DUP1)		**Source: 18I1625-03**			Prepared & Analyzed: 10/02/18						
Dissolved Organic Carbon	1.41	0.600	1.00	mg/L		1.44			1.99	20	

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83224 - General Prep											
MRL Check (AJ83224-MRL1)					Prepared & Analyzed: 10/02/18						
Dissolved Organic Carbon	1.38	0.600	1.00	mg/L	1.25		111	0-200			
Matrix Spike (AJ83224-MS1)		**Source: 18I1625-03**			Prepared & Analyzed: 10/02/18						
Dissolved Organic Carbon	22.7	1.20	2.00	mg/L	20.0	1.44	106	70-130			
Matrix Spike Dup (AJ83224-MSD1)		**Source: 18I1625-03**			Prepared & Analyzed: 10/02/18						
Dissolved Organic Carbon	21.0	1.20	2.00	mg/L	20.0	1.44	97.9	70-130	7.67	20	
Batch AJ83376 - General Preparation											
Blank (AJ83376-BLK1)					Prepared: 09/21/18 Analyzed: 10/11/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L							U
Duplicate (AJ83376-DUP1)		**Source: 18I1864-01**			Prepared: 09/21/18 Analyzed: 10/11/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Duplicate (AJ83376-DUP2)		**Source: 18I2402-01**			Prepared: 09/27/18 Analyzed: 10/11/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83837 - General Preparation											
Blank (AI83837-BLK1)					Prepared & Analyzed: 09/20/18						
Orthophosphate	ND	0.10	0.30	mg/L							U
Nitrite as N	ND	0.050	0.20	mg/L							U
Nitrate as N	ND	0.040	0.20	mg/L							U
LCS (AI83837-BS1)					Prepared & Analyzed: 09/20/18						
Nitrate as N	5.78	0.040	0.20	mg/L	5.56		104	90-110			
Orthophosphate	17.1	0.10	0.30	mg/L	16.7		103	90-110			
Nitrite as N	5.47	0.050	0.20	mg/L	5.56		98.5	90-110			
Duplicate (AI83837-DUP1)		**Source: 18I1864-02**			Prepared & Analyzed: 09/20/18						
Nitrate as N	ND	0.040	0.20	mg/L		ND				20	U
Orthophosphate	ND	0.10	0.30	mg/L		ND				20	U
Nitrite as N	ND	0.050	0.20	mg/L		ND				20	U
Matrix Spike (AI83837-MS1)		**Source: 18I1864-02**			Prepared & Analyzed: 09/20/18						
Nitrite as N	5.73	0.050	0.20	mg/L	5.56	ND	103	80-120			
Nitrate as N	5.86	0.040	0.20	mg/L	5.56	ND	105	80-120			
Orthophosphate	17.5	0.10	0.30	mg/L	16.7	ND	105	80-120			
Matrix Spike (AI83837-MS2)		**Source: 18I0829-05**			Prepared & Analyzed: 09/24/18						
Orthophosphate	15.1	0.50	1.5	mg/L	16.7	ND	90.5	80-120			
Nitrite as N	5.39	0.25	1.0	mg/L	5.56	ND	97.0	80-120			
Nitrate as N	5.49	0.20	1.0	mg/L	5.56	ND	98.8	80-120			
Matrix Spike Dup (AI83837-MSD1)		**Source: 18I1864-02**			Prepared & Analyzed: 09/20/18						
Orthophosphate	17.5	0.10	0.30	mg/L	16.7	ND	105	80-120	0.155	20	
Nitrate as N	5.85	0.040	0.20	mg/L	5.56	ND	105	80-120	0.201	20	
Nitrite as N	5.73	0.050	0.20	mg/L	5.56	ND	103	80-120	0.155	20	

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Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

TPH by EPA/LUFT GC Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84014 - SVOAs in Water GC											
Blank (AI84014-BLK1)					Prepared: 09/25/18 Analyzed: 10/01/18						
TPH as Diesel	ND	50	250	ug/L							U
TPH as Motor Oil	ND	100	250	ug/L							U
Surrogate: Tetratetracontane	*61.9*			*ug/L*	*58.8*		*105*	*39-120*			
LCS (AI84014-BS1)					Prepared: 09/25/18 Analyzed: 10/01/18						
TPH as Diesel	2170	50	250	ug/L	2020		107	61-120			
Surrogate: Tetratetracontane	*34.4*			*ug/L*	*58.8*		*58.6*	*39-120*			
LCS (AI84014-BS2)					Prepared: 09/25/18 Analyzed: 10/01/18						
TPH as Motor Oil	2090	100	250	ug/L	2010		104	71-125			
Surrogate: Tetratetracontane	*61.7*			*ug/L*	*58.8*		*105*	*39-120*			
LCS Dup (AI84014-BSD1)					Prepared: 09/25/18 Analyzed: 10/01/18						
TPH as Diesel	1910	50	250	ug/L	2020		94.5	61-120	12.8	25	
Surrogate: Tetratetracontane	*58.1*			*ug/L*	*58.8*		*98.9*	*39-120*			
LCS Dup (AI84014-BSD2)					Prepared: 09/25/18 Analyzed: 10/01/18						
TPH as Motor Oil	2130	100	250	ug/L	2010		106	71-125	2.10	25	
Surrogate: Tetratetracontane	*61.0*			*ug/L*	*58.8*		*104*	*39-120*			
Matrix Spike (AI84014-MS1)		**Source: 18I1855-01**			Prepared: 09/25/18 Analyzed: 10/01/18						
TPH as Diesel	1920	50	250	ug/L	2020	ND	95.2	61-120			
Surrogate: Tetratetracontane	*36.2*			*ug/L*	*58.8*		*61.6*	*39-120*			

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Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

TPH by EPA/LUFT GCMS Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84174 - VOAs in Water GCMS											
Blank (AI84174-BLK1)					Prepared: 09/26/18 Analyzed: 09/27/18						
TPH as Gasoline	ND	50	50	ug/L							U
Surrogate: Toluene-d8	*24.1*			*ug/L*	*25.0*		*96.4*	*76-129*			
LCS (AI84174-BS1)					Prepared: 09/26/18 Analyzed: 09/27/18						
TPH as Gasoline	197	50	50	ug/L	200		98.3	67-132			
Surrogate: Toluene-d8	*24.4*			*ug/L*	*25.0*		*97.4*	*76-129*			
LCS Dup (AI84174-BSD1)					Prepared: 09/26/18 Analyzed: 09/27/18						
TPH as Gasoline	173	50	50	ug/L	200		86.4	67-132	12.8	25	
Surrogate: Toluene-d8	*24.2*			*ug/L*	*25.0*		*96.8*	*76-129*			
Matrix Spike (AI84174-MS1)		**Source: 18I1872-01**			Prepared: 09/26/18 Analyzed: 09/27/18						
TPH as Gasoline	233	50	50	ug/L	200	ND	117	37-156			
Surrogate: Toluene-d8	*24.4*			*ug/L*	*25.0*		*97.7*	*76-129*			
Matrix Spike (AI84174-MS2)		**Source: 18I1872-03**			Prepared: 09/26/18 Analyzed: 09/28/18						
TPH as Gasoline	209	50	50	ug/L	200	ND	105	37-156			
Surrogate: Toluene-d8	*25.3*			*ug/L*	*25.0*		*101*	*76-129*			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84176 - VOAs in Water GCMS											
Blank (AI84176-BLK1)					Prepared: 09/26/18 Analyzed: 09/27/18						
Benzene	ND	0.30	0.30	ug/L							U
Toluene	ND	0.30	0.30	ug/L							U
Ethylbenzene	ND	0.40	0.50	ug/L							U
Xylenes (total)	ND	0.50	0.50	ug/L							U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L							U
Di-isopropyl ether	ND	0.40	0.50	ug/L							U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L							U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L							U
Tert-butyl alcohol	ND	6.0	10	ug/L							U
Surrogate: Bromofluorobenzene	*24.9*			*ug/L*	*25.0*		*99.6*	*70-130*			
Surrogate: Dibromofluoromethane	*22.7*			*ug/L*	*25.0*		*91.0*	*70-130*			
Surrogate: Toluene-d8	*25.0*			*ug/L*	*25.0*		*99.9*	*70-130*			
LCS (AI84176-BS1)					Prepared: 09/26/18 Analyzed: 09/27/18						
Benzene	20.4	0.30	0.30	ug/L	20.0		102	82-122			
Toluene	20.1	0.30	0.30	ug/L	20.0		100	75-134			
Ethylbenzene	20.9	0.40	0.50	ug/L	20.0		104	84-124			
Xylenes (total)	60.6	0.50	0.50	ug/L	60.0		101	81-126			
Methyl tert-butyl ether	18.1	0.50	0.50	ug/L	20.0		90.4	84-119			
Di-isopropyl ether	23.4	0.40	0.50	ug/L	20.0		117	83-132			
Ethyl tert-butyl ether	21.5	0.40	0.50	ug/L	20.0		108	74-127			
Tert-amyl methyl ether	18.2	0.40	0.50	ug/L	20.0		90.8	74-120			
Tert-butyl alcohol	416	6.0	10	ug/L	400		104	66-147			
Surrogate: Bromofluorobenzene	*25.0*			*ug/L*	*25.0*		*100*	*70-130*			
Surrogate: Dibromofluoromethane	*24.1*			*ug/L*	*25.0*		*96.4*	*70-130*			
Surrogate: Toluene-d8	*24.0*			*ug/L*	*25.0*		*95.9*	*70-130*			
LCS Dup (AI84176-BSD1)					Prepared: 09/26/18 Analyzed: 09/27/18						
Benzene	20.4	0.30	0.30	ug/L	20.0		102	82-122	0.343	25	
Toluene	19.5	0.30	0.30	ug/L	20.0		97.6	75-134	2.83	25	
Ethylbenzene	20.7	0.40	0.50	ug/L	20.0		103	84-124	1.06	25	
Xylenes (total)	59.9	0.50	0.50	ug/L	60.0		99.9	81-126	1.05	25	
Methyl tert-butyl ether	18.3	0.50	0.50	ug/L	20.0		91.6	84-119	1.21	25	
Di-isopropyl ether	23.0	0.40	0.50	ug/L	20.0		115	83-132	1.72	25	
Ethyl tert-butyl ether	21.6	0.40	0.50	ug/L	20.0		108	74-127	0.695	25	

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.

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267
Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 •Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 13:25

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84176 - VOAs in Water GCMS											
LCS Dup (AI84176-BSD1)					Prepared: 09/26/18 Analyzed: 09/27/18						
Tert-amyl methyl ether	18.2	0.40	0.50	ug/L	20.0		91.1	74-120	0.275	25	
Tert-butyl alcohol	405	6.0	10	ug/L	400		101	66-147	2.54	25	
Surrogate: Bromofluorobenzene	*24.8*			*ug/L*	*25.0*		*99.0*	*70-130*			
Surrogate: Dibromofluoromethane	*23.6*			*ug/L*	*25.0*		*94.3*	*70-130*			
Surrogate: Toluene-d8	*23.7*			*ug/L*	*25.0*		*94.7*	*70-130*			
Matrix Spike (AI84176-MS1)		**Source: 18I1872-02**			Prepared: 09/26/18 Analyzed: 09/27/18						
Benzene	18.3	0.30	0.30	ug/L	20.0	ND	91.4	58-139			
Toluene	17.9	0.30	0.30	ug/L	20.0	ND	89.4	59-147			
Ethylbenzene	18.9	0.40	0.50	ug/L	20.0	ND	94.4	59-147			
Xylenes (total)	54.5	0.50	0.50	ug/L	60.0	ND	90.8	49-153			
Methyl tert-butyl ether	15.6	0.50	0.50	ug/L	20.0	ND	78.2	55-144			
Di-isopropyl ether	20.3	0.40	0.50	ug/L	20.0	ND	102	49-143			
Ethyl tert-butyl ether	19.8	0.40	0.50	ug/L	20.0	ND	98.8	44-143			
Tert-amyl methyl ether	16.6	0.40	0.50	ug/L	20.0	ND	83.2	41-136			
Tert-butyl alcohol	413	6.0	10	ug/L	400	ND	103	38-175			
Surrogate: Bromofluorobenzene	*25.6*			*ug/L*	*25.0*		*102*	*70-130*			
Surrogate: Dibromofluoromethane	*24.0*			*ug/L*	*25.0*		*96.1*	*70-130*			
Surrogate: Toluene-d8	*24.3*			*ug/L*	*25.0*		*97.3*	*70-130*			
Matrix Spike (AI84176-MS2)		**Source: 18I1872-04**			Prepared: 09/26/18 Analyzed: 09/28/18						
Benzene	18.7	0.30	0.30	ug/L	20.0	ND	93.6	58-139			
Toluene	17.8	0.30	0.30	ug/L	20.0	ND	89.0	59-147			
Ethylbenzene	18.8	0.40	0.50	ug/L	20.0	ND	93.8	59-147			
Xylenes (total)	54.0	0.50	0.50	ug/L	60.0	ND	90.0	49-153			
Methyl tert-butyl ether	15.5	0.50	0.50	ug/L	20.0	ND	77.6	55-144			
Di-isopropyl ether	20.4	0.40	0.50	ug/L	20.0	ND	102	49-143			
Ethyl tert-butyl ether	19.3	0.40	0.50	ug/L	20.0	ND	96.4	44-143			
Tert-amyl methyl ether	16.0	0.40	0.50	ug/L	20.0	ND	79.8	41-136			
Tert-butyl alcohol	404	6.0	10	ug/L	400	ND	101	38-175			
Surrogate: Bromofluorobenzene	*25.8*			*ug/L*	*25.0*		*103*	*70-130*			
Surrogate: Dibromofluoromethane	*24.4*			*ug/L*	*25.0*		*97.7*	*70-130*			
Surrogate: Toluene-d8	*24.4*			*ug/L*	*25.0*		*97.7*	*70-130*			

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	10/22/18 13:25

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
P-02	Sample acidified to pH <2 and allowed to sit 24 hours before further processing.
QD-02	High duplicate RPD due to sample non-homogeneity.
QM-01	The spike recovery for this QC sample is outside of established control limits possibly due to a sample matrix interference.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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BROOKS APPLIED LABS
18804 North Creek Parkway, Ste 100, Bothell, WA 98011 • USA • T: 206 632 6206 F: 206 632 6017 • info@brooksapplied.com

October 19, 2018

Basic Laboratory, Inc.
ATTN: Jen McCurdy
2218 Railroad Avenue
Redding, CA 96001
jmccurdy@basiclab.com

Revision 1: This revision updates the sample IDs of 1841019-04 and 1841019-06 to *18I1245-04 18I1864-04 OC0.1* and *18I1245-06 18I1864-06 ER126.1*, respectively. No other changes were made.

RE: Project BSL-RE1801 Client Project: 18I1245

Dear Jen McCurdy,

On October 10, 2018, Brooks Applied Labs (BAL) received six (6) water samples. The samples were logged-in for the analyses of methyl mercury (MeHg) according to the chain-of-custody form. All samples were received and stored according to BAL SOPs and EPA methodology. Samples were preserved with hydrochloric acid by the client.

Water samples were distilled via EPA Method 1630.

The results were method blank corrected as described in the calculations section of the relevant BAL SOP(s) and were evaluated using reporting limits adjusted to account for sample aliquot size. Please refer to the *Sample Results* page for sample-specific MDLs, MRLs, and other details.

The method blank (BLK) BLK4 did not ethylate properly during analysis. It was re-analyzed as BLK5, which met all acceptance criteria. Only BLK5 was reported.

All data was reported without qualification (aside from concentration qualifiers) and all associated quality control sample results met the acceptance criteria.

BAL, an accredited laboratory, certifies that the reported results of all analyses for which BAL is NELAP accredited meet all NELAP requirements. For more information please see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Sincerely,

Lydia Greaves

Lydia Greaves
Client Services Manager
lydia@brooksapplied.com

Report Information

Laboratory Accreditation

BAL is accredited by the *National Environmental Laboratory Accreditation Program* (NELAP) through the State of Florida Department of Health, Bureau of Laboratories (E87982) and is certified to perform many environmental analyses. BAL is also certified by many other states to perform environmental analyses. For a current list of our accreditations/certifications, please visit our website at <http://www.brooksapplied.com/resources/certificates-permits/>. Results reported relate only to the samples listed in the report.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

AR	as received	**MS**	matrix spike
BAL	Brooks Applied Labs	**MSD**	matrix spike duplicate
BLK	method blank	**ND**	non-detect
BS	blank spike	**NR**	non-reportable
CAL	calibration standard	**N/C**	not calculated
CCB	continuing calibration blank	**PS**	post preparation spike
CCV	continuing calibration verification	**REC**	percent recovery
COC	chain of custody record	**RPD**	relative percent difference
D	dissolved fraction	**SCV**	secondary calibration verification
DUP	duplicate	**SOP**	standard operating procedure
IBL	instrument blank	**SRM**	standard reference material
ICV	initial calibration verification	**T**	total fraction
MDL	method detection limit	**TR**	total recoverable fraction
MRL	method reporting limit		

Definition of Data Qualifiers

(Effective 9/23/09)

E	An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H	Holding time and/or preservation requirements not met. Please see narrative for explanation.
J	Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
J-1	Estimated value. A full explanation is presented in the narrative.
M	Duplicate precision (RPD) was not within acceptance criteria. Please see narrative for explanation.
N	Spike recovery was not within acceptance criteria. Please see narrative for explanation.
R	Rejected, unusable value. A full explanation is presented in the narrative.
U	Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
X	Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.

These qualifiers are based on those previously utilized by Brooks Applied Labs, those found in the EPA SOW ILM03.0, Exhibit B, Section III, pg. B-18, and the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review; USEPA; January 2010. These supersede all previous qualifiers ever employed by BAL.

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Project ID: BSL-RE1801
PM: Lydia Greaves

BROOKS APPLIED LABS

Client PM: Jen McCurdy
Client Project: 18I1245

Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
18I1245-01 18I1864-01 ER118.9	1841019-01	Water	Sample	09/19/2018	10/10/2018
18I1245-02 18I1864-02 ER119.1	1841019-02	Water	Sample	09/19/2018	10/10/2018
18I1245-03 18I1864-03 MF0.1	1841019-03	Water	Sample	09/19/2018	10/10/2018
18I1245-04 18I1864-04 OC0.1	1841019-04	Water	Sample	09/19/2018	10/10/2018
18I1245-05 18I1864-05 ER125.9	1841019-05	Water	Sample	09/19/2018	10/10/2018
18I1245-06 18I1864-06 ER126.1	1841019-06	Water	Sample	09/19/2018	10/10/2018

Batch Summary

Analyte	Lab Matrix	Method	Prepared	Analyzed	Batch	Sequence
MeHg	Water	EPA 1630	10/12/2018	10/13/2018	B182746	1801394

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Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
18I1245-01 18I1864-01 ER118.9										
1841019-01	MeHg	Water	TR	0.069		0.023	0.049	ng/L	B182746	1801394
18I1245-02 18I1864-02 ER119.1										
1841019-02	MeHg	Water	TR	0.041	J	0.023	0.050	ng/L	B182746	1801394
18I1245-03 18I1864-03 MF0.1										
1841019-03	MeHg	Water	TR	0.025	J	0.023	0.050	ng/L	B182746	1801394
18I1245-04 18I1864-04 OC0.1										
1841019-04	MeHg	Water	TR	0.094		0.023	0.050	ng/L	B182746	1801394
18I1245-05 18I1864-05 ER125.9										
1841019-05	MeHg	Water	TR	0.032	J	0.023	0.050	ng/L	B182746	1801394
18I1245-06 18I1864-06 ER126.1										
1841019-06	MeHg	Water	TR	0.078		0.023	0.050	ng/L	B182746	1801394

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Accuracy & Precision Summary

Batch: B182746
Lab Matrix: Water
Method: EPA 1630

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B182746-BS1	**Blank Spike, (1839004)**						
	MeHg		1.000	1.016	ng/L	102% 67-133	
B182746-MS1	**Matrix Spike (1841017-02)**						
	MeHg	0.038	1.000	1.031	ng/L	99% 65-135	
B182746-MSD1	**Matrix Spike Duplicate (1841017-02)**						
	MeHg	0.038	1.000	1.047	ng/L	101% 65-135	2% 35
B182746-MS2	**Matrix Spike (1841020-01)**						
	MeHg	0.467	1.000	1.684	ng/L	122% 65-135	
B182746-MSD2	**Matrix Spike Duplicate (1841020-01)**						
	MeHg	0.467	1.000	1.441	ng/L	97% 65-135	16% 35

Method Blanks & Reporting Limits

Batch: B182746
Matrix: Water
Method: EPA 1630
Analyte: MeHg

Sample	Result	Units
B182746-BLK1	0.006	ng/L
B182746-BLK2	0.003	ng/L
B182746-BLK3	-0.0004	ng/L
B182746-BLK5	0.014	ng/L

Average: 0.006 **Standard Deviation:** 0.006 **MDL:** 0.027
Limit: 0.045 **Limit:** 0.015 **MRL:** 0.058

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Project ID: BSL-RE1801
PM: Lydia Greaves

BROOKS APPLIED LABS

Client PM: Jen McCurdy
Client Project: 18I1245

Sample Containers

Lab ID: 1841019-01
Sample: 18I1245-01 18I1864-01 ER118.9
Report Matrix: Water
Sample Type: Sample
Collected: 09/19/2018
Received: 10/10/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	500mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841019

Lab ID: 1841019-02
Sample: 18I1245-02 18I1864-02 ER119.1
Report Matrix: Water
Sample Type: Sample
Collected: 09/19/2018
Received: 10/10/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	500mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841019

Lab ID: 1841019-03
Sample: 18I1245-03 18I1864-03 MF0.1
Report Matrix: Water
Sample Type: Sample
Collected: 09/19/2018
Received: 10/10/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	500mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841019

Lab ID: 1841019-04
Sample: 18I1245-04 18I1864-04 OC0.1
Report Matrix: Water
Sample Type: Sample
Collected: 09/19/2018
Received: 10/10/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	500mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841019

Lab ID: 1841019-05
Sample: 18I1245-05 18I1864-05 ER125.9
Report Matrix: Water
Sample Type: Sample
Collected: 09/19/2018
Received: 10/10/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	500mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841019

Lab ID: 1841019-06
Sample: 18I1245-06 18I1864-06 ER126.1
Report Matrix: Water
Sample Type: Sample
Collected: 09/19/2018
Received: 10/10/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	500mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841019

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Shipping Containers

Cooler - 1841019

Received: October 10, 2018 15:00
Tracking No: 1Z8336E31378214118 via UPS
Coolant Type: Ice
Temperature: 2.0 °C

Description: Cooler
Damaged in transit? No
Returned to client? No
Comments: IR#18

Custody seals present? No
Custody seals intact? No
COC present? Yes

18804 North Creek Parkway, Suite 100, Bothell, WA 98011 · P(206) 632-6206 · F(206) 632-6017 · info@brooksapplied.com · www.brooksapplied.com

SUBCONTRACT ORDER

BAL Report 1841019

Basic Laboratory Inc

18I1245

SENDING LABORATORY:

Basic Laboratory Inc
2218 Railroad Avenue
Redding, CA 96001-2504
Phone: (530) 243-7234
Fax: (530) 243-6204
Project Manager: Jen McCurdy

RECEIVING LABORATORY:

Brooks Applied

BROOKS RAND LIMITED LAB
3958 6TH AVENUE NORTHWEST
SEATTLE, WA 981075056
Phone :(206) 632-6206
Fax: (206) 632-6017
E-Mail: jmccurdy@basiclab.com

Attn: Lydia Greaves

Please use standard TAT unless specific due date is requested. Email results & Element transfer file to reporting@basiclab.com.

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 18I1245-01	18I1864-01 ER118.9	Water	Sampled: 09/19/18 10:45	
Methyl Mercury 1630	~~10/05/18 15:00~~	~~03/18/19 10:45~~		
Containers Supplied:				
Sample ID: 18I1245-02	18I1864-02 ER119.1	Water	Sampled: 09/19/18 11:45	
Methyl Mercury 1630	~~10/05/18 15:00~~	~~03/18/19 11:45~~		
Containers Supplied:				
Sample ID: 18I1245-03	18I1864-03 MF0.1	Water	Sampled: 09/19/18 12:20	
Methyl Mercury 1630	~~10/05/18 15:00~~	~~03/18/19 12:20~~		
Containers Supplied:				
Sample ID: 18I1245-04	18I1864-04 OC0.1	Water	Sampled: 09/19/18 14:05	
Methyl Mercury 1630	~~10/05/18 15:00~~	~~03/18/19 14:05~~		
Containers Supplied:				
Sample ID: 18I1245-05	18I1864-05 ER125.9	Water	Sampled: 09/19/18 15:00	
Methyl Mercury 1630	~~10/05/18 15:00~~	~~03/18/19 15:00~~		
Containers Supplied:				
Sample ID: 18I1245-06	18I1864-06 ER261.1	Water	Sampled: 09/19/18 15:25	
Methyl Mercury 1630	~~10/05/18 15:00~~	~~03/18/19 15:25~~		
Containers Supplied:				

Released By	Date	Received By	Date
Paul	10-9-18	[signature]	10/10/18 15:00
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18I1864

1811245
1

18I 1245
10-5-18

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

Basic Laboratory
2218 Railroad Ave
Redding, CA 96001
Phone :530-243-7234
Fax: 530-243-7494
Terms: Net 30

Analysis	Due	Expires	Comments
18I1864-01 ER118.9 [Water] Sampled 09/19/18 10:45			-1 9.1°
BAL Hg Methyl	10/03/18 12:00	03/18/19 10:45	
Containers Supplied: 500ml Glass - HCl (H) AG			
18I1864-02 ER119.1 [Water] Sampled 09/19/18 11:45			-2 9.4°
BAL Hg Methyl	10/03/18 12:00	03/18/19 11:45	
Containers Supplied: 500ml Glass - HCl (H) ✓ AG			
18I1864-03 MF0.1 [Water] Sampled 09/19/18 12:20			-3 9.5°
BAL Hg Methyl	10/03/18 12:00	03/18/19 12:20	
Containers Supplied: 500ml Glass - HCl (H) ✓ AG			
18I1864-04 OC0.1 [Water] Sampled 09/19/18 14:05			-4 10.1°
BAL Hg Methyl	10/03/18 12:00	03/18/19 14:05	
Containers Supplied: 500ml Glass - HCl (H) ✓ AG			
18I1864-05 ER125.9 [Water] Sampled 09/19/18 15:00			-5 9.3°
BAL Hg Methyl	10/03/18 12:00	03/18/19 15:00	
Containers Supplied: 500ml Glass - HCl (H) ✓ AG			

Released By	Date	Received By	Date
	9-24-18	TWilhelmson	9-25-18 1441
		TW	9-25-18 1516

SUBCONTRACT ORDER

18I1245

Alpha Analytical Laboratories, Inc.

18I1864

Analysis	Due	Expires	Comments
18I1864-06 ER126.1 [Water] Sampled 09/19/18 15:25			−6 9.3°
BAL Hg Methyl	10/03/18 12:00	03/18/19 15:25	

Containers Supplied:

500ml Glass - HCl (H)

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+QC

Released By	Date	Received By	Date
	9-24-18	T Willhelmson	9-25-18 1441
		TW	9-25-18 1516

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ELAP Certifications
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Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
918-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18I1864 Pg 1 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	TPH-D/MO	TPH-Gas/BTEX/Oxys	Oil and Grease	TOC	DOC	CAM17 200.8 total + Al/Mn	Fe 200.8 Total	Hardness, total	Ammonia-N	Phosphorus, Total	TKN	Sample Notes or DDW Source Numbers:
ER 118.9	9/19	1045											X			15	X	X	X	X	X	X	X	X	X	X	X	
ER 119.1	↓	1145											↓			15	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MF0.1		1220														15												
DC0.1		1405														15												
ER 125.9		1500														15												
~~ER 12~~ ER 126.1	↓	1525											↓			15	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	

TAT
Standard 10 days: X
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ (Lab preapproval required)

Temp upon Receipt °C
Ukiah temp: 3.4
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		9/19/18	1640

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number:
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):

Travel and Site Time:	Mileage:	Misc. Supplies:

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Central Valley Laboratory
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Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18I864 Pg 2 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	CAM17 200.8 dissolved / lab filter	Al dissolved 200.8	Alkalinity	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	TDS	TSS	Chlorophyll-A	Sulfide	Hg 1631	MeHg 1630	Sample Notes or DDW Source Numbers:
ER118.9	9/19	1045											X			1	X	X	X	X	X	X	X	X	X	#1	X	X	
ER119.1	↓	1145											↓				↓	↓	↓	↓	↓	↓	↓	↓	↓		↓	↓	
MF0.1		1220																											
GC0.1		1405																											
ER125.9		1500																											
ER126.1	↓	1585											↓			See p. 1	↓	↓	↓	↓	↓	↓	↓	↓	↓	NO SULFIDE	↓	↓	

TAT: Standard 10 days (X)
RUSH: 5 days ( ) 48 hours ( ) Other: ___days ( ) Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 3.4
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		9/19/18	1610

DDW Write On EDT Transmission? ( ) Yes ( ) No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ( ) Yes ( ) No
Global ID:
EDF to (Email Address):
Sampling Company Log Code:

Travel and Site Time:	Mileage:	Misc. Supplies:

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ELAP Certificates 1551, 2728, and 2922

22 October 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18I2017

Enclosed are the results of analyses for samples received by the laboratory on 09/20/18 15:35. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
VA2-S	18I2017-01	Water	09/20/18 11:45	09/20/18 15:35
VA2-B	18I2017-02	Water	09/20/18 12:05	09/20/18 15:35
VA-EQB	18I2017-03	Water	09/20/18 09:40	09/20/18 15:35
ER156.7	18I2017-04	Water	09/20/18 13:30	09/20/18 15:35
EB-BLPH	18I2017-05	Water	09/20/18 14:20	09/20/18 15:35
EB-ABLM	18I2017-06	Water	09/20/18 15:05	09/20/18 15:35

This represents an amended copy of the original report.

Subcontracted results added.

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.

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-S (18I2017-01) Water Sampled: 09/20/18 11:45 Received: 09/20/18 15:35											
Calcium	**25**	**0.080**	**1.0**	**mg/L**	1	AI83937	09/24/18 07:45	10/04/18 11:23	EPA 200.7	MAM	
Magnesium	**7.3**	**0.030**	**1.0**	**mg/L**	1	AI83937	09/24/18 07:45	10/04/18 11:23	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AI84085	09/26/18 08:07	09/26/18 15:07	EPA 245.1	LMR	U
VA2-B (18I2017-02) Water Sampled: 09/20/18 12:05 Received: 09/20/18 15:35											
Calcium	**24**	**0.080**	**1.0**	**mg/L**	1	AI83937	09/24/18 07:45	10/04/18 11:27	EPA 200.7	MAM	
Magnesium	**7.0**	**0.030**	**1.0**	**mg/L**	1	AI83937	09/24/18 07:45	10/04/18 11:27	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AI84085	09/26/18 08:07	09/26/18 15:15	EPA 245.1	LMR	U
VA-EQB (18I2017-03) Water Sampled: 09/20/18 09:40 Received: 09/20/18 15:35											
Calcium	ND	0.080	1.0	mg/L	1	AI83937	09/24/18 07:45	10/04/18 11:32	EPA 200.7	MAM	U
Magnesium	ND	0.030	1.0	mg/L	1	AI83937	09/24/18 07:45	10/04/18 11:32	EPA 200.7	MAM	U
Mercury	ND	0.060	0.20	ug/L	1	AI84085	09/26/18 08:07	09/26/18 15:17	EPA 245.1	LMR	U
ER156.7 (18I2017-04) Water Sampled: 09/20/18 13:30 Received: 09/20/18 15:35											
Calcium	**24**	**0.080**	**1.0**	**mg/L**	1	AI83937	09/24/18 07:45	10/04/18 11:36	EPA 200.7	MAM	
Magnesium	**7.0**	**0.030**	**1.0**	**mg/L**	1	AI83937	09/24/18 07:45	10/04/18 11:36	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AI84085	09/26/18 08:07	09/26/18 15:20	EPA 245.1	LMR	U
EB-BLPH (18I2017-05) Water Sampled: 09/20/18 14:20 Received: 09/20/18 15:35											
Calcium	**25**	**0.080**	**1.0**	**mg/L**	1	AI83937	09/24/18 07:45	10/04/18 11:41	EPA 200.7	MAM	
Magnesium	**7.9**	**0.030**	**1.0**	**mg/L**	1	AI83937	09/24/18 07:45	10/04/18 11:41	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AI84085	09/26/18 08:07	09/26/18 15:22	EPA 245.1	LMR	U
EB-ABLM (18I2017-06) Water Sampled: 09/20/18 15:05 Received: 09/20/18 15:35											
Calcium	**25**	**0.080**	**1.0**	**mg/L**	1	AI83937	09/24/18 07:45	10/04/18 11:46	EPA 200.7	MAM	
Magnesium	**9.1**	**0.030**	**1.0**	**mg/L**	1	AI83937	09/24/18 07:45	10/04/18 11:46	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AI84085	09/26/18 08:07	09/26/18 15:25	EPA 245.1	LMR	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-S (18I2017-01) Water Sampled: 09/20/18 11:45 Received: 09/20/18 15:35											
Aluminum	**42**	**20**	**40**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:38	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:38	EPA 200.8	MMY	R-01, U
Arsenic	**3.6**	**0.80**	**2.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:38	EPA 200.8	MMY	
Barium	**63**	**0.80**	**2.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:38	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:38	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:38	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:38	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:38	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:38	EPA 200.8	MMY	R-01, U
Iron	**130**	**40**	**200**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:38	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:38	EPA 200.8	MMY	R-01, U
Manganese	**45**	**8.0**	**20**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:38	EPA 200.8	MMY	
Molybdenum	**0.58**	**0.28**	**1.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:38	EPA 200.8	MMY	R-01, J
Nickel	**1.9**	**1.2**	**2.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:38	EPA 200.8	MMY	R-01, J
Selenium	ND	1.2	8.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:38	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:38	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:38	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:38	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:38	EPA 200.8	MMY	R-01, U
VA2-B (18I2017-02) Water Sampled: 09/20/18 12:05 Received: 09/20/18 15:35											
Aluminum	**42**	**20**	**40**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:44	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:44	EPA 200.8	MMY	R-01, U
Arsenic	**3.3**	**0.80**	**2.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:44	EPA 200.8	MMY	
Barium	**64**	**0.80**	**2.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:44	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:44	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:44	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:44	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:44	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:44	EPA 200.8	MMY	R-01, U
Iron	**140**	**40**	**200**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:44	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:44	EPA 200.8	MMY	R-01, U
Manganese	**46**	**8.0**	**20**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:44	EPA 200.8	MMY	
Molybdenum	**0.55**	**0.28**	**1.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:44	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-B (18I2017-02) Water Sampled: 09/20/18 12:05 Received: 09/20/18 15:35											
Nickel	**2.1**	**1.2**	**2.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:44	EPA 200.8	MMY	
Selenium	ND	1.2	8.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:44	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:44	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:44	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:44	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:44	EPA 200.8	MMY	R-01, U
VA-EQB (18I2017-03) Water Sampled: 09/20/18 09:40 Received: 09/20/18 15:35											
Aluminum	**43**	**20**	**40**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:51	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:51	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:51	EPA 200.8	MMY	R-01, U
Barium	ND	0.80	2.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:51	EPA 200.8	MMY	R-01, U
Beryllium	ND	0.20	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:51	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:51	EPA 200.8	MMY	R-01, U
Chromium	**2.1**	**2.0**	**2.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:51	EPA 200.8	MMY	
Cobalt	ND	0.40	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:51	EPA 200.8	MMY	R-01, U
Copper	**34**	**1.6**	**2.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:51	EPA 200.8	MMY	
Iron	ND	40	200	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:51	EPA 200.8	MMY	R-01, U
Lead	ND	0.24	1.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:51	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:51	EPA 200.8	MMY	R-01, U
Molybdenum	ND	0.28	1.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:51	EPA 200.8	MMY	R-01, U
Nickel	**4.9**	**1.2**	**2.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:51	EPA 200.8	MMY	
Selenium	ND	1.2	8.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:51	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:51	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:51	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:51	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:51	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER156.7 (18I2017-04) Water Sampled: 09/20/18 13:30 Received: 09/20/18 15:35											
Aluminum	**43**	**20**	**40**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:58	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:58	EPA 200.8	MMY	R-01, U
Arsenic	**3.4**	**0.80**	**2.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:58	EPA 200.8	MMY	
Barium	**62**	**0.80**	**2.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:58	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:58	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:58	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:58	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:58	EPA 200.8	MMY	R-01, U
Copper	**2.5**	**1.6**	**2.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:58	EPA 200.8	MMY	
Iron	**130**	**40**	**200**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:58	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:58	EPA 200.8	MMY	R-01, U
Manganese	**34**	**8.0**	**20**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:58	EPA 200.8	MMY	
Molybdenum	**0.57**	**0.28**	**1.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:58	EPA 200.8	MMY	R-01, J
Nickel	**2.0**	**1.2**	**2.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 15:58	EPA 200.8	MMY	
Selenium	ND	1.2	8.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:58	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:58	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:58	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:58	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI84052	09/26/18 09:10	09/27/18 15:58	EPA 200.8	MMY	R-01, U
EB-BLPH (18I2017-05) Water Sampled: 09/20/18 14:20 Received: 09/20/18 15:35											
Aluminum	**97**	**20**	**40**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 16:05	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:05	EPA 200.8	MMY	R-01, U
Arsenic	**2.7**	**0.80**	**2.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 16:05	EPA 200.8	MMY	
Barium	**64**	**0.80**	**2.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 16:05	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:05	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:05	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:05	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:05	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:05	EPA 200.8	MMY	R-01, U
Iron	**220**	**40**	**200**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 16:05	EPA 200.8	MMY	
Lead	ND	0.24	1.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:05	EPA 200.8	MMY	R-01, U
Manganese	**27**	**8.0**	**20**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 16:05	EPA 200.8	MMY	
Molybdenum	**0.53**	**0.28**	**1.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 16:05	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
EB-BLPH (18I2017-05) Water Sampled: 09/20/18 14:20 Received: 09/20/18 15:35											
Nickel	**2.9**	**1.2**	**2.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 16:05	EPA 200.8	MMY	
Selenium	ND	1.2	8.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:05	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:05	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:05	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:05	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:05	EPA 200.8	MMY	R-01, U
EB-ABLM (18I2017-06) Water Sampled: 09/20/18 15:05 Received: 09/20/18 15:35											
Aluminum	**140**	**20**	**40**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 16:11	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:11	EPA 200.8	MMY	R-01, U
Arsenic	**3.5**	**0.80**	**2.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 16:11	EPA 200.8	MMY	
Barium	**64**	**0.80**	**2.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 16:11	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:11	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:11	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:11	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:11	EPA 200.8	MMY	R-01, U
Copper	**1.6**	**1.6**	**2.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 16:11	EPA 200.8	MMY	R-01, J
Iron	**260**	**40**	**200**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 16:11	EPA 200.8	MMY	
Lead	ND	0.24	1.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:11	EPA 200.8	MMY	R-01, U
Manganese	**18**	**8.0**	**20**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 16:11	EPA 200.8	MMY	R-01, J
Molybdenum	**0.53**	**0.28**	**1.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 16:11	EPA 200.8	MMY	R-01, J
Nickel	**2.4**	**1.2**	**2.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 16:11	EPA 200.8	MMY	
Selenium	ND	1.2	8.0	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:11	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:11	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:11	EPA 200.8	MMY	R-01, U
Vanadium	**2.0**	**2.0**	**4.0**	**ug/L**	4	AI84052	09/26/18 09:10	09/27/18 16:11	EPA 200.8	MMY	R-01, J
Zinc	ND	8.0	20	ug/L	4	AI84052	09/26/18 09:10	09/27/18 16:11	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-S (18I2017-01) Water Sampled: 09/20/18 11:45 Received: 09/20/18 15:35											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AI84164	09/27/18 09:49	10/01/18 17:30	EPA 245.1	LMR	U
VA2-B (18I2017-02) Water Sampled: 09/20/18 12:05 Received: 09/20/18 15:35											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AI84164	09/27/18 09:49	10/01/18 17:38	EPA 245.1	LMR	U
VA-EQB (18I2017-03) Water Sampled: 09/20/18 09:40 Received: 09/20/18 15:35											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AI84164	09/27/18 09:49	10/01/18 17:40	EPA 245.1	LMR	U
ER156.7 (18I2017-04) Water Sampled: 09/20/18 13:30 Received: 09/20/18 15:35											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AI84164	09/27/18 09:49	10/01/18 17:44	EPA 245.1	LMR	U
EB-BLPH (18I2017-05) Water Sampled: 09/20/18 14:20 Received: 09/20/18 15:35											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AI84164	09/27/18 09:49	10/01/18 17:47	EPA 245.1	LMR	U
EB-ABLM (18I2017-06) Water Sampled: 09/20/18 15:05 Received: 09/20/18 15:35											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AI84164	09/27/18 09:49	10/01/18 17:49	EPA 245.1	LMR	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-S (18I2017-01) Water Sampled: 09/20/18 11:45 Received: 09/20/18 15:35											
Aluminum, dissolved	ND	20	40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:27	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:27	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**4.2**	**0.80**	**2.0**	**ug/L**	4	AI84179	10/04/18 11:47	10/05/18 16:27	EPA 200.8	MMY	
Barium, dissolved	**64**	**0.80**	**2.0**	**ug/L**	4	AI84179	10/04/18 11:47	10/05/18 16:27	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:27	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:27	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:27	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:27	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:27	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:27	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.62**	**0.28**	**1.0**	**ug/L**	4	AI84179	10/04/18 11:47	10/05/18 16:27	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.8**	**1.2**	**2.0**	**ug/L**	4	AI84179	10/04/18 11:47	10/05/18 16:27	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:27	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:27	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:27	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:27	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:27	EPA 200.8	MMY	R-01, U
VA2-B (18I2017-02) Water Sampled: 09/20/18 12:05 Received: 09/20/18 15:35											
Aluminum, dissolved	ND	20	40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:33	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:33	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**3.8**	**0.80**	**2.0**	**ug/L**	4	AI84179	10/04/18 11:47	10/05/18 16:33	EPA 200.8	MMY	
Barium, dissolved	**63**	**0.80**	**2.0**	**ug/L**	4	AI84179	10/04/18 11:47	10/05/18 16:33	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:33	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:33	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:33	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:33	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AI84179	10/04/18 11:47	10/08/18 11:42	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:33	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.59**	**0.28**	**1.0**	**ug/L**	4	AI84179	10/04/18 11:47	10/05/18 16:33	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.7**	**1.2**	**2.0**	**ug/L**	4	AI84179	10/04/18 11:47	10/05/18 16:33	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:33	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:33	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:33	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-B (18I2017-02) Water Sampled: 09/20/18 12:05 Received: 09/20/18 15:35											
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:33	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:33	EPA 200.8	MMY	R-01, U
VA-EQB (18I2017-03) Water Sampled: 09/20/18 09:40 Received: 09/20/18 15:35											
Aluminum, dissolved	ND	20	40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:40	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:40	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:40	EPA 200.8	MMY	R-01, U
Barium, dissolved	ND	0.80	2.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:40	EPA 200.8	MMY	R-01, U
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:40	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:40	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:40	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:40	EPA 200.8	MMY	R-01, U
Copper, dissolved	**4.5**	**1.6**	**2.0**	**ug/L**	4	AI84179	10/04/18 11:47	10/05/18 16:40	EPA 200.8	MMY	
Lead, dissolved	ND	0.24	1.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:40	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	ND	0.28	1.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:40	EPA 200.8	MMY	R-01, U
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:40	EPA 200.8	MMY	R-01, U
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:40	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:40	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:40	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:40	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:40	EPA 200.8	MMY	R-01, U
ER156.7 (18I2017-04) Water Sampled: 09/20/18 13:30 Received: 09/20/18 15:35											
Aluminum, dissolved	ND	20	40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:47	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:47	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**2.8**	**0.80**	**2.0**	**ug/L**	4	AI84179	10/04/18 11:47	10/05/18 16:47	EPA 200.8	MMY	
Barium, dissolved	**38**	**0.80**	**2.0**	**ug/L**	4	AI84179	10/04/18 11:47	10/05/18 16:47	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:47	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:47	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:47	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:47	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:47	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:47	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.37**	**0.28**	**1.0**	**ug/L**	4	AI84179	10/04/18 11:47	10/05/18 16:47	EPA 200.8	MMY	R-01, J
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:47	EPA 200.8	MMY	R-01, U

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER156.7 (18I2017-04) Water Sampled: 09/20/18 13:30 Received: 09/20/18 15:35											
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:47	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:47	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:47	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:47	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:47	EPA 200.8	MMY	R-01, U
EB-BLPH (18I2017-05) Water Sampled: 09/20/18 14:20 Received: 09/20/18 15:35											
Aluminum, dissolved	ND	20	40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:53	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:53	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**3.1**	**0.80**	**2.0**	**ug/L**	4	AI84179	10/04/18 11:47	10/05/18 16:53	EPA 200.8	MMY	
Barium, dissolved	**60**	**0.80**	**2.0**	**ug/L**	4	AI84179	10/04/18 11:47	10/05/18 16:53	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:53	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:53	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:53	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:53	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AI84179	10/04/18 11:47	10/08/18 11:55	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:53	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.59**	**0.28**	**1.0**	**ug/L**	4	AI84179	10/04/18 11:47	10/05/18 16:53	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.6**	**1.2**	**2.0**	**ug/L**	4	AI84179	10/04/18 11:47	10/05/18 16:53	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:53	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:53	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:53	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:53	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AI84179	10/04/18 11:47	10/05/18 16:53	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
EB-ABLM (18I2017-06) Water Sampled: 09/20/18 15:05 Received: 09/20/18 15:35											
Aluminum, dissolved	ND	20	40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 14:58	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 14:58	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**3.3**	**0.80**	**2.0**	**ug/L**	4	AI84179	10/04/18 11:47	10/05/18 14:58	EPA 200.8	MMY	
Barium, dissolved	**62**	**0.80**	**2.0**	**ug/L**	4	AI84179	10/04/18 11:47	10/05/18 14:58	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 14:58	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 14:58	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 14:58	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 14:58	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AI84179	10/04/18 11:47	10/08/18 11:49	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 14:58	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.61**	**0.28**	**1.0**	**ug/L**	4	AI84179	10/04/18 11:47	10/05/18 14:58	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.6**	**1.2**	**2.0**	**ug/L**	4	AI84179	10/04/18 11:47	10/05/18 14:58	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 14:58	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 14:58	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AI84179	10/04/18 11:47	10/05/18 14:58	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AI84179	10/04/18 11:47	10/05/18 14:58	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AI84179	10/04/18 11:47	10/05/18 14:58	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-S (18I2017-01) Water Sampled: 09/20/18 11:45 Received: 09/20/18 15:35											
Mercury	**2.98**	**0.200**	**0.500**	**ng/l**	1	AJ83262	10/03/18 14:00	10/04/18 15:08	EPA 1631E	AJC	
VA2-B (18I2017-02) Water Sampled: 09/20/18 12:05 Received: 09/20/18 15:35											
Mercury	**2.87**	**0.200**	**0.500**	**ng/l**	1	AJ83262	10/03/18 14:00	10/04/18 14:45	EPA 1631E	AJC	
VA-EQB (18I2017-03) Water Sampled: 09/20/18 09:40 Received: 09/20/18 15:35											
Mercury	ND	0.200	0.500	ng/l	1	AJ83262	10/03/18 14:00	10/04/18 14:53	EPA 1631E	AJC	U
ER156.7 (18I2017-04) Water Sampled: 09/20/18 13:30 Received: 09/20/18 15:35											
Mercury	**2.51**	**0.200**	**0.500**	**ng/l**	1	AJ83262	10/03/18 14:00	10/04/18 15:32	EPA 1631E	AJC	
EB-BLPH (18I2017-05) Water Sampled: 09/20/18 14:20 Received: 09/20/18 15:35											
Mercury	**2.61**	**0.200**	**0.500**	**ng/l**	1	AJ83262	10/03/18 14:00	10/04/18 15:40	EPA 1631E	AJC	
EB-ABLM (18I2017-06) Water Sampled: 09/20/18 15:05 Received: 09/20/18 15:35											
Mercury	**1.69**	**0.200**	**0.500**	**ng/l**	1	AJ83262	10/03/18 14:00	10/04/18 15:48	EPA 1631E	AJC	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-S (18I2017-01) Water Sampled: 09/20/18 11:45 Received: 09/20/18 15:35											
Ammonia as N	ND	0.10	0.20	mg/L	1	AI84088	09/26/18 10:30	09/26/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI83883	09/21/18 13:00	09/26/18 14:30	SM5210B	WCS	U
Chlorophyll-a	**0.0016**	**0.0010**	**0.010**	**mg/L**	1	AJ83376	09/21/18 10:00	10/11/18 10:00	SM10200H	EV	J
Dissolved Organic Carbon	**2.44**	**0.600**	**1.00**	**mg/L**	1	AJ83340	10/04/18 14:23	10/08/18 12:54	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AJ83243	10/03/18 08:06	10/04/18 15:46	EPA 1664A	STS	U
Total Dissolved Solids	**100**	**5.0**	**10**	**mg/L**	1	AI84078	09/26/18 07:22	10/04/18 11:53	SM2540C	PBM	
Total Suspended Solids	**1.4**	**0.30**	**1.0**	**mg/L**	1	AI84152	09/27/18 09:45	09/27/18 17:20	SM2540D	SEF	
Bicarbonate Alkalinity as CaCO3	**79**	**1.0**	**5.0**	**mg/L**	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	U
Total Alkalinity as CaCO3	**79**	**1.0**	**5.0**	**mg/L**	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	
Nitrate + Nitrite as N	**0.16**	**0.0086**	**0.40**	**mg/L**	1	AI83825	09/21/18 10:10	10/07/18 16:04	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.21**	**0.050**	**1.0**	**mg/L**	1	AJ83184	10/03/18 07:03	10/04/18 13:00	SM4500-Norg B	JVO	J
Hardness, Total	**92**	**1**	**5**	**mg/L**	1	AI83937	09/24/18 07:45	10/04/18 11:23	SM2340B	MAM	
Phosphorus, total	**0.047**	**0.010**	**0.040**	**mg/L**	1	AJ83284	10/04/18 08:30	10/04/18 15:01	SM4500-P E	SMS	
Total Organic Carbon	**2.80**	**0.300**	**1.00**	**mg/L**	1	AJ83341	10/04/18 14:24	10/06/18 15:03	SM5310C	JIM	
VA2-B (18I2017-02) Water Sampled: 09/20/18 12:05 Received: 09/20/18 15:35											
Ammonia as N	**0.14**	**0.10**	**0.20**	**mg/L**	1	AI84088	09/26/18 10:30	09/26/18 16:00	SM4500NH3C	FCM	J
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI83883	09/21/18 13:00	09/26/18 14:30	SM5210B	WCS	U
Chlorophyll-a	**0.0018**	**0.0010**	**0.010**	**mg/L**	1	AJ83376	09/21/18 10:00	10/11/18 10:00	SM10200H	EV	J
Dissolved Organic Carbon	**2.24**	**0.600**	**1.00**	**mg/L**	1	AJ83340	10/04/18 14:23	10/08/18 13:13	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AJ83243	10/03/18 08:06	10/04/18 15:46	EPA 1664A	STS	U
Total Dissolved Solids	**100**	**5.0**	**10**	**mg/L**	1	AI84078	09/26/18 07:22	10/04/18 11:53	SM2540C	PBM	
Total Suspended Solids	**1.7**	**0.30**	**1.0**	**mg/L**	1	AI84152	09/27/18 09:45	09/27/18 17:20	SM2540D	SEF	
Bicarbonate Alkalinity as CaCO3	**80**	**1.0**	**5.0**	**mg/L**	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	U
Total Alkalinity as CaCO3	**80**	**1.0**	**5.0**	**mg/L**	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	
Nitrate + Nitrite as N	**0.16**	**0.0086**	**0.40**	**mg/L**	1	AI83825	09/21/18 10:10	10/07/18 16:04	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.21**	**0.050**	**1.0**	**mg/L**	1	AJ83184	10/03/18 07:03	10/04/18 13:00	SM4500-Norg B	JVO	J
Hardness, Total	**90**	**1**	**5**	**mg/L**	1	AI83937	09/24/18 07:45	10/04/18 11:27	SM2340B	MAM	
Phosphorus, total	**0.046**	**0.010**	**0.040**	**mg/L**	1	AJ83284	10/04/18 08:30	10/04/18 15:01	SM4500-P E	SMS	
Total Organic Carbon	**2.93**	**0.300**	**1.00**	**mg/L**	1	AJ83341	10/04/18 14:24	10/06/18 15:22	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA-EQB (18I2017-03) Water Sampled: 09/20/18 09:40 Received: 09/20/18 15:35											
Ammonia as N	**0.23**	**0.10**	**0.20**	**mg/L**	1	AI84088	09/26/18 10:30	09/26/18 16:00	SM4500NH3C	FCM	
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI83883	09/21/18 13:00	09/26/18 14:30	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AJ83376	09/21/18 10:00	10/11/18 10:00	SM10200H	EV	U
Dissolved Organic Carbon	ND	0.600	1.00	mg/L	1	AJ83340	10/04/18 14:23	10/08/18 13:32	SM5310C	JIM	U
Oil & Grease (HEM)	**4.9**	**1.4**	**5.0**	**mg/L**	1	AJ83243	10/03/18 08:06	10/04/18 15:46	EPA 1664A	STS	J
Total Dissolved Solids	ND	5.0	10	mg/L	1	AI84078	09/26/18 07:22	10/04/18 11:53	SM2540C	PBM	U
Total Suspended Solids	ND	0.30	1.0	mg/L	1	AI84152	09/27/18 09:45	09/27/18 17:20	SM2540D	SEF	U
Bicarbonate Alkalinity as CaCO3	**2.0**	**1.0**	**5.0**	**mg/L**	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	J
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	U
Total Alkalinity as CaCO3	**2.0**	**1.0**	**5.0**	**mg/L**	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	J
Nitrate + Nitrite as N	**0.027**	**0.0086**	**0.40**	**mg/L**	1	AI83825	09/21/18 10:10	10/07/18 16:04	Calculation	RLG	J
Total Kjeldahl Nitrogen	ND	0.050	1.0	mg/L	1	AJ83184	10/03/18 07:03	10/04/18 13:00	SM4500-Norg B	JVO	U
Hardness, Total	ND	1	5	mg/L	1	AI83937	09/24/18 07:45	10/04/18 11:32	SM2340B	MAM	U
Phosphorus, total	ND	0.010	0.040	mg/L	1	AJ83284	10/04/18 08:30	10/04/18 15:01	SM4500-P E	SMS	U
Total Organic Carbon	**0.460**	**0.300**	**1.00**	**mg/L**	1	AJ83341	10/04/18 14:24	10/06/18 15:41	SM5310C	JIM	J
ER156.7 (18I2017-04) Water Sampled: 09/20/18 13:30 Received: 09/20/18 15:35											
Ammonia as N	ND	0.10	0.20	mg/L	1	AI84088	09/26/18 10:30	09/26/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI83883	09/21/18 13:00	09/26/18 14:30	SM5210B	WCS	U
Chlorophyll-a	**0.0011**	**0.0010**	**0.010**	**mg/L**	1	AJ83376	09/21/18 10:00	10/11/18 10:00	SM10200H	EV	J
Dissolved Organic Carbon	**2.41**	**0.600**	**1.00**	**mg/L**	1	AJ83340	10/04/18 14:23	10/08/18 13:52	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AJ83243	10/03/18 08:06	10/04/18 15:46	EPA 1664A	STS	U
Total Dissolved Solids	**110**	**5.0**	**10**	**mg/L**	1	AI84078	09/26/18 07:22	10/04/18 11:53	SM2540C	PBM	
Total Suspended Solids	**1.3**	**0.30**	**1.0**	**mg/L**	1	AI84152	09/27/18 09:45	09/27/18 17:20	SM2540D	SEF	
Bicarbonate Alkalinity as CaCO3	**81**	**1.0**	**5.0**	**mg/L**	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	U
Total Alkalinity as CaCO3	**81**	**1.0**	**5.0**	**mg/L**	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	
Nitrate + Nitrite as N	**0.15**	**0.0086**	**0.40**	**mg/L**	1	AI83825	09/21/18 10:10	10/07/18 16:04	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.18**	**0.050**	**1.0**	**mg/L**	1	AJ83184	10/03/18 07:03	10/04/18 13:00	SM4500-Norg B	JVO	J
Hardness, Total	**89**	**1**	**5**	**mg/L**	1	AI83937	09/24/18 07:45	10/04/18 11:36	SM2340B	MAM	
Phosphorus, total	**0.048**	**0.010**	**0.040**	**mg/L**	1	AJ83284	10/04/18 08:30	10/04/18 15:01	SM4500-P E	SMS	
Total Organic Carbon	**2.72**	**0.300**	**1.00**	**mg/L**	1	AJ83341	10/04/18 14:24	10/06/18 16:01	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
EB-BLPH (18I2017-05) Water Sampled: 09/20/18 14:20 Received: 09/20/18 15:35											
Ammonia as N	**0.14**	**0.10**	**0.20**	**mg/L**	1	AI84088	09/26/18 10:30	09/26/18 16:00	SM4500NH3C	FCM	J
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI83883	09/21/18 13:00	09/26/18 14:30	SM5210B	WCS	U
Chlorophyll-a	**0.0041**	**0.0010**	**0.010**	**mg/L**	1	AJ83376	09/21/18 10:00	10/11/18 10:00	SM10200H	EV	J
Dissolved Organic Carbon	**2.59**	**0.600**	**1.00**	**mg/L**	1	AJ83340	10/04/18 14:23	10/08/18 14:11	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AJ83243	10/03/18 08:06	10/04/18 15:46	EPA 1664A	STS	U
Total Dissolved Solids	**110**	**5.0**	**10**	**mg/L**	1	AI84078	09/26/18 07:22	10/04/18 11:53	SM2540C	PBM	
Total Suspended Solids	**3.0**	**0.30**	**1.0**	**mg/L**	1	AI84152	09/27/18 09:45	09/27/18 17:20	SM2540D	SEF	
Bicarbonate Alkalinity as CaCO3	**84**	**1.0**	**5.0**	**mg/L**	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	U
Total Alkalinity as CaCO3	**84**	**1.0**	**5.0**	**mg/L**	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	
Nitrate + Nitrite as N	**0.19**	**0.0086**	**0.40**	**mg/L**	1	AI83825	09/21/18 10:10	10/07/18 16:04	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.21**	**0.050**	**1.0**	**mg/L**	1	AJ83184	10/03/18 07:03	10/04/18 13:00	SM4500-Norg B	JVO	J
Hardness, Total	**95**	**1**	**5**	**mg/L**	1	AI83937	09/24/18 07:45	10/04/18 11:41	SM2340B	MAM	
Phosphorus, total	**0.057**	**0.010**	**0.040**	**mg/L**	1	AJ83284	10/04/18 08:30	10/04/18 15:01	SM4500-P E	SMS	
Total Organic Carbon	**2.98**	**0.300**	**1.00**	**mg/L**	1	AJ83341	10/04/18 14:24	10/06/18 16:20	SM5310C	JIM	
EB-ABLM (18I2017-06) Water Sampled: 09/20/18 15:05 Received: 09/20/18 15:35											
Ammonia as N	ND	0.10	0.20	mg/L	1	AI84088	09/26/18 10:30	09/26/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI83883	09/21/18 13:00	09/26/18 14:30	SM5210B	WCS	U
Chlorophyll-a	**0.0013**	**0.0010**	**0.010**	**mg/L**	1	AJ83376	09/21/18 10:00	10/11/18 10:00	SM10200H	EV	J
Dissolved Organic Carbon	**3.01**	**0.600**	**1.00**	**mg/L**	1	AJ83340	10/04/18 14:23	10/08/18 14:31	SM5310C	JIM	
Oil & Grease (HEM)	**4.2**	**1.4**	**5.0**	**mg/L**	1	AJ83243	10/03/18 08:06	10/04/18 15:46	EPA 1664A	STS	J
Total Dissolved Solids	**120**	**5.0**	**10**	**mg/L**	1	AI84078	09/26/18 07:22	10/04/18 11:53	SM2540C	PBM	
Total Suspended Solids	**3.9**	**0.30**	**1.0**	**mg/L**	1	AI84152	09/27/18 09:45	09/27/18 17:20	SM2540D	SEF	
Bicarbonate Alkalinity as CaCO3	**87**	**1.0**	**5.0**	**mg/L**	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	U
Total Alkalinity as CaCO3	**87**	**1.0**	**5.0**	**mg/L**	1	AI84203	09/28/18 08:00	09/28/18 15:51	SM2320B	CEF	
Nitrate + Nitrite as N	**0.095**	**0.0086**	**0.40**	**mg/L**	1	AI83825	09/21/18 10:10	10/07/18 16:04	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.24**	**0.050**	**1.0**	**mg/L**	1	AJ83184	10/03/18 07:03	10/04/18 13:00	SM4500-Norg B	JVO	J
Hardness, Total	**100**	**1**	**5**	**mg/L**	1	AI83937	09/24/18 07:45	10/04/18 11:46	SM2340B	MAM	
Phosphorus, total	**0.063**	**0.010**	**0.040**	**mg/L**	1	AJ83284	10/04/18 08:30	10/04/18 15:01	SM4500-P E	SMS	
Total Organic Carbon	**3.38**	**0.300**	**1.00**	**mg/L**	1	AJ83341	10/04/18 14:24	10/06/18 16:40	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-S (18I2017-01) Water Sampled: 09/20/18 11:45 Received: 09/20/18 15:35											
Nitrate as N	**0.095**	**0.040**	**0.20**	**mg/L**	1	AI83878	09/21/18 12:56	09/21/18 12:56	EPA 300.0	SMP	J
Nitrite as N	**0.069**	**0.050**	**0.20**	**mg/L**	1	AI83878	09/21/18 12:56	09/21/18 12:56	EPA 300.0	SMP	J
Orthophosphate	**0.46**	**0.10**	**0.30**	**mg/L**	1	AI83878	09/21/18 12:56	09/21/18 12:56	EPA 300.0	SMP	
VA2-B (18I2017-02) Water Sampled: 09/20/18 12:05 Received: 09/20/18 15:35											
Nitrate as N	**0.096**	**0.040**	**0.20**	**mg/L**	1	AI83878	09/21/18 13:12	09/21/18 13:12	EPA 300.0	SMP	J
Nitrite as N	**0.069**	**0.050**	**0.20**	**mg/L**	1	AI83878	09/21/18 13:12	09/21/18 13:12	EPA 300.0	SMP	J
Orthophosphate	**0.15**	**0.10**	**0.30**	**mg/L**	1	AI83878	09/21/18 13:12	09/21/18 13:12	EPA 300.0	SMP	J
VA-EQB (18I2017-03) Water Sampled: 09/20/18 09:40 Received: 09/20/18 15:35											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI83878	09/21/18 13:29	09/21/18 13:29	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI83878	09/21/18 13:29	09/21/18 13:29	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI83878	09/21/18 13:29	09/21/18 13:29	EPA 300.0	SMP	U
ER156.7 (18I2017-04) Water Sampled: 09/20/18 13:30 Received: 09/20/18 15:35											
Nitrate as N	**0.081**	**0.040**	**0.20**	**mg/L**	1	AI83878	09/21/18 13:45	09/21/18 13:45	EPA 300.0	SMP	J
Nitrite as N	**0.068**	**0.050**	**0.20**	**mg/L**	1	AI83878	09/21/18 13:45	09/21/18 13:45	EPA 300.0	SMP	J
Orthophosphate	**0.15**	**0.10**	**0.30**	**mg/L**	1	AI83878	09/21/18 13:45	09/21/18 13:45	EPA 300.0	SMP	J
EB-BLPH (18I2017-05) Water Sampled: 09/20/18 14:20 Received: 09/20/18 15:35											
Nitrate as N	**0.12**	**0.040**	**0.20**	**mg/L**	1	AI83878	09/21/18 14:01	09/21/18 14:01	EPA 300.0	SMP	J
Nitrite as N	**0.068**	**0.050**	**0.20**	**mg/L**	1	AI83878	09/21/18 14:01	09/21/18 14:01	EPA 300.0	SMP	J
Orthophosphate	**0.14**	**0.10**	**0.30**	**mg/L**	1	AI83878	09/21/18 14:01	09/21/18 14:01	EPA 300.0	SMP	J
EB-ABLM (18I2017-06) Water Sampled: 09/20/18 15:05 Received: 09/20/18 15:35											
Nitrate as N	**0.095**	**0.040**	**0.20**	**mg/L**	1	AI83878	09/21/18 14:18	09/21/18 14:18	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AI83878	09/21/18 14:18	09/21/18 14:18	EPA 300.0	SMP	U
Orthophosphate	**0.15**	**0.10**	**0.30**	**mg/L**	1	AI83878	09/21/18 14:18	09/21/18 14:18	EPA 300.0	SMP	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

TPH by EPA/LUFT GC Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-S (18I2017-01) Water Sampled: 09/20/18 11:45 Received: 09/20/18 15:35											
TPH as Diesel	ND	50	250	ug/L	1	AI84072	09/26/18 06:30	10/04/18 23:59	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AI84072	09/26/18 06:30	10/04/18 23:59	8015DRO	DLD	U
Surrogate: Tetratetracontane		*101 %*	*39-120*			*AI84072*	*09/26/18 06:30*	*10/04/18 23:59*	*8015DRO*	*DLD*	
VA2-B (18I2017-02) Water Sampled: 09/20/18 12:05 Received: 09/20/18 15:35											
TPH as Diesel	ND	50	250	ug/L	1	AI84072	09/26/18 06:30	10/05/18 00:34	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AI84072	09/26/18 06:30	10/05/18 00:34	8015DRO	DLD	U
Surrogate: Tetratetracontane		*98.2 %*	*39-120*			*AI84072*	*09/26/18 06:30*	*10/05/18 00:34*	*8015DRO*	*DLD*	
VA-EQB (18I2017-03) Water Sampled: 09/20/18 09:40 Received: 09/20/18 15:35											
TPH as Diesel	ND	50	250	ug/L	1	AI84072	09/26/18 06:30	10/05/18 01:09	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AI84072	09/26/18 06:30	10/05/18 01:09	8015DRO	DLD	U
Surrogate: Tetratetracontane		*96.1 %*	*39-120*			*AI84072*	*09/26/18 06:30*	*10/05/18 01:09*	*8015DRO*	*DLD*	
ER156.7 (18I2017-04) Water Sampled: 09/20/18 13:30 Received: 09/20/18 15:35											
TPH as Diesel	ND	50	250	ug/L	1	AI84072	09/26/18 06:30	10/05/18 01:43	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AI84072	09/26/18 06:30	10/05/18 01:43	8015DRO	DLD	U
Surrogate: Tetratetracontane		*107 %*	*39-120*			*AI84072*	*09/26/18 06:30*	*10/05/18 01:43*	*8015DRO*	*DLD*	
EB-BLPH (18I2017-05) Water Sampled: 09/20/18 14:20 Received: 09/20/18 15:35											
TPH as Diesel	ND	50	250	ug/L	1	AI84072	09/26/18 06:30	10/05/18 02:18	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AI84072	09/26/18 06:30	10/05/18 02:18	8015DRO	DLD	U
Surrogate: Tetratetracontane		*88.3 %*	*39-120*			*AI84072*	*09/26/18 06:30*	*10/05/18 02:18*	*8015DRO*	*DLD*	
EB-ABLM (18I2017-06) Water Sampled: 09/20/18 15:05 Received: 09/20/18 15:35											
TPH as Diesel	ND	50	250	ug/L	1	AI84072	09/26/18 06:30	10/05/18 02:53	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AI84072	09/26/18 06:30	10/05/18 02:53	8015DRO	DLD	U
Surrogate: Tetratetracontane		*104 %*	*39-120*			*AI84072*	*09/26/18 06:30*	*10/05/18 02:53*	*8015DRO*	*DLD*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

TPH by EPA/LUFT GCMS Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-S (18I2017-01) Water Sampled: 09/20/18 11:45 Received: 09/20/18 15:35											
TPH as Gasoline	ND		50	ug/L	1	AJ83207	10/02/18 10:00	10/02/18 11:13	8260GRO	JV/MM	U
Surrogate: Toluene-d8	*98.4 %*		*76-129*			*AJ83207*	*10/02/18 10:00*	*10/02/18 11:13*	*8260GRO*	*JV/MM*	
VA2-B (18I2017-02) Water Sampled: 09/20/18 12:05 Received: 09/20/18 15:35											
TPH as Gasoline	ND		50	ug/L	1	AJ83207	10/02/18 10:00	10/02/18 11:45	8260GRO	JV/MM	U
Surrogate: Toluene-d8	*97.7 %*		*76-129*			*AJ83207*	*10/02/18 10:00*	*10/02/18 11:45*	*8260GRO*	*JV/MM*	
VA-EQB (18I2017-03) Water Sampled: 09/20/18 09:40 Received: 09/20/18 15:35											
TPH as Gasoline	ND		50	ug/L	1	AJ83207	10/02/18 10:00	10/02/18 12:17	8260GRO	JV/MM	U
Surrogate: Toluene-d8	*97.3 %*		*76-129*			*AJ83207*	*10/02/18 10:00*	*10/02/18 12:17*	*8260GRO*	*JV/MM*	
ER156.7 (18I2017-04) Water Sampled: 09/20/18 13:30 Received: 09/20/18 15:35											
TPH as Gasoline	ND		50	ug/L	1	AJ83207	10/02/18 10:00	10/02/18 12:49	8260GRO	JV/MM	U
Surrogate: Toluene-d8	*97.5 %*		*76-129*			*AJ83207*	*10/02/18 10:00*	*10/02/18 12:49*	*8260GRO*	*JV/MM*	
EB-BLPH (18I2017-05) Water Sampled: 09/20/18 14:20 Received: 09/20/18 15:35											
TPH as Gasoline	ND		50	ug/L	1	AJ83207	10/02/18 10:00	10/02/18 13:21	8260GRO	JV/MM	U
Surrogate: Toluene-d8	*96.4 %*		*76-129*			*AJ83207*	*10/02/18 10:00*	*10/02/18 13:21*	*8260GRO*	*JV/MM*	
EB-ABLM (18I2017-06) Water Sampled: 09/20/18 15:05 Received: 09/20/18 15:35											
TPH as Gasoline	ND		50	ug/L	1	AJ83207	10/02/18 10:00	10/02/18 13:53	8260GRO	JV/MM	U
Surrogate: Toluene-d8	*96.0 %*		*76-129*			*AJ83207*	*10/02/18 10:00*	*10/02/18 13:52*	*8260GRO*	*JV/MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA2-S (18I2017-01) Water Sampled: 09/20/18 11:45 Received: 09/20/18 15:35											
Benzene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 11:13	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 11:13	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 11:13	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 11:13	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 11:13	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 11:13	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 11:13	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 11:13	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 11:13	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*121 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 11:13*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*103 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 11:13*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*120 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 11:13*	*EPA 8260B*	*JV*	
VA2-B (18I2017-02) Water Sampled: 09/20/18 12:05 Received: 09/20/18 15:35											
Benzene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 11:45	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 11:45	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 11:45	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 11:45	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 11:45	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 11:45	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 11:45	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 11:45	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 11:45	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*120 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 11:45*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*101 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 11:45*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*120 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 11:45*	*EPA 8260B*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
VA-EQB (18I2017-03) Water Sampled: 09/20/18 09:40 Received: 09/20/18 15:35											
Benzene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 12:17	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 12:17	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 12:17	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 12:17	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 12:17	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 12:17	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 12:17	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 12:17	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 12:17	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*119 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 12:17*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*101 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 12:17*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*120 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 12:17*	*EPA 8260B*	*JV*	
ER156.7 (18I2017-04) Water Sampled: 09/20/18 13:30 Received: 09/20/18 15:35											
Benzene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 12:49	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 12:49	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 12:49	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 12:49	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 12:49	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 12:49	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 12:49	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 12:49	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 12:49	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*120 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 12:49*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*102 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 12:49*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*120 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 12:49*	*EPA 8260B*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
EB-BLPH (18I2017-05) Water Sampled: 09/20/18 14:20 Received: 09/20/18 15:35											
Benzene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 13:21	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 13:21	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 13:21	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 13:21	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 13:21	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 13:21	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 13:21	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 13:21	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 13:21	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*120 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 13:21*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*104 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 13:21*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*118 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 13:21*	*EPA 8260B*	*JV*	
EB-ABLM (18I2017-06) Water Sampled: 09/20/18 15:05 Received: 09/20/18 15:35											
Benzene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 13:53	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 13:53	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 13:53	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 13:53	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 13:53	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 13:53	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 13:53	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 13:53	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 13:53	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*118 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 13:53*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*103 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 13:53*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*117 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 13:53*	*EPA 8260B*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83937 - Metals Digest											
Blank (AI83937-BLK1)					Prepared: 09/24/18 Analyzed: 10/03/18						
Calcium	ND	0.080	1.0	mg/L							U
Magnesium	ND	0.030	1.0	mg/L							U
Duplicate (AI83937-DUP1)		**Source: 18I1969-01**			Prepared: 09/24/18 Analyzed: 10/03/18						
Calcium	30.5	0.080	1.0	mg/L		30.4			0.592	20	
Magnesium	22.9	0.030	1.0	mg/L		22.8			0.569	20	
Matrix Spike (AI83937-MS1)		**Source: 18I1969-01**			Prepared: 09/24/18 Analyzed: 10/03/18						
Calcium	38.2	0.080	1.0	mg/L	8.00	30.4	98.4	70-130			
Magnesium	30.9	0.030	1.0	mg/L	8.00	22.8	101	70-130			
Matrix Spike (AI83937-MS2)		**Source: 18I2062-01**			Prepared: 09/24/18 Analyzed: 10/03/18						
Calcium	17.8	0.080	1.0	mg/L	8.00	9.42	105	70-130			
Magnesium	11.4	0.030	1.0	mg/L	8.00	3.24	102	70-130			
Matrix Spike Dup (AI83937-MSD1)		**Source: 18I1969-01**			Prepared: 09/24/18 Analyzed: 10/03/18						
Calcium	37.7	0.080	1.0	mg/L	8.00	30.4	91.9	70-130	1.37	20	
Magnesium	31.2	0.030	1.0	mg/L	8.00	22.8	105	70-130	0.900	20	
Batch AI84085 - EPA 245.1 Hg Water											
Blank (AI84085-BLK1)					Prepared & Analyzed: 09/26/18						
Mercury	ND	0.060	0.20	ug/L							U
LCS (AI84085-BS1)					Prepared & Analyzed: 09/26/18						
Mercury	2.71	0.060	0.20	ug/L	2.50		108	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84085 - EPA 245.1 Hg Water											
Duplicate (AI84085-DUP1)		**Source: 18I1764-01**			Prepared & Analyzed: 09/26/18						
Mercury	ND	0.060	0.20	ug/L		ND				20	U
Matrix Spike (AI84085-MS1)		**Source: 18I1764-01**			Prepared & Analyzed: 09/26/18						
Mercury	2.54	0.060	0.20	ug/L	2.50	ND	102	70-130			
Matrix Spike (AI84085-MS2)		**Source: 18I1764-02**			Prepared & Analyzed: 09/26/18						
Mercury	2.55	0.060	0.20	ug/L	2.50	ND	102	70-130			
Matrix Spike Dup (AI84085-MSD1)		**Source: 18I1764-01**			Prepared & Analyzed: 09/26/18						
Mercury	2.60	0.060	0.20	ug/L	2.50	ND	104	70-130	2.18	20	

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84052 - EPA 200.8											
Blank (AI84052-BLK1)					Prepared: 09/26/18 Analyzed: 09/27/18						
Aluminum	ND	5.0	10	ug/L							U
Antimony	ND	0.20	0.50	ug/L							U
Arsenic	ND	0.20	0.50	ug/L							U
Barium	ND	0.20	0.50	ug/L							U
Beryllium	ND	0.050	0.10	ug/L							U
Cadmium	ND	0.060	0.10	ug/L							U
Chromium	ND	0.50	0.50	ug/L							U
Cobalt	ND	0.10	0.10	ug/L							U
Copper	ND	0.40	0.50	ug/L							U
Iron	ND	10	50	ug/L							U
Lead	ND	0.060	0.25	ug/L							U
Manganese	ND	2.0	5.0	ug/L							U
Molybdenum	ND	0.070	0.25	ug/L							U
Nickel	ND	0.30	0.50	ug/L							U
Selenium	ND	0.30	2.0	ug/L							U
Silver	ND	0.050	0.10	ug/L							U
Thallium	ND	0.050	0.10	ug/L							U
Vanadium	ND	0.50	1.0	ug/L							U
Zinc	ND	2.0	5.0	ug/L							U
LCS (AI84052-BS1)					Prepared: 09/26/18 Analyzed: 09/27/18						
Aluminum	555	5.0	10	ug/L	520		107	85-115			
Antimony	21.0	0.20	0.50	ug/L	20.0		105	85-115			
Arsenic	21.3	0.20	0.50	ug/L	20.0		106	85-115			
Barium	20.5	0.20	0.50	ug/L	20.0		103	85-115			
Beryllium	20.7	0.050	0.10	ug/L	20.0		104	85-115			
Cadmium	21.0	0.060	0.10	ug/L	20.0		105	85-115			
Chromium	20.8	0.50	0.50	ug/L	20.0		104	85-115			
Cobalt	20.9	0.10	0.10	ug/L	20.0		105	85-115			
Copper	20.8	0.40	0.50	ug/L	20.0		104	85-115			
Iron	554	10	50	ug/L	520		107	85-115			
Lead	20.8	0.060	0.25	ug/L	20.0		104	85-115			
Manganese	20.7	2.0	5.0	ug/L	20.0		104	85-115			
Molybdenum	21.0	0.070	0.25	ug/L	20.0		105	85-115			
Nickel	21.1	0.30	0.50	ug/L	20.0		106	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84052 - EPA 200.8											
LCS (AI84052-BS1)					Prepared: 09/26/18 Analyzed: 09/27/18						
Selenium	20.9	0.30	2.0	ug/L	20.0		104	85-115			
Silver	20.7	0.050	0.10	ug/L	20.0		103	85-115			
Thallium	20.7	0.050	0.10	ug/L	20.0		103	85-115			
Vanadium	20.8	0.50	1.0	ug/L	20.0		104	85-115			
Zinc	104	2.0	5.0	ug/L	100		104	85-115			
Duplicate (AI84052-DUP1)		**Source: 18I2122-01**			Prepared: 09/26/18 Analyzed: 09/27/18						
Aluminum	37.0	20	40	ug/L		38.4			3.72	20	R-01, J
Antimony	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic	ND	0.80	2.0	ug/L		ND				20	R-01, U
Barium	38.1	0.80	2.0	ug/L		39.4			3.31	20	
Beryllium	ND	0.20	0.40	ug/L		ND				20	U
Cadmium	ND	0.24	0.40	ug/L		ND				20	U
Chromium	2.32	2.0	2.0	ug/L		2.42			4.13	20	
Cobalt	0.757	0.40	0.40	ug/L		0.758			0.198	20	
Copper	4.34	1.6	2.0	ug/L		4.37			0.713	20	
Iron	ND	40	200	ug/L		ND				20	R-01, U
Lead	ND	0.24	1.0	ug/L		ND				20	R-01, U
Manganese	10.2	8.0	20	ug/L		10.4			2.12	20	R-01, J
Molybdenum	ND	0.28	1.0	ug/L		ND				20	R-01, U
Nickel	6.83	1.2	2.0	ug/L		7.11			4.00	20	
Selenium	ND	1.2	8.0	ug/L		ND				20	R-01, U
Silver	ND	0.20	0.40	ug/L		ND				20	R-01, U
Thallium	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium	ND	2.0	4.0	ug/L		ND				20	R-01, U
Zinc	ND	8.0	20	ug/L		ND				20	R-01, U
Matrix Spike (AI84052-MS1)		**Source: 18I2122-01**			Prepared: 09/26/18 Analyzed: 09/27/18						
Aluminum	578	20	40	ug/L	520	38.4	104	70-130			
Antimony	21.4	0.80	2.0	ug/L	20.0	ND	107	70-130			
Arsenic	21.7	0.80	2.0	ug/L	20.0	ND	109	70-130			
Barium	60.2	0.80	2.0	ug/L	20.0	39.4	104	70-130			
Beryllium	22.1	0.20	0.40	ug/L	20.0	ND	110	70-130			
Cadmium	21.0	0.24	0.40	ug/L	20.0	ND	105	70-130			
Chromium	24.6	2.0	2.0	ug/L	20.0	2.42	111	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84052 - EPA 200.8											
Matrix Spike (AI84052-MS1)		**Source: 18I2122-01**			Prepared: 09/26/18 Analyzed: 09/27/18						
Cobalt	21.9	0.40	0.40	ug/L	20.0	0.758	105	70-130			
Copper	25.7	1.6	2.0	ug/L	20.0	4.37	107	70-130			
Iron	552	40	200	ug/L	520	ND	106	70-130			
Lead	20.9	0.24	1.0	ug/L	20.0	ND	105	70-130			
Manganese	31.1	8.0	20	ug/L	20.0	10.4	104	70-130			
Molybdenum	21.7	0.28	1.0	ug/L	20.0	ND	108	70-130			
Nickel	28.7	1.2	2.0	ug/L	20.0	7.11	108	70-130			
Selenium	21.3	1.2	8.0	ug/L	20.0	ND	106	70-130			
Silver	21.6	0.20	0.40	ug/L	20.0	ND	108	70-130			
Thallium	20.7	0.20	0.40	ug/L	20.0	ND	104	70-130			
Vanadium	22.2	2.0	4.0	ug/L	20.0	ND	111	70-130			
Zinc	113	8.0	20	ug/L	100	ND	113	70-130			
Matrix Spike (AI84052-MS2)		**Source: 18I2164-01**			Prepared: 09/26/18 Analyzed: 09/27/18						
Aluminum	657	20	40	ug/L	520	124	103	70-130			
Antimony	24.3	0.80	2.0	ug/L	20.0	3.06	106	70-130			
Arsenic	28.6	0.80	2.0	ug/L	20.0	7.21	107	70-130			
Barium	215	0.80	2.0	ug/L	20.0	209	32.7	70-130			
Beryllium	20.2	0.20	0.40	ug/L	20.0	ND	101	70-130			
Cadmium	20.6	0.24	0.40	ug/L	20.0	ND	103	70-130			
Chromium	20.6	2.0	2.0	ug/L	20.0	ND	103	70-130			
Cobalt	20.0	0.40	0.40	ug/L	20.0	0.435	98.0	70-130			
Iron	674	40	200	ug/L	520	156	99.5	70-130			
Lead	20.3	0.24	1.0	ug/L	20.0	ND	101	70-130			
Manganese	32.6	8.0	20	ug/L	20.0	14.1	92.7	70-130			
Molybdenum	30.3	0.28	1.0	ug/L	20.0	9.23	105	70-130			
Nickel	23.1	1.2	2.0	ug/L	20.0	3.28	99.2	70-130			
Selenium	21.8	1.2	8.0	ug/L	20.0	ND	109	70-130			
Silver	20.5	0.20	0.40	ug/L	20.0	0.201	101	70-130			
Thallium	19.8	0.20	0.40	ug/L	20.0	ND	99.2	70-130			
Vanadium	22.2	2.0	4.0	ug/L	20.0	2.65	97.5	70-130			
Zinc	107	8.0	20	ug/L	100	ND	107	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84052 - EPA 200.8											
Matrix Spike Dup (AI84052-MSD1)		**Source: 18I2122-01**			Prepared: 09/26/18 Analyzed: 09/27/18						
Aluminum	586	20	40	ug/L	520	38.4	105	70-130	1.41	20	
Antimony	21.7	0.80	2.0	ug/L	20.0	ND	108	70-130	1.33	20	
Arsenic	22.1	0.80	2.0	ug/L	20.0	ND	110	70-130	1.73	20	
Barium	61.0	0.80	2.0	ug/L	20.0	39.4	108	70-130	1.37	20	
Beryllium	22.0	0.20	0.40	ug/L	20.0	ND	110	70-130	0.474	20	
Cadmium	21.6	0.24	0.40	ug/L	20.0	ND	108	70-130	2.87	20	
Chromium	24.0	2.0	2.0	ug/L	20.0	2.42	108	70-130	2.27	20	
Cobalt	22.0	0.40	0.40	ug/L	20.0	0.758	106	70-130	0.752	20	
Copper	26.0	1.6	2.0	ug/L	20.0	4.37	108	70-130	1.09	20	
Iron	566	40	200	ug/L	520	ND	109	70-130	2.58	20	
Lead	20.9	0.24	1.0	ug/L	20.0	ND	104	70-130	0.0585	20	
Manganese	31.1	8.0	20	ug/L	20.0	10.4	103	70-130	0.202	20	
Molybdenum	21.6	0.28	1.0	ug/L	20.0	ND	108	70-130	0.317	20	
Nickel	29.0	1.2	2.0	ug/L	20.0	7.11	109	70-130	0.990	20	
Selenium	20.7	1.2	8.0	ug/L	20.0	ND	104	70-130	2.65	20	
Silver	21.2	0.20	0.40	ug/L	20.0	ND	106	70-130	2.06	20	
Thallium	20.7	0.20	0.40	ug/L	20.0	ND	103	70-130	0.318	20	
Vanadium	22.2	2.0	4.0	ug/L	20.0	ND	111	70-130	0.138	20	
Zinc	114	8.0	20	ug/L	100	ND	114	70-130	0.816	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84164 - EPA 245.1 Hg Water											
Blank (AI84164-BLK1)					Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	ND	0.060	0.20	ug/L							U
LCS (AI84164-BS1)					Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	2.41	0.060	0.20	ug/L	2.50		96.5	85-115			
Duplicate (AI84164-DUP1)		**Source: 18I1764-02**			Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	ND	0.060	0.20	ug/L		ND				20	U
MRL Check (AI84164-MRL1)					Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	0.591	0.060	0.20	ug/L				0-200			
Matrix Spike (AI84164-MS1)		**Source: 18I1764-02**			Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	2.48	0.060	0.20	ug/L	2.50	ND	99.4	70-130			
Matrix Spike (AI84164-MS2)		**Source: 18I1764-03**			Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	2.56	0.060	0.20	ug/L	2.50	ND	102	70-130			
Matrix Spike Dup (AI84164-MSD1)		**Source: 18I1764-02**			Prepared: 09/27/18 Analyzed: 10/01/18						
Mercury, dissolved	2.93	0.060	0.20	ug/L	2.50	ND	117	70-130	16.5	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84179 - EPA 200.8 (D)											
Blank (AI84179-BLK1)					Prepared: 10/04/18 Analyzed: 10/05/18						
Aluminum, dissolved	ND	5.0	10	ug/L							U
Antimony, dissolved	ND	0.20	0.50	ug/L							U
Arsenic, dissolved	0.425	0.20	0.50	ug/L							J
Barium, dissolved	ND	0.20	0.50	ug/L							U
Beryllium, dissolved	ND	0.050	0.10	ug/L							U
Cadmium, dissolved	ND	0.060	0.10	ug/L							U
Chromium, dissolved	ND	0.50	0.50	ug/L							U
Cobalt, dissolved	ND	0.10	0.10	ug/L							U
Copper, dissolved	0.415	0.40	0.50	ug/L							J
Lead, dissolved	ND	0.060	0.25	ug/L							U
Molybdenum, dissolved	ND	0.070	0.25	ug/L							U
Nickel, dissolved	ND	0.30	0.50	ug/L							U
Selenium, dissolved	ND	0.30	2.0	ug/L							U
Silver, dissolved	ND	0.050	0.10	ug/L							U
Thallium, dissolved	ND	0.050	0.10	ug/L							U
Vanadium, dissolved	ND	0.50	1.0	ug/L							U
Zinc, dissolved	5.89	2.0	5.0	ug/L							QB-01
LCS (AI84179-BS1)					Prepared: 10/04/18 Analyzed: 10/05/18						
Aluminum, dissolved	532	5.0	10	ug/L	520		102	85-115			
Antimony, dissolved	20.7	0.20	0.50	ug/L	20.0		103	85-115			
Arsenic, dissolved	20.6	0.20	0.50	ug/L	20.0		103	85-115			
Barium, dissolved	21.0	0.20	0.50	ug/L	20.0		105	85-115			
Beryllium, dissolved	19.6	0.050	0.10	ug/L	20.0		98.2	85-115			
Cadmium, dissolved	20.4	0.060	0.10	ug/L	20.0		102	85-115			
Chromium, dissolved	20.4	0.50	0.50	ug/L	20.0		102	85-115			
Cobalt, dissolved	20.5	0.10	0.10	ug/L	20.0		103	85-115			
Copper, dissolved	20.3	0.40	0.50	ug/L	20.0		101	85-115			
Lead, dissolved	20.8	0.060	0.25	ug/L	20.0		104	85-115			
Molybdenum, dissolved	21.5	0.070	0.25	ug/L	20.0		108	85-115			
Nickel, dissolved	20.9	0.30	0.50	ug/L	20.0		104	85-115			
Selenium, dissolved	20.3	0.30	2.0	ug/L	20.0		102	85-115			
Silver, dissolved	21.2	0.050	0.10	ug/L	20.0		106	85-115			
Thallium, dissolved	20.5	0.050	0.10	ug/L	20.0		103	85-115			
Vanadium, dissolved	20.5	0.50	1.0	ug/L	20.0		102	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84179 - EPA 200.8 (D)											
LCS (AI84179-BS1)					Prepared: 10/04/18 Analyzed: 10/05/18						
Zinc, dissolved	102	2.0	5.0	ug/L	100		102	85-115			
Duplicate (AI84179-DUP1)		**Source: 18I2017-06**			Prepared: 10/04/18 Analyzed: 10/05/18						
Aluminum, dissolved	ND	20	40	ug/L		ND				20	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic, dissolved	2.82	0.80	2.0	ug/L		3.31			15.9	20	
Barium, dissolved	64.2	0.80	2.0	ug/L		62.4			2.88	20	
Beryllium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L		ND				20	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L		ND				20	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L		ND				20	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L		ND				20	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L		ND				20	R-01, U
Molybdenum, dissolved	0.682	0.28	1.0	ug/L		0.606			11.8	20	R-01, J
Nickel, dissolved	1.72	1.2	2.0	ug/L		1.56			9.33	20	R-01, J
Selenium, dissolved	ND	1.2	8.0	ug/L		ND				20	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L		ND				20	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L		ND				20	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Metals by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83262 - EPA 1631											
Blank (AJ83262-BLK1)					Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	ND	0.200	0.500	ng/l							U
LCS (AJ83262-BS1)					Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	5.12	0.200	0.500	ng/l	5.00		102	77-123			
Matrix Spike (AJ83262-MS1)		**Source: 18I2017-01**			Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	18.1	0.200	0.500	ng/l	25.0	2.98	60.6	71-125			
Matrix Spike (AJ83262-MS2)		**Source: 18I2371-06**			Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	16.7	0.200	0.500	ng/l	25.0	0.879	63.2	71-125			
Matrix Spike Dup (AJ83262-MSD1)		**Source: 18I2017-01**			Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	18.1	0.200	0.500	ng/l	25.0	2.98	60.6	71-125	0.0552	24	
Matrix Spike Dup (AJ83262-MSD2)		**Source: 18I2371-06**			Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	16.6	0.200	0.500	ng/l	25.0	0.879	62.8	71-125	0.601	24	
Reference (AJ83262-SRM1)					Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	52.8	0.200	0.500	ng/l	50.0		106	68-125			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83883 - General Preparation											
Blank (AI83883-BLK1)					Prepared: 09/21/18 Analyzed: 09/26/18						
Biochemical Oxygen Demand	ND	2.0	2.0	mg/L							U
Blank (AI83883-BLK2)					Prepared: 09/21/18 Analyzed: 09/26/18						
Biochemical Oxygen Demand	ND	2.0	2.0	mg/L							U
LCS (AI83883-BS1)					Prepared: 09/21/18 Analyzed: 09/26/18						
Biochemical Oxygen Demand	206	2.0	2.0	mg/L	200		103	84-115			
Duplicate (AI83883-DUP1)		**Source: 18I1978-01**			Prepared: 09/21/18 Analyzed: 09/26/18						
Biochemical Oxygen Demand	172	2.0	2.0	mg/L		186			7.64	30	
Batch AI83937 - Metals Digest											
Blank (AI83937-BLK1)					Prepared: 09/24/18 Analyzed: 10/03/18						
Hardness, Total	ND	1	5	mg/L							U
Duplicate (AI83937-DUP1)		**Source: 18I1969-01**			Prepared: 09/24/18 Analyzed: 10/03/18						
Hardness, Total	171	1	5	mg/L		170			0.579	20	
Batch AI84078 - General Preparation											
Blank (AI84078-BLK1)					Prepared: 09/26/18 Analyzed: 10/04/18						
Total Dissolved Solids	ND	5.0	10	mg/L							U
Duplicate (AI84078-DUP1)		**Source: 18I2017-06**			Prepared: 09/26/18 Analyzed: 10/04/18						
Total Dissolved Solids	122	5.0	10	mg/L		124			1.63	15	

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Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84078 - General Preparation											
Duplicate (AI84078-DUP2)		**Source: 18I2150-03**			Prepared: 09/26/18 Analyzed: 10/04/18						
Total Dissolved Solids	126	5.0	10	mg/L		128			1.57	15	
Batch AI84088 - General Preparation											
LCS (AI84088-BS1)					Prepared & Analyzed: 09/26/18						
Ammonia as N	5.08	0.10	0.20	mg/L	5.00		102	90-110			
LCS Dup (AI84088-BSD1)					Prepared & Analyzed: 09/26/18						
Ammonia as N	4.90	0.10	0.20	mg/L	5.00		98.1	90-110	3.51	20	
Matrix Spike (AI84088-MS1)		**Source: 18I2193-01**			Prepared & Analyzed: 09/26/18						
Ammonia as N	8.93	0.10	0.20	mg/L	10.0	ND	89.3	85-115			
Matrix Spike Dup (AI84088-MSD1)		**Source: 18I2193-01**			Prepared & Analyzed: 09/26/18						
Ammonia as N	9.11	0.10	0.20	mg/L	10.0	ND	91.1	85-115	1.95	20	
Batch AI84152 - General Preparation											
Blank (AI84152-BLK1)					Prepared & Analyzed: 09/27/18						
Total Suspended Solids	ND	0.30	1.0	mg/L							U
Duplicate (AI84152-DUP1)		**Source: 18I1985-01**			Prepared & Analyzed: 09/27/18						
Total Suspended Solids	265	0.30	1.0	mg/L		265			0.00	30	
Duplicate (AI84152-DUP2)		**Source: 18I1987-01**			Prepared & Analyzed: 09/27/18						
Total Suspended Solids	166	0.30	1.0	mg/L		183			9.71	30	

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84203 - General Preparation											
Duplicate (AI84203-DUP1)		**Source: 18I2475-02**			Prepared & Analyzed: 09/28/18						
Total Alkalinity as CaCO3	60.0	1.0	5.0	mg/L		59.0			1.68	20	
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Bicarbonate Alkalinity as CaCO3	60.0	1.0	5.0	mg/L		59.0			1.68	20	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Batch AJ83184 - General Prep											
LCS (AJ83184-BS1)					Prepared: 10/02/18 Analyzed: 10/04/18						
Total Kjeldahl Nitrogen	2.95	0.050	1.0	mg/L	2.98		99.0	80-120			
LCS Dup (AJ83184-BSD1)					Prepared: 10/02/18 Analyzed: 10/04/18						
Total Kjeldahl Nitrogen	2.95	0.050	1.0	mg/L	2.98		99.0	80-120	0.00	20	
Matrix Spike (AJ83184-MS1)		**Source: 18I1923-03**			Prepared: 10/02/18 Analyzed: 10/04/18						
Total Kjeldahl Nitrogen	3.87	0.050	1.0	mg/L	2.98	0.350	118	75-125			
Matrix Spike Dup (AJ83184-MSD1)		**Source: 18I1923-03**			Prepared: 10/02/18 Analyzed: 10/04/18						
Total Kjeldahl Nitrogen	3.87	0.050	1.0	mg/L	2.98	0.350	118	75-125	0.00	20	
Batch AJ83243 - General Preparation											
Blank (AJ83243-BLK1)					Prepared: 10/03/18 Analyzed: 10/04/18						
Oil & Grease (HEM)	ND	1.4	5.0	mg/L							U
LCS (AJ83243-BS1)					Prepared: 10/03/18 Analyzed: 10/04/18						
Oil & Grease (HEM)	39.9	1.4	5.0	mg/L	40.0		99.8	78-114			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83243 - General Preparation											
LCS Dup (AJ83243-BSD1)					Prepared: 10/03/18 Analyzed: 10/04/18						
Oil & Grease (HEM)	39.8	1.4	5.0	mg/L	40.0		99.5	78-114	0.251	18	
Matrix Spike (AJ83243-MS1)		**Source: 18I2604-01**			Prepared: 10/03/18 Analyzed: 10/04/18						
Oil & Grease (HEM)	28.2	1.4	5.0	mg/L	40.0	3.80	61.0	78-114			QM-05
Batch AJ83284 - General Prep											
Blank (AJ83284-BLK1)					Prepared & Analyzed: 10/04/18						
Phosphorus, total	ND	0.010	0.040	mg/L							U
LCS (AJ83284-BS1)					Prepared & Analyzed: 10/04/18						
Phosphorus, total	0.195	0.010	0.040	mg/L	0.200		97.4	85-115			
Duplicate (AJ83284-DUP1)		**Source: 18I2150-01**			Prepared & Analyzed: 10/04/18						
Phosphorus, total	0.0209	0.010	0.040	mg/L		0.0196			6.48	20	J
Matrix Spike (AJ83284-MS1)		**Source: 18I2150-01**			Prepared & Analyzed: 10/04/18						
Phosphorus, total	0.207	0.010	0.040	mg/L	0.200	0.0196	93.5	70-130			
Matrix Spike (AJ83284-MS2)		**Source: 18I2017-01**			Prepared & Analyzed: 10/04/18						
Phosphorus, total	0.226	0.010	0.040	mg/L	0.200	0.0470	89.6	70-130			
Matrix Spike Dup (AJ83284-MSD1)		**Source: 18I2150-01**			Prepared & Analyzed: 10/04/18						
Phosphorus, total	0.204	0.010	0.040	mg/L	0.200	0.0196	92.2	70-130	1.28	20	
Batch AJ83340 - General Prep											
Blank (AJ83340-BLK1)					Prepared: 10/04/18 Analyzed: 10/08/18						
Dissolved Organic Carbon	ND	0.600	1.00	mg/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83340 - General Prep											
LCS (AJ83340-BS1)					Prepared: 10/04/18 Analyzed: 10/08/18						
Dissolved Organic Carbon	10.4	0.600	1.00	mg/L	10.0		104	85-115			
LCS Dup (AJ83340-BSD1)					Prepared: 10/04/18 Analyzed: 10/08/18						
Dissolved Organic Carbon	9.86	0.600	1.00	mg/L	10.0		98.6	85-115	4.83	20	
Duplicate (AJ83340-DUP1)		**Source: 18I2150-01**			Prepared: 10/04/18 Analyzed: 10/08/18						
Dissolved Organic Carbon	1.50	0.600	1.00	mg/L		1.39			7.24	20	
MRL Check (AJ83340-MRL1)					Prepared: 10/04/18 Analyzed: 10/08/18						
Dissolved Organic Carbon	1.30	0.600	1.00	mg/L	1.25		104	0-200			
Matrix Spike (AJ83340-MS1)		**Source: 18I2150-01**			Prepared: 10/04/18 Analyzed: 10/08/18						
Dissolved Organic Carbon	11.3	0.600	1.00	mg/L	10.0	1.39	99.1	70-130			
Matrix Spike Dup (AJ83340-MSD1)		**Source: 18I2150-01**			Prepared: 10/04/18 Analyzed: 10/08/18						
Dissolved Organic Carbon	11.5	0.600	1.00	mg/L	10.0	1.39	101	70-130	2.03	20	
Batch AJ83341 - General Prep											
Blank (AJ83341-BLK1)					Prepared: 10/04/18 Analyzed: 10/06/18						
Total Organic Carbon	ND	0.300	1.00	mg/L							U
LCS (AJ83341-BS1)					Prepared: 10/04/18 Analyzed: 10/06/18						
Total Organic Carbon	10.4	0.300	1.00	mg/L	10.0		104	85-115			
LCS Dup (AJ83341-BSD1)					Prepared: 10/04/18 Analyzed: 10/06/18						
Total Organic Carbon	9.54	0.300	1.00	mg/L	10.0		95.4	85-115	8.90	20	

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83341 - General Prep											
Duplicate (AJ83341-DUP1)		**Source: 18I1869-01**			Prepared: 10/04/18 Analyzed: 10/06/18						
Total Organic Carbon	0.318	0.300	1.00	mg/L		ND			200	20	J
MRL Check (AJ83341-MRL1)					Prepared: 10/04/18 Analyzed: 10/06/18						
Total Organic Carbon	1.43	0.300	1.00	mg/L	1.25		115	0-200			
Matrix Spike (AJ83341-MS1)		**Source: 18I1869-01**			Prepared: 10/04/18 Analyzed: 10/06/18						
Total Organic Carbon	10.9	0.300	1.00	mg/L	10.0	ND	109	70-130			
Matrix Spike Dup (AJ83341-MSD1)		**Source: 18I1869-01**			Prepared: 10/04/18 Analyzed: 10/06/18						
Total Organic Carbon	11.3	0.300	1.00	mg/L	10.0	ND	113	70-130	3.75	20	
Batch AJ83376 - General Preparation											
Blank (AJ83376-BLK1)					Prepared: 09/21/18 Analyzed: 10/11/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L							U
Duplicate (AJ83376-DUP1)		**Source: 18I1864-01**			Prepared: 09/21/18 Analyzed: 10/11/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Duplicate (AJ83376-DUP2)		**Source: 18I2402-01**			Prepared: 09/27/18 Analyzed: 10/11/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U

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Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI83878 - General Preparation											
Blank (AI83878-BLK1)					Prepared & Analyzed: 09/21/18						
Nitrate as N	ND	0.040	0.20	mg/L							U
Nitrite as N	ND	0.050	0.20	mg/L							U
Orthophosphate	ND	0.10	0.30	mg/L							U
LCS (AI83878-BS1)					Prepared & Analyzed: 09/21/18						
Nitrate as N	5.82	0.040	0.20	mg/L	5.56		105	90-110			
Nitrite as N	5.51	0.050	0.20	mg/L	5.56		99.3	90-110			
Orthophosphate	17.3	0.10	0.30	mg/L	16.7		104	90-110			
Duplicate (AI83878-DUP1)		**Source: 18I1917-01**			Prepared & Analyzed: 09/22/18						
Nitrate as N	0.293	0.040	0.20	mg/L		0.293			0.00	20	
Orthophosphate	0.202	0.10	0.30	mg/L		0.190			6.25	20	J
Nitrite as N	ND	0.050	0.20	mg/L		ND				20	U
Matrix Spike (AI83878-MS1)		**Source: 18I1917-01**			Prepared & Analyzed: 09/22/18						
Nitrite as N	5.42	0.25	1.0	mg/L	5.56	ND	97.6	80-120			
Nitrate as N	5.71	0.20	1.0	mg/L	5.56	0.293	97.5	80-120			
Orthophosphate	13.7	0.50	1.5	mg/L	16.7	ND	82.4	80-120			
Matrix Spike (AI83878-MS2)		**Source: 18I2020-01**			Prepared & Analyzed: 09/22/18						
Nitrate as N	6.13	0.040	0.20	mg/L	5.56	0.310	105	80-120			
Orthophosphate	16.8	0.10	0.30	mg/L	16.7	ND	101	80-120			
Nitrite as N	5.68	0.050	0.20	mg/L	5.56	0.0690	101	80-120			
Matrix Spike Dup (AI83878-MSD1)		**Source: 18I1917-01**			Prepared & Analyzed: 09/22/18						
Nitrite as N	5.43	0.25	1.0	mg/L	5.56	ND	97.8	80-120	0.205	20	
Nitrate as N	5.71	0.20	1.0	mg/L	5.56	0.293	97.5	80-120	0.00	20	
Orthophosphate	13.8	0.50	1.5	mg/L	16.7	ND	83.0	80-120	0.618	20	

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

TPH by EPA/LUFT GC Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84072 - SVOAs in Water GC											
Blank (AI84072-BLK1)					Prepared: 09/26/18 Analyzed: 10/04/18						
TPH as Diesel	ND	50	250	ug/L							U
TPH as Motor Oil	ND	100	250	ug/L							U
Surrogate: Tetratetracontane	*59.3*			*ug/L*	*58.8*		*101*	*39-120*			
LCS (AI84072-BS1)					Prepared: 09/26/18 Analyzed: 10/04/18						
TPH as Diesel	1880	50	250	ug/L	2020		93.1	61-120			
Surrogate: Tetratetracontane	*56.6*			*ug/L*	*58.8*		*96.2*	*39-120*			
LCS (AI84072-BS2)					Prepared: 09/26/18 Analyzed: 10/04/18						
TPH as Motor Oil	1920	100	250	ug/L	2010		95.5	71-125			
Surrogate: Tetratetracontane	*48.7*			*ug/L*	*58.8*		*82.8*	*39-120*			
LCS Dup (AI84072-BSD1)					Prepared: 09/26/18 Analyzed: 10/04/18						
TPH as Diesel	1620	50	250	ug/L	2020		80.1	61-120	14.9	25	
Surrogate: Tetratetracontane	*43.8*			*ug/L*	*58.8*		*74.4*	*39-120*			
LCS Dup (AI84072-BSD2)					Prepared: 09/26/18 Analyzed: 10/04/18						
TPH as Motor Oil	1880	100	250	ug/L	2010		93.7	71-125	1.88	25	
Surrogate: Tetratetracontane	*53.7*			*ug/L*	*58.8*		*91.3*	*39-120*			
Matrix Spike (AI84072-MS1)		**Source: 18I2010-01**			Prepared: 09/26/18 Analyzed: 10/04/18						
TPH as Diesel	1540	50	250	ug/L	2020	ND	76.2	61-120			
Surrogate: Tetratetracontane	*54.0*			*ug/L*	*58.8*		*91.8*	*39-120*			

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

TPH by EPA/LUFT GCMS Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83207 - VOAs in Water GCMS											
Blank (AJ83207-BLK1)					Prepared: 10/01/18 Analyzed: 10/02/18						
TPH as Gasoline	ND	50	50	ug/L							U
Surrogate: Toluene-d8	*24.5*			*ug/L*	*25.0*		*97.9*	*76-129*			
LCS (AJ83207-BS1)					Prepared: 10/01/18 Analyzed: 10/02/18						
TPH as Gasoline	217	50	50	ug/L	200		109	67-132			
Surrogate: Toluene-d8	*24.2*			*ug/L*	*25.0*		*96.7*	*76-129*			
LCS Dup (AJ83207-BSD1)					Prepared: 10/01/18 Analyzed: 10/02/18						
TPH as Gasoline	214	50	50	ug/L	200		107	67-132	1.72	25	
Surrogate: Toluene-d8	*50.1*			*ug/L*	*50.0*		*100*	*76-129*			
Matrix Spike (AJ83207-MS1)		**Source: 18I2017-01**			Prepared: 10/01/18 Analyzed: 10/02/18						
TPH as Gasoline	196	50	50	ug/L	200	ND	98.1	37-156			
Surrogate: Toluene-d8	*23.9*			*ug/L*	*25.0*		*95.8*	*76-129*			
Matrix Spike (AJ83207-MS2)		**Source: 18I2017-02**			Prepared: 10/01/18 Analyzed: 10/03/18						
TPH as Gasoline	189	50	50	ug/L	200	ND	94.5	37-156			
Surrogate: Toluene-d8	*23.8*			*ug/L*	*25.0*		*95.3*	*76-129*			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83208 - VOAs in Water GCMS											
Blank (AJ83208-BLK1)					Prepared: 10/01/18 Analyzed: 10/02/18						
Benzene	ND	0.30	0.30	ug/L							U
Toluene	ND	0.30	0.30	ug/L							U
Ethylbenzene	ND	0.40	0.50	ug/L							U
Xylenes (total)	ND	0.50	0.50	ug/L							U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L							U
Di-isopropyl ether	ND	0.40	0.50	ug/L							U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L							U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L							U
Tert-butyl alcohol	ND	6.0	10	ug/L							U
Surrogate: Bromofluorobenzene	*28.7*			*ug/L*	*25.0*		*115*	*70-130*			
Surrogate: Dibromofluoromethane	*25.8*			*ug/L*	*25.0*		*103*	*70-130*			
Surrogate: Toluene-d8	*29.6*			*ug/L*	*25.0*		*118*	*70-130*			
LCS (AJ83208-BS1)					Prepared: 10/01/18 Analyzed: 10/02/18						
Benzene	21.1	0.30	0.30	ug/L	20.0		106	82-122			
Toluene	22.3	0.30	0.30	ug/L	20.0		112	75-134			
Ethylbenzene	23.1	0.40	0.50	ug/L	20.0		116	84-124			
Xylenes (total)	68.3	0.50	0.50	ug/L	60.0		114	81-126			
Methyl tert-butyl ether	19.8	0.50	0.50	ug/L	20.0		99.0	84-119			
Di-isopropyl ether	22.2	0.40	0.50	ug/L	20.0		111	83-132			
Ethyl tert-butyl ether	21.4	0.40	0.50	ug/L	20.0		107	74-127			
Tert-amyl methyl ether	19.3	0.40	0.50	ug/L	20.0		96.6	74-120			
Tert-butyl alcohol	394	6.0	10	ug/L	400		98.5	66-147			
Surrogate: Bromofluorobenzene	*28.7*			*ug/L*	*25.0*		*115*	*70-130*			
Surrogate: Dibromofluoromethane	*26.5*			*ug/L*	*25.0*		*106*	*70-130*			
Surrogate: Toluene-d8	*28.6*			*ug/L*	*25.0*		*114*	*70-130*			
LCS Dup (AJ83208-BSD1)					Prepared: 10/01/18 Analyzed: 10/02/18						
Benzene	21.5	0.30	0.30	ug/L	20.0		107	82-122	1.69	25	
Toluene	22.7	0.30	0.30	ug/L	20.0		114	75-134	1.78	25	
Ethylbenzene	23.6	0.40	0.50	ug/L	20.0		118	84-124	2.06	25	
Xylenes (total)	69.7	0.50	0.50	ug/L	60.0		116	81-126	2.04	25	
Methyl tert-butyl ether	20.5	0.50	0.50	ug/L	20.0		102	84-119	3.38	25	
Di-isopropyl ether	22.4	0.40	0.50	ug/L	20.0		112	83-132	0.763	25	
Ethyl tert-butyl ether	21.8	0.40	0.50	ug/L	20.0		109	74-127	1.71	25	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:06

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83208 - VOAs in Water GCMS											
LCS Dup (AJ83208-BSD1)					Prepared: 10/01/18 Analyzed: 10/02/18						
Tert-amyl methyl ether	20.1	0.40	0.50	ug/L	20.0		100	74-120	3.76	25	
Tert-butyl alcohol	417	6.0	10	ug/L	400		104	66-147	5.68	25	
Surrogate: Bromofluorobenzene	*28.8*			*ug/L*	*25.0*		*115*	*70-130*			
Surrogate: Dibromofluoromethane	*26.3*			*ug/L*	*25.0*		*105*	*70-130*			
Surrogate: Toluene-d8	*28.7*			*ug/L*	*25.0*		*115*	*70-130*			
Matrix Spike (AJ83208-MS1)		**Source: 18I2017-01**			Prepared: 10/01/18 Analyzed: 10/02/18						
Benzene	23.0	0.30	0.30	ug/L	20.0	ND	115	58-139			
Toluene	23.3	0.30	0.30	ug/L	20.0	ND	117	59-147			
Ethylbenzene	24.2	0.40	0.50	ug/L	20.0	ND	121	59-147			
Xylenes (total)	71.3	0.50	0.50	ug/L	60.0	ND	119	49-153			
Methyl tert-butyl ether	19.3	0.50	0.50	ug/L	20.0	ND	96.6	55-144			
Di-isopropyl ether	23.9	0.40	0.50	ug/L	20.0	ND	120	49-143			
Ethyl tert-butyl ether	20.5	0.40	0.50	ug/L	20.0	ND	102	44-143			
Tert-amyl methyl ether	18.6	0.40	0.50	ug/L	20.0	ND	93.1	41-136			
Tert-butyl alcohol	444	6.0	10	ug/L	400	ND	111	38-175			
Surrogate: Bromofluorobenzene	*29.6*			*ug/L*	*25.0*		*118*	*70-130*			
Surrogate: Dibromofluoromethane	*26.8*			*ug/L*	*25.0*		*107*	*70-130*			
Surrogate: Toluene-d8	*27.9*			*ug/L*	*25.0*		*112*	*70-130*			
Matrix Spike (AJ83208-MS2)		**Source: 18I2017-02**			Prepared: 10/01/18 Analyzed: 10/03/18						
Benzene	23.2	0.30	0.30	ug/L	20.0	ND	116	58-139			
Toluene	23.0	0.30	0.30	ug/L	20.0	ND	115	59-147			
Ethylbenzene	24.2	0.40	0.50	ug/L	20.0	ND	121	59-147			
Xylenes (total)	70.6	0.50	0.50	ug/L	60.0	ND	118	49-153			
Methyl tert-butyl ether	20.4	0.50	0.50	ug/L	20.0	ND	102	55-144			
Di-isopropyl ether	25.0	0.40	0.50	ug/L	20.0	ND	125	49-143			
Ethyl tert-butyl ether	21.9	0.40	0.50	ug/L	20.0	ND	110	44-143			
Tert-amyl methyl ether	19.4	0.40	0.50	ug/L	20.0	ND	97.2	41-136			
Tert-butyl alcohol	275	6.0	10	ug/L	400	ND	68.8	38-175			
Surrogate: Bromofluorobenzene	*30.1*			*ug/L*	*25.0*		*120*	*70-130*			
Surrogate: Dibromofluoromethane	*27.2*			*ug/L*	*25.0*		*109*	*70-130*			
Surrogate: Toluene-d8	*28.0*			*ug/L*	*25.0*		*112*	*70-130*			

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Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	10/22/18 10:06

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QB-01	The method blank contains analyte at a concentration above the MRL; however, the analyte in all associated samples was either ND or greater than 10X the blank concentration.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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BROOKS APPLIED LABS
18804 North Creek Parkway, Ste 100, Bothell, WA 98011 • USA • T: 206 632 6206 F: 206 632 6017 • info@brooksapplied.com

October 18, 2018

Basic Laboratory, Inc.
ATTN: Jen McCurdy
2218 Railroad Avenue
Redding, CA 96001
jmccurdy@basiclab.com

RE: Project BSL-RE1801 Client Project: 18I1246

Dear Jen McCurdy,

On October 10, 2018, Brooks Applied Labs (BAL) received six (6) water samples. The samples were logged-in for the analyses of methyl mercury (MeHg) according to the chain-of-custody form. All samples were received and stored according to BAL SOPs and EPA methodology. Samples were preserved with hydrochloric acid by the client.

Water samples were distilled via EPA Method 1630.

The results were method blank corrected as described in the calculations section of the relevant BAL SOP(s) and were evaluated using reporting limits adjusted to account for sample aliquot size. Please refer to the *Sample Results* page for sample-specific MDLs, MRLs, and other details.

The method blank (BLK) BLK4 did not ethylate properly during analysis. It was re-analyzed as BLK5, which met all acceptance criteria. Only BLK5 was reported.

All data was reported without qualification (aside from concentration qualifiers) and all associated quality control sample results met the acceptance criteria.

BAL, an accredited laboratory, certifies that the reported results of all analyses for which BAL is NELAP accredited meet all NELAP requirements. For more information please see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Sincerely,

Lydia Greaves

Lydia Greaves
Client Services Manager
lydia@brooksapplied.com

Report Information

Laboratory Accreditation

BAL is accredited by the *National Environmental Laboratory Accreditation Program* (NELAP) through the State of Florida Department of Health, Bureau of Laboratories (E87982) and is certified to perform many environmental analyses. BAL is also certified by many other states to perform environmental analyses. For a current list of our accreditations/certifications, please visit our website at <http://www.brooksapplied.com/resources/certificates-permits/>. Results reported relate only to the samples listed in the report.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

AR	as received	**MS**	matrix spike
BAL	Brooks Applied Labs	**MSD**	matrix spike duplicate
BLK	method blank	**ND**	non-detect
BS	blank spike	**NR**	non-reportable
CAL	calibration standard	**N/C**	not calculated
CCB	continuing calibration blank	**PS**	post preparation spike
CCV	continuing calibration verification	**REC**	percent recovery
COC	chain of custody record	**RPD**	relative percent difference
D	dissolved fraction	**SCV**	secondary calibration verification
DUP	duplicate	**SOP**	standard operating procedure
IBL	instrument blank	**SRM**	standard reference material
ICV	initial calibration verification	**T**	total fraction
MDL	method detection limit	**TR**	total recoverable fraction
MRL	method reporting limit		

Definition of Data Qualifiers

(Effective 9/23/09)

E	An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H	Holding time and/or preservation requirements not met. Please see narrative for explanation.
J	Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
J-1	Estimated value. A full explanation is presented in the narrative.
M	Duplicate precision (RPD) was not within acceptance criteria. Please see narrative for explanation.
N	Spike recovery was not within acceptance criteria. Please see narrative for explanation.
R	Rejected, unusable value. A full explanation is presented in the narrative.
U	Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
X	Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.

These qualifiers are based on those previously utilized by Brooks Applied Labs, those found in the EPA SOW ILM03.0, Exhibit B, Section III, pg. B-18, and the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review; USEPA; January 2010. These supersede all previous qualifiers ever employed by BAL.

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Project ID: BSL-RE1801
PM: Lydia Greaves

Client PM: Jen McCurdy
Client Project: 18I1246

Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
18I1246-01 18I2017-01 VA2-S	1841020-01	Water	Sample	09/20/2018	10/10/2018
18I1246-02 18I2017-02 VA2-B	1841020-02	Water	Sample	09/20/2018	10/10/2018
18I1246-03 18I2017-03 VA-EQB	1841020-03	Water	Sample	09/20/2018	10/10/2018
18I1246-04 18I2017-04 ER156.7	1841020-04	Water	Sample	09/20/2018	10/10/2018
18I1246-05 18I2017-05 EB-BLPH	1841020-05	Water	Sample	09/20/2018	10/10/2018
18I1246-06 18I2017-06 EB-ABLM	1841020-06	Water	Sample	09/20/2018	10/10/2018

Batch Summary

Analyte	Lab Matrix	Method	Prepared	Analyzed	Batch	Sequence
MeHg	Water	EPA 1630	10/12/2018	10/13/2018	B182746	1801394

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Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
18I1246-01 18I2017-01 VA2-S										
1841020-01	MeHg	Water	TR	0.467		0.023	0.050	ng/L	B182746	1801394
18I1246-02 18I2017-02 VA2-B										
1841020-02	MeHg	Water	TR	0.702		0.023	0.049	ng/L	B182746	1801394
18I1246-03 18I2017-03 VA-EQB										
1841020-03	MeHg	Water	TR	≤ 0.023	U	0.023	0.049	ng/L	B182746	1801394
18I1246-04 18I2017-04 ER156.7										
1841020-04	MeHg	Water	TR	0.458		0.023	0.050	ng/L	B182746	1801394
18I1246-05 18I2017-05 EB-BLPH										
1841020-05	MeHg	Water	TR	0.233		0.023	0.049	ng/L	B182746	1801394
18I1246-06 18I2017-06 EB-ABLM										
1841020-06	MeHg	Water	TR	0.086		0.023	0.050	ng/L	B182746	1801394

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Accuracy & Precision Summary

Batch: B182746
Lab Matrix: Water
Method: EPA 1630

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B182746-BS1	**Blank Spike, (1839004)**						
	MeHg		1.000	1.016	ng/L	102% 67-133	
B182746-MS1	**Matrix Spike (1841017-02)**						
	MeHg	0.038	1.000	1.031	ng/L	99% 65-135	
B182746-MSD1	**Matrix Spike Duplicate (1841017-02)**						
	MeHg	0.038	1.000	1.047	ng/L	101% 65-135	2% 35
B182746-MS2	**Matrix Spike (1841020-01)**						
	MeHg	0.467	1.000	1.684	ng/L	122% 65-135	
B182746-MSD2	**Matrix Spike Duplicate (1841020-01)**						
	MeHg	0.467	1.000	1.441	ng/L	97% 65-135	16% 35

Method Blanks & Reporting Limits

Batch: B182746
Matrix: Water
Method: EPA 1630
Analyte: MeHg

Sample	Result	Units
B182746-BLK1	0.006	ng/L
B182746-BLK2	0.003	ng/L
B182746-BLK3	-0.0004	ng/L
B182746-BLK5	0.014	ng/L

Average: 0.006 **Standard Deviation:** 0.006 **MDL:** 0.027
Limit: 0.045 **Limit:** 0.015 **MRL:** 0.058

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Project ID: BSL-RE1801
PM: Lydia Greaves

Client PM: Jen McCurdy
Client Project: 18I1246

Sample Containers

Lab ID: 1841020-01 **Report Matrix:** Water **Collected:** 09/20/2018
Sample: 18I1246-01 18I2017-01 VA2-S **Sample Type:** Sample **Received:** 10/10/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	500mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841020

Lab ID: 1841020-02 **Report Matrix:** Water **Collected:** 09/20/2018
Sample: 18I1246-02 18I2017-02 VA2-B **Sample Type:** Sample **Received:** 10/10/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	500mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841020

Lab ID: 1841020-03 **Report Matrix:** Water **Collected:** 09/20/2018
Sample: 18I1246-03 18I2017-03 VA-EQB **Sample Type:** Sample **Received:** 10/10/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	500mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841020

Lab ID: 1841020-04 **Report Matrix:** Water **Collected:** 09/20/2018
Sample: 18I1246-04 18I2017-04 ER156.7 **Sample Type:** Sample **Received:** 10/10/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	500mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841020

Lab ID: 1841020-05 **Report Matrix:** Water **Collected:** 09/20/2018
Sample: 18I1246-05 18I2017-05 EB-BLPH **Sample Type:** Sample **Received:** 10/10/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	500mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841020

Lab ID: 1841020-06 **Report Matrix:** Water **Collected:** 09/20/2018
Sample: 18I1246-06 18I2017-06 EB-ABLM **Sample Type:** Sample **Received:** 10/10/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	500mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841020

18804 North Creek Parkway, Suite 100, Bothell, WA 98011 · P(206) 632-6206 · F(206) 632-6017 · info@brooksapplied.com · www.brooksapplied.com

Project ID: BSL-RE1801
PM: Lydia Greaves

Client PM: Jen McCurdy
Client Project: 18I1246

Shipping Containers

Cooler - 1841020

Received: October 10, 2018 15:00
Tracking No: 1Z8336E31378214118 via UPS
Coolant Type: Ice
Temperature: 2.0 °C

Description: Cooler
Damaged in transit? No
Returned to client? No
Comments: IR#18

Custody seals present? No
Custody seals intact? No
COC present? Yes

18804 North Creek Parkway, Suite 100, Bothell, WA 98011 · P(206) 632-6206 · F(206) 632-6017 · info@brooksapplied.com · www.brooksapplied.com

SUBCONTRACT ORDER

BAL Report 1841020

Basic Laboratory Inc

18I1246

SENDING LABORATORY:
Basic Laboratory Inc
2218 Railroad Avenue
Redding, CA 96001-2504
Phone: (530) 243-7234
Fax: (530) 243-6204
Project Manager: Jen McCurdy

RECEIVING LABORATORY:
BROOKS RAND LIMITED LAB Brooks Applied
3958 6TH AVENUE NORTHWEST
SEATTLE, WA 981075056
Phone :(206) 632-6206
Fax: (206) 632-6017 Attn: Lydia Greaves
E-Mail: jmccurdy@basiclab.com

Please use standard TAT unless specific due date is requested. Email results & Element transfer file to reporting@basiclab.com.

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 18I1246-01	18I2017-01 VA2-S	Water	Sampled: 09/20/18 11:45	
Methyl Mercury 1630	~~10/05/18 15:00~~	~~03/19/19 11:45~~		
Containers Supplied:				
Sample ID: 18I1246-02	18I2017-02 VA2-B	Water	Sampled: 09/20/18 12:05	
Methyl Mercury 1630	~~10/05/18 15:00~~	~~03/19/19 12:05~~		
Containers Supplied:				
Sample ID: 18I1246-03	18I2017-03 VA-EQB	Water	Sampled: 09/20/18 09:40	
Methyl Mercury 1630	~~10/05/18 15:00~~	~~03/19/19 09:40~~		
Containers Supplied:				
Sample ID: 18I1246-04	18I2017-04 ER156.7	Water	Sampled: 09/20/18 13:30	
Methyl Mercury 1630	~~10/05/18 15:00~~	~~03/19/19 13:30~~		
Containers Supplied:				
Sample ID: 18I1246-05	18I2017-05 EB-BLPH	Water	Sampled: 09/20/18 14:20	
Methyl Mercury 1630	~~10/05/18 15:00~~	~~03/19/19 14:20~~		
Containers Supplied:				
Sample ID: 18I1246-06	18I2017-06 EB-ABLM	Water	Sampled: 09/20/18 15:05	
Methyl Mercury 1630	~~10/05/18 15:00~~	~~03/19/19 15:05~~		
Containers Supplied:				

Released By	Date	Received By	Date
[signature]	10.9.18	[signature]	10/10/18 15:00
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18I2017

18T 1246

10-5-18

1811246

1

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

Basic Laboratory
2218 Railroad Ave
Redding, CA 96001
Phone :530-243-7234
Fax: 530-243-7494
Terms: Net 30

Analysis	Due	Expires	Comments
18I2017-01 VA2-S [Water] Sampled 09/20/18 11:45			-1 9.9°
BAL Hg Methyl	10/04/18 12:00	03/19/19 11:45	
Containers Supplied:			
500ml Glass - HCl (H) AG			
18I2017-02 VA2-B [Water] Sampled 09/20/18 12:05			-2 8.8°
BAL Hg Methyl	10/04/18 12:00	03/19/19 12:05	
Containers Supplied:			
500ml Glass - HCl (H) AG			
18I2017-03 VA-EQB [Water] Sampled 09/20/18 09:40			-3 10.5°
BAL Hg Methyl	10/04/18 12:00	03/19/19 09:40	
Containers Supplied:			
500ml Glass - HCl (H) AG			
18I2017-04 ER156.7 [Water] Sampled 09/20/18 13:30			-4 8.6°
BAL Hg Methyl	10/04/18 12:00	03/19/19 13:30	
Containers Supplied:			
500ml Glass - HCl (H) AG			
18I2017-05 EB-BLPH [Water] Sampled 09/20/18 14:20			-5 9.7°
BAL Hg Methyl	10/04/18 12:00	03/19/19 14:20	
Containers Supplied:			
500ml Glass - HCl (H) AG			

Released By	9-24-18 Date	T Wilhelmson Received By	9-25-18 1443 Date
Released By	Date	TLW Received By	9-25-18 1612 Date

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18I2017

18I1248

Analysis	Due	Expires	Comments
18I2017-06 EB-ABLM [Water] Sampled 09/20/18 15:05			-4 8.0°
BAL Hg Methyl	10/04/18 12:00	03/19/19 15:05	

Containers Supplied:
500ml Glass - HCl (H)

☐ *Report to State*

System Name: **Employed by:**

User ID: **Sampler:**

System Number:

+2C

Released By	9-24-18 Date	T Wilhelmson Received By	9-25-18 Date	1443
Released By	Date	TW Received By	9-25-18 Date	1612

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email: clientservices@alpha-labs.com

ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

Bay Area Laboratory
262 Rickenbacker Circle, Livermore CA 94551
925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18I2017 Pg 1 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	TPH-D/MO	TPH-Gas/BTEX/Oxys	Oil and Grease	TOC	DOC	CAM17 200.8 total + Al/Mn	Fe 200.8 Total	Hardness, total	Ammonia-N	Phosphorus, Total	TKN
VA2-S	9/20	1145											X			15	X	X	X	X	X	X	X	X	X	X	X
VA2-B	↓	1205																									
VA-EQB		940																									
ER 156.7		1330																									
EB-BLPH		1420																									
EB-ABLM	↓	1505											↓			↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

Analysis Request

TAT
Standard 10 days: X
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.2
Livermore temp:
Elk Grove temp:

Sample Notes or DDW Source Numbers:

Relinquished by	Received by	Date	Time
Christina Buck		9/20/18	1535

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):
Travel and Site Time: Mileage: Misc. Supplies:

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ELAP Certifications
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Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 181 2017 Pg 1 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	CAM17 200.8 dissolved / lab filter	Al dissolved 200.8	Alkalinity	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	TDS	TSS	Chlorophyll-A	~~Sulfide~~	Hg 1631	MeHg 1630	Sample Notes or DDW Source Numbers:
VA2-S	9/20	1145											X				X	X	X	X	X	X	X	X	X		X	X	
VA2-B	↓	1205											↓				↓	↓	↓	↓	↓	↓	↓	↓	↓		↓	↓	
VA-EQB		940														1													
FR 1567		1330																											
FB-BLPH		1420																											
FB-ABLM	↓	1505														See p. 1	↓	↓	↓	↓	↓	↓	↓	↓	↓	NO SULFIDES	↓	↓	

TAT
Standard 10 days: ☒
RUSH: 5 days ○ / 48 hours ○ / Other: ___days ○ (Lab preapproval required)

Temp upon Receipt °C
Ukiah temp: 1.2
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		9/20/18	1535

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number:
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID:
EDF to (Email Address):
Sampling Company Log Code:

Travel and Site Time:	Mileage:	Misc. Supplies:

Alpha Analytical Laboratories Inc.
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Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 •Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

ELAP Certificates 1551, 2728, and 2922

22 October 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18I2371

Enclosed are the results of analyses for samples received by the laboratory on 09/26/18 08:15. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LP2-S	18I2371-01	Water	09/25/18 13:20	09/26/18 08:15
LP2-M	18I2371-02	Water	09/25/18 13:45	09/26/18 08:15
LP2-B	18I2371-03	Water	09/25/18 14:15	09/26/18 08:15
LP-BL	18I2371-04	Water	09/25/18 14:40	09/26/18 08:15
LP3-S	18I2371-05	Water	09/25/18 10:45	09/26/18 08:15
LP3-M	18I2371-06	Water	09/25/18 11:15	09/26/18 08:15
LP3-B	18I2371-07	Water	09/25/18 11:45	09/26/18 08:15

This represents an amended copy of the original report.

Subcontracted results added.

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.

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-S (18I2371-01) Water Sampled: 09/25/18 13:20 Received: 09/26/18 08:15											
Calcium	**21**	**0.080**	**1.0**	**mg/L**	1	AJ83496	10/09/18 07:21	10/11/18 16:45	EPA 200.7	MAM	
Magnesium	**6.3**	**0.030**	**1.0**	**mg/L**	1	AJ83496	10/09/18 07:21	10/11/18 16:45	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AJ83616	10/11/18 07:58	10/11/18 15:09	EPA 245.1	LMR	U
LP2-M (18I2371-02) Water Sampled: 09/25/18 13:45 Received: 09/26/18 08:15											
Calcium	**21**	**0.080**	**1.0**	**mg/L**	1	AJ83496	10/09/18 07:21	10/11/18 16:50	EPA 200.7	MAM	
Magnesium	**6.3**	**0.030**	**1.0**	**mg/L**	1	AJ83496	10/09/18 07:21	10/11/18 16:50	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AJ83616	10/11/18 07:58	10/11/18 15:12	EPA 245.1	LMR	U
LP2-B (18I2371-03) Water Sampled: 09/25/18 14:15 Received: 09/26/18 08:15											
Calcium	**21**	**0.080**	**1.0**	**mg/L**	1	AJ83496	10/09/18 07:21	10/11/18 16:55	EPA 200.7	MAM	
Magnesium	**6.2**	**0.030**	**1.0**	**mg/L**	1	AJ83496	10/09/18 07:21	10/11/18 16:55	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AJ83616	10/11/18 07:58	10/11/18 15:14	EPA 245.1	LMR	U
LP-BL (18I2371-04) Water Sampled: 09/25/18 14:40 Received: 09/26/18 08:15											
Calcium	ND	0.080	1.0	mg/L	1	AJ83496	10/09/18 07:21	10/11/18 17:00	EPA 200.7	MAM	U
Magnesium	ND	0.030	1.0	mg/L	1	AJ83496	10/09/18 07:21	10/11/18 17:00	EPA 200.7	MAM	U
Mercury	ND	0.060	0.20	ug/L	1	AJ83616	10/11/18 07:58	10/11/18 15:17	EPA 245.1	LMR	U
LP3-S (18I2371-05) Water Sampled: 09/25/18 10:45 Received: 09/26/18 08:15											
Calcium	**21**	**0.080**	**1.0**	**mg/L**	1	AJ83496	10/09/18 07:21	10/11/18 17:04	EPA 200.7	MAM	
Magnesium	**6.3**	**0.030**	**1.0**	**mg/L**	1	AJ83496	10/09/18 07:21	10/11/18 17:04	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AJ83616	10/11/18 07:58	10/11/18 15:20	EPA 245.1	LMR	U
LP3-M (18I2371-06) Water Sampled: 09/25/18 11:15 Received: 09/26/18 08:15											
Calcium	**21**	**0.080**	**1.0**	**mg/L**	1	AJ83496	10/09/18 07:21	10/11/18 17:09	EPA 200.7	MAM	
Magnesium	**6.4**	**0.030**	**1.0**	**mg/L**	1	AJ83496	10/09/18 07:21	10/11/18 17:09	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AJ83616	10/11/18 07:58	10/11/18 15:22	EPA 245.1	LMR	U

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.

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-B (18I2371-07) Water Sampled: 09/25/18 11:45 Received: 09/26/18 08:15											
Calcium	**21**	**0.080**	**1.0**	**mg/L**	1	AJ83496	10/09/18 07:21	10/11/18 15:52	EPA 200.7	MAM	
Magnesium	**5.9**	**0.030**	**1.0**	**mg/L**	1	AJ83496	10/09/18 07:21	10/11/18 15:52	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AJ83616	10/11/18 07:58	10/11/18 15:40	EPA 245.1	LMR	U

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.

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-S (18I2371-01) Water Sampled: 09/25/18 13:20 Received: 09/26/18 08:15											
Aluminum	**34**	**20**	**40**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 13:46	EPA 200.8	JRA	R-01, J
Antimony	ND	0.80	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 13:46	EPA 200.8	JRA	R-01, U
Arsenic	**2.3**	**0.80**	**2.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 13:46	EPA 200.8	JRA	
Barium	**68**	**0.80**	**2.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 13:46	EPA 200.8	JRA	
Beryllium	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 13:46	EPA 200.8	JRA	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 13:46	EPA 200.8	JRA	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 13:46	EPA 200.8	JRA	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 13:46	EPA 200.8	JRA	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 13:46	EPA 200.8	JRA	R-01, U
Iron	**120**	**40**	**200**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 13:46	EPA 200.8	JRA	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 13:46	EPA 200.8	JRA	R-01, U
Manganese	**8.0**	**8.0**	**20**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 13:46	EPA 200.8	JRA	R-01, J
Molybdenum	**0.55**	**0.28**	**1.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 13:46	EPA 200.8	JRA	R-01, J
Nickel	**1.3**	**1.2**	**2.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 13:46	EPA 200.8	JRA	R-01, J
Selenium	ND	1.2	8.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 13:46	EPA 200.8	JRA	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 13:46	EPA 200.8	JRA	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 13:46	EPA 200.8	JRA	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 13:46	EPA 200.8	JRA	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI84222	09/28/18 13:20	10/01/18 13:46	EPA 200.8	JRA	R-01, U
LP2-M (18I2371-02) Water Sampled: 09/25/18 13:45 Received: 09/26/18 08:15											
Aluminum	**69**	**20**	**40**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 15:52	EPA 200.8	JRA	
Antimony	ND	0.80	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:52	EPA 200.8	JRA	R-01, U
Arsenic	**3.2**	**0.80**	**2.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/11/18 13:28	EPA 200.8	JRA	
Barium	**68**	**0.80**	**2.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 15:52	EPA 200.8	JRA	
Beryllium	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:52	EPA 200.8	JRA	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:52	EPA 200.8	JRA	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:52	EPA 200.8	JRA	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:52	EPA 200.8	JRA	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:52	EPA 200.8	JRA	R-01, U
Iron	**140**	**40**	**200**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 15:52	EPA 200.8	JRA	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:52	EPA 200.8	JRA	R-01, U
Manganese	**11**	**8.0**	**20**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 15:52	EPA 200.8	JRA	R-01, J
Molybdenum	**0.58**	**0.28**	**1.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 15:52	EPA 200.8	JRA	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-M (18I2371-02) Water Sampled: 09/25/18 13:45 Received: 09/26/18 08:15											
Nickel	**1.5**	**1.2**	**2.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 15:52	EPA 200.8	JRA	R-01, J
Selenium	**1.2**	**1.2**	**8.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 15:52	EPA 200.8	JRA	R-01, J
Silver	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:52	EPA 200.8	JRA	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:52	EPA 200.8	JRA	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:52	EPA 200.8	JRA	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:52	EPA 200.8	JRA	R-01, U
LP2-B (18I2371-03) Water Sampled: 09/25/18 14:15 Received: 09/26/18 08:15											
Aluminum	**58**	**20**	**40**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 15:58	EPA 200.8	JRA	
Antimony	ND	0.80	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:58	EPA 200.8	JRA	R-01, U
Arsenic	**2.7**	**0.80**	**2.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/11/18 13:34	EPA 200.8	JRA	
Barium	**68**	**0.80**	**2.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 15:58	EPA 200.8	JRA	
Beryllium	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:58	EPA 200.8	JRA	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:58	EPA 200.8	JRA	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:58	EPA 200.8	JRA	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:58	EPA 200.8	JRA	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:58	EPA 200.8	JRA	R-01, U
Iron	**200**	**40**	**200**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 15:58	EPA 200.8	JRA	
Lead	ND	0.24	1.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:58	EPA 200.8	JRA	R-01, U
Manganese	**18**	**8.0**	**20**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 15:58	EPA 200.8	JRA	R-01, J
Molybdenum	**0.54**	**0.28**	**1.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 15:58	EPA 200.8	JRA	R-01, J
Nickel	**1.8**	**1.2**	**2.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 15:58	EPA 200.8	JRA	R-01, J
Selenium	**1.3**	**1.2**	**8.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 15:58	EPA 200.8	JRA	R-01, J
Silver	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:58	EPA 200.8	JRA	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:58	EPA 200.8	JRA	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:58	EPA 200.8	JRA	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI84222	09/28/18 13:20	10/01/18 15:58	EPA 200.8	JRA	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-BL (18I2371-04) Water Sampled: 09/25/18 14:40 Received: 09/26/18 08:15											
Aluminum	ND	20	40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:04	EPA 200.8	JRA	R-01, U
Antimony	ND	0.80	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:04	EPA 200.8	JRA	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:04	EPA 200.8	JRA	R-01, U
Barium	ND	0.80	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:04	EPA 200.8	JRA	R-01, U
Beryllium	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:04	EPA 200.8	JRA	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:04	EPA 200.8	JRA	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:04	EPA 200.8	JRA	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:04	EPA 200.8	JRA	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:04	EPA 200.8	JRA	R-01, U
Iron	ND	40	200	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:04	EPA 200.8	JRA	R-01, U
Lead	ND	0.24	1.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:04	EPA 200.8	JRA	R-01, U
Manganese	ND	8.0	20	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:04	EPA 200.8	JRA	R-01, U
Molybdenum	ND	0.28	1.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:04	EPA 200.8	JRA	R-01, U
Nickel	ND	1.2	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:04	EPA 200.8	JRA	R-01, U
Selenium	ND	1.2	8.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:04	EPA 200.8	JRA	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:04	EPA 200.8	JRA	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:04	EPA 200.8	JRA	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:04	EPA 200.8	JRA	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:04	EPA 200.8	JRA	R-01, U
LP3-S (18I2371-05) Water Sampled: 09/25/18 10:45 Received: 09/26/18 08:15											
Aluminum	**63**	**20**	**40**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:10	EPA 200.8	JRA	
Antimony	ND	0.80	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:10	EPA 200.8	JRA	R-01, U
Arsenic	**3.6**	**0.80**	**2.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/11/18 13:40	EPA 200.8	JRA	
Barium	**71**	**0.80**	**2.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:10	EPA 200.8	JRA	
Beryllium	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:10	EPA 200.8	JRA	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:10	EPA 200.8	JRA	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:10	EPA 200.8	JRA	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:10	EPA 200.8	JRA	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:10	EPA 200.8	JRA	R-01, U
Iron	**140**	**40**	**200**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:10	EPA 200.8	JRA	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:10	EPA 200.8	JRA	R-01, U
Manganese	**14**	**8.0**	**20**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:10	EPA 200.8	JRA	R-01, J
Molybdenum	**0.59**	**0.28**	**1.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:10	EPA 200.8	JRA	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-S (18I2371-05) Water Sampled: 09/25/18 10:45 Received: 09/26/18 08:15											
Nickel	**1.5**	**1.2**	**2.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:10	EPA 200.8	JRA	R-01, J
Selenium	ND	1.2	8.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:10	EPA 200.8	JRA	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:10	EPA 200.8	JRA	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:10	EPA 200.8	JRA	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:10	EPA 200.8	JRA	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:10	EPA 200.8	JRA	R-01, U
LP3-M (18I2371-06) Water Sampled: 09/25/18 11:15 Received: 09/26/18 08:15											
Aluminum	**48**	**20**	**40**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:16	EPA 200.8	JRA	
Antimony	ND	0.80	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:16	EPA 200.8	JRA	R-01, U
Arsenic	**3.4**	**0.80**	**2.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/11/18 13:46	EPA 200.8	JRA	
Barium	**68**	**0.80**	**2.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:16	EPA 200.8	JRA	
Beryllium	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:16	EPA 200.8	JRA	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:16	EPA 200.8	JRA	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:16	EPA 200.8	JRA	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:16	EPA 200.8	JRA	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:16	EPA 200.8	JRA	R-01, U
Iron	**140**	**40**	**200**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:16	EPA 200.8	JRA	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:16	EPA 200.8	JRA	R-01, U
Manganese	**18**	**8.0**	**20**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:16	EPA 200.8	JRA	R-01, J
Molybdenum	**0.58**	**0.28**	**1.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:16	EPA 200.8	JRA	R-01, J
Nickel	**1.6**	**1.2**	**2.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:16	EPA 200.8	JRA	R-01, J
Selenium	ND	1.2	8.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:16	EPA 200.8	JRA	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:16	EPA 200.8	JRA	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:16	EPA 200.8	JRA	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:16	EPA 200.8	JRA	R-01, U
Zinc	**290**	**8.0**	**20**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:16	EPA 200.8	JRA	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-B (18I2371-07) Water Sampled: 09/25/18 11:45 Received: 09/26/18 08:15											
Aluminum	**50**	**20**	**40**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:22	EPA 200.8	JRA	
Antimony	ND	0.80	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:22	EPA 200.8	JRA	R-01, U
Arsenic	**9.5**	**0.80**	**2.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:22	EPA 200.8	JRA	
Barium	**88**	**0.80**	**2.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:22	EPA 200.8	JRA	
Beryllium	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:22	EPA 200.8	JRA	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:22	EPA 200.8	JRA	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:22	EPA 200.8	JRA	R-01, U
Cobalt	**0.55**	**0.40**	**0.40**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:22	EPA 200.8	JRA	
Copper	ND	1.6	2.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:22	EPA 200.8	JRA	R-01, U
Iron	**1900**	**40**	**200**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:22	EPA 200.8	JRA	
Lead	ND	0.24	1.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:22	EPA 200.8	JRA	R-01, U
Manganese	**1100**	**8.0**	**20**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:22	EPA 200.8	JRA	
Molybdenum	**0.53**	**0.28**	**1.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:22	EPA 200.8	JRA	R-01, J
Nickel	**2.4**	**1.2**	**2.0**	**ug/L**	4	AI84222	09/28/18 13:20	10/01/18 16:22	EPA 200.8	JRA	
Selenium	ND	1.2	8.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:22	EPA 200.8	JRA	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:22	EPA 200.8	JRA	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:22	EPA 200.8	JRA	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:22	EPA 200.8	JRA	R-01, U
Zinc	ND	8.0	20	ug/L	4	AI84222	09/28/18 13:20	10/01/18 16:22	EPA 200.8	JRA	R-01, U

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-S (18I2371-01) Water Sampled: 09/25/18 13:20 Received: 09/26/18 08:15											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AJ83562	10/10/18 08:01	10/10/18 14:14	EPA 245.1	LMR	U
LP2-M (18I2371-02) Water Sampled: 09/25/18 13:45 Received: 09/26/18 08:15											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AJ83562	10/10/18 08:01	10/10/18 14:16	EPA 245.1	LMR	U
LP2-B (18I2371-03) Water Sampled: 09/25/18 14:15 Received: 09/26/18 08:15											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AJ83562	10/10/18 08:01	10/10/18 14:19	EPA 245.1	LMR	U
LP-BL (18I2371-04) Water Sampled: 09/25/18 14:40 Received: 09/26/18 08:15											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AJ83562	10/10/18 08:01	10/10/18 14:21	EPA 245.1	LMR	U
LP3-S (18I2371-05) Water Sampled: 09/25/18 10:45 Received: 09/26/18 08:15											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AJ83562	10/10/18 08:01	10/10/18 14:24	EPA 245.1	LMR	U
LP3-M (18I2371-06) Water Sampled: 09/25/18 11:15 Received: 09/26/18 08:15											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AJ83562	10/10/18 08:01	10/10/18 14:27	EPA 245.1	LMR	U
LP3-B (18I2371-07) Water Sampled: 09/25/18 11:45 Received: 09/26/18 08:15											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AJ83562	10/10/18 08:01	10/10/18 14:29	EPA 245.1	LMR	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-S (18I2371-01) Water Sampled: 09/25/18 13:20 Received: 09/26/18 08:15											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 13:04	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 13:04	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**2.7**	**0.80**	**2.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 13:04	EPA 200.8	MMY	
Barium, dissolved	**69**	**0.80**	**2.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 13:04	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 13:04	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 13:04	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 13:04	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 13:04	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 13:04	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 13:04	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.57**	**0.28**	**1.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 13:04	EPA 200.8	MMY	R-01, J
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 13:04	EPA 200.8	MMY	R-01, U
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 13:04	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 13:04	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 13:04	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 13:04	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 13:04	EPA 200.8	MMY	R-01, U
LP2-M (18I2371-02) Water Sampled: 09/25/18 13:45 Received: 09/26/18 08:15											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:24	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:24	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**2.6**	**0.80**	**2.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:24	EPA 200.8	MMY	
Barium, dissolved	**68**	**0.80**	**2.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:24	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:24	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:24	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:24	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:24	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:24	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:24	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.63**	**0.28**	**1.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:24	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.3**	**1.2**	**2.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:24	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:24	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:24	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:24	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-M (18I2371-02) Water Sampled: 09/25/18 13:45 Received: 09/26/18 08:15											**FILT**
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:24	EPA 200.8	MMY	R-01, U
Zinc, dissolved	**8.2**	**8.0**	**20**	**ug/L**	4	AJ83428	10/08/18 08:13	10/10/18 14:55	EPA 200.8	MMY	R-01, J
LP2-B (18I2371-03) Water Sampled: 09/25/18 14:15 Received: 09/26/18 08:15											**FILT**
Aluminum, dissolved	**20**	**20**	**40**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:31	EPA 200.8	MMY	R-01, J
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:31	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**3.2**	**0.80**	**2.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:31	EPA 200.8	MMY	
Barium, dissolved	**67**	**0.80**	**2.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:31	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:31	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:31	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:31	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:31	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:31	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:31	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.57**	**0.28**	**1.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:31	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.6**	**1.2**	**2.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:31	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:31	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:31	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:31	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:31	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AJ83428	10/08/18 08:13	10/16/18 10:35	EPA 200.8	JRA	R-01, U
LP-BL (18I2371-04) Water Sampled: 09/25/18 14:40 Received: 09/26/18 08:15											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:38	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:38	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:38	EPA 200.8	MMY	R-01, U
Barium, dissolved	ND	0.80	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:38	EPA 200.8	MMY	R-01, U
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:38	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:38	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:38	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:38	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:38	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:38	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	ND	0.28	1.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:38	EPA 200.8	MMY	R-01, U
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:38	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-BL (18I2371-04) Water Sampled: 09/25/18 14:40 Received: 09/26/18 08:15											**FILT**
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:38	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:38	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:38	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:38	EPA 200.8	MMY	R-01, U
Zinc, dissolved	**11**	**8.0**	**20**	**ug/L**	4	AJ83428	10/08/18 08:13	10/10/18 15:07	EPA 200.8	MMY	R-01, J
LP3-S (18I2371-05) Water Sampled: 09/25/18 10:45 Received: 09/26/18 08:15											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:44	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:44	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**3.0**	**0.80**	**2.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:44	EPA 200.8	MMY	
Barium, dissolved	**68**	**0.80**	**2.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:44	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:44	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:44	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:44	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:44	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:44	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:44	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.61**	**0.28**	**1.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:44	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.3**	**1.2**	**2.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:44	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:44	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:44	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:44	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:44	EPA 200.8	MMY	R-01, U
Zinc, dissolved	**17**	**8.0**	**20**	**ug/L**	4	AJ83428	10/08/18 08:13	10/10/18 15:13	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-M (18I2371-06) Water Sampled: 09/25/18 11:15 Received: 09/26/18 08:15											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:51	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:51	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**3.2**	**0.80**	**2.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:51	EPA 200.8	MMY	
Barium, dissolved	**66**	**0.80**	**2.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:51	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:51	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:51	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:51	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:51	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:51	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:51	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.71**	**0.28**	**1.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:51	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.4**	**1.2**	**2.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:51	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:51	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:51	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:51	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:51	EPA 200.8	MMY	R-01, U
Zinc, dissolved	**11**	**8.0**	**20**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:51	EPA 200.8	MMY	R-01, J
LP3-B (18I2371-07) Water Sampled: 09/25/18 11:45 Received: 09/26/18 08:15											**FILT**
Aluminum, dissolved	**27**	**20**	**40**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:58	EPA 200.8	MMY	R-01, J
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:58	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**6.7**	**0.80**	**2.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:58	EPA 200.8	MMY	
Barium, dissolved	**43**	**0.80**	**2.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:58	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:58	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:58	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:58	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:58	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:58	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:58	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.75**	**0.28**	**1.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:58	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**2.2**	**1.2**	**2.0**	**ug/L**	4	AJ83428	10/08/18 08:13	10/09/18 15:58	EPA 200.8	MMY	
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:58	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:58	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:58	EPA 200.8	MMY	R-01, U

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-B (18I2371-07) Water Sampled: 09/25/18 11:45 Received: 09/26/18 08:15											**FILT**
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AJ83428	10/08/18 08:13	10/09/18 15:58	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AJ83428	10/08/18 08:13	10/16/18 10:41	EPA 200.8	JRA	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-S (18I2371-01) Water Sampled: 09/25/18 13:20 Received: 09/26/18 08:15											
Mercury	**0.800**	**0.200**	**0.500**	**ng/l**	1	AJ83262	10/03/18 14:00	10/04/18 16:02	EPA 1631E	AJC	
LP2-M (18I2371-02) Water Sampled: 09/25/18 13:45 Received: 09/26/18 08:15											
Mercury	**0.934**	**0.200**	**0.500**	**ng/l**	1	AJ83262	10/03/18 14:00	10/04/18 16:10	EPA 1631E	AJC	
LP2-B (18I2371-03) Water Sampled: 09/25/18 14:15 Received: 09/26/18 08:15											
Mercury	**1.01**	**0.200**	**0.500**	**ng/l**	1	AJ83262	10/03/18 14:00	10/04/18 16:18	EPA 1631E	AJC	
LP-BL (18I2371-04) Water Sampled: 09/25/18 14:40 Received: 09/26/18 08:15											
Mercury	ND	0.200	0.500	ng/l	1	AJ83262	10/03/18 14:00	10/04/18 16:26	EPA 1631E	AJC	U
LP3-S (18I2371-05) Water Sampled: 09/25/18 10:45 Received: 09/26/18 08:15											
Mercury	**0.823**	**0.200**	**0.500**	**ng/l**	1	AJ83262	10/03/18 14:00	10/04/18 17:07	EPA 1631E	AJC	
LP3-M (18I2371-06) Water Sampled: 09/25/18 11:15 Received: 09/26/18 08:15											
Mercury	**0.879**	**0.200**	**0.500**	**ng/l**	1	AJ83262	10/03/18 14:00	10/04/18 17:15	EPA 1631E	AJC	
LP3-B (18I2371-07) Water Sampled: 09/25/18 11:45 Received: 09/26/18 08:15											
Mercury	**3.72**	**0.200**	**0.500**	**ng/l**	1	AJ83262	10/03/18 14:00	10/04/18 17:39	EPA 1631E	AJC	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-S (18I2371-01) Water Sampled: 09/25/18 13:20 Received: 09/26/18 08:15											
Ammonia as N	ND	0.10	0.20	mg/L	1	AJ83248	10/03/18 10:30	10/03/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	**2.3**	**2.0**	**5.0**	**mg/L**	1	AI84148	09/27/18 07:45	10/02/18 08:30	SM5210B	WCS	J
Chlorophyll-a	**0.010**	**0.0020**	**0.010**	**mg/L**	2	AJ83376	09/27/18 08:30	10/11/18 10:00	SM10200H	EV	
Dissolved Organic Carbon	**2.94**	**0.600**	**1.00**	**mg/L**	1	AJ83631	10/11/18 10:44	10/12/18 13:33	SM5310C	JIM	
Oil & Grease (HEM)	**1.8**	**1.4**	**5.0**	**mg/L**	1	AJ83373	10/05/18 08:11	10/10/18 14:43	EPA 1664A	STS	J
Sulfide	ND	0.020	0.10	mg/L	1	AJ83169	10/01/18 15:00	10/01/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**97**	**10**	**10**	**mg/L**	1	AJ83119	10/01/18 08:21	10/08/18 09:01	SM2540C	PBM	
Total Suspended Solids	**2.2**	**0.30**	**1.0**	**mg/L**	1	AJ83159	10/01/18 14:30	10/08/18 15:30	SM2540D	RLG	
Bicarbonate Alkalinity as CaCO3	**80**	**1.0**	**5.0**	**mg/L**	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	U
Total Alkalinity as CaCO3	**80**	**1.0**	**5.0**	**mg/L**	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	
Nitrate + Nitrite as N	**0.10**	**0.0086**	**0.40**	**mg/L**	1	AJ83405	10/05/18 12:44	10/08/18 15:04	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.42**	**0.050**	**1.0**	**mg/L**	1	AJ83424	10/08/18 07:32	10/10/18 11:16	SM4500-Norg B	JVO	J
Hardness, Total	**80**	**1**	**5**	**mg/L**	1	AJ83496	10/09/18 07:21	10/11/18 16:45	SM2340B	MAM	
Phosphorus, total	**0.021**	**0.010**	**0.040**	**mg/L**	1	AJ83422	10/08/18 09:20	10/08/18 14:16	SM4500-P E	SMS	J
Total Organic Carbon	**3.24**	**0.300**	**1.00**	**mg/L**	1	AJ83487	10/09/18 06:03	10/09/18 16:41	SM5310C	JIM	
LP2-M (18I2371-02) Water Sampled: 09/25/18 13:45 Received: 09/26/18 08:15											
Ammonia as N	ND	0.10	0.20	mg/L	1	AJ83248	10/03/18 10:30	10/03/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	**2.1**	**2.0**	**5.0**	**mg/L**	1	AI84148	09/27/18 07:45	10/02/18 08:30	SM5210B	WCS	J
Chlorophyll-a	**0.011**	**0.0020**	**0.010**	**mg/L**	2	AJ83376	09/27/18 08:30	10/11/18 10:00	SM10200H	EV	
Dissolved Organic Carbon	**2.92**	**0.600**	**1.00**	**mg/L**	1	AJ83631	10/11/18 10:44	10/12/18 13:53	SM5310C	JIM	
Oil & Grease (HEM)	**1.7**	**1.4**	**5.0**	**mg/L**	1	AJ83373	10/05/18 08:11	10/10/18 14:43	EPA 1664A	STS	J
Sulfide	ND	0.020	0.10	mg/L	1	AJ83169	10/01/18 15:00	10/01/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**99**	**10**	**10**	**mg/L**	1	AJ83119	10/01/18 08:21	10/08/18 09:01	SM2540C	PBM	
Total Suspended Solids	**3.3**	**0.30**	**1.0**	**mg/L**	1	AJ83159	10/01/18 14:30	10/08/18 15:30	SM2540D	RLG	
Bicarbonate Alkalinity as CaCO3	**80**	**1.0**	**5.0**	**mg/L**	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	U
Total Alkalinity as CaCO3	**80**	**1.0**	**5.0**	**mg/L**	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	
Nitrate + Nitrite as N	**0.032**	**0.0086**	**0.40**	**mg/L**	1	AJ83405	10/05/18 12:44	10/08/18 15:04	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.35**	**0.050**	**1.0**	**mg/L**	1	AJ83424	10/09/18 07:32	10/10/18 11:16	SM4500-Norg B	JVO	J
Hardness, Total	**77**	**1**	**5**	**mg/L**	1	AJ83496	10/09/18 07:21	10/11/18 16:50	SM2340B	MAM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-M (18I2371-02) Water Sampled: 09/25/18 13:45 Received: 09/26/18 08:15											
Phosphorus, total	**0.026**	**0.010**	**0.040**	**mg/L**	1	AJ83422	10/08/18 09:20	10/08/18 14:16	SM4500-P E	SMS	J
Total Organic Carbon	**3.20**	**0.300**	**1.00**	**mg/L**	1	AJ83487	10/09/18 06:03	10/09/18 17:00	SM5310C	JIM	
LP2-B (18I2371-03) Water Sampled: 09/25/18 14:15 Received: 09/26/18 08:15											
Ammonia as N	ND	0.10	0.20	mg/L	1	AJ83248	10/03/18 10:30	10/03/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	**2.9**	**2.0**	**5.0**	**mg/L**	1	AI84148	09/27/18 07:45	10/02/18 08:30	SM5210B	WCS	J
Chlorophyll-a	**0.0089**	**0.0020**	**0.010**	**mg/L**	2	AJ83376	09/27/18 08:30	10/11/18 10:00	SM10200H	EV	J
Dissolved Organic Carbon	**3.07**	**0.600**	**1.00**	**mg/L**	1	AJ83631	10/11/18 10:44	10/12/18 14:12	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AJ83373	10/05/18 08:11	10/10/18 14:43	EPA 1664A	STS	U
Sulfide	ND	0.020	0.10	mg/L	1	AJ83169	10/01/18 15:00	10/01/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**96**	**10**	**10**	**mg/L**	1	AJ83119	10/01/18 08:21	10/08/18 09:01	SM2540C	PBM	
Total Suspended Solids	**3.3**	**0.30**	**1.0**	**mg/L**	1	AJ83159	10/01/18 14:30	10/08/18 15:30	SM2540D	RLG	
Bicarbonate Alkalinity as CaCO3	**80**	**1.0**	**5.0**	**mg/L**	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	U
Total Alkalinity as CaCO3	**80**	**1.0**	**5.0**	**mg/L**	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AJ83405	10/05/18 12:44	10/08/18 15:04	Calculation	RLG	U
Total Kjeldahl Nitrogen	**0.42**	**0.050**	**1.0**	**mg/L**	1	AJ83424	10/09/18 07:32	10/10/18 11:16	SM4500-Norg B	JVO	J
Hardness, Total	**77**	**1**	**5**	**mg/L**	1	AJ83496	10/09/18 07:21	10/11/18 16:55	SM2340B	MAM	
Phosphorus, total	**0.025**	**0.010**	**0.040**	**mg/L**	1	AJ83422	10/08/18 09:20	10/08/18 14:16	SM4500-P E	SMS	J
Total Organic Carbon	**3.41**	**0.300**	**1.00**	**mg/L**	1	AJ83487	10/09/18 06:03	10/09/18 17:20	SM5310C	JIM	
LP-BL (18I2371-04) Water Sampled: 09/25/18 14:40 Received: 09/26/18 08:15											
Ammonia as N	**0.19**	**0.10**	**0.20**	**mg/L**	1	AJ83248	10/03/18 10:30	10/03/18 16:00	SM4500NH3C	FCM	J
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI84148	09/27/18 07:45	10/02/18 08:30	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AJ83376	09/27/18 08:30	10/11/18 10:00	SM10200H	EV	U
Dissolved Organic Carbon	ND	0.600	1.00	mg/L	1	AJ83631	10/11/18 10:44	10/12/18 14:32	SM5310C	JIM	U
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AJ83373	10/05/18 08:11	10/10/18 14:43	EPA 1664A	STS	U
Sulfide	ND	0.020	0.10	mg/L	1	AJ83169	10/01/18 15:00	10/01/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	ND	10	10	mg/L	1	AJ83119	10/01/18 08:21	10/08/18 09:01	SM2540C	PBM	U
Total Suspended Solids	ND	0.30	1.0	mg/L	1	AJ83159	10/01/18 14:30	10/08/18 15:30	SM2540D	RLG	U
Bicarbonate Alkalinity as CaCO3	**3.0**	**1.0**	**5.0**	**mg/L**	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	J
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-BL (18I2371-04) Water Sampled: 09/25/18 14:40 Received: 09/26/18 08:15											
Total Alkalinity as CaCO3	**3.0**	**1.0**	**5.0**	**mg/L**	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	J
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AJ83405	10/05/18 12:44	10/08/18 15:04	Calculation	RLG	U
Total Kjeldahl Nitrogen	ND	0.050	1.0	mg/L	1	AJ83424	10/09/18 07:32	10/10/18 11:16	SM4500-Norg B	JVO	U
Hardness, Total	ND	1	5	mg/L	1	AJ83496	10/09/18 07:21	10/11/18 17:00	SM2340B	MAM	U
Phosphorus, total	**0.015**	**0.010**	**0.040**	**mg/L**	1	AJ83422	10/08/18 09:20	10/08/18 14:16	SM4500-P E	SMS	J
Total Organic Carbon	**0.405**	**0.300**	**1.00**	**mg/L**	1	AJ83487	10/09/18 06:03	10/09/18 17:39	SM5310C	JIM	J
LP3-S (18I2371-05) Water Sampled: 09/25/18 10:45 Received: 09/26/18 08:15											
Ammonia as N	ND	0.10	0.20	mg/L	1	AJ83248	10/03/18 10:30	10/03/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	**2.4**	**2.0**	**5.0**	**mg/L**	1	AI84148	09/27/18 07:45	10/02/18 08:30	SM5210B	WCS	J
Chlorophyll-a	**0.022**	**0.0050**	**0.010**	**mg/L**	5	AJ83376	09/27/18 08:30	10/11/18 10:00	SM10200H	EV	
Dissolved Organic Carbon	**2.82**	**0.600**	**1.00**	**mg/L**	1	AJ83631	10/11/18 10:44	10/12/18 14:51	SM5310C	JIM	
Oil & Grease (HEM)	**2.8**	**1.4**	**5.0**	**mg/L**	1	AJ83373	10/05/18 08:11	10/10/18 14:43	EPA 1664A	STS	J
Sulfide	ND	0.020	0.10	mg/L	1	AJ83169	10/01/18 15:00	10/01/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**92**	**10**	**10**	**mg/L**	1	AJ83119	10/01/18 08:21	10/08/18 09:01	SM2540C	PBM	
Total Suspended Solids	**3.7**	**0.30**	**1.0**	**mg/L**	1	AJ83159	10/01/18 14:30	10/08/18 15:30	SM2540D	RLG	
Bicarbonate Alkalinity as CaCO3	**81**	**1.0**	**5.0**	**mg/L**	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	U
Total Alkalinity as CaCO3	**81**	**1.0**	**5.0**	**mg/L**	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	
Nitrate + Nitrite as N	**0.035**	**0.0086**	**0.40**	**mg/L**	1	AJ83405	10/05/18 12:44	10/08/18 15:04	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.52**	**0.050**	**1.0**	**mg/L**	1	AJ83379	10/08/18 09:24	10/09/18 11:19	SM4500-Norg B	JVO	J
Hardness, Total	**78**	**1**	**5**	**mg/L**	1	AJ83496	10/09/18 07:21	10/11/18 17:04	SM2340B	MAM	
Phosphorus, total	**0.056**	**0.010**	**0.040**	**mg/L**	1	AJ83422	10/08/18 09:20	10/08/18 14:16	SM4500-P E	SMS	
Total Organic Carbon	**3.10**	**0.300**	**1.00**	**mg/L**	1	AJ83487	10/09/18 06:03	10/09/18 17:59	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-M (18I2371-06) Water Sampled: 09/25/18 11:15 Received: 09/26/18 08:15											
Ammonia as N	**0.19**	**0.10**	**0.20**	**mg/L**	1	AJ83248	10/03/18 10:30	10/03/18 16:00	SM4500NH3C	FCM	J
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI84148	09/27/18 07:45	10/02/18 08:30	SM5210B	WCS	U
Chlorophyll-a	**0.012**	**0.0020**	**0.010**	**mg/L**	2	AJ83376	09/27/18 08:30	10/11/18 10:00	SM10200H	EV	
Dissolved Organic Carbon	**2.69**	**0.600**	**1.00**	**mg/L**	1	AJ83631	10/11/18 10:44	10/12/18 15:10	SM5310C	JIM	
Oil & Grease (HEM)	**2.3**	**1.4**	**5.0**	**mg/L**	1	AJ83373	10/05/18 08:11	10/10/18 14:43	EPA 1664A	STS	J
Sulfide	ND	0.020	0.10	mg/L	1	AJ83169	10/01/18 15:00	10/01/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**110**	**10**	**10**	**mg/L**	1	AJ83119	10/01/18 08:21	10/08/18 09:01	SM2540C	PBM	
Total Suspended Solids	**2.9**	**0.30**	**1.0**	**mg/L**	1	AJ83159	10/01/18 14:30	10/08/18 15:30	SM2540D	RLG	
Bicarbonate Alkalinity as CaCO3	**80**	**1.0**	**5.0**	**mg/L**	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	U
Total Alkalinity as CaCO3	**80**	**1.0**	**5.0**	**mg/L**	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	
Nitrate + Nitrite as N	**0.034**	**0.0086**	**0.40**	**mg/L**	1	AJ83405	10/05/18 12:44	10/08/18 15:04	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.42**	**0.050**	**1.0**	**mg/L**	1	AJ83379	10/08/18 09:24	10/09/18 11:19	SM4500-Norg B	JVO	J
Hardness, Total	**79**	**1**	**5**	**mg/L**	1	AJ83496	10/09/18 07:21	10/11/18 17:09	SM2340B	MAM	
Phosphorus, total	**0.023**	**0.010**	**0.040**	**mg/L**	1	AJ83422	10/08/18 09:20	10/08/18 14:16	SM4500-P E	SMS	J
Total Organic Carbon	**3.12**	**0.300**	**1.00**	**mg/L**	1	AJ83487	10/09/18 06:03	10/09/18 18:18	SM5310C	JIM	
LP3-B (18I2371-07) Water Sampled: 09/25/18 11:45 Received: 09/26/18 08:15											
Ammonia as N	**0.93**	**0.10**	**0.20**	**mg/L**	1	AJ83248	10/03/18 10:30	10/03/18 16:00	SM4500NH3C	FCM	
Biochemical Oxygen Demand	**5.8**	**2.0**	**5.0**	**mg/L**	1	AI84148	09/27/18 07:45	10/02/18 08:30	SM5210B	WCS	
Chlorophyll-a	**0.0021**	**0.0010**	**0.010**	**mg/L**	1	AJ83376	09/27/18 08:30	10/11/18 10:00	SM10200H	EV	J
Dissolved Organic Carbon	**2.35**	**0.600**	**1.00**	**mg/L**	1	AJ83631	10/11/18 10:44	10/12/18 15:30	SM5310C	JIM	
Oil & Grease (HEM)	**1.5**	**1.4**	**5.0**	**mg/L**	1	AJ83373	10/05/18 08:11	10/10/18 14:43	EPA 1664A	STS	J
Sulfide	ND	0.020	0.10	mg/L	1	AJ83169	10/01/18 15:00	10/01/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**94**	**10**	**10**	**mg/L**	1	AJ83119	10/01/18 08:21	10/08/18 09:01	SM2540C	PBM	
Total Suspended Solids	**6.7**	**0.30**	**1.0**	**mg/L**	1	AJ83159	10/01/18 14:30	10/08/18 15:30	SM2540D	RLG	
Bicarbonate Alkalinity as CaCO3	**85**	**1.0**	**5.0**	**mg/L**	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	U
Total Alkalinity as CaCO3	**85**	**1.0**	**5.0**	**mg/L**	1	AJ83359	10/05/18 08:00	10/05/18 17:00	SM2320B	CEF	
Nitrate + Nitrite as N	**0.028**	**0.0086**	**0.40**	**mg/L**	1	AJ83405	10/05/18 12:44	10/08/18 15:04	Calculation	RLG	J
Total Kjeldahl Nitrogen	**1.1**	**0.050**	**1.0**	**mg/L**	1	AJ83379	10/08/18 09:24	10/09/18 11:19	SM4500-Norg B	JVO	
Hardness, Total	**77**	**1**	**5**	**mg/L**	1	AJ83496	10/09/18 07:21	10/11/18 15:52	SM2340B	MAM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-B (18I2371-07) Water Sampled: 09/25/18 11:45 Received: 09/26/18 08:15											
Phosphorus, total	**0.54**	**0.050**	**0.20**	**mg/L**	5	AJ83422	10/08/18 09:20	10/08/18 14:16	SM4500-P E	SMS	
Total Organic Carbon	**5.02**	**0.300**	**1.00**	**mg/L**	1	AJ83487	10/09/18 06:03	10/09/18 18:38	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-S (18I2371-01) Water Sampled: 09/25/18 13:20 Received: 09/26/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI84136	09/27/18 02:37	09/27/18 02:37	EPA 300.0	SMP	U
Nitrite as N	**0.067**	**0.050**	**0.20**	**mg/L**	1	AI84136	09/27/18 02:37	09/27/18 02:37	EPA 300.0	SMP	J
Orthophosphate	ND	0.10	0.30	mg/L	1	AI84136	09/27/18 02:37	09/27/18 02:37	EPA 300.0	SMP	U
LP2-M (18I2371-02) Water Sampled: 09/25/18 13:45 Received: 09/26/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI84136	09/27/18 02:54	09/27/18 02:54	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI84136	09/27/18 02:54	09/27/18 02:54	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI84136	09/27/18 02:54	09/27/18 02:54	EPA 300.0	SMP	U
LP2-B (18I2371-03) Water Sampled: 09/25/18 14:15 Received: 09/26/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI84136	09/27/18 03:10	09/27/18 03:10	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI84136	09/27/18 03:10	09/27/18 03:10	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI84136	09/27/18 03:10	09/27/18 03:10	EPA 300.0	SMP	U
LP-BL (18I2371-04) Water Sampled: 09/25/18 14:40 Received: 09/26/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI84136	09/27/18 03:26	09/27/18 03:26	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI84136	09/27/18 03:26	09/27/18 03:26	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI84136	09/27/18 03:26	09/27/18 03:26	EPA 300.0	SMP	U
LP3-S (18I2371-05) Water Sampled: 09/25/18 10:45 Received: 09/26/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI84136	09/27/18 03:43	09/27/18 03:43	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI84136	09/27/18 03:43	09/27/18 03:43	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI84136	09/27/18 03:43	09/27/18 03:43	EPA 300.0	SMP	U
LP3-M (18I2371-06) Water Sampled: 09/25/18 11:15 Received: 09/26/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI84136	09/27/18 03:59	09/27/18 03:59	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI84136	09/27/18 03:59	09/27/18 03:59	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI84136	09/27/18 03:59	09/27/18 03:59	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-B (18I2371-07) Water Sampled: 09/25/18 11:45 Received: 09/26/18 08:15											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI84136	09/27/18 04:16	09/27/18 04:16	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI84136	09/27/18 04:16	09/27/18 04:16	EPA 300.0	SMP	U
Orthophosphate	**0.23**	**0.10**	**0.30**	**mg/L**	1	AI84136	09/27/18 04:16	09/27/18 04:16	EPA 300.0	SMP	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

TPH by EPA/LUFT GC Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-S (18I2371-01) Water Sampled: 09/25/18 13:20 Received: 09/26/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AJ83114	10/01/18 06:24	10/10/18 18:33	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AJ83114	10/01/18 06:24	10/10/18 18:33	8015DRO	DLD	U
Surrogate: Tetratetracontane		*98.1 %*	*39-120*			*AJ83114*	*10/01/18 06:24*	*10/10/18 18:33*	*8015DRO*	*DLD*	
LP2-M (18I2371-02) Water Sampled: 09/25/18 13:45 Received: 09/26/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AJ83114	10/01/18 06:24	10/10/18 19:08	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AJ83114	10/01/18 06:24	10/10/18 19:08	8015DRO	DLD	U
Surrogate: Tetratetracontane		*102 %*	*39-120*			*AJ83114*	*10/01/18 06:24*	*10/10/18 19:08*	*8015DRO*	*DLD*	
LP2-B (18I2371-03) Water Sampled: 09/25/18 14:15 Received: 09/26/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AJ83114	10/01/18 06:24	10/10/18 19:43	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AJ83114	10/01/18 06:24	10/10/18 19:43	8015DRO	DLD	U
Surrogate: Tetratetracontane		*88.3 %*	*39-120*			*AJ83114*	*10/01/18 06:24*	*10/10/18 19:43*	*8015DRO*	*DLD*	
LP-BL (18I2371-04) Water Sampled: 09/25/18 14:40 Received: 09/26/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AJ83114	10/01/18 06:24	10/10/18 20:18	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AJ83114	10/01/18 06:24	10/10/18 20:18	8015DRO	DLD	U
Surrogate: Tetratetracontane		*98.7 %*	*39-120*			*AJ83114*	*10/01/18 06:24*	*10/10/18 20:18*	*8015DRO*	*DLD*	
LP3-S (18I2371-05) Water Sampled: 09/25/18 10:45 Received: 09/26/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AJ83114	10/01/18 06:24	10/10/18 20:52	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AJ83114	10/01/18 06:24	10/10/18 20:52	8015DRO	DLD	U
Surrogate: Tetratetracontane		*107 %*	*39-120*			*AJ83114*	*10/01/18 06:24*	*10/10/18 20:52*	*8015DRO*	*DLD*	
LP3-M (18I2371-06) Water Sampled: 09/25/18 11:15 Received: 09/26/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AJ83114	10/01/18 06:24	10/10/18 21:27	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AJ83114	10/01/18 06:24	10/10/18 21:27	8015DRO	DLD	U
Surrogate: Tetratetracontane		*89.4 %*	*39-120*			*AJ83114*	*10/01/18 06:24*	*10/10/18 21:27*	*8015DRO*	*DLD*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

TPH by EPA/LUFT GC Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-B (18I2371-07) Water Sampled: 09/25/18 11:45 Received: 09/26/18 08:15											
TPH as Diesel	ND	50	250	ug/L	1	AJ83114	10/01/18 06:24	10/10/18 22:02	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AJ83114	10/01/18 06:24	10/10/18 22:02	8015DRO	DLD	U
Surrogate: Tetratetracontane		*86.1 %*	*39-120*			*AJ83114*	*10/01/18 06:24*	*10/10/18 22:02*	*8015DRO*	*DLD*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

TPH by EPA/LUFT GCMS Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-S (18I2371-01) Water Sampled: 09/25/18 13:20 Received: 09/26/18 08:15											
TPH as Gasoline	ND	50	50	ug/L	1	AJ83207	10/02/18 10:00	10/02/18 14:26	8260GRO	JV/MM	U
Surrogate: Toluene-d8		*97.0 %*	*76-129*			*AJ83207*	*10/02/18 10:00*	*10/02/18 14:26*	*8260GRO*	*JV/MM*	
LP2-M (18I2371-02) Water Sampled: 09/25/18 13:45 Received: 09/26/18 08:15											
TPH as Gasoline	ND	50	50	ug/L	1	AJ83207	10/02/18 10:00	10/02/18 14:58	8260GRO	JV/MM	U
Surrogate: Toluene-d8		*97.7 %*	*76-129*			*AJ83207*	*10/02/18 10:00*	*10/02/18 14:58*	*8260GRO*	*JV/MM*	
LP2-B (18I2371-03) Water Sampled: 09/25/18 14:15 Received: 09/26/18 08:15											
TPH as Gasoline	ND	50	50	ug/L	1	AJ83207	10/02/18 10:00	10/02/18 15:30	8260GRO	JV/MM	U
Surrogate: Toluene-d8		*96.8 %*	*76-129*			*AJ83207*	*10/02/18 10:00*	*10/02/18 15:30*	*8260GRO*	*JV/MM*	
LP-BL (18I2371-04) Water Sampled: 09/25/18 14:40 Received: 09/26/18 08:15											
TPH as Gasoline	ND	50	50	ug/L	1	AJ83207	10/02/18 10:00	10/02/18 16:02	8260GRO	JV/MM	U
Surrogate: Toluene-d8		*96.8 %*	*76-129*			*AJ83207*	*10/02/18 10:00*	*10/02/18 16:02*	*8260GRO*	*JV/MM*	
LP3-S (18I2371-05) Water Sampled: 09/25/18 10:45 Received: 09/26/18 08:15											
TPH as Gasoline	ND	50	50	ug/L	1	AJ83207	10/02/18 10:00	10/02/18 16:34	8260GRO	JV/MM	U
Surrogate: Toluene-d8		*98.2 %*	*76-129*			*AJ83207*	*10/02/18 10:00*	*10/02/18 16:34*	*8260GRO*	*JV/MM*	
LP3-M (18I2371-06) Water Sampled: 09/25/18 11:15 Received: 09/26/18 08:15											
TPH as Gasoline	ND	50	50	ug/L	1	AJ83207	10/02/18 10:00	10/02/18 17:06	8260GRO	JV/MM	U
Surrogate: Toluene-d8		*96.7 %*	*76-129*			*AJ83207*	*10/02/18 10:00*	*10/02/18 17:06*	*8260GRO*	*JV/MM*	
LP3-B (18I2371-07) Water Sampled: 09/25/18 11:45 Received: 09/26/18 08:15											
TPH as Gasoline	ND	50	50	ug/L	1	AJ83207	10/02/18 10:00	10/02/18 17:38	8260GRO	JV/MM	U
Surrogate: Toluene-d8		*96.1 %*	*76-129*			*AJ83207*	*10/02/18 10:00*	*10/02/18 17:38*	*8260GRO*	*JV/MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-S (18I2371-01) Water Sampled: 09/25/18 13:20 Received: 09/26/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 14:26	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 14:26	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 14:26	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 14:26	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 14:26	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 14:26	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 14:26	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 14:26	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 14:26	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*117 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 14:26*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*104 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 14:26*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*119 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 14:26*	*EPA 8260B*	*JV*	
LP2-M (18I2371-02) Water Sampled: 09/25/18 13:45 Received: 09/26/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 14:58	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 14:58	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 14:58	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 14:58	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 14:58	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 14:58	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 14:58	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 14:58	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 14:58	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*120 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 14:58*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*105 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 14:58*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*119 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 14:58*	*EPA 8260B*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-B (18I2371-03) Water Sampled: 09/25/18 14:15 Received: 09/26/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 15:30	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 15:30	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 15:30	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 15:30	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 15:30	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 15:30	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 15:30	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 15:30	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 15:30	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*121 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 15:30*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*106 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 15:30*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*118 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 15:30*	*EPA 8260B*	*JV*	
LP-BL (18I2371-04) Water Sampled: 09/25/18 14:40 Received: 09/26/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 16:02	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 16:02	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 16:02	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 16:02	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 16:02	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 16:02	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 16:02	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 16:02	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 16:02	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*120 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 16:02*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*103 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 16:02*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*119 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 16:02*	*EPA 8260B*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-S (18I2371-05) Water Sampled: 09/25/18 10:45 Received: 09/26/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 16:34	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 16:34	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 16:34	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 16:34	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 16:34	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 16:34	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 16:34	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 16:34	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 16:34	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*121 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 16:34*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*106 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 16:34*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*120 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 16:34*	*EPA 8260B*	*JV*	
LP3-M (18I2371-06) Water Sampled: 09/25/18 11:15 Received: 09/26/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 17:06	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 17:06	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 17:06	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 17:06	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 17:06	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 17:06	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 17:06	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 17:06	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 17:06	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*119 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 17:06*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*105 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 17:06*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*118 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 17:06*	*EPA 8260B*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-B (18I2371-07) Water Sampled: 09/25/18 11:45 Received: 09/26/18 08:15											
Benzene	ND	0.30	0.30	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 17:38	EPA 8260B	JV	U
Toluene	**0.89**	**0.30**	**0.30**	**ug/L**	1	AJ83208	10/02/18 10:00	10/02/18 17:38	EPA 8260B	JV	
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 17:38	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 17:38	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 17:38	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 17:38	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 17:38	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 17:38	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83208	10/02/18 10:00	10/02/18 17:38	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*118 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 17:38*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*105 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 17:38*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*117 %*	*70-130*			*AJ83208*	*10/02/18 10:00*	*10/02/18 17:38*	*EPA 8260B*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83496 - Metals Digest											
Blank (AJ83496-BLK1)					Prepared: 10/09/18 Analyzed: 10/11/18						
Calcium	ND	0.080	1.0	mg/L							U
Magnesium	ND	0.030	1.0	mg/L							U
LCS (AJ83496-BS1)					Prepared: 10/09/18 Analyzed: 10/11/18						
Calcium	7.80	0.080	1.0	mg/L	8.00		97.5	85-115			
Magnesium	7.82	0.030	1.0	mg/L	8.00		97.7	85-115			
Duplicate (AJ83496-DUP1)		**Source: 18I2350-03**			Prepared: 10/09/18 Analyzed: 10/11/18						
Calcium	49.1	0.080	1.0	mg/L		52.4			6.37	20	
Magnesium	36.5	0.030	1.0	mg/L		38.0			3.86	20	
Matrix Spike (AJ83496-MS1)		**Source: 18I2350-03**			Prepared: 10/09/18 Analyzed: 10/11/18						
Calcium	59.3	0.080	1.0	mg/L	8.00	52.4	86.8	70-130			
Magnesium	45.1	0.030	1.0	mg/L	8.00	38.0	89.6	70-130			
Matrix Spike (AJ83496-MS2)		**Source: 18I2371-07**			Prepared: 10/09/18 Analyzed: 10/11/18						
Calcium	29.2	0.080	1.0	mg/L	8.00	21.1	102	70-130			
Magnesium	13.8	0.030	1.0	mg/L	8.00	5.88	99.4	70-130			
Matrix Spike Dup (AJ83496-MSD1)		**Source: 18I2350-03**			Prepared: 10/09/18 Analyzed: 10/11/18						
Calcium	57.7	0.080	1.0	mg/L	8.00	52.4	66.7	70-130	2.75	20	QM-4X
Magnesium	44.4	0.030	1.0	mg/L	8.00	38.0	80.4	70-130	1.65	20	
Batch AJ83616 - EPA 245.1 Hg Water											
Blank (AJ83616-BLK1)					Prepared & Analyzed: 10/11/18						
Mercury	ND	0.060	0.20	ug/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83616 - EPA 245.1 Hg Water											
LCS (AJ83616-BS1)					Prepared & Analyzed: 10/11/18						
Mercury	2.61	0.060	0.20	ug/L	2.50		104	85-115			
Duplicate (AJ83616-DUP1)		**Source: 18J1071-01**			Prepared & Analyzed: 10/11/18						
Mercury	ND	0.060	0.20	ug/L		ND				20	U
Matrix Spike (AJ83616-MS1)		**Source: 18J1071-01**			Prepared & Analyzed: 10/11/18						
Mercury	2.70	0.060	0.20	ug/L	2.50	ND	108	70-130			
Matrix Spike (AJ83616-MS2)		**Source: 18J1073-01**			Prepared & Analyzed: 10/11/18						
Mercury	2.62	0.060	0.20	ug/L	2.50	ND	105	70-130			
Matrix Spike Dup (AJ83616-MSD1)		**Source: 18J1071-01**			Prepared & Analyzed: 10/11/18						
Mercury	2.74	0.060	0.20	ug/L	2.50	ND	109	70-130	1.36	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84222 - EPA 200.8											
Blank (AI84222-BLK1)					Prepared: 09/28/18 Analyzed: 10/01/18						
Aluminum	ND	5.0	10	ug/L							U
Antimony	ND	0.20	0.50	ug/L							U
Arsenic	ND	0.20	0.50	ug/L							U
Barium	ND	0.20	0.50	ug/L							U
Beryllium	ND	0.050	0.10	ug/L							U
Cadmium	ND	0.060	0.10	ug/L							U
Chromium	ND	0.50	0.50	ug/L							U
Cobalt	ND	0.10	0.10	ug/L							U
Copper	ND	0.40	0.50	ug/L							U
Iron	ND	10	50	ug/L							U
Lead	ND	0.060	0.25	ug/L							U
Manganese	ND	2.0	5.0	ug/L							U
Molybdenum	ND	0.070	0.25	ug/L							U
Nickel	ND	0.30	0.50	ug/L							U
Selenium	ND	0.30	2.0	ug/L							U
Silver	ND	0.050	0.10	ug/L							U
Thallium	ND	0.050	0.10	ug/L							U
Vanadium	ND	0.50	1.0	ug/L							U
Zinc	ND	2.0	5.0	ug/L							U
LCS (AI84222-BS1)					Prepared: 09/28/18 Analyzed: 10/01/18						
Aluminum	503	5.0	10	ug/L	520		96.7	85-115			
Antimony	20.5	0.20	0.50	ug/L	20.0		103	85-115			
Arsenic	20.6	0.20	0.50	ug/L	20.0		103	85-115			
Barium	20.4	0.20	0.50	ug/L	20.0		102	85-115			
Beryllium	20.3	0.050	0.10	ug/L	20.0		102	85-115			
Cadmium	20.2	0.060	0.10	ug/L	20.0		101	85-115			
Chromium	20.3	0.50	0.50	ug/L	20.0		102	85-115			
Cobalt	20.8	0.10	0.10	ug/L	20.0		104	85-115			
Copper	20.5	0.40	0.50	ug/L	20.0		103	85-115			
Iron	516	10	50	ug/L	520		99.2	85-115			
Lead	20.6	0.060	0.25	ug/L	20.0		103	85-115			
Manganese	20.5	2.0	5.0	ug/L	20.0		102	85-115			
Molybdenum	20.4	0.070	0.25	ug/L	20.0		102	85-115			
Nickel	21.3	0.30	0.50	ug/L	20.0		106	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84222 - EPA 200.8											
LCS (AI84222-BS1)					Prepared: 09/28/18 Analyzed: 10/01/18						
Selenium	20.0	0.30	2.0	ug/L	20.0		100	85-115			
Silver	19.9	0.050	0.10	ug/L	20.0		99.4	85-115			
Thallium	20.3	0.050	0.10	ug/L	20.0		102	85-115			
Vanadium	20.7	0.50	1.0	ug/L	20.0		104	85-115			
Zinc	100	2.0	5.0	ug/L	100		100	85-115			
Duplicate (AI84222-DUP1)		**Source: 18I2544-03**			Prepared: 09/28/18 Analyzed: 10/01/18						
Aluminum	25.4	20	40	ug/L		24.3			4.47	20	R-01, J
Antimony	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic	ND	0.80	2.0	ug/L		ND				20	R-01, U
Barium	61.0	0.80	2.0	ug/L		59.7			2.10	20	
Beryllium	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium	ND	0.24	0.40	ug/L		ND				20	R-01, U
Chromium	ND	2.0	2.0	ug/L		2.27			200	20	R-01, U
Cobalt	ND	0.40	0.40	ug/L		ND				20	R-01, U
Copper	5.17	1.6	2.0	ug/L		5.33			3.04	20	
Iron	483	40	200	ug/L		467			3.20	20	
Lead	0.446	0.24	1.0	ug/L		0.423			5.26	20	R-01, J
Manganese	ND	8.0	20	ug/L		ND				20	R-01, U
Molybdenum	1.02	0.28	1.0	ug/L		1.04			1.37	20	
Nickel	1.57	1.2	2.0	ug/L		1.42			9.74	20	R-01, J
Selenium	ND	1.2	8.0	ug/L		1.27			200	20	R-01, U
Silver	ND	0.20	0.40	ug/L		ND				20	R-01, U
Thallium	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium	2.38	2.0	4.0	ug/L		ND			200	20	R-01, J
Zinc	14.0	8.0	20	ug/L		14.0			0.103	20	R-01, J
Matrix Spike (AI84222-MS1)		**Source: 18I2544-03**			Prepared: 09/28/18 Analyzed: 10/01/18						
Aluminum	581	20	40	ug/L	520	24.3	107	70-130			
Antimony	20.9	0.80	2.0	ug/L	20.0	ND	104	70-130			
Arsenic	20.9	0.80	2.0	ug/L	20.0	ND	105	70-130			
Barium	81.1	0.80	2.0	ug/L	20.0	59.7	107	70-130			
Beryllium	20.8	0.20	0.40	ug/L	20.0	ND	104	70-130			
Cadmium	20.1	0.24	0.40	ug/L	20.0	ND	101	70-130			
Chromium	21.9	2.0	2.0	ug/L	20.0	2.27	98.0	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84222 - EPA 200.8											
Matrix Spike (AI84222-MS1)		**Source: 18I2544-03**			Prepared: 09/28/18 Analyzed: 10/01/18						
Cobalt	20.2	0.40	0.40	ug/L	20.0	ND	101	70-130			
Copper	25.3	1.6	2.0	ug/L	20.0	5.33	99.9	70-130			
Iron	918	40	200	ug/L	520	467	86.6	70-130			
Lead	20.6	0.24	1.0	ug/L	20.0	0.423	101	70-130			
Manganese	26.8	8.0	20	ug/L	20.0	ND	134	70-130			QM-01
Molybdenum	22.3	0.28	1.0	ug/L	20.0	1.04	107	70-130			
Nickel	22.0	1.2	2.0	ug/L	20.0	1.42	103	70-130			
Selenium	21.4	1.2	8.0	ug/L	20.0	1.27	101	70-130			
Silver	20.3	0.20	0.40	ug/L	20.0	ND	101	70-130			
Thallium	20.3	0.20	0.40	ug/L	20.0	ND	102	70-130			
Vanadium	22.6	2.0	4.0	ug/L	20.0	ND	113	70-130			
Zinc	130	8.0	20	ug/L	100	14.0	116	70-130			
Matrix Spike (AI84222-MS2)		**Source: 18I2371-01**			Prepared: 09/28/18 Analyzed: 10/01/18						
Aluminum	604	20	40	ug/L	520	33.7	110	70-130			
Antimony	22.6	0.80	2.0	ug/L	20.0	ND	113	70-130			
Arsenic	25.8	0.80	2.0	ug/L	20.0	2.33	117	70-130			
Barium	92.8	0.80	2.0	ug/L	20.0	68.2	123	70-130			
Beryllium	21.9	0.20	0.40	ug/L	20.0	ND	110	70-130			
Cadmium	21.8	0.24	0.40	ug/L	20.0	ND	109	70-130			
Chromium	22.2	2.0	2.0	ug/L	20.0	ND	111	70-130			
Cobalt	21.8	0.40	0.40	ug/L	20.0	ND	109	70-130			
Copper	23.7	1.6	2.0	ug/L	20.0	ND	119	70-130			
Iron	667	40	200	ug/L	520	123	105	70-130			
Lead	21.8	0.24	1.0	ug/L	20.0	ND	109	70-130			
Manganese	30.2	8.0	20	ug/L	20.0	8.03	111	70-130			
Molybdenum	22.9	0.28	1.0	ug/L	20.0	0.549	112	70-130			
Nickel	23.8	1.2	2.0	ug/L	20.0	1.34	112	70-130			
Selenium	22.9	1.2	8.0	ug/L	20.0	ND	114	70-130			
Silver	21.9	0.20	0.40	ug/L	20.0	ND	109	70-130			
Thallium	21.9	0.20	0.40	ug/L	20.0	ND	110	70-130			
Vanadium	23.2	2.0	4.0	ug/L	20.0	ND	116	70-130			
Zinc	108	8.0	20	ug/L	100	ND	108	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84222 - EPA 200.8											
Matrix Spike Dup (AI84222-MSD1)		**Source: 18I2544-03**			Prepared: 09/28/18 Analyzed: 10/01/18						
Aluminum	542	20	40	ug/L	520	24.3	99.6	70-130	6.99	20	
Antimony	20.7	0.80	2.0	ug/L	20.0	ND	103	70-130	0.982	20	
Arsenic	20.6	0.80	2.0	ug/L	20.0	ND	103	70-130	1.41	20	
Barium	80.1	0.80	2.0	ug/L	20.0	59.7	102	70-130	1.25	20	
Beryllium	20.1	0.20	0.40	ug/L	20.0	ND	100	70-130	3.48	20	
Cadmium	20.1	0.24	0.40	ug/L	20.0	ND	100	70-130	0.166	20	
Chromium	21.1	2.0	2.0	ug/L	20.0	2.27	94.2	70-130	3.53	20	
Cobalt	19.7	0.40	0.40	ug/L	20.0	ND	98.4	70-130	2.38	20	
Copper	25.3	1.6	2.0	ug/L	20.0	5.33	100	70-130	0.0962	20	
Iron	895	40	200	ug/L	520	467	82.2	70-130	2.54	20	
Lead	20.1	0.24	1.0	ug/L	20.0	0.423	98.3	70-130	2.61	20	
Manganese	26.3	8.0	20	ug/L	20.0	ND	132	70-130	1.62	20	QM-01
Molybdenum	21.5	0.28	1.0	ug/L	20.0	1.04	102	70-130	3.81	20	
Nickel	21.3	1.2	2.0	ug/L	20.0	1.42	99.2	70-130	3.55	20	
Selenium	20.3	1.2	8.0	ug/L	20.0	1.27	95.0	70-130	5.59	20	
Silver	19.9	0.20	0.40	ug/L	20.0	ND	99.6	70-130	1.76	20	
Thallium	19.9	0.20	0.40	ug/L	20.0	ND	99.7	70-130	1.85	20	
Vanadium	22.8	2.0	4.0	ug/L	20.0	ND	114	70-130	0.997	20	
Zinc	112	8.0	20	ug/L	100	14.0	98.2	70-130	14.9	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83562 - EPA 245.1 Hg Water											
Blank (AJ83562-BLK1)					Prepared & Analyzed: 10/10/18						
Mercury, dissolved	ND	0.060	0.20	ug/L							U
LCS (AJ83562-BS1)					Prepared & Analyzed: 10/10/18						
Mercury, dissolved	2.62	0.060	0.20	ug/L	2.50		105	85-115			
Duplicate (AJ83562-DUP1)		**Source: 18I2599-01**			Prepared & Analyzed: 10/10/18						
Mercury, dissolved	ND	0.060	0.20	ug/L		ND				20	U
MRL Check (AJ83562-MRL1)					Prepared & Analyzed: 10/10/18						
Mercury, dissolved	0.528	0.060	0.20	ug/L	0.500		106	0-200			
Matrix Spike (AJ83562-MS1)		**Source: 18I2599-01**			Prepared & Analyzed: 10/10/18						
Mercury, dissolved	2.66	0.060	0.20	ug/L	2.50	ND	107	70-130			
Matrix Spike (AJ83562-MS2)		**Source: 18I2599-02**			Prepared & Analyzed: 10/10/18						
Mercury, dissolved	2.62	0.060	0.20	ug/L	2.50	ND	105	70-130			
Matrix Spike Dup (AJ83562-MSD1)		**Source: 18I2599-01**			Prepared & Analyzed: 10/10/18						
Mercury, dissolved	2.68	0.060	0.20	ug/L	2.50	ND	107	70-130	0.785	20	

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83428 - EPA 200.8 (D)											
Blank (AJ83428-BLK1)					Prepared: 10/08/18 Analyzed: 10/09/18						
Aluminum, dissolved	ND	5.0	10	ug/L							U
Antimony, dissolved	ND	0.20	0.50	ug/L							U
Arsenic, dissolved	ND	0.20	0.50	ug/L							U
Barium, dissolved	ND	0.20	0.50	ug/L							U
Beryllium, dissolved	ND	0.050	0.10	ug/L							U
Cadmium, dissolved	ND	0.060	0.10	ug/L							U
Chromium, dissolved	ND	0.50	0.50	ug/L							U
Cobalt, dissolved	ND	0.10	0.10	ug/L							U
Copper, dissolved	ND	0.40	0.50	ug/L							U
Lead, dissolved	ND	0.060	0.25	ug/L							U
Molybdenum, dissolved	ND	0.070	0.25	ug/L							U
Nickel, dissolved	ND	0.30	0.50	ug/L							U
Selenium, dissolved	ND	0.30	2.0	ug/L							U
Silver, dissolved	ND	0.050	0.10	ug/L							U
Thallium, dissolved	ND	0.050	0.10	ug/L							U
Vanadium, dissolved	ND	0.50	1.0	ug/L							U
Zinc, dissolved	ND	2.0	5.0	ug/L							U
LCS (AJ83428-BS1)					Prepared: 10/08/18 Analyzed: 10/09/18						
Aluminum, dissolved	555	5.0	10	ug/L	520		107	85-115			
Antimony, dissolved	21.9	0.20	0.50	ug/L	20.0		109	85-115			
Arsenic, dissolved	22.2	0.20	0.50	ug/L	20.0		111	85-115			
Barium, dissolved	21.6	0.20	0.50	ug/L	20.0		108	85-115			
Beryllium, dissolved	21.2	0.050	0.10	ug/L	20.0		106	85-115			
Cadmium, dissolved	21.8	0.060	0.10	ug/L	20.0		109	85-115			
Chromium, dissolved	21.6	0.50	0.50	ug/L	20.0		108	85-115			
Cobalt, dissolved	21.6	0.10	0.10	ug/L	20.0		108	85-115			
Copper, dissolved	22.2	0.40	0.50	ug/L	20.0		111	85-115			
Lead, dissolved	21.9	0.060	0.25	ug/L	20.0		109	85-115			
Molybdenum, dissolved	22.0	0.070	0.25	ug/L	20.0		110	85-115			
Nickel, dissolved	21.8	0.30	0.50	ug/L	20.0		109	85-115			
Selenium, dissolved	22.2	0.30	2.0	ug/L	20.0		111	85-115			
Silver, dissolved	21.6	0.050	0.10	ug/L	20.0		108	85-115			
Thallium, dissolved	21.9	0.050	0.10	ug/L	20.0		110	85-115			
Vanadium, dissolved	21.5	0.50	1.0	ug/L	20.0		107	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83428 - EPA 200.8 (D)											
LCS (AJ83428-BS1)					Prepared: 10/08/18 Analyzed: 10/09/18						
Zinc, dissolved	111	2.0	5.0	ug/L	100		111	85-115			
Duplicate (AJ83428-DUP1)		**Source: 18I2371-01**			Prepared: 10/08/18 Analyzed: 10/09/18						
Aluminum, dissolved	21.1	20	40	ug/L		ND			200	20	R-01, J
Antimony, dissolved	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic, dissolved	2.93	0.80	2.0	ug/L		2.71			7.81	20	
Barium, dissolved	68.8	0.80	2.0	ug/L		69.2			0.601	20	
Beryllium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L		ND				20	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L		ND				20	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L		ND				20	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L		ND				20	U
Lead, dissolved	ND	0.24	1.0	ug/L		ND				20	R-01, U
Molybdenum, dissolved	0.597	0.28	1.0	ug/L		0.571			4.33	20	R-01, J
Nickel, dissolved	ND	1.2	2.0	ug/L		ND				20	R-01, U
Selenium, dissolved	ND	1.2	8.0	ug/L		ND				20	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L		ND				20	U
Thallium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L		ND				20	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L		ND				20	R-01, U
MRL Check (AJ83428-MRL1)					Prepared: 10/08/18 Analyzed: 10/09/18						
Aluminum, dissolved	18.6	5.0	10	ug/L	16.0		117	0-200			
Antimony, dissolved	0.809	0.20	0.50	ug/L	0.800		101	0-200			
Arsenic, dissolved	0.786	0.20	0.50	ug/L	0.800		98.3	0-200			
Barium, dissolved	0.862	0.20	0.50	ug/L	0.800		108	0-200			
Beryllium, dissolved	0.146	0.050	0.10	ug/L	0.160		91.0	0-200			
Cadmium, dissolved	0.173	0.060	0.10	ug/L	0.160		108	0-200			
Chromium, dissolved	0.905	0.50	0.50	ug/L	0.800		113	0-200			
Cobalt, dissolved	0.166	0.10	0.10	ug/L	0.160		104	0-200			
Copper, dissolved	0.911	0.40	0.50	ug/L	0.800		114	0-200			
Lead, dissolved	0.407	0.060	0.25	ug/L	0.400		102	0-200			
Molybdenum, dissolved	0.412	0.070	0.25	ug/L	0.400		103	0-200			
Nickel, dissolved	0.892	0.30	0.50	ug/L	0.800		111	0-200			
Selenium, dissolved	0.810	0.30	2.0	ug/L	0.800		101	0-200			J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83428 - EPA 200.8 (D)											
MRL Check (AJ83428-MRL1)					Prepared: 10/08/18 Analyzed: 10/09/18						
Silver, dissolved	0.154	0.050	0.10	ug/L	0.160		96.0	0-200			
Thallium, dissolved	0.160	0.050	0.10	ug/L	0.160		99.9	0-200			
Vanadium, dissolved	1.66	0.50	1.0	ug/L	1.60		103	0-200			
Zinc, dissolved	8.87	2.0	5.0	ug/L	8.00		111	0-200			
Matrix Spike (AJ83428-MS1)		**Source: 18I2371-01**			Prepared: 10/08/18 Analyzed: 10/09/18						
Aluminum, dissolved	560	20	40	ug/L	520	ND	108	70-130			
Antimony, dissolved	22.0	0.80	2.0	ug/L	20.0	ND	110	70-130			
Arsenic, dissolved	25.8	0.80	2.0	ug/L	20.0	2.71	115	70-130			
Barium, dissolved	89.7	0.80	2.0	ug/L	20.0	69.2	103	70-130			
Beryllium, dissolved	20.8	0.20	0.40	ug/L	20.0	ND	104	70-130			
Cadmium, dissolved	21.6	0.24	0.40	ug/L	20.0	ND	108	70-130			
Chromium, dissolved	20.4	2.0	2.0	ug/L	20.0	ND	102	70-130			
Cobalt, dissolved	21.4	0.40	0.40	ug/L	20.0	ND	107	70-130			
Copper, dissolved	22.9	1.6	2.0	ug/L	20.0	ND	114	70-130			
Lead, dissolved	21.2	0.24	1.0	ug/L	20.0	ND	106	70-130			
Molybdenum, dissolved	22.4	0.28	1.0	ug/L	20.0	0.571	109	70-130			
Nickel, dissolved	22.9	1.2	2.0	ug/L	20.0	ND	114	70-130			
Selenium, dissolved	22.7	1.2	8.0	ug/L	20.0	ND	114	70-130			
Silver, dissolved	22.0	0.20	0.40	ug/L	20.0	ND	110	70-130			
Thallium, dissolved	21.4	0.20	0.40	ug/L	20.0	ND	107	70-130			
Vanadium, dissolved	21.3	2.0	4.0	ug/L	20.0	ND	107	70-130			
Zinc, dissolved	113	8.0	20	ug/L	100	ND	113	70-130			
Matrix Spike (AJ83428-MS2)		**Source: 18J0163-01**			Prepared: 10/08/18 Analyzed: 10/09/18						
Aluminum, dissolved	631	20	40	ug/L	520	75.5	107	70-130			
Antimony, dissolved	21.8	0.80	2.0	ug/L	20.0	ND	109	70-130			
Arsenic, dissolved	35.2	0.80	2.0	ug/L	20.0	13.5	109	70-130			
Barium, dissolved	76.5	0.80	2.0	ug/L	20.0	55.9	103	70-130			
Beryllium, dissolved	21.0	0.20	0.40	ug/L	20.0	ND	105	70-130			
Cadmium, dissolved	21.4	0.24	0.40	ug/L	20.0	ND	107	70-130			
Chromium, dissolved	22.3	2.0	2.0	ug/L	20.0	ND	111	70-130			
Cobalt, dissolved	22.2	0.40	0.40	ug/L	20.0	1.77	102	70-130			
Copper, dissolved	70.3	1.6	2.0	ug/L	20.0	43.9	132	70-130			QM-01
Lead, dissolved	20.5	0.24	1.0	ug/L	20.0	0.292	101	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83428 - EPA 200.8 (D)											
Matrix Spike (AJ83428-MS2)		**Source: 18J0163-01**			Prepared: 10/08/18 Analyzed: 10/09/18						
Molybdenum, dissolved	26.1	0.28	1.0	ug/L	20.0	3.85	111	70-130			
Nickel, dissolved	30.9	1.2	2.0	ug/L	20.0	10.2	104	70-130			
Selenium, dissolved	23.3	1.2	8.0	ug/L	20.0	ND	117	70-130			
Silver, dissolved	21.0	0.20	0.40	ug/L	20.0	ND	105	70-130			
Thallium, dissolved	20.2	0.20	0.40	ug/L	20.0	ND	101	70-130			
Vanadium, dissolved	30.4	2.0	4.0	ug/L	20.0	9.50	104	70-130			
Zinc, dissolved	506	8.0	20	ug/L	100	333	173	70-130			QM-01
Matrix Spike Dup (AJ83428-MSD1)		**Source: 18I2371-01**			Prepared: 10/08/18 Analyzed: 10/09/18						
Aluminum, dissolved	561	20	40	ug/L	520	ND	108	70-130	0.134	20	
Antimony, dissolved	21.7	0.80	2.0	ug/L	20.0	ND	109	70-130	1.08	20	
Arsenic, dissolved	23.9	0.80	2.0	ug/L	20.0	2.71	106	70-130	7.29	20	
Barium, dissolved	88.4	0.80	2.0	ug/L	20.0	69.2	96.1	70-130	1.48	20	
Beryllium, dissolved	21.6	0.20	0.40	ug/L	20.0	ND	108	70-130	3.92	20	
Cadmium, dissolved	21.4	0.24	0.40	ug/L	20.0	ND	107	70-130	1.27	20	
Chromium, dissolved	20.8	2.0	2.0	ug/L	20.0	ND	104	70-130	1.99	20	
Cobalt, dissolved	21.4	0.40	0.40	ug/L	20.0	ND	107	70-130	0.193	20	
Copper, dissolved	22.6	1.6	2.0	ug/L	20.0	ND	113	70-130	1.01	20	
Lead, dissolved	21.1	0.24	1.0	ug/L	20.0	ND	105	70-130	0.509	20	
Molybdenum, dissolved	22.2	0.28	1.0	ug/L	20.0	0.571	108	70-130	1.02	20	
Nickel, dissolved	23.3	1.2	2.0	ug/L	20.0	ND	117	70-130	2.03	20	
Selenium, dissolved	21.6	1.2	8.0	ug/L	20.0	ND	108	70-130	5.31	20	
Silver, dissolved	21.5	0.20	0.40	ug/L	20.0	ND	107	70-130	2.60	20	
Thallium, dissolved	21.1	0.20	0.40	ug/L	20.0	ND	106	70-130	1.29	20	
Vanadium, dissolved	21.3	2.0	4.0	ug/L	20.0	ND	106	70-130	0.296	20	
Zinc, dissolved	112	8.0	20	ug/L	100	ND	112	70-130	0.679	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Metals by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83262 - EPA 1631											
Blank (AJ83262-BLK1)					Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	ND	0.200	0.500	ng/l							U
LCS (AJ83262-BS1)					Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	5.12	0.200	0.500	ng/l	5.00		102	77-123			
Matrix Spike (AJ83262-MS1)		**Source: 18I2017-01**			Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	18.1	0.200	0.500	ng/l	25.0	2.98	60.6	71-125			
Matrix Spike (AJ83262-MS2)		**Source: 18I2371-06**			Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	16.7	0.200	0.500	ng/l	25.0	0.879	63.2	71-125			
Matrix Spike Dup (AJ83262-MSD1)		**Source: 18I2017-01**			Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	18.1	0.200	0.500	ng/l	25.0	2.98	60.6	71-125	0.0552	24	
Matrix Spike Dup (AJ83262-MSD2)		**Source: 18I2371-06**			Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	16.6	0.200	0.500	ng/l	25.0	0.879	62.8	71-125	0.601	24	
Reference (AJ83262-SRM1)					Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	52.8	0.200	0.500	ng/l	50.0		106	68-125			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84148 - General Preparation											
Blank (AI84148-BLK1)					Prepared: 09/27/18 Analyzed: 10/02/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
Blank (AI84148-BLK2)					Prepared: 09/27/18 Analyzed: 10/02/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
LCS (AI84148-BS1)					Prepared: 09/27/18 Analyzed: 10/02/18						
Biochemical Oxygen Demand	206	2.0	5.0	mg/L	200		103	84-115			
Duplicate (AI84148-DUP1)		**Source: 18I2513-01**			Prepared: 09/27/18 Analyzed: 10/02/18						
Biochemical Oxygen Demand	672	2.0	5.0	mg/L		702			4.29	30	
Batch AJ83119 - General Preparation											
Blank (AJ83119-BLK1)					Prepared: 10/01/18 Analyzed: 10/08/18						
Total Dissolved Solids	ND	10	10	mg/L							U
Duplicate (AJ83119-DUP1)		**Source: 18I2223-01**			Prepared: 10/01/18 Analyzed: 10/08/18						
Total Dissolved Solids	258	10	10	mg/L		282			8.89	15	
Duplicate (AJ83119-DUP2)		**Source: 18I2371-05**			Prepared: 10/01/18 Analyzed: 10/08/18						
Total Dissolved Solids	86.0	10	10	mg/L		92.0			6.74	15	
Batch AJ83159 - General Preparation											
Blank (AJ83159-BLK1)					Prepared: 10/01/18 Analyzed: 10/08/18						
Total Suspended Solids	ND	0.30	1.0	mg/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83159 - General Preparation											
Duplicate (AJ83159-DUP1)		**Source: 18I2429-01**			Prepared: 10/01/18 Analyzed: 10/08/18						
Total Suspended Solids	89.1	0.30	1.0	mg/L		92.2			3.45	30	
Duplicate (AJ83159-DUP2)		**Source: 18I2513-03**			Prepared: 10/01/18 Analyzed: 10/08/18						
Total Suspended Solids	89.1	0.30	1.0	mg/L		87.6			1.68	30	
Batch AJ83169 - General Preparation											
Blank (AJ83169-BLK1)					Prepared & Analyzed: 10/01/18						
Sulfide	ND	0.020	0.10	mg/L							U
LCS (AJ83169-BS1)					Prepared & Analyzed: 10/01/18						
Sulfide	0.270	0.020	0.10	mg/L	0.244		110	85-115			
Duplicate (AJ83169-DUP1)		**Source: 18I2353-01**			Prepared & Analyzed: 10/01/18						
Sulfide	ND	0.020	0.10	mg/L		ND				15	U
Matrix Spike (AJ83169-MS1)		**Source: 18I2353-01**			Prepared & Analyzed: 10/01/18						
Sulfide	0.199	0.020	0.10	mg/L	0.244	ND	81.4	80-120			
Matrix Spike Dup (AJ83169-MSD1)		**Source: 18I2353-01**			Prepared & Analyzed: 10/01/18						
Sulfide	0.200	0.020	0.10	mg/L	0.244	ND	81.8	80-120	0.501	15	
Batch AJ83248 - General Preparation											
LCS (AJ83248-BS1)					Prepared & Analyzed: 10/03/18						
Ammonia as N	4.82	0.10	0.20	mg/L	5.00		96.3	90-110			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83248 - General Preparation											
LCS Dup (AJ83248-BSD1)					Prepared & Analyzed: 10/03/18						
Ammonia as N	4.55	0.10	0.20	mg/L	5.00		91.1	90-110	5.61	20	
Matrix Spike (AJ83248-MS1)		**Source: 18J0181-01**			Prepared & Analyzed: 10/03/18						
Ammonia as N	9.11	0.10	0.20	mg/L	10.0	ND	91.1	85-115			
Matrix Spike Dup (AJ83248-MSD1)		**Source: 18J0181-01**			Prepared & Analyzed: 10/03/18						
Ammonia as N	9.28	0.10	0.20	mg/L	10.0	ND	92.8	85-115	1.90	20	
Batch AJ83359 - General Preparation											
Duplicate (AJ83359-DUP1)		**Source: 18I2348-01**			Prepared & Analyzed: 10/05/18						
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Total Alkalinity as CaCO3	80.0	1.0	5.0	mg/L		80.0			0.00	20	
Bicarbonate Alkalinity as CaCO3	80.0	1.0	5.0	mg/L		80.0			0.00	20	
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Batch AJ83373 - General Preparation											
Blank (AJ83373-BLK1)					Prepared: 10/05/18 Analyzed: 10/10/18						
Oil & Grease (HEM)	ND	1.4	5.0	mg/L							U
LCS (AJ83373-BS1)					Prepared: 10/05/18 Analyzed: 10/10/18						
Oil & Grease (HEM)	39.8	1.4	5.0	mg/L	40.0		99.5	78-114			
LCS Dup (AJ83373-BSD1)					Prepared: 10/05/18 Analyzed: 10/10/18						
Oil & Grease (HEM)	39.8	1.4	5.0	mg/L	40.0		99.5	78-114	0.00	18	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83373 - General Preparation											
Matrix Spike (AJ83373-MS1)		**Source: 18I2335-01**			Prepared: 10/05/18 Analyzed: 10/10/18						
Oil & Grease (HEM)	36.4	1.4	5.0	mg/L	40.0	ND	91.0	78-114			
Batch AJ83376 - General Preparation											
Blank (AJ83376-BLK1)					Prepared: 09/21/18 Analyzed: 10/11/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L							U
Duplicate (AJ83376-DUP1)		**Source: 18I1864-01**			Prepared: 09/21/18 Analyzed: 10/11/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Duplicate (AJ83376-DUP2)		**Source: 18I2402-01**			Prepared: 09/27/18 Analyzed: 10/11/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Batch AJ83379 - General Prep											
LCS (AJ83379-BS1)					Prepared: 10/05/18 Analyzed: 10/09/18						
Total Kjeldahl Nitrogen	2.95	0.050	1.0	mg/L	2.98		99.0	80-120			
LCS Dup (AJ83379-BSD1)					Prepared: 10/05/18 Analyzed: 10/09/18						
Total Kjeldahl Nitrogen	2.95	0.050	1.0	mg/L	2.98		99.0	80-120	0.00	20	
Matrix Spike (AJ83379-MS1)		**Source: 18I2401-02**			Prepared: 10/05/18 Analyzed: 10/09/18						
Total Kjeldahl Nitrogen	3.32	0.050	1.0	mg/L	2.98	0.350	99.6	75-125			
Matrix Spike Dup (AJ83379-MSD1)		**Source: 18I2401-02**			Prepared: 10/05/18 Analyzed: 10/09/18						
Total Kjeldahl Nitrogen	3.23	0.050	1.0	mg/L	2.98	0.350	96.5	75-125	2.81	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83422 - General Prep											
Blank (AJ83422-BLK1)					Prepared & Analyzed: 10/08/18						
Phosphorus, total	ND	0.010	0.040	mg/L							U
LCS (AJ83422-BS1)					Prepared & Analyzed: 10/08/18						
Phosphorus, total	0.191	0.010	0.040	mg/L	0.200		95.3	85-115			
Duplicate (AJ83422-DUP1)		**Source: 18I2371-01**			Prepared & Analyzed: 10/08/18						
Phosphorus, total	0.0206	0.010	0.040	mg/L		0.0206			0.00	20	J
Matrix Spike (AJ83422-MS1)		**Source: 18I2371-01**			Prepared & Analyzed: 10/08/18						
Phosphorus, total	0.201	0.010	0.040	mg/L	0.200	0.0206	90.4	70-130			
Matrix Spike (AJ83422-MS2)		**Source: 18I2371-02**			Prepared & Analyzed: 10/08/18						
Phosphorus, total	0.204	0.010	0.040	mg/L	0.200	0.0260	89.1	70-130			
Matrix Spike Dup (AJ83422-MSD1)		**Source: 18I2371-01**			Prepared & Analyzed: 10/08/18						
Phosphorus, total	0.200	0.010	0.040	mg/L	0.200	0.0206	89.7	70-130	0.672	20	
Batch AJ83424 - General Prep											
LCS (AJ83424-BS1)					Prepared: 10/09/18 Analyzed: 10/10/18						
Total Kjeldahl Nitrogen	2.86	0.050	1.0	mg/L	2.98		95.9	80-120			
LCS Dup (AJ83424-BSD1)					Prepared: 10/09/18 Analyzed: 10/10/18						
Total Kjeldahl Nitrogen	2.95	0.050	1.0	mg/L	2.98		99.0	80-120	3.17	20	
Matrix Spike (AJ83424-MS1)		**Source: 18J0570-02**			Prepared: 10/09/18 Analyzed: 10/10/18						
Total Kjeldahl Nitrogen	51.4	0.050	1.0	mg/L	2.98	29.4	737	75-125			QM-4X

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83424 - General Prep											
Matrix Spike Dup (AJ83424-MSD1)		**Source: 18J0570-02**			Prepared: 10/09/18 Analyzed: 10/10/18						
Total Kjeldahl Nitrogen	50.4	0.050	1.0	mg/L	2.98	29.4	705	75-125	1.87	20	QM-4X
Batch AJ83487 - General Prep											
Blank (AJ83487-BLK1)					Prepared & Analyzed: 10/09/18						
Total Organic Carbon	ND	0.300	1.00	mg/L							U
LCS (AJ83487-BS1)					Prepared & Analyzed: 10/09/18						
Total Organic Carbon	9.26	0.300	1.00	mg/L	10.0		92.6	85-115			
LCS Dup (AJ83487-BSD1)					Prepared & Analyzed: 10/09/18						
Total Organic Carbon	9.59	0.300	1.00	mg/L	10.0		95.9	85-115	3.49	20	
Duplicate (AJ83487-DUP1)		**Source: 18I2150-03**			Prepared & Analyzed: 10/09/18						
Total Organic Carbon	1.55	0.300	1.00	mg/L		1.47			5.29	20	
MRL Check (AJ83487-MRL1)					Prepared & Analyzed: 10/09/18						
Total Organic Carbon	1.27	0.300	1.00	mg/L	1.25		102	0-200			
Matrix Spike (AJ83487-MS1)		**Source: 18I2150-03**			Prepared & Analyzed: 10/09/18						
Total Organic Carbon	23.7	0.600	2.00	mg/L	20.0	1.47	111	70-130			
Matrix Spike Dup (AJ83487-MSD1)		**Source: 18I2150-03**			Prepared: 10/09/18 Analyzed: 10/10/18						
Total Organic Carbon	23.8	0.600	2.00	mg/L	20.0	1.47	112	70-130	0.333	20	
Batch AJ83496 - Metals Digest											
Blank (AJ83496-BLK1)					Prepared: 10/09/18 Analyzed: 10/11/18						
Hardness, Total	ND	1	5	mg/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83496 - Metals Digest											
Duplicate (AJ83496-DUP1)		**Source: 18I2350-03**			Prepared: 10/09/18 Analyzed: 10/11/18						
Hardness, Total	273	1	5	mg/L		287			5.00	20	
Batch AJ83631 - General Prep											
Blank (AJ83631-BLK1)					Prepared: 10/11/18 Analyzed: 10/12/18						
Dissolved Organic Carbon	ND	0.600	1.00	mg/L							U
LCS (AJ83631-BS1)					Prepared: 10/11/18 Analyzed: 10/12/18						
Dissolved Organic Carbon	9.71	0.600	1.00	mg/L	10.0		97.1	85-115			
LCS Dup (AJ83631-BSD1)					Prepared: 10/11/18 Analyzed: 10/12/18						
Dissolved Organic Carbon	9.92	0.600	1.00	mg/L	10.0		99.2	85-115	2.12	20	
Duplicate (AJ83631-DUP1)		**Source: 18I2401-04**			Prepared: 10/11/18 Analyzed: 10/12/18						
Dissolved Organic Carbon	2.54	0.600	1.00	mg/L		2.57			1.16	20	
Matrix Spike (AJ83631-MS1)		**Source: 18I2401-04**			Prepared: 10/11/18 Analyzed: 10/12/18						
Dissolved Organic Carbon	22.5	1.20	2.00	mg/L	20.0	2.57	99.6	70-130			
Matrix Spike Dup (AJ83631-MSD1)		**Source: 18I2401-04**			Prepared: 10/11/18 Analyzed: 10/12/18						
Dissolved Organic Carbon	23.6	1.20	2.00	mg/L	20.0	2.57	105	70-130	4.62	20	

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Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84136 - General Preparation											
Blank (AI84136-BLK1)					Prepared & Analyzed: 09/27/18						
Nitrite as N	ND	0.050	0.20	mg/L							U
Nitrate as N	ND	0.040	0.20	mg/L							U
Orthophosphate	ND	0.10	0.30	mg/L							U
LCS (AI84136-BS1)					Prepared & Analyzed: 09/27/18						
Nitrate as N	5.80	0.040	0.20	mg/L	5.56		104	90-110			
Nitrite as N	5.65	0.050	0.20	mg/L	5.56		102	90-110			
Orthophosphate	17.0	0.10	0.30	mg/L	16.7		102	90-110			
Duplicate (AI84136-DUP1)		**Source: 18I2371-01**			Prepared & Analyzed: 09/27/18						
Orthophosphate	ND	0.10	0.30	mg/L		ND				20	U
Nitrite as N	ND	0.050	0.20	mg/L		0.0670			200	20	U
Nitrate as N	ND	0.040	0.20	mg/L		ND				20	U
Matrix Spike (AI84136-MS1)		**Source: 18I2371-01**			Prepared & Analyzed: 09/27/18						
Nitrite as N	5.80	0.050	0.20	mg/L	5.56	0.0670	103	80-120			
Orthophosphate	17.5	0.10	0.30	mg/L	16.7	ND	105	80-120			
Nitrate as N	5.89	0.040	0.20	mg/L	5.56	ND	106	80-120			
Matrix Spike (AI84136-MS2)		**Source: 18I2416-02**			Prepared & Analyzed: 09/27/18						
Nitrite as N	1.15	0.050	0.20	mg/L	5.56	ND	20.8	80-120			QM-05
Nitrate as N	7.25	0.040	0.20	mg/L	5.56	1.40	105	80-120			
Orthophosphate	17.4	0.10	0.30	mg/L	16.7	0.303	103	80-120			
Matrix Spike Dup (AI84136-MSD1)		**Source: 18I2371-01**			Prepared & Analyzed: 09/27/18						
Nitrate as N	5.89	0.040	0.20	mg/L	5.56	ND	106	80-120	0.0298	20	
Orthophosphate	17.5	0.10	0.30	mg/L	16.7	ND	105	80-120	0.0779	20	
Nitrite as N	5.80	0.050	0.20	mg/L	5.56	0.0670	103	80-120	0.00	20	

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

TPH by EPA/LUFT GC Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83114 - SVOAs in Water GC											
Blank (AJ83114-BLK1)					Prepared: 10/01/18 Analyzed: 10/10/18						
TPH as Diesel	ND	50	250	ug/L							U
TPH as Motor Oil	ND	100	250	ug/L							U
Surrogate: Tetratetracontane	*57.8*			*ug/L*	*57.4*		*101*	*39-120*			
LCS (AJ83114-BS1)					Prepared: 10/01/18 Analyzed: 10/10/18						
TPH as Diesel	1970	50	250	ug/L	2020		97.5	61-120			
Surrogate: Tetratetracontane	*54.5*			*ug/L*	*57.4*		*95.0*	*39-120*			
LCS (AJ83114-BS2)					Prepared: 10/01/18 Analyzed: 10/10/18						
TPH as Motor Oil	2110	100	250	ug/L	2010		105	71-125			
Surrogate: Tetratetracontane	*56.4*			*ug/L*	*57.4*		*98.2*	*39-120*			
LCS Dup (AJ83114-BSD1)					Prepared: 10/01/18 Analyzed: 10/10/18						
TPH as Diesel	2140	50	250	ug/L	2020		106	61-120	8.16	25	
Surrogate: Tetratetracontane	*54.5*			*ug/L*	*57.4*		*95.0*	*39-120*			
LCS Dup (AJ83114-BSD2)					Prepared: 10/01/18 Analyzed: 10/10/18						
TPH as Motor Oil	2140	100	250	ug/L	2010		107	71-125	1.46	25	
Surrogate: Tetratetracontane	*57.7*			*ug/L*	*57.4*		*100*	*39-120*			

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Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

TPH by EPA/LUFT GCMS Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83207 - VOAs in Water GCMS											
Blank (AJ83207-BLK1)					Prepared: 10/01/18 Analyzed: 10/02/18						
TPH as Gasoline	ND	50	50	ug/L							U
Surrogate: Toluene-d8	*24.5*			*ug/L*	*25.0*		*97.9*	*76-129*			
LCS (AJ83207-BS1)					Prepared: 10/01/18 Analyzed: 10/02/18						
TPH as Gasoline	217	50	50	ug/L	200		109	67-132			
Surrogate: Toluene-d8	*24.2*			*ug/L*	*25.0*		*96.7*	*76-129*			
LCS Dup (AJ83207-BSD1)					Prepared: 10/01/18 Analyzed: 10/02/18						
TPH as Gasoline	214	50	50	ug/L	200		107	67-132	1.72	25	
Surrogate: Toluene-d8	*50.1*			*ug/L*	*50.0*		*100*	*76-129*			
Matrix Spike (AJ83207-MS1)		**Source: 18I2017-01**			Prepared: 10/01/18 Analyzed: 10/02/18						
TPH as Gasoline	196	50	50	ug/L	200	ND	98.1	37-156			
Surrogate: Toluene-d8	*23.9*			*ug/L*	*25.0*		*95.8*	*76-129*			
Matrix Spike (AJ83207-MS2)		**Source: 18I2017-02**			Prepared: 10/01/18 Analyzed: 10/03/18						
TPH as Gasoline	189	50	50	ug/L	200	ND	94.5	37-156			
Surrogate: Toluene-d8	*23.8*			*ug/L*	*25.0*		*95.3*	*76-129*			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83208 - VOAs in Water GCMS											
Blank (AJ83208-BLK1)					Prepared: 10/01/18 Analyzed: 10/02/18						
Benzene	ND	0.30	0.30	ug/L							U
Toluene	ND	0.30	0.30	ug/L							U
Ethylbenzene	ND	0.40	0.50	ug/L							U
Xylenes (total)	ND	0.50	0.50	ug/L							U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L							U
Di-isopropyl ether	ND	0.40	0.50	ug/L							U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L							U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L							U
Tert-butyl alcohol	ND	6.0	10	ug/L							U
Surrogate: Bromofluorobenzene	*28.7*			*ug/L*	*25.0*		*115*	*70-130*			
Surrogate: Dibromofluoromethane	*25.8*			*ug/L*	*25.0*		*103*	*70-130*			
Surrogate: Toluene-d8	*29.6*			*ug/L*	*25.0*		*118*	*70-130*			
LCS (AJ83208-BS1)					Prepared: 10/01/18 Analyzed: 10/02/18						
Benzene	21.1	0.30	0.30	ug/L	20.0		106	82-122			
Toluene	22.3	0.30	0.30	ug/L	20.0		112	75-134			
Ethylbenzene	23.1	0.40	0.50	ug/L	20.0		116	84-124			
Xylenes (total)	68.3	0.50	0.50	ug/L	60.0		114	81-126			
Methyl tert-butyl ether	19.8	0.50	0.50	ug/L	20.0		99.0	84-119			
Di-isopropyl ether	22.2	0.40	0.50	ug/L	20.0		111	83-132			
Ethyl tert-butyl ether	21.4	0.40	0.50	ug/L	20.0		107	74-127			
Tert-amyl methyl ether	19.3	0.40	0.50	ug/L	20.0		96.6	74-120			
Tert-butyl alcohol	394	6.0	10	ug/L	400		98.5	66-147			
Surrogate: Bromofluorobenzene	*28.7*			*ug/L*	*25.0*		*115*	*70-130*			
Surrogate: Dibromofluoromethane	*26.5*			*ug/L*	*25.0*		*106*	*70-130*			
Surrogate: Toluene-d8	*28.6*			*ug/L*	*25.0*		*114*	*70-130*			
LCS Dup (AJ83208-BSD1)					Prepared: 10/01/18 Analyzed: 10/02/18						
Benzene	21.5	0.30	0.30	ug/L	20.0		107	82-122	1.69	25	
Toluene	22.7	0.30	0.30	ug/L	20.0		114	75-134	1.78	25	
Ethylbenzene	23.6	0.40	0.50	ug/L	20.0		118	84-124	2.06	25	
Xylenes (total)	69.7	0.50	0.50	ug/L	60.0		116	81-126	2.04	25	
Methyl tert-butyl ether	20.5	0.50	0.50	ug/L	20.0		102	84-119	3.38	25	
Di-isopropyl ether	22.4	0.40	0.50	ug/L	20.0		112	83-132	0.763	25	
Ethyl tert-butyl ether	21.8	0.40	0.50	ug/L	20.0		109	74-127	1.71	25	

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e-mail: clientservices@alpha-labs.com
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Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 •Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 10:08

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83208 - VOAs in Water GCMS											
LCS Dup (AJ83208-BSD1)					Prepared: 10/01/18 Analyzed: 10/02/18						
Tert-amyl methyl ether	20.1	0.40	0.50	ug/L	20.0		100	74-120	3.76	25	
Tert-butyl alcohol	417	6.0	10	ug/L	400		104	66-147	5.68	25	
Surrogate: Bromofluorobenzene	*28.8*			*ug/L*	*25.0*		*115*	*70-130*			
Surrogate: Dibromofluoromethane	*26.3*			*ug/L*	*25.0*		*105*	*70-130*			
Surrogate: Toluene-d8	*28.7*			*ug/L*	*25.0*		*115*	*70-130*			
Matrix Spike (AJ83208-MS1)		**Source: 18I2017-01**			Prepared: 10/01/18 Analyzed: 10/02/18						
Benzene	23.0	0.30	0.30	ug/L	20.0	ND	115	58-139			
Toluene	23.3	0.30	0.30	ug/L	20.0	ND	117	59-147			
Ethylbenzene	24.2	0.40	0.50	ug/L	20.0	ND	121	59-147			
Xylenes (total)	71.3	0.50	0.50	ug/L	60.0	ND	119	49-153			
Methyl tert-butyl ether	19.3	0.50	0.50	ug/L	20.0	ND	96.6	55-144			
Di-isopropyl ether	23.9	0.40	0.50	ug/L	20.0	ND	120	49-143			
Ethyl tert-butyl ether	20.5	0.40	0.50	ug/L	20.0	ND	102	44-143			
Tert-amyl methyl ether	18.6	0.40	0.50	ug/L	20.0	ND	93.1	41-136			
Tert-butyl alcohol	444	6.0	10	ug/L	400	ND	111	38-175			
Surrogate: Bromofluorobenzene	*29.6*			*ug/L*	*25.0*		*118*	*70-130*			
Surrogate: Dibromofluoromethane	*26.8*			*ug/L*	*25.0*		*107*	*70-130*			
Surrogate: Toluene-d8	*27.9*			*ug/L*	*25.0*		*112*	*70-130*			
Matrix Spike (AJ83208-MS2)		**Source: 18I2017-02**			Prepared: 10/01/18 Analyzed: 10/03/18						
Benzene	23.2	0.30	0.30	ug/L	20.0	ND	116	58-139			
Toluene	23.0	0.30	0.30	ug/L	20.0	ND	115	59-147			
Ethylbenzene	24.2	0.40	0.50	ug/L	20.0	ND	121	59-147			
Xylenes (total)	70.6	0.50	0.50	ug/L	60.0	ND	118	49-153			
Methyl tert-butyl ether	20.4	0.50	0.50	ug/L	20.0	ND	102	55-144			
Di-isopropyl ether	25.0	0.40	0.50	ug/L	20.0	ND	125	49-143			
Ethyl tert-butyl ether	21.9	0.40	0.50	ug/L	20.0	ND	110	44-143			
Tert-amyl methyl ether	19.4	0.40	0.50	ug/L	20.0	ND	97.2	41-136			
Tert-butyl alcohol	275	6.0	10	ug/L	400	ND	68.8	38-175			
Surrogate: Bromofluorobenzene	*30.1*			*ug/L*	*25.0*		*120*	*70-130*			
Surrogate: Dibromofluoromethane	*27.2*			*ug/L*	*25.0*		*109*	*70-130*			
Surrogate: Toluene-d8	*28.0*			*ug/L*	*25.0*		*112*	*70-130*			

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Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	10/22/18 10:08

Notes and Definitions

FILT	The sample was filtered in the lab prior to analysis.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QM-01	The spike recovery for this QC sample is outside of established control limits possibly due to a sample matrix interference.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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BROOKS APPLIED LABS
18804 North Creek Parkway, Ste 100, Bothell, WA 98011 • USA • T: 206 632 6206 F: 206 632 6017 • info@brooksapplied.com

October 18, 2018

Basic Laboratory, Inc.
ATTN: Jen McCurdy
2218 Railroad Avenue
Redding, CA 96001
jmccurdy@basiclab.com

RE: Project BSL-RE1801 Client Project: 18J0211

Dear Jen McCurdy,

On October 11, 2018, Brooks Applied Labs (BAL) received seven (7) water samples. The samples were logged-in for the analyses of methyl mercury (MeHg) according to the chain-of-custody form. All samples were received and stored according to BAL SOPs and EPA methodology. Samples were preserved with hydrochloric acid by the client.

Water samples were distilled via EPA Method 1630.

The results were method blank corrected as described in the calculations section of the relevant BAL SOP(s) and were evaluated using reporting limits adjusted to account for sample aliquot size. Please refer to the *Sample Results* page for sample-specific MDLs, MRLs, and other details.

All data was reported without qualification (aside from concentration qualifiers) and all associated quality control sample results met the acceptance criteria.

BAL, an accredited laboratory, certifies that the reported results of all analyses for which BAL is NELAP accredited meet all NELAP requirements. For more information please see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Sincerely,

Lydia Greaves

Lydia Greaves
Client Services Manager
lydia@brooksapplied.com

Report Information

Laboratory Accreditation

BAL is accredited by the *National Environmental Laboratory Accreditation Program* (NELAP) through the State of Florida Department of Health, Bureau of Laboratories (E87982) and is certified to perform many environmental analyses. BAL is also certified by many other states to perform environmental analyses. For a current list of our accreditations/certifications, please visit our website at <http://www.brooksapplied.com/resources/certificates-permits/>. Results reported relate only to the samples listed in the report.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

AR	as received	**MS**	matrix spike
BAL	Brooks Applied Labs	**MSD**	matrix spike duplicate
BLK	method blank	**ND**	non-detect
BS	blank spike	**NR**	non-reportable
CAL	calibration standard	**N/C**	not calculated
CCB	continuing calibration blank	**PS**	post preparation spike
CCV	continuing calibration verification	**REC**	percent recovery
COC	chain of custody record	**RPD**	relative percent difference
D	dissolved fraction	**SCV**	secondary calibration verification
DUP	duplicate	**SOP**	standard operating procedure
IBL	instrument blank	**SRM**	standard reference material
ICV	initial calibration verification	**T**	total fraction
MDL	method detection limit	**TR**	total recoverable fraction
MRL	method reporting limit		

Definition of Data Qualifiers

(Effective 9/23/09)

E	An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H	Holding time and/or preservation requirements not met. Please see narrative for explanation.
J	Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
J-1	Estimated value. A full explanation is presented in the narrative.
M	Duplicate precision (RPD) was not within acceptance criteria. Please see narrative for explanation.
N	Spike recovery was not within acceptance criteria. Please see narrative for explanation.
R	Rejected, unusable value. A full explanation is presented in the narrative.
U	Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
X	Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.

These qualifiers are based on those previously utilized by Brooks Applied Labs, those found in the EPA SOW ILM03.0, Exhibit B, Section III, pg. B-18, and the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review; USEPA; January 2010. These supersede all previous qualifiers ever employed by BAL.

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Project ID: BSL-RE1801
PM: Lydia Greaves

Client PM: Jen McCurdy
Client Project: 18J0211

Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
18J0211-01 18I2371-01 LP2-S	1841037-01	Water	Sample	09/25/2018	10/11/2018
18J0211-02 18I2371-02 LP2-M	1841037-02	Water	Sample	09/25/2018	10/11/2018
18J0211-03 18I2371-03 LP2-B	1841037-03	Water	Sample	09/25/2018	10/11/2018
18J0211-04 18I2371-04 LP-BL	1841037-04	Water	Sample	09/25/2018	10/11/2018
18J0211-05 18I2371-05 LP3-S	1841037-05	Water	Sample	09/25/2018	10/11/2018
18J0211-06 18I2371-06 LP3-M	1841037-06	Water	Sample	09/25/2018	10/11/2018
18J0211-07 18I2371-07 LP3-B	1841037-07	Water	Sample	09/25/2018	10/11/2018

Batch Summary

Analyte	Lab Matrix	Method	Prepared	Analyzed	Batch	Sequence
MeHg	Water	EPA 1630	10/15/2018	10/16/2018	B182752	1801404

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Project ID: BSL-RE1801
PM: Lydia Greaves

Client PM: Jen McCurdy
Client Project: 18J0211

Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
18J0211-01 18I2371-01 LP2-S										
1841037-01	MeHg	Water	TR	0.142		0.023	0.049	ng/L	B182752	1801404
18J0211-02 18I2371-02 LP2-M										
1841037-02	MeHg	Water	TR	0.175		0.023	0.050	ng/L	B182752	1801404
18J0211-03 18I2371-03 LP2-B										
1841037-03	MeHg	Water	TR	0.139		0.023	0.049	ng/L	B182752	1801404
18J0211-04 18I2371-04 LP-BL										
1841037-04	MeHg	Water	TR	≤ 0.023	U	0.023	0.050	ng/L	B182752	1801404
18J0211-05 18I2371-05 LP3-S										
1841037-05	MeHg	Water	TR	0.199		0.023	0.050	ng/L	B182752	1801404
18J0211-06 18I2371-06 LP3-M										
1841037-06	MeHg	Water	TR	0.106		0.023	0.049	ng/L	B182752	1801404
18J0211-07 18I2371-07 LP3-B										
1841037-07	MeHg	Water	TR	2.73		0.023	0.050	ng/L	B182752	1801404

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Accuracy & Precision Summary

Batch: B182752
Lab Matrix: Water
Method: EPA 1630

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B182752-BS1	**Blank Spike, (1839004)**						
	MeHg		1.000	0.914	ng/L	91% 67-133	
B182752-BS2	**Blank Spike, (1839004)**						
	MeHg		1.000	1.037	ng/L	104% 67-133	
B182752-MS1	**Matrix Spike (1841036-01)**						
	MeHg	0.123	1.000	1.023	ng/L	90% 65-135	
B182752-MSD1	**Matrix Spike Duplicate (1841036-01)**						
	MeHg	0.123	1.000	1.084	ng/L	96% 65-135	6% 35
B182752-MS2	**Matrix Spike (1841037-02)**						
	MeHg	0.175	1.000	0.953	ng/L	78% 65-135	
B182752-MSD2	**Matrix Spike Duplicate (1841037-02)**						
	MeHg	0.175	1.000	1.041	ng/L	87% 65-135	9% 35
B182752-MS3	**Matrix Spike (1841038-04)**						
	MeHg	0.205	1.000	1.185	ng/L	98% 65-135	
B182752-MSD3	**Matrix Spike Duplicate (1841038-04)**						
	MeHg	0.205	1.000	1.071	ng/L	87% 65-135	10% 35

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Project ID: BSL-RE1801
PM: Lydia Greaves

Client PM: Jen McCurdy
Client Project: 18J0211

Method Blanks & Reporting Limits

Batch: B182752
Matrix: Water
Method: EPA 1630
Analyte: MeHg

Sample	Result	Units
B182752-BLK1	0.016	ng/L
B182752-BLK2	0.009	ng/L
B182752-BLK3	0.005	ng/L
B182752-BLK4	0.005	ng/L

Average: 0.009 **Standard Deviation:** 0.005 **MDL:** 0.023
Limit: 0.045 **Limit:** 0.015 **MRL:** 0.050

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Project ID: BSL-RE1801
PM: Lydia Greaves

Client PM: Jen McCurdy
Client Project: 18J0211

Sample Containers

Lab ID: 1841037-01 **Report Matrix:** Water **Collected:** 09/25/2018
Sample: 18J0211-01 18I2371-01 LP2-S **Sample Type:** Sample **Received:** 10/11/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	250mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841037

Lab ID: 1841037-02 **Report Matrix:** Water **Collected:** 09/25/2018
Sample: 18J0211-02 18I2371-02 LP2-M **Sample Type:** Sample **Received:** 10/11/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	250mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841037

Lab ID: 1841037-03 **Report Matrix:** Water **Collected:** 09/25/2018
Sample: 18J0211-03 18I2371-03 LP2-B **Sample Type:** Sample **Received:** 10/11/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	250mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841037

Lab ID: 1841037-04 **Report Matrix:** Water **Collected:** 09/25/2018
Sample: 18J0211-04 18I2371-04 LP-BL **Sample Type:** Sample **Received:** 10/11/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	250mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841037

Lab ID: 1841037-05 **Report Matrix:** Water **Collected:** 09/25/2018
Sample: 18J0211-05 18I2371-05 LP3-S **Sample Type:** Sample **Received:** 10/11/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	250mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841037

Lab ID: 1841037-06 **Report Matrix:** Water **Collected:** 09/25/2018
Sample: 18J0211-06 18I2371-06 LP3-M **Sample Type:** Sample **Received:** 10/11/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	250mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841037

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Project ID: BSL-RE1801
PM: Lydia Greaves

Client PM: Jen McCurdy
Client Project: 18J0211

Sample Containers

Lab ID: 1841037-07
Sample: 18J0211-07 18I2371-07 LP3-B
Report Matrix: Water
Sample Type: Sample
Collected: 09/25/2018
Received: 10/11/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	250mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841037

Shipping Containers

Cooler - 1841037

Received: October 11, 2018 11:30
Tracking No: 1Z8336E31377720402 via UPS
Coolant Type: Ice
Temperature: 3.6 °C

Description: Cooler
Damaged in transit? No
Returned to client? No
Comments: IR#15

Custody seals present? No
Custody seals intact? No
COC present? No

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SUBCONTRACT ORDER

BAL Report 1841037

Basic Laboratory Inc

18J0211

5-Day TAT

SENDING LABORATORY:

Basic Laboratory Inc
2218 Railroad Avenue
Redding, CA 96001-2504
Phone: (530) 243-7234
Fax: (530) 243-6204
Project Manager: Jen McCurdy

RECEIVING LABORATORY:

BROOKS RAND LIMITED LAB Brooks Applied Labs
3958 6TH AVENUE NORTHWEST
SEATTLE, WA 981075056
Phone :(206) 632-6206 Attn: Lydia Greaves
Fax: (206) 632-6017
E-Mail: jmccurdy@basiclab.com

Please use standard TAT unless specific due date is requested. Email results & Element transfer file to reporting@basiclab.com.

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 18J0211-01	18I2371-01 LP2-S	Water	Sampled: 09/25/18 13:20	
Methyl Mercury 1630	10/15/18 15:00	03/24/19 13:20		
Containers Supplied:				
Sample ID: 18J0211-02	18I2371-02 LP2-M	Water	Sampled: 09/25/18 13:45	
Methyl Mercury 1630	10/15/18 15:00	03/24/19 13:45		
Containers Supplied:				
Sample ID: 18J0211-03	18I2371-03 LP2-B	Water	Sampled: 09/25/18 14:15	
Methyl Mercury 1630	10/15/18 15:00	03/24/19 14:15		
Containers Supplied:				
Sample ID: 18J0211-04	18I2371-04 LP-BL	Water	Sampled: 09/25/18 14:40	
Methyl Mercury 1630	10/15/18 15:00	03/24/19 14:40		
Containers Supplied:				
Sample ID: 18J0211-05	18I2371-05 LP3-S	Water	Sampled: 09/25/18 10:45	
Methyl Mercury 1630	10/15/18 15:00	03/24/19 10:45		
Containers Supplied:				
Sample ID: 18J0211-06	18I2371-06 LP3-M	Water	Sampled: 09/25/18 11:15	
Methyl Mercury 1630	10/15/18 15:00	03/24/19 11:15		
Containers Supplied:				

Released By	Date	Received By	Date
TW Holmson	10/10/18		10/11/18 19:30
Released By	Date	Received By	Date

SUBCONTRACT ORDER

BAL Report 1841037

Basic Laboratory Inc

18J0211

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 18J0211-07	18I2371-07 LP3-B	Water	Sampled: 09/25/18 11:45	
Methyl Mercury 1630	~~10/15/18 15:00~~	~~03/24/19 11:45~~		
Containers Supplied:				

T Wheelman 10-10-18 — Released By — Date

Received By — Date — 10/11/18 1130

Released By — Date

Received By — Date

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18I2371

18J0211
10-15-18

SENDING LABORATORY:	RECEIVING LABORATORY:
Alpha Analytical Laboratories, Inc.	Basic Laboratory
208 Mason St.	2218 Railroad Ave
Ukiah, CA 95482	Redding, CA 96001
Phone: (707)468-0401	Phone :530-243-7234
Fax: (707)468-5267	Fax: 530-243-7494
Project Manager: David S. Pingatore	**Terms: Net 30**

Analysis	Due	Expires	Comments
18I2371-01 LP2-S [Water] Sampled 09/25/18 13:20			-1 10.6°
BAL Hg Methyl	10/10/18 12:00	03/24/19 13:20	
Containers Supplied:			
500ml Glass - HCl (H) AG			
18I2371-02 LP2-M [Water] Sampled 09/25/18 13:45			-2 10.0°
BAL Hg Methyl	10/10/18 12:00	03/24/19 13:45	
Containers Supplied:			
500ml Glass - HCl (H) AG			
18I2371-03 LP2-B [Water] Sampled 09/25/18 14:15			-3 10.4°
BAL Hg Methyl	10/10/18 12:00	03/24/19 14:15	
Containers Supplied:			
500ml Glass - HCl (H) AG			
18I2371-04 LP-BL [Water] Sampled 09/25/18 14:40			-4 9.6°
BAL Hg Methyl	10/10/18 12:00	03/24/19 14:40	
Containers Supplied:			
500ml Glass - HCl (H) AG			
18I2371-05 LP3-S [Water] Sampled 09/25/18 10:45			-5 9.6
BAL Hg Methyl	10/10/18 12:00	03/24/19 10:45	
Containers Supplied:			
500ml Glass - HCl (H) AG			

Released By	Date	Received By	Date
	9-26-18	T Wilhelmsen	10.3.18 1424
		TW	10.3.18 1434

1850211

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18I2371

Analysis	Due	Expires	Comments
18I2371-06 LP3-M [Water] Sampled 09/25/18 11:15			-6 10.4°
BAL Hg Methyl	10/10/18 12:00	03/24/19 11:15	
Containers Supplied:			
500ml Glass - HCl (H) A6			
18I2371-07 LP3-B [Water] Sampled 09/25/18 11:45			-7 8.8°
BAL Hg Methyl	10/10/18 12:00	03/24/19 11:45	
Containers Supplied:			
500ml Glass - HCl (H) A6			

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+QC
+MDL

Released By	9-26-18 Date	TWilhelmson Received By	10-3-18 Date	1424
Released By	Date	TLW Received By	10-3-18 Date	1434

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email: clientservices@alpha-labs.com

ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

Bay Area Laboratory
262 Rickenbacker Circle, Livermore CA 94551
925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18I2371 Pg 1 of 3

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	TPH-D/MO	TPH-Gas/BTEX/Oxys	Oil and Grease	TOC	DOC	CAM17 200.8 total + Al/Mn	Fe 200.8 Total	Hardness, total	Ammonia-N	Phosphorus, Total	TKN
LP2-S	9/25 ~~9/26~~	1320											X			17	X	X	X	X	X	X	X	X	X	X	X
LP2-M	↓	1345											↓			17	↓	↓	↓	↓		↓	↓	↓	↓	↓	↓
LP2-B		1415														16											
LP-BL		1440														16											
LP3-S		~~1045~~														17											
LP3-M		1145														17											
LP3-B	↓	1145											↓			16	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

TAT
Standard 10 days ~~X~~
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.2
Livermore temp:
Elk Grove temp:

Sample Notes or DDW Source Numbers:

Relinquished by	Received by	Date	Time
Christina Buck		9-26-18	0815

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):

Travel and Site Time:	Mileage:	Misc. Supplies:

alpha
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Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18I2371 Pg 2 of 3

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: Christina Buck / Christina Buck

TAT: Standard 10 days (X) — RUSH: 5 days ( ) 48 hours ( ) Other: ___days ( ) — Lab preapproval required

Temp upon Receipt °C: Ukiah temp: 1.2 — Livermore temp: — Elk Grove temp:

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	CAM17 200.8 dissolved / lab filter	Al dissolved 200.8	Alkalinity	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	TDS	TSS	Chlorophyll-A	Sulfide	Hg 1631	MeHg 1630	Sample Notes or DDW Source Numbers:
LP2-S 9/25	~~9/26~~	1320											X				X	X	X	X	X	X	X	X	X	X	X	X	
LP2-M		1345																											
LP2-B		1415																											
LP-BL		1410																											
LP3-S		1045														1 per bottle													
LP3-BM		1115																											
LP3-B	↓	1145											↓				↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	

Relinquished by	Received by	Date	Time
Christina Buck		9-26-18	0815

DDW Write On EDT Transmission? ( ) Yes ( ) No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ( ) Yes ( ) No

Global ID:

Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time:	Mileage:	Misc. Supplies:

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Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18I2371 Pg 3 of 3

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA Buck Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Algal ID & E (sub to Greenwater)
LP2-S 9/25	~~9/26~~	1320											X			Bea p.1	X
LP2-M	↓	1315											↓				↓
LP3-S	↓	1045											↓				
LP3-M	↓	1115											↓				

Analysis Request

Please hold phytoplankton sample analysis until further notice.

TAT
Standard 10 days
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.2
Livermore temp:
Elk Grove temp:

Sample Notes or DDW Source Numbers:

Relinquished by	Received by	Date	Time
Christina Buck	[signature]	9.26.18	0815

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number:
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):
Travel and Site Time: Mileage: Misc. Supplies:

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

ELAP Certificates 1551, 2728, and 2922

23 October 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18I2517

Enclosed are the results of analyses for samples received by the laboratory on 09/27/18 08:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Jeanette L. Poplin For David S. Pingatore
Project Manager

Alpha Analytical Laboratories Inc.
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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ER173.7	18I2517-01	Water	09/26/18 13:00	09/27/18 08:10
RF3.8	18I2517-02	Water	09/26/18 14:30	09/27/18 08:10
ER-BL	18I2517-03	Water	09/26/18 10:30	09/27/18 08:10
LP4-S	18I2517-04	Water	09/26/18 17:15	09/27/18 08:10
LP4-M	18I2517-05	Water	09/26/18 17:35	09/27/18 08:10
LP4-B	18I2517-06	Water	09/26/18 18:00	09/27/18 08:10

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.

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER173.7 (18I2517-01) Water Sampled: 09/26/18 13:00 Received: 09/27/18 08:10											
Calcium	**47**	**0.080**	**1.0**	**mg/L**	1	AJ83612	10/11/18 09:35	10/15/18 16:24	EPA 200.7	MAM	
Magnesium	**9.9**	**0.030**	**1.0**	**mg/L**	1	AJ83612	10/11/18 09:35	10/15/18 16:24	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AJ83624	10/11/18 08:16	10/11/18 16:43	EPA 245.1	LMR	U
RF3.8 (18I2517-02) Water Sampled: 09/26/18 14:30 Received: 09/27/18 08:10											
Calcium	**44**	**0.080**	**1.0**	**mg/L**	1	AJ83612	10/11/18 09:35	10/15/18 16:37	EPA 200.7	MAM	
Magnesium	**17**	**0.030**	**1.0**	**mg/L**	1	AJ83612	10/11/18 09:35	10/15/18 16:37	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AJ83624	10/11/18 08:16	10/11/18 16:51	EPA 245.1	LMR	U
ER-BL (18I2517-03) Water Sampled: 09/26/18 10:30 Received: 09/27/18 08:10											
Calcium	ND	0.080	1.0	mg/L	1	AJ83612	10/11/18 09:35	10/15/18 16:45	EPA 200.7	MAM	U
Magnesium	ND	0.030	1.0	mg/L	1	AJ83612	10/11/18 09:35	10/15/18 16:45	EPA 200.7	MAM	U
Mercury	ND	0.060	0.20	ug/L	1	AJ83624	10/11/18 08:16	10/11/18 16:53	EPA 245.1	LMR	U
LP4-S (18I2517-04) Water Sampled: 09/26/18 17:15 Received: 09/27/18 08:10											
Calcium	**22**	**0.080**	**1.0**	**mg/L**	1	AJ83612	10/11/18 09:35	10/15/18 16:50	EPA 200.7	MAM	
Magnesium	**6.8**	**0.030**	**1.0**	**mg/L**	1	AJ83612	10/11/18 09:35	10/15/18 16:50	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AJ83624	10/11/18 08:16	10/11/18 16:56	EPA 245.1	LMR	U
LP4-M (18I2517-05) Water Sampled: 09/26/18 17:35 Received: 09/27/18 08:10											
Calcium	**22**	**0.080**	**1.0**	**mg/L**	1	AJ83612	10/11/18 09:35	10/15/18 16:55	EPA 200.7	MAM	
Magnesium	**6.8**	**0.030**	**1.0**	**mg/L**	1	AJ83612	10/11/18 09:35	10/15/18 16:55	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AJ83624	10/11/18 08:16	10/11/18 16:58	EPA 245.1	LMR	U
LP4-B (18I2517-06) Water Sampled: 09/26/18 18:00 Received: 09/27/18 08:10											
Calcium	**25**	**0.080**	**1.0**	**mg/L**	1	AJ83612	10/11/18 09:35	10/15/18 16:59	EPA 200.7	MAM	
Magnesium	**8.1**	**0.030**	**1.0**	**mg/L**	1	AJ83612	10/11/18 09:35	10/15/18 16:59	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AJ83624	10/11/18 08:16	10/11/18 17:01	EPA 245.1	LMR	U

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.

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER173.7 (18I2517-01) Water Sampled: 09/26/18 13:00 Received: 09/27/18 08:10											
Aluminum	**39**	**20**	**40**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:18	EPA 200.8	MMY	R-01, J
Antimony	ND	0.80	2.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:18	EPA 200.8	MMY	R-01, U
Arsenic	**0.82**	**0.80**	**2.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:18	EPA 200.8	MMY	R-01, J
Barium	**110**	**0.80**	**2.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:18	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:18	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:18	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:18	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:18	EPA 200.8	MMY	R-01, U
Copper	**2.9**	**1.6**	**2.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:18	EPA 200.8	MMY	
Iron	**150**	**40**	**200**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:18	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:18	EPA 200.8	MMY	R-01, U
Manganese	**23**	**8.0**	**20**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:18	EPA 200.8	MMY	
Molybdenum	**0.63**	**0.28**	**1.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:18	EPA 200.8	MMY	R-01, J
Nickel	**2.2**	**1.2**	**2.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:18	EPA 200.8	MMY	
Selenium	ND	1.2	8.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:18	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:18	EPA 200.8	MMY	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:18	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:18	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:18	EPA 200.8	MMY	R-01, U
RF3.8 (18I2517-02) Water Sampled: 09/26/18 14:30 Received: 09/27/18 08:10											**P-02**
Aluminum	**27**	**20**	**40**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:25	EPA 200.8	MMY	R-01, J
Antimony	ND	0.80	2.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:25	EPA 200.8	MMY	R-01, U
Arsenic	**1.7**	**0.80**	**2.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:25	EPA 200.8	MMY	R-01, J
Barium	**130**	**0.80**	**2.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:25	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:25	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:25	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:25	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:25	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:25	EPA 200.8	MMY	R-01, U
Iron	**130**	**40**	**200**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:25	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:25	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:25	EPA 200.8	MMY	R-01, U
Molybdenum	**0.61**	**0.28**	**1.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:25	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
RF3.8 (18I2517-02) Water Sampled: 09/26/18 14:30 Received: 09/27/18 08:10											**P-02**
Nickel	**2.3**	**1.2**	**2.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:25	EPA 200.8	MMY	
Selenium	ND	1.2	8.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:25	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:25	EPA 200.8	MMY	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:25	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:25	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:25	EPA 200.8	MMY	R-01, U
ER-BL (18I2517-03) Water Sampled: 09/26/18 10:30 Received: 09/27/18 08:10											
Aluminum	ND	20	40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:31	EPA 200.8	MMY	R-01, U
Antimony	ND	0.80	2.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:31	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:31	EPA 200.8	MMY	R-01, U
Barium	ND	0.80	2.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:31	EPA 200.8	MMY	R-01, U
Beryllium	ND	0.20	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:31	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:31	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:31	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:31	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:31	EPA 200.8	MMY	R-01, U
Iron	ND	40	200	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:31	EPA 200.8	MMY	R-01, U
Lead	ND	0.24	1.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:31	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:31	EPA 200.8	MMY	R-01, U
Molybdenum	ND	0.28	1.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:31	EPA 200.8	MMY	R-01, U
Nickel	ND	1.2	2.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:31	EPA 200.8	MMY	R-01, U
Selenium	ND	1.2	8.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:31	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:31	EPA 200.8	MMY	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:31	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:31	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:31	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-S (18I2517-04) Water Sampled: 09/26/18 17:15 Received: 09/27/18 08:10											
Aluminum	**76**	**20**	**40**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:38	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:38	EPA 200.8	MMY	R-01, U
Arsenic	**3.4**	**0.80**	**2.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:38	EPA 200.8	MMY	
Barium	**70**	**0.80**	**2.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:38	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:38	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:38	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:38	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:38	EPA 200.8	MMY	R-01, U
Copper	**1.6**	**1.6**	**2.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:38	EPA 200.8	MMY	R-01, J
Iron	**190**	**40**	**200**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:38	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:38	EPA 200.8	MMY	R-01, U
Manganese	**36**	**8.0**	**20**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:38	EPA 200.8	MMY	
Molybdenum	**0.57**	**0.28**	**1.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:38	EPA 200.8	MMY	R-01, J
Nickel	**2.3**	**1.2**	**2.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:38	EPA 200.8	MMY	
Selenium	ND	1.2	8.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:38	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:38	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:38	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:38	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:38	EPA 200.8	MMY	R-01, U
LP4-M (18I2517-05) Water Sampled: 09/26/18 17:35 Received: 09/27/18 08:10											
Aluminum	**77**	**20**	**40**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:45	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:45	EPA 200.8	MMY	R-01, U
Arsenic	**3.7**	**0.80**	**2.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:45	EPA 200.8	MMY	
Barium	**67**	**0.80**	**2.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:45	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:45	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:45	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:45	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:45	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:45	EPA 200.8	MMY	R-01, U
Iron	**190**	**40**	**200**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:45	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:45	EPA 200.8	MMY	R-01, U
Manganese	**34**	**8.0**	**20**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:45	EPA 200.8	MMY	
Molybdenum	**0.52**	**0.28**	**1.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:45	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-M (18I2517-05) Water Sampled: 09/26/18 17:35 Received: 09/27/18 08:10											
Nickel	**2.2**	**1.2**	**2.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:45	EPA 200.8	MMY	
Selenium	ND	1.2	8.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:45	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:45	EPA 200.8	MMY	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:45	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:45	EPA 200.8	MMY	R-01, U
Zinc	**13**	**8.0**	**20**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:45	EPA 200.8	MMY	R-01, J
LP4-B (18I2517-06) Water Sampled: 09/26/18 18:00 Received: 09/27/18 08:10											
Aluminum	**160**	**20**	**40**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:52	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:52	EPA 200.8	MMY	R-01, U
Arsenic	**4.7**	**0.80**	**2.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:52	EPA 200.8	MMY	
Barium	**75**	**0.80**	**2.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:52	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:52	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:52	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:52	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:52	EPA 200.8	MMY	R-01, U
Copper	**1.7**	**1.6**	**2.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:52	EPA 200.8	MMY	R-01, J
Iron	**410**	**40**	**200**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:52	EPA 200.8	MMY	
Lead	ND	0.24	1.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:52	EPA 200.8	MMY	R-01, U
Manganese	**94**	**8.0**	**20**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:52	EPA 200.8	MMY	
Molybdenum	**0.53**	**0.28**	**1.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:52	EPA 200.8	MMY	R-01, J
Nickel	**3.1**	**1.2**	**2.0**	**ug/L**	4	AJ83491	10/09/18 08:20	10/12/18 20:52	EPA 200.8	MMY	
Selenium	ND	1.2	8.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:52	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:52	EPA 200.8	MMY	U
Thallium	ND	0.20	0.40	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:52	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:52	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AJ83491	10/09/18 08:20	10/12/18 20:52	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER173.7 (18I2517-01) Water Sampled: 09/26/18 13:00 Received: 09/27/18 08:10											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AJ83562	10/10/18 08:01	10/10/18 14:32	EPA 245.1	LMR	U
RF3.8 (18I2517-02) Water Sampled: 09/26/18 14:30 Received: 09/27/18 08:10											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AJ83562	10/10/18 08:01	10/10/18 14:35	EPA 245.1	LMR	U
ER-BL (18I2517-03) Water Sampled: 09/26/18 10:30 Received: 09/27/18 08:10											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AJ83562	10/10/18 08:01	10/10/18 14:37	EPA 245.1	LMR	U
LP4-S (18I2517-04) Water Sampled: 09/26/18 17:15 Received: 09/27/18 08:10											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AJ83562	10/10/18 08:01	10/10/18 14:45	EPA 245.1	LMR	U
LP4-M (18I2517-05) Water Sampled: 09/26/18 17:35 Received: 09/27/18 08:10											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AJ83562	10/10/18 08:01	10/10/18 14:48	EPA 245.1	LMR	U
LP4-B (18I2517-06) Water Sampled: 09/26/18 18:00 Received: 09/27/18 08:10											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AJ83562	10/10/18 08:01	10/10/18 14:50	EPA 245.1	LMR	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER173.7 (18I2517-01) Water Sampled: 09/26/18 13:00 Received: 09/27/18 08:10											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 22:59	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 22:59	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**0.88**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/12/18 22:59	EPA 200.8	MMY	R-01, J
Barium, dissolved	**100**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/12/18 22:59	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 22:59	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 22:59	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 22:59	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 22:59	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 22:59	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 22:59	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.53**	**0.28**	**1.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/12/18 22:59	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.8**	**1.2**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/12/18 22:59	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 22:59	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 22:59	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 22:59	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 22:59	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 22:59	EPA 200.8	MMY	R-01, U
RF3.8 (18I2517-02) Water Sampled: 09/26/18 14:30 Received: 09/27/18 08:10											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:06	EPA 200.8	MMY	U, R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:06	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**1.7**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 00:06	EPA 200.8	MMY	R-01, J
Barium, dissolved	**110**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 00:06	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:06	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:06	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:06	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:06	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:06	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:06	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.56**	**0.28**	**1.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 00:06	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.8**	**1.2**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 00:06	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:06	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:06	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:06	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
RF3.8 (18I2517-02) Water Sampled: 09/26/18 14:30 Received: 09/27/18 08:10											**FILT**
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:06	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:06	EPA 200.8	MMY	R-01, U
ER-BL (18I2517-03) Water Sampled: 09/26/18 10:30 Received: 09/27/18 08:10											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:12	EPA 200.8	MMY	U, R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:12	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:12	EPA 200.8	MMY	R-01, U
Barium, dissolved	ND	0.80	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:12	EPA 200.8	MMY	R-01, U
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:12	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:12	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:12	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:12	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:12	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:12	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	ND	0.28	1.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:12	EPA 200.8	MMY	R-01, U
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:12	EPA 200.8	MMY	R-01, U
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:12	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:12	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:12	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:12	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:12	EPA 200.8	MMY	R-01, U
LP4-S (18I2517-04) Water Sampled: 09/26/18 17:15 Received: 09/27/18 08:10											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:19	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:19	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**3.3**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 00:19	EPA 200.8	MMY	R-01
Barium, dissolved	**65**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 00:19	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:19	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:19	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:19	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:19	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:19	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:19	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.49**	**0.28**	**1.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 00:19	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.6**	**1.2**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 00:19	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-S (18I2517-04) Water Sampled: 09/26/18 17:15 Received: 09/27/18 08:10											**FILT**
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:19	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:19	EPA 200.8	MMY	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:19	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:19	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:19	EPA 200.8	MMY	R-01, U
LP4-M (18I2517-05) Water Sampled: 09/26/18 17:35 Received: 09/27/18 08:10											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:26	EPA 200.8	MMY	U, R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:26	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**3.2**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 00:26	EPA 200.8	MMY	R-01
Barium, dissolved	**66**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 00:26	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:26	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:26	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:26	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:26	EPA 200.8	MMY	R-01, U
Copper, dissolved	**1.9**	**1.6**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 00:26	EPA 200.8	MMY	R-01, J
Lead, dissolved	ND	0.24	1.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:26	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.54**	**0.28**	**1.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 00:26	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.8**	**1.2**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 00:26	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:26	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:26	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:26	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:26	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:26	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-B (18I2517-06) Water Sampled: 09/26/18 18:00 Received: 09/27/18 08:10											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:32	EPA 200.8	MMY	U, R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:32	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**3.6**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 00:32	EPA 200.8	MMY	
Barium, dissolved	**70**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 00:32	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:32	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:32	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:32	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:32	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:32	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:32	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.51**	**0.28**	**1.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 00:32	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.8**	**1.2**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 00:32	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:32	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:32	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:32	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:32	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 00:32	EPA 200.8	MMY	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER173.7 (18I2517-01) Water Sampled: 09/26/18 13:00 Received: 09/27/18 08:10											
Mercury	**0.986**	**0.200**	**0.500**	**ng/l**	1	AJ83262	10/03/18 14:00	10/04/18 18:04	EPA 1631E	AJC	
RF3.8 (18I2517-02) Water Sampled: 09/26/18 14:30 Received: 09/27/18 08:10											
Mercury	**1.26**	**0.200**	**0.500**	**ng/l**	1	AJ83262	10/03/18 14:00	10/04/18 18:12	EPA 1631E	AJC	
ER-BL (18I2517-03) Water Sampled: 09/26/18 10:30 Received: 09/27/18 08:10											
Mercury	ND	0.200	0.500	ng/l	1	AJ83262	10/03/18 14:00	10/04/18 18:20	EPA 1631E	AJC	U
LP4-S (18I2517-04) Water Sampled: 09/26/18 17:15 Received: 09/27/18 08:10											
Mercury	**1.57**	**0.200**	**0.500**	**ng/l**	1	AJ83262	10/03/18 14:00	10/04/18 18:28	EPA 1631E	AJC	
LP4-M (18I2517-05) Water Sampled: 09/26/18 17:35 Received: 09/27/18 08:10											
Mercury	**1.41**	**0.200**	**0.500**	**ng/l**	1	AJ83262	10/03/18 14:00	10/04/18 18:36	EPA 1631E	AJC	
LP4-B (18I2517-06) Water Sampled: 09/26/18 18:00 Received: 09/27/18 08:10											
Mercury	**2.74**	**0.200**	**0.500**	**ng/l**	1	AJ83641	10/11/18 14:00	10/12/18 14:13	EPA 1631E	AJC	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER173.7 (18I2517-01) Water Sampled: 09/26/18 13:00 Received: 09/27/18 08:10											
Ammonia as N	ND	0.10	0.20	mg/L	1	AJ83426	10/08/18 11:00	10/08/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI84213	09/28/18 08:00	10/03/18 14:30	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AJ83619	09/28/18 09:40	10/16/18 14:00	SM10200H	EV	U
Dissolved Organic Carbon	**0.768**	**0.600**	**1.00**	**mg/L**	1	AJ84026	10/22/18 06:54	10/22/18 20:10	SM5310C	JIM	J
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AJ83623	10/11/18 08:14	10/11/18 14:07	EPA 1664A	STS	U
Total Dissolved Solids	**190**	**10**	**10**	**mg/L**	1	AJ83250	10/03/18 19:02	10/10/18 13:20	SM2540C	PBM	
Total Suspended Solids	ND	0.30	1.0	mg/L	1	AJ83202	10/02/18 09:30	10/08/18 09:45	SM2540D	MRL	U
Bicarbonate Alkalinity as CaCO3	**150**	**1.0**	**5.0**	**mg/L**	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	U
Total Alkalinity as CaCO3	**150**	**1.0**	**5.0**	**mg/L**	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	
Nitrate + Nitrite as N	**0.031**	**0.0086**	**0.40**	**mg/L**	1	AJ83405	10/05/18 12:44	10/08/18 15:04	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.14**	**0.050**	**1.0**	**mg/L**	1	AJ83554	10/10/18 07:07	10/11/18 10:53	SM4500-Norg B	JVO	J
Hardness, Total	**159**	**1**	**5**	**mg/L**	1	AJ83612	10/11/18 09:35	10/15/18 16:24	SM2340B	MAM	
Phosphorus, total	**0.025**	**0.010**	**0.040**	**mg/L**	1	AJ83490	10/09/18 09:00	10/09/18 13:00	SM4500-P E	SMS	J
Total Organic Carbon	**0.759**	**0.300**	**1.00**	**mg/L**	1	AJ83834	10/16/18 09:43	10/19/18 14:36	SM5310C	JIM	J
RF3.8 (18I2517-02) Water Sampled: 09/26/18 14:30 Received: 09/27/18 08:10											
Ammonia as N	ND	0.10	0.20	mg/L	1	AJ83426	10/08/18 11:00	10/08/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI84213	09/28/18 08:00	10/03/18 14:30	SM5210B	WCS	U
Chlorophyll-a	**0.0064**	**0.0010**	**0.010**	**mg/L**	1	AJ83619	09/28/18 09:40	10/16/18 14:00	SM10200H	EV	J
Dissolved Organic Carbon	**0.883**	**0.600**	**1.00**	**mg/L**	1	AJ84026	10/22/18 06:54	10/22/18 20:29	SM5310C	JIM	J
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AJ83623	10/11/18 08:14	10/11/18 14:07	EPA 1664A	STS	U
Total Dissolved Solids	**280**	**10**	**10**	**mg/L**	1	AJ83250	10/03/18 19:02	10/10/18 13:20	SM2540C	PBM	
Total Suspended Solids	**1.7**	**0.30**	**1.0**	**mg/L**	1	AJ83202	10/02/18 09:30	10/08/18 09:45	SM2540D	MRL	
Bicarbonate Alkalinity as CaCO3	**170**	**1.0**	**5.0**	**mg/L**	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	**10**	**1.0**	**5.0**	**mg/L**	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	U
Total Alkalinity as CaCO3	**180**	**1.0**	**5.0**	**mg/L**	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	
Nitrate + Nitrite as N	**0.039**	**0.0086**	**0.40**	**mg/L**	1	AJ83405	10/05/18 12:44	10/08/18 15:04	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.18**	**0.050**	**1.0**	**mg/L**	1	AJ83554	10/10/18 07:07	10/11/18 10:53	SM4500-Norg B	JVO	J
Hardness, Total	**181**	**1**	**5**	**mg/L**	1	AJ83612	10/11/18 09:35	10/15/18 16:37	SM2340B	MAM	
Phosphorus, total	**0.025**	**0.010**	**0.040**	**mg/L**	1	AJ83490	10/09/18 09:00	10/09/18 13:00	SM4500-P E	SMS	J
Total Organic Carbon	**0.691**	**0.300**	**1.00**	**mg/L**	1	AJ83834	10/16/18 09:43	10/19/18 14:55	SM5310C	JIM	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER-BL (18I2517-03) Water Sampled: 09/26/18 10:30 Received: 09/27/18 08:10											
Ammonia as N	**0.14**	**0.10**	**0.20**	**mg/L**	1	AJ83426	10/08/18 11:00	10/08/18 16:00	SM4500NH3C	FCM	J
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI84213	09/28/18 08:00	10/03/18 14:30	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AJ83619	09/28/18 09:40	10/16/18 14:00	SM10200H	EV	U
Dissolved Organic Carbon	ND	0.600	1.00	mg/L	1	AJ84026	10/22/18 06:54	10/22/18 20:49	SM5310C	JIM	U
Oil & Grease (HEM)	**1.7**	**1.4**	**5.0**	**mg/L**	1	AJ83623	10/11/18 08:14	10/11/18 14:07	EPA 1664A	STS	J
Sulfide	ND	0.020	0.10	mg/L	1	AJ83267	10/03/18 15:00	10/03/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	ND	10	10	mg/L	1	AJ83250	10/03/18 19:02	10/10/18 13:20	SM2540C	PBM	U
Total Suspended Solids	ND	0.30	1.0	mg/L	1	AJ83202	10/02/18 09:30	10/08/18 09:45	SM2540D	MRL	U
Bicarbonate Alkalinity as CaCO3	**4.0**	**1.0**	**5.0**	**mg/L**	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	J
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	U
Total Alkalinity as CaCO3	**4.0**	**1.0**	**5.0**	**mg/L**	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	J
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AJ83405	10/05/18 12:44	10/08/18 15:04	Calculation	RLG	U
Total Kjeldahl Nitrogen	**0.070**	**0.050**	**1.0**	**mg/L**	1	AJ83554	10/10/18 07:07	10/11/18 10:53	SM4500-Norg B	JVO	J
Hardness, Total	ND	1	5	mg/L	1	AJ83612	10/11/18 09:35	10/15/18 16:45	SM2340B	MAM	U
Phosphorus, total	ND	0.010	0.040	mg/L	1	AJ83490	10/09/18 09:00	10/09/18 13:00	SM4500-P E	SMS	U
Total Organic Carbon	ND	0.300	1.00	mg/L	1	AJ83834	10/16/18 09:43	10/19/18 15:15	SM5310C	JIM	U
LP4-S (18I2517-04) Water Sampled: 09/26/18 17:15 Received: 09/27/18 08:10											
Ammonia as N	ND	0.10	0.20	mg/L	1	AJ83426	10/08/18 11:00	10/08/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	**3.7**	**2.0**	**5.0**	**mg/L**	1	AI84213	09/28/18 08:00	10/03/18 14:30	SM5210B	WCS	J
Chlorophyll-a	**0.024**	**0.0050**	**0.010**	**mg/L**	5	AJ83619	09/28/18 09:40	10/16/18 14:00	SM10200H	EV	
Dissolved Organic Carbon	**2.82**	**0.600**	**1.00**	**mg/L**	1	AJ84026	10/22/18 06:54	10/22/18 21:08	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AJ83623	10/11/18 08:14	10/11/18 14:07	EPA 1664A	STS	U
Sulfide	ND	0.020	0.10	mg/L	1	AJ83267	10/03/18 15:00	10/03/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**120**	**10**	**10**	**mg/L**	1	AJ83250	10/03/18 19:02	10/10/18 13:20	SM2540C	PBM	
Total Suspended Solids	**4.4**	**0.30**	**1.0**	**mg/L**	1	AJ83202	10/02/18 09:30	10/08/18 09:45	SM2540D	MRL	
Bicarbonate Alkalinity as CaCO3	**86**	**1.0**	**5.0**	**mg/L**	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	U
Total Alkalinity as CaCO3	**86**	**1.0**	**5.0**	**mg/L**	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AJ83405	10/05/18 12:44	10/08/18 15:04	Calculation	RLG	U
Total Kjeldahl Nitrogen	**0.46**	**0.050**	**1.0**	**mg/L**	1	AJ83554	10/10/18 07:07	10/11/18 10:53	SM4500-Norg B	JVO	J
Hardness, Total	**84**	**1**	**5**	**mg/L**	1	AJ83612	10/11/18 09:35	10/15/18 16:50	SM2340B	MAM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-S (18I2517-04) Water Sampled: 09/26/18 17:15 Received: 09/27/18 08:10											
Phosphorus, total	**0.034**	**0.010**	**0.040**	**mg/L**	1	AJ83490	10/09/18 09:00	10/09/18 13:00	SM4500-P E	SMS	J
Total Organic Carbon	**3.11**	**0.300**	**1.00**	**mg/L**	1	AJ83834	10/16/18 09:43	10/19/18 15:34	SM5310C	JIM	
LP4-M (18I2517-05) Water Sampled: 09/26/18 17:35 Received: 09/27/18 08:10											
Ammonia as N	ND	0.10	0.20	mg/L	1	AJ83426	10/08/18 11:00	10/08/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	**4.4**	**2.0**	**5.0**	**mg/L**	1	AI84213	09/28/18 08:00	10/03/18 14:30	SM5210B	WCS	J
Chlorophyll-a	**0.032**	**0.0050**	**0.010**	**mg/L**	5	AJ83619	09/28/18 09:40	10/16/18 14:00	SM10200H	EV	
Dissolved Organic Carbon	**2.92**	**0.600**	**1.00**	**mg/L**	1	AJ84026	10/22/18 06:54	10/22/18 21:28	SM5310C	JIM	
Oil & Grease (HEM)	**3.2**	**1.4**	**5.0**	**mg/L**	1	AJ83623	10/11/18 08:14	10/11/18 14:07	EPA 1664A	STS	J
Sulfide	ND	0.020	0.10	mg/L	1	AJ83267	10/03/18 15:00	10/03/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**110**	**10**	**10**	**mg/L**	1	AJ83250	10/03/18 19:02	10/10/18 13:20	SM2540C	PBM	
Total Suspended Solids	**5.4**	**0.30**	**1.0**	**mg/L**	1	AJ83202	10/02/18 09:30	10/08/18 09:45	SM2540D	MRL	
Bicarbonate Alkalinity as CaCO3	**88**	**1.0**	**5.0**	**mg/L**	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	U
Total Alkalinity as CaCO3	**88**	**1.0**	**5.0**	**mg/L**	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	
Nitrate + Nitrite as N	**0.035**	**0.0086**	**0.40**	**mg/L**	1	AJ83405	10/05/18 12:44	10/08/18 15:04	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.49**	**0.050**	**1.0**	**mg/L**	1	AJ83554	10/10/18 07:07	10/11/18 10:53	SM4500-Norg B	JVO	J
Hardness, Total	**83**	**1**	**5**	**mg/L**	1	AJ83612	10/11/18 09:35	10/15/18 16:55	SM2340B	MAM	
Phosphorus, total	**0.036**	**0.010**	**0.040**	**mg/L**	1	AJ83490	10/09/18 09:00	10/09/18 13:00	SM4500-P E	SMS	J
Total Organic Carbon	**3.18**	**0.300**	**1.00**	**mg/L**	1	AJ83834	10/16/18 09:43	10/19/18 15:53	SM5310C	JIM	
LP4-B (18I2517-06) Water Sampled: 09/26/18 18:00 Received: 09/27/18 08:10											
Ammonia as N	ND	0.10	0.20	mg/L	1	AJ83426	10/08/18 11:00	10/08/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	**3.5**	**2.0**	**5.0**	**mg/L**	1	AI84213	09/28/18 08:00	10/03/18 14:30	SM5210B	WCS	J
Chlorophyll-a	**0.019**	**0.0050**	**0.010**	**mg/L**	5	AJ83619	09/28/18 09:40	10/16/18 14:00	SM10200H	EV	
Dissolved Organic Carbon	**3.61**	**0.600**	**1.00**	**mg/L**	1	AJ84026	10/22/18 06:54	10/22/18 21:47	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AJ83623	10/11/18 08:14	10/11/18 14:07	EPA 1664A	STS	U
Sulfide	ND	0.020	0.10	mg/L	1	AJ83267	10/03/18 15:00	10/03/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**120**	**10**	**10**	**mg/L**	1	AJ83250	10/03/18 19:02	10/10/18 13:20	SM2540C	PBM	
Total Suspended Solids	**6.5**	**0.30**	**1.0**	**mg/L**	1	AJ83202	10/02/18 09:30	10/08/18 09:45	SM2540D	MRL	
Bicarbonate Alkalinity as CaCO3	**95**	**1.0**	**5.0**	**mg/L**	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-B (18I2517-06) Water Sampled: 09/26/18 18:00 Received: 09/27/18 08:10											
Total Alkalinity as CaCO3	**95**	**1.0**	**5.0**	**mg/L**	1	AJ83410	10/09/18 08:00	10/09/18 16:42	SM2320B	CEF	
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AJ83405	10/05/18 12:44	10/08/18 15:04	Calculation	RLG	U
Total Kjeldahl Nitrogen	**0.44**	**0.050**	**1.0**	**mg/L**	1	AJ83554	10/10/18 07:07	10/11/18 10:53	SM4500-Norg B	JVO	J
Hardness, Total	**96**	**1**	**5**	**mg/L**	1	AJ83612	10/11/18 09:35	10/15/18 16:59	SM2340B	MAM	
Phosphorus, total	**0.050**	**0.010**	**0.040**	**mg/L**	1	AJ83490	10/09/18 09:00	10/09/18 13:00	SM4500-P E	SMS	
Total Organic Carbon	**3.12**	**0.300**	**1.00**	**mg/L**	1	AJ83834	10/16/18 09:43	10/19/18 16:13	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER173.7 (18I2517-01) Water Sampled: 09/26/18 13:00 Received: 09/27/18 08:10											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI84137	09/27/18 22:01	09/27/18 22:01	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI84137	09/27/18 22:01	09/27/18 22:01	EPA 300.0	SMP	U
Orthophosphate	**0.15**	**0.10**	**0.30**	**mg/L**	1	AI84137	09/27/18 22:01	09/27/18 22:01	EPA 300.0	SMP	J
RF3.8 (18I2517-02) Water Sampled: 09/26/18 14:30 Received: 09/27/18 08:10											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI84137	09/27/18 22:33	09/27/18 22:33	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI84137	09/27/18 22:33	09/27/18 22:33	EPA 300.0	SMP	U
Orthophosphate	**0.14**	**0.10**	**0.30**	**mg/L**	1	AI84137	09/27/18 22:33	09/27/18 22:33	EPA 300.0	SMP	J
ER-BL (18I2517-03) Water Sampled: 09/26/18 10:30 Received: 09/27/18 08:10											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI84137	09/27/18 23:06	09/27/18 23:06	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI84137	09/27/18 23:06	09/27/18 23:06	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI84137	09/27/18 23:06	09/27/18 23:06	EPA 300.0	SMP	U
LP4-S (18I2517-04) Water Sampled: 09/26/18 17:15 Received: 09/27/18 08:10											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI84137	09/27/18 23:39	09/27/18 23:39	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI84137	09/27/18 23:39	09/27/18 23:39	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI84137	09/27/18 23:39	09/27/18 23:39	EPA 300.0	SMP	U
LP4-M (18I2517-05) Water Sampled: 09/26/18 17:35 Received: 09/27/18 08:10											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI84137	09/27/18 23:55	09/27/18 23:55	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI84137	09/27/18 23:55	09/27/18 23:55	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI84137	09/27/18 23:55	09/27/18 23:55	EPA 300.0	SMP	U
LP4-B (18I2517-06) Water Sampled: 09/26/18 18:00 Received: 09/27/18 08:10											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI84137	09/28/18 00:12	09/28/18 00:12	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI84137	09/28/18 00:12	09/28/18 00:12	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI84137	09/28/18 00:12	09/28/18 00:12	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

TPH by EPA/LUFT GC Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER173.7 (18I2517-01) Water Sampled: 09/26/18 13:00 Received: 09/27/18 08:10											
TPH as Diesel	ND	50	250	ug/L	1	AJ83114	10/01/18 06:24	10/11/18 00:20	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AJ83114	10/01/18 06:24	10/11/18 00:20	8015DRO	DLD	U
Surrogate: Tetratetracontane		*92.2 %*	*39-120*			*AJ83114*	*10/01/18 06:24*	*10/11/18 00:20*	*8015DRO*	*DLD*	
RF3.8 (18I2517-02) Water Sampled: 09/26/18 14:30 Received: 09/27/18 08:10											
TPH as Diesel	ND	50	250	ug/L	1	AJ83114	10/01/18 06:24	10/11/18 00:55	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AJ83114	10/01/18 06:24	10/11/18 00:55	8015DRO	DLD	U
Surrogate: Tetratetracontane		*96.6 %*	*39-120*			*AJ83114*	*10/01/18 06:24*	*10/11/18 00:55*	*8015DRO*	*DLD*	
ER-BL (18I2517-03) Water Sampled: 09/26/18 10:30 Received: 09/27/18 08:10											
TPH as Diesel	ND	50	250	ug/L	1	AJ83114	10/01/18 06:24	10/11/18 01:30	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AJ83114	10/01/18 06:24	10/11/18 01:30	8015DRO	DLD	U
Surrogate: Tetratetracontane		*93.4 %*	*39-120*			*AJ83114*	*10/01/18 06:24*	*10/11/18 01:30*	*8015DRO*	*DLD*	
LP4-S (18I2517-04) Water Sampled: 09/26/18 17:15 Received: 09/27/18 08:10											
TPH as Diesel	ND	50	250	ug/L	1	AJ83114	10/01/18 06:24	10/11/18 02:05	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AJ83114	10/01/18 06:24	10/11/18 02:05	8015DRO	DLD	U
Surrogate: Tetratetracontane		*103 %*	*39-120*			*AJ83114*	*10/01/18 06:24*	*10/11/18 02:05*	*8015DRO*	*DLD*	
LP4-M (18I2517-05) Water Sampled: 09/26/18 17:35 Received: 09/27/18 08:10											
TPH as Diesel	ND	50	250	ug/L	1	AJ83114	10/01/18 06:24	10/11/18 02:39	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AJ83114	10/01/18 06:24	10/11/18 02:39	8015DRO	DLD	U
Surrogate: Tetratetracontane		*94.8 %*	*39-120*			*AJ83114*	*10/01/18 06:24*	*10/11/18 02:39*	*8015DRO*	*DLD*	
LP4-B (18I2517-06) Water Sampled: 09/26/18 18:00 Received: 09/27/18 08:10											
TPH as Diesel	ND	50	250	ug/L	1	AJ83114	10/01/18 06:24	10/11/18 03:14	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AJ83114	10/01/18 06:24	10/11/18 03:14	8015DRO	DLD	U
Surrogate: Tetratetracontane		*112 %*	*39-120*			*AJ83114*	*10/01/18 06:24*	*10/11/18 03:14*	*8015DRO*	*DLD*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

TPH by EPA/LUFT GCMS Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER173.7 (18I2517-01) Water Sampled: 09/26/18 13:00 Received: 09/27/18 08:10											
TPH as Gasoline	ND	50	50	ug/L	1	AJ83268	10/03/18 12:00	10/03/18 15:42	8260GRO	JV/MM	U
Surrogate: Toluene-d8		*94.9 %*	*76-129*			*AJ83268*	*10/03/18 12:00*	*10/03/18 15:42*	*8260GRO*	*JV/MM*	
RF3.8 (18I2517-02) Water Sampled: 09/26/18 14:30 Received: 09/27/18 08:10											
TPH as Gasoline	ND	50	50	ug/L	1	AJ83268	10/03/18 12:00	10/03/18 16:14	8260GRO	JV/MM	U
Surrogate: Toluene-d8		*94.6 %*	*76-129*			*AJ83268*	*10/03/18 12:00*	*10/03/18 16:14*	*8260GRO*	*JV/MM*	
ER-BL (18I2517-03) Water Sampled: 09/26/18 10:30 Received: 09/27/18 08:10											
TPH as Gasoline	ND	50	50	ug/L	1	AJ83268	10/03/18 12:00	10/03/18 16:46	8260GRO	JV/MM	U
Surrogate: Toluene-d8		*94.9 %*	*76-129*			*AJ83268*	*10/03/18 12:00*	*10/03/18 16:46*	*8260GRO*	*JV/MM*	
LP4-S (18I2517-04) Water Sampled: 09/26/18 17:15 Received: 09/27/18 08:10											
TPH as Gasoline	ND	50	50	ug/L	1	AJ83268	10/03/18 12:00	10/03/18 17:18	8260GRO	JV/MM	U
Surrogate: Toluene-d8		*94.1 %*	*76-129*			*AJ83268*	*10/03/18 12:00*	*10/03/18 17:18*	*8260GRO*	*JV/MM*	
LP4-M (18I2517-05) Water Sampled: 09/26/18 17:35 Received: 09/27/18 08:10											
TPH as Gasoline	ND	50	50	ug/L	1	AJ83268	10/03/18 12:00	10/03/18 17:49	8260GRO	JV/MM	U
Surrogate: Toluene-d8		*93.9 %*	*76-129*			*AJ83268*	*10/03/18 12:00*	*10/03/18 17:49*	*8260GRO*	*JV/MM*	
LP4-B (18I2517-06) Water Sampled: 09/26/18 18:00 Received: 09/27/18 08:10											
TPH as Gasoline	ND	50	50	ug/L	1	AJ83268	10/03/18 12:00	10/03/18 18:21	8260GRO	JV/MM	U
Surrogate: Toluene-d8		*93.4 %*	*76-129*			*AJ83268*	*10/03/18 12:00*	*10/03/18 18:21*	*8260GRO*	*JV/MM*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER173.7 (18I2517-01) Water Sampled: 09/26/18 13:00 Received: 09/27/18 08:10											
Benzene	ND	0.30	0.30	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 15:42	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 15:42	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 15:42	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 15:42	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 15:42	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 15:42	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 15:42	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 15:42	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 15:42	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*119 %*	*70-130*			*AJ83269*	*10/03/18 12:00*	*10/03/18 15:42*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*105 %*	*70-130*			*AJ83269*	*10/03/18 12:00*	*10/03/18 15:42*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*116 %*	*70-130*			*AJ83269*	*10/03/18 12:00*	*10/03/18 15:42*	*EPA 8260B*	*JV*	
RF3.8 (18I2517-02) Water Sampled: 09/26/18 14:30 Received: 09/27/18 08:10											
Benzene	ND	0.30	0.30	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 16:14	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 16:14	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 16:14	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 16:14	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 16:14	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 16:14	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 16:14	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 16:14	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 16:14	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*120 %*	*70-130*			*AJ83269*	*10/03/18 12:00*	*10/03/18 16:14*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*102 %*	*70-130*			*AJ83269*	*10/03/18 12:00*	*10/03/18 16:14*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*116 %*	*70-130*			*AJ83269*	*10/03/18 12:00*	*10/03/18 16:14*	*EPA 8260B*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER-BL (18I2517-03) Water Sampled: 09/26/18 10:30 Received: 09/27/18 08:10											
Benzene	ND	0.30	0.30	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 16:46	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 16:46	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 16:46	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 16:46	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 16:46	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 16:46	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 16:46	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 16:46	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 16:46	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*122 %*	*70-130*			*AJ83269*	*10/03/18 12:00*	*10/03/18 16:46*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*106 %*	*70-130*			*AJ83269*	*10/03/18 12:00*	*10/03/18 16:46*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*116 %*	*70-130*			*AJ83269*	*10/03/18 12:00*	*10/03/18 16:46*	*EPA 8260B*	*JV*	
LP4-S (18I2517-04) Water Sampled: 09/26/18 17:15 Received: 09/27/18 08:10											
Benzene	ND	0.30	0.30	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 17:18	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 17:18	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 17:18	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 17:18	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 17:18	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 17:18	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 17:18	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 17:18	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 17:18	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*120 %*	*70-130*			*AJ83269*	*10/03/18 12:00*	*10/03/18 17:18*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*103 %*	*70-130*			*AJ83269*	*10/03/18 12:00*	*10/03/18 17:18*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*115 %*	*70-130*			*AJ83269*	*10/03/18 12:00*	*10/03/18 17:18*	*EPA 8260B*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-M (18I2517-05) Water Sampled: 09/26/18 17:35 Received: 09/27/18 08:10											
Benzene	ND	0.30	0.30	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 17:49	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 17:49	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 17:49	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 17:49	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 17:49	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 17:49	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 17:49	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 17:49	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 17:49	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*120 %*	*70-130*			*AJ83269*	*10/03/18 12:00*	*10/03/18 17:49*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*102 %*	*70-130*			*AJ83269*	*10/03/18 12:00*	*10/03/18 17:49*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*116 %*	*70-130*			*AJ83269*	*10/03/18 12:00*	*10/03/18 17:49*	*EPA 8260B*	*JV*	
LP4-B (18I2517-06) Water Sampled: 09/26/18 18:00 Received: 09/27/18 08:10											
Benzene	ND	0.30	0.30	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 18:21	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 18:21	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 18:21	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 18:21	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 18:21	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 18:21	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 18:21	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 18:21	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83269	10/03/18 12:00	10/03/18 18:21	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*118 %*	*70-130*			*AJ83269*	*10/03/18 12:00*	*10/03/18 18:21*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*105 %*	*70-130*			*AJ83269*	*10/03/18 12:00*	*10/03/18 18:21*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*114 %*	*70-130*			*AJ83269*	*10/03/18 12:00*	*10/03/18 18:21*	*EPA 8260B*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83612 - Metals Digest											
Blank (AJ83612-BLK1)					Prepared: 10/11/18 Analyzed: 10/12/18						
Calcium	ND	0.080	1.0	mg/L							U
Magnesium	ND	0.030	1.0	mg/L							U
LCS (AJ83612-BS1)					Prepared: 10/11/18 Analyzed: 10/12/18						
Calcium	7.24	0.080	1.0	mg/L	8.00		90.5	85-115			
Magnesium	7.25	0.030	1.0	mg/L	8.00		90.6	85-115			
Duplicate (AJ83612-DUP1)		**Source: 18J0880-01**			Prepared: 10/11/18 Analyzed: 10/12/18						
Calcium	128	0.080	1.0	mg/L		132			3.08	20	
Magnesium	43.9	0.030	1.0	mg/L		45.5			3.61	20	
Matrix Spike (AJ83612-MS1)		**Source: 18J0880-01**			Prepared: 10/11/18 Analyzed: 10/12/18						
Calcium	106	0.080	1.0	mg/L	8.00	132	NR	70-130			QM-4X
Magnesium	40.9	0.030	1.0	mg/L	8.00	45.5	NR	70-130			QM-4X
Matrix Spike (AJ83612-MS2)		**Source: 18I2487-04**			Prepared: 10/11/18 Analyzed: 10/12/18						
Calcium	13.0	0.080	1.0	mg/L	8.00	5.06	98.7	70-130			
Magnesium	8.38	0.030	1.0	mg/L	8.00	0.669	96.3	70-130			
Matrix Spike Dup (AJ83612-MSD1)		**Source: 18J0880-01**			Prepared: 10/11/18 Analyzed: 10/12/18						
Calcium	106	0.080	1.0	mg/L	8.00	132	NR	70-130	0.0991	20	QM-4X
Magnesium	41.7	0.030	1.0	mg/L	8.00	45.5	NR	70-130	1.91	20	QM-4X
Batch AJ83624 - EPA 245.1 Hg Water											
LCS (AJ83624-BS1)					Prepared & Analyzed: 10/11/18						
Mercury	2.60	0.060	0.20	ug/L	2.50		104	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83624 - EPA 245.1 Hg Water											
Duplicate (AJ83624-DUP1)		**Source: 18I2599-01**			Prepared & Analyzed: 10/11/18						
Mercury	ND	0.060	0.20	ug/L		ND				20	U
MRL Check (AJ83624-MRL1)					Prepared & Analyzed: 10/11/18						
Mercury	0.506	0.060	0.20	ug/L	0.500		101	0-200			
Matrix Spike (AJ83624-MS1)		**Source: 18I2599-01**			Prepared & Analyzed: 10/11/18						
Mercury	2.59	0.060	0.20	ug/L	2.50	ND	103	70-130			
Matrix Spike (AJ83624-MS2)		**Source: 18I2599-02**			Prepared & Analyzed: 10/11/18						
Mercury	2.58	0.060	0.20	ug/L	2.50	ND	103	70-130			
Matrix Spike Dup (AJ83624-MSD1)		**Source: 18I2599-01**			Prepared & Analyzed: 10/11/18						
Mercury	2.64	0.060	0.20	ug/L	2.50	ND	106	70-130	2.07	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83491 - EPA 200.8											
Blank (AJ83491-BLK1)					Prepared: 10/09/18 Analyzed: 10/11/18						
Aluminum	ND	5.0	10	ug/L							U
Antimony	ND	0.20	0.50	ug/L							U
Arsenic	ND	0.20	0.50	ug/L							U
Barium	ND	0.20	0.50	ug/L							U
Beryllium	ND	0.050	0.10	ug/L							U
Cadmium	ND	0.060	0.10	ug/L							U
Chromium	ND	0.50	0.50	ug/L							U
Cobalt	ND	0.10	0.10	ug/L							U
Copper	ND	0.40	0.50	ug/L							U
Iron	ND	10	50	ug/L							U
Lead	ND	0.060	0.25	ug/L							U
Manganese	ND	2.0	5.0	ug/L							U
Molybdenum	ND	0.070	0.25	ug/L							U
Nickel	ND	0.30	0.50	ug/L							U
Selenium	ND	0.30	2.0	ug/L							U
Silver	ND	0.050	0.10	ug/L							U
Thallium	ND	0.050	0.10	ug/L							U
Vanadium	ND	0.50	1.0	ug/L							U
Zinc	ND	2.0	5.0	ug/L							U
LCS (AJ83491-BS1)					Prepared: 10/09/18 Analyzed: 10/11/18						
Aluminum	569	5.0	10	ug/L	520		109	85-115			
Antimony	21.3	0.20	0.50	ug/L	20.0		106	85-115			
Arsenic	21.3	0.20	0.50	ug/L	20.0		106	85-115			
Barium	21.2	0.20	0.50	ug/L	20.0		106	85-115			
Beryllium	20.2	0.050	0.10	ug/L	20.0		101	85-115			
Cadmium	20.5	0.060	0.10	ug/L	20.0		103	85-115			
Chromium	22.4	0.50	0.50	ug/L	20.0		112	85-115			
Cobalt	22.0	0.10	0.10	ug/L	20.0		110	85-115			
Copper	19.7	0.40	0.50	ug/L	20.0		98.5	85-115			
Iron	581	10	50	ug/L	520		112	85-115			
Lead	21.0	0.060	0.25	ug/L	20.0		105	85-115			
Manganese	22.3	2.0	5.0	ug/L	20.0		111	85-115			
Molybdenum	21.8	0.070	0.25	ug/L	20.0		109	85-115			
Nickel	22.1	0.30	0.50	ug/L	20.0		110	85-115			

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Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83491 - EPA 200.8											
LCS (AJ83491-BS1)					Prepared: 10/09/18 Analyzed: 10/11/18						
Selenium	21.8	0.30	2.0	ug/L	20.0		109	85-115			
Silver	21.7	0.050	0.10	ug/L	20.0		109	85-115			
Thallium	20.6	0.050	0.10	ug/L	20.0		103	85-115			
Vanadium	22.5	0.50	1.0	ug/L	20.0		112	85-115			
Zinc	103	2.0	5.0	ug/L	100		103	85-115			
Duplicate (AJ83491-DUP1)		**Source: 18I2494-01**			Prepared: 10/09/18 Analyzed: 10/11/18						
Aluminum	64.3	20	40	ug/L		60.3			6.43	20	
Antimony	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic	ND	0.80	2.0	ug/L		ND				20	R-01, U
Barium	9.82	0.80	2.0	ug/L		9.87			0.597	20	
Beryllium	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium	ND	0.24	0.40	ug/L		ND				20	R-01, U
Chromium	ND	2.0	2.0	ug/L		ND				20	R-01, U
Cobalt	ND	0.40	0.40	ug/L		ND				20	R-01, U
Copper	ND	1.6	2.0	ug/L		ND				20	R-01, U
Iron	72.9	40	200	ug/L		70.7			3.13	20	R-01, J
Lead	ND	0.24	1.0	ug/L		ND				20	R-01, U
Manganese	ND	8.0	20	ug/L		ND				20	R-01, U
Molybdenum	0.349	0.28	1.0	ug/L		0.288			19.0	20	R-01, J
Nickel	ND	1.2	2.0	ug/L		ND				20	R-01, U
Selenium	ND	1.2	8.0	ug/L		ND				20	R-01, U
Silver	ND	0.20	0.40	ug/L		ND				20	R-01, U
Thallium	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium	ND	2.0	4.0	ug/L		ND				20	R-01, U
Zinc	ND	8.0	20	ug/L		ND				20	R-01, U
Matrix Spike (AJ83491-MS1)		**Source: 18I2494-01**			Prepared: 10/09/18 Analyzed: 10/11/18						
Aluminum	646	20	40	ug/L	520	60.3	113	70-130			
Antimony	21.8	0.80	2.0	ug/L	20.0	ND	109	70-130			
Arsenic	22.4	0.80	2.0	ug/L	20.0	ND	112	70-130			
Barium	31.9	0.80	2.0	ug/L	20.0	9.87	110	70-130			
Beryllium	20.5	0.20	0.40	ug/L	20.0	ND	103	70-130			
Cadmium	20.8	0.24	0.40	ug/L	20.0	ND	104	70-130			
Chromium	23.9	2.0	2.0	ug/L	20.0	ND	119	70-130			

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2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83491 - EPA 200.8											
Matrix Spike (AJ83491-MS1)		**Source: 18I2494-01**			Prepared: 10/09/18 Analyzed: 10/11/18						
Cobalt	22.3	0.40	0.40	ug/L	20.0	ND	112	70-130			
Copper	20.8	1.6	2.0	ug/L	20.0	ND	104	70-130			
Iron	656	40	200	ug/L	520	70.7	113	70-130			
Lead	24.6	0.24	1.0	ug/L	20.0	ND	123	70-130			
Manganese	23.3	8.0	20	ug/L	20.0	ND	117	70-130			
Molybdenum	23.0	0.28	1.0	ug/L	20.0	0.288	114	70-130			
Nickel	23.1	1.2	2.0	ug/L	20.0	ND	115	70-130			
Selenium	20.8	1.2	8.0	ug/L	20.0	ND	104	70-130			
Silver	22.7	0.20	0.40	ug/L	20.0	ND	114	70-130			
Thallium	23.8	0.20	0.40	ug/L	20.0	ND	119	70-130			
Vanadium	24.4	2.0	4.0	ug/L	20.0	ND	122	70-130			
Zinc	104	8.0	20	ug/L	100	ND	104	70-130			
Matrix Spike (AJ83491-MS2)		**Source: 18I2549-09**			Prepared: 10/09/18 Analyzed: 10/11/18						
Aluminum	783	20	40	ug/L	520	199	112	70-130			
Antimony	22.0	0.80	2.0	ug/L	20.0	ND	110	70-130			
Arsenic	22.6	0.80	2.0	ug/L	20.0	1.34	106	70-130			
Barium	66.4	0.80	2.0	ug/L	20.0	44.6	109	70-130			
Beryllium	20.3	0.20	0.40	ug/L	20.0	ND	101	70-130			
Cadmium	20.2	0.24	0.40	ug/L	20.0	ND	101	70-130			
Chromium	23.8	2.0	2.0	ug/L	20.0	ND	119	70-130			
Cobalt	22.2	0.40	0.40	ug/L	20.0	ND	111	70-130			
Copper	24.3	1.6	2.0	ug/L	20.0	5.03	96.5	70-130			
Iron	1890	40	200	ug/L	520	1270	118	70-130			
Lead	24.2	0.24	1.0	ug/L	20.0	0.769	117	70-130			
Manganese	95.3	8.0	20	ug/L	20.0	74.7	103	70-130			
Molybdenum	23.5	0.28	1.0	ug/L	20.0	1.02	113	70-130			
Nickel	24.8	1.2	2.0	ug/L	20.0	2.54	111	70-130			
Selenium	21.1	1.2	8.0	ug/L	20.0	ND	106	70-130			
Silver	21.6	0.20	0.40	ug/L	20.0	ND	108	70-130			
Thallium	23.2	0.20	0.40	ug/L	20.0	ND	116	70-130			
Vanadium	26.6	2.0	4.0	ug/L	20.0	3.67	114	70-130			
Zinc	151	8.0	20	ug/L	100	51.9	98.7	70-130			

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Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83491 - EPA 200.8											
Matrix Spike Dup (AJ83491-MSD1)		**Source: 18I2494-01**			Prepared: 10/09/18 Analyzed: 10/11/18						
Aluminum	651	20	40	ug/L	520	60.3	114	70-130	0.705	20	
Antimony	22.1	0.80	2.0	ug/L	20.0	ND	110	70-130	1.48	20	
Arsenic	22.3	0.80	2.0	ug/L	20.0	ND	112	70-130	0.421	20	
Barium	31.9	0.80	2.0	ug/L	20.0	9.87	110	70-130	0.00360	20	
Beryllium	20.9	0.20	0.40	ug/L	20.0	ND	104	70-130	1.76	20	
Cadmium	21.1	0.24	0.40	ug/L	20.0	ND	105	70-130	1.09	20	
Chromium	23.9	2.0	2.0	ug/L	20.0	ND	119	70-130	0.140	20	
Cobalt	22.6	0.40	0.40	ug/L	20.0	ND	113	70-130	0.927	20	
Copper	21.2	1.6	2.0	ug/L	20.0	ND	106	70-130	2.05	20	
Iron	647	40	200	ug/L	520	70.7	111	70-130	1.41	20	
Lead	24.7	0.24	1.0	ug/L	20.0	ND	124	70-130	0.565	20	
Manganese	23.7	8.0	20	ug/L	20.0	ND	119	70-130	1.67	20	
Molybdenum	23.2	0.28	1.0	ug/L	20.0	0.288	115	70-130	0.912	20	
Nickel	23.4	1.2	2.0	ug/L	20.0	ND	117	70-130	1.50	20	
Selenium	22.2	1.2	8.0	ug/L	20.0	ND	111	70-130	6.20	20	
Silver	22.9	0.20	0.40	ug/L	20.0	ND	115	70-130	0.886	20	
Thallium	24.0	0.20	0.40	ug/L	20.0	ND	120	70-130	1.04	20	
Vanadium	24.7	2.0	4.0	ug/L	20.0	ND	123	70-130	1.15	20	
Zinc	105	8.0	20	ug/L	100	ND	105	70-130	1.47	20	

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2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83562 - EPA 245.1 Hg Water											
Blank (AJ83562-BLK1)					Prepared & Analyzed: 10/10/18						
Mercury, dissolved	ND	0.060	0.20	ug/L							U
LCS (AJ83562-BS1)					Prepared & Analyzed: 10/10/18						
Mercury, dissolved	2.62	0.060	0.20	ug/L	2.50		105	85-115			
Duplicate (AJ83562-DUP1)		**Source: 18I2599-01**			Prepared & Analyzed: 10/10/18						
Mercury, dissolved	ND	0.060	0.20	ug/L		ND				20	U
MRL Check (AJ83562-MRL1)					Prepared & Analyzed: 10/10/18						
Mercury, dissolved	0.528	0.060	0.20	ug/L	0.500		106	0-200			
Matrix Spike (AJ83562-MS1)		**Source: 18I2599-01**			Prepared & Analyzed: 10/10/18						
Mercury, dissolved	2.66	0.060	0.20	ug/L	2.50	ND	107	70-130			
Matrix Spike (AJ83562-MS2)		**Source: 18I2599-02**			Prepared & Analyzed: 10/10/18						
Mercury, dissolved	2.62	0.060	0.20	ug/L	2.50	ND	105	70-130			
Matrix Spike Dup (AJ83562-MSD1)		**Source: 18I2599-01**			Prepared & Analyzed: 10/10/18						
Mercury, dissolved	2.68	0.060	0.20	ug/L	2.50	ND	107	70-130	0.785	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83510 - EPA 200.8 (D)											
Blank (AJ83510-BLK1)					Prepared: 10/10/18 Analyzed: 10/12/18						
Aluminum, dissolved	ND	5.0	10	ug/L							U
Antimony, dissolved	ND	0.20	0.50	ug/L							U
Arsenic, dissolved	0.394	0.20	0.50	ug/L							J
Barium, dissolved	ND	0.20	0.50	ug/L							U
Beryllium, dissolved	ND	0.050	0.10	ug/L							U
Cadmium, dissolved	ND	0.060	0.10	ug/L							U
Chromium, dissolved	ND	0.50	0.50	ug/L							U
Cobalt, dissolved	ND	0.10	0.10	ug/L							U
Copper, dissolved	ND	0.40	0.50	ug/L							U
Lead, dissolved	ND	0.060	0.25	ug/L							U
Molybdenum, dissolved	ND	0.070	0.25	ug/L							U
Nickel, dissolved	ND	0.30	0.50	ug/L							U
Selenium, dissolved	ND	0.30	2.0	ug/L							U
Silver, dissolved	ND	0.050	0.10	ug/L							U
Thallium, dissolved	ND	0.050	0.10	ug/L							U
Vanadium, dissolved	ND	0.50	1.0	ug/L							U
Zinc, dissolved	3.66	2.0	5.0	ug/L							J
LCS (AJ83510-BS1)					Prepared: 10/10/18 Analyzed: 10/12/18						
Aluminum, dissolved	559	5.0	10	ug/L	520		107	85-115			
Antimony, dissolved	21.6	0.20	0.50	ug/L	20.0		108	85-115			
Arsenic, dissolved	20.4	0.20	0.50	ug/L	20.0		102	85-115			
Barium, dissolved	19.2	0.20	0.50	ug/L	20.0		95.8	85-115			
Beryllium, dissolved	23.3	0.050	0.10	ug/L	20.0		117	85-115			
Cadmium, dissolved	19.2	0.060	0.10	ug/L	20.0		95.9	85-115			
Chromium, dissolved	21.1	0.50	0.50	ug/L	20.0		106	85-115			
Cobalt, dissolved	20.7	0.10	0.10	ug/L	20.0		103	85-115			
Copper, dissolved	21.1	0.40	0.50	ug/L	20.0		105	85-115			
Lead, dissolved	21.6	0.060	0.25	ug/L	20.0		108	85-115			
Molybdenum, dissolved	18.0	0.070	0.25	ug/L	20.0		90.2	85-115			
Nickel, dissolved	20.8	0.30	0.50	ug/L	20.0		104	85-115			
Selenium, dissolved	20.4	0.30	2.0	ug/L	20.0		102	85-115			
Silver, dissolved	18.9	0.050	0.10	ug/L	20.0		94.7	85-115			
Thallium, dissolved	20.9	0.050	0.10	ug/L	20.0		105	85-115			
Vanadium, dissolved	21.2	0.50	1.0	ug/L	20.0		106	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83510 - EPA 200.8 (D)											
LCS (AJ83510-BS1)					Prepared: 10/10/18 Analyzed: 10/12/18						
Zinc, dissolved	99.6	2.0	5.0	ug/L	100		99.6	85-115			
Duplicate (AJ83510-DUP1)		**Source: 18I2517-01**			Prepared: 10/10/18 Analyzed: 10/12/18						
Aluminum, dissolved	ND	20	40	ug/L		ND				20	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L		0.878			200	20	R-01, U
Barium, dissolved	105	0.80	2.0	ug/L		104			0.860	20	
Beryllium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L		ND				20	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L		ND				20	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L		ND				20	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L		ND				20	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L		ND				20	R-01, U
Molybdenum, dissolved	0.567	0.28	1.0	ug/L		0.531			6.57	20	R-01, J
Nickel, dissolved	1.86	1.2	2.0	ug/L		1.79			3.80	20	R-01, J
Selenium, dissolved	ND	1.2	8.0	ug/L		ND				20	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L		ND				20	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L		ND				20	R-01, U
MRL Check (AJ83510-MRL1)					Prepared: 10/10/18 Analyzed: 10/12/18						
Zinc, dissolved	10.9	2.0	5.0	ug/L	8.00		136	0-200			
Matrix Spike (AJ83510-MS1)		**Source: 18I2517-01**			Prepared: 10/10/18 Analyzed: 10/12/18						
Aluminum, dissolved	566	20	40	ug/L	520	ND	109	70-130			
Antimony, dissolved	21.8	0.80	2.0	ug/L	20.0	ND	109	70-130			
Arsenic, dissolved	22.4	0.80	2.0	ug/L	20.0	0.878	108	70-130			
Barium, dissolved	125	0.80	2.0	ug/L	20.0	104	107	70-130			
Beryllium, dissolved	24.5	0.20	0.40	ug/L	20.0	ND	123	70-130			
Cadmium, dissolved	19.6	0.24	0.40	ug/L	20.0	ND	97.9	70-130			
Chromium, dissolved	21.1	2.0	2.0	ug/L	20.0	ND	106	70-130			
Cobalt, dissolved	20.5	0.40	0.40	ug/L	20.0	ND	103	70-130			
Copper, dissolved	21.4	1.6	2.0	ug/L	20.0	ND	107	70-130			
Lead, dissolved	21.2	0.24	1.0	ug/L	20.0	ND	106	70-130			
Molybdenum, dissolved	18.8	0.28	1.0	ug/L	20.0	0.531	91.5	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83510 - EPA 200.8 (D)											
Matrix Spike (AJ83510-MS1)		**Source: 18I2517-01**			Prepared: 10/10/18 Analyzed: 10/12/18						
Nickel, dissolved	22.4	1.2	2.0	ug/L	20.0	1.79	103	70-130			
Selenium, dissolved	21.1	1.2	8.0	ug/L	20.0	ND	105	70-130			
Silver, dissolved	19.6	0.20	0.40	ug/L	20.0	ND	98.1	70-130			
Thallium, dissolved	20.7	0.20	0.40	ug/L	20.0	ND	103	70-130			
Vanadium, dissolved	21.8	2.0	4.0	ug/L	20.0	ND	109	70-130			
Zinc, dissolved	99.5	8.0	20	ug/L	100	ND	99.5	70-130			
Matrix Spike (AJ83510-MS2)		**Source: 18I2599-07**			Prepared: 10/10/18 Analyzed: 10/12/18						
Aluminum, dissolved	622	20	40	ug/L	520	ND	120	70-130			
Antimony, dissolved	22.5	0.80	2.0	ug/L	20.0	ND	113	70-130			
Arsenic, dissolved	25.7	0.80	2.0	ug/L	20.0	3.66	110	70-130			
Barium, dissolved	87.4	0.80	2.0	ug/L	20.0	64.9	113	70-130			
Beryllium, dissolved	24.2	0.20	0.40	ug/L	20.0	ND	121	70-130			
Cadmium, dissolved	19.9	0.24	0.40	ug/L	20.0	ND	99.4	70-130			
Chromium, dissolved	22.3	2.0	2.0	ug/L	20.0	ND	112	70-130			
Cobalt, dissolved	21.8	0.40	0.40	ug/L	20.0	ND	109	70-130			
Lead, dissolved	22.6	0.24	1.0	ug/L	20.0	ND	113	70-130			
Molybdenum, dissolved	19.4	0.28	1.0	ug/L	20.0	0.520	94.2	70-130			
Nickel, dissolved	23.2	1.2	2.0	ug/L	20.0	1.58	108	70-130			
Selenium, dissolved	22.4	1.2	8.0	ug/L	20.0	ND	112	70-130			
Silver, dissolved	19.9	0.20	0.40	ug/L	20.0	ND	99.4	70-130			
Thallium, dissolved	22.2	0.20	0.40	ug/L	20.0	ND	111	70-130			
Vanadium, dissolved	22.3	2.0	4.0	ug/L	20.0	ND	111	70-130			
Zinc, dissolved	105	8.0	20	ug/L	100	ND	105	70-130			
Matrix Spike Dup (AJ83510-MSD1)		**Source: 18I2517-01**			Prepared: 10/10/18 Analyzed: 10/12/18						
Aluminum, dissolved	571	20	40	ug/L	520	ND	110	70-130	0.921	20	
Antimony, dissolved	21.5	0.80	2.0	ug/L	20.0	ND	108	70-130	1.23	20	
Arsenic, dissolved	22.9	0.80	2.0	ug/L	20.0	0.878	110	70-130	2.12	20	
Barium, dissolved	125	0.80	2.0	ug/L	20.0	104	104	70-130	0.396	20	
Beryllium, dissolved	23.1	0.20	0.40	ug/L	20.0	ND	116	70-130	5.89	20	
Cadmium, dissolved	19.4	0.24	0.40	ug/L	20.0	ND	96.9	70-130	1.03	20	
Chromium, dissolved	21.1	2.0	2.0	ug/L	20.0	ND	106	70-130	0.141	20	
Cobalt, dissolved	20.5	0.40	0.40	ug/L	20.0	ND	103	70-130	0.0197	20	
Copper, dissolved	22.0	1.6	2.0	ug/L	20.0	ND	110	70-130	2.61	20	

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2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83510 - EPA 200.8 (D)											
Matrix Spike Dup (AJ83510-MSD1)		**Source: 18I2517-01**			Prepared: 10/10/18 Analyzed: 10/12/18						
Lead, dissolved	21.4	0.24	1.0	ug/L	20.0	ND	107	70-130	1.22	20	
Molybdenum, dissolved	18.5	0.28	1.0	ug/L	20.0	0.531	90.0	70-130	1.54	20	
Nickel, dissolved	26.8	1.2	2.0	ug/L	20.0	1.79	125	70-130	17.9	20	
Selenium, dissolved	22.1	1.2	8.0	ug/L	20.0	ND	111	70-130	4.92	20	
Silver, dissolved	19.0	0.20	0.40	ug/L	20.0	ND	94.8	70-130	3.45	20	
Thallium, dissolved	21.0	0.20	0.40	ug/L	20.0	ND	105	70-130	1.21	20	
Vanadium, dissolved	21.9	2.0	4.0	ug/L	20.0	ND	110	70-130	0.675	20	
Zinc, dissolved	101	8.0	20	ug/L	100	ND	101	70-130	1.23	20	

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Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83262 - EPA 1631											
Blank (AJ83262-BLK1)					Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	ND	0.200	0.500	ng/l							U
LCS (AJ83262-BS1)					Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	5.12	0.200	0.500	ng/l	5.00		102	77-123			
Matrix Spike (AJ83262-MS1)		**Source: 18I2017-01**			Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	18.1	0.200	0.500	ng/l	25.0	2.98	60.6	71-125			
Matrix Spike (AJ83262-MS2)		**Source: 18I2371-06**			Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	16.7	0.200	0.500	ng/l	25.0	0.879	63.2	71-125			
Matrix Spike Dup (AJ83262-MSD1)		**Source: 18I2017-01**			Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	18.1	0.200	0.500	ng/l	25.0	2.98	60.6	71-125	0.0552	24	
Matrix Spike Dup (AJ83262-MSD2)		**Source: 18I2371-06**			Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	16.6	0.200	0.500	ng/l	25.0	0.879	62.8	71-125	0.601	24	
Reference (AJ83262-SRM1)					Prepared: 10/03/18 Analyzed: 10/04/18						
Mercury	52.8	0.200	0.500	ng/l	50.0		106	68-125			
Batch AJ83641 - EPA 1631											
Blank (AJ83641-BLK1)					Prepared: 10/11/18 Analyzed: 10/12/18						
Mercury	ND	0.200	0.500	ng/l							U
LCS (AJ83641-BS1)					Prepared: 10/11/18 Analyzed: 10/12/18						
Mercury	5.27	0.200	0.500	ng/l	5.00		105	77-123			

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Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Metals by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83641 - EPA 1631											
Matrix Spike (AJ83641-MS1)		**Source: 18I2517-06**			Prepared: 10/11/18 Analyzed: 10/12/18						
Mercury	28.1	0.200	0.500	ng/l	25.0	2.74	102	71-125			
Matrix Spike (AJ83641-MS2)		**Source: 18J0313-01**			Prepared: 10/11/18 Analyzed: 10/12/18						
Mercury	26.4	0.200	0.500	ng/l	25.0	1.87	98.2	71-125			
Matrix Spike Dup (AJ83641-MSD1)		**Source: 18I2517-06**			Prepared: 10/11/18 Analyzed: 10/12/18						
Mercury	28.2	0.200	0.500	ng/l	25.0	2.74	102	71-125	0.248	24	
Matrix Spike Dup (AJ83641-MSD2)		**Source: 18J0313-01**			Prepared: 10/11/18 Analyzed: 10/12/18						
Mercury	26.9	0.200	0.500	ng/l	25.0	1.87	100	71-125	1.69	24	
Reference (AJ83641-SRM1)					Prepared: 10/11/18 Analyzed: 10/12/18						
Mercury	64.1	0.200	0.500	ng/l	50.0		128	68-125			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84213 - General Preparation											
Blank (AI84213-BLK1)					Prepared: 09/28/18 Analyzed: 10/03/18						
Biochemical Oxygen Demand	ND	2.0	2.0	mg/L							U
Blank (AI84213-BLK2)					Prepared: 09/28/18 Analyzed: 10/03/18						
Biochemical Oxygen Demand	ND	2.0	2.0	mg/L							U
LCS (AI84213-BS2)					Prepared: 09/28/18 Analyzed: 10/03/18						
Biochemical Oxygen Demand	202	2.0	2.0	mg/L	200		101	84-115			
Duplicate (AI84213-DUP2)		**Source: 18I2562-01**			Prepared: 09/28/18 Analyzed: 10/03/18						
Biochemical Oxygen Demand	266	2.0	2.0	mg/L		287			7.59	30	
Batch AJ83202 - General Preparation											
Blank (AJ83202-BLK1)					Prepared: 10/02/18 Analyzed: 10/08/18						
Total Suspended Solids	ND	0.30	1.0	mg/L							U
Duplicate (AJ83202-DUP1)		**Source: 18I2442-01**			Prepared: 10/02/18 Analyzed: 10/08/18						
Total Suspended Solids	167	0.30	1.0	mg/L		196			16.4	30	
Duplicate (AJ83202-DUP2)		**Source: 18I2500-01**			Prepared: 10/02/18 Analyzed: 10/08/18						
Total Suspended Solids	581	0.30	1.0	mg/L		591			1.60	30	
Batch AJ83250 - General Preparation											
Blank (AJ83250-BLK2)					Prepared: 10/03/18 Analyzed: 10/10/18						
Total Dissolved Solids	ND	10	10	mg/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83250 - General Preparation											
Duplicate (AJ83250-DUP1)		**Source: 18I2401-01**			Prepared: 10/03/18 Analyzed: 10/10/18						
Total Dissolved Solids	104	10	10	mg/L		112			7.41	15	
Duplicate (AJ83250-DUP2)		**Source: 18J0063-02**			Prepared: 10/03/18 Analyzed: 10/10/18						
Total Dissolved Solids	96.0	10	10	mg/L		104			8.00	15	
Batch AJ83267 - General Preparation											
Blank (AJ83267-BLK1)					Prepared & Analyzed: 10/03/18						
Sulfide	ND	0.020	0.10	mg/L							U
LCS (AJ83267-BS1)					Prepared & Analyzed: 10/03/18						
Sulfide	0.245	0.020	0.10	mg/L	0.238		103	85-115			
Duplicate (AJ83267-DUP1)		**Source: 18I2517-03**			Prepared & Analyzed: 10/03/18						
Sulfide	ND	0.020	0.10	mg/L		ND				15	U
Matrix Spike (AJ83267-MS1)		**Source: 18I2517-03**			Prepared & Analyzed: 10/03/18						
Sulfide	0.234	0.020	0.10	mg/L	0.238	ND	98.5	80-120			
Matrix Spike Dup (AJ83267-MSD1)		**Source: 18I2517-03**			Prepared & Analyzed: 10/03/18						
Sulfide	0.237	0.020	0.10	mg/L	0.238	ND	99.8	80-120	1.27	15	
Batch AJ83410 - General Preparation											
Duplicate (AJ83410-DUP1)		**Source: 18J0591-01**			Prepared & Analyzed: 10/09/18						
Total Alkalinity as CaCO3	695	1.0	5.0	mg/L		700			0.717	20	
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Bicarbonate Alkalinity as CaCO3	695	1.0	5.0	mg/L		700			0.717	20	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83426 - General Preparation											
LCS (AJ83426-BS1)					Prepared & Analyzed: 10/08/18						
Ammonia as N	4.90	0.10	0.20	mg/L	5.00		98.1	90-110			
LCS Dup (AJ83426-BSD1)					Prepared & Analyzed: 10/08/18						
Ammonia as N	4.64	0.10	0.20	mg/L	5.00		92.8	90-110	5.51	20	
Matrix Spike (AJ83426-MS1)		**Source: 18J0719-02**			Prepared & Analyzed: 10/08/18						
Ammonia as N	9.11	0.10	0.20	mg/L	10.0	ND	91.1	85-115			
Matrix Spike Dup (AJ83426-MSD1)		**Source: 18J0719-02**			Prepared & Analyzed: 10/08/18						
Ammonia as N	9.28	0.10	0.20	mg/L	10.0	ND	92.8	85-115	1.90	20	
Batch AJ83490 - General Prep											
Blank (AJ83490-BLK1)					Prepared & Analyzed: 10/09/18						
Phosphorus, total	ND	0.010	0.040	mg/L							U
LCS (AJ83490-BS1)					Prepared & Analyzed: 10/09/18						
Phosphorus, total	0.191	0.010	0.040	mg/L	0.200		95.4	85-115			
Duplicate (AJ83490-DUP1)		**Source: 18I2401-01**			Prepared & Analyzed: 10/09/18						
Phosphorus, total	0.171	0.010	0.040	mg/L		0.174			1.51	20	
Matrix Spike (AJ83490-MS1)		**Source: 18I2401-01**			Prepared & Analyzed: 10/09/18						
Phosphorus, total	0.357	0.010	0.040	mg/L	0.200	0.174	91.8	70-130			
Matrix Spike (AJ83490-MS2)		**Source: 18I2517-01**			Prepared & Analyzed: 10/09/18						
Phosphorus, total	0.208	0.010	0.040	mg/L	0.200	0.0254	91.1	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83490 - General Prep											
Matrix Spike Dup (AJ83490-MSD1)		**Source: 18I2401-01**			Prepared & Analyzed: 10/09/18						
Phosphorus, total	0.356	0.010	0.040	mg/L	0.200	0.174	91.1	70-130	0.367	20	
Batch AJ83554 - General Prep											
LCS (AJ83554-BS1)					Prepared: 10/10/18 Analyzed: 10/11/18						
Total Kjeldahl Nitrogen	2.86	0.050	1.0	mg/L	2.98		95.9	80-120			
LCS Dup (AJ83554-BSD1)					Prepared: 10/10/18 Analyzed: 10/11/18						
Total Kjeldahl Nitrogen	2.86	0.050	1.0	mg/L	2.98		95.9	80-120	0.00	20	
Matrix Spike (AJ83554-MS1)		**Source: 18I2588-03**			Prepared: 10/10/18 Analyzed: 10/11/18						
Total Kjeldahl Nitrogen	1.18	0.050	1.0	mg/L	2.98	0.245	31.4	75-125			QM-4X
Matrix Spike Dup (AJ83554-MSD1)		**Source: 18I2588-03**			Prepared: 10/10/18 Analyzed: 10/11/18						
Total Kjeldahl Nitrogen	3.04	0.050	1.0	mg/L	2.98	0.245	93.9	75-125	88.2	20	QM-4X
Batch AJ83612 - Metals Digest											
Blank (AJ83612-BLK1)					Prepared: 10/11/18 Analyzed: 10/12/18						
Hardness, Total	ND	1	5	mg/L							U
Duplicate (AJ83612-DUP1)		**Source: 18J0880-01**			Prepared: 10/11/18 Analyzed: 10/12/18						
Hardness, Total	499	1	5	mg/L		516			3.27	20	
Batch AJ83619 - General Preparation											
Blank (AJ83619-BLK1)					Prepared: 09/27/18 Analyzed: 10/16/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83619 - General Preparation											
Duplicate (AJ83619-DUP1)		**Source: 18I2517-01**			Prepared: 09/28/18 Analyzed: 10/16/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Duplicate (AJ83619-DUP2)		**Source: 18I2599-06**			Prepared: 09/28/18 Analyzed: 10/16/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Batch AJ83623 - General Preparation											
Blank (AJ83623-BLK1)					Prepared & Analyzed: 10/11/18						
Oil & Grease (HEM)	ND	1.4	5.0	mg/L							U
LCS (AJ83623-BS1)					Prepared & Analyzed: 10/11/18						
Oil & Grease (HEM)	39.3	1.4	5.0	mg/L	40.0		98.2	78-114			
LCS Dup (AJ83623-BSD1)					Prepared & Analyzed: 10/11/18						
Oil & Grease (HEM)	39.7	1.4	5.0	mg/L	40.0		99.2	78-114	1.01	18	
Matrix Spike (AJ83623-MS1)		**Source: 18J0718-01**			Prepared & Analyzed: 10/11/18						
Oil & Grease (HEM)	27.2	1.4	5.0	mg/L	40.0	3.90	58.2	78-114			QM-05
Batch AJ83834 - General Prep											
Blank (AJ83834-BLK1)					Prepared: 10/16/18 Analyzed: 10/19/18						
Total Organic Carbon	ND	0.300	1.00	mg/L							U
LCS (AJ83834-BS1)					Prepared: 10/16/18 Analyzed: 10/19/18						
Total Organic Carbon	9.79	0.300	1.00	mg/L	10.0		97.9	85-115			

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Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83834 - General Prep											
LCS Dup (AJ83834-BSD1)					Prepared: 10/16/18 Analyzed: 10/19/18						
Total Organic Carbon	9.64	0.300	1.00	mg/L	10.0		96.4	85-115	1.57	20	
Duplicate (AJ83834-DUP1)		**Source: 18I2588-03**			Prepared: 10/16/18 Analyzed: 10/19/18						
Total Organic Carbon	1.49	0.300	1.00	mg/L		1.46			1.92	20	
MRL Check (AJ83834-MRL1)					Prepared: 10/16/18 Analyzed: 10/19/18						
Total Organic Carbon	1.34	0.300	1.00	mg/L	1.25		107	0-200			
Matrix Spike (AJ83834-MS1)		**Source: 18I2588-03**			Prepared: 10/16/18 Analyzed: 10/19/18						
Total Organic Carbon	21.7	0.600	2.00	mg/L	20.0	1.46	101	70-130			
Matrix Spike Dup (AJ83834-MSD1)		**Source: 18I2588-03**			Prepared: 10/16/18 Analyzed: 10/19/18						
Total Organic Carbon	22.0	0.600	2.00	mg/L	20.0	1.46	103	70-130	1.01	20	
Batch AJ84026 - General Prep											
Blank (AJ84026-BLK1)					Prepared & Analyzed: 10/22/18						
Dissolved Organic Carbon	ND	0.600	1.00	mg/L							U
LCS (AJ84026-BS1)					Prepared & Analyzed: 10/22/18						
Dissolved Organic Carbon	9.62	0.600	1.00	mg/L	10.0		96.2	85-115			
LCS Dup (AJ84026-BSD1)					Prepared & Analyzed: 10/22/18						
Dissolved Organic Carbon	9.22	0.600	1.00	mg/L	10.0		92.2	85-115	4.30	20	
Duplicate (AJ84026-DUP1)		**Source: 18I2588-02**			Prepared & Analyzed: 10/22/18						
Dissolved Organic Carbon	1.34	0.600	1.00	mg/L		1.26			6.06	20	

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ84026 - General Prep											
Matrix Spike (AJ84026-MS1)		**Source: 18I2588-02**			Prepared & Analyzed: 10/22/18						
Dissolved Organic Carbon	11.2	0.600	1.00	mg/L	10.0	1.26	99.9	70-130			
Matrix Spike Dup (AJ84026-MSD1)		**Source: 18I2588-02**			Prepared & Analyzed: 10/22/18						
Dissolved Organic Carbon	10.6	0.600	1.00	mg/L	10.0	1.26	93.9	70-130	5.51	20	

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Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84137 - General Preparation											
Blank (AI84137-BLK1)					Prepared & Analyzed: 09/27/18						
Orthophosphate	ND	0.10	0.30	mg/L							U
Nitrite as N	ND	0.050	0.20	mg/L							U
Nitrate as N	ND	0.040	0.20	mg/L							U
LCS (AI84137-BS1)					Prepared & Analyzed: 09/27/18						
Nitrate as N	5.28	0.040	0.20	mg/L	5.00		106	90-110			
Orthophosphate	15.7	0.10	0.30	mg/L	15.0		104	90-110			
Nitrite as N	5.17	0.050	0.20	mg/L	5.00		103	90-110			
Duplicate (AI84137-DUP1)		**Source: 18I2504-01**			Prepared & Analyzed: 09/27/18						
Orthophosphate	0.166	0.10	0.30	mg/L		0.156			5.71	20	J
Nitrite as N	ND	0.050	0.20	mg/L		ND				20	U
Nitrate as N	ND	0.040	0.20	mg/L		ND				20	U
Matrix Spike (AI84137-MS1)		**Source: 18I2504-01**			Prepared & Analyzed: 09/27/18						
Nitrate as N	5.84	0.040	0.20	mg/L	5.56	ND	105	80-120			
Nitrite as N	5.76	0.050	0.20	mg/L	5.56	ND	104	80-120			
Orthophosphate	17.3	0.10	0.30	mg/L	16.7	0.156	103	80-120			
Matrix Spike (AI84137-MS2)		**Source: 18I2454-01**			Prepared & Analyzed: 09/27/18						
Nitrite as N	5.62	0.050	0.20	mg/L	5.56	ND	101	80-120			
Nitrate as N	5.73	0.040	0.20	mg/L	5.56	0.0422	102	80-120			
Orthophosphate	16.8	0.10	0.30	mg/L	16.7	ND	101	80-120			
Matrix Spike Dup (AI84137-MSD1)		**Source: 18I2504-01**			Prepared & Analyzed: 09/27/18						
Nitrate as N	5.85	0.040	0.20	mg/L	5.56	ND	105	80-120	0.155	20	
Nitrite as N	5.78	0.050	0.20	mg/L	5.56	ND	104	80-120	0.347	20	
Orthophosphate	17.4	0.10	0.30	mg/L	16.7	0.156	103	80-120	0.235	20	

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

TPH by EPA/LUFT GC Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83114 - SVOAs in Water GC											
Blank (AJ83114-BLK1)					Prepared: 10/01/18 Analyzed: 10/10/18						
TPH as Diesel	ND	50	250	ug/L							U
TPH as Motor Oil	ND	100	250	ug/L							U
Surrogate: Tetratetracontane	*57.8*			*ug/L*	*57.4*		*101*	*39-120*			
LCS (AJ83114-BS1)					Prepared: 10/01/18 Analyzed: 10/10/18						
TPH as Diesel	1970	50	250	ug/L	2020		97.5	61-120			
Surrogate: Tetratetracontane	*54.5*			*ug/L*	*57.4*		*95.0*	*39-120*			
LCS (AJ83114-BS2)					Prepared: 10/01/18 Analyzed: 10/10/18						
TPH as Motor Oil	2110	100	250	ug/L	2010		105	71-125			
Surrogate: Tetratetracontane	*56.4*			*ug/L*	*57.4*		*98.2*	*39-120*			
LCS Dup (AJ83114-BSD1)					Prepared: 10/01/18 Analyzed: 10/10/18						
TPH as Diesel	2140	50	250	ug/L	2020		106	61-120	8.16	25	
Surrogate: Tetratetracontane	*54.5*			*ug/L*	*57.4*		*95.0*	*39-120*			
LCS Dup (AJ83114-BSD2)					Prepared: 10/01/18 Analyzed: 10/10/18						
TPH as Motor Oil	2140	100	250	ug/L	2010		107	71-125	1.46	25	
Surrogate: Tetratetracontane	*57.7*			*ug/L*	*57.4*		*100*	*39-120*			

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TPH by EPA/LUFT GCMS Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83268 - VOAs in Water GCMS											
Blank (AJ83268-BLK1)					Prepared & Analyzed: 10/03/18						
TPH as Gasoline	ND	50	50	ug/L							U
Surrogate: Toluene-d8	*23.6*			*ug/L*	*25.0*		*94.4*	*76-129*			
LCS (AJ83268-BS1)					Prepared & Analyzed: 10/03/18						
TPH as Gasoline	211	50	50	ug/L	200		105	67-132			
Surrogate: Toluene-d8	*23.6*			*ug/L*	*25.0*		*94.5*	*76-129*			
LCS Dup (AJ83268-BSD1)					Prepared & Analyzed: 10/03/18						
TPH as Gasoline	209	50	50	ug/L	200		104	67-132	1.01	25	
Surrogate: Toluene-d8	*23.4*			*ug/L*	*25.0*		*93.8*	*76-129*			
Matrix Spike (AJ83268-MS1)		**Source: 18I2517-01**			Prepared & Analyzed: 10/03/18						
TPH as Gasoline	198	50	50	ug/L	200	ND	98.9	37-156			
Surrogate: Toluene-d8	*23.5*			*ug/L*	*25.0*		*94.0*	*76-129*			

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83269 - VOAs in Water GCMS											
Blank (AJ83269-BLK1)					Prepared & Analyzed: 10/03/18						
Benzene	ND	0.30	0.30	ug/L							U
Toluene	ND	0.30	0.30	ug/L							U
Ethylbenzene	ND	0.40	0.50	ug/L							U
Xylenes (total)	ND	0.50	0.50	ug/L							U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L							U
Di-isopropyl ether	ND	0.40	0.50	ug/L							U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L							U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L							U
Tert-butyl alcohol	ND	6.0	10	ug/L							U
Surrogate: Bromofluorobenzene	*30.0*			*ug/L*	*25.0*		*120*	*70-130*			
Surrogate: Dibromofluoromethane	*26.2*			*ug/L*	*25.0*		*105*	*70-130*			
Surrogate: Toluene-d8	*28.8*			*ug/L*	*25.0*		*115*	*70-130*			
LCS (AJ83269-BS1)					Prepared & Analyzed: 10/03/18						
Benzene	21.8	0.30	0.30	ug/L	20.0		109	82-122			
Toluene	21.7	0.30	0.30	ug/L	20.0		108	75-134			
Ethylbenzene	22.4	0.40	0.50	ug/L	20.0		112	84-124			
Xylenes (total)	66.1	0.50	0.50	ug/L	60.0		110	81-126			
Methyl tert-butyl ether	21.2	0.50	0.50	ug/L	20.0		106	84-119			
Di-isopropyl ether	24.4	0.40	0.50	ug/L	20.0		122	83-132			
Ethyl tert-butyl ether	23.8	0.40	0.50	ug/L	20.0		119	74-127			
Tert-amyl methyl ether	21.0	0.40	0.50	ug/L	20.0		105	74-120			
Tert-butyl alcohol	498	6.0	10	ug/L	400		124	66-147			
Surrogate: Bromofluorobenzene	*29.5*			*ug/L*	*25.0*		*118*	*70-130*			
Surrogate: Dibromofluoromethane	*27.1*			*ug/L*	*25.0*		*109*	*70-130*			
Surrogate: Toluene-d8	*28.0*			*ug/L*	*25.0*		*112*	*70-130*			
LCS Dup (AJ83269-BSD1)					Prepared & Analyzed: 10/03/18						
Benzene	22.1	0.30	0.30	ug/L	20.0		111	82-122	1.32	25	
Toluene	22.0	0.30	0.30	ug/L	20.0		110	75-134	1.37	25	
Ethylbenzene	23.0	0.40	0.50	ug/L	20.0		115	84-124	2.47	25	
Xylenes (total)	67.6	0.50	0.50	ug/L	60.0		113	81-126	2.20	25	
Methyl tert-butyl ether	22.6	0.50	0.50	ug/L	20.0		113	84-119	5.98	25	
Di-isopropyl ether	24.5	0.40	0.50	ug/L	20.0		123	83-132	0.327	25	
Ethyl tert-butyl ether	24.5	0.40	0.50	ug/L	20.0		123	74-127	3.02	25	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/23/18 13:36

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83269 - VOAs in Water GCMS											
LCS Dup (AJ83269-BSD1)					Prepared & Analyzed: 10/03/18						
Tert-amyl methyl ether	21.9	0.40	0.50	ug/L	20.0		110	74-120	4.28	25	
Tert-butyl alcohol	482	6.0	10	ug/L	400		120	66-147	3.23	25	
Surrogate: Bromofluorobenzene	*30.2*			*ug/L*	*25.0*		*121*	*70-130*			
Surrogate: Dibromofluoromethane	*27.7*			*ug/L*	*25.0*		*111*	*70-130*			
Surrogate: Toluene-d8	*27.9*			*ug/L*	*25.0*		*112*	*70-130*			
Matrix Spike (AJ83269-MS1)		**Source: 18I2517-01**			Prepared & Analyzed: 10/03/18						
Benzene	23.6	0.30	0.30	ug/L	20.0	ND	118	58-139			
Toluene	23.4	0.30	0.30	ug/L	20.0	ND	117	59-147			
Ethylbenzene	24.7	0.40	0.50	ug/L	20.0	ND	124	59-147			
Xylenes (total)	71.8	0.50	0.50	ug/L	60.0	ND	120	49-153			
Methyl tert-butyl ether	23.1	0.50	0.50	ug/L	20.0	ND	115	55-144			
Di-isopropyl ether	25.8	0.40	0.50	ug/L	20.0	ND	129	49-143			
Ethyl tert-butyl ether	27.6	0.40	0.50	ug/L	20.0	ND	138	44-143			
Tert-amyl methyl ether	23.5	0.40	0.50	ug/L	20.0	ND	117	41-136			
Tert-butyl alcohol	1130	6.0	10	ug/L	400	ND	282	38-175			QM-05
Surrogate: Bromofluorobenzene	*30.0*			*ug/L*	*25.0*		*120*	*70-130*			
Surrogate: Dibromofluoromethane	*27.8*			*ug/L*	*25.0*		*111*	*70-130*			
Surrogate: Toluene-d8	*27.4*			*ug/L*	*25.0*		*109*	*70-130*			
Matrix Spike (AJ83269-MS2)		**Source: 18I2517-02**			Prepared: 10/03/18 Analyzed: 10/04/18						
Benzene	20.8	0.30	0.30	ug/L	20.0	ND	104	58-139			
Toluene	20.3	0.30	0.30	ug/L	20.0	ND	102	59-147			
Ethylbenzene	22.0	0.40	0.50	ug/L	20.0	ND	110	59-147			
Xylenes (total)	63.0	0.50	0.50	ug/L	60.0	ND	105	49-153			
Methyl tert-butyl ether	18.9	0.50	0.50	ug/L	20.0	ND	94.5	55-144			
Di-isopropyl ether	22.8	0.40	0.50	ug/L	20.0	ND	114	49-143			
Ethyl tert-butyl ether	21.2	0.40	0.50	ug/L	20.0	ND	106	44-143			
Tert-amyl methyl ether	17.6	0.40	0.50	ug/L	20.0	ND	87.9	41-136			
Tert-butyl alcohol	1200	6.0	10	ug/L	400	ND	301	38-175			QM-05
Surrogate: Bromofluorobenzene	*30.1*			*ug/L*	*25.0*		*120*	*70-130*			
Surrogate: Dibromofluoromethane	*28.1*			*ug/L*	*25.0*		*112*	*70-130*			
Surrogate: Toluene-d8	*27.3*			*ug/L*	*25.0*		*109*	*70-130*			

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Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	10/23/18 13:36

Notes and Definitions

FILT	The sample was filtered in the lab prior to analysis.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
P-02	Sample acidified to pH <2 and allowed to sit 24 hours before further processing.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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BROOKS APPLIED LABS
18804 North Creek Parkway, Ste 100, Bothell, WA 98011 • USA • T: 206 632 6206 F: 206 632 6017 • info@brooksapplied.com

October 18, 2018

Basic Laboratory, Inc.
ATTN: Jen McCurdy
2218 Railroad Avenue
Redding, CA 96001
jmccurdy@basiclab.com

RE: Project BSL-RE1801 Client Project: 18J0212

Dear Jen McCurdy,

On October 11, 2018, Brooks Applied Labs (BAL) received six (6) water samples. The samples were logged-in for the analyses of methyl mercury (MeHg) according to the chain-of-custody form. All samples were received and stored according to BAL SOPs and EPA methodology. Samples were preserved with hydrochloric acid by the client.

Water samples were distilled via EPA Method 1630.

The results were method blank corrected as described in the calculations section of the relevant BAL SOP(s) and were evaluated using reporting limits adjusted to account for sample aliquot size. Please refer to the *Sample Results* page for sample-specific MDLs, MRLs, and other details.

All data was reported without qualification (aside from concentration qualifiers) and all associated quality control sample results met the acceptance criteria.

BAL, an accredited laboratory, certifies that the reported results of all analyses for which BAL is NELAP accredited meet all NELAP requirements. For more information please see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Sincerely,

Lydia Greaves

Lydia Greaves
Client Services Manager
lydia@brooksapplied.com

Report Information

Laboratory Accreditation

BAL is accredited by the *National Environmental Laboratory Accreditation Program* (NELAP) through the State of Florida Department of Health, Bureau of Laboratories (E87982) and is certified to perform many environmental analyses. BAL is also certified by many other states to perform environmental analyses. For a current list of our accreditations/certifications, please visit our website at <http://www.brooksapplied.com/resources/certificates-permits/>. Results reported relate only to the samples listed in the report.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

AR	as received	**MS**	matrix spike
BAL	Brooks Applied Labs	**MSD**	matrix spike duplicate
BLK	method blank	**ND**	non-detect
BS	blank spike	**NR**	non-reportable
CAL	calibration standard	**N/C**	not calculated
CCB	continuing calibration blank	**PS**	post preparation spike
CCV	continuing calibration verification	**REC**	percent recovery
COC	chain of custody record	**RPD**	relative percent difference
D	dissolved fraction	**SCV**	secondary calibration verification
DUP	duplicate	**SOP**	standard operating procedure
IBL	instrument blank	**SRM**	standard reference material
ICV	initial calibration verification	**T**	total fraction
MDL	method detection limit	**TR**	total recoverable fraction
MRL	method reporting limit		

Definition of Data Qualifiers

(Effective 9/23/09)

E	An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H	Holding time and/or preservation requirements not met. Please see narrative for explanation.
J	Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
J-1	Estimated value. A full explanation is presented in the narrative.
M	Duplicate precision (RPD) was not within acceptance criteria. Please see narrative for explanation.
N	Spike recovery was not within acceptance criteria. Please see narrative for explanation.
R	Rejected, unusable value. A full explanation is presented in the narrative.
U	Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
X	Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.

These qualifiers are based on those previously utilized by Brooks Applied Labs, those found in the EPA SOW ILM03.0, Exhibit B, Section III, pg. B-18, and the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review; USEPA; January 2010. These supersede all previous qualifiers ever employed by BAL.

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Project ID: BSL-RE1801
PM: Lydia Greaves

Client PM: Jen McCurdy
Client Project: 18J0212

Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
18J0212-01 18I2517-01 ER173.7	1841038-01	Water	Sample	09/26/2018	10/11/2018
18J0212-02 18I2517-02 RF3.8	1841038-02	Water	Sample	09/26/2018	10/11/2018
18J0212-03 18I2517-03 ER-BL	1841038-03	Water	Sample	09/26/2018	10/11/2018
18J0212-04 18I2517-04 LP4-S	1841038-04	Water	Sample	09/26/2018	10/11/2018
18J0212-05 18I2517-05 LP4-M	1841038-05	Water	Sample	09/26/2018	10/11/2018
18J0212-06 18I2517-06 LP4-B	1841038-06	Water	Sample	09/26/2018	10/11/2018

Batch Summary

Analyte	Lab Matrix	Method	Prepared	Analyzed	Batch	Sequence
MeHg	Water	EPA 1630	10/15/2018	10/16/2018	B182752	1801404

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Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
18J0212-01 18I2517-01 ER173.7										
1841038-01	MeHg	Water	TR	0.067		0.023	0.050	ng/L	B182752	1801404
18J0212-02 18I2517-02 RF3.8										
1841038-02	MeHg	Water	TR	0.056		0.023	0.050	ng/L	B182752	1801404
18J0212-03 18I2517-03 ER-BL										
1841038-03	MeHg	Water	TR	≤ 0.023	U	0.023	0.049	ng/L	B182752	1801404
18J0212-04 18I2517-04 LP4-S										
1841038-04	MeHg	Water	TR	0.205		0.023	0.049	ng/L	B182752	1801404
18J0212-05 18I2517-05 LP4-M										
1841038-05	MeHg	Water	TR	0.188		0.023	0.050	ng/L	B182752	1801404
18J0212-06 18I2517-06 LP4-B										
1841038-06	MeHg	Water	TR	0.273		0.023	0.050	ng/L	B182752	1801404

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Project ID: BSL-RE1801
PM: Lydia Greaves

Client PM: Jen McCurdy
Client Project: 18J0212

Accuracy & Precision Summary

Batch: B182752
Lab Matrix: Water
Method: EPA 1630

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B182752-BS1	**Blank Spike, (1839004)**						
	MeHg		1.000	0.914	ng/L	91% 67-133	
B182752-BS2	**Blank Spike, (1839004)**						
	MeHg		1.000	1.037	ng/L	104% 67-133	
B182752-MS1	**Matrix Spike (1841036-01)**						
	MeHg	0.123	1.000	1.023	ng/L	90% 65-135	
B182752-MSD1	**Matrix Spike Duplicate (1841036-01)**						
	MeHg	0.123	1.000	1.084	ng/L	96% 65-135	6% 35
B182752-MS2	**Matrix Spike (1841037-02)**						
	MeHg	0.175	1.000	0.953	ng/L	78% 65-135	
B182752-MSD2	**Matrix Spike Duplicate (1841037-02)**						
	MeHg	0.175	1.000	1.041	ng/L	87% 65-135	9% 35
B182752-MS3	**Matrix Spike (1841038-04)**						
	MeHg	0.205	1.000	1.185	ng/L	98% 65-135	
B182752-MSD3	**Matrix Spike Duplicate (1841038-04)**						
	MeHg	0.205	1.000	1.071	ng/L	87% 65-135	10% 35

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Project ID: BSL-RE1801
PM: Lydia Greaves

Client PM: Jen McCurdy
Client Project: 18J0212

Method Blanks & Reporting Limits

Batch: B182752
Matrix: Water
Method: EPA 1630
Analyte: MeHg

Sample	Result	Units
B182752-BLK1	0.016	ng/L
B182752-BLK2	0.009	ng/L
B182752-BLK3	0.005	ng/L
B182752-BLK4	0.005	ng/L

Average: 0.009 **Standard Deviation:** 0.005 **MDL:** 0.023
Limit: 0.045 **Limit:** 0.015 **MRL:** 0.050

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Project ID: BSL-RE1801
PM: Lydia Greaves

Client PM: Jen McCurdy
Client Project: 18J0212

Sample Containers

Lab ID: 1841038-01 **Report Matrix:** Water **Collected:** 09/26/2018
Sample: 18J0212-01 18I2517-01 ER173.7 **Sample Type:** Sample **Received:** 10/11/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	250mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841038

Lab ID: 1841038-02 **Report Matrix:** Water **Collected:** 09/26/2018
Sample: 18J0212-02 18I2517-02 RF3.8 **Sample Type:** Sample **Received:** 10/11/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	250mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841038

Lab ID: 1841038-03 **Report Matrix:** Water **Collected:** 09/26/2018
Sample: 18J0212-03 18I2517-03 ER-BL **Sample Type:** Sample **Received:** 10/11/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	250mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841038

Lab ID: 1841038-04 **Report Matrix:** Water **Collected:** 09/26/2018
Sample: 18J0212-04 18I2517-04 LP4-S **Sample Type:** Sample **Received:** 10/11/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	250mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841038

Lab ID: 1841038-05 **Report Matrix:** Water **Collected:** 09/26/2018
Sample: 18J0212-05 18I2517-05 LP4-M **Sample Type:** Sample **Received:** 10/11/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	250mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841038

Lab ID: 1841038-06 **Report Matrix:** Water **Collected:** 09/26/2018
Sample: 18J0212-06 18I2517-06 LP4-B **Sample Type:** Sample **Received:** 10/11/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	250mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841038

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Project ID: BSL-RE1801
PM: Lydia Greaves

Client PM: Jen McCurdy
Client Project: 18J0212

Shipping Containers

Cooler - 1841038

Received: October 11, 2018 11:30
Tracking No: 1Z8336E31377293213 via UPS
Coolant Type: Ice
Temperature: 3.0 °C

Description: Cooler
Damaged in transit? No
Returned to client? No
Comments: IR#15

Custody seals present? No
Custody seals intact? No
COC present? Yes

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Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
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Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18T2517 Pg 1 of 3

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	TPH-D/MO	TPH-Gas/BTEX/Oxys	Oil and Grease	TOC	DOC	CAM17 200.8 total + Al/Mn	Fe 200.8 Total	Hardness, total	Ammonia-N	Phosphorus, Total	TKN
ER173.7	9/26	1300											X			15	X	X	X	X	X	X	X	X	X	X	X
RF3.8	↓	1430											↓			15											
BR-BL		1030														16											
LP4-S		1715														17											
LP4-M		1755													17	18											
LP4-B	↓	1800											↓			16	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

TAT
Standard 10 days ⊗
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.0
Livermore temp:
Elk Grove temp:

Sample Notes or DDW Source Numbers:

Relinquished by	Received by	Date	Time
Christina Buck		9-27-18	0810

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):
Travel and Site Time: Mileage: Misc. Supplies:

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925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18E2517 Pg 2 of 3

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	CAM17 200.8 dissolved / lab filter	Al dissolved 200.8	Alkalinity	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	TDS	TSS	Chlorophyll-A	Sulfide	Hg 1631	MeHg 1630	Sample Notes or DDW Source Numbers:
ER173.7	9/26	1300															X	X	X	X	X	X	X	X	X		X	X	no sulfide
RF3.8	↓	1430																									X		no sulfide
ER BL		1030														1										X			
UP4-S		1715														Pr										X			
UP4-M		1755														See										X			
UP4-B	↓	1800															↓	↓	↓	↓	↓	↓	↓	↓	↓	X	↓	↓	

TAT
Standard 10 days: X
RUSH: 5 days ○ 48 hours ○ Other: ___ days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.0
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		9-27-18	0810

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID:
EDF to (Email Address):
Sampling Company Log Code:

Travel and Site Time:	Mileage:	Misc. Supplies:

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Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18I2517 Pg 3 of 3

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	Analysis Request: Algal ID & E (sub to Greenwater)
LP4-S	9/26	1715											X				X
LP4-B	9/26	1735											X				X
																$24 P.1	

Please hold phytoplankton sample analysis until further notice.

TAT
Standard 10 days ○
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.0
Livermore temp:
Elk Grove temp:

Sample Notes or DDW Source Numbers:

Relinquished by	Received by	Date	Time
Christina Buck		9-27-18	0810

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):

Travel and Site Time:	Mileage:	Misc. Supplies:

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ELAP Certificates 1551, 2728, and 2922

22 October 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18I2599

Enclosed are the results of analyses for samples received by the laboratory on 09/27/18 17:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LP1-S	18I2599-01	Water	09/27/18 11:15	09/27/18 17:00
LP1-M	18I2599-02	Water	09/27/18 11:30	09/27/18 17:00
LP1-B	18I2599-03	Water	09/27/18 12:00	09/27/18 17:00
ER167.8	18I2599-04	Water	09/27/18 15:30	09/27/18 17:00
ER-DUP2	18I2599-05	Water	09/27/18 15:45	09/27/18 17:00
LP-EQB	18I2599-06	Water	09/27/18 14:45	09/27/18 17:00
LP-DUP	18I2599-07	Water	09/27/18 12:30	09/27/18 17:00

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-S (18I2599-01) Water Sampled: 09/27/18 11:15 Received: 09/27/18 17:00											
Calcium	**22**	**0.080**	**1.0**	**mg/L**	1	AJ83611	10/11/18 12:00	10/12/18 18:43	EPA 200.7	MAM	
Magnesium	**6.5**	**0.030**	**1.0**	**mg/L**	1	AJ83611	10/11/18 12:00	10/12/18 18:43	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AJ83624	10/11/18 08:16	10/11/18 16:27	EPA 245.1	LMR	U
LP1-M (18I2599-02) Water Sampled: 09/27/18 11:30 Received: 09/27/18 17:00											
Calcium	**21**	**0.080**	**1.0**	**mg/L**	1	AJ83611	10/11/18 12:00	10/12/18 18:48	EPA 200.7	MAM	
Magnesium	**6.4**	**0.030**	**1.0**	**mg/L**	1	AJ83611	10/11/18 12:00	10/12/18 18:48	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AJ83624	10/11/18 08:16	10/11/18 16:37	EPA 245.1	LMR	U
LP1-B (18I2599-03) Water Sampled: 09/27/18 12:00 Received: 09/27/18 17:00											
Calcium	**22**	**0.080**	**1.0**	**mg/L**	1	AJ83611	10/11/18 12:00	10/12/18 19:01	EPA 200.7	MAM	
Magnesium	**6.5**	**0.030**	**1.0**	**mg/L**	1	AJ83611	10/11/18 12:00	10/12/18 19:01	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AJ83624	10/11/18 08:16	10/11/18 17:04	EPA 245.1	LMR	U
ER167.8 (18I2599-04) Water Sampled: 09/27/18 15:30 Received: 09/27/18 17:00											
Calcium	**22**	**0.080**	**1.0**	**mg/L**	1	AJ83611	10/11/18 12:00	10/12/18 19:06	EPA 200.7	MAM	
Magnesium	**6.6**	**0.030**	**1.0**	**mg/L**	1	AJ83611	10/11/18 12:00	10/12/18 19:06	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AJ83624	10/11/18 08:16	10/11/18 17:06	EPA 245.1	LMR	U
ER-DUP2 (18I2599-05) Water Sampled: 09/27/18 15:45 Received: 09/27/18 17:00											
Calcium	**22**	**0.080**	**1.0**	**mg/L**	1	AJ83611	10/11/18 12:00	10/12/18 19:10	EPA 200.7	MAM	
Magnesium	**6.5**	**0.030**	**1.0**	**mg/L**	1	AJ83611	10/11/18 12:00	10/12/18 19:10	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AJ83624	10/11/18 08:16	10/11/18 17:09	EPA 245.1	LMR	U
LP-EQB (18I2599-06) Water Sampled: 09/27/18 14:45 Received: 09/27/18 17:00											
Calcium	**0.10**	**0.080**	**1.0**	**mg/L**	1	AJ83611	10/11/18 12:00	10/12/18 19:15	EPA 200.7	MAM	J
Magnesium	ND	0.030	1.0	mg/L	1	AJ83611	10/11/18 12:00	10/12/18 19:15	EPA 200.7	MAM	U
Mercury	ND	0.060	0.20	ug/L	1	AJ83624	10/11/18 08:16	10/11/18 17:11	EPA 245.1	LMR	U

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-DUP (18I2599-07) Water Sampled: 09/27/18 12:30 Received: 09/27/18 17:00											
Calcium	**22**	**0.080**	**1.0**	**mg/L**	1	AJ83611	10/11/18 12:00	10/12/18 17:31	EPA 200.7	MAM	
Magnesium	**6.6**	**0.030**	**1.0**	**mg/L**	1	AJ83611	10/11/18 12:00	10/12/18 17:31	EPA 200.7	MAM	
Mercury	ND	0.060	0.20	ug/L	1	AJ83624	10/11/18 08:16	10/11/18 17:14	EPA 245.1	LMR	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-S (18I2599-01) Water Sampled: 09/27/18 11:15 Received: 09/27/18 17:00											
Aluminum	ND	20	40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:25	EPA 200.8	MMY	R-01, U
Antimony	ND	0.80	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:25	EPA 200.8	MMY	R-01, U
Arsenic	**5.2**	**0.80**	**2.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:25	EPA 200.8	MMY	
Barium	**70**	**0.80**	**2.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:25	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:25	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:25	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:25	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:25	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:25	EPA 200.8	MMY	U
Iron	**54**	**40**	**200**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:25	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:25	EPA 200.8	MMY	R-01, U
Manganese	**15**	**8.0**	**20**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:25	EPA 200.8	MMY	R-01, J
Molybdenum	**0.60**	**0.28**	**1.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:25	EPA 200.8	MMY	R-01, J
Nickel	**1.5**	**1.2**	**2.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:25	EPA 200.8	MMY	R-01, J
Selenium	ND	1.2	8.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:25	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:25	EPA 200.8	MMY	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:25	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:25	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:25	EPA 200.8	MMY	R-01, U
LP1-M (18I2599-02) Water Sampled: 09/27/18 11:30 Received: 09/27/18 17:00											
Aluminum	ND	20	40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:32	EPA 200.8	MMY	R-01, U
Antimony	ND	0.80	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:32	EPA 200.8	MMY	R-01, U
Arsenic	**3.7**	**0.80**	**2.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:32	EPA 200.8	MMY	
Barium	**68**	**0.80**	**2.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/15/18 14:01	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:32	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:32	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:32	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:32	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:32	EPA 200.8	MMY	U
Iron	ND	40	200	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:32	EPA 200.8	MMY	R-01, U
Lead	ND	0.24	1.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:32	EPA 200.8	MMY	R-01, U
Manganese	ND	8.0	20	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:32	EPA 200.8	MMY	U
Molybdenum	**0.31**	**0.28**	**1.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:32	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-M (18I2599-02) Water Sampled: 09/27/18 11:30 Received: 09/27/18 17:00											
Nickel	ND	1.2	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:32	EPA 200.8	MMY	R-01, U
Selenium	ND	1.2	8.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:32	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:32	EPA 200.8	MMY	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:32	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:32	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:32	EPA 200.8	MMY	R-01, U
LP1-B (18I2599-03) Water Sampled: 09/27/18 12:00 Received: 09/27/18 17:00											
Aluminum	**160**	**20**	**40**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:39	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:39	EPA 200.8	MMY	R-01, U
Arsenic	**3.9**	**0.80**	**2.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:39	EPA 200.8	MMY	
Barium	**72**	**0.80**	**2.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:39	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:39	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:39	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:39	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:39	EPA 200.8	MMY	R-01, U
Copper	**67**	**1.6**	**2.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/11/18 13:46	EPA 200.8	MMY	
Iron	**330**	**40**	**200**	**ug/L**	4	AJ83446	10/08/18 11:17	10/11/18 13:46	EPA 200.8	MMY	
Lead	ND	0.24	1.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:39	EPA 200.8	MMY	R-01, U
Manganese	**100**	**8.0**	**20**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:39	EPA 200.8	MMY	
Molybdenum	**0.60**	**0.28**	**1.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/15/18 14:12	EPA 200.8	MMY	R-01, J
Nickel	**2.3**	**1.2**	**2.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:39	EPA 200.8	MMY	
Selenium	ND	1.2	8.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:39	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:39	EPA 200.8	MMY	R-01, U
Thallium	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:39	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:39	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:39	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER167.8 (18I2599-04) Water Sampled: 09/27/18 15:30 Received: 09/27/18 17:00											
Aluminum	**78**	**20**	**40**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:45	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:45	EPA 200.8	MMY	R-01, U
Arsenic	**4.5**	**0.80**	**2.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:45	EPA 200.8	MMY	
Barium	**72**	**0.80**	**2.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:45	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:45	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:45	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:45	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:45	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:45	EPA 200.8	MMY	U
Iron	**180**	**40**	**200**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:45	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:45	EPA 200.8	MMY	R-01, U
Manganese	**300**	**8.0**	**20**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:45	EPA 200.8	MMY	
Molybdenum	**0.71**	**0.28**	**1.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:45	EPA 200.8	MMY	R-01, J
Nickel	**2.1**	**1.2**	**2.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:45	EPA 200.8	MMY	
Selenium	ND	1.2	8.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:45	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:45	EPA 200.8	MMY	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:45	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:45	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:45	EPA 200.8	MMY	R-01, U
ER-DUP2 (18I2599-05) Water Sampled: 09/27/18 15:45 Received: 09/27/18 17:00											
Aluminum	**78**	**20**	**40**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:52	EPA 200.8	MMY	
Antimony	ND	0.80	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:52	EPA 200.8	MMY	R-01, U
Arsenic	**3.6**	**0.80**	**2.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:52	EPA 200.8	MMY	
Barium	**70**	**0.80**	**2.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:52	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:52	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:52	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:52	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:52	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:52	EPA 200.8	MMY	U
Iron	**170**	**40**	**200**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:52	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:52	EPA 200.8	MMY	R-01, U
Manganese	**280**	**8.0**	**20**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:52	EPA 200.8	MMY	
Molybdenum	**0.52**	**0.28**	**1.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:52	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER-DUP2 (18I2599-05) Water Sampled: 09/27/18 15:45 Received: 09/27/18 17:00											
Nickel	**2.2**	**1.2**	**2.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:52	EPA 200.8	MMY	
Selenium	ND	1.2	8.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:52	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:52	EPA 200.8	MMY	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:52	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:52	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:52	EPA 200.8	MMY	R-01, U
LP-EQB (18I2599-06) Water Sampled: 09/27/18 14:45 Received: 09/27/18 17:00											
Aluminum	ND	20	40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:59	EPA 200.8	MMY	U
Antimony	ND	0.80	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:59	EPA 200.8	MMY	R-01, U
Arsenic	ND	0.80	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:59	EPA 200.8	MMY	U
Barium	ND	0.80	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:59	EPA 200.8	MMY	R-01, U
Beryllium	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:59	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:59	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:59	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:59	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:59	EPA 200.8	MMY	U
Iron	**250**	**40**	**200**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:59	EPA 200.8	MMY	
Lead	**0.69**	**0.24**	**1.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 20:59	EPA 200.8	MMY	R-01, J
Manganese	ND	8.0	20	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:59	EPA 200.8	MMY	U
Molybdenum	ND	0.28	1.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:59	EPA 200.8	MMY	R-01, U
Nickel	ND	1.2	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:59	EPA 200.8	MMY	R-01, U
Selenium	ND	1.2	8.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:59	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:59	EPA 200.8	MMY	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:59	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:59	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 20:59	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-DUP (18I2599-07) Water Sampled: 09/27/18 12:30 Received: 09/27/18 17:00											
Aluminum	ND	20	40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 21:05	EPA 200.8	MMY	U
Antimony	ND	0.80	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 21:05	EPA 200.8	MMY	R-01, U
Arsenic	**3.7**	**0.80**	**2.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 21:05	EPA 200.8	MMY	
Barium	**67**	**0.80**	**2.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 21:05	EPA 200.8	MMY	
Beryllium	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 21:05	EPA 200.8	MMY	R-01, U
Cadmium	ND	0.24	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 21:05	EPA 200.8	MMY	R-01, U
Chromium	ND	2.0	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 21:05	EPA 200.8	MMY	R-01, U
Cobalt	ND	0.40	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 21:05	EPA 200.8	MMY	R-01, U
Copper	ND	1.6	2.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 21:05	EPA 200.8	MMY	U
Iron	**53**	**40**	**200**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 21:05	EPA 200.8	MMY	R-01, J
Lead	ND	0.24	1.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 21:05	EPA 200.8	MMY	R-01, U
Manganese	**14**	**8.0**	**20**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 21:05	EPA 200.8	MMY	J
Molybdenum	**0.55**	**0.28**	**1.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 21:05	EPA 200.8	MMY	R-01, J
Nickel	**1.6**	**1.2**	**2.0**	**ug/L**	4	AJ83446	10/08/18 11:17	10/09/18 21:05	EPA 200.8	MMY	R-01, J
Selenium	ND	1.2	8.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 21:05	EPA 200.8	MMY	R-01, U
Silver	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 21:05	EPA 200.8	MMY	U, R-01
Thallium	ND	0.20	0.40	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 21:05	EPA 200.8	MMY	R-01, U
Vanadium	ND	2.0	4.0	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 21:05	EPA 200.8	MMY	R-01, U
Zinc	ND	8.0	20	ug/L	4	AJ83446	10/08/18 11:17	10/09/18 21:05	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-S (18I2599-01) Water Sampled: 09/27/18 11:15 Received: 09/27/18 17:00											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AJ83562	10/10/18 08:01	10/10/18 13:53	EPA 245.1	LMR	U
LP1-M (18I2599-02) Water Sampled: 09/27/18 11:30 Received: 09/27/18 17:00											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AJ83562	10/10/18 08:01	10/10/18 14:03	EPA 245.1	LMR	U
LP1-B (18I2599-03) Water Sampled: 09/27/18 12:00 Received: 09/27/18 17:00											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AJ83562	10/10/18 08:01	10/10/18 14:53	EPA 245.1	LMR	U
ER167.8 (18I2599-04) Water Sampled: 09/27/18 15:30 Received: 09/27/18 17:00											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AJ83562	10/10/18 08:01	10/10/18 14:55	EPA 245.1	LMR	U
ER-DUP2 (18I2599-05) Water Sampled: 09/27/18 15:45 Received: 09/27/18 17:00											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AJ83562	10/10/18 08:01	10/10/18 14:58	EPA 245.1	LMR	U
LP-EQB (18I2599-06) Water Sampled: 09/27/18 14:45 Received: 09/27/18 17:00											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AJ83562	10/10/18 08:01	10/10/18 15:01	EPA 245.1	LMR	U
LP-DUP (18I2599-07) Water Sampled: 09/27/18 12:30 Received: 09/27/18 17:00											
Mercury, dissolved	ND	0.060	0.20	ug/L	1	AJ83562	10/10/18 08:01	10/10/18 15:03	EPA 245.1	LMR	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-S (18I2599-01) Water Sampled: 09/27/18 11:15 Received: 09/27/18 17:00											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:32	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:32	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**3.2**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 01:32	EPA 200.8	MMY	R-01
Barium, dissolved	**66**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 01:32	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:32	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:32	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:32	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:32	EPA 200.8	MMY	R-01, U
Copper, dissolved	**1.7**	**1.6**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 01:32	EPA 200.8	MMY	R-01, J
Lead, dissolved	ND	0.24	1.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:32	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.54**	**0.28**	**1.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 01:32	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.6**	**1.2**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 01:32	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:32	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:32	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:32	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:32	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:32	EPA 200.8	MMY	R-01, U
LP1-M (18I2599-02) Water Sampled: 09/27/18 11:30 Received: 09/27/18 17:00											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:39	EPA 200.8	MMY	U, R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:39	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**3.5**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 01:39	EPA 200.8	MMY	
Barium, dissolved	**68**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/15/18 13:48	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:39	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:39	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:39	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:39	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:39	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:39	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.48**	**0.28**	**1.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 01:39	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.2**	**1.2**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 01:39	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:39	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:39	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:39	EPA 200.8	MMY	R-01, U

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-M (18I2599-02) Water Sampled: 09/27/18 11:30 Received: 09/27/18 17:00											**FILT**
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:39	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:39	EPA 200.8	MMY	R-01, U
LP1-B (18I2599-03) Water Sampled: 09/27/18 12:00 Received: 09/27/18 17:00											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:46	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:46	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**3.2**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 01:46	EPA 200.8	MMY	
Barium, dissolved	**65**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 01:46	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:46	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:46	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:46	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:46	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:46	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:46	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.67**	**0.28**	**1.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/17/18 14:17	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.6**	**1.2**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 01:46	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:46	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:46	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:46	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:46	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:46	EPA 200.8	MMY	R-01, U
ER167.8 (18I2599-04) Water Sampled: 09/27/18 15:30 Received: 09/27/18 17:00											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:53	EPA 200.8	MMY	U, R-01
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:53	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**4.6**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 01:53	EPA 200.8	MMY	
Barium, dissolved	**58**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 01:53	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:53	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:53	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:53	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:53	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:53	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:53	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.51**	**0.28**	**1.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 01:53	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.7**	**1.2**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 01:53	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER167.8 (18I2599-04) Water Sampled: 09/27/18 15:30 Received: 09/27/18 17:00											**FILT**
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:53	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:53	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:53	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:53	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:53	EPA 200.8	MMY	R-01, U
ER-DUP2 (18I2599-05) Water Sampled: 09/27/18 15:45 Received: 09/27/18 17:00											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:59	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:59	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**3.9**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 01:59	EPA 200.8	MMY	
Barium, dissolved	**58**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 01:59	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:59	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:59	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:59	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:59	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:59	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:59	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.51**	**0.28**	**1.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 01:59	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**2.0**	**1.2**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/13/18 01:59	EPA 200.8	MMY	
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:59	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:59	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:59	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:59	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 01:59	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-EQB (18I2599-06) Water Sampled: 09/27/18 14:45 Received: 09/27/18 17:00											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 02:06	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 02:06	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 02:06	EPA 200.8	MMY	R-01, U
Barium, dissolved	ND	0.80	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 02:06	EPA 200.8	MMY	U
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 02:06	EPA 200.8	MMY	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 02:06	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 02:06	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 02:06	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 02:06	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 02:06	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	ND	0.28	1.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 02:06	EPA 200.8	MMY	R-01, U
Nickel, dissolved	ND	1.2	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 02:06	EPA 200.8	MMY	R-01, U
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 02:06	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 02:06	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 02:06	EPA 200.8	MMY	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 02:06	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AJ83510	10/10/18 07:40	10/13/18 02:06	EPA 200.8	MMY	R-01, U
LP-DUP (18I2599-07) Water Sampled: 09/27/18 12:30 Received: 09/27/18 17:00											**FILT**
Aluminum, dissolved	ND	20	40	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 23:05	EPA 200.8	MMY	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 23:05	EPA 200.8	MMY	R-01, U
Arsenic, dissolved	**3.7**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/12/18 23:05	EPA 200.8	MMY	R-01
Barium, dissolved	**65**	**0.80**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/12/18 23:05	EPA 200.8	MMY	
Beryllium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 23:05	EPA 200.8	MMY	U
Cadmium, dissolved	ND	0.24	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 23:05	EPA 200.8	MMY	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 23:05	EPA 200.8	MMY	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 23:05	EPA 200.8	MMY	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 23:05	EPA 200.8	MMY	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 23:05	EPA 200.8	MMY	R-01, U
Molybdenum, dissolved	**0.52**	**0.28**	**1.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/12/18 23:05	EPA 200.8	MMY	R-01, J
Nickel, dissolved	**1.6**	**1.2**	**2.0**	**ug/L**	4	AJ83510	10/10/18 07:40	10/12/18 23:05	EPA 200.8	MMY	R-01, J
Selenium, dissolved	ND	1.2	8.0	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 23:05	EPA 200.8	MMY	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 23:05	EPA 200.8	MMY	U, R-01
Thallium, dissolved	ND	0.20	0.40	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 23:05	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals (Dissolved) by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-DUP (18I2599-07) Water Sampled: 09/27/18 12:30 Received: 09/27/18 17:00											**FILT**
Vanadium, dissolved	ND	2.0	4.0	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 23:05	EPA 200.8	MMY	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L	4	AJ83510	10/10/18 07:40	10/12/18 23:05	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-S (18I2599-01) Water Sampled: 09/27/18 11:15 Received: 09/27/18 17:00											
Mercury	**1.03**	**0.200**	**0.500**	**ng/l**	1	AJ83641	10/11/18 14:00	10/12/18 14:38	EPA 1631E	AJC	
LP1-M (18I2599-02) Water Sampled: 09/27/18 11:30 Received: 09/27/18 17:00											
Mercury	**0.879**	**0.200**	**0.500**	**ng/l**	1	AJ83641	10/11/18 14:00	10/12/18 14:46	EPA 1631E	AJC	
LP1-B (18I2599-03) Water Sampled: 09/27/18 12:00 Received: 09/27/18 17:00											
Mercury	**1.21**	**0.200**	**0.500**	**ng/l**	1	AJ83641	10/11/18 14:00	10/12/18 14:54	EPA 1631E	AJC	
ER167.8 (18I2599-04) Water Sampled: 09/27/18 15:30 Received: 09/27/18 17:00											
Mercury	**2.37**	**0.200**	**0.500**	**ng/l**	1	AJ83641	10/11/18 14:00	10/12/18 15:02	EPA 1631E	AJC	
ER-DUP2 (18I2599-05) Water Sampled: 09/27/18 15:45 Received: 09/27/18 17:00											
Mercury	**2.50**	**0.200**	**0.500**	**ng/l**	1	AJ83641	10/11/18 14:00	10/12/18 15:10	EPA 1631E	AJC	
LP-EQB (18I2599-06) Water Sampled: 09/27/18 14:45 Received: 09/27/18 17:00											
Mercury	ND	0.200	0.500	ng/l	1	AJ83641	10/11/18 14:00	10/12/18 15:18	EPA 1631E	AJC	U
LP-DUP (18I2599-07) Water Sampled: 09/27/18 12:30 Received: 09/27/18 17:00											
Mercury	**0.913**	**0.200**	**0.500**	**ng/l**	1	AJ83641	10/11/18 14:00	10/12/18 15:27	EPA 1631E	AJC	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-S (18I2599-01) Water Sampled: 09/27/18 11:15 Received: 09/27/18 17:00											
Ammonia as N	**0.14**	**0.10**	**0.20**	**mg/L**	1	AJ83372	10/05/18 10:30	10/05/18 16:00	SM4500NH3C	FCM	J
Biochemical Oxygen Demand	**2.7**	**2.0**	**5.0**	**mg/L**	1	AI84213	09/28/18 13:00	10/03/18 14:30	SM5210B	WCS	J
Chlorophyll-a	**0.013**	**0.0020**	**0.010**	**mg/L**	2	AJ83619	09/28/18 12:00	10/16/18 14:00	SM10200H	EV	
Dissolved Organic Carbon	**3.03**	**0.600**	**1.00**	**mg/L**	1	AJ83631	10/11/18 10:44	10/12/18 16:28	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AJ83623	10/11/18 08:14	10/11/18 14:07	EPA 1664A	STS	U
Sulfide	ND	0.020	0.10	mg/L	1	AJ83267	10/03/18 15:00	10/03/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**94**	**10**	**10**	**mg/L**	1	AJ83291	10/04/18 08:00	10/10/18 13:28	SM2540C	PBM	
Total Suspended Solids	**2.6**	**0.30**	**1.0**	**mg/L**	1	AJ83261	10/03/18 17:30	10/05/18 15:26	SM2540D	PBM	
Bicarbonate Alkalinity as CaCO3	**84**	**1.0**	**5.0**	**mg/L**	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	U
Total Alkalinity as CaCO3	**84**	**1.0**	**5.0**	**mg/L**	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AJ83405	10/05/18 12:44	10/09/18 15:04	Calculation	RLG	U
Total Kjeldahl Nitrogen	**0.38**	**0.050**	**1.0**	**mg/L**	1	AJ83424	10/09/18 07:32	10/10/18 11:16	SM4500-Norg B	JVO	J
Hardness, Total	**81**	**1**	**5**	**mg/L**	1	AJ83611	10/11/18 12:00	10/12/18 18:43	SM2340B	MAM	
Phosphorus, total	**0.022**	**0.010**	**0.040**	**mg/L**	1	AJ83555	10/10/18 08:00	10/10/18 11:34	SM4500-P E	SMS	J
Total Organic Carbon	**2.97**	**0.300**	**1.00**	**mg/L**	1	AJ83834	10/16/18 09:43	10/19/18 17:50	SM5310C	JIM	
LP1-M (18I2599-02) Water Sampled: 09/27/18 11:30 Received: 09/27/18 17:00											
Ammonia as N	ND	0.10	0.20	mg/L	1	AJ83372	10/05/18 10:30	10/05/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI84213	09/28/18 13:00	10/03/18 14:30	SM5210B	WCS	U
Chlorophyll-a	**0.0096**	**0.0020**	**0.010**	**mg/L**	2	AJ83619	09/28/18 12:00	10/16/18 14:00	SM10200H	EV	J
Dissolved Organic Carbon	**2.73**	**0.600**	**1.00**	**mg/L**	1	AJ83631	10/11/18 10:44	10/12/18 16:47	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AJ83623	10/11/18 08:14	10/11/18 14:07	EPA 1664A	STS	U
Sulfide	ND	0.020	0.10	mg/L	1	AJ83267	10/03/18 15:00	10/03/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**100**	**10**	**10**	**mg/L**	1	AJ83291	10/04/18 08:00	10/10/18 13:28	SM2540C	PBM	
Total Suspended Solids	**1.0**	**0.30**	**1.0**	**mg/L**	1	AJ83261	10/03/18 17:30	10/05/18 15:26	SM2540D	PBM	
Bicarbonate Alkalinity as CaCO3	**82**	**1.0**	**5.0**	**mg/L**	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	U
Total Alkalinity as CaCO3	**82**	**1.0**	**5.0**	**mg/L**	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	
Nitrate + Nitrite as N	**0.035**	**0.0086**	**0.40**	**mg/L**	1	AJ83405	10/05/18 12:44	10/09/18 15:04	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.35**	**0.050**	**1.0**	**mg/L**	1	AJ83424	10/09/18 07:32	10/10/18 11:16	SM4500-Norg B	JVO	J
Hardness, Total	**80**	**1**	**5**	**mg/L**	1	AJ83611	10/11/18 12:00	10/12/18 18:48	SM2340B	MAM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-M (18I2599-02) Water Sampled: 09/27/18 11:30 Received: 09/27/18 17:00											
Phosphorus, total	**0.016**	**0.010**	**0.040**	**mg/L**	1	AJ83555	10/10/18 08:00	10/10/18 11:34	SM4500-P E	SMS	J
Total Organic Carbon	**2.84**	**0.300**	**1.00**	**mg/L**	1	AJ83834	10/16/18 09:43	10/19/18 18:10	SM5310C	JIM	
LP1-B (18I2599-03) Water Sampled: 09/27/18 12:00 Received: 09/27/18 17:00											
Ammonia as N	ND	0.10	0.20	mg/L	1	AJ83372	10/05/18 10:30	10/05/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI84213	09/28/18 13:00	10/03/18 14:30	SM5210B	WCS	U
Chlorophyll-a	**0.0045**	**0.0010**	**0.010**	**mg/L**	1	AJ83619	09/28/18 12:00	10/16/18 14:00	SM10200H	EV	J
Dissolved Organic Carbon	**2.67**	**0.600**	**1.00**	**mg/L**	1	AJ83631	10/11/18 10:44	10/12/18 17:07	SM5310C	JIM	
Oil & Grease (HEM)	**1.7**	**1.4**	**5.0**	**mg/L**	1	AJ83623	10/11/18 08:14	10/11/18 14:07	EPA 1664A	STS	J
Sulfide	ND	0.020	0.10	mg/L	1	AJ83267	10/03/18 15:00	10/03/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**100**	**10**	**10**	**mg/L**	1	AJ83291	10/04/18 08:00	10/10/18 13:28	SM2540C	PBM	
Total Suspended Solids	**2.3**	**0.30**	**1.0**	**mg/L**	1	AJ83261	10/03/18 17:30	10/05/18 15:26	SM2540D	PBM	
Bicarbonate Alkalinity as CaCO3	**80**	**1.0**	**5.0**	**mg/L**	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	U
Total Alkalinity as CaCO3	**80**	**1.0**	**5.0**	**mg/L**	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	
Nitrate + Nitrite as N	**0.045**	**0.0086**	**0.40**	**mg/L**	1	AJ83405	10/05/18 12:44	10/09/18 15:04	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.46**	**0.050**	**1.0**	**mg/L**	1	AJ83424	10/09/18 07:32	10/10/18 14:39	SM4500-Norg B	JVO	J
Hardness, Total	**81**	**1**	**5**	**mg/L**	1	AJ83611	10/11/18 12:00	10/12/18 19:01	SM2340B	MAM	
Phosphorus, total	**0.025**	**0.010**	**0.040**	**mg/L**	1	AJ83555	10/10/18 08:00	10/10/18 11:34	SM4500-P E	SMS	J
Total Organic Carbon	**2.81**	**0.300**	**1.00**	**mg/L**	1	AJ83834	10/16/18 09:43	10/19/18 18:29	SM5310C	JIM	
ER167.8 (18I2599-04) Water Sampled: 09/27/18 15:30 Received: 09/27/18 17:00											
Ammonia as N	ND	0.10	0.20	mg/L	1	AJ83372	10/05/18 10:30	10/05/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	**2.6**	**2.0**	**5.0**	**mg/L**	1	AI84213	09/28/18 13:00	10/03/18 14:30	SM5210B	WCS	J
Chlorophyll-a	**0.0061**	**0.0010**	**0.010**	**mg/L**	1	AJ83619	09/28/18 12:00	10/16/18 14:00	SM10200H	EV	J
Dissolved Organic Carbon	**2.94**	**0.600**	**1.00**	**mg/L**	1	AJ83631	10/11/18 10:44	10/12/18 17:26	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AJ83623	10/11/18 08:14	10/11/18 14:07	EPA 1664A	STS	U
Sulfide	ND	0.020	0.10	mg/L	1	AJ83267	10/03/18 15:00	10/03/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**110**	**10**	**10**	**mg/L**	1	AJ83291	10/04/18 08:00	10/10/18 13:28	SM2540C	PBM	
Total Suspended Solids	**3.9**	**0.30**	**1.0**	**mg/L**	1	AJ83261	10/03/18 17:30	10/05/18 15:26	SM2540D	PBM	
Bicarbonate Alkalinity as CaCO3	**81**	**1.0**	**5.0**	**mg/L**	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER167.8 (18I2599-04) Water Sampled: 09/27/18 15:30 Received: 09/27/18 17:00											
Total Alkalinity as CaCO3	**81**	**1.0**	**5.0**	**mg/L**	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	
Nitrate + Nitrite as N	**0.13**	**0.0086**	**0.40**	**mg/L**	1	AJ83405	10/05/18 12:44	10/09/18 15:04	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.46**	**0.050**	**1.0**	**mg/L**	1	AJ83424	10/09/18 07:32	10/11/18 10:48	SM4500-Norg B	JVO	J
Hardness, Total	**82**	**1**	**5**	**mg/L**	1	AJ83611	10/11/18 12:00	10/12/18 19:06	SM2340B	MAM	
Phosphorus, total	**0.047**	**0.010**	**0.040**	**mg/L**	1	AJ83555	10/10/18 08:00	10/10/18 11:34	SM4500-P E	SMS	
Total Organic Carbon	**2.81**	**0.300**	**1.00**	**mg/L**	1	AJ83834	10/16/18 09:43	10/19/18 18:49	SM5310C	JIM	
ER-DUP2 (18I2599-05) Water Sampled: 09/27/18 15:45 Received: 09/27/18 17:00											
Ammonia as N	ND	0.10	0.20	mg/L	1	AJ83372	10/05/18 10:30	10/05/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	**2.7**	**2.0**	**5.0**	**mg/L**	1	AI84213	09/28/18 13:00	10/03/18 14:30	SM5210B	WCS	J
Chlorophyll-a	**0.0063**	**0.0010**	**0.010**	**mg/L**	1	AJ83619	09/28/18 12:00	10/16/18 14:00	SM10200H	EV	J
Dissolved Organic Carbon	**2.85**	**0.600**	**1.00**	**mg/L**	1	AJ83631	10/11/18 10:44	10/12/18 17:46	SM5310C	JIM	
Oil & Grease (HEM)	**1.4**	**1.4**	**5.0**	**mg/L**	1	AJ83623	10/11/18 08:14	10/11/18 14:07	EPA 1664A	STS	J
Sulfide	ND	0.020	0.10	mg/L	1	AJ83267	10/03/18 15:00	10/03/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**100**	**10**	**10**	**mg/L**	1	AJ83291	10/04/18 08:00	10/10/18 13:28	SM2540C	PBM	
Total Suspended Solids	**3.6**	**0.30**	**1.0**	**mg/L**	1	AJ83261	10/03/18 17:30	10/05/18 15:26	SM2540D	PBM	
Bicarbonate Alkalinity as CaCO3	**82**	**1.0**	**5.0**	**mg/L**	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	U
Total Alkalinity as CaCO3	**82**	**1.0**	**5.0**	**mg/L**	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	
Nitrate + Nitrite as N	**0.14**	**0.0086**	**0.40**	**mg/L**	1	AJ83405	10/05/18 12:44	10/09/18 15:04	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.42**	**0.050**	**1.0**	**mg/L**	1	AJ83424	10/09/18 07:32	10/11/18 10:48	SM4500-Norg B	JVO	J
Hardness, Total	**81**	**1**	**5**	**mg/L**	1	AJ83611	10/11/18 12:00	10/12/18 19:10	SM2340B	MAM	
Phosphorus, total	**0.054**	**0.010**	**0.040**	**mg/L**	1	AJ83555	10/10/18 08:00	10/10/18 11:34	SM4500-P E	SMS	
Total Organic Carbon	**2.89**	**0.300**	**1.00**	**mg/L**	1	AJ83834	10/16/18 09:43	10/19/18 19:08	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-EQB (18I2599-06) Water Sampled: 09/27/18 14:45 Received: 09/27/18 17:00											
Ammonia as N	ND	0.10	0.20	mg/L	1	AJ83372	10/05/18 10:30	10/05/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AI84213	09/28/18 13:00	10/03/18 14:30	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AJ83619	09/28/18 12:00	10/16/18 14:00	SM10200H	EV	U
Dissolved Organic Carbon	ND	0.600	1.00	mg/L	1	AJ83631	10/11/18 10:44	10/12/18 18:05	SM5310C	JIM	U
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AJ83623	10/11/18 08:14	10/11/18 14:07	EPA 1664A	STS	U
Sulfide	ND	0.020	0.10	mg/L	1	AJ83267	10/03/18 15:00	10/03/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	ND	10	10	mg/L	1	AJ83291	10/04/18 08:00	10/10/18 13:28	SM2540C	PBM	U
Total Suspended Solids	ND	0.30	1.0	mg/L	1	AJ83261	10/03/18 17:30	10/05/18 15:26	SM2540D	PBM	U
Bicarbonate Alkalinity as CaCO3	**3.0**	**1.0**	**5.0**	**mg/L**	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	J
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	U
Total Alkalinity as CaCO3	**3.0**	**1.0**	**5.0**	**mg/L**	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	J
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AJ83405	10/05/18 12:44	10/09/18 15:04	Calculation	RLG	U
Total Kjeldahl Nitrogen	**0.070**	**0.050**	**1.0**	**mg/L**	1	AJ83424	10/09/18 07:32	10/11/18 10:48	SM4500-Norg B	JVO	J
Hardness, Total	ND	1	5	mg/L	1	AJ83611	10/11/18 12:00	10/12/18 19:15	SM2340B	MAM	U
Phosphorus, total	ND	0.010	0.040	mg/L	1	AJ83555	10/10/18 08:00	10/10/18 11:34	SM4500-P E	SMS	U
Total Organic Carbon	**0.308**	**0.300**	**1.00**	**mg/L**	1	AJ83834	10/16/18 09:43	10/19/18 19:27	SM5310C	JIM	J
LP-DUP (18I2599-07) Water Sampled: 09/27/18 12:30 Received: 09/27/18 17:00											
Ammonia as N	ND	0.10	0.20	mg/L	1	AJ83372	10/05/18 10:30	10/05/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	**3.4**	**2.0**	**5.0**	**mg/L**	1	AI84213	09/28/18 13:00	10/03/18 14:30	SM5210B	WCS	J
Chlorophyll-a	**0.018**	**0.0050**	**0.010**	**mg/L**	5	AJ83619	09/28/18 12:00	10/16/18 14:00	SM10200H	EV	
Dissolved Organic Carbon	**3.19**	**0.600**	**1.00**	**mg/L**	1	AJ83631	10/11/18 10:44	10/12/18 18:25	SM5310C	JIM	
Oil & Grease (HEM)	ND	1.4	5.0	mg/L	1	AJ83623	10/11/18 08:14	10/11/18 14:07	EPA 1664A	STS	U
Sulfide	ND	0.020	0.10	mg/L	1	AJ83267	10/03/18 15:00	10/03/18 17:00	SM4500-S2 D	EV	U
Total Dissolved Solids	**100**	**10**	**10**	**mg/L**	1	AJ83291	10/04/18 08:00	10/10/18 13:28	SM2540C	PBM	
Total Suspended Solids	**2.2**	**0.30**	**1.0**	**mg/L**	1	AJ83261	10/03/18 17:30	10/05/18 15:26	SM2540D	PBM	
Bicarbonate Alkalinity as CaCO3	**81**	**1.0**	**5.0**	**mg/L**	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	U
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	U
Total Alkalinity as CaCO3	**81**	**1.0**	**5.0**	**mg/L**	1	AJ83513	10/10/18 08:00	10/10/18 16:36	SM2320B	CEF	
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AJ83405	10/05/18 12:44	10/09/18 15:04	Calculation	RLG	U
Total Kjeldahl Nitrogen	**0.35**	**0.050**	**1.0**	**mg/L**	1	AJ83424	10/09/18 07:32	10/11/18 10:48	SM4500-Norg B	JVO	J
Hardness, Total	**83**	**1**	**5**	**mg/L**	1	AJ83611	10/11/18 12:00	10/12/18 17:31	SM2340B	MAM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-DUP (18I2599-07) Water Sampled: 09/27/18 12:30 Received: 09/27/18 17:00											
Phosphorus, total	**0.022**	**0.010**	**0.040**	**mg/L**	1	AJ83555	10/10/18 08:00	10/10/18 11:34	SM4500-P E	SMS	J
Total Organic Carbon	**3.10**	**0.300**	**1.00**	**mg/L**	1	AJ83834	10/16/18 09:43	10/19/18 19:47	SM5310C	JIM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-S (18I2599-01) Water Sampled: 09/27/18 11:15 Received: 09/27/18 17:00											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI84228	09/28/18 15:30	09/28/18 15:30	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI84228	09/28/18 15:30	09/28/18 15:30	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI84228	09/28/18 15:30	09/28/18 15:30	EPA 300.0	SMP	U
LP1-M (18I2599-02) Water Sampled: 09/27/18 11:30 Received: 09/27/18 17:00											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI84228	09/28/18 15:47	09/28/18 15:47	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI84228	09/28/18 15:47	09/28/18 15:47	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI84228	09/28/18 15:47	09/28/18 15:47	EPA 300.0	SMP	U
LP1-B (18I2599-03) Water Sampled: 09/27/18 12:00 Received: 09/27/18 17:00											
Nitrate as N	**0.045**	**0.040**	**0.20**	**mg/L**	1	AI84228	09/28/18 16:03	09/28/18 16:03	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AI84228	09/28/18 16:03	09/28/18 16:03	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI84228	09/28/18 16:03	09/28/18 16:03	EPA 300.0	SMP	U
ER167.8 (18I2599-04) Water Sampled: 09/27/18 15:30 Received: 09/27/18 17:00											
Nitrate as N	**0.059**	**0.040**	**0.20**	**mg/L**	1	AI84228	09/28/18 16:19	09/28/18 16:19	EPA 300.0	SMP	J
Nitrite as N	**0.069**	**0.050**	**0.20**	**mg/L**	1	AI84228	09/28/18 16:19	09/28/18 16:19	EPA 300.0	SMP	J
Orthophosphate	**0.13**	**0.10**	**0.30**	**mg/L**	1	AI84228	09/28/18 16:19	09/28/18 16:19	EPA 300.0	SMP	J
ER-DUP2 (18I2599-05) Water Sampled: 09/27/18 15:45 Received: 09/27/18 17:00											
Nitrate as N	**0.067**	**0.040**	**0.20**	**mg/L**	1	AI84228	09/28/18 16:36	09/28/18 16:36	EPA 300.0	SMP	J
Nitrite as N	**0.069**	**0.050**	**0.20**	**mg/L**	1	AI84228	09/28/18 16:36	09/28/18 16:36	EPA 300.0	SMP	J
Orthophosphate	**0.13**	**0.10**	**0.30**	**mg/L**	1	AI84228	09/28/18 16:36	09/28/18 16:36	EPA 300.0	SMP	J
LP-EQB (18I2599-06) Water Sampled: 09/27/18 14:45 Received: 09/27/18 17:00											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI84228	09/28/18 16:52	09/28/18 16:52	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI84228	09/28/18 16:52	09/28/18 16:52	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI84228	09/28/18 16:52	09/28/18 16:52	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-DUP (18I2599-07) Water Sampled: 09/27/18 12:30 Received: 09/27/18 17:00											
Nitrate as N	ND	0.040	0.20	mg/L	1	AI84228	09/28/18 17:09	09/28/18 17:09	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AI84228	09/28/18 17:09	09/28/18 17:09	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AI84228	09/28/18 17:09	09/28/18 17:09	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

TPH by EPA/LUFT GC Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-S (18I2599-01) Water Sampled: 09/27/18 11:15 Received: 09/27/18 17:00											
TPH as Diesel	ND	50	250	ug/L	1	AJ83187	10/02/18 07:32	10/05/18 16:12	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AJ83187	10/02/18 07:32	10/05/18 16:12	8015DRO	DLD	U
Surrogate: Tetratetracontane		*78.8 %*	*39-120*			*AJ83187*	*10/02/18 07:32*	*10/05/18 16:12*	*8015DRO*	*DLD*	
LP1-M (18I2599-02) Water Sampled: 09/27/18 11:30 Received: 09/27/18 17:00											
TPH as Diesel	ND	50	250	ug/L	1	AJ83187	10/02/18 07:32	10/05/18 16:46	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AJ83187	10/02/18 07:32	10/05/18 16:46	8015DRO	DLD	U
Surrogate: Tetratetracontane		*48.3 %*	*39-120*			*AJ83187*	*10/02/18 07:32*	*10/05/18 16:46*	*8015DRO*	*DLD*	
LP1-B (18I2599-03) Water Sampled: 09/27/18 12:00 Received: 09/27/18 17:00											
TPH as Diesel	ND	50	250	ug/L	1	AJ83187	10/02/18 07:32	10/05/18 17:21	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AJ83187	10/02/18 07:32	10/05/18 17:21	8015DRO	DLD	U
Surrogate: Tetratetracontane		*98.6 %*	*39-120*			*AJ83187*	*10/02/18 07:32*	*10/05/18 17:21*	*8015DRO*	*DLD*	
ER167.8 (18I2599-04) Water Sampled: 09/27/18 15:30 Received: 09/27/18 17:00											
TPH as Diesel	ND	50	250	ug/L	1	AJ83187	10/02/18 07:32	10/05/18 17:56	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AJ83187	10/02/18 07:32	10/05/18 17:56	8015DRO	DLD	U
Surrogate: Tetratetracontane		*109 %*	*39-120*			*AJ83187*	*10/02/18 07:32*	*10/05/18 17:56*	*8015DRO*	*DLD*	
ER-DUP2 (18I2599-05) Water Sampled: 09/27/18 15:45 Received: 09/27/18 17:00											
TPH as Diesel	ND	50	250	ug/L	1	AJ83187	10/02/18 07:32	10/05/18 18:31	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AJ83187	10/02/18 07:32	10/05/18 18:31	8015DRO	DLD	U
Surrogate: Tetratetracontane		*87.3 %*	*39-120*			*AJ83187*	*10/02/18 07:32*	*10/05/18 18:31*	*8015DRO*	*DLD*	
LP-EQB (18I2599-06) Water Sampled: 09/27/18 14:45 Received: 09/27/18 17:00											
TPH as Diesel	ND	50	250	ug/L	1	AJ83187	10/02/18 07:32	10/05/18 19:05	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AJ83187	10/02/18 07:32	10/05/18 19:05	8015DRO	DLD	U
Surrogate: Tetratetracontane		*91.7 %*	*39-120*			*AJ83187*	*10/02/18 07:32*	*10/05/18 19:05*	*8015DRO*	*DLD*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

TPH by EPA/LUFT GC Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-DUP (18I2599-07) Water Sampled: 09/27/18 12:30 Received: 09/27/18 17:00											
TPH as Diesel	ND	50	250	ug/L	1	AJ83187	10/02/18 07:32	10/05/18 19:40	8015DRO	DLD	U
TPH as Motor Oil	ND	100	250	ug/L	1	AJ83187	10/02/18 07:32	10/05/18 19:40	8015DRO	DLD	U
Surrogate: Tetratetracontane		*105 %*	*39-120*			*AJ83187*	*10/02/18 07:32*	*10/05/18 19:40*	*8015DRO*	*DLD*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

TPH by EPA/LUFT GCMS Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-S (18I2599-01) Water Sampled: 09/27/18 11:15 Received: 09/27/18 17:00											
TPH as Gasoline	ND		50	ug/L	1	AJ83448	10/08/18 13:00	10/08/18 16:51	8260GRO	MM/JV	U
Surrogate: Toluene-d8	*100 %*		*76-129*			*AJ83448*	*10/08/18 13:00*	*10/08/18 16:51*	*8260GRO*	*MM/JV*	
LP1-M (18I2599-02) Water Sampled: 09/27/18 11:30 Received: 09/27/18 17:00											
TPH as Gasoline	ND		50	ug/L	1	AJ83448	10/08/18 13:00	10/08/18 17:23	8260GRO	MM/JV	U
Surrogate: Toluene-d8	*98.4 %*		*76-129*			*AJ83448*	*10/08/18 13:00*	*10/08/18 17:23*	*8260GRO*	*MM/JV*	
LP1-B (18I2599-03) Water Sampled: 09/27/18 12:00 Received: 09/27/18 17:00											
TPH as Gasoline	ND		50	ug/L	1	AJ83448	10/08/18 13:00	10/08/18 17:55	8260GRO	MM/JV	U
Surrogate: Toluene-d8	*98.2 %*		*76-129*			*AJ83448*	*10/08/18 13:00*	*10/08/18 17:55*	*8260GRO*	*MM/JV*	
ER167.8 (18I2599-04) Water Sampled: 09/27/18 15:30 Received: 09/27/18 17:00											
TPH as Gasoline	ND		50	ug/L	1	AJ83448	10/08/18 13:00	10/08/18 18:27	8260GRO	MM/JV	U
Surrogate: Toluene-d8	*98.4 %*		*76-129*			*AJ83448*	*10/08/18 13:00*	*10/08/18 18:27*	*8260GRO*	*MM/JV*	
ER-DUP2 (18I2599-05) Water Sampled: 09/27/18 15:45 Received: 09/27/18 17:00											
TPH as Gasoline	ND		50	ug/L	1	AJ83448	10/08/18 13:00	10/08/18 18:59	8260GRO	MM/JV	U
Surrogate: Toluene-d8	*98.0 %*		*76-129*			*AJ83448*	*10/08/18 13:00*	*10/08/18 18:59*	*8260GRO*	*MM/JV*	
LP-EQB (18I2599-06) Water Sampled: 09/27/18 14:45 Received: 09/27/18 17:00											
TPH as Gasoline	ND		50	ug/L	1	AJ83448	10/08/18 13:00	10/08/18 19:31	8260GRO	MM/JV	U
Surrogate: Toluene-d8	*100 %*		*76-129*			*AJ83448*	*10/08/18 13:00*	*10/08/18 19:31*	*8260GRO*	*MM/JV*	
LP-DUP (18I2599-07) Water Sampled: 09/27/18 12:30 Received: 09/27/18 17:00											
TPH as Gasoline	ND		50	ug/L	1	AJ83448	10/08/18 13:00	10/08/18 20:03	8260GRO	MM/JV	U
Surrogate: Toluene-d8	*98.0 %*		*76-129*			*AJ83448*	*10/08/18 13:00*	*10/08/18 20:03*	*8260GRO*	*MM/JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-S (18I2599-01) Water Sampled: 09/27/18 11:15 Received: 09/27/18 17:00											
Benzene	ND	0.30	0.30	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 16:51	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 16:51	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 16:51	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 16:51	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 16:51	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 16:51	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 16:51	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 16:51	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 16:51	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*108 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 16:51*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*100 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 16:51*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*121 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 16:51*	*EPA 8260B*	*JV*	
LP1-M (18I2599-02) Water Sampled: 09/27/18 11:30 Received: 09/27/18 17:00											
Benzene	ND	0.30	0.30	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 17:23	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 17:23	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 17:23	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 17:23	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 17:23	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 17:23	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 17:23	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 17:23	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 17:23	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*107 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 17:23*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*101 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 17:23*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*119 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 17:23*	*EPA 8260B*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-B (18I2599-03) Water Sampled: 09/27/18 12:00 Received: 09/27/18 17:00											
Benzene	ND	0.30	0.30	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 17:55	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 17:55	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 17:55	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 17:55	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 17:55	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 17:55	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 17:55	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 17:55	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 17:55	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*107 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 17:55*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*101 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 17:55*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*117 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 17:55*	*EPA 8260B*	*JV*	
ER167.8 (18I2599-04) Water Sampled: 09/27/18 15:30 Received: 09/27/18 17:00											
Benzene	ND	0.30	0.30	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 18:27	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 18:27	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 18:27	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 18:27	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 18:27	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 18:27	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 18:27	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 18:27	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 18:27	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*106 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 18:27*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*102 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 18:27*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*117 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 18:27*	*EPA 8260B*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER-DUP2 (18I2599-05) Water Sampled: 09/27/18 15:45 Received: 09/27/18 17:00											
Benzene	ND	0.30	0.30	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 18:59	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 18:59	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 18:59	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 18:59	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 18:59	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 18:59	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 18:59	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 18:59	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 18:59	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*105 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 18:59*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*99.7 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 18:59*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*116 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 18:59*	*EPA 8260B*	*JV*	
LP-EQB (18I2599-06) Water Sampled: 09/27/18 14:45 Received: 09/27/18 17:00											
Benzene	ND	0.30	0.30	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 19:31	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 19:31	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 19:31	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 19:31	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 19:31	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 19:31	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 19:31	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 19:31	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 19:31	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*108 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 19:31*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*101 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 19:31*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*120 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 19:31*	*EPA 8260B*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-DUP (18I2599-07) Water Sampled: 09/27/18 12:30 Received: 09/27/18 17:00											
Benzene	ND	0.30	0.30	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 20:03	EPA 8260B	JV	U
Toluene	ND	0.30	0.30	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 20:03	EPA 8260B	JV	U
Ethylbenzene	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 20:03	EPA 8260B	JV	U
Xylenes (total)	ND	0.50	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 20:03	EPA 8260B	JV	U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 20:03	EPA 8260B	JV	U
Di-isopropyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 20:03	EPA 8260B	JV	U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 20:03	EPA 8260B	JV	U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 20:03	EPA 8260B	JV	U
Tert-butyl alcohol	ND	6.0	10	ug/L	1	AJ83450	10/08/18 13:30	10/08/18 20:03	EPA 8260B	JV	U
Surrogate: Bromofluorobenzene		*104 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 20:03*	*EPA 8260B*	*JV*	
Surrogate: Dibromofluoromethane		*100 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 20:03*	*EPA 8260B*	*JV*	
Surrogate: Toluene-d8		*117 %*	*70-130*			*AJ83450*	*10/08/18 13:30*	*10/08/18 20:03*	*EPA 8260B*	*JV*	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83611 - Metals Digest											
Blank (AJ83611-BLK1)					Prepared: 10/11/18 Analyzed: 10/12/18						
Calcium	ND	0.080	1.0	mg/L							U
Magnesium	ND	0.030	1.0	mg/L							U
LCS (AJ83611-BS1)					Prepared: 10/11/18 Analyzed: 10/12/18						
Calcium	8.05	0.080	1.0	mg/L	8.00		101	85-115			
Magnesium	8.06	0.030	1.0	mg/L	8.00		101	85-115			
Duplicate (AJ83611-DUP1)		**Source: 18I2575-01**			Prepared: 10/11/18 Analyzed: 10/12/18						
Calcium	61.8	0.080	1.0	mg/L		61.6			0.336	20	
Magnesium	20.9	0.030	1.0	mg/L		21.2			1.13	20	
Matrix Spike (AJ83611-MS1)		**Source: 18I2575-01**			Prepared: 10/11/18 Analyzed: 10/12/18						
Calcium	70.9	0.080	1.0	mg/L	8.00	61.6	116	70-130			
Magnesium	29.3	0.030	1.0	mg/L	8.00	21.2	101	70-130			
Matrix Spike (AJ83611-MS2)		**Source: 18I2599-07**			Prepared: 10/11/18 Analyzed: 10/12/18						
Calcium	30.1	0.080	1.0	mg/L	8.00	22.4	96.9	70-130			
Magnesium	14.8	0.030	1.0	mg/L	8.00	6.58	102	70-130			
Matrix Spike Dup (AJ83611-MSD1)		**Source: 18I2575-01**			Prepared: 10/11/18 Analyzed: 10/12/18						
Calcium	71.7	0.080	1.0	mg/L	8.00	61.6	126	70-130	1.11	20	
Magnesium	29.2	0.030	1.0	mg/L	8.00	21.2	100	70-130	0.325	20	
Batch AJ83624 - EPA 245.1 Hg Water											
LCS (AJ83624-BS1)					Prepared & Analyzed: 10/11/18						
Mercury	2.60	0.060	0.20	ug/L	2.50		104	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83624 - EPA 245.1 Hg Water											
Duplicate (AJ83624-DUP1)		**Source: 18I2599-01**			Prepared & Analyzed: 10/11/18						
Mercury	ND	0.060	0.20	ug/L		ND				20	U
MRL Check (AJ83624-MRL1)					Prepared & Analyzed: 10/11/18						
Mercury	0.506	0.060	0.20	ug/L	0.500		101	0-200			
Matrix Spike (AJ83624-MS1)		**Source: 18I2599-01**			Prepared & Analyzed: 10/11/18						
Mercury	2.59	0.060	0.20	ug/L	2.50	ND	103	70-130			
Matrix Spike (AJ83624-MS2)		**Source: 18I2599-02**			Prepared & Analyzed: 10/11/18						
Mercury	2.58	0.060	0.20	ug/L	2.50	ND	103	70-130			
Matrix Spike Dup (AJ83624-MSD1)		**Source: 18I2599-01**			Prepared & Analyzed: 10/11/18						
Mercury	2.64	0.060	0.20	ug/L	2.50	ND	106	70-130	2.07	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83446 - Metals Digest											
Blank (AJ83446-BLK1)					Prepared: 10/08/18 Analyzed: 10/09/18						
Aluminum	ND	5.0	10	ug/L							U
Antimony	ND	0.20	0.50	ug/L							U
Arsenic	0.205	0.20	0.50	ug/L							J
Barium	ND	0.20	0.50	ug/L							U
Beryllium	ND	0.050	0.10	ug/L							U
Cadmium	ND	0.060	0.10	ug/L							U
Chromium	ND	0.50	0.50	ug/L							U
Cobalt	0.121	0.10	0.10	ug/L							
Copper	6.19	0.40	0.50	ug/L							QB-01
Iron	ND	10	50	ug/L							U
Lead	ND	0.060	0.25	ug/L							U
Manganese	ND	2.0	5.0	ug/L							U
Molybdenum	ND	0.070	0.25	ug/L							U
Nickel	ND	0.30	0.50	ug/L							U
Selenium	ND	0.30	2.0	ug/L							U
Silver	ND	0.050	0.10	ug/L							U
Thallium	ND	0.050	0.10	ug/L							U
Vanadium	ND	0.50	1.0	ug/L							U
Zinc	ND	2.0	5.0	ug/L							U
LCS (AJ83446-BS1)					Prepared: 10/08/18 Analyzed: 10/09/18						
Aluminum	551	5.0	10	ug/L	520		106	85-115			
Antimony	21.1	0.20	0.50	ug/L	20.0		106	85-115			
Arsenic	21.0	0.20	0.50	ug/L	20.0		105	85-115			
Barium	20.8	0.20	0.50	ug/L	20.0		104	85-115			
Beryllium	20.1	0.050	0.10	ug/L	20.0		101	85-115			
Cadmium	21.5	0.060	0.10	ug/L	20.0		108	85-115			
Chromium	20.3	0.50	0.50	ug/L	20.0		101	85-115			
Cobalt	20.1	0.10	0.10	ug/L	20.0		100	85-115			
Copper	22.4	0.40	0.50	ug/L	20.0		112	85-115			
Iron	574	10	50	ug/L	520		110	85-115			
Lead	20.7	0.060	0.25	ug/L	20.0		104	85-115			
Manganese	20.3	2.0	5.0	ug/L	20.0		102	85-115			
Molybdenum	20.9	0.070	0.25	ug/L	20.0		105	85-115			
Nickel	20.5	0.30	0.50	ug/L	20.0		102	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83446 - Metals Digest											
LCS (AJ83446-BS1)					Prepared: 10/08/18 Analyzed: 10/09/18						
Selenium	22.8	0.30	2.0	ug/L	20.0		114	85-115			
Silver	20.9	0.050	0.10	ug/L	20.0		105	85-115			
Thallium	20.6	0.050	0.10	ug/L	20.0		103	85-115			
Vanadium	20.2	0.50	1.0	ug/L	20.0		101	85-115			
Zinc	110	2.0	5.0	ug/L	100		110	85-115			
Duplicate (AJ83446-DUP1)		**Source: 18I2589-01**			Prepared: 10/08/18 Analyzed: 10/11/18						
Aluminum	ND	50	100	ug/L		ND				20	R-01, U
Antimony	ND	2.0	5.0	ug/L		ND				20	R-01, U
Arsenic	6.94	2.0	5.0	ug/L		6.98			0.528	20	
Barium	12.4	2.0	5.0	ug/L		12.4			0.480	20	R-01
Beryllium	ND	0.50	1.0	ug/L		ND				20	R-01, U
Cadmium	ND	0.60	1.0	ug/L		ND				20	R-01, U
Chromium	16.4	5.0	5.0	ug/L		15.5			5.32	20	
Cobalt	ND	1.0	1.0	ug/L		ND				20	U
Copper	42.7	4.0	5.0	ug/L		47.2			10.2	20	
Iron	922	100	500	ug/L		874			5.36	20	
Lead	ND	0.60	2.5	ug/L		ND				20	R-01, U
Manganese	ND	20	50	ug/L		ND				20	R-01, U
Molybdenum	225	0.70	2.5	ug/L		243			7.29	20	
Nickel	22.7	3.0	5.0	ug/L		23.1			1.81	20	
Selenium	267	3.0	20	ug/L		265			0.766	20	
Silver	ND	0.50	1.0	ug/L		ND				20	R-01, U
Thallium	ND	0.50	1.0	ug/L		ND				20	R-01, U
Vanadium	ND	5.0	10	ug/L		ND				20	R-01, U
Zinc	ND	20	50	ug/L		ND				20	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83562 - EPA 245.1 Hg Water											
Blank (AJ83562-BLK1)					Prepared & Analyzed: 10/10/18						
Mercury, dissolved	ND	0.060	0.20	ug/L							U
LCS (AJ83562-BS1)					Prepared & Analyzed: 10/10/18						
Mercury, dissolved	2.62	0.060	0.20	ug/L	2.50		105	85-115			
Duplicate (AJ83562-DUP1)		**Source: 18I2599-01**			Prepared & Analyzed: 10/10/18						
Mercury, dissolved	ND	0.060	0.20	ug/L		ND				20	U
MRL Check (AJ83562-MRL1)					Prepared & Analyzed: 10/10/18						
Mercury, dissolved	0.528	0.060	0.20	ug/L	0.500		106	0-200			
Matrix Spike (AJ83562-MS1)		**Source: 18I2599-01**			Prepared & Analyzed: 10/10/18						
Mercury, dissolved	2.66	0.060	0.20	ug/L	2.50	ND	107	70-130			
Matrix Spike (AJ83562-MS2)		**Source: 18I2599-02**			Prepared & Analyzed: 10/10/18						
Mercury, dissolved	2.62	0.060	0.20	ug/L	2.50	ND	105	70-130			
Matrix Spike Dup (AJ83562-MSD1)		**Source: 18I2599-01**			Prepared & Analyzed: 10/10/18						
Mercury, dissolved	2.68	0.060	0.20	ug/L	2.50	ND	107	70-130	0.785	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83510 - EPA 200.8 (D)											
Blank (AJ83510-BLK1)					Prepared: 10/10/18 Analyzed: 10/12/18						
Aluminum, dissolved	ND	5.0	10	ug/L							U
Antimony, dissolved	ND	0.20	0.50	ug/L							U
Arsenic, dissolved	0.394	0.20	0.50	ug/L							J
Barium, dissolved	ND	0.20	0.50	ug/L							U
Beryllium, dissolved	ND	0.050	0.10	ug/L							U
Cadmium, dissolved	ND	0.060	0.10	ug/L							U
Chromium, dissolved	ND	0.50	0.50	ug/L							U
Cobalt, dissolved	ND	0.10	0.10	ug/L							U
Copper, dissolved	ND	0.40	0.50	ug/L							U
Lead, dissolved	ND	0.060	0.25	ug/L							U
Molybdenum, dissolved	ND	0.070	0.25	ug/L							U
Nickel, dissolved	ND	0.30	0.50	ug/L							U
Selenium, dissolved	ND	0.30	2.0	ug/L							U
Silver, dissolved	ND	0.050	0.10	ug/L							U
Thallium, dissolved	ND	0.050	0.10	ug/L							U
Vanadium, dissolved	ND	0.50	1.0	ug/L							U
Zinc, dissolved	3.66	2.0	5.0	ug/L							J
LCS (AJ83510-BS1)					Prepared: 10/10/18 Analyzed: 10/12/18						
Aluminum, dissolved	559	5.0	10	ug/L	520		107	85-115			
Antimony, dissolved	21.6	0.20	0.50	ug/L	20.0		108	85-115			
Arsenic, dissolved	20.4	0.20	0.50	ug/L	20.0		102	85-115			
Barium, dissolved	19.2	0.20	0.50	ug/L	20.0		95.8	85-115			
Beryllium, dissolved	23.3	0.050	0.10	ug/L	20.0		117	85-115			
Cadmium, dissolved	19.2	0.060	0.10	ug/L	20.0		95.9	85-115			
Chromium, dissolved	21.1	0.50	0.50	ug/L	20.0		106	85-115			
Cobalt, dissolved	20.7	0.10	0.10	ug/L	20.0		103	85-115			
Copper, dissolved	21.1	0.40	0.50	ug/L	20.0		105	85-115			
Lead, dissolved	21.6	0.060	0.25	ug/L	20.0		108	85-115			
Molybdenum, dissolved	18.0	0.070	0.25	ug/L	20.0		90.2	85-115			
Nickel, dissolved	20.8	0.30	0.50	ug/L	20.0		104	85-115			
Selenium, dissolved	20.4	0.30	2.0	ug/L	20.0		102	85-115			
Silver, dissolved	18.9	0.050	0.10	ug/L	20.0		94.7	85-115			
Thallium, dissolved	20.9	0.050	0.10	ug/L	20.0		105	85-115			
Vanadium, dissolved	21.2	0.50	1.0	ug/L	20.0		106	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83510 - EPA 200.8 (D)											
LCS (AJ83510-BS1)					Prepared: 10/10/18 Analyzed: 10/12/18						
Zinc, dissolved	99.6	2.0	5.0	ug/L	100		99.6	85-115			
Duplicate (AJ83510-DUP1)		**Source: 18I2517-01**			Prepared: 10/10/18 Analyzed: 10/12/18						
Aluminum, dissolved	ND	20	40	ug/L		ND				20	R-01, U
Antimony, dissolved	ND	0.80	2.0	ug/L		ND				20	R-01, U
Arsenic, dissolved	ND	0.80	2.0	ug/L		0.878			200	20	R-01, U
Barium, dissolved	105	0.80	2.0	ug/L		104			0.860	20	
Beryllium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Cadmium, dissolved	ND	0.24	0.40	ug/L		ND				20	R-01, U
Chromium, dissolved	ND	2.0	2.0	ug/L		ND				20	R-01, U
Cobalt, dissolved	ND	0.40	0.40	ug/L		ND				20	R-01, U
Copper, dissolved	ND	1.6	2.0	ug/L		ND				20	R-01, U
Lead, dissolved	ND	0.24	1.0	ug/L		ND				20	R-01, U
Molybdenum, dissolved	0.567	0.28	1.0	ug/L		0.531			6.57	20	R-01, J
Nickel, dissolved	1.86	1.2	2.0	ug/L		1.79			3.80	20	R-01, J
Selenium, dissolved	ND	1.2	8.0	ug/L		ND				20	R-01, U
Silver, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Thallium, dissolved	ND	0.20	0.40	ug/L		ND				20	R-01, U
Vanadium, dissolved	ND	2.0	4.0	ug/L		ND				20	R-01, U
Zinc, dissolved	ND	8.0	20	ug/L		ND				20	R-01, U
MRL Check (AJ83510-MRL1)					Prepared: 10/10/18 Analyzed: 10/12/18						
Zinc, dissolved	10.9	2.0	5.0	ug/L	8.00		136	0-200			
Matrix Spike (AJ83510-MS1)		**Source: 18I2517-01**			Prepared: 10/10/18 Analyzed: 10/12/18						
Aluminum, dissolved	566	20	40	ug/L	520	ND	109	70-130			
Antimony, dissolved	21.8	0.80	2.0	ug/L	20.0	ND	109	70-130			
Arsenic, dissolved	22.4	0.80	2.0	ug/L	20.0	0.878	108	70-130			
Barium, dissolved	125	0.80	2.0	ug/L	20.0	104	107	70-130			
Beryllium, dissolved	24.5	0.20	0.40	ug/L	20.0	ND	123	70-130			
Cadmium, dissolved	19.6	0.24	0.40	ug/L	20.0	ND	97.9	70-130			
Chromium, dissolved	21.1	2.0	2.0	ug/L	20.0	ND	106	70-130			
Cobalt, dissolved	20.5	0.40	0.40	ug/L	20.0	ND	103	70-130			
Copper, dissolved	21.4	1.6	2.0	ug/L	20.0	ND	107	70-130			
Lead, dissolved	21.2	0.24	1.0	ug/L	20.0	ND	106	70-130			
Molybdenum, dissolved	18.8	0.28	1.0	ug/L	20.0	0.531	91.5	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83510 - EPA 200.8 (D)											
Matrix Spike (AJ83510-MS1)		**Source: 18I2517-01**			Prepared: 10/10/18 Analyzed: 10/12/18						
Nickel, dissolved	22.4	1.2	2.0	ug/L	20.0	1.79	103	70-130			
Selenium, dissolved	21.1	1.2	8.0	ug/L	20.0	ND	105	70-130			
Silver, dissolved	19.6	0.20	0.40	ug/L	20.0	ND	98.1	70-130			
Thallium, dissolved	20.7	0.20	0.40	ug/L	20.0	ND	103	70-130			
Vanadium, dissolved	21.8	2.0	4.0	ug/L	20.0	ND	109	70-130			
Zinc, dissolved	99.5	8.0	20	ug/L	100	ND	99.5	70-130			
Matrix Spike (AJ83510-MS2)		**Source: 18I2599-07**			Prepared: 10/10/18 Analyzed: 10/12/18						
Aluminum, dissolved	622	20	40	ug/L	520	ND	120	70-130			
Antimony, dissolved	22.5	0.80	2.0	ug/L	20.0	ND	113	70-130			
Arsenic, dissolved	25.7	0.80	2.0	ug/L	20.0	3.66	110	70-130			
Barium, dissolved	87.4	0.80	2.0	ug/L	20.0	64.9	113	70-130			
Beryllium, dissolved	24.2	0.20	0.40	ug/L	20.0	ND	121	70-130			
Cadmium, dissolved	19.9	0.24	0.40	ug/L	20.0	ND	99.4	70-130			
Chromium, dissolved	22.3	2.0	2.0	ug/L	20.0	ND	112	70-130			
Cobalt, dissolved	21.8	0.40	0.40	ug/L	20.0	ND	109	70-130			
Lead, dissolved	22.6	0.24	1.0	ug/L	20.0	ND	113	70-130			
Molybdenum, dissolved	19.4	0.28	1.0	ug/L	20.0	0.520	94.2	70-130			
Nickel, dissolved	23.2	1.2	2.0	ug/L	20.0	1.58	108	70-130			
Selenium, dissolved	22.4	1.2	8.0	ug/L	20.0	ND	112	70-130			
Silver, dissolved	19.9	0.20	0.40	ug/L	20.0	ND	99.4	70-130			
Thallium, dissolved	22.2	0.20	0.40	ug/L	20.0	ND	111	70-130			
Vanadium, dissolved	22.3	2.0	4.0	ug/L	20.0	ND	111	70-130			
Zinc, dissolved	105	8.0	20	ug/L	100	ND	105	70-130			
Matrix Spike Dup (AJ83510-MSD1)		**Source: 18I2517-01**			Prepared: 10/10/18 Analyzed: 10/12/18						
Aluminum, dissolved	571	20	40	ug/L	520	ND	110	70-130	0.921	20	
Antimony, dissolved	21.5	0.80	2.0	ug/L	20.0	ND	108	70-130	1.23	20	
Arsenic, dissolved	22.9	0.80	2.0	ug/L	20.0	0.878	110	70-130	2.12	20	
Barium, dissolved	125	0.80	2.0	ug/L	20.0	104	104	70-130	0.396	20	
Beryllium, dissolved	23.1	0.20	0.40	ug/L	20.0	ND	116	70-130	5.89	20	
Cadmium, dissolved	19.4	0.24	0.40	ug/L	20.0	ND	96.9	70-130	1.03	20	
Chromium, dissolved	21.1	2.0	2.0	ug/L	20.0	ND	106	70-130	0.141	20	
Cobalt, dissolved	20.5	0.40	0.40	ug/L	20.0	ND	103	70-130	0.0197	20	
Copper, dissolved	22.0	1.6	2.0	ug/L	20.0	ND	110	70-130	2.61	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals (Dissolved) by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83510 - EPA 200.8 (D)											
Matrix Spike Dup (AJ83510-MSD1)		**Source: 18I2517-01**			Prepared: 10/10/18 Analyzed: 10/12/18						
Lead, dissolved	21.4	0.24	1.0	ug/L	20.0	ND	107	70-130	1.22	20	
Molybdenum, dissolved	18.5	0.28	1.0	ug/L	20.0	0.531	90.0	70-130	1.54	20	
Nickel, dissolved	26.8	1.2	2.0	ug/L	20.0	1.79	125	70-130	17.9	20	
Selenium, dissolved	22.1	1.2	8.0	ug/L	20.0	ND	111	70-130	4.92	20	
Silver, dissolved	19.0	0.20	0.40	ug/L	20.0	ND	94.8	70-130	3.45	20	
Thallium, dissolved	21.0	0.20	0.40	ug/L	20.0	ND	105	70-130	1.21	20	
Vanadium, dissolved	21.9	2.0	4.0	ug/L	20.0	ND	110	70-130	0.675	20	
Zinc, dissolved	101	8.0	20	ug/L	100	ND	101	70-130	1.23	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Metals by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83641 - EPA 1631											
Blank (AJ83641-BLK1)					Prepared: 10/11/18 Analyzed: 10/12/18						
Mercury	ND	0.200	0.500	ng/l							U
LCS (AJ83641-BS1)					Prepared: 10/11/18 Analyzed: 10/12/18						
Mercury	5.27	0.200	0.500	ng/l	5.00		105	77-123			
Matrix Spike (AJ83641-MS1)		**Source: 18I2517-06**			Prepared: 10/11/18 Analyzed: 10/12/18						
Mercury	28.1	0.200	0.500	ng/l	25.0	2.74	102	71-125			
Matrix Spike (AJ83641-MS2)		**Source: 18J0313-01**			Prepared: 10/11/18 Analyzed: 10/12/18						
Mercury	26.4	0.200	0.500	ng/l	25.0	1.87	98.2	71-125			
Matrix Spike Dup (AJ83641-MSD1)		**Source: 18I2517-06**			Prepared: 10/11/18 Analyzed: 10/12/18						
Mercury	28.2	0.200	0.500	ng/l	25.0	2.74	102	71-125	0.248	24	
Matrix Spike Dup (AJ83641-MSD2)		**Source: 18J0313-01**			Prepared: 10/11/18 Analyzed: 10/12/18						
Mercury	26.9	0.200	0.500	ng/l	25.0	1.87	100	71-125	1.69	24	
Reference (AJ83641-SRM1)					Prepared: 10/11/18 Analyzed: 10/12/18						
Mercury	64.1	0.200	0.500	ng/l	50.0		128	68-125			

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84213 - General Preparation											
Blank (AI84213-BLK1)					Prepared: 09/28/18 Analyzed: 10/03/18						
Biochemical Oxygen Demand	ND	2.0	2.0	mg/L							U
Blank (AI84213-BLK2)					Prepared: 09/28/18 Analyzed: 10/03/18						
Biochemical Oxygen Demand	ND	2.0	2.0	mg/L							U
LCS (AI84213-BS2)					Prepared: 09/28/18 Analyzed: 10/03/18						
Biochemical Oxygen Demand	202	2.0	2.0	mg/L	200		101	84-115			
Duplicate (AI84213-DUP2)		**Source: 18I2562-01**			Prepared: 09/28/18 Analyzed: 10/03/18						
Biochemical Oxygen Demand	266	2.0	2.0	mg/L		287			7.59	30	
Batch AJ83261 - General Preparation											
Blank (AJ83261-BLK1)					Prepared: 10/03/18 Analyzed: 10/05/18						
Total Suspended Solids	ND	0.30	1.0	mg/L							U
Duplicate (AJ83261-DUP1)		**Source: 18I2606-03**			Prepared: 10/03/18 Analyzed: 10/05/18						
Total Suspended Solids	49.7	0.30	1.0	mg/L		50.4			1.42	30	
Duplicate (AJ83261-DUP2)		**Source: 18I2609-01**			Prepared: 10/03/18 Analyzed: 10/05/18						
Total Suspended Solids	1490	0.30	1.0	mg/L		1450			2.41	30	
Batch AJ83267 - General Preparation											
Blank (AJ83267-BLK1)					Prepared & Analyzed: 10/03/18						
Sulfide	ND	0.020	0.10	mg/L							U

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Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83267 - General Preparation											
LCS (AJ83267-BS1)					Prepared & Analyzed: 10/03/18						
Sulfide	0.245	0.020	0.10	mg/L	0.238		103	85-115			
Duplicate (AJ83267-DUP1)		**Source: 18I2517-03**			Prepared & Analyzed: 10/03/18						
Sulfide	ND	0.020	0.10	mg/L		ND				15	U
Matrix Spike (AJ83267-MS1)		**Source: 18I2517-03**			Prepared & Analyzed: 10/03/18						
Sulfide	0.234	0.020	0.10	mg/L	0.238	ND	98.5	80-120			
Matrix Spike Dup (AJ83267-MSD1)		**Source: 18I2517-03**			Prepared & Analyzed: 10/03/18						
Sulfide	0.237	0.020	0.10	mg/L	0.238	ND	99.8	80-120	1.27	15	
Batch AJ83291 - General Preparation											
Blank (AJ83291-BLK1)					Prepared: 10/04/18 Analyzed: 10/10/18						
Total Dissolved Solids	ND	10	10	mg/L							U
Duplicate (AJ83291-DUP1)		**Source: 18I2599-01**			Prepared: 10/04/18 Analyzed: 10/10/18						
Total Dissolved Solids	110	10	10	mg/L		94.0			15.7	15	QD-03
Duplicate (AJ83291-DUP2)		**Source: 18I2678-03**			Prepared: 10/04/18 Analyzed: 10/10/18						
Total Dissolved Solids	254	10	10	mg/L		250			1.59	15	
Batch AJ83372 - General Preparation											
LCS (AJ83372-BS1)					Prepared & Analyzed: 10/05/18						
Ammonia as N	4.64	0.10	0.20	mg/L	5.00		92.8	90-110			

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83372 - General Preparation											
LCS Dup (AJ83372-BSD1)					Prepared & Analyzed: 10/05/18						
Ammonia as N	4.82	0.10	0.20	mg/L	5.00		96.3	90-110	3.70	20	
Matrix Spike (AJ83372-MS1)		**Source: 18I2599-04**			Prepared & Analyzed: 10/05/18						
Ammonia as N	9.11	0.10	0.20	mg/L	10.0	ND	91.1	85-115			
Matrix Spike Dup (AJ83372-MSD1)		**Source: 18I2599-04**			Prepared & Analyzed: 10/05/18						
Ammonia as N	9.63	0.10	0.20	mg/L	10.0	ND	96.3	85-115	5.60	20	
Batch AJ83424 - General Prep											
LCS (AJ83424-BS1)					Prepared: 10/09/18 Analyzed: 10/10/18						
Total Kjeldahl Nitrogen	2.86	0.050	1.0	mg/L	2.98		95.9	80-120			
LCS Dup (AJ83424-BSD1)					Prepared: 10/09/18 Analyzed: 10/10/18						
Total Kjeldahl Nitrogen	2.95	0.050	1.0	mg/L	2.98		99.0	80-120	3.17	20	
Matrix Spike (AJ83424-MS1)		**Source: 18J0570-02**			Prepared: 10/09/18 Analyzed: 10/10/18						
Total Kjeldahl Nitrogen	51.4	0.050	1.0	mg/L	2.98	29.4	737	75-125			QM-4X
Matrix Spike Dup (AJ83424-MSD1)		**Source: 18J0570-02**			Prepared: 10/09/18 Analyzed: 10/10/18						
Total Kjeldahl Nitrogen	50.4	0.050	1.0	mg/L	2.98	29.4	705	75-125	1.87	20	QM-4X
Batch AJ83513 - General Preparation											
Duplicate (AJ83513-DUP1)		**Source: 18J0718-05**			Prepared & Analyzed: 10/10/18						
Bicarbonate Alkalinity as CaCO3	23.0	1.0	5.0	mg/L		23.0			0.00	20	
Total Alkalinity as CaCO3	23.0	1.0	5.0	mg/L		23.0			0.00	20	
Hydroxide Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U
Carbonate Alkalinity as CaCO3	ND	1.0	5.0	mg/L		ND				20	U

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83555 - General Prep											
Blank (AJ83555-BLK1)					Prepared & Analyzed: 10/10/18						
Phosphorus, total	ND	0.010	0.040	mg/L							U
LCS (AJ83555-BS1)					Prepared & Analyzed: 10/10/18						
Phosphorus, total	0.191	0.010	0.040	mg/L	0.200		95.4	85-115			
Duplicate (AJ83555-DUP1)		**Source: 18I2588-01**			Prepared & Analyzed: 10/10/18						
Phosphorus, total	0.0327	0.010	0.040	mg/L		0.0314			4.06	20	J
Matrix Spike (AJ83555-MS1)		**Source: 18I2588-01**			Prepared & Analyzed: 10/10/18						
Phosphorus, total	0.212	0.010	0.040	mg/L	0.200	0.0314	90.2	70-130			
Matrix Spike (AJ83555-MS2)		**Source: 18I2599-02**			Prepared & Analyzed: 10/10/18						
Phosphorus, total	0.190	0.010	0.040	mg/L	0.200	0.0157	86.9	70-130			
Matrix Spike Dup (AJ83555-MSD1)		**Source: 18I2588-01**			Prepared & Analyzed: 10/10/18						
Phosphorus, total	0.212	0.010	0.040	mg/L	0.200	0.0314	90.2	70-130	0.00	20	
Batch AJ83611 - Metals Digest											
Blank (AJ83611-BLK1)					Prepared: 10/11/18 Analyzed: 10/12/18						
Hardness, Total	ND	1	5	mg/L							U
Duplicate (AJ83611-DUP1)		**Source: 18I2575-01**			Prepared: 10/11/18 Analyzed: 10/12/18						
Hardness, Total	241	1	5	mg/L		241			0.190	20	
Batch AJ83619 - General Preparation											
Blank (AJ83619-BLK1)					Prepared: 09/27/18 Analyzed: 10/16/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L							U

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Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83619 - General Preparation											
Duplicate (AJ83619-DUP1)		**Source: 18I2517-01**			Prepared: 09/28/18 Analyzed: 10/16/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Duplicate (AJ83619-DUP2)		**Source: 18I2599-06**			Prepared: 09/28/18 Analyzed: 10/16/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Batch AJ83623 - General Preparation											
Blank (AJ83623-BLK1)					Prepared & Analyzed: 10/11/18						
Oil & Grease (HEM)	ND	1.4	5.0	mg/L							U
LCS (AJ83623-BS1)					Prepared & Analyzed: 10/11/18						
Oil & Grease (HEM)	39.3	1.4	5.0	mg/L	40.0		98.2	78-114			
LCS Dup (AJ83623-BSD1)					Prepared & Analyzed: 10/11/18						
Oil & Grease (HEM)	39.7	1.4	5.0	mg/L	40.0		99.2	78-114	1.01	18	
Matrix Spike (AJ83623-MS1)		**Source: 18J0718-01**			Prepared & Analyzed: 10/11/18						
Oil & Grease (HEM)	27.2	1.4	5.0	mg/L	40.0	3.90	58.2	78-114			QM-05
Batch AJ83631 - General Prep											
Blank (AJ83631-BLK1)					Prepared: 10/11/18 Analyzed: 10/12/18						
Dissolved Organic Carbon	ND	0.600	1.00	mg/L							U
LCS (AJ83631-BS1)					Prepared: 10/11/18 Analyzed: 10/12/18						
Dissolved Organic Carbon	9.71	0.600	1.00	mg/L	10.0		97.1	85-115			

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Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83631 - General Prep											
LCS Dup (AJ83631-BSD1)					Prepared: 10/11/18 Analyzed: 10/12/18						
Dissolved Organic Carbon	9.92	0.600	1.00	mg/L	10.0		99.2	85-115	2.12	20	
Duplicate (AJ83631-DUP1)		**Source: 18I2401-04**			Prepared: 10/11/18 Analyzed: 10/12/18						
Dissolved Organic Carbon	2.54	0.600	1.00	mg/L		2.57			1.16	20	
Matrix Spike (AJ83631-MS1)		**Source: 18I2401-04**			Prepared: 10/11/18 Analyzed: 10/12/18						
Dissolved Organic Carbon	22.5	1.20	2.00	mg/L	20.0	2.57	99.6	70-130			
Matrix Spike Dup (AJ83631-MSD1)		**Source: 18I2401-04**			Prepared: 10/11/18 Analyzed: 10/12/18						
Dissolved Organic Carbon	23.6	1.20	2.00	mg/L	20.0	2.57	105	70-130	4.62	20	
Batch AJ83834 - General Prep											
Blank (AJ83834-BLK1)					Prepared: 10/16/18 Analyzed: 10/19/18						
Total Organic Carbon	ND	0.300	1.00	mg/L							U
LCS (AJ83834-BS1)					Prepared: 10/16/18 Analyzed: 10/19/18						
Total Organic Carbon	9.79	0.300	1.00	mg/L	10.0		97.9	85-115			
LCS Dup (AJ83834-BSD1)					Prepared: 10/16/18 Analyzed: 10/19/18						
Total Organic Carbon	9.64	0.300	1.00	mg/L	10.0		96.4	85-115	1.57	20	
Duplicate (AJ83834-DUP1)		**Source: 18I2588-03**			Prepared: 10/16/18 Analyzed: 10/19/18						
Total Organic Carbon	1.49	0.300	1.00	mg/L		1.46			1.92	20	
MRL Check (AJ83834-MRL1)					Prepared: 10/16/18 Analyzed: 10/19/18						
Total Organic Carbon	1.34	0.300	1.00	mg/L	1.25		107	0-200			

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Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83834 - General Prep											
Matrix Spike (AJ83834-MS1)		**Source: 18I2588-03**			Prepared: 10/16/18 Analyzed: 10/19/18						
Total Organic Carbon	21.7	0.600	2.00	mg/L	20.0	1.46	101	70-130			
Matrix Spike Dup (AJ83834-MSD1)		**Source: 18I2588-03**			Prepared: 10/16/18 Analyzed: 10/19/18						
Total Organic Carbon	22.0	0.600	2.00	mg/L	20.0	1.46	103	70-130	1.01	20	

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Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AI84228 - General Preparation											
Blank (AI84228-BLK1)					Prepared & Analyzed: 09/28/18						
Orthophosphate	ND	0.10	0.30	mg/L							U
Nitrate as N	ND	0.040	0.20	mg/L							U
Nitrite as N	ND	0.050	0.20	mg/L							U
LCS (AI84228-BS1)					Prepared & Analyzed: 09/28/18						
Nitrate as N	5.73	0.040	0.20	mg/L	5.56		103	90-110			
Orthophosphate	16.8	0.10	0.30	mg/L	16.7		101	90-110			
Nitrite as N	5.61	0.050	0.20	mg/L	5.56		101	90-110			
Duplicate (AI84228-DUP1)		**Source: 18I2621-01**			Prepared & Analyzed: 09/28/18						
Nitrate as N	0.0406	0.040	0.20	mg/L		0.0418			2.74	20	J
Orthophosphate	0.264	0.10	0.30	mg/L		0.261			1.17	20	J
Nitrite as N	ND	0.050	0.20	mg/L		ND				20	U
Matrix Spike (AI84228-MS1)		**Source: 18I2621-01**			Prepared & Analyzed: 09/28/18						
Nitrite as N	5.28	0.25	1.0	mg/L	5.56	ND	95.0	80-120			
Orthophosphate	13.8	0.50	1.5	mg/L	16.7	ND	83.1	80-120			
Nitrate as N	5.18	0.20	1.0	mg/L	5.56	ND	93.3	80-120			
Matrix Spike (AI84228-MS2)		**Source: 18I2626-01**			Prepared & Analyzed: 09/28/18						
Orthophosphate	13.6	0.50	1.5	mg/L	16.7	ND	81.6	80-120			
Nitrite as N	5.17	0.25	1.0	mg/L	5.56	ND	93.1	80-120			
Nitrate as N	5.19	0.20	1.0	mg/L	5.56	ND	93.4	80-120			
Matrix Spike Dup (AI84228-MSD1)		**Source: 18I2621-01**			Prepared & Analyzed: 09/28/18						
Orthophosphate	14.0	0.50	1.5	mg/L	16.7	ND	84.1	80-120	1.22	20	
Nitrite as N	5.28	0.25	1.0	mg/L	5.56	ND	95.1	80-120	0.105	20	
Nitrate as N	5.17	0.20	1.0	mg/L	5.56	ND	93.1	80-120	0.121	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

TPH by EPA/LUFT GC Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83187 - SVOAs in Water GC											
Blank (AJ83187-BLK1)					Prepared: 10/02/18 Analyzed: 10/05/18						
TPH as Diesel	ND	50	250	ug/L							U
TPH as Motor Oil	ND	100	250	ug/L							U
Surrogate: Tetratetracontane	*63.3*			*ug/L*	*57.4*		*110*	*39-120*			
LCS (AJ83187-BS1)					Prepared: 10/02/18 Analyzed: 10/05/18						
TPH as Diesel	2310	50	250	ug/L	2020		114	61-120			
Surrogate: Tetratetracontane	*61.3*			*ug/L*	*57.4*		*107*	*39-120*			
LCS (AJ83187-BS2)					Prepared: 10/02/18 Analyzed: 10/05/18						
TPH as Motor Oil	2000	100	250	ug/L	2010		99.5	71-125			
Surrogate: Tetratetracontane	*53.9*			*ug/L*	*57.4*		*94.0*	*39-120*			
LCS Dup (AJ83187-BSD1)					Prepared: 10/02/18 Analyzed: 10/05/18						
TPH as Diesel	1920	50	250	ug/L	2020		95.1	61-120	18.2	25	
Surrogate: Tetratetracontane	*50.9*			*ug/L*	*57.4*		*88.7*	*39-120*			
LCS Dup (AJ83187-BSD2)					Prepared: 10/02/18 Analyzed: 10/05/18						
TPH as Motor Oil	1580	100	250	ug/L	2010		78.9	71-125	23.2	25	
Surrogate: Tetratetracontane	*40.8*			*ug/L*	*57.4*		*71.0*	*39-120*			
Matrix Spike (AJ83187-MS1)		**Source: 18I2604-02**			Prepared: 10/02/18 Analyzed: 10/05/18						
TPH as Diesel	2030	50	250	ug/L	2020	ND	100	61-120			
Surrogate: Tetratetracontane	*51.7*			*ug/L*	*57.4*		*90.0*	*39-120*			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

TPH by EPA/LUFT GCMS Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83448 - VOAs in Water GCMS											
Blank (AJ83448-BLK1)					Prepared: 10/07/18 Analyzed: 10/08/18						
TPH as Gasoline	ND	50	50	ug/L							U
Surrogate: Toluene-d8	*25.1*			*ug/L*	*25.0*		*100*	*76-129*			
LCS (AJ83448-BS1)					Prepared: 10/07/18 Analyzed: 10/08/18						
TPH as Gasoline	223	50	50	ug/L	200		111	67-132			
Surrogate: Toluene-d8	*25.4*			*ug/L*	*25.0*		*102*	*76-129*			
LCS Dup (AJ83448-BSD1)					Prepared: 10/07/18 Analyzed: 10/08/18						
TPH as Gasoline	219	50	50	ug/L	200		109	67-132	1.84	25	
Surrogate: Toluene-d8	*25.2*			*ug/L*	*25.0*		*101*	*76-129*			
Matrix Spike (AJ83448-MS1)		**Source: 18I2599-01**			Prepared: 10/07/18 Analyzed: 10/08/18						
TPH as Gasoline	208	50	50	ug/L	200	ND	104	37-156			
Surrogate: Toluene-d8	*25.2*			*ug/L*	*25.0*		*101*	*76-129*			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83450 - VOAs in Water GCMS											
Blank (AJ83450-BLK1)					Prepared: 10/07/18 Analyzed: 10/08/18						
Benzene	ND	0.30	0.30	ug/L							U
Toluene	ND	0.30	0.30	ug/L							U
Ethylbenzene	ND	0.40	0.50	ug/L							U
Xylenes (total)	ND	0.50	0.50	ug/L							U
Methyl tert-butyl ether	ND	0.50	0.50	ug/L							U
Di-isopropyl ether	ND	0.40	0.50	ug/L							U
Ethyl tert-butyl ether	ND	0.40	0.50	ug/L							U
Tert-amyl methyl ether	ND	0.40	0.50	ug/L							U
Tert-butyl alcohol	ND	6.0	10	ug/L							U
Surrogate: Bromofluorobenzene	*27.3*			*ug/L*	*25.0*		*109*	*70-130*			
Surrogate: Dibromofluoromethane	*25.8*			*ug/L*	*25.0*		*103*	*70-130*			
Surrogate: Toluene-d8	*29.9*			*ug/L*	*25.0*		*120*	*70-130*			
LCS (AJ83450-BS1)					Prepared: 10/07/18 Analyzed: 10/08/18						
Benzene	21.4	0.30	0.30	ug/L	20.0		107	82-122			
Toluene	21.7	0.30	0.30	ug/L	20.0		108	75-134			
Ethylbenzene	21.4	0.40	0.50	ug/L	20.0		107	84-124			
Xylenes (total)	63.8	0.50	0.50	ug/L	60.0		106	81-126			
Methyl tert-butyl ether	20.0	0.50	0.50	ug/L	20.0		100	84-119			
Di-isopropyl ether	19.5	0.40	0.50	ug/L	20.0		97.4	83-132			
Ethyl tert-butyl ether	25.2	0.40	0.50	ug/L	20.0		126	74-127			
Tert-amyl methyl ether	24.0	0.40	0.50	ug/L	20.0		120	74-120			
Tert-butyl alcohol	502	6.0	10	ug/L	400		126	66-147			
Surrogate: Bromofluorobenzene	*27.4*			*ug/L*	*25.0*		*110*	*70-130*			
Surrogate: Dibromofluoromethane	*25.0*			*ug/L*	*25.0*		*100*	*70-130*			
Surrogate: Toluene-d8	*28.9*			*ug/L*	*25.0*		*116*	*70-130*			
LCS Dup (AJ83450-BSD1)					Prepared: 10/07/18 Analyzed: 10/08/18						
Benzene	21.0	0.30	0.30	ug/L	20.0		105	82-122	1.70	25	
Toluene	21.5	0.30	0.30	ug/L	20.0		107	75-134	1.02	25	
Ethylbenzene	21.2	0.40	0.50	ug/L	20.0		106	84-124	0.987	25	
Xylenes (total)	62.8	0.50	0.50	ug/L	60.0		105	81-126	1.58	25	
Methyl tert-butyl ether	19.2	0.50	0.50	ug/L	20.0		96.0	84-119	4.03	25	
Di-isopropyl ether	19.0	0.40	0.50	ug/L	20.0		95.2	83-132	2.23	25	
Ethyl tert-butyl ether	24.4	0.40	0.50	ug/L	20.0		122	74-127	3.23	25	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	10/22/18 15:48

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ83450 - VOAs in Water GCMS											
LCS Dup (AJ83450-BSD1)					Prepared: 10/07/18 Analyzed: 10/08/18						
Tert-amyl methyl ether	21.4	0.40	0.50	ug/L	20.0		107	74-120	11.8	25	
Tert-butyl alcohol	468	6.0	10	ug/L	400		117	66-147	7.13	25	
Surrogate: Bromofluorobenzene	*26.8*			*ug/L*	*25.0*		*107*	*70-130*			
Surrogate: Dibromofluoromethane	*25.8*			*ug/L*	*25.0*		*103*	*70-130*			
Surrogate: Toluene-d8	*28.1*			*ug/L*	*25.0*		*112*	*70-130*			
Matrix Spike (AJ83450-MS1)		**Source: 18I2599-02**			Prepared: 10/07/18 Analyzed: 10/09/18						
Benzene	23.1	0.30	0.30	ug/L	20.0	ND	116	58-139			
Toluene	22.9	0.30	0.30	ug/L	20.0	ND	115	59-147			
Ethylbenzene	22.8	0.40	0.50	ug/L	20.0	ND	114	59-147			
Xylenes (total)	66.8	0.50	0.50	ug/L	60.0	ND	111	49-153			
Methyl tert-butyl ether	16.6	0.50	0.50	ug/L	20.0	ND	82.8	55-144			
Di-isopropyl ether	20.8	0.40	0.50	ug/L	20.0	ND	104	49-143			
Ethyl tert-butyl ether	20.1	0.40	0.50	ug/L	20.0	ND	100	44-143			
Tert-amyl methyl ether	18.6	0.40	0.50	ug/L	20.0	ND	93.2	41-136			
Tert-butyl alcohol	333	6.0	10	ug/L	400	ND	83.2	38-175			
Surrogate: Bromofluorobenzene	*26.5*			*ug/L*	*25.0*		*106*	*70-130*			
Surrogate: Dibromofluoromethane	*26.1*			*ug/L*	*25.0*		*104*	*70-130*			
Surrogate: Toluene-d8	*27.5*			*ug/L*	*25.0*		*110*	*70-130*			
Matrix Spike (AJ83450-MS2)		**Source: 18I2599-03**			Prepared: 10/07/18 Analyzed: 10/09/18						
Benzene	23.0	0.30	0.30	ug/L	20.0	ND	115	58-139			
Toluene	22.8	0.30	0.30	ug/L	20.0	ND	114	59-147			
Ethylbenzene	22.8	0.40	0.50	ug/L	20.0	ND	114	59-147			
Xylenes (total)	66.8	0.50	0.50	ug/L	60.0	ND	111	49-153			
Methyl tert-butyl ether	17.7	0.50	0.50	ug/L	20.0	ND	88.7	55-144			
Di-isopropyl ether	20.8	0.40	0.50	ug/L	20.0	ND	104	49-143			
Ethyl tert-butyl ether	21.8	0.40	0.50	ug/L	20.0	ND	109	44-143			
Tert-amyl methyl ether	20.8	0.40	0.50	ug/L	20.0	ND	104	41-136			
Tert-butyl alcohol	332	6.0	10	ug/L	400	ND	83.0	38-175			
Surrogate: Bromofluorobenzene	*27.1*			*ug/L*	*25.0*		*109*	*70-130*			
Surrogate: Dibromofluoromethane	*26.5*			*ug/L*	*25.0*		*106*	*70-130*			
Surrogate: Toluene-d8	*28.1*			*ug/L*	*25.0*		*112*	*70-130*			

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2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	10/22/18 15:48

Notes and Definitions

FILT	The sample was filtered in the lab prior to analysis.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QB-01	The method blank contains analyte at a concentration above the MRL; however, the analyte in all associated samples was either ND or greater than 10X the blank concentration.
QD-03	High duplicate RPD due to matrix interference.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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BROOKS APPLIED LABS
18804 North Creek Parkway, Ste 100, Bothell, WA 98011 • USA • T: 206 632 6206 F: 206 632 6017 • info@brooksapplied.com

October 18, 2018

Basic Laboratory, Inc.
ATTN: Jen McCurdy
2218 Railroad Avenue
Redding, CA 96001
jmccurdy@basiclab.com

RE: Project BSL-RE1801 Client Project: 18J0213

Dear Jen McCurdy,

On October 11, 2018, Brooks Applied Labs (BAL) received seven (7) water samples. The samples were logged-in for the analyses of methyl mercury (MeHg) according to the chain-of-custody form. All samples were received and stored according to BAL SOPs and EPA methodology. Samples were preserved with hydrochloric acid by the client.

Water samples were distilled via EPA Method 1630.

The results were method blank corrected as described in the calculations section of the relevant BAL SOP(s) and were evaluated using reporting limits adjusted to account for sample aliquot size. Please refer to the *Sample Results* page for sample-specific MDLs, MRLs, and other details.

All data was reported without qualification (aside from concentration qualifiers) and all associated quality control sample results met the acceptance criteria.

BAL, an accredited laboratory, certifies that the reported results of all analyses for which BAL is NELAP accredited meet all NELAP requirements. For more information please see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Sincerely,

Lydia Greaves

Lydia Greaves
Client Services Manager
lydia@brooksapplied.com

Report Information

Laboratory Accreditation

BAL is accredited by the *National Environmental Laboratory Accreditation Program* (NELAP) through the State of Florida Department of Health, Bureau of Laboratories (E87982) and is certified to perform many environmental analyses. BAL is also certified by many other states to perform environmental analyses. For a current list of our accreditations/certifications, please visit our website at <http://www.brooksapplied.com/resources/certificates-permits/>. Results reported relate only to the samples listed in the report.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

AR	as received	**MS**	matrix spike
BAL	Brooks Applied Labs	**MSD**	matrix spike duplicate
BLK	method blank	**ND**	non-detect
BS	blank spike	**NR**	non-reportable
CAL	calibration standard	**N/C**	not calculated
CCB	continuing calibration blank	**PS**	post preparation spike
CCV	continuing calibration verification	**REC**	percent recovery
COC	chain of custody record	**RPD**	relative percent difference
D	dissolved fraction	**SCV**	secondary calibration verification
DUP	duplicate	**SOP**	standard operating procedure
IBL	instrument blank	**SRM**	standard reference material
ICV	initial calibration verification	**T**	total fraction
MDL	method detection limit	**TR**	total recoverable fraction
MRL	method reporting limit		

Definition of Data Qualifiers

(Effective 9/23/09)

E	An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H	Holding time and/or preservation requirements not met. Please see narrative for explanation.
J	Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
J-1	Estimated value. A full explanation is presented in the narrative.
M	Duplicate precision (RPD) was not within acceptance criteria. Please see narrative for explanation.
N	Spike recovery was not within acceptance criteria. Please see narrative for explanation.
R	Rejected, unusable value. A full explanation is presented in the narrative.
U	Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
X	Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.

These qualifiers are based on those previously utilized by Brooks Applied Labs, those found in the EPA SOW ILM03.0, Exhibit B, Section III, pg. B-18, and the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review; USEPA; January 2010. These supersede all previous qualifiers ever employed by BAL.

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Project ID: BSL-RE1801
PM: Lydia Greaves

Client PM: Jen McCurdy
Client Project: 18J0213

Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
18J0213-01 18I2599-01 LP1-S	1841036-01	Water	Sample	09/27/2018	10/11/2018
18J0213-02 18I2599-02 LP1-M	1841036-02	Water	Sample	09/27/2018	10/11/2018
18J0213-03 18I2599-03 LP1-B	1841036-03	Water	Sample	09/27/2018	10/11/2018
18J0213-04 18I2599-04 ER167.8	1841036-04	Water	Sample	09/27/2018	10/11/2018
18J0213-05 18I2599-05 ER-DUP2	1841036-05	Water	Sample	09/27/2018	10/11/2018
18J0213-06 18I2599-06 LP-EQB	1841036-06	Water	Sample	09/27/2018	10/11/2018
18J0213-07 18I2599-07 LP-DUP	1841036-07	Water	Sample	09/27/2018	10/11/2018

Batch Summary

Analyte	Lab Matrix	Method	Prepared	Analyzed	Batch	Sequence
MeHg	Water	EPA 1630	10/15/2018	10/16/2018	B182752	1801404

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Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
18J0213-01 18I2599-01 LP1-S										
1841036-01	MeHg	Water	TR	0.123		0.023	0.050	ng/L	B182752	1801404
18J0213-02 18I2599-02 LP1-M										
1841036-02	MeHg	Water	TR	0.141		0.023	0.050	ng/L	B182752	1801404
18J0213-03 18I2599-03 LP1-B										
1841036-03	MeHg	Water	TR	0.097		0.023	0.050	ng/L	B182752	1801404
18J0213-04 18I2599-04 ER167.8										
1841036-04	MeHg	Water	TR	0.723		0.023	0.049	ng/L	B182752	1801404
18J0213-05 18I2599-05 ER-DUP2										
1841036-05	MeHg	Water	TR	0.758		0.023	0.050	ng/L	B182752	1801404
18J0213-06 18I2599-06 LP-EQB										
1841036-06	MeHg	Water	TR	≤ 0.023	U	0.023	0.049	ng/L	B182752	1801404
18J0213-07 18I2599-07 LP-DUP										
1841036-07	MeHg	Water	TR	0.114		0.023	0.049	ng/L	B182752	1801404

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Accuracy & Precision Summary

Batch: B182752
Lab Matrix: Water
Method: EPA 1630

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B182752-BS1	**Blank Spike, (1839004)**						
	MeHg		1.000	0.914	ng/L	91% 67-133	
B182752-BS2	**Blank Spike, (1839004)**						
	MeHg		1.000	1.037	ng/L	104% 67-133	
B182752-MS1	**Matrix Spike (1841036-01)**						
	MeHg	0.123	1.000	1.023	ng/L	90% 65-135	
B182752-MSD1	**Matrix Spike Duplicate (1841036-01)**						
	MeHg	0.123	1.000	1.084	ng/L	96% 65-135	6% 35
B182752-MS2	**Matrix Spike (1841037-02)**						
	MeHg	0.175	1.000	0.953	ng/L	78% 65-135	
B182752-MSD2	**Matrix Spike Duplicate (1841037-02)**						
	MeHg	0.175	1.000	1.041	ng/L	87% 65-135	9% 35
B182752-MS3	**Matrix Spike (1841038-04)**						
	MeHg	0.205	1.000	1.185	ng/L	98% 65-135	
B182752-MSD3	**Matrix Spike Duplicate (1841038-04)**						
	MeHg	0.205	1.000	1.071	ng/L	87% 65-135	10% 35

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Method Blanks & Reporting Limits

Batch: B182752
Matrix: Water
Method: EPA 1630
Analyte: MeHg

Sample	Result	Units
B182752-BLK1	0.016	ng/L
B182752-BLK2	0.009	ng/L
B182752-BLK3	0.005	ng/L
B182752-BLK4	0.005	ng/L

Average: 0.009 **Standard Deviation:** 0.005 **MDL:** 0.023
Limit: 0.045 **Limit:** 0.015 **MRL:** 0.050

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Project ID: BSL-RE1801
PM: Lydia Greaves

BROOKS APPLIED LABS

Client PM: Jen McCurdy
Client Project: 18J0213

Sample Containers

Lab ID: 1841036-01 **Report Matrix:** Water **Collected:** 09/27/2018
Sample: 18J0213-01 18I2599-01 LP1-S **Sample Type:** Sample **Received:** 10/11/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	250mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841036

Lab ID: 1841036-02 **Report Matrix:** Water **Collected:** 09/27/2018
Sample: 18J0213-02 18I2599-02 LP1-M **Sample Type:** Sample **Received:** 10/11/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	250mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841036

Lab ID: 1841036-03 **Report Matrix:** Water **Collected:** 09/27/2018
Sample: 18J0213-03 18I2599-03 LP1-B **Sample Type:** Sample **Received:** 10/11/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	250mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841036

Lab ID: 1841036-04 **Report Matrix:** Water **Collected:** 09/27/2018
Sample: 18J0213-04 18I2599-04 ER167.8 **Sample Type:** Sample **Received:** 10/11/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	250mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841036

Lab ID: 1841036-05 **Report Matrix:** Water **Collected:** 09/27/2018
Sample: 18J0213-05 18I2599-05 ER-DUP2 **Sample Type:** Sample **Received:** 10/11/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	250mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841036

Lab ID: 1841036-06 **Report Matrix:** Water **Collected:** 09/27/2018
Sample: 18J0213-06 18I2599-06 LP-EQB **Sample Type:** Sample **Received:** 10/11/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	250mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841036

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Project ID: BSL-RE1801
PM: Lydia Greaves

Client PM: Jen McCurdy
Client Project: 18J0213

Sample Containers

Lab ID: 1841036-07
Sample: 18J0213-07 18I2599-07 LP-DUP

Report Matrix: Water
Sample Type: Sample

Collected: 09/27/2018
Received: 10/11/2018

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided - Hg-Sp	250mL	n/a	HCl (Client)	n/a	<2	Cooler - 1841036

Shipping Containers

Cooler - 1841036

Received: October 11, 2018 11:30
Tracking No: 1Z8336E31377720402 via UPS
Coolant Type: Ice
Temperature: 3.6 °C

Description: Cooler
Damaged in transit? No
Returned to client? No
Comments: IR#15

Custody seals present? No
Custody seals intact? No
COC present? No

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SUBCONTRACT ORDER

Basic Laboratory Inc

18J0213

BAL Report 1841036

5-Day TAT

SENDING LABORATORY:
Basic Laboratory Inc
2218 Railroad Avenue
Redding, CA 96001-2504
Phone: (530) 243-7234
Fax: (530) 243-6204
Project Manager: Jen McCurdy

RECEIVING LABORATORY:
BROOKS RAND LIMITED LAB Brooks Applied Labs
3958 6TH AVENUE NORTHWEST
SEATTLE, WA 981075056
Phone :(206) 632-6206 Attn: Lydia Greaves
Fax: (206) 632-6017
E-Mail: jmccurdy@basiclab.com

Please use standard TAT unless specific due date is requested. Email results & Element transfer file to reporting@basiclab.com.

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 18J0213-01	**18I2599-01 LP1-S**	**Water**	**Sampled: 09/27/18 11:15**	
Methyl Mercury 1630	~~10/15/18~~ 15:00	~~03/26/19 11:~~15		
Containers Supplied:				
Sample ID: 18J0213-02	**18I2599-02 LP1-M**	**Water**	**Sampled: 09/27/18 11:30**	
Methyl Mercury 1630	~~10/15/18~~ 15:00	~~03/26/19 11:~~30		
Containers Supplied:				
Sample ID: 18J0213-03	**18I2599-03 LP1-B**	**Water**	**Sampled: 09/27/18 12:00**	
Methyl Mercury 1630	~~10/15/18~~ 15:00	~~03/26/19 12:~~00		
Containers Supplied:				
Sample ID: 18J0213-04	**18I2599-04 ER167.8**	**Water**	**Sampled: 09/27/18 15:30**	
Methyl Mercury 1630	~~10/15/18~~ 15:00	~~03/26/19 15:~~30		
Containers Supplied:				
Sample ID: 18J0213-05	**18I2599-05 ER-DUP2**	**Water**	**Sampled: 09/27/18 15:45**	
Methyl Mercury 1630	~~10/15/18~~ 15:00	~~03/26/19 15:45~~		
Containers Supplied:				
Sample ID: 18J0213-06	**18I2599-06 LP-EQB**	**Water**	**Sampled: 09/27/18 14:45**	
Methyl Mercury 1630	~~10/15/18~~ 15:00	~~03/26/19 14:45~~		
Containers Supplied:				

T Wilkerson 10-10-18 — 10/11/18 1130
Released By — Date — Received By — Date

Released By — Date — Received By — Date

SUBCONTRACT ORDER

BAL Report 1841036

Basic Laboratory Inc

18J0213

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 18J0213-07	18I2599-07 LP-DUP	Water	Sampled: 09/27/18 12:30	
Methyl Mercury 1630	~~10/15/18 15:00~~	~~03/26/19 12:30~~		
Containers Supplied:				

T Wilkerson 10-10-18 — 10/11/18 1130

Released By — Date — Received By — Date

Released By — Date — Received By — Date

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18I2599

18J0213

10-15-18

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

Basic Laboratory
2218 Railroad Ave
Redding, CA 96001
Phone :530-243-7234
Fax: 530-243-7494
Terms: Net 30

18J0213

1

Analysis	Due	Expires	Comments
18I2599-01 LP1-S [Water] Sampled 09/27/18 11:15			-1 9.7°
BAL Hg Methyl	10/11/18 12:00	03/26/19 11:15	
Containers Supplied:			
500ml Glass - HCl (H) AG			
18I2599-02 LP1-M [Water] Sampled 09/27/18 11:30			-2 9.4°
BAL Hg Methyl	10/11/18 12:00	03/26/19 11:30	
Containers Supplied:			
500ml Glass - HCl (H) AG			
18I2599-03 LP1-B [Water] Sampled 09/27/18 12:00			-3 10.8°
BAL Hg Methyl	10/11/18 12:00	03/26/19 12:00	
Containers Supplied:			
500ml Glass - HCl (H) AG			
18I2599-04 ER167.8 [Water] Sampled 09/27/18 15:30			-4 10.2°
BAL Hg Methyl	10/11/18 12:00	03/26/19 15:30	
Containers Supplied:			
500ml Glass - HCl (H) AG			
18I2599-05 ER-DUP2 [Water] Sampled 09/27/18 15:45			-5 9.6°
BAL Hg Methyl	10/11/18 12:00	03/26/19 15:45	
Containers Supplied:			
500ml Glass - HCl (H) AG			

Released By	10-1-18 Date	Received By	10-3-18 Date	1426
Released By	Date	TW Received By	10-3-18 Date	1648

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18I2599

18J0213

Analysis	Due	Expires	Comments
18I2599-06 LP-EQB [Water] Sampled 09/27/18 14:45			-4 9.4°
BAL Hg Methyl	10/11/18 12:00	03/26/19 14:45	
Containers Supplied:			
500ml Glass - HCl (H) A6			
18I2599-07 LP-DUP [Water] Sampled 09/27/18 12:30			-7 9.7°
BAL Hg Methyl	10/11/18 12:00	03/26/19 12:30	
Containers Supplied:			
500ml Glass - HCl (H) A6			

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+QC
+MDL

Released By	10-1-18 Date	T Wilhelmsen Received By	10-3-18 1426 Date
Released By	Date	TW Received By	10-3-18 1648 Date

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email: clientservices@alpha-labs.com

ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

Bay Area Laboratory
262 Rickenbacker Circle, Livermore CA 94551
925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18I2599 Pg 1 of

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	TPH-D/MO	TPH-Gas/BTEX/Oxys	Oil and Grease	TOC	DOC	CAM17 200.8 total + Al/Mn	Fe 200.8 Total	Hardness, total	Ammonia-N	Phosphorus, Total	TKN	Sample Notes or DDW Source Numbers:
LPI-S	9/27	1115											X				X	X	X	X	X	X	X	X	X	X	X	
LPI-M	↓	1130											↓				↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
LPI-B		1200														1												
ER 167.8		1530														2												
ER-DUP2		1545																										
LP-EQB		1445														2												
LP-DUP	↓	1230											↓				↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	

TAT
Standard 10 days ~~X~~
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.4
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		9-27-18	1700

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):

Travel and Site Time: *	Mileage:	Misc. Supplies:

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email: clientservices@alpha-labs.com

ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

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925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18I2599 Pg 2 of ____

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	CAM17 200.8 dissolved / lab filter	Al dissolved 200.8	Alkalinity	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	TDS	TSS	Chlorophyll-A	Sulfide	Hg 1631	MeHg 1630
LP1-S 9/27	9/27	1115											X			17	X	X	X	X	X	X	X	X	X	X	X	X
LP1-M		1130														17												
LP1-B		1200														16												
ER167.8		1530														16												
ER-DUP2		1545														16												
LP-EQB		1445														16												
LP-DUP ✓	✓	1230											✓			16	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

TAT
Standard 10 days ○
RUSH: 5 days ○ 48 hours ○ Other: ____days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.4
Livermore temp:
Elk Grove temp:

Sample Notes or DDW Source Numbers:

Relinquished by	Received by	Date	Time
Christina Buck		9-27-18	1700

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: ____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID:
EDF to (Email Address):
Sampling Company Log Code:

Travel and Site Time:	Mileage:	Misc. Supplies:

alpha
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email: clientservices@alpha-labs.com

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925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18I2599 Pg 3 of ____

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Algal ID & E (sub to Greenwater)
LPC-S	9/27	9/28											X			2	X
LPC-M	9/27	9/28											X			2	X

Please hold phytoplankton sample analysis until further notice.

TAT
Standard 10 days: X
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1-4
Livermore temp:
Elk Grove temp:

Sample Notes or DDW Source Numbers:

Relinquished by	Received by	Date	Time
Christina Buck		9-27-18	1700

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):
Travel and Site Time: Mileage: Misc. Supplies:

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
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Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 • Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 • Phone: (916) 686-5190 • Fax: (916) 686-5192
North Bay: 110 Liberty Street, Petaluma, CA 94952 • Phone: (707) 769-3128 • Fax: (707) 769-8093

ELAP Certificates 1551, 2728, 2922, and 2303

13 November 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18J2406

Enclosed are the results of analyses for samples received by the laboratory on 10/24/18 08:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267
Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 • Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 • Phone: (916) 686-5190 • Fax: (916) 686-5192
North Bay: 110 Liberty Street, Petaluma, CA 94952 • Phone: (707) 769-3128 • Fax: (707) 769-8093

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/13/18 11:58

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LP-BL	18J2406-01	Water	10/23/18 09:15	10/24/18 08:05
LP-EQB	18J2406-02	Water	10/23/18 09:30	10/24/18 08:05
LP3-S	18J2406-03	Water	10/23/18 11:20	10/24/18 08:05
LP3-M	18J2406-04	Water	10/23/18 11:45	10/24/18 08:05
LP3-B	18J2406-05	Water	10/23/18 12:15	10/24/18 08:05
LP1-S	18J2406-06	Water	10/23/18 13:10	10/24/18 08:05
LP1-M	18J2406-07	Water	10/23/18 13:30	10/24/18 08:05
LP1-B	18J2406-08	Water	10/23/18 14:00	10/24/18 08:05
LP2-S	18J2406-09	Water	10/23/18 15:10	10/24/18 08:05
LP2-M	18J2406-10	Water	10/23/18 15:40	10/24/18 08:05
LP2-BL	18J2406-11	Water	10/23/18 16:00	10/24/18 08:05
LP-DUP	18J2406-12	Water	10/23/18 15:20	10/24/18 08:05

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.

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267
Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 • Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 • Phone: (916) 686-5190 • Fax: (916) 686-5192
North Bay: 110 Liberty Street, Petaluma, CA 94952 • Phone: (707) 769-3128 • Fax: (707) 769-8093

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/13/18 11:58

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-BL (18J2406-01) Water Sampled: 10/23/18 09:15 Received: 10/24/18 08:05											
Iron	ND	40	200	ug/L	4	AJ84274	10/26/18 11:00	10/29/18 18:11	EPA 200.8	MMY	U
LP-EQB (18J2406-02) Water Sampled: 10/23/18 09:30 Received: 10/24/18 08:05											
Iron	ND	40	200	ug/L	4	AJ84274	10/26/18 11:00	10/29/18 18:57	EPA 200.8	MMY	U
LP3-S (18J2406-03) Water Sampled: 10/23/18 11:20 Received: 10/24/18 08:05											
Iron	**100**	**40**	**200**	**ug/L**	4	AJ84274	10/26/18 11:00	10/29/18 19:04	EPA 200.8	MMY	J
LP3-M (18J2406-04) Water Sampled: 10/23/18 11:45 Received: 10/24/18 08:05											
Iron	**100**	**40**	**200**	**ug/L**	4	AJ84274	10/26/18 11:00	10/29/18 19:11	EPA 200.8	MMY	J
LP3-B (18J2406-05) Water Sampled: 10/23/18 12:15 Received: 10/24/18 08:05											
Iron	**2000**	**40**	**200**	**ug/L**	4	AJ84274	10/26/18 11:00	10/29/18 19:17	EPA 200.8	MMY	
LP1-S (18J2406-06) Water Sampled: 10/23/18 13:10 Received: 10/24/18 08:05											
Iron	**110**	**40**	**200**	**ug/L**	4	AJ84274	10/26/18 11:00	10/29/18 19:24	EPA 200.8	MMY	J
LP1-M (18J2406-07) Water Sampled: 10/23/18 13:30 Received: 10/24/18 08:05											
Iron	**140**	**40**	**200**	**ug/L**	4	AJ84274	10/26/18 11:00	10/29/18 19:31	EPA 200.8	MMY	J
LP1-B (18J2406-08) Water Sampled: 10/23/18 14:00 Received: 10/24/18 08:05											
Iron	**180**	**40**	**200**	**ug/L**	4	AJ84274	10/26/18 11:00	10/29/18 19:38	EPA 200.8	MMY	J
LP2-S (18J2406-09) Water Sampled: 10/23/18 15:10 Received: 10/24/18 08:05											
Iron	**91**	**40**	**200**	**ug/L**	4	AJ84274	10/26/18 11:00	10/29/18 19:44	EPA 200.8	MMY	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/13/18 11:58

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-M (18J2406-10) Water Sampled: 10/23/18 15:40 Received: 10/24/18 08:05											
Iron	**85**	**40**	**200**	**ug/L**	4	AJ84274	10/26/18 11:00	10/29/18 19:51	EPA 200.8	MMY	J
LP2-BL (18J2406-11) Water Sampled: 10/23/18 16:00 Received: 10/24/18 08:05											
Iron	**90**	**40**	**200**	**ug/L**	4	AJ84274	10/26/18 11:00	10/29/18 19:58	EPA 200.8	MMY	J
LP-DUP (18J2406-12) Water Sampled: 10/23/18 15:20 Received: 10/24/18 08:05											
Iron	**97**	**40**	**200**	**ug/L**	4	AJ84274	10/26/18 11:00	10/29/18 18:04	EPA 200.8	MMY	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/13/18 11:58

Metals by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-BL (18J2406-01) Water Sampled: 10/23/18 09:15 Received: 10/24/18 08:05											
Mercury	**0.271**	**0.200**	**0.500**	**ng/l**	1	AJ84236	10/25/18 14:00	10/26/18 15:37	EPA 1631E	AJC	J
LP-EQB (18J2406-02) Water Sampled: 10/23/18 09:30 Received: 10/24/18 08:05											
Mercury	ND	0.200	0.500	ng/l	1	AJ84236	10/25/18 14:00	10/26/18 15:46	EPA 1631E	AJC	U
LP3-S (18J2406-03) Water Sampled: 10/23/18 11:20 Received: 10/24/18 08:05											
Mercury	**0.766**	**0.200**	**0.500**	**ng/l**	1	AJ84236	10/25/18 14:00	10/26/18 15:54	EPA 1631E	AJC	
LP3-M (18J2406-04) Water Sampled: 10/23/18 11:45 Received: 10/24/18 08:05											
Mercury	**0.787**	**0.200**	**0.500**	**ng/l**	1	AJ84236	10/25/18 14:00	10/26/18 16:18	EPA 1631E	AJC	
LP3-B (18J2406-05) Water Sampled: 10/23/18 12:15 Received: 10/24/18 08:05											
Mercury	**6.86**	**0.200**	**0.500**	**ng/l**	1	AJ84236	10/25/18 14:00	10/26/18 16:43	EPA 1631E	AJC	
LP1-S (18J2406-06) Water Sampled: 10/23/18 13:10 Received: 10/24/18 08:05											
Mercury	**0.905**	**0.200**	**0.500**	**ng/l**	1	AJ84236	10/25/18 14:00	10/26/18 16:51	EPA 1631E	AJC	
LP1-M (18J2406-07) Water Sampled: 10/23/18 13:30 Received: 10/24/18 08:05											
Mercury	**1.20**	**0.200**	**0.500**	**ng/l**	1	AJ84236	10/25/18 14:00	10/26/18 16:59	EPA 1631E	AJC	
LP1-B (18J2406-08) Water Sampled: 10/23/18 14:00 Received: 10/24/18 08:05											
Mercury	**1.52**	**0.200**	**0.500**	**ng/l**	1	AJ84236	10/25/18 14:00	10/26/18 17:07	EPA 1631E	AJC	
LP2-S (18J2406-09) Water Sampled: 10/23/18 15:10 Received: 10/24/18 08:05											
Mercury	**0.858**	**0.200**	**0.500**	**ng/l**	1	AJ84236	10/25/18 14:00	10/26/18 17:15	EPA 1631E	AJC	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/13/18 11:58

Metals by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-M (18J2406-10) Water Sampled: 10/23/18 15:40 Received: 10/24/18 08:05											
Mercury	**0.835**	**0.200**	**0.500**	**ng/l**	1	AJ84236	10/25/18 14:00	10/26/18 17:23	EPA 1631E	AJC	
LP2-BL (18J2406-11) Water Sampled: 10/23/18 16:00 Received: 10/24/18 08:05											
Mercury	**0.875**	**0.200**	**0.500**	**ng/l**	1	AJ84236	10/25/18 14:00	10/26/18 17:31	EPA 1631E	AJC	
LP-DUP (18J2406-12) Water Sampled: 10/23/18 15:20 Received: 10/24/18 08:05											
Mercury	**0.803**	**0.200**	**0.500**	**ng/l**	1	AJ84236	10/25/18 14:00	10/26/18 17:40	EPA 1631E	AJC	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/13/18 11:58

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-BL (18J2406-01) Water Sampled: 10/23/18 09:15 Received: 10/24/18 08:05											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK82684	11/05/18 10:00	11/05/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AJ84204	10/25/18 08:00	10/30/18 08:30	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AK82739	10/24/18 09:00	11/09/18 09:39	SM10200H	PBM	U
Sulfide	ND	0.020	0.10	mg/L	1	AJ84389	10/30/18 10:00	10/30/18 16:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	**0.50**		**0.20**	**mg/L**	1	AK82837	11/06/18 16:00	11/07/18 17:00	SM4500-NO3 E	EV	
Total Kjeldahl Nitrogen	**0.17**	**0.050**	**1.0**	**mg/L**	1	AK82678	11/05/18 07:15	11/06/18 10:18	SM4500-Norg B	JVO	J
Phosphorus, total	**0.013**	**0.010**	**0.040**	**mg/L**	1	AJ84426	10/31/18 08:00	10/31/18 11:58	SM4500-P E	SMS	J
LP-EQB (18J2406-02) Water Sampled: 10/23/18 09:30 Received: 10/24/18 08:05											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK82684	11/05/18 10:00	11/05/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AJ84204	10/25/18 08:00	10/30/18 08:30	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AK82739	10/24/18 09:00	11/09/18 09:39	SM10200H	PBM	U
Sulfide	ND	0.020	0.10	mg/L	1	AJ84389	10/30/18 10:00	10/30/18 16:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	ND		0.20	mg/L	1	AK82837	11/06/18 16:00	11/07/18 17:00	SM4500-NO3 E	EV	
Total Kjeldahl Nitrogen	**0.093**	**0.050**	**1.0**	**mg/L**	1	AK82678	11/05/18 07:15	11/06/18 10:18	SM4500-Norg B	JVO	J
Phosphorus, total	ND	0.010	0.040	mg/L	1	AJ84426	10/31/18 08:00	10/31/18 11:58	SM4500-P E	SMS	U
LP3-S (18J2406-03) Water Sampled: 10/23/18 11:20 Received: 10/24/18 08:05											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK82684	11/05/18 10:00	11/05/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AJ84204	10/25/18 08:00	10/30/18 08:30	SM5210B	WCS	U
Chlorophyll-a	**0.0017**	**0.0010**	**0.010**	**mg/L**	1	AK82739	10/24/18 09:00	11/09/18 09:39	SM10200H	PBM	J
Sulfide	ND	0.020	0.10	mg/L	1	AJ84389	10/30/18 10:00	10/30/18 16:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	ND		0.20	mg/L	1	AK82837	11/06/18 16:00	11/07/18 17:00	SM4500-NO3 E	EV	
Total Kjeldahl Nitrogen	**0.32**	**0.050**	**1.0**	**mg/L**	1	AK82678	11/05/18 07:15	11/06/18 10:18	SM4500-Norg B	JVO	J
Phosphorus, total	**0.027**	**0.010**	**0.040**	**mg/L**	1	AJ84426	10/31/18 08:00	10/31/18 11:58	SM4500-P E	SMS	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/13/18 11:58

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-M (18J2406-04) Water Sampled: 10/23/18 11:45 Received: 10/24/18 08:05											
Ammonia as N	**0.15**	**0.10**	**0.20**	**mg/L**	1	AK82684	11/05/18 10:00	11/05/18 16:00	SM4500NH3C	FCM	J
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AJ84204	10/25/18 08:00	10/30/18 08:30	SM5210B	WCS	U
Chlorophyll-a	**0.0015**	**0.0010**	**0.010**	**mg/L**	1	AK82739	10/24/18 09:00	11/09/18 09:39	SM10200H	PBM	J
Sulfide	ND	0.020	0.10	mg/L	1	AJ84389	10/30/18 10:00	10/30/18 16:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	ND		0.20	mg/L	1	AK82837	11/06/18 16:00	11/07/18 17:00	SM4500-NO3 E	EV	
Total Kjeldahl Nitrogen	**0.35**	**0.050**	**1.0**	**mg/L**	1	AK82678	11/05/18 07:15	11/06/18 10:18	SM4500-Norg B	JVO	J
Phosphorus, total	**0.034**	**0.010**	**0.040**	**mg/L**	1	AJ84426	10/31/18 08:00	10/31/18 11:58	SM4500-P E	SMS	J
LP3-B (18J2406-05) Water Sampled: 10/23/18 12:15 Received: 10/24/18 08:05											
Ammonia as N	**1.6**	**0.10**	**0.20**	**mg/L**	1	AK82684	11/05/18 10:00	11/05/18 16:00	SM4500NH3C	FCM	
Biochemical Oxygen Demand	**4.6**	**2.0**	**5.0**	**mg/L**	1	AJ84204	10/25/18 08:00	10/30/18 08:30	SM5210B	WCS	BOD-4, J
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AK82739	10/24/18 09:00	11/09/18 09:39	SM10200H	PBM	U
Sulfide	**0.16**	**0.020**	**0.10**	**mg/L**	1	AJ84389	10/30/18 10:00	10/30/18 16:00	SM4500-S2 D	EV	
Nitrate + Nitrite as N	ND		0.20	mg/L	1	AK82837	11/06/18 16:00	11/07/18 17:00	SM4500-NO3 E	EV	
Total Kjeldahl Nitrogen	**1.7**	**0.050**	**1.0**	**mg/L**	1	AK82678	11/05/18 07:15	11/06/18 10:18	SM4500-Norg B	JVO	
Phosphorus, total	**0.76**	**0.050**	**0.20**	**mg/L**	5	AJ84426	10/31/18 08:00	10/31/18 11:58	SM4500-P E	SMS	
LP1-S (18J2406-06) Water Sampled: 10/23/18 13:10 Received: 10/24/18 08:05											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK82684	11/05/18 10:00	11/05/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AJ84204	10/25/18 08:00	10/30/18 08:30	SM5210B	WCS	U
Chlorophyll-a	**0.0016**	**0.0010**	**0.010**	**mg/L**	1	AK82739	10/24/18 09:00	11/09/18 09:39	SM10200H	PBM	J
Sulfide	ND	0.020	0.10	mg/L	1	AJ84389	10/30/18 10:00	10/30/18 16:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	ND		0.20	mg/L	1	AK82837	11/06/18 16:00	11/07/18 17:00	SM4500-NO3 E	EV	
Total Kjeldahl Nitrogen	**0.35**	**0.050**	**1.0**	**mg/L**	1	AK82678	11/05/18 07:15	11/06/18 10:18	SM4500-Norg B	JVO	J
Phosphorus, total	**0.043**	**0.010**	**0.040**	**mg/L**	1	AJ84426	10/31/18 08:00	10/31/18 11:58	SM4500-P E	SMS	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/13/18 11:58

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-M (18J2406-07) Water Sampled: 10/23/18 13:30 Received: 10/24/18 08:05											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK82684	11/05/18 10:00	11/05/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AJ84204	10/25/18 08:00	10/30/18 08:30	SM5210B	WCS	U
Chlorophyll-a	**0.0022**	**0.0010**	**0.010**	**mg/L**	1	AK82739	10/24/18 09:00	11/09/18 09:39	SM10200H	PBM	J
Sulfide	ND	0.020	0.10	mg/L	1	AJ84389	10/30/18 10:00	10/30/18 16:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	ND		0.20	mg/L	1	AK82837	11/06/18 16:00	11/07/18 17:00	SM4500-NO3 E	EV	
Total Kjeldahl Nitrogen	**0.24**	**0.050**	**1.0**	**mg/L**	1	AK82678	11/05/18 07:15	11/06/18 10:18	SM4500-Norg B	JVO	J
Phosphorus, total	**0.031**	**0.010**	**0.040**	**mg/L**	1	AJ84426	10/31/18 08:00	10/31/18 11:58	SM4500-P E	SMS	J
LP1-B (18J2406-08) Water Sampled: 10/23/18 14:00 Received: 10/24/18 08:05											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK82684	11/05/18 10:00	11/05/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AJ84204	10/25/18 08:00	10/30/18 08:30	SM5210B	WCS	U
Chlorophyll-a	**0.0011**	**0.0010**	**0.010**	**mg/L**	1	AK82739	10/24/18 09:00	11/09/18 09:39	SM10200H	PBM	J
Sulfide	ND	0.020	0.10	mg/L	1	AJ84389	10/30/18 10:00	10/30/18 16:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	**0.25**		**0.20**	**mg/L**	1	AK82837	11/06/18 16:00	11/07/18 17:00	SM4500-NO3 E	EV	
Total Kjeldahl Nitrogen	**0.21**	**0.050**	**1.0**	**mg/L**	1	AK82678	11/05/18 07:15	11/06/18 10:18	SM4500-Norg B	JVO	J
Phosphorus, total	**0.026**	**0.010**	**0.040**	**mg/L**	1	AJ84426	10/31/18 08:00	10/31/18 11:58	SM4500-P E	SMS	J
LP2-S (18J2406-09) Water Sampled: 10/23/18 15:10 Received: 10/24/18 08:05											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK82684	11/05/18 10:00	11/05/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AJ84204	10/25/18 08:00	10/30/18 08:30	SM5210B	WCS	U
Chlorophyll-a	**0.0017**	**0.0010**	**0.010**	**mg/L**	1	AK82739	10/24/18 09:00	11/09/18 09:39	SM10200H	PBM	J
Sulfide	ND	0.020	0.10	mg/L	1	AJ84389	10/30/18 10:00	10/30/18 16:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	ND		0.20	mg/L	1	AK82837	11/06/18 16:00	11/07/18 17:00	SM4500-NO3 E	EV	
Total Kjeldahl Nitrogen	**0.28**	**0.050**	**1.0**	**mg/L**	1	AK82678	11/05/18 07:15	11/06/18 10:18	SM4500-Norg B	JVO	J
Phosphorus, total	**0.025**	**0.010**	**0.040**	**mg/L**	1	AJ84426	10/31/18 08:00	10/31/18 11:58	SM4500-P E	SMS	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/13/18 11:58

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-M (18J2406-10) Water Sampled: 10/23/18 15:40 Received: 10/24/18 08:05											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK82684	11/05/18 10:00	11/05/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AJ84204	10/25/18 08:00	10/30/18 08:30	SM5210B	WCS	U
Chlorophyll-a	**0.0015**	**0.0010**	**0.010**	**mg/L**	1	AK82739	10/24/18 09:00	11/09/18 09:39	SM10200H	PBM	J
Sulfide	ND	0.020	0.10	mg/L	1	AJ84389	10/30/18 10:00	10/30/18 16:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	ND		0.20	mg/L	1	AK82837	11/06/18 16:00	11/07/18 17:00	SM4500-NO3 E	EV	
Total Kjeldahl Nitrogen	**0.28**	**0.050**	**1.0**	**mg/L**	1	AK82678	11/05/18 07:15	11/06/18 10:18	SM4500-Norg B	JVO	J
Phosphorus, total	**0.030**	**0.010**	**0.040**	**mg/L**	1	AJ84426	10/31/18 08:00	10/31/18 11:58	SM4500-P E	SMS	J
LP2-BL (18J2406-11) Water Sampled: 10/23/18 16:00 Received: 10/24/18 08:05											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK82684	11/05/18 10:00	11/05/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AJ84204	10/25/18 08:00	10/30/18 08:30	SM5210B	WCS	U
Chlorophyll-a	**0.0013**	**0.0010**	**0.010**	**mg/L**	1	AK82739	10/24/18 09:00	11/09/18 09:39	SM10200H	PBM	J
Sulfide	ND	0.020	0.10	mg/L	1	AJ84389	10/30/18 10:00	10/30/18 16:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	ND		0.20	mg/L	1	AK82837	11/06/18 16:00	11/07/18 17:00	SM4500-NO3 E	EV	
Total Kjeldahl Nitrogen	**0.28**	**0.050**	**1.0**	**mg/L**	1	AK82678	11/05/18 07:15	11/06/18 10:18	SM4500-Norg B	JVO	J
Phosphorus, total	**0.030**	**0.010**	**0.040**	**mg/L**	1	AJ84426	10/31/18 08:00	10/31/18 11:58	SM4500-P E	SMS	J
LP-DUP (18J2406-12) Water Sampled: 10/23/18 15:20 Received: 10/24/18 08:05											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK82684	11/05/18 10:00	11/05/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AJ84204	10/25/18 08:00	10/30/18 08:30	SM5210B	WCS	U
Chlorophyll-a	**0.0024**	**0.0010**	**0.010**	**mg/L**	1	AK82739	10/24/18 09:00	11/09/18 09:39	SM10200H	PBM	J
Sulfide	ND	0.020	0.10	mg/L	1	AJ84389	10/30/18 10:00	10/30/18 16:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	ND		0.20	mg/L	1	AK82837	11/06/18 16:00	11/07/18 17:00	SM4500-NO3 E	EV	
Total Kjeldahl Nitrogen	**0.28**	**0.050**	**1.0**	**mg/L**	1	AK82678	11/05/18 07:15	11/06/18 10:18	SM4500-Norg B	JVO	J
Phosphorus, total	**0.024**	**0.010**	**0.040**	**mg/L**	1	AJ84426	10/31/18 08:00	10/31/18 11:58	SM4500-P E	SMS	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/13/18 11:58

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-BL (18J2406-01) Water Sampled: 10/23/18 09:15 Received: 10/24/18 08:05											
Orthophosphate	ND	0.20	0.30	mg/L	1	AJ84467	11/01/18 03:50	11/01/18 03:50	EPA 300.0	SMP	QB-06, T-16, U
LP-EQB (18J2406-02) Water Sampled: 10/23/18 09:30 Received: 10/24/18 08:05											
Orthophosphate	ND	0.20	0.30	mg/L	1	AJ84467	11/01/18 04:06	11/01/18 04:06	EPA 300.0	SMP	QB-06, T-16, U
LP3-S (18J2406-03) Water Sampled: 10/23/18 11:20 Received: 10/24/18 08:05											
Orthophosphate	ND	0.20	0.30	mg/L	1	AJ84467	11/01/18 04:23	11/01/18 04:23	EPA 300.0	SMP	QB-06, T-16, U
LP3-M (18J2406-04) Water Sampled: 10/23/18 11:45 Received: 10/24/18 08:05											
Orthophosphate	ND	0.20	0.30	mg/L	1	AJ84467	11/01/18 04:39	11/01/18 04:39	EPA 300.0	SMP	QB-06, T-16, U
LP3-B (18J2406-05) Water Sampled: 10/23/18 12:15 Received: 10/24/18 08:05											
Orthophosphate	ND	0.20	0.30	mg/L	1	AJ84467	11/01/18 04:56	11/01/18 04:56	EPA 300.0	SMP	QB-06, T-16, U
LP1-S (18J2406-06) Water Sampled: 10/23/18 13:10 Received: 10/24/18 08:05											
Orthophosphate	ND	0.20	0.30	mg/L	1	AJ84467	11/01/18 05:12	11/01/18 05:12	EPA 300.0	SMP	QB-06, T-16, U
LP1-M (18J2406-07) Water Sampled: 10/23/18 13:30 Received: 10/24/18 08:05											
Orthophosphate	ND	0.20	0.30	mg/L	1	AJ84467	11/01/18 05:28	11/01/18 05:28	EPA 300.0	SMP	QB-06, T-16, U
LP1-B (18J2406-08) Water Sampled: 10/23/18 14:00 Received: 10/24/18 08:05											
Orthophosphate	ND	0.20	0.30	mg/L	1	AJ84467	11/01/18 05:45	11/01/18 05:45	EPA 300.0	SMP	QB-06, T-16, U
LP2-S (18J2406-09) Water Sampled: 10/23/18 15:10 Received: 10/24/18 08:05											
Orthophosphate	ND	0.20	0.30	mg/L	1	AJ84467	11/01/18 06:01	11/01/18 06:01	EPA 300.0	SMP	QB-06, T-16, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/13/18 11:58

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-M (18J2406-10) Water Sampled: 10/23/18 15:40 Received: 10/24/18 08:05											
Orthophosphate	ND	0.20	0.30	mg/L	1	AJ84467	11/01/18 06:18	11/01/18 06:18	EPA 300.0	SMP	QB-06, T-16, U
LP2-BL (18J2406-11) Water Sampled: 10/23/18 16:00 Received: 10/24/18 08:05											
Orthophosphate	ND	0.20	0.30	mg/L	1	AJ84467	11/01/18 07:07	11/01/18 07:07	EPA 300.0	SMP	QB-06, T-16, U
LP-DUP (18J2406-12) Water Sampled: 10/23/18 15:20 Received: 10/24/18 08:05											
Orthophosphate	ND	0.20	0.30	mg/L	1	AJ84467	11/01/18 07:40	11/01/18 07:40	EPA 300.0	SMP	QB-06, T-16, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/13/18 11:58

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ84274 - EPA 200.8											
Blank (AJ84274-BLK1)					Prepared: 10/26/18 Analyzed: 10/29/18						
Iron	ND	10	50	ug/L							U
LCS (AJ84274-BS1)					Prepared: 10/26/18 Analyzed: 10/29/18						
Iron	539	10	50	ug/L	520		104	85-115			
Duplicate (AJ84274-DUP1)		**Source: 18J1934-01**			Prepared: 10/26/18 Analyzed: 10/29/18						
Iron	ND	40	200	ug/L		ND				20	U
Matrix Spike (AJ84274-MS1)		**Source: 18J1934-01**			Prepared: 10/26/18 Analyzed: 10/29/18						
Iron	582	40	200	ug/L	520	ND	112	70-130			
Matrix Spike (AJ84274-MS2)		**Source: 18J2406-12**			Prepared: 10/26/18 Analyzed: 10/29/18						
Iron	623	40	200	ug/L	520	97.4	101	70-130			
Matrix Spike Dup (AJ84274-MSD1)		**Source: 18J1934-01**			Prepared: 10/26/18 Analyzed: 10/29/18						
Iron	580	40	200	ug/L	520	ND	112	70-130	0.287	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/13/18 11:58

Metals by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ84236 - EPA 1631											
Blank (AJ84236-BLK1)					Prepared: 10/25/18 Analyzed: 10/26/18						
Mercury	ND	0.200	0.500	ng/l							U
LCS (AJ84236-BS1)					Prepared: 10/25/18 Analyzed: 10/26/18						
Mercury	4.53	0.200	0.500	ng/l	5.00		90.5	77-123			
Matrix Spike (AJ84236-MS1)		**Source: 18J1794-02**			Prepared: 10/25/18 Analyzed: 10/26/18						
Mercury	27.0	0.200	0.500	ng/l	25.0	1.63	101	71-125			
Matrix Spike (AJ84236-MS2)		**Source: 18J2406-04**			Prepared: 10/25/18 Analyzed: 10/26/18						
Mercury	26.1	0.200	0.500	ng/l	25.0	0.787	101	71-125			
Matrix Spike Dup (AJ84236-MSD1)		**Source: 18J1794-02**			Prepared: 10/25/18 Analyzed: 10/26/18						
Mercury	26.5	0.200	0.500	ng/l	25.0	1.63	99.4	71-125	1.94	24	
Matrix Spike Dup (AJ84236-MSD2)		**Source: 18J2406-04**			Prepared: 10/25/18 Analyzed: 10/26/18						
Mercury	27.8	0.200	0.500	ng/l	25.0	0.787	108	71-125	6.19	24	
Reference (AJ84236-SRM1)					Prepared: 10/25/18 Analyzed: 10/26/18						
Mercury	52.9	0.200	0.500	ng/l	50.0		106	68-125			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/13/18 11:58

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ84204 - General Preparation											
Blank (AJ84204-BLK1)					Prepared: 10/25/18 Analyzed: 10/30/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
Blank (AJ84204-BLK2)					Prepared: 10/25/18 Analyzed: 10/30/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
LCS (AJ84204-BS1)					Prepared: 10/25/18 Analyzed: 10/30/18						
Biochemical Oxygen Demand	191	2.0	5.0	mg/L	200		95.6	84-115			
Duplicate (AJ84204-DUP2)		**Source: 18J2431-01**			Prepared: 10/25/18 Analyzed: 10/30/18						
Biochemical Oxygen Demand	250	2.0	5.0	mg/L		240			3.88	30	
Batch AJ84389 - General Preparation											
Blank (AJ84389-BLK1)					Prepared & Analyzed: 10/30/18						
Sulfide	ND	0.020	0.10	mg/L							U
LCS (AJ84389-BS1)					Prepared & Analyzed: 10/30/18						
Sulfide	0.207	0.020	0.10	mg/L	0.200		104	85-115			
Duplicate (AJ84389-DUP1)		**Source: 18J2406-01**			Prepared & Analyzed: 10/30/18						
Sulfide	ND	0.020	0.10	mg/L		ND				15	U
Matrix Spike (AJ84389-MS1)		**Source: 18J2406-01**			Prepared & Analyzed: 10/30/18						
Sulfide	0.167	0.020	0.10	mg/L	0.200	ND	83.7	80-120			
Matrix Spike Dup (AJ84389-MSD1)		**Source: 18J2406-01**			Prepared & Analyzed: 10/30/18						
Sulfide	0.170	0.020	0.10	mg/L	0.200	ND	85.2	80-120	1.78	15	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/13/18 11:58

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ84426 - General Prep											
Blank (AJ84426-BLK1)					Prepared & Analyzed: 10/31/18						
Phosphorus, total	ND	0.010	0.040	mg/L							U
LCS (AJ84426-BS1)					Prepared & Analyzed: 10/31/18						
Phosphorus, total	0.192	0.010	0.040	mg/L	0.200		96.1	85-115			
Duplicate (AJ84426-DUP1)		**Source: 18J2406-01**			Prepared & Analyzed: 10/31/18						
Phosphorus, total	0.0104	0.010	0.040	mg/L		0.0130			22.6	20	J
Matrix Spike (AJ84426-MS1)		**Source: 18J2406-01**			Prepared & Analyzed: 10/31/18						
Phosphorus, total	0.196	0.010	0.040	mg/L	0.200	0.0130	91.5	70-130			
Matrix Spike (AJ84426-MS2)		**Source: 18J2339-01**			Prepared & Analyzed: 10/31/18						
Phosphorus, total	0.191	0.010	0.040	mg/L	0.200	0.0130	88.9	70-130			
Matrix Spike Dup (AJ84426-MSD1)		**Source: 18J2406-01**			Prepared & Analyzed: 10/31/18						
Phosphorus, total	0.196	0.010	0.040	mg/L	0.200	0.0130	91.5	70-130	0.00	20	
Batch AK82678 - General Prep											
LCS (AK82678-BS1)					Prepared: 11/02/18 Analyzed: 11/05/18						
Total Kjeldahl Nitrogen	3.04	0.050	1.0	mg/L	2.98		102	80-120			
LCS Dup (AK82678-BSD1)					Prepared: 11/02/18 Analyzed: 11/05/18						
Total Kjeldahl Nitrogen	3.04	0.050	1.0	mg/L	2.98		102	80-120	0.00	20	
Matrix Spike (AK82678-MS1)		**Source: 18J2368-01**			Prepared: 11/02/18 Analyzed: 11/05/18						
Total Kjeldahl Nitrogen	74.3	0.050	1.0	mg/L	22.6	56.7	77.3	75-125			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/13/18 11:58

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK82678 - General Prep											
Matrix Spike Dup (AK82678-MSD1)		**Source: 18J2368-01**			Prepared: 11/02/18 Analyzed: 11/05/18						
Total Kjeldahl Nitrogen	79.3	0.050	1.0	mg/L	22.6	56.7	99.4	75-125	6.51	20	
Batch AK82684 - General Preparation											
Blank (AK82684-BLK1)					Prepared & Analyzed: 11/05/18						
Ammonia as N	ND	0.10	0.20	mg/L							U
Blank (AK82684-BLK2)					Prepared & Analyzed: 11/05/18						
Ammonia as N	ND	0.10	0.20	mg/L							U
LCS (AK82684-BS1)					Prepared & Analyzed: 11/05/18						
Ammonia as N	4.99	0.10	0.20	mg/L	5.00		99.8	90-110			
LCS Dup (AK82684-BSD1)					Prepared & Analyzed: 11/05/18						
Ammonia as N	4.82	0.10	0.20	mg/L	5.00		96.3	90-110	3.57	20	
Matrix Spike (AK82684-MS1)		**Source: 18J2442-03**			Prepared & Analyzed: 11/05/18						
Ammonia as N	9.28	0.10	0.20	mg/L	10.0	ND	92.8	85-115			
Matrix Spike Dup (AK82684-MSD1)		**Source: 18J2442-03**			Prepared & Analyzed: 11/05/18						
Ammonia as N	9.28	0.10	0.20	mg/L	10.0	ND	92.8	85-115	0.00	20	
Batch AK82739 - General Preparation											
Blank (AK82739-BLK1)					Prepared: 10/24/18 Analyzed: 11/09/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L							U

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Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267
Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 • Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 • Phone: (916) 686-5190 • Fax: (916) 686-5192
North Bay: 110 Liberty Street, Petaluma, CA 94952 • Phone: (707) 769-3128 • Fax: (707) 769-8093

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/13/18 11:58

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK82739 - General Preparation											
Duplicate (AK82739-DUP1)		**Source: 18J2398-01**			Prepared: 10/24/18 Analyzed: 11/09/18						
Chlorophyll-a	0.0237	0.010	0.010	mg/L		0.0237			0.00	50	
Batch AK82837 - General Preparation											
Blank (AK82837-BLK1)					Prepared & Analyzed: 11/07/18						
Nitrate + Nitrite as N	ND		0.20	mg/L							
LCS (AK82837-BS1)					Prepared & Analyzed: 11/07/18						
Nitrate + Nitrite as N	0.395		0.20	mg/L	0.400		98.7	85-115			
LCS Dup (AK82837-BSD1)					Prepared & Analyzed: 11/07/18						
Nitrate + Nitrite as N	0.400		0.20	mg/L	0.400		99.9	85-115	1.23	15	
Matrix Spike (AK82837-MS1)		**Source: 18J2406-04**			Prepared & Analyzed: 11/07/18						
Nitrate + Nitrite as N	0.440		0.20	mg/L	0.400	0.126	78.5	80-120			QM-05
Matrix Spike Dup (AK82837-MSD1)		**Source: 18J2406-04**			Prepared & Analyzed: 11/07/18						
Nitrate + Nitrite as N	0.447		0.20	mg/L	0.400	0.126	80.1	80-120	1.47	15	

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.

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/13/18 11:58

Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ84467 - General Preparation											
Blank (AJ84467-BLK1)					Prepared & Analyzed: 11/01/18						
Orthophosphate	ND	0.20	0.30	mg/L							QB-06, U
LCS (AJ84467-BS1)					Prepared & Analyzed: 11/01/18						
Orthophosphate	16.2	0.20	0.30	mg/L	16.7		97.3	90-110			
Duplicate (AJ84467-DUP1)		**Source: 18J2406-12**			Prepared & Analyzed: 11/01/18						
Orthophosphate	ND	0.20	0.30	mg/L		ND				20	U
Matrix Spike (AJ84467-MS1)		**Source: 18J2406-12**			Prepared & Analyzed: 11/01/18						
Orthophosphate	11.3	1.0	1.5	mg/L	16.7	ND	68.0	80-120			QM-07
Matrix Spike (AJ84467-MS2)		**Source: 18J2653-01**			Prepared & Analyzed: 11/01/18						
Orthophosphate	14.4	0.40	0.60	mg/L	16.7	ND	86.6	80-120			
Matrix Spike Dup (AJ84467-MSD1)		**Source: 18J2406-12**			Prepared & Analyzed: 11/01/18						
Orthophosphate	11.7	1.0	1.5	mg/L	16.7	ND	70.1	80-120	2.96	20	QM-07

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/13/18 11:58

Notes and Definitions

BOD-4	Result is an estimate due to excessive oxygen depletion in all sample dilutions.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QB-06	The method blank contains analyte near but below the MRL; sample MDLs were raised accordingly.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
T-16	Sample prepared outside of recommended hold time. Client notified.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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Analytical Sciences

Report Date: November 01, 2018

Laboratory Report

Alpha Analytical Laboratories, Inc
208 Mason St.
Ukiah, CA 95482

Project Name: **TOC & DOC Analysis** **18J2406**

Lab Project Number: **8102602**

This 10 page report of analytical data has been reviewed and approved for release.



Michele Peters

Laboratory Director

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110 Liberty Street
Petaluma, CA
94952

Dissolved Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-01	**18J2406-01 LP-BL**	Dissolved Organic Carbon	ND	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/31/18	QC Batch: B018096
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Dissolved Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-02	**18J2406-02 LP-EQB**	Dissolved Organic Carbon	ND	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/31/18	QC Batch: B018096
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Dissolved Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-03	**18J2406-03 LP3-S**	Dissolved Organic Carbon	3.20	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/31/18	QC Batch: B018096
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Dissolved Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-04	**18J2406-04 LP3-M**	Dissolved Organic Carbon	3.05	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/31/18	QC Batch: B018096
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Dissolved Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-05	**18J2406-05 LP3-B**	Dissolved Organic Carbon	3.55	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/31/18	QC Batch: B018096
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Dissolved Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-06	**18J2406-06 LP1-S**	Dissolved Organic Carbon	3.19	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/31/18	QC Batch: B018096
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Dissolved Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-07	**18J2406-07 LP1-M**	Dissolved Organic Carbon	3.11	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/31/18	QC Batch: B018096
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Dissolved Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-08	**18J2406-08 LP1-B**	Dissolved Organic Carbon	3.11	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/31/18	QC Batch: B018096
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Dissolved Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-09	**18J2406-09 LP2-S**	Dissolved Organic Carbon	3.18	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/31/18	QC Batch: B018096
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Dissolved Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-10	**18J2406-10 LP2-M**	Dissolved Organic Carbon	3.07	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/31/18	QC Batch: B018096
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Dissolved Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-11	**18J2406-11 LP2-BL**	Dissolved Organic Carbon	3.16	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/31/18	QC Batch: B018096
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Dissolved Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-12	**18J2406-12 LP-Dup**	Dissolved Organic Carbon	3.30	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/31/18	QC Batch: B018096
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Total Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-01	**18J2406-01 LP-BL**	Total Organic Carbon	ND	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/30/18	QC Batch: B018095
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Total Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-02	**18J2406-02 LP-EQB**	Total Organic Carbon	ND	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/30/18	QC Batch: B018095
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Total Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-03	**18J2406-03 LP3-S**	Total Organic Carbon	2.90	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/30/18	QC Batch: B018095
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Total Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-04	**18J2406-04 LP3-M**	Total Organic Carbon	3.01	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/30/18	QC Batch: B018095
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Total Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-05	**18J2406-05 LP3-B**	Total Organic Carbon	6.79	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/30/18	QC Batch: B018095
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Total Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-06	**18J2406-06 LP1-S**	Total Organic Carbon	3.08	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/30/18	QC Batch: B018095
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Total Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-07	**18J2406-07 LP1-M**	Total Organic Carbon	2.95	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/30/18	QC Batch: B018095
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Total Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-08	**18J2406-08 LP1-B**	Total Organic Carbon	2.98	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/30/18	QC Batch: B018095
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Total Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-09	**18J2406-09 LP2-S**	Total Organic Carbon	3.07	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/30/18	QC Batch: B018095
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Total Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-10	**18J2406-10 LP2-M**	Total Organic Carbon	2.99	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/30/18	QC Batch: B018095
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Total Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-11	**18J2406-11 LP2-BL**	Total Organic Carbon	2.99	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/30/18	QC Batch: B018095
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Total Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102602-12	**18J2406-12 LP-Dup**	Total Organic Carbon	3.10	0.50

Date Sampled:	10/23/18	Date Analyzed:	10/30/18	QC Batch: B018095
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Quality Assurance Report

Dissolved Organic Carbon

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B018096 - NO PREP										
Blank (B018096-BLK1)				Prepared: 10/29/18		Analyzed: 10/31/18				
Dissolved Organic Carbon	ND	0.50	mg C/L							
LCS (B018096-BS1)				Prepared: 10/29/18		Analyzed: 10/31/18				
Dissolved Organic Carbon	5.24	0.50	mg C/L	5.00		105	85-115			
LCS Dup (B018096-BSD1)				Prepared: 10/29/18		Analyzed: 10/31/18				
Dissolved Organic Carbon	5.17	0.50	mg C/L	5.00		103	85-115	1	20	
Duplicate (B018096-DUP1)		**Source: 8102601-06**		Prepared: 10/29/18		Analyzed: 10/31/18				
Dissolved Organic Carbon	0.74	0.50	mg C/L		0.81			9	20	
Matrix Spike (B018096-MS1)		**Source: 8102602-12**		Prepared: 10/29/18		Analyzed: 10/31/18				
Dissolved Organic Carbon	8.45	0.50	mg C/L	5.00	3.30	103	75-125			
Matrix Spike Dup (B018096-MSD1)		**Source: 8102602-12**		Prepared: 10/29/18		Analyzed: 10/31/18				
Dissolved Organic Carbon	8.52	0.50	mg C/L	5.00	3.30	104	75-125	1	20	

Total Organic Carbon

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B018095 - NO PREP										
Blank (B018095-BLK1)				Prepared: 10/29/18 Analyzed: 10/30/18						
Total Organic Carbon	ND	0.50	mg C/L							
LCS (B018095-BS1)				Prepared: 10/29/18 Analyzed: 10/30/18						
Total Organic Carbon	5.13	0.50	mg C/L	5.00		103	85-115			
LCS Dup (B018095-BSD1)				Prepared: 10/29/18 Analyzed: 10/30/18						
Total Organic Carbon	5.16	0.50	mg C/L	5.00		103	85-115	0.6	20	
Duplicate (B018095-DUP1)		**Source: 8102601-06**		Prepared: 10/29/18 Analyzed: 10/30/18						
Total Organic Carbon	0.88	0.50	mg C/L		0.80			9	20	
Matrix Spike (B018095-MS1)		**Source: 8102601-07**		Prepared: 10/29/18 Analyzed: 10/31/18						
Total Organic Carbon	6.92	0.50	mg C/L	5.00	1.62	106	75-125			
Matrix Spike Dup (B018095-MSD1)		**Source: 8102601-07**		Prepared: 10/29/18 Analyzed: 10/31/18						
Total Organic Carbon	7.00	0.50	mg C/L	5.00	1.62	107	75-125	2	20	

Notes and Definitions

RDL	Reporting Detection Limit
ND	Analyte NOT DETECTED at or above the reporting detection limit (RDL)
RPD	Relative Percent Difference
NR	Not Reported

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18J2406

8102602

SENDING LABORATORY:

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Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

Analytical Sciences
P.O.Box 750336
Petaluma, CA 94975
Phone :707-769-3128
Fax: 707-769-8093
Terms: Net 30

Temperature Received
9.0

Analysis	Due	Expires	Comments
18J2406-01 LP-BL [Water] Sampled 10/23/18 09:15			
DOC-SM5310	11/07/18 12:00	11/20/18 09:15	
TOC-SM5310	11/07/18 12:00	11/20/18 09:15	
Containers Supplied:			
VOA Vial - H3PO4 - Amb VOA Vial - H3PO4 - Amb 125ml Amber (K)			
18J2406-02 LP-EQB [Water] Sampled 10/23/18 09:30			
DOC-SM5310	11/07/18 12:00	11/20/18 09:30	
TOC-SM5310	11/07/18 12:00	11/20/18 09:30	
Containers Supplied:			
VOA Vial - H3PO4 - Amb VOA Vial - H3PO4 - Amb 125ml Amber (K)			
18J2406-03 LP3-S [Water] Sampled 10/23/18 11:20			
DOC-SM5310	11/07/18 12:00	11/20/18 11:20	
TOC-SM5310	11/07/18 12:00	11/20/18 11:20	
Containers Supplied:			
VOA Vial - H3PO4 - Amb VOA Vial - H3PO4 - Amb 125ml Amber (K)			
18J2406-04 LP3-M [Water] Sampled 10/23/18 11:45			
DOC-SM5310	11/07/18 12:00	11/20/18 11:45	
TOC-SM5310	11/07/18 12:00	11/20/18 11:45	
Containers Supplied:			
VOA Vial - H3PO4 - Amb VOA Vial - H3PO4 - Amb 125ml Amber (K)			

Released By	Date	Received By	Date
	10-25-18		10-25-18
Released By	Date	Received By	Date
	10-25-18		10/25/18

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18J2406

Analysis	Due	Expires	Comments
18J2406-05 LP3-B [Water] Sampled 10/23/18 12:15			
DOC-SM5310	11/07/18 12:00	11/20/18 12:15	
TOC-SM5310	11/07/18 12:00	11/20/18 12:15	
Containers Supplied:			
VOA Vial - H3PO4 - Amb VOA Vial - H3PO4 - Amb 125ml Amber (K)			
18J2406-06 LP1-S [Water] Sampled 10/23/18 13:10			
DOC-SM5310	11/07/18 12:00	11/20/18 13:10	
TOC-SM5310	11/07/18 12:00	11/20/18 13:10	
Containers Supplied:			
VOA Vial - H3PO4 - Amb VOA Vial - H3PO4 - Amb 125ml Amber (K)			
18J2406-07 LP1-M [Water] Sampled 10/23/18 13:30			
DOC-SM5310	11/07/18 12:00	11/20/18 13:30	
TOC-SM5310	11/07/18 12:00	11/20/18 13:30	
Containers Supplied:			
VOA Vial - H3PO4 - Amb VOA Vial - H3PO4 - Amb 125ml Amber (K)			
18J2406-08 LP1-B [Water] Sampled 10/23/18 14:00			
DOC-SM5310	11/07/18 12:00	11/20/18 14:00	
TOC-SM5310	11/07/18 12:00	11/20/18 14:00	
Containers Supplied:			
VOA Vial - H3PO4 - Amb VOA Vial - H3PO4 - Amb 125ml Amber (K)			
18J2406-09 LP2-S [Water] Sampled 10/23/18 15:10			
DOC-SM5310	11/07/18 12:00	11/20/18 15:10	
TOC-SM5310	11/07/18 12:00	11/20/18 15:10	
Containers Supplied:			
VOA Vial - H3PO4 - Amb VOA Vial - H3PO4 - Amb 125ml Amber (K)			

Released By	10-25-18 Date	Received By	10-25-18 Date
Released By	10-25-18 Date	Received By	10/25/18 Date

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18J2406

Analysis	Due	Expires	Comments
18J2406-10 LP2-M [Water] Sampled 10/23/18 15:40			
DOC-SM5310	11/07/18 12:00	11/20/18 15:40	
TOC-SM5310	11/07/18 12:00	11/20/18 15:40	
Containers Supplied:			
VOA Vial - H3PO4 - Amb VOA Vial - H3PO4 - Amb 125ml Amber (K)			
18J2406-11 LP2-BL [Water] Sampled 10/23/18 16:00			
DOC-SM5310	11/07/18 12:00	11/20/18 16:00	
TOC-SM5310	11/07/18 12:00	11/20/18 16:00	
Containers Supplied:			
VOA Vial - H3PO4 - Amb VOA Vial - H3PO4 - Amb 125ml Amber (K)			
18J2406-12 LP-DUP [Water] Sampled 10/23/18 15:20			
DOC-SM5310	11/07/18 12:00	11/20/18 15:20	
TOC-SM5310	11/07/18 12:00	11/20/18 15:20	
Containers Supplied:			
VOA Vial - H3PO4 - Amb VOA Vial - H3PO4 - Amb 125ml Amber (K)			

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+QC
+MDL

Released By	Date	Received By	Date
Released By	Date	Received By	Date

basic laboratory

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November 06, 2018

Lab ID: 18J1118

SHERI L. SPEAKS
ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
RE: LOW LEVEL METALS 18J2406

Dear SHERI L. SPEAKS ,

Enclosed are the analysis results for Work Order number 18J1118. All analyses were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

Ricky D. Jensen
Laboratory Director
California ELAP Certification Number 1677

basic laboratory

www.basiclab.com

2218 Railroad Avenue
Redding, California 96001
voice 530.243.7234
fax 530.243.7494

3860 Morrow Lane, Suite F
Chico, California 95928
voice 530.894.8966
fax 530.894.5143

Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18J2406

Lab No: 18J1118
Reported: 11/06/18
Phone: (707) 468-0401
P.O. #

Metals - Total

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
18J2406-01 LP-BL - Grab Water (18J1118-01) Sampled:10/23/18 09:15 Received:10/26/18 13:31									
Methyl Mercury as Mercury	ng/l	ND		0.020	0.050	EPA 1630	11/02/18	11/01/18	B8K0671
18J2406-02 LP-EQB - Grab Water (18J1118-02) Sampled:10/23/18 09:30 Received:10/26/18 13:31									
Methyl Mercury as Mercury	ng/l	ND		0.020	0.050	EPA 1630	11/02/18	11/01/18	B8K0671
18J2406-03 LP3-S - Grab Water (18J1118-03) Sampled:10/23/18 11:20 Received:10/26/18 13:31									
Methyl Mercury as Mercury	ng/l	**0.131**		0.020	0.050	EPA 1630	11/02/18	11/01/18	B8K0671
18J2406-04 LP3-M - Grab Water (18J1118-04) Sampled:10/23/18 11:45 Received:10/26/18 13:31									
Methyl Mercury as Mercury	ng/l	**0.166**		0.020	0.050	EPA 1630	11/02/18	11/01/18	B8K0671
18J2406-05 LP3-B - Grab Water (18J1118-05) Sampled:10/23/18 12:15 Received:10/26/18 13:31									
Methyl Mercury as Mercury	ng/l	**6.96**		0.020	0.050	EPA 1630	11/02/18	11/01/18	B8K0671
18J2406-06 LP1-S - Grab Water (18J1118-06) Sampled:10/23/18 13:10 Received:10/26/18 13:31									
Methyl Mercury as Mercury	ng/l	**0.117**		0.020	0.050	EPA 1630	11/02/18	11/01/18	B8K0671
18J2406-07 LP1-M - Grab Water (18J1118-07) Sampled:10/23/18 13:30 Received:10/26/18 13:31									
Methyl Mercury as Mercury	ng/l	**0.125**		0.020	0.050	EPA 1630	11/02/18	11/01/18	B8K0671
18J2406-08 LP1-B - Grab Water (18J1118-08) Sampled:10/23/18 14:00 Received:10/26/18 13:31									
Methyl Mercury as Mercury	ng/l	**0.103**		0.020	0.050	EPA 1630	11/02/18	11/01/18	B8K0671
18J2406-09 LP2-S - Grab Water (18J1118-09) Sampled:10/23/18 15:10 Received:10/26/18 13:31									
Methyl Mercury as Mercury	ng/l	**0.135**		0.020	0.050	EPA 1630	11/02/18	11/01/18	B8K0671
18J2406-10 LP2-M - Grab Water (18J1118-10) Sampled:10/23/18 15:40 Received:10/26/18 13:31									
Methyl Mercury as Mercury	ng/l	**0.153**		0.020	0.050	EPA 1630	11/02/18	11/01/18	B8K0671
18J2406-11 LP2-BL - Grab Water (18J1118-11) Sampled:10/23/18 16:00 Received:10/26/18 13:31									
Methyl Mercury as Mercury	ng/l	**0.123**		0.020	0.050	EPA 1630	11/02/18	11/01/18	B8K0671
18J2406-12 LP-DUP - Grab Water (18J1118-12) Sampled:10/23/18 15:20 Received:10/26/18 13:31									
Methyl Mercury as Mercury	ng/l	**0.124**		0.020	0.050	EPA 1630	11/02/18	11/01/18	B8K0671



Approved By

Basic Laboratory Inc
California ELAP Cert #1677 and #2718

basic laboratory

www.basiclab.com

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18J2406

Lab No: 18J1118
Reported: 11/06/18
Phone: (707) 468-0401
P.O. #

Quality Control Data

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Metals - Total										
Batch B8K0671 - Draft EPA Method 1630 Distillation (Modified)										
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
LCS										
Methyl Mercury as Mercury	1.90	0.050	ng/l	2.00		94.9	67-133			
Matrix Spike Source: 18J1113-01										
Methyl Mercury as Mercury	1.23	0.050	ng/l	1.00	0.040	119	65-135			
Matrix Spike Source: 18J1118-03										
Methyl Mercury as Mercury	1.17	0.050	ng/l	1.00	0.131	104	65-135			
Matrix Spike Dup Source: 18J1113-01										
Methyl Mercury as Mercury	1.22	0.050	ng/l	1.00	0.040	118	65-135	0.814	35	
Matrix Spike Dup Source: 18J1118-03										
Methyl Mercury as Mercury	1.30	0.050	ng/l	1.00	0.131	117	65-135	10.5	35	

Approved By

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18J2406

Lab No: 18J1118
Reported: 11/06/18
Phone: (707) 468-0401
P.O. #

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). The J flag is equivalent to the DNQ Estimated Concentration flag.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
<	Less than reporting limit
≤	Less than or equal to reporting limit
>	Greater than reporting limit
≥	Greater than or equal to reporting limit
MDL	Method Detection Limit
RL/ML	Minimum Level of Quantitation
MCL/AL	Maxium Contaminant Level/Action Level
mg/kg	Results reported as wet weight
TTLC	Total Threshold Limit Concentration
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leachate Procedure
Note 1	Received Temperature - according to EPA guidelines, samples for most chemistry methods should be held at ≤6 degrees C after collection, including during transportation, unless the time from sampling to delivery is <2 hours. Regulating agencies may invalidate results if temperature requirements are not met.
Note 2	According to 40 CFR Part 136 Table II, the following tests should be analyzed in the field within 15 minutes of sampling: pH, chlorine, dissolved oxygen, and sulfite.

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc. 18J1118

18J2406 Due 11-7-18

1

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY: 11-16-18 DSO

Basic Laboratory
2218 Railroad Ave
Redding, CA 96001
Phone :530-243-7234
Fax: 530-243-7494
Terms: Net 30

Analysis	Due	Expires	Comments
18J2406-01 LP-BL [Water] Sampled 10/23/18 09:15			-1 4.4°C
BAL Hg Methyl	11/07/18 12:00	04/21/19 09:15	
Containers Supplied: Amber (all samples)			
500ml Glass - HCl (I)			
18J2406-02 LP-EQB [Water] Sampled 10/23/18 09:30			-2 4.7°C
BAL Hg Methyl	11/07/18 12:00	04/21/19 09:30	
Containers Supplied:			
500ml Glass - HCl (I)			
18J2406-03 LP3-S [Water] Sampled 10/23/18 11:20			-3 4.2°C
BAL Hg Methyl	11/07/18 12:00	04/21/19 11:20	
Containers Supplied:			
500ml Glass - HCl (I)			
18J2406-04 LP3-M [Water] Sampled 10/23/18 11:45			-4 5.0°C
BAL Hg Methyl	11/07/18 12:00	04/21/19 11:45	
Containers Supplied:			
500ml Glass - HCl (I)			
18J2406-05 LP3-B [Water] Sampled 10/23/18 12:15			-5 4.4°C
BAL Hg Methyl	11/07/18 12:00	04/21/19 12:15	
Containers Supplied:			
500ml Glass - HCl (I)			

Released By	Date	Received By	Date
	10-24-18	P. Olen	10-26-18 13:31
		P. Olen	10-26-18 15:00

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18J2406

18J1118

Analysis	Due	Expires	Comments
18J2406-06 LP1-S [Water] Sampled 10/23/18 13:10			-6 6.7°C
BAL Hg Methyl	11/07/18 12:00	04/21/19 13:10	
Containers Supplied:			
500ml Glass - HCl (I)			
18J2406-07 LP1-M [Water] Sampled 10/23/18 13:30			-7 4.4°C
BAL Hg Methyl	11/07/18 12:00	04/21/19 13:30	
Containers Supplied:			
500ml Glass - HCl (I)			
18J2406-08 LP1-B [Water] Sampled 10/23/18 14:00			-8 7.0°C
BAL Hg Methyl	11/07/18 12:00	04/21/19 14:00	
Containers Supplied:			
500ml Glass - HCl (I)			
18J2406-09 LP2-S [Water] Sampled 10/23/18 15:10			-9 5.0°C
BAL Hg Methyl	11/07/18 12:00	04/21/19 15:10	
Containers Supplied:			
500ml Glass - HCl (I)			
18J2406-10 LP2-M [Water] Sampled 10/23/18 15:40			-10 6.2°C
BAL Hg Methyl	11/07/18 12:00	04/21/19 15:40	
Containers Supplied:			
500ml Glass - HCl (I)			
18J2406-11 LP2-BL [Water] Sampled 10/23/18 16:00			-11 4.4°C
BAL Hg Methyl	11/07/18 12:00	04/21/19 16:00	
Containers Supplied:			
500ml Glass - HCl (I)			

Released By	Date	Received By	Date
[signature]	10-24-18	P. Ocle	10.26.18 13:31
Released By	Date	Received By	Date
		P. Ocle	10.26.18 15:00

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

1851118

18J2406

Analysis	Due	Expires	Comments
18J2406-12 LP-DUP [Water] Sampled 10/23/18 15:20			-12 3.8°C
BAL Hg Methyl	11/07/18 12:00	04/21/19 15:20	

Containers Supplied:

500ml Glass - HCl (I)

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+QC
+MW

Released By	10-24-18 Date	Received By	10-26-18 Date	13:31
Released By	Date	Received By	10-26-18 Date	15.00

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ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

Bay Area Laboratory
262 Rickenbacker Circle, Livermore CA 94551
925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18J2406 Pg 1 of 4

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	TOC	DOC	Fe 200.8 Total	Ammonia-N	Phosphorus, Total	TKN	BOD	NO2 + NO3 - N ~~300.0~~ SM4500	Orthophosphate 300.0	Chlorophyll-A	Sulfide	Sample Notes or DDW Source Numbers:
LP-BL	10/23 ~~10/24~~ SF	915											X			10	X	X	X	X	X	X	X	X	X	X	X	
LP-EQB		930																										
LP3-S		1120																										Ortho analyzed out of hold
LP3-M		1145																										for all samples. (SF)
LP3-B		1215																										OK to flag & report
LP1-S		1310																										@ no charge per David.
LP1-M		1330																										10-29-18
LP1-B		1400																										
LP2-S		1510																										
LP2-M		1540																										

TAT
Standard 10 days ⊗
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1, 4
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		10/24/18	0805

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):
Travel and Site Time: Mileage: Misc. Supplies:

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Central Valley Laboratory
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916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

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Lab No 1852406 Pg 2 of 4

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

TAT: Standard 10 days (X) | RUSH: 5 days ( ) 48 hours ( ) Other: ___ days ( ) Lab preapproval required

Temp upon Receipt °C: Ukiah temp: 1.4 | Livermore temp: | Elk Grove temp:

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Analysis Request: TOC	DOC	Fe 200.8 Total	Ammonia-N	Phosphorus, Total	TKN	BOD	NO2 + NO3 - N ~~300.0~~ SM4500	Orthophosphate 300.0	Chlorophyll-A	Sulfide	Sample Notes or DDW Source Numbers:
LP2-BL 18/23	10/24	1600											X			10	X	X	X	X	X	X	X	X	X	X	X	
LP-DUP "	↓	1520											↓			↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	

Relinquished by	Received by	Date	Time
Christina Buck		10/24/18	0805

DDW Write On EDT Transmission? ( ) Yes ( ) No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ( ) Yes ( ) No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

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Chain of Custody - Work Order

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Lab No 18J2406 Pg 3 of 4

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature:
CHRISTINA BUCK
Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Analysis Request: Hg 1631	MeHg 1630	Sample Notes or DDW Source Numbers:
LP-BL 10/23	~~10/24~~	915											X				X	X	
LP-EQB		930																	
LP3-S		1120																	
LP3-M		1145																	
LP3-B		1215																	
LP1-S		1310																	
LP1-M		1330																	
LP1-B		1400																	
LP2-S		1510																	
LP2-M		1540																	

TAT
Standard 10 days: Ø
RUSH: 5 days ○ 48 hours ○ Other: ___ days ○
Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.4
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		10/24/18	0805

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID:
EDF to (Email Address):
Sampling Company Log Code:

Travel and Site Time:	Mileage:	Misc. Supplies:

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Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	Analysis Request: Hg 1631	Analysis Request: MeHg 1630
LP2-BL	10/23	10/24 1600											2			2	2	2
LP-DUP	"	" 1520											2			2	2	2
																See P2		

TAT
Standard 10 days ○
RUSH: 5 days ○ 48 hours ○ Other: ___days ○
Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.4
Livermore temp:
Elk Grove temp:

Sample Notes or DDW Source Numbers:

Relinquished by	Received by	Date	Time
Christina Buck		10/24/18	0805

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID:
EDF to (Email Address):
Sampling Company Log Code:

Travel and Site Time: | Mileage: | Misc. Supplies:

SF

Cheryl Watson

From: David Pingatore <david@alpha-labs.com>
Sent: Thursday, October 25, 2018 10:07 AM
To: 'Cheryl Watson'
Subject: RE: 18J2406 Stillwater NO2+NO3

That's a great solution. Thank you.

-----Original Message-----
From: Cheryl Watson <cwatson@alpha-labs.com>
Sent: Thursday, October 25, 2018 9:57 AM
To: David Pingatore (David Pingatore) <david@alpha-labs.com>
Subject: 18J2406 Stillwater NO2+NO3

David,

We are going to miss the hold times on these samples for NO2+NO3 as N by 300.0 due to an instrument malfunction last night. Since they didn't request separate NO2 and NO3 can run them by SM4500 from preserved sample instead. Let me know if this will work.

Thanks,
Cheryl

Cheryl Watson
Quality Manager
Alpha Analytical Laboratories, Inc.
707-468-0401
cwatson@alpha-labs.com

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267
Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 • Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 • Phone: (916) 686-5190 • Fax: (916) 686-5192
North Bay: 110 Liberty Street, Petaluma, CA 94952 • Phone: (707) 769-3128 • Fax: (707) 769-8093

ELAP Certificates 1551, 2728, 2922, and 2303

16 November 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18J2519

Enclosed are the results of analyses for samples received by the laboratory on 10/25/18 08:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
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North Bay: 110 Liberty Street, Petaluma, CA 94952 • Phone: (707) 769-3128 • Fax: (707) 769-8093

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/16/18 10:44

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LP4-S	18J2519-01	Water	10/24/18 11:15	10/25/18 08:10
LP4-M	18J2519-02	Water	10/24/18 11:40	10/25/18 08:10
LP4-B	18J2519-03	Water	10/24/18 11:30	10/25/18 08:10
LP-DUP2	18J2519-04	Water	10/24/18 11:45	10/25/18 08:10
LP-BL2	18J2519-05	Water	10/24/18 12:00	10/25/18 08:10
RF3.8	18J2519-06	Water	10/24/18 13:50	10/25/18 08:10
ER173.7	18J2519-07	Water	10/24/18 15:45	10/25/18 08:10

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/16/18 10:44

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-S (18J2519-01) Water Sampled: 10/24/18 11:15 Received: 10/25/18 08:10											
Iron	**190**	**40**	**200**	**ug/L**	4	AK82670	11/02/18 08:30	11/06/18 15:28	EPA 200.8	MMY	R-01, J
LP4-M (18J2519-02) Water Sampled: 10/24/18 11:40 Received: 10/25/18 08:10											
Iron	**200**	**40**	**200**	**ug/L**	4	AK82670	11/02/18 08:30	11/06/18 15:46	EPA 200.8	MMY	
LP4-B (18J2519-03) Water Sampled: 10/24/18 11:30 Received: 10/25/18 08:10											
Iron	**240**	**40**	**200**	**ug/L**	4	AK82670	11/02/18 08:30	11/06/18 16:28	EPA 200.8	MMY	
LP-DUP2 (18J2519-04) Water Sampled: 10/24/18 11:45 Received: 10/25/18 08:10											
Iron	**240**	**40**	**200**	**ug/L**	4	AK82670	11/02/18 08:30	11/06/18 16:34	EPA 200.8	MMY	
LP-BL2 (18J2519-05) Water Sampled: 10/24/18 12:00 Received: 10/25/18 08:10											
Iron	ND	40	200	ug/L	4	AK82670	11/02/18 08:30	11/06/18 16:40	EPA 200.8	MMY	U
RF3.8 (18J2519-06) Water Sampled: 10/24/18 13:50 Received: 10/25/18 08:10											
Iron	**180**	**40**	**200**	**ug/L**	4	AK82670	11/02/18 08:30	11/06/18 16:47	EPA 200.8	MMY	R-01, J
ER173.7 (18J2519-07) Water Sampled: 10/24/18 15:45 Received: 10/25/18 08:10											
Iron	**310**	**40**	**200**	**ug/L**	4	AK82670	11/02/18 08:30	11/06/18 16:53	EPA 200.8	MMY	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/16/18 10:44

Metals by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-S (18J2519-01) Water Sampled: 10/24/18 11:15 Received: 10/25/18 08:10											
Mercury	**0.926**	**0.200**	**0.500**	**ng/l**	1	AJ84368	10/29/18 14:00	10/30/18 14:35	EPA 1631E	AJC	
LP4-M (18J2519-02) Water Sampled: 10/24/18 11:40 Received: 10/25/18 08:10											
Mercury	**1.08**	**0.200**	**0.500**	**ng/l**	1	AJ84368	10/29/18 14:00	10/30/18 14:43	EPA 1631E	AJC	
LP4-B (18J2519-03) Water Sampled: 10/24/18 11:30 Received: 10/25/18 08:10											
Mercury	**1.13**	**0.200**	**0.500**	**ng/l**	1	AJ84368	10/29/18 14:00	10/30/18 14:51	EPA 1631E	AJC	
LP-DUP2 (18J2519-04) Water Sampled: 10/24/18 11:45 Received: 10/25/18 08:10											
Mercury	**1.12**	**0.200**	**0.500**	**ng/l**	1	AJ84368	10/29/18 14:00	10/30/18 14:59	EPA 1631E	AJC	
LP-BL2 (18J2519-05) Water Sampled: 10/24/18 12:00 Received: 10/25/18 08:10											
Mercury	ND	0.200	0.500	ng/l	1	AJ84368	10/29/18 14:00	10/30/18 15:07	EPA 1631E	AJC	U
RF3.8 (18J2519-06) Water Sampled: 10/24/18 13:50 Received: 10/25/18 08:10											
Mercury	**0.918**	**0.200**	**0.500**	**ng/l**	1	AJ84368	10/29/18 14:00	10/30/18 15:16	EPA 1631E	AJC	
ER173.7 (18J2519-07) Water Sampled: 10/24/18 15:45 Received: 10/25/18 08:10											
Mercury	**1.31**	**0.200**	**0.500**	**ng/l**	1	AJ84368	10/29/18 14:00	10/30/18 15:24	EPA 1631E	AJC	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/16/18 10:44

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-S (18J2519-01) Water Sampled: 10/24/18 11:15 Received: 10/25/18 08:10											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK82795	11/06/18 10:00	11/06/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AJ84279	10/26/18 08:00	10/31/18 14:45	SM5210B	WCS	U
Chlorophyll-a	**0.0017**	**0.0010**	**0.010**	**mg/L**	1	AK83040	10/26/18 10:30	11/14/18 13:00	SM10200H	PBM	J
Sulfide	ND	0.020	0.10	mg/L	1	AJ84389	10/30/18 10:00	10/30/18 16:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	**0.053**	**0.0086**	**0.40**	**mg/L**	1	AJ84250	10/25/18 15:48	11/01/18 10:15	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.35**	**0.050**	**1.0**	**mg/L**	1	AK82789	11/08/18 07:18	11/09/18 12:51	SM4500-Norg B	JVO	J
Phosphorus, total	**0.033**	**0.010**	**0.040**	**mg/L**	1	AK82846	11/07/18 08:40	11/07/18 10:27	SM4500-P E	SMS	J
LP4-M (18J2519-02) Water Sampled: 10/24/18 11:40 Received: 10/25/18 08:10											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK82795	11/06/18 10:00	11/06/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AJ84279	10/26/18 08:00	10/31/18 14:45	SM5210B	WCS	U
Chlorophyll-a	**0.0015**	**0.0010**	**0.010**	**mg/L**	1	AK83040	10/26/18 10:30	11/14/18 13:00	SM10200H	PBM	J
Sulfide	ND	0.020	0.10	mg/L	1	AJ84389	10/30/18 10:00	10/30/18 16:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	**0.042**	**0.0086**	**0.40**	**mg/L**	1	AJ84250	10/25/18 15:48	11/01/18 10:15	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.35**	**0.050**	**1.0**	**mg/L**	1	AK82789	11/08/18 07:18	11/09/18 12:51	SM4500-Norg B	JVO	J
Phosphorus, total	**0.034**	**0.010**	**0.040**	**mg/L**	1	AK82846	11/07/18 08:40	11/07/18 10:27	SM4500-P E	SMS	J
LP4-B (18J2519-03) Water Sampled: 10/24/18 11:30 Received: 10/25/18 08:10											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK82795	11/06/18 10:00	11/06/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AJ84279	10/26/18 08:00	10/31/18 14:45	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AK83040	10/26/18 10:30	11/14/18 13:00	SM10200H	PBM	U
Sulfide	ND	0.020	0.10	mg/L	1	AJ84389	10/30/18 10:00	10/30/18 16:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	**0.040**	**0.0086**	**0.40**	**mg/L**	1	AJ84250	10/25/18 15:48	11/01/18 10:15	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.32**	**0.050**	**1.0**	**mg/L**	1	AK82789	11/08/18 07:18	11/09/18 12:51	SM4500-Norg B	JVO	J
Phosphorus, total	**0.040**	**0.010**	**0.040**	**mg/L**	1	AK82846	11/07/18 08:40	11/07/18 10:27	SM4500-P E	SMS	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/16/18 10:44

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-DUP2 (18J2519-04) Water Sampled: 10/24/18 11:45 Received: 10/25/18 08:10											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK82795	11/06/18 10:00	11/06/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AJ84279	10/26/18 08:00	10/31/18 14:45	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AK83040	10/26/18 10:30	11/14/18 13:00	SM10200H	PBM	U
Sulfide	ND	0.020	0.10	mg/L	1	AJ84389	10/30/18 10:00	10/30/18 16:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	**0.040**	**0.0086**	**0.40**	**mg/L**	1	AJ84250	10/25/18 15:48	11/01/18 10:15	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.35**	**0.050**	**1.0**	**mg/L**	1	AK82789	11/08/18 07:18	11/09/18 12:51	SM4500-Norg B	JVO	J
Phosphorus, total	**0.030**	**0.010**	**0.040**	**mg/L**	1	AK82846	11/07/18 08:40	11/07/18 10:27	SM4500-P E	SMS	J
LP-BL2 (18J2519-05) Water Sampled: 10/24/18 12:00 Received: 10/25/18 08:10											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK82795	11/06/18 10:00	11/06/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AJ84279	10/26/18 08:00	10/31/18 14:45	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AK83040	10/26/18 10:30	11/14/18 13:00	SM10200H	PBM	U
Sulfide	ND	0.020	0.10	mg/L	1	AJ84389	10/30/18 10:00	10/30/18 16:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	**0.026**	**0.0086**	**0.40**	**mg/L**	1	AJ84250	10/25/18 15:48	11/01/18 10:15	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.070**	**0.050**	**1.0**	**mg/L**	1	AK82789	11/08/18 07:18	11/09/18 12:51	SM4500-Norg B	JVO	J
Phosphorus, total	ND	0.010	0.040	mg/L	1	AK82846	11/07/18 08:40	11/07/18 10:27	SM4500-P E	SMS	U
RF3.8 (18J2519-06) Water Sampled: 10/24/18 13:50 Received: 10/25/18 08:10											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK82795	11/06/18 10:00	11/06/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AJ84279	10/26/18 08:00	10/31/18 14:45	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AK83040	10/26/18 10:30	11/14/18 13:00	SM10200H	PBM	U
Nitrate + Nitrite as N	**0.028**	**0.0086**	**0.40**	**mg/L**	1	AJ84250	10/25/18 15:48	11/01/18 10:15	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.10**	**0.050**	**1.0**	**mg/L**	1	AK82789	11/08/18 07:18	11/09/18 12:51	SM4500-Norg B	JVO	J
Phosphorus, total	**0.016**	**0.010**	**0.040**	**mg/L**	1	AK82846	11/07/18 08:40	11/07/18 10:27	SM4500-P E	SMS	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/16/18 10:44

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER173.7 (18J2519-07) Water Sampled: 10/24/18 15:45 Received: 10/25/18 08:10											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK82795	11/06/18 10:00	11/06/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AJ84279	10/26/18 08:00	10/31/18 14:45	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AK83040	10/26/18 10:30	11/14/18 13:00	SM10200H	PBM	U
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AJ84250	10/25/18 15:48	11/01/18 10:15	Calculation	RLG	U
Total Kjeldahl Nitrogen	**0.14**	**0.050**	**1.0**	**mg/L**	1	AK82789	11/08/18 07:18	11/09/18 12:51	SM4500-Norg B	JVO	J
Phosphorus, total	**0.053**	**0.010**	**0.040**	**mg/L**	1	AK82846	11/07/18 08:40	11/07/18 10:27	SM4500-P E	SMS	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/16/18 10:44

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-S (18J2519-01) Water Sampled: 10/24/18 11:15 Received: 10/25/18 08:10											
Nitrate as N	**0.053**	**0.040**	**0.20**	**mg/L**	1	AJ84256	10/26/18 03:37	10/26/18 03:37	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AJ84256	10/26/18 03:37	10/26/18 03:37	EPA 300.0	SMP	U
Orthophosphate	**0.13**	**0.10**	**0.30**	**mg/L**	1	AJ84256	10/26/18 03:37	10/26/18 03:37	EPA 300.0	SMP	J
LP4-M (18J2519-02) Water Sampled: 10/24/18 11:40 Received: 10/25/18 08:10											
Nitrate as N	**0.042**	**0.040**	**0.20**	**mg/L**	1	AJ84256	10/26/18 03:53	10/26/18 03:53	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AJ84256	10/26/18 03:53	10/26/18 03:53	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AJ84256	10/26/18 03:53	10/26/18 03:53	EPA 300.0	SMP	U
LP4-B (18J2519-03) Water Sampled: 10/24/18 11:30 Received: 10/25/18 08:10											
Nitrate as N	**0.040**	**0.040**	**0.20**	**mg/L**	1	AJ84256	10/26/18 04:10	10/26/18 04:10	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AJ84256	10/26/18 04:10	10/26/18 04:10	EPA 300.0	SMP	U
Orthophosphate	**0.11**	**0.10**	**0.30**	**mg/L**	1	AJ84256	10/26/18 04:10	10/26/18 04:10	EPA 300.0	SMP	J
LP-DUP2 (18J2519-04) Water Sampled: 10/24/18 11:45 Received: 10/25/18 08:10											
Nitrate as N	**0.040**	**0.040**	**0.20**	**mg/L**	1	AJ84256	10/26/18 04:26	10/26/18 04:26	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AJ84256	10/26/18 04:26	10/26/18 04:26	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AJ84256	10/26/18 04:26	10/26/18 04:26	EPA 300.0	SMP	U
LP-BL2 (18J2519-05) Water Sampled: 10/24/18 12:00 Received: 10/25/18 08:10											
Nitrate as N	ND	0.040	0.20	mg/L	1	AJ84256	10/26/18 05:15	10/26/18 05:15	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AJ84256	10/26/18 05:15	10/26/18 05:15	EPA 300.0	SMP	U
Orthophosphate	**0.11**	**0.10**	**0.30**	**mg/L**	1	AJ84256	10/26/18 05:15	10/26/18 05:15	EPA 300.0	SMP	J
RF3.8 (18J2519-06) Water Sampled: 10/24/18 13:50 Received: 10/25/18 08:10											
Nitrate as N	ND	0.040	0.20	mg/L	1	AJ84256	10/26/18 05:32	10/26/18 05:32	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AJ84256	10/26/18 05:32	10/26/18 05:32	EPA 300.0	SMP	U
Orthophosphate	**0.15**	**0.10**	**0.30**	**mg/L**	1	AJ84256	10/26/18 05:32	10/26/18 05:32	EPA 300.0	SMP	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/16/18 10:44

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER173.7 (18J2519-07) Water Sampled: 10/24/18 15:45 Received: 10/25/18 08:10											
Nitrate as N	ND	0.040	0.20	mg/L	1	AJ84256	10/26/18 05:48	10/26/18 05:48	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AJ84256	10/26/18 05:48	10/26/18 05:48	EPA 300.0	SMP	U
Orthophosphate	**0.15**	**0.10**	**0.30**	**mg/L**	1	AJ84256	10/26/18 05:48	10/26/18 05:48	EPA 300.0	SMP	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/16/18 10:44

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK82670 - EPA 200.8											
Blank (AK82670-BLK1)					Prepared: 11/02/18 Analyzed: 11/06/18						
Iron	ND	10	50	ug/L							U
LCS (AK82670-BS1)					Prepared: 11/02/18 Analyzed: 11/06/18						
Iron	495	10	50	ug/L	520		95.2	85-115			
Duplicate (AK82670-DUP1)		**Source: 18J2519-01**			Prepared: 11/02/18 Analyzed: 11/06/18						
Iron	189	40	200	ug/L		189			0.123	20	R-01, J
Matrix Spike (AK82670-MS1)		**Source: 18J2519-01**			Prepared: 11/02/18 Analyzed: 11/06/18						
Iron	667	40	200	ug/L	520	189	91.9	70-130			
Matrix Spike (AK82670-MS2)		**Source: 18K0043-05**			Prepared: 11/02/18 Analyzed: 11/06/18						
Iron	2210	40	200	ug/L	520	1630	113	70-130			
Matrix Spike Dup (AK82670-MSD1)		**Source: 18J2519-01**			Prepared: 11/02/18 Analyzed: 11/06/18						
Iron	665	40	200	ug/L	520	189	91.5	70-130	0.294	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/16/18 10:44

Metals by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ84368 - EPA 1631											
Blank (AJ84368-BLK1)					Prepared: 10/29/18 Analyzed: 10/30/18						
Mercury	0.345	0.200	0.500	ng/l							J
LCS (AJ84368-BS1)					Prepared: 10/29/18 Analyzed: 10/30/18						
Mercury	5.25	0.200	0.500	ng/l	5.00		105	77-123			
Matrix Spike (AJ84368-MS1)		**Source: 18J2475-02**			Prepared: 10/29/18 Analyzed: 10/30/18						
Mercury	25.8	0.200	0.500	ng/l	25.0	ND	103	71-125			
Matrix Spike Dup (AJ84368-MSD1)		**Source: 18J2475-02**			Prepared: 10/29/18 Analyzed: 10/30/18						
Mercury	26.0	0.200	0.500	ng/l	25.0	ND	104	71-125	0.849	24	
Reference (AJ84368-SRM1)					Prepared: 10/29/18 Analyzed: 10/30/18						
Mercury	53.1	0.200	0.500	ng/l	50.0		106	68-125			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/16/18 10:44

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ84279 - General Preparation											
Blank (AJ84279-BLK1)					Prepared: 10/26/18 Analyzed: 10/31/18						
Biochemical Oxygen Demand	ND	2.0	2.0	mg/L							U
Blank (AJ84279-BLK2)					Prepared: 10/26/18 Analyzed: 10/31/18						
Biochemical Oxygen Demand	ND	2.0	2.0	mg/L							U
LCS (AJ84279-BS1)					Prepared: 10/26/18 Analyzed: 10/31/18						
Biochemical Oxygen Demand	193	2.0	2.0	mg/L	200		96.6	84-115			
Duplicate (AJ84279-DUP1)		**Source: 18J2581-03**			Prepared: 10/26/18 Analyzed: 10/31/18						
Biochemical Oxygen Demand	147	2.0	2.0	mg/L		154			4.43	30	
Batch AJ84389 - General Preparation											
Blank (AJ84389-BLK1)					Prepared & Analyzed: 10/30/18						
Sulfide	ND	0.020	0.10	mg/L							U
LCS (AJ84389-BS1)					Prepared & Analyzed: 10/30/18						
Sulfide	0.207	0.020	0.10	mg/L	0.200		104	85-115			
Duplicate (AJ84389-DUP1)		**Source: 18J2406-01**			Prepared & Analyzed: 10/30/18						
Sulfide	ND	0.020	0.10	mg/L		ND				15	U
Matrix Spike (AJ84389-MS1)		**Source: 18J2406-01**			Prepared & Analyzed: 10/30/18						
Sulfide	0.167	0.020	0.10	mg/L	0.200	ND	83.7	80-120			
Matrix Spike Dup (AJ84389-MSD1)		**Source: 18J2406-01**			Prepared & Analyzed: 10/30/18						
Sulfide	0.170	0.020	0.10	mg/L	0.200	ND	85.2	80-120	1.78	15	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/16/18 10:44

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK82789 - General Prep											
LCS (AK82789-BS1)					Prepared: 11/06/18 Analyzed: 11/08/18						
Total Kjeldahl Nitrogen	2.95	0.050	1.0	mg/L	2.98		99.0	80-120			
LCS Dup (AK82789-BSD1)					Prepared: 11/06/18 Analyzed: 11/08/18						
Total Kjeldahl Nitrogen	2.95	0.050	1.0	mg/L	2.98		99.0	80-120	0.00	20	
Matrix Spike (AK82789-MS1)		**Source: 18J2468-02**			Prepared: 11/06/18 Analyzed: 11/08/18						
Total Kjeldahl Nitrogen	3.31	0.050	1.0	mg/L	2.98	0.350	99.5	75-125			
Matrix Spike Dup (AK82789-MSD1)		**Source: 18J2468-02**			Prepared: 11/06/18 Analyzed: 11/08/18						
Total Kjeldahl Nitrogen	3.23	0.050	1.0	mg/L	2.98	0.350	96.5	75-125	2.66	20	
Batch AK82795 - General Preparation											
Blank (AK82795-BLK1)					Prepared & Analyzed: 11/06/18						
Ammonia as N	ND	0.10	0.20	mg/L							U
Blank (AK82795-BLK2)					Prepared & Analyzed: 11/06/18						
Ammonia as N	ND	0.10	0.20	mg/L							U
LCS (AK82795-BS1)					Prepared & Analyzed: 11/06/18						
Ammonia as N	4.82	0.10	0.20	mg/L	5.00		96.3	90-110			
LCS Dup (AK82795-BSD1)					Prepared & Analyzed: 11/06/18						
Ammonia as N	4.64	0.10	0.20	mg/L	5.00		92.8	90-110	3.70	20	
Matrix Spike (AK82795-MS1)		**Source: 18K0018-01**			Prepared & Analyzed: 11/06/18						
Ammonia as N	9.28	0.10	0.20	mg/L	10.0	ND	92.8	85-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/16/18 10:44

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK82795 - General Preparation											
Matrix Spike Dup (AK82795-MSD1)		**Source: 18K0018-01**			Prepared & Analyzed: 11/06/18						
Ammonia as N	9.46	0.10	0.20	mg/L	10.0	ND	94.6	85-115	1.87	20	
Batch AK82846 - General Prep											
Blank (AK82846-BLK1)					Prepared & Analyzed: 11/07/18						
Phosphorus, total	ND	0.010	0.040	mg/L							U
LCS (AK82846-BS1)					Prepared & Analyzed: 11/07/18						
Phosphorus, total	0.196	0.010	0.040	mg/L	0.200		97.8	85-115			
Duplicate (AK82846-DUP1)		**Source: 18J2519-01**			Prepared & Analyzed: 11/07/18						
Phosphorus, total	0.0300	0.010	0.040	mg/L		0.0327			8.64	20	J
Matrix Spike (AK82846-MS1)		**Source: 18J2519-01**			Prepared & Analyzed: 11/07/18						
Phosphorus, total	0.225	0.010	0.040	mg/L	0.200	0.0327	96.4	70-130			
Matrix Spike (AK82846-MS2)		**Source: 18K0048-01**			Prepared & Analyzed: 11/07/18						
Phosphorus, total	0.262	0.010	0.040	mg/L	0.200	0.0762	93.0	70-130			
Matrix Spike Dup (AK82846-MSD1)		**Source: 18J2519-01**			Prepared & Analyzed: 11/07/18						
Phosphorus, total	0.227	0.010	0.040	mg/L	0.200	0.0327	97.0	70-130	0.597	20	
Batch AK83040 - General Preparation											
Blank (AK83040-BLK1)					Prepared: 10/24/18 Analyzed: 11/14/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
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Berkeley CA, 94705	Project Number: 642.1	11/16/18 10:44

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK83040 - General Preparation											
Duplicate (AK83040-DUP1)		**Source: 18J2591-01**			Prepared: 10/26/18 Analyzed: 11/14/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U

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Berkeley CA, 94705	Project Number: 642.1	11/16/18 10:44

Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ84256 - General Preparation											
Blank (AJ84256-BLK1)					Prepared & Analyzed: 10/25/18						
Nitrite as N	ND	0.050	0.20	mg/L							U
Nitrate as N	ND	0.040	0.20	mg/L							U
Orthophosphate	ND	0.15	0.15	mg/L							QB-03, U
LCS (AJ84256-BS1)					Prepared & Analyzed: 10/25/18						
Nitrate as N	5.81	0.040	0.20	mg/L	5.56		105	90-110			
Nitrite as N	5.70	0.050	0.20	mg/L	5.56		103	90-110			
Orthophosphate	17.1	0.10	0.30	mg/L	16.7		103	90-110			
Duplicate (AJ84256-DUP1)		**Source: 18J2497-01**			Prepared & Analyzed: 10/27/18						
Orthophosphate	0.824	0.10	0.30	mg/L		0.708			15.2	20	
Nitrate as N	0.0436	0.040	0.20	mg/L		0.0429			1.57	20	J
Nitrite as N	ND	0.050	0.20	mg/L		ND				20	U
Matrix Spike (AJ84256-MS1)		**Source: 18J2497-01**			Prepared & Analyzed: 10/31/18						
Nitrite as N	5.47	0.050	0.20	mg/L	5.56	ND	98.5	80-120			
Nitrate as N	6.11	0.040	0.20	mg/L	5.56	0.0429	109	80-120			
Orthophosphate	17.9	0.10	0.30	mg/L	16.7	0.708	103	80-120			
Matrix Spike (AJ84256-MS2)		**Source: 18J2519-01**			Prepared & Analyzed: 10/27/18						
Nitrate as N	5.73	0.040	0.20	mg/L	5.56	0.0530	102	80-120			
Orthophosphate	16.0	0.10	0.30	mg/L	16.7	0.129	95.0	80-120			
Nitrite as N	5.62	0.050	0.20	mg/L	5.56	ND	101	80-120			
Matrix Spike Dup (AJ84256-MSD1)		**Source: 18J2497-01**			Prepared & Analyzed: 10/27/18						
Nitrite as N	5.39	0.050	0.20	mg/L	5.56	ND	97.0	80-120	1.55	20	
Nitrate as N	6.09	0.040	0.20	mg/L	5.56	0.0429	109	80-120	0.255	20	
Orthophosphate	17.8	0.10	0.30	mg/L	16.7	0.708	103	80-120	0.705	20	

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Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	11/16/18 10:44

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QB-03	The method blank contains analyte at a concentration above the MRL; sample reporting limits were raised as necessary.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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Analytical Sciences

Report Date: November 01, 2018

Laboratory Report

Alpha Analytical Laboratories, Inc
208 Mason St.
Ukiah, CA 95482

Project Name: **TOC & DOC Analysis** **18J2519**

Lab Project Number: **8102601**

This 8 page report of analytical data has been reviewed and approved for release.



Michele Peters

Laboratory Director

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Petaluma, CA
94952

Dissolved Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102601-01	**18J2519-01 LP4-S**	Dissolved Organic Carbon	3.11	0.50

Date Sampled:	10/24/18	Date Analyzed:	10/31/18	QC Batch: B018096
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Dissolved Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102601-02	**18J2519-02 LP4-M**	Dissolved Organic Carbon	3.07	0.50

Date Sampled:	10/24/18	Date Analyzed:	10/31/18	QC Batch: B018096
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Dissolved Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102601-03	**18J2519-03 LP4-B**	Dissolved Organic Carbon	3.04	0.50

Date Sampled:	10/24/18	Date Analyzed:	10/31/18	QC Batch: B018096
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Dissolved Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102601-04	**18J2519-04 LP-DUP2**	Dissolved Organic Carbon	3.18	0.50

Date Sampled:	10/24/18	Date Analyzed:	10/31/18	QC Batch: B018096
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Dissolved Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102601-05	**18J2519-05 LP-BL2**	Dissolved Organic Carbon	ND	0.50

Date Sampled:	10/24/18	Date Analyzed:	10/31/18	QC Batch: B018096
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Dissolved Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102601-06	**18J2519-06 RF3.8**	Dissolved Organic Carbon	0.81	0.50

Date Sampled:	10/24/18	Date Analyzed:	10/31/18	QC Batch: B018096
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Dissolved Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102601-07	**18J2519 07 ER173.7**	Dissolved Organic Carbon	1.64	0.50

Date Sampled:	10/24/18	Date Analyzed:	10/31/18	QC Batch: B018096
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Total Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102601-01	**18J2519-01 LP4-S**	Total Organic Carbon	2.92	0.50

Date Sampled:	10/24/18	Date Analyzed:	10/30/18	QC Batch: B018095
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Total Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102601-02	**18J2519-02 LP4-M**	Total Organic Carbon	3 .04	0.50

Date Sampled:	10/24/18	Date Analyzed:	10/30/18	QC Batch: B018095
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Total Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102601-03	**18J2519-03 LP4-B**	Total Organic Carbon	4 .49	0.50

Date Sampled:	10/24/18	Date Analyzed:	10/30/18	QC Batch: B018095
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Total Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102601-04	**18J2519-04 LP-DUP2**	Total Organic Carbon	3 .04	0.50

Date Sampled:	10/24/18	Date Analyzed:	10/30/18	QC Batch: B018095
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Total Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102601-05	**18J2519-05 LP-BL2**	Total Organic Carbon	ND	0.50

Date Sampled:	10/24/18	Date Analyzed:	10/30/18	QC Batch: B018095
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Total Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102601-06	**18J2519-06 RF3.8**	Total Organic Carbon	0.80	0.50

Date Sampled:	10/24/18	Date Analyzed:	10/30/18	QC Batch: B018095
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Total Organic Carbon

Lab#	Sample ID	Compound Name	Result (mg C/L)	RDL (mg C/L)
8102601-07	**18J2519 07 ER173.7**	Total Organic Carbon	1.62	0.50

Date Sampled:	10/24/18	Date Analyzed:	10/30/18	QC Batch: B018095
Date Received:	10/25/18	Method:	SM 5310 C-2000	

Quality Assurance Report

Dissolved Organic Carbon

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B018096 - NO PREP										
Blank (B018096-BLK1)				Prepared: 10/29/18		Analyzed: 10/31/18				
Dissolved Organic Carbon	ND	0.50	mg C/L							
LCS (B018096-BS1)				Prepared: 10/29/18		Analyzed: 10/31/18				
Dissolved Organic Carbon	5.24	0.50	mg C/L	5.00		105	85-115			
LCS Dup (B018096-BSD1)				Prepared: 10/29/18		Analyzed: 10/31/18				
Dissolved Organic Carbon	5.17	0.50	mg C/L	5.00		103	85-115	1	20	
Duplicate (B018096-DUP1)		**Source: 8102601-06**		Prepared: 10/29/18		Analyzed: 10/31/18				
Dissolved Organic Carbon	0.74	0.50	mg C/L		0.81			9	20	
Matrix Spike (B018096-MS1)		**Source: 8102602-12**		Prepared: 10/29/18		Analyzed: 10/31/18				
Dissolved Organic Carbon	8.45	0.50	mg C/L	5.00	3.30	103	75-125			
Matrix Spike Dup (B018096-MSD1)		**Source: 8102602-12**		Prepared: 10/29/18		Analyzed: 10/31/18				
Dissolved Organic Carbon	8.52	0.50	mg C/L	5.00	3.30	104	75-125	1	20	

Total Organic Carbon

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B018095 - NO PREP										
Blank (B018095-BLK1)				Prepared: 10/29/18 Analyzed: 10/30/18						
Total Organic Carbon	ND	0.50	mg C/L							
LCS (B018095-BS1)				Prepared: 10/29/18 Analyzed: 10/30/18						
Total Organic Carbon	5.13	0.50	mg C/L	5.00		103	85-115			
LCS Dup (B018095-BSD1)				Prepared: 10/29/18 Analyzed: 10/30/18						
Total Organic Carbon	5.16	0.50	mg C/L	5.00		103	85-115	0.6	20	
Duplicate (B018095-DUP1)		**Source: 8102601-06**		Prepared: 10/29/18 Analyzed: 10/30/18						
Total Organic Carbon	0.88	0.50	mg C/L		0.80			9	20	
Matrix Spike (B018095-MS1)		**Source: 8102601-07**		Prepared: 10/29/18 Analyzed: 10/31/18						
Total Organic Carbon	6.92	0.50	mg C/L	5.00	1.62	106	75-125			
Matrix Spike Dup (B018095-MSD1)		**Source: 8102601-07**		Prepared: 10/29/18 Analyzed: 10/31/18						
Total Organic Carbon	7.00	0.50	mg C/L	5.00	1.62	107	75-125	2	20	

Notes and Definitions

RDL	Reporting Detection Limit
ND	Analyte NOT DETECTED at or above the reporting detection limit (RDL)
RPD	Relative Percent Difference
NR	Not Reported

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18J2519

8102601

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

Analytical Sciences
P.O.Box 750336
Petaluma, CA 94975
Phone :707-769-3128
Fax: 707-769-8093
Terms: Net 30

Temperature Received
9.0

Analysis	Due	Expires	Comments
18J2519-01 LP4-S [Water] Sampled 10/24/18 11:15			
DOC-SM5310	11/08/18 12:00	11/21/18 11:15	
TOC-SM5310	11/08/18 12:00	11/21/18 11:15	
Containers Supplied:			
VOA Vial - H3PO4 - Amb VOA Vial - H3PO4 - Amb 125ml Amber (K)			
18J2519-02 LP4-M [Water] Sampled 10/24/18 11:40			
DOC-SM5310	11/08/18 12:00	11/21/18 11:40	
TOC-SM5310	11/08/18 12:00	11/21/18 11:40	
Containers Supplied:			
VOA Vial - H3PO4 - Amb VOA Vial - H3PO4 - Amb 125ml Amber (K)			
18J2519-03 LP4-B [Water] Sampled 10/24/18 11:30			
DOC-SM5310	11/08/18 12:00	11/21/18 11:30	
TOC-SM5310	11/08/18 12:00	11/21/18 11:30	
Containers Supplied:			
VOA Vial - H3PO4 - Amb VOA Vial - H3PO4 - Amb 125ml Amber (K)			
18J2519-04 LP-DUP2 [Water] Sampled 10/24/18 11:45			
DOC-SM5310	11/08/18 12:00	11/21/18 11:45	
TOC-SM5310	11/08/18 12:00	11/21/18 11:45	
Containers Supplied:			
VOA Vial - H3PO4 - Amb VOA Vial - H3PO4 - Amb 125ml Amber (K)			

Released By	10-25-18 Date	Received By	10-25-18 Date
Released By	10-25-18 Date	Received By	10/25/18 Date

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18J2519

Analysis	Due	Expires	Comments
18J2519-05 LP-BL2 [Water] Sampled 10/24/18 12:00			
DOC-SM5310	11/08/18 12:00	11/21/18 12:00	
TOC-SM5310	11/08/18 12:00	11/21/18 12:00	
Containers Supplied:			
VOA Vial - H3PO4 - Amb VOA Vial - H3PO4 - Amb 125ml Amber (K)			
18J2519-06 RF3.8 [Water] Sampled 10/24/18 13:50			
DOC-SM5310	11/08/18 12:00	11/21/18 13:50	
TOC-SM5310	11/08/18 12:00	11/21/18 13:50	
Containers Supplied:			
VOA Vial - H3PO4 - Amb VOA Vial - H3PO4 - Amb 125ml Amber (K)			
18J2519-07 ER173.7 [Water] Sampled 10/24/18 15:45			
DOC-SM5310	11/08/18 12:00	11/21/18 15:45	
TOC-SM5310	11/08/18 12:00	11/21/18 15:45	
Containers Supplied:			
VOA Vial - H3PO4 - Amb VOA Vial - H3PO4 - Amb 125ml Amber (K)			

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+QC
+MDL

Released By	Date	Received By	Date
10-25-18	10-25-18	10-25-18	10/25/18

basic laboratory

www.basiclab.com

2218 Railroad Avenue
Redding, California 96001
voice 530.243.7234
fax 530.243.7494

3860 Morrow Lane, Suite F
Chico, California 95928
voice 530.894.8966
fax 530.894.5143

November 06, 2018

Lab ID: 18J1117

SHERI L. SPEAKS
ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
RE: LOW LEVEL METALS 18J2519

Dear SHERI L. SPEAKS ,

Enclosed are the analysis results for Work Order number 18J1117. All analyses were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

Ricky D. Jensen
Laboratory Director
California ELAP Certification Number 1677

basic laboratory
www.basiclab.com
2218 Railroad Avenue voice 530.243.7234
Redding, California 96001 fax 530.243.7494
3860 Morrow Lane, Suite F voice 530.894.8966
Chico, California 95928 fax 530.894.5143

Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18J2519

Lab No: 18J1117
Reported: 11/06/18
Phone: (707) 468-0401
P.O. #

Metals - Total

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
18J2519-01 LP4-S - Grab Water (18J1117-01) Sampled:10/24/18 11:15 Received:10/26/18 13:31									
Methyl Mercury as Mercury	ng/l	**0.170**		0.020	0.050	EPA 1630	11/02/18	11/01/18	B8K0671
18J2519-02 LP4-M - Grab Water (18J1117-02) Sampled:10/24/18 11:40 Received:10/26/18 13:31									
Methyl Mercury as Mercury	ng/l	**0.220**		0.020	0.050	EPA 1630	11/02/18	11/01/18	B8K0671
18J2519-04 LP-DUP2 - Grab Water (18J1117-03) Sampled:10/24/18 11:45 Received:10/26/18 13:31									
Methyl Mercury as Mercury	ng/l	**0.225**		0.020	0.050	EPA 1630	11/02/18	11/01/18	B8K0671
18J2519-05 LP-BL2 - Grab Water (18J1117-04) Sampled:10/24/18 12:00 Received:10/26/18 13:31									
Methyl Mercury as Mercury	ng/l	ND		0.020	0.050	EPA 1630	11/02/18	11/01/18	B8K0671
18J2519-06 RF3.8 - Grab Water (18J1117-05) Sampled:10/24/18 13:50 Received:10/26/18 13:31									
Methyl Mercury as Mercury	ng/l	**0.041**	J	0.020	0.050	EPA 1630	11/02/18	11/01/18	B8K0671
18J2519-07 ER173.7 - Grab Water (18J1117-06) Sampled:10/24/18 15:45 Received:10/26/18 13:31									
Methyl Mercury as Mercury	ng/l	**0.102**		0.020	0.050	EPA 1630	11/02/18	11/01/18	B8K0671

Quality Control Data

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Metals - Total										
Batch B8K0671 - Draft EPA Method 1630 Distillation (Modified)										
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
LCS										
Methyl Mercury as Mercury	1.90	0.050	ng/l	2.00		94.9	67-133			
Matrix Spike Source: 18J1113-01										
Methyl Mercury as Mercury	1.23	0.050	ng/l	1.00	0.040	119	65-135			
Matrix Spike Source: 18J1118-03										
Methyl Mercury as Mercury	1.17	0.050	ng/l	1.00	0.131	104	65-135			
Matrix Spike Dup Source: 18J1113-01										
Methyl Mercury as Mercury	1.22	0.050	ng/l	1.00	0.040	118	65-135	0.814	35	
Matrix Spike Dup Source: 18J1118-03										
Methyl Mercury as Mercury	1.30	0.050	ng/l	1.00	0.131	117	65-135	10.5	35	

Approved By

Basic Laboratory Inc
California ELAP Cert #1677 and #2718

basic laboratory

www.basiclab.com

2218 Railroad Avenue voice 530.243.7234
Redding, California 96001 fax 530.243.7494

3860 Morrow Lane, Suite F voice 530.894.8966
Chico, California 95928 fax 530.894.5143

Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18J2519

Lab No: 18J1117
Reported: 11/06/18
Phone: (707) 468-0401
P.O. #

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). The J flag is equivalent to the DNQ Estimated Concentration flag.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
<	Less than reporting limit
≤	Less than or equal to reporting limit
>	Greater than reporting limit
≥	Greater than or equal to reporting limit
MDL	Method Detection Limit
RL/ML	Minimum Level of Quantitation
MCL/AL	Maxium Contaminant Level/Action Level
mg/kg	Results reported as wet weight
TTLC	Total Threshold Limit Concentration
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leachate Procedure
Note 1	Received Temperature - according to EPA guidelines, samples for most chemistry methods should be held at ≤6 degrees C after collection, including during transportation, unless the time from sampling to delivery is <2 hours. Regulating agencies may invalidate results if temperature requirements are not met.
Note 2	According to 40 CFR Part 136 Table II, the following tests should be analyzed in the field within 15 minutes of sampling: pH, chlorine, dissolved oxygen, and sulfite.

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

18J1117

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc. 18J1117

18J2519 Due 11-7-18

1

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

11-16-18 PJO
1- ice Chest

Basic Laboratory
2218 Railroad Ave
Redding, CA 96001
Phone :530-243-7234
Fax: 530-243-7494
Terms: Net 30

Analysis	Due	Expires	Comments
18J2519-01 LP4-S [Water] Sampled 10/24/18 11:15			-1 2.4°C
BAL Hg Methyl	11/08/18 12:00	04/22/19 11:15	
Containers Supplied: 500ml Glass - HCl (I)			
18J2519-02 LP4-M [Water] Sampled 10/24/18 11:40			-2 5.8°C
BAL Hg Methyl	11/08/18 12:00	04/22/19 11:40	
Containers Supplied: 500ml Glass - HCl (I)			
18J2519-03 LP4-B [Water] Sampled 10/24/18 11:30 Candel 10/25/18 (2)			PJO -3
BAL Hg Methyl	11/08/18 12:00	04/22/19 11:30	
Containers Supplied: 500ml Glass - HCl (I)			
18J2519-04 LP-DUP2 [Water] Sampled 10/24/18 11:45			PJO -4 -3 3.7°C
BAL Hg Methyl	11/08/18 12:00	04/22/19 11:45	
Containers Supplied: 500ml Glass - HCl (I)			
18J2519-05 LP-BL2 [Water] Sampled 10/24/18 12:00			PJO -5 -4 5.1°C
BAL Hg Methyl	11/08/18 12:00	04/22/19 12:00	
Containers Supplied: 500ml Glass - HCl (I)			

Released By	10-25-18 Date	P Ocle Received By	10-26-18 Date	13:31
Released By	Date	P. Ocle Received By	10-26-18 Date	14:46

SUBCONTRACT ORDER

1851117

Alpha Analytical Laboratories, Inc.

18J2519

Analysis	Due	Expires	Comments
18J2519-06 RF3.8 [Water] Sampled 10/24/18 13:50			3.5° >6 -5 5.6°C
BAL Hg Methyl	11/08/18 12:00	04/22/19 13:50	
Containers Supplied:			
500ml Glass - HCl (I)			
18J2519-07 ER173.7 [Water] Sampled 10/24/18 15:45			3.5° >7 -6 4.3°C
BAL Hg Methyl	11/08/18 12:00	04/22/19 15:45	
Containers Supplied:			
500ml Glass - HCl (I)			

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+QC
+MDL

Released By	Date	Received By	Date
	10-25-18	P. Oda	10.26.18 13:31
		P. Oda	10.26.18 1445

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

Corporate Laboratory
208 Mason Street, Ukiah CA 95482
707-468-0401 F) 707-468-5267
email: clientservices@alpha-labs.com

ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

Bay Area Laboratory
262 Rickenbacker Circle, Livermore CA 94551
925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18J2519 Pg 1 of 3

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	Analysis Request: Hg 1631	Analysis Request: MeHg 1630	Sample Notes or DDW Source Numbers:
LP4-S	10/24	1115											X			10	X	X	
LP4-M		1140																	
LP4-B		1130																	03: Methyl Hg Sample
LP-DUP2		1145																	broken during Shipping.
LP-BL2		1200																	Client notified. SF
RF3-8		1350														9			
ER173.7		1545														9			

TAT
- Standard 10 days: ⊗
- RUSH: 5 days ○
- 48 hours ○
- Other: ___ days ○
- Lab preapproval required

Temp upon Receipt °C
- Ukiah temp: 1.6
- Livermore temp:
- Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		10-25-18	0810

DDW Write On EDT Transmission? ○ Yes ○ No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time:	Mileage:	Misc. Supplies:

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

Corporate Laboratory
208 Mason Street, Ukiah CA 95482
707-468-0401 F) 707-466-5267
email: clientservices@alpha-labs.com

ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

Bay Area Laboratory
262 Rickenbacker Circle, Livermore CA 94551
925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18J2519 Pg 2 of 3

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	TOC	DOC	Fe 200.8 Total	Ammonia-N	Phosphorus, Total	TKN	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	Chlorophyll-A	Sulfide	Sample Notes or DDW Source Numbers:
LP4-S	10/24	1115											X				X	X	X	X	X	X	X	X	X	X	X	
LP4-M	↓	1140											↓				↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
LP4-B		1130																										
LP-DUP2		1145																									↓	
LP-BL2		1200														5 EDD											X	
RF3.8		1350																										
ER173.7	↓	1545											✓				X	X	X	X	X	X	X	X	X	X		

Analysis Request

TAT
Standard 10 days ○
RUSH: 5 days ○ 48 hours ○ Other: ___ days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1-6
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		10-25-18	0810

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number:
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):

Travel and Site Time:	Mileage:	Misc. Supplies:

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

Corporate Laboratory
208 Mason Street, Ukiah CA 95482
707-468-0401 F) 707-468-5267
email: clientservices@alpha-labs.com

ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

Bay Area Laboratory
262 Rickenbacker Circle, Livermore CA 94551
925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18J2579 Pg 3 of 3

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature:
CHRISTINA BUCK
Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	Analysis Request: Algal ID & E (sub to Greenwater)
LP-BR	10/24	1030		X								X	X			1	X

Please hold phytoplankton sample analysis until further notice.

TAT
- Standard 10 days ○
- RUSH: 5 days ○ / 48 hours ○ / Other: ___days ○ (Lab preapproval required)

Temp upon Receipt °C
- Ukiah temp: 1.6
- Livermore temp:
- Elk Grove temp:

Sample Notes or DDW Source Numbers:

Relinquished by	Received by	Date	Time
Christina Buck		10-25-18	0810

DDW Write On EDT Transmission? ○ Yes ○ No

State System Number:

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

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ELAP Certificates 1551, 2728, 2922, and 2303

15 November 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18J2591

Enclosed are the results of analyses for samples received by the laboratory on 10/25/18 14:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/15/18 14:41

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ER167.8	18J2591-01	Water	10/25/18 09:50	10/25/18 14:30

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/15/18 14:41

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER167.8 (18J2591-01) Water Sampled: 10/25/18 09:50 Received: 10/25/18 14:30											
Iron	**180**	**40**	**200**	**ug/L**	4	AJ84377	10/30/18 10:00	11/01/18 19:13	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/15/18 14:41

Metals by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER167.8 (18J2591-01) Water Sampled: 10/25/18 09:50 Received: 10/25/18 14:30											
Mercury	**1.05**	**0.200**	**0.500**	**ng/l**	1	AJ84368	10/29/18 19:30	10/30/18 15:32	EPA 1631E	AJC	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/15/18 14:41

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER167.8 (18J2591-01) Water Sampled: 10/25/18 09:50 Received: 10/25/18 14:30											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK82795	11/06/18 10:00	11/06/18 16:00	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AJ84279	10/26/18 08:00	10/31/18 14:45	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AK83040	10/26/18 10:30	11/14/18 13:00	SM10200H	PBM	U
Dissolved Organic Carbon	**2.88**	**0.600**	**1.00**	**mg/L**	1	AK82617	11/01/18 07:02	11/02/18 12:59	SM5310C	EAM	
Sulfide	ND	0.020	0.10	mg/L	1	AJ84389	10/30/18 10:00	10/30/18 16:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	**0.029**	**0.0086**	**0.40**	**mg/L**	1	AJ84250	11/01/18 11:47	11/01/18 11:50	Calculation	RLG	J
Total Kjeldahl Nitrogen	**0.24**	**0.050**	**1.0**	**mg/L**	1	AK82789	11/08/18 07:18	11/09/18 12:51	SM4500-Norg B	JVO	J
Phosphorus, total	**0.039**	**0.010**	**0.040**	**mg/L**	1	AK82732	11/05/18 07:45	11/05/18 12:20	SM4500-P E	SMS	J
Total Organic Carbon	**3.05**	**0.300**	**1.00**	**mg/L**	1	AK82746	11/05/18 09:26	11/06/18 17:35	SM5310C	EAM	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/15/18 14:41

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER167.8 (18J2591-01) Water Sampled: 10/25/18 09:50 Received: 10/25/18 14:30											
Nitrate as N	**0.091**	**0.040**	**0.20**	**mg/L**	1	AJ84308	10/27/18 00:06	10/27/18 00:06	EPA 300.0	SMP	J
Nitrite as N	**0.062**	**0.050**	**0.20**	**mg/L**	1	AJ84308	10/27/18 00:06	10/27/18 00:06	EPA 300.0	SMP	J
Orthophosphate	ND	0.15	0.15	mg/L	1	AJ84308	10/27/18 00:06	10/27/18 00:06	EPA 300.0	SMP	QB-03, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/15/18 14:41

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ84377 - EPA 200.8											
Blank (AJ84377-BLK1)					Prepared: 10/30/18 Analyzed: 11/01/18						
Iron	ND	10	50	ug/L							U
LCS (AJ84377-BS1)					Prepared: 10/30/18 Analyzed: 11/01/18						
Iron	556	10	50	ug/L	520		107	85-115			
Duplicate (AJ84377-DUP1)		**Source: 18J2695-03**			Prepared: 10/30/18 Analyzed: 11/01/18						
Iron	56.4	40	200	ug/L		52.5			7.13	20	J
Matrix Spike (AJ84377-MS1)		**Source: 18J2695-03**			Prepared: 10/30/18 Analyzed: 11/01/18						
Iron	592	40	200	ug/L	520	52.5	104	70-130			
Matrix Spike Dup (AJ84377-MSD1)		**Source: 18J2695-03**			Prepared: 10/30/18 Analyzed: 11/01/18						
Iron	573	40	200	ug/L	520	52.5	100	70-130	3.25	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/15/18 14:41

Metals by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ84368 - EPA 1631											
Blank (AJ84368-BLK1)					Prepared: 10/29/18 Analyzed: 10/30/18						
Mercury	0.345	0.200	0.500	ng/l							J
LCS (AJ84368-BS1)					Prepared: 10/29/18 Analyzed: 10/30/18						
Mercury	5.25	0.200	0.500	ng/l	5.00		105	77-123			
Matrix Spike (AJ84368-MS1)		**Source: 18J2475-02**			Prepared: 10/29/18 Analyzed: 10/30/18						
Mercury	25.8	0.200	0.500	ng/l	25.0	ND	103	71-125			
Matrix Spike Dup (AJ84368-MSD1)		**Source: 18J2475-02**			Prepared: 10/29/18 Analyzed: 10/30/18						
Mercury	26.0	0.200	0.500	ng/l	25.0	ND	104	71-125	0.849	24	
Reference (AJ84368-SRM1)					Prepared: 10/29/18 Analyzed: 10/30/18						
Mercury	53.1	0.200	0.500	ng/l	50.0		106	68-125			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/15/18 14:41

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ84279 - General Preparation											
Blank (AJ84279-BLK1)					Prepared: 10/26/18 Analyzed: 10/31/18						
Biochemical Oxygen Demand	ND	2.0	2.0	mg/L							U
Blank (AJ84279-BLK2)					Prepared: 10/26/18 Analyzed: 10/31/18						
Biochemical Oxygen Demand	ND	2.0	2.0	mg/L							U
LCS (AJ84279-BS1)					Prepared: 10/26/18 Analyzed: 10/31/18						
Biochemical Oxygen Demand	193	2.0	2.0	mg/L	200		96.6	84-115			
Duplicate (AJ84279-DUP1)		**Source: 18J2581-03**			Prepared: 10/26/18 Analyzed: 10/31/18						
Biochemical Oxygen Demand	147	2.0	2.0	mg/L		154			4.43	30	
Batch AJ84389 - General Preparation											
Blank (AJ84389-BLK1)					Prepared & Analyzed: 10/30/18						
Sulfide	ND	0.020	0.10	mg/L							U
LCS (AJ84389-BS1)					Prepared & Analyzed: 10/30/18						
Sulfide	0.207	0.020	0.10	mg/L	0.200		104	85-115			
Duplicate (AJ84389-DUP1)		**Source: 18J2406-01**			Prepared & Analyzed: 10/30/18						
Sulfide	ND	0.020	0.10	mg/L		ND				15	U
Matrix Spike (AJ84389-MS1)		**Source: 18J2406-01**			Prepared & Analyzed: 10/30/18						
Sulfide	0.167	0.020	0.10	mg/L	0.200	ND	83.7	80-120			
Matrix Spike Dup (AJ84389-MSD1)		**Source: 18J2406-01**			Prepared & Analyzed: 10/30/18						
Sulfide	0.170	0.020	0.10	mg/L	0.200	ND	85.2	80-120	1.78	15	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/15/18 14:41

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK82617 - General Prep											
Blank (AK82617-BLK1)					Prepared: 11/01/18 Analyzed: 11/02/18						
Dissolved Organic Carbon	ND	0.600	1.00	mg/L							U
LCS (AK82617-BS1)					Prepared: 11/01/18 Analyzed: 11/02/18						
Dissolved Organic Carbon	9.60	0.600	1.00	mg/L	10.0		96.0	85-115			
LCS Dup (AK82617-BSD1)					Prepared: 11/01/18 Analyzed: 11/02/18						
Dissolved Organic Carbon	9.66	0.600	1.00	mg/L	10.0		96.6	85-115	0.665	20	
Duplicate (AK82617-DUP1)		**Source: 18J1618-01**			Prepared: 11/01/18 Analyzed: 11/02/18						
Dissolved Organic Carbon	2.20	0.600	1.00	mg/L		2.33			5.59	20	
Matrix Spike (AK82617-MS1)		**Source: 18J1618-01**			Prepared: 11/01/18 Analyzed: 11/02/18						
Dissolved Organic Carbon	12.5	0.600	1.00	mg/L	10.0	2.33	102	70-130			
Matrix Spike Dup (AK82617-MSD1)		**Source: 18J1618-01**			Prepared: 11/01/18 Analyzed: 11/02/18						
Dissolved Organic Carbon	12.6	0.600	1.00	mg/L	10.0	2.33	103	70-130	0.920	20	
Batch AK82732 - General Prep											
Blank (AK82732-BLK1)					Prepared & Analyzed: 11/05/18						
Phosphorus, total	ND	0.010	0.040	mg/L							U
LCS (AK82732-BS1)					Prepared & Analyzed: 11/05/18						
Phosphorus, total	0.188	0.010	0.040	mg/L	0.200		94.2	85-115			
Duplicate (AK82732-DUP1)		**Source: 18J2468-01**			Prepared & Analyzed: 11/05/18						
Phosphorus, total	0.191	0.010	0.040	mg/L		0.192			0.678	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/15/18 14:41

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK82732 - General Prep											
Matrix Spike (AK82732-MS1)		**Source: 18J2468-01**			Prepared & Analyzed: 11/05/18						
Phosphorus, total	0.391	0.010	0.040	mg/L	0.200	0.192	99.4	70-130			
Matrix Spike Dup (AK82732-MSD1)		**Source: 18J2468-01**			Prepared & Analyzed: 11/05/18						
Phosphorus, total	0.390	0.010	0.040	mg/L	0.200	0.192	98.8	70-130	0.333	20	
Batch AK82746 - General Prep											
Blank (AK82746-BLK1)					Prepared: 11/05/18 Analyzed: 11/06/18						
Total Organic Carbon	ND	0.300	1.00	mg/L							U
LCS (AK82746-BS1)					Prepared: 11/05/18 Analyzed: 11/06/18						
Total Organic Carbon	9.85	0.300	1.00	mg/L	10.0		98.5	85-115			
LCS Dup (AK82746-BSD1)					Prepared: 11/05/18 Analyzed: 11/06/18						
Total Organic Carbon	9.71	0.300	1.00	mg/L	10.0		97.1	85-115	1.39	20	
Duplicate (AK82746-DUP1)		**Source: 18J2745-03**			Prepared: 11/05/18 Analyzed: 11/06/18						
Total Organic Carbon	3.64	0.300	1.00	mg/L		3.49			4.33	20	
Matrix Spike (AK82746-MS1)		**Source: 18J2745-03**			Prepared: 11/05/18 Analyzed: 11/06/18						
Total Organic Carbon	12.5	0.300	1.00	mg/L	10.0	3.49	89.8	70-130			
Matrix Spike Dup (AK82746-MSD1)		**Source: 18J2745-03**			Prepared: 11/05/18 Analyzed: 11/06/18						
Total Organic Carbon	12.6	0.300	1.00	mg/L	10.0	3.49	91.6	70-130	1.45	20	
Batch AK82789 - General Prep											
LCS (AK82789-BS1)					Prepared: 11/06/18 Analyzed: 11/08/18						
Total Kjeldahl Nitrogen	2.95	0.050	1.0	mg/L	2.98		99.0	80-120			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/15/18 14:41

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK82789 - General Prep											
LCS Dup (AK82789-BSD1)					Prepared: 11/06/18 Analyzed: 11/08/18						
Total Kjeldahl Nitrogen	2.95	0.050	1.0	mg/L	2.98		99.0	80-120	0.00	20	
Matrix Spike (AK82789-MS1)		**Source: 18J2468-02**			Prepared: 11/06/18 Analyzed: 11/08/18						
Total Kjeldahl Nitrogen	3.31	0.050	1.0	mg/L	2.98	0.350	99.5	75-125			
Matrix Spike Dup (AK82789-MSD1)		**Source: 18J2468-02**			Prepared: 11/06/18 Analyzed: 11/08/18						
Total Kjeldahl Nitrogen	3.23	0.050	1.0	mg/L	2.98	0.350	96.5	75-125	2.66	20	
Batch AK82795 - General Preparation											
Blank (AK82795-BLK1)					Prepared & Analyzed: 11/06/18						
Ammonia as N	ND	0.10	0.20	mg/L							U
Blank (AK82795-BLK2)					Prepared & Analyzed: 11/06/18						
Ammonia as N	ND	0.10	0.20	mg/L							U
LCS (AK82795-BS1)					Prepared & Analyzed: 11/06/18						
Ammonia as N	4.82	0.10	0.20	mg/L	5.00		96.3	90-110			
LCS Dup (AK82795-BSD1)					Prepared & Analyzed: 11/06/18						
Ammonia as N	4.64	0.10	0.20	mg/L	5.00		92.8	90-110	3.70	20	
Matrix Spike (AK82795-MS1)		**Source: 18K0018-01**			Prepared & Analyzed: 11/06/18						
Ammonia as N	9.28	0.10	0.20	mg/L	10.0	ND	92.8	85-115			
Matrix Spike Dup (AK82795-MSD1)		**Source: 18K0018-01**			Prepared & Analyzed: 11/06/18						
Ammonia as N	9.46	0.10	0.20	mg/L	10.0	ND	94.6	85-115	1.87	20	

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.

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e-mail: clientservices@alpha-labs.com
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North Bay: 110 Liberty Street, Petaluma, CA 94952 • Phone: (707) 769-3128 • Fax: (707) 769-8093

Stillwater Sciences	Project Manager:	Christina Buck
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)
Berkeley CA, 94705	Project Number:	642.1
		Reported: 11/15/18 14:41

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK83040 - General Preparation											
Blank (AK83040-BLK1)					Prepared: 10/24/18 Analyzed: 11/14/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L							U
Duplicate (AK83040-DUP1)		**Source: 18J2591-01**			Prepared: 10/26/18 Analyzed: 11/14/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	11/15/18 14:41

Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AJ84308 - General Preparation											
Blank (AJ84308-BLK1)					Prepared & Analyzed: 10/26/18						
Orthophosphate	ND	0.15	0.15	mg/L							QB-03, U
Nitrite as N	ND	0.050	0.20	mg/L							U
Nitrate as N	ND	0.040	0.20	mg/L							U
LCS (AJ84308-BS1)					Prepared & Analyzed: 10/26/18						
Nitrite as N	5.72	0.050	0.20	mg/L	5.56		103	90-110			
Orthophosphate	17.0	0.15	0.15	mg/L	16.7		102	90-110			QB-03
Nitrate as N	5.82	0.040	0.20	mg/L	5.56		105	90-110			
Duplicate (AJ84308-DUP1)		**Source: 18J2622-01**			Prepared & Analyzed: 10/26/18						
Nitrate as N	0.175	0.040	0.20	mg/L		0.177			1.15	20	J
Nitrite as N	0.118	0.050	0.20	mg/L		0.121			2.51	20	J
Orthophosphate	0.570	0.15	0.15	mg/L		0.573			0.536	20	QB-03
Matrix Spike (AJ84308-MS1)		**Source: 18J2622-01**			Prepared & Analyzed: 10/26/18						
Nitrate as N	5.41	0.20	1.0	mg/L	5.56	ND	97.5	80-120			
Orthophosphate	14.3	0.75	0.75	mg/L	16.7	ND	85.6	80-120			QB-03
Nitrite as N	5.39	0.25	1.0	mg/L	5.56	ND	97.1	80-120			
Matrix Spike (AJ84308-MS2)		**Source: 18J2591-01**			Prepared & Analyzed: 10/27/18						
Nitrate as N	5.38	0.20	1.0	mg/L	5.56	ND	96.8	80-120			
Orthophosphate	13.5	0.75	0.75	mg/L	16.7	ND	80.9	80-120			QB-03
Nitrite as N	5.41	0.25	1.0	mg/L	5.56	ND	97.3	80-120			
Matrix Spike Dup (AJ84308-MSD1)		**Source: 18J2622-01**			Prepared & Analyzed: 10/26/18						
Orthophosphate	14.2	0.75	0.75	mg/L	16.7	ND	85.2	80-120	0.478	20	QB-03
Nitrite as N	5.39	0.25	1.0	mg/L	5.56	ND	97.0	80-120	0.103	20	
Nitrate as N	5.39	0.20	1.0	mg/L	5.56	ND	97.0	80-120	0.488	20	

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Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	11/15/18 14:41

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
QB-03	The method blank contains analyte at a concentration above the MRL; sample reporting limits were raised as necessary.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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basic laboratory

www.basiclab.com

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Redding, California 96001
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fax 530.243.7494

3860 Morrow Lane, Suite F
Chico, California 95928
voice 530.894.8966
fax 530.894.5143

November 26, 2018

Lab ID: 18K0030

SHERI L. SPEAKS
ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
RE: LOW LEVEL METALS 18J2591

Dear SHERI L. SPEAKS ,

Enclosed are the analysis results for Work Order number 18K0030. All analyses were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

Ricky D. Jensen
Laboratory Director
California ELAP Certification Number 1677

basic laboratory

www.basiclab.com

2218 Railroad Avenue voice 530.243.7234
Redding, California 96001 fax 530.243.7494

3860 Morrow Lane, Suite F voice 530.894.8966
Chico, California 95928 fax 530.894.5143

Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18J2591

Lab No: 18K0030
Reported: 11/26/18
Phone: (707) 468-0401
P.O. #

Metals - Total

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
18J2591-01 ER167.8 - Grab Water (18K0030-01) Sampled:10/25/18 09:50 Received:11/01/18 11:53									
Methyl Mercury as Mercury	ng/l	**0.289**		0.020	0.050	EPA 1630	11/09/18	11/08/18	B8K0808

Quality Control Data

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Metals - Total										
Batch B8K0808 - Draft EPA Method 1630 Distillation (Modified)										
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
LCS										
Methyl Mercury as Mercury	2.05	0.050	ng/l	2.00		103	67-133			
Matrix Spike Source: 18K0302-01										
Methyl Mercury as Mercury	1.16	0.050	ng/l	1.00	0.035	113	65-135			
Matrix Spike Dup Source: 18K0302-01										
Methyl Mercury as Mercury	1.20	0.050	ng/l	1.00	0.035	117	65-135	3.43	35	

Approved By

Basic Laboratory Inc
California ELAP Cert #1677 and #2718

basic laboratory

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Redding, California 96001 fax 530.243.7494

3860 Morrow Lane, Suite F voice 530.894.8966
Chico, California 95928 fax 530.894.5143

Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18J2591

Lab No: 18K0030
Reported: 11/26/18
Phone: (707) 468-0401
P.O. #

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
<	Less than reporting limit
≤	Less than or equal to reporting limit
>	Greater than reporting limit
≥	Greater than or equal to reporting limit
MDL	Method Detection Limit
RL/ML	Minimum Level of Quantitation
MCL/AL	Maxium Contaminant Level/Action Level
mg/kg	Results reported as wet weight
TTLC	Total Threshold Limit Concentration
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leachate Procedure

Note 1 Received Temperature - according to EPA guidelines, samples for most chemistry methods should be held at ≤6 degrees C after collection, including during transportation, unless the time from sampling to delivery is <2 hours. Regulating agencies may invalidate results if temperature requirements are not met.

Note 2 According to 40 CFR Part 136 Table II, the following tests should be analyzed in the field within 15 minutes of sampling: pH, chlorine, dissolved oxygen, and sulfite.

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

SUBCONTRACT ORDER

18K0030

Alpha Analytical Laboratories, Inc.

18J2591

1

18K0030
18J TW
11-13-18 TW
11-26-18

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

Basic Laboratory
2218 Railroad Ave
Redding, CA 96001
Phone :530-243-7234
Fax: 530-243-7494
Terms: Net 30

Analysis	Due	Expires	Comments
18J2591-01 ER167.8 [Water] Sampled 10/25/18 09:50			
			-1 9.8°
BAL Hg Methyl	11/08/18 12:00	04/23/19 09:50	

Containers Supplied:
500ml Glass - HCl (I) AG

☐ *Report to State*

System Name: _____ Employed by: _____
User ID: _____ Sampler: _____
System Number: _____

+QC
+MW

Released By	Date	Received By	Date
	10-26-18	T Wilhelmson	11-1-18 1153
Released By	Date	Received By	Date
		T Wilhelmson	11-1-18 1242

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Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18J2591 Pg 1 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	

Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Signature below authorizes work under terms stated on reverse side.

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	TOC	DOC	Fe 200.8 Total	Ammonia-N	Phosphorus, Total	TKN	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	Chlorophyll-A	Sulfide	Sample Notes or DDW Source Numbers:
ER167.8	10/25	950											X			10	X	X	X	X	X	X	X	X	X	X	X	

TAT: Standard 10 days ⊘ | RUSH: 5 days ○ | 48 hours ○ | Other: ___days ○ | Lab preapproval required

Temp upon Receipt °C: Ukiah temp: 1.2° | Livermore temp: | Elk Grove temp:

Relinquished by	Received by	Date	Time
		10.25.18	1430

DDW Write On EDT Transmission? ○ Yes ○ No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

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Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18J2591 Pg 2 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

TAT: Standard 10 days (6); RUSH: 5 days ( ) 48 hours ( ) Other: ___ days ( ) Lab preapproval required

Temp upon Receipt °C: Ukiah temp: 1.2 · Livermore temp: Elk Grove temp:

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Analysis Request: Hg 1631	MeHg 1630	Sample Notes or DDW Source Numbers:
ER1678	10/25	950											X			5 (4 + P1)	X	X	

Relinquished by	Received by	Date	Time
		10.25.18	1430

DDW Write On EDT Transmission? ( ) Yes ( ) No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ( ) Yes ( ) No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

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ELAP Certificates 1551, 2728, 2922, and 2303

12 December 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18K1420

Enclosed are the results of analyses for samples received by the laboratory on 11/13/18 16:35. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ER167.8	18K1420-01	Water	11/13/18 08:10	11/13/18 16:35
ER-DUP	18K1420-02	Water	11/13/18 08:15	11/13/18 16:35
LP3-S	18K1420-03	Water	11/13/18 11:05	11/13/18 16:35
LP3-M	18K1420-04	Water	11/13/18 11:20	11/13/18 16:35
LP3-B	18K1420-05	Water	11/13/18 11:45	11/13/18 16:35
LP1-S	18K1420-06	Water	11/13/18 12:30	11/13/18 16:35
LP1-M	18K1420-07	Water	11/13/18 12:45	11/13/18 16:35
LP1-B	18K1420-08	Water	11/13/18 13:05	11/13/18 16:35
LP2-S	18K1420-09	Water	11/13/18 15:10	11/13/18 16:35
LP2-B	18K1420-10	Water	11/13/18 15:20	11/13/18 16:35
LP-BL	18K1420-11	Water	11/13/18 15:30	11/13/18 16:35

This represents an amended copy of the original report.

Subcontracted results added. Complete report.

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.

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North Bay: 110 Liberty Street, Petaluma, CA 94952 • Phone: (707) 769-3128 • Fax: (707) 769-8093

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER167.8 (18K1420-01) Water Sampled: 11/13/18 08:10 Received: 11/13/18 16:35											
Iron	**170**	**40**	**200**	**ug/L**	4	AK83272	11/16/18 09:45	11/19/18 14:11	EPA 200.8	JRA	R-01, J
ER-DUP (18K1420-02) Water Sampled: 11/13/18 08:15 Received: 11/13/18 16:35											
Iron	**97**	**40**	**200**	**ug/L**	4	AK83272	11/16/18 09:45	11/19/18 17:27	EPA 200.8	JRA	R-01, J
LP3-S (18K1420-03) Water Sampled: 11/13/18 11:05 Received: 11/13/18 16:35											
Iron	**66**	**40**	**200**	**ug/L**	4	AK83272	11/16/18 09:45	11/19/18 17:34	EPA 200.8	JRA	R-01, J
LP3-M (18K1420-04) Water Sampled: 11/13/18 11:20 Received: 11/13/18 16:35											
Iron	**58**	**40**	**200**	**ug/L**	4	AK83272	11/16/18 09:45	11/19/18 17:40	EPA 200.8	JRA	R-01, J
LP3-B (18K1420-05) Water Sampled: 11/13/18 11:45 Received: 11/13/18 16:35											
Iron	**120**	**40**	**200**	**ug/L**	4	AK83272	11/16/18 09:45	11/19/18 17:47	EPA 200.8	JRA	R-01, J
LP1-S (18K1420-06) Water Sampled: 11/13/18 12:30 Received: 11/13/18 16:35											
Iron	ND	40	200	ug/L	4	AK83272	11/16/18 09:45	11/19/18 17:54	EPA 200.8	JRA	R-01, U
LP1-M (18K1420-07) Water Sampled: 11/13/18 12:45 Received: 11/13/18 16:35											
Iron	ND	40	200	ug/L	4	AK83272	11/16/18 09:45	11/19/18 18:00	EPA 200.8	JRA	R-01, U
LP1-B (18K1420-08) Water Sampled: 11/13/18 13:05 Received: 11/13/18 16:35											
Iron	**40**	**40**	**200**	**ug/L**	4	AK83272	11/16/18 09:45	11/19/18 18:07	EPA 200.8	JRA	R-01, J
LP2-S (18K1420-09) Water Sampled: 11/13/18 15:10 Received: 11/13/18 16:35											
Iron	ND	40	200	ug/L	4	AK83272	11/16/18 09:45	11/19/18 18:14	EPA 200.8	JRA	R-01, U

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North Bay: 110 Liberty Street, Petaluma, CA 94952 • Phone: (707) 769-3128 • Fax: (707) 769-8093

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-B (18K1420-10) Water Sampled: 11/13/18 15:20 Received: 11/13/18 16:35											
Iron	ND	40	200	ug/L	4	AK83272	11/16/18 09:45	11/19/18 18:21	EPA 200.8	JRA	U, R-01
LP-BL (18K1420-11) Water Sampled: 11/13/18 15:30 Received: 11/13/18 16:35											
Iron	ND	40	200	ug/L	4	AK83272	11/16/18 09:45	11/19/18 15:11	EPA 200.8	MMY	R-01, U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

Metals by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER167.8 (18K1420-01) Water Sampled: 11/13/18 08:10 Received: 11/13/18 16:35											
Mercury	**1.11**	**0.200**	**0.500**	**ng/l**	1	AK83192	11/14/18 19:00	11/15/18 16:48	EPA 1631E	AJC	
ER-DUP (18K1420-02) Water Sampled: 11/13/18 08:15 Received: 11/13/18 16:35											
Mercury	**1.02**	**0.200**	**0.500**	**ng/l**	1	AK83192	11/14/18 19:00	11/15/18 16:56	EPA 1631E	AJC	
LP3-S (18K1420-03) Water Sampled: 11/13/18 11:05 Received: 11/13/18 16:35											
Mercury	**1.07**	**0.200**	**0.500**	**ng/l**	1	AK83192	11/14/18 19:00	11/15/18 17:05	EPA 1631E	AJC	
LP3-M (18K1420-04) Water Sampled: 11/13/18 11:20 Received: 11/13/18 16:35											
Mercury	**1.34**	**0.200**	**0.500**	**ng/l**	1	AK83192	11/14/18 19:00	11/15/18 17:13	EPA 1631E	AJC	
LP3-B (18K1420-05) Water Sampled: 11/13/18 11:45 Received: 11/13/18 16:35											
Mercury	**1.33**	**0.200**	**0.500**	**ng/l**	1	AK83192	11/14/18 19:00	11/15/18 17:21	EPA 1631E	AJC	
LP1-S (18K1420-06) Water Sampled: 11/13/18 12:30 Received: 11/13/18 16:35											
Mercury	**1.32**	**0.200**	**0.500**	**ng/l**	1	AK83192	11/14/18 19:00	11/15/18 17:29	EPA 1631E	AJC	
LP1-M (18K1420-07) Water Sampled: 11/13/18 12:45 Received: 11/13/18 16:35											
Mercury	**1.91**	**0.200**	**0.500**	**ng/l**	1	AK83192	11/14/18 19:00	11/15/18 17:37	EPA 1631E	AJC	
LP1-B (18K1420-08) Water Sampled: 11/13/18 13:05 Received: 11/13/18 16:35											
Mercury	**1.09**	**0.200**	**0.500**	**ng/l**	1	AK83379	11/19/18 14:00	11/20/18 15:11	EPA 1631E	AJC	
LP2-S (18K1420-09) Water Sampled: 11/13/18 15:10 Received: 11/13/18 16:35											
Mercury	**0.828**	**0.200**	**0.500**	**ng/l**	1	AK83379	11/19/18 14:00	11/20/18 15:45	EPA 1631E	AJC	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

Metals by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-B (18K1420-10) Water Sampled: 11/13/18 15:20 Received: 11/13/18 16:35											
Mercury	**1.42**	**0.200**	**0.500**	**ng/l**	1	AK83379	11/19/18 14:00	11/20/18 15:53	EPA 1631E	AJC	
LP-BL (18K1420-11) Water Sampled: 11/13/18 15:30 Received: 11/13/18 16:35											
Mercury	**0.279**	**0.200**	**0.500**	**ng/l**	1	AK83379	11/19/18 14:00	11/20/18 16:02	EPA 1631E	AJC	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER167.8 (18K1420-01) Water Sampled: 11/13/18 08:10 Received: 11/13/18 16:35											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK83614	11/27/18 09:30	11/27/18 15:30	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AK83215	11/15/18 08:00	11/20/18 08:15	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AK83338	11/14/18 16:30	11/29/18 12:00	SM10200H	EV	U
Dissolved Organic Carbon	**2.68**	**0.600**	**1.00**	**mg/L**	1	AK83344	11/19/18 08:35	11/20/18 11:25	SM5310C	SMS	
Sulfide	**0.024**	**0.020**	**0.10**	**mg/L**	1	AK83287	11/16/18 14:00	11/16/18 15:30	SM4500-S2 D	EV	J
Nitrate + Nitrite as N	**0.070**	**0.0086**	**0.40**	**mg/L**	1	AK83225	11/15/18 09:09	11/27/18 12:53	Calculation	ZMH	J
Total Kjeldahl Nitrogen	**0.28**	**0.050**	**1.0**	**mg/L**	1	AK83352	11/20/18 09:12	11/21/18 11:10	SM4500-Norg B	JVO	J
Phosphorus, total	**0.029**	**0.010**	**0.040**	**mg/L**	1	AK83209	11/15/18 08:15	11/15/18 11:13	SM4500-P E	SMS	J
ER-DUP (18K1420-02) Water Sampled: 11/13/18 08:15 Received: 11/13/18 16:35											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK83614	11/27/18 09:30	11/27/18 15:30	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AK83215	11/15/18 08:00	11/20/18 08:15	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AK83338	11/14/18 16:30	11/29/18 12:00	SM10200H	EV	U
Dissolved Organic Carbon	**2.75**	**0.600**	**1.00**	**mg/L**	1	AK83344	11/19/18 08:35	11/20/18 11:37	SM5310C	SMS	
Sulfide	**0.027**	**0.020**	**0.10**	**mg/L**	1	AK83287	11/16/18 14:00	11/16/18 15:30	SM4500-S2 D	EV	J
Nitrate + Nitrite as N	**0.058**	**0.0086**	**0.40**	**mg/L**	1	AK83225	11/15/18 09:09	11/27/18 12:53	Calculation	ZMH	J
Total Kjeldahl Nitrogen	**0.24**	**0.050**	**1.0**	**mg/L**	1	AK83352	11/20/18 09:12	11/21/18 11:10	SM4500-Norg B	JVO	J
Phosphorus, total	**0.027**	**0.010**	**0.040**	**mg/L**	1	AK83209	11/15/18 08:15	11/15/18 11:13	SM4500-P E	SMS	J
LP3-S (18K1420-03) Water Sampled: 11/13/18 11:05 Received: 11/13/18 16:35											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK83614	11/27/18 09:30	11/27/18 15:30	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AK83215	11/15/18 08:00	11/20/18 08:15	SM5210B	WCS	U
Chlorophyll-a	**0.0017**	**0.0010**	**0.010**	**mg/L**	1	AK83338	11/14/18 16:30	11/29/18 12:00	SM10200H	EV	J
Dissolved Organic Carbon	**2.84**	**0.600**	**1.00**	**mg/L**	1	AK83344	11/19/18 08:35	11/20/18 12:13	SM5310C	SMS	
Sulfide	**0.030**	**0.020**	**0.10**	**mg/L**	1	AK83287	11/16/18 14:00	11/16/18 15:30	SM4500-S2 D	EV	J
Nitrate + Nitrite as N	**0.049**	**0.0086**	**0.40**	**mg/L**	1	AK83225	11/15/18 09:09	11/27/18 12:53	Calculation	ZMH	J
Total Kjeldahl Nitrogen	**0.28**	**0.050**	**1.0**	**mg/L**	1	AK83352	11/20/18 09:12	11/21/18 10:23	SM4500-Norg B	JVO	J
Phosphorus, total	**0.024**	**0.010**	**0.040**	**mg/L**	1	AK83209	11/15/18 08:15	11/15/18 11:13	SM4500-P E	SMS	J
Total Organic Carbon	**2.77**	**0.300**	**1.00**	**mg/L**	1	AK83633	11/27/18 09:56	11/30/18 11:30	SM5310C	SMS	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP3-M (18K1420-04) Water Sampled: 11/13/18 11:20 Received: 11/13/18 16:35											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK83614	11/27/18 09:30	11/27/18 15:30	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AK83215	11/15/18 08:00	11/20/18 08:15	SM5210B	WCS	U
Chlorophyll-a	**0.0016**	**0.0010**	**0.010**	**mg/L**	1	AK83338	11/14/18 16:30	11/29/18 12:00	SM10200H	EV	J
Dissolved Organic Carbon	**2.80**	**0.600**	**1.00**	**mg/L**	1	AK83344	11/19/18 08:35	11/20/18 12:25	SM5310C	SMS	
Sulfide	**0.024**	**0.020**	**0.10**	**mg/L**	1	AK83287	11/16/18 14:00	11/16/18 15:30	SM4500-S2 D	EV	J
Nitrate + Nitrite as N	**0.049**	**0.0086**	**0.40**	**mg/L**	1	AK83225	11/15/18 09:09	11/27/18 12:53	Calculation	ZMH	J
Total Kjeldahl Nitrogen	**0.32**	**0.050**	**1.0**	**mg/L**	1	AK83352	11/20/18 09:12	11/21/18 11:10	SM4500-Norg B	JVO	J
Phosphorus, total	**0.027**	**0.010**	**0.040**	**mg/L**	1	AK83209	11/15/18 08:15	11/15/18 11:13	SM4500-P E	SMS	J
Total Organic Carbon	**2.85**	**0.300**	**1.00**	**mg/L**	1	AK83633	11/27/18 09:56	11/30/18 11:43	SM5310C	SMS	
LP3-B (18K1420-05) Water Sampled: 11/13/18 11:45 Received: 11/13/18 16:35											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK83614	11/27/18 09:30	11/27/18 15:30	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AK83215	11/15/18 08:00	11/20/18 08:15	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AK83338	11/14/18 16:30	11/29/18 12:00	SM10200H	EV	U
Dissolved Organic Carbon	**2.63**	**0.600**	**1.00**	**mg/L**	1	AK83344	11/19/18 08:35	11/20/18 12:37	SM5310C	SMS	
Sulfide	**0.025**	**0.020**	**0.10**	**mg/L**	1	AK83287	11/16/18 14:00	11/16/18 15:30	SM4500-S2 D	EV	J
Nitrate + Nitrite as N	**0.046**	**0.0086**	**0.40**	**mg/L**	1	AK83225	11/15/18 09:09	11/27/18 12:53	Calculation	ZMH	J
Total Kjeldahl Nitrogen	**0.28**	**0.050**	**1.0**	**mg/L**	1	AK83352	11/20/18 09:12	11/21/18 11:10	SM4500-Norg B	JVO	J
Phosphorus, total	**0.033**	**0.010**	**0.040**	**mg/L**	1	AK83209	11/15/18 08:15	11/15/18 11:13	SM4500-P E	SMS	J
Total Organic Carbon	**2.73**	**0.300**	**1.00**	**mg/L**	1	AK83633	11/27/18 09:56	11/30/18 11:56	SM5310C	SMS	
LP1-S (18K1420-06) Water Sampled: 11/13/18 12:30 Received: 11/13/18 16:35											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK83614	11/27/18 09:30	11/27/18 15:30	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AK83215	11/15/18 08:00	11/20/18 08:15	SM5210B	WCS	U
Chlorophyll-a	**0.0020**	**0.0010**	**0.010**	**mg/L**	1	AK83338	11/14/18 16:30	11/29/18 12:00	SM10200H	EV	J
Dissolved Organic Carbon	**2.77**	**0.600**	**1.00**	**mg/L**	1	AK83344	11/19/18 08:35	11/20/18 12:49	SM5310C	SMS	
Sulfide	**0.025**	**0.020**	**0.10**	**mg/L**	1	AK83287	11/16/18 14:00	11/16/18 15:30	SM4500-S2 D	EV	J
Nitrate + Nitrite as N	**0.047**	**0.0086**	**0.40**	**mg/L**	1	AK83225	11/15/18 09:09	11/27/18 12:53	Calculation	ZMH	J
Total Kjeldahl Nitrogen	**0.32**	**0.050**	**1.0**	**mg/L**	1	AK83352	11/20/18 09:12	11/21/18 11:10	SM4500-Norg B	JVO	J
Phosphorus, total	**0.029**	**0.010**	**0.040**	**mg/L**	1	AK83209	11/15/18 08:15	11/15/18 11:13	SM4500-P E	SMS	J
Total Organic Carbon	**2.80**	**0.300**	**1.00**	**mg/L**	1	AK83633	11/27/18 09:56	11/30/18 12:35	SM5310C	SMS	

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2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-M (18K1420-07) Water Sampled: 11/13/18 12:45 Received: 11/13/18 16:35											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK83614	11/27/18 09:30	11/27/18 15:30	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AK83215	11/15/18 08:00	11/20/18 08:15	SM5210B	WCS	U
Chlorophyll-a	**0.0022**	**0.0010**	**0.010**	**mg/L**	1	AK83338	11/14/18 16:30	11/29/18 12:00	SM10200H	EV	J
Dissolved Organic Carbon	**2.69**	**0.600**	**1.00**	**mg/L**	1	AK83344	11/19/18 08:35	11/20/18 13:02	SM5310C	SMS	
Sulfide	**0.021**	**0.020**	**0.10**	**mg/L**	1	AK83287	11/16/18 14:00	11/16/18 15:30	SM4500-S2 D	EV	J
Nitrate + Nitrite as N	**0.045**	**0.0086**	**0.40**	**mg/L**	1	AK83225	11/15/18 09:09	11/27/18 12:53	Calculation	ZMH	J
Total Kjeldahl Nitrogen	**0.28**	**0.050**	**1.0**	**mg/L**	1	AK83352	11/20/18 09:12	11/21/18 10:23	SM4500-Norg B	JVO	J
Phosphorus, total	**0.025**	**0.010**	**0.040**	**mg/L**	1	AK83209	11/15/18 08:15	11/15/18 11:13	SM4500-P E	SMS	J
Total Organic Carbon	**2.81**	**0.300**	**1.00**	**mg/L**	1	AK83633	11/27/18 09:56	11/30/18 12:48	SM5310C	SMS	
LP1-B (18K1420-08) Water Sampled: 11/13/18 13:05 Received: 11/13/18 16:35											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK83614	11/27/18 09:30	11/27/18 15:30	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AK83215	11/15/18 08:00	11/20/18 08:15	SM5210B	WCS	U
Chlorophyll-a	**0.0010**	**0.0010**	**0.010**	**mg/L**	1	AK83338	11/14/18 16:30	11/29/18 12:00	SM10200H	EV	J
Dissolved Organic Carbon	**2.69**	**0.600**	**1.00**	**mg/L**	1	AK83344	11/19/18 08:35	11/20/18 13:14	SM5310C	SMS	
Sulfide	**0.020**	**0.020**	**0.10**	**mg/L**	1	AK83287	11/16/18 14:00	11/16/18 15:30	SM4500-S2 D	EV	J
Nitrate + Nitrite as N	**0.046**	**0.0086**	**0.40**	**mg/L**	1	AK83225	11/15/18 09:09	11/27/18 12:53	Calculation	ZMH	J
Total Kjeldahl Nitrogen	**0.24**	**0.050**	**1.0**	**mg/L**	1	AK83352	11/20/18 09:12	11/21/18 10:23	SM4500-Norg B	JVO	J
Phosphorus, total	**0.024**	**0.010**	**0.040**	**mg/L**	1	AK83209	11/15/18 08:15	11/15/18 11:13	SM4500-P E	SMS	J
Total Organic Carbon	**2.79**	**0.300**	**1.00**	**mg/L**	1	AK83633	11/27/18 09:56	11/30/18 13:01	SM5310C	SMS	
LP2-S (18K1420-09) Water Sampled: 11/13/18 15:10 Received: 11/13/18 16:35											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK83614	11/27/18 09:30	11/27/18 15:30	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AK83215	11/15/18 08:00	11/20/18 08:15	SM5210B	WCS	U
Chlorophyll-a	**0.0026**	**0.0010**	**0.010**	**mg/L**	1	AK83338	11/14/18 16:30	11/29/18 12:00	SM10200H	EV	J
Dissolved Organic Carbon	**2.73**	**0.600**	**1.00**	**mg/L**	1	AK83344	11/19/18 08:35	11/20/18 13:26	SM5310C	SMS	
Sulfide	**0.024**	**0.020**	**0.10**	**mg/L**	1	AK83287	11/16/18 14:00	11/16/18 15:30	SM4500-S2 D	EV	J
Nitrate + Nitrite as N	**0.055**	**0.0086**	**0.40**	**mg/L**	1	AK83225	11/15/18 09:09	11/27/18 12:53	Calculation	ZMH	J
Total Kjeldahl Nitrogen	**0.32**	**0.050**	**1.0**	**mg/L**	1	AK83352	11/20/18 09:12	11/21/18 10:23	SM4500-Norg B	JVO	J
Phosphorus, total	**0.032**	**0.010**	**0.040**	**mg/L**	1	AK83209	11/15/18 08:15	11/15/18 11:13	SM4500-P E	SMS	J
Total Organic Carbon	**2.88**	**0.300**	**1.00**	**mg/L**	1	AK83633	11/27/18 09:56	11/30/18 13:14	SM5310C	SMS	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP2-B (18K1420-10) Water Sampled: 11/13/18 15:20 Received: 11/13/18 16:35											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK83614	11/27/18 09:30	11/27/18 15:30	SM4500NH3C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AK83215	11/15/18 08:00	11/20/18 08:15	SM5210B	WCS	U
Chlorophyll-a	**0.0024**	**0.0010**	**0.010**	**mg/L**	1	AK83338	11/14/18 16:30	11/29/18 12:00	SM10200H	EV	J
Dissolved Organic Carbon	**2.75**	**0.600**	**1.00**	**mg/L**	1	AK83344	11/19/18 08:35	11/20/18 13:38	SM5310C	SMS	
Sulfide	**0.024**	**0.020**	**0.10**	**mg/L**	1	AK83287	11/16/18 14:00	11/16/18 15:30	SM4500-S2 D	EV	J
Nitrate + Nitrite as N	**0.044**	**0.0086**	**0.40**	**mg/L**	1	AK83225	11/15/18 09:09	11/27/18 12:53	Calculation	ZMH	J
Total Kjeldahl Nitrogen	**0.28**	**0.050**	**1.0**	**mg/L**	1	AK83352	11/20/18 09:12	11/21/18 10:23	SM4500-Norg B	JVO	J
Phosphorus, total	**0.029**	**0.010**	**0.040**	**mg/L**	1	AK83209	11/15/18 08:15	11/15/18 11:13	SM4500-P E	SMS	J
Total Organic Carbon	**2.83**	**0.300**	**1.00**	**mg/L**	1	AK83633	11/27/18 09:56	11/30/18 13:27	SM5310C	SMS	
LP-BL (18K1420-11) Water Sampled: 11/13/18 15:30 Received: 11/13/18 16:35											
Ammonia as N	**0.10**	**0.10**	**0.20**	**mg/L**	1	AK83523	11/26/18 10:00	11/26/18 15:30	SM4500NH3C	FCM	J
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AK83215	11/15/18 08:00	11/20/18 08:15	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AK83338	11/14/18 16:30	11/29/18 12:00	SM10200H	EV	U
Dissolved Organic Carbon	**0.704**	**0.600**	**1.00**	**mg/L**	1	AK83344	11/19/18 08:35	11/20/18 13:50	SM5310C	SMS	J
Sulfide	**0.020**	**0.020**	**0.10**	**mg/L**	1	AK83287	11/16/18 14:00	11/16/18 15:30	SM4500-S2 D	EV	J
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AK83225	11/15/18 09:09	11/27/18 12:53	Calculation	ZMH	U
Total Kjeldahl Nitrogen	**0.070**	**0.050**	**1.0**	**mg/L**	1	AK83352	11/20/18 09:12	11/21/18 10:23	SM4500-Norg B	JVO	J
Phosphorus, total	ND	0.010	0.040	mg/L	1	AK83209	11/15/18 08:15	11/15/18 11:13	SM4500-P E	SMS	U
Total Organic Carbon	ND	0.300	1.00	mg/L	1	AK83633	11/27/18 09:56	11/30/18 13:40	SM5310C	SMS	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER167.8 (18K1420-01) Water Sampled: 11/13/18 08:10 Received: 11/13/18 16:35											
Nitrate as N	**0.070**	**0.040**	**0.20**	**mg/L**	1	AK83193	11/14/18 20:43	11/14/18 20:43	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AK83193	11/14/18 20:43	11/14/18 20:43	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AK83193	11/14/18 20:43	11/14/18 20:43	EPA 300.0	SMP	U
ER-DUP (18K1420-02) Water Sampled: 11/13/18 08:15 Received: 11/13/18 16:35											
Nitrate as N	**0.058**	**0.040**	**0.20**	**mg/L**	1	AK83193	11/14/18 21:49	11/14/18 21:49	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AK83193	11/14/18 21:49	11/14/18 21:49	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AK83193	11/14/18 21:49	11/14/18 21:49	EPA 300.0	SMP	U
LP3-S (18K1420-03) Water Sampled: 11/13/18 11:05 Received: 11/13/18 16:35											
Nitrate as N	**0.049**	**0.040**	**0.20**	**mg/L**	1	AK83193	11/14/18 22:05	11/14/18 22:05	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AK83193	11/14/18 22:05	11/14/18 22:05	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AK83193	11/14/18 22:05	11/14/18 22:05	EPA 300.0	SMP	U
LP3-M (18K1420-04) Water Sampled: 11/13/18 11:20 Received: 11/13/18 16:35											
Nitrate as N	**0.049**	**0.040**	**0.20**	**mg/L**	1	AK83193	11/14/18 22:21	11/14/18 22:21	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AK83193	11/14/18 22:21	11/14/18 22:21	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AK83193	11/14/18 22:21	11/14/18 22:21	EPA 300.0	SMP	U
LP3-B (18K1420-05) Water Sampled: 11/13/18 11:45 Received: 11/13/18 16:35											
Nitrate as N	**0.046**	**0.040**	**0.20**	**mg/L**	1	AK83193	11/14/18 22:38	11/14/18 22:38	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AK83193	11/14/18 22:38	11/14/18 22:38	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AK83193	11/14/18 22:38	11/14/18 22:38	EPA 300.0	SMP	U
LP1-S (18K1420-06) Water Sampled: 11/13/18 12:30 Received: 11/13/18 16:35											
Nitrate as N	**0.047**	**0.040**	**0.20**	**mg/L**	1	AK83193	11/14/18 22:54	11/14/18 22:54	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AK83193	11/14/18 22:54	11/14/18 22:54	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AK83193	11/14/18 22:54	11/14/18 22:54	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP1-M (18K1420-07) Water Sampled: 11/13/18 12:45 Received: 11/13/18 16:35											
Nitrate as N	**0.045**	**0.040**	**0.20**	**mg/L**	1	AK83193	11/14/18 23:11	11/14/18 23:11	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AK83193	11/14/18 23:11	11/14/18 23:11	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AK83193	11/14/18 23:11	11/14/18 23:11	EPA 300.0	SMP	U
LP1-B (18K1420-08) Water Sampled: 11/13/18 13:05 Received: 11/13/18 16:35											
Nitrate as N	**0.046**	**0.040**	**0.20**	**mg/L**	1	AK83193	11/14/18 23:27	11/14/18 23:27	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AK83193	11/14/18 23:27	11/14/18 23:27	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AK83193	11/14/18 23:27	11/14/18 23:27	EPA 300.0	SMP	U
LP2-S (18K1420-09) Water Sampled: 11/13/18 15:10 Received: 11/13/18 16:35											
Nitrate as N	**0.055**	**0.040**	**0.20**	**mg/L**	1	AK83193	11/14/18 23:43	11/14/18 23:43	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AK83193	11/14/18 23:43	11/14/18 23:43	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AK83193	11/14/18 23:43	11/14/18 23:43	EPA 300.0	SMP	U
LP2-B (18K1420-10) Water Sampled: 11/13/18 15:20 Received: 11/13/18 16:35											
Nitrate as N	**0.044**	**0.040**	**0.20**	**mg/L**	1	AK83193	11/15/18 00:00	11/15/18 00:00	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AK83193	11/15/18 00:00	11/15/18 00:00	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AK83193	11/15/18 00:00	11/15/18 00:00	EPA 300.0	SMP	U
LP-BL (18K1420-11) Water Sampled: 11/13/18 15:30 Received: 11/13/18 16:35											
Nitrate as N	ND	0.040	0.20	mg/L	1	AK83193	11/15/18 00:16	11/15/18 00:16	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AK83193	11/15/18 00:16	11/15/18 00:16	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AK83193	11/15/18 00:16	11/15/18 00:16	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK83272 - EPA 200.8											
Blank (AK83272-BLK1)					Prepared: 11/16/18 Analyzed: 11/19/18						
Iron	ND	10	50	ug/L							U
LCS (AK83272-BS1)					Prepared: 11/16/18 Analyzed: 11/19/18						
Iron	517	10	50	ug/L	520		99.4	85-115			
Duplicate (AK83272-DUP1)		**Source: 18K1420-01**			Prepared: 11/16/18 Analyzed: 11/19/18						
Iron	163	40	200	ug/L		165			1.15	20	R-01, J
Matrix Spike (AK83272-MS1)		**Source: 18K1420-01**			Prepared: 11/16/18 Analyzed: 11/19/18						
Iron	687	40	200	ug/L	520	165	100	70-130			
Matrix Spike (AK83272-MS2)		**Source: 18K1420-11**			Prepared: 11/16/18 Analyzed: 11/19/18						
Iron	537	40	200	ug/L	520	ND	103	70-130			
Matrix Spike Dup (AK83272-MSD1)		**Source: 18K1420-01**			Prepared: 11/16/18 Analyzed: 11/19/18						
Iron	674	40	200	ug/L	520	165	97.8	70-130	1.97	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

Metals by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK83192 - EPA 1631											
Blank (AK83192-BLK1)					Prepared: 11/14/18 Analyzed: 11/15/18						
Mercury	ND	0.200	0.500	ng/l							U
LCS (AK83192-BS1)					Prepared: 11/14/18 Analyzed: 11/15/18						
Mercury	5.23	0.200	0.500	ng/l	5.00		105	77-123			
Matrix Spike (AK83192-MS1)		**Source: 18K0844-02**			Prepared: 11/14/18 Analyzed: 11/15/18						
Mercury	26.4	0.200	0.500	ng/l	25.0	1.61	99.4	71-125			
Matrix Spike (AK83192-MS2)		**Source: 18K1044-05**			Prepared: 11/14/18 Analyzed: 11/15/18						
Mercury	26.2	0.200	0.500	ng/l	25.0	0.373	103	71-125			
Matrix Spike Dup (AK83192-MSD1)		**Source: 18K0844-02**			Prepared: 11/14/18 Analyzed: 11/15/18						
Mercury	26.7	0.200	0.500	ng/l	25.0	1.61	100	71-125	1.05	24	
Matrix Spike Dup (AK83192-MSD2)		**Source: 18K1044-05**			Prepared: 11/14/18 Analyzed: 11/15/18						
Mercury	26.0	0.200	0.500	ng/l	25.0	0.373	102	71-125	0.806	24	
Reference (AK83192-SRM1)					Prepared: 11/14/18 Analyzed: 11/15/18						
Mercury	50.5	0.200	0.500	ng/l	50.0		101	68-125			
Batch AK83379 - EPA 1631											
Blank (AK83379-BLK1)					Prepared: 11/19/18 Analyzed: 11/20/18						
Mercury	ND	0.200	0.500	ng/l							U
LCS (AK83379-BS1)					Prepared: 11/19/18 Analyzed: 11/20/18						
Mercury	5.34	0.200	0.500	ng/l	5.00		107	77-123			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

Metals by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK83379 - EPA 1631											
Matrix Spike (AK83379-MS1)		**Source: 18K1420-08**			Prepared: 11/19/18 Analyzed: 11/20/18						
Mercury	27.6	0.200	0.500	ng/l	25.0	1.09	106	71-125			
Matrix Spike (AK83379-MS2)		**Source: 18K1591-03**			Prepared: 11/19/18 Analyzed: 11/20/18						
Mercury	26.7	0.200	0.500	ng/l	25.0	0.928	103	71-125			
Matrix Spike Dup (AK83379-MSD1)		**Source: 18K1420-08**			Prepared: 11/19/18 Analyzed: 11/20/18						
Mercury	27.8	0.200	0.500	ng/l	25.0	1.09	107	71-125	0.685	24	
Matrix Spike Dup (AK83379-MSD2)		**Source: 18K1591-03**			Prepared: 11/19/18 Analyzed: 11/20/18						
Mercury	26.4	0.200	0.500	ng/l	25.0	0.928	102	71-125	1.13	24	
Reference (AK83379-SRM1)					Prepared: 11/19/18 Analyzed: 11/20/18						
Mercury	52.4	0.200	0.500	ng/l	50.0		105	68-125			

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North Bay: 110 Liberty Street, Petaluma, CA 94952 • Phone: (707) 769-3128 • Fax: (707) 769-8093

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK83209 - General Prep											
Blank (AK83209-BLK1)					Prepared & Analyzed: 11/15/18						
Phosphorus, total	ND	0.010	0.040	mg/L							U
LCS (AK83209-BS1)					Prepared & Analyzed: 11/15/18						
Phosphorus, total	0.192	0.010	0.040	mg/L	0.200		96.1	85-115			
Duplicate (AK83209-DUP1)		**Source: 18K1420-01**			Prepared & Analyzed: 11/15/18						
Phosphorus, total	0.0266	0.010	0.040	mg/L		0.0292			9.22	20	J
Matrix Spike (AK83209-MS1)		**Source: 18K1420-01**			Prepared & Analyzed: 11/15/18						
Phosphorus, total	0.210	0.010	0.040	mg/L	0.200	0.0292	90.5	70-130			
Matrix Spike (AK83209-MS2)		**Source: 18K1420-02**			Prepared & Analyzed: 11/15/18						
Phosphorus, total	0.208	0.010	0.040	mg/L	0.200	0.0266	90.5	70-130			
Matrix Spike Dup (AK83209-MSD1)		**Source: 18K1420-01**			Prepared & Analyzed: 11/15/18						
Phosphorus, total	0.209	0.010	0.040	mg/L	0.200	0.0292	89.9	70-130	0.611	20	
Batch AK83215 - General Preparation											
Blank (AK83215-BLK1)					Prepared: 11/15/18 Analyzed: 11/20/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
Blank (AK83215-BLK2)					Prepared: 11/15/18 Analyzed: 11/20/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
LCS (AK83215-BS1)					Prepared: 11/15/18 Analyzed: 11/20/18						
Biochemical Oxygen Demand	193	2.0	5.0	mg/L	200		96.5	84-115			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK83215 - General Preparation											
Duplicate (AK83215-DUP1)		**Source: 18K1644-01**			Prepared: 11/15/18 Analyzed: 11/20/18						
Biochemical Oxygen Demand	304	2.0	5.0	mg/L		300			1.32	30	
Batch AK83287 - General Preparation											
Blank (AK83287-BLK1)					Prepared & Analyzed: 11/16/18						
Sulfide	ND	0.020	0.10	mg/L							U
LCS (AK83287-BS1)					Prepared & Analyzed: 11/16/18						
Sulfide	0.243	0.020	0.10	mg/L	0.218		111	85-115			
Duplicate (AK83287-DUP1)		**Source: 18K1420-07**			Prepared & Analyzed: 11/16/18						
Sulfide	0.0220	0.020	0.10	mg/L		0.0210			4.65	15	J
Matrix Spike (AK83287-MS1)		**Source: 18K1420-07**			Prepared & Analyzed: 11/16/18						
Sulfide	0.247	0.020	0.10	mg/L	0.218	0.0210	103	80-120			
Matrix Spike Dup (AK83287-MSD1)		**Source: 18K1420-07**			Prepared & Analyzed: 11/16/18						
Sulfide	0.247	0.020	0.10	mg/L	0.218	0.0210	103	80-120	0.00	15	
Batch AK83338 - General Preparation											
Blank (AK83338-BLK1)					Prepared: 11/14/18 Analyzed: 11/29/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L							U
Duplicate (AK83338-DUP1)		**Source: 18K1420-01**			Prepared: 11/14/18 Analyzed: 11/29/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK83338 - General Preparation											
Duplicate (AK83338-DUP2)		**Source: 18K1591-01**			Prepared: 11/16/18 Analyzed: 11/29/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Batch AK83344 - General Prep											
Blank (AK83344-BLK1)					Prepared: 11/19/18 Analyzed: 11/20/18						
Dissolved Organic Carbon	ND	0.600	1.00	mg/L							U
LCS (AK83344-BS1)					Prepared: 11/19/18 Analyzed: 11/20/18						
Dissolved Organic Carbon	9.26	0.600	1.00	mg/L	10.0		92.6	85-115			
LCS Dup (AK83344-BSD1)					Prepared: 11/19/18 Analyzed: 11/20/18						
Dissolved Organic Carbon	8.76	0.600	1.00	mg/L	10.0		87.6	85-115	5.57	20	
Duplicate (AK83344-DUP1)		**Source: 18K1420-01**			Prepared: 11/19/18 Analyzed: 11/20/18						
Dissolved Organic Carbon	2.88	0.600	1.00	mg/L		2.68			7.10	20	
Matrix Spike (AK83344-MS1)		**Source: 18K1420-05**			Prepared: 11/19/18 Analyzed: 11/20/18						
Dissolved Organic Carbon	10.3	0.600	1.00	mg/L	10.0	2.63	76.3	70-130			
Matrix Spike Dup (AK83344-MSD1)		**Source: 18K1420-05**			Prepared: 11/19/18 Analyzed: 11/20/18						
Dissolved Organic Carbon	11.6	0.600	1.00	mg/L	10.0	2.63	90.0	70-130	12.5	20	
Batch AK83352 - General Prep											
LCS (AK83352-BS1)					Prepared & Analyzed: 11/19/18						
Total Kjeldahl Nitrogen	2.95	0.050	1.0	mg/L	2.98		99.0	80-120			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK83352 - General Prep											
LCS Dup (AK83352-BSD1)					Prepared & Analyzed: 11/19/18						
Total Kjeldahl Nitrogen	2.86	0.050	1.0	mg/L	2.98		95.9	80-120	3.17	20	
Matrix Spike (AK83352-MS1)		**Source: 18K1821-02**			Prepared & Analyzed: 11/19/18						
Total Kjeldahl Nitrogen	90.4	0.050	1.0	mg/L	22.6	67.2	102	75-125			
Matrix Spike Dup (AK83352-MSD1)		**Source: 18K1821-02**			Prepared & Analyzed: 11/19/18						
Total Kjeldahl Nitrogen	89.7	0.050	1.0	mg/L	22.6	67.2	99.0	75-125	0.779	20	
Batch AK83523 - General Preparation											
Blank (AK83523-BLK1)					Prepared & Analyzed: 11/26/18						
Ammonia as N	ND	0.10	0.20	mg/L							U
Blank (AK83523-BLK2)					Prepared & Analyzed: 11/26/18						
Ammonia as N	ND	0.10	0.20	mg/L							U
LCS (AK83523-BS1)					Prepared & Analyzed: 11/26/18						
Ammonia as N	4.82	0.10	0.20	mg/L	5.00		96.3	90-110			
LCS Dup (AK83523-BSD1)					Prepared & Analyzed: 11/26/18						
Ammonia as N	4.99	0.10	0.20	mg/L	5.00		99.8	90-110	3.57	20	
Matrix Spike (AK83523-MS1)		**Source: 18K1725-02**			Prepared & Analyzed: 11/26/18						
Ammonia as N	9.63	0.10	0.20	mg/L	10.0	ND	96.3	85-115			
Matrix Spike Dup (AK83523-MSD1)		**Source: 18K1725-02**			Prepared & Analyzed: 11/26/18						
Ammonia as N	9.46	0.10	0.20	mg/L	10.0	ND	94.6	85-115	1.83	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK83614 - General Preparation											
Blank (AK83614-BLK1)					Prepared & Analyzed: 11/27/18						
Ammonia as N	ND	0.10	0.20	mg/L							U
Blank (AK83614-BLK2)					Prepared & Analyzed: 11/27/18						
Ammonia as N	ND	0.10	0.20	mg/L							U
LCS (AK83614-BS1)					Prepared & Analyzed: 11/27/18						
Ammonia as N	4.73	0.10	0.20	mg/L	5.00		94.6	90-110			
LCS Dup (AK83614-BSD1)					Prepared & Analyzed: 11/27/18						
Ammonia as N	4.99	0.10	0.20	mg/L	5.00		99.8	90-110	5.41	20	
Matrix Spike (AK83614-MS1)		**Source: 18K1632-01**			Prepared & Analyzed: 11/27/18						
Ammonia as N	9.28	0.10	0.20	mg/L	10.0	ND	92.8	85-115			
Matrix Spike Dup (AK83614-MSD1)		**Source: 18K1632-01**			Prepared & Analyzed: 11/27/18						
Ammonia as N	9.11	0.10	0.20	mg/L	10.0	ND	91.1	85-115	1.90	20	
Batch AK83633 - General Prep											
LCS (AK83633-BS1)					Prepared: 11/27/18 Analyzed: 11/30/18						
Total Organic Carbon	9.11	0.300	1.00	mg/L	10.0		91.1	85-115			
LCS Dup (AK83633-BSD1)					Prepared: 11/27/18 Analyzed: 11/30/18						
Total Organic Carbon	8.77	0.300	1.00	mg/L	10.0		87.7	85-115	3.80	20	
Duplicate (AK83633-DUP1)		**Source: 18K1949-02**			Prepared: 11/27/18 Analyzed: 11/30/18						
Total Organic Carbon	0.677	0.300	1.00	mg/L		0.655			3.29	20	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK83633 - General Prep											
Matrix Spike (AK83633-MS1)		**Source: 18K1949-01**			Prepared: 11/27/18 Analyzed: 11/30/18						
Total Organic Carbon	20.0	0.600	2.00	mg/L	20.0	ND	99.8	70-130			
Matrix Spike Dup (AK83633-MSD1)		**Source: 18K1949-01**			Prepared: 11/27/18 Analyzed: 11/30/18						
Total Organic Carbon	20.1	0.600	2.00	mg/L	20.0	ND	101	70-130	0.835	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/12/18 05:50

Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK83193 - General Preparation											
Blank (AK83193-BLK1)					Prepared & Analyzed: 11/14/18						
Nitrite as N	ND	0.050	0.20	mg/L							U
Orthophosphate	ND	0.10	0.30	mg/L							U
Nitrate as N	ND	0.040	0.20	mg/L							U
LCS (AK83193-BS1)					Prepared & Analyzed: 11/14/18						
Nitrate as N	5.71	0.040	0.20	mg/L	5.56		103	90-110			
Nitrite as N	5.53	0.050	0.20	mg/L	5.56		99.5	90-110			
Orthophosphate	16.7	0.10	0.30	mg/L	16.7		100	90-110			
Duplicate (AK83193-DUP1)		**Source: 18K1354-01**			Prepared & Analyzed: 11/15/18						
Nitrate as N	2.94	0.040	0.20	mg/L		2.94			0.138	20	
Nitrite as N	ND	0.050	0.20	mg/L		ND				20	U
Orthophosphate	ND	0.10	0.30	mg/L		ND				20	U
Matrix Spike (AK83193-MS1)		**Source: 18K1354-01**			Prepared & Analyzed: 11/15/18						
Nitrate as N	8.40	0.20	1.0	mg/L	5.56	2.94	98.3	80-120			
Nitrite as N	5.29	0.25	1.0	mg/L	5.56	ND	95.3	80-120			
Orthophosphate	13.8	0.50	1.5	mg/L	16.7	ND	82.7	80-120			
Matrix Spike (AK83193-MS2)		**Source: 18K1395-01**			Prepared & Analyzed: 11/15/18						
Nitrate as N	10.6	0.20	1.0	mg/L	5.56	4.78	104	80-120			
Nitrite as N	5.43	0.25	1.0	mg/L	5.56	ND	97.7	80-120			
Orthophosphate	14.7	0.50	1.5	mg/L	16.7	ND	88.0	80-120			
Matrix Spike Dup (AK83193-MSD1)		**Source: 18K1354-01**			Prepared & Analyzed: 11/15/18						
Nitrate as N	8.52	0.20	1.0	mg/L	5.56	2.94	100	80-120	1.38	20	
Orthophosphate	14.1	0.50	1.5	mg/L	16.7	ND	84.8	80-120	2.56	20	
Nitrite as N	5.41	0.25	1.0	mg/L	5.56	ND	97.4	80-120	2.18	20	

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Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	12/12/18 05:50

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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November 29, 2018

Lab ID: 18K0644

SHERI L. SPEAKS
ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
RE: LOW LEVEL METALS 18K1420

Dear SHERI L. SPEAKS ,

Enclosed are the analysis results for Work Order number 18K0644. All analyses were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

Ricky D. Jensen
Laboratory Director
California ELAP Certification Number 1677

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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18K1420

Lab No: 18K0644
Reported: 11/29/18
Phone: (707) 468-0401
P.O. #

Metals - Total

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
18K1420-01 ER167.8 - Grab Water (18K0644-01) Sampled:11/13/18 08:10 Received:11/15/18 13:02									
Methyl Mercury as Mercury	ng/l	**0.158**		0.020	0.050	EPA 1630	11/28/18	11/27/18	B8K1229
18K1420-02 ER-DUP - Grab Water (18K0644-02) Sampled:11/13/18 08:15 Received:11/15/18 13:02									
Methyl Mercury as Mercury	ng/l	**0.157**		0.020	0.050	EPA 1630	11/28/18	11/27/18	B8K1229
18K1420-03 LP3-S - Grab Water (18K0644-03) Sampled:11/13/18 11:05 Received:11/15/18 13:02									
Methyl Mercury as Mercury	ng/l	**0.110**		0.020	0.050	EPA 1630	11/28/18	11/27/18	B8K1229
18K1420-04 LP3-M - Grab Water (18K0644-04) Sampled:11/13/18 11:20 Received:11/15/18 13:02									
Methyl Mercury as Mercury	ng/l	**0.165**		0.020	0.050	EPA 1630	11/28/18	11/27/18	B8K1229
18K1420-05 LP3-B - Grab Water (18K0644-05) Sampled:11/13/18 11:45 Received:11/15/18 13:02									
Methyl Mercury as Mercury	ng/l	**0.172**		0.020	0.050	EPA 1630	11/28/18	11/27/18	B8K1229
18K1420-06 LP1-S - Grab Water (18K0644-06) Sampled:11/13/18 12:30 Received:11/15/18 13:02									
Methyl Mercury as Mercury	ng/l	**0.113**		0.020	0.050	EPA 1630	11/28/18	11/27/18	B8K1229
18K1420-07 LP1-M - Grab Water (18K0644-07) Sampled:11/13/18 12:45 Received:11/15/18 13:02									
Methyl Mercury as Mercury	ng/l	**0.095**		0.020	0.050	EPA 1630	11/28/18	11/27/18	B8K1229
18K1420-08 LP1-B - Grab Water (18K0644-08) Sampled:11/13/18 13:05 Received:11/15/18 13:02									
Methyl Mercury as Mercury	ng/l	**0.113**		0.020	0.050	EPA 1630	11/28/18	11/27/18	B8K1229
18K1420-09 LP2-S - Grab Water (18K0644-09) Sampled:11/13/18 15:10 Received:11/15/18 13:02									
Methyl Mercury as Mercury	ng/l	**0.104**		0.020	0.050	EPA 1630	11/28/18	11/27/18	B8K1229
18K1420-10 LP2-B - Grab Water (18K0644-10) Sampled:11/13/18 15:20 Received:11/15/18 13:02									
Methyl Mercury as Mercury	ng/l	**0.106**		0.020	0.050	EPA 1630	11/28/18	11/27/18	B8K1229
18K1420-11 LP-BL - Grab Water (18K0644-11) Sampled:11/13/18 15:30 Received:11/15/18 13:02									
Methyl Mercury as Mercury	ng/l	ND		0.020	0.050	EPA 1630	11/28/18	11/27/18	B8K1229

Approved By

Basic Laboratory Inc
California ELAP Cert #1677 and #2718

basic laboratory
www.basiclab.com
2218 Railroad Avenue voice 530.243.7234
Redding, California 96001 fax 530.243.7494
3860 Morrow Lane, Suite F voice 530.894.8966
Chico, California 95928 fax 530.894.5143

Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18K1420

Lab No: 18K0644
Reported: 11/29/18
Phone: (707) 468-0401
P.O. #

Quality Control Data

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Metals - Total										
Batch B8K1229 - Draft EPA Method 1630 Distillation (Modified)										
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
LCS										
Methyl Mercury as Mercury	1.88	0.050	ng/l	2.00		93.9	67-133			
Matrix Spike Source: 18K0507-01										
Methyl Mercury as Mercury	1.16	0.050	ng/l	1.00	ND	116	65-135			
Matrix Spike Source: 18K0644-07										
Methyl Mercury as Mercury	1.18	0.050	ng/l	1.00	0.095	108	65-135			
Matrix Spike Dup Source: 18K0507-01										
Methyl Mercury as Mercury	1.13	0.050	ng/l	1.00	ND	113	65-135	3.00	35	
Matrix Spike Dup Source: 18K0644-07										
Methyl Mercury as Mercury	1.22	0.050	ng/l	1.00	0.095	112	65-135	3.08	35	

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

basic laboratory

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voice 530.894.8966
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Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18K1420

Lab No: 18K0644
Reported: 11/29/18
Phone: (707) 468-0401
P.O. #

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). The J flag is equivalent to the DNQ Estimated Concentration flag.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
<	Less than reporting limit
≤	Less than or equal to reporting limit
>	Greater than reporting limit
≥	Greater than or equal to reporting limit
MDL	Method Detection Limit
RL/ML	Minimum Level of Quantitation
MCL/AL	Maxium Contaminant Level/Action Level
mg/kg	Results reported as wet weight
TTLC	Total Threshold Limit Concentration
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leachate Procedure
Note 1	Received Temperature - according to EPA guidelines, samples for most chemistry methods should be held at ≤6 degrees C after collection, including during transportation, unless the time from sampling to delivery is <2 hours. Regulating agencies may invalidate results if temperature requirements are not met.
Note 2	According to 40 CFR Part 136 Table II, the following tests should be analyzed in the field within 15 minutes of sampling: pH, chlorine, dissolved oxygen, and sulfite.

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18K1420

18K0644
11/29/18

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

Basic Laboratory
2218 Railroad Ave
Redding, CA 96001
Phone :530-243-7234
Fax: 530-243-7494
Terms: Net 30

18K0644
1

Analysis	Due	Expires	Comments
18K1420-01 ER167.8 [Water] Sampled 11/13/18 08:10			-1 6.2°
BAL Hg Methyl	11/29/18 12:00	05/12/19 08:10	
Containers Supplied:			
500ml Glass - HCl (I)			
18K1420-02 ER-DUP [Water] Sampled 11/13/18 08:15			-2 5.9°
BAL Hg Methyl	11/29/18 12:00	05/12/19 08:15	
Containers Supplied:			
500ml Glass - HCl (I)			
18K1420-03 LP3-S [Water] Sampled 11/13/18 11:05			-3 6.4°
BAL Hg Methyl	11/29/18 12:00	05/12/19 11:05	
Containers Supplied:			
500ml Glass - HCl (I)			
18K1420-04 LP3-M [Water] Sampled 11/13/18 11:20			-4 6.9°
BAL Hg Methyl	11/29/18 12:00	05/12/19 11:20	
Containers Supplied:			
500ml Glass - HCl (I)			
18K1420-05 LP3-B [Water] Sampled 11/13/18 11:45			TW-4-5 7.5°
BAL Hg Methyl	11/29/18 12:00	05/12/19 11:45	
Containers Supplied:			
500ml Glass - HCl (I)			

Released By	Date	Received By	Date	
	11-14-18	T Wilkerson	11-15-18	1302
		TW	11-15-18	1415

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18K1420

18K0644

Analysis	Due	Expires	Comments
18K1420-06 LP1-S [Water] Sampled 11/13/18 12:30			TW-56 8.9c
BAL Hg Methyl	11/29/18 12:00	05/12/19 12:30	
Containers Supplied:			
500ml Glass - HCl (I)			
18K1420-07 LP1-M [Water] Sampled 11/13/18 12:45			TW-57 8.0
BAL Hg Methyl	11/29/18 12:00	05/12/19 12:45	
Containers Supplied:			
500ml Glass - HCl (I)			
18K1420-08 LP1-B [Water] Sampled 11/13/18 13:05			-8 9.0c
BAL Hg Methyl	11/29/18 12:00	05/12/19 13:05	
Containers Supplied:			
500ml Glass - HCl (I)			
18K1420-09 LP2-S [Water] Sampled 11/13/18 15:10			TW-59 8.7c
BAL Hg Methyl	11/29/18 12:00	05/12/19 15:10	
Containers Supplied:			
500ml Glass - HCl (I)			
18K1420-10 LP2-B [Water] Sampled 11/13/18 15:20			TW-510 7.4c
BAL Hg Methyl	11/29/18 12:00	05/12/19 15:20	
Containers Supplied:			
500ml Glass - HCl (I)			
18K1420-11 LP-BL [Water] Sampled 11/13/18 15:30			TW-511 6.0c
BAL Hg Methyl	11/29/18 12:00	05/12/19 15:30	
Containers Supplied:			
500ml Glass - HCl (I)			

Released By	Date	Received By	Date	
	11-14-18	TWilhelmson	11-15-18	1302
Released By	Date	Received By	Date	
		TLW	11-15-18	1415

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18K1420

18K0644

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+QC
+MDL

Released By	Date	Received By	Date	
	11-14-18	T.W Whelmoon	11-15-18	1302
Released By	Date	Received By	Date	
		TW	11-15-18	1415

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Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18K1428 Pg 1 of 4

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

TAT: Standard 10 days ⊘ | RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C: Ukiah temp: 0.8 | Livermore temp: | Elk Grove temp:

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	TOC	DOC	Fe 200.8 Total	Ammonia-N	Phosphorus, Total	TKN	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	Chlorophyll-A	Sulfide	Sample Notes or DDW Source Numbers:
ER167.8	11/13	810			X								X			10	X	X	X	X	X	X	X	X	X	X	X	CANCEL TOC DUE TO INSTRUMENT FAILURE, -01 & -02 ONLY. PER DSP 11.27.18
ER-DUP		815																										
LP3-S		1105																										
LP3-M		1120																										
LP3-B		1145																										
LP1-S		1230																										
LP1-M		1245																										NO MORE SAMPLE
LP1-B	↓	1305											↓			↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
More on page 2																												

Relinquished by	Received by	Date	Time
Christina Buck		11/13/18	1635

DDW Write On EDT Transmission? ○ Yes ○ No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

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Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18K1420 Pg 2 of 4

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	TOC	DOC	Fe 200.8 Total	Ammonia-N	Phosphorus, Total	TKN	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	Chlorophyll-A	Sulfide	Sample Notes or DDW Source Numbers:
LP2-S	11/13	1510											X			10	X	X	X	X	X	X	X	X	X	X	X	
LP2-B	↓	1520											↓			↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
LP-BL	↓	1530											↓			↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	

TAT
Standard 10 days ⊘
RUSH: 5 days ○ 48 hours ○ Other: ___ days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 0.8
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		11/13/18	1635

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):

Travel and Site Time:	Mileage:	Misc. Supplies:

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Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18K1428 Pg 3 of 4

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Analysis Request: Hg 1631	MeHg 1630	Sample Notes or DDW Source Numbers:
ER167.8	11/13	810											X				X	X	labels not sticking to bags
ER-DUP	↓	815											↓			-			
LP3-S		1105														see			
LP3-M		1120														P1			
LP3-B		1145																	
LP1-S		1230																	
LP1-M		1245																	
LP1-B	↓	1305											↓				↓	↓	

TAT
Standard 10 days
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 0-8
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		~~11/18~~ 11/13/18	1635

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

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Global ID:
EDF to (Email Address):
Sampling Company Log Code:

Travel and Site Time:	Mileage:	Misc. Supplies:

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Lab No 18K1420 Pg 4 of 4

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

TAT: Standard 10 days ○ | RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C: Ukiah temp: 0.8 | Livermore temp: | Elk Grove temp:

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Analysis Request: Hg 1631	MeHg 1630	Sample Notes or DDW Source Numbers:
LP2-S	11/13	1510											X				X	X	
LP2-B	↓	1520											↓			qq P1	↓	↓	
LP-BL	↓	1530											↓			P1	↓	↓	

Relinquished by	Received by	Date	Time
Christina Buck		11/13/18	1635

DDW Write On EDT Transmission? ○ Yes ○ No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 • Phone: (916) 686-5190 • Fax: (916) 686-5192
North Bay: 110 Liberty Street, Petaluma, CA 94952 • Phone: (707) 769-3128 • Fax: (707) 769-8093

ELAP Certificates 1551, 2728, 2922, and 2303

24 December 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18K1591

Enclosed are the results of analyses for samples received by the laboratory on 11/14/18 16:55. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267
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North Bay: 110 Liberty Street, Petaluma, CA 94952 • Phone: (707) 769-3128 • Fax: (707) 769-8093

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/24/18 08:13

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LP-EQBL	18K1591-01	Water	11/14/18 09:20	11/14/18 16:55
ER-BL	18K1591-02	Water	11/14/18 09:05	11/14/18 16:55
LP4-S	18K1591-03	Water	11/14/18 10:25	11/14/18 16:55
LP4-B	18K1591-04	Water	11/14/18 10:45	11/14/18 16:55
LP-DUP	18K1591-05	Water	11/14/18 10:35	11/14/18 16:55
RF 3.8	18K1591-06	Water	11/14/18 11:55	11/14/18 16:55
ER 173.7	18K1591-07	Water	11/14/18 14:00	11/14/18 16:55

This represents an amended copy of the original report.

Subcontracted results added. Complete report.

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.

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e-mail: clientservices@alpha-labs.com
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North Bay: 110 Liberty Street, Petaluma, CA 94952 • Phone: (707) 769-3128 • Fax: (707) 769-8093

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/24/18 08:13

Metals by EPA Method 200.8 ICP/MS

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-EQBL (18K1591-01) Water Sampled: 11/14/18 09:20 Received: 11/14/18 16:55											
Iron	ND	40	200	ug/L	4	AK83339	11/19/18 09:15	11/27/18 02:46	EPA 200.8	MMY	R-01, U
ER-BL (18K1591-02) Water Sampled: 11/14/18 09:05 Received: 11/14/18 16:55											
Iron	ND	40	200	ug/L	4	AK83339	11/19/18 09:15	11/27/18 02:52	EPA 200.8	MMY	R-01, U
LP4-S (18K1591-03) Water Sampled: 11/14/18 10:25 Received: 11/14/18 16:55											
Iron	**120**	**40**	**200**	**ug/L**	4	AK83339	11/19/18 09:15	11/27/18 02:59	EPA 200.8	MMY	R-01, J
LP4-B (18K1591-04) Water Sampled: 11/14/18 10:45 Received: 11/14/18 16:55											
Iron	**130**	**40**	**200**	**ug/L**	4	AK83339	11/19/18 09:15	11/27/18 03:06	EPA 200.8	MMY	R-01, J
LP-DUP (18K1591-05) Water Sampled: 11/14/18 10:35 Received: 11/14/18 16:55											
Iron	**130**	**40**	**200**	**ug/L**	4	AK83339	11/19/18 09:15	11/27/18 03:13	EPA 200.8	MMY	R-01, J
RF 3.8 (18K1591-06) Water Sampled: 11/14/18 11:55 Received: 11/14/18 16:55											
Iron	**96**	**40**	**200**	**ug/L**	4	AK83339	11/19/18 09:15	11/27/18 03:19	EPA 200.8	MMY	R-01, J
ER 173.7 (18K1591-07) Water Sampled: 11/14/18 14:00 Received: 11/14/18 16:55											
Iron	**150**	**40**	**200**	**ug/L**	4	AK83339	11/19/18 09:15	11/27/18 03:26	EPA 200.8	MMY	R-01, J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/24/18 08:13

Metals by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-EQBL (18K1591-01) Water Sampled: 11/14/18 09:20 Received: 11/14/18 16:55											
Mercury	ND	0.200	0.500	ng/l	1	AK83379	11/19/18 14:00	11/20/18 16:42	EPA 1631E	AJC	U
ER-BL (18K1591-02) Water Sampled: 11/14/18 09:05 Received: 11/14/18 16:55											
Mercury	**0.311**	**0.200**	**0.500**	**ng/l**	1	AK83379	11/19/18 14:00	11/20/18 16:50	EPA 1631E	AJC	J
LP4-S (18K1591-03) Water Sampled: 11/14/18 10:25 Received: 11/14/18 16:55											
Mercury	**0.928**	**0.200**	**0.500**	**ng/l**	1	AK83379	11/19/18 14:00	11/20/18 17:15	EPA 1631E	AJC	
LP4-B (18K1591-04) Water Sampled: 11/14/18 10:45 Received: 11/14/18 16:55											
Mercury	**1.09**	**0.200**	**0.500**	**ng/l**	1	AK83379	11/19/18 14:00	11/20/18 17:39	EPA 1631E	AJC	
LP-DUP (18K1591-05) Water Sampled: 11/14/18 10:35 Received: 11/14/18 16:55											
Mercury	**1.00**	**0.200**	**0.500**	**ng/l**	1	AK83379	11/19/18 14:00	11/20/18 17:47	EPA 1631E	AJC	
RF 3.8 (18K1591-06) Water Sampled: 11/14/18 11:55 Received: 11/14/18 16:55											
Mercury	**2.23**	**0.200**	**0.500**	**ng/l**	1	AK83379	11/19/18 14:00	11/20/18 17:55	EPA 1631E	AJC	
ER 173.7 (18K1591-07) Water Sampled: 11/14/18 14:00 Received: 11/14/18 16:55											
Mercury	**0.701**	**0.200**	**0.500**	**ng/l**	1	AK83379	11/19/18 14:00	11/20/18 18:04	EPA 1631E	AJC	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/24/18 08:13

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-EQBL (18K1591-01) Water Sampled: 11/14/18 09:20 Received: 11/14/18 16:55											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK83710	11/28/18 10:00	11/28/18 16:00	SM4500NH3B,C	FCM	U
Biochemical Oxygen Demand	**2.1**	**2.0**	**5.0**	**mg/L**	1	AK83215	11/15/18 13:00	11/20/18 08:15	SM5210B	WCS	J
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AK83338	11/16/18 08:45	11/29/18 12:00	SM10200H	EV	U
Dissolved Organic Carbon	ND	0.600	1.00	mg/L	1	AK83344	11/19/18 08:35	11/20/18 14:03	SM5310C	SMS	U
Sulfide	ND	0.020	0.10	mg/L	1	AK83491	11/21/18 14:30	11/21/18 17:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AK83225	11/15/18 09:09	11/27/18 12:53	Calculation	ZMH	U
Total Kjeldahl Nitrogen	**0.16**	**0.050**	**1.0**	**mg/L**	1	AK83589	11/27/18 07:09	11/29/18 10:46	SM4500-Norg B	JVO	J
Phosphorus, total	**0.15**	**0.010**	**0.040**	**mg/L**	1	AK83336	11/19/18 09:15	11/19/18 14:04	SM4500-P E	SMS	
Total Organic Carbon	ND	0.300	1.00	mg/L	1	AK83633	11/27/18 09:56	11/30/18 13:53	SM5310C	SMS	U
ER-BL (18K1591-02) Water Sampled: 11/14/18 09:05 Received: 11/14/18 16:55											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK83710	11/28/18 10:00	11/28/18 16:00	SM4500NH3B,C	FCM	U
Biochemical Oxygen Demand	**2.3**	**2.0**	**5.0**	**mg/L**	1	AK83215	11/15/18 13:00	11/20/18 08:15	SM5210B	WCS	J
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AK83338	11/16/18 08:45	11/29/18 12:00	SM10200H	EV	U
Dissolved Organic Carbon	ND	0.600	1.00	mg/L	1	AK83344	11/19/18 08:35	11/20/18 14:39	SM5310C	SMS	U
Sulfide	ND	0.020	0.10	mg/L	1	AK83491	11/21/18 14:30	11/21/18 17:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AK83225	11/15/18 09:09	11/27/18 12:53	Calculation	ZMH	U
Total Kjeldahl Nitrogen	**0.070**	**0.050**	**1.0**	**mg/L**	1	AK83589	11/27/18 07:09	11/29/18 10:46	SM4500-Norg B	JVO	J
Phosphorus, total	**0.012**	**0.010**	**0.040**	**mg/L**	1	AK83336	11/19/18 09:15	11/19/18 14:04	SM4500-P E	SMS	J
Total Organic Carbon	ND	0.300	1.00	mg/L	1	AK83633	11/27/18 09:56	11/30/18 14:06	SM5310C	SMS	U
LP4-S (18K1591-03) Water Sampled: 11/14/18 10:25 Received: 11/14/18 16:55											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK83710	11/28/18 10:00	11/28/18 16:00	SM4500NH3B,C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AK83215	11/15/18 13:00	11/20/18 08:15	SM5210B	WCS	U
Chlorophyll-a	**0.0044**	**0.0010**	**0.010**	**mg/L**	1	AK83338	11/16/18 08:45	11/29/18 12:00	SM10200H	EV	J
Dissolved Organic Carbon	**2.60**	**0.600**	**1.00**	**mg/L**	1	AK83344	11/19/18 08:35	11/20/18 14:51	SM5310C	SMS	
Sulfide	ND	0.020	0.10	mg/L	1	AK83491	11/21/18 14:30	11/21/18 17:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	**0.051**	**0.0086**	**0.40**	**mg/L**	1	AK83225	11/15/18 09:09	11/27/18 12:53	Calculation	ZMH	J
Total Kjeldahl Nitrogen	**0.35**	**0.050**	**1.0**	**mg/L**	1	AK83589	11/27/18 07:09	11/29/18 10:46	SM4500-Norg B	JVO	J
Phosphorus, total	**0.033**	**0.010**	**0.040**	**mg/L**	1	AK83336	11/19/18 09:15	11/19/18 14:04	SM4500-P E	SMS	J
Total Organic Carbon	**2.79**	**0.300**	**1.00**	**mg/L**	1	AK83633	11/27/18 09:56	11/30/18 14:18	SM5310C	SMS	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/24/18 08:13

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP4-B (18K1591-04) Water Sampled: 11/14/18 10:45 Received: 11/14/18 16:55											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK83710	11/28/18 10:00	11/28/18 16:00	SM4500NH3B,C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AK83215	11/15/18 13:00	11/20/18 08:15	SM5210B	WCS	U
Chlorophyll-a	**0.0024**	**0.0010**	**0.010**	**mg/L**	1	AK83338	11/16/18 08:45	11/29/18 12:00	SM10200H	EV	J
Dissolved Organic Carbon	**2.68**	**0.600**	**1.00**	**mg/L**	1	AK83344	11/19/18 08:35	11/20/18 15:03	SM5310C	SMS	
Sulfide	ND	0.020	0.10	mg/L	1	AK83491	11/21/18 14:30	11/21/18 17:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	**0.046**	**0.0086**	**0.40**	**mg/L**	1	AK83225	11/15/18 09:09	11/27/18 12:53	Calculation	ZMH	J
Total Kjeldahl Nitrogen	**0.32**	**0.050**	**1.0**	**mg/L**	1	AK83589	11/27/18 07:09	11/29/18 10:46	SM4500-Norg B	JVO	J
Phosphorus, total	**0.027**	**0.010**	**0.040**	**mg/L**	1	AK83336	11/19/18 09:15	11/19/18 14:04	SM4500-P E	SMS	J
Total Organic Carbon	**2.80**	**0.300**	**1.00**	**mg/L**	1	AK83633	11/27/18 09:56	11/30/18 14:31	SM5310C	SMS	
LP-DUP (18K1591-05) Water Sampled: 11/14/18 10:35 Received: 11/14/18 16:55											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK83710	11/28/18 10:00	11/28/18 16:00	SM4500NH3B,C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AK83215	11/15/18 13:00	11/20/18 08:15	SM5210B	WCS	U
Chlorophyll-a	**0.0042**	**0.0010**	**0.010**	**mg/L**	1	AK83338	11/16/18 08:45	11/29/18 12:00	SM10200H	EV	J
Dissolved Organic Carbon	**2.73**	**0.600**	**1.00**	**mg/L**	1	AK83344	11/19/18 08:35	11/20/18 15:15	SM5310C	SMS	
Sulfide	ND	0.020	0.10	mg/L	1	AK83491	11/21/18 14:30	11/21/18 17:00	SM4500-S2 D	EV	U
Nitrate + Nitrite as N	**0.051**	**0.0086**	**0.40**	**mg/L**	1	AK83225	11/15/18 09:09	11/27/18 12:53	Calculation	ZMH	J
Total Kjeldahl Nitrogen	**0.35**	**0.050**	**1.0**	**mg/L**	1	AK83589	11/27/18 07:09	11/29/18 10:46	SM4500-Norg B	JVO	J
Phosphorus, total	**0.030**	**0.010**	**0.040**	**mg/L**	1	AK83336	11/19/18 09:15	11/19/18 14:04	SM4500-P E	SMS	J
Total Organic Carbon	**2.79**	**0.300**	**1.00**	**mg/L**	1	AK83633	11/27/18 09:56	11/30/18 15:11	SM5310C	SMS	
RF 3.8 (18K1591-06) Water Sampled: 11/14/18 11:55 Received: 11/14/18 16:55											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK83710	11/28/18 10:00	11/28/18 16:00	SM4500NH3B,C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AK83215	11/15/18 13:00	11/20/18 08:15	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AK83338	11/16/18 08:45	11/29/18 12:00	SM10200H	EV	U
Dissolved Organic Carbon	**0.786**	**0.600**	**1.00**	**mg/L**	1	AK83344	11/19/18 08:35	11/20/18 15:27	SM5310C	SMS	J
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AK83225	11/15/18 09:09	11/27/18 12:53	Calculation	ZMH	U
Total Kjeldahl Nitrogen	**0.070**	**0.050**	**1.0**	**mg/L**	1	AK83589	11/27/18 07:09	11/28/18 10:16	SM4500-Norg B	JVO	J
Phosphorus, total	**0.020**	**0.010**	**0.040**	**mg/L**	1	AK83336	11/19/18 09:15	11/19/18 14:04	SM4500-P E	SMS	J
Total Organic Carbon	**0.571**	**0.300**	**1.00**	**mg/L**	1	AK83633	11/27/18 09:56	11/30/18 15:23	SM5310C	SMS	J

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/24/18 08:13

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 173.7 (18K1591-07) Water Sampled: 11/14/18 14:00 Received: 11/14/18 16:55											
Ammonia as N	ND	0.10	0.20	mg/L	1	AK83710	11/28/18 10:00	11/28/18 16:00	SM4500NH3B,C	FCM	U
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L	1	AK83215	11/15/18 13:00	11/20/18 08:15	SM5210B	WCS	U
Chlorophyll-a	ND	0.0010	0.010	mg/L	1	AK83338	11/16/18 08:45	11/29/18 12:00	SM10200H	EV	U
Dissolved Organic Carbon	**1.07**	**0.600**	**1.00**	**mg/L**	1	AK83344	11/19/18 08:35	11/20/18 15:39	SM5310C	SMS	
Nitrate + Nitrite as N	ND	0.0086	0.40	mg/L	1	AK83225	11/15/18 09:09	11/27/18 12:53	Calculation	ZMH	U
Total Kjeldahl Nitrogen	**0.10**	**0.050**	**1.0**	**mg/L**	1	AK83589	11/27/18 07:09	11/29/18 10:46	SM4500-Norg B	JVO	J
Phosphorus, total	**0.034**	**0.010**	**0.040**	**mg/L**	1	AK83336	11/19/18 09:15	11/19/18 14:04	SM4500-P E	SMS	J
Total Organic Carbon	**1.03**	**0.300**	**1.00**	**mg/L**	1	AK83633	11/27/18 09:56	11/30/18 15:36	SM5310C	SMS	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/24/18 08:13

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP-EQBL (18K1591-01) Water Sampled: 11/14/18 09:20 Received: 11/14/18 16:55											
Nitrate as N	ND	0.040	0.20	mg/L	1	AK83259	11/15/18 15:49	11/15/18 15:49	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AK83259	11/15/18 15:49	11/15/18 15:49	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AK83259	11/15/18 15:49	11/15/18 15:49	EPA 300.0	SMP	U
ER-BL (18K1591-02) Water Sampled: 11/14/18 09:05 Received: 11/14/18 16:55											
Nitrate as N	ND	0.040	0.20	mg/L	1	AK83259	11/15/18 16:06	11/15/18 16:06	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AK83259	11/15/18 16:06	11/15/18 16:06	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AK83259	11/15/18 16:06	11/15/18 16:06	EPA 300.0	SMP	U
LP4-S (18K1591-03) Water Sampled: 11/14/18 10:25 Received: 11/14/18 16:55											
Nitrate as N	**0.051**	**0.040**	**0.20**	**mg/L**	1	AK83259	11/15/18 16:22	11/15/18 16:22	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AK83259	11/15/18 16:22	11/15/18 16:22	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AK83259	11/15/18 16:22	11/15/18 16:22	EPA 300.0	SMP	U
LP4-B (18K1591-04) Water Sampled: 11/14/18 10:45 Received: 11/14/18 16:55											
Nitrate as N	**0.046**	**0.040**	**0.20**	**mg/L**	1	AK83259	11/15/18 16:38	11/15/18 16:38	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AK83259	11/15/18 16:38	11/15/18 16:38	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AK83259	11/15/18 16:38	11/15/18 16:38	EPA 300.0	SMP	U
LP-DUP (18K1591-05) Water Sampled: 11/14/18 10:35 Received: 11/14/18 16:55											
Nitrate as N	**0.050**	**0.040**	**0.20**	**mg/L**	1	AK83259	11/15/18 16:55	11/15/18 16:55	EPA 300.0	SMP	J
Nitrite as N	ND	0.050	0.20	mg/L	1	AK83259	11/15/18 16:55	11/15/18 16:55	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AK83259	11/15/18 16:55	11/15/18 16:55	EPA 300.0	SMP	U
RF 3.8 (18K1591-06) Water Sampled: 11/14/18 11:55 Received: 11/14/18 16:55											
Nitrate as N	ND	0.040	0.20	mg/L	1	AK83259	11/15/18 17:11	11/15/18 17:11	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AK83259	11/15/18 17:11	11/15/18 17:11	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AK83259	11/15/18 17:11	11/15/18 17:11	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/24/18 08:13

Anions by EPA Method 300.0

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
ER 173.7 (18K1591-07) Water Sampled: 11/14/18 14:00 Received: 11/14/18 16:55											
Nitrate as N	ND	0.040	0.20	mg/L	1	AK83259	11/15/18 17:28	11/15/18 17:28	EPA 300.0	SMP	U
Nitrite as N	ND	0.050	0.20	mg/L	1	AK83259	11/15/18 17:28	11/15/18 17:28	EPA 300.0	SMP	U
Orthophosphate	ND	0.10	0.30	mg/L	1	AK83259	11/15/18 17:28	11/15/18 17:28	EPA 300.0	SMP	U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/24/18 08:13

Metals by EPA Method 200.8 ICP/MS - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK83339 - EPA 200.8											
Blank (AK83339-BLK1)					Prepared: 11/19/18 Analyzed: 11/26/18						
Iron	ND	10	50	ug/L							U
LCS (AK83339-BS1)					Prepared: 11/19/18 Analyzed: 11/26/18						
Iron	532	10	50	ug/L	520		102	85-115			
Duplicate (AK83339-DUP1)		**Source: 18K1699-01**			Prepared: 11/19/18 Analyzed: 11/26/18						
Iron	ND	40	200	ug/L		ND				20	R-01, U
Matrix Spike (AK83339-MS1)		**Source: 18K1699-01**			Prepared: 11/19/18 Analyzed: 11/26/18						
Iron	522	40	200	ug/L	520	ND	100	70-130			
Matrix Spike (AK83339-MS2)		**Source: 18K1200-01**			Prepared: 11/19/18 Analyzed: 11/27/18						
Iron	733	40	200	ug/L	520	210	101	70-130			
Matrix Spike Dup (AK83339-MSD1)		**Source: 18K1699-01**			Prepared: 11/19/18 Analyzed: 11/26/18						
Iron	542	40	200	ug/L	520	ND	104	70-130	3.70	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/24/18 08:13

Metals by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK83379 - EPA 1631											
Blank (AK83379-BLK1)					Prepared: 11/19/18 Analyzed: 11/20/18						
Mercury	ND	0.200	0.500	ng/l							U
LCS (AK83379-BS1)					Prepared: 11/19/18 Analyzed: 11/20/18						
Mercury	5.34	0.200	0.500	ng/l	5.00		107	77-123			
Matrix Spike (AK83379-MS1)		**Source: 18K1420-08**			Prepared: 11/19/18 Analyzed: 11/20/18						
Mercury	27.6	0.200	0.500	ng/l	25.0	1.09	106	71-125			
Matrix Spike (AK83379-MS2)		**Source: 18K1591-03**			Prepared: 11/19/18 Analyzed: 11/20/18						
Mercury	26.7	0.200	0.500	ng/l	25.0	0.928	103	71-125			
Matrix Spike Dup (AK83379-MSD1)		**Source: 18K1420-08**			Prepared: 11/19/18 Analyzed: 11/20/18						
Mercury	27.8	0.200	0.500	ng/l	25.0	1.09	107	71-125	0.685	24	
Matrix Spike Dup (AK83379-MSD2)		**Source: 18K1591-03**			Prepared: 11/19/18 Analyzed: 11/20/18						
Mercury	26.4	0.200	0.500	ng/l	25.0	0.928	102	71-125	1.13	24	
Reference (AK83379-SRM1)					Prepared: 11/19/18 Analyzed: 11/20/18						
Mercury	52.4	0.200	0.500	ng/l	50.0		105	68-125			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/24/18 08:13

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK83215 - General Preparation											
Blank (AK83215-BLK1)					Prepared: 11/15/18 Analyzed: 11/20/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
Blank (AK83215-BLK2)					Prepared: 11/15/18 Analyzed: 11/20/18						
Biochemical Oxygen Demand	ND	2.0	5.0	mg/L							U
LCS (AK83215-BS1)					Prepared: 11/15/18 Analyzed: 11/20/18						
Biochemical Oxygen Demand	193	2.0	5.0	mg/L	200		96.5	84-115			
Duplicate (AK83215-DUP1)		**Source: 18K1644-01**			Prepared: 11/15/18 Analyzed: 11/20/18						
Biochemical Oxygen Demand	304	2.0	5.0	mg/L		300			1.32	30	
Batch AK83336 - General Prep											
Blank (AK83336-BLK1)					Prepared & Analyzed: 11/19/18						
Phosphorus, total	ND	0.010	0.040	mg/L							U
LCS (AK83336-BS1)					Prepared & Analyzed: 11/19/18						
Phosphorus, total	0.195	0.010	0.040	mg/L	0.200		97.3	85-115			
Duplicate (AK83336-DUP1)		**Source: 18K1591-01**			Prepared & Analyzed: 11/19/18						
Phosphorus, total	0.146	0.010	0.040	mg/L		0.148			1.80	20	
Matrix Spike (AK83336-MS1)		**Source: 18K1591-01**			Prepared & Analyzed: 11/19/18						
Phosphorus, total	0.323	0.010	0.040	mg/L	0.200	0.148	87.5	70-130			
Matrix Spike (AK83336-MS2)		**Source: 18K1591-02**			Prepared & Analyzed: 11/19/18						
Phosphorus, total	0.180	0.010	0.040	mg/L	0.200	0.0116	84.2	70-130			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/24/18 08:13

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK83336 - General Prep											
Matrix Spike Dup (AK83336-MSD1)		**Source: 18K1591-01**			Prepared & Analyzed: 11/19/18						
Phosphorus, total	0.326	0.010	0.040	mg/L	0.200	0.148	88.9	70-130	0.816	20	
Batch AK83338 - General Preparation											
Blank (AK83338-BLK1)					Prepared: 11/14/18 Analyzed: 11/29/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L							U
Duplicate (AK83338-DUP1)		**Source: 18K1420-01**			Prepared: 11/14/18 Analyzed: 11/29/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Duplicate (AK83338-DUP2)		**Source: 18K1591-01**			Prepared: 11/16/18 Analyzed: 11/29/18						
Chlorophyll-a	ND	0.0010	0.010	mg/L		ND				50	U
Batch AK83344 - General Prep											
Blank (AK83344-BLK1)					Prepared: 11/19/18 Analyzed: 11/20/18						
Dissolved Organic Carbon	ND	0.600	1.00	mg/L							U
LCS (AK83344-BS1)					Prepared: 11/19/18 Analyzed: 11/20/18						
Dissolved Organic Carbon	9.26	0.600	1.00	mg/L	10.0		92.6	85-115			
LCS Dup (AK83344-BSD1)					Prepared: 11/19/18 Analyzed: 11/20/18						
Dissolved Organic Carbon	8.76	0.600	1.00	mg/L	10.0		87.6	85-115	5.57	20	
Duplicate (AK83344-DUP1)		**Source: 18K1420-01**			Prepared: 11/19/18 Analyzed: 11/20/18						
Dissolved Organic Carbon	2.88	0.600	1.00	mg/L		2.68			7.10	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/24/18 08:13

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK83344 - General Prep											
Matrix Spike (AK83344-MS1)		**Source: 18K1420-05**			Prepared: 11/19/18 Analyzed: 11/20/18						
Dissolved Organic Carbon	10.3	0.600	1.00	mg/L	10.0	2.63	76.3	70-130			
Matrix Spike Dup (AK83344-MSD1)		**Source: 18K1420-05**			Prepared: 11/19/18 Analyzed: 11/20/18						
Dissolved Organic Carbon	11.6	0.600	1.00	mg/L	10.0	2.63	90.0	70-130	12.5	20	
Batch AK83491 - General Preparation											
Blank (AK83491-BLK1)					Prepared & Analyzed: 11/21/18						
Sulfide	ND	0.020	0.10	mg/L							U
LCS (AK83491-BS1)					Prepared & Analyzed: 11/21/18						
Sulfide	0.215	0.020	0.10	mg/L	0.214		100	85-115			
Duplicate (AK83491-DUP1)		**Source: 18K1591-01**			Prepared & Analyzed: 11/21/18						
Sulfide	ND	0.020	0.10	mg/L		ND				15	U
Matrix Spike (AK83491-MS1)		**Source: 18K1591-01**			Prepared & Analyzed: 11/21/18						
Sulfide	0.218	0.020	0.10	mg/L	0.214	ND	102	80-120			
Matrix Spike Dup (AK83491-MSD1)		**Source: 18K1591-01**			Prepared & Analyzed: 11/21/18						
Sulfide	0.220	0.020	0.10	mg/L	0.214	ND	103	80-120	0.913	15	
Batch AK83589 - General Prep											
LCS (AK83589-BS1)					Prepared: 11/27/18 Analyzed: 11/28/18						
Total Kjeldahl Nitrogen	2.95	0.050	1.0	mg/L	2.98		99.0	80-120			

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/24/18 08:13

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK83589 - General Prep											
LCS Dup (AK83589-BSD1)					Prepared: 11/27/18 Analyzed: 11/28/18						
Total Kjeldahl Nitrogen	2.86	0.050	1.0	mg/L	2.98		95.9	80-120	3.17	20	
Matrix Spike (AK83589-MS1)		**Source: 18K1632-03**			Prepared: 11/27/18 Analyzed: 11/28/18						
Total Kjeldahl Nitrogen	3.60	0.050	1.0	mg/L	2.98	0.788	94.2	75-125			
Matrix Spike Dup (AK83589-MSD1)		**Source: 18K1632-03**			Prepared: 11/27/18 Analyzed: 11/28/18						
Total Kjeldahl Nitrogen	3.69	0.050	1.0	mg/L	2.98	0.788	97.3	75-125	2.53	20	
Batch AK83633 - General Prep											
LCS (AK83633-BS1)					Prepared: 11/27/18 Analyzed: 11/30/18						
Total Organic Carbon	9.11	0.300	1.00	mg/L	10.0		91.1	85-115			
LCS Dup (AK83633-BSD1)					Prepared: 11/27/18 Analyzed: 11/30/18						
Total Organic Carbon	8.77	0.300	1.00	mg/L	10.0		87.7	85-115	3.80	20	
Duplicate (AK83633-DUP1)		**Source: 18K1949-02**			Prepared: 11/27/18 Analyzed: 11/30/18						
Total Organic Carbon	0.677	0.300	1.00	mg/L		0.655			3.29	20	J
Matrix Spike (AK83633-MS1)		**Source: 18K1949-01**			Prepared: 11/27/18 Analyzed: 11/30/18						
Total Organic Carbon	20.0	0.600	2.00	mg/L	20.0	ND	99.8	70-130			
Matrix Spike Dup (AK83633-MSD1)		**Source: 18K1949-01**			Prepared: 11/27/18 Analyzed: 11/30/18						
Total Organic Carbon	20.1	0.600	2.00	mg/L	20.0	ND	101	70-130	0.835	20	
Batch AK83710 - General Preparation											
Blank (AK83710-BLK1)					Prepared & Analyzed: 11/28/18						
Ammonia as N	ND	0.10	0.20	mg/L							U

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/24/18 08:13

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK83710 - General Preparation											
Blank (AK83710-BLK2)					Prepared & Analyzed: 11/28/18						
Ammonia as N	ND	0.10	0.20	mg/L							U
LCS (AK83710-BS1)					Prepared & Analyzed: 11/28/18						
Ammonia as N	4.99	0.10	0.20	mg/L	5.00		99.8	90-110			
LCS Dup (AK83710-BSD1)					Prepared & Analyzed: 11/28/18						
Ammonia as N	4.90	0.10	0.20	mg/L	5.00		98.1	90-110	1.76	20	
Matrix Spike (AK83710-MS1)		**Source: 18K1445-02**			Prepared & Analyzed: 11/28/18						
Ammonia as N	9.63	0.10	0.20	mg/L	10.0	ND	96.3	85-115			
Matrix Spike Dup (AK83710-MSD1)		**Source: 18K1445-02**			Prepared & Analyzed: 11/28/18						
Ammonia as N	9.81	0.10	0.20	mg/L	10.0	ND	98.1	85-115	1.80	20	

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	12/24/18 08:13

Anions by EPA Method 300.0 - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AK83259 - General Preparation											
Blank (AK83259-BLK1)					Prepared & Analyzed: 11/15/18						
Nitrate as N	ND	0.040	0.20	mg/L							U
Nitrite as N	ND	0.050	0.20	mg/L							U
Orthophosphate	ND	0.10	0.30	mg/L							U
LCS (AK83259-BS1)					Prepared & Analyzed: 11/15/18						
Nitrate as N	5.66	0.040	0.20	mg/L	5.56		102	90-110			
Nitrite as N	5.45	0.050	0.20	mg/L	5.56		98.0	90-110			
Orthophosphate	16.5	0.10	0.30	mg/L	16.7		99.2	90-110			
Duplicate (AK83259-DUP1)		**Source: 18K1591-01**			Prepared & Analyzed: 11/16/18						
Nitrite as N	ND	0.050	0.20	mg/L		ND				20	U
Nitrate as N	ND	0.040	0.20	mg/L		ND				20	U
Orthophosphate	ND	0.10	0.30	mg/L		ND				20	U
Matrix Spike (AK83259-MS1)		**Source: 18K1591-01**			Prepared & Analyzed: 11/16/18						
Nitrate as N	5.71	0.040	0.20	mg/L	5.56	ND	103	80-120			
Nitrite as N	5.11	0.050	0.20	mg/L	5.56	ND	92.0	80-120			
Orthophosphate	16.4	0.10	0.30	mg/L	16.7	ND	98.1	80-120			
Matrix Spike (AK83259-MS2)		**Source: 18K1628-01**			Prepared & Analyzed: 11/16/18						
Nitrate as N	5.67	0.040	0.20	mg/L	5.56	0.0472	101	80-120			
Nitrite as N	5.40	0.050	0.20	mg/L	5.56	ND	97.2	80-120			
Orthophosphate	16.4	0.10	0.30	mg/L	16.7	ND	98.3	80-120			
Matrix Spike Dup (AK83259-MSD1)		**Source: 18K1591-01**			Prepared & Analyzed: 11/16/18						
Nitrate as N	5.66	0.040	0.20	mg/L	5.56	ND	102	80-120	0.798	20	
Orthophosphate	16.5	0.10	0.30	mg/L	16.7	ND	98.9	80-120	0.726	20	
Nitrite as N	5.10	0.050	0.20	mg/L	5.56	ND	91.7	80-120	0.283	20	

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Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	12/24/18 08:13

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration, detected but not quantified (DNQ).
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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December 07, 2018

Lab ID: 18K0848

SHERI L. SPEAKS
ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
RE: LOW LEVEL METALS 18K1591

Dear SHERI L. SPEAKS ,

Enclosed are the analysis results for Work Order number 18K0848. All analyses were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

For

Ricky D. Jensen
Laboratory Director
California ELAP Certification Number 1677

basic laboratory

www.basiclab.com

2218 Railroad Avenue
Redding, California 96001
voice 530.243.7234
fax 530.243.7494

3860 Morrow Lane, Suite F
Chico, California 95928
voice 530.894.8966
fax 530.894.5143

Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18K1591

Lab No: 18K0848
Reported: 12/07/18
Phone: (707) 468-0401
P.O. #

Metals - Total

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
18K1591-01 LP-EQBL - Grab Water (18K0848-01) Sampled:11/14/18 09:20 Received:11/20/18 13:41									
Methyl Mercury as Mercury	ng/l	ND		0.020	0.050	EPA 1630	12/05/18	12/04/18	B8L0787
18K1591-02 ER-BL - Grab Water (18K0848-02) Sampled:11/14/18 09:05 Received:11/20/18 13:41									
Methyl Mercury as Mercury	ng/l	ND		0.020	0.050	EPA 1630	12/05/18	12/04/18	B8L0787
18K1591-03 LP4-S - Grab Water (18K0848-03) Sampled:11/14/18 10:25 Received:11/20/18 13:41									
Methyl Mercury as Mercury	ng/l	**0.147**		0.020	0.050	EPA 1630	12/05/18	12/04/18	B8L0787
18K1591-04 LP4-B - Grab Water (18K0848-04) Sampled:11/14/18 10:45 Received:11/20/18 13:41									
Methyl Mercury as Mercury	ng/l	**0.153**		0.020	0.050	EPA 1630	12/05/18	12/04/18	B8L0787
18K1591-05 LP-DUP - Grab Water (18K0848-05) Sampled:11/14/18 10:35 Received:11/20/18 13:41									
Methyl Mercury as Mercury	ng/l	**0.132**		0.020	0.050	EPA 1630	12/05/18	12/04/18	B8L0787
18K1591-06 RF 3.8 - Grab Water (18K0848-06) Sampled:11/14/18 11:55 Received:11/20/18 13:41									
Methyl Mercury as Mercury	ng/l	ND		0.020	0.050	EPA 1630	12/05/18	12/04/18	B8L0787
18K1591-07 ER 173.7 - Grab Water (18K0848-07) Sampled:11/14/18 14:00 Received:11/20/18 13:41									
Methyl Mercury as Mercury	ng/l	**0.052**		0.020	0.050	EPA 1630	12/05/18	12/04/18	B8L0787

Quality Control Data

Metals - Total

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch B8L0787 - Draft EPA Method 1630 Distillation (Modified)										
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
Blank										
Methyl Mercury as Mercury	ND	0.050	ng/l							
LCS										
Methyl Mercury as Mercury	1.94	0.050	ng/l	2.00		96.8	67-133			
Matrix Spike Source: 18K0848-01										
Methyl Mercury as Mercury	1.20	0.050	ng/l	1.00	ND	120	65-135			
Matrix Spike Source: 18K1113-01										
Methyl Mercury as Mercury	1.20	0.050	ng/l	1.00	ND	120	65-135			
Matrix Spike Dup Source: 18K0848-01										
Methyl Mercury as Mercury	1.16	0.050	ng/l	1.00	ND	116	65-135	3.04	35	
Matrix Spike Dup Source: 18K1113-01										
Methyl Mercury as Mercury	1.19	0.050	ng/l	1.00	ND	119	65-135	1.22	35	

Approved By

Basic Laboratory Inc
California ELAP Cert #1677 and #2718

basic laboratory

www.basiclab.com

2218 Railroad Avenue
Redding, California 96001
voice 530.243.7234
fax 530.243.7494

3860 Morrow Lane, Suite F
Chico, California 95928
voice 530.894.8966
fax 530.894.5143

Report To: ALPHA ANALYTICAL LABS - UKIAH
208 MASON STREET
UKIAH, CA 95482
Attention: SHERI L. SPEAKS
Project: LOW LEVEL METALS 18K1591

Lab No: 18K0848
Reported: 12/07/18
Phone: (707) 468-0401
P.O. #

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). The J flag is equivalent to the DNQ Estimated Concentration flag.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
<	Less than reporting limit
≤	Less than or equal to reporting limit
>	Greater than reporting limit
≥	Greater than or equal to reporting limit
MDL	Method Detection Limit
RL/ML	Minimum Level of Quantitation
MCL/AL	Maxium Contaminant Level/Action Level
mg/kg	Results reported as wet weight
TTLC	Total Threshold Limit Concentration
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leachate Procedure
Note 1	Received Temperature - according to EPA guidelines, samples for most chemistry methods should be held at ≤6 degrees C after collection, including during transportation, unless the time from sampling to delivery is <2 hours. Regulating agencies may invalidate results if temperature requirements are not met.
Note 2	According to 40 CFR Part 136 Table II, the following tests should be analyzed in the field within 15 minutes of sampling: pH, chlorine, dissolved oxygen, and sulfite.

Approved By
Basic Laboratory Inc
California ELAP Cert #1677 and #2718

18K0848
1

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18K1591

18K0848

Date Due: 12-4-18

1 of 2

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

Basic Laboratory
2218 Railroad Ave
Redding, CA 96001
Phone :530-243-7234
Fax: 530-243-7494
Terms: Net 30

Analysis	Due	Expires	Comments
18K1591-01 LP-EQBL [Water] Sampled 11/14/18 09:20			5.6 c
BAL Hg Methyl	11/30/18 12:00	05/13/19 09:20	
Containers Supplied:			
500ml Glass - HCl (I)			
18K1591-02 ER-BL [Water] Sampled 11/14/18 09:05			4.8 c
BAL Hg Methyl	11/30/18 12:00	05/13/19 09:05	
Containers Supplied:			
500ml Glass - HCl (I)			
18K1591-03 LP4-S [Water] Sampled 11/14/18 10:25			6.1 C
BAL Hg Methyl	11/30/18 12:00	05/13/19 10:25	
Containers Supplied:			
500ml Glass - HCl (I)			
18K1591-04 LP4-M [Water] Sampled 11/14/18 10:45			5.6 C
BAL Hg Methyl	11/30/18 12:00	05/13/19 10:45	
Containers Supplied:			
500ml Glass - HCl (I)			
18K1591-05 LP-DUP [Water] Sampled 11/14/18 10:35			4.3 c
BAL Hg Methyl	11/30/18 12:00	05/13/19 10:35	
Containers Supplied:			
500ml Glass - HCl (I)			

Released By	Date	Received By	Date
	11-16-18	J McCurdy	11-20-18 1341
Released By	Date	Received By	Date
		T Williamson	11-20-18 1601

18K0848

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18K1591

Analysis	Due	Expires	Comments
18K1591-06 RF 3.8 [Water] Sampled 11/14/18 11:55			
BAL Hg Methyl	11/30/18 12:00	05/13/19 11:55	6.1C
Containers Supplied: 500ml Glass - HCl (I)			
18K1591-07 ER 173.7 [Water] Sampled 11/14/18 14:00			6.8C
BAL Hg Methyl	11/30/18 12:00	05/13/19 14:00	
Containers Supplied: 500ml Glass - HCl (I)			

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+QC
+MDL

Released By	Date	Received By	Date
	11-16-18	Amy McCurdy	11-20-18 1341
		T Wilkerson	11-20-18 1601

TerriLynn Wilhelmson

From: Sean Foley <sfoley@alpha-labs.com>
Sent: Wednesday, November 28, 2018 8:40 AM
To: TerriLynn Wilhelmson
Subject: RE: BASIC LABORATORY 18K0848

Hi TerriLynn,

I was mistaken on this sample. Please report sample 18K1591-04 as **LP4-B**.

Please confirm. Thanks!

Sean Foley
Alpha Analytical Laboratories, Inc
Sample Control
208 Mason St
Ukiah, CA 95482
707-468-0401 x200

Privileged Communications: This email (and/or the documents attached to it) may contain confidential information belonging to the sender which is privileged. The information is intended only for the use of the individual or entity named on the distribution. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of this information is strictly prohibited. If you received this email in error, please notify us by telephone to arrange for the return of the documents.

From: TerriLynn Wilhelmson [mailto:twilhelmson@basiclab.com]
Sent: Tuesday, November 20, 2018 3:40 PM
To: Sean Foley <sfoley@alpha-labs.com>
Subject: RE: BASIC LABORATORY 18K0848

Hi
Okay will do
TL

From: Sean Foley [mailto:sfoley@alpha-labs.com]
Sent: Tuesday, November 20, 2018 3:28 PM
To: TerriLynn Wilhelmson
Subject: RE: BASIC LABORATORY 18K0848

Hello,

Please report using sample ID, LP4-M, as per COC.

Thanks!

Sean Foley
Alpha Analytical Laboratories, Inc
Sample Control
208 Mason St
Ukiah, CA 95482
707-468-0401 x200

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From: Sheri Speaks [mailto:sspeaks@alpha-labs.com]
Sent: Tuesday, November 20, 2018 3:20 PM
To: Sean Foley <sfoley@alpha-labs.com>
Subject: Fwd: BASIC LABORATORY 18K0848

---------- Forwarded message ---------
From: TerriLynn Wilhelmson <twilhelmson@basiclab.com>
Date: Tue, Nov 20, 2018, 2:14 PM
Subject: BASIC LABORATORY 18K0848
To: sspeaks@alpha-labs.com <sspeaks@alpha-labs.com>

Hi Sheri,

We received your samples today for 18K1591. On sample 18k1591-04 the chain of custody say LP4-M, however, the bottle says LP4-B. Which sample ID would you like us to use?

Let me know soon. We will be closed Thursday and Friday.

Thank you for choosing Basic Laboratory

TerriLynn Wilhelmson

Sample Custody

Basic Laboratory

530.243.7234 Fax: 530.243.7494

twilhelmson@basiclab.com

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

Corporate Laboratory
208 Mason Street, Ukiah CA 95482
707-468-0401 F) 707-468-5267
email: clientservices@alpha-labs.com

ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

Bay Area Laboratory
262 Rickenbacker Circle, Livermore CA 94551
925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18K1591 Pg 1 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

TAT
Standard 10 days: ○
RUSH: 5 days ○ / 48 hours ○ / Other: ____days ○ (Lab preapproval required)

Temp upon Receipt °C
Ukiah temp: 1.4
Livermore temp:
Elk Grove temp:

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Analysis Request: Hg 1631	MeHg 1630	Sample Notes or DDW Source Numbers:
LP-EQBL	11/14	920											X				↓	↓	
ER-BL	↓	905											↓						
LP4-S		1025																	
LP4-MB		1045																	
LP-DUP		1035																	
RF 3.8		1155																	
ER-173.7	✓	1400											↓				↓	↓	

Relinquished by	Received by	Date	Time
Christina Buck		11-14-18	1655

DDW Write On EDT Transmission? ○ Yes ○ No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No

Global ID:
EDF to (Email Address):
Sampling Company Log Code:

Travel and Site Time: | Mileage: | Misc. Supplies:

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

Corporate Laboratory
208 Mason Street, Ukiah CA 95482
707-468-0401 F) 707-468-5267
email: clientservices@alpha-labs.com

ELAP Certifications
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262 Rickenbacker Circle, Livermore CA 94551
925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18K1591 Pg 2 of 2

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Analysis Request: TOC	DOC	Fe 200.8 Total	Ammonia-N	Phosphorus, Total	TKN	BOD	NO2 + NO3 - N 300.0	Orthophosphate 300.0	Chlorophyll-A	Sulfide	Sample Notes or DDW Source Numbers:
LP-EQBL	11/14	920											X			10												
ER-BL		905														10												
LP4-5		1025														10												
LP4-B		1045														10												
LP-DUP		1035														10											X	
RF3.8		1155														9												no sulfide
ER-173.7	↓	1400											↓			9	↓	↓	↓	↓	↓	↓	↓	↓	↓	X		no sulfide

TAT
Standard 10 days ✓
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.4
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		11.14.18	1655

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):
Travel and Site Time: Mileage: Misc. Supplies:

Attachment C

Chains of Custody and Laboratory Reports- Bacteriological Samples

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267
Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 •Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

ELAP Certificates 1551, 2728, and 2922

28 June 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18F1677

Enclosed are the results of analyses for samples received by the laboratory on 06/18/18 12:55. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267
Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 •Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/28/18 16:25

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LP5	18F1677-01	Water	06/18/18 09:30	06/18/18 12:55
LP6	18F1677-02	Water	06/18/18 10:00	06/18/18 12:55
LP7	18F1677-03	Water	06/18/18 10:25	06/18/18 12:55
ER4	18F1677-04	Water	06/18/18 11:30	06/18/18 12:55
VA1	18F1677-05	Water	06/18/18 11:55	06/18/18 12:55
LPER-BL	18F1677-06	Water	06/18/18 09:30	06/18/18 12:55
LPER-Dup	18F1677-07	Water	06/18/18 10:25	06/18/18 12:55

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.

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267
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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/28/18 16:25

Microbiological Parameters by APHA Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP5 (18F1677-01) Water Sampled: 06/18/18 09:30 Received: 06/18/18 12:55											
Total Coliforms	**11**	**1.8**	**1.8**	**MPN/100mL**	1	AF84015	06/18/18 15:00	06/22/18 14:15	SM9221B,C	TCA	
Fecal Coliforms	ND	1.8	1.8	MPN/100mL	1	AF84015	06/18/18 15:00	06/22/18 14:15	SM9221B,E	TCA	U
LP6 (18F1677-02) Water Sampled: 06/18/18 10:00 Received: 06/18/18 12:55											
Total Coliforms	**14**	**1.8**	**1.8**	**MPN/100mL**	1	AF84015	06/18/18 15:15	06/22/18 14:15	SM9221B,C	TCA	
Fecal Coliforms	ND	1.8	1.8	MPN/100mL	1	AF84015	06/18/18 15:15	06/22/18 14:15	SM9221B,E	TCA	U
LP7 (18F1677-03) Water Sampled: 06/18/18 10:25 Received: 06/18/18 12:55											
Total Coliforms	**2.0**	**1.8**	**1.8**	**MPN/100mL**	1	AF84015	06/18/18 15:15	06/22/18 14:00	SM9221B,C	TCA	
Fecal Coliforms	ND	1.8	1.8	MPN/100mL	1	AF84015	06/18/18 15:15	06/22/18 14:00	SM9221B,E	TCA	U
ER4 (18F1677-04) Water Sampled: 06/18/18 11:30 Received: 06/18/18 12:55											
Total Coliforms	**540**	**1.8**	**1.8**	**MPN/100mL**	1	AF84015	06/18/18 15:15	06/22/18 14:15	SM9221B,C	TCA	
Fecal Coliforms	**4.5**	**1.8**	**1.8**	**MPN/100mL**	1	AF84015	06/18/18 15:15	06/22/18 14:15	SM9221B,E	TCA	
VA1 (18F1677-05) Water Sampled: 06/18/18 11:55 Received: 06/18/18 12:55											
Total Coliforms	**540**	**1.8**	**1.8**	**MPN/100mL**	1	AF84015	06/18/18 15:30	06/22/18 14:15	SM9221B,C	TCA	
Fecal Coliforms	**13**	**1.8**	**1.8**	**MPN/100mL**	1	AF84015	06/18/18 15:30	06/22/18 14:15	SM9221B,E	TCA	
LPER-BL (18F1677-06) Water Sampled: 06/18/18 09:30 Received: 06/18/18 12:55											
Total Coliforms	ND	1.8	1.8	MPN/100mL	1	AF83956	06/18/18 15:00	06/20/18 14:15	SM9221B,C	TCA	U
Fecal Coliforms	ND	1.8	1.8	MPN/100mL	1	AF83956	06/18/18 15:00	06/20/18 14:15	SM9221B,E	TCA	U
LPER-Dup (18F1677-07) Water Sampled: 06/18/18 10:25 Received: 06/18/18 12:55											
Total Coliforms	**13**	**1.8**	**1.8**	**MPN/100mL**	1	AF84015	06/18/18 15:15	06/22/18 14:00	SM9221B,C	TCA	
Fecal Coliforms	ND	1.8	1.8	MPN/100mL	1	AF84015	06/18/18 15:15	06/22/18 14:00	SM9221B,E	TCA	U

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.

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
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Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 •Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	06/28/18 16:25

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

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.

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
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Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 •Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	06/28/18 16:25

Notes and Definitions

U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

Bay Area Laboratory
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925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18F1677 Pg _____ of _____

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: Joey Verdian

TAT
Standard 10 days ●
RUSH: 5 days ○ 48 hours ○ Other: ____days ○
Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.2
Livermore temp:
Elk Grove temp:

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	Analysis Request: Coliform, TCFC 15 Tube	Sample Notes or DDW Source Numbers:
LP5	6/18/18	9:30														1	x	
LP6	6/18/18	10:00														1	x	
LP7	6/18/18	10:25														1	x	
ER4	6/18/18	11:30														1	x	
VA1	6/18/18	11:55														1	x	
LPER-BL	6/18/18	9:30														1	x	
LPER-Dup	6/18/18	10:25														1	x	

Relinquished by	Received by	Date	Time
		6-18-18	12:55

DDW Write On EDT Transmission? ○ Yes ○ No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

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ELAP Certificates 1551, 2728, and 2922

05 July 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18F2450

Enclosed are the results of analyses for samples received by the laboratory on 06/26/18 15:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Jeanette L. Poplin For David S. Pingatore
Project Manager

Alpha Analytical Laboratories Inc.
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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/05/18 16:01

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LP5	18F2450-01	Water	06/26/18 11:15	06/26/18 15:10
LP6	18F2450-02	Water	06/26/18 11:35	06/26/18 15:10
LP7	18F2450-03	Water	06/26/18 11:55	06/26/18 15:10
ER4	18F2450-04	Water	06/26/18 14:10	06/26/18 15:10
VA1	18F2450-05	Water	06/26/18 14:35	06/26/18 15:10
LPER-BL	18F2450-06	Water	06/26/18 14:25	06/26/18 15:10
LPER-Dup	18F2450-07	Water	06/26/18 14:15	06/26/18 15:10

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/05/18 16:01

Microbiological Parameters by APHA Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP5 (18F2450-01) Water Sampled: 06/26/18 11:15 Received: 06/26/18 15:10											
Total Coliforms	**14**	**1.8**	**1.8**	**MPN/100mL**	1	AG83146	06/26/18 16:00	06/30/18 16:00	SM9221B,C	RLG	
Fecal Coliforms	ND	1.8	1.8	MPN/100mL	1	AG83146	06/26/18 16:00	06/30/18 16:00	SM9221B,E	RLG	U
LP6 (18F2450-02) Water Sampled: 06/26/18 11:35 Received: 06/26/18 15:10											
Total Coliforms	**280**	**1.8**	**1.8**	**MPN/100mL**	1	AG83146	06/26/18 16:00	06/30/18 16:00	SM9221B,C	RLG	
Fecal Coliforms	ND	1.8	1.8	MPN/100mL	1	AG83146	06/26/18 16:00	06/30/18 16:00	SM9221B,E	RLG	U
LP7 (18F2450-03) Water Sampled: 06/26/18 11:55 Received: 06/26/18 15:10											
Total Coliforms	**240**	**1.8**	**1.8**	**MPN/100mL**	1	AG83146	06/26/18 16:00	06/30/18 16:00	SM9221B,C	RLG	
Fecal Coliforms	ND	1.8	1.8	MPN/100mL	1	AG83146	06/26/18 16:00	06/30/18 16:00	SM9221B,E	RLG	U
ER4 (18F2450-04) Water Sampled: 06/26/18 14:10 Received: 06/26/18 15:10											
Total Coliforms	**350**	**1.8**	**1.8**	**MPN/100mL**	1	AG83146	06/26/18 16:00	06/30/18 16:00	SM9221B,C	RLG	
Fecal Coliforms	**7.8**	**1.8**	**1.8**	**MPN/100mL**	1	AG83146	06/26/18 16:00	06/30/18 16:00	SM9221B,E	RLG	
VA1 (18F2450-05) Water Sampled: 06/26/18 14:35 Received: 06/26/18 15:10											
Total Coliforms	**350**	**1.8**	**1.8**	**MPN/100mL**	1	AG83146	06/26/18 15:45	06/30/18 16:00	SM9221B,C	RLG	
Fecal Coliforms	**33**	**1.8**	**1.8**	**MPN/100mL**	1	AG83146	06/26/18 15:45	06/30/18 16:00	SM9221B,E	RLG	
LPER-BL (18F2450-06) Water Sampled: 06/26/18 14:25 Received: 06/26/18 15:10											
Total Coliforms	ND	1.8	1.8	MPN/100mL	1	AF84268	06/26/18 16:00	06/28/18 16:00	SM9221B,C	ZMH	U
Fecal Coliforms	ND	1.8	1.8	MPN/100mL	1	AF84268	06/26/18 16:00	06/28/18 16:00	SM9221B,E	ZMH	U
LPER-Dup (18F2450-07) Water Sampled: 06/26/18 14:15 Received: 06/26/18 15:10											
Total Coliforms	**350**	**1.8**	**1.8**	**MPN/100mL**	1	AG83146	06/26/18 16:00	06/30/18 16:00	SM9221B,C	RLG	
Fecal Coliforms	**7.8**	**1.8**	**1.8**	**MPN/100mL**	1	AG83146	06/26/18 16:00	06/30/18 16:00	SM9221B,E	RLG	

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/05/18 16:01

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

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Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	07/05/18 16:01

Notes and Definitions

U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

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Lab No 18F2450 Pg 1 of 1

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature:
CHRISTINA BUCK
Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	Analysis Request: Coliform, TCFC 15 Tube	Sample Notes or DDW Source Numbers:
LP5	6/26/18	1115											X				X	
LP6		1135											X				X	
LP7		1155											X				X	
ER4		1410											X				X	
VA1		1435											X				X	
LPER-BL		1425											X				X	
LPER-Dup		1415											X				X	

TAT
Standard 10 days ◉
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.4
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
Christina Buck		6-26-18	1510

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number:
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):

Travel and Site Time:	Mileage:	Misc. Supplies:

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ELAP Certificates 1551, 2728, and 2922

13 July 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18G0387

Enclosed are the results of analyses for samples received by the laboratory on 07/05/18 12:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Jeanette L. Poplin For David S. Pingatore
Project Manager

Alpha Analytical Laboratories Inc.
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Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267
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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/13/18 16:19

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LP5	18G0387-01	Water	07/05/18 09:50	07/05/18 12:10
LP6	18G0387-02	Water	07/05/18 10:08	07/05/18 12:10
LP7	18G0387-03	Water	07/05/18 10:25	07/05/18 12:10
ER4	18G0387-04	Water	07/05/18 11:15	07/05/18 12:10
VA1	18G0387-05	Water	07/05/18 11:30	07/05/18 12:10
LPER-BL	18G0387-06	Water	07/05/18 10:10	07/05/18 12:10
LPER-Dup	18G0387-07	Water	07/05/18 09:45	07/05/18 12:10

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/13/18 16:19

Microbiological Parameters by APHA Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP5 (18G0387-01) Water Sampled: 07/05/18 09:50 Received: 07/05/18 12:10											
Total Coliforms	**540**	**1.8**	**1.8**	**MPN/100mL**	1	AG83449	07/05/18 14:15	07/09/18 16:00	SM9221B,C	ZMH	
Fecal Coliforms	ND	1.8	1.8	MPN/100mL	1	AG83449	07/05/18 14:15	07/09/18 16:00	SM9221B,E	ZMH	U
LP6 (18G0387-02) Water Sampled: 07/05/18 10:08 Received: 07/05/18 12:10											
Total Coliforms	**25**	**1.8**	**1.8**	**MPN/100mL**	1	AG83449	07/05/18 13:30	07/09/18 16:00	SM9221B,C	ZMH	
Fecal Coliforms	ND	1.8	1.8	MPN/100mL	1	AG83449	07/05/18 13:30	07/09/18 16:00	SM9221B,E	ZMH	U
LP7 (18G0387-03) Water Sampled: 07/05/18 10:25 Received: 07/05/18 12:10											
Total Coliforms	**49**	**1.8**	**1.8**	**MPN/100mL**	1	AG83449	07/05/18 14:30	07/09/18 16:00	SM9221B,C	ZMH	
Fecal Coliforms	ND	1.8	1.8	MPN/100mL	1	AG83449	07/05/18 14:30	07/09/18 16:00	SM9221B,E	ZMH	U
ER4 (18G0387-04) Water Sampled: 07/05/18 11:15 Received: 07/05/18 12:10											
Total Coliforms	**540**	**1.8**	**1.8**	**MPN/100mL**	1	AG83449	07/05/18 13:45	07/09/18 16:00	SM9221B,C	ZMH	
Fecal Coliforms	**7.8**	**1.8**	**1.8**	**MPN/100mL**	1	AG83449	07/05/18 13:45	07/09/18 16:00	SM9221B,E	ZMH	
VA1 (18G0387-05) Water Sampled: 07/05/18 11:30 Received: 07/05/18 12:10											
Total Coliforms	**920**	**1.8**	**1.8**	**MPN/100mL**	1	AG83449	07/05/18 13:45	07/09/18 16:00	SM9221B,C	ZMH	
Fecal Coliforms	**33**	**1.8**	**1.8**	**MPN/100mL**	1	AG83449	07/05/18 13:45	07/09/18 16:00	SM9221B,E	ZMH	
LPER-BL (18G0387-06) Water Sampled: 07/05/18 10:10 Received: 07/05/18 12:10											
Total Coliforms	ND	1.8	1.8	MPN/100mL	1	AG83449	07/05/18 13:45	07/07/18 16:30	SM9221B,C	TCA	U
Fecal Coliforms	ND	1.8	1.8	MPN/100mL	1	AG83449	07/05/18 13:45	07/07/18 16:30	SM9221B,E	TCA	U
LPER-Dup (18G0387-07) Water Sampled: 07/05/18 09:45 Received: 07/05/18 12:10											
Total Coliforms	**130**	**1.8**	**1.8**	**MPN/100mL**	1	AG83449	07/05/18 13:30	07/09/18 16:00	SM9221B,C	ZMH	
Fecal Coliforms	ND	1.8	1.8	MPN/100mL	1	AG83449	07/05/18 13:30	07/09/18 16:00	SM9221B,E	ZMH	U

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/13/18 16:19

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

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.

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Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	07/13/18 16:19

Notes and Definitions

U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 1860387 Pg ____ of ____

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mrmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Analysis Request: Coliform, TCFC 15 Tube
LP5	7/5/18	950											X				x
LP6	↓	1008											↓				x
LP7		1025															x
ER4		1115															x
VA1		1130															x
LPER-BL		1010															x
LPER-Dup	↓	945											↓				x

TAT
Standard 10 days ◉
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.4
Livermore temp:
Elk Grove temp:

Sample Notes or DDW Source Numbers:

Relinquished by	Received by	Date	Time
Christina Buck		7-5-18	1210

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):
Travel and Site Time: Mileage: Misc. Supplies:

Alpha Analytical Laboratories Inc.
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ELAP Certificates 1551, 2728, and 2922

31 July 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18G1457

Enclosed are the results of analyses for samples received by the laboratory on 07/16/18 12:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/31/18 15:17

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LP5	18G1457-01	Water	07/16/18 09:35	07/16/18 12:10
LP6	18G1457-02	Water	07/16/18 10:00	07/16/18 12:10
LP7	18G1457-03	Water	07/16/18 10:15	07/16/18 12:10
ER4	18G1457-04	Water	07/16/18 11:05	07/16/18 12:10
VA1	18G1457-05	Water	07/16/18 11:30	07/16/18 12:10
LPER-BL	18G1457-06	Water	07/16/18 10:20	07/16/18 12:10
LBER-Dup	18G1457-07	Water	07/16/18 11:30	07/16/18 12:10

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.

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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/31/18 15:17

Microbiological Parameters by APHA Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP5 (18G1457-01) Water Sampled: 07/16/18 09:35 Received: 07/16/18 12:10											
Total Coliforms	**130**	**1.8**	**1.8**	**MPN/100mL**	1	AG84020	07/16/18 16:30	07/20/18 14:30	SM9221B,C	TCA	
Fecal Coliforms	**4.0**	**1.8**	**1.8**	**MPN/100mL**	1	AG84020	07/16/18 16:30	07/20/18 14:30	SM9221B,E	TCA	
LP6 (18G1457-02) Water Sampled: 07/16/18 10:00 Received: 07/16/18 12:10											
Total Coliforms	**130**	**1.8**	**1.8**	**MPN/100mL**	1	AG84020	07/16/18 16:30	07/20/18 14:30	SM9221B,C	TCA	
Fecal Coliforms	ND	1.8	1.8	MPN/100mL	1	AG84020	07/16/18 16:30	07/20/18 14:30	SM9221B,E	TCA	U
LP7 (18G1457-03) Water Sampled: 07/16/18 10:15 Received: 07/16/18 12:10											
Total Coliforms	**9.2**	**1.8**	**1.8**	**MPN/100mL**	1	AG84020	07/16/18 16:30	07/20/18 14:30	SM9221B,C	TCA	
Fecal Coliforms	ND	1.8	1.8	MPN/100mL	1	AG84020	07/16/18 16:30	07/20/18 14:30	SM9221B,E	TCA	U
ER4 (18G1457-04) Water Sampled: 07/16/18 11:05 Received: 07/16/18 12:10											
Total Coliforms	>1600	1.8	1.8	MPN/100mL	1	AG84020	07/16/18 16:00	07/20/18 14:30	SM9221B,C	TCA	
Fecal Coliforms	**7.8**	**1.8**	**1.8**	**MPN/100mL**	1	AG84020	07/16/18 16:00	07/20/18 14:30	SM9221B,E	TCA	
VA1 (18G1457-05) Water Sampled: 07/16/18 11:30 Received: 07/16/18 12:10											
Total Coliforms	**920**	**1.8**	**1.8**	**MPN/100mL**	1	AG84020	07/16/18 16:00	07/20/18 14:30	SM9221B,C	TCA	
Fecal Coliforms	**23**	**1.8**	**1.8**	**MPN/100mL**	1	AG84020	07/16/18 16:00	07/20/18 14:30	SM9221B,E	TCA	
LPER-BL (18G1457-06) Water Sampled: 07/16/18 10:20 Received: 07/16/18 12:10											
Total Coliforms	ND	1.8	1.8	MPN/100mL	1	AG83955	07/16/18 16:00	07/18/18 15:30	SM9221B,C	TCA	U
Fecal Coliforms	ND	1.8	1.8	MPN/100mL	1	AG83955	07/16/18 16:00	07/18/18 15:30	SM9221B,E	TCA	U
LBER-Dup (18G1457-07) Water Sampled: 07/16/18 11:30 Received: 07/16/18 12:10											
Total Coliforms	**240**	**1.8**	**1.8**	**MPN/100mL**	1	AG84020	07/16/18 16:00	07/20/18 14:30	SM9221B,C	TCA	
Fecal Coliforms	**13**	**1.8**	**1.8**	**MPN/100mL**	1	AG84020	07/16/18 16:00	07/20/18 14:30	SM9221B,E	TCA	

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager:	Christina Buck
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)
Berkeley CA, 94705	Project Number:	642.1

Reported: 07/31/18 15:17

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

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Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	07/31/18 15:17

Notes and Definitions

>1600	>1600
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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.

Alpha Analytical Laboratories Inc.
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WATERS, SEDIMENTS, SOLIDS

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email: clientservices@alpha-labs.com

ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

Bay Area Laboratory
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925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 1861457 Pg _____ of _____

Report to	Invoice to (If different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: Joey Verdin

TAT: Standard 10 days (●) | RUSH: 5 days ( ) 48 hours ( ) Other: ___days ( ) Lab preapproval required

Temp upon Receipt °C: Ukiah temp: 17 | Livermore temp: | Elk Grove temp:

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Analysis Request: Coliform, TCFC 15 Tube	Sample Notes or DDW Source Numbers:
LP5	7/16/18	09:35														1	x	
LP6	7/16/18	10:00														1	x	
LP7	7/16/18	10:15														1	x	
ER4	7/16/18	11:05														1	x	
VA1	7/16/18	11:30														1	x	
LPER-BL	7/16/18	10:20														1	x	
LPER-Dup	7/16/18	11:30														1	x	

Relinquished by	Received by	Date	Time
Joey Verdin		7-16-18	1210

DDW Write On EDT Transmission? ( ) Yes ( ) No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ( ) Yes ( ) No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

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ELAP Certificates 1551, 2728, and 2922

31 July 2018

Stillwater Sciences
Attn: Christina Buck
2855 Telegraph Avenue, Suite 400
Berkeley, CA 94705
RE: Potter Valley WQ (AQ3)
Work Order: 18G1373

Enclosed are the results of analyses for samples received by the laboratory on 07/13/18 11:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeanette L. Poplin For David S. Pingatore
Project Manager

Alpha Analytical Laboratories Inc.
e-mail: clientservices@alpha-labs.com
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Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/31/18 15:14

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LP5	18G1373-01	Water	07/13/18 09:00	07/13/18 11:45
LP6	18G1373-02	Water	07/13/18 09:20	07/13/18 11:45
LP7	18G1373-03	Water	07/13/18 09:50	07/13/18 11:45
ER4	18G1373-04	Water	07/13/18 10:35	07/13/18 11:45
VA1	18G1373-05	Water	07/13/18 11:00	07/13/18 11:45
LPER-BL	18G1373-06	Water	07/13/18 09:50	07/13/18 11:45
LBER-Dup	18G1373-07	Water	07/13/18 10:35	07/13/18 11:45

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.

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Bay Area: 262 Rickenbacker Circle, Livermore, CA 94551 •Phone: (925) 828-6226 • Fax: (925) 828-6309
Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/31/18 15:14

Microbiological Parameters by APHA Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
LP5 (18G1373-01) Water Sampled: 07/13/18 09:00 Received: 07/13/18 11:45											
Total Coliforms	**240**	**1.8**	**1.8**	**MPN/100mL**	1	AG83843	07/13/18 16:45	07/17/18 15:15	SM9221B,C	TCA	
Fecal Coliforms	**2.0**	**1.8**	**1.8**	**MPN/100mL**	1	AG83843	07/13/18 16:45	07/17/18 15:15	SM9221B,E	TCA	
LP6 (18G1373-02) Water Sampled: 07/13/18 09:20 Received: 07/13/18 11:45											
Total Coliforms	**110**	**1.8**	**1.8**	**MPN/100mL**	1	AG83843	07/13/18 16:45	07/17/18 15:00	SM9221B,C	TCA	
Fecal Coliforms	**4.5**	**1.8**	**1.8**	**MPN/100mL**	1	AG83843	07/13/18 16:45	07/17/18 15:00	SM9221B,E	TCA	
LP7 (18G1373-03) Water Sampled: 07/13/18 09:50 Received: 07/13/18 11:45											
Total Coliforms	**220**	**1.8**	**1.8**	**MPN/100mL**	1	AG83843	07/13/18 16:30	07/17/18 15:15	SM9221B,C	TCA	
Fecal Coliforms	ND	1.8	1.8	MPN/100mL	1	AG83843	07/13/18 16:30	07/17/18 15:15	SM9221B,E	TCA	U
ER4 (18G1373-04) Water Sampled: 07/13/18 10:35 Received: 07/13/18 11:45											
Total Coliforms	>1600	1.8	1.8	MPN/100mL	1	AG83795	07/13/18 16:15	07/16/18 16:00	SM9221B,C	ZMH	
Fecal Coliforms	**13**	**1.8**	**1.8**	**MPN/100mL**	1	AG83795	07/13/18 16:15	07/16/18 16:00	SM9221B,E	ZMH	
VA1 (18G1373-05) Water Sampled: 07/13/18 11:00 Received: 07/13/18 11:45											
Total Coliforms	**540**	**1.8**	**1.8**	**MPN/100mL**	1	AG83795	07/13/18 16:45	07/16/18 16:00	SM9221B,C	ZMH	
Fecal Coliforms	**23**	**1.8**	**1.8**	**MPN/100mL**	1	AG83795	07/13/18 16:45	07/16/18 16:00	SM9221B,E	ZMH	
LPER-BL (18G1373-06) Water Sampled: 07/13/18 09:50 Received: 07/13/18 11:45											
Total Coliforms	ND	1.8	1.8	MPN/100mL	1	AG83795	07/13/18 16:30	07/15/18 15:30	SM9221B,C	RLG	U
Fecal Coliforms	ND	1.8	1.8	MPN/100mL	1	AG83795	07/13/18 16:30	07/15/18 15:30	SM9221B,E	RLG	U
LBER-Dup (18G1373-07) Water Sampled: 07/13/18 10:35 Received: 07/13/18 11:45											
Total Coliforms	>1600	1.8	1.8	MPN/100mL	1	AG83795	07/13/18 16:45	07/16/18 16:00	SM9221B,C	ZMH	
Fecal Coliforms	**7.8**	**1.8**	**1.8**	**MPN/100mL**	1	AG83795	07/13/18 16:45	07/16/18 16:00	SM9221B,E	ZMH	

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager: Christina Buck	
2855 Telegraph Avenue, Suite 400	Project: Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number: 642.1	07/31/18 15:14

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

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.

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Central Valley: 9090 Union Park Way, Suite 113, Elk Grove, CA 95624 •Phone: (916) 686-5190 • Fax: (916) 686-5192

Stillwater Sciences	Project Manager:	Christina Buck	
2855 Telegraph Avenue, Suite 400	Project:	Potter Valley WQ (AQ3)	Reported:
Berkeley CA, 94705	Project Number:	642.1	07/31/18 15:14

Notes and Definitions

>1600	>1600
U	Analyte included in analysis, but not detected at or above MDL.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
MDL	Method detection limit
Rec	Recovery
RPD	Relative Percent Difference

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.

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WATERS, SEDIMENTS, SOLIDS

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ELAP Certifications
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Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18G1373 Pg _____ of _____

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: Joey Verdian

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	Analysis Request: Coliform, TCFC 15 Tube
LP5	7/13/18	0900											1			1	x
LP6	7/13/18	0920											1			1	x
LP7	7/13/18	0950											1			1	x
ER4	7/13/18	1035											1			1	x
VA1	7/13/18	1100											1			1	x
LPER-BL	7/13/18	0950											1			1	x
LPER-Dup	7/13/18	1035											1			1	x

TAT
Standard 10 days ●
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.6°
Livermore temp:
Elk Grove temp:

Sample Notes or DDW Source Numbers:

Relinquished by	Received by	Date	Time
		7.13.18	1145

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):
Travel and Site Time: Mileage: Misc. Supplies:

Attachment D

Chains of Custody and Laboratory Reports – Cyanobacteria and Toxin Samples

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1806A44

Report Created for: Alpha Analytical Laboratories

262 Rickenbacker Circle
Livermore, CA 94551

Project Contact: David S. Pingatore
Project P.O.:
Project: 18F1680

Project Received: 06/20/2018

Analytical Report reviewed & approved for release on 07/09/2018 by:

Yen Cao
Project Manager

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McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: Alpha Analytical Laboratories
Project: 18F1680
WorkOrder: 1806A44

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

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Analytical Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1806A44
Date Received:	6/20/18 15:30	**Extraction Method:**	E545
Date Prepared:	6/27/18	**Analytical Method:**	E545
Project:	18F1680	**Unit:**	µg/L

E545 UCMR4 (Cylindrospermopsin and Anatoxin-a)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LP5	1806A44-001A	Water	06/18/2018 09:30	LC3Q-MS2 F0628181310.D	160620

Analytes	Result	MDL	RL	DF	Date Analyzed
Anatoxin-a	ND	0.0100	0.0300	1	06/28/2018 15:43
Cylindrospermopsin	ND	0.0300	0.0900	1	06/28/2018 15:43

Internal Standard	REC (%)	Limits	
Uracil-d4	78	50-150	06/28/2018 15:43
L-Phenylalanine-d5	94	50-150	06/28/2018 15:43

Analyst(s): JS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LP6	1806A44-002A	Water	06/18/2018 10:00	LC3Q-MS2 F0628181311.D	160620

Analytes	Result	MDL	RL	DF	Date Analyzed
Anatoxin-a	ND	0.0100	0.0300	1	06/28/2018 15:57
Cylindrospermopsin	ND	0.0300	0.0900	1	06/28/2018 15:57

Internal Standard	REC (%)	Limits	
Uracil-d4	77	50-150	06/28/2018 15:57
L-Phenylalanine-d5	94	50-150	06/28/2018 15:57

Analyst(s): JS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LP7	1806A44-003A	Water	06/18/2018 10:25	LC3Q-MS2 F0628181313.D	160620

Analytes	Result	MDL	RL	DF	Date Analyzed
Anatoxin-a	ND	0.0100	0.0300	1	06/28/2018 16:40
Cylindrospermopsin	ND	0.0300	0.0900	1	06/28/2018 16:40

Internal Standard	REC (%)	Limits	
Uracil-d4	97	50-150	06/28/2018 16:40
L-Phenylalanine-d5	97	50-150	06/28/2018 16:40

Analyst(s): JS

(Cont.)

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Analytical Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1806A44
Date Received:	6/20/18 15:30	**Extraction Method:**	E545
Date Prepared:	6/27/18	**Analytical Method:**	E545
Project:	18F1680	**Unit:**	µg/L

E545 UCMR4 (Cylindrospermopsin and Anatoxin-a)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ER4	1806A44-004A	Water	06/18/2018 11:30	LC3Q-MS2 F0628181314.D	160620

Analytes	Result	MDL	RL	DF	Date Analyzed
Anatoxin-a	ND	0.0100	0.0300	1	06/28/2018 17:23
Cylindrospermopsin	ND	0.0300	0.0900	1	06/28/2018 17:23

Internal Standard	REC (%)	Limits	
Uracil-d4	106	50-150	06/28/2018 17:23
L-Phenylalanine-d5	96	50-150	06/28/2018 17:23

Analyst(s): JS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
VA1	1806A44-005A	Water	06/18/2018 11:55	LC3Q-MS2 F0628181315.D	160620

Analytes	Result	MDL	RL	DF	Date Analyzed
Anatoxin-a	ND	0.0100	0.0300	1	06/28/2018 17:38
Cylindrospermopsin	ND	0.0300	0.0900	1	06/28/2018 17:38

Internal Standard	REC (%)	Limits	
Uracil-d4	96	50-150	06/28/2018 17:38
L-Phenylalanine-d5	95	50-150	06/28/2018 17:38

Analyst(s): JS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LPER-BL	1806A44-006A	Water	06/18/2018 09:30	LC3Q-MS2 F0628181316.D	160620

Analytes	Result	MDL	RL	DF	Date Analyzed
Anatoxin-a	ND	0.0100	0.0300	1	06/28/2018 17:52
Cylindrospermopsin	ND	0.0300	0.0900	1	06/28/2018 17:52

Internal Standard	REC (%)	Limits	
Uracil-d4	130	50-150	06/28/2018 17:52
L-Phenylalanine-d5	95	50-150	06/28/2018 17:52

Analyst(s): JS

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Analytical Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1806A44
Date Received:	6/20/18 15:30	**Extraction Method:**	E545
Date Prepared:	6/27/18	**Analytical Method:**	E545
Project:	18F1680	**Unit:**	µg/L

E545 UCMR4 (Cylindrospermopsin and Anatoxin-a)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LPER-Dup	1806A44-007A	Water	06/18/2018 10:25	LC3Q-MS2 F0628181317.D	160620

Analytes	Result	MDL	RL	DF	Date Analyzed
Anatoxin-a	ND	0.0100	0.0300	1	06/28/2018 18:06
Cylindrospermopsin	ND	0.0300	0.0900	1	06/28/2018 18:06

Internal Standard	REC (%)	Limits	
Uracil-d4	93	50-150	06/28/2018 18:06
L-Phenylalanine-d5	91	50-150	06/28/2018 18:06

Analyst(s): JS

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Analytical Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1806A44
Date Received:	6/20/18 15:30	**Extraction Method:**	E546
Date Prepared:	6/29/18	**Analytical Method:**	E546
Project:	18F1680	**Unit:**	µg/L

E546 UCMR4 ELISA (Total Microcystins)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LP5	1806A44-001B	Water	06/18/2018 09:30	SPECTROPHOTOMETER	160705

Analytes	Result	MDL	RL	DF	Date Analyzed
%CV	**3.03**	NA	NA	1	06/29/2018 13:20
Total Microcystin	ND	0.150	0.300	1	06/29/2018 13:20

Analyst(s): BM

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LP6	1806A44-002B	Water	06/18/2018 10:00	SPECTROPHOTOMETER	160705

Analytes	Result	MDL	RL	DF	Date Analyzed
%CV	**1.56**	NA	NA	1	06/29/2018 13:20
Total Microcystin	ND	0.150	0.300	1	06/29/2018 13:20

Analyst(s): BM

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LP7	1806A44-003B	Water	06/18/2018 10:25	SPECTROPHOTOMETER	160705

Analytes	Result	MDL	RL	DF	Date Analyzed
%CV	**3.15**	NA	NA	1	06/29/2018 13:20
Total Microcystin	ND	0.150	0.300	1	06/29/2018 13:20

Analyst(s): BM

(Cont.)

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Analytical Report

Client: Alpha Analytical Laboratories
Date Received: 6/20/18 15:30
Date Prepared: 6/29/18
Project: 18F1680

WorkOrder: 1806A44
Extraction Method: E546
Analytical Method: E546
Unit: µg/L

E546 UCMR4 ELISA (Total Microcystins)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ER4	1806A44-004B	Water	06/18/2018 11:30	SPECTROPHOTOMETER	160705

Analytes	Result	MDL	RL	DF	Date Analyzed
%CV	**1.39**	NA	NA	1	06/29/2018 13:20
Total Microcystin	ND	0.150	0.300	1	06/29/2018 13:20

Analyst(s): BM

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
VA1	1806A44-005B	Water	06/18/2018 11:55	SPECTROPHOTOMETER	160705

Analytes	Result	MDL	RL	DF	Date Analyzed
%CV	**3.40**	NA	NA	1	06/29/2018 13:20
Total Microcystin	ND	0.150	0.300	1	06/29/2018 13:20

Analyst(s): BM

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LPER-BL	1806A44-006B	Water	06/18/2018 09:30	SPECTROPHOTOMETER	160705

Analytes	Result	MDL	RL	DF	Date Analyzed
%CV	**3.84**	NA	NA	1	06/29/2018 13:20
Total Microcystin	ND	0.150	0.300	1	06/29/2018 13:20

Analyst(s): BM

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Analytical Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1806A44
Date Received:	6/20/18 15:30	**Extraction Method:**	E546
Date Prepared:	6/29/18	**Analytical Method:**	E546
Project:	18F1680	**Unit:**	µg/L

E546 UCMR4 ELISA (Total Microcystins)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LPER-Dup	**1806A44-007B**	**Water**	**06/18/2018 10:25**	**SPECTROPHOTOMETER**	**160705**

Analytes	Result	MDL	RL	DF	Date Analyzed
%CV	**5.14**	NA	NA	1	06/29/2018 13:20
Total Microcystin	ND	0.150	0.300	1	06/29/2018 13:20

Analyst(s): BM

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Quality Control Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1806A44
Date Prepared:	6/27/18	**BatchID:**	160620
Date Analyzed:	6/28/18	**Extraction Method:**	E545
Instrument:	LC3Q-MS2	**Analytical Method:**	E545
Matrix:	Drinking Water	**Unit:**	µg/L
Project:	18F1680	**Sample ID:**	MB/LCS-160620 1806A43-001BMS/MSD

QC Summary Report E545 UCMR4

Analyte	MB Result	MDL	RL			
Anatoxin-a	ND	0.0100	0.0300	-	-	-
Cylindrospermopsin	ND	0.0300	0.0900	-	-	-
Internal Standard Recovery						
Uracil-d4					116	50-150
L-Phenylalanine-d5					94	50-150

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Anatoxin-a	0.520	-	0.59	89	-	70-130	-	-
Cylindrospermopsin	1.05	-	1	105	-	70-130	-	-
Internal Standard Recovery								
Uracil-d4				92	-	50-150	-	-
L-Phenylalanine-d5				96	-	50-150	-	-

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Anatoxin-a	0.439	0.482	0.59	ND	75	82	70-130	9.34	20
Cylindrospermopsin	0.863	0.838	1	ND	86	84	70-130	2.94	20
Internal Standard Recovery									
Uracil-d4					89	92	50-150	-	-
L-Phenylalanine-d5					99	98	50-150	-	-

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Quality Control Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1806A44
Date Prepared:	6/29/18	**BatchID:**	160705
Date Analyzed:	6/29/18	**Extraction Method:**	E546
Instrument:	SPECTROPHOTOMETER	**Analytical Method:**	E546
Matrix:	Drinking Water	**Unit:**	µg/L
Project:	18F1680	**Sample ID:**	MB/LCS/LCSD-160705 1806A41-001AMS/MSD

QC Summary Report for E546 UCMR4

Analyte	MB Result	MDL	RL			
%CV	3.03	-	-	-	-	-
Total Microcystin	ND	0.150	0.300	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Total Microcystin	0.751	0.809	0.75	100	108	60-140	7.34	40

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Total Microcystin	0.851	0.712	0.75	ND	113	95	60-140	17.8	40

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1806A44 **ClientCode: ALPU**

☐ WaterTrax ☐ WriteOn ☐ EDF ☑ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☑ J-flag
☐ Detection Summary ☐ Dry-Weight

Report to:
David S. Pingatore
Alpha Analytical Laboratories
262 Rickenbacker Circle
Livermore, CA 94551
(707) 468-0401 FAX: (707) 468-5267

Email: sspeaks@alpha-labs.com;david@alpha-la
cc/3rd Party:
PO:
Project: 18F1680

Bill to:
Accounts Payable
Alpha Analytical Laboratories
262 Rickenbacker Circle
Livermore, CA 94551

Requested TAT: 5 days;

Date Received: **06/20/2018**
Date Logged: **06/21/2018**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1806A44-001	LP5	Water	6/18/2018 09:30	☐	A	B										
1806A44-002	LP6	Water	6/18/2018 10:00	☐	A	B										
1806A44-003	LP7	Water	6/18/2018 10:25	☐	A	B										
1806A44-004	ER4	Water	6/18/2018 11:30	☐	A	B										
1806A44-005	VA1	Water	6/18/2018 11:55	☐	A	B										
1806A44-006	LPER-BL	Water	6/18/2018 09:30	☐	A	B										
1806A44-007	LPER-Dup	Water	6/18/2018 10:25	☐	A	B										

Test Legend:

1	545_UCMR4	2	546_UCMR4	3		4	
5		6		7		8	
9		10		11		12	

Prepared by: Jena Alfaro

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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WORK ORDER SUMMARY

Client Name: ALPHA ANALYTICAL LABORATORIES **Project:** 18F1680 **Work Order:** 1806A44

Client Contact: David S. Pingatore **QC Level:** LEVEL 2

Contact's Email: sspeaks@alpha-labs.com;david@alpha-labs.com; lquinn@alpha-labs.com **Comments:** **Date Logged:** 6/21/2018

☐ WaterTrax ☐ WriteOn ☐ EDF ☑ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☑ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1806A44-001A	LP5	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	6/18/2018 9:30	5 days	Present	☐	
1806A44-001B	LP5	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	6/18/2018 9:30	5 days	Present	☐	
1806A44-002A	LP6	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	6/18/2018 10:00	5 days	Present	☐	
1806A44-002B	LP6	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	6/18/2018 10:00	5 days	Present	☐	
1806A44-003A	LP7	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	6/18/2018 10:25	5 days	Present	☐	
1806A44-003B	LP7	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	6/18/2018 10:25	5 days	Present	☐	
1806A44-004A	ER4	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	6/18/2018 11:30	5 days	Present	☐	
1806A44-004B	ER4	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	6/18/2018 11:30	5 days	Present	☐	
1806A44-005A	VA1	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	6/18/2018 11:55	5 days	Present	☐	
1806A44-005B	VA1	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	6/18/2018 11:55	5 days	Present	☐	
1806A44-006A	LPER-BL	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	6/18/2018 9:30	5 days	None	☐	
1806A44-006B	LPER-BL	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	6/18/2018 9:30	5 days	None	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

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WORK ORDER SUMMARY

Client Name: ALPHA ANALYTICAL LABORATORIES **Project:** 18F1680 **Work Order:** 1806A44

Client Contact: David S. Pingatore **QC Level:** LEVEL 2

Contact's Email: sspeaks@alpha-labs.com;david@alpha-labs.com; lquinn@alpha-labs.com **Comments:** **Date Logged:** 6/21/2018

☐ WaterTrax ☐ WriteOn ☐ EDF ☑ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☑ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1806A44-007A	LPER-Dup	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	6/18/2018 10:25	5 days	Present	☐	
1806A44-007B	LPER-Dup	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	6/18/2018 10:25	5 days	Present	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

1806A44

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18F1680

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

McCampbell Analytical / Alpha Quote # 181981
1534 Willowpass Rd.
Pittsburg, CA 94565
Phone :(925) 252-9262
Fax: (925) 252-9269
Terms: Net 30

Analysis	Due	Expires	Comments
18F1680-01 LP5 [Water] Sampled 06/18/18 09:30			
UCMR4 AM3 545 Cyanotoxins	07/02/18 12:00	07/16/18 09:30	
UCMR4 AM3 546 Total Microcystins	07/02/18 12:00	07/02/18 09:30	
Containers Supplied: 125ml Amber (A) 125ml Amber (B)			
18F1680-02 LP6 [Water] Sampled 06/18/18 10:00			
UCMR4 AM3 545 Cyanotoxins	07/02/18 12:00	07/16/18 10:00	
UCMR4 AM3 546 Total Microcystins	07/02/18 12:00	07/02/18 10:00	
Containers Supplied: 125ml Amber (A) 125ml Amber (B)			
18F1680-03 LP7 [Water] Sampled 06/18/18 10:25			
UCMR4 AM3 545 Cyanotoxins	07/02/18 12:00	07/16/18 10:25	
UCMR4 AM3 546 Total Microcystins	07/02/18 12:00	07/02/18 10:25	
Containers Supplied: 125ml Amber (A) 125ml Amber (B)			
18F1680-04 ER4 [Water] Sampled 06/18/18 11:30			
UCMR4 AM3 545 Cyanotoxins	07/02/18 12:00	07/16/18 11:30	
UCMR4 AM3 546 Total Microcystins	07/02/18 12:00	07/02/18 11:30	
Containers Supplied: 125ml Amber (A) 125ml Amber (B)			

UCMR4 - AM3

3.1°C

Released By	Date	Received By	Date
	6/18/18		6-19-18
	6-19-18		6/19/18

6/20/18 6/20/18 1630

6/20/18 1407
6/20/18 1530

2 wet

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18F1680

Analysis	Due	Expires	Comments
18F1680-05 VA1 [Water] Sampled 06/18/18 11:55			
UCMR4 AM3 545 Cyanotoxins	07/02/18 12:00	07/16/18 11:55	
UCMR4 AM3 546 Total Microcystins	07/02/18 12:00	07/02/18 11:55	
Containers Supplied:			
125ml Amber (A) 125ml Amber (B)			
18F1680-06 LPER-BL [Water] Sampled 06/18/18 09:30			
UCMR4 AM3 545 Cyanotoxins	07/02/18 12:00	07/16/18 09:30	
UCMR4 AM3 546 Total Microcystins	07/02/18 12:00	07/02/18 09:30	
Containers Supplied:			
125ml Amber (A) 125ml Amber (B)			
18F1680-07 LPER-Dup [Water] Sampled 06/18/18 10:25			
UCMR4 AM3 545 Cyanotoxins	07/02/18 12:00	07/16/18 10:25	
UCMR4 AM3 546 Total Microcystins	07/02/18 12:00	07/02/18 10:25	
Containers Supplied:			
125ml Amber (A) 125ml Amber (B)			

☐ *Report to State*

System Name: **Employed by:**

User ID: **Sampler:**

System Number:

UCMR4

w/QC
JFlags
EXCEL

6/20/18 1530

Released By	Date	Received By	Date
	6/18/18		6-19-18
	6-19-18		6/19/18
	6/20/18		6/20/18 1407
			6/20/18 1530

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Sample Receipt Checklist

Client Name:	**Alpha Analytical Laboratories**	Date and Time Received	**6/20/2018 15:30**
Project:	**18F1680**	Date Logged:	**6/21/2018**
		Received by:	Jena Alfaro
WorkOrder №:	**1806A44** Matrix: Water	Logged by:	Jena Alfaro
Carrier:	Benjamin Yslas (MAI Courier)		

Chain of Custody (COC) Information

Chain of custody present?	Yes	☑	No	☐		
Chain of custody signed when relinquished and received?	Yes	☑	No	☐		
Chain of custody agrees with sample labels?	Yes	☑	No	☐		
Sample IDs noted by Client on COC?	Yes	☑	No	☐		
Date and Time of collection noted by Client on COC?	Yes	☑	No	☐		
Sampler's name noted on COC?	Yes	☑	No	☐		
COC agrees with Quote?	Yes	☐	No	☐	NA	☑

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes	☐	No	☐	NA	☑
Shipping container/cooler in good condition?	Yes	☑	No	☐		
Samples in proper containers/bottles?	Yes	☑	No	☐		
Sample containers intact?	Yes	☑	No	☐		
Sufficient sample volume for indicated test?	Yes	☑	No	☐		

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes	☑	No	☐	NA	☐
Samples Received on Ice?	Yes	☑	No	☐		
(Ice Type: WET ICE)						
Sample/Temp Blank temperature	Temp: 2.1°C				NA	☐
Water - VOA vials have zero headspace / no bubbles?	Yes	☐	No	☐	NA	☑
Sample labels checked for correct preservation?	Yes	☑	No	☐		
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes	☐	No	☐	NA	☑
UCMR Samples:						
pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes	☐	No	☐	NA	☑
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes	☑	No	☐	NA	☐

Comments:

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

Corporate Laboratory
208 Mason Street, Ukiah CA 95482
707-468-0401 F) 707-468-5267
email: clientservices@alpha-labs.com

ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

Bay Area Laboratory
262 Rickenbacker Circle, Livermore CA 94551
925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18F1680 Pg _____ of _____

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: Joey Verdin

TAT: Standard 10 days ●; RUSH: 5 days ○, 48 hours ○, Other: ____days ○ (Lab preapproval required)

Temp upon Receipt °C: Ukiah temp: 1.7; Livermore temp: ; Elk Grove temp:

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Poly	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Water	Soil	Other	Total Number of Containers per Sample ID	Analysis Request: EPA 545 (Cylindo & Anatoxin-A)	EPA 546 (Microcystins)	Algal ID & E (sub to Greenwater)	Sample Notes or DDW Source Numbers:
LP5	6/18/18	9:30														3	x	x	x	
LP6	6/18/18	10:00														3	x	x	x	
LP7	6/18/18	10:25														3	x	x	x	
ER4	6/18/18	11:36														3	x	x	x	
VA1	6/18/18	11:55														3	x	x	x	
LPER-BL	6/18/18	9:30														2	x	x		
LPER-Dup	6/18/18	10:25														2	x	x		

Please hold phytoplankton sample analysis until further notice.

Relinquished by	Received by	Date	Time
		6-18-18	12:55

DDW Write On EDT Transmission? ○ Yes ○ No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

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Analytical Report

WorkOrder: 1809996

Report Created for: Alpha Analytical Laboratories

262 Rickenbacker Circle
Livermore, CA 94551

Project Contact: David S. Pingatore
Project P.O.:
Project: 18I1866

Project Received: 09/21/2018

Analytical Report reviewed & approved for release on 10/27/2018 by:

Yen Cao
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.

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Glossary of Terms & Qualifier Definitions

Client: Alpha Analytical Laboratories
Project: 18I1866
WorkOrder: 1809996

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Analytical Qualifiers

J	Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.

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Analytical Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1809996
Date Received:	9/21/18 14:15	**Extraction Method:**	E545
Date Prepared:	9/26/18	**Analytical Method:**	E545
Project:	18I1866	**Unit:**	µg/L

E545 UCMR4 (Cylindrospermopsin and Anatoxin-a)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LP5	1809996-001A	Water	09/18/2018 14:50	LC3Q-MS2 F0927181103.D	165589

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Anatoxin-a	**0.0180**	J	0.0100	0.0300	1	09/27/2018 12:28
Cylindrospermopsin	ND		0.0300	0.0900	1	09/27/2018 12:28

Internal Standard	REC (%)	Limits	
Uracil-d4	74	50-150	09/27/2018 12:28
L-Phenylalanine-d5	97	50-150	09/27/2018 12:28

Analyst(s): JS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LP6	1809996-002A	Water	09/18/2018 15:25	LC3Q-MS2 F0927181104.D	165589

Analytes	Result	MDL	RL	DF	Date Analyzed
Anatoxin-a	ND	0.0100	0.0300	1	09/27/2018 12:42
Cylindrospermopsin	ND	0.0300	0.0900	1	09/27/2018 12:42

Internal Standard	REC (%)	Limits	
Uracil-d4	89	50-150	09/27/2018 12:42
L-Phenylalanine-d5	114	50-150	09/27/2018 12:42

Analyst(s): JS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LP7	1809996-003A	Water	09/18/2018 16:00	LC3Q-MS2 F0927181105.D	165589

Analytes	Result	MDL	RL	DF	Date Analyzed
Anatoxin-a	ND	0.0100	0.0300	1	09/27/2018 12:56
Cylindrospermopsin	ND	0.0300	0.0900	1	09/27/2018 12:56

Internal Standard	REC (%)	Limits	
Uracil-d4	92	50-150	09/27/2018 12:56
L-Phenylalanine-d5	103	50-150	09/27/2018 12:56

Analyst(s): JS

(Cont.)

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Analytical Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1809996
Date Received:	9/21/18 14:15	**Extraction Method:**	E545
Date Prepared:	9/26/18	**Analytical Method:**	E545
Project:	18I1866	**Unit:**	µg/L

E545 UCMR4 (Cylindrospermopsin and Anatoxin-a)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ER4	1809996-004A	Water	09/18/2018 16:50	LC3Q-MS2 F0927181106.D	165589

Analytes	Result	MDL	RL	DF	Date Analyzed
Anatoxin-a	ND	0.0100	0.0300	1	09/27/2018 13:11
Cylindrospermopsin	ND	0.0300	0.0900	1	09/27/2018 13:11

Internal Standard	REC (%)	Limits	
Uracil-d4	92	50-150	09/27/2018 13:11
L-Phenylalanine-d5	112	50-150	09/27/2018 13:11

Analyst(s): JS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
VA1	1809996-005A	Water	09/18/2018 17:15	LC3Q-MS2 F0927181107.D	165589

Analytes	Result	MDL	RL	DF	Date Analyzed
Anatoxin-a	ND	0.0100	0.0300	1	09/27/2018 13:25
Cylindrospermopsin	ND	0.0300	0.0900	1	09/27/2018 13:25

Internal Standard	REC (%)	Limits	
Uracil-d4	111	50-150	09/27/2018 13:25
L-Phenylalanine-d5	125	50-150	09/27/2018 13:25

Analyst(s): JS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LPER-BL	1809996-006A	Water	09/18/2018 15:00	LC3Q-MS2 F0927181108.D	165589

Analytes	Result	MDL	RL	DF	Date Analyzed
Anatoxin-a	ND	0.0100	0.0300	1	09/27/2018 13:39
Cylindrospermopsin	ND	0.0300	0.0900	1	09/27/2018 13:39

Internal Standard	REC (%)	Limits	
Uracil-d4	92	50-150	09/27/2018 13:39
L-Phenylalanine-d5	96	50-150	09/27/2018 13:39

Analyst(s): JS

(Cont.)

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Analytical Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1809996
Date Received:	9/21/18 14:15	**Extraction Method:**	E545
Date Prepared:	9/26/18	**Analytical Method:**	E545
Project:	18I1866	**Unit:**	µg/L

E545 UCMR4 (Cylindrospermopsin and Anatoxin-a)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LPER-Dup	1809996-007A	Water	09/18/2018 15:20	LC3Q-MS2 F0927181109.D	165589

Analytes	Result	MDL	RL	DF	Date Analyzed
Anatoxin-a	ND	0.0100	0.0300	1	09/27/2018 13:54
Cylindrospermopsin	ND	0.0300	0.0900	1	09/27/2018 13:54

Internal Standard	REC (%)	Limits	
Uracil-d4	100	50-150	09/27/2018 13:54
L-Phenylalanine-d5	122	50-150	09/27/2018 13:54

Analyst(s): JS

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Analytical Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1809996
Date Received:	9/21/18 14:15	**Extraction Method:**	E546
Date Prepared:	9/28/18	**Analytical Method:**	E546
Project:	18I1866	**Unit:**	µg/L

E546 UCMR4 ELISA (Total Microcystins)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LP5	1809996-001B	Water	09/18/2018 14:50	SPECTROPHOTOMETER	165744

Analytes	Result	MDL	RL	DF	Date Analyzed
%CV	**1.01**	NA	NA	1	09/28/2018 05:01
Total Microcystin	ND	0.150	0.300	1	09/28/2018 05:01

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LP6	1809996-002B	Water	09/18/2018 15:25	SPECTROPHOTOMETER	165744

Analytes	Result	MDL	RL	DF	Date Analyzed
%CV	**1.01**	NA	NA	1	09/28/2018 05:01
Total Microcystin	ND	0.150	0.300	1	09/28/2018 05:01

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LP7	1809996-003B	Water	09/18/2018 16:00	SPECTROPHOTOMETER	165744

Analytes	Result	MDL	RL	DF	Date Analyzed
%CV	**2.36**	NA	NA	1	09/28/2018 05:01
Total Microcystin	ND	0.150	0.300	1	09/28/2018 05:01

Analyst(s): AO

(Cont.)

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Analytical Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1809996
Date Received:	9/21/18 14:15	**Extraction Method:**	E546
Date Prepared:	9/28/18	**Analytical Method:**	E546
Project:	18I1866	**Unit:**	µg/L

E546 UCMR4 ELISA (Total Microcystins)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ER4	1809996-004B	Water	09/18/2018 16:50	SPECTROPHOTOMETER	165744

Analytes	Result	MDL	RL	DF	Date Analyzed
%CV	**2.28**	NA	NA	1	09/28/2018 05:02
Total Microcystin	ND	0.150	0.300	1	09/28/2018 05:02

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
VA1	1809996-005B	Water	09/18/2018 17:15	SPECTROPHOTOMETER	165744

Analytes	Result	MDL	RL	DF	Date Analyzed
%CV	**3.72**	NA	NA	1	09/28/2018 05:02
Total Microcystin	ND	0.150	0.300	1	09/28/2018 05:02

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LPER-BL	1809996-006B	Water	09/18/2018 15:00	SPECTROPHOTOMETER	165744

Analytes	Result	MDL	RL	DF	Date Analyzed
%CV	**0.329**	NA	NA	1	09/28/2018 05:02
Total Microcystin	ND	0.150	0.300	1	09/28/2018 05:02

Analyst(s): AO

(Cont.)

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Analytical Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1809996
Date Received:	9/21/18 14:15	**Extraction Method:**	E546
Date Prepared:	9/28/18	**Analytical Method:**	E546
Project:	18I1866	**Unit:**	µg/L

E546 UCMR4 ELISA (Total Microcystins)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LPER-Dup	**1809996-007B**	**Water**	**09/18/2018 15:20**	**SPECTROPHOTOMETER**	**165744**

Analytes	Result	MDL	RL	DF	Date Analyzed
%CV	**1.16**	NA	NA	1	09/28/2018 05:02
Total Microcystin	ND	0.150	0.300	1	09/28/2018 05:02

Analyst(s): AO

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Quality Control Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1809996
Date Prepared:	9/26/18	**BatchID:**	165589
Date Analyzed:	9/27/18	**Extraction Method:**	E545
Instrument:	LC3Q-MS2	**Analytical Method:**	E545
Matrix:	Drinking Water	**Unit:**	µg/L
Project:	18I1866	**Sample ID:**	MB/LCS/LCSD-165589 1809996-001AMS/MSD

QC Summary Report E545 UCMR4

Analyte	MB Result	MDL	RL			
Anatoxin-a	ND	0.0100	0.0300	-	-	-
Cylindrospermopsin	ND	0.0300	0.0900	-	-	-
Internal Standard Recovery						
Uracil-d4					96	50-150
L-Phenylalanine-d5					88	50-150

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Anatoxin-a	0.593	0.547	0.59	101	93	70-130	8.07	20
Cylindrospermopsin	0.988	0.848	1	99	85	70-130	15.3	20
Internal Standard Recovery								
Uracil-d4				95	103	50-150	-	-
L-Phenylalanine-d5				97	108	50-150	-	-

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Anatoxin-a	1	0.573	0.537	0.59	ND	95	88	70-130	6.49	20
Cylindrospermopsin	1	1.05	0.965	1	ND	105	96	70-130	8.44	20
Internal Standard Recovery										
Uracil-d4	1					85	101	50-150	-	-
L-Phenylalanine-d5	1					109	116	50-150	-	-

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Quality Control Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1809996
Date Prepared:	9/28/18	**BatchID:**	165744
Date Analyzed:	9/28/18	**Extraction Method:**	E546
Instrument:	SPECTROPHOTOMETER	**Analytical Method:**	E546
Matrix:	Drinking Water	**Unit:**	µg/L
Project:	18I1866	**Sample ID:**	MB/LCS/LCSD-165744 1809996-001BMS/MSD

QC Summary Report for E546 UCMR4

Analyte	MB Result	MDL	RL			
%CV	1.84	-	-	-	-	-
Total Microcystin	ND	0.150	0.300	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Total Microcystin	0.707	0.750	0.75	94	100	60-140	5.92	40

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Total Microcystin	1	0.761	0.869	0.75	ND	101	116	60-140	13.2	40

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Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1809996 **ClientCode: ALPU**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ▣ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag
▣ Detection Summary ▣ Dry-Weight

Report to:
David S. Pingatore
Alpha Analytical Laboratories
262 Rickenbacker Circle
Livermore, CA 94551
(707) 468-0401 FAX: (707) 468-5267

Email: sspeaks@alpha-labs.com;david@alpha-la
cc/3rd Party:
PO:
Project: 18I1866

Bill to:
Accounts Payable
Alpha Analytical Laboratories
262 Rickenbacker Circle
Livermore, CA 94551

Requested TAT: 5 days;

Date Received: **09/21/2018**
Date Logged: **09/21/2018**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1809996-001	LP5	Water	9/18/2018 14:50	☐	A	B										
1809996-002	LP6	Water	9/18/2018 15:25	☐	A	B										
1809996-003	LP7	Water	9/18/2018 16:00	☐	A	B										
1809996-004	ER4	Water	9/18/2018 16:50	☐	A	B										
1809996-005	VA1	Water	9/18/2018 17:15	☐	A	B										
1809996-006	LPER-BL	Water	9/18/2018 15:00	☐	A	B										
1809996-007	LPER-Dup	Water	9/18/2018 15:20	☐	A	B										

Test Legend:

1	545_UCMR4	2	546_UCMR4	3		4	
5		6		7		8	
9		10		11		12	

Prepared by: Nancy Palacios

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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WORK ORDER SUMMARY

Client Name: ALPHA ANALYTICAL LABORATORIES **Project:** 18I1866 **Work Order:** 1809996

Client Contact: David S. Pingatore **QC Level:** LEVEL 2

Contact's Email: sspeaks@alpha-labs.com;david@alpha-labs.com; lquinn@alpha-labs.com **Comments:** **Date Logged:** 9/21/2018

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1809996-001A	LP5	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	9/18/2018 14:50	5 days	Present	☐	
1809996-001B	LP5	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	9/18/2018 14:50	5 days	Present	☐	
1809996-002A	LP6	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	9/18/2018 15:25	5 days	Present	☐	
1809996-002B	LP6	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	9/18/2018 15:25	5 days	Present	☐	
1809996-003A	LP7	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	9/18/2018 16:00	5 days	Present	☐	
1809996-003B	LP7	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	9/18/2018 16:00	5 days	Present	☐	
1809996-004A	ER4	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	9/18/2018 16:50	5 days	Present	☐	
1809996-004B	ER4	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	9/18/2018 16:50	5 days	Present	☐	
1809996-005A	VA1	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	9/18/2018 17:15	5 days	Present	☐	
1809996-005B	VA1	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	9/18/2018 17:15	5 days	Present	☐	
1809996-006A	LPER-BL	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	9/18/2018 15:00	5 days	Present	☐	
1809996-006B	LPER-BL	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	9/18/2018 15:00	5 days	Present	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

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WORK ORDER SUMMARY

Client Name: ALPHA ANALYTICAL LABORATORIES **Project:** 18I1866 **Work Order:** 1809996

Client Contact: David S. Pingatore **QC Level:** LEVEL 2

Contact's Email: sspeaks@alpha-labs.com;david@alpha-labs.com; lquinn@alpha-labs.com **Comments:** **Date Logged:** 9/21/2018

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1809996-007A	LPER-Dup	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	9/18/2018 15:20	5 days	Present	☐	
1809996-007B	LPER-Dup	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	9/18/2018 15:20	5 days	Present	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18I1866

1809996 NP 1809996

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

McCampbell Analytical / Alpha Quote # 181981
1534 Willowpass Rd.
Pittsburg, CA 94565
Phone :(925) 252-9262
Fax: (925) 252-9269
Terms: Net 30

Analysis	Due	Expires	Comments
18I1866-01 LP5 [Water] Sampled 09/18/18 14:50			
UCMR4 AM3 545 Cyanotoxins	10/03/18 12:00	10/16/18 14:50	
UCMR4 AM3 546 Total Microcystins	10/03/18 12:00	10/02/18 14:50	
Containers Supplied:			
Other (A) Other (B)			
18I1866-02 LP6 [Water] Sampled 09/18/18 15:25			
UCMR4 AM3 545 Cyanotoxins	10/03/18 12:00	10/16/18 15:25	
UCMR4 AM3 546 Total Microcystins	10/03/18 12:00	10/02/18 15:25	
Containers Supplied:			
Other (A) Other (B)			
18I1866-03 LP7 [Water] Sampled 09/18/18 16:00			
UCMR4 AM3 545 Cyanotoxins	10/03/18 12:00	10/16/18 16:00	
UCMR4 AM3 546 Total Microcystins	10/03/18 12:00	10/02/18 16:00	
Containers Supplied:			
Other (A) Other (B)			
18I1866-04 ER4 [Water] Sampled 09/18/18 16:50			
UCMR4 AM3 545 Cyanotoxins	10/03/18 12:00	10/16/18 16:50	
UCMR4 AM3 546 Total Microcystins	10/03/18 12:00	10/02/18 16:50	
Containers Supplied:			
Other (A) Other (B)			

NP 1415 0.8°

Released By	Date	Received By	Date
[signature]	9/20/18 1415	Nancy Palacios 1415 NP 09.21.18	
[signature]	9-20-18	[signature]	9-20-18
[signature]	9-20-18	RS (Fridge)	9/20/18
RS (Fridge)	9/21/18	[signature]	9/21/18 926

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18I1866

1809996

Analysis	Due	Expires	Comments
+ 18I1866-05 VA1 [Water] Sampled 09/18/18 17:15			
UCMR4 AM3 545 Cyanotoxins	10/03/18 12:00	10/16/18 17:15	
UCMR4 AM3 546 Total Microcystins	10/03/18 12:00	10/02/18 17:15	
Containers Supplied:			
Other (A) Other (B)			
+ 18I1866-06 LPER-BL [Water] Sampled 09/18/18 15:00			
UCMR4 AM3 545 Cyanotoxins	10/03/18 12:00	10/16/18 15:00	
UCMR4 AM3 546 Total Microcystins	10/03/18 12:00	10/02/18 15:00	
Containers Supplied:			
Other (A) Other (B)			
+ 18I1866-07 LPER-Dup [Water] Sampled 09/18/18 15:20			
UCMR4 AM3 545 Cyanotoxins	10/03/18 12:00	10/16/18 15:20	
UCMR4 AM3 546 Total Microcystins	10/03/18 12:00	10/02/18 15:20	
Containers Supplied:			
Other (A) Other (B)			

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

+QC

+MDL

Released By	9-20-18 Date	Received By	9-20-18 Date
Released By	9-20-18 Date	Received By	9/20/18 926 Date
9/21/18 1415		Nancy Palacios 9-21-18 1415	

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Sample Receipt Checklist

Client Name:	**Alpha Analytical Laboratories**	Date and Time Received	**9/21/2018 14:15**
Project:	**18I1866**	Date Logged:	**9/21/2018**
		Received by:	Nancy Palacios
WorkOrder №:	**1809996** Matrix: Water	Logged by:	Nancy Palacios
Carrier:	Benjamin Yslas (MAI Courier)		

Chain of Custody (COC) Information

Chain of custody present?	Yes	☑	No	☐		
Chain of custody signed when relinquished and received?	Yes	☑	No	☐		
Chain of custody agrees with sample labels?	Yes	☑	No	☐		
Sample IDs noted by Client on COC?	Yes	☑	No	☐		
Date and Time of collection noted by Client on COC?	Yes	☑	No	☐		
Sampler's name noted on COC?	Yes	☐	No	☑		
COC agrees with Quote?	Yes	☐	No	☐	NA	☑

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes	☐	No	☐	NA	☑
Shipping container/cooler in good condition?	Yes	☑	No	☐		
Samples in proper containers/bottles?	Yes	☑	No	☐		
Sample containers intact?	Yes	☑	No	☐		
Sufficient sample volume for indicated test?	Yes	☑	No	☐		

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes	☑	No	☐	NA	☐
Samples Received on Ice?	Yes	☑	No	☐		
(Ice Type: WET ICE)						
Sample/Temp Blank temperature	Temp: 3.7°C				NA	☐
Water - VOA vials have zero headspace / no bubbles?	Yes	☑	No	☐	NA	☐
Sample labels checked for correct preservation?	Yes	☑	No	☐		
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes	☐	No	☐	NA	☑
UCMR Samples:						
pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes	☑	No	☐	NA	☐
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes	☑	No	☐	NA	☐

Comments:

TOXINS

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

Corporate Laboratory
208 Mason Street, Ukiah CA 95482
707-468-0401 F) 707-468-5267
email: clientservices@alpha-labs.com

ELAP Certifications
Ukiah 1551, Livermore 2728, Elk Grove 2922

Bay Area Laboratory
262 Rickenbacker Circle, Livermore CA 94551
925-828-6226 F) 925-828-6309

Central Valley Laboratory
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 18I1866 Pg 1 of 1

Report to	Invoice to (if different)	Project Information
Company: Stillwater Sciences	Contact: Marissa Montjoy	Project ID: Potter Valley WQ (AQ3)
Attn: Christina Buck & Noah Hume	Email address: mmontjoy@stillwatersci.com	Project No: 642.1
Address: 2855 Telegraph Ave, Suite 400 Berkeley Ca 94705	Address: 2855 Telegraph Ave, Suite 400 Berkeley, CA 94705	PO Number:
Phone/Fax: 510-848-8098	Phone/Fax: 510-848-8098	
Email Address: cbuck@stillwatersci.com; noah@stillwatersci.com		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: CHRISTINA BUCK Christina Buck

Sample Identification	Sampling Date	Sampling Time	Container: 40ml Vial	Container: Poly	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	Analysis Request: EPA 545 (Cylindo & Anatoxin-A)	Analysis Request: EPA 546 (Microcystins)	Analysis Request: Algal ID & E (sub to Greenwater)	Sample Notes or DDW Source Numbers:
LP5	9/18	1450										x	x			3	x	x	x	Please hold phytoplankton sample analysis until further notice.
LP6		1525										x	x			3	x	x	x	
LP7		1600										x	x			3	x	x	x	
ER4		1650										x	x			3	x	x	x	
VA1		1715										x	x			3	x	x	x	
LPER-BL		1500										x	x			2	x	x		
LPER-Dup	↓	1520										x	x			2	x	x		no phyto
																				no phyto

TAT
Standard 10 days ◉
RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Lab preapproval required

Temp upon Receipt °C
Ukiah temp: 1.2
Livermore temp:
Elk Grove temp:

Relinquished by	Received by	Date	Time
CHRISTINA BUCK		9-19-18	0815

DDW Write On EDT Transmission? ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):

Travel and Site Time:	Mileage:	Misc. Supplies:

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Analytical Report

WorkOrder: 1810E77

Report Created for: Alpha Analytical Laboratories

262 Rickenbacker Circle
Livermore, CA 94551

Project Contact: David S. Pingatore
Project P.O.:
Project: 18J2660

Project Received: 10/30/2018

Analytical Report reviewed & approved for release on 12/05/2018 by:

Yen Cao
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.

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CA ELAP 1644 ♦ NELAP 4033 ORELAP

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Glossary of Terms & Qualifier Definitions

Client: Alpha Analytical Laboratories
Project: 18J2660
WorkOrder: 1810E77

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Quality Control Qualifiers

F2	LCS/LCSD recovery and/or RPD is out of acceptance criteria.

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Analytical Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1810E77
Date Received:	10/30/18 9:54	**Extraction Method:**	E545
Date Prepared:	11/2/18	**Analytical Method:**	E545
Project:	18J2660	**Unit:**	µg/L

E545 UCMR4 (Cylindrospermopsin and Anatoxin-a)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LP5	1810E77-001A	Water	10/25/2018 12:15	LC3Q-MS2 F1102180303.D	167736

Analytes	Result	RL	DF	Date Analyzed
Anatoxin-a	ND	0.0300	1	11/02/2018 16:14
Cylindrospermopsin	ND	0.0900	1	11/02/2018 16:14
Internal Standard	**REC (%)**	**Limits**		
Uracil-d4	77	50-150		11/02/2018 16:14
L-Phenylalanine-d5	95	50-150		11/02/2018 16:14

Analyst(s): JS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LP6	1810E77-002A	Water	10/25/2018 11:50	LC3Q-MS2 F1102180306.D	167736

Analytes	Result	RL	DF	Date Analyzed
Anatoxin-a	ND	0.0300	1	11/02/2018 16:57
Cylindrospermopsin	ND	0.0900	1	11/02/2018 16:57
Internal Standard	**REC (%)**	**Limits**		
Uracil-d4	81	50-150		11/02/2018 16:57
L-Phenylalanine-d5	100	50-150		11/02/2018 16:57

Analyst(s): JS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LP7	1810E77-003A	Water	10/25/2018 10:20	LC3Q-MS2 F1102180307.D	167736

Analytes	Result	RL	DF	Date Analyzed
Anatoxin-a	ND	0.0300	1	11/02/2018 17:11
Cylindrospermopsin	ND	0.0900	1	11/02/2018 17:11
Internal Standard	**REC (%)**	**Limits**		
Uracil-d4	92	50-150		11/02/2018 17:11
L-Phenylalanine-d5	98	50-150		11/02/2018 17:11

Analyst(s): JS

(Cont.)

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Analytical Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1810E77
Date Received:	10/30/18 9:54	**Extraction Method:**	E545
Date Prepared:	11/2/18	**Analytical Method:**	E545
Project:	18J2660	**Unit:**	µg/L

E545 UCMR4 (Cylindrospermopsin and Anatoxin-a)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ER4	1810E77-004A	Water	10/25/2018 13:10	LC3Q-MS2 F1102180308.D	167736

Analytes	Result	RL	DF	Date Analyzed
Anatoxin-a	ND	0.0300	1	11/02/2018 17:25
Cylindrospermopsin	ND	0.0900	1	11/02/2018 17:25
Internal Standard	**REC (%)**	**Limits**		
Uracil-d4	78	50-150		11/02/2018 17:25
L-Phenylalanine-d5	99	50-150		11/02/2018 17:25

Analyst(s): JS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
VA1	1810E77-005A	Water	10/25/2018 13:30	LC3Q-MS2 F1102180309.D	167736

Analytes	Result	RL	DF	Date Analyzed
Anatoxin-a	ND	0.0300	1	11/02/2018 17:40
Cylindrospermopsin	ND	0.0900	1	11/02/2018 17:40
Internal Standard	**REC (%)**	**Limits**		
Uracil-d4	95	50-150		11/02/2018 17:40
L-Phenylalanine-d5	96	50-150		11/02/2018 17:40

Analyst(s): JS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LPER-BL	1810E77-006A	Water	10/25/2018 13:15	LC3Q-MS2 F1102180310.D	167736

Analytes	Result	RL	DF	Date Analyzed
Anatoxin-a	ND	0.0300	1	11/02/2018 17:54
Cylindrospermopsin	ND	0.0900	1	11/02/2018 17:54
Internal Standard	**REC (%)**	**Limits**		
Uracil-d4	79	50-150		11/02/2018 17:54
L-Phenylalanine-d5	96	50-150		11/02/2018 17:54

Analyst(s): JS

(Cont.)

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Analytical Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1810E77
Date Received:	10/30/18 9:54	**Extraction Method:**	E545
Date Prepared:	11/2/18	**Analytical Method:**	E545
Project:	18J2660	**Unit:**	µg/L

E545 UCMR4 (Cylindrospermopsin and Anatoxin-a)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LPER-Dup	1810E77-007A	Water	10/25/2018 13:00	LC3Q-MS2 F1102180311.D	167736

Analytes	Result	RL	DF	Date Analyzed
Anatoxin-a	ND	0.0300	1	11/02/2018 18:08
Cylindrospermopsin	ND	0.0900	1	11/02/2018 18:08

Internal Standard	REC (%)	Limits	Date Analyzed
Uracil-d4	91	50-150	11/02/2018 18:08
L-Phenylalanine-d5	99	50-150	11/02/2018 18:08

Analyst(s): JS

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Analytical Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1810E77
Date Received:	10/30/18 9:54	**Extraction Method:**	E546
Date Prepared:	11/7/18	**Analytical Method:**	E546
Project:	18J2660	**Unit:**	µg/L

E546 UCMR4 ELISA (Total Microcystins)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LP5	1810E77-001B	Water	10/25/2018 12:15	SPECTROPHOTOMETER	167996

Analytes	Result	RL	DF	Date Analyzed
%CV	**0.463**	NA	1	11/07/2018 15:30
Total Microcystin	ND	0.300	1	11/07/2018 15:30

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LP6	1810E77-002B	Water	10/25/2018 11:50	SPECTROPHOTOMETER	167996

Analytes	Result	RL	DF	Date Analyzed
%CV	**2.14**	NA	1	11/07/2018 15:30
Total Microcystin	ND	0.300	1	11/07/2018 15:30

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LP7	1810E77-003B	Water	10/25/2018 10:20	SPECTROPHOTOMETER	167996

Analytes	Result	RL	DF	Date Analyzed
%CV	**2.84**	NA	1	11/07/2018 15:30
Total Microcystin	ND	0.300	1	11/07/2018 15:30

Analyst(s): AO

(Cont.)

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
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Analytical Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1810E77
Date Received:	10/30/18 9:54	**Extraction Method:**	E546
Date Prepared:	11/7/18	**Analytical Method:**	E546
Project:	18J2660	**Unit:**	µg/L

E546 UCMR4 ELISA (Total Microcystins)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ER4	1810E77-004B	Water	10/25/2018 13:10	SPECTROPHOTOMETER	167996

Analytes	Result	RL	DF	Date Analyzed
%CV	**2.21**	NA	1	11/07/2018 15:31
Total Microcystin	ND	0.300	1	11/07/2018 15:31

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
VA1	1810E77-005B	Water	10/25/2018 13:30	SPECTROPHOTOMETER	167996

Analytes	Result	RL	DF	Date Analyzed
%CV	**0.417**	NA	1	11/07/2018 15:31
Total Microcystin	ND	0.300	1	11/07/2018 15:31

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LPER-BL	1810E77-006B	Water	10/25/2018 13:15	SPECTROPHOTOMETER	167996

Analytes	Result	RL	DF	Date Analyzed
%CV	**4.93**	NA	1	11/07/2018 15:31
Total Microcystin	ND	0.300	1	11/07/2018 15:31

Analyst(s): AO

(Cont.)

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Analytical Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1810E77
Date Received:	10/30/18 9:54	**Extraction Method:**	E546
Date Prepared:	11/7/18	**Analytical Method:**	E546
Project:	18J2660	**Unit:**	µg/L

E546 UCMR4 ELISA (Total Microcystins)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
LPER-Dup	**1810E77-007B**	**Water**	**10/25/2018 13:00**	**SPECTROPHOTOMETER**	**167996**

Analytes	Result	RL	DF	Date Analyzed
%CV	**3.82**	NA	1	11/07/2018 15:31
Total Microcystin	ND	0.300	1	11/07/2018 15:31

Analyst(s): AO

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Quality Control Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1810E77
Date Prepared:	11/2/18	**BatchID:**	167736
Date Analyzed:	11/2/18	**Extraction Method:**	E545
Instrument:	LC3Q-MS2	**Analytical Method:**	E545
Matrix:	Drinking Water	**Unit:**	µg/L
Project:	18J2660	**Sample ID:**	MB/LCS/LCSD-167736 1810E77-001AMS/MSD

QC Summary Report E545 UCMR4

Analyte	MB Result	RL			
Anatoxin-a	ND	0.0300	-	-	-
Cylindrospermopsin	ND	0.0900	-	-	-
Internal Standard Recovery					
Uracil-d4				103	50-150
L-Phenylalanine-d5				110	50-150

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Anatoxin-a	0.521	0.523	0.59	89	89	70-130	0	20
Cylindrospermopsin	0.747	0.874	1	75	87	70-130	15.7	20
Internal Standard Recovery								
Uracil-d4				108	98	50-150	-	-
L-Phenylalanine-d5				106	103	50-150	-	-

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Anatoxin-a	1	0.471	0.514	0.59	ND	80	88	70-130	8.73	20
Cylindrospermopsin	1	0.862	1.01	1	ND	86	101	70-130	15.9	20
Internal Standard Recovery										
Uracil-d4	1					82	82	50-150	-	-
L-Phenylalanine-d5	1					105	95	50-150	-	-

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Quality Control Report

Client:	Alpha Analytical Laboratories	**WorkOrder:**	1810E77
Date Prepared:	11/7/18	**BatchID:**	167996
Date Analyzed:	11/7/18	**Extraction Method:**	E546
Instrument:	SPECTROPHOTOMETER	**Analytical Method:**	E546
Matrix:	Drinking Water	**Unit:**	µg/L
Project:	18J2660	**Sample ID:**	MB/LCS/LCSD-167996 1810E77-001BMS/MSD

QC Summary Report for E546 UCMR4

Analyte	MB Result	RL			
%CV	1.16	N/A	-	-	-
Total Microcystin	ND	0.300	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Total Microcystin	0.896	0.597	0.75	120	80	60-140	40.1,F2	40

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Total Microcystin	1	0.757	0.839	0.75	ND	101	112	60-140	10.2	40

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Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1810E77 **ClientCode: ALPU**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ■ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ■ J-flag
■ Detection Summary ■ Dry-Weight

Report to:
David S. Pingatore
Alpha Analytical Laboratories
262 Rickenbacker Circle
Livermore, CA 94551
(707) 468-0401 FAX: (707) 468-5267

Email: sspeaks@alpha-labs.com;david@alpha-la
cc/3rd Party:
PO:
Project: 18J2660

Bill to:
Accounts Payable
Alpha Analytical Laboratories
262 Rickenbacker Circle
Livermore, CA 94551

Requested TAT: **5 days;**

Date Received: **10/30/2018**
Date Logged: **10/30/2018**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1810E77-001	LP5	Water	10/25/2018 12:15	☐	A	B										
1810E77-002	LP6	Water	10/25/2018 11:50	☐	A	B										
1810E77-003	LP7	Water	10/25/2018 10:20	☐	A	B										
1810E77-004	ER4	Water	10/25/2018 13:10	☐	A	B										
1810E77-005	VA1	Water	10/25/2018 13:30	☐	A	B										
1810E77-006	LPER-BL	Water	10/25/2018 13:15	☐	A	B										
1810E77-007	LPER-Dup	Water	10/25/2018 13:00	☐	A	B										

Test Legend:

1	545_UCMR4	2	546_UCMR4	3		4	
5		6		7		8	
9		10		11		12	

Project Manager: Christine Askari

Prepared by: Tina Perez

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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WORK ORDER SUMMARY

Client Name: ALPHA ANALYTICAL LABORATORIES **Project:** 18J2660 **Work Order:** 1810E77

Client Contact: David S. Pingatore **QC Level:** LEVEL 2

Contact's Email: sspeaks@alpha-labs.com;david@alpha-labs.com; lquinn@alpha-labs.com **Comments:** **Date Logged:** 10/30/2018

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1810E77-001A	LP5	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	10/25/2018 12:15	5 days	None	☐	
1810E77-001B	LP5	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	10/25/2018 12:15	5 days	None	☐	
1810E77-002A	LP6	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	10/25/2018 11:50	5 days	None	☐	
1810E77-002B	LP6	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	10/25/2018 11:50	5 days	None	☐	
1810E77-003A	LP7	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	10/25/2018 10:20	5 days	None	☐	
1810E77-003B	LP7	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	10/25/2018 10:20	5 days	None	☐	
1810E77-004A	ER4	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	10/25/2018 13:10	5 days	None	☐	
1810E77-004B	ER4	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	10/25/2018 13:10	5 days	None	☐	
1810E77-005A	VA1	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	10/25/2018 13:30	5 days	None	☐	
1810E77-005B	VA1	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	10/25/2018 13:30	5 days	None	☐	
1810E77-006A	LPER-BL	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	10/25/2018 13:15	5 days	None	☐	
1810E77-006B	LPER-BL	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	10/25/2018 13:15	5 days	None	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

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WORK ORDER SUMMARY

Client Name: ALPHA ANALYTICAL LABORATORIES **Project:** 18J2660 **Work Order:** 1810E77

Client Contact: David S. Pingatore **QC Level:** LEVEL 2

Contact's Email: sspeaks@alpha-labs.com;david@alpha-labs.com; lquinn@alpha-labs.com **Comments:** **Date Logged:** 10/30/2018

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1810E77-007A	LPER-Dup	Water	E545 UCMR4 AM3 (Cylindrospermopsin & Anatoxin-a)	1	125mL aG w/ NaHSO4 + C6H8O6	☐	10/25/2018 13:00	5 days	None	☐	
1810E77-007B	LPER-Dup	Water	E546 UCMR4 AM3 ELISA (Total Microcystins)	1	120mL w/Na2S2O3	☐	10/25/2018 13:00	5 days	None	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18J2660

181077

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

McCampbell Analytical / Alpha Quote # 181981
1534 Willowpass Rd.
Pittsburg, CA 94565
Phone :(925) 252-9262
Fax: (925) 252-9269
Terms: Net 30

Analysis	Due	Expires	Comments
18J2660-01 LP5 [Water] Sampled 10/25/18 12:15			
UCMR4 AM3 545 Cyanotoxins	11/08/18 12:00	11/22/18 12:15	
UCMR4 AM3 546 Total Microcystins	11/08/18 12:00	11/08/18 12:15	
Containers Supplied:			
Other (A) Other (B)			
18J2660-02 LP6 [Water] Sampled 10/25/18 11:50			
UCMR4 AM3 545 Cyanotoxins	11/08/18 12:00	11/22/18 11:50	
UCMR4 AM3 546 Total Microcystins	11/08/18 12:00	11/08/18 11:50	
Containers Supplied:			
Other (A) Other (B)			
18J2660-03 LP7 [Water] Sampled 10/25/18 10:20			
UCMR4 AM3 545 Cyanotoxins	11/08/18 12:00	11/22/18 10:20	
UCMR4 AM3 546 Total Microcystins	11/08/18 12:00	11/08/18 10:20	
Containers Supplied:			
Other (A) Other (B)			
18J2660-04 ER4 [Water] Sampled 10/25/18 13:10			
UCMR4 AM3 545 Cyanotoxins	11/08/18 12:00	11/22/18 13:10	
UCMR4 AM3 546 Total Microcystins	11/08/18 12:00	11/08/18 13:10	
Containers Supplied:			
Other (A) Other (B)			

Released By	Date	Received By	Date
			10/30/18 09:54
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18J2660

Analysis	Due	Expires	Comments
18J2660-05 VA1 [Water] Sampled 10/25/18 13:30			
UCMR4 AM3 545 Cyanotoxins	11/08/18 12:00	11/22/18 13:30	
UCMR4 AM3 546 Total Microcystins	11/08/18 12:00	11/08/18 13:30	
Containers Supplied:			
Other (A) Other (B)			
18J2660-06 LPER-BL [Water] Sampled 10/25/18 13:15			
UCMR4 AM3 545 Cyanotoxins	11/08/18 12:00	11/22/18 13:15	
UCMR4 AM3 546 Total Microcystins	11/08/18 12:00	11/08/18 13:15	
Containers Supplied:			
Other (A) Other (B)			
18J2660-07 LPER-Dup [Water] Sampled 10/25/18 13:00			
UCMR4 AM3 545 Cyanotoxins	11/08/18 12:00	11/22/18 13:00	
UCMR4 AM3 546 Total Microcystins	11/08/18 12:00	11/08/18 13:00	
Containers Supplied:			
Other (A) Other (B)			

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

Released By	Date	Received By	Date
		10/30/18 09:54	
Released By	Date	Received By	Date

Page 2 of 2

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18J2660

181DE77

SENDING LABORATORY:

Alpha Analytical Laboratories, Inc.
208 Mason St.
Ukiah, CA 95482
Phone: (707)468-0401
Fax: (707)468-5267
Project Manager: David S. Pingatore

RECEIVING LABORATORY:

McCampbell Analytical / Alpha Quote # 181981
1534 Willowpass Rd.
Pittsburg, CA 94565
Phone :(925) 252-9262
Fax: (925) 252-9269
Terms: Net 30

Analysis	Due	Expires	Comments
18J2660-01 LP5 [Water] Sampled 10/25/18 12:15			
UCMR4 AM3 545 Cyanotoxins	11/08/18 12:00	11/22/18 12:15	
UCMR4 AM3 546 Total Microcystins	11/08/18 12:00	11/08/18 12:15	
Containers Supplied:			
Other (A) Other (B)			
18J2660-02 LP6 [Water] Sampled 10/25/18 11:50			
UCMR4 AM3 545 Cyanotoxins	11/08/18 12:00	11/22/18 11:50	
UCMR4 AM3 546 Total Microcystins	11/08/18 12:00	11/08/18 11:50	
Containers Supplied:			
Other (A) Other (B)			
18J2660-03 LP7 [Water] Sampled 10/25/18 10:20			
UCMR4 AM3 545 Cyanotoxins	11/08/18 12:00	11/22/18 10:20	
UCMR4 AM3 546 Total Microcystins	11/08/18 12:00	11/08/18 10:20	
Containers Supplied:			
Other (A) Other (B)			
18J2660-04 ER4 [Water] Sampled 10/25/18 13:10			
UCMR4 AM3 545 Cyanotoxins	11/08/18 12:00	11/22/18 13:10	
UCMR4 AM3 546 Total Microcystins	11/08/18 12:00	11/08/18 13:10	
Containers Supplied:			
Other (A) Other (B)			

0.4 3.3 WET

Released By	Date	Received By	Date
	10-26-18		10-29-18
	10-29-18	RS (Fridge)	10/29/18
RS (Fridge)	10/30/18		10/30/18
	10/30/18	agustinA - 10/30/18 0954A	

SUBCONTRACT ORDER

Alpha Analytical Laboratories, Inc.

18J2660

Analysis	Due	Expires	Comments
18J2660-05 VA1 [Water] Sampled 10/25/18 13:30			
UCMR4 AM3 545 Cyanotoxins	11/08/18 12:00	11/22/18 13:30	
UCMR4 AM3 546 Total Microcystins	11/08/18 12:00	11/08/18 13:30	
Containers Supplied:			
Other (A) Other (B)			
18J2660-06 VPER-BL [Water] Sampled 10/25/18 13:15			
UCMR4 AM3 545 Cyanotoxins	11/08/18 12:00	11/22/18 13:15	
UCMR4 AM3 546 Total Microcystins	11/08/18 12:00	11/08/18 13:15	
Containers Supplied:			
Other (A) Other (B)			
18J2660-07 VPER-Dup [Water] Sampled 10/25/18 13:00			
UCMR4 AM3 545 Cyanotoxins	11/08/18 12:00	11/22/18 13:00	
UCMR4 AM3 546 Total Microcystins	11/08/18 12:00	11/08/18 13:00	
Containers Supplied:			
Other (A) Other (B)			

☐ *Report to State*

System Name: _____ **Employed by:** _____

User ID: _____ **Sampler:** _____

System Number: _____

"Non-Regulatory"

0.4

Released By	Date	Received By	Date
	10-26-18		10-29-18
	10-29-18	RS (fridge)	10/29/18
RS (fridge) Alan Lee	10/30/18 10/30/18	Alan Lee	10/30/18 Page 2 of 2

agustinAV. 10/30/18 0954

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Sample Receipt Checklist

Client Name:	**Alpha Analytical Laboratories**	Date and Time Received	**10/30/2018 09:54**
Project:	**18J2660**	Date Logged:	**10/30/2018**
		Received by:	Agustina Venegas
WorkOrder №:	**1810E77** Matrix: Water	Logged by:	Tina Perez
Carrier:	Client Drop-In		

Chain of Custody (COC) Information

Chain of custody present?	Yes	☑	No	☐		
Chain of custody signed when relinquished and received?	Yes	☑	No	☐		
Chain of custody agrees with sample labels?	Yes	☑	No	☐		
Sample IDs noted by Client on COC?	Yes	☑	No	☐		
Date and Time of collection noted by Client on COC?	Yes	☑	No	☐		
Sampler's name noted on COC?	Yes	☑	No	☐		
COC agrees with Quote?	Yes	☑	No	☐	NA	☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes	☐	No	☐	NA	☑
Shipping container/cooler in good condition?	Yes	☑	No	☐		
Samples in proper containers/bottles?	Yes	☑	No	☐		
Sample containers intact?	Yes	☑	No	☐		
Sufficient sample volume for indicated test?	Yes	☑	No	☐		

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes	☑	No	☐	NA	☐
Samples Received on Ice?	Yes	☑	No	☐		
(Ice Type: WET ICE)						
Sample/Temp Blank temperature	Temp: 3.3°C				NA	☐
Water - VOA vials have zero headspace / no bubbles?	Yes	☐	No	☐	NA	☑
Sample labels checked for correct preservation?	Yes	☑	No	☐		
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes	☑	No	☐	NA	☐
UCMR Samples:						
pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes	☑	No	☐	NA	☐
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes	☑	No	☐	NA	☐

Comments:

Attachment E

Chains of Custody and Laboratory Reports – Sportfish Tissue Samples

SWAMP REQUEST FOR ANALYSIS AND CHAIN OF CUSTODY (COC) RECORD

Analysis Authorization		**Project ID:**	**Potter Valley AQ 3**	Contact Person:	Autumn Bonnema	Kim Pham
		Client:	Cardno	Phone:	831-771-4175	916-322-8429
Season:	Fall	**Client Contac**	Norm Ponferrada	Email:	bonnema@miml.calstate.edu	kimberly.pham@waterboards.ca.gov
Date:	10/15/18	**Phone:**	209-598-7826			
		Email:	norm.ponferrada@cardno.com			

Station Code	Station Name	Bag ID	Sample Date	Sample Time	Fish length (mm)			Comments (weight in g.)	Field Preparation Preservation	Tissue Mercury THg
					SL	FL	TL			total
Station 1	Eel River - US of Bucknell Creek	**PMBK01**	10/10/2018	11:12	305	341	364	380.4	Field Frozen	x
Station 1	Eel River - US of Bucknell Creek	**PMBK02**	10/10/2018	11:17	280	421	459	701.2	Field Frozen	x
Station 1	Eel River - US of Bucknell Creek	**PMBK03**	10/10/2018	11:20	349	333	419	559.0	Field Frozen	x
Station 1	Eel River - US of Bucknell Creek	**PMBK04**	10/10/2018	11:22	251	284	304	221.7	Field Frozen	x
Station 1	Eel River - US of Bucknell Creek	**PMBK05**	10/10/2018	11:24	269	306	331	281.9	Field Frozen	x
Station 1	Eel River - US of Bucknell Creek	**PMBK06**	10/10/2018	11:27	274	301	324	272.3	Field Frozen	x
Station 1	Eel River - US of Bucknell Creek	**PMBK07**	10/10/2018	11:28	265	294	319	235.4	Field Frozen	x
Station 1	Eel River - US of Bucknell Creek	**PMBK08**	10/10/2018	11:28	240	272	294	190.9	Field Frozen	x
Station 1	Eel River - US of Bucknell Creek	**PMBK09**	10/10/2018	11:30	377	415	448	657.2	Field Frozen	x
Station 2	Eel River - near Trout Creek	**PMTC10**	10/10/2018	16:27	268	305	325	255.3	Field Frozen	x
Station 2	Eel River - near Trout Creek	**PMTC11**	10/10/2018	16:31	261	299	320	245.2	Field Frozen	x
Station 2	Eel River - near Trout Creek	**PMTC12**	10/10/2018	16:33	310	350	373	379.2	Field Frozen	x

Comments:

Samples Relinquished by (Print and Sign):	**Date & Time**	**Samples Received by (Print and Sign):**	**Date & Time**
Jessica May Jessica May	10/15/18 4:00 (Dropped @ FedEx)	Jessica Jang Jessica Jang	10/16/2018 7.4°C 12:30

20181016-1230

LabSampleID	ProjectCode	StationCode	StationName	CompositeID	OrganismGroup	SampleTypeCode	PrepPreservationName	PrepPreservationDate	LabBatch	AnalysisDate	LabReplicate	MatrixName	AnalyteName	FractionName	UnitName	Result	ResQualCode	MDL	RL	QACode	ExpectedValue	TissueResultComments	ResQualName	QAName	IDORG	LabLogComments	Sex	SL (mm)	FL (mm)	TL (mm)	Weight (g)
DORM4	Not Applicable	LABQA	CRM	NRCC_DORM4	Fish	CRM	None	1/1/1950	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Mercury	Total	ug/g ww	0.33	=	0.003	0.009	None	0.395	PR 82.9	Equal To	None - No							
DORM4	Not Applicable	LABQA	CRM	NRCC_DORM4	Fish	CRM	None	1/1/1950	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Moisture	Total	%	3.63	=	-88	-88	None			Equal To	None - No							
MB1	Not Applicable	LABQA	LabBlank	MethodBlank1	Not Applica	LabBlank	None	1/1/1950	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Mercury	Total	ug/g ww	-0.003	ND	0.003	0.009	None			Not Detect	None - No							
MB2	Not Applicable	LABQA	LabBlank	MethodBlank2	Not Applica	LabBlank	None	1/1/1950	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Mercury	Total	ug/g ww	-0.003	ND	0.003	0.009	None			Not Detect	None - No							
MB3	Not Applicable	LABQA	LabBlank	MethodBlank3	Not Applica	LabBlank	None	1/1/1950	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Mercury	Total	ug/g ww	-0.003	ND	0.003	0.009	None			Not Detect	None - No							
2018-2154	PotterValley_AQ3	Station 1	Eel River - US of Bucknell Creek PMBK01	PMBK01	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Mercury	Total	ug/g ww	0.801	=	0.003	0.009	None			Equal To	None - No			F	305	341	364	380.4
2018-2154-dup	PotterValley_AQ3	Station 1	Eel River - US of Bucknell Creek PMBK01	PMBK01	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	2	Tissue	Mercury	Total	ug/g ww	0.811	=	0.003	0.009	None		RPD 1.15	Equal To	None - No							
2018-2154	PotterValley_AQ3	Station 1	Eel River - US of Bucknell Creek PMBK01	PMBK01	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Moisture	Total	%	77.97	=	-88	-88	None			Equal To	None - No							
2018-2155	PotterValley_AQ3	Station 1	Eel River - US of Bucknell Creek PMBK02	PMBK02	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Mercury	Total	ug/g ww	2.15	=	0.003	0.009	None			Equal To	None - No			F	280	421	459	701.2
2018-2155	PotterValley_AQ3	Station 1	Eel River - US of Bucknell Creek PMBK02	PMBK02	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Moisture	Total	%	80.95	=	-88	-88	None			Equal To	None - No							
2018-2156	PotterValley_AQ3	Station 1	Eel River - US of Bucknell Creek PMBK03	PMBK03	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Mercury	Total	ug/g ww	0.943	=	0.003	0.009	None			Equal To	None - No			F	349	333	419	559
2018-2156	PotterValley_AQ3	Station 1	Eel River - US of Bucknell Creek PMBK03	PMBK03	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Moisture	Total	%	79.01	=	-88	-88	None			Equal To	None - No							
2018-2157	PotterValley_AQ3	Station 1	Eel River - US of Bucknell Creek PMBK04	PMBK04	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Mercury	Total	ug/g ww	0.647	=	0.003	0.009	None			Equal To	None - No			F	251	284	304	221.7
2018-2157	PotterValley_AQ3	Station 1	Eel River - US of Bucknell Creek PMBK04	PMBK04	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Moisture	Total	%	77.80	=	-88	-88	None			Equal To	None - No							
2018-2158	PotterValley_AQ3	Station 1	Eel River - US of Bucknell Creek PMBK05	PMBK05	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Mercury	Total	ug/g ww	0.742	=	0.003	0.009	None			Equal To	None - No			F	269	306	331	281.9
2018-2158	PotterValley_AQ3	Station 1	Eel River - US of Bucknell Creek PMBK05	PMBK05	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Moisture	Total	%	78.57	=	-88	-88	None			Equal To	None - No							
2018-2159	PotterValley_AQ3	Station 1	Eel River - US of Bucknell Creek PMBK06	PMBK06	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Mercury	Total	ug/g ww	0.424	=	0.003	0.009	None			Equal To	None - No			F	274	301	324	272.3
2018-2159	PotterValley_AQ3	Station 1	Eel River - US of Bucknell Creek PMBK06	PMBK06	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Moisture	Total	%	77.90	=	-88	-88	None			Equal To	None - No							
2018-2160	PotterValley_AQ3	Station 1	Eel River - US of Bucknell Creek PMBK07	PMBK07	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Mercury	Total	ug/g ww	0.705	=	0.003	0.009	None			Equal To	None - No			M	265	294	319	235.4
2018-2160	PotterValley_AQ3	Station 1	Eel River - US of Bucknell Creek PMBK07	PMBK07	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Moisture	Total	%	78.61	=	-88	-88	None			Equal To	None - No							
2018-2161	PotterValley_AQ3	Station 1	Eel River - US of Bucknell Creek PMBK08	PMBK08	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Mercury	Total	ug/g ww	0.291	=	0.003	0.009	None			Equal To	None - No			F	240	272	294	190.9
2018-2161	PotterValley_AQ3	Station 1	Eel River - US of Bucknell Creek PMBK08	PMBK08	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Moisture	Total	%	78.11	=	-88	-88	None			Equal To	None - No							
2018-2162	PotterValley_AQ3	Station 1	Eel River - US of Bucknell Creek PMBK09	PMBK09	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Mercury	Total	ug/g ww	1.60	=	0.003	0.009	None			Equal To	None - No			F	377	415	448	657.2
2018-2162	PotterValley_AQ3	Station 1	Eel River - US of Bucknell Creek PMBK09	PMBK09	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Moisture	Total	%	78.35	=	-88	-88	None			Equal To	None - No							
2018-2163	PotterValley_AQ3	Station 2	Eel River - near Trout Creek PMTC10	PMTC10	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Mercury	Total	ug/g ww	0.883	=	0.003	0.009	None			Equal To	None - No			M	268	305	325	255.3
2018-2163	PotterValley_AQ3	Station 2	Eel River - near Trout Creek PMTC10	PMTC10	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Moisture	Total	%	78.77	=	-88	-88	None			Equal To	None - No							
2018-2164	PotterValley_AQ3	Station 2	Eel River - near Trout Creek PMTC11	PMTC11	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Mercury	Total	ug/g ww	0.699	=	0.003	0.009	None			Equal To	None - No			F	261	299	320	245.2
2018-2164	PotterValley_AQ3	Station 2	Eel River - near Trout Creek PMTC11	PMTC11	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Moisture	Total	%	79.33	=	-88	-88	None			Equal To	None - No							
2018-2165	PotterValley_AQ3	Station 2	Eel River - near Trout Creek PMTC12	PMTC12	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Mercury	Total	ug/g ww	1.46	=	0.003	0.009	None			Equal To	None - No			F	310	350	373	379.2
2018-2165-MS	PotterValley_AQ3	Station 2	Eel River - near Trout Creek PMTC12	PMTC12	Fish	MS1	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Mercury	Total	ug/g ww	5.21	=	0.003	0.009	None	4.92	PR 108	Equal To	None - No							

LabSampleID	ProjectCode	StationCode	StationName	CompositeID	OrganismGroup	SampleTypeCode	PrepPreservationName	PrepPreservationDate	LabBatch	AnalysisDate	LabReplicate	MatrixName	AnalyteName	FractionName	UnitName	Result	ResQualCode	MDL	RL	QACode	ExpectedValue	TissueResultComments	ResQualName	QAName	IDORG	LabLogComments	Sex	SL (mm)	FL (mm)	TL (mm)	Weight (g)
2018-2165-MSD	PotterValley_AQ3	Station 2	Eel River - near Trout Creek PMTC12	PMTC12	Fish	MS1	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	2	Tissue	Mercury	Total	ug/g ww	5.52	=	0.003	0.009	None	5.26	PR 107, RPD 1.38	Equal To	None - No							
2018-2165	PotterValley_AQ3	Station 2	Eel River - near Trout Creek PMTC12	PMTC12	Fish	Composite	FieldFrozen	10/10/2018	MPSL-DFW_DMA121918a_T_Hg	12/19/2018	1	Tissue	Moisture	Total	%	79.02	=	-88	-88	None			Equal To	None - No							

SWAMP REQUEST FOR ANALYSIS AND CHAIN OF CUSTODY (COC) RECORD

Analysis Authorization	Project ID:Potter Valley Project (FERC#77)-Water Quality (AQ3)			Contact Person:	Autumn Bonnema		Christina Buck
				Phone:	831-771-4175		415-609-6903 (cell)
Season:	Summer/Fall	**Client:**	Stillwater Sciences	Email:	bonnema@mlml.calstate.edu		cbuck@stillwatersci.com
Date:	10/1/2018			Please send data to: Christina Buck: cbuck@stillwatersci.com			
				Noah Hume: noah@stillwatersci.com			

Station Code	Station Name	Bag ID	Sample Date	Sample Time	Fish length (mm)			Weight (grams)	Comments	Field Preparation Preservation	Tissue Mercury THg total
					SL	FL	TL				
GLP-1	Lake Pillsbury	M-LMB-1	9/25/2018	1849	304	340	350	555	none	FieldFrozen	x
GLP-1	Lake Pillsbury	M-LMB-4	9/25/2018	2043	297	330	346	690	none	FieldFrozen	x
GLP-1	Lake Pillsbury	M-PMN-7	9/25/2018	2127	253	275	299	205	none	FieldFrozen	x
GLP-1	Lake Pillsbury	M-LMB-5	9/25/2018	2245	281	309	320	430	none	FieldFrozen	x
GLP-1	Lake Pillsbury	M-LMB-6	9/25/2018	2249	409	449	463	1520	none	FieldFrozen	x
GLP-1	Lake Pillsbury	M-PMN-8	9/25/2018	2256	382	417	451	665	none	FieldFrozen	x
GLP-1	Lake Pillsbury	M-BG-3	9/25/2018	2258	186	209	221	320	none	FieldFrozen	x
GLP-1	Lake Pillsbury	M-BG-4	9/25/2018	2303	191	215	231	335	none	FieldFrozen	x
GLP-1	Lake Pillsbury	M-BG-6	9/25/2018	2312	207	236	244	390	none	FieldFrozen	x
GLP-2	Lake Pillsbury	M-LMB-9	9/26/2018	1920	182	201	210	155	none	FieldFrozen	x
GLP-4	Lake Pillsbury	M-BG-8	9/27/2018	1636	36	44	46	1.2	none	FieldFrozen	x
GLP-4	Lake Pillsbury	M-BG-9	9/27/2018	1637	39	48	50	1.7	none	FieldFrozen	x
GLP-4	Lake Pillsbury	M-BG-10	9/27/2018	1639	30	37	39	0.7	none	FieldFrozen	x
GLP-4	Lake Pillsbury	M-LMB-11	9/27/2018	1643	55	64	67	3.6	none	FieldFrozen	x
GLP-4	Lake Pillsbury	M-LMB-12	9/27/2018	1644	54	62	65	3.5	none	FieldFrozen	x

Comments:

Samples Relinquished by (Print and Sign):	Date & Time	Samples Received by (Print and Sign):	Date & Time
MICHAEL DAVIS	10/1/2018; 12:00	April Guimaraes	10/2/18 11:45
			3.6°C

20181002_1145

SWAMP REQUEST FOR ANALYSIS AND CHAIN OF CUSTODY (COC) RECORD

Analysis Authorization	Project ID:Potter Valley Project (FERC#77)-Water Quality (AQ3)			Contact Person:	Autumn Bonnema		Christina Buck
				Phone:	831-771-4175		415-609-6903 (cell)
Season:	Summer/Fall	**Client:**	Stillwater Sciences	Email:	bonnema@mlml.calstate.edu		cbuck@stillwatersci.com
Date:	10/1/2018			Please send data to: Christina Buck: cbuck@stillwatersci.com			
				Noah Hume: noah@stillwatersci.com			

Station Code	Station Name	Bag ID	Sample Date	Sample Time	Fish length (mm)			Weight (grams)	Comments	Field Preparation Preservation	Tissue Mercury THg total
					SL	FL	TL				
GLP-3	Lake Pillsbury	M-PMN-1	9/24/2018	2039	321	350	384	395	none	FieldFrozen	x
GLP-3	Lake Pillsbury	M-PMN-3	9/24/2018	2038	322	358	386	430	none	FieldFrozen	x
GLP-3	Lake Pillsbury	M-BG-1	9/24/2018	2038	191	217	326	295	none	FieldFrozen	x
GLP-1	Lake Pillsbury	M-LMB-2	9/25/2018	1849	339	369	387	860	none	FieldFrozen	x
GLP-1	Lake Pillsbury	M-LMB-3	9/25/2018	2041	153	170	179	72	none	FieldFrozen	x
GLP-1	Lake Pillsbury	M-PMN-6	9/25/2018	2047	414	450	481	745	none	FieldFrozen	x
GLP-1	Lake Pillsbury	M-BG-2	9/25/2018	2247	199	225	236	370	none	FieldFrozen	x
GLP-1	Lake Pillsbury	M-BG-5	9/25/2018	2308	191	215	231	360	none	FieldFrozen	x
GLP-2	Lake Pillsbury	M-LMB-8	9/26/2018	1919	277	304	319	470	none	FieldFrozen	x
GLP-2	Lake Pillsbury	M-LMB-10	9/26/2018	1922	205	228	237	200	none	FieldFrozen	x
GLP-2	Lake Pillsbury	M-PMN-10	9/26/2018	1926	388	417	452	760	none	FieldFrozen	x
GLP-2	Lake Pillsbury	M-BG-7	9/26/2018	2215	198	219	230	320	none	FieldFrozen	x

Comments:

Samples Relinquished by (Print and Sign):	Date & Time	Samples Received by (Print and Sign):	Date & Time
MICHAEL DAVIS	10/1/2018; 12:00	April Guimaraes	10/2/18 11:46
			6.4°C

20181002-1146

SWAMP REQUEST FOR ANALYSIS AND CHAIN OF CUSTODY (COC) RECORD

Analysis Authorization	Project ID:Potter Valley Project (FERC#77)-Water Quality (AQ3)			Contact Person:	Autumn Bonnema		Christina Buck
				Phone:	831-771-4175		415-609-6903 (cell)
Season:	Summer/Fall	**Client:**	Stillwater Sciences	Email:	bonnema@mlml.calstate.edu		cbuck@stillwatersci.com
Date:	10/1/2018			Please send data to: Christina Buck: cbuck@stillwatersci.com			
				Noah Hume: noah@stillwatersci.com			

Station Code	Station Name	Bag ID	Sample Date	Sample Time	Fish length (mm)			Weight (grams)	Comments	Field Preparation Preservation	Tissue Mercury THg
					SL	FL	TL				total
GLP-3	Lake Pillsbury	M-PMN-2	9/24/2018	2038	395	428	460	770	none	FieldFrozen	x
GLP-3	Lake Pillsbury	M-PMN-4	9/24/2018	2155	335	365	387	430	none	FieldFrozen	x
GLP-1	Lake Pillsbury	M-PMN-5	9/25/2018	2037	395	424	452	680	none	FieldFrozen	x
GLP-2	Lake Pillsbury	M-LMB-7	9/26/2018	1909	392	433	450	1505	none	FieldFrozen	x
GLP-2	Lake Pillsbury	M-PMN-9	9/26/2018	1924	377	407	439	660	none	FieldFrozen	x

Comments:

Samples Relinquished by (Print and Sign):	Date & Time	Samples Received by (Print and Sign):	Date & Time
MICHAEL DAVIS	10/1/2018; 12:00	April Guimaraes	10/2/18 11:47
			6.2°C

20181002_1147

LabSampleID	ProjectCode	StationCode	StationName	CompositeID	OrganismGroup	SampleTypeCode	PrepPreservationNar	PrepPreservationDat	LabBatch	AnalysisDate	LabReplicate	MatrixName	AnalyteName	FractionName	UnitName	Result	ResQualCode	MDL	RL	QACode	ExpectedValue	TissueResultComme	ResQualName	QAName	IDORG	LabLogComments	Sex	SL	FL	TL
DORM4	Not Applicable	LABQA	CRM	NRCC_DORM4	Fish	CRM	None	1/1/1950	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.40	=	0.003	0.009	None	0.395	PR 100	Equal To	None - No QA Qualifier						
DORM4	Not Applicable	LABQA	CRM	NRCC_DORM4	Fish	CRM	None	1/1/1950	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	3.63	=	-88	-88	None			Equal To	None - No QA Qualifier						
MB1	Not Applicable	LABQA	LabBlank	MethodBlank1	Not Applicable	LabBlank	None	1/1/1950	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.00	ND	0.003	0.009	None			Not Detected	None - No QA Qualifier						
MB2	Not Applicable	LABQA	LabBlank	MethodBlank2	Not Applicable	LabBlank	None	1/1/1950	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.00	ND	0.003	0.009	None			Not Detected	None - No QA Qualifier						
MB3	Not Applicable	LABQA	LabBlank	MethodBlank3	Not Applicable	LabBlank	None	1/1/1950	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.00	ND	0.003	0.009	None			Not Detected	None - No QA Qualifier						
2018-1993	PotterValley_FERC77	GLP-1	Lake Pillsbury M-LMB-1	M-LMB-1	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.97	=	0.003	0.009	None			Equal To	None - No QA Qualifier		F	304	340	350
2018-1993	PotterValley_FERC77	GLP-1	Lake Pillsbury M-LMB-1	M-LMB-1	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	81.67	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-1994	PotterValley_FERC77	GLP-1	Lake Pillsbury M-LMB-4	M-LMB-4	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.80	=	0.003	0.009	None			Equal To	None - No QA Qualifier		M	297	330	346
2018-1994	PotterValley_FERC77	GLP-1	Lake Pillsbury M-LMB-4	M-LMB-4	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	80.01	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-1995	PotterValley_FERC77	GLP-1	Lake Pillsbury M-PMN-7	M-PMN-7	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.52	=	0.003	0.009	None			Equal To	None - No QA Qualifier		F	253	275	299
2018-1995	PotterValley_FERC77	GLP-1	Lake Pillsbury M-PMN-7	M-PMN-7	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	72.04	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-1996	PotterValley_FERC77	GLP-1	Lake Pillsbury M-LMB-5	M-LMB-5	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.87	=	0.003	0.009	None			Equal To	None - No QA Qualifier		M	281	309	320
2018-1996	PotterValley_FERC77	GLP-1	Lake Pillsbury M-LMB-5	M-LMB-5	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	80.23	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-1998	PotterValley_FERC77	GLP-1	Lake Pillsbury M-PMN-8	M-PMN-8	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	1.90	=	0.003	0.009	None			Equal To	None - No QA Qualifier		F	382	417	451
2018-1998	PotterValley_FERC77	GLP-1	Lake Pillsbury M-PMN-8	M-PMN-8	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	78.63	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-1999-dup	PotterValley_FERC77	GLP-1	Lake Pillsbury M-BG-3	M-BG-3	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	2	Tissue	Mercury	Total	ug/g ww	0.42	=	0.003	0.009	None	RPD 14.1		Equal To	None - No QA Qualifier						
2018-1999	PotterValley_FERC77	GLP-1	Lake Pillsbury M-BG-3	M-BG-3	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.48	=	0.003	0.009	None			Equal To	None - No QA Qualifier		F	186	209	221
2018-1999	PotterValley_FERC77	GLP-1	Lake Pillsbury M-BG-3	M-BG-3	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	79.20	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-2000	PotterValley_FERC77	GLP-1	Lake Pillsbury M-BG-4	M-BG-4	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.43	=	0.003	0.009	None			Equal To	None - No QA Qualifier		F	191	215	231
2018-2000	PotterValley_FERC77	GLP-1	Lake Pillsbury M-BG-4	M-BG-4	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	80.01	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-2001	PotterValley_FERC77	GLP-1	Lake Pillsbury M-BG-6	M-BG-6	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.40	=	0.003	0.009	None			Equal To	None - No QA Qualifier		M	207	236	244
2018-2001	PotterValley_FERC77	GLP-1	Lake Pillsbury M-BG-6	M-BG-6	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	79.89	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-2002	PotterValley_FERC77	GLP-2	Lake Pillsbury M-LMB-9	M-LMB-9	Fish	Composite	FieldFrozen	9/26/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.73	=	0.003	0.009	None			Equal To	None - No QA Qualifier		F	182	201	210
2018-2002	PotterValley_FERC77	GLP-2	Lake Pillsbury M-LMB-9	M-LMB-9	Fish	Composite	FieldFrozen	9/26/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	80.22	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-2003	PotterValley_FERC77	GLP-4	Lake Pillsbury M-BG-8	M-BG-8	Fish	Composite	FieldFrozen	9/27/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.25	=	0.003	0.009	None			Equal To	None - No QA Qualifier		unk	36	44	46
2018-2003	PotterValley_FERC77	GLP-4	Lake Pillsbury M-BG-8	M-BG-8	Fish	Composite	FieldFrozen	9/27/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	-88.00	NA	-88	-88	None			Not Analyzed	None - No QA Qualifier						
2018-2004	PotterValley_FERC77	GLP-4	Lake Pillsbury M-BG-9	M-BG-9	Fish	Composite	FieldFrozen	9/27/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.36	=	0.003	0.009	None			Equal To	None - No QA Qualifier		unk	39	48	50
2018-2004	PotterValley_FERC77	GLP-4	Lake Pillsbury M-BG-9	M-BG-9	Fish	Composite	FieldFrozen	9/27/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	-88.00	NA	-88	-88	None			Not Analyzed	None - No QA Qualifier						
2018-2005	PotterValley_FERC77	GLP-4	Lake Pillsbury M-BG-10	M-BG-10	Fish	Composite	FieldFrozen	9/27/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.37	=	0.003	0.009	None			Equal To	None - No QA Qualifier		unk	30	37	39
2018-2005	PotterValley_FERC77	GLP-4	Lake Pillsbury M-BG-10	M-BG-10	Fish	Composite	FieldFrozen	9/27/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	-88.00	NA	-88	-88	None			Not Analyzed	None - No QA Qualifier						
2018-2006	PotterValley_FERC77	GLP-4	Lake Pillsbury M-LMB-11	M-LMB-11	Fish	Composite	FieldFrozen	9/27/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.42	=	0.003	0.009	None			Equal To	None - No QA Qualifier		unk	55	64	67
2018-2006	PotterValley_FERC77	GLP-4	Lake Pillsbury M-LMB-11	M-LMB-11	Fish	Composite	FieldFrozen	9/27/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	-88.00	NA	-88	-88	None			Not Analyzed	None - No QA Qualifier						
2018-2007	PotterValley_FERC77	GLP-4	Lake Pillsbury M-LMB-12	M-LMB-12	Fish	Composite	FieldFrozen	9/27/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.47	=	0.003	0.009	None			Equal To	None - No QA Qualifier		unk	54	62	65
2018-2007	PotterValley_FERC77	GLP-4	Lake Pillsbury M-LMB-12	M-LMB-12	Fish	Composite	FieldFrozen	9/27/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	-88.00	NA	-88	-88	None			Not Analyzed	None - No QA Qualifier						
2018-2008	PotterValley_FERC77	GLP-3	Lake Pillsbury M-PMN-1	M-PMN-1	Fish	Composite	FieldFrozen	9/24/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	1.48	=	0.003	0.009	None			Equal To	None - No QA Qualifier		F	321	354	384
2018-2008-MS	PotterValley_FERC77	GLP-3	Lake Pillsbury M-PMN-1	M-PMN-1	Fish	MS1	FieldFrozen	9/24/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	5.42	=	0.003	0.009	None	5.24	PR 105	Equal To	None - No QA Qualifier						
2018-2008-MSD	PotterValley_FERC77	GLP-3	Lake Pillsbury M-PMN-1	M-PMN-1	Fish	MS1	FieldFrozen	9/24/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	2	Tissue	Mercury	Total	ug/g ww	5.70	=	0.003	0.009	None	5.87	PR 96.3, RPD 8.40	Equal To	None - No QA Qualifier						
2018-2008	PotterValley_FERC77	GLP-3	Lake Pillsbury M-PMN-1	M-PMN-1	Fish	Composite	FieldFrozen	9/24/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	75.99	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-2010	PotterValley_FERC77	GLP-3	Lake Pillsbury M-BG-1	M-BG-1	Fish	Composite	FieldFrozen	9/24/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.42	=	0.003	0.009	None			Equal To	None - No QA Qualifier		M	191	217	226
2018-2010	PotterValley_FERC77	GLP-3	Lake Pillsbury M-BG-1	M-BG-1	Fish	Composite	FieldFrozen	9/24/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	78.48	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-2012	PotterValley_FERC77	GLP-1	Lake Pillsbury M-LMB-3	M-LMB-3	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.40	=	0.003	0.009	None			Equal To	None - No QA Qualifier		F	153	170	179
2018-2012	PotterValley_FERC77	GLP-1	Lake Pillsbury M-LMB-3	M-LMB-3	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	77.35	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-2017	PotterValley_FERC77	GLP-2	Lake Pillsbury M-LMB-10	M-LMB-10	Fish	Composite	FieldFrozen	9/26/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.73	=	0.003	0.009	None			Equal To	None - No QA Qualifier		M	205	228	237
2018-2017	PotterValley_FERC77	GLP-2	Lake Pillsbury M-LMB-10	M-LMB-10	Fish	Composite	FieldFrozen	9/26/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	83.28	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-2019	PotterValley_FERC77	GLP-2	Lake Pillsbury M-BG-7	M-BG-7	Fish	Composite	FieldFrozen	9/26/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.62	=	0.003	0.009	None			Equal To	None - No QA Qualifier		M	198	219	230
2018-2019	PotterValley_FERC77	GLP-2	Lake Pillsbury M-BG-7	M-BG-7	Fish	Composite	FieldFrozen	9/26/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	85.11	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-2024	PotterValley_FERC77	GLP-2	Lake Pillsbury M-PMN-9	M-PMN-9	Fish	Composite	FieldFrozen	9/26/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	1.55	=	0.003	0.009	None			Equal To	None - No QA Qualifier		F	377	407	439
2018-2024	PotterValley_FERC77	GLP-2	Lake Pillsbury M-PMN-9	M-PMN-9	Fish	Composite	FieldFrozen	9/26/2018	MPSL-DFW_DMA010919a_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	74.66	=	-88	-88	None			Equal To	None - No QA Qualifier						
DORM4	Not Applicable	LABQA	CRM	NRCC_DORM4	Fish	CRM	None	1/1/1950	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.39	=	0.003	0.009	None	0.395	PR 98.1	Equal To	None - No QA Qualifier						
DORM4	Not Applicable	LABQA	CRM	NRCC_DORM4	Fish	CRM	None	1/1/1950	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	3.63	=	-88	-88	None			Equal To	None - No QA Qualifier						
MB1	Not Applicable	LABQA	LabBlank	MethodBlank1	Not Applicable	LabBlank	None	1/1/1950	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.00	ND	0.003	0.009	None			Not Detected	None - No QA Qualifier						
MB2	Not Applicable	LABQA	LabBlank	MethodBlank2	Not Applicable	LabBlank	None	1/1/1950	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.00	ND	0.003	0.009	None			Not Detected	None - No QA Qualifier						
MB3	Not Applicable	LABQA	LabBlank	MethodBlank3	Not Applicable	LabBlank	None	1/1/1950	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.00	ND	0.003	0.009	None			Not Detected	None - No QA Qualifier						
2018-2009-dup	PotterValley_FERC77	GLP-3	Lake Pillsbury M-PMN-3	M-PMN-3	Fish	Composite	FieldFrozen	9/24/2018	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	2	Tissue	Mercury	Total	ug/g ww	1.18	=	0.003	0.009	None	RPD 3.12		Equal To	None - No QA Qualifier						
2018-2009	PotterValley_FERC77	GLP-3	Lake Pillsbury M-PMN-3	M-PMN-3	Fish	Composite	FieldFrozen	9/24/2018	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	1.22	=	0.003	0.009	None			Equal To	None - No QA Qualifier		F	322	358	386
2018-2009	PotterValley_FERC77	GLP-3	Lake Pillsbury M-PMN-3	M-PMN-3	Fish	Composite	FieldFrozen	9/24/2018	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	79.31	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-2011	PotterValley_FERC77	GLP-1	Lake Pillsbury M-LMB-2	M-LMB-2	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.91	=	0.003	0.009	None			Equal To	None - No QA Qualifier		M	339	369	387
2018-2011-MSD	PotterValley_FERC77	GLP-1	Lake Pillsbury M-LMB-2	M-LMB-2	Fish	MS1	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	2	Tissue	Mercury	Total	ug/g ww	4.06	=	0.003	0.009	None	4.00	PR 109, RPD 0.994	Equal To	None - No QA Qualifier						
2018-2011-MS	PotterValley_FERC77	GLP-1	Lake Pillsbury M-LMB-2	M-LMB-2	Fish	MS1	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	4.54	=	0.003	0.009	None	4.21	PR 110	Equal To	None - No QA Qualifier						
2018-2011	PotterValley_FERC77	GLP-1	Lake Pillsbury M-LMB-2	M-LMB-2	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	77.95	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-2014	PotterValley_FERC77	GLP-1	Lake Pillsbury M-BG-2	M-BG-2	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.49	=	0.003	0.009	None			Equal To	None - No QA Qualifier		M	199	225	236
2018-2014	PotterValley_FERC77	GLP-1	Lake Pillsbury M-BG-2	M-BG-2	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	78.46	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-2015	PotterValley_FERC77	GLP-1	Lake Pillsbury M-BG-5	M-BG-5	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.55	=	0.003	0.009	None			Equal To	None - No QA Qualifier		M	191	215	231
2018-2015	PotterValley_FERC77	GLP-1	Lake Pillsbury M-BG-5	M-BG-5	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	79.61	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-2016	PotterValley_FERC77	GLP-2	Lake Pillsbury M-LMB-8	M-LMB-8	Fish	Composite	FieldFrozen	9/26/2018	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	0.99	=	0.003	0.009	None			Equal To	None - No QA Qualifier		M	277	304	319
2018-2016	PotterValley_FERC77	GLP-2	Lake Pillsbury M-LMB-8	M-LMB-8	Fish	Composite	FieldFrozen	9/26/2018	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	78.39	=	-88	-88	None			Equal To	None - No QA Qualifier						

LabSampleID	ProjectCode	StationCode	StationName	CompositeID	OrganismGroup	SampleTypeCode	PrepPreservationNar	PrepPreservationDat	LabBatch	AnalysisDate	LabReplicate	MatrixName	AnalyteName	FractionName	UnitName	Result	ResQualCode	MDL	RL	QACode	ExpectedValue	TissueResultComme	ResQualName	QAName	IDORG	LabLogComments	Sex	SL	FL	TL
2018-2021	PotterValley_FERC77	GLP-3	Lake Pillsbury M-PMN-4	M-PMN-4	Fish	Composite	FieldFrozen	9/24/2018	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	1.33	=	0.003	0.009	None			Equal To	None - No QA Qualifier			F	335	365	387
2018-2021	PotterValley_FERC77	GLP-3	Lake Pillsbury M-PMN-4	M-PMN-4	Fish	Composite	FieldFrozen	9/24/2018	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	78.16	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-2022	PotterValley_FERC77	GLP-1	Lake Pillsbury M-PMN-5	M-PMN-5	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	1	Tissue	Mercury	Total	ug/g ww	1.58	=	0.003	0.009	None			Equal To	None - No QA Qualifier			F	395	424	452
2018-2022	PotterValley_FERC77	GLP-1	Lake Pillsbury M-PMN-5	M-PMN-5	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA010919b_T_Hg	1/9/2019	1	Tissue	Moisture	Total	%	79.05	=	-88	-88	None			Equal To	None - No QA Qualifier						
DORM4	Not Applicable	LABQA	CRM	NRCC_DORM4	Fish	CRM	None	1/1/1950	MPSL-DFW_DMA011119a_T_Hg	1/11/2019	1	Tissue	Moisture	Total	%	3.63	=	-88	-88	None			Equal To	None - No QA Qualifier						
MB1	Not Applicable	LABQA	LabBlank	MethodBlank1	Not Applicable	LabBlank	None	1/1/1950	MPSL-DFW_DMA011119a_T_Hg	1/11/2019	1	Tissue	Mercury	Total	ug/g ww	0.00	ND	0.003	0.009	None			Not Detected	None - No QA Qualifier						
MB2	Not Applicable	LABQA	LabBlank	MethodBlank2	Not Applicable	LabBlank	None	1/1/1950	MPSL-DFW_DMA011119a_T_Hg	1/11/2019	1	Tissue	Mercury	Total	ug/g ww	0.00	ND	0.003	0.009	None			Not Detected	None - No QA Qualifier						
MB3	Not Applicable	LABQA	LabBlank	MethodBlank3	Not Applicable	LabBlank	None	1/1/1950	MPSL-DFW_DMA011119a_T_Hg	1/11/2019	1	Tissue	Mercury	Total	ug/g ww	0.00	ND	0.003	0.009	None			Not Detected	None - No QA Qualifier						
2018-1997	PotterValley_FERC77	GLP-1	Lake Pillsbury M-LMB-6	M-LMB-6	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA011119a_T_Hg	1/11/2019	1	Tissue	Mercury	Total	ug/g ww	1.08	=	0.003	0.009	None			Equal To	None - No QA Qualifier			F	409	449	463
2018-1997	PotterValley_FERC77	GLP-1	Lake Pillsbury M-LMB-6	M-LMB-6	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA011119a_T_Hg	1/11/2019	1	Tissue	Moisture	Total	%	78.89	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-2013	PotterValley_FERC77	GLP-1	Lake Pillsbury M-PMN-6	M-PMN-6	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA011119a_T_Hg	1/11/2019	1	Tissue	Mercury	Total	ug/g ww	2.08	=	0.003	0.009	None			Equal To	None - No QA Qualifier			F	414	450	481
2018-2013	PotterValley_FERC77	GLP-1	Lake Pillsbury M-PMN-6	M-PMN-6	Fish	Composite	FieldFrozen	9/25/2018	MPSL-DFW_DMA011119a_T_Hg	1/11/2019	1	Tissue	Moisture	Total	%	80.30	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-2018	PotterValley_FERC77	GLP-2	Lake Pillsbury M-PMN-10	M-PMN-10	Fish	Composite	FieldFrozen	9/26/2018	MPSL-DFW_DMA011119a_T_Hg	1/11/2019	1	Tissue	Mercury	Total	ug/g ww	1.92	=	0.003	0.009	None			Equal To	None - No QA Qualifier			F	388	417	452
2018-2018	PotterValley_FERC77	GLP-2	Lake Pillsbury M-PMN-10	M-PMN-10	Fish	Composite	FieldFrozen	9/26/2018	MPSL-DFW_DMA011119a_T_Hg	1/11/2019	1	Tissue	Moisture	Total	%	77.98	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-2020	PotterValley_FERC77	GLP-3	Lake Pillsbury M-PMN-2	M-PMN-2	Fish	Composite	FieldFrozen	9/24/2018	MPSL-DFW_DMA011119a_T_Hg	1/11/2019	1	Tissue	Mercury	Total	ug/g ww	1.29	=	0.003	0.009	None			Equal To	None - No QA Qualifier			F	395	428	460
2018-2020-dup	PotterValley_FERC77	GLP-3	Lake Pillsbury M-PMN-2	M-PMN-2	Fish	Composite	FieldFrozen	9/24/2018	MPSL-DFW_DMA011119a_T_Hg	1/11/2019	2	Tissue	Mercury	Total	ug/g ww	1.29	=	0.003	0.009	None		RPD 0.360	Equal To	None - No QA Qualifier						
2018-2020	PotterValley_FERC77	GLP-3	Lake Pillsbury M-PMN-2	M-PMN-2	Fish	Composite	FieldFrozen	9/24/2018	MPSL-DFW_DMA011119a_T_Hg	1/11/2019	1	Tissue	Moisture	Total	%	78.46	=	-88	-88	None			Equal To	None - No QA Qualifier						
2018-2023	PotterValley_FERC77	GLP-2	Lake Pillsbury M-LMB-7	M-LMB-7	Fish	Composite	FieldFrozen	9/26/2018	MPSL-DFW_DMA011119a_T_Hg	1/11/2019	1	Tissue	Mercury	Total	ug/g ww	1.19	=	0.003	0.009	None			Equal To	None - No QA Qualifier			M	392	433	450
2018-2023-MSD	PotterValley_FERC77	GLP-2	Lake Pillsbury M-LMB-7	M-LMB-7	Fish	MS1	FieldFrozen	9/26/2018	MPSL-DFW_DMA011119a_T_Hg	1/11/2019	1	Tissue	Mercury	Total	ug/g ww	4.47	=	0.003	0.009	None	4.09	PR 112	Equal To	None - No QA Qualifier						
2018-2023-MSD	PotterValley_FERC77	GLP-2	Lake Pillsbury M-LMB-7	M-LMB-7	Fish	MS1	FieldFrozen	9/26/2018	MPSL-DFW_DMA011119a_T_Hg	1/11/2019	2	Tissue	Mercury	Total	ug/g ww	4.59	=	0.003	0.009	None	4.29	PR 109, RPD 2.62	Equal To	None - No QA Qualifier						
2018-2023	PotterValley_FERC77	GLP-2	Lake Pillsbury M-LMB-7	M-LMB-7	Fish	Composite	FieldFrozen	9/26/2018	MPSL-DFW_DMA011119a_T_Hg	1/11/2019	1	Tissue	Moisture	Total	%	79.43	=	-88	-88	None			Equal To	None - No QA Qualifier						

Technical Study Summary

Cardno

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USA

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www.cardno.com

Date December 31, 2019

To: Pacific Gas and Electric Company (Susan Kester)

From: Cardno, Inc.

Project: Potter Valley Project (FERC Project No. 77) Relicensing

RE: **AQ 5 – Instream Flow Study Data Memorialization**

1 Introduction

This Technical Study Summary (TSS) presents select data and information that was developed by the Cardno Team in association with the AQ 5 – Instream Flow Technical Study Plan (AQ 5 – TSP) (PG&E 2018), which was one of the 21 approved technical studies initiated by Pacific Gas and Electric Company (PG&E) in association with the relicensing process for the Potter valley Project[1]. The information presented herein is based on work that was completed prior to January 25, 2019, the date that Pacific, Gas and Electric Company (PG&E) filed a notice with the Federal Energy Regulatory Commission (FERC) stating they would no longer be relicensing the Project (PG&E 2019).

2 Study Status

Table AQ 5-1 summarizes the status of the AQ 5 – Instream Flow Study when work ended on January 25, 2019.

3 Work Products

The following information was developed as part of this study and will be transmitted to PG&E. The information is organized by the primary study elements identified in the AQ 5 – TSP.

3.1 Instream Flow Modelling

3.1.1 Eel River 1D Physical Habitat Simulation (PHABSIM) Modeling

Historical PHABSIM hydraulics modeling and cross-sections were reviewed. The number of water surface elevation and discharge measurement pairs, and the appropriate water surface modeling approach, were identified and are summarized in **Table AQ 5-2** by site. The observed

[1] PG&E filed a Proposed Study Plan (PSP) with the Federal Energy Regulatory Commission (FERC) that included 21 separate Technical Study Plans on September 14, 2017. After collaborating with the stakeholders, PG&E subsequently filed a Revised Study Plan (RSP) with the FERC on January 15, 2018. On February 15, 2018, the FERC issued its Study Plan Determination, approving 17 of the 21 studies included in the RSP and approving the remaining four studies with FERC staff recommended modifications.

and simulated water surface elevations were compared at all transects and are depicted on **Figures AQ 5-1 to AQ 5-7.**

3.1.2 FYLF Habitat Modeling

Four Eel River FYLF breeding study sites were selected to model habitat versus flow and ramping rate relationships utilizing the Habitat Suitability Criteria (HSC) developed for the AQ 10 – Special Status Amphibians and Aquatic Reptiles Study. **Map AQ 5-1** shows the study site locations and **Table AQ 5-3** describes the locations.

2D hydrodynamic/habitat modeling was selected in coordination with the stakeholders as the most applicable modeling approach for FYLF habitat modeling. Bed geometry, water surface elevations, discharge, and substrate and vegetation mapping data were collected during the spring, summer, and fall of 2018 at four locations. The data had not yet been processed or vetted when the relicensing effort was terminated on January 25, 2019. Therefore, the data are not provided as part of this TSS.

3.1.3 East Branch Russian River Minimum Flows

Cardno, PG&E, and a group of stakeholders conducted a site visit on October 24, 2018 to assess the adequacy of minimum flows in the East Branch Russian River (EBRR). A list of site visit participants is provided on **Table AQ 5-4.** Representative sites were selected to view the habitat conditions in the EBRR between Lake Mendocino and Potter Valley Powerhouse. **Table AQ 5-5** identifies and describes each of the sites (i.e. “stops”) that were visited during the field trip. Flow at time of visit was between 35 cfs and 44 cfs and the diversion through Powerhouse was 47 cfs at Gage E16; Potter Valley Irrigation District (PVID) was drawing approximately 3 cfs, leaving approximately 44 cfs in the East Branch Russian River below the powerhouse. The gage at Capella was 35 cfs at this time.

Fish habitat, recreation and water quality at each site during the field trip as determined by the group is summarized in **Table AQ 5-6.** In general, all stakeholders agreed that the observed flows provided good trout fish habitat and adequate recreation flow (e.g., swimming) in the canyon reach between the lower end of Potter Valley and Lake Mendocino. This is the location where most fishing and recreation occurs. Some low gradient sites in the downstream portion of the Potter Valley reach (before the canyon starts) consisted of slow/shallow habitat that would be improved with increased flow. Limited opportunity for fishing or recreation occurs in this area, however, due to private landownership. A summary of the site visit and observations is provide in **Attachment A – East Branch Russian River Draft Field Meeting Notes.**

4 Important Outcomes

The East Branch Russian River minimum flow field visit participants all agreed that the observed flow was good for trout habitat and adequate for recreation (e.g., swimming).

5 References

PG&E. 2018. AQ 5 – Instream Flow Technical Study Plan, Potter Valley Project, Revised Study Plan. Filed with FERC on January 15, 2018.

PG&E. 2019. Notice of Withdrawal of Notice of Intent to File License Application and Pre-Application Document. Filed with FERC on January 25, 2019.

Tables

Table AQ 5 - 1. AQ 5 – Instream Flow Technical Study Plan Status as of January 25, 2019

Study Elements Completed / Data Collected	Resource Agency Consultation / Technical Working Group Updates	Technical Study Plan Variances	Outstanding Study Elements	Modifications to Ongoing Studies	Proposed New Studies
AQ 5 – Instream Flow					
Eel River Geomorphic Sediments and Mesohabitats • Coordinated with Study AQ 4 – Geomorphology to review historical geomorphic segment delineation and modified for application as necessary. • Reviewed mesohabitat types used in the SEC instream flow study and habitat mapping to evaluate the applicability of previous mapping and instream flow transects to current conditions using historical and current aerial photography, if available, or by conducting mapping in representative river reach locations. **Selection of Target Species and/or Guilds** • Species and life stages (and/or guilds) to be used for instream flow habitat were selected in collaboration with stakeholders based on management importance and/or sensitivity to Project operations. **Instream Flow Modeling** *Eel River 1D Physical Habitat Simulation (PHABSIM) Modeling* • Reviewed historical PHABSIM hydraulics modeling and cross-sections. Identified number of water surface elevation measurements and water surface modeling approach. *FYLF Habitat Modeling* • Selected four Eel River FYLF breeding study sites to model habitat versus flow and ramping rate relationships. • Utilized the Habitat Suitability Criteria (HSC) developed in Study AQ 10 – Special Status Amphibians and Aquatic Reptiles. • Selected the most applicable modeling approach, empirical habitat mapping, or 2d modeling to the study site in coordination with stakeholders. *East Branch Russian River Minimum Flows* • Conducted a site visit during the summer to provide stakeholders with an opportunity to assess the adequacy of minimum flows. • Assessed both summer and winter minimum flows during 2018.	• October 25, 2017: Conducted Aquatic Resources TWG meeting to discuss implementation of the AQ 5 – Instream Flow TSP and continue discussion on previous TSPs, as needed. (UVCC) • May 9, 2018: Conducted Aquatic Resources TWG meeting to select Eel River FYLF breeding sites and select the FYLF modeling approach. (WebEx) • July 19, 2018: Conducted Aquatic Resources TWG meeting to discuss species and life stages of fish to be modeled; habitat suitability criteria for selected species/life stage; and identification of stage-change ramping rate criteria for fish species for different mobile life stages. (WebEx) • October 24, 2018: Conducted Aquatic Resources TWG site visit to view minimum instream flows in the East Branch Russian River. (Site Visit)		**Selection of Target Species and/or Guilds** • Develop a life stage periodicity chart utilizing existing information and pertinent study results. **Species and Lifestage Habitat Suitability (in Progress)** • Collaborate with stakeholders to identify HSC for each selected species/life stage using a two stage approach. • Develop water temperature HSC for juvenile steelhead using a combination of observed growth data, literature data, and bioenergetics. • Develop HSC for FYLF breeding and larval development using habitat use information for eggs and tadpoles from existing studies and in coordination with Study AQ 10 – Special Status Amphibians and Aquatic Reptiles **Instream Flow Modeling** *Eel River 1D Physical Habitat Simulation (PHABSIM) Modeling* • Update water surface elevation hydraulics approach and velocity modeling approach as appropriate. • Determine proper habitat weighting for PHABSIM transects using geomorphic segments and mesohabitat mapping. • Re-model habitat versus flow relationships using updated hydraulics modeling, habitat weighting, and species-specific HSC, as appropriate. • Develop a habitat time series analysis for each river segment using the habitat vs flow relationships and Project hydrology scenarios. *Fish Stranding and Stage-Change / Ramping Rates* • Develop stage-change versus flow-change relationship models at each of the instream flow transects and each of the Eel River gaging locations. • Review available fish stranding literature and natural ramping rates in the Project area, and	None	None

Table AQ 5 - 1. AQ 5 – Instream Flow Technical Study Plan Status as of January 25, 2019

Study Elements Completed / Data Collected	Resource Agency Consultation / Technical Working Group Updates	Technical Study Plan Variances	Outstanding Study Elements	Modifications to Ongoing Studies	Proposed New Studies
• Collected qualitative data at the fish snorkeling study sites to characterize pool depth and pool-to-pool connectivity at minimum flow.			collaborated with stakeholders to identify stage-change ramping rate for fish species for different mobile lifestages. • Identify hourly ramping rates at Project gages for fish lifestages in the Project area between Scott and Cape Horn dams and below Cape Horn Dam to the Middle Fork Eel River. *Effective Spawning Habitat* • Model effective spawning habitat at each instream flow study site using the PHABSIM model, a time series of hydrology, historical spawning periodicity information, and time series of water temperature. Utilized the hydrology data and the PHABSIM model to quantify effective habitat each year. *Eel River Juvenile Out-Migration* • Use historical data to identify steelhead and Chinook salmon out-migration timing and associated cues related to time-of-year, hydrology, fish size/growth, and water temperature. • Identify potential thermal barriers in the lower Eel River during juvenile outmigration using historical water temperature data. *FYLF Habitat Modeling* • Model habitat versus flow relationships over a range of flows applicable to the April/May breeding and early rearing season.		

Table AQ 5-2. Instream Flow Sites.

Reach	Site	Number of Transects	Number of Calibration Pairs (wsel pairs)	Method
Scott Dam	Trout Creek	10	3	Stage Q
Scott Dam	Slide Creek	7	3	Stage Q
Cape Horn Dam	Cape Horn	10	4	Stage Q
Tomki to Outlet Creek	Todd	8	4	Stage Q
Tomki to Outlet Creek	Emandel	8	4	Stage Q
Tomki to Outlet Creek	Cavanagh	8	4	Stage Q
Tomki to Outlet Creek	Additional Spawning	9	4	Stage Q

Table AQ 5-3. Foothill Yellow Legged Frog (FYLF) Sites.

River Mile	FYLF 2D Site Description
ER157.9	Eel River at Van Arsdale Reservoir near bridge
ER153.0	Eel River at Tomki Creek and Tomki Creek
ER161.2	Eel River at Bucknell Creek and Bucknell Creek
ER166.4	Eel River at Benmore Creek and Benmore Creek

Table AQ 5-4. East Branch Russian River Minimum Flow Site Visit Attendance.

Name	Organization
Craig Addley	Cardno
Jen Hammond	Cardno
Paul Kubicek	PGE
Allen Renger	CDFW
Tom Dougherty	NMFS
Bob Anderson	United Winegrowers
Vivian Helliwell	PCFFA
David Helliwell	PCFFA

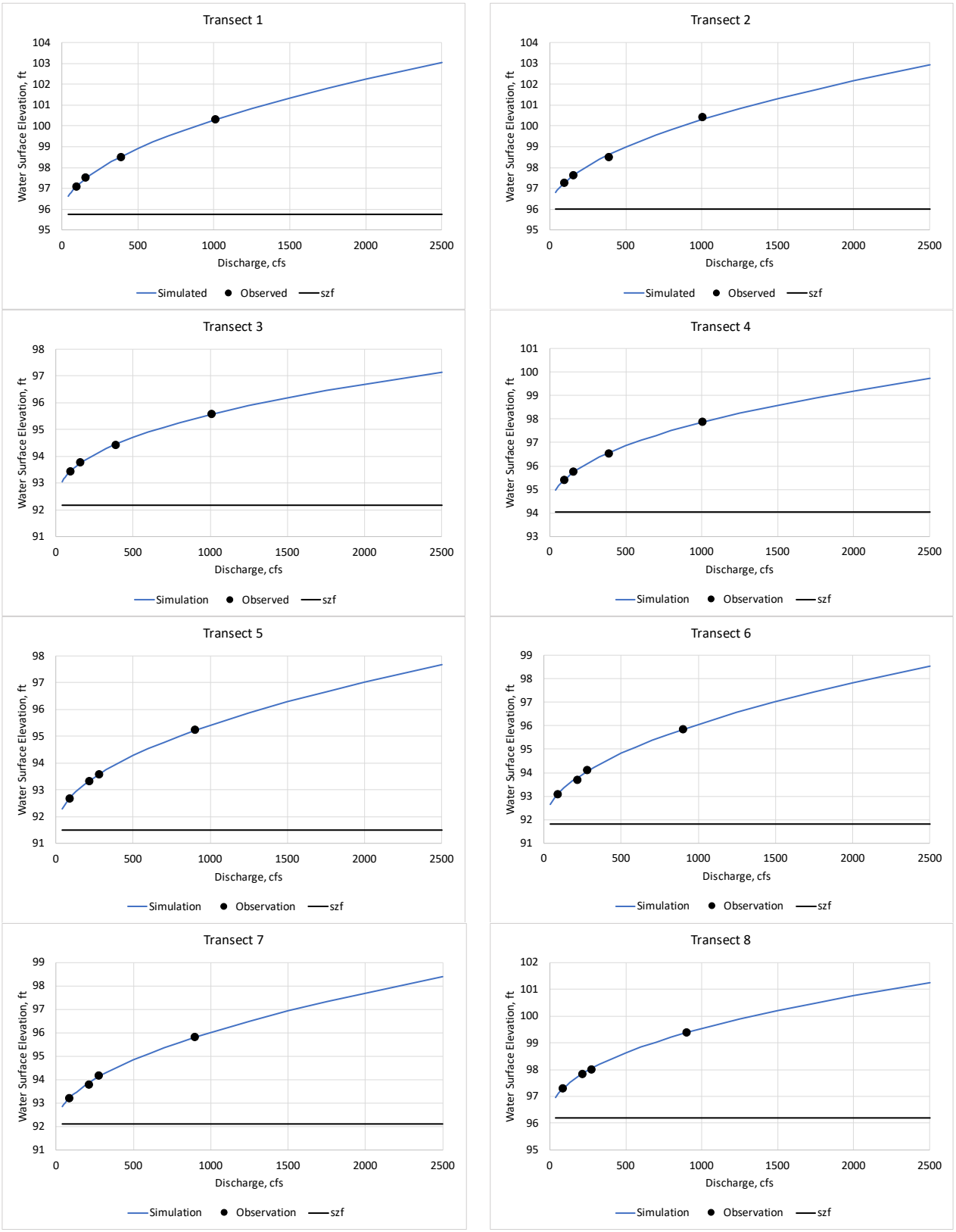
Table AQ 5-5. East Branch Russian River Field Sites.

Site	Location
Stop #1	Recreation site pull off near turn out for Potter Valley Road between Hwy 20 and first bridge over the EBRR (old highway bridge)
Stop #2	Slightly upstream of stop #1. Narrow riffle/run area above new bridge
Stop #3	Approximately 0.4 miles upstream of stop #2, pull out on the right
Stop #4	Approximately 0.6 miles upstream of stop #3, rec pull out locally called “three rocks”
Stop #5	Private bridge over EBRR approximately 1.6 miles upstream of Stop #4
Stop #6	Approximately 3.1 miles upstream of stop #5 on a bridge on Main St, in Potter Valley
Stop #7	Approximately 1 mile upstream of stop #6 at bridge crossing on Gibson Lane
Stop #8	At Potter Valley Powerhouse approximately 2.15 miles upstream of stop #7

Table AQ 5-6. East Branch Russian River Minimum Flow Site Quality.

Site	Fish Habitat	Recreation Quality	Water Quality
Stop #1	Good	Good	Turbid
Stop #2	Low	Low	Turbid
Stop #3	High	Good	Turbid
Stop #4	Good	Good	Clear
Stop #5	Low	Low	Turbid
Stop #6	Low	Low	Clear
Stop #7	Good	Low	Clear
Stop #8	-	-	-

Figure AQ 5-1. Comparison of simulated and observed water surface elevations for new Spawning Transects on the Eel River.



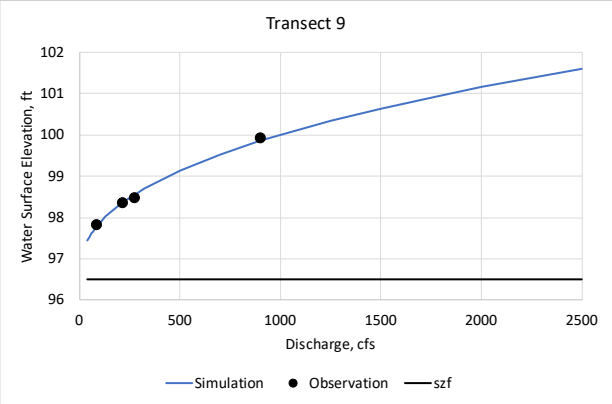

Transect 9
Water Surface Elevation, ft
102
101
100
99
98
97
96
0
500
1000
1500
2000
2500
Discharge, cfs
Simulation
Observation
szf

Figure AQ 5-2. Comparison of simulated and observed water surface elevations for Cavanaugh Transects

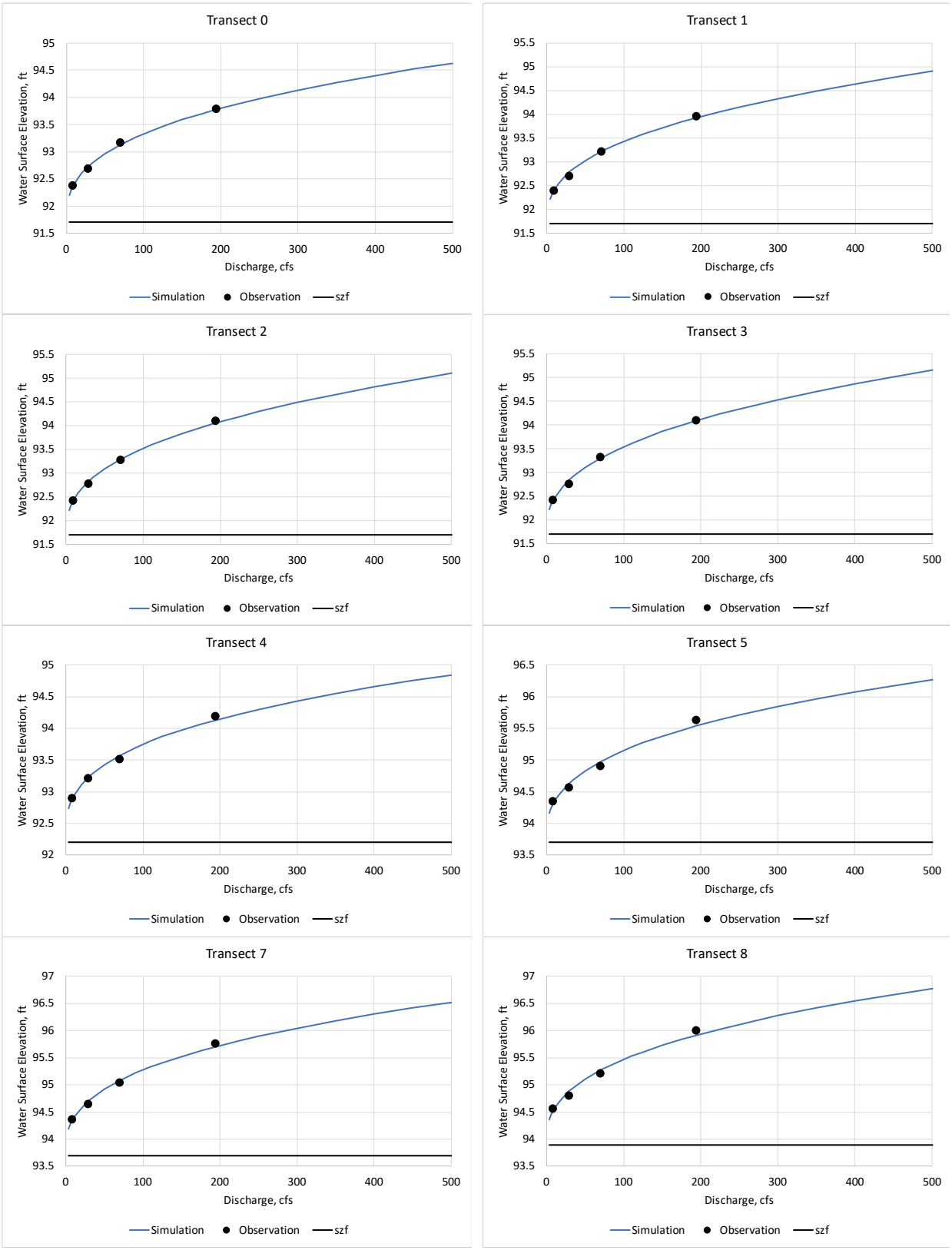
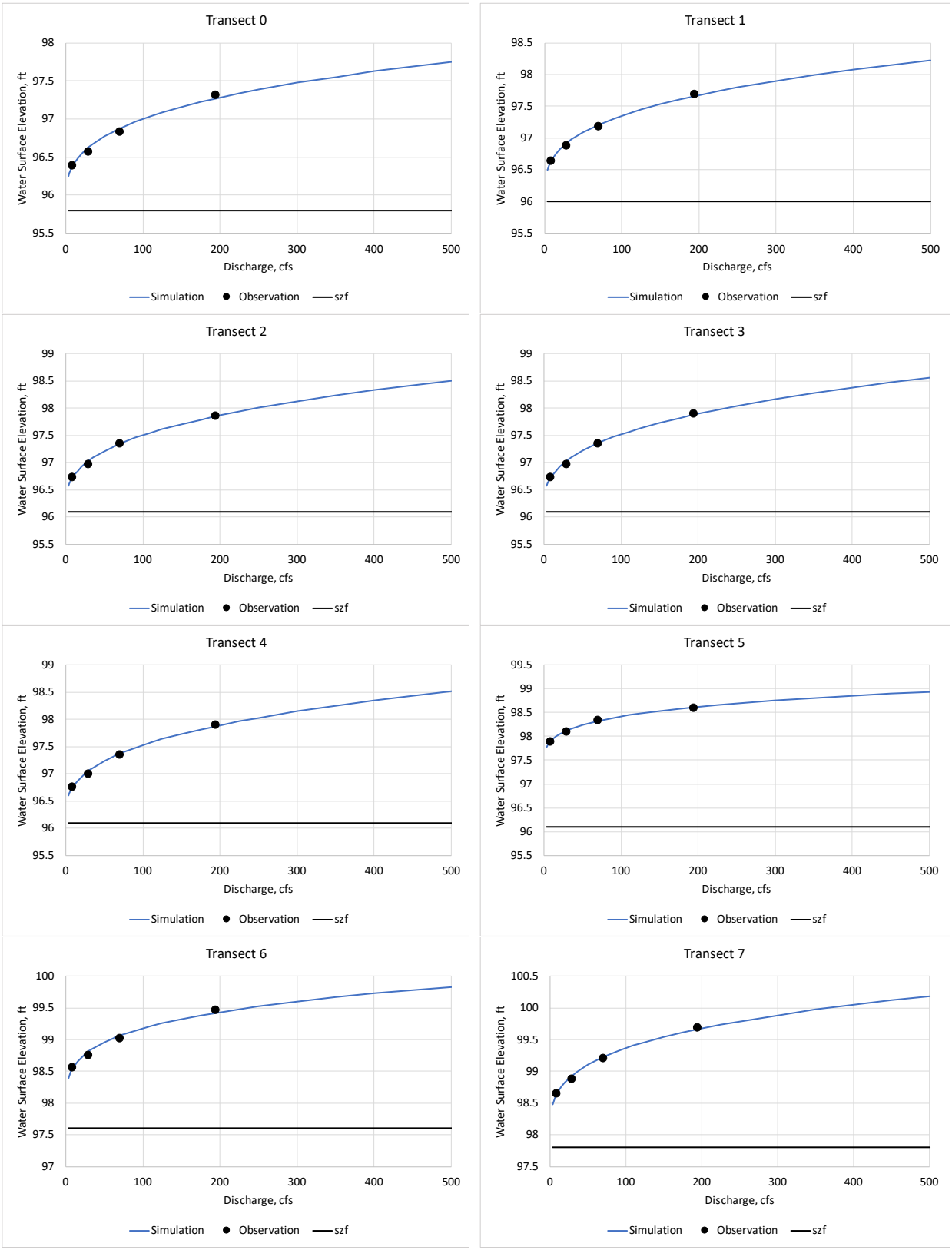


Figure AQ 5-3. Comparison of simulated and observed water surface elevations for Emandel Transects



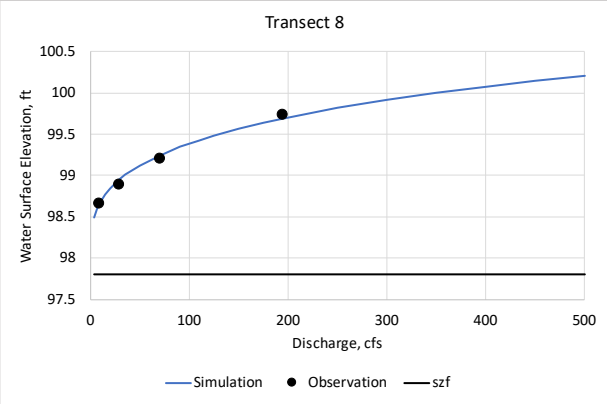
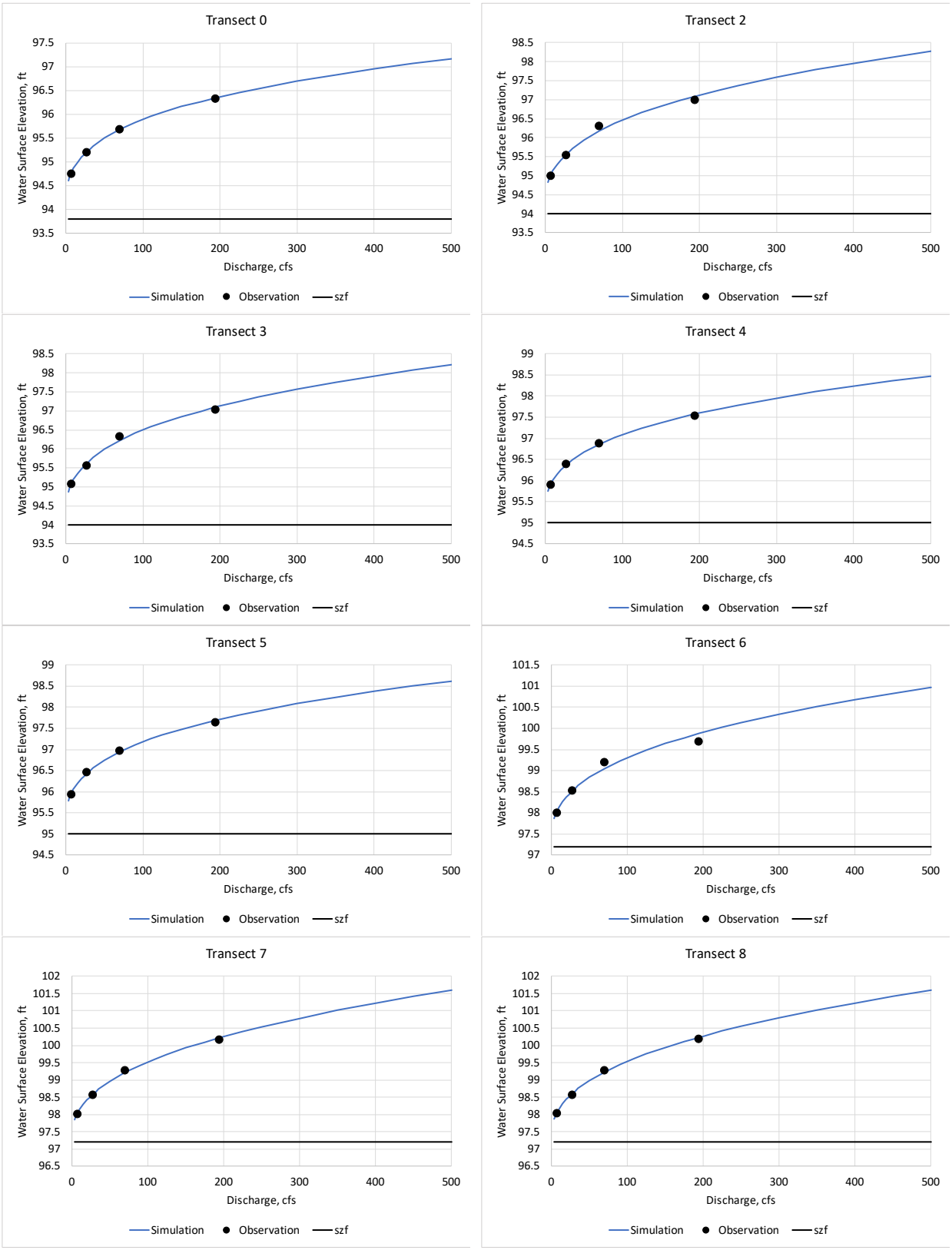
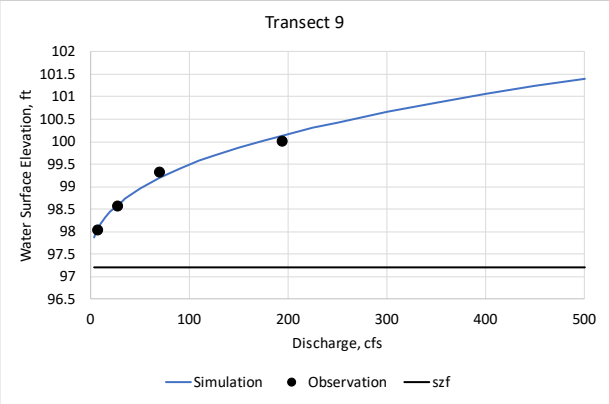

Transect 8
Water Surface Elevation, ft
100.5
100
99.5
99
98.5
98
97.5
0
100
200
300
400
500
Discharge, cfs
Simulation
Observation
szf

Figure AQ 5-4. Comparison of simulated and observed water surface elevations for Cape Horn Transects




Transect 9
Water Surface Elevation, ft
102
101.5
101
100.5
100
99.5
99
98.5
98
97.5
97
96.5
0
100
200
300
400
500
Discharge, cfs
Simulation
Observation
szf

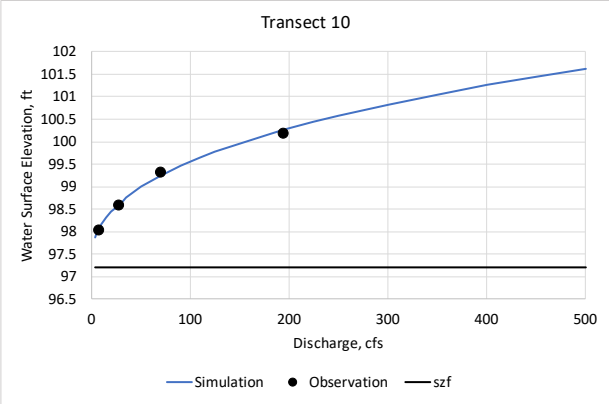

Transect 10
Water Surface Elevation, ft
102
101.5
101
100.5
100
99.5
99
98.5
98
97.5
97
96.5
0
100
200
300
400
500
Discharge, cfs
Simulation
Observation
szf

Figure AQ 5-5. Comparison of simulated and observed water surface elevations for Slides Transects

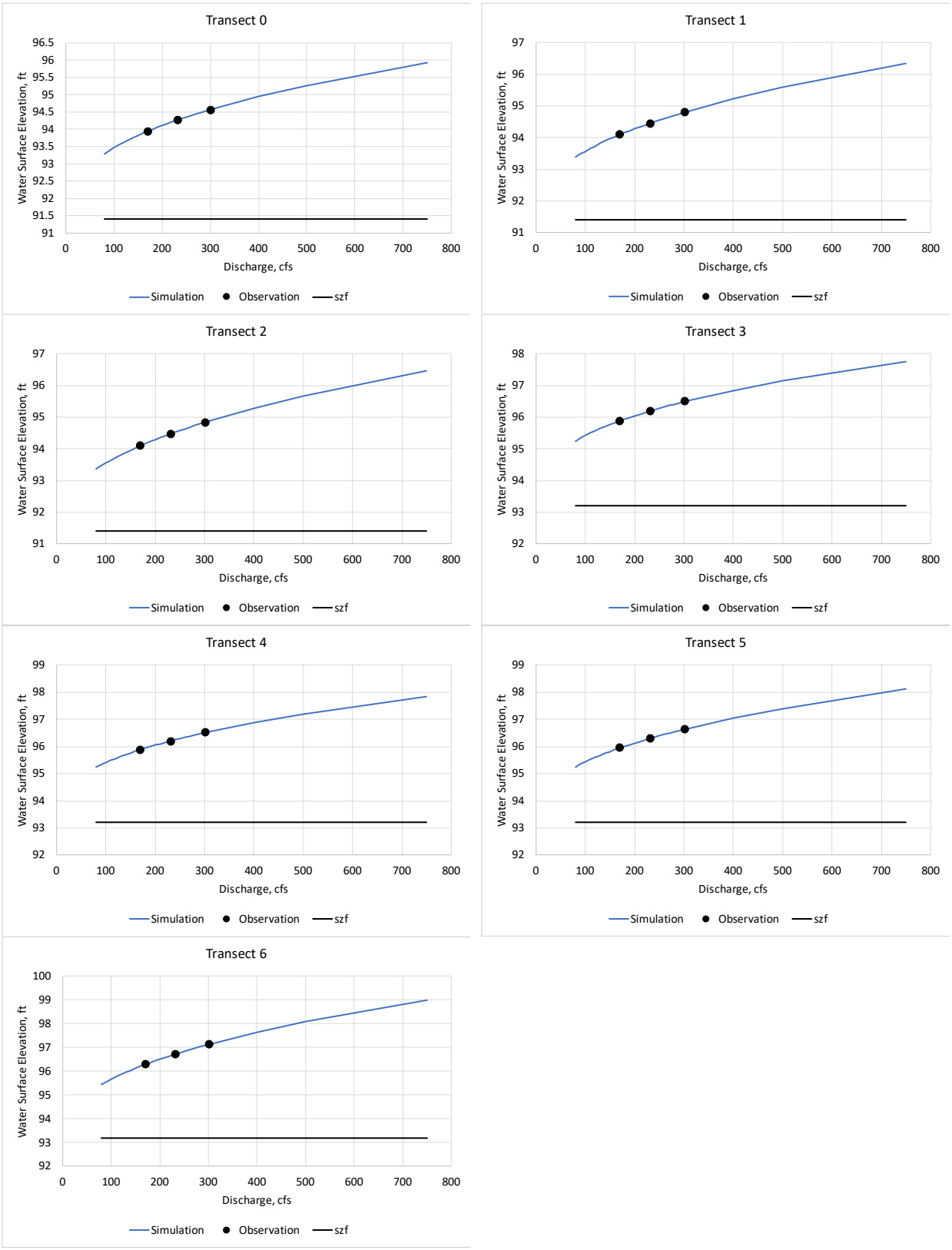


Figure AQ 5-6. Comparison of simulated and observed water surface elevations for Todd Transects

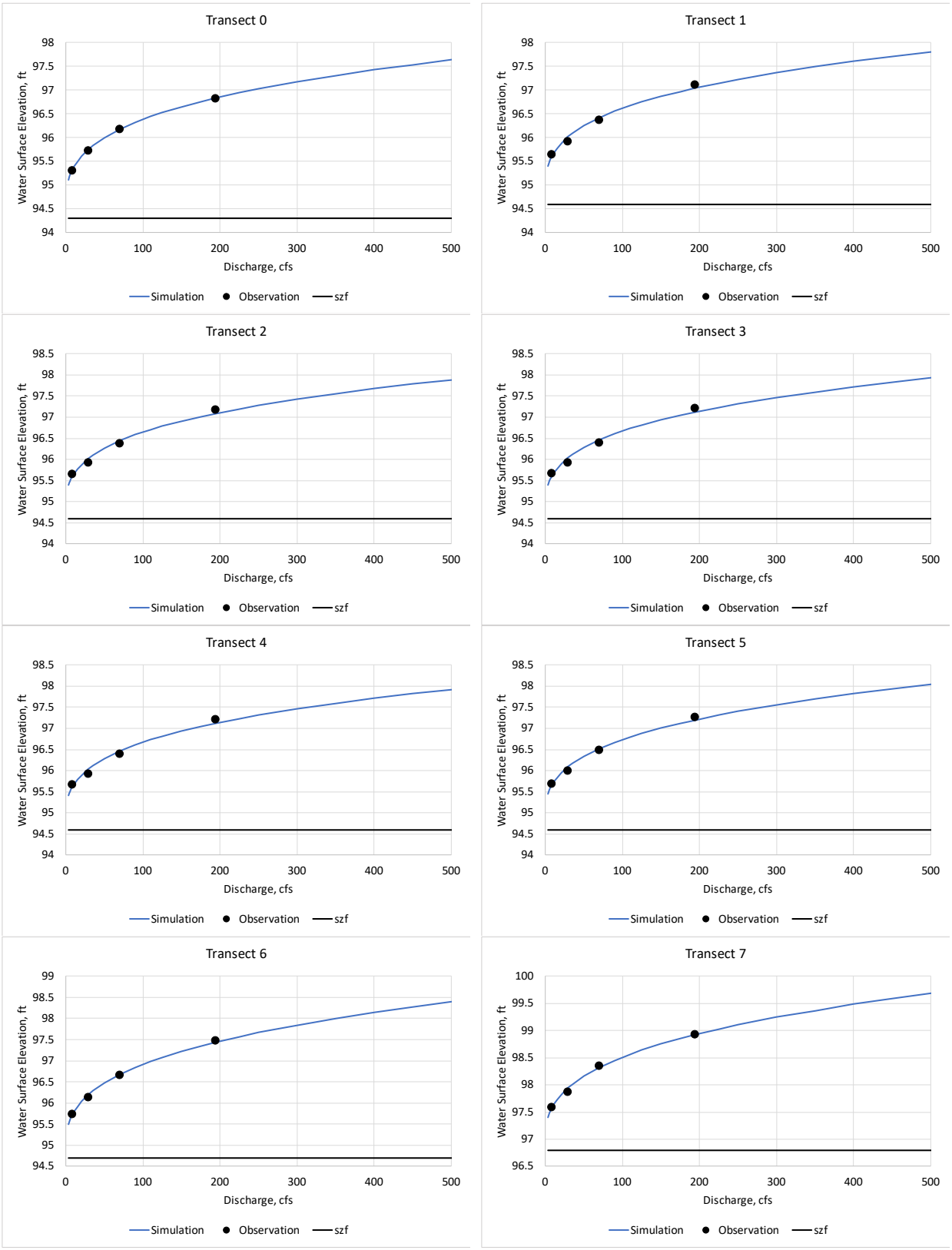
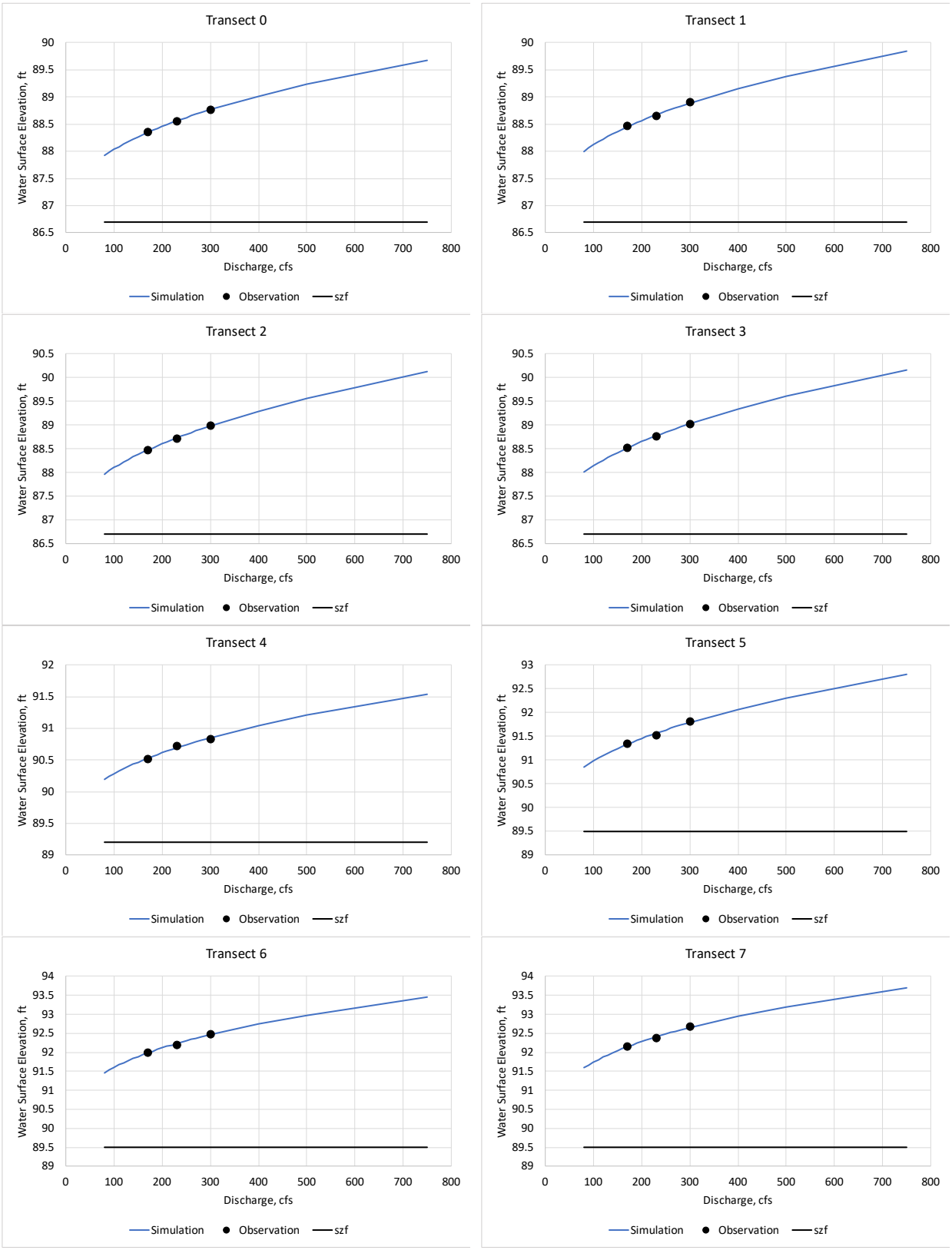
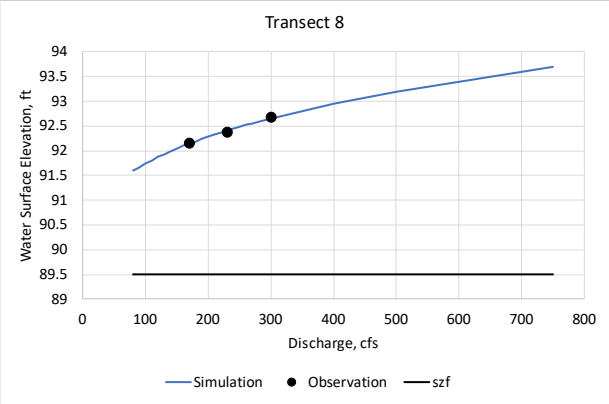
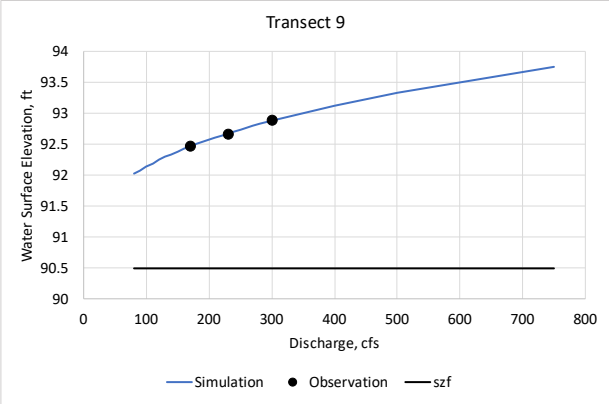


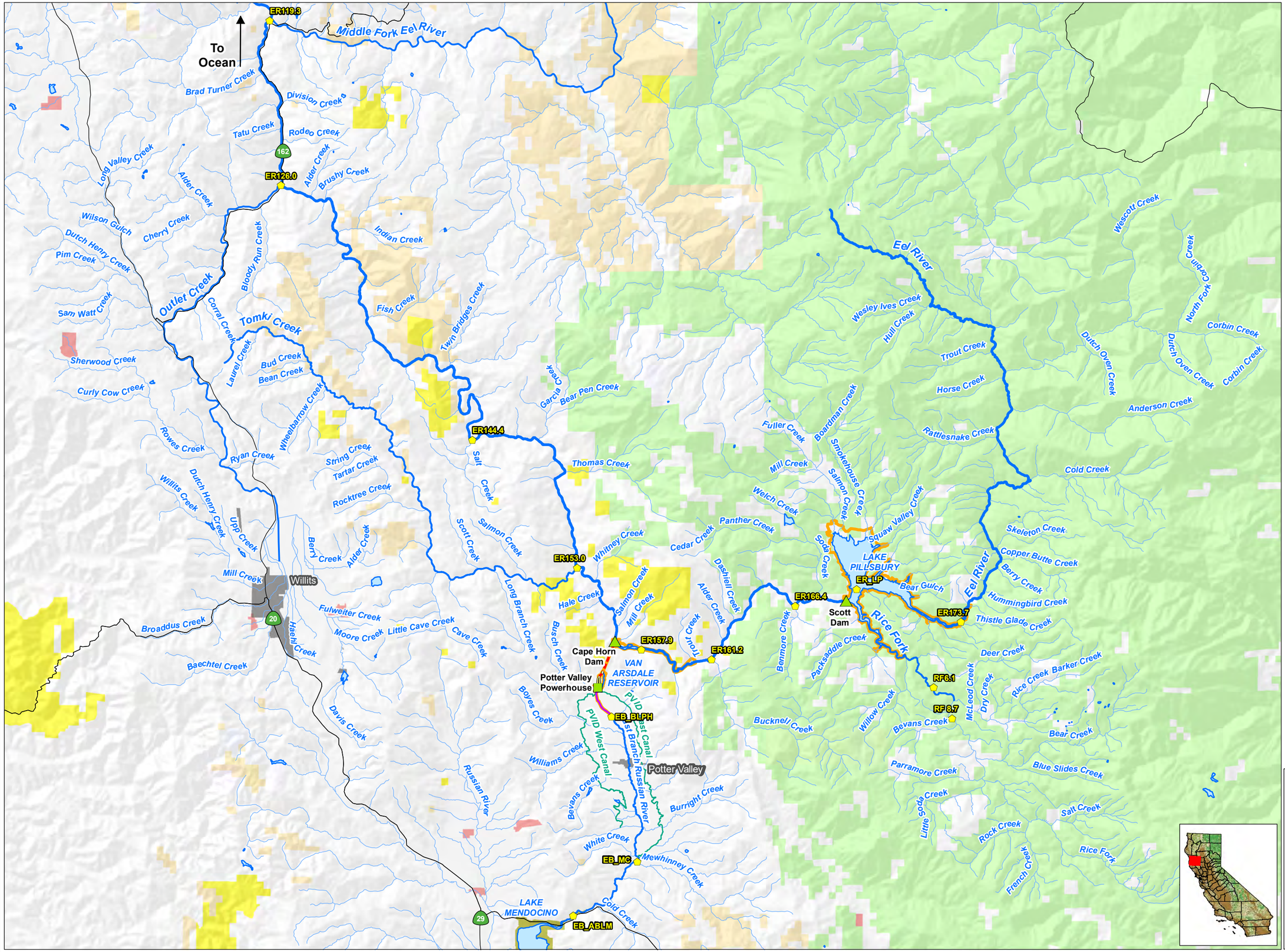
Figure AQ 5-7. Comparison of simulated and observed water surface elevations for Trout Transects




Transect 8
Water Surface Elevation, ft
94
93.5
93
92.5
92
91.5
91
90.5
90
89.5
89
0
100
200
300
400
500
600
700
800
Discharge, cfs
Simulation
Observation
szf


Transect 9
Water Surface Elevation, ft
94
93.5
93
92.5
92
91.5
91
90.5
90
0
100
200
300
400
500
600
700
800
Discharge, cfs
Simulation
Observation
szf

Map



PG&E Project Facilities

- Powerhouse
- Dam
- Water Conveyance Feature
- Water Conduit
- Penstock
- Powerhouse Discharge Canal
- FERC Project Boundary

Other Features

- Road
- Canal
- Watercourse
- Water Body

Land Ownership**

- U.S. Forest Service
- U.S. Army Corps of Engineers
- Bureau of Land Management
- Bureau of Indian Affairs
- State of California
- Private (Blank)

**SOURCE: BLM, 2016

Sampling Locations

- FYLF and WPT Sampling

Pacific Gas and Electric Company

PG&E Potter Valley Project

Map AQ 10-1

Foothill Yellow-Legged Frog and Western Pond Turtle Sampling Locations

0 0.5 1 2 Miles

Projection: UTM Zone 10 N
Datum: NAD 83

Date: 12/31/2019

Z:\E317900030_Kerckhoff\map\AquaticMaps\PGE_PotterValley_Aquatic_TSP_FYLF_WPT_17i11l_11.mxd

Attachment A

East Branch Russian River Site Visit Draft Meeting Notes

Meeting Record
Pacific Gas and Electric Company
Potter Valley Hydroelectric Project (FERC Project No. 77)

Date: October 24, 2018

Time: 10 a.m. – 1 p.m.

Location: East Branch Russian River (EBBR)

Subject: Observe and assess trout habitat and recreation quality in the East Branch Russian River under minimum instream flow conditions.

Attendees:

Name	Organization
Craig Addley	Cardno
Jen Hammond	Cardno
Paul Kubicek	PGE
Allen Renger	CDFW
Tom Dougherty	NMFS
Bob Anderson	United Winegrowers
Vivian Helliwell	PCFFA
David Helliwell	PCFFA

Meeting Summary

The purpose of the field visit to the East Branch Russian River was to provide relicensing stakeholders with an opportunity to assess the adequacy of EBRR minimum flows. Selected sites were visited to view the EBRR between Lake Mendocino and Potter Valley Powerhouse. The adequacy of minimum flows was assessed. Flow at time of visit was between 35 cfs and 44 cfs. The diversion through the Powerhouse was 47 cfs at E16; PVID was taking about 3 cfs, leaving about 44 cfs in the EBRR below the powerhouse. Gage at Capella was 35 cfs. Eight sites were visited and stakeholders agreed the observed flows provided good fish habitat and adequate recreation flows, particularly in the canyon section (downstream of Potter Valley) that is most frequented by fishermen and recreationists. There were some wide low gradient sections of river, particularly in the lower Potter Valley area (e.g., see comments in Stop 5 below) that exhibited shallow and/or slow velocities less than optimal for trout habitat; however, these were in areas with limited access for fishermen and essentially no access for recreationists.

Summary of River Review Stops/Locations

Stop #1

Recreation site pull off near turn out for Potter Valley Road (Figure 1) between Hwy 20 and first bridge over the EBRR (old hwy bridge). This is a heavily used area with a short riffle/run below

the abandoned bridge leading into a long pool at the recreation site (Figure 2 and Figure 3). This site is unique compared to the rest of the stream within the lower canyon area. There is a large heavily used gravel bar (Figure 4) along the left side of pool. The right side of the pool had two rope swings. Boulder, cobble, and gravel predominately made up the riffle/run below the old bridge. There was nice trout habitat at this flow. Gravel, silt made up the pool/slow run. Dense mature riparian vegetation covered the edges (willow and alders) but with open canopy due to the width of the stream. Good cover and complexity of habitat for trout was observed in the riffle. Recreation opportunities : trout fishing, swimming (not very deep at this flow but may be good for children), picnicking, rafting/kayaking (would likely need flows over 200 cfs). Water was slightly turbid.

Stop #2

Slightly upstream of stop #1 (Figure 1). There was a narrow riffle/run area above the new bridge, one of the steeper riffles was made up primarily of boulder and cobble (Figure 5). Flow was bank to bank, this is a confined floodplain stream channel with limited alluvial features/ opportunity for flows to spread; however, the wetted channel was relatively wide. There was dense mature riparian vegetation (alder and ash) with a moderate canopy. Lower quality trout habitat was observed in the riffle. Above this riffle was a shallow, slow run area made up of cobble, boulder, and silt (Figure 6). The flow is bank to bank with a dense riparian cover including blackberries. This is a relatively unique area but not great for trout habitat due to the slow velocity habitat. It would take a little more water to improve the habitat for trout. Water is slightly turbid.

Stop #3

Approximately 0.4 miles upstream of stop #2, pull out on the right (Figure 7). The trail access to the river is steeper. This is a nice riffle/run area with boulder/cobble substrate (Figure 8). The channel is confined with dense riparian vegetation along the banks. The pool has a rope swing. Good trout habitat exists over a wide range of flows. Upstream a few hundred yards is a steeper, narrower riffle area with primarily boulder/cobble substrate (Figure 9). The area contains high quality trout habitat at this flow and habitat quality might be reduced at higher flows, particularly from a fishing standpoint. Water is slightly turbid.

Stop #4

Approximately 0.6 miles upstream of stop #3, recreation pull out locally called “three rocks” (Figure 10). This site has a lower gradient than the downstream sites with a slow run with cobble/gravel/silt substrate (Figure 11 and Figure 12). Dense mature riparian vegetation along the banks was observed (willow and alder) but the understory is less dense. This area contains moderate quality trout habitat at this flow. A higher flow would provide better habitat. This is

the upstream most site where trout are planted in the spring and summer. (Note – from this point downstream the reach is a put-and-take fishery for catchable rainbow trout, some striped bass make spawning migrations up to this reach from Lake Mendocino). Water is relatively clear at this site compared to sites in the canyon reach downstream.

Stop #5

Private bridge over EBRR approximately 1.6 miles upstream of Stop #4 (Figure 13). This site has a low gradient area primarily made up of run/pool habitat (Figure 14 and Figure 15). Under the current flow the wetted width is bank to bank with dense riparian vegetation along the banks (mostly willow and blackberry with some grape vines). Overhanging willows grow along the stream margins. The substrate consists of gravel and silt. Water quality is slightly turbid with greenish color. Relatively poor trout habitat was observed at this flow due to the wide channel in this particular area. It would take a much higher flow to produce higher quality trout habitat. Looks like slow, rich "frog" habitat. This is an open exposed area. There is no access for sport fishing due to the dense riparian vegetation and private land holding.

Stop #6

Approximately 3.1 miles upstream of stop #5 on a bridge on Main St, in Potter Valley (Figure 16). The water quality is clear at this site. The high flow channel is entrenched at this location, but the low flow channel is wide and low gradient riffle/run habitat (Figure 17). At this flow the wetted width covers bank to bank without much depth due to the wide low gradient riffle/run habitat, resulting in lower quality trout habitat due to lack of depth cover. The banks were covered with a dense riparian cover made up of alder, oak, bay, blackberries and grapevines. The substrate consisted of gravel and silt. There is a check dam a few hundred feet upstream (Figure 18). There is no access for sport fishing or recreation due to the dense riparian vegetation and private land holding.

Stop #7

Approximately 1 mile upstream of stop #6 at the bridge crossing on Gibson Lane (Figure 19). The water quality is clear at this point with a gradient that is low to moderate with a check dam just upstream of the bridge (Figure 20). The habitat is riffle/run downstream with a mostly gravel substrate (Figure 21). The amount of flow in the channel appeared to be less than what was observed downstream. The channel is confined with dense riparian vegetation made up of poplar, alder, willow and blackberry. The quality of trout habitat at this flow is good providing good cover. There is no access for sport fishing due to the dense riparian vegetation and private land holding.

Stop #8

At Potter Valley Powerhouse approximately 2.15 miles upstream of stop #7 (Figure 22). Participants viewed the tailrace area and beginning of the EBRR (Figure 23). The powerhouse flows empty into the powerhouse discharge canal. At this flow the wetted width covers bank to bank. There is a dense riparian cover. The habitat is a relatively wide open run.

Table 1. Summary table of observations.

Site	Fish Habitat	Recreation Quality	Water Quality
Stop #1	Good	Good	Turbid
Stop #2	Low	Low	Turbid
Stop #3	Excellent	Good	Turbid
Stop #4	Good	Good	Clear
Stop #5	Low	Low	Turbid
Stop #6	Low	Low	Clear
Stop #7	Good	Low	Clear
Stop #8	-	-	-



Figure 1. Overview of Stop #1 and Stop #2.



Figure 2. Short riffle run downstream of bridge and at the head of the long pool/run.



Figure 3. Pool/Run with rope swing at Stop #1.



Figure 4. Large gravel bar along pool/run at Stop #1, looking upstream at bridge.



Figure 5. Stop #2, riffle representing slightly steeper habitat.

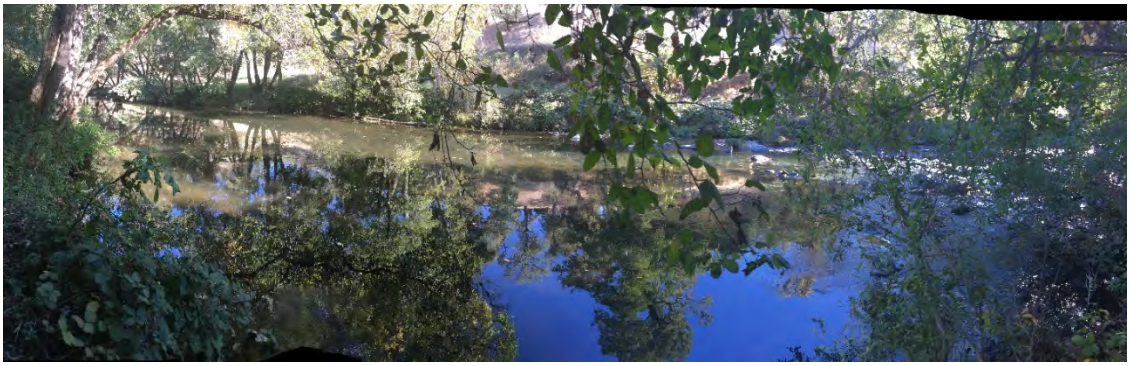


Figure 6. Stop #2 upstream slow shallow run.



Figure 7. Stop #3



Figure 8. Stop #3, downstream riffle/run



Figure 9. Stop #3 upstream, riffle, confined stream



Figure 10. Stop #4



Figure 11. Stop #4 - slow run, looking downstream.



Figure 12. Stop #4, looking upstream.



Figure 13. Stop #5



Figure 14. Stop #5 looking upstream from bridge.



Figure 15. Stop #5 looking downstream from bridge.



Figure 16. Stop #6



Figure 17. Stop #6 Looking downstream off of bridge



Figure 18. Stop #6, looking upstream from bridge with check dam in background.

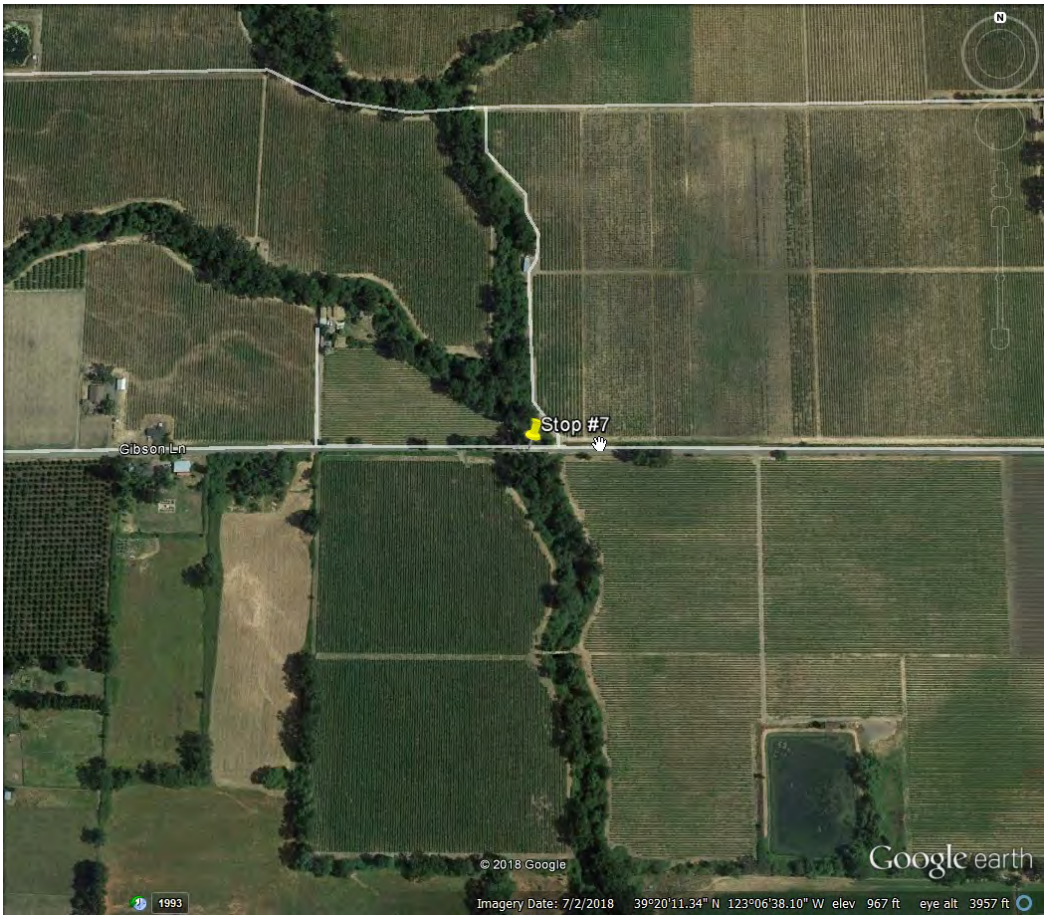


Figure 19. Stop #7



Figure 20. Stop #7 and looking upstream from bridge.



Figure 21. Stop #7 looking downstream off of bridge.



Figure 22. Stop #8



Figure 23. Stop #8 at Potter Valley Powerhouse looking downstream from tailrace.

Technical Study Summary

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Date	December 30, 2019
To:	Pacific Gas and Electric Company (Susan Kester)
From:	Cardno, Inc.
Project:	Potter Valley Project (FERC Project No. 77) Relicensing
RE:	**AQ 10 – Special Status Amphibians and Aquatic Reptiles Study Data Memorialization**

1 Introduction

This Technical Study Summary (TSS) presents select data and information that was developed by the Cardno Team in association with the AQ 10 – Special Status Amphibians and Aquatic Reptiles Study Plan (AQ 10 – TSP) (PG&E 2018), which was one of the 21 approved technical studies initiated by Pacific Gas and Electric Company (PG&E) in association with the relicensing process for the Potter Valley Project.[1] The information presented herein is based on work that was completed prior to January 25, 2019, the date that PG&E filed a notice with the Federal Energy Regulatory Commission (FERC) stating they would no longer be relicensing the Project (PG&E 2019).

2 Study Status

Table AQ 10-1 summarizes the status of the AQ 10 – Special Status Amphibians and Aquatic Reptiles Study when work ended on January 25, 2019.

3 Work Products

The following information was developed as part of the AQ 10 – TSP and is organized by the select study elements identified in the AQ 10 – TSP, focusing on Foothill Yellow Legged Frog (FYLF) and Western Pond Turtle (WPT).

3.1 Foothill Yellow Legged Frog

Rana boylii, the Foothill Yellow Legged Frog (FYLF), is widely distributed throughout the Eel River watershed. Past studies of breeding abundance have found that density varies in relation to the upstream watershed area of a given fluvial habitat and water temperature during the warmest month of summer. Specifically, cool, small, shaded tributaries and larger regulated

[1] PG&E filed a Proposed Study Plan (PSP) with the Federal Energy Regulatory Commission (FERC) that included 21 separate Technical Study Plans on September 14, 2017. After collaborating with the stakeholders, PG&E subsequently filed a Revised Study Plan (RSP) with the FERC on January 15, 2018. On February 15, 2018, the FERC issued its Study Plan Determination, approving 17 of the 21 studies included in the RSP and approving the remaining four studies with FERC staff recommended modifications.

rivers receiving hypolimnetic releases of cold water support relatively small populations (Catenazzi and Kupferberg 2013, 2017) compared to river reaches where water temperatures are warmer and more conducive to production of young of the year frogs. Abundance in Eel River watersheds has also been negatively associated with the presence of bullfrogs (Kupferberg 1997), and more broadly presence is negatively correlated with the presence of non-native predatory fish, such as pikeminnow (Hayes and Jennings 1988). Consistent with those historical patterns, the 2018 surveys throughout the Potter Valley Project area revealed great spatial variation in the abundance of frogs. Abundance and production of young of the year frogs was greater upstream of Lake Pillsbury in unregulated reaches of the mainstem Eel and in the Rice Fork than in reaches of the Eel River downstream of Cape Horn Dam and in the East Branch Russian River. Below Scott Dam there is a relatively dense population of breeding adults in the vicinity of Benmore Creek, but recruitment of young of the year appears to be constrained at that site by slow development of tadpoles.

3.1.1 Habitat Characterization

A habitat characterization was completed during distribution and abundance surveys along 1 kilometer long study reaches. **Map AQ 10-1** shows the locations of the study reaches and **Table AQ 10-2** briefly describes the study reaches.

All breeding sites, i.e. cobble bars, pool tail outs, etc. where egg masses were found were geolocated. At four breeding sites in the Eel River (downstream of the confluence with Benmore Creek; downstream of the confluence with Bucknell Creek; upstream of the Van Arsdale Bridge; and downstream of the confluence with Tomki Creek) the channel topography was surveyed and individual egg mass locations were mapped so that flow habitat relationships could be modelled. The water depth and velocity at each clutch was measured when clutches were first observed and also later during development stages to characterize the physical conditions that could influence early life stage survival. Conditions at Project and reference sites were compared. **Figures AQ 10-2, AQ 10-3, and AQ 10-4** show depths and velocities that could be used to develop site specific habitat suitability criteria within the Potter Valley Project. Depths and velocities observed are lower than those found in rivers of the Sierra Nevada foothills (Bondi et al 2013).

Appendix A – **Foothill Yellow Legged Frog 2018 Clutch Data** includes the specific locations (latitudes and longitudes) where breeding and oviposition were observed in each study reach and the depth and velocities measured at each clutch. At the mesohabitat scale, cobble bars and pool tail outs typically used by FYLF for breeding were found to be abundant throughout the Project area near confluences with tributaries where adult frogs live.

3.2 Distribution and Abundance Surveys

Initiation and duration of breeding in the Project area was monitored by searching for eggmasses on the margins of the channel for approximately 1 km in each study reach. At least two surveys for breeding in spring (April – early June) were conducted at each study site. Observed clutch data in relation to date and site is shown in **Table AQ 10-3**. **Table AQ 10-4** summarizes the breeding population abundance throughout the Project area. Surveyed hatchling quadrat and tadpole data are presented in **Table AQ 10-5 and Table AQ 10-6**, respectively. One survey for metamorphosed young of the year was conducted in late summer/early fall at each study site **(Table AQ 10-7).**

Temperature data loggers were installed in the thalweg and channel margin breeding areas at each study site prior to the breeding season. Loggers were maintained throughout the end of late summer/early fall surveys, although many were vandalized or stolen. Additional information regarding water temperature monitoring is available in the AQ 2 – Water Temperature TSS.

FYLF were found throughout the Project area with the highest density in the Rice Fork Eel River, which flows into Lake Pillsbury. Despite the intense wildfire that occurred in August/September 2018, abundant metamorphs and adults in the Rice Fork and the Upper Eel were found in late September 2018 (**Figures AQ 10-5 and AQ 10-6**).

Survival of recently hatched tadpoles was potentially impaired at the breeding sites near Benmore Creek in the mainstem Eel below Scott Dam during a May pulse flow planned for salmonid smolt outmigration. Most that survived the outmigration flow were eggs at the time, a life stage more resistant to elevated flow. Evidence for the absence of the early cohort of young of the year is that more than three quarters of the individuals observed at that site had not reached metamorphosis by the third week of September. Those that had metamorphosed were smaller in body size (**Table AQ 10-7**). Cooler water temperature at the site could also be a confounding factor.

3.3 Western Pond Turtle

Western Pond Turtles (WPT) research strongly suggests that relatively cool summer water temperatures can negatively influence turtle populations downstream of dams that make hypolimnetic releases during the summer (Ashton et al. 2015, Snover et al. 2015). The potential consequences of a given flow schedule for turtles could be forecast by applying empirical temperature observations as well as temperature predictions for the sites we observed turtles downstream of Scott Dam, near Benmore and Bucknell Creeks. Known relationships between water temperature and turtle growth (Snover et al. 2015) should be consulted. Turtle hatchlings were observed in the warmer tributaries.

3.3.1 Distribution and Abundance

WPT surveys were conducted around the perimeter of Lake Pillsbury by boat. Potential nesting habitat in proximity to the lake edge was evaluated by hiking up hillslopes, and the sites of future (early summer) lake perimeter VES were identified. These data are presented in **Appendix B – Western Pond Turtle Reconnaissance Surveys on Lake Pillsbury**.

Protocol-level VES were conducted at pool or backwater habitats in the river by wading and walking along the margins of the Project and reference reaches with binoculars to observe basking turtles in the spring, summer and fall. Around the margins of Lake Pillsbury VES were conducted using a motorized boat and by kayak.

Turtle basking sites in the riverine sites consisted almost entirely of emergent boulders and banks as large woody debris was not frequently observed. Along the margins of Lake Pillsbury, both rocks and large wood debris were utilized for basking.

Hatchling turtles were observed throughout the Project area (often in tributaries) indicating that the populations are successfully reproducing.

Non-native red-eared sliders were observed at ponds near Busch Creek, a tributary to the East Branch Russian River, but no red-eared sliders were observed in any of the riparian surveys.

VES observations of basking by groups of turtles were most common at the study reaches downstream of Scott Dam, near Benmore and Bucknell Creeks, which may indicate a bias in detectability. Because the proportion of time turtles spend basking and are visible to land based surveyors with binoculars varies inversely with water temperature (Ruso et al. 2017), detectability is likely to be higher in the upstream portions of the study reach in proximity to Scott Dam. Where the water is colder, turtles need to spend more time basking and less time in the water pursuing other activities (foraging, mating, etc.).

Transcriptions of field observations of the river and lake turtle surveys and incidental observations of turtles while conducting frog surveys are presented in **Table AQ 10-8.** Incidental observations of other amphibians and reptiles are also included.

4 Important Outcomes

- FYLF abundance was greatest upstream of Lake Pillsbury in the Rice Fork Eel River reference site.
- Among the Project reaches, there is a sizeable population of frogs in the vicinity of Benmore Creek and they breed in the mainstem Eel as well as in the tributary. However, conditions in the Eel River appear to be

not conducive for rapid larval development. This is supported by the observation that more than three fourths of the young of the year identified at that site were still tadpoles by the third week of September in 2018.

- FYLF are present and breeding in the East Branch Russian River, but at very low densities compared to East Branch tributaries such as Mewhennie Creek.
- Where bullfrogs and Sacramento Pikeminnow were observed, FYLF were sparse or absent, even in free-flowing tributaries such as Tomki and Outlet Creeks.
- Disturbance and trampling of egg masses and larvae was observed at the breeding sites in the vicinity of Van Arsdale Bridge, an area which is heavily used by recreation visitors.
- At least in the short term, FYLF appear to be resilient to the effects of wildfire. Many adults and metamorphs were observed in heavily burned areas in the immediate aftermath of the wildfire. Continued monitoring is required to determine if post fire changes to the river channels due to sediment inputs will have a time-lagged impact on their populations.
- WPT were found throughout a majority of the Project area. Hatchlings and small juveniles were found in several of the tributaries and along the southern margins of Lake Pillsbury. WPT were absent from the northern survey site of Lake Pillsbury.

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Tables

Table AQ 10-1. AQ 10 – Special Status Amphibians and Aquatic Reptiles Study Status as of January 1, 2019

Study Elements Completed / Data Collected	Resource Agency Consultation / Technical Working Group Updates	Technical Study Plan Variances	Outstanding Study Elements	Modifications to Ongoing Studies	Proposed New Studies
AQ 10 – Special Status Amphibians and Aquatic Reptiles					
Foothill Yellow Legged Frog (FYLF) *Study Site Selection* • Selected representative study sites to provide spatial coverage of the Study area and to assess the distribution and abundance of FYLF breeding populations. *Habitat Characterization* • Identified and mapped potential breeding and rearing habitat for FYLF in the river reaches based on review of aerial photography and/or an aerial flight. • Completed a habitat characterization of study sites and comparison sites in the field during distribution and abundance surveys. • Developed a GIS map of potential FYLF habitat. *Distribution and Abundance Surveys* • Identified and mapped known occurrences of FYLF within the Study Area based on agency consultation and review of existing information. • Monitored initiation of breeding in the Project area, and conducted two surveys for breeding in spring at each study site. Conducted one survey for metamorphosed young of the year in late summer/early fall at each study site. • Installed temperature data loggers in the thalweg and channel margin breeding areas at each study sit prior to breeding. Maintained loggers throughout the end of late summer/early fall surveys. *Timing and Length of Breeding Season* • Identified the timing and length of breeding season. **Western Pond Turtle** *Study Sites* • Co-located study sites for WPT with the FYLF study sites. • Selected WPT survey sites in Lake Pillsbury. *Habitat Characterization* • Developed a GIS map of potential WPT nesting habitat locations in the Study Area.	• November 9, 2017: Conducted Aquatic Resources TWG meeting to discuss implementation of the AQ 10 – Special-status Amphibians and Aquatic Reptiles TSP and continue discussion on previous TSPs, as needed. (UVCC) • May 22, 2018: Conducted Aquatic Resources TWG meeting to select WPT survey sites and nesting analysis in Lake Pillsbury. (WebEx) • July 19, 2018: Conducted Aquatic Resources TWG meeting to discuss development of habitat suitability criteria. (WebEx)		**Foothill Yellow Legged Frog (FYLF)** *Habitat Characterization* • Develop a GIS map of potential FYLF habitat. *Distribution and Abundance Surveys* • Prepare and submitted a California Native Species Field Survey Form for all FYLF recorded to the California Natural Diversity Database. *Coordination to Determine Stage, Velocity and Temperature Effects* • Use Habitat Suitability Criteria (HSC) information for eggs and tadpoles from existing studies to develop HSC, in coordination with stakeholders, for habitat versus flow modeling in Study AQ 5 – Instream Flow. • Develop a life stage periodicity chart for FYLF that identifies the season of the year when each life stage is likely to be present within the Study Area. • Coordinate with Study AQ 5 – Instream Flow to evaluate habitat suitability for FYLF egg masses and tadpoles under existing and alternative flow regimes and ramping rates, as appropriate. • Coordinate with Study AQ 2 – Water Temperature modeling to determine the best way to model water temperature at FYLF breeding and rearing sites. • Coordinate with Study AQ 4 – Fluvial Processes and Geomorphology to identify flow regime issues related to FYLF habitat. **Western Pond Turtle** *Habitat Characterization* • Conduct a field reconnaissance survey of potential nesting locations identified in the GIS map near Project facilities *Distribution and Abundance* • Coordinate with Study AQ 4 – Fluvial Processes and Geomorphology to identify the amount of LWD available for basking habitat as part of the geomorphology LWD analysis of Lake Pillsbury and the Eel River.	None	None

Table AQ 10-1. AQ 10 – Special Status Amphibians and Aquatic Reptiles Study Status as of January 1, 2019

Study Elements Completed / Data Collected	Resource Agency Consultation / Technical Working Group Updates	Technical Study Plan Variances	Outstanding Study Elements	Modifications to Ongoing Studies	Proposed New Studies
• Conducted a field reconnaissance survey of potential nesting locations identified in the GIS map near Project facilities. *Distribution and Abundance* • Identified and mapped known occurrences of WPT within the Study Area based on agency consultation and a review of existing information • Conducted protocol-level visual encounter surveys (VES) at pool or backwater habitats at the survey sites.			• Prepare and submit a California Native Species Field Survey Form for all WPT recorded to the CNDDB. *Water Temperature* • Evaluate output from Study AQ 2 – Water Temperature to compare WPT habitat conditions and/or growth under existing and alternative Project operations. • Correct VES observations for biases in detectability through the inverse relationship between water temperature and detectability.		

Table AQ 10-2. Station ID, Description, and Sampling Type.

Station ID	Station Description	Sampling Type
Eel River Watershed		
ER173.7	Eel River above Lake Pillsbury near Thistle Glade Ck.	Reference (M)
RF8.7	Rice Fork above Lake Pillsbury near Bear Ck.	Reference (M)
RF6.1	Rice Fork above Lake Pillsbury near Rice Ck.	Reference (M)
ER166.4	Eel River at Benmore Ck., Benmore Ck	Project (M), Reference (T)
ER161.2	Eel River at Bucknell Creek, Bucknell Ck.	Project (M), Reference (T)
ER157.9	Eel River at Van Arsdale Reservoir near bridge	General Project (M)
ER153.0	Eel River at Tomki Creek, Tomki Ck.	Project (M), Reference (T)
ER144.4	Eel River at Salt Creek, Salt Ck.	Project (M), Reference (T)
ER126.0	Eel River at Outlet Creek, Outlet Ck.	Project (M), Reference (T)
ER119.3	Eel River at Middle Fork Eel River, Middle Fork Eel	Project (M), Reference (T)
Lake Pillsbury		
ER_LP	Shoreline surveys by powerboat and kayak	Project
East Branch Russian River Watershed		
EB_BLPH	East Branch Russian River below Potter Valley Powerhouse at Busch Creek, 2 reaches of Busch Creek.	Project (M)
	For WPT this also includes the PVID West Canal in the vicinity of Busch and Williams Creeks.	Reference (T_1, T_2)
EB_MC	East Branch Russian River at Mewhinney Creek	Project (M)
		Reference (T)
EB_ABLM	East Branch Russian River above Lake Mendocino, 3 reaches	General Project (M)

Notes:
M = Mainstem
T = Tributary

Table AQ 10-3. Clutch Totals by Site and Date.

Station ID	Reach	Total Observed Clutches													Reach Length (km)	FYLF Breeding Density	Upstream		Downstream	
		30/2018	1/2018	2/2018	3/2018	4/2018	5/2018	14/2018	15/2018	16/2018	17/2018	4/2018	5/2018	6/2018			Latitude	Longitude	Latitude	Longitude
RF8.7 (Reference)	Rice Fork near Bear Creek				112										1.0	108.7	39.32397	-122.87096	39.331783	-122.875611
RF8.7 (Reference)	Tributary to Rice Fork				0										0.6	0.0	39.325309	-122.87657	39.328422	-122.872192
RF6.1 (Reference)	Rice Fork near Rice Creek									89					0.8	113.4	39.35302	-122.88745	39.358136	-122.889263
ER173.7 (Reference)	Eel River U/S of Lake Pillsbury				1										--	--	39.44295	-122.84852	39.441767	-122.851783
ER173.7 (Reference)	Tributary to Eel River Upstream of Lake Pillsbury				0										0.4	0.0	39.44295	-122.84852	39.4417667	-122.851783
ER173.7 (Reference)	Eel River Upstream of Lake Pillsbury										52				0.9	57.8	39.39785	-122.880150	39.394000	-122.887083
ER166.4 (Project)	Eek River near Benmore Creek					18		65					16		1.1	87.5	39.40755	-122.989391	39.408442	-122.998759
ER166.4 (Reference)	Benmore Creek		54												0.7	81.8	39.39996	-122.991989	39.405067	-122.993714
ER161.2 (Project)	Eel River near Bucknell Creek		4					5						4	0.9	14.2	39.38096	-123.046899	39.376300	-123.05425
ER161.2 (Reference)	Bucknell Creek							12						1	0.1	130.0	39.37634	-123.049722	39.376783	-123.05052
ER157.9 (Project)	Eel River near Van Arsdale Bridge	0				0			27			8			1.1	32.9	39.38170	-123.093425	39.382728	-123.105858
ER153.0 (Project)	Eel River near Tomki Creek Confluence	2		0					8					1	1.1	9.8	39.42407	-123.138091	39.430665	-123.144649
ER153.0 (Reference)	Tomki Creek	4							0					0	1.0	4.0	39.41982	-123.149443	39.425247	-123.142352
ER151.0 (Project)	Eel River D/S of Tomki Creek Confluence					0									1.0	0.0	39.43210	-123.143250	39.438452	-123.144073

Station ID	Reach	Total Observed Clutches													Reach Length (km)	FYLF Breeding Density	Upstream		Downstream	
		30/2018	31/2018	2/2018	3/2018	4/2018	5/2018	14/2018	15/2018	16/2018	17/2018	4/2018	5/2018	6/2018			Latitude	Longitude	Latitude	Longitude
ER144.4 (Project)	Eel River near Salt Creek Confluence					1									1.0	1.0	39.49485	-123.203434	39.494333	-123.21573
ER144.4 (Reference)	Salt Creek					8									0.2	40.0	39.49152	-123.214187	39.492303	-123.214043
ER126.0 (Project)	Eel River near Outlet Creek					0									0.9	0.0	39.62480	-123.340583	39.630417	-123.344506
ER126.0 (Reference)	Outlet Creek					0									0.7	0.0	39.62297	-123.350067	39.626386	-123.344951
ER119.3 (Project)	Mainstem Eel near Middle Fork Confluence						0								0.7	0.0	39.70882	-123.355098	39.713397	-123.35313
ER119.3 (Reference)	Middle Fork Eel						0								1.0	0.0	39.71109	-123.347977	39.713397	-123.35313
EB_ABLM (Project)	East Branch Russian River U/S Lake Mendocino					0									1.1	0.0	39.25709	-123.115025	39.248773	-123.121314
EB_MC (Project)	East Branch Russian River near Mewhennie Creek			1											0.6	1.8	39.27028	-123.100960	39.268159	-123.105664
EB_MC (Reference)	Mewhennie Creek			11											0.8	13.1	39.267317	-123.092859	39.269730	-123.10132
EB_BLPH (Project)	East Branch Russian River near Busch Creek			0											0.5	0.0	39.33920	-123.111382	39.334750	-123.109965
EB_BLPH (Reference)	Busch Creek			0											1.3	0.0	39.34055	-123.124129	39.337142	-123.111262

Notes:

Due to flow conditions early in spring making crossings difficult, some surveys spanned multiple days because of access issues (e.g. returning with a kayak to cross channel).

Table AQ 10-4. Study sites and indices of abundance for FYLF (*Rana boylii*) and distribution of Bullfrogs (*Lithobates catesbeianus*), Spring and Summer 2018.

Station ID	Reach Description	Reach Type, Mainstem (M) Tributary (T)	*R .boylii,* any stage[a]	Total # of Clutches	Distance (km)	2018 Clutch Density (#/km)	Bull-frogs
Eel River Watershed							
ER173.7	Eel River above Lake Pillsbury near Thistle Glade Ck.	Reference (M)	**+**	52	0.9	57.8	**-**
RF8.7	Rice Fork above Lake Pillsbury near Bear Ck.	Reference (M)	**+**	112	1.0	108.7	**-**
RF6.1	Rice Fork above Lake Pillsbury near Rice Ck.	Reference (M)	**+**	89	0.8	113.4	**-**
ER166.4	Eel River at Benmore Ck., Benmore Ck	Project, (M), Reference, (T)	**+, +**	99 54	1.1 0.7	87.5 81.8	**-**
ER161.2	Eel River at Bucknell Creek, Bucknell Ck.	Project, (M), Reference (T)	**+, +**	13 13	0.9 0.1	14.2 130	**-**
ER157.9	Eel River at Van Arsdale Reservoir near bridge	General Project (M)	**+**	35	1.1	32.9	**+**
ER153.0	Eel River at Tomki Creek, Tomki Ck.	Project (M), Reference (T)	**+, +**	11 4	1.12 1.0	9.8 4	**+, +**
ER144.4	Eel River at Salt Creek, Salt Ck.	Project (M), Reference (T)	**+, +**	1 8	1 0.2	1 40	**+,-**
ER126.0	Eel River at Outlet Creek, Outlet Ck.	Project (M), Reference (T)	**+, +**	0 0	0.91 0.65	n/a	**+,+**
ER119.3	Eel River at Middle Fork Eel River, Middle Fork Eel	Project (M), Reference (T)	**+, +** 9, 82 meta's	Unknown clutches	0.7 0.97	Unknown	**+,-**

Station ID	Reach Description	Reach Type, Mainstem (M) Tributary (T)	*R .boylii,* any stage[a]	Total # of Clutches	Distance (km)	2018 Clutch Density (#/km)	Bull-frogs
East Branch Russian River Watershed							
EB_BLPH	East Branch Russian River below Potter Valley Powerhouse at Busch Creek	Project (M)	**-**	0	0.53	0	+
	Busch Creek + PVID West Canal in the vicinity of Busch and Williams Creeks.	Reference (T_1, T_2)	**-,+** 0, 9 tads	0, Unknown clutches	1.29	Unknown	+
EB_MC	E. Br. Russian at Mewhinney Creek	Project (M)	**+,+**	1	0.56	1.8	+
	Mewhinney Creek	Reference (T)		11	0.84	13.1	+
EB_ABLM	East Branch Russian above Lake Mendocino, 3 reaches	Project (M)	**+** 5 tads 2 meta	Unknown clutches	1.07	Unknown	+

Notes:

Reference – reach unaffected by project

General Project – sampling of mainstem where tributaries in proximity to site are either too small to support breeding or not accessible

Project (M), Reference (T) - sampling of mainstem and tributary large enough to support FYLF breeding

[a] Qualitative sampling for presence/absence in spring and quantitative sampling when presence was confirmed; when presence was not confirmed, search areas shifted in subsequent visits. Both banks of ca. 1000 m of river or stream were surveyed at each site. Details regarding distances searched, visit dates, and clutch locations in Appendix AQ10-A.

Presence (+) indicates that tadpoles, metamorphosed, or adult frogs were observed at secondary or tertiary sites after surveys of the primary sites yielded no observations. Absence (-) indicates no individuals of any life stage observed.

Table AQ 10-5. FYLF Hatchling Quadrat Data.

Project/Reference Reach	River (Stream)	Latitude	Longitude	Date	Quadrat	Sub-sample of Quadrat	Depth (cm)	Water Velocity (mid-column) (cm/sec)	Water Velocity (bottom) (cm/sec)	# of Tadpoles Observed	Gosner stage	Body Length (mm)
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	1	a	11	14	--	0		--
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	1	b	13	18	--	0		--
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	2	a	2	0	--	8	25	4.5
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	2	b	10	0	--	5	25	4.5
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	2	c	13	0	--	0	25	4.5
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	2	d	17	0	--	2	25	4.5
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	3	a	1	0	--	0	25	--
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	3	b	3	0	--	4	25	--
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	3	c	8	0	--	1	25	--
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	3	d	10	0.023	--	0	25	--
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	4	a	2	0	--	2	25	5.5
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	4	a	2	0	--	1	26	5.5
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	4	b	7	0	--	3	25	5.5
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	4	b	7	0	--	2	26	5.5
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	4	c	12	0	--	1	25	5.5
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	4	c	12	0	--	2	26	5.5
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	4	d	9	0	--	1	25	5.5
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	4	d	9	0	--	1	26	5.5
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	5	a	3	0	--	7	26	6.7
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	5	b	10	0	--	0	26	6.7
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	5	c	12	0	--	0	26	6.7
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	5	d	18	0	--	0	26	6.7
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	6	a	7	0	--	44	25	--
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	6	b	12	0	--	21	25	--
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	6	c	18	0	--	29	25	--
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	6	d	22	0	--	49	25	--
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	7	a	10	0	--	22	25	--
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	7	b	21	0	--	46	25	--
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	7	c	29	0.01	--	1	25	--
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	7	d	33	0.049	--	0	25	--
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	8	a	6	0	--	22	25	--
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	8	b	19	0.009	--	24	25	--
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	8	c	31	0.01	--	4	25	--
Project	Eel River near Van Arsdale Bridge	39.38219	-123.09622	6/4/2018	8	d	35	0.013	--	1	25	--

Project/Reference Reach	River (Stream)	Latitude	Longitude	Date	Quadrat	Sub-sample of Quadrat	Depth (cm)	Water Velocity (mid-column) (cm/sec)	Water Velocity (bottom) (cm/sec)	# of Tadpoles Observed	Gosner stage	Body Length (mm)
Reference	Bucknell Creek	39.37824103	-123.049618	6/6/2018	1	a	4	0	0	14	25	9.5
Reference	Bucknell Creek	39.37824103	-123.049618	6/6/2018	1	b	10	0	0	13	26	9.5
Reference	Bucknell Creek	39.37824103	-123.049618	6/6/2018	1	c	14	0	0	5	25	9
Reference	Bucknell Creek	39.37824103	-123.049618	6/6/2018	1	d	0	0	0	0	26	9
Reference	Bucknell Creek	39.37824103	-123.049618	6/6/2018	3	a	0	0	0	0	--	--
Reference	Bucknell Creek	39.37824103	-123.049618	6/6/2018	3	b	17	0.18	0.11	0	25	9
Reference	Bucknell Creek	39.37824103	-123.049618	6/6/2018	3	c	25	0.18	0.11	8	26	9
Reference	Bucknell Creek	39.37824103	-123.049618	6/6/2018	3	d	28	0.18	0.11	10	25	9
Reference	Bucknell Creek	39.37684796	-123.050119	6/6/2018	4	a	5.1	0	0	11	25	9.5
Reference	Bucknell Creek	39.37684796	-123.050119	6/6/2018	4	b	13	0	0	5	26	9.5
Reference	Bucknell Creek	39.37684796	-123.050119	6/6/2018	4	c	9	0	0	72	25	9.5
Reference	Bucknell Creek	39.37684796	-123.050119	6/6/2018	4	d	18	0.05	0.08	7	26	9.5
Reference	Bucknell Creek	39.37675701	-123.049987	6/6/2018	5	a	4	0.025	0	76	25	9
Reference	Bucknell Creek	39.37675701	-123.049987	6/6/2018	5	b	804	0	0	93	26	9
Reference	Bucknell Creek	39.37675701	-123.049987	6/6/2018	5	c	5	0.021	0.021	30	25	8
Reference	Bucknell Creek	39.37675701	-123.049987	6/6/2018	5	d	8	0.041	0.101	7	26	10.5
Project	Eel River D/S of Bucknell Creek Confluence	39.37624304	-123.053698	6/6/2018	6	a	10	0	0	84	24	5.5
Project	Eel River D/S of Bucknell Creek Confluence	39.37624304	-123.053698	6/6/2018	6	b	15	0	0	58	24	5.5
Project	Eel River D/S of Bucknell Creek Confluence	39.37624304	-123.053698	6/6/2018	6	c	22	2	0	34	24	5.5
Project	Eel River D/S of Bucknell Creek Confluence	39.37624304	-123.053698	6/6/2018	6	d	30	6	2	1	24	5.5
Project	Eel River D/S of Bucknell Creek Confluence	39.37864303	-123.049269	6/6/2018	7	a	9	<2	0	3	26	7.5
Project	Eel River D/S of Bucknell Creek Confluence	39.37864303	-123.049269	6/6/2018	7	b	18	5	<2	9	25	7.5
Project	Eel River D/S of Bucknell Creek Confluence	39.37864303	-123.049269	6/6/2018	7	c	20	6-7	<2	1	25	7
Project	Eel River D/S of Bucknell Creek Confluence	39.37864303	-123.049269	6/6/2018	7	d	25	6-7	<2	1	25	8
Project	Eel River D/S of Bucknell Creek Confluence	39.3789020	-123.048728	6/6/2018	8	a	15	0	0	11	26	8.5
Project	Eel River D/S of Bucknell Creek Confluence	39.3789020	-123.048728	6/6/2018	8	b	8	0	0	15	24	5
Project	Eel River D/S of Bucknell Creek Confluence	39.3789020	-123.048728	6/6/2018	8	c	3	0	0	31	24	4.5
Project	Eel River D/S of Bucknell Creek Confluence	39.3789020	-123.048728	6/6/2018	8	d	12	<2	0	61	24	4.5
Project	Eel River D/S of Tomki Creek Confluence	39.42491197	-123.142185	6/6/2018	9	a	3	0	0	0	--	--
Project	Eel River D/S of Tomki Creek Confluence	39.42491197	-123.142185	6/6/2018	9	b	8	0	0	0	--	--
Project	Eel River D/S of Tomki Creek Confluence	39.42491197	-123.142185	6/6/2018	9	c	10	0	0	0	--	--
Project	Eel River D/S of Tomki Creek Confluence	39.42491197	-123.142185	6/6/2018	9	d	12	2-5	2-5	0	--	--
Project	Eel River near Benmore Creek	39.40527904	-122.993263	6/7/2018	1	a	5	-0.003	-0.021	6	24	6
Project	Eel River near Benmore Creek	39.40527904	-122.993263	6/7/2018	1	b	11	-0.084	-0.068	1	25	6
Project	Eel River near Benmore Creek	39.40527904	-122.993263	6/7/2018	1	c	20	-0.079	-0.065	1	25	6
Project	Eel River near Benmore Creek	39.40527904	-122.993263	6/7/2018	1	d	28	-0.066	-0.044	0	--	--

Project/Reference Reach	River (Stream)	Latitude	Longitude	Date	Quadrat	Sub-sample of Quadrat	Depth (cm)	Water Velocity (mid-column) (cm/sec)	Water Velocity (bottom) (cm/sec)	# of Tadpoles Observed	Gosner stage	Body Length (mm)
Project	Eel River near Benmore Creek	39.405244	-122.993887	6/7/2018	2	a	3	-0.015	-0.015	5	25	6
Project	Eel River near Benmore Creek	39.405244	-122.993887	6/7/2018	2	b	8	-0.001	-0.01	12	25	6
Project	Eel River near Benmore Creek	39.405244	-122.993887	6/7/2018	2	c	12	0.151	0.071	1	26	7
Project	Eel River near Benmore Creek	39.405244	-122.993887	6/7/2018	2	d	16	0.239	0.163	0	--	--
Project	Eel River near Benmore Creek	39.40481803	-122.994242	6/7/2018	3	a	4	0	0	8	26	6.5
Project	Eel River near Benmore Creek	39.40481803	-122.994242	6/7/2018	3	b	4	-0.021	-0.021	3	25	6
Project	Eel River near Benmore Creek	39.40481803	-122.994242	6/7/2018	3	c	11	0.033	0.026	1	25	6
Project	Eel River near Benmore Creek	39.40481803	-122.994242	6/7/2018	3	d	12	0.142	0.152	23	25	6.5
Project	Eel River near Benmore Creek	39.40481803	-122.994242	6/7/2018	3	e	5	0.162	0.015	16	25	6.5
Project	Eel River near Benmore Creek	39.40481803	-122.994242	6/7/2018	3	f	18	0.202	-0.03	5	25	6.5
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	4	a	15	0.005	0.001	2	26	6.5
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	4	b	30	0.867	0.235	1	26	6
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	4	c	40	0.652	0.017	0	--	--
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	4	d	42	0.936	0.339	0	--	--
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	5	a	4.5	0.014	0.014	40	26	7
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	5	b	10	0.348	0.059	34	26	6
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	5	c	13	0.347	0.269	100	26	6
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	5	d	26	0.096	0.039	58	26	6
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	5	e	29	0.129	0.024	1	26	6
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	6	a	5	0	0	86	26	7
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	6	b	10	0	0	173	26	8
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	6	c	11	0.004	0.004	236	26	8
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	6	d	9	0.023	0.023	45	26	8
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	7	a	7	0	0	246	25	7
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	7	b	9	0.073	0.073	163	25	8
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	7	c	17	0.132	0.044	73	25	8
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	7	d	19	0.232	0.146	8	25	8
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	8	a	4	0	0	10	25	8
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	8	b	4	0	0	0	25	8
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	8	c	9	0.001	0.001	5	25	7
Project	Eel River near Benmore Creek	39.40568598	-122.995426	6/7/2018	8	d	10	0.03	0.03	2	26	9
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	1	a	2	0	0	11	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	1	b	5	0.003	0	13	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	1	c	5	0.009	0.01	6	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	1	d	4	0.009	0.007	12	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	2	a	4	0	0	16	25-26	--

Project/Reference Reach	River (Stream)	Latitude	Longitude	Date	Quadrat	Sub-sample of Quadrat	Depth (cm)	Water Velocity (mid-column) (cm/sec)	Water Velocity (bottom) (cm/sec)	# of Tadpoles Observed	Gosner stage	Body Length (mm)
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	2	b	6	0	0	14	25-26	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	2	c	5	0	0	35	25-26	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	2	d	7	0.01	0.11	7	25-26	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	3	a	2	0	0	13	25-26	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	3	b	5	0	0	26	25-26	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	3	c	5	0	0	26	25-26	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	3	d	7	0	0	37	25-26	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	4	a	4	0	0	143	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	4	b	5	0	0	59	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	4	c	7	0.005	0.005	44	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	4	d	9	0.1	0.1	26	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	5	a	4	0	0	37	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	5	b	10	0.091	0.105	45	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	5	c	15	0.121	0.135	22	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	5	d	17	0.178	0.201	15	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	6	a	11	0	0	54	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	6	b	15	0	0	67	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	6	c	27	0	0	48	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	6	d	35	0	0	26	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	7	a	2	0	0	2	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	7	b	3	0	0	10	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	7	c	5	0	0	21	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	7	d	5	0	0	11	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	8	a	2	0	0	17	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	8	b	4	0	0	68	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	8	c	5	0.005	0.005	93	25	--
Reference	Eel River U/S of Lake Pillsbury	--	--	6/5/2018	8	d	5	0.01	0.01	71	25	--
Reference	Benmore Creek	39.4044080	-122.9933940	6/7/2018	1	a	20	0.065	0.011	80	25	--
Reference	Benmore Creek	39.4044080	-122.9933940	6/7/2018	1	b	7	0.004	0.004	40	25	--
Reference	Benmore Creek	39.4044080	-122.9933940	6/7/2018	1	c	9	0.093	0.02	80	25	--
Reference	Benmore Creek	39.4044080	-122.9933940	6/7/2018	1	d	14	0.136	0.1	86	25	--
Reference	Benmore Creek	39.4036990	-122.9933840	6/7/2018	2	a	5	0.02	0.2	15	25	--
Reference	Benmore Creek	39.4036990	-122.9933840	6/7/2018	2	b	8	0.095	0.077	16	25-26	--
Reference	Benmore Creek	39.4036990	-122.9933840	6/7/2018	2	c	10	0.098	0.087	11	25	--
Reference	Benmore Creek	39.4036990	-122.9933840	6/7/2018	2	d	10	0.094	0.071	5	26	--
Reference	Benmore Creek	39.4022570	-122.9930750	6/7/2018	3	a	6	0	0	6	25	--

Project/Reference Reach	River (Stream)	Latitude	Longitude	Date	Quadrat	Sub-sample of Quadrat	Depth (cm)	Water Velocity (mid-column) (cm/sec)	Water Velocity (bottom) (cm/sec)	# of Tadpoles Observed	Gosner stage	Body Length (mm)
Reference	Benmore Creek	39.4022570	-122.9930750	6/7/2018	3	b	14	0.004	0	42	25	--
Reference	Benmore Creek	39.4022570	-122.9930750	6/7/2018	3	c	21	0	0	29	25	--
Reference	Benmore Creek	39.4022570	-122.9930750	6/7/2018	3	d	30	0.203	0.12	1	25	--
Reference	Benmore Creek	39.4013660	-122.9926250	6/7/2018	4	a	8	0.063	0.063	8	26	--
Reference	Benmore Creek	39.4013660	-122.9926250	6/7/2018	4	b	3	0.072	0.072	3	26	--
Reference	Benmore Creek	39.4013660	-122.9926250	6/7/2018	4	c	5	0.107	0.107	4	26	--
Reference	Benmore Creek	39.4013660	-122.9926250	6/7/2018	4	d	6	0.077	0.077	5	26	--
Reference	Benmore Creek	39.4008060	-122.9918880	6/7/2018	5	a	7	0.03	0.027	4	25	--
Reference	Benmore Creek	39.4008060	-122.9918880	6/7/2018	5	b	24	0.024	0.018	8	25	--
Reference	Benmore Creek	39.4008060	-122.9918880	6/7/2018	5	c	37	0.028	0.015	0	25	--
Reference	Benmore Creek	39.4008060	-122.9918880	6/7/2018	5	d	14	0.048	0.041	0	25	--
Reference	Benmore Creek	--	--	6/7/2018	6	a	9	0.006	0.006	7	26	--
Reference	Benmore Creek	--	--	6/7/2018	6	b	16	0.027	0.02	23	25-26	--
Reference	Benmore Creek	--	--	6/7/2018	6	c	9	0.019	0.19	34	26	--
Reference	Benmore Creek	--	--	6/7/2018	6	d	16	0.258	0.15	4	25-26	--
Reference	Mewhenny Creek	39.26727796	-123.094162	6/8/2018	1	a	5	0.007	0.007	4	25	8
Reference	Mewhenny Creek	39.26727796	-123.094162	6/8/2018	1	b	10	0.016	0.008	5	26	11
Reference	Mewhenny Creek	39.26727796	-123.094162	6/8/2018	1	c	15	0.07	0.021	0	27	0
Reference	Mewhenny Creek	39.26727796	-123.094162	6/8/2018	1	d	16	0.095	0.017	0	26	0
Reference	Mewhenny Creek	39.26732196	-123.093414	6/8/2018	2	a	27	0.009	0.008	0	--	--
Reference	Mewhenny Creek	39.26732196	-123.093414	6/8/2018	2	b	40	0.028	0.018	0	--	--
Reference	Mewhenny Creek	39.26732196	-123.093414	6/8/2018	2	c	32	0.059	0.03	2	20	--
Reference	Mewhenny Creek	39.26732196	-123.093414	6/8/2018	2	d	14	0.011	0	0	--	--
Reference	Mewhenny Creek	39.267284	-123.093238	6/8/2018	3	a	10	0.039	0.024	3	25	11
Reference	Mewhenny Creek	39.267284	-123.093238	6/8/2018	3	b	15	0.079	0.045	7	26	12
Reference	Mewhenny Creek	39.267284	-123.093238	6/8/2018	3	c	20	0.046	0.02	4	32	15
Reference	Mewhenny Creek	39.267284	-123.093238	6/8/2018	3	d	10	0.024	0.02	1	30	13
Reference	Mewhenny Creek	39.267860	-123.097842	6/8/2018	4	a	4	0.041	0.041	0	--	--
Reference	Mewhenny Creek	39.267860	-123.097842	6/8/2018	4	b	6	0.072	0.072	0	--	--
Reference	Mewhenny Creek	39.267860	-123.097842	6/8/2018	4	c	6	0.154	0.154	0	--	--
Reference	Mewhenny Creek	39.267860	-123.097842	6/8/2018	4	d	6	0.093	0.093	0	--	--
Reference	Mewhenny Creek	39.269326	-123.100739	6/8/2018	5	a	6	0.019	0.019	11	26	11
Reference	Mewhenny Creek	39.269326	-123.100739	6/8/2018	5	b	3	0.009	0.009	0	--	--
Reference	Mewhenny Creek	39.269326	-123.100739	6/8/2018	5	c	15	0.096	0.041	1	29	12
Reference	Mewhenny Creek	39.269326	-123.100739	6/8/2018	5	d	10	0.091	0.039	9	29	11
Reference	Mewhenny Creek	39.269485	-123.100907	6/8/2018	6	a	9	0.011	0.006	0	--	--

Project/Reference Reach	River (Stream)	Latitude	Longitude	Date	Quadrat	Sub-sample of Quadrat	Depth (cm)	Water Velocity (mid-column) (cm/sec)	Water Velocity (bottom) (cm/sec)	# of Tadpoles Observed	Gosner stage	Body Length (mm)
Reference	Mewhenny Creek	39.269485	-123.100907	6/8/2018	6	b	19	0.021	0.005	0	--	--
Reference	Mewhenny Creek	39.269485	-123.100907	6/8/2018	6	c	21	0.041	0.011	0	--	--
Reference	Mewhenny Creek	39.269485	-123.100907	6/8/2018	6	d	--	--	--	0	--	--
Reference	Mewhenny Creek	39.269562	-123.100973	6/8/2018	7	a	8	0.033	0.007	1	30	14
Reference	Mewhenny Creek	39.269562	-123.100973	6/8/2018	7	b	14	0.128	0.042	1	30	14
Reference	Mewhenny Creek	39.269562	-123.100973	6/8/2018	7	c	11	0	0	0	--	--
Reference	Mewhenny Creek	39.269562	-123.100973	6/8/2018	7	d	--	--	--	0	--	--
Project	East Branch Russian River near Mewhenny Creek	--	--	6/8/2018	1	a	12	0.11	--	2	--	--
Project	East Branch Russian River near Mewhenny Creek	--	--	6/8/2018	1	b	12	0.09	--	0	--	--
Project	East Branch Russian River near Mewhenny Creek	--	--	6/8/2018	1	c	14	0.81	--	0	--	--
Project	East Branch Russian River near Mewhenny Creek	--	--	6/8/2018	1	d	0	--	--	0	--	--
Reference	Middle Fork Eel River	39.713168	-123.351691	6/9/2018	1	a	7	4.5	--	6	25	8
Reference	Middle Fork Eel River	39.713168	-123.351691	6/9/2018	1	b	18	22.7	--	3	25	8
Reference	Middle Fork Eel River	39.713168	-123.351691	6/9/2018	1	c	20	11.6	--	0	--	--
Reference	Middle Fork Eel River	39.713168	-123.351691	6/9/2018	1	d	40	0	0	0	--	--
Reference	Middle Fork Eel River	39.713253	-123.351905	6/9/2018	2	a	12	0	--	8	25	10
Reference	Middle Fork Eel River	39.713253	-123.351905	6/9/2018	2	b	16	0	--	10	25	10
Reference	Middle Fork Eel River	39.713253	-123.351905	6/9/2018	2	c	28	2.6	--	3	25	10
Reference	Middle Fork Eel River	39.713253	-123.351905	6/9/2018	2	d	28	2.9	--	6	25	10
Reference	Middle Fork Eel River	39.713253	-123.351905	6/9/2018	2	e	45	3.2	--	2	26	12
Reference	Middle Fork Eel River	39.713356	-123.352887	6/9/2018	3	a	10	0	--	10	--	--
Reference	Middle Fork Eel River	39.713356	-123.352887	6/9/2018	3	b	13	4.2	--	5	--	--
Reference	Middle Fork Eel River	39.713356	-123.352887	6/9/2018	3	c	15	4.4	--	4	--	--
Reference	Middle Fork Eel River	39.713356	-123.352887	6/9/2018	3	d	17	1.8	--	1	--	--
Reference	Middle Fork Eel River	39.711050	-123.355867	6/9/2018	4	a	10	0	--	5	25	--
Reference	Middle Fork Eel River	39.711050	-123.355867	6/9/2018	4	b	10	--	--	1	25	--
Reference	Middle Fork Eel River	39.711050	-123.355867	6/9/2018	4	c	15	1.1	--	0	--	--
Reference	Middle Fork Eel River	39.711050	-123.355867	6/9/2018	4	d	17	5-10	--	0	--	--
Reference	Middle Fork Eel River	39.381659	-123.093295	6/9/2018	5	a	10	1	--	10	--	--
Reference	Middle Fork Eel River	39.381659	-123.093295	6/9/2018	5	b	10	1	--	2	--	--
Reference	Middle Fork Eel River	39.381659	-123.093295	6/9/2018	5	c	0	8.6	--	--	--	--
Reference	Middle Fork Eel River	39.381659	-123.093295	6/9/2018	5	d	0	8.6	--	--	--	--

Table AQ 10-6. July FYLF *(Rana boylii)* Tadpole Data.

Project / Reference Reach	River (Stream)	Tad ID # per Site	Gosner scale	Body Length (mm)	Total Length (mm)	Weight (g)	Tail Damage Y/N	Date of Observation
Project	Eel River near Van Arsdale Bridge	1	35	16.7	41.5	0.77	N	7/9/2018
		2	29	11.7	33	0.29	N	7/9/2018
		3	31	13.6	31.8	0.52	N	7/9/2018
		4	35	19.5	49.4	1.23	N	7/9/2018
		5	36	18.1	53	1.4	N	7/9/2018
		6	33	13.5	37.4	0.47	N	7/9/2018
		7	29	4.7	38	0.5	N	7/9/2018
		8	32	17	30.6	0.28	N	7/9/2018
		9	31	13.6	36.5	0.44	N	7/9/2018
		10	29	11	29.7	0.29	N	7/9/2018
		11	28	11.6	28.5	0.23	N	7/9/2018
		12	34	14.5	37.7	0.58	N	7/9/2018
		13	28	11.3	28.9	0.27	N	7/9/2018
		14	35	14.9	40.6	0.61	N	7/9/2018
		15	28	11.5	28	0.27	N	7/9/2018
		16	34	14.2	35.9	0.47	N	7/9/2018
		17	27	9.8	24.1	0.16	N	7/9/2018
		18	27	10	26	0.19	N	7/9/2018
		19	26	8.4	21.4	0.12	N	7/9/2018
		20	34	16.5	40.2	0.98	Y	7/9/2018
		21	34	15.6	37.5	0.6	N	7/9/2018
		22	33	17.3	39.5	0.7	N	7/9/2018
		23	34	14.6	36.4	0.58	N	7/9/2018
		24	32	13	34.2	0.4	N	7/9/2018

Project / Reference Reach	River (Stream)	Tad ID # per Site	Gosner scale	Body Length (mm)	Total Length (mm)	Weight (g)	Tail Damage Y/N	Date of Observation
		25	27	10.8	27	0.33	N	7/9/2018
		26	29	13.1	34.2	0.43	N	7/9/2018
		27	34	13	27.4	0.4	Y	7/9/2018
		28	33	11.7	31.4	0.4	N	7/9/2018
		29	27	11	27.4	0.32	N	7/9/2018
		30	25	11.5	32	0.35	N	7/9/2018
		31	25	10.9	27.9	0.26	N	7/9/2018
		32	25	7.3	27.5	0.05	N	7/9/2018
		33	25	8.3	20.5	0.14	N	7/9/2018
		34	32	13.8	35.7	0.36	N	7/9/2018
Project	**Eel River D/S of Tomki Creek Confluence**	1	29	12.6	31.4	0.34	Y	7/9/2018
		2	32	14.8	35.4	0.6	Y	7/9/2018
		3	35	17.6	47	0.95	Y	7/9/2018
		1	29	8.3	19.2	0.14	Y	7/9/2018
		2	27	7.8	19.3	0.1	N	7/9/2018
		3	27	9.3	20.4	0.14	Y	7/9/2018
		4	26	9.9	24.4	0.17	N	7/9/2018
		5	27	8	20	0.08	N	7/9/2018
		6	27	9.8	21	0.16	Y	7/9/2018
		7	26	8.5	19.2	0.12	Y	7/9/2018
		8	27	8.4	18.9	0.12	Y	7/9/2018
		9	26	7.3	14.5	0.05	N	7/9/2018
		10	25	7	16	0.05	N	7/9/2018
		11	26	10.5	24	0.15	N	7/9/2018
Reference	**Benmore Creek**	1	34	20	47.4	1.44	N	7/9/2018
		2	37	19.7	54	1.6	N	7/9/2018

Project / Reference Reach	River (Stream)	Tad ID # per Site	Gosner scale	Body Length (mm)	Total Length (mm)	Weight (g)	Tail Damage Y/N	Date of Observation
		3	31	15.6	48.1	0.66	N	7/9/2018
		4	36	19.8	51.6	1.98	N	7/9/2018
		5	31	17.9	41	0.75	N	7/9/2018
		6	36	19.5	54	1.4	N	7/9/2018
		7	35	18.5	49.5	1.32	N	7/9/2018
		8	35	17.6	41.4	1.01	Y	7/9/2018
		9	34	17.8	43.9	1.04	N	7/9/2018
		10	33	17.3	47	1.05	N	7/9/2018
		11	26	10.1	24.1	0.2	N	7/9/2018
		12	35	16.9	43.2	0.88	Y	7/9/2018
		13	30	11.8	30	0.35	N	7/9/2018
		14	34	17	39.1	0.6	N	7/9/2018
		15	27	9.3	24.7	0.12	N	7/9/2018
		16	31	12.7	30.2	0.39	N	7/9/2018
		17	35	15.5	39.3	0.95	Y	7/9/2018
		18	36	18	47.5	1.06	N	7/9/2018
		19	37	20	62.4	2.56	N	7/9/2018
		20	36	20	50.7	1.42	N	7/9/2018
		21	34	18	40	0.76	N	7/9/2018
		22	34	17.9	78	1.08	N	7/9/2018
		23	38	22.5	57.6	2.42	N	7/9/2018
		24	36	18.2	49.5	1.23	N	7/9/2018
		25	34	28.2	43.8	1.11	N	7/9/2018
		26	35	17	45.5	1.05	Y	7/9/2018
		27	35	17.4	41.1	1.02	N	7/9/2018
		28	34	16.3	41	0.86	N	7/9/2018

Project / Reference Reach	River (Stream)	Tad ID # per Site	Gosner scale	Body Length (mm)	Total Length (mm)	Weight (g)	Tail Damage Y/N	Date of Observation
		29	36	20.9	53.7	1.53	N	7/9/2018
		30	34	16.9	42.9	0.99	N	7/9/2018
		31	32	14.4	36	0.57	N	7/9/2018
		32	31	15	34.2	0.56	Y	7/9/2018
Project	**Eel River near Benmore Creek Confluence**	1	26	7.4	14.2	0.07	N	7/9/2018
		2	26	8.5	13.1	0.09	Y	7/9/2018
		3	25	6.2	12.6	0.04	N	7/9/2018
		4	27	9.2	19.2	0.12	N	7/9/2018
		5	26	6.4	13.2	0.05	N	7/9/2018
		6	25	5.1	8.2	0.01	N	7/9/2018
		7	26	7.7	16	0.04	N	7/9/2018
		8	26	6.9	14.9	0.06	N	7/9/2018
		9	26	8.3	14.6	0.08	Y	7/9/2018
		10	26	6.1	13.1	0.08	N	7/9/2018
		11	25	8	16	0.03	N	7/9/2018
		12	25	6	12	0.01	N	7/9/2018
		13	25	6.4	13	0.04	N	7/9/2018
		14	25	5.9	11.9	0.02	N	7/9/2018
		15	26	6	11.2	0.03	Y	7/9/2018
		16	26	6.4	3.5	0.04	Y	7/9/2018
		17	25	6	11.9	0.03	N	7/9/2018
		18	29	10.6	23.8	0.22	N	7/9/2018
		19	27	12.6	26.2	0.4	Y	7/9/2018
		20	26	9.6	21.4	0.25	N	7/9/2018
		21	29	11	27.9	0.34	N	7/9/2018
		22	25	7.4	14.9	0.18	N	7/9/2018

Project / Reference Reach	River (Stream)	Tad ID # per Site	Gosner scale	Body Length (mm)	Total Length (mm)	Weight (g)	Tail Damage Y/N	Date of Observation
		23	29	12	29.6	0.42	N	7/9/2018
		24	28	10.9	22	0.25	N	7/9/2018
		25	26	8.3	15.6	0.13	Y	7/9/2018
		26	26	10.2	20.6	0.17	Y	7/9/2018
		27	26	7.8	17	0.09	N	7/9/2018
		28	25	5.1	11.5	0.03	N	7/9/2018
		29	25	5.7	9	0.03	Y	7/9/2018
		30	26	7.2	14.4	0.07	N	7/9/2018
		31	26	7.6	15.1	0.07	N	7/9/2018
		32	26	7.2	14.6	0.07	N	7/9/2018
		33	26	5	11.8	0.04	N	7/9/2018
		34	25	6	12.3	0.05	N	7/9/2018
		35	25	5.3	10.5	0.01	N	7/9/2018
		36	26	5.8	12.2	0.05	N	7/9/2018
		37	25	4.8	9	0.01	N	7/9/2018
Project	**Eel River at Bucknell Confluence**	1	36	18	50.7	1.47	N	7/11/2018
		2	30	8	26	0.18	N	7/11/2018
		3	28	12.5	32.5	0.32	N	7/11/2018
		4	36	19	52	1.28	N	7/11/2018
		5	39	22.6	58	2	N	7/11/2018
		6	30	13.7	36.8	0.48	N	7/11/2018
		7	38	20.8	59	1.86	N	7/11/2018
		8	36	18.4	52	1.18	N	7/11/2018
		9	29	13.3	32	0.3	N	7/11/2018
		10	29	12	33	0.37	N	7/11/2018
		11	31	14.9	38.9	0.6	N	7/11/2018

Project / Reference Reach	River (Stream)	Tad ID # per Site	Gosner scale	Body Length (mm)	Total Length (mm)	Weight (g)	Tail Damage Y/N	Date of Observation
		12	33	13.8	34.1	0.42	N	7/11/2018
		13	30	12.5	26	0.39	Y	7/11/2018
		14	32	12	35.5	0.36	N	7/11/2018
		15	26	11.4	25.6	0.17	N	7/11/2018
		16	26	8.2	20.7	0.17	Y	7/11/2018
		17	34	14	37.5	0.58	N	7/11/2018
		18	30	12	32	0.29	N	7/11/2018
		19	30	13	28.4	0.28	N	7/11/2018
		20	26	7.6	2	0.1	N	7/11/2018
		21	35	16	37.8	0.62	N	7/11/2018
		22	34	15.6	38.1	0.53	N	7/11/2018
		23	35	16.8	43	0.86	N	7/11/2018
		24	35	16.6	37.5	0.063	N	7/11/2018
		25	31	13.8	33	0.42	N	7/11/2018
		26	26	10.2	25.2	0.21	N	7/11/2018
		27	25	7.4	19	0.08	N	7/11/2018
		28	25	8.2	17.1	0.05	N	7/11/2018
		29	26	8.3	19	0.06	N	7/11/2018
		30	25	7.3	17.7	0.06	N	7/11/2018
		31	25	5.5	12.7	0.03	N	7/11/2018
Reference	**Bucknell Creek**	1	25	9	21.4	0.134	N	7/11/2018
		2	30	9	20.7	0.137	N	7/11/2018
		3	28	13.6	33.5	0.46	N	7/11/2018
		4	28	11.8	30	0.36	N	7/11/2018
		5	29	11.3	28	0.24	N	7/11/2018
		6	30	15	40.6	0.79	N	7/11/2018

Project / Reference Reach	River (Stream)	Tad ID # per Site	Gosner scale	Body Length (mm)	Total Length (mm)	Weight (g)	Tail Damage Y/N	Date of Observation
		7	31	16.8	41.4	0.69	N	7/11/2018
		8	27	13	32.3	0.32	N	7/11/2018
		9	30	12.5	31.6	0.32	N	7/11/2018
		10	28	12.6	25	0.33	N	7/11/2018
		11	27	11.4	24.6	0.18	N	7/11/2018
		12	28	12	28.1	0.31	N	7/11/2018
		13	36	18.8	46	1.11	N	7/11/2018
		14	29	11.4	28.3	0.25	N	7/11/2018
		15	28	12	26.4	0.07	N	7/11/2018
		16	35	17.4	39.7	0.07	Y	7/11/2018
		17	27	13.9	32.5	0.39	N	7/11/2018
		18	31	15	38.6	0.77	N	7/11/2018
		19	26	11.3	28.6	0.27	N	7/11/2018
		20	34	16.8	35.9	0.72	N	7/11/2018
		21	26	9.6	23	0.35	N	7/11/2018
		22	27	11.1	24.9	0.28	N	7/11/2018
		23	28	11.7	33.5	0.37	N	7/11/2018
		24	31	16.3	41	0.63	N	7/11/2018
		25	26	12.3	41	0.18	N	7/11/2018
		26	27	11.8	27.1	0.23	N	7/11/2018
		27	28	10.1	27	0.21	N	7/11/2018
		28	27	8.7	21	0.13	N	7/11/2018
		29	26	10.7	26.5	0.25	N	7/11/2018
		30	27	10.4	25.5	0.21	N	7/11/2018
		31	28	12.3	26.5	0.24	N	7/11/2018
		32	26	9.3	20	0.17	N	7/11/2018

Project / Reference Reach	River (Stream)	Tad ID # per Site	Gosner scale	Body Length (mm)	Total Length (mm)	Weight (g)	Tail Damage Y/N	Date of Observation
		33	29	12	25.2	0.33	N	7/11/2018
Reference	**Busch Creek**	1	40	24.5	57.4	2.22	Y	7/12/2018
		2	38	15.3	40.3	0.68	N	7/12/2018
		3	39	20.2	26.3	2.22	N	7/12/2018
		4	42	24.2	55	1.8	N	7/12/2018
		5	40	22.8	59	2.16	Y	7/12/2018
		6	37	22.6	54	2	Y	7/12/2018
		7	38	24.5	58.5	2.25	Y	7/12/2018
Reference	**Rice Fork near Rice Creek**	1	39	21.3	57.5	1.92	N	7/13/2018
		2	31	15.6	43.1	0.73	N	7/13/2018
		3	33	16.7	43	0.78	N	7/13/2018
		4	36	20	52.3	1.52	N	7/13/2018
		5	34	17	45.7	0.91	N	7/13/2018
		6	32	13	34.4	0.42	N	7/13/2018
		7	35	19.1	47.3	1.18	N	7/13/2018
		8	27	10.1	24.4	0.18	N	7/13/2018
		9	31	13	34.2	0.43	N	7/13/2018
		10	40	20.6	59.7	1.96	N	7/13/2018
		11	36	18.7	46.5	1.2	N	7/13/2018
		12	36	18.2	47	1.04	N	7/13/2018
		13	36	18.5	47.4	1.25	N	7/13/2018
		14	36	20.8	52.9	1.54	N	7/13/2018
		15	28	11.4	30	0.28	N	7/13/2018
		16	30	11.2	31.6	0.34	N	7/13/2018
		17	40	21.7	59.6	2.23	N	7/13/2018
		18	28	11.3	28.4	0.2	N	7/13/2018

Project / Reference Reach	River (Stream)	Tad ID # per Site	Gosner scale	Body Length (mm)	Total Length (mm)	Weight (g)	Tail Damage Y/N	Date of Observation
		19	35	15.1	44.3	0.97	N	7/13/2018
		20	30	12.3	33.7	0.44	N	7/13/2018
		21	31	14	32.5	0.39	N	7/13/2018
		22	34	18.2	45	1.11	Y	7/13/2018
		23	33	13.2	35.3	0.47	N	7/13/2018
		24	29	10.5	28.5	0.33	N	7/13/2018
		25	36	20.8	54.8	1.45	N	7/13/2018
		26	30	13.7	35.5	0.39	N	7/13/2018
		27	32	15.6	40.9	0.68	N	7/13/2018
		28	31	12	33.2	0.34	N	7/13/2018
		29	31	13.9	37.8	0.52	N	7/13/2018
		30	25	9.4	24.5	0.18	N	7/13/2018
		31	29	11.6	29.5	0.24	N	7/13/2018
		32	31	13.4	33.4	0.37	N	7/13/2018

Table AQ 10-7. Production of Young-of-the-Year FYLF (*Rana boylii*) assessed September 2018.

Station ID	Reach Descriptions	Reach Type, Mainstem (M) Tributary (T)	Young of Year Density[a] (#/km)	Distance (km)	Sample size for body metrics	Body length[b] (mean ±SE mm)	Weight[b] (mean ±SE mg)	Tadpoles[c] (%, median Gosner)
ER173.7	Eel River above Lake Pillsbury near Thistle Glade Ck.	Reference (M)	121.0	1.7	38	23.7±0.7	2.3±0.2	0.2, 41
RF6.1	Rice Fork above Lake Pillsbury near Rice Ck.	Reference (M)	523.5	1.0	25	23.5±0.4	1.7±0.1	1.6, 41
ER166.4	Eel River at Benmore Ck., Benmore Ck	Project, (M), Reference, (T)	158.1 48.5	1.1 0.7	10 6	20.4±0.9 20.3±1.5	1.7±0.2 1.6±0.3	76.4, 40 0
ER161.2	Eel River at Bucknell Creek, Bucknell Ck.	Project, (M), Reference (T)	43.5 50.0	0.9 0.1	9 3	18.0±0.5 17.7±1.4	1.0±0.1 1.0±0.1	35.0, 40 0
ER157.9	Eel River at Van Arsdale Reservoir near bridge	Project (M)	102.5	1.1	21	22.9±0.6	1.1±0.1	0
ER153.0	Eel River at Tomki Creek, Tomki Ck.	Project (M), Reference (T)	4.5 4.0	1.0 1.0	4 4	23±0.6 22.5±1.0	-- --	0 0
ER144.4	Eel River at Salt Creek, Salt Ck.	Project (M), Reference (T)	3.0 195.0	1 0.2	3 23	24.8±1.7 23.4±0.7	2.5±0.0 1.4±0.1	0 0
ER126.0	Eel River at Outlet Creek, Outlet Ck.	Project (M), Reference (T)	0 0	0.91 0.65	0 0	--	--	--
ER119.3	Eel River at Middle Fork Eel, Middle Fork Eel	Project (M), Reference (T)	15.7 78.4	0.7 0.97	6 18	23±1.3 21.9±0.5	1.7±0.3 1.3±0.1	22.0, 42 12.0, 42
EB_BLPH	East Branch Russian River below Potter Valley Powerhouse at Busch Creek	Project (M)	0	0.53	0	--	--	--
	Busch Creek + PVID West Canal in the vicinity of Busch and Williams Creeks.	Reference (T_1, T_2)	No access in Sept	1.29	n/a	n/a	n/a	n/a
EB_MC	E. Br. Russian at Mewhinney Creek	Project (M)	0	0.56	--	--	--	--
	Mewhinney Creek	Reference (T)	No access in Sept	0.84	n/a	n/a	n/a	n/a
EB_ABLM	East Branch Russian above Lake Mendocino, summed over 3 reaches	Project (M)	3.0	1.35	4	23.2±0.8	2.0±0.3	0

Notes:
Reference = reach unaffected by project, General Project = sampling of mainstem where tributaries in proximity to site are either too small to support breeding or not accessible Project (M), Reference (T) - sampling of mainstem and tributary large enough to support FYLF breeding

[a] Sampling for abundance of recently metamorphosed frog and tadpoles done by VES along banks of ca. 1000 m of river or stream. Details regarding reach locations in Appendix AQ10-A.

[b] Metamorphs and tadpoles were caught, then Snout Urostyle Length measured with dial calipers and weight measured on a digital balance.

[c] At sites with tadpoles still remaining in late summer, median Gosner stage assessed and proportion of observed individuals not yet transformed was calculated

Shaded rows indicate sites closest to Scott Dam where young of the year were smaller than other sites and a greater proportion remained un-transformed into frogs.

Table AQ 10-8. Visual Encounter Survey (VES) Data.

Species	Common Name	Lifestage / Sex	Number of Individuals	Latitude	Longitude	Date	River (Stream)	Project/Reference Reach	Habitat	Water Temperature (C°)	Notes
Rana boylii	Foothill yellow-legged frog	Juvenile	1	39.38328	-123.104353	4/30/2018	Eel River	Project	Margin of pool	10	
Rana boylii	Foothill yellow-legged frog	Juvenile	1	39.382249	-123.096286	4/30/2018	Eel River	Project	Sidepool	15	
Rana boylii	Foothill yellow-legged frog	Juvenile	1	39.382249	-123.096286	4/30/2018	Eel River	Project	Sidepool	15	
Rana boylii	Foothill yellow-legged frog	Adult	1	39.381839	-123.09361	4/30/2018	Eel River	Project	Riffle	11	
Taricha granulosa	Rough-skinned Newt	Adult	3	39.382249	-123.096286	4/30/2018	Eel River	Project	Sidepool	15	
Actinemys marmorata	Western pond turtle	Female	1	39.430665	-123.144649	4/30/2018	Eel River	Project	Backwater	17	
Actinemys marmorata	Western pond turtle	Adult	1	39.423676	-123.14387	4/30/2018	Tomki Creek	Reference	Margin of run	14	Front left foot no claws, no hands, 1/4 tail chewed off, able to walk, shell very dirty, may have just emerged from underground
Actinemys marmorata	Western pond turtle	Adult	1	39.424216	-123.142668	4/30/2018	Tomki Creek	Reference	Run	14	
Lampetra	Lamprey	Redd	1	39.424216	-123.142668	4/30/2018	Tomki Creek	Reference	Run	14	
Lithobates catesbeianus	American bullfrog	Tadpoles	1	39.422466	-123.144693	4/30/2018	Tomki Creek	Reference	Sidepool	14	
Lithobates catesbeianus	American bullfrog	Tadpoles	1	39.422788	-123.144514	4/30/2018	Tomki Creek	Reference	Sidepool	14	
Thamnophis atratus	Aquatic gartersnake	Adult	1	39.423676	-123.14387	4/30/2018	Tomki Creek	Reference	Margin of run	14	
Actinemys marmorata	Western pond turtle	Adult	1	39.407345	-122.991494	5/1/2018	Eel River	Project	Pool	10.5	
Rana boylii	Foothill yellow-legged frog	Male	1	39.405078	-122.993824	5/4/2018	Eel River	Project	Riffle	10.5	
Rana boylii	Foothill yellow-legged frog	Male	1	39.404856	-122.99426	5/4/2018	Eel River	Project	Riffle	10.5	
Rana boylii	Foothill yellow-legged frog	Male	1	39.404856	-122.99426	5/4/2018	Eel River	Project	Riffle	10.5	
Rana boylii	Foothill yellow-legged frog	male	1	39.404856	-122.99426	5/4/2018	Eel River	Project	Riffle	10.5	
Rana boylii	Foothill yellow-legged frog	Adult	1	39.405834	-122.996069	5/4/2018	Eel River	Project	Riffle	10.5	
Rana boylii	Foothill yellow-legged frog	Adult	8	39.40607	-122.996408	5/4/2018	Eel River	Project	Lateral bar with sedges / lek site	10.5	Includes one amplecting pair
Actinemys marmorata	Western pond turtle	Adult	1	39.710281	-123.355376	5/5/2018	Eel River	Project	Pool	--	
Lithobates caetsbeianus	American bullfrog	Tadpoles	10	39.712607	-123.354087	5/5/2018	Eel River	Project	Sidepool	--	
Lithobates caetsbeianus	American bullfrog	Tadpoles	4	39.709881	-123.35500	5/5/2018	Eel River	Project	Shallow pool	--	
Rana boylii	Foothill yellow-legged frog	Juvenile	1	39.712370	-123.354312	5/5/2018	Eel River	Project	Margin of run	--	
Thamnophis atratus	Aquatic gartersnake	Adult	1	39.710281	-123.355376	5/5/2018	Eel River	Project	Pool	--	
Rana boylii	Foothill yellow-legged frog	Juvenile	1	39.711719	-123.349271	5/5/2018	Middle Fork Eel River	Reference	Large cobble bar	--	
Actinemys marmorata	Western pond turtle	Male	1	39.356933	-122.886300	5/16/2018	Rice Fork	Reference	Pool	13.5	
Rana boylii	Foothill yellow-legged frog	Male	1	39.355083	-122.885833	5/16/2018	Rice Fork	Reference	Braided channel	13.5	
Rana boylii	Foothill yellow-legged frog	Juvenile	3	39.355083	-122.885833	5/16/2018	Rice Fork	Reference	Braided channel	13.5	
Rana boylii	Foothill yellow-legged frog	Male	4	39.354883	-122.886167	5/16/2018	Rice Fork	Reference	Cobble bar	13.5	
Rana boylii	Foothill yellow-legged frog	Male	1	39.354483	-122.886550	5/16/2018	Rice Fork	Reference	Cobble bar	13.5	Very red in body color
Rana boylii	Foothill yellow-legged frog	Male	1	39.353400	-122.887150	5/16/2018	Rice Fork	Reference	Cobble bar	13.5	
Rana boylii	Foothill yellow-legged frog	Male	1	39.353400	-122.887150	5/16/2018	Rice Fork	Reference	Cobble bar	13.5	

Species	Common Name	Lifestage / Sex	Number of Individuals	Latitude	Longitude	Date	River (Stream)	Project/Reference Reach	Habitat	Water Temperature (C°)	Notes
Rana boylii	Foothill yellow-legged frog	Male	1	39.353400	-122.887150	5/16/2018	Rice Fork	Reference	Cobble bar	13.5	
Rana boylii	Foothill yellow-legged frog	Female	1	39.353400	-122.887150	5/16/2018	Rice Fork	Reference	Cobble bar	13.5	Spent
Rana boylii	Foothill yellow-legged frog	Female	1	39.353400	-122.887150	5/16/2018	Rice Fork	Reference	Cobble bar	13.5	Gravid
Actinemys marmorata	Western pond turtle	Adult	1	--	--	6/5/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Adult	1	--	--	6/6/2018	Bucknell Creek	Reference	--	14.5	Wet, on roots/rock basking; went into water
Actinemys marmorata	Western pond turtle	Adult	1	--	--	6/6/2018	Bucknell Creek	Reference	--	14.5	Underwater
Rana boylii	Foothill yellow-legged frog	Male	1	--	--	6/6/2018	Bucknell Creek	Reference	--	--	
Rana boylii	Foothill yellow-legged frog	Male	1	--	--	6/6/2018	Bucknell Creek	Reference	--	--	
Lithobates catesbeianus	American bullfrog	Adult	3	39.425329	-123.138842	6/6/2018	Eel River	Project	Warm side pool at a meander bend	--	
Lithobates catesbeianus	American bullfrog	Tadpoles	40	39.425329	-123.138842	6/6/2018	Eel River	Project	Warm side pool at a meander bend	--	
Rana boylii	Foothill yellow-legged frog	Male	1	39.214430	-122.531320	6/6/2018	Rice Fork	Reference	--	17	
Actinemys marmorata	Western pond turtle	Juvenile	1	39.214430	-122.531320	6/6/2018	Rice Fork	Reference	--	17	
Rana boylii	Foothill yellow-legged frog	Adult	2	39.213060	-122.531520	6/6/2018	Rice Fork	Reference	--	16.5	
Rana boylii	Foothill yellow-legged frog	Male	1	39.212530	-122.532020	6/6/2018	Rice Fork	Reference	--	20.5	
Rana boylii	Foothill yellow-legged frog	Female	1	39.212530	-122.532020	6/6/2018	Rice Fork	Reference	--	20.5	
Rana boylii	Foothill yellow-legged frog	Juvenile	5	39.212530	-122.532020	6/6/2018	Rice Fork	Reference	--	20.5	
Thamnophis atratus	Aquatic gartersnake	Adult	2	39.212530	-122.532020	6/6/2018	Rice Fork	Reference	--	16.5	
Rana boylii	Foothill yellow-legged frog	Male	1	39.211980	-122.532340	6/6/2018	Rice Fork	Reference	--	20	
Rana boylii	Foothill yellow-legged frog	Juvenile	5	39.211980	-122.532340	6/6/2018	Rice Fork	Reference	--	20	
Rana boylii	Foothill yellow-legged frog	Male	1	39.21118	-122.533050	6/6/2018	Rice Fork	Reference	--	21	
Rana boylii	Foothill yellow-legged frog	Juvenile	6	39.21118	-122.533050	6/6/2018	Rice Fork	Reference	--	21	
Thamnophis atratus	Aquatic gartersnake	Adult	1	39.21118	-122.533050	6/6/2018	Rice Fork	Reference	--	21	
Rana boylii	Foothill yellow-legged frog	Male	1	39.2975	-123.125530	6/6/2018	Rice Fork	Reference	--	21	
Lithobates caetsbeianus	American bullfrog	Male	1	39.2975	-123.125530	6/6/2018	Rice Fork	Reference	--	21	
Lithobates catesbeianus	American bullfrog	Juvenile	1	39.422059	-123.146434	6/6/2018	Tomki Creek	Reference	Edge of pool	20	
Lithobates catesbeianus	American bullfrog	Adult	1	39.423740	-123.1437689	6/6/2018	Tomki Creek	Reference	Edge of pool	20	
Lithobates catesbeianus	American bullfrog	Tadpoles	3	39.422004	-123.145519	6/6/2018	Tomki Creek	Reference	Edge of pool	20	
Lithobates catesbeianus	American bullfrog	Tadpoles	1	39.420543	-123.149163	6/6/2018	Tomki Creek	Reference	Shallow pooL, bedrock	--	
Lithobates catesbeianus	American bullfrog	Juvenile	1	39.421665	-123.145756	6/6/2018	Tomki Creek	Reference	Side pool	--	
Lithobates catesbeianus	American bullfrog	Tadpoles	1	39.421665	-123.145756	6/6/2018	Tomki Creek	Reference	Margin of main channel	--	
Lithobates catesbeianus	American bullfrog	Tadpoles	2	39.421665	-123.145756	6/6/2018	Tomki Creek	Reference	Margin of main channel	--	
Actinemys marmorata	Western pond turtle	--	1	--	--	6/6/2018	Tomki Creek	Reference	--	--	Dead turtle
Actinemys marmorata	Western pond turtle	Juvenile	1	--	--	6/6/2018	Tomki Creek	Reference	--	25.5	Hatchling turtle, dry; on rock on hillside with loose soil.
Actinemys marmorata	Western pond turtle	--	1	--	--	6/6/2018	Tomki Creek	Reference	--	26.6	

Species	Common Name	Lifestage / Sex	Number of Individuals	Latitude	Longitude	Date	River (Stream)	Project/Reference Reach	Habitat	Water Temperature (C°)	Notes
Rana boylii	Foothill yellow-legged frog	Adult	1	--	--	6/6/2018	Tomki Creek	Reference	--	26.6	
Actinemys marmorata	Western pond turtle	Adult	7	--	--	6/6/2018	Eel River	Project	--	--	Group of 9 turtles on rocky island, right bank
Actinemys marmorata	Western pond turtle	Juvenile	2	--	--	6/6/2018	Eel River	Project	--	--	Group of 9 on rocky island, right bank
Rana boylii	Foothill yellow-legged frog	Adult	1	--	--	6/6/2018	Eel River	Project	--	--	Reddish morph in backwater
Actinemys marmorata	Western pond turtle	--	2	39.37965296	-123.048025	6/6/2018	Eel River	Project	Right bank	--	
Actinemys marmorata	Western pond turtle	Adult	7	39.37965296	-123.048025	6/6/2018	Eel River	Project	Right bank	--	
Rana boylii	Foothill yellow-legged frog	Adult	1	39.37624304	-123.053698	6/6/2018	Eel River	Project	Left bank	--	
Rana boylii	Foothill yellow-legged frog	Adult	1	39.42389399	-123.143453	6/6/2018	Tomki Creek	Reference	Riffle	25.6	
Lithobates caetsbeianus	American bullfrog	Adult	1	39.42374001	-123.143769	6/6/2018	Tomki Creek	Reference		25.6	
Actinemys marmorata	Western pond turtle	Hatchling	1	39.42331798	-123.144086	6/6/2018	Tomki Creek	Reference	Dry hillside with loose soil on rock	25.6	
Lithobates caetsbeianus	American bullfrog	Tadpoles	2	39.42292303	-123.144566	6/6/2018	Tomki Creek	Reference	Right bank, mid channel	25.6	
Actinemys marmorata	Western pond turtle	--	1	39.42255498	-123.144768	6/6/2018	Tomki Creek	Reference	Bedrock	25.7	
Rana boylii	Foothill yellow-legged frog	Adult	1	39.42224803	-123.145005	6/6/2018	Tomki Creek	Reference	Riffle	--	
Actinemys marmorata	Western pond turtle	Adult, Male	1	39.42196003	-123.145468	6/6/2018	Tomki Creek	Reference	Riffle	--	
Lithobates caetsbeianus	American bullfrog	Tadpoles	3	39.42200404	-123.145519	6/6/2018	Tomki Creek	Reference		--	
Actinemys marmorata	Western pond turtle	Adult, Female	2	39.42200404	-123.145519	6/6/2018	Tomki Creek	Reference	Sidepool, bedrock	--	
Actinemys marmorata	Western pond turtle	Adult, Female	1	39.42183699	-123.145752	6/6/2018	Tomki Creek	Reference	10 cm depth	--	
Actinemys marmorata	Western pond turtle	Adult, Female	1	39.42194704	-123.14593	6/6/2018	Tomki Creek	Reference	10 cm depth	--	
Lithobates caetsbeianus	American bullfrog	Juvenile	1	39.42205902	-123.146434	6/6/2018	Tomki Creek	Reference	--	--	
Actinemys marmorata	Western pond turtle	Hatchling	1	39.422012	-123.146551	6/6/2018	Tomki Creek	Reference	-	--	
Actinemys marmorata	Western pond turtle	--	1	39.42240796	-123.147665	6/6/2018	Tomki Creek	Reference	Shallow water	--	
Lithobates caetsbeianus	American bullfrog	Tadpole	20	39.42240796	-123.147665	6/6/2018	Tomki Creek	Reference	Shallow, bedrock	--	
Rana boylii	Foothill yellow-legged frog	Adult	1	39.42173397	-123.148291	6/6/2018	Tomki Creek	Reference	--	--	
Actinemys marmorata	Western pond turtle	--	1	39.42054299	-123.149163	6/6/2018	Tomki Creek	Reference	--	--	
Rana boylii	Foothill yellow-legged frog	Adult	1	39.42053	-123.149051	6/6/2018	Tomki Creek	Reference	--	--	
Actinemys marmorata	Western pond turtle	--	1	39.42053	-123.149051	6/6/2018	Tomki Creek	Reference	--	20.6	
Pseudacris regilla	Pacific tree frog	--	--	39.42171796	-123.14615	6/6/2018	Tomki Creek	Reference	Stranded sidepool	--	
Taricha granulosa	Rough-skinned Newt	--	3	39.42166499	-123.145756	6/6/2018	Tomki Creek	Reference	--	--	
Lithobates caetsbeianus	American bullfrog	Juvenile	1	39.42166499	-123.145756	6/6/2018	Tomki Creek	Reference	--	--	
Rana boylii	Foothill yellow-legged frog	--	1	39.42166499	-123.145756	6/6/2018	Tomki Creek	Reference	--	--	
Lithobates caetsbeianus	American bullfrog	Tadpole	1	39.42166499	-123.145756	6/6/2018	Tomki Creek	Reference	--	--	
Pacifastacus leniusculus	Signal crayfish	--	1	39.42166499	-123.145756	6/6/2018	Tomki Creek	Reference	--	--	
Actinemys marmorata	Western pond turtle	--	1	39.42272304	-123.14459	6/6/2018	Tomki Creek	Reference	Found in water	--	
Lithobates caetsbeianus	American bullfrog	Tadpole	1	39.42298698	-123.144269	6/6/2018	Tomki Creek	Reference	--	--	
Actinemys marmorata	Western pond turtle	--	1	39.424889	-123.142175	6/6/2018	Tomki Creek	Reference	--	--	

Species	Common Name	Lifestage / Sex	Number of Individuals	Latitude	Longitude	Date	River (Stream)	Project/Reference Reach	Habitat	Water Temperature (C°)	Notes
Lithobates caetsbeianus	American bullfrog	Tadpole	1	39.42491197	-123.142185	6/6/2018	Tomki Creek	Reference	--	--	
Actinemys marmorata	Western pond turtle	--	6	--	--	6/6/2018	Eel River	Project	--	--	
Lithobates caetsbeianus	American bullfrog	Adult	3	--	--	6/6/2018	Eel River	Project	--	--	
Lithobates caetsbeianus	American bullfrog	Tadpole	30-40	--	--	6/6/2018	Eel River	Project	In pool	--	
Rana boylii eggmass	Foothill yellow-legged frog	--	1	--	--	6/6/2018	Eel River	Project	--	--	
Rana boylii	Foothill yellow-legged frog	Adult	1	--	--	6/6/2018	Eel River	Project	--	--	
Rana boylii	Foothill yellow-legged frog	Juvenile	3	--	--	6/7/2018	Benmore Creek	Reference	--	13	
Rana boylii	Foothill yellow-legged frog	Adult	1	--	--	6/7/2018	Benmore Creek	Reference	--	13	
Actinemys marmorata	Western pond turtle	Juvenile	1	--	--	6/7/2018	Benmore Creek	Reference	--	13	
Rana boylii	Foothill yellow-legged frog	Juvenile	1	--	--	6/7/2018	Benmore Creek	Reference	--	14	
Rana boylii	Foothill yellow-legged frog	Adult	1	--	--	6/7/2018	Benmore Creek	Reference	--	14	
Rana boylii	Foothill yellow-legged frog	Adult	3	--	--	6/7/2018	Benmore Creek	Reference	--	15	
Rana boylii	Foothill yellow-legged frog	Adult	3	--	--	6/7/2018	Benmore Creek	Reference	--	16	
Thamnophis atratus	Aquatic gartersnake	Adult	1	--	--	6/7/2018	Benmore Creek	Reference	--	16	
Rana boylii	Foothill yellow-legged frog	Adult	2	--	--	6/7/2018	Benmore Creek	Reference	--	16	
Lithobates caetsbeianus	American bullfrog	Juvenile	2	39.37789	-123.20671	6/7/2018	Eel River	Project	--	--	
Lithobates caetsbeianus	American bullfrog	Adult	5	39.37486	-213.2043	6/7/2018	Eel River	Project	--	22	
Actinemys marmorata	Western pond turtle	Adult	1	39.29563	-123.12795	6/7/2018	Eel River	Project	--	--	
Lithobates caetsbeianus	American bullfrog	Adult	3	39.37579	-123.2072	6/7/2018	Outlet Creek	Reference	--	24	
Lithobates caetsbeianus	American bullfrog	Juvenile	1	39.37481	-123.20846	6/7/2018	Outlet Creek	Reference	--	24	
Actinemys marmorata	Western pond turtle	Adult	1	39.37404	-123.20919	6/7/2018	Outlet Creek	Reference	--	24	
Rana boylii	Foothill yellow-legged frog	Adult	1	--	--	6/7/2018	Eel River	Project	--	--	
Actinemys Marmorata	Western pond turtle	Adult	1	--	--	6/7/2018	Eel River	Project	River left, dry, on partially submerged tree	--	
Actinemys Marmorata	Western pond turtle	Adult	1	--	--	6/7/2018	Eel River	Project	River left, dry, on partially submerged tree	--	
Actinemys Marmorata	Western pond turtle	Adult	1	--	--	6/7/2018	Eel River	Project	River left, dry, on partially submerged tree	--	
Actinemys Marmorata	Western pond turtle	Adult	1	--	--	6/7/2018	Eel River	Project	1 very large adult basking (dry) on river right, small angled driftwood in sedge	--	
Actinemys Marmorata	Western pond turtle	Adult	1	--	--	6/7/2018	Eel River	Project	Dry, basking on willow stump on river left	--	
Actinemys Marmorata	Western pond turtle	Adult	1	--	--	6/7/2018	Eel River	Project	Partial wet, basking on willow trunk	--	
Actinemys Marmorata	Western pond turtle	Adult	1	--	--	6/7/2018	Eel River	Project	Dry, on willow trunk	--	
Actinemys Marmorata	Western pond turtle	Adult	1	--	--	6/7/2018	Eel River	Project	Basking on alder trunk	--	
Actinemys Marmorata	Western pond turtle	Adult	1	--	--	6/7/2018	Eel River	Project	Basking on alder trunk	--	

Species	Common Name	Lifestage / Sex	Number of Individuals	Latitude	Longitude	Date	River (Stream)	Project/Reference Reach	Habitat	Water Temperature (C°)	Notes
Actinemys Marmorata	Western pond turtle	Adult	1	--	--	6/7/2018	Eel River	Project	River left, dry.	--	
Actinemys Marmorata	Western pond turtle	Juvenile	1	--	--	6/7/2018	Eel River	Project	River right, basking on a willow trunk	--	
Actinemys marmorata	Western pond turtle		2	39.40527904	-122.993263	6/7/2018	Eel River	Project	On log	15.6	
Rana boylii	Foothill yellow-legged frog	Adult	3	39.405244	-122.993887	6/7/2018	Eel River	Project	Backwater, behind willows	15.6	
Rana boylii	Foothill yellow-legged frog	Adult	1	39.40483304	-122.994308	6/7/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Adult	11	39.40529304	-122.994988	6/7/2018	Eel River	Project	Perched on various rocks emergent from channel	--	
Actinemys marmorata	Western pond turtle	--	1	39.40529304	-122.994988	6/7/2018	Eel River	Project	On logs	--	
Actinemys marmorata	Western pond turtle	--	3	39.40529304	-122.994988	6/7/2018	Eel River	Project	On logs	--	
Actinemys marmorata	Western pond turtle	--	2	39.40568598	-122.995426	6/7/2018	Eel River	Project	On logs	--	
Actinemys marmorata	Western pond turtle	--	1	39.40568598	-122.995426	6/7/2018	Eel River	Project	On rock opposite bank from Rana Boylii clutches 31-33	--	
Lithobates catesbeianus	American bullfrog	Tadpoles	4	39.336715	-123.110717	6/8/2018	East Branch Russian River	Project	Shaded, u shaped channel	--	
Lithobates catesbeianus	American bullfrog	Adult	1	39.26709699	-123.095499	6/8/2018	Mewhinney Creek	Reference	small creek, 1,5 m wide	--	
Lithobates catesbeianus	American bullfrog	Adult	1	39.26694503	-123.095217	6/8/2018	Mewhinney Creek	Reference	Small creek	--	
Lithobates catesbeianus	American bullfrog	Adult	5	39.26786	-123.097842	6/8/2018	Mewhinney Creek	Reference	Small creek	--	
Lithobates catesbeianus	American bullfrog	Adult	1	39.26904696	-123.10049	6/8/2018	Mewhinney Creek	Reference	Small creek	--	
Actinemys marmorata	Western pond turtle	Juvenile	1	39.42999903	-123.144579	7/9/2018	Eel River	Project	--	25.5	
Actinemys marmorata	Western pond turtle	Male	1	39.42999903	-123.144579	7/9/2018	Eel River	Project	--	25.5	
Actinemys marmorata	Western pond turtle	Female	1	39.42999903	-123.144579	7/9/2018	Eel River	Project	--	25.5	
Actinemys marmorata	Western pond turtle	Female	1	--	--	7/10/2018	Lake Pillsbury	Project	--	27	
Lithobates catesbeianus	American bullfrog	Adult	2	39.33163396	-123.136264	7/12/2018	Busch Creek	Reference	Canal	17	
Rana boylii	Foothill yellow-legged frog	Tadpoles	4	39.34184899	-123.131053	7/12/2018	Busch Creek	Reference	Shaded creek approx 2.5 m wide, with some pools, running through vineyard	18	
Rana boylii	Foothill yellow-legged frog	Tadpoles	3	39.34218099	-123.135148	7/12/2018	Busch Creek	Reference	Vineyard work-road crossing of creek	18	
Actinemys marmorata	Western pond turtle	Male	1	39.24724999	-123.127662	7/12/2018	East Branch Russian River	Project	--	--	
Actinemys marmorata	Western pond turtle	Female	2	39.24416402	-123.134447	7/12/2018	East Branch Russian River	Project	--	--	
Rana boylii	Foothill yellow-legged frog	Adult	1	39.24376002	-123.13556	7/12/2018	East Branch Russian River	Project	Side pool, shaded	--	
Rana boylii	Foothill yellow-legged frog	Tadpoles	5	39.24204902	-123.14383	7/12/2018	East Branch Russian River	Project	Margin of channel	--	
Lithobates caetsbeianus	American bullfrog	--	1	39.332489	-123.137231	7/12/2018	West Canal	Reference	--	--	
Actinemys marmorata	Western pond turtle	Female	1	39.33229798	-123.136911	7/12/2018	West Canal	Reference	--	--	

Species	Common Name	Lifestage / Sex	Number of Individuals	Latitude	Longitude	Date	River (Stream)	Project/Reference Reach	Habitat	Water Temperature (C°)	Notes
Lithobates caetsbeianus	American bullfrog	--	1	39.33222304	-123.136803	7/12/2018	West Canal	Reference	--	--	
Lithobates caetsbeianus	American bullfrog	--	1	39.33163396	-123.136264	7/12/2018	West Canal	Reference	--	--	
Actinemys marmorata	Western pond turtle	Adult	1	39.33120397	-123.136116	7/12/2018	West Canal	Reference	--	--	
Rana boylii	Foothill yellow-legged frog	Juvenile	1	--	--	7/13/2018	Rice Fork	Reference	--	--	
Thamnophis atratus	Aquatic gartersnake	--	1	--	--	7/13/2018	Rice Fork	Reference	--	--	
Thamnophis atratus	Aquatic gartersnake	--	1	--	--	7/13/2018	Rice Fork	Reference	--	--	
Actinemys marmorata	Western pond turtle	Juvenile	1	--	--	7/13/2018	Rice Fork	Reference	--	--	
Actinemys marmorata	Western pond turtle	Juvenile	1	--	--	7/13/2018	Rice Fork	Reference	--	--	
Actinemys marmorata	Western pond turtle	Adult	2	39.37826601	-123.049653	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Male	1	39.37903698	-123.048679	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Male	2	39.37962002	-123.048084	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Female	1	39.37962002	-123.048084	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Male	1	39.37962002	-123.048084	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Adult	1	39.37962002	-123.048084	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Adult	1	39.37992403	-123.047735	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Adult	1	39.38052502	-123.047246	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Juvenile	1	39.38004096	-123.047608	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Adult	1	39.38004096	-123.047608	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Juvenile	1	39.38004096	-123.047608	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Adult	1	39.38004096	-123.047608	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Male	1	39.38004096	-123.047608	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Adult	1	39.38004096	-123.047608	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Adult	3	39.38004096	-123.047608	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Adult	1	39.38004096	-123.047608	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	--	1	39.38052502	-123.047246	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	--	1	39.38116699	-123.04662	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Adult	1	39.38116699	-123.04662	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Adult	1	39.38127796	-123.046514	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Male	1	39.38164802	-123.046229	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Adult	2	39.38185397	-123.046032	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Adult	1	39.38185397	-123.046032	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Male	1	39.38185397	-123.046032	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	--	1	39.38185397	-123.046032	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Adult	1	39.38242896	-123.045512	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Adult	4	39.38343102	-123.044555	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Adult	1	39.38343102	-123.044555	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Adult	1	39.38343102	-123.044555	7/14/2018	Eel River	Project	--	--	
Actinemys marmorata	Western pond turtle	Adult	1	39.38343102	-123.044555	7/14/2018	Eel River	Project	--	--	

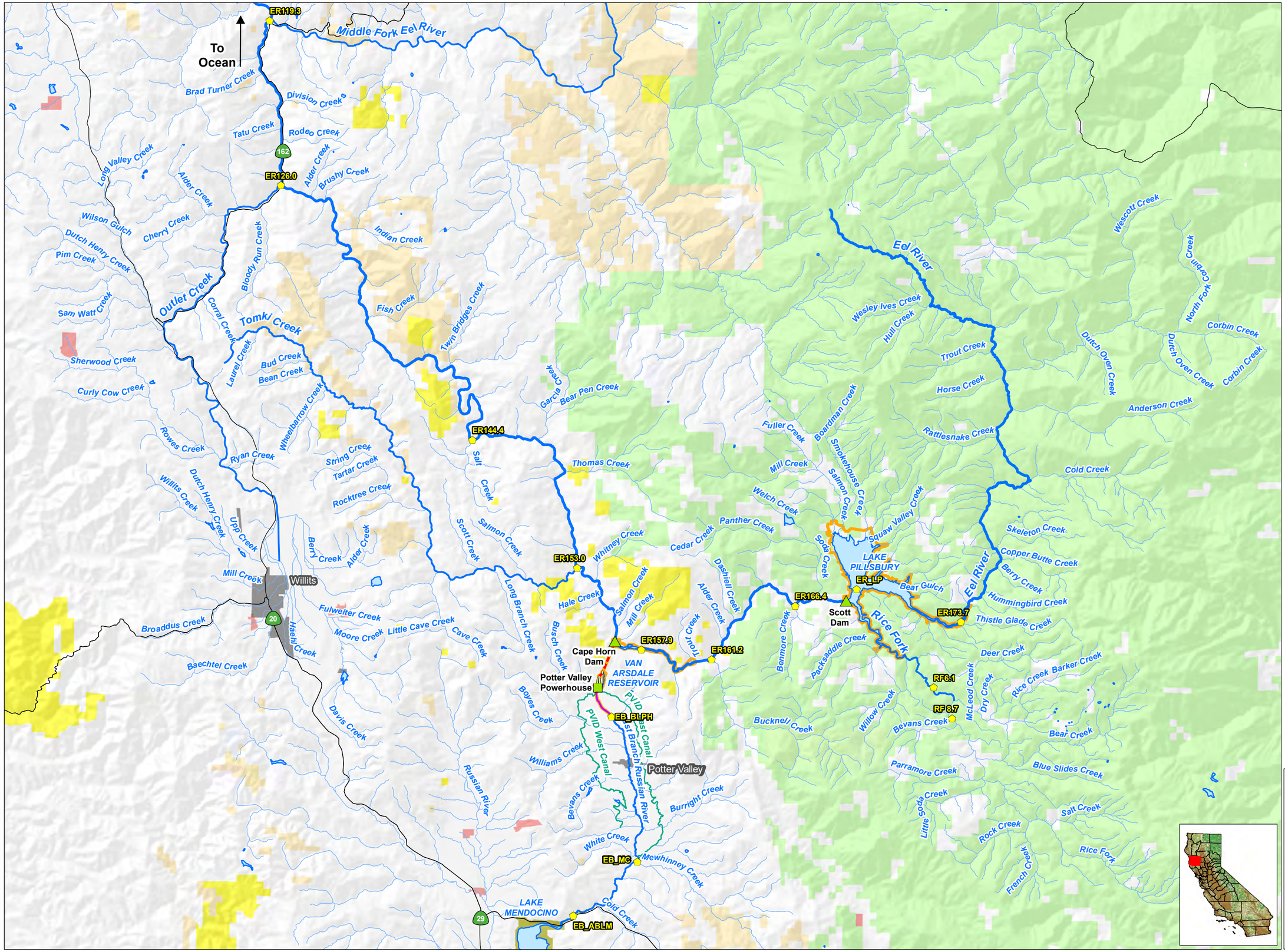
Species	Common Name	Lifestage / Sex	Number of Individuals	Latitude	Longitude	Date	River (Stream)	Project/Reference Reach	Habitat	Water Temperature (C°)	Notes
Actinemys marmorata	Western pond turtle	Adult	2	39.37712003	-123.050505	7/14/2018	Eel River	Project	--	--	
Thamnophis atratus	Aquatic gartersnake	--	1	39.37641302	-123.050994	7/14/2018	Eel River	Project	--	--	
Rana boylii	Foothill yellow-legged frog	Metamorphs	2	39.260714	-123.115103	9/19/2018	East Branch Russian River	Project	Pool tail out	16	
Rana boylii	Foothill yellow-legged frog	Metamorphs	1	39.242087	-123.143992	9/19/2018	East Branch Russian River	Project	Margin of channel	15.5	
Lithobates catesbeianus	American bullfrog	Juvenile	1	39.33592	-123.109959	9/19/2018	East Branch Russian River	Project	Shaded, u shaped channel	16.5	
Lithobates catesbeianus	American bullfrog	Juvenile	1	39.239361	-123.146299	9/19/2018	East Branch Russian River	Project	Shaded, u shaped channel	16.5	
Margaritifera falcata	Western pearlshell	Adult	3	39.240795	-123.1446	9/19/2018	East Branch Russian River	Project	At 60-70 cm water depth in pool	16.1	
Lithobates catesbeianus	American bullfrog	Juvenile	1	39.33592	-123.109959	9/19/2018	East Branch Russian River	Project	On the bank under a log	16.7	Under a log
Anaxyrus boreas	Western toad	Metamorphs	30	39.398013	-122.902803	9/21/2018	Eel River Upstream of Lake Pillsbury	Reference	Where lake and stream meet	19	
Anaxyrus boreas	Western toad	Metamorphs	1	39.397565	-122.898512	9/21/2018	Eel River Upstream of Lake Pillsbury	Reference	Near where stream meets lake	20	
Actinemys Marmorata	Western pond turtle	Adult	1	39.409933	-122.920745	9/21/2018	Eel River Upstream of Lake Pillsbury	Reference	Pool	21	
Rana boylii	Foothill yellow-legged frog	Adult	4	39.396209	-122.894542	9/21/2018	Eel River Upstream of Lake Pillsbury	Reference	In willow area at channel margin	20	
Rana boylii	Foothill yellow-legged frog	Adult	1	39.39565	-122.892656	9/21/2018	Eel River Upstream of Lake Pillsbury	Reference	Channel margin	20	
Rana boylii	Foothill yellow-legged frog	Adult / Female	1	39.395512	-122.892341	9/21/2018	Eel River Upstream of Lake Pillsbury	Reference	Channel margin	20	
Rana boylii	Foothill yellow-legged frog	Adult	1	39.394768	-122.885623	9/21/2018	Eel River Upstream of Lake Pillsbury	Reference	Sidepool, at base of burned hillside	19	
Rana boylii	Foothill yellow-legged frog	Adult	23	39.394721	-122.884389	9/21/2018	Eel River Upstream of Lake Pillsbury	Reference	Sidepool, at base of burned hillside	19	
Rana boylii	Foothill yellow-legged frog	Adult / Female	1	39.39413	-122.886393	9/21/2018	Eel River Upstream of Lake Pillsbury	Reference	Sidepool, at base of burned hillside	18.5	
Rana boylii	Foothill yellow-legged frog	Adult / Female	1	39.397423	-122.898502	9/21/2018	Eel River Upstream of Lake Pillsbury	Reference	Near tributary, Thistle Glade Creek	18.5	

Species	Common Name	Lifestage / Sex	Number of Individuals	Latitude	Longitude	Date	River (Stream)	Project/Reference Reach	Habitat	Water Temperature (C°)	Notes
Rana boylii	Foothill yellow-legged frog	Adult / Male	1	39.397423	-122.898502	9/21/2018	Eel River Upstream of Lake Pillsbury	Reference	Near tributary, Thistle Glade Creek	18.5	
Thamnophis atratus	Aquatic gartersnake	Adult	2	39.394824	-122.891651	9/21/2018	Eel River Upstream of Lake Pillsbury	Reference	Channel margin	19	
Thamnophis atratus	Aquatic gartersnake	Adult	1	39.394006	-122.887299	9/21/2018	Eel River Upstream of Lake Pillsbury	Reference	In water near area of many R. boylii metamorphs	18.5	
Thamnophis atratus	Aquatic gartersnake	Adult	2	39.394749	-122.886037	9/21/2018	Eel River Upstream of Lake Pillsbury	Reference	In water near area of many R. boylii metamorphs	19	
Thamnophis atratus	Aquatic gartersnake	Juvenile	1	39.394768	-122.885623	9/21/2018	Eel River Upstream of Lake Pillsbury	Reference	In water near area of many R. boylii metamorphs	19	
Actinemys marmorata	Western pond turtle	Adult / Female	1	39.378098	-122.920351	9/22/2018	Rice Fork	Reference	Little vegetation along margins of pool	--	
Actinemys marmorata	Western pond turtle	Adult	1	39.377278	-122.917555	9/22/2018	Rice Fork	Reference	Pool	--	
Actinemys marmorata	Western pond turtle	Adult	2	39.38592	-122.938003	9/22/2018	Rice Fork	Reference	Wide pool	--	
Rana boylii	Foothill yellow-legged frog	Adult	3	39.385871	-122.938035	9/22/2018	Rice Fork	Reference	Transition from stream to lak	16.5	
Rana boylii	Foothill yellow-legged frog	Metamorphs	7	39.385306	-122.937835	9/22/2018	Rice Fork	Reference	Side channel, watershed heavily burned, down to channel margins	16.5	
Rana boylii	Foothill yellow-legged frog	Adult	1	39.385306	-122.937835	9/22/2018	Rice Fork	Reference	Side channel, watershed heavily burned, down to channel margins	16.5	
Rana boylii	Foothill yellow-legged frog	Metamorphs	20	39.38449	-122.936811	9/22/2018	Rice Fork	Reference	Spring, small trib	14	
Rana boylii	Foothill yellow-legged frog	Metamorphs	30	39.383609	-122.93253	9/22/2018	Rice Fork	Reference	Gravel bar, tamarisk, depression with lots of algae	17	
Rana boylii	Foothill yellow-legged frog	Metamorphs	20	39.381404	-122.929223	9/22/2018	Rice Fork	Reference	Gravel bar, tamarisk, depression with lots of algae	--	
Rana boylii	Foothill yellow-legged frog	Adult	6	39.377194	-122.924061	9/22/2018	Rice Fork	Reference	Ash covered banks, burnt tree in channel	--	
Rana boylii	Foothill yellow-legged frog	Metamorphs	20	39.378098	-122.920351	9/22/2018	Rice Fork	Reference	Margins of gravel bars	--	
Rana boylii	Foothill yellow-legged frog	Tadpoles and Metamorphs	20	39.378868	-122.919227	9/22/2018	Rice Fork	Reference	Margins of gravel bars	--	
Rana boylii	Foothill yellow-legged frog	Metamorphs	1	39.377214	-122.911117	9/22/2018	Rice Fork	Reference	Near a trib confluence	--	
Thamnophis atratus	Aquatic gartersnake	Adult	1	39.377278	-122.917555	9/22/2018	Rice Fork	Reference	At confluence of a drying tributary	--	
Thamnophis atratus	Aquatic gartersnake	Adult	1	39.357797	-122.886812	9/22/2018	Rice Fork	Reference	Shallow pool created by beaver dam,many boylii metamorphs	--	

Species	Common Name	Lifestage / Sex	Number of Individuals	Latitude	Longitude	Date	River (Stream)	Project/Reference Reach	Habitat	Water Temperature (C°)	Notes
Thamnophis atratus	Aquatic gartersnake	Adult	1	39.355214	-122.885852	9/22/2018	Rice Fork	Reference	Shallow pool created by beaver dam,many boylii metamorphs	--	
Actinemys marmorata	Western pond turtle	Adult / Female	1	39.375791	-123.051401	9/23/2018	Eel River	Project	Gravel bar	18	Basking at margin, startled into water
Actinemys marmorata	Western pond turtle	Adult / Female	1	39.376946	-123.050574	9/23/2018	Eel River	Project	At frog breeding site	18	
Margaritifera falcata	Western pearlshell	Adult	8	39.377588	-123.050163	9/23/2018	Eel River	Project	Shaded, sand between cobbles substrate, 30 cm deep, v=5-10 cm/sec, evidence of beaver chewing and corbicula	18	Lengths of carapace: 105.7.113.2,103.7,100.9, 101.7, 104.7, 106.3, 109.3
Thamnophis atratus	Aquatic gartersnake	Adult	1	39.33659303	-122.993246	9/24/2018	Benmore Creek	Reference	Discontinuous pools, post fire, burned down to edges of creek	16.1	
Lithobates catesbeianus	American bullfrog	Tadpoles	100's	39.62584	-123.34381	9/24/2018	Eel River	Project	Cobble / gravel bar and island margin	22	
Lithobates catesbeianus	American bullfrog	Tadpoles and Metamorphs	10's	39.62424	-123.34043	9/24/2018	Eel River	Project	Pool	22	
Pseudacris regilla	Pacific tree frog	Tadpoles, Metamorphs, and Adults	10's	39.62559	-123.34709	9/24/2018	Outlet Creek	Reference	Bedrock pools, incised canyon	22	
Lithobates catesbeianus	American bullfrog	Tadpoles, Metamorphs, and Adults	10's	39.62559	-123.34709	9/24/2018	Outlet Creek	Reference	Bedrock pools, incised canyon	22	
Actinemys marmorata	Western pond turtle	Hatchling	1	39.49074	-123.214810	9/24/2018	Salt Creek	Reference	Small pool in intermittent reach of creek	--	
Lithobates catesbeianus	American bullfrog	Adult	1	39.709664	-123.35481	9/25/2018	Eel River	Project	Vegetated margin of large pool	21	
Lithobates catesbeianus	American bullfrog	Adult	1	39.709558	-123.35475	9/25/2018	Eel River	Project	Vegetated margin of large pool	21	
Lithobates catesbeianus	American bullfrog	Tadpoles	2	39.709989	-123.355331	9/25/2018	Eel River	Project	Vegetated margin of large pool	21	
Rana boylii	Foothill yellow-legged frog	Metamorphs	1	39.7124	-123.354315	9/25/2018	Eel River	Project	Riffle	19	
Rana boylii	Foothill yellow-legged frog	Metamorphs	4	39.71237	-123.354312	9/25/2018	Eel River	Project	Riffle	19	
Rana boylii	Foothill yellow-legged frog	Tadpoles	1	39.71237	-123.354312	9/25/2018	Eel River	Project	Riffle	19	
Rana boylii	Foothill yellow-legged frog	Metamorphs	4	39.713397	-123.35313	9/25/2018	Eel River	Project	Riffle	19	
Rana boylii	Foothill yellow-legged frog	Metamorphs	35	39.71185	-123.34915	9/25/2018	Middle Fork Eel River	Reference	Open cobble bar	16	
Rana boylii	Foothill yellow-legged frog	Tadpoles	5	39.711839	-123.349119	9/25/2018	Middle Fork Eel River	Reference	Cobble bar, upstream of confluence	18	
Rana boylii	Foothill yellow-legged frog	Metamorphs	33	39.711839	-123.349119	9/25/2018	Middle Fork Eel River	Reference	Cobble bar, upstream of confluence	18	
Rana boylii	Foothill yellow-legged frog	Adult / Female	1	39.33659303	-122.993216	9/24/2018	Benmore Creek	Reference	Discontinuous pools, post fire, burned down to edges of creek	16	

Species	Common Name	Lifestage / Sex	Number of Individuals	Latitude	Longitude	Date	River (Stream)	Project/Reference Reach	Habitat	Water Temperature (C°)	Notes
Rana boylii	Foothill yellow-legged frog	Adult / Male	1	39.33659303	-122.992657	9/24/2018	Benmore Creek	Reference	Discontinuous pools, post fire, burned down to edges of creek	16.4	
Actinemys marmorata	Western pond turtle	--	4	39.378557	-123.04919	9/23/2018	Benmore Creek	Reference	--	15	--
Actinemys marmorata	Western pond turtle	--	2	39.49485	-123.203434	9/24/2018	Eel River near Salt Creek Confluence	Project	--	17.5	--
Actinemys marmorata	Western pond turtle	--	1	39.49152	-123.214187	9/24/2018	Salt Creek	Reference	--	10	--

Map



PG&E Project Facilities

- Powerhouse
- Dam
- Water Conveyance Feature
- Water Conduit
- Penstock
- Powerhouse Discharge Canal
- FERC Project Boundary

Other Features

- Road
- Canal
- Watercourse
- Water Body

Land Ownership**

- U.S. Forest Service
- U.S. Army Corps of Engineers
- Bureau of Land Management
- Bureau of Indian Affairs
- State of California
- Private (Blank)

**SOURCE: BLM, 2016

Sampling Locations

- FYLF and WPT Sampling

Pacific Gas and Electric Company

PG&E Potter Valley Project

Map AQ 10-1

Foothill Yellow-Legged Frog and Western Pond Turtle Sampling Locations

0 0.5 1 2 Miles

Projection: UTM Zone 10 N
Datum: NAD 83

Date: 12/31/2019

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Figures

Figure AQ 10 - 1. Example breeding habitat at gravel and cobble bars in the Mainstem Eel River between Scott Dam and Cape Horn Dam.



Figure AQ 10 - 2. Depth and flow velocity at FYLF eggmasses found throughout the Potter Valley Project area.

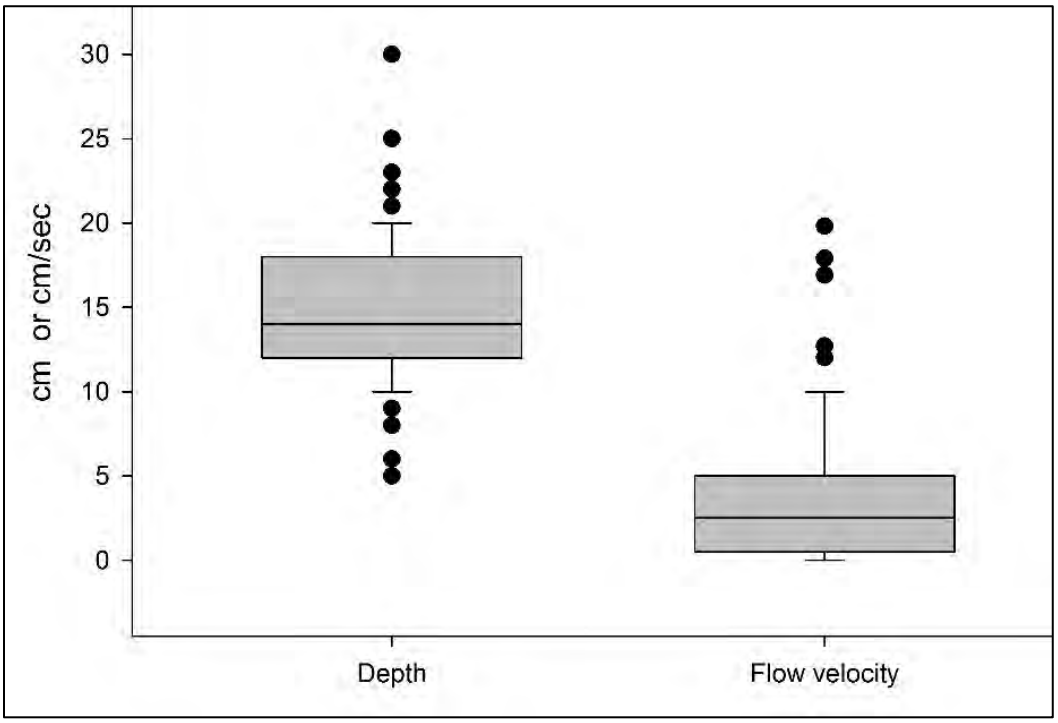


Figure AQ 10-3. Mean water depth of FYLF eggmasses when first observed at regulated sites within the range of depths for egg laying at the reference sites.

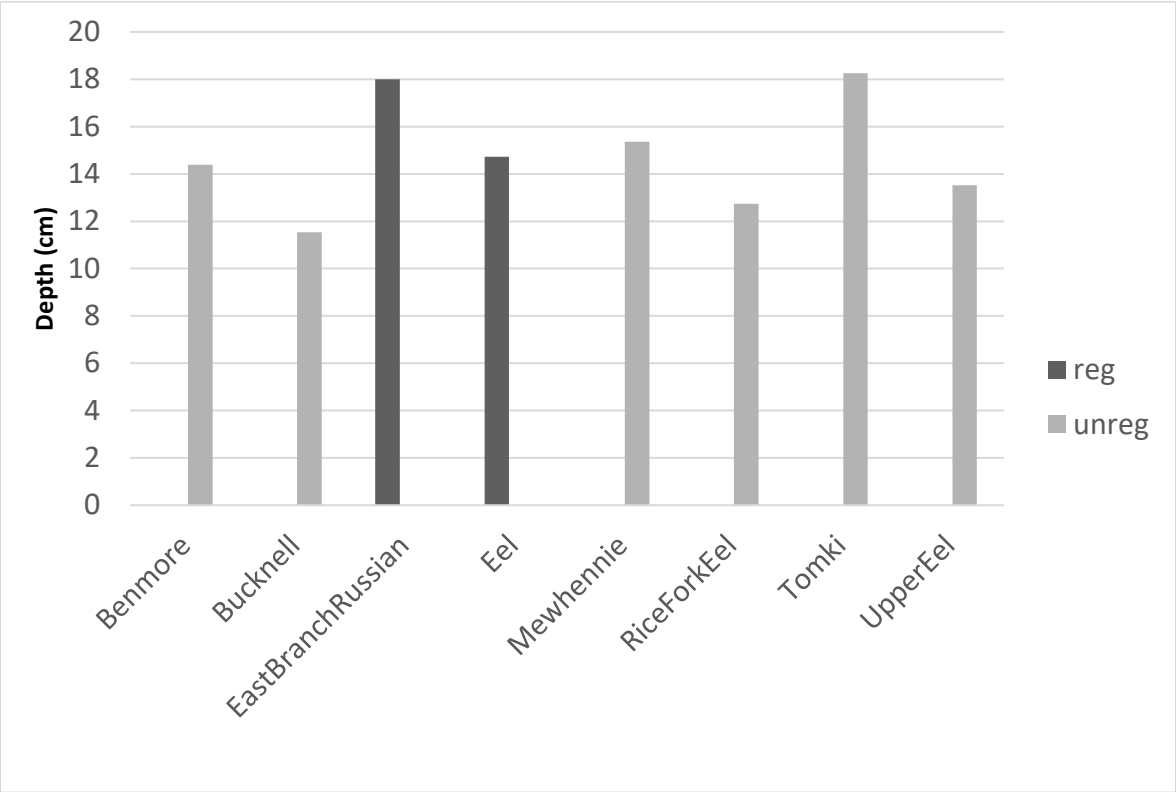
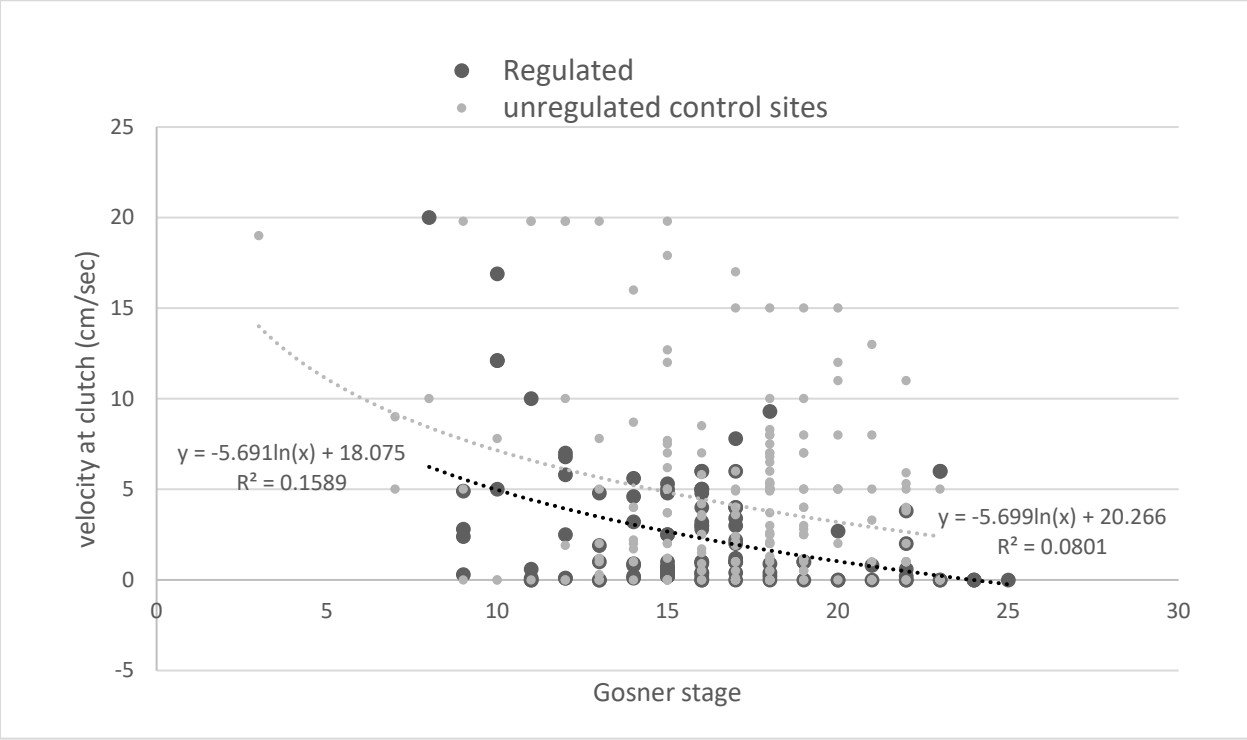


Figure AQ 10 - 4. Water velocity at FYLF eggmasses as a function of developmental stage (*top)* at Project and reference sites showing that frogs are using lower velocity environments in Project reaches and clutches are placed on rocks where flows are below the midcolumn velocity *(bottom).*



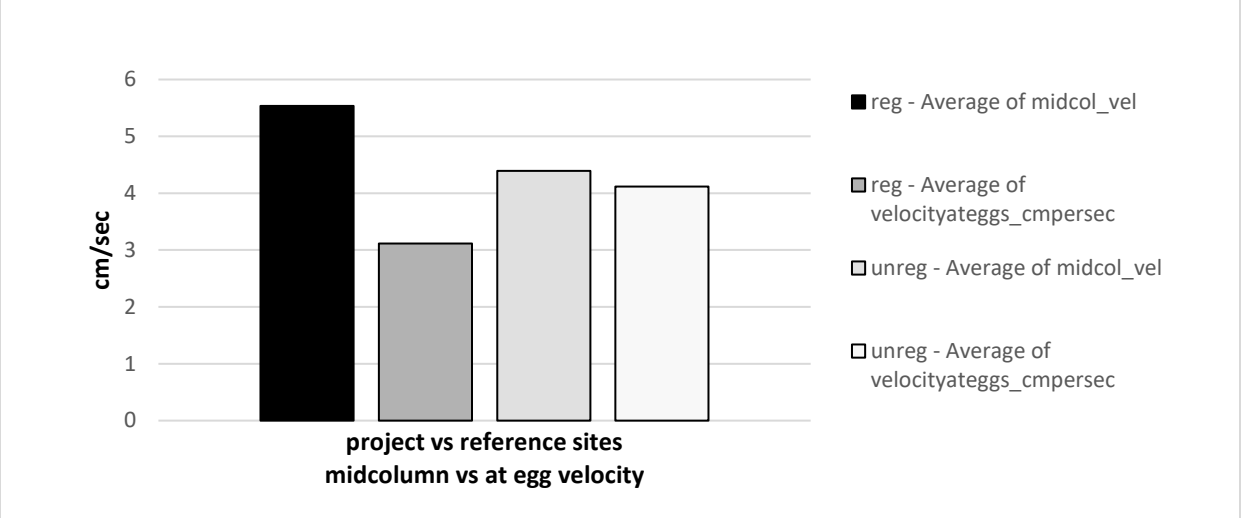


Figure AQ 10-5. Rice Fork Eel River after the Mendocino Complex fire (September 2018), with gravel bar graded by firefighters.



Figure AQ 10-6. FYLF adult and metamorph on a charred piece of bark in a side pool refuge post-fire.



Appendix A

Foothill Yellow Legged Frog 2018 Clutch Data

Site	Date	Depth (cm)	Velocity at Eggs (cm/s)	Velocity at Mid-Column (cm/s)	Substrate
Eel River at Tomki Creek	4/29/2018	12	3	6	small boulder
Eel Riverat Tomki Creek	4/29/2018	10	1	2.1	small boulder
Tomki Creek	4/29/2018	17	2.1	1	boulder
Tomki Creek	4/29/2018	20	3	7	boulder
Tomki Creek	4/29/2018	18	5	5	cobble
Tomki Creek	4/29/2018	18	7	7	cobble
Benmore Creek	4/30/2018	12	3.7	3.7	cobble
Benmore Creek	4/30/2018	12	3.7	3.7	cobble
Benmore Creek	4/30/2018	12	3.7	3.7	cobble
Benmore Creek	4/30/2018	12	1.9	1.9	cobble
Benmore Creek	4/30/2018	15	6.5	6.5	cobble
Benmore Creek	4/30/2018	20	8.3	8.3	cobble
Benmore Creek	4/30/2018	10	2	2	cobble
Benmore Creek	4/30/2018	15	2	2	cobble
Benmore Creek	4/30/2018	10	2	2	cobble
Benmore Creek	4/30/2018	12	2	2	cobble
Benmore Creek	4/30/2018	13	2	2	cobble
Benmore Creek	4/30/2018	15	2	2	cobble
Benmore Creek	4/30/2018	16	12.7	12.7	boulder
Benmore Creek	4/30/2018	22	0	0	boulder
Benmore Creek	4/30/2018	14	1.2	1.2	boulder
Benmore Creek	4/30/2018	16	1.2	1.2	boulder
Benmore Creek	4/30/2018	16	5.1	5.1	boulder
Benmore Creek	4/30/2018	13	2.4	2.4	boulder
Benmore Creek	4/30/2018	20	0	0	boulder
Benmore Creek	4/30/2018	10	0	0	cobble
Benmore Creek	4/30/2018	18	0	0	cobble
Benmore Creek	4/30/2018	18	4.9	4.9	cobble
Benmore Creek	4/30/2018	20	0.9	0.9	cobble
Benmore Creek	4/30/2018	10	1.7	1.7	cobble
Benmore Creek	4/30/2018	21	1.7	1.7	cobble
Benmore Creek	4/30/2018	15	1	1	cobble
Benmore Creek	4/30/2018	18	1	1	cobble
Benmore Creek	4/30/2018	10	0	0	willow
Benmore Creek	4/30/2018	10	0	0	cobble
Benmore Creek	4/30/2018	10	0	0	cobble
Benmore Creek	4/30/2018	10	0	0	cobble
Benmore Creek	4/30/2018	10	0	0	cobble
Benmore Creek	4/30/2018	12	5.4	5.4	cobble
Benmore Creek	4/30/2018	10	7.7	7.7	cobble
Benmore Creek	4/30/2018	15	0	0	cobble
Benmore Creek	4/30/2018	18	0	0	cobble
Benmore Creek	4/30/2018	18	0	0	cobble
Benmore Creek	4/30/2018	18	0	0	cobble
Benmore Creek	4/30/2018	15	0	0	cobble

Benmore Creek	4/30/2018	13	0	0	cobble
Benmore Creek	4/30/2018	13	0	0	cobble
Benmore Creek	4/30/2018	18	0	0	cobble
Benmore Creek	4/30/2018	12	19.8	19.8	cobble
Benmore Creek	4/30/2018	18	19.8	19.8	cobble
Benmore Creek	4/30/2018	18	19.8	19.8	cobble
Benmore Creek	4/30/2018	18	19.8	19.8	cobble
Benmore Creek	4/30/2018	18	19.8	19.8	cobble
Benmore Creek	4/30/2018	20	19.8	19.8	cobble
Benmore Creek	4/30/2018	10	5	5	cobble
Benmore Creek	4/30/2018	10	5	5	cobble
Benmore Creek	4/30/2018	10	5	5	cobble
Benmore Creek	4/30/2018	12	7.8	7.8	cobble
Benmore Creek	4/30/2018	6	7.8	7.8	cobble
Eel River at Bucknell Creek	5/1/2018	15	0	0	cobble
Eel River at Bucknell Creek	5/1/2018	12	0	0	cobble
Eel River at Bucknell Creek	5/1/2018	23	0	0	cobble
Eel River at Bucknell Creek	5/1/2018	23	0	0	cobble
East Branch Russian River	5/2/2018	18	16.9	16.9	cobble
Mewhinny Creek	5/2/2018	11	5	5	cobble
Mewhinny Creek	5/2/2018	12	5.3	5.3	cobble
Mewhinny Creek	5/2/2018	9	5	5	cobble
Mewhinny Creek	5/2/2018	14	17.9	17.9	cobble
Mewhinny Creek	5/2/2018	30	8.7	8.7	cobble
Mewhinny Creek	5/2/2018	12	4	4	cobble
Mewhinny Creek	5/2/2018	20	4	4	cobble
Mewhinny Creek	5/2/2018	8	8.5	8.5	cobble
Mewhinny Creek	5/2/2018	15	5.9	5.9	cobble
Mewhinny Creek	5/2/2018	18	3.8	3.8	cobble
Mewhinny Creek	5/2/2018	20	10	23.3	roots
Rice Fork Eel near Bear Cree	5/3/2018	15	5	5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	15	5	5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	25	5	5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	13	7.5	7.5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	12	7	7	cobble
Rice Fork Eel near Bear Cree	5/3/2018	15	5	5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	11	6.2	6.2	cobble
Rice Fork Eel near Bear Cree	5/3/2018	5	5.8	5.8	cobble
Rice Fork Eel near Bear Cree	5/3/2018	10	7	7	cobble
Rice Fork Eel near Bear Cree	5/3/2018	10	5.3	5.3	cobble
Rice Fork Eel near Bear Cree	5/3/2018	12	6.8	6.8	cobble
Rice Fork Eel near Bear Cree	5/3/2018	15	4.2	4.2	cobble
Rice Fork Eel near Bear Cree	5/3/2018	10	3.6	3.6	cobble
Rice Fork Eel near Bear Cree	5/3/2018	12	2.1	2.1	cobble
Rice Fork Eel near Bear Cree	5/3/2018	12	3.3	3.3	cobble
Rice Fork Eel near Bear Cree	5/3/2018	10	4	4	cobble

Rice Fork Eel near Bear Cree	5/3/2018	12	2.8	2.8	cobble
Rice Fork Eel near Bear Cree	5/3/2018	10	1.2	1.2	cobble
Rice Fork Eel near Bear Cree	5/3/2018	17	0	0	cobble
Rice Fork Eel near Bear Cree	5/3/2018	15	5.3	5.3	cobble
Rice Fork Eel near Bear Cree	5/3/2018	15	4.9	4.9	cobble
Rice Fork Eel near Bear Cree	5/3/2018	17	2.5	2.5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	18	5	5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	21	5	5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	15	2.2	2.2	cobble
Rice Fork Eel near Bear Cree	5/3/2018	11	1.9	1.9	cobble
Rice Fork Eel near Bear Cree	5/3/2018	12	3.6	3.6	cobble
Rice Fork Eel near Bear Cree	5/3/2018	12	2.5	2.5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	12	2.6	2.6	cobble
Rice Fork Eel near Bear Cree	5/3/2018	12	2.5	2.5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	10	1.5	1.5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	12	3.5	3.5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	12	2.5	2.5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	11	0	0	cobble
Rice Fork Eel near Bear Cree	5/3/2018	12	0	0	cobble
Rice Fork Eel near Bear Cree	5/3/2018	13	0	0	cobble
Rice Fork Eel near Bear Cree	5/3/2018	14	5	5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	15	5	5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	20	2.5	2.5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	21	2.5	2.5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	21	2.5	2.5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	22	3.9	3.9	cobble
Rice Fork Eel near Bear Cree	5/3/2018	30	0	0	cobble
Rice Fork Eel near Bear Cree	5/3/2018	18	1	1	cobble
Rice Fork Eel near Bear Cree	5/3/2018	20	2	2	cobble
Rice Fork Eel near Bear Cree	5/3/2018	16	0	0	cobble
Rice Fork Eel near Bear Cree	5/3/2018	16	1	1	cobble
Rice Fork Eel near Bear Cree	5/3/2018	16	0	0	cobble
Rice Fork Eel near Bear Cree	5/3/2018	16	1.3	1.3	cobble
Rice Fork Eel near Bear Cree	5/3/2018	14	0	0	cobble
Rice Fork Eel near Bear Cree	5/3/2018	13	0.5	0.5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	11	0.5	0.5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	11	0.5	0.5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	16	0.5	0.5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	17	0.5	0.5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	14	0.5	0.5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	13	0.5	0.5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	13	0.5	0.5	cobble
Rice Fork Eel near Bear Cree	5/3/2018	8	1	1	cobble
Rice Fork Eel near Bear Cree	5/3/2018	12	1	1	cobble
Rice Fork Eel near Bear Cree	5/3/2018	12	1	1	cobble
Rice Fork Eel near Bear Cree	5/3/2018	12	10	10	cobble
Rice Fork Eel near Bear Cree	5/3/2018	12	10	10	cobble

Rice Fork Eel near Bear Cree	5/3/2018	10	4	4	cobble
Rice Fork Eel near Bear Cree	5/3/2018	13	12	12	cobble
Eel River at Benmore Creek	5/4/2018	20	0.3	0.3	cobble
Eel River at Benmore Creek	5/4/2018	22	5.6	5.6	cobble
Eel River at Benmore Creek	5/4/2018	19	12.1	12.1	cobble
Eel River at Benmore Creek	5/4/2018	25	12.1	12.1	cobble
Eel River at Benmore Creek	5/4/2018	11	1	1	cobble
Eel River at Benmore Creek	5/4/2018	11	1	1	cobble
Eel River at Benmore Creek	5/4/2018	12	1	1	cobble
Eel River at Benmore Creek	5/4/2018	20	9.3	9.3	cobble
Eel River at Benmore Creek	5/4/2018	21	1.9	1.9	cobble
Eel River at Benmore Creek	5/4/2018	20	4.8	4.8	cobble
Eel River at Benmore Creek	5/4/2018	18	4.8	4.8	cobble
Eel River at Benmore Creek	5/4/2018	20	0.3	0.3	cobble
Eel River at Benmore Creek	5/4/2018	25	5.8	5.8	cobble
Eel River at Benmore Creek	5/4/2018	25	4.6	4.6	cobble
Eel River at Benmore Creek	5/4/2018	18	5.3	5.3	cobble
Eel River at Benmore Creek	5/4/2018	15	3.2	3.2	cobble
Eel River at Benmore Creek	5/4/2018	33	1	18	boulder
Eel River at Benmore Creek	5/4/2018	12	6.8	6.8	cobble
Eel River at Hearst Creek	5/4/2018	10	20	20	cobble
Salt Creek	5/4/2018	8	0	0	gravel
Salt Creek	5/4/2018	5	0	0	gravel
Salt Creek	5/4/2018	10	0	0	gravel
Salt Creek	5/4/2018	5	5	5	gravel
Salt Creek	5/4/2018	15	7		gravel
Salt Creek	5/4/2018	10	7.5		gravel
Salt Creek	5/4/2018	10	8		gravel
Salt Creek	5/4/2018	17	0	0	cobble
Bucknell Creek	5/14/2018	18	6	6	
Bucknell Creek	5/14/2018	15	1	1	
Bucknell Creek	5/14/2018	14	3	3	
Bucknell Creek	5/14/2018	13	0.3	0.3	
Bucknell Creek	5/14/2018	13	1	1	
Bucknell Creek	5/14/2018	13	0.1	0.1	
Bucknell Creek	5/14/2018	10	5	5	
Bucknell Creek	5/14/2018	8	2	2	
Bucknell Creek	5/14/2018	4	0	0	
Bucknell Creek	5/14/2018	15	1	1	
Bucknell Creek	5/14/2018	12	1	1	
Bucknell Creek	5/14/2018	12	1	1	
Eel River at Benmore Creek	5/14/2018	7	1	1.2	
Eel River at Benmore Creek	5/14/2018				
Eel River at Benmore Creek	5/14/2018				
Eel River at Benmore Creek	5/14/2018				
Eel River at Benmore Creek	5/14/2018				
Eel River at Benmore Creek	5/14/2018				

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Eel River at Benmore Creek	5/14/2018			
Eel River at Benmore Creek	5/14/2018			
Eel River at Benmore Creek	5/14/2018			
Eel River at Benmore Creek	5/14/2018	10	6	6
Eel River at Benmore Creek	5/14/2018	24	6	15
Eel River at Benmore Creek	5/14/2018	3	0	0
Eel River at Benmore Creek	5/14/2018	18	0.1	0.6
Eel River at Benmore Creek	5/14/2018	6	0.4	0.4
Eel River at Benmore Creek	5/14/2018	7	0.4	0.5
Eel River at Benmore Creek	5/14/2018	8	0	0
Eel River at Benmore Creek	5/14/2018	28	0.4	0.1
Eel River at Benmore Creek	5/14/2018	9	1	1
Eel River at Benmore Creek	5/14/2018	17	0.1	0.1
Eel River at Benmore Creek	5/14/2018	17	0.1	0.1
Eel River at Benmore Creek	5/14/2018	17	0.4	0.8
Eel River at Benmore Creek	5/14/2018	17	0.4	0.8
Eel River at Benmore Creek	5/14/2018	12	0.1	1
Eel River at Benmore Creek	5/14/2018	13	0.3	0.3
Eel River at Benmore Creek	5/14/2018	17	5	15
Eel River at Benmore Creek	5/14/2018	14	5	8
Eel River at Benmore Creek	5/14/2018	14	5	8
Eel River at Benmore Creek	5/14/2018	19	7	6
Eel River at Benmore Creek	5/14/2018	9	3	19
Eel River at Benmore Creek	5/14/2018	9	4	5
Eel River at Benmore Creek	5/14/2018	13	4	7.5
Eel River at Benmore Creek	5/14/2018	12	5	17
Eel River at Benmore Creek	5/14/2018	13	4	7.5
Eel River at Benmore Creek	5/14/2018	9	3	9
Eel River at Benmore Creek	5/14/2018	10	2	1.5
Eel River at Benmore Creek	5/14/2018			
Eel River at Benmore Creek	5/14/2018			
Eel River at Benmore Creek	5/14/2018			
Eel River at Benmore Creek	5/14/2018			
Eel River at Benmore Creek	5/14/2018			
Eel River at Benmore Creek	5/14/2018			
Eel River at Benmore Creek	5/14/2018			
Eel River at Benmore Creek	5/14/2018			
Eel River at Benmore Creek	5/14/2018			
Eel River at Benmore Creek	5/14/2018			
Eel River at Benmore Creek	5/14/2018			
Eel River at Benmore Creek	5/14/2018			

Eel River at Benmore Creek	5/14/2018				
Eel River at Benmore Creek	5/14/2018				
Eel River at Benmore Creek	5/14/2018				
Eel River at Benmore Creek	5/14/2018				
Eel River at Benmore Creek	5/14/2018				
Eel River at Benmore Creek	5/14/2018	19	6	18	
Eel River at Benmore Creek	5/14/2018	18	2	3	
Eel River at Benmore Creek	5/14/2018	10	6	6	
Eel River at Benmore Creek	5/14/2018	12	5	14	
Eel River at Benmore Creek	5/14/2018	14	1	6	
Eel River at Benmore Creek	5/14/2018	14	1	6	
Eel River at Benmore Creek	5/14/2018	13	2.5	0.5	
Eel River at Benmore Creek	5/14/2018	21	0.6	15	
Eel River at Benmore Creek	5/14/2018	13	2.5	0.5	
Eel River at Benmore Creek	5/14/2018	20	2.5	0.5	
Eel River at Benmore Creek	5/14/2018				
Eel River at Benmore Creek	5/14/2018				
Eel River at Benmore Creek	5/14/2018	16	0.7	4	
Eel River at Benmore Creek	5/14/2018	16	0.7	4	
Eel River at Benmore Creek	5/14/2018	16	0.7	4	
Eel River at Benmore Creek	5/14/2018	24	6	15	
Eel River at Benmore Creek	5/14/2018	16	0.7	4	
Eel River at Benmore Creek	5/14/2018	16	0.7	4	
Eel River at Benmore Creek	5/14/2018	16	0.7	4	
Eel River at Benmore Creek	5/14/2018				
Eel River at Benmore Creek	5/14/2018				
Eel River at Benmore Creek	5/14/2018				
Eel River at Benmore Creek	5/14/2018				
Eel River at Benmore Creek	5/14/2018				
Eel River at Benmore Creek	5/14/2018	15	10	10	
Eel River at Bucknell Creek	5/14/2018	9	0	0	
Eel River at Bucknell Creek	5/14/2018	10	0	0	
Eel River at Bucknell Creek	5/14/2018	15	0	0	
Eel River at Bucknell Creek	5/14/2018	15	0	0	
Eel River at Bucknell Creek	5/14/2018	17	0	0	
Eel River at Bucknell Creek	5/14/2018	13	0	0	
Eel River at Bucknell Creek	5/14/2018	12	0	0	
Eel River at Bucknell Creek	5/14/2018	22	0	0	
Eel River at Bucknell Creek	5/14/2018	34	0	1	
Eel River at Tomki Creek	5/15/2018	9	0	0	small boulder
Eel River at Tomki Creek	5/15/2018	7	0	0	
Eel River at Tomki Creek	5/15/2018	17	3.2	10.1	
Eel River at Tomki Creek	5/15/2018	15	3.8	6.8	
Eel River at Tomki Creek	5/15/2018	5	0.2	0.3	
Eel River at Tomki Creek	5/15/2018	12	0.8	7.2	
Eel River at Tomki Creek	5/15/2018	7	4.9	7.4	
Eel River at Tomki Creek	5/15/2018	13	2.4	0.7	

Eel River at Tomki Creek	5/15/2018	9	0.6	1	
Eel River at Tomki Creek	5/15/2018	13	1	6	
Eel River at Van Arsdale Bric	5/15/2018	22	3	7	
Eel River at Van Arsdale Bric	5/15/2018	25	2.8	0.7	
Eel River at Van Arsdale Bric	5/15/2018	22	0.9	1.1	
Eel River at Van Arsdale Bric	5/15/2018	18	2.8	10	
Eel River at Van Arsdale Bric	5/15/2018	16	0.2	0.6	
Eel River at Van Arsdale Bric	5/15/2018	16	0.2	0.6	
Eel River at Van Arsdale Bric	5/15/2018	17	0.2	0.6	
Eel River at Van Arsdale Bric	5/15/2018	19	0.6	0.4	
Eel River at Van Arsdale Bric	5/15/2018	19	0.1	0.2	
Eel River at Van Arsdale Bric	5/15/2018	7	0.9	0.16	
Eel River at Van Arsdale Bric	5/15/2018	17	0.4	0.1	
Eel River at Van Arsdale Bric	5/15/2018	5	0.2	0.2	
Eel River at Van Arsdale Bric	5/15/2018	5	0.8	0.8	
Eel River at Van Arsdale Bric	5/15/2018	7	0	1	
Eel River at Van Arsdale Bric	5/15/2018	11	2.2	1.7	
Eel River at Van Arsdale Bric	5/15/2018	9	0.9	4	
Eel River at Van Arsdale Bric	5/15/2018	10	4.8	12	
Eel River at Van Arsdale Bric	5/15/2018	9	0	0	
Eel River at Van Arsdale Bric	5/15/2018	13	0.2	0.7	
Eel River at Van Arsdale Bric	5/15/2018	11	0.3	1	
Eel River at Van Arsdale Bric	5/15/2018	5	2.7	10	
Eel River at Van Arsdale Bric	5/15/2018	10	7.8	19	pebble/cobble
Eel River at Van Arsdale Bric	5/15/2018	5	0	0	
Eel River at Van Arsdale Bric	5/15/2018	11	0.5	0.3	
Eel River at Van Arsdale Bric	5/15/2018	8	1.2	1.3	
Eel River at Van Arsdale Bric	5/15/2018	11	3.4	3.4	
Eel River at Van Arsdale Bric	5/15/2018	15	0.2	0.6	
Rice Fork Eel near Rice Cree	5/16/2018	4	0	0	cobble
Rice Fork Eel near Rice Cree	5/16/2018	6	2	2	cobble
Rice Fork Eel near Rice Cree	5/16/2018	6	2	2	cobble
Rice Fork Eel near Rice Cree	5/16/2018	8	4	4	cobble
Rice Fork Eel near Rice Cree	5/16/2018	6	2	2	cobble
Rice Fork Eel near Rice Cree	5/16/2018	6	2	2	cobble
Rice Fork Eel near Rice Cree	5/16/2018	12	2.8	2.8	cobble
Rice Fork Eel near Rice Cree	5/16/2018	12	2.8	2.8	cobble
Rice Fork Eel near Rice Cree	5/16/2018	12	2.8	2.8	cobble
Rice Fork Eel near Rice Cree	5/16/2018	12	2.8	2.8	cobble
Rice Fork Eel near Rice Cree	5/16/2018	12	2.8	2.8	cobble
Rice Fork Eel near Rice Cree	5/16/2018	12	2.8	2.8	cobble
Rice Fork Eel near Rice Cree	5/16/2018	12	12	12	cobble
Rice Fork Eel near Rice Cree	5/16/2018	8	17.8	17.8	cobble
Rice Fork Eel near Rice Cree	5/16/2018	5	4	4	boulder
Rice Fork Eel near Rice Cree	5/16/2018	5	4	4	boulder
Rice Fork Eel near Rice Cree	5/16/2018	5	4	4	boulder
Rice Fork Eel near Rice Cree	5/16/2018	5	4	4	boulder

Rice Fork Eel near Rice Cree	5/16/2018	5	4	4	boulder
Rice Fork Eel near Rice Cree	5/16/2018	8	0	0	
Rice Fork Eel near Rice Cree	5/16/2018	8	1.5	1.5	
Rice Fork Eel near Rice Cree	5/16/2018	30	1.5	1.5	
Rice Fork Eel near Rice Cree	5/16/2018	12	0	0	
Rice Fork Eel near Rice Cree	5/16/2018	12	6	6	
Rice Fork Eel near Rice Cree	5/16/2018	12	15	15	
Rice Fork Eel near Rice Cree	5/16/2018	5	0	0	
Rice Fork Eel near Rice Cree	5/16/2018	7	0	0	
Rice Fork Eel near Rice Cree	5/16/2018	9	0	0	
Rice Fork Eel near Rice Cree	5/16/2018	10	0	0	
Rice Fork Eel near Rice Cree	5/16/2018	14	10.1	10.1	
Rice Fork Eel near Rice Cree	5/16/2018	5	3.6	3.6	
Rice Fork Eel near Rice Cree	5/16/2018	8	3.6	3.6	
Rice Fork Eel near Rice Cree	5/16/2018	8	7.4	7.4	
Rice Fork Eel near Rice Cree	5/16/2018	9	7.4	7.4	
Rice Fork Eel near Rice Cree	5/16/2018	12	7.4	7.4	
Eel River above Lake Pillsbu	5/17/2018	14	1.15	3	
Eel River above Lake Pillsbu	5/17/2018	14	1.15	3	
Eel River above Lake Pillsbu	5/17/2018	12	1.15	3	
Eel River above Lake Pillsbu	5/17/2018	13	1.15	3	
Eel River above Lake Pillsbu	5/17/2018	7	6	6	cobble
Eel River above Lake Pillsbu	5/17/2018	13	4	4	cobble
Eel River above Lake Pillsbu	5/17/2018	12	4	4	cobble
Eel River above Lake Pillsbu	5/17/2018	14	11	11	cobble
Eel River above Lake Pillsbu	5/17/2018	14	4	4	cobble
Eel River above Lake Pillsbu	5/17/2018	14	15	15	cobble
Eel River above Lake Pillsbu	5/17/2018	15	15	15	cobble
Eel River above Lake Pillsbu	5/17/2018	6	1	1	cobble
Eel River above Lake Pillsbu	5/17/2018	14	16	16	cobble
Eel River above Lake Pillsbu	5/17/2018	10	7	7	cobble
Eel River above Lake Pillsbu	5/17/2018	7	2	2	cobble
Eel River above Lake Pillsbu	5/17/2018	6	1	1	cobble
Eel River above Lake Pillsbu	5/17/2018	21	8	8	cobble
Eel River above Lake Pillsbu	5/17/2018	17	15	15	cobble
Eel River above Lake Pillsbu	5/17/2018	17	2	2	cobble
Eel River above Lake Pillsbu	5/17/2018	15	8	8	cobble
Eel River above Lake Pillsbu	5/17/2018	16	5	5	cobble
Eel River above Lake Pillsbu	5/17/2018	14	7	7	cobble
Eel River above Lake Pillsbu	5/17/2018	10	0	0	cobble
Eel River above Lake Pillsbu	5/17/2018	12	0	0	cobble
Eel River above Lake Pillsbu	5/17/2018	13	0	0	cobble
Eel River above Lake Pillsbu	5/17/2018	17	0	0	cobble
Eel River above Lake Pillsbu	5/17/2018	21	0	0	cobble
Eel River above Lake Pillsbu	5/17/2018	21	0	0	cobble
Eel River above Lake Pillsbu	5/17/2018	15	0	0	cobble
Eel River above Lake Pillsbu	5/17/2018	17	0	0	cobble

Eel River above Lake Pillsbu	5/17/2018	17	0	0	cobble
Eel River above Lake Pillsbu	5/17/2018	14	0	0	cobble
Eel River above Lake Pillsbu	5/17/2018	21	0	0	cobble
Eel River above Lake Pillsbu	5/17/2018	14	0	0	cobble
Eel River above Lake Pillsbu	5/17/2018	13	5	5	cobble
Eel River above Lake Pillsbu	5/17/2018	14	12	12	cobble
Eel River above Lake Pillsbu	5/17/2018	13	19	19	cobble
Eel River above Lake Pillsbu	5/17/2018	12	5	5	cobble
Eel River above Lake Pillsbu	5/17/2018	13	0	0	cobble
Eel River above Lake Pillsbu	5/17/2018	8	0	0	cobble
Eel River above Lake Pillsbu	5/17/2018	16	9	9	cobble
Eel River above Lake Pillsbu	5/17/2018	13	8	8	cobble
Eel River above Lake Pillsbu	5/17/2018	14	13	13	cobble
Eel River above Lake Pillsbu	5/17/2018	10	11	11	cobble
Eel River above Lake Pillsbu	5/17/2018	11	8	8	cobble
Eel River above Lake Pillsbu	5/17/2018	17	5	5	cobble
Eel River above Lake Pillsbu	5/17/2018	17	5	5	cobble
Eel River above Lake Pillsbu	5/17/2018	5	0	0	cobble
Eel River above Lake Pillsbu	5/17/2018	14	10	10	cobble
Eel River above Lake Pillsbu	5/17/2018	13	15	15	cobble
Eel River above Lake Pillsbu	5/17/2018	14	17	17	cobble
Eel River above Lake Pillsbu	5/17/2018	9	0	0	cobble

Dshore	Gosner	Hatched	Condition	Streamtype	Flow status	Mesohabitat
		8	0 entire	Mainstem	reg	cobble bar
		8	0 entire	Mainstem	reg	cobble bar
		18	0 entire	Tributary	unreg	
		18	0 entire	Tributary	unreg	
		20	0 entire	Tributary	unreg	run
		16	0 entire	Tributary	unreg	run
		15	0 entire	Tributary	unreg	run
		15	0 entire	Tributary	unreg	run
		18	0 entire	Tributary	unreg	run
		17	0 entire	Tributary	unreg	run
		18	0 entire	Tributary	unreg	run
		18	0 entire	Tributary	unreg	run
		15	0 entire	Tributary	unreg	run
		17	0 entire	Tributary	unreg	run
		13	0 entire	Tributary	unreg	run
		15	0 entire	Tributary	unreg	run
		18	0 entire	Tributary	unreg	run
		18	0 entire	Tributary	unreg	run
		15	0 entire	Tributary	unreg	run
		17	0 entire	Tributary	unreg	run
		13	0 entire	Tributary	unreg	run
		15	0 entire	Tributary	unreg	run
		18	0 entire	Tributary	unreg	run
		17	0 entire	Tributary	unreg	run
		18	0 entire	Tributary	unreg	run
		18	0 entire	Tributary	unreg	run
		15	0 entire	Tributary	unreg	run
		17	0 entire	Tributary	unreg	run
		16	0 entire	Tributary	unreg	run
		16	0 entire	Tributary	unreg	run
		14	0 entire	Tributary	unreg	run
		17	0 entire	Tributary	unreg	run
		17	0 entire	Tributary	unreg	run
		15	0 entire	Tributary	unreg	run
		15	0 entire	Tributary	unreg	run
		18	0 entire	Tributary	unreg	run
		17	0 entire	Tributary	unreg	run
		18	0 entire	Tributary	unreg	run
		18	0 entire	Tributary	unreg	run
		15	0 entire	Tributary	unreg	run
		17	0 entire	Tributary	unreg	run
		13	0 entire	Tributary	unreg	run
		15	0 entire	Tributary	unreg	run
		12	0 entire	Tributary	unreg	run
		15	0 entire	Tributary	unreg	run

	12	0	entire	Tributary	unreg	run
	14	0	entire	Tributary	unreg	run
	18	0	entire	Tributary	unreg	run
	11	0	entire	Tributary	unreg	run
	11	0	entire	Tributary	unreg	run
	9	0	entire	Tributary	unreg	run
	13	0	entire	Tributary	unreg	run
	12	0	entire	Tributary	unreg	run
	12	0	entire	Tributary	unreg	run
	15	0	entire	Tributary	unreg	run
	15	0	entire	Tributary	unreg	run
	9	0	entire	Tributary	unreg	run
	15	0	entire	Tributary	unreg	run
	13	0	entire	Tributary	unreg	run
	10	0	entire	Tributary	unreg	run
	13	0	entire	Mainstem	reg	pool tail out
	13	0	entire	Mainstem	reg	pool tail out
	11	0	entire	Mainstem	reg	pool tail out
	11	0	entire	Mainstem	reg	pool tail out
	10	0	entire	Mainstem	reg	pointbar
	20	1	entire	Tributary	unreg	glide
	22	1	entire	Tributary	unreg	glide
	22	1	entire	Tributary	unreg	glide
	15	0	entire	Tributary	unreg	glide
	14	0	entire	Tributary	unreg	run
	22	1	entire	Tributary	unreg	glide
	17	0	entire	Tributary	unreg	glide
	16	0	entire	Tributary	unreg	glide
	22	1	entire	Tributary	unreg	glide
	22	1	entire	Tributary	unreg	glide
	19	0	entire	Tributary	unreg	glide
	18	0	entire	Mainstem	unreg	pool margin
2	18	0	entire	Mainstem	unreg	glide, cobble/grav
2	13	0	entire	Mainstem	unreg	glide, cobble/grav
2	15	0	entire	Mainstem	unreg	glide, cobble/grav
2	18	0	entire	Mainstem	unreg	glide, cobble/grav
2	18	0	entire	Mainstem	unreg	glide, cobble/grav
2	15	0	entire	Mainstem	unreg	glide, cobble/grav
2	16	0	entire	Mainstem	unreg	glide, cobble/grav
2	15	0	entire	Mainstem	unreg	glide, cobble/grav
2	18	0	entire	Mainstem	unreg	glide, cobble/grav
2	18	0	entire	Mainstem	unreg	glide, cobble/grav
2	16	0	entire	Mainstem	unreg	glide, cobble/grav
2	17	0	entire	Mainstem	unreg	glide, cobble/grav
0.8	17	0	entire	Mainstem	unreg	glide, cobble/grav
0.8	21	1	entire	Mainstem	unreg	glide, cobble/grav
0.8	19	0	entire	Mainstem	unreg	glide, cobble/grav

1	19	0	entire	Mainstem	unreg	glide, cobble/grav
1	18	0	entire	Mainstem	unreg	glide, cobble/grav
1	18	0	entire	Mainstem	unreg	glide, cobble/grav
1	18	0	entire	Mainstem	unreg	glide, cobble/grav
1	18	0	entire	Mainstem	unreg	glide, cobble/grav
2	18	0	entire	Mainstem	unreg	glide, cobble/grav
2	18	0	tattered	Mainstem	unreg	glide, cobble/grav
4	18	0	entire	Mainstem	unreg	glide, cobble/grav
1.5	14	0	entire	Mainstem	unreg	glide, cobble/grav
1.5	12	0	entire	Mainstem	unreg	glide, cobble/grav
1.5	16	0	entire	Mainstem	unreg	glide, cobble/grav
1.5	16	0	entire	Mainstem	unreg	glide, cobble/grav
1.5	18	0	entire	Mainstem	unreg	glide, cobble/grav
1.5	16	0	entire	Mainstem	unreg	glide, cobble/grav
1.5	16	0	entire	Mainstem	unreg	glide, cobble/grav
1.5	16	0	entire	Mainstem	unreg	glide, cobble/grav
1.5	18	0	entire	Mainstem	unreg	glide, cobble/grav
1.5	17	0	entire	Mainstem	unreg	glide, cobble/grav
1.5	23	1	entire	Mainstem	unreg	glide, cobble/grav
1.5	19	0	entire	Mainstem	unreg	glide, cobble/grav
1.5	19	0	entire	Mainstem	unreg	glide, cobble/grav
1.5	18	0	entire	Mainstem	unreg	glide, cobble/grav
1.5	19	0	entire	Mainstem	unreg	glide, cobble/grav
1.5	19	0	entire	Mainstem	unreg	glide, cobble/grav
1.5	19	0	entire	Mainstem	unreg	glide, cobble/grav
1	22	1	entire	Mainstem	unreg	pool
0.4	13	0	entire	Mainstem	unreg	side channel
0.4	13	0	entire	Mainstem	unreg	side channel
0.4	20	0	entire	Mainstem	unreg	side channel
0.4	17	0	entire	Mainstem	unreg	pool edge
0.4	17	0	entire	Mainstem	unreg	pool edge
0.4	17	0	entire	Mainstem	unreg	pool edge
0.4	18	0	entire	Mainstem	unreg	pool edge
0.4	18	0	entire	Mainstem	unreg	pool edge
0.4	18	0	entire	Mainstem	unreg	pool edge
0.4	18	0	entire	Mainstem	unreg	pool edge
0.4	19	0	entire	Mainstem	unreg	pool edge
0.4	17	0	entire	Mainstem	unreg	pool edge
0.4	19	0	entire	Mainstem	unreg	pool edge
0.4	19	0	entire	Mainstem	unreg	pool edge
0.4	16	0	entire	Mainstem	unreg	pool edge
0.4	16	0	entire	Mainstem	unreg	pool edge
0.25	14	0	entire	Mainstem	unreg	pool tail out
0.25	14	0	entire	Mainstem	unreg	pool tail out
0.25	18	0	entire	Mainstem	unreg	pool tail out
0.25	8	0	entire	Mainstem	unreg	pool tail out
0.25	12	0	entire	Mainstem	unreg	pool tail out

0.25	14	0	entire	Mainstem	unreg	pool tail out
0.25	15	0	entire	Mainstem	unreg	pool tail out
0.9	9	0	entire	Mainstem	reg	pool
1.4	14	0	entire	Mainstem	reg	pointbar
1.3	10	0	entire	Mainstem	reg	pointbar
1.3	10	0	entire	Mainstem	reg	pointbar
0.56	17	0	entire	Mainstem	reg	pointbar
1	17	0	entire	Mainstem	reg	pointbar
0.5	15	0	entire	Mainstem	reg	pointbar
2.2	18	0	entire	Mainstem	reg	pointbar
2.2	13	0	entire	Mainstem	reg	pointbar
1.3	13	0	entire	Mainstem	reg	pointbar
1.2	16	0	entire	Mainstem	reg	pointbar
2	16	0	entire	Mainstem	reg	pointbar
2.5	12	0	entire	Mainstem	reg	pointbar
2	14	0	entire	Mainstem	reg	pointbar
1.3	15	0	entire	Mainstem	reg	pointbar
0.6	16	0	entire	Mainstem	reg	pointbar
2.1	17	0	entire	Mainstem	reg	pointbar
2.1	12	0	entire	Mainstem	reg	pointbar
0.1	8	0	entire	Mainstem	reg	edgewater
0.06	23	1	entire	Tributary	unreg	step pool tail out
0.06	23	1	entire	Tributary	unreg	step pool tail out
0.06	23	1	entire	Tributary	unreg	step pool tail out
	23	1	entire	Tributary	unreg	step pool gravel b
	18	0	entire	Tributary	unreg	step pool gravel b
	18	0	entire	Tributary	unreg	step pool gravel b
	18	0	entire	Tributary	unreg	step pool gravel b
	16	0	entire	Tributary	unreg	run
	18	0	entire	Tributary	unreg	margin
	22	1	entire	Tributary	unreg	margin
	19	0	entire	Tributary	unreg	margin
	13	0	entire	Tributary	unreg	margin
	17	0	entire	Tributary	unreg	margin
	17	0	entire	Tributary	unreg	margin
	21	1	entire	Tributary	unreg	margin
	22	1	entire	Tributary	unreg	margin
	22	1	entire	Tributary	unreg	margin
	22	1	entire	Tributary	unreg	margin
	22	1	entire	Tributary	unreg	margin
	22	1	entire	Tributary	unreg	margin
	19	0	tattered	Mainstem	reg	pool
		1	n/a	Mainstem	reg	pointbar
				Mainstem	reg	pointbar
				Mainstem	reg	pointbar
		1	n/a	Mainstem	reg	pointbar
					reg	

				reg	
				reg	
				reg	
		entire	Mainstem	reg	pointbar
		entire	Mainstem	reg	pointbar
		entire	Mainstem	reg	pointbar
		entire	Mainstem	reg	pointbar
		entire	Mainstem	reg	pointbar
		entire	Mainstem	reg	pointbar
23	1	entire	Mainstem	reg	pointbar
23	1	tattered	Mainstem	reg	pointbar
22	1	entire	Mainstem	reg	pointbar
14	0	entire	Mainstem	reg	pointbar
16	0	entire	Mainstem	reg	margin
18	0	entire	Mainstem	reg	margin
23	1	tattered	Mainstem	reg	margin
17	0	tattered	Mainstem	reg	margin
13	0	tattered	Mainstem	reg	margin
12	0	entire	Mainstem	reg	margin
12	0	entire	Mainstem	reg	margin
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16	0	entire	Mainstem	reg	margin
17	0	entire	Mainstem	reg	margin
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17	0	entire	Mainstem	reg	margin
16	0	tattered	Mainstem	reg	margin
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		0	entire	Mainstem	reg	margin
		0	entire	Mainstem	reg	margin
	11	0	tattered	Mainstem	reg	margin
	24	1	n/a	Mainstem	reg	sidepool
	24	1		Mainstem	reg	sidepool
	23	1		Mainstem	reg	sidepool
	18	0	entire	Mainstem	reg	sidepool
	21	0	entire	Mainstem	reg	sidepool
	20	0	entire	Mainstem	reg	sidepool
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1	22	1	entire	Mainstem	reg	pointbar
	24	1	entire	Mainstem	reg	
	25	1	entire	Mainstem	reg	
	14	0	entire	Mainstem	reg	
	22	1	remnant	Mainstem	reg	
	22	1	entire	Mainstem	reg	
	14	0	entire	Mainstem	reg	
	9	0	entire	Mainstem	reg	
	9	0	entire	Mainstem	reg	

22	1	tattered	Mainstem	reg	
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14	0	entire	Mainstem	unreg	edgewater
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15	0	entire	Mainstem	unreg	edgewater
14	0	entire	Mainstem	unreg	edgewater
13	0	entire	Mainstem	unreg	pool tail out
14	0	entire	Mainstem	unreg	pool tail out
13	0	entire	Mainstem	unreg	pool tail out
14	0	entire	Mainstem	unreg	pool tail out

18	0	entire	Mainstem	unreg	pool tail out
25	1	n/a	Mainstem	unreg	backwater
27	1	n/a	Mainstem	unreg	head of pool
28	1	n/a	Mainstem	unreg	head of pool
19	0	entire	Mainstem	unreg	edgewater of run
14	0	entire	Mainstem	unreg	edgewater of run
13	0	entire	Mainstem	unreg	edgewater of run
22	1	entire	Mainstem	unreg	pool tail out
22	1	entire	Mainstem	unreg	pool tail out
22	1	entire	Mainstem	unreg	pool tail out
18	0	entire	Mainstem	unreg	pool tail out
19	0	entire	Mainstem	unreg	pool tail out
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19	0	entire	mainstem	unreg	edgewater
19	0	entire	mainstem	unreg	edgewater
19	0	entire	mainstem	unreg	edgewater
19	0	entire	mainstem	unreg	edgewater
17	0	entire	mainstem	unreg	cobble bar, pool
19	0	entire	mainstem	unreg	cobble bar, pool
17	0	entire	mainstem	unreg	cobble bar, pool
22	0	entire	mainstem	unreg	cobble bar, pool
14	0	entire	mainstem	unreg	edgewater of a ru
18	0	entire	mainstem	unreg	edgewater of a ru
17	0	entire	mainstem	unreg	edgewater of a ru
21	0	entire	mainstem	unreg	edgewater of a ru
14	0	entire	mainstem	unreg	edgewater of a ru
19	0	entire	mainstem	unreg	edgewater of a ru
14	0	entire	mainstem	unreg	edgewater of a ru
19	0	entire	mainstem	unreg	edgewater of a ru
21	0	entire	mainstem	unreg	edgewater of a ru
20	0	entire	mainstem	unreg	edgewater of a ru
18	0	entire	mainstem	unreg	edgewater of a ru
18	0	entire	mainstem	unreg	edgewater of a ru
19	0	entire	mainstem	unreg	edgewater of a ru
19	0	entire	mainstem	unreg	pool tail out
13	0	entire	mainstem	unreg	pool tail out
21	0	entire	mainstem	unreg	pool tail out
18	0	entire	mainstem	unreg	pool tail out
20	0	entire	mainstem	unreg	margin of braidec
21	0	entire	mainstem	unreg	margin of braidec
10	0	entire	mainstem	unreg	margin of braidec
11	0	entire	mainstem	unreg	margin of braidec
10	0	entire	mainstem	unreg	cobble bar, run

19	0	entire	mainstem	unreg	cobble bar, run
9	0	entire	mainstem	unreg	cobble bar, run
18	0	entire	mainstem	unreg	cobble bar, run
16	0	entire	mainstem	unreg	cobble bar, run
7	0	entire	mainstem	unreg	cobble bar, run
20	0	entire	mainstem	unreg	cobble bar, run
3	0	entire	mainstem	unreg	edgewater of poc
20	0	entire	mainstem	unreg	pool tail out
21	0	entire	mainstem	unreg	pool tail out
22	0	entire	mainstem	unreg	pool tail out
7	0	entire	mainstem	unreg	pool tail out
19	0	entire	mainstem	unreg	margin of a run
21	0	entire	mainstem	unreg	margin of a run
20	0	entire	mainstem	unreg	margin of a run
20	0	entire	mainstem	unreg	margin of a run
17	0	entire	mainstem	unreg	margin of a run
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17	0	entire	mainstem	unreg	margin of a run
18	0	entire	mainstem	unreg	margin of a run
19	0	entire	mainstem	unreg	margin of a run
17	0	entire	mainstem	unreg	margin of a run
21	1	entire	mainstem	unreg	margin of a run

Water Temperature	Time	Lat	Long
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16	12:30	39.267385	-123.093160
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19	13:00	39.376380	-123.051110
15.5	13:30	39.376760	-123.050620
18	15:00	39.430074	-123.144274
18	15:00	39.430074	-123.144274
18	15:00	39.430074	-123.144274
20	16:20	39.430074	-123.144274
20	15:00	39.430074	-123.144274
20	15:00	39.430074	-123.144274
20	15:00	39.430074	-123.144274
20	15:00	39.430074	-123.144274

20	15:00	39.430074	-123.144274
20	15:00	39.430074	-123.144274
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14	10:00	39.382187	-123.096218
14	10:00	39.382187	-123.096218
14	10:00	39.382187	-123.096218
14	10:00	39.382105	-123.095572
14	10:00	39.382105	-123.095572
14	10:00	39.382105	-123.095572
14	10:00	39.382105	-123.095572
14	10:00	39.382105	-123.095572
14	10:00	39.382105	-123.095572
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14	10:00	39.381922	-123.093641
14	10:00	39.381922	-123.093641
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14	10:00	39.381853	-123.093172
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14	10:00	39.381853	-123.093172
14	10:00	39.3817	-123.093425
14	10:00	39.3817	-123.093425
14	10:00	39.381922	-123.093641
14	10:00	39.382105	-123.095572
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17	14:00	39.3817	-123.093425
17	14:00	39.382105	-123.095572
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14		39.358136	-122.889263
14		39.358136	-122.889263
14		39.358050	-122.870783
14		39.358050	-122.870783
14		39.358050	-122.870783
14		39.358050	-122.870783
14		39.358050	-122.870783
14		39.358050	-122.870783
14		39.358050	-122.870783
14		39.358050	-122.870783
15.5		39.358000	-122.887000
15.5		39.358000	-122.887000
15.5		39.358000	-122.887000
15.5		39.358000	-122.887000

15.5		39.358000	-122.887000
14		39.358000	-122.887000
14.5		39.357833	-122.886733
14.5		39.357833	-122.886733
14		39.357408	-122.886333
14		39.357350	-122.886333
14		39.357350	-122.886333
14.5		39.356933	-122.886300
14.5		39.356933	-122.886300
14.5		39.356933	-122.886300
14.5		39.356933	-122.886300
14.5		39.356933	-122.886300
14.5		39.356933	-122.886300
14.5		39.356933	-122.886300
14.5		39.356933	-122.886300
14.5		39.356933	-122.886300
14.5		39.356933	-122.886300
17	13:25	39.394450	-122.886920
17	13:25	39.394450	-122.886920
17	13:25	39.394450	-122.886920
17	13:25	39.394450	-122.886920
18	14:30	39.394583	-122.886330
18	14:30	39.394583	-122.886330
18	14:30	39.394583	-122.886330
18	14:30	39.394583	-122.886330
18	15:00	39.394766	-122.885549
18	15:00	39.394766	-122.885549
18	15:00	39.394766	-122.885549
18	15:00	39.394766	-122.885549
18	15:00	39.394766	-122.885549
17	15:30	39.394730	-122.884200
17	15:30	39.394730	-122.884200
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17	15:30	39.394730	-122.884200
17	15:30	39.394730	-122.884200
17	15:30	39.394730	-122.884200
17	15:30	39.394730	-122.884200
17	15:30	39.394730	-122.884200
17	15:45	39.394750	-122.884070
17	15:45	39.394750	-122.884070
17	15:45	39.394750	-122.884070
17	15:45	39.394750	-122.884070
17	15:45	39.394950	-122.883600
17	15:45	39.394950	-122.883600
17	15:45	39.395000	-122.883250
17	15:45	39.395000	-122.883250
17	16:00	39.395400	-122.882320

17	16:00	39.395400	-122.882320
17	16:00	39.395400	-122.882320
17	16:00	39.395400	-122.882320
17	16:00	39.395400	-122.882320
17	16:00	39.395400	-122.882320
17	16:00	39.395400	-122.882320
17	16:20	39.396270	-122.881770
18	16:50	39.396267	-122.881233
18	16:50	39.396267	-122.881233
18	16:50	39.396267	-122.881233
18	16:50	39.396267	-122.881233
18	17:20	39.396866	-122.880760
18	17:20	39.396866	-122.880760
18	17:20	39.396866	-122.880760
18	17:20	39.396866	-122.880760
18	17:20	39.396866	-122.880760
18	17:20	39.396866	-122.880760
18	17:20	39.396866	-122.880760
18	17:20	39.396866	-122.880760
18	17:20	39.397050	-122.880530
18	17:20	39.397050	-122.880530
18	17:20	39.397050	-122.880530

Appendix B

Western Pond Turtle Reconnaissance Surveys on Lake Pillsbury

Reconnaissance Survey for Western Pond Turtle Distribution

Lake Pillsbury Reservoir, Mendocino Co., CA 05 June 2018

Survey conducted by:

Sarah Kupferberg, RCS Cardno	skupferberg@gmail.com	(510) 367-4546
Don Ashton, McBain Associates	ashton.don@gmail.com	(541) 286-8806

Watercraft support and logistics: Robert and Norm of Cardno

Write up Preparation: Don Ashton

Purpose: Baseline assessment of turtle distribution in Lake Pillsbury to help guide site selection for study of potential impacts of changes in reservoir surface elevation on nest success.

Methods: Visual encounter survey using binoculars to scan shorelines and emergent structures for basking turtles. Binocular scans were conducted from shore and from motor boat. Turtle detection locations were marked by waypoint and survey tracks for boat-based survey route was recorded by GPS. When feasible, turtles or associated habitat were photographed. Size class was estimated for each turtle sighted; individuals with carapace length less than 125 mm were presumed to be juveniles. No turtles were captured or handled during this survey.

Coverage: From 08:30 to 10:30 AM, Don conducted spot checks from shore along the north and east shorelines, from Fuller Grove Campground to Pillsbury Pines Campground. From 11:15 AM to 6:15 PM, Don and Sarah conducted surveys from motorboat, covering from the Eel River arm clockwise to the Rice Fork arm, along to Scott Dam and west shore around to Lake Pillsbury Resort Marina. Survey included one hour wait at Eel River rendezvous point during which time Sarah and Don assessed potential nesting habitat on terraces above inner gorge. After picking Robert and Norm and the Eel River inlet, boat survey was resumed to cover the north shore, from near Sunset Point west to Fuller Grove Boat Ramp. Due to limited time, not all portions of the reservoir were surveyed. GPS tracks of survey paths show what portions on the reservoir were covered in these surveys, and what areas were not covered (Fig 1).

Conditions: Warm and clear with some high clouds (<50%). Light breeze in the morning, increasing to moderate breeze by early afternoon, especially in main water body. Breeze remained relatively light in the smaller coves and tributary forks. Human activity was mostly concentrated along west shore marinas and mouth of Rice Fork arm. A few boats navigating in main body of reservoir, but generally minimal human disturbance in tributary arms.

Temperatures at Fuller Grove boat ramp:
At 22:00 on 04 June, water=22.0°C, air=16.1° C; and at 08:00 on 05 June, water=20.8° C, air=13.3° C.

Temperatures at Eel River inflow at 16:50 on 05 June: river=21.2°C, edgewater=27.6°C, air=27.0°C.

Results: On 05 June 2018, we saw 40 turtles basking at 24 locations in Lake Pillsbury Reservoir (Table 1). Western Pond Turtles were readily detected in coves and tributary arms (Eel River and Rice Fork) but were rarely detected along the main body of the reservoir (Fig 1). Most turtles seen were classified as adult-size (80%), which is typical for this type of survey. At least 8 turtles (20%) were estimated at carapace length <125 mm and presumed juveniles. These smaller turtles were only seen in the tributary arms, including an approximately two-year old seen on the Eel River arm (WayPoint 024).

No other turtle species were detected in this survey, but non-native Red-eared Sliders do occur in the Potter Valley. Future surveyors should be aware of the potential to encounter non-native turtles in the reservoir. Two adult American Bullfrogs were seen; one in a cove near Fuller Grove, and another in the cove on the north side of Pillsbury Pines day-use area.

Discussion: Western Pond Turtles were detected in numbers and size distribution suggesting a reproductive population in the reservoir. Turtles were not uniformly distributed around the reservoir. Turtles were detected near shore in coves and tributary arms. Few turtles were seen along shorelines adjacent to the main reservoir body, where wind and wave action were greater. The shallow areas along the north shore appeared suitable for Western Pond Turtles at the time of this survey, but no turtles were seen there during this survey. Several factors that could lead to non-detection of turtles, even if turtles were present, including: abundant emergent vegetation along shoreline and shallows would limit the view of basking turtles; shoreline surveys on this area were limited due to large expanse of wetland habitat; and motor-boat survey of this section occurred later in the day, although conditions were still suitable for basking, especially in areas where turtles were most likely expected. Additional surveys visits in this area on the reservoir would be helpful to confirm absence. Turtles may be absent from this portion of the reservoir due to large changes in shoreline position associated with changes in reservoir surface elevation. It is possible turtles may still be restricted to occupying portions of the reservoir that are inundated portions of the rivers occupied by turtles prior to damming and have not colonized areas of the reservoir further away from the historically occupied tributary forks.

Areas of interest for potential nesting are in the Eel River arm of the reservoir, labeled “SEEP” and “EEL RIVER” in Figure 1, and the upper end the Rice Fork arm near the beaver activity (WayPoint 017). Locations and notes are provided in Table 2.

Summary: Western Pond Turtles occupy Lake Pillsbury Reservoir and appear to favor tributary arms and coves where they are sheltered from wind and wave action. Turtles were found along shorelines, perched for basking on emergent structures. No turtles were detected or expected in open water away from shore. Additional survey effort is advised in the shallows along the north shore and wooded island out from Fuller Grove boat launch to confirm non-use of this area by turtles.

Size-class distribution suggests recruitment is occurring in this population. Juvenile turtles were detected in portions of the reservoir where nests would be unlikely to be impacted by fluctuating reservoir elevation because of steeper banks with nesting habitat perched on terraces above the floodplain. The shallow area along the north shore would be impacted by reservoir fluctuations but no turtles were seen in this area. Presence of non-native predators (Large-mouth Bass, American Bullfrog) could suppress population growth; no data were collected to investigate potential impacts of non-native predators on turtle recruitment.

Table 1. Turtle sighting location waypoints (WayPt) with total turtle count (WPT#) and counts by age class, adult (A) or juvenile (J). Juvenile defined as <125 mm straight-line carapace length (CL) by visual estimate.

WayPt	Latitude	Longitude	altitude (m)	**WPT#**	A	J	datetime
001	39.436476	-122.940549	567.29	1	1		6/5/2018 9:22
002	39.435649	-122.941026	568.29	1	1		6/5/2018 9:29
003	39.436941	-122.938926	568.96	4	4		6/5/2018 9:48
004	39.400490	-122.907210	562.19	1		1	6/5/2018 11:41
005	39.402100	-122.909795	566.53	3	2	1	6/5/2018 12:30
006	39.403323	-122.912112	562.62	1	1		6/5/2018 12:36
007	39.405002	-122.916670	558.31	2	2		6/5/2018 12:43
008	39.405244	-122.916809	561.73	3	3		6/5/2018 12:44
009	39.410155	-122.922319	563.60	2	2		6/5/2018 12:52
010	39.410829	-122.924457	555.54	2		2	6/5/2018 12:56
011	39.410830	-122.929802	563.74	1		1	6/5/2018 13:06
012	39.413294	-122.944825	559.23	1		1	6/5/2018 13:23
013	39.403728	-122.948472	564.01	2	2		6/5/2018 14:01
014	39.398781	-122.946103	568.57	4	3	1	6/5/2018 14:10
015	39.397861	-122.944208	568.37	1	1		6/5/2018 14:12
016	39.387516	-122.935410	568.06	1	1		6/5/2018 14:25
017	39.387031	-122.935994	565.93	2	2		6/5/2018 14:29
018	39.394273	-122.943349	566.83	1	1		6/5/2018 14:47
019	39.397392	-122.949500	563.83	1	1		6/5/2018 14:55
020	39.409984	-122.955834	563.40	1	1		6/5/2018 15:06
021	39.411365	-122.955580	560.20	1	1		6/5/2018 15:09
022	39.420001	-122.957538	559.07	1	1		6/5/2018 15:19
023	39.421666	-122.957961	562.90	2	2		6/5/2018 15:22
024	39.397282	-122.898953	561.90	1		1	6/5/2018 15:57
			Turtle Count =	**40**	(32)	(8)	

Table 2. Areas of interest for turtle nesting.

Name	Latitude	Longitude	Altitude m	Description
EEL RIVER	39.397208	-122.899358	563.35	Juvenile turtles nearby; nesting habitat
SEEP	39.413133	-122.938033	554.36	Juvenile turtles nearby; potential hatchling habitat at seep source
BEAVER	39.387031	-122.935994	565.93	Fresh beaver sign near wp017; Nesting habitat to west

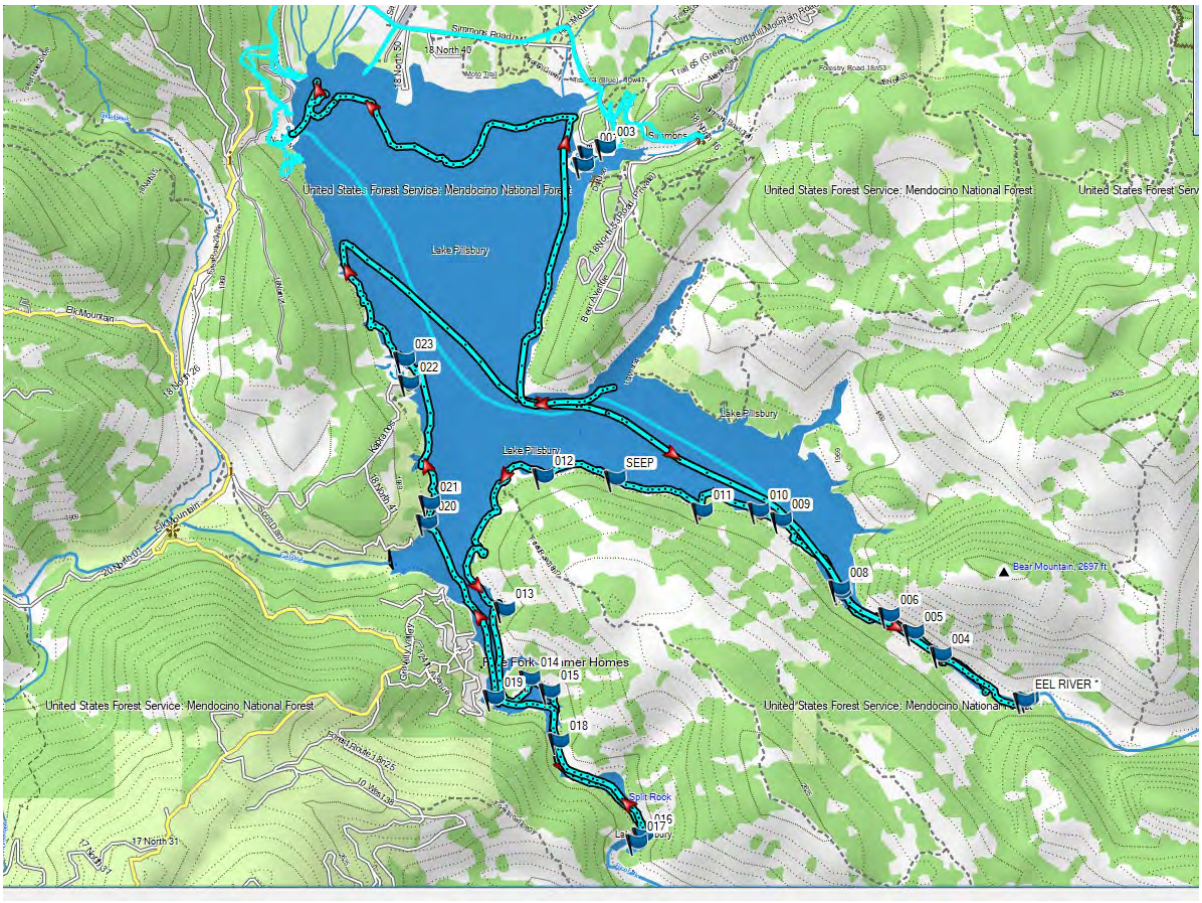


Figure 1. Map of Lake Pillsbury Reservoir showing survey tracks and turtle sighting waypoint locations. Segmented lines track primary boat survey path. Plain line in reservoir shows path to drop-off frog crew. Plain path on north shoreline shows driving path for land-based survey prior to starting boat survey.

Technical Memorandum

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Date December 20, 2019

To: Pacific Gas and Electric Company (Susan Kester)

From: Cardno, Inc.

Project: Potter Valley Project (FERC Project No. 77) Relicensing

RE: **AQ 11 – Special-Status and Invasive Aquatic Mollusks**

1 Introduction

This Technical Study Summary presents select data and information that was developed by the Cardno Team in association with the AQ 11 – Special Status and Invasive Aquatic Mollusks Technical Study Plan (AQ 10 – TSP) (PG&E 2018), which was one of 21 approved technical studies initiated by Pacific Gas and Electric Company (PG&E) in association with the relicensing process for the Potter Valley Project.[1] The information presented herein is based on work that was completed prior to January 25, 2019, the date that Pacific, Gas and Electric Company (PG&E) filed a notice with the Federal Energy Regulatory Commission (FERC) stating they would no longer be relicensing the Project (PG&E 2019).

2 Study Status

Table AQ 11 - 1 summarizes the status of the AQ 11 – Special Status and Invasive Aquatic Mollusks when work ended on January 25, 2019.

3 Work Products

The following information developed as part of this study is included in this TSS, organized by the primary study elements identified in the AQ 11 - TSP. Note that all maps, tables, and figures identified in this TSS will be uploaded to the Potter Valley Project SharePoint

3.1 On-going Potter Valley Project Invasive Mussel Monitoring Studies

PG&E has an ongoing Quagga/Zebra Mussel Prevention Program for Lake Pillsbury, which began in 2009 (PG&E 2011, 2016). This program includes the following:

- Phase 1 (completed): Vulnerability assessment of PG&E's lakes and reservoirs to determine the potential for mussel infestation;
- Phase 2 (ongoing): Public education program to inform reservoir users of the infestation risk and measures to prevent an infestation;

[1] PG&E filed a Proposed Study Plan (PSP) with the Federal Energy Regulatory Commission (FERC) that included 21 separate Technical Study Plans on September 14, 2017. After collaborating with the stakeholders, PG&E subsequently filed a Revised Study Plan (RSP) with the FERC on January 15, 2018. On February 15, 2018, the FERC issued its Study Plan Determination, approving 17 of the 21 studies included in the RSP and approving the remaining four studies with FERC staff recommended modifications.

- Phase 2 (ongoing): Monitoring for early detection of these mussels; and
- Phase 3 (if needed, in consultation with CDFW): Management of recreational, boating, and fishing activities.

Monitoring is performed monthly between May and October as weather and road conditions permit. The monitoring includes shoreline surveys, inspection of artificial substrate (settling plates), vertical plankton tows, and in-situ water quality (temperature, pH, and dissolved oxygen). For the shoreline survey, surfaces of docks, cables, concrete or logs, and shorelines are inspected for attached or dead mussels (CDFW 2008). Inspection of artificial substrate (settling plates) (CDFW 2009a), consists of an assembly of small plastic plates suspended in the water by a cable and inspected during site visits for attached mussels. The vertical plankton tow consists of a 12-inch diameter 63 µm net pulled through the water a specified distance (CDFW 2009b). Plankton net samples are composited, preserved, and sent in for laboratory analysis. The methods were adapted by CDFW from the California Department of Water Resources (CDWR) instructions for monitoring Quagga and Zebra mussels.

3.2 Special-Status Aquatic Mollusk Study Sites

The proposed study sites for special-status aquatic mollusks were co-located with the foothill yellow-legged frog (FYLF) sampling sites in Study AQ 10 – Special-Status Amphibians and Aquatic Reptiles. Mollusks are often found where boundary shear stress conditions are low (Howard and Cuffey 2003) similar to FYLF breeding sites. Twelve sites were proposed: 3 sites in the Eel River from Scott Dam to Van Arsdale Reservoir; 4 sites in the Eel River from Cape Horn Dam to Middle Fork Eel River; 3 sites in the East Branch Russian River from Potter Valley Powerhouse Tailrace to Lake Mendocino; and 2 comparison sites upstream of Lake Pillsbury (Table AQ 11-2 and Map AQ 11-1).

Resource agency staff was invited to participate in the “on the ground” study site selection. Specifically excluded from the study were areas where access was deemed unsafe (very steep terrain or high water flows) or private property for which PG&E did not receive approval from the landowner to enter the property to perform the study. PG&E made a good faith effort to obtain access to private property to conduct the study.

3.3 Special-Status Aquatic Mollusks Sampling

Special-status aquatic mollusk sampling was conducted as summarized below.

- USFS sensitive aquatic mollusk species are the subject of this study (13 potential species) (USFS 2013). One of the species, California floater (Anodonta californiensis), is known to be extant in the Eel River watershed (Howard and Cuffey 2003). Some of the species are unlikely to be present due to specific habitat requirements or known historical distributions that do not include the Eel River. A target list of special-status aquatic mollusk species that could potentially be found in the Study Area was developed through a literature review and consultation with knowledgeable parties. In addition, a list of non-native species such as Asian clam (Corbicula fluminea) that could potentially occur in the Study Area was developed.
- Potential habitat for the target species was identified and mapped using aerial photographs, Project maps, United States Geological Survey (USGS) 7.5 minute topographic maps, and existing literature.
- The number and location of representative survey sites (see Table AQ 11-2 and Map AQ 11-1) was determined based on the extent of identified suitable habitat.
- If mollusks were observed during other field surveys (e.g., mussels in channel or mussel shells out of channel), then sites were shifted in coordination with stakeholders to encompass these areas, as appropriate.

- Survey sites were established to minimum of 100 meters (m) in length and surveyed by wading in shallow areas and snorkeling in deeper areas. All submerged rock substrates, woody debris, and vegetation were searched. Mud and sand/silt substrates were searched by hand sieving.
- All sites were surveyed during the low flow summer/early fall period (e.g., July to October) for a minimum of two hours.
- Physical habitat characteristics were collected (mesohabitat type, water temperature, substrate composition, water velocity, and estimated channel gradient, width, and mean depth) at each study site.
- Aquatic gastropods were field identified to family, genus, or species using keys in Burch (1989), McMahon (1991), and Frest and Johannes (1999) or other appropriate keys, and representative specimens were collected and preserved for laboratory verification.
- Mussels were field identified using keys in Burch (1975a, b) and McMahon (1991) or other appropriate keys, and empty shells were collected if present for future reference

3.4 Environmental DNA

In addition to the visual searches, environmental DNA (eDNA) samples were collected at three locations (Lake Pillsbury, Eel River below Lake Pillsbury, and Eel River below Van Arsdale Reservoir) to detect presence of special-status mollusks for which DNA primers are available. Samples of eDNA were collected using protocols adapted from the USFS National Genomics Center for Wildlife and Fish Conservation.

4 Study Results

4.1 On-going Potter Valley Project Invasive Mussel Monitoring Studies

A summary of PG&E's on-going invasive mussel monitoring studies was not completed before work on this project was stopped on January 25, 2019. To our knowledge, the on-going invasive mussel work was completed by PG&E, but a summary of PG&E's ongoing invasive monitoring efforts is not provided in this report.

4.2 Special-Status Aquatic Mollusk Study Sites

Mollusk study sites were located within or near Study AQ 10 Amphibian and Reptile study sites. Surveys for mollusks were focused in locations with the best potentially suitable habitat for target species, which was determined in the field. Sites surveyed for mollusks were located within 1.5 river miles from proposed study site locations (Table AQ 11-2). Names and locations of sites surveyed, including GPS coordinates for site access points, are provided in Table AQ 11-3.

4.3 Special-Status Aquatic Mollusk Sampling

Field data collection for mollusks was completed at all sites during September 18–22, 2018. Native mollusks identified within the Study Area included the freshwater mussel *Margaritifera falcata* (western pearlshell), six air-breathing (pulmonate) snail taxa, and one gilled snail (pollution intolerant group) in the genus *Juga* (Table AQ 11-4). Non-native mollusks included *Radix auricularia* (marsh pond snail, exotic in California), *Potamopyrgus antipodarum* (New Zealand mud snail), and *Corbicula fluminea* (Asian clam). The distributions of these mollusks by site are summarized in Table AQ 11-5. Habitat data recorded for each site is summarized in Table AQ 11-6.

Margaritifera falcata was found at the two downstream-most sites in the East Branch Russian River (EB_ABLM and EB_MC), and at the two downstream-most sites in the Scott Dam to Van Arsdale Reach (ER158.4 and ER161.4) (Table AQ 11-5). Based on the size ranges of all mussels found (i.e., 10 to 100 mm in length), mussels larger than 60 mm were estimated to be adults (see Figure AQ 11-1). At EB_ABLM, 36 mussels with estimated size ranges of 30 to 100 mm were observed in a glide habitat burrowed in and along the river-right bank and 2 more mussels were observed in an upstream pool beneath large boulders (Table AQ 11-6). At EB_MC, eight mussels ranging in size

from 10 to 70 mm were observed in a glide habitat burrowed in and along the river-right bank. At ER158.4, one live mussel estimated at 100 mm was observed in a pool burrowed in sand/silt and the shell of a 35-mm mussel was found further downstream. At ER161.4, one live mussel estimated at 100 mm and one freshly dead mussel (108 mm) were observed in a glide habitat burrowed in sand/gravel beside a large downed tree.

Sites occupied by *Margaritifera falcata* had mean-column water velocities that ranged from 0.0 to 2.8 feet/second (ft/s), depending on mesohabitat type (Table AQ 11-6); however, mussels were predominantly found in glides with moderate mean-column water velocities in the range of 0.45 to 0.76 ft/s. Bottom water velocities at locations where mussels were burrowed ranged from 0.0 to 0.10 ft/s, and mussels were burrowed in areas with water depths ranging from 1 to 4 ft.

Pulmonate snails, particularly *Physa/Physella*, were widely distributed and abundant at all Project-affected study sites and at both comparison sites (ER173.7 and RF3.8). No gilled snails were found at any Project-affected study site, and *Juga* sp. (Figure AQ 11-2) was the only gilled snail species found at the comparison sites. *Juga* sp. was abundant (5 to 50 snails per square meter) in Thistle Glade Creek at its confluence with the Eel River (Site ER173.7), and was rare (only two individuals were found) in Willow Creek at its confluence with the Rice Fork (Site RF3.8). *Juga* sp. was not found in a second perennial tributary to the Rice Fork, located downstream from the Willow Creek confluence.

The invasive Asian clam (*Corbicula fluminea*) was found at all Project survey sites except ER166.4 at Benmore Creek, where high turbidity limited visibility and survey efficacy (Tables AQ 11-5 and AQ 11-6). Densities of *Corbicula fluminea* were high (20 to 100 clams per square meter) at all East Branch Russian River sites and at the Eel River sites located downstream of Van Arsdale Reservoir. Densities of *Corbicula fluminea* were lower (less than 10 clams per square meter) at the Eel River sites ER158.4 and ER161.4 located upstream of Van Arsdale Reservoir. No live *Corbicula fluminea* or shells of the species were observed in Lake Pillsbury or in either comparison site. The invasive New Zealand mud snail (*Potamopyrgus antipodarum*) was only found in the East Branch Russian River at EB_ABLM. Surveyors found and collected 12 individuals in a patch of aquatic vegetation along the river-left bank. The non-native marsh pond snail (*Radix auricularia*) was only found along the shores of Lake Pillsbury.

4.4 Environmental DNA

Environmental DNA (e-DNA) samples were in the process of being analyzed when work on this project was stopped. Therefore, e-DNA results are not provided in this report.

5 Discussion

Margaritifera falcata was the only mollusk with special-status designation that was observed in the Study Area. The current California Natural Diversity Database (CNDDB) status rank for Margaritifera falcata is S1S2, which indicates that the species is imperiled to critically imperiled in California (CDFW 2018). It is considered Near Threatened according to the IUCN Red List criteria (IUCN 2012) due to reported declines in watershed area and other qualitative criteria (see Blevins et al. 2017). Suitable habitat for Margaritifera falcata was present in the East Branch Russian River and in the Scott Dam to Van Arsdale Reach of the Eel River. Flow in the Eel River from Cape Horn Dam to the Middle Fork appeared to be too low relative to the channel width to provide adequate current required for Margaritifera falcata to respire and feed. The Cape Horn Dam to Middle Fork Reach was characterized by long stagnant pools and warm-water aquatic species. Mean-column water velocities at the sites surveyed in the Cape Horn Dam to Middle Fork Reach ranged from 0.0 to 0.4 f/s (Table AQ 11-6), and average mean-column water velocity per site was visually estimated to be less than 0.2 ft/s. In the Pit River, California, Margaritifera falcata are typically found in locations where mean-column water velocities range from 0.4 to 2.0 ft/s (PG&E 2017), which is similar to the range of velocities (0.45 to 0.76 feet/second) measured in locations occupied by Margaritifera falcata in the Scott Dam to Van Arsdale Reach of the Eel River and in the East Branch Russian River.

Unlike Margaritifera falcata, the USDA-Forest Service sensitive species Anodonta californiensis (i.e., California floater mussel) can occupy lotic and lentic habitats, and is found in higher densities in lentic habitat (Spring Rivers 2007). Potentially suitable habitat for Anodonta californiensis was present in Lake Pillsbury and in pool habitats of the Scott Dam to Van Arsdale and Cape Horn Dam to Middle Fork reaches of the Eel River; however, no shells of the species were found around Lake Pillsbury or elsewhere in the Study Area.

Based on research presented in Campbell at al. (2016), the Juga (Oreobasis) species found in Thistle Glade Creek at its confluence with upper Eel River and in Willow Creek at its confluence with Rice Fork (Table AQ 11-5) is likely a local or regional endemic that should be treated as a special-status species. The small, cold (13 °C), perennial tributaries where Juga was found were located upstream of the Project-affected area. Juga was more abundant in Thistle Glade Creek, where densities at the mouth ranged from 5 to 50 snails per square meter, than in Willow Creek, where only two individuals were found. Willow Creek had a less stable channel than Thistle Glade Creek, with more sand and gravel, which could explain the lower Juga densities in Willow Creek. Although the riparian zone at the mouth of Willow Creek was intact, it is likely that portions of the upper Willow Creek channel were impacted (destabilized) by the recent wildfire (Mendocino complex), which appeared to burn more of the lower Rice Fork watershed than the lower Eel River watershed.

Potentially suitable habitat for Juga and other gilled snails within the Project-affected river reaches would most likely be present at the confluences of perennial springs/seeps or tributaries with high oxygen concentration that offer either stable streamflow or stable substrates protected from surface erosion and scour. Three potentially suitable tributary streams were searched in September 2018; no molluscs were found in one unnamed tributary to the Rice Fork, in Trout Creek (tributary to Eel River downstream of Bucknell Creek), or in a small tributary to Salt Creek that was flowing along the Hearst-Willits access road. Four of the tributary streams located at or near the Eel River study sites (i.e., Benmore, Bucknell, Salt, and Outlet creeks) were dry (at the confluence) or too stagnant to support gilled snails. Private property constraints limited access to other potentially suitable tributary inflow locations.

The invasive Asian clam (Corbicula fluminea) was present throughout the Project-affected river reaches and the invasive New Zealand mud snail (Potamopyrgus antipodarum) was present at the lower East Branch Russian River site. The potential for spread of both species into Lake Pillsbury and other waters within and outside of the Study Area is high. The biological traits of both species contribute to their success as invaders. These traits include high growth rates, short life spans, high fecundity rates, self-fertilization or self-cloning (parthenogenesis), and unique dispersal mechanisms (Crespo et al. 2015, Poirier 2013, Rosa et al. 2013). Both species can live out of water for prolonged periods of time and be spread through many natural and human-related processes. Natural processes include passive transport by currents and active transport by attaching to the fur or feathers of terrestrial wildlife, including livestock and waterfowl, or being consumed and dispersed in the excrement of local fish species (Crespo et al. 2015, Poirier 2013). New Zealand mud snails may pass through the digestive tracts of fish and birds unharmed (Aarnio and Bonsdorff 1997; McCarter 1986; Bruce et al. 2009). Asian clam pediveligers or juveniles can be dispersed by attaching their byssal thread (mucilaginous drogue line) to mobile animals such as birds and mammals (Prezant and Chalermwat 1984; McMahon 2000; Sousa et al. 2008).

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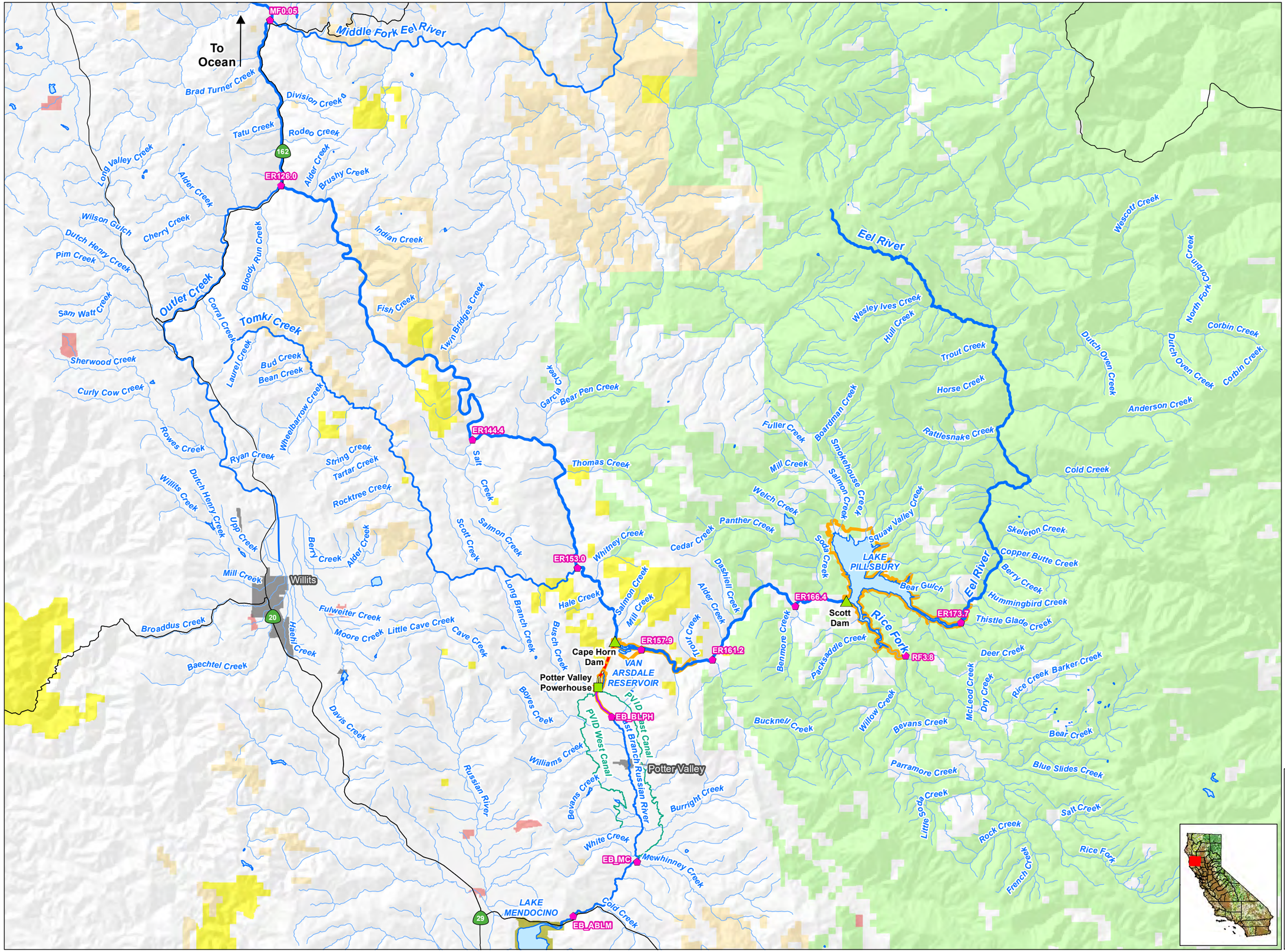
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Map



PG&E Project Facilities

- Powerhouse
- Dam
- Water Conveyance Feature
- Water Conduit
- Penstock
- Powerhouse Discharge Canal
- FERC Project Boundary

Other Features

- Road
- Canal
- Watercourse
- Water Body

Land Ownership**

- U.S. Forest Service
- U.S. Army Corps of Engineers
- Bureau of Land Management
- Bureau of Indian Affairs
- State of California
- Private (Blank)

**SOURCE: BLM, 2016

Sampling Locations

- Special-status Aquatic Mollusk Sampling

Pacific Gas and Electric Company

PG&E Potter Valley Project

Map AQ 11-1

Special-Status Aquatic Mollusk Sampling Locations

0 0.5 1 2 Miles

Projection: UTM Zone 10 N
Datum: NAD 83

Date: 11/7/2017

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Tables

Table AQ 11-1. AQ 11 – Special Status and Invasive Aquatic Mollusks Study Status (as of January 25, 2019)

Study Elements Completed / Data Collected	Resource Agency Consultation / Technical Working Group Updates	Technical Study Plan Variances (Data analysis and reporting schedule are shown on the implementation schedules provided in Attachment D)	Outstanding Study Elements (Data analysis and reporting schedules are shown on the implementation schedules provided in Attachment D)	Modifications to Ongoing Studies	Proposed New Studies
Ongoing Potter Valley Project Invasive Mussel Monitoring Studies • Performed monthly monitoring between May and October as weather and road conditions permitted. **Special Status Aquatic Mollusk Study Sites** • Co-located study sites for special-status aquatic mollusks with the FYLF sampling sties in Study AQ 10 – Special Status Amphibians and Aquatic Reptiles. • Invited resource agency staff to participate in 'on the ground' study site selection. **Special-Status Aquatic Mollusks Sampling** • Identified and mapped potential habitat for target species using aerial photographs, Project maps, USGS topographic maps and existing literature. • Shifted study sites as necessary due to observations of mollusks during other field surveys in coordination with stakeholders. • Surveyed all sites during the low flow summer/early fall period (e.g. July to October) for a minimum of two hours. • Collected physical habitat characteristics at each study site. • Identified aquatic gastropods and in the field, and collected representative specimens to preserve for laboratory verification. • Identified mollusks in the field, and collected empty shells if present for future reference. **Environmental DNA** • Sampled for eDNA during the summer/early fall period using the protocols of the USFS eDNA program at three locations.	• November 9, 2017: Conducted Aquatic Resources TWG meeting to discuss implementation of the AQ 11 – Special-status and Invasive Aquatic Mollusks TSP and continue discussion on previous TSPs, as needed. (UVCC) • May 22, 2018: Conducted Aquatic Resources TWG meeting to select mollusk sampling sites within the FYLF study site areas. (WebEx) • August 15, 2018: Conducted Aquatic Resources TWG meeting to continue discussion of mollusk sampling sites. (WebEx)		**Environmental DNA** Process the samples for up to seven aquatic species identified by the MNF that have existing markers developed for DNA identification.		

Table AQ 11-2 Proposed Special-Status Aquatic Mollusk Sites

Station ID	Station Description
Eel River Watershed	
ER173.7	Eel River above Lake Pillsbury near Thistle Glade Creek
RF3.8	Rice Fork above Lake Pillsbury near Willow Creek
ER166.4	Eel River at Benmore Creek
ER161.2	Eel River at Bucknell Creek
ER157.9	Eel River at Van Arsdale Reservoir near bridge
ER153.0	Eel River at Tomki Creek
ER144.4	Eel River at Salt Creek
ER126.0	Eel River at Outlet Creek
ER119.3	Eel River at Middle Fork Eel River
East Branch Russian River Watershed	
EB_BLPH	East Branch Russian River below Potter Valley Powerhouse at Busch Creek
EB_MC	East Branch Russian River at Mewhinney Creek
EB_ABLM	East Branch Russian River above Lake Mendocino

Table AQ 11-3 Aquatic Mollusk Study Sites Surveyed in September 2018

Site Name (Based on River Mile Location)	GPS Coordinates (Latitude, Longitude) at Site Access Point	Site Description
Eel River Watershed		
ER173.7	39°23'41.80"N 122°53'0.24"W	Eel River above Lake Pillsbury near Thistle Glade Creek
RF3.8	39°22'36.87"N 122°54'39.67"W	Rice Fork above Lake Pillsbury near Willow Creek
ER166.4	39°24'17.25"N 122°59'39.70"W	Eel River at Benmore Creek
ER161.4	39°22'41.83"N 123° 2'58.28"W	Eel River 0.2 mile upstream of Bucknell Creek
ER158.4	39°22'53.67"N 123° 5'25.88"W	Eel River upstream of Van Arsdale Reservoir
ER152.6	39°25'51.64"N 123° 8'40.97"W	Eel River 0.4 mile downstream of Tomki Creek
ER144.6	39°29'39.73"N 123°12'33.65"W	Eel River 0.2 mile upstream of Salt Creek
ER125.2	39°38'13.42"N 123°20'43.55"W	Eel River 0.8 mile downstream of Outlet Creek
ER119.6	39°42'32.03"N 123°21'17.74"W	Eel River 0.3 mile upstream of Middle Fork Eel River
East Branch Russian River Watershed		
EB_BLPH	39°20'11.55"N 123° 6'37.72"W	East Branch Russian River below Potter Valley Powerhouse at Gibson Road Bridge
EB_MC	39°15'15.68"N 123° 6'56.27"W	East Branch Russian River at public river access 1.5 miles downstream of Mewhinney Creek
EB_ABLM	39°14'29.98"N 123° 8'39.54"W	East Branch Russian River above Lake Mendocino

Table AQ 11-4 Taxonomic Information for Mollusks Found in the Study Area

Family, Tribe [1]	Scientific Name [2]	Common Name	Native to North American (Yes/No)	Global (G) or State (S) Status Rank [3]	Distribution and Habitat Preference
Pulmonate (Air-Breathing) Snails					
Lymnaeidae	*Galba/Fossaria modicella*	Rock fossaria	Yes	G5	Widespread. Found in shallow, low-velocity habitats such as margins of rivers, lakes, and marshes.
Lymnaeidae	*Pseudosuccinea columella*	Mimic Lymnaea or Striated pond snail	Yes, Exotic in California	G5	Widespread. Found along margins of small and large streams and rivers.
Lymnaeidae	*Radix auricularia*	Big-eared radix	No	G5	Globally distributed, introduced to North America. Threat impact considered low. Found in slow-moving rivers, lakes, and ponds with mud bottoms.
Physidae	*Physa/Physella* species	Tadpole or bladder snail	Yes	G5	Widespread, abundant, and tolerant to pollution. Habitat generalist.
Planorbidae, Planorbini	*Gyraulus parvus*	Ash gyro	Yes	G5	Widespread. Found in shallow, low-velocity habitats with rooted aquatic vegetation.
Planorbidae, "C-Clade"	*Planorbella trivolvis*	Marsh or pond ramshorn	Yes	G5	Widespread, abundant, and tolerant to pollution. Habitat generalist. Species is intermediate host for trematode fluke associated with Black Spot Disease (see Schaaf et al. 2017).
Planorbidae, Ancylini	*Ferrissia rivularis*	Creeping ancylid	Yes	G5	Widespread. Found in well-oxygenated rivers, streams, and lakes.
Tateidae (formerly Hydrobiidae)	*Potamopyrgus antipodarum*	New Zealand mud snail	No	G5, Invasive	In California, current distribution includes Owens, Klamath, Russian, Lower American, Stanislaus, Merced, San Joaquin, and Sacramento watersheds (CDFW 2018). Habitat generalist.

Family, Tribe [1]	Scientific Name [2]	Common Name	Native to North American (Yes/No)	Global (G) or State (S) Status Rank [3]	Distribution and Habitat Preference
Gilled Snails					
Pleuroceridae	*Juga* (*Oreobasis*) species	Juga	Yes	None; species possibly undescribed	Genus with narrow ranges and high level of local and regional endemism (Campbell et al. 2016). Found in clear, permanent springs, creeks, and rivers. Intolerant to excessive sedimentation and pollution.
Bivalves (Clams and Mussels)					
Corbiculidea	*Corbicula fluminea*	Asian clam	No	G5, Invasive	Currently widespread throughout U.S. and California. Habitat generalist.
Margaritiferidae	*Margaritifera falcata*	Western Pearlshell Mussel	Yes	S1S2	Broadly distributed west of the Continental Divide in well-oxygenated rivers and streams that support salmonids. Considered near threatened due to reported declines in watershed area and other qualitative criteria (see Blevins et al. 2017).

[1] Phylogenetic information from Albrecht et al. 2007.

[2] Identifications based on external morphology using Burch (1989) with updated taxonomic information if available; molluscan taxonomy is undergoing extensive revision and remains largely unresolved.

[3] NatureServe (2018) status Global Rank G5= Secure due to wide distribution and/or large population size. California Natural Diversity Database (CDFW, 2018) status State Rank S1 = Critically Imperiled due to extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state; S2 = Imperiled due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state.

Table AQ 11-5 Distribution by Site for each Mollusk Taxon Found in the Study Area

Site Number	Project Reach	Survey Date	Native to North America								Exotic			Total Number of Species
			Galba/Fossaria modicella	*Pseudosuccinea columella*	*Physa/Physella* species	*Gyraulus parvus*	*Planorbella trivolvis*	*Ferrissia rivularis*	*Juga* species [1]	*Margaritifera falcata*	*Radix auricularia*	*Potamopyrgus antipodarum*	*Corbicula fluminea*	
ER173.7	Above Lake Pillsbury	9/21/18			X			X	X					3
RF3.8	Above Lake Pillsbury	9/22/18			X				X					2
ER166.4	Scott Dam to Van Arsdale	9/20/18			X									1
ER161.4	Scott Dam to Van Arsdale	9/20/18	X		X	X		X		X			X	6
ER158.4	Scott Dam to Van Arsdale	9/20/18			X			X		X			X	4
ER152.6	Cape Horn Dam to Middle Fork	9/20/18			X	X							X	3
ER144.6	Cape Horn Dam to Middle Fork	9/19/18	X		X	X	X	X					X	6
ER125.2	Cape Horn Dam to Middle Fork	9/19/18			X	X	X						X	4
ER119.6	Cape Horn Dam to Middle Fork	9/19/18			X	X		X					X	4
EB_BLPH	EB Russian	9/18/18			X			X					X	3
EB_MC	EB Russian	9/18/18			X		X	X		X			X	5
EB_ABLM	EB Russian	9/18/18	X	X	X	X		X		X		X	X	8
Lake Pillsbury	Lake Margins	Anecdotal Search	X		X		X				X			3

[1] *Juga* was found in one tributary to upper Eel River (Thistle Glade Creek) and in one tributary to Rice Fork (Willow Creek); no individuals were found in the Eel River or Rice Fork mainstems.

Table AQ 11-6 Habitat Data and Survey Notes for Each Mollusk Study Site

Site Name and Location	Primary Mesohabitat Types Searched	Length (ft) of Habitat Searched	Mid-Day Water Temperature (°C)	Dominant and Subdominant Substrates	Mean-Column Water Velocity (f/s) Range at Site	Wetted Channel Width (ft) Range	Max Depth (ft)	Survey Notes
Lake Pillsbury	n/a	1000	no data	mud, sand	no data	n/a	1	Surveyed lake-influenced portions of Eel River and Rice Fork
ER173.7 Reference	glide	6000	15.0	cobble, gravel	no data	5 to 15	2	*Physa* abundant.
	riffle	500	15.0	cobble, gravel	no data	5 to 15	1	*Physa* abundant.
	off channel spring	50	13.0	bedrock, gravel	no data	2 to 5	3	Two individuals of *Ferrissia* found in isolated spring pool.
	tributary	30	13.0	boulder, cobble	no data	2 to 4	1	*Juga* abundant in Thistle Glade Creek; none in mainstem.
RF3.8 Reference	glide	7000	15.0	cobble, gravel	no data	5 to 15	2	*Physa* abundant.
	riffle	3000	15.0	boulder, cobble	no data	5 to 15	1	*Physa* abundant.
	off channel spring	500	13.0	bedrock, gravel	no data	2 to 5	3	No molluscs in spring
	tributary	40	13.0	boulder, cobble	no data	3 to 6	1	Two *Juga* individuals found in Willow Creek. None found in unnamed tributary further downstream.
ER166.4 at Benmore Creek	riffle	60	15.0	boulder, cobble	1.0 to 3.0	15 to 20	3	Highly turbid, visibility less than 1 ft. Conditions too poor to survey effectively.
	pool	50	15.0	boulder, cobble	no data	35 to 40	4	Benmore Creek was dry.
ER161.4	riffle	230	16.0	boulder, cobble	0.4 to 2.5	50 to 60	2	Riffle too swift to survey thoroughly.

Site Name and Location	Primary Mesohabitat Types Searched	Length (ft) of Habitat Searched	Mid-Day Water Temperature (°C)	Dominant and Subdominant Substrates	Mean-Column Water Velocity (f/s) Range at Site	Wetted Channel Width (ft) Range	Max Depth (ft)	Survey Notes
upstream of Bucknell Creek	pool	150	16.0	cobble, gravel	0.0 to 0.4	40 to 80	4	*Ferrissia* and *Physa* abundant. *Corbicula* less abundant at this site compared to sites downstream of Van Arsdale.
	glide	100	16.0	boulder, cobble	0.4 to 1.5	40 to 80	3	One freshly dead mussel found burrowed next to live mussel.
ER158.4 upstream of Van Arsdale	pool	100	16.0	gravel, sand	0.0 to 0.4	25 to 30	6	One live adult mussel in pool beneath swing rope. Shell of juvenile mussel found downstream.
	riffle	400	16.0	boulder, cobble	0.4 to 2.0	30 to 80	2	Noticeably more flow here than in lower Eel River sites. One adult *Margaritifera* found in pool with moderate current; shell of juvenile mussel found downstream.
ER152.6 downstream of Tomki Creek	pool	800	16.5	boulder, sand	0.0 to 0.1	40 to 90	15	Slow, stagnant pools. Signal crayfish highly abundant.
	riffle	50	16.5	boulder, cobble	0.2 to 1.0	12 to 20	2	Short, shallow riffle segments between long pools.
ER144.6 upstream of Salt Creek	pool	200	17.0	bedrock, gravel	0 to 0.4	50 to 60	7	Habitat under bridge looks good for *Margaritifera*, none found.
	glide	130	17.0	boulder, cobble	0.4 to 1.8	13 to 25	3	Better current here than in lower Eel River sites. *Planorbella* highly abundant (20 to 100 per square meter).
ER125.2	pool	170	17.5	bedrock, gravel	0.0 to 0.1	30 to 60	12	Pool too deep to survey bottom.

Site Name and Location	Primary Mesohabitat Types Searched	Length (ft) of Habitat Searched	Mid-Day Water Temperature (°C)	Dominant and Subdominant Substrates	Mean-Column Water Velocity (f/s) Range at Site	Wetted Channel Width (ft) Range	Max Depth (ft)	Survey Notes
downstream of Outlet Creek	riffle	170	17.5	cobble, gravel	0.2 to 1.0	20 to 30	2	Site chosen for short riffle segment. All pools too slow (long retention time) for *Margaritifera*. Would be good for *Anodonta* if present.
ER119.6 upstream of Middle Fork Eel River	glide	100	17.5	bedrock, boulder	0.2 to 0.5	30 to 40	5	Bottom covered in algae.
	riffle	60	17.5	boulder, cobble	0.2 to 1.0	30 to 40	1	Short riffle segment downstream of long pool. Some *Ferrissia* here.
	pool	170	17.5	bedrock, sand	0.0 to 0.1	140 to 160	15	Slow, stagnant pool with human waste scattered along river-right bank (did not survey this side of pool).
	backwater	20	18.0	boulder, cobble	0.0	100	1	*Physa* attached to vegetation in backwater. A few *Gyraulus* found.
EB_BLPH East Branch Russian	pool	150	16.0	sand, gravel	0.0 to 0.6	15 to 30	5	Slow pool above weir with suitable mollusc habitat. Colder (13°C) water coming up through gravel (subsurface tributary inflow). Lots of algae in spring area. *Corbicula* highly abundant in sand/gravel beneath layer of silt.
	riffle	250	16.0	cobble, gravel	1.0 to 2.8	20 to 30	2	Fast riffle below weir. Some mollusc habitat in margins where only *Corbicula* was found.
EB_MC East Branch Russian	pool	150	16.0	bedrock, sand	0.0 to 0.5	20 to 30	10	Slow pool with large bedrock boulders and sand. No molluscs.
	glide	150	16.0	cobble, gravel	0.5 to 1.0	20 to 30	3	8 mussels burrowed in river-right bank upstream of downed tree.

Site Name and Location	Primary Mesohabitat Types Searched	Length (ft) of Habitat Searched	Mid-Day Water Temperature (°C)	Dominant and Subdominant Substrates	Mean-Column Water Velocity (f/s) Range at Site	Wetted Channel Width (ft) Range	Max Depth (ft)	Survey Notes
EB_ABLM East Branch Russian	pool	120	17.0	bedrock, sand	0.1 to 0.5	30 to 40	12	2 mussels found beneath large boulders in silty sand.
	glide	75	17.0	boulder, gravel	0.5 to 2.8	30 to 40	3	36 mussels burrowed in river-right bank. Lots of vegetation in channel margins where New Zealand mud snails were found.

Notes: All sites were located in low-gradient river/stream segments with slopes (i.e., rise over run) between 0 and 0.5 percent. Survey lengths and wetted channel dimensions were estimated in the field.

Figures



Figure AQ 11-1 **Photographs of *Margaritifera falcata* showing adult mussel *in situ* (left photo) and two subadults (right photo).**



Figure AQ 11-2 **Photographs of *Juga* (*Oreobasis*) species showing adult snail *in situ* and size ranges of collected vouchers.**