



# Filed Electronically

March 2, 2021

Kimberly D. Bose, Secretary Nathaniel J. Davis, Sr., Deputy Secretary Federal Energy Regulatory Commission 825 First Street, N.E. Washington, D.C. 20426

Subject: 2021 Progress Report 1

Bishop Creek Hydroelectric Project, FERC Project No. 1394

Dear Ms. Bose:

Southern California Edison Company (SCE) hereby files with the Federal Energy Regulatory Commission (FERC) its first Progress Report of 2021. SCE continues to implement the approved study plans supporting the relicensing of the Bishop Creek Hydroelectric Project (FERC Project 1394).

SCE will forward the "Acceptance for Filing" e-mail generated by FERC's e-filing service to all contacts on the distribution list either via e-mail or U.S. Mail, as appropriate. This filing will also be placed on SCE's Bishop Creek Relicensing Website (<a href="www.sce.com/bishopcreek">www.sce.com/bishopcreek</a>) where it will be available for download and available for review by appointment at the Bishop Creek Hydro Headquarters Office – 4000 E. Bishop Creek Road, Bishop, CA 93514.

SCE looks forward to continuing to work with FERC and other interested parties on the Bishop Creek relicensing. Should there be any questions or concerns regarding this filing please contact Matthew Woodhall, Senior Regulatory Advisor, by phone at (626) 302-9596 or via e-mail at matthew.woodhall@sce.com.

Sincerely,

Docusigned by:

Wayne Illun

Wayne P. Allen

Principal Manager

Regulatory Support Services

Southern California Edison Company

#### Attachments:

Progress Report 1 Memorandum and Appendix

# **MEMORANDUM**

To: Federal Energy Regulatory Commission

Docket P-1394-080

FROM: Bishop Creek Relicensing Team

CC: Technical Work Groups

FERC Distribution List

**DATE:** March 3, 2021

**RE:** Quarterly Study Progress Report No. 1

# INTRODUCTION

On November 4, 2019 the Federal Energy Regulatory Commission (FERC) approved Southern California Edison's (SCE) Technical Study Plan (TSP) for the relicensing of the Bishop Creek Project (FERC No. 1394). As provided for in 18 Code of Federal Regulation (CFR) 5.11(b)(3), the TSP included provisions for periodic progress reports. These progress reports are to be distributed to the Technical Working Groups (TWG) and the Federal Energy Regulatory Commission (FERC) on a quarterly basis as required by the Study Plan Determination (SPD). The progress reports are intended to be brief, technical memoranda that will at a minimum summarize work completed to date, any deviations from previously described methods, and any unforeseen issues that may warrant further stakeholder consultation. This memorandum serves as the first progress report for the Bishop Creek Project for 2021. The Initial Study Report (ISR) serve as the final quarterly progress report for 2020, which was filed October 30, 2020.

A virtual ISR meeting was held November 10, 2020 and the meeting summary was filed with FERC on November 23, 2020. One formal comment letter was received during the ISR comment period. The California State Water Resources Control Board filed a letter dated December 18, 2020 in support of the ongoing Bishop Creek water quality study program. No other comments were received.

# **PROGRESS REPORT**

SCE completed or initiated several resource studies in 2019 as outlined in the revised TSP and SPD. As such, several studies conducted their second study season in 2020 and are now complete. Table 1 provides a summary of the field efforts conducted to date and a schedule for remaining studies and data analysis. Those studies impacted by the COVID-19 pandemic are identified in the table below. SCE is currently drafting technical reports for each study program. As discussed in the ISR Meeting, the first batch of these are being issued for TWG review concurrent with the filing of this Progress Report. An Annual Water Quality Report for work completed in 2020 is attached to this submittal.

Attachment:

Attachment 1 – Annual Water Quality Report

**Kleinschmidt** 

<sup>&</sup>lt;sup>1</sup> Issued by FERC on November 4, 2019.

TABLE 1 BISHOP CREEK HYDRO RELICENSING PROJECT 2019 FIELD STUDY SUMMARY

STUDY NAME	STATUS	MODIFICATIONS TO METHODOLOGY AND/OR NEEDED				
		CONSULTATION				
	TERRESTRIAL AND BOTANICAL					
TERR 1 – Assessment of Bishop Creek Riparian Community	This survey effort is complete, and a technical report is being drafted to be finalized in 2021.	No changes or modifications to methodology and no additional field work is anticipated for the duration of this relicensing process.				
TERR 2 – Invasive Plants	This survey effort is complete, and a technical report is being drafted to be finalized in 2021.	No changes or modifications to methodology and no additional field work is anticipated for the duration of this relicensing process.				
TERR 3 – Assessment of Special Status Plants	This survey effort is complete, and a technical report is being drafted to be finalized in 2021.	No changes or modifications to methodology and no additional field work is anticipated for the duration of this relicensing process.				
TERR 4 – Wildlife	This survey effort is complete, and a technical report is being drafted to be finalized in 2021.	No changes or modifications to methodology and no additional field work is anticipated for the duration of this relicensing process.				
	AQUATICS AND AQUATIC PROCESSES					
AQ 1 – Instream Flow Needs and Assessment	This survey effort is complete, and a technical report is being submitted to the Aquatics TWG for review.	No changes or modifications to methodology and no additional field work is anticipated for the duration of this relicensing process.				
AQ 2 – Operations Model	The Operations Model has been configured and populated with historical data. The Relicensing Team continues to calibrate the model with SCE Operations.	No changes or modifications to methodology and no field work is anticipated for the duration of this relicensing process.				
AQ 3 – Fish Distribution Baseline Study (Creek)	This survey effort is complete, and a technical report is being submitted to the Aquatics TWG for review.	No changes or modifications to methodology and no additional field work is anticipated for the duration of this relicensing process.				
AQ 4 –Baseline Fish Distribution Study (Reservoirs)	This survey effort is complete, and a technical report is being submitted to the Aquatics TWG for review.	No changes or modifications to methodology and no additional field work is anticipated for the duration of this relicensing process.				
AQ 5 – Water Quality	Water Quality sampling is being conducted at Lake Sabrina, South Lake, Intake No. 2 reservoir and locations along Bishop Creek throughout the summer of 2021 as outlined in the revised Water Quality Implementation Plan submitted to FERC in April 2020. An Interim Annual Report is included with this filing as Attachment 1.	No additional changes or modifications to methodology.				
AQ 6 – Sediment and Geomorphology	Channel and substrate surveys were conducted in September 2019. Tracer rocks were deployed into Bishop Creek in August of 2020. SCE intends to complete this study and retrieve the rocks in the summer of 2021.	After a review of field conditions at bankfull flow, SCE does not believe the planned use of a bed-load sampler can be safely deployed or effectively implemented via wading, and notes that necessary infrastructure (bridges) for deployment of the sampler is not present for the desired sample reaches. To help resolve the question relating to sediment mobility that can't be answered by the bedload sampling that is not feasible, SCE proposed to perform a tracer rock study during higher flows to understand when various size substrates are mobilized. SCE discussed the change in methods with the TWG				

STUDY NAME	STATUS	MODIFICATIONS TO METHODOLOGY AND/OR NEEDED				
		CONSULTATION				
		during review of the 2 <sup>nd</sup> progress report in May 2020 and no				
		concerns were raised.				
	HUMAN ENVIRONMENT AND COMMUNIT					
REC 1 – Recreation Use and Needs	Off-site recreation use surveys were implemented in 2020. SCE is currently working with stakeholders and the Recreation TWG on implementation of the remaining objectives of the REC 1 study during the 2021 recreation season. However, because of continued health concerns over in-person surveys, considerations for revised methods and/or schedules are being	Due to road construction on the South Lake Road and travel restrictions relating to COVID-19, a revised implementation schedule for the REC 1 study plan was developed in consultation with the USFS which moved the general recreation field surveys to the 2021 recreation season.				
	discussed with the Recreation TWG.	The Recreation TWG will be considering alternative methods and schedules to address the Recreation Use and Needs Study Objectives, which may result in the need for a study plan variance and/or modification with FERC. SCE will provide a timely request for a modification upon completion of consultation with the TWG.				
REC 2 – Recreation Facilities Condition and Public Accessibility	This survey effort is complete, and a technical report is being drafted to be finalized in 2021.	No changes or modifications to methodology and no additional field work is anticipated for the duration of this relicensing process.				
LAND 1 – Project Boundary and Lands	This study is underway and is being informed by the results of numerous surveys. The results of the study and its recommendations will be incorporated into the DLA for review.	No changes or modifications to methodology and no additional field work is anticipated for the duration of this relicensing process.				
CULT 1 – Cultural Resources	Field surveys were delayed due to wildfires in the project area in the summer of 2020. Delayed studies were conducted in the fall of 2020. Snow in the higher elevations prevented recording of two archaeological sites. Additional architectural surveys and archaeological site evaluations are currently planned for the spring and summer of 2021.	No changes or modifications to methodology with the exception of submitting separate archaeological and architectural reports. The Relicensing Team will submit their ARPA permits to the INF and BLM Archaeologists in early spring 2021.				
CULT 2 – Tribal Resources	This study will be implemented in 2021, when conditions warrant safe interview techniques. Work on background studies is continuing, although access to archives is creating some slowdown.	Due to COVID-19, the Relicensing Team has had difficulty scheduling interviews with tribes and conducting outreach to tribal councils. Background research has been initiated and no changes to methodology are expected.				

# BISHOP CREEK 2020 WATER QUALITY ANNUAL REPORT

# BISHOP CREEK HYDROELECTRIC PROJECT (FERC PROJECT NO. 1394)



Energy for What's Ahead<sup>™</sup>

# Bishop, California

Prepared by:

Kleinschmidt

www.KleinschmidtGroup.com

February 2021

# BISHOP CREEK HYDROELECTRIC PROJECT (FERC No. 1394)

# Bishop Creek 2020 Water Quality Annual Report

# Prepared for:



Bishop, California

February 2021

Prepared by:

**Kleinschmidt** 

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# DRAFT BISHOP CREEK WATER QUALITY ANNUAL REPORT

# BISHOP CREEK HYDROELECTRIC PROJECT (FERC No. 1394)

# SOUTHERN CALIFORNIA EDISON

# 1.0 INTRODUCTION

Southern California Edison Company (SCE) is the licensee, owner and operator of the Bishop Creek Hydroelectric Project (Project) (Federal Energy Regulatory Commission [FERC] Project No. 1394). The Project is located on Bishop Creek in Inyo County, California, approximately 5 miles southwest of the city of Bishop (Figure 1-1). The licensee operates the Project under a 30-year license issued by FERC on July 19, 1994. As the current license is due to expire on June 30, 2024, SCE has initiated the formal relicensing process utilizing the Integrated Licensing Process (ILP) by filing the Notification of Intent (NOI) and Pre-Application Document (PAD) with FERC on May 1, 2019.

During the TWG meetings, and in written comments, stakeholders identified the need to develop an understanding of water quality parameters in the Project area. Draft study plans were distributed with the PAD and revised after receiving comments pursuant to 18 CFR § 5.9. FERC approved the Revised Study Plan (RSP) with its Study Plan Determination on November 4, 2019. After filing the Initial Study Report (ISR) with FERC on October 30, 2020, SCE held an ISR meeting on November 10, 2020. Preliminary data on the water quality study program was presented in the ISR; this Water Quality Annual Report builds on that materials and presents the results of the 2020 monitoring program.

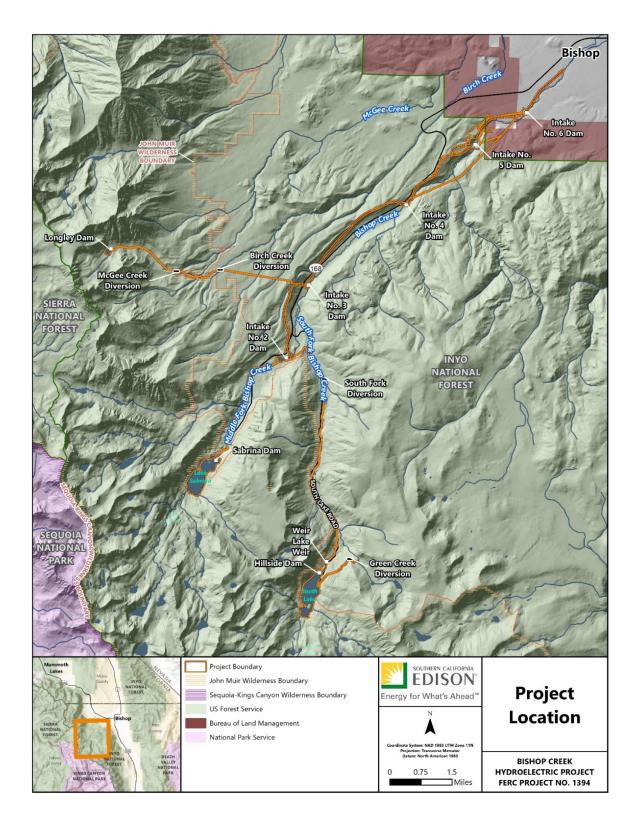


Figure 1-1 Project Location Map

# 2.0 PROJECT NEXUS

Although the Project is located in a relatively clean granitic watershed with limited factors to impact water quality, stakeholders expressed a need to establish baseline conditions to establish a baseline for the future. Water storage and diversion activities could affect water quality in Project waters or contribute to water quality issues downstream.

The goals and objectives of this study are:

- Monitor water quality<sup>1</sup> for 2 years on a regular basis at multiple monitoring sites:
  - Above-Project: establish reference baseline conditions of inflow from natural runoff in the watershed
  - In-Project: assess how/if water quality changes throughout various facilities within the Project Area (i.e., various depths and locations in South Lake and Lake Sabrina, powerhouse discharges)
  - Below-Project: assess any/all potential impacts Project operations may have on water quality that is leaving the Project Area
- Monitor water temperature for 2 years on a regular basis at multiple monitoring sites
  - Above-Project: establish reference baseline conditions of inflow from natural runoff in watershed
  - In-Project: assess how/if water temperature changes throughout various facilities within Project Area (various depths and locations in South Lake and Lake Sabrina, powerhouse discharges)
  - Below-Project: assess any/all impacts Project operations may have on water temperature that is leaving the Project Area
- Ensure that future Project facilities and operations are:
  - Consistent with the water quality goals and objectives for Bishop Creek in the Water Quality Control Plan (Basin Plan) for the Lahontan Region (LRWQCB 1995)
  - Consistent with the desired conditions described in the 2018 Land Management Plan for the Inyo National Forest for Social and Economic Sustainability and Multiple Uses with the desired conditions described in "Land Management Plan for the Inyo National Forest" (USDA, 2018) as they relate to ecological sustainability and diversity of plant and animal communities.

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<sup>&</sup>lt;sup>1</sup> For the purposes of this study, water quality is being monitored for dissolved oxygen (DO), water temperature, turbidity, conductivity, total dissolved solids, orthophosphate, nitrate, total nitrogen and E.coli.

# 3.0 REVIEW OF EXISTING INFORMATION

# 3.1. WATER QUALITY BENEFICIAL USES, OBJECTIVES, GOALS

The state of California has responsibility for maintaining water quality standards through the federal Clean Water Act (CWA). The SWRCB and Lahontan Regional Water Quality Control Board (LRWQCB) are responsible for the protection of beneficial uses of water resources within its jurisdiction and use planning, permitting, and enforcement authorities to meet this responsibility. Every water body within the LRWQCB jurisdiction is designated a set of beneficial uses that are protected by appropriate water quality objectives as described in the Basin Plan for the Lahontan Region ([Basin Plan], LRWQCB, 1995).

For smaller tributary streams in which beneficial uses are not specifically designated, they are granted with the same beneficial uses as the streams, lakes, or reservoirs to which they are a tributary. Table 3-1 lists the water bodies to which this Project drains and their beneficial use designations.

The Basin Plan defines the beneficial use abbreviations as the following:

- Municipal and Domestic Supply (MUN) Uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.
- Agricultural Supply (AGR) Beneficial uses of waters used for farming, horticulture, or ranching, including, but not limited to, irrigation, stock watering, and support of vegetation for range grazing.
- **Industrial Process Supply (PRO)** Uses of water for industrial activities that depend primarily on water quality.
- Industrial Service Supply (IND) Uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, geothermal energy production, hydraulic conveyance, gravel washing, fire protection, or oil well repressurization.
- **Ground Water Recharge (GWR)** Beneficial uses of waters used for natural or artificial recharge of ground water for purposes of future extraction, maintenance of water quality, or halting of saltwater intrusion into freshwater aquifers.
- Freshwater Replenishment (FRSH) Beneficial uses of waters used for natural or artificial maintenance of surface water quantity or quality (e.g., salinity).
- Hydropower Generation (POW) Uses of water for hydroelectric power generation.
- Water Contact Recreation (REC-1) Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, or use of natural hot springs.

- Non-Contact Water Recreation (REC-2) Uses of water for recreational activities
  involving proximity to water, but not normally involving body contact with water
  where ingestion of water is reasonably possible. These uses include, but are not
  limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tide pool
  and marine life study, hunting, sightseeing, and aesthetic enjoyment in conjunction
  with the above activities.
- Commercial and Sportfishing (COMM) Beneficial uses of waters used for commercial or recreational collection of fish or other organisms including, but not limited to, uses involving organisms intended for human consumption.
- Cold Freshwater Habitat (COLD) Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
- **Wildlife Habitat (WILD)** Uses of water that support terrestrial or wetland ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats or wetlands, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.
- Preservation of Biological Habitats of Special Significance (BIOL) Beneficial
  uses of waters that support designated areas or habitats, such as established
  refuges, parks, sanctuaries, ecological reserves, and Areas of Special Biological
  Significance (ASBS), where the preservation and enhancement of natural resources
  requires special protection.
- Spawning, Reproduction, and/or Early Development (SPWN) Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.

The water quality objectives include both numeric and narrative standards for surface water that are based on criteria that protect both human health and aquatic life. If water quality is maintained at levels consistent with these objectives, beneficial uses are considered protected. Applicable water quality objectives and standards in the Basin Plan are provided in Table 3-2 and Table 3-3.

Table 3-1 Water Body Beneficial Use Designations

		Beneficial Use																				
	MUN	AGR	PRO	QN	GWR	FRSH	NAN	POW	REC1	REC-2	СОММ	AQUA	WARM	COLD	SAL	WILD	BIOL	RARE	MIGR	SPWN	WQE	FLD
SURFACE WATER BODY	Municipal and Domestic Supply	Agricultural Supply	Industrial Process Supply	Industrial Service Supply	Groundwater Recharge	Freshwater Replenishment	Navigation	Hydropower Gen.	Water Contact Recreation	Non-Contact Water Recreation	Commercial and Sport Fishing	Aquaculture	Warm Freshwater Habitat	Cold Freshwater Habitat	Inland Saline Water Habitat	Wildlife Habitat	Special Biological Habitats	Rare, Threatened & Endangered Species	Migration of Aquatic Organisms	Spawning, Reproduction & Dev.	Water Quality Enhancement	Flood Peak Attenuation/Flood Water Storage
Upper Owens Hy	ydrolo	gic Ar	ea Hyd	Irolog	ic Unit	603.20	)															
McGee Creek	X	X			Х	X		X	X	Х	X			X		X	X			X		
Bishop Creek (above intakes)	x	x						X	X	x	X			x		X				x		
Intake 2 Reservoir	х							х	х	х	X			Х		X						
Bishop Creek (below intakes)	х							X	х	х	х			Х		х				х		
Bishop Creek (below last Powerhouse)	^	X		х	x				x	x	x			x		x				x		

<u>Table 3-2 Water Quality Objectives for Hydrologic Unit 603.20 - Upper Owens River Hydrologic Unit</u>

CONSTITUENT/ PARAMETER	WATER QUALITY OBJECTIVE
Ammonia	Shall not exceed the values in Tables 3-1 to 3-4 in LRWQCB Basin Plan.
Bacteria	The fecal coliform concentration during any 30-day period shall not exceed a log mean of 20/100 milliliters (ml), nor shall more than 10 percent of all samples collected during any 30-day period exceed 40/100 ml.
Biostimulatory Substances	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect the water for beneficial uses.
Chemical Constituents	Waters designated as MUN shall not contain concentrations of chemical constituents exceeding the maximum contaminant level (MCL) or secondary maximum contaminant level (SMCL) based upon drinking water standards specified in Title 22.
Chlorine, total residual	For the protection of aquatic life, total chlorine residual shall not exceed either a median value of 0.002 mg/L or a maximum value of 0.003 mg/L. Median values shall be based on daily measurements taken within any 6-month period.
Color	Water shall be free of discoloration that causes nuisance or adversely affects beneficial uses.
Dissolved Oxygen (DO)	The DO concentration, as percent saturation, shall not be depressed by more than 10 percent, nor shall the minimum DO concentration be less than 80 percent of saturation. For waters with the beneficial uses of COLD, COLD with SPWN, WARM, and WARM with SPWN, the minimum DO concentration shall not be less than that specified in Table 3-6 of the LRWQCB Basin Plan.
Floating Material	Water shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.
Oil & Grease	Waters shall not contain oils, greases, waxes, or other materials in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water that cause nuisance, or that otherwise adversely affect the water for beneficial uses.
pH	In fresh waters with designated beneficial uses of COLD or WARM, changes in normal ambient pH levels shall not exceed 0.5 pH units. For all other waters of the region, the pH shall not be depressed below 6.5 nor raised above 8.5.
Radioactivity	Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
Sediment	The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.
Settleable Material	Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses.
Suspended Material	Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.
Tastes and Odors	Waters shall not contain taste or odor-producing substances in concentrations that impart undesirable tastes or odors to fish or other edible products of aquatic origin that cause nuisance, or that adversely affect the water for beneficial uses.

Temperature	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Quality Control Board (RWQCB) that such alteration in temperature does not adversely affect beneficial uses.
Toxicity	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Turbidity	Waters shall be free of changes in turbidity that cause nuisance or adversely affect the water for beneficial uses. Increases in turbidity shall not exceed natural levels by more than 10 percent.

Source: LRWQCB 1995

<u>Table 3-3 Water Quality Objectives for Certain Water Bodies in Upper Owens</u>

<u>River Hydrologic Unit</u>

SURFACE WATERS	OBJECTIVE (mg/L) a,b											
SURFACE WATERS	TDS	CI	F	В	NO <sub>3</sub> -N	Total N	PO <sub>4</sub>					
Lake Sabrina	<u>10</u>	2.0	0.10	0.05	0.2	<u>0.3</u>	0.03					
Lake Sabrina	17	3.0	0.10	0.05	0.3	0.6	0.05					
South Lake	<u>12</u>	<u>3.7</u>	0.10	0.02	<u>0.1</u>	<u>0.1</u>	0.03					
South Lake	20	4.3	0.10	0.02	0.1	0.4	0.04					
Bishop Creek	<u>27</u>	<u>1.9</u>	<u>0.15</u>	0.02	<u>0.1</u>	<u>0.1</u>	<u>0.05</u>					
(Intake 2)	29	3.0	0.15	0.02	0.2	0.4	0.09					

Source: LRWQCB, 1995

B = Boron

CI = Chloride

F = Fluoride

N = Nitrogen, Total

NO<sub>3</sub>-N = Nitrate as Nitrogen

PO<sub>4</sub> = Orthophosphate, dissolved

TDS = Total Dissolved Solids (Total Filterable Residue)

# 3.2. Previous Investigations

# 3.2.1. BISHOP CREEK

In 1974, Environmental Science and Engineering (ESE 1975) in cooperation with the University of California at Los Angeles conducted an environmental baseline study of the water quality of Bishop Creek. The report concluded that the water quality of Bishop Creek was excellent and displayed the following characteristics:

Total dissolved solids (TDS) remained very low throughout the summer, less than 30 mg/L

<sup>&</sup>lt;sup>a</sup> Annual average value/90th percentile value.

<sup>&</sup>lt;sup>b</sup> Objectives are in mg/L and are defined as follows:

- Calcium (Ca) was the predominant cation in all sampled waters and surface water composition reflected the general geology of the drainage basin
- Nitrate and phosphate levels were low, generally less than 0.10 mg/1 and 0.05 mg/L, respectively

Water temperatures generally increased downstream; the report further stated that Ca was the dominant cation and that the North Fork of Bishop Creek had higher values than other drainages and appeared to be related to the geology (marble roof pendants) that is found in the upper reaches of the North Fork. In addition, the report noted that as flow decreased in Bishop Creek increases in various ions were noted and was attributed to groundwater providing a larger percentage of the baseflow of the stream. The groundwater generally has more contact time with the underlying bedrock resulting in higher concentrations of major ions (ESE, 1975).

The ESE report (1975) determined that similar water characteristics that were reported from previous investigations with increasing dissolved constituents coincides with decreasing elevation. The dominant anion was bicarbonate, and the dominant cations were Ca and sodium. In addition, the water quality of Bishop Creek at the furthest downstream site (below Powerhouse No. 6) had lower concentrations of alkalinity and dissolved constituents. The ESE report (1975) stated that the likely reason for the decrease was the routing of water for power generation purposes. Table 3-4 and Table 3-5 provides a summary of the water quality characteristics for the various watersheds sampled.

Minor amounts of boron, barium, aluminum, iron, and manganese were found in the various drainages with the highest levels generally found in Bishop Creek below the confluence with South Fork.

# 3.2.2. SOUTH LAKE AND LAKE SABRINA

In 1986, the University of California at Riverside conducted a water quality investigation of Bishop Creek and selected eastern Sierra Nevada lakes for SCE (Lund, n.d.). The following discussion presents the results of that investigation.

Like most Sierra reservoirs, South Lake and Lake Sabrina have very steep sides and considerable annual fluctuations in surface elevations which severely limit the production of littoral aquatic vegetation. There have been no comprehensive limnological studies of these lakes. Limited water quality profiling of the lakes was conducted from June 1986 until November 1987 and are presented in Table 3-6 and Table 3-7. Field measurements of water temperature, pH and DO was conducted at one location on each lake. In general, water temperature varied from lows of 32.3°F in March to 59.7°F in late August. Overall, water temperature decreased with increasing depth. DO ranged from 11.98 mg/L in early March to 2.44 mg/L in late August and was generally above 100 percent saturation except in August when DO values dropped to less than 38 percent saturation.

<u>Table 3-4 Bishop Creek - Project No. 1394 Physical and Chemical Characteristics of North and Middle Forks of Bishop Creek June-November 1974</u>

					SAN	IPLE LOCATION	ON				
	S1	S2	S2A	S3	S4	S6	S6A	<b>S</b> 7	<b>S</b> 8	S19 Bis Creek @ 395 (*)	
PARAMETER	RANGE	RANGE	RANGE	RANGE	RANGE	RANGE	RANGE	RANGE	RANGE	SPRIN G	FALL
Ca (mg/L)	1.7-3.7	2.3-4.9	1.9-2.9	1.9-3.2	2.2-2.6	2.3-3.0	2.3-3.3	2.1-2.7	2.1-3.0	9.6	8.8
Magnesium (mg/L)	0.1-0.16	0.13-0.18	0.12-0.16	0.14-0.22	0.17-0.19	0.18-0.22	0.18-0.23	0.13-0.22	0.13-0.16	0.7	0.5
Sodium (mg/L)	0.4-0.8	0.8-1.1	0.6-1.0	0.5-1.0	0.6-0.8	0.80.8-1.1	0.7-1.1	0.8-1.2	0.6-0.7	4.5	3.4
Nitrate as N (mg/L)	0.03-0.11	0.08-0.13	0.05-0.12	0.05-0.1	0.05-0.12	0.05-0.13	0.06-0.12	0.06-0.12	0.06-0.1	0.3	0.8
Phosphate as P (mg/L)	0.03-0.04	0.02-0.05	0.02-0.05	0.02-0.04	0.02-0.05	0.02-0.03	0.01-0.03	0.01-0.04	0.01-0.03		
TDS (mg/L)	6-27	8-26	7-20	8-21	9-16	11-21	20	11-21	8-10		-
Water Temperature (deg °C)	10.0-11.5	8.5-11.0	10.0-13.5	9.0-13.5	10.0-14.0	10.0-15.0	12.5-14.5	11.0-15.0	9.9-15.0	12.5	8.5
pH (units)	5.5-7.5	5.0-7.1	5.0-8.8	5.0-7.4	5.0-6.8	5.0-8.2	5.5-7.2	5.0-8.4	5.0-7.3	7.5	7.29
DO (mg/L)	6.6-8.1	6.7-9.4	6.8-9.1	6.8-8.8	6.8-7.5	6.4-8.6	6.3-7.7	7.46.6-8.1	6.2-7.8	9.2	9.3

Source: ESE, 1975

(\*) Spring: May 1974; Fall: November 1974

(--) indicates analysis not performed.

<u>Table 3-5 Physical and Chemical Characteristics of Middle and South Forks of Bishop Creek, McGee Creek and Birch Creek (a, b) May 1986 - December 1987</u>

	WATERSHED/SAMPLE LOCATIONS (C)												
	MIDDLE FORK OF BISHOP CREEK	SOUTH FORK OF BISHOP CREEK	BISHOP CREEK BELOW SOUTH FORK	McGEE CREEK	North Fork of Birch Creek	South Fork of Birch Creek							
PARAMETER	1, 2, 3, 4	15, 25, 35, 45	5, 6, 7, 8, 9, 10, 17	11, 12	13, 14,	15, 16							
Calcium (mg/L)	1.3-10.0	2.5-47.3	4.1-20	2.58-10.3	5.5-13.9	13.8-15.3							
Magnesium (mg/L)	0.1-0.9	0.3-5.7	0.4-4.9	0.20-0.77	0.3-0.5	1.34-1.59							
Sodium (mg/L)	0.3-2.7	0.7-4.8	1.2-16.7	1.00-2.77	1.8-2.5	1.93-2.85							
Potassium (mg/L)	0.04-1.0	0.4-3.3	0.1-2.0	0.50-1.67	0.6-1.3	1.38-1.56							
ANC (µeq/L) (d)	122-447	146-2,532	235-1,537	153-651	321-789	893-1,006							
Chloride (mg/L)	0.1-0.5	0.2-1.0	0.2-5.6	0.12-0.28	0.2-0.3	0.23-0.25							
Nitrate (mg/L)	ND(e)-1.1	ND-0.8	ND-1.2	0.55-0.59	ND-0.5	ND							
Sulfate (mg/L)	0.1-13.3	1.3-23.2	1.7-13.0	1.16-2.76	2.9-3.5	1.78-2.25							
Silica (mg/L)	1.5-9.1	2.52-13.9	5.65-22.7	NS (f)	9.65-11.4	16.63-19.58							
Boron (mg/L)	ND-0.01	ND-0.02	ND-0.04	NS	ND	ND							
Barium (mg/L)	ND	ND-0.019	ND-0.054	NS	ND-0.003	0.001-0.005							
Aluminum (mg/L)	ND-0.07	ND-0.09	ND-0.60	NS	ND-0.16	ND-0.15							
Iron (mg/L)	ND-0.83	ND-0.19	ND-0.74	NS	ND-0.002	0.02-0.04							
Manganese (mg/L)	ND-0.042	ND-0.035	ND-0.028	NS	ND	ND-0.002							

Source: Lund, n.d.

<sup>&</sup>lt;sup>a</sup> Derived from Lund undated.

<sup>&</sup>lt;sup>b</sup> Values presented are estimated. Original values were reported in µmoles/L (Lund, n.d.) and converted to mg/L.

<sup>&</sup>lt;sup>c</sup> ANC=Acid Neutralizing Capacity.

d ND=Not detected (no detection limit provided).

e NS=Not sampled.

Table 3-6 1986 Field Water Quality Depth Profiles for Lake Sabrina

	<b>D</b> EPTH	WATER TEMPERATURE	рН	Dissol	VED OXYGEN
DATE	(meters)	(deg °C)	(units)	mg/L	% Saturation
06/24/86	0.5	12.61	7.25	8.31	108.3
	2.5	11.16	7.26	8.72	110.1
	4.5	9.33	7.33	9.07	110.0
	6.5	8.64	7.34	9.31	111.3
	8.5	8.01	7.43	9.46	111.5
	10.3	7.50	7.46	9.59	111.8
08/19/86	0.5	15.41	7.27	7.93	109.9
	2.5	15.25	7.23	7.72	106.6
	4.5	15.23	7.25	7.63	105.3
	6.5	14.91	7.45	8.11	111.1
	8.5	14.50	7.71	8.23	111.8
	10.3	14.03	8.06	8.44	113.5
	12.5	12.81	7.89	8.45	110.6
	14.5	10.82	7.65	8.43	105.7
	16.5	10.05	7.30	6.97	85.9
10/27/86	0.5	7.29	6.81	9.33	108.3
	2.5	7.29	7.01	8.96	104.0
	4.5	7.31	7.09	8.91	103.4
	6.5	7.30	7.13	8.85	102.7
	8.5	7.26	7.15	8.82	102.3

Source: Lund, n.d.

Table 3-7 1987 Field Water Quality Depth Profiles for Lake Sabrina

		Water Temperature	рН	DISSOLVED OXYGEN		
DATE	DEPTH (meters)	(deg °C)	(units)	mg/L	% Saturation	
03/18/87	0.5	0.14	7.14	11.98	114	
	1.0	0.49	7.21	11.03	106	
	2.0	1.66	7.26	10.45	105	
	3.0	2.24	7.31	10.09	103	
	4.0	2.80	7.35	9.70	100	
	4.6	2.94	7.38	9.47	98	
06/30/87	0.0	14.8	*	8.61	121	
	0.5	14.5	*	8.70	122	
	1.5	14.4	*	8.64	121	
	2.5	14.4	*	8.62	120	
	3.5	14.3	*	8.64	120	
	4.5	14.3	*	8.64	120	
	5.5	14.3	*	8.61	120	
	6.5	14.2	*	8.74	122	
	7.5	13.7	*	9.05	124	
	8.5	13.1	*	9.26	126	
	9.5	12.8	*	9.41	127	
	10.5	12.1	*	9.64	128	
	11.5	11.6	*	9.81	128	
	12.5	10.5	*	10.41	133	
08/24/871	0.5	15.39	7.74	2.58	37	
	2.5	15.42	7.69	2.44	35	
	4.5	15.42	7.66	2.44	35	
	6.5	15.41	7.66	2.44	35	
	8.5	15.37	7.62	2.48	35	
	10.5	14.91	7.62	2.55	36	
	12.5	13.47	7.63	2.60	36	
	14.5	12.25	7.78	2.71	36	
	15.I	11.92	7.75	2.72	36	
11/03/87	0.5	8.48	7.04	8.42	102	
	2.5	8.50	7.23	8.25	100	
	4.5	8.52	9.32	7.87	95	
	6.5	8.51	7.55	8.34	101	
	8.5	8.53	7.66	8.07	98	
	10.5	8.42	7.40	7.82	95	
	11.0	8.52	7.66	8.14	99	

Source: Lund, n.d.

<sup>&</sup>lt;sup>1</sup> Low DO readings do not appear to correspond with any reported fish-kill and may be suspect. However, the Lund report shows similar data at other lakes in the Sierras at the same time-period, include Gem and Waugh lakes

DO inversely followed water temperature and decreased values were observed as water temperatures increased. Values for pH ranged from 6.81 to 9.32; however, most values were between 7 and 8 pH units.

Measurements of the chemical characteristics of the lakes were taken in fall 1985 and are presented in Table 3-8. The chemical composition of these lake waters appears typical for reservoirs in the Sierra Nevada elevation and latitude. There are three basic factors which cause the high elevation reservoirs of this portion of the High Sierra to be mineral and nutrient-poor. First, the watersheds are generally undisturbed and support very little human habitation. Second, the substrates in these drainages are dominantly igneous intrusive rocks, and third, the drainages contain very shallow and poorly vegetated soils. The combination of these factors results in very little leaching of minerals and nutrients into waters entering the reservoirs.

Table 3-8 Chemical Characteristics for South Lake and Lake Sabrina<sup>a</sup>

	Souti	H LAKE	LAKE SABRINA		
PARAMETER	SURFACE	Воттом	SURFACE	Воттом	
Calcium (mg/L)	1.98	1.98	1.94	1.88	
Magnesium (mg/L)	0.16	0.16	0.11	0.11	
Sodium (mg/L)	0.34	0.34	0.18	0.28	
Potassium (mg/L)	0.98	0.98	0.78	0.78	
Nitrate as N (mg/L)	0.035	0.026	0.016	0.013	
Sulfate as S (mg/L)	0.438	0.399	0.136	0.138	
Bicarbonate					

Source: Lund, n.d.

Notes: a Samples collected September 1985.

As part of the California's Surface Water Ambient Monitoring Program (SWAMP) for perennial streams, the California SWRCB undertook a water quality monitoring program on Bishop Creek from 2013 to 2016. The results of the study are summarized in Table 3-9.

The water quality was similar to that observed in previous studies with Ca and sodium the dominant cations. TDS was low, ranging from 25 to 66 mg/L, but averaged above the Basin Plan value of 27 mg/L above Intake 2. Water temperature was generally less than 62.6F. Two biological parameters detected were fecal coliform and *Escherichia coli* (E coli.) and ranged from 1 to 66 colony forming units (cfu) per100 ml and 1 cfu to 61 cfu per 100 ml, respectively; exceeding the basin standard of 20 cfu/100 ml for fecal coliform.

Samples collected over the 2-year period of 2015 and 2016 indicated non-detectable values for fecal coliform or *E. coli* for Bishop Creek (total of three samples) at the USFS boundary. Studies conducted by the LRWQCB for Bishop Creek concluded that the impaired portion of Bishop Creek was located below Powerhouse No. 6 and was likely

the result of cattle grazing in or near Bishop Creek and potentially leaking sanitary sewer systems in lower Bishop Creek (Knapp and Craig, 2016).

<u>Table 3-9 Summary of Swamp Water Quality Sampling on Bishop Creek at National Forest Boundary (Station 603BSP111)</u>

PARAMETER/CONSTITUENT (A)	Units	No. of Samples	MAXIMUM	MINIMUM	MEAN	BASIN STANDARDS
Oxygen, dissolved	(mg/L)	1	10.7	10.7	'	varies
Water Temperature	(deg °C)	12	16.4	2.2	9.84	NA
рН	(units)	12	10.3	7	7.97	6.5-8.5 (b)
Alkalinity (as calcium carbonate [CaCO₃])	(mg/L)	12	44	19	30.4	NA (c)
Turbidity	(NTU)	12	1.54	0.33	0.724	5 (d)
Specific Conductance	(µS/cm)	12	104.4	40.7	74.63	900-1,600 (d)
TDS	(mg/L)	12	66	25	46.0	27 (a)
Ca	(mg/L)	12	13.7	0.6	7.99	NA
Magnesium	(mg/L)	11	1.63	0.43	1.032	NA
Sodium	(mg/L)	11	4.82	1.1	3.085	NA
Potassium	(mg/L)	10	2.86	0.31	1.636	NA
Chloride	(mg/L)	12	1.6	0.36	0.884	1.9 (a)
Sulfate (as SO <sub>4</sub> )	(mg/L)	12	9.55	3.15	6.157	250-500 (d)
Fluoride	(mg/L)	11	0.143	0.046	0.1014	0.15 (a)
Boron	(mg/L)	12	0.481	0.0058	0.1271	0.2 (a)
Nitrate and Nitrite (as N)	(mg/L)	11	0.0475	0.0065	0.01999	10 (e)
Nitrogen, Total	(mg/L)	12	0.125	0.049	0.0794	0.1 (a)
Phosphorus as P	(mg/L)	9	0.0094	0.0054	0.00752	NA
Orthophosphate as P	(mg/L)	12	0.0132	0.0051	0.00880	0.05 (a)
Fecal Coliform	cfu/100 ml(f)	27	66	1	8.9	20 (g)
E. coli	cfu/100 ml	24	61	1	8.0	100/320 (h)

Source: CEDEN, 2018

# Notes:

**BOLD** Equal to or above current MCLs or notification levels

<sup>&</sup>lt;sup>a</sup> Basin Plan for Bishop Creek at Intake 2

<sup>&</sup>lt;sup>b</sup> United States Environmental Protection Agency (USEPA) secondary standard for pH

<sup>°</sup> NA = Not Applicable – no current MCL

<sup>&</sup>lt;sup>d</sup> California Drinking Water Program (CDWP) secondary MCL

e CDWP primary MCL.

f.cfu

<sup>&</sup>lt;sup>g</sup> Lahontan Basin Plan

<sup>&</sup>lt;sup>h</sup> Basin Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California

# 4.0 STUDY AREA

Figure 4-1 below shows the proposed study area for the Bishop Creek Water Quality Study.

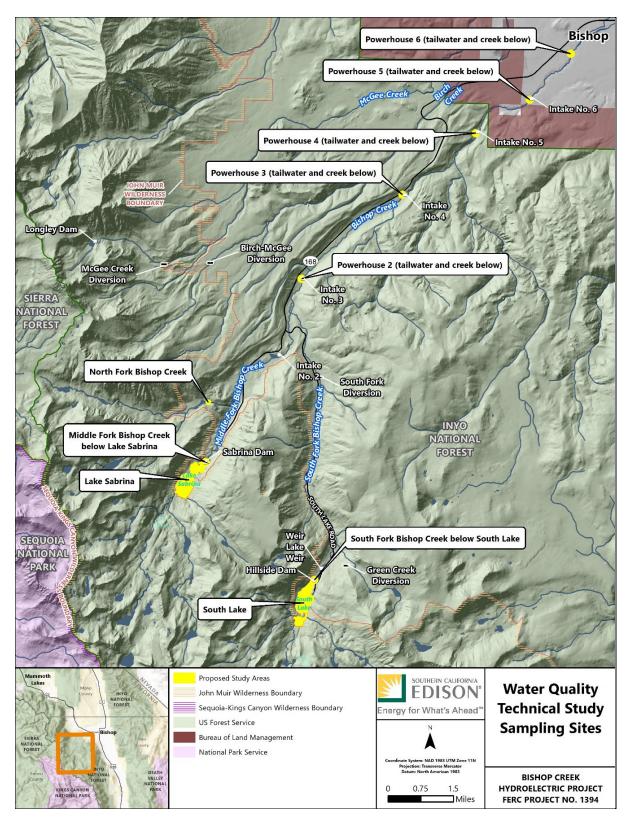


Figure 4-1 Water Quality Technical Study Area

# 5.0 METHODS

# **5.1. PARAMETERS MONITORED**

The Study Plan identified the below parameters to be monitored:

- Water Temperature (in °C)
- TDS
- Dissolved Oxygen (DO) (in mg/l)
- Conductivity (in µmhos/cm)
- Total Dissolved Solids (TDS)
- Total Nitrogen
- Nitrate (NO<sub>3</sub>) as Nitrogen
- Orthophosphate (PO<sub>4</sub>) as P (dissolved)
- Turbidity
- Water Clarity (Secchi Disk)
- Escherichia coli (E. coli)

# 5.2. VERTICAL PROFILES OF DISSOLVED OXYGEN AND WATER TEMPERATURE

Vertical profiles of DO and temperature were collected at the deepest location(s) in South Lake and Lake Sabrina. The purpose of the survey is to identify the timing, extent and duration of any lake stratification. Vertical profiles of DO and temperature were taken monthly in June and ending in October 2020. The following schedule is proposed for collecting the vertical profiles for each year of the study:

June, July, August, September, and October

The following sampling locations were proposed:

- Deepest point in Lake Sabrina (estimated at 220-feet-deep at full capacity)
- Deepest Point in South Lake (estimated at 220-feet-deep at full capacity)

When collecting DO and temperature profiles, the same sampling location was visited each time so that the relative change in the profile (DO and temperature) can be determined throughout the summer. DO and temperature readings were taken every meter from the water surface to the lake bottom. Lake surface elevation was also recorded during each sampling date.

# 5.3. BISHOP CREEK DISSOLVED OXYGEN AND TEMPERATURE SAMPLING

Bishop Creek DO and water temperature sampling was conducted during the same periods as the lake sampling, monthly in June and October and bi-monthly from early July and terminating in late September. DO and temperature measurements would be sampled mid-depth in the middle, if accessible, otherwise adjacent to the bank of the stream. DO and water temperature data were recorded using a calibrated hand-held digital instrument. The following sampling locations were sampled:

- North Fork Bishop Creek (background)
- Middle Fork Bishop Creek below Lake Sabrina
- South Fork Bishop Creek below South Lake
- Bishop Creek below Powerhouse No. 2
- Tailwater of Powerhouse No. 2
- Bishop Creek below Powerhouse No. 3
- Tailwater of Powerhouse No. 3
- Bishop Creek below Powerhouse No. 4
- Tailwater of Powerhouse No. 4
- Bishop Creek below Powerhouse No. 5
- Tailwater of Powerhouse No. 5
- Bishop Creek below Powerhouse No. 6
- Tailwater of Powerhouse No. 6

# 5.4. SAMPLING FOR SECCHI DISK, TURBIDITY, CONDUCTIVITY, TOTAL DISSOLVED SOLIDS, ORTHOPHOSPHATE, TOTAL NITROGEN, NITRATE AND E. COLI

# 5.4.1. SECCHI DISK READINGS

- Sampling Period: June, July, August, September and October
- Sampling Locations: within deepest portion of Lake Sabrina and South Lake at the same locations used for water temperature and DO profiles
- Sampling Protocol: One sample per site using the Secchi disk to approximate depth of the euphotic zone/light penetration

# 5.4.2. TURBIDITY, CONDUCTIVITY, TOTAL DISSOLVED SOLIDS, ORTHOPHOSPHATE, TOTAL NITROGEN AND NITRATE

- Sampling Frequency: a minimum of 1 per month during June, July, August and late September
- Sampling Locations
  - Lakes
    - Within a deep hole of Lake Sabrina and South Lake
    - Sampling was performed at two points: one above and one below the thermocline
  - Riverine Segment
    - North Fork Bishop Creek (background)
    - Middle Fork Bishop Creek below Lake Sabrina
    - South Fork Bishop Creek below South Lake
    - Bishop Creek below Powerhouse No. 2

- o Bishop Creek below Powerhouse No. 3
- Bishop Creek below Powerhouse No. 4
- o Bishop Creek below Powerhouse No. 5
- Bishop Creek below Powerhouse No. 6
- Sampling Protocol: U.S. Geological Survey (USGS) sampling protocol and procedures

# **5.4.3**. **E.** COLI<sup>2</sup>

- Sampling Frequency: six separate sample events starting July 1 and ending August
   15
- Sampling Locations:
  - South Lake and Lake Sabrina
    - Adjacent to the boat ramp
  - Intake #2 Forebay
    - Any easily accessible location adjacent to shore

# **5.4.4. GENERAL**

At each of the creek sampling events the following information is being recorded:

- Streamflow (in cubic feet per second [cfs])
- Air temperature
- Wind speed and direction
- Percent cloud cover
- Date, duration and amount of most recent precipitation event (if known or obtainable)

The overall program is summarized in Table 5-1.

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<sup>&</sup>lt;sup>2 2</sup> If any sample detects greater than 50 col/100 ml of E. coli, microbial source tracking methods (MST [qPCR]) were performed to assess if the E. coli originates from humans.

Bishop Creek

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Table 5-1 Locations, Parameters and Sampling Frequency for Water Quality Study

						PARAMETE	RS				
LOCATION	Water Temperature	Dissolved Oxygen	Secchi Disk	Turbidity	Conductivity	Total Dissolved Solids	Total Kjeldahl Nitrogen (a)	Nitrite + Nitrate as N (a)	Nitrate as N	Orthophosphate as PO4	E. coli
LAKES											
Lake Sabrina											
Deepest Point	J, Jy, A, S, O (b, c)	J, Jy, A, S, O (b)	J, Jy, A, S, O	NA (d)	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	NA
Adjacent to Boat Ramp	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	July 1-August 15 (e)
South Lake											
Deepest Point	J, Jy, A, S, O (b)	J, Jy, A, S, O (b)	J, Jy, A, S, O	NA	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	NA
Adjacent to Boat Ramp	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	July 1-August 15 (e)
Intake # 2 Forebay	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	July 1-August 15 (e)
SURFACE FLOWS											
North Fork Bishop Creek (background)	J, 2Jy, 2A, 2S, O	J, 2Jy, 2A, 2S, O	NA	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	NA
Middle Fork Bishop Creek below Lake Sabrina	J, 2Jy, 2A, 2S, O	J, 2Jy, 2A, 2S, O	NA	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	NA
South Fork Bishop Creek below South Lake	J, 2Jy, 2A, 2S, O	J, 2Jy, 2A, 2S, O	NA	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	NA
Bishop Creek below Powerhouse No. 2	J, 2Jy, 2A, 2S, O	J, 2Jy, 2A, 2S, O	NA	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	NA
Bishop Creek below Powerhouse No. 3	J, 2Jy, 2A, 2S, O	J, 2Jy, 2A, 2S, O	NA	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	NA
Bishop Creek below Powerhouse No. 4	J, 2Jy, 2A, 2S, O	J, 2Jy, 2A, 2S, O	NA	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	NA
Bishop Creek below Powerhouse No. 5	J, 2Jy, 2A, 2S, O	J, 2Jy, 2A, 2S, O	NA	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	NA
Bishop Creek below Powerhouse No. 6	J, 2Jy, 2A, 2S, O	J, 2Jy, 2A, 2S, O	NA	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	J, Jy, A, S	NA
Tailwater of Powerhouse No. 2	J, 2Jy, 2A, 2S, O	J, 2Jy, 2A, 2S, O	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tailwater of Powerhouse No. 3	J, 2Jy, 2A, 2S, O	J, 2Jy, 2A, 2S, O	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tailwater of Powerhouse No. 4	J, 2Jy, 2A, 2S, O	J, 2Jy, 2A, 2S, O	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tailwater of Powerhouse No. 5	J, 2Jy, 2A, 2S, O	J, 2Jy, 2A, 2S, O	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tailwater of Powerhouse No. 6	J, 2Jy, 2A, 2S, O	J, 2Jy, 2A, 2S, O	NA	NA	NA	NA	NA	NA	NA	NA	NA

#### Notes

- (a) Lab analysis parameters needed to calculate Total Nitrogen.
- (b) -Vertical profile of dissolved oxygen and water temperature at the deepest point on the lake.
- (c) -J=June, Jy=July, A=August, S=September, O=October. All locations indicated are sampled once per month unless month is preceded by a number which indicates the number of times samples were collected during that month.
- (d) NA=Not Applicable.
- (e) A total of 6 samples were collected and analyzed during the 45-day period,

# 6.0 SAMPLING PROCEDURES AND METHODS

This section specifies the procedures used for collecting surface water measurements and/or water quality samples for chemical analysis. Several methods for collecting surface water samples were used, depending on the type of surface water to be sampled (i.e., tailraces, streams, lakes).

# 6.1. Lake Sampling Procedures

Field measurements of dissolved oxygen and water temperature were collected at the deepest portion of the lake based on the 1980 bathymetric survey (see Bishop Creek Water Quality Implementation Plan [BCWQIP] [SCE, 2020]). The maximum depth for Lake Sabrina and South Lake was initially reported to be 78 feet and 130 feet, respectively. However, subsequent onsite measurements indicated that Lake Sabrina and South Lake were approximately 240 and 223 feet deep, respectively. Field measurements of DO and water temperature measurements were collected starting at 0.5 meter below the water surface and at 1 meter below water surface and continuing in 1 meter increments until the total depth of the lake was obtained. Measurements were recorded on the appropriate forms and/or field notebook. Copies of the field forms are included in Appendix A.

Secchi disk measurements were collected at the same location as the field measurements for DO and water temperature. The Secchi depth measurement procedures are summarized in Standard Operating Procedure (SOP) for surface water sampling (SW-001) in the BCWQIP (SCE, 2020).

If a thermocline<sup>3</sup> is identified from the monthly field measurements of water temperature and dissolved oxygen, water quality samples for laboratory analysis and field measurement of conductivity were collected at above and below the thermocline. If no thermocline is identified, water samples were collected at one-half of the Secchi depth and 80 percent of the total depth of the lake at the time of sampling.

Water samples for conductivity, TDS, orthophosphate, total nitrogen and nitrate were collected using either a peristaltic pump or discrete depth sampler (Kemmerer or Van Dorn bottle) in accordance with SOP for surface water sampling (SW-001) in BCWQIP (SCE, 2020). Water samples for E. coli and MST (qPCR) were collected near shore using a grab sampling method.

# 6.2. SURFACE WATER SAMPLING PROCEDURES

Surface water sampling refers to the collection of water samples for the purposes of field or laboratory testing of water collected from a flowing water site. A flowing water site can refer to streams and tailraces in which water flows unidirectionally.

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<sup>&</sup>lt;sup>3</sup> A thermocline is the horizontal plane in a thermally stratified lake located at the depth where water temperature decreases most rapidly (greater than 1 °C per meter) with depth.

Field measurements of dissolved oxygen, turbidity, conductivity, and water temperature were collected from straight reaches having uniform flow, and having a uniform and stable bottom contour, and where constituents are well mixed along the cross-section. Field measurements were collected in accordance with SOP for surface water sampling (SW-001) in BCWQIP (SCE, 2020).

Water samples for laboratory testing were collected using either the grab sample method or swing sampler in accordance with SOP for surface water sampling (SW-001) in BCWQIP (SCE, 2020).

# 6.3. FIELD ANALYTICAL METHODS

Field measurements of dissolved oxygen, turbidity, conductivity, and water temperature were conducted using the methods indicated in Table 6-1 and with SOP for surface water sampling (SW-001) in BCWQIP (SCE, 2020).

**Table 6-1 Field Methods** 

ANALYSIS	METHOD	METHOD REPORTING LIMIT
Dissolved Oxygen in mg/L	EPA 360.1	0.1 mg/L
Water Temperature in °C	EPA 170.1	0.1 °C
Conductivity in µmhos/cm @25 °C	EPA 120.1	1 μS/cm
Turbidity in NTUs	EPA 180.1	varies

#### Notes:

mg/L=milligrams per liter; °C=degrees Centigrade; µmhos/cm=micro-mhos per centimeter; NTU=Nephelometric turbidity units.

# 6.4. FIELD CALIBRATION METHODS

The equipment used in collecting field data includes a variety of instruments. Proper maintenance, calibration, and operation of each instrument are the responsibility of the individual assigned to each task. Instruments and equipment used during the study are maintained, calibrated, documented for calibration, and operated according to the manufacturers' guidelines and recommendations and SOP for field instrument calibration (SW-002) in BCWQIP (SCE, 2020).

# **6.5.** Laboratory Methods

In general, the selected laboratory will adhere to those recommendations promulgated in Title 21, Code of Federal Regulations (CFR) Part 58, Good Laboratory Practices; and criteria described in Methods for Chemical Analysis of Water and Wastes (EPA, 1979; EPA-600/4-79-202). Water samples collected for chemical analysis during this Project were tested in accordance with the standard analytical procedures established by the EPA Methods for Chemical Analysis of Water and Wastes (EPA, 1979; EPA-600/4-79-

202), American Society for Testing and Materials, or Standard Methods for the Examination of Water and Wastewater and are indicated in Table 6-2.

**Table 6-2 Laboratory Methods** 

ANALYSIS	METHOD	METHOD REPORTING LIMIT (units)	HOLDING TIME
Total Dissolved Solids	SM 2540C	10 mg/L	7 days
Total Nitrogen by calculation	calculation		
Nitrite + Nitrate as N	EPA 353.2	0.20 mg/L	28 days
Total Kjeldahl Nitrogen	EPA 351.2	0.10 mg/L	28 days
Nitrate as N	EPA 300.0	0.11 mg/L	2 days
Orthophosphate as P	EPA 365.3	0.10 mg/L	2 days
E. coli	SM 9222G	20 col/100 ml	24 hours*
MST (qPCR)	BacHum or HF183		48 ours

#### Notes:

The samples for each analytical parameter were collected and preserved in the appropriate sample containers as presented in Table 6-3. The sample containers provided by the analytical laboratories were new, pre-cleaned, pre-loaded with the appropriate preservative, and delivered in a clean cooler.

<sup>\*-</sup> Per SWAMP guidelines for monitoring E. coli in ambient water.

SM=Standard Methods for the Examination of Water and Wastewater; EPA= Method for Chemical Analysis of Waters and Wastes, EPA-600/4-79-020; N=Nitrogen; P=Phosphorus.

**Table 6-3 Sampling Container and Preservation Requirements** 

ANALYSIS	METHOD	CONTAINER	PRESERVATION
Total Dissolved Solids	SM 2540C	500 ml -poly	<6°C
Nitrite + Nitrate as N	EPA 353.2	250 ml - poly	<6°C, H <sub>2</sub> SO <sub>4</sub>
Total Kjeldahl Nitrogen	EPA 351.2	250 ml - poly	<6°C, H <sub>2</sub> SO <sub>4</sub>
Nitrate as N	EPA 300.0	60 ml - poly	<6°C
Orthophosphate as P	EPA 365.3	250 ml - poly, filtered	<6°C
E. coli	SM 9222G	100 ml, glass	<6°C
MST (qPCR)	BacHum or HF183	1000 ml, polypropylene	<10°C

# Notes:

SM=Standard Methods for the Examination of Water and Wastewater; EPA= Method for Chemical Analysis of Waters and Wastes, EPA-600/4-79-020; N=Nitrogen; P=Phosphorus; poly=polyethylene; ml=milliliters; °C= degrees centigrade; H<sub>2</sub>SO<sub>4</sub>=sulfuric acid.

# 6.6. SAMPLE LABELING AND CHAIN-OF-CUSTODY

Sample labels were completed for each sample using indelible ink. The labels include sample number and location, type of sample, date and time of sampling, sampler's name (or initials), preservation method, and analyses to be performed. The completed sample labels were affixed to each sample container.

A chain-of-custody record accompanied all samples. During transfer, individuals relinquishing and receiving the samples sign, date, and note the time on the record. The chain-of-custody form documents the sample custody transfer from the sampler, through a courier, to the laboratory.

All laboratory water quality samples were managed in accordance with SOP for Sample Management (SW-003) in BCWQIP (SCE, 2020). All laboratory reports for each sampling period are included in Appendix B.

# 6.7. MODIFICATION TO METHODS

The original Study Plan required the use of the Sierra Nevada Aquatic Research Laboratory (SNARL) to conduct the laboratory analysis of *E. coli* and MST (qPCR). Due to the Covid-19 pandemic, SNARL was not available to conduct the analyses. Weck Laboratories was engaged to conduct the *E. coli* analysis using Standard Method 9223B along with a holding time of 24-hours which followed the SWAMP guidelines for monitoring *E. coli* in ambient water. Source Molecular, in Florida, was engaged to conduct the MST (qPCR) analysis for any samples that exceeded 50 MPN/100 ml of *E. coli*. No

samples exceeded the 50 MPN/100 ml of *E. coli* so no MST (qPCR) analysis was performed.

Additionally, the total depth for both lakes was greater than was previously reported. Equipment used to collect vertical profiles of DO and water temperature were unable to obtain the maximum depth of the lakes during the June 2020 sampling period. Additional equipment was obtained to reach the bottom of the lakes in subsequent profiles conducted in July 2020 through October 2020. Reservoir depths will be verified with results of the bathymetry data collected as part of the Reservoir Fish Distribution Study and incorporated into the Final Technical Report to be completed after the 2021 field season.

#### 7.0 RESULTS

#### 7.1. SOUTH LAKE

#### 7.1.1. DISSOLVED OXYGEN AND WATER TEMPERATURE PROFILES

June 2020

A DO and water temperature profile was conducted on June 15, 2020 at the deepest point reachable in South Lake. DO ranged from 9.61 mg/L at a depth of 18 meters (59.1 feet) below water surface (BWS) to 0.13 mg/L at a depth of 50.5 meters (165.7 feet) BWS. In general, DO saturation was above 90 percent and often exceeded 100 percent in the upper portion of the lake. DO saturation declined sharply to less than 10 percent at 49 meters (160.8 feet) BWS (see Appendix C, Table C-1). No thermocline<sup>4</sup> was identified. **Figure** 7-1 presents a profile of DO and water temperature over the surveyed water column and Appendix C (Table C-1) presents the individual values recorded for each depth interval.

July 2020

The DO and water temperature profile was conducted on July 28, 2020 at the deepest point in South Lake. The maximum depth at the profile point on July 28, 2020 was 68 meters (223.1 feet) with a lake surface elevation of 9747.82 feet msl. DO ranged from 9.45 mg/L at a depth of 20 meters (65.6 feet) BWS and 0.00 mg/L at a depth of 57 meters (187.0 feet) BWS. In general, DO saturation was above 80 percent and often exceeded 100 percent in the upper portion of the lake. DO saturation declined sharply to less than 0 percent at 53 meters (173.9 feet) BWS (see Appendix C, Table C-2). No thermocline was identified. **Figure** 7-2 presents a profile of DO and water temperature over the surveyed water column and Appendix C (Table C-2) presents the individual values recorded for each depth interval.

#### August 2020

The DO and water temperature profile was conducted on August 25, 2020 at the deepest point in South Lake. The maximum depth at the profile point on August 25, 2020 was 64 meters (210 feet) with a lake surface elevation of 9741.96 feet msl. DO ranged from 9.12 mg/L at a depth of 28 meters (91.9 feet) BWS and 0.03 mg/L at a depth of 63 meters (206.7 feet) BWS. In general, DO saturation was above 80 percent and often exceeded 100 percent in the upper portion of the lake. DO saturation declined sharply to less than 5 percent at 50 meters (164.0 feet) BWS (see Appendix C, Table C-3). A thermocline was identified at approximately 17-18 meters (55.8 – 59.1 feet) BWS. Figure 7-3 presents a profile of DO and water temperature over the surveyed water column and Appendix C (Table C-3) presents the individual values recorded for each depth interval.

<sup>&</sup>lt;sup>4</sup> A thermocline is defined as the horizontal plane in a thermally stratified lake located at the depth where water temperature decreases most rapidly (greater than 1 °C per meter) with depth.

# September 2020

The DO and water temperature profile was conducted on September 23, 2020 at the deepest point in South Lake. The maximum depth at the profile point on September 23, 2020 was 62.7 meters (205.7 feet) with a lake surface elevation of 9736.50 feet msl. DO ranged from 8.68 mg/L at a depth of 32 meters (105 feet) BWS and 0.01 mg/L at a depth of 62 meters (203.4 feet) BWS. In general, DO saturation was above 60 percent and often exceeded 100 percent in the upper portion of the lake. DO saturation declined sharply to less than 5 percent at 48 meters (157.5 feet) BWS (see Appendix C, Table C-4). A thermocline was identified at approximately 34 - 35 meters (111.5 – 114.8 feet) BWS. Figure 7-4 presents a profile of DO, water temperature and limited number of grab samples for conductivity over the surveyed water column and Appendix C (Table C-4) presents the individual values recorded for each depth interval.

#### October 2020

The DO and water temperature profile was conducted on October 5, 2020 at the deepest point in South Lake. The maximum depth at the profile point on October 5, 2020 was 60.5 meters (198.5 feet) with a lake surface elevation of 9734.02 feet msl. DO ranged from 8.25 mg/L at a depth of 32 meters (105 feet) BWS and 0.04 mg/L at a depth of 58 meters (190.3 feet) BWS. In general, DO saturation was above 60 percent and often exceeded 100 percent in the upper portion of the lake. DO saturation declined sharply to less than 5 percent at 48 meters (157.5 feet) BWS (see Appendix C, Table C-5). A thermocline was identified at approximately 28 - 29 meters (91.9 – 95.1 feet) BWS. Figure 7-5 presents a profile of DO and water temperature over the surveyed water column and Appendix C (Table C-5) presents the individual values recorded for each depth interval.

# **7.1.2. SUMMARY**

The DO and water temperature profiles for South Lake were similar for each monitoring period throughout the summer and early fall. Each exhibited elevated DO readings in the upper two thirds of the lake and very low DO readings in the bottom portion of the lake (approximately 15 meters below the outlet). A comparison was made to see if the very low DO readings altered with lake elevation over the monitoring period and are presented in Figure 7-6. No major changes were noted with the location of the very low DO readings.

The very low DO readings, the rise in conductivity and water temperature in the lower portion of the lake (see Figure 7-4) is suggestive of a stratified lake. Boehrer and Schultze (2008) indicated that meromictic lakes can occur when chemically different bottom layer, called a monimolimnion, has continuously been present for a least one annual cycle. Higher concentrations of dissolved substances have increased density sufficiently to resist deep recirculation and the exchange rates with the mixolimnion (the freely circulating upper layer of a meromictic lake) are small enough that chemically different conditions are sustained continuously. Figure 7-7 presents an example of DO, water temperature and conductivity with depth in a meromictic lake observed in Germany's Former Mining Area of Merseburg-Ost. At the present time, it is unclear whether the stratification will remain into 2021 and the 2021 monitoring program should indicate if South Lake may be a meromictic lake.

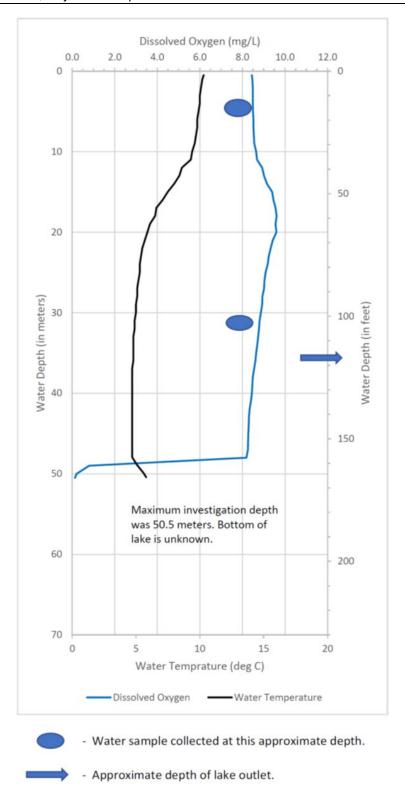


Figure 7-1 South Lake Dissolved Oxygen and Water Temperature Profile June 2020

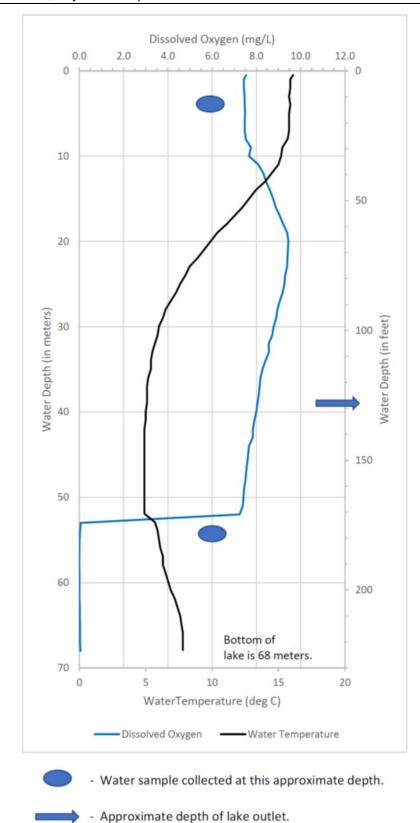


Figure 7-2 South Lake – Dissolved Oxygen and Water Temperature Profile – July 2020

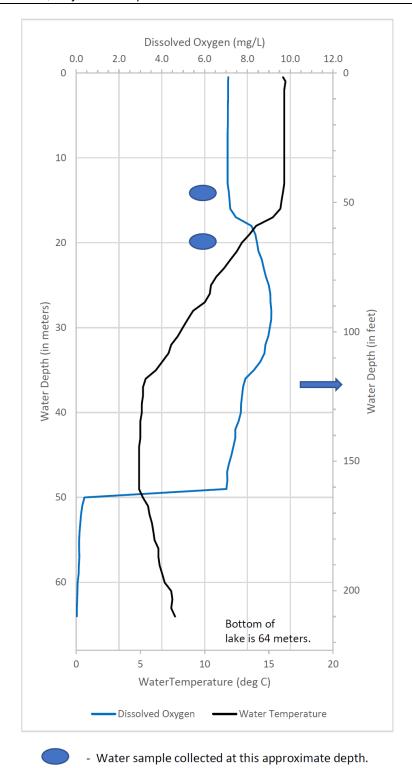


Figure 7-3 South Lake – Dissolved Oxygen and Water Temperature Profile – August 2020

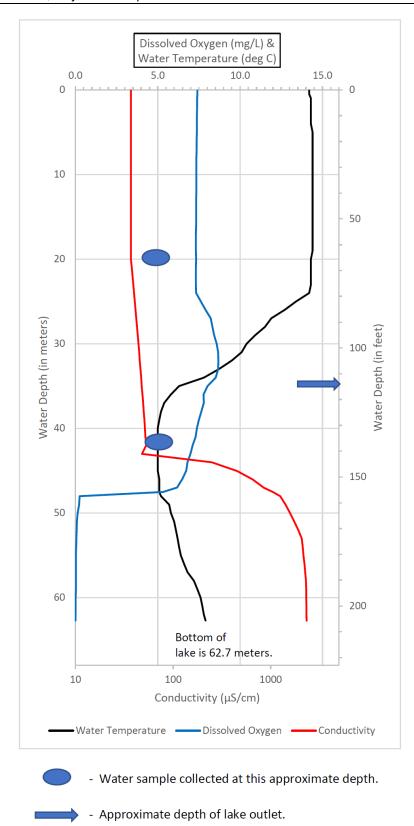


Figure 7-4 South Lake – Dissolved Oxygen, Conductivity and Water Temperature Profile – September 2020

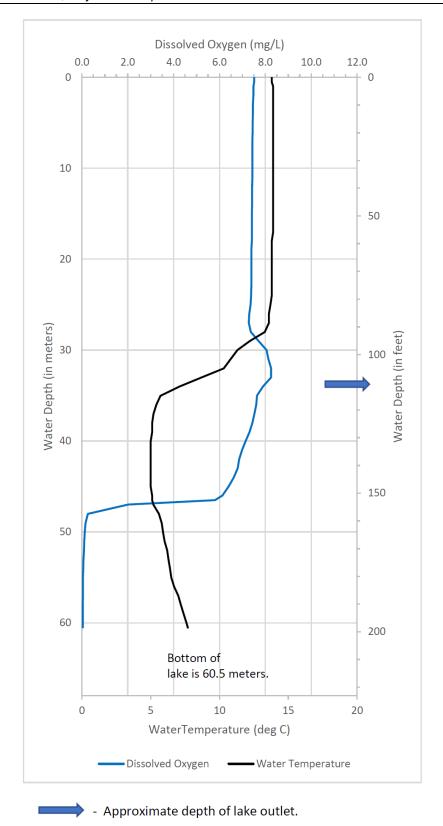


Figure 7-5 South Lake – Dissolved Oxygen and Water Temperature Profile – October 2020

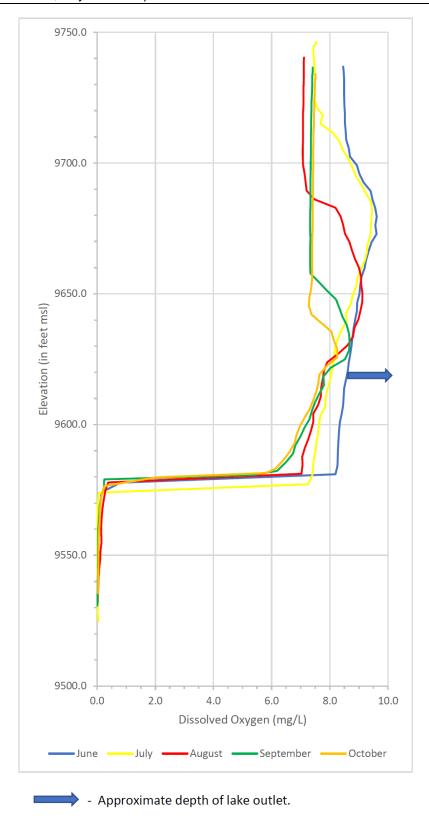
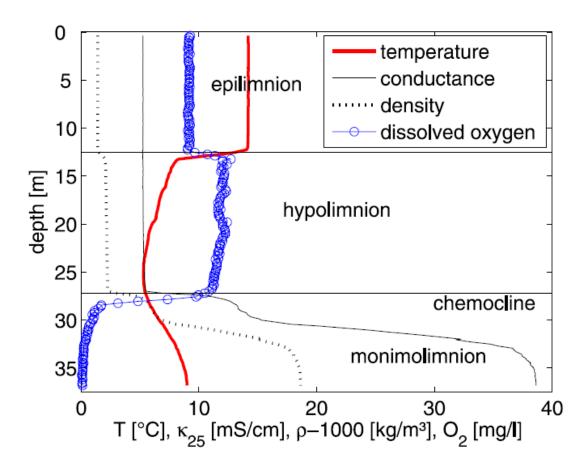


Figure 7-6 South Lake - Comparison of June-October Vertical DO Profiles with Lake Elevation



(Source: Boehrer & Schultze, 2008)

Figure 7-7 DO, Water Temperature and Conductivity in a Meromictic Lake in Rassnitzer in Former Mining Area Merseburg-Ost, Germany

#### 7.1.3. GENERAL WATER QUALITY

Field water quality testing and laboratory water quality samples were collected during the same time periods that DO profiles were conducted and are presented in Table 7-1. Field measurements indicated Secchi disk depth ranged from 8.5 – 12 meters BWS between June and October sampling periods. Thermoclines were not identified in the June or July sampling periods however thermoclines were detected in the subsequent monitoring periods and ranged from 17 – 18 meters in the August period to 28 – 35 meters in the October sampling period. The following water quality measurements are based on collection of measurements above and below the observed thermoclines.

Conductivity ranged from 30 microSiemens/cm ( $\mu$ S/cm) to 40  $\mu$ S/cm in the shallow sampling zone to 53  $\mu$ S/cm to 1,880  $\mu$ S/cm in the deeper sampling zone. Laboratory water quality analysis indicated values of TDS ranging from not detected (ND) <10 mg/L to 30 mg/L in the shallow sampling zone (above the thermocline) to 16 mg/L to 1,100 mg/L in the deeper sampling zone (below the thermocline).

Nitrate as Nitrogen (NO<sub>3</sub>-N) was ND<0.110 for all samples collected in South Lake. Total nitrogen as N was detected once at 5.2 mg/L at a depth of 54 meters during the July sampling period. Orthophosphate as phosphorus (PO<sub>4</sub>-P) ranged from ND<0.010 mg/L to 0.17 mg/L. Generally, the ND values of PO<sub>4</sub>-P were collected in the shallow (4-5 meters BWS) water samples and detectable values of PO<sub>4</sub>-P in the deeper (31.5-54 meters BWS) samples.

#### 7.1.4. BACTERIOLOGICAL

Bacteriological samples were collected between July 1 and August 15, 2020 and analyzed for *E. coli*. A total of seven samples were collected and only one sample had a detectable value of *E. coli* with 1 most probable number in 100 milliliters (MPN/100ml). All other samples were non-detect at ND<1.0 MPN/100 ml and are presented in Table 7-2.

Table 7-1 Field Water Quality Measurements and Laboratory Results of Lake Samples, June - October 2020

							FIELD MEASUREMENTS (a)			LA	BORATOR	RY ANALY	'SIS	
											To	tal Nitrog	en	
				LAKE					Total			Nitrite +	Total	Ortho
				SURFACE		SAMPLE	Secchi Disk	Conductivity	Dissolved	Nitrate	Total	Nitrate	Kjeldahl	phosphate
	SAMPLE			ELEVATION	THERMO-	DEPTH	Depth	(µS/cm	Solids	as N	Nitrogen	as N	Nitrogen	as P
LOCATION	DESIGNATION	DATE	TIME	(b) (ft msl)	CLINE	(meters)	(meters)	@25°C)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
	SL-DP-5	6/15/2020	9:15	9738.50	No	5	10.5	30	15	ND<0.110	ND<0.30	ND<0.200	ND<0.10	ND<0.010
	SL-DP-31.5	6/15/2020	9:00	9738.30	INO	31.5	10.5	110	16	ND<0.110	ND<0.30	ND<0.200	ND<0.10	0.011
	SL-DP-4	7/28/2020	10:30	9747.82	No	4	8.5	30	ND<10	ND<0.110	ND<0.30	ND<0.200	ND<0.10	ND<0.010
	SL-DP-54	7/28/2020	10:05	3747.02	NO	54	6.5	1,880	1,100	ND<0.110	5.2	ND<0.200	5.2	0.17
South Lake	SL-DP-15	8/25/2020	12:20	9741.96	Yes, 17-18	15	11.75	40	30	ND<0.110	ND<0.30	ND<0.200	ND<0.10	ND<0.010
South Lake	SL-DP-20	8/25/2020	11:55	9741.96	meters	20	11./5	70	33	ND<0.110	ND<0.30	ND<0.200	ND<0.10	ND<0.010
	SL-DP-20	9/23/2020	12:05	9736.50	Yes, 34-35	20	9.75	37	10	ND<0.110	ND<0.30	ND<0.200	ND<0.10	ND<0.010
	SL-DP-42	9/23/2020	12:50		meters	42	9.75	53	31	ND<0.110	ND<0.30	ND<0.200	ND<0.10	ND<0.010
	(c)	10/5/2020	(c)	9734.02	Yes, 28-35 meters	(c)	12.0				(c)			
	LS-DP-8	6/17/2020	9:00	0116 20	Yes, 11-12	8	7.5	30	16	ND<0.110	ND<0.30	ND<0.200	ND<0.10	ND<0.010
	LS-DP-15	6/17/2020	9:30	9116.20	meters	15	7.5	20	25	ND<0.110	0.30	ND<0.200	0.30	ND<0.010
	LS-DP-7	7/29/2020	11:25	0110.63	Yes, 9-14	7	12.0	20	11	ND<0.110	ND<0.30	ND<0.200	ND<0.10	ND<0.010
	LS-DP-16	7/29/2020	10:55	9118.62	meters	16	12.0	30	12	ND<0.110	ND<0.30	ND<0.200	ND<0.10	ND<0.010
Lake	LS-DP-8	8/24/2020	12:30	0115 52	Yes, 10-14	8	10.0	30	31	ND<0.110	ND<0.30	ND<0.200	ND<0.10	ND<0.010
Sabrina	LS-DP-17	8/24/2020	12:05	9115.53	meters	17	10.0	40	39	ND<0.110	0.52	ND<0.200	0.52	ND<0.010
	LS-DP-7	9/21/2020	11:10	0111 00	Yes, 10-14	7	10.25	23	20	ND<0.110	ND<0.30	ND<0.200	ND<0.10	0.022
	LS-DP-28	9/21/2020	11:50	9111.89	meters	28	10.25	39	25	ND<0.110	ND<0.30	ND<0.200	0.11	ND<0.010
	(c)	10/5/2020	(c)	9108.97	Yes, 10-13 meters	(c)	11.0				(c)			

# Notes:

- a For dissolved oxygen and water temperature, see vertical profiles.
- b At time of sampling.

c – No laboratory water quality sample collected. ND=Not detected at the indicated detection limit.

<u>Table 7-2 Summary of Water Quality Analysis for E. Coli from Various Lakes in the Bishop Creek Watershed July 1 - August 15, 2020</u>

	<i>E. COLI</i> (MPN/100 ml)								
DATE	South Lake Boat Ramp	Lake Sabrina Boat Ramp	Intake 2 Reservoir						
7/13/2020	ND<1.0	ND<1.0	24						
7/16/2020	1.0	ND<1.0	3.1						
7/27/2020	ND<1.0	ND<1.0	18						
7/30/2020	ND<1.0	ND<1.0	6.3						
7/31/2020	ND<1.0	ND<1.0	6.3						
8/3/2020	ND<1.0	ND<1.0	ND<1.0						
8/5/2020	ND<1.0	3.1	1.0						

#### 7.2. LAKE SABRINA

#### 7.2.1. DISSOLVED OXYGEN AND WATER TEMPERATURE PROFILES

June 2020

A DO and water temperature profile was conducted on June 17, 2020 at the deepest point reachable in Lake Sabrina. The maximum depth achieved at the profile point on June 17, 2020 was 50 meters (164.0 feet) with a lake surface elevation of 9116.20 feet msl. DO ranged from 9.80 mg/L at a depth of 14 meters (45.9 feet) BWS and 7.90 mg/L at a depth of 50 meters (164 feet) BWS. A thermocline was identified between 11-12 meters (36.1 feet and 39.4 feet) BWS. Figure 7-8 presents a profile of DO and water temperature over the surveyed water column and Appendix C (Table C-6) presents the individual values recorded for each depth interval.

July 2020

The DO and water temperature profile was conducted on July 29, 2020 at the deepest point in Lake Sabrina. The maximum depth at the profile point on July 29, 2020 was 71 meters (232.9 feet) with a lake surface elevation of 9118.62 feet msl. DO ranged from 9.47 mg/L at a depth of 15 meters (49.2 feet) BWS and 1.85 mg/L at a depth of 71 meters (232.9 feet) BWS. In general, DO saturation was above 80 percent and often exceeded 100 percent in the upper portion of the lake. DO saturation gradually declined to less than 20 percent at 71 meters (232.9 feet) BWS (see Appendix C, Table C-7). A thermocline was identified between 9 – 14 meters (29.5 feet and 45.9 feet) BWS. Figure 7-9 presents a profile of DO and water temperature over the surveyed water column and Appendix C (Table C-7) presents the individual values recorded for each depth interval.

#### August 2020

A DO and water temperature profile was conducted on August 24, 2020 at the deepest point in Lake Sabrina. The maximum depth at the profile point on August 24, 2020 was 73 meters (239.5 feet) with a lake surface elevation of 9115.53 feet msl. DO ranged from 9.70 mg/L at a depth of 14 meters (45.9 feet) BWS and 0.05 mg/L at a depth of 73 meters (239.5 feet) BWS. In general, DO saturation was above 80 percent and often exceeded 100 percent in the upper portion of the lake. DO saturation gradually declined to less than 10 percent at 70 meters (229.7 feet) BWS (see Appendix C, Table C-8). A thermocline was identified between 10 – 14 meters (32.8 – 45.9 feet) BWS. Figure 7-10 presents a profile of DO and water temperature over the surveyed water column and Appendix C (Table C-8) presents the individual values recorded for each depth interval.

# September 2020

A DO and water temperature profile was conducted on September 21, 2020 at the deepest point in Lake Sabrina. The maximum depth at the profile point on September 21, 2020 was 72 meters (236.2 feet) with a lake surface elevation of 9111.89 feet msl. DO ranged from 9.97 mg/L at a depth of 14 meters (45.9 feet) BWS and 0.80 mg/L at a depth of 72 meters (236.2 feet) BWS. In general, DO saturation was above 80 percent and often exceeded 100 percent in the upper portion of the lake. DO saturation gradually declined to less than 10 percent at 72 meters (236.2 feet) BWS (see Appendix C, Table C-9). A thermocline was identified between 10 – 14 meters (32.8 feet and 45.9 feet) BWS. Figure 7-11 presents a profile of DO and water temperature over the surveyed water column and Appendix C (Table C-9) presents the individual values recorded for each depth interval.

#### October 2020

A DO and water temperature profile was conducted on October 5, 2020 at the deepest point in Lake Sabrina. The maximum depth at the profile point on October 5, 2020 was 69.5 meters (228 feet) with a lake surface elevation of 9108.97 feet msl. DO ranged from 10.03 mg/L at a depth of 13 meters (42.7 feet) BWS and 0.27 mg/L at a depth of 69.5 meters (228.0 feet) BWS. In general, DO saturation was above 80 percent and often exceeded 100 percent in the upper portion of the lake. DO saturation gradually declined to less than 10 percent at 69 meters (226.4 feet) BWS (see Appendix C, Table C-10). A thermocline was identified between 10 – 13 meters (32.8 feet and 42.7 feet) BWS. Figure 7-12 presents a profile of DO and water temperature over the surveyed water column and Appendix C (Table C-10) presents the individual values recorded for each depth interval.

#### **7.2.2. SUMMARY**

The DO and water temperature profiles for Lake Sabrina were similar for each monitoring period throughout the summer and early fall. Each exhibited elevated DO readings in the upper two thirds of the lake and a gradual decline in DO near the bottom portion of the lake (well below the lake outlet). A comparison was made to see if the DO readings altered with lake elevation over the monitoring period and are presented in Figure 7-13. No major changes were noted between the monthly monitoring periods.

# 7.2.3. GENERAL WATER QUALITY

Field water quality testing and laboratory water quality samples were collected during the same time periods that DO profiles were conducted and are presented in Table 7-1. Field measurements indicated Secchi disk depth of 7.5 - 12.0 meters between June and October sampling periods.

Thermoclines were identified during all sampling periods and ranged from 9-14 meters in the July sampling period and 10-14 meters during the September sampling period. The following measurements are based on collection of measurements above and below the observed thermoclines. Conductivity ranged from  $20-30~\mu\text{S/cm}$  in the shallow zone (above the thermocline) to  $20-40~\mu\text{S/cm}$  in the deeper zone (below the thermocline).

Laboratory water quality analysis for June and July sampling periods indicated very low values of TDS ranging from 11 mg/L to 39 mg/L with generally the higher values in the deeper zone.

 $NO_3$ -N was ND<0.110 for all samples collected in Lake Sabrina. Total nitrogen as N was detected twice, once at 0.30 mg/L at a depth of 15 meters during the June sampling period at and 0.52 mg/L at 17 meters during the August sampling period.  $PO_4$ -P was detected once at 0.022 mg/L at 7 meters during the September sampling period. All other samples in Lake Sabrina were ND<0.010 mg/L for  $PO_4$ -P.

#### 7.2.4. BACTERIOLOGICAL

Bacteriological samples were collected between July 1 and August 15, 2020 and analyzed for *E. coli*. A total of seven samples were collected and only one sample (collected on August 5, 2020) had a detectable value of *E. coli* at 3.1 MPN/100ml. All other samples were non-detect at ND<1.0 MPN/100 ml. Table 7-2 summarizes the results for *E. coli* for Lake Sabrina.

#### 7.3. INTAKE 2 RESERVOIR

#### 7.3.1. BACTERIOLOGICAL

A total of seven samples were collected for *E. coli* and ranged from ND<1.0 MPN/100 ml to 24 MPN/100 ml. Only one sample, collected on August 3, 2020 had a non-detectable value of *E. coli* at ND<1.0 MPN/100 ml. Table 7-2 summarizes the results for *E. coli* for Intake 2 Reservoir.

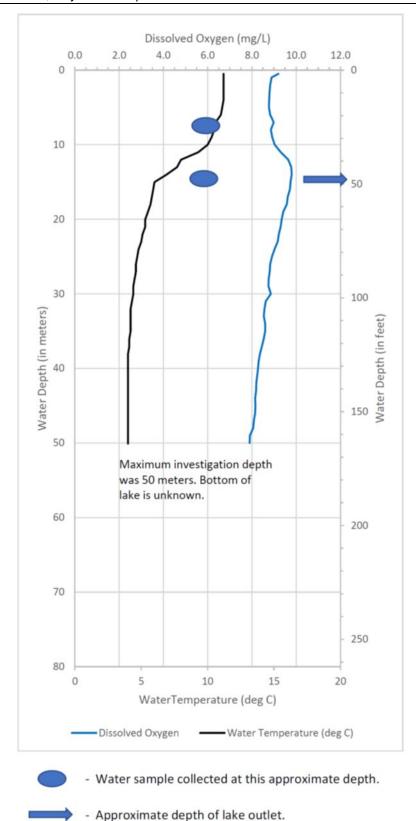


Figure 7-8 Lake Sabrina Dissolved Oxygen and Water Temperature Profile – June 2020

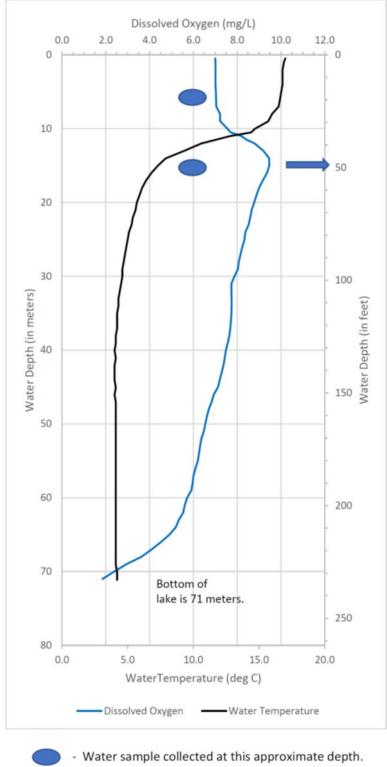


Figure 7-9 Lake Sabrina Dissolved Oxygen and Water Temperature Profile – July 2020

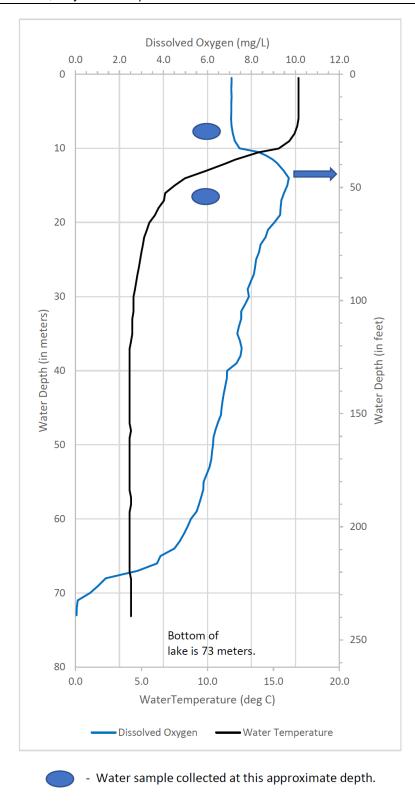
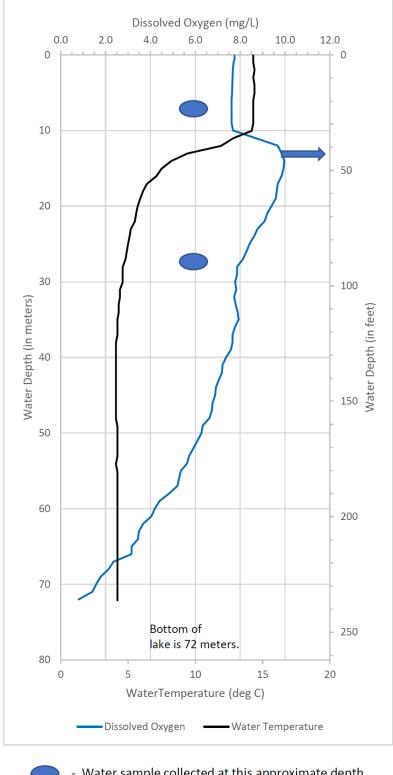


Figure 7-10 Lake Sabrina Dissolved Oxygen and Water Temperature Profile – August 2020



- Water sample collected at this approximate depth.

Figure 7-11 Lake Sabrina – Dissolved Oxygen and Water Temperature Profile – September 2020

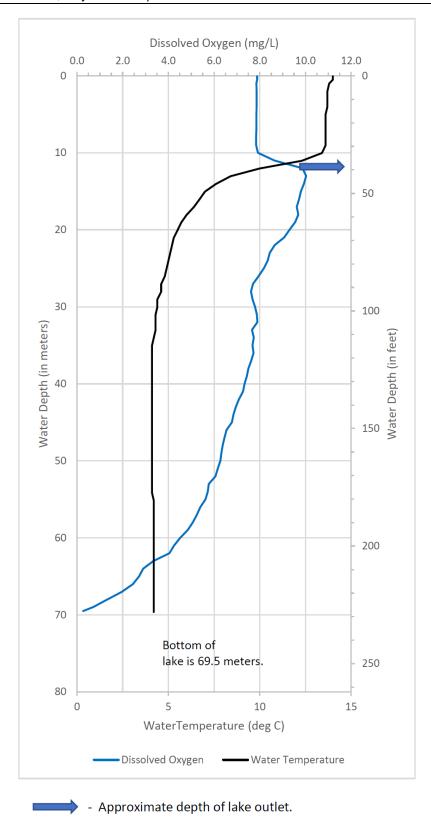


Figure 7-12 Lake Sabrina – Dissolved Oxygen and Water Temperature Profile – October 2020

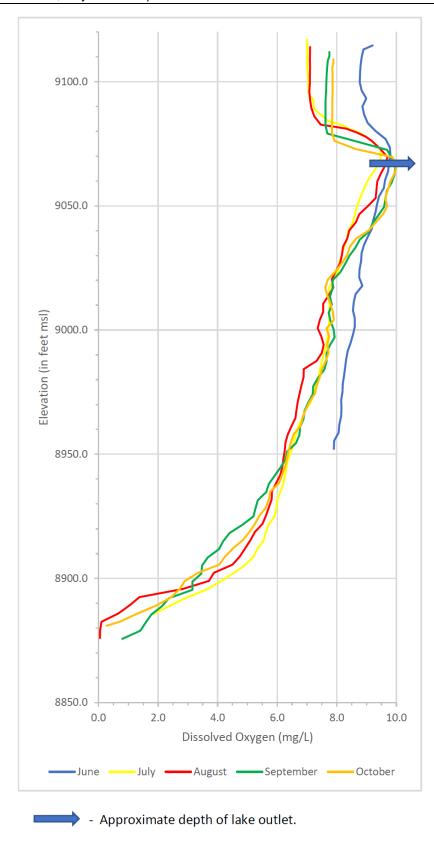


Figure 7-13 Lake Sabrina - Comparison of June-October Vertical DO Profiles with Lake Elevation

#### 7.4. BISHOP CREEK

#### 7.4.1. DISSOLVED OXYGEN AND WATER TEMPERATURE

Water temperature ranged from 6.9 °C to 17.8 °C with the lower values occurring near the upper reaches of Bishop Creek and the higher values generally occurring in the lower reaches of Bishop Creek. DO occurred in a narrow range from 7.12 mg/L to 9.68 mg/L. The oxygen saturation level for the observed water temperature and air pressure was generally above 98 percent and often exceeded 100 percent for all monitored reaches of Bishop Creek.

Table 7-3 presents the DO and water temperature values obtained during the June-October 2020 monitoring period.

#### 7.4.2. GENERAL WATER QUALITY

Field and laboratory water quality samples were collected along Bishop Creek in June, July, August and September 2020 and are summarized in Table 7-4. Turbidity ranged from 0.36 to 69.6 NTU with the highest concentration at Bishop Creek below Powerhouse No. 3 during the June sampling period. Generally, Bishop Creek had values of turbidity below 5 NTU for all locations and all sampling periods. Conductivity ranged from 20 to 78  $\mu$ S/cm@25°C with the highest concentration observed at South Fork of Bishop Creek below South Lake during the September sampling period. Generally, conductivity increased in value as you progressed downstream in the Bishop Creek watershed.

TDS ranged from 11 mg/L to 41 mg/L with the highest concentration occurring below Powerhouse No. 4 and below Powerhouse No. 6 in September 2020.

NO<sub>3</sub>-N was reported to below the detection limit (ND<0.110 mg/L) in all samples. Total Nitrogen was detected in only three samples at 1.1 mg/l in the South Fork of Bishop Creek below South Lake in June 2020 and at 0.41 mg/L in the Middle Fork of Bishop Creek below Lake Sabrina in June 2020, and 0.37 mg/L in Bishop Creek below Powerhouse No. 5 in September 2020. All other samples reported Total Nitrogen below the detection limit of ND<0.30 mg/L.

PO<sub>4</sub>-P was detected in only five samples (out of a total of 32 samples) and ranged from ND<0.010 mg/L to 0.044 mg/L. The highest concentration was detected in North Fork of Bishop Creek in July 2020.

<u>Table 7-3 Dissolved Oxygen and Water Temperature Measurements for Bishop Creek June - October 2020</u>

							FIELD MEASUREME	NTS		Calculated DO
				MEAN DAILY	Air Tem	perature	Water	Dissolved	Barometric	Saturation **
	STATION			DISCHARGE *	Measured	Calculated	Temperature	Oxygen	Pressure	(%)
LOCATION	DESIGNATION	DATE	TIME	(cfs)	(deg F)	(deg C)	(deg C)	(mg/L)	(in Hg)	` ,
		6/16/2020	7:40	24	50	10.0	9.1	8.71		
	-	7/13/2020	14:40	17	88	31.1	17.8	8.08	21.60	116.1%
	-	7/13/2020	9:00	14	61	16.1	13.8	7.63	21.65	100.6%
North Fork of Bishop	_	8/6/2020	10:20	14	62	16.7	15.4	8.29	21.43	115.8%
•	BC-NF-1	8/26/2020	11:40	12	69	20.6	14.5	8.23	21.50	112.5%
Creek	-	9/20/2020	12:50	8.4	66	18.9	14.2	8.95	21.51	122.3%
	-	9/22/2020	11:45	8.5	64	17.8	11.3	9.02	21.59	124.9%
	-								<b>+</b>	
		10/6/2020	9:45	7.2	58	14.4	9.2	9.02	21.50	109.9%
		6/15/2020	12:30	16	60	15.6	7.1	9.23	21.20	102.80/
		7/13/2020	16:00	22	86	30.0	7.0	8.86	21.30	102.8%
South Fork of Bishop		7/31/2020	10:00	33	68	20.0	6.9	9.00	21.30	101.8%
Creek below South	BC-blw-SL	8/6/2020	12:00	35	66	18.9	8.9	8.62	21.15	104.0%
Lake	-	8/25/2020	12:45	34	67	19.4	8.0	8.62	21.25	104.0%
		9/20/2020	11:45	22	64	17.8	10.5	8.17	21.24	103.4%
	-	9/22/2020	8:55	22	53	11.7	8.9	8.65	21.30	102.9%
		10/5/2020	10:50	20	60	15.6	9.7	8.16	21.25	100.8%
		6/16/2020	7:00	40	50	10.0	10.7	8.09		
	BC-blw-LS	7/13/2020	15:05	42	85	29.4	15.4	7.58	21.70	104.4%
Middle Fork of Bishop		7/31/2020	9:20	36	61	16.1	15.7	7.16	21.79	98.6%
Creek below Lake		8/6/2020	10:45	34	62	16.7	17.0	7.22	21.58	103.8%
Sabrina		8/24/2020	12:55	36	73	22.8	17.2	7.12	21.78	102.3%
Subilitu		9/20/2020	12:15	19	65	18.3	15.3	7.42	21.63	102.2%
		9/22/2020	11:00	20	63	17.2	14.9	7.55	21.70	101.7%
		10/5/2020	13:45	33	71	21.7	14.2	7.49	21.60	100.9%
		6/16/2020	9:30	14	64	17.8	10.6	8.94		
		7/14/2020	10:30	14	78	25.6	13.5	8.30	23.20	102.3%
		7/30/2020	10:15	14	80	26.7	12.9	8.41	23.27	101.3%
Bishop Creek below	BC-blw-PH2	8/6/2020	9:45	14	68	20.0	14.0	8.17	23.15	103.0%
Powerhouse No. 2	BC-DIW-PHZ	8/26/2020	10:15	14	76	24.4	11.9	8.67	23.17	112.3%
		9/20/2020	11:15	15	72	22.2	11.6	8.74	23.21	113.2%
		9/22/2020	12:20	15			13.9	8.53	23.28	105.1%
		10/6/2020	9:25	15	62	16.7	9.5	9.10	23.20	102.2%
		6/16/2020	10:40	5.9	70	21.1	12.1	8.97		
		7/14/2020	9:50	6	80	26.7	14.6	8.31	23.90	102.1%
Dishara Caral III		7/30/2020	9:40	5.9	80	26.7	14.7	8.28	23.96	100.4%
Bishop Creek below	BC-blw-PH3	8/6/2020	9:20	6	73	22.8	13.5	8.44	23.84	101.4%
Powerhouse No. 3		8/26/2020	9:40	5.7	75	23.9	12.9	8.66	23.86	101.7%
		9/20/2020	10:55	6.5	71	21.7	11.8	8.93	23.91	112.7%
		9/22/2020	12:55	6.4	74	23.3	13.2	8.78	23.97	104.2%

							FIELD MEASUREME	NTS		Calculated DO
				MEAN DAILY	Air Tem	perature	Water	Dissolved	Barometric	Saturation *
	STATION			DISCHARGE *	Measured	Calculated	Temperature	Oxygen	Pressure	(%)
LOCATION	DESIGNATION	DATE	TIME	(cfs)	(deg F)	(deg C)	(deg C)	(mg/L)	(in Hg)	
		10/6/2020	9:05	6.9	63	17.2	10.5	9.15	23.90	102.6%
		6/16/2020	11:55	20	79	26.1	13.0	9.13		
		7/14/2020	8:55	20	80	26.7	14.8	8.60	24.90	100.5%
Bishop Creek below Powerhouse No. 4		7/30/2020	9:00	20	83	28.3	14.7	9.01	24.92	105.3%
	DC 1-1 DUA	8/6/2020	8:42	21	71	21.7	13.6	8.88	24.79	102.8%
	BC-blw-PH4	8/26/2020	8:40	20	69	20.6	13.3	8.98	24.81	103.9%
		9/20/2020	10:20	21	72	22.2	11.3	9.44	24.91	113.4%
		9/24/2020	9:40	21	64	17.8	10.9	9.50	24.92	101.4%
		10/6/2020	8:45	19	57	13.9	10.7	9.50	24.90	101.4%
		6/16/2020	12:25	0.52	79	26.1	16.1	9.01		
		7/14/2020	8:20	2.9	79	26.1	15.0	8.47	25.20	100.0%
		7/30/2020	8:30	2.1	79	26.1	14.7	8.54	25.29	98.6%
Bishop Creek below	BC-blw-PH5	8/6/2020	8:20	2.4	71	21.7	13.8	8.68	25.13	98.1%
Powerhouse No. 5		8/26/2020	8:15	2.2	67	19.4	13.7	8.67	25.19	98.0%
		9/20/2020	10:00	1.8	68	20.0	12.5	9.04	25.25	99.9%
		9/24/2020	8:50	1.8	61	16.1	11.1	9.23	25.30	109.6%
		10/6/2020	8:25	3.0	55	12.8	10.8	9.29	25.25	98.0%
		6/16/2020	13:00	115	81	27.2	14.4	9.15		
		7/14/2020	7:45	108	78	25.6	15.3	8.73	25.40	103.1%
		7/30/2020	7:45	110	71	21.7	16.6	8.34	25.53	99.4%
Bishop Creek below	BC-blw-PH6	8/6/2020	8:05	106	71	21.7	14.5	8.84	25.36	102.1%
Powerhouse No. 6	BC-DIW-PHO	8/26/2020	7:35	105	65	18.3	13.8	8.99	25.43	100.4%
		9/20/2020	9:35	69	67	19.4	12.2	9.28	25.47	101.3%
		9/24/2020	8:05	69	59	15.0	11.0	9.59		
		10/6/2020	8:00	73	55	12.8	10.7	9.68	25.50	100.9%
				Maximum	88	31.1	17.8	9.68	25.53	124.9%
				Minimum	50	10.0	6.9	7.12	21.15	98.0%

## Notes:

<sup>\* -</sup> Instantaneous measurements made on North Fork of Bishop Creek. All other values were calculated on a mean daily average discharge.

<sup>\*\* -</sup> Saturation based on calculated DO saturation at reported water temperature and ambient barometric pressure.

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Table 7-4 Field Water Quality Measurements and Laboratory Results of Bishop Creek Samples for Bishop Creek June - September 2020

					F	IELD MEASU	JREMENTS (	(a)		LA	BORATORY	MEASUREME	NTS	
				MEAN							Т	otal Nitroge	n	
	STATION DESIGNATI			DAILY DISCHARGE	Water	Dissolved	T who i al i to .	Conductivity	TDS	NO <sub>3</sub>	Total	NO <sub>2</sub> + NO <sub>3</sub>	TKN	DO as D
LOCATION	ON	DATE	TIME	(cfs) (b)	Temperature (deg C)	Oxygen (mg/L)	Turbidity (NTU)	(μS/cm@25C)	(mg/L)	as N (mg/L)	Nitrogen (mg/L)	as N (mg/L)	(mg/L)	PO₄ as P (mg/L)
		6/16/2020	8:00	24	9.1	8.71	1.92	30	21	ND<0.11	ND<0.30	ND<0.200	0.16	ND<0.010
North Ford of Birkey Cond	BC-NF-1	7/31/2020	9:00	14	13.8	7.63	1.38	30	28	ND<0.11 0	ND<0.30	ND<0.200	0.12	0.044
North Fork of Bishop Creek		8/26/2020	11:40	12	14.5	8.23	0.68	40	11	ND<0.11 0	ND<0.30	ND<0.200	0.10	ND<0.010
		9/22/2020	11:45	8.5	11.3	9.02	2.95	40	21	ND<0.11 0	ND<0.30	ND<0.200	0.23	ND<0.010
		6/15/2020	12:30	16	7.1	9.23	0.43	30	33	ND<0.11 0	1.1	ND<0.200	1.1	0.013
South Fork of Bishop Creek	BC-blw-SL	7/31/2020	10:00	33	6.9	9.00	1.11	40	17	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	0.043
below South Lake	BC-UIW-3L	8/25/2020	12:45	34	8.0	8.62	3.45	40	31	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010
		9/22/2020	8:55	22	8.9	8.65	1.49	78	ND<10	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010
		6/16/2020	7:15	40	10.7	8.09	4.16	20	25	ND<0.11 0	0.41	ND<0.200	0.41	0.010
Middle Fork of Bishop Creek		7/31/2020	9:20	36	15.7	7.16	1.44	20	12	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	0.017
below Lake Sabrina	BC-blw-LS	8/24/2020	12:55	36	17.2	7.12	5.06	30	30	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010
		9/22/2020	11:00	22	14.9	7.55	2.52	37	10	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010
		6/16/2020	9:30	14	10.6	8.94	2.72	40	28	ND<0.11 0	ND<0.30	ND<0.200	0.11	ND<0.010
Bishop Creek below	BC-blw-PH2	7/30/2020	10:15	14	12.9	8.41	0.68	40	20	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010
Powerhouse No. 2	DC-DIW-FIIZ	8/26/2020	10:15	14	11.9	8.67	1.63	46	14	ND<0.11 0	ND<0.30	ND<0.200	0.13	ND<0.010
		9/22/2020	12:20	15	13.9	8.53	1.65	50	24	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010
Bishop Creek below Powerhouse No. 3	BC-blw-DH2	6/16/2020	10:40	5.9	12.1	8.97	69.6	40	27	ND<0.11 0	ND<0.30	ND<0.200	0.11	ND<0.010
	BC-blw-PH3	7/30/2020	9:40	5.9	14.7	8.28	0.60	50	35	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010

		8/26/2020	9:40	5.7	12.9	8.66	1.37	50	20	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010
		9/22/2020	12:55	6.4	13.2	8.78	1.88	52	28	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010
		6/16/2020	11:55	20	13.0	9.13	1.55	50	35	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010
Bishop Creek below	DC blue DIA	7/30/2020	9:00	20	14.7	9.01	0.76	50	27	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010
Powerhouse No. 4	BC-blw-PH4	8/26/2020	8:40	20	13.3	8.98	1.14	53	23	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010
		9/24/2020	9:40	21	10.9	9.50	3.69	58	41	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010
		6/16/2020	12:25	0.52	16.1	9.01	1.27	60	37	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010
Bishop Creek below	BC-blw-PH5	7/30/2020	8:30	2.1	14.7	8.54	0.36	50	26	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010
Powerhouse No. 5	BC-NIM-LU2	8/26/2020	8:15	2.2	13.7	8.67	2.14	58	15	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010
		9/24/2020	8:50	1.8	11.1	9.23	4.15	59	37	ND<0.11 0	0.37	ND<0.200	0 ND<0.10 0 0.37	ND<0.010
		6/16/2020	13:00	115	14.4	9.15	2.03	50	35	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010
Bishop Creek below	DC hlv: DUC	7/30/2020	7:45	110	16.6	8.34	1.10	50	38	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010
Powerhouse No. 6	BC-blw-PH6	8/26/2020	7:35	105	13.8	8.99	3.04	66	27	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010
		9/24/2020	8:05	69	11.0	9.59	4.15	58	41	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010
				Maximum	(c)	(c)	69.60	78	41	ND<0.11 0	1.10	ND<0.200	1.10	0.04
				Minimum	(c)	(c)	0.36	20	ND<10	ND<0.11 0	ND<0.30	ND<0.200	ND<0.10	ND<0.010

### Notes:

NO2=Nitrite; NO3=Nitrate, PO4=Orthophosphate; TDS=Total Dissolved Solids; TKN=Total Kjeldahl.

<sup>&</sup>lt;sup>a</sup> Concurrent measurements when laboratory samples were collected.

<sup>&</sup>lt;sup>b</sup> Instantaneous measurements made on North Fork of Bishop Creek. All other values were calculated on a mean daily average discharge.

<sup>&</sup>lt;sup>c</sup> See Table 7-3 for DO and water temperature values.

#### 7.5. POWERHOUSE TAILWATER

#### 7.5.1. FIELD WATER TEMPERATURE AND DISSOLVED OXYGEN

Water temperature ranged from 10.5 °C to 15.4 °C with generally the lower values occurring in tailwater in the powerhouses in the upper reaches of Bishop Creek and the higher values generally occurring in the powerhouse tailraces from the lower reach of Bishop Creek. DO occurred in a very narrow range from 8.17 mg/L to 9.64 mg/L. The oxygen saturation level for the observed water temperature and air pressure at each of the tailraces was generally above 96 percent and often exceeded 100 percent for the monitored tailraces of each of the powerhouses.

Table 7-5 presents the field DO and water temperature values obtained from the various tailraces during the June-August 2020 monitoring period.

<u>Table 7-5 Field Water Quality Measurements for Powerhouse Tailwater June - August 2020</u>

					FIE	LD MEASUREM	ENTS		Calculated
LOCATION	STATION DESIGNATION	DATE	TIME	Air Tem Measured (deg F)	calculated (deg C)	Water Temperature (deg C)	Dissolved Oxygen (mg/L)	Barometric Pressure (in Hg)	DO Saturation * (%)
LOCATION	DESIGNATION		9:15	64	17.8	11.3	8.85	(III IIg)	
		6/16/2020 7/14/2020	10:10	79	26.1	13.8	8.17	23.20	100.7%
		7/30/2020	10:10	80	26.7	13.8	8.21	23.27	100.7%
Tailwater at		8/6/2020	9:32	70	21.1	13.8	8.26	23.27	101.2%
Powerhouse No. 2	TW@PH2	8/26/2020	10:05	76	24.4	12.7	8.43	23.11	101.6%
		9/20/2020	11:05	70	22.2	11.6	8.72	23.22	112.9%
		9/22/2020	12:35	72	22.2	12.4	8.72	23.22	105.0%
		10/6/2020	9:15	62	16.7	10.8	8.87	23.20	103.0%
		6/16/2020	10:25	69	20.6	11.4	8.84	23.20	102.176
		7/14/2020	9:30	80	26.7	14.2	8.41	23.90	103.3%
		7/30/2020	9:20	80	26.7	13.7	8.42	23.96	99.9%
Tailwater at		8/6/2020	9:10	73	22.8	13.5	8.47	23.81	101.8%
Powerhouse	TW@PH3	8/26/2020	9:25	75	23.9	12.9	8.62	23.86	101.8%
No. 3		9/20/2020	10:40	71	21.7	11.4	9.04	23.90	114.1%
		9/22/2020	12:45	74	23.3	12.2	8.88	23.97	103.0%
		10/6/2020	8:55	63	17.2	10.5	9.20	23.90	103.0%
		6/16/2020	11:35	79	26.1	12.4	9.07		
		7/14/2020	8:40	80	26.7	14.7	8.58	24.90	100.3%
		7/30/2020	8:45	82	27.8	14.7	8.60	24.92	100.5%
Tailwater at		8/6/2020	8:37	71	21.7	13.9	8.72	24.77	100.9%
Powerhouse	TW@PH4	8/26/2020	8:30	69	20.6	13.2	8.90	24.81	103.0%
No. 4		9/20/2020	10:10	72	22.2	11.7	9.29	24.89	111.6%
		9/24/2020	9:25	64	17.8	11.4	9.44	24.92	113.4%
		10/6/2020	8:40	57	13.9	10.6	9.49	24.85	101.3%
		6/16/2020	12:15	79	26.1	13.0	9.09		
		7/14/2020	8:10	79	26.1	15.0	8.52	25.20	100.6%
		7/30/2020	8:15	76	24.4	14.9	8.42	25.29	97.3%
Tailwater at		8/6/2020	8:16	71	21.7	13.8	8.58	25.13	96.9%
Powerhouse	TW@PH5	8/26/2020	8:00	67	19.4	13.4	8.65	25.19	97.7%
No. 5		9/20/2020	9:50	68	20.0	11.7	8.88	25.26	105.4%
		9/24/2020	8:40	61	16.1	11.3	8.99	25.30	106.7%
		10/6/2020	8:15	55	12.8	10.9	9.06	25.25	95.6%

				FIELD MEASUREMENTS					Calculated
				Air Tem	perature	Water	Dissolved	Barometric	DO
LOCATION	STATION DESIGNATION	DATE	TIME	Measured (deg F)	Calculated (deg C)	Temperature (deg C)	Oxygen (mg/L)	Pressure (in Hg)	Saturation * (%)
		6/16/2020	12:50	81	27.2	14.6	8.88		
	TW@PH6	7/14/2020	7:15	77	25.0	15.4	8.30	25.40	98.0%
Tailwater at		7/30/2020	7:30	70	21.1	15.1	8.80	25.50	102.7%
Powerhouse		8/6/2020	7:58	71	21.7	14.0	8.82	25.38	101.9%
	100@PH0	8/26/2020	7:15	65	18.3	14.1	8.90	25.43	101.6%
No. 6		9/20/2020	9:20	67	19.4	12.2	9.64	25.51	105.2%
		9/24/2020	7:40	59	15.0	11.7	9.46	25.54	111.0%
		10/6/2020	7:45	55	12.8	10.9	9.58	25.50	99.8%
	Maximum					15.4	9.64	25.54	114.1%
			Minimum	55	12.8	10.5	8.17	23.11	95.6%

# Notes:

<sup>\* -</sup> Saturation based on calculated DO saturation at reported water temperature and ambient barometric pressure.

#### 7.6. DISCUSSION

The Water Quality Study has completed the first year of the proposed 2-year investigation. Preliminary data has been collected on water quality of upstream lakes and creeks as well as Project facilities. Continuation of the program will assist in achieving current characteristics of the upstream and downstream water quality and will assist in establishing baseline conditions and assist in assessing any impacts that the Project operations may have on the existing water quality. In addition, the water quality data will assist in assuring Project facilities and operations are consistent with the current water quality goals and objectives for Bishop Creek in the Water Quality Control Plan.

### 7.7. CONSULTATION SUMMARY

- SCE distributed three periodic progress reports on the following schedule:
- Progress Report 1: December 19, 2019
- Progress Report 2: April 14, 2020
- Progress Report 3: July 24, 2020
- Initial Study Report: October 30, 2020
- Initial Study Report Meeting: November 10, 2020

Eight technical memoranda summarizing the 2019 study implementation were submitted with Progress Report 2. Following that filing, SCE hosted a TWG meeting on May 7, 2020 to discuss the 2019 study season, work completed to date and the technical memoranda. After the meeting, TWG members submitted comments on the technical memoranda and SCE provided a general response to those comments as part of Progress Report 3.

The Initial Study Report (ISR) was filed with FERC on October 30, 2020 and a virtual ISR Meeting was held on November 10, 2020. The State Water Resources Control Board filed a comment letter during the comment period offering support for the ongoing study program with no requested changes or modifications. No other comments were received from TWG members or stakeholders on the ISR materials or on the previously provided responses to comments.

# 8.0 PROJECT SCHEDULE

The projected schedule for implementation of the water quality study is presented in Table 8-1.

Table 8-1 Bishop Creek Water Quality Study Plan Schedule

ANALYSIS	RESPONSIBLE ENTITY	SCHEDULE MILESTONES
File NOI/PAD with FERC along with Final Study Plans	SCE	05/01/19
FERC Holds Scoping and Site Visit	FERC	05/30/19 - 06/29/19
FERC Director's Study Plan Determination	FERC	01/10/20 - 02/09/20
First Field Season	SCE	2020
Second Field Season	SCE	2021
Final Study Report	SCE	2022
License Application	SCE	June 2022

#### 9.0 REFERENCES

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- SNARL, 2015. Assessment of Bacterial Water Quality in the Lahontan Region. State Water Resources Control Board Contract Number: 12-067-160. October 2012-March 2015.
- USEPA, EMSL-Cincinnati, Method for Chemical Analysis of Waters and Wastes, EPA-600/4-79-020 (Cincinnati, OH, 1983).
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# APPENDIX A COMPLETED FIELD FORMS

# Field Data Forms June 2020

# BISHOP CREEK WATER QUALITY STUDY FIELD FORM

SITE NAME:	South Lake DATE: 6/15/20 TIME: 8:25am
DRAINAGE:	Bishop Creek INVESTIGATORS: TB JB
	R QUALITY PARAMETERS WEATHER CONDITIONS  : See prof. (2F or 2C) Dissolved Oxygen: See prof. (mg/L)
Water Temperature	Elevation (mg/L)  See blow (umhos/cm@25 °C) Stream or Lake gage reading: 9,738.5 feet (an
Furbidity: Secol	
Vinds 5-6 (mph) No.545 10-15 Secchi Disk:  Visual Condition of Clear Floating Material	Cloud cover O (%) Precipitation Fog Rain Sleet Hail Snow  Depth of Disappear: 1 meters  Depth of Reappearance: 10 meters  Secchi Depth: 10.5 meters  Stream (check all that apply):  Cloudy Colored  Other:
	site Drawing  epths: no thermocline observed.
- 31.4	on; Cond. = 30 mS  5m; Cond = 110 mS  elevation of 9,738.5 amsl provided by  1.1 Schmidt, SCE operations
	WATER QUALITY SAMPLE DATA  5L - DP - 5  5L - DP - 31.5 Sample Method: Grab Preservatives: Ice  es
SIGNED BY:	REVIEWED BY:

# WAŢER TEMPERATURE AND DISSOLVED OXYGEN

Location:	South Lake	6/15/	20
92			

DEPTH FROM WATER SURFACE	WATER TEMPERATURE	DISSOLVED OXYGEN	DEPTH FROM WATER SURFACE	WATER TEMPERATURE	DISSOLVED OXYGEN
(meters)	(°C)	(mg/L)	(meters)	(°C)	(mg/L)
0.5	10.3	8,45	31	4.9	8.81
1	10.2	8.47	32	4.9	8.78
2	10.1	8.49	33	4.8	8.74
3	10.0	8.49	34	4.8	8.70
4	10.0	8.49	35	4.8	8.65
5	9.9	8.50	36	4.8	8.61
6	9.8	8.52	37	4.7	8.55
7	9.8	8.52	38	4.7	8,49
8	9.7.	8.54	39	4.7	8.47
9	9.57	8.56	40	4. 7	8.45
10	9.4	8.65	41	4.7	8.40
11	9.3	8.69	42	4.7	8.34
12	8.6	8.93	43	4.7	8.31
13	8.4	9.02	44	4.7	8,30
14	8.0	9.16	45	4.7	8.28
15	7.5	9.40	46	4.7	8.27
16	7.1	9.46	47	4.7	8.26
17	6.6	9.56	48	4,7	8.19
18	4.5	9.61	49	5.1	0.8
19	6.1	9.56	50	5.6	0-21
20	5.9	9.60	5 <b>10-</b> 5	€.8	0.13
21	5.7	9.43	52		
22	5.5	9.33	53		
23	5,4	9.24	54		
24	5.3	9.19	55		
25	5.3	9.09	56		
26	5,2	9.04	57		
27	5.1	9.02	58		
28	5.1	8.94	59		
29	5.0	8.93	60		
30	5.0	8.87	61		

DRAINAGE: Bishop	Creek INVESTIGATORS: TB JB	_
PHYSICAL WATER QUAL	TY PARAMETERS WEATHER CONDITIONS	
Water Temperature: 7.	1 (2F or ©) Dissolved Oxygen: 9.23 (mg/L)	
Conductivity: 30	)(μmhos/cm@25 ºC) Stream or Lake gage reading:	
Turbidity: 0.43	(NTUs) Air Temperature 60 (F)or °C) Baro, Pressure (ir	n Hg)
Winds <u>4-5 (mph)</u> Clo	ud cover90(%) Precipitation Fog RainSleetHailSn	ow
Secchi Disk: NA Depth	f Disappear:meters	
	Secchi Depth: meter	s
Visual Condition of Stream Clear	check all that apply): Cloudy Colored	
Floating Material	Other:	
Remarks:		
	Site Drawing	
· · · · · · · · · · · · · · · · · · ·		
Sample No. BC -	WATER QUALITY SAMPLE DATA	
	Now-5L Sample Method: Grab Preservatives: Ice	
	Nw- 5L Sample Method: Grab Preservatives: Ice	1 b
Sample No. <u>BC -</u> No. of Sample Bottles	Preservatives: Ice  Preservatives: H2504 in	1 bc

DRAINAGE: Bishop	Creek INV	ESTIGATORS	: TB	JB	TIME:	
	4 10 10 10					-
PHYSICAL WATER QUAL		7		WEATHER CO		
Water Temperature: 10	· + (ºF o	or 🙆	Dissolved	Oxygen: 8	.09	(mg/L)
Conductivity: $\partial$	ν (μmh	10s/cm@25 ºC	C) Stream or	Lake gage rea	ding:	
urbidity: 4.16	(NTU	Js) Air Tem	perature_50	(E) (E) (C) (E)	Baro. Pressur	e(in H
Winds 1-2 (mph) Clo	ud cover	_(%) Precipita	ation Fog	g Rain	SleetHail	Snow
Secchi Disk: NA Depth						
	3 4 5 5 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7				epth:	
/isual Condition of Stream Clear	(check all that app Cloudy	oly):	Colored			
Floating Material	Othe	er:	_			
Remarks:						
		Site Draw	· inc			
Sample No. BC-bl		R QUALITY SA		Preservat		Ice
				Preservat		
			d: <u>Grab</u>	Preservat	ives: ives:_ <del></del>	
Sample No. BC-bl		Sample Method	d: <u>Grab</u>	Preservat		

				16/20	_ 1.119112-1	7:40
DRAINAGE:	Bishop Creek	_ INVESTIGATOR	rs: TB	JB		
PHYSICAL WATER	QUALITY PARAM	ETERS	W	EATHER COND	ITIONS	
Water Temperature:	9.1	_(ºF or •6)	Dissolved Ox	xygen: <u>8.</u>	71	_(mg/L)
Conductivity:		_(µmhos/cm@25		~		
Furbidity: 1.9	2	_(NTUs) Air Te	emperature 50	(°F or °C) Bare	o. Pressure	(in H
Winds (mph)	Cloud cover	O(%) Precip	oitation Fog _	RainSle	etHail _	Snow
Secchi Disk: NA	Depth of Disappea	r:meter	s Depth o	of Reappearance	o:	_meters
				Secchi Depti	n:	meters
Visual Condition of Schear Kanada Schear Kanada Schear Sch	Cloudy	Other:	Colored		199	
	North F	Site Dr	awing			
Sample No.	BC-NF-1	WATER QUALITY Sample Met		Preservative	s:	Ice
	BC-NF-1			Preservative	Transaction and	lce
Sample No. No. of Sample Bottle	BC-NF-1	Sample Met			Transaction and	lce in 1 be
	BC-NF-1	Sample Met	hod: Grab	Preservative	Transaction and	lce in 1 be
	BC-NF-1	Sample Met	hod: Grab	Preservative	Transaction and	ice in 1 b

Bishop Creek	_ INVEST	IGATORS:		TB	JB	)	_	
R QUALITY PARAM	ETERS			WEAT	HER C	ONDITIO	NS	
a: 11.3	_(ºF or €C	D	Dissolv	ed Oxyg	en:	8.85		(mg/L)
NA	_(NTUs)	Air Temp	erature_	64 GF	or °C)	Baro. Pre	essure_	(in H
i) Cloud cover	0 (%)	Precipita	tion <u> </u>	Fog	Rain	_Sleet	_Hail _	Snow
Depth of Disappear	r <u></u>	_meters	D	epth of R	eappea	rance:		meters
f Stream (check all the	at apply): Other:		Colored		Secchi [	Depth:		meters
		Site Draw	ina					
1.00		JALITY SA						
		JALITY SA		_ 1		atives:		
1.00			Grab	_ 1				lce <sup>-</sup>
-	R QUALITY PARAM  E: 11.3   NA  NA  Cloud cover  Depth of Disappear	R QUALITY PARAMETERS  a: 11.3 (°F or €C  WA (µmhos/o  WA (NTUs)  ) Cloud cover (%)  Depth of Disappear:  Stream (check all that apply):  Cloudy  Other:	R QUALITY PARAMETERS  a:	PROUALITY PARAMETERS  PROUALITY PARAMETERS  PROUALITY PARAMETERS  PROUALITY PARAMETERS  PROUALITY PARAMETERS  Procedure (Procedure (	PROUBLITY PARAMETERS  WEAT  IN 3 (PF or C) Dissolved Oxyge  WA (µmhos/cm@25 PC) Stream or Lake  WA (NTUs) Air Temperature WH (FF)  O) Cloud cover (%) Precipitation — Fog —  Depth of Disappear: meters Depth of R  Stream (check all that apply):  Cloudy Other:	R QUALITY PARAMETERS  (°F or C)  Dissolved Oxygen:  (μmhos/cm@25 °C) Stream or Lake gage real (NTUs)  Air Temperature  (NTUs)  Cloud cover  (%)  Precipitation — Fog — Rain — Depth of Disappear: — meters  Depth of Disappear: — Secchi I Stream (check all that apply):  Cloudy  Other:	WEATHER CONDITION  BY A (Profe) Dissolved Oxygen: 8.85  WA (Profe) Dissolved Oxygen: 8.85  WA (Profe) Dissolved Oxygen: 8.85  WA (NTUS) Air Temperature Profesor C Baro. Profesor Depth of Disappear: Profesor Depth of Reappearance: Secchi Depth:  Stream (check all that apply): Cloudy Other:	R QUALITY PARAMETERS  (°F or © Dissolved Oxygen: 8.85  MA (µmhos/cm@25 °C) Stream or Lake gage reading:

SITE NAME:	BC below PH # 2 DATE: 6/16/20 TIME: 9:30 am
DRAINAGE:	Bishop Creek INVESTIGATORS: TB JB
PHYSICAL WATE	ER QUALITY PARAMETERS WEATHER CONDITIONS
Water Temperatu	re: 10.6 (2F or © Dissolved Oxygen: 8.94 (mg/L)
Conductivity:	40(μmhos/cm@25 °C) Stream <del>or Lake</del> gage reading: 1.6 Let at we
Turbidity: 2	.72 (NTUs) Air Temperature 64 (For °C) Baro. Pressure (in Hg)
Winds 1/2 (mp	h) Cloud cover(%) Precipitation Fog RainSleetHailSnow
	Depth of Disappear:meters Depth of Reappearance:meters
Clear K	Secchi Depth: meters  of Stream (check all that apply):  Cloudy Colored  Other: t gauge  At sediment/rocks collecting in weirg, velocity = 3.1 ft/5
Neillaiks	Site Drawing
4	3.1 H/s
Sample No. No. of Sample Bo	WATER QUALITY SAMPLE DATA  BC-blw-PH2 Sample Method: Grab Preservatives: Ice  ttles Preservatives: H259 in 1 better
	REMARKS

SITE NAME:	Strong Cold Strong		TR
DRAINAGE:		INVESTIGATORS:TB	
PHYSICAL WATER			WEATHER CONDITIONS
Water Temperature	11.4	(ºF or C) Dissolved (	Oxygen: <u>8.84</u> (mg/L)
Conductivity:	NA	(μmhos/cm@25 °C) Stream or I	_ake gage reading:
Turbidity:	NA	(NTUs) Air Temperature 6	Per °C) Baro, Pressure(in F
Winds 4-8 (mph)	Cloud cover_		RainSleetHailSnow
			of Reappearance:meters
Visual Condition of	Stream (check all	that apply):	Secchi Depth: meters
Clear 🔍	Cloudy	Colored	
Floating Material		Other:	
Remarks:			
		Site Drawing	
		WATER QUALITY SAMPLE DATA	A
Sample No.	N/A	WATER QUALITY SAMPLE DATA	
Sample No.	NA_	WATER QUALITY SAMPLE DATA Sample Method: Grab	Preservatives: Ice
Sample No. No. of Sample Bottl		Sample Method: Grab	Preservatives: Ice

SITE NAME: $\frac{P}{R}$	shop Creek	INVESTIGATOR	s: 1	B JB		
PHYSICAL WATER Q	1-11-10-1-1			WEATHER COND	UTIONS	
						and the
Water Temperature:		/ 11 11 <del>                                </del>		Oxygen: 8.4		
Conductivity:				<del>Lake</del> gage reading		
Turbidity: 69	.6	(NTUs) Air Ten	nperature 70	② (°F) or °C) Bare	o. Pressure_	(in Hg
Winds 1-2 (mph)	Cloud cover_C	)(%) Precipit	tation Fo	g RainSle	etHail _	Snow
Secchi Disk: NA De	epth of Disappear:_	meters	Dept	th of Reappearance	e;	meters
Visual Condition of Str	ann (abaal) all that	Cuchá.		Secchi Depti	n:	meters
Clear	Cloudy		Colored			
Floating Material		Other:	-			
Remarks: Low	flow in a	creek				
		Site Dra	wing			
Sample No.	WA C-blw-PH3	TER QUALITY S		ΓA Preservative:	s: I	ce
				Preservative		
Sample No. <u>B</u> No. of Sample Bottles			od: <u>Grab</u>			
		Sample Metho	od: <u>Grab</u>	Preservative		

DRAINAGE:	Bishop Creek	INVEST	IGATORS:		TB ;	JB	
PHYSICAL WATER	QUALITY PARA	METERS			WEATHER C	CONDITIONS	i.
Water Temperature	12.4	(ºF or 🖰		Dissolved	d Oxygen:	9.07	(mg/L)
Conductivity:	NA	(μmhos/c	cm@25 ºC)	Stream o	r Lake gage re	eading:	
Turbidity:	NA	(NTUs)	Air Tempe	erature 7	9 (For °C)	Baro. Press	sure(in H
Winds_ <u>H(mph)</u>	Cloud cover_	0_(%)	Precipitati	ion Fo	og Rain _	_SleetH	ailSnow
Secchi Disk: NA	Depth of Disapp	ear:	_meters	Dep	oth of Reappea	rance:	meters
Javal Candition of	Stroom (abook all	that applied			Secchi	Depth:	meters
Visual Condition of Clear	Cloud	у	411	Colored			
Floating Material		Other:	_				
Remarks:							
			Site Drawii	ng			
	111	WATER QU					
	_ NA		JALITY SAI		Preserv	atives:	Ice
			ole Method:	Grab	Preserv	ratives:	Ice
Sample No. No. of Sample Bottl				Grab	Preserv	-	Ice

SITE NAME:								
DRAINAGE:	Bishop Creek	INVESTIG	ATORS: _	TB	5 51	В		
PHYSICAL WATER	QUALITY PARAM	ETERS		W	VEATHER C	CONDITIO	NS	
Water Temperature:	13.0	_(ºF or 🐑	ſ	Dissolved C	Oxygen:	9.13		(mg/L)
Conductivity:	50	_(µmhos/cm(	@25 ºC) s	Stream or L	ake gage re	eading:		
Turbidity: 1.	55	_(NTUs) A	Air Temper	ature 7		Baro. Pr	essure_	(in H
Winds_3_(mph)	Cloud cover_(	<u>)</u> (%) F	Precipitatio	n Fog	Rain _	_Sleet _	_Hail _	Snow
Secchi Disk: NA								
					Secchi	Depth:		_ meters
Visual Condition of S Clear 📗 💢	Stream (check all th Cloudy		(	Colored				
Floating Material		Other:						
Remarks:								
		Sit	te Drawin	n .				
Sample No.	SC-blw. PH	WATER QUA	LITY SAM			/atives:		Се
	BC-blw. PH	1			Preserv	/atives: /atives: <u>}</u>	250 y	ce in 1 be
Sample No. {	BC-blw. PH	Sample		Grab	Preserv		350y	ce in 1 ba
	BC-blw. PH	Sample	Method: (	Grab	Preserv		250y	ce in 1 bo

DRAINAGE:	Bishop Creek	INVESTIG	GATORS: _	TB	JB		
PHYSICAL WATE	R QUALITY PAF	RAMETERS		WEA	THER CON	DITIONS	
Water Temperatur	e: 13.0	(ºF or €C)	) D	issolved Oxy	gen: 9.0	9	(mg/L)
Conductivity:	NA	(μmhos/cm	n@25 ºC) S	tream or Lake	e gage readin	g:	
Turbidity:	NA	(NTUs)	Air Tempera	ture 79 (	For °C) Ba	ro. Pressu	re(in H
Winds_H_(mp	n) Cloud cove	erO(%)	Precipitation	Fog	RainSle	eetHai	ISnow
Secchi Disk: NA	Depth of Disap	pear:	meters	Depth of	Reappearanc	e:	meters
Visual Condition of Clear	f Stream (check a		c	olored	Secchi Dep	th:	meters
Remarks:							
		5	ite Drawing				
		WATER QUA	ALITY SAME	PLE DATA			
Sample No.	NA	WATER QUA	ALITY SAMI e Method: <u>G</u>		Preservative	os:	Ice
	NA_	WATER QUA	e Method: <u>G</u>				
Sample No. No. of Sample Bo	NA	WATER QUA					Ice

SITE NAME: BC belo	DATE: 6/16/20 TIME: 12:25
DRAINAGE: Bishop Cree	k INVESTIGATORS: TB JB
PHYSICAL WATER QUALITY PA	ARAMETERS WEATHER CONDITIONS
Water Temperature: 16.	(°F or ©) Dissolved Oxygen: 9.0 (mg/L)
Conductivity: 60	(μmhos/cm@25 ºC) Stream or Lake gage reading:
Turbidity: 1.27	(NTUs) Air Temperature 79 (F) or °C) Baro. Pressure (in H
Winds 1- 4 (mph) Cloud co	ver(%) Precipitation Fog RainSleetHailSnow
	appear: meters
	Secchi Depth: meters
	oudy Colored
Floating Material	Other:
Remarks: 4 50°	ne leaf liter
	m forebay into creek downstream. Calm on and low flow in creek below.
20.11	WATER QUALITY SAMPLE DATA
Sample No. BC-blw-	WATER QUALITY SAMPLE DATA  PHS Sample Method: Grab Preservatives: Ice
Sample No. BC-blw-	WATER QUALITY SAMPLE DATA
26.11	WATER QUALITY SAMPLE DATA  PHS Sample Method: Grab Preservatives: Ice  Preservatives: Hasy in 15

DRAINAGE:	Bishop Creek	INVESTIGATORS:	TB JB	
PHYSICAL WATE	R QUALITY PARA	AMETERS	WEATHER CONDITIONS	5
Water Temperatur	e: 14.6	(ºF or (C) Diss	olved Oxygen: 8.88	(mg/L)
Conductivity:	- NA	(μmhos/cm@25 ºC) Strea	am or Lake gage reading:	
Turbidity:	NA	(NTUs) Air Temperatur	re <u> 81 (F</u> or °C) Baro. Press	sure (in H
Winds 3-8 (mp	n) Cloud cover	O (%) Precipitation	Fog Rain Sleet F	lailSnow
			Depth of Reappearance:	
Visual Condition o	f Stream (check all	I that apply):	Secchi Depth:	meters
Clear Floating Material	Cloud			
Remarks:		outer.		
remarks		2012/03/03		**************************************
		Site Drawing		
Sample No	112	WATER QUALITY SAMPLE		lea
		WATER QUALITY SAMPLE Sample Method: Grat	preservatives:	
Sample No. No. of Sample Bo		Sample Method: Grat	preservatives:	

SITE NAME: BC below	INVESTIGATORS: TB JB
PHYSICAL WATER QUALITY PAF	
Water Temperature: 14. 4	(°F or °C) Dissolved Oxygen: 9.15 (mg/L)
Conductivity: 50	(μmhos/cm@25 <sup>o</sup> C) Stream or Lake gage reading:
Turbidity: 2.03	(NTUs) Air Temperature 1 (in Ho
WindsO-1 (mph) Cloud cove	rO(%) Precipitation Fog RainSleetHailSnow
	pear:meters Depth of Reappearance:meters
767.	Secchi Depth: meters
Visual Condition of Stream (check a Clear Clou-Floating Material Commerce:	
Remarks:	
	Site Drawing
Sample No. BC-blw-P No. of Sample Bottles	WATER QUALITY SAMPLE DATA H B Sample Method: Grab Preservatives: Ice  Preservatives: Hっいし
odinplo ito.	Sample Method: Grab Preservatives: Ice

Turbidity: Secch; (NTUs) Air Temperature 42 (F) or °C) Baro. Pressure (in Hg)  Winds 4-6 (mph) Cloud cover 0 (%) Precipitation Fog Rain Sleet Hall Snow  Secchi Disk: Depth of Disappear: 8 meters Depth of Reappearance: 7 meters  Visual Condition of Stream (check all that apply):  Clear Cloudy Colored Floating Material Other:  Remarks: Sunny clear, calm whight winds  Site Drawing  Sample depths: Throughy no 11-12m depth. (see profile)  -8m; Cand. = 30 \text{ MS}  -15m; Cond. = 20 \text{ MS}  Lake elevation of 9,116.2 ams1 provided by  Paul Schmidt, SCE operations  WATER QUALITY SAMPLE DATA  15-DP-8  Sample No. L5-DP-15 Sample Method: Grab Preservatives: Ice	SITE NAME:	Lake Sabrina DATE: 6/17/20 TIME: 7:50 am
Water Temperature: See profile (%F or °C) Dissolved Oxygen: See profile (mg/L) Conductivity: 5-26 below (umhos/cm@25 °C) Stream or Lake gases reading: 9116.2 feat for function of the conductivity: (myll)  Function of the conductivity: (nyll) Air Temperature 42 (**Por °C) Baro. Pressure (in Hg)  Winds 4-6 (mph) Cloud cover (%) Precipitation Fog Rain Sleet Hail Snow  Secchi Disk: Depth of Disappear: 8 meters Depth of Reappearance: 7 meters  Visual Condition of Stream (check all that apply):  Clear Cloudy Colored Floating Material Other:  Remarks: Sunny Clear Calm of Light winds  Site Drawing  Sample depths: Thereoding a 11-12m depth. (see profile)  - 8m; Cond. = 30 \text{ MS}  - 15m; Cond. = 30 \text{ MS}  Lake elevation of 9,116.2 amsl provided by  Paul Schmidt, SCE operations  WATER QUALITY SAMPLE DATA  Sample No. LS-DP-15 Sample Method: Grab Preservatives: Lce  No. of Sample Bottles 4 x 2 = 8 Preservatives: H3Sy in 2 both.	DRAINAGE:	Bishop Creek INVESTIGATORS: TB JB
Conductivity: 546 below (umhos/cm@25 °C) Stream or Lake gass sending: 9116.2 feb 100 cook of Stream or Lake gass sending: 9116.2 feb 100 cook of Stream or Lake gass sending: 9116.2 feb 100 cook of Stream or Lake gass sending: 9116.2 feb 100 cook of Stream or Cloud cover O (%) Precipitation Fog Rain Sleet Hail Snow Secchi Disk: Depth of Disappear: 8 meters Depth of Reappearance: 7 meters  Secchi Depth: 7.5 meters  Visual Condition of Stream (check all that apply): Colored Cloudy Cloud Cloudy Cloudy Cloud Cloudy Cl		
Conductivity: 546 below (umhos/cm@25°C) Stream or Lake pages senting: 9116.2 feat  Turbidity: Secch; (NTUs) Air Temperature 42 Por °C) Baro. Pressure (in Hg)  Winds 4-6 (mph) Cloud cover 0 (%) Precipitation Fog Rain Sleet Hall Snow  Secchi Disk: Depth of Disappear: 8 meters Depth of Reappearance: 7 meters  Visual Condition of Stream (check all that apply):  Clear Cloudy Colored Floating Material Other:  Remarks: Sunny Clear Calm Wight winds  Site Drawing  Sample depths: Thermodian of 11-12m depth. (see profile)  - 8m; Cond. = 30 ps  - 15m; Cond. = 20 ps  Lake elevation of 9,116.2 ams  provided by  Paul Schmidt, SCE Operations  WATER QUALITY SAMPLE DATA  15-0P-8  Sample Method: Grab Preservatives: Ice  No. of Sample Bottles 4 x 2 = 8  Preservatives: H35y in 25 beth	Water Temperature	: See profit (PF or PC) Dissolved Oxygen: See profit (mg/L)
Turbidity: Secchi (NTUS) Air Temperature 42 (Flor °C) Baro. Pressure (in Hg)  Winds 4-6 (mph) Cloud cover (%) Precipitation Fog Rain Sleet Hail Snow  Secchi Disk: Depth of Disappear. 8 meters Depth of Reappearance: 7 meters  Secchi Depth: 7.5 meters  Visual Condition of Stream (check all that apply):  Clear Cloudy Colored  Floating Material Other:  Remarks: Sunny clear calm of light winds  Site Drawing  Sample depths: Throughout 11-12m depth. (see profile)  -8m; Cond. = 30 pcs  -15m; Cond. = 20 pcs  Lake elevation of 9,116.2 ams/provided by  Paul Schmidt, SCE operations  WATER QUALITY SAMPLE DATA  Sample No. L5-DP-15 Sample Method: Grab Preservatives: Ice  No. of Sample Bottles 4 x 2 = 8 Preservatives: Ice	Conductivity:	54e below (µmhos/cm@25 °C) Stream or Lake gage reading: 9116.2 feet
Winds 4-6 (mph) Cloud cover 0 (%) Precipitation Fog Rain Sleet Hail Snow Secchi Disk: Depth of Disappear: 8 meters Depth of Reappearance: 7 meters  Secchi Depth: 7.5 meters  Visual Condition of Stream (check all that apply): Clear Cloudy Colored Floating Material Cloudy Colored  Remarks: Sunny Clear Calm Whight winds  Site Drawing  Sample depths: The mock of 11-12m depth. (see profile)  - 8m; Cend. = 30 \text{ \text{MS}}  - 15m; Cend. = 20 \text{ \text{MS}}  Lake elevation of 9,116.2 amsl provided by  Paul Schmidt, SCE operations  WATER QUALITY SAMPLE DATA  Sample No. L5-DP-15 Sample Method: Grab Preservatives: Ice  No. of Sample Bottles 4 x 2 = 8 Preservatives: H32y in 2 both.	Turbidity: Sec	110
Visual Condition of Stream (check all that apply):  Clear Cloudy Colored Floating Material Other:  Remarks: Sunny clear calm w/ light winds  Site Drawing  Sample depths: Themseling no 11-12m depth. (see profile)  - 8m; Cond. = 30 µS  - 15m; Cond. = 20 µS  Lake elevation of 9,116.2' amsl provided by  Paul Schmidt, SCE operations  WATER QUALITY SAMPLE DATA  Sample No. L5-DP-15 Sample Method: Grab Preservatives: Ice  No. of Sample Bottles 4 x 2 = 8 Preservatives: H3Su in 2 bottle.		) Cloud coverO(%) PrecipitationFogRainSleetHailSnow  Depth of Disappear: meters
Remarks: Sunny, clear, calm w/ light winds  Site Drawing  Sample depths: Themseline ~ 11-12m depth. (see profile)  - 8m; Cond. = 30 µS  - 15m; Cond. = 20 µS  Lake elevation of 9,116.2 amsl provided by  Paul Schmidt, SCE operations  WATER QUALITY SAMPLE DATA  15-DP-8  Sample No. LS-DP-15 Sample Method: Grab Preservatives: Ice  No. of Sample Bottles 4 x 2 = 8  Preservatives: HSDy in 2 bottles	Clear	Stream (check all that apply): Cloudy Colored
Sample depths: Themseling ~ 11-12m depth. (see profile)  - 8m; Cand. = 30 \mu S  - 15m; Cand. = 20 \mu S  Lake elevation of 9,116.2 amsl provided by  Paul Schmidt, SCE operations  WATER QUALITY SAMPLE DATA  15-DP-8  Sample No. L5-DP-15 Sample Method: Grab Preservatives: Ice  No. of Sample Bottles 4 x 2 = 8  Preservatives: H3Sy in 2 bottles		
Sample depths: Thermoding 11-12m depth. (see profile)  -8m; Cond. = 30 \muS  -15m; Cond. = 20 \muS  Lake elevation of 9,116.2 ams1 provided by  Paul Schmidt, SCE operations  WATER QUALITY SAMPLE DATA  LS-DP-8  Sample No. LS-DP-15 Sample Method: Grab Preservatives: Ice  No. of Sample Bottles 4 x 2 = 8  Preservatives: HySUy in 2 bottles	Remarks: ) \(\int \)	ing, clear, calm w/ light wines
-8m; Cend. = 30 \muS  -15m; Cend. = 20 \muS  Lake elevation of 9,116.2' ams  provided by  Paul Schmidt, SCE operations  WATER QUALITY SAMPLE DATA  LS-DP-8  Sample No. L5-DP-15 Sample Method: Grab Preservatives: Ice  No. of Sample Bottles 4 x 2 = 8  Preservatives: H350y in 2 both.	, , , ,	
No. of Sample Bottles  L5 - DP - 3  Sample Method: Grab Preservatives: Ice  Preservatives: H3504 in 2 bottles	Lake ela	vation of 9,116.2' ams provided by
REMARKS	Sample No. L	-5 - DP - 8 -5 - DP - 15 Sample Method: Grab Preservatives: Ice
SIGNED BY:		an D

WATER TEMPERATURE AND DISSOLVED OXYGEN

LAKE PROFILE DATA FORM

Location: Lake Sapring (6 | 17)

DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)	DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)
0.5	11.2	9.20	31	4,3	8.63
1	11. 8	8.89	32	4.2	8.57
2	11. 2	8.83	33	4.2	8.54
3	11. 2	8.80	34	4.2	8.60
4	11.2	2.78	35	4.2	8.60
5	11.2	8.77	36	4.1	8.54
6	11. D	8.83	37	4.1	8.46
7	10.96	8.99	38	4.0	8.37
• 8	10.5	8.86	39	4.0	8.31
9	10.23	8.92	40	4.0	8.28
10	10.0	9.03	41	4.0	8.24
11	9.3	9.30	42	4.0	8,20
12	8.0	9.64	43	4.0	8.19
13	7.7	9.78	44 .	4.0	8.15
14	6.339	9.80	45	.4.0	8.16
<b>•</b> 15	6. D	9,375	46	4.0	8.15
16	5.9	9.78	47	4.0	8.09
17	5.8	9.62	48	4.0	8,06
18	5.7	9.58	49	4.0	17.91
19	3.5	9.42	50	4.0	7.90
20	5.3	9.35	51		
21	5.3	9.30	52		
22	5.1	9.22	53		
23	5.0	9.17	54		
24	4.8	9.03	55		
25	4.7	8,91	56		
26	4.6	8.83	57		
27	4.6	3.81	58		
28	4,65	8.76	59		
29	4,4	8.75	60		

# Field Data Forms July 2020

SITE NAME: South Lake DATE: 7/13/20 TIME: 11:05 ar
DRAINAGE: Bishop Creek INVESTIGATORS: TB 53
PHYSICAL WATER QUALITY PARAMETERS WEATHER CONDITIONS
Water Temperature: (°F or °C) Dissolved Oxygen: (mg/L)
Conductivity:(µmhos/cm@25 °C) Stream or Lake gage reading:
Turbidity:(NTUs) Air Temperature UH (F)or °C) Baro. Pressure 21. 2 (in Hg)
Winds 2-15 (mph) Cloud cover (%) Precipitation — Fog Rain Sleet Hail Snow
Secchi Disk: Depth of Disappear:meters Depth of Reappearance:meters
Visual Condition of Stream (check all that apply):  Clear Cloudy Colored  Floating Material Other:  Remarks: Lake was higher than in Turk trip
Site Drawing
WATER QUALITY SAMPLE DATA
Sample No. 5L-BR-1 Sample Method: Grab Preservatives: Ice
No. of Sample Bottles Preservatives:
Neck bacti  1 Some Molecular  Took sample off of ramp.
SIGNED BY: REVIEWED BY:

SITE NAME: Lake Sarina DATE: 7/13/20 TIME: 11:53am
DRAINAGE: Bishop Creek INVESTIGATORS: TB 53
PHYSICAL WATER QUALITY PARAMETERS WEATHER CONDITIONS
Water Temperature: (ºF or ºC) Dissolved Oxygen: (mg/L)
Conductivity: (μmhos/cm@25 °C) Stream or Lake gage reading:
Turbidity:(NTUs) Air Temperature 72 (°F) or °C) Baro. Pressure (in Hg)
Winds H - Mmph) Cloud cover (%) Precipitation Fog Rain Sleet Hail Snow
Secchi Disk: Depth of Disappear:meters Depth of Reappearance:meters
Visual Condition of Stream (check all that apply):  Clear Cloudy Colored  Floating Material Other:
Remarks: Lake is a little higher than June trip
Site Drawing
WATER QUALITY SAMPLE DATA
Sample No. L5-BR-\ Sample Method: Grab Preservatives: Ice
No. of Sample Bottles Preservatives: No.
1 Weck bacti 1 Source Molecular Sampled at end at boat ramp dock.
SIGNED BY: REVIEWED BY:

SITE NAME: INTAKE 2 Res. DATE: 7/13/20 TIME: 12:25
DRAINAGE: Bishop Creek INVESTIGATORS: TB JB
PHYSICAL WATER QUALITY PARAMETERS WEATHER CONDITIONS
Water Temperature: (°F or °C) Dissolved Oxygen: (mg/L)
Conductivity: (\mu mhos/cm@25 \cdot C) Stream or Lake gage reading:
Turbidity:(NTUs) Air Temperature 78 (F) or °C) Baro. Pressure (in H
Winds I = 3 (mph) Cloud cover (%) Precipitation Fog Rain Sleet Hail Snow
Secchi Disk: Depth of Disappear:meters Depth of Reappearance:meters
Visual Condition of Stream (check all that apply):  Clear Cloudy Colored  Floating Material Other:
Remarks:
Site Drawing
WATER QUALITY SAMPLE DATA
Sample No. TNT2-RE5- Sample Method: Grab Preservatives: Ice
No. of Sample Bottles Preservatives: No.
REMARKS
1 Weck bacti
1 Source Molecular
Sampled shoreline across from porking grea,
just west of duck
SIGNED BY: REVIEWED BY:

				-		
DRAINAGE:	Bishop Creek	INVESTIGATORS	s:	BJ	3	
PHYSICAL WATE	R QUALITY PARA	METERS		WEATHER COM	NDITIONS	
Water Temperatur	e: 17,8	_(ºF or C)	Dissolved	Oxygen: 8.	08	(mg/L)
Conductivity:	-	(µmhos/cm@25 º	C) Stream or	Lake gage readi	ing: 17	cfs
Turbidity:		(NTUs) Air Tem	nperature ${\cal B}$	8 (°F or °C) B	aro. Pressure	e ما . الح in Hg)
Winds 0 ~ 2 (mpl	n) Cloud cover_	O (%) Precipit	tation Fo	g Rain S	leet Hail	Snow
Secchi Disk: NA	Depth of Disappe	ear:meters	Dept	h of Reappearar	ice:	_meters
Viewal Condition o	f Ctroom (about all	that apply		Secchi De	pth:	meters
Clear 🗡	f Stream (check all Cloudy	- COS SV	Colored			
Floating Material		Other:	_			
Remarks:						
		Site Dra	wing			
			August No.	V		
		WATER QUALITY S	SAMPLE DAT	-A		
Sample No.	_NA	WATER QUALITY S Sample Metho			/es:	Ice
	<i>N</i> _ <i>A</i> tles	Sample Metho	od: Grab			Ice
	N À		od: Grab	Preservativ		Ice
Sample No. No. of Sample Bot	N_}tles	Sample Metho	od: Grab	Preservativ		Ice
	LV A	Sample Metho	od: Grab	Preservativ		Ice

	Bishop Creek		IGATORS	: <u> </u>	<u>ن</u>	1 <u>D</u>			
PHYSICAL WATER		METERS			WEA	THER C	ONDITIO	NS	
Water Temperature:	15.4	_(ºF or ºC)	0)	Dissolv	ed Oxyg	jen:	7.5	8_	_(mg/L)
Conductivity:	=	(µmhos/c	:m@25 ºC	) Stream	or Lake	gage re	ading:		21 7
urbidity:		(NTUs)	Air Temp	perature &	35 C	or °C)	Baro. Pre	essure	21.7 (in H
Winds O- \ (mph)	Cloud cover_	0 (%)	Precipita	ation	Fog	Rain _	_Sleet	_Hail_	Snow
Secchi Disk: WA	Depth of Disappe	ear:	_meters	De	epth of F	Reappea	rance:		meters
√isual Condition of S	Stream (check all	that apply):				Secchi	Depth:		meters
Clear 🔽	Cloudy	2	_	Colored					
Floating Material		Other:		-					
Remarks:									
			Site Draw	ina					
	Λ	WATER QU	JALITY SA		PATA				
Sample No.	NA	WATER QU	JALITY SA	AMPLE D		Preserv	atives:		Ice
	NA	WATER QU	ole Method	AMPLE D	_	Preserv Preserv	-		Ice
Sample No.	NA es	WATER QU		AMPLE D	_		-		Ice
	NA	WATER QU	ole Method	AMPLE D	_		-		Ice
	NA	WATER QU	ole Method	AMPLE D	_		-		Ice
	NA es	WATER QU	ole Method	AMPLE D	_		-		Ice

	0111	Fork		ATE:	ישן כון	TIME:	
DRAINAGE:	Bishop Creek	INVESTIG	GATORS: _	TB	<u>JB</u>		
PHYSICAL WATER	QUALITY PARA	METERS		W	EATHER CO	NDITIONS	
Water Temperature:	7.0	_(°F o(°C)	D	issolved O	xygen: 8	.86	(mg/L)
Conductivity:	-	(µmhos/cm	n@25 ºC) S	tream or La	ike gage read	ding:	21.7
Turbidity:	-	(NTUs)	Air Tempera	ature 86	(Enr°C) E	Baro. Pressur	21.3 (in Hg)
Winds5_(mph)	Cloud cover_	10 (%)	Precipitation	rFog_	Rain	SleetHail	Snow
Secchi Disk:	Depth of Disappe	ear:	meters	Depth	of Reappeara	nce:	meters
Visual Condition of S	tream (check all	that annly):			Secchi De	epth:	meters
Clear X	Cloudy		С	olored _			
		Other.					
Remarks:							
		S	ite Drawing	<u></u>			
	111	WATER QUA					
-	NA		ALITY SAMI e Method: <u>G</u>		Preservati		Ice
-		Sample	e Method: <u>G</u>				Ice
-		Sample			Preservati		Ice
-		Sample	e Method: <u>G</u>		Preservati		Ice
Sample No. No. of Sample Bottle		Sample	e Method: <u>G</u>		Preservati		Ice
-		Sample	e Method: <u>G</u>		Preservati		Ice
-		Sample	e Method: <u>G</u>		Preservati		Ice

DRAINAGE:	Bishop Creek	— INVEST	IGATORS:	71.	3 JI	)	
PHYSICAL WATER	QUALITY PARA	METERS			WEATHER C	CONDITIONS	3
Water Temperature	15,4	(ºF or (C	Ď	Dissolved	Oxygen:	8.3	(mg/L)
Conductivity:		(µmhos/c	cm@25 ºC)	Stream or	Lake gage re	eading:	25.4
Turbidity:	-	(NTUs)	Air Tempe	erature,_	(°F or °C)	Baro. Pres	sure(in
WindsO-1_(mph)	Cloud cover_	0 (%)	Precipitation	on Fo	g Rain	_SleetH	HailSnov
Secchi Disk: NA	Depth of Disapp	ear:	_meters	Dept	h of Reappea	rance:	meters
		and the second			Secchi	Depth:	meters
Visual Condition of Clear   Floating Material	Stream (check all Cloudy			Colored			
Remarks:							
			Site Drawir	ng			
		WATER O					
	rr y		JALITY SAM				
Sample No.	_NA		JALITY SAM		Preserv	atives:	
Sample No. No. of Sample Bottl				Grab	Preserv	atives:	
			ole Method:	Grab	Preserv		

DRAINAGE:	Bishop Creek	_ INVESTI	GATORS:		15 J	5	
PHYSICAL WATER	QUALITY PARAM	METERS			WEATHER C	CONDITIONS	3
Water Temperature:	15.53	_(°F or (C)	)	Dissolved	Oxygen:	8.73	(mg/L)
Conductivity:		(µmhos/c	m@25 ºC)	Stream or	Lake gage re		
Turbidity:	-	(NTUs)	Air Tempe	rature	<b>/</b> 6 or °C)	Baro. Press	35.4 Sure 25.4
Winds O (mph)	Cloud cover	0 (%)	Precipitation	on Fog	] Rain	_SleetH	lailSnov
Secchi Disk: NA [	epth of Disappea	ar:	meters	Depti	of Reappea	rance:	meters
					Secchi	Depth:	meters
Visual Condition of S Clear Floating Material	Cloudy	Other:		Colored _			
Remarks:			4				*
			Site Drawin	g			
		WATER OU	AI ITY SAN	€PI E DAT	Δ		
Sample No	The second second	WATER QU				ativos	lee
Sample No.	NA		ALITY SAN		Preserva	atives:	Ice
Sample No No. of Sample Bottles	NA	Sampl		Grab			Ice
	NA	Sampl	le Method:	Grab	Preserva		Ice

DRAINAGE:	Bishop Creek	INVEST	IGATORS:	18	A.C.			
PHYSICAL WATER	QUALITY PARA	METERS			WEATHER	CONDITIC	ONS	
Water Temperature:	15.0	(ºF or ⓒ	D	Dissolved	Oxygen: _	8.52		(mg/L)
Conductivity:		(µmhos/c						
Turbidity:		(NTUs)	Air Tempe	erature Z	2 (For °C	) Baro. Pr	essure	25.2 (in h
Winds O-1 (mph)								
Secchi Disk: NA	Depth of Disappe	ear:	meters	Dept	h of Reappe	arance:		meters
/isual Condition of S	Stream (check all	that apply):			Secch	i Depth:		meters
	Cloudy			Colored				
Remarks:	-c - ore min							
			Site Drawi	ng				
		WATER QU	JALITY SA	MPLE DAT	-A			
Sample No.	NA					vatives:		cce
Sample No.			JALITY SA		Preser	vatives:		ССЕ
Sample No.  No. of Sample Bottle				Grab	Preser	vatives:		CCE
			ele Method:	Grab	Preser			cce

DRAINAGE:	Bishop Creek	_ INVEST	IGATORS: _	TB	<u> </u>		
PHYSICAL WATER	QUALITY PARAI	METERS		WE	EATHER COND	ITIONS	
Water Temperature:	15.0	(ºF or @C		Dissolved Ox	kygen: 8.2	17	(mg/L)
Conductivity:	-	(µmhos/c	cm@25 ºC) S	Stream or La	ke gage reading	g:	
urbidity:	-	(NTUs)	Air Temper	ature, 79	(°F or °C) Bard	o. Pressur	e 25. 2 (in H
Vinds O (mph)	Cloud cover_	0 (%)	Precipitatio	n Fog _	RainSle	etHai	ISnow
Secchi Disk: NA 1	Depth of Disappe	ar:	_meters	Depth o	f Reappearance	9:	meters
liqual Condition of C	traora (obook oll t	hat analyly			Secchi Depth	n:	meters
/isual Condition of S Clear	Cloudy			Colored			
loating Material		Other:					
Remarks:						y yn en	Shirt Service
			Site Drawing	g			
			JALITY SAM				
Sample No.	NA		JALITY SAM		Preservatives		Ice
Sample No No. of Sample Bottle	NA		ole Method: <u>C</u>	Grab	Preservative:		Ice
	NA			Grab			
	NA		ole Method: <u>C</u>	Grab			
	NA		ole Method: <u>C</u>	Grab			
	NA		ole Method: <u>C</u>	Grab			

DRAINAGE:		y lwade	_DATE: 7	14/20 TIN	IE: 8:40
DIVINIAL.	Bishop Creek	INVESTIGATORS	3: TB	JB	
PHYSICAL WATER	R QUALITY PARAI	WETERS	WEA	THER CONDITION	IS
Water Temperature	14.7	_(ºF o(ºC))	Dissolved Oxy	gen: 8.5	8 (mg/L)
Conductivity:		(µmhos/cm@25 º(	C) Stream or Lake	e gage reading:	
Turbidity:	-	(NTUs) Air Tem	perature 80 (	Pr °C) Baro. Pre	ssure(in Hg
Winds (mph)	Cloud cover_	O(%) Precipit	ation Fog	RainSleet	HailSnow
Secchi Disk: NA	Depth of Disappe	ar:meters	Depth of	Reappearance:	meters
Visual Condition of	Stream (chack all i	that apply):		Secchi Depth:	meters
Clear <u>L</u> Floating Material	Cloudy		Colored		
Remarks:					
		Site Drav	wing		
		WATER QUALITY S	AMPLE DATA		
Sample No.	NA	WATER QUALITY S		Preservatives:	Ice
Sample No. No. of Sample Bott	_NA			Preservatives:	
	_NA		d: Grab		

DRAINAGE:	Bishop Creek	INVEST	IGATORS:	TB	JB		
PHYSICAL WATER	QUALITY PARAM	METERS	_	W	EATHER C	ONDITIONS	
Water Temperature:	14.8		) [	Dissolved O	kygen:	8.40	(mg/L)
Conductivity:	-	(µmhos/c	cm@25 ºC) s	Stream or La	ke gage rea	ading:	
Turbidity:	-	_(NTUs)	Air Temper	ature 20	_(°F or °C)	Baro. Press	ure 24.9 <sub>(in</sub>
Winds O (mph)	Cloud cover	0 (%)	Precipitatio	n Fog _	Rain	_SleetH	ailSno
Secchi Disk: NA 1	Depth of Disappea	ar	_meters	Depth o	of Reappear	rance:	meters
					Secchi [	Depth:	meters
Visual Condition of Society Clear Floating Material	tream (check all ti Cloudy	Other:		Colored	_		
Remarks:			erro transition en				
			Site Drawin	g			
		WATER QL	JALITY SAM	PLE DATA			
Sample No.	NA		JALITY SAM		Preserva	atives:	Ice
	NA						Ice
	NA			Grab			
Sample No No. of Sample Bottle	NA		ole Method: <u>(</u>	Grab			

DRAINAGE: B	ishop Creek	INVEST	IGATORS:	TB	23		
PHYSICAL WATER C	UALITY PARA	AMETERS		1	WEATHER O	CONDITIONS	S
Water Temperature:	14.2	(ºF or ºC	) [	Dissolved	Oxygen:	8.41	(mg/L)
Conductivity:			cm@25 ºC) §				
Furbidity:	, <del>-</del>	(NTUs)	Air Temper	ature 20		Baro. Pres	sure 23. 7 in Ho
Winds 1-3 (mph)	Cloud cover	0 (%)	Precipitatio	n Fog	Rain	_Sleetl	HailSnow
Secchi Disk: NA D	epth of Disapp	ear:	_meters	Depth	of Reappea	гапсе:	meters
		A 1 4 2			Secchi	Depth:	meters
Visual Condition of Str Clear X Floating Material	eam (check al Cloud	The second secon		Colored _			
Remarks:							
			Site Drawin	a			10
			UALITY SAM				
Sample No.	NA		UALITY SAM			atives:	Ice
Sample No No. of Sample Bottles			ple Method: <u>(</u>	Grab	Preserv	atives:	Ice
				Grab	Preserv		Ice

	TIGATORS:		
ALITY PARAMETERS		WEATHER CONDITION	NS
(NTUs)	Air Tempera	ture <b>BO</b> (F) or °C) Baro. Pre	essure 23.9 <sub>(in Hg)</sub>
Cloud cover 0 (%	6) Precipitation	Fog RainSleet	_HailSnow
oth of Disappear:	meters	Depth of Reappearance:	meters
am (check all that apply)	5	Secchi Depth:	meters
Cloudy		olored	
Other:			
		11.000	
	Site Drawing		
	QUALITY SAMP	LE DATA	
101	QUALITY SAMP		Ice
101			Ice
101		ab Preservatives:	Ice
101	nple Method: <u>G</u> i	ab Preservatives:	Ice
101	nple Method: <u>G</u> i	ab Preservatives:	Ice
101	nple Method: <u>G</u> i	ab Preservatives:	Ice
	ALITY PARAMETERS  14, 6	ALITY PARAMETERS  14.6 (PF) or °C) Dis  (mhos/cm@25 °C) Str  (NTUs) Air Temperal  Cloud cover (%) Precipitation oth of Disappear: meters  am (check all that apply):	ALITY PARAMETERS  WEATHER CONDITION  (#For **C)  Dissolved Oxygen: 8.3   (#mhos/cm@25 **C) Stream or Lake gage reading: 6  (NTUs) Air Temperature 6  Cloud cover 0 (%) Precipitation Fog Rain Sleet 5  oth of Disappear: meters  Depth of Reappearance: Secchi Depth: 6  am (check all that apply): Cloudy Other:

DRAINAGE:	Bishop Creek	_ INVESTI	IGATORS: _	TB	4t		
PHYSICAL WATER	R QUALITY PARAM	METERS		W	EATHER CONDITI	ONS	
Water Temperature	13.8	_(ºF or C)	) D	issolved O	xygen: 8.1	7	_(mg/L)
Conductivity:		_			ake gage reading: _		
Furbidity:	+	(NTUs)	Air Tempera	ature, 79	_("F or "C) Baro. F	ressure	23. 2 (in Hg
Winds 1-3 (mph)	Cloud cover_	0 (%)	Precipitation	rFog_	RainSleet	Hail	Snow
Secchi Disk: MA	Depth of Disappea	ar:	_meters	Depth (	of Reappearance:		meters
					Secchi Depth:		meters
/isual Condition of Clear K	Stream (check all t Cloudy	hat apply):	C	olored			
Floating Material		Other:					
Remarks:							
			Site Drawing				
Sample No	W i A		JALITY SAMI				
Sample No.	- NA		JALITY SAMI ble Method: <u>G</u>		Preservatives:_		
	- NA						
Sample No.	- NA		le Method: <u>G</u>		Preservatives:_		

DRAINAGE: E	ishop Creek	INVESTI	GATORS:	713	ナら			
PHYSICAL WATER	QUALITY PARAMI	ETERS			WEATHER C	CONDITIONS	3	
Water Temperature:_	13.5	(°F or (°C)	)	Dissolved	Oxygen:	8.3	(mg/L)	
Conductivity:		(µmhos/cr	n@25 ºC)	Stream or	Lake_gage re	eading:		
Turbidity:	~	(NTUs)	Air Tempe	erature 7	&_ <b>(E</b> or °C)	Baro. Pres	sure 33.2 (în H	g)
Winds (mph)	Cloud cover	0 (%)	Precipitat	tion Fo	g Rain	_SleetH	HailSnow	
Secchi Disk: ルA D	epth of Disappear		meters	Dept	h of Reappea	rance:	meters	
Visual Condition of St Clear	ream (check all the Cloudy	at apply): Other:		Colored	Secchi	Depth:	meters	
Remarks:								
		S	Site Drawi	ina				
				MPLE DAT				•
	AU		ALITY SA		Preserva		Ice	•
Sample No No. of Sample Bottles	AU	Sample	e Method:	Grab			Ice	
	AU	Sample		Grab	Preserva		Ice	
	AU	Sample	e Method:	Grab	Preserva		Ice	
	AU	Sample	e Method:	Grab	Preserva		lce	
	AU	Sample	e Method:	Grab	Preserva		Ice	

	SITE NAME: South Long DATE: 7/14/20 TIME: 11:00 a
	DRAINAGE: Bishop Creek INVESTIGATORS: TB/TB
	PHYSICAL WATER QUALITY PARAMETERS WEATHER CONDITIONS
	Water Temperature: (°F or °C) Dissolved Oxygen: (mg/L)
	Conductivity:(µmhos/cm@25 °C) Stream or Lake gage reading:
THOS .	Turbidity:
CANSTK CANS	Winds (mph) Cloud cover (%) Precipitation Fog Rain Sleet Hail Snow
XXX	Secchi Disk: NA Depth of Disappear:meters Depth of Reappearance:meters
	Visual Condition of Stream (check all that apply):
	Clear Cloudy Colored Floating Material Other:
	Remarks: WIND FROM NE GUSTS TO MARK
	Site Drawing
	1 de W.L. e Spillwry Eter un 7- e 9747.56 per SCE
	@ g7A751' an SCF
	C 9141,56 per 300
	MSL
	WATER QUALITY SAMPLE DATA
	Sample No. 513 - BR-\ Sample Method: Grab Preservatives: Ice
	No. of Sample Bottles 2 Preservatives: Vory
	REMARKS
	1 Weck Bacti
	1 Source Molern for
	SIGNED BY:
1	

SITE NAME:	Lalle Sabring	DATE: 7/16/20 TIME: 12:00 P
DRAINAGE:	Bishop Creek INVESTIGATORS:	2
PHYSICAL WAT	ER QUALITY PARAMETERS	WEATHER CONDITIONS
Water Temperatu	ure:(ºF or ºC) [	Dissolved Oxygen: (mg/L)
Conductivity:	- (μmhos/cm@25 °C) ς	Stream or Lake gage reading:
Turbidity:		rature 80 (F) or °C) Baro. Pressure (in Hg)
Winds 5 Cm		n Fog Rain Sleet Hail Snow
Secchi Disk: N		Depth of Reappearance:meters
		Secchi Depth: meters
Clear		Colored
Floating Material		1 1
Remarks:	Mins Fran 1	Joy 15
	Site Drawin	g
1 2	KE WIL. @	9119.52 perSCE
	WATER QUALITY SAM	PLE DATA
Sample No.	L5-BR-1 Sample Method:	Grab Preservatives: Ice
No. of Sample B	ottles2	Preservatives: Now
	REMARKS	
1 Weck		
1 Weck	REMARKS E Molecula	
1 Weck		
1 Weck		

SITE NAME:	They is a	L Res.	DATE: 1101 20 TIVI	
DRAINAGE:	Bishop Creek			12:30
PHYSICAL WAT	TER QUALITY PAR		WEATHER CONDITION	s
	ure:		Dissolved Oxygen:	
	uic			
Conductivity:			Stream or Lake gage reading:	-7 110
Turbidity:			perature 82 (°F or °C) Baro. Pres	
			ation Fog RainSleet	
Secchi Disk: M	Depth of Disap	pear:meters	Depth of Reappearance:	
Visual Condition	of Stream (check a	all that apply):	Secchi Depth:	meters
Clear X	Clou		Colored	
	.\ <		_	
Remarks:	KILO	sieria (		
		Site Draw	ving	
Sample No.	.TNT) -	WATER QUALITY SA		lea
		WATER QUALITY SA	d: Grab Preservatives:	
		RB-1 Sample Method	d: Grab Preservatives:	
No. of Sample E	Bottles		d: Grab Preservatives:	
No. of Sample E	Bottles	REMARI	d: Grab Preservatives:	
No. of Sample E	Bottles	REMARI	d: Grab Preservatives: Preservatives: KS	
Sample No. No. of Sample E	Bottles	REMARI	d: Grab Preservatives: Preservatives: KS	
No. of Sample E	Bottles	REMARI	d: Grab Preservatives: Preservatives: KS	

SITE NAME:	South Lake DATE: 7/27	120 TIME: 11:150
DRAINAGE:	Bishop Creek INVESTIGATORS: TB J	)
		R CONDITIONS
Water Temperature	e: - (2F or 2C) Dissolved Oxygen:	- (mg/L)
Conductivity:	- (μmhos/cm@25 °C) Stream or Lake gage	1,000
Turbidity:	- (NTUs) Air Temperature 65 (F) or %	71 71
Winds 2- 4 (mph	Cloud cover 20 (%) Precipitation Fog Rain	SleetHailSnow
	Depth of Disappear:meters	
	Seco	chi Depth: meters
Clear 🗶	Stream (check all that apply):  Cloudy  Colored	
Floating Material	Other:	
Remarks:		
	Site Drawing	and the second s
	11'15 A WATER QUALITY SAMPLE DATA	
Sample No.		ervatives: lce
No. of Sample Bott		ervatives: Vuy
Transfer M	REMARKS	
1 Sur	Bacti	
1 Juw	e l'okin'a	
SIGNED BY:	REVIEWED BY:	
UIGINED DI	TEVIEWEDDI.	

SITE NAME:	Distance Ossale	INDECT	SATORO.	TR	JB		
DRAINAGE:	Bishop Creek	_ INVEST	IGATORS:	1.15	JD		
PHYSICAL WATER	R QUALITY PARAI	METERS		W	EATHER CONDIT	IONS	
Nater Temperature		(ºF or ºC)	) 1	Dissolved Ox	kygen:		_(mg/L)
Conductivity:		(µmhos/c	cm@25 ºC) :	Stream or La	ke gage reading:		2) 108
Furbidity:	_	(NTUs)	Air Tempe	rature 67	For °C) Baro.	Pressur	e (in I
Winds 2-6 gus	Cloud covery	40 (%)	Precipitation	on Fog _	RainSleet	Hail	Snov
Secchi Disk: NA	Depth of Disappe	ar:	meters	Depth o	of Reappearance:		meters
					Secchi Depth:	4	meters
/isual Condition of Clear	Stream (check all t Cloudy			Colored			
loating Material		Other:					
Remarks:							
			Site Drawin				
	2:05pm 5-BR-1				Preservatives:		Ice
Sample No.	5-BR-1				Preservatives:		
Sample No.	5-BR-1			Grab			
Sample No.  No. of Sample Bottl	5-BR-1	Samp	ole Method: 6	Grab	Preservatives:	<u></u>	
Sample No. L No. of Sample Bottl	5-BR-1 es Badi	Samp	ole Method: <u>s</u> 	Grab	Preservatives:	_^	one
Sample No. L No. of Sample Bottl	5-BR-1	Samp	ole Method: <u>s</u> 	Grab	Preservatives:	_^	one
Sample No. L No. of Sample Bottl	5-BR-1 es Badi	Samp	ole Method: <u>s</u> 	Grab	Preservatives:	_^	one

DRAINAGE:	Bishop Creek	INVESTIGAT	TORS:	IB =	5B	
PHYSICAL WATER					THER CONDITIO	)NS
Water Temperature		(ºF or ºC)	Diss		en:	
Conductivity:	_				gage reading:	
						essure 22.5 in I
Furbidity:	18 to 6 4		rremperatur	9 00 CF	egrac) Baro. Pr	essure (in i
Winds 0 - 2 (mph)	Cloud cover	(%) Pr				_HailSnov
Secchi Disk: NA	Depth of Disappea	r:m	eters			
isual Condition of	Stream (check all th	nat apply):			Secchi Depth:	meters
Clear Floating Material	Cloudy	Other:	Colo	red		
		Outon.				
Remarks:						
		Sitte	Drawing			-0-7
1 2	:35pm 1	WATER QUAL	ITY SAMPLE	E DATA		
	:35 pm 1 NT2-RES-				Preservatives;	lce
Sample No. I	NT2-RES-				Preservatives: Preservatives:	
Sample No. I	NT2-RES-	Sample N				
Sample No. I	NT2-RES-	Sample N	Method: <u>Grab</u>			
Sample No. I  No. of Sample Bottl  I Weck	NT2-RES- Bachi	Sample N	Method: <u>Grab</u>			
Sample No. I  No. of Sample Bottl  I Weck	NT2-RES-	Sample N	Method: <u>Grab</u>			
Sample No. I  No. of Sample Bottl  I Weck	NT2-RES- Bachi	Sample N	Method: <u>Grab</u>			

SITE NAME: South Lake DATE: 7/28/20 TIME: 10:050
DRAINAGE: Bishop Creek INVESTIGATORS: TB JR
PHYSICAL WATER QUALITY PARAMETERS  WEATHER CONDITIONS  Water Temperature: 5-20 profile (2F or 2C)  Dissolved Oxygen: 5-0-1; le (mg/L)  Conductivity: 1.88 MS (µmhos/cm@25 2C) Stream-or Lake gage reading: 9747.82 H
Turbidity: Secchi (NTUs) Air Temperature 62 For °C) Baro. Pressure 21. (in Hg)
Winds 3-8 (mph) Cloud cover ( ) (%) Precipitation Fog Rain Sleet Hail Snow  Secchi Disk: Depth of Disappear: Depth of Reappearance: 8 meters  Secchi Depth: 8.5 meters
Visual Condition of Stream (check all that apply):  Clear Cloudy Colored  Floating Material Other:
Remarks: Lake level 9747. 82 Let per Paul Schmidt-SCE
Site Drawing
Sample No. 5L-DP-5 Sample Method: Grab Preservatives: Ice
No. of Sample Bottles Preservatives: H250y in 1
REMARKS be +-
Anoxic Zene Storts Between 52-53 m depth. Sample taken at 54 m. Sample was cloudy (organics?) and smelled of decay? No themocrine
SIGNED BY:

SITE NAME:	South Lake DATE: 7/28/20 TIME: 10:30ar
DRAINAGE:	Bishop Creek INVESTIGATORS: TB JB
PHYSICAL WAT	ER QUALITY PARAMETERS WEATHER CONDITIONS
Water Temperati	
Conductivity:	U.63 mm/ (µmhos/cm@25 °C) Streem or Lake gage reading: 9747.82 4
Turbidity: <u>5 e</u>	(NTUs) Air Temperature 64 (For °C) Baro. Pressure (in Hg)
Winds 3 - 8 (m)	
Secchi Disk:	Depth of Disappear: 9 meters Depth of Reappearance: 8 meters
Visual Condition Clear	Secchi Depth: 8-5 meters of Stream (check all that apply): Cloudy Colored
Floating Material	Other:
Remarks: Lak	se level 9747.82 feet per Paul Schmidt-SCE
DELET	Site Drawing
	0: 30 and Water quality sample data
	5L-DP-L Sample Method: Grab Preservatives: Ice
	SL-DP-H Sample Method: Grab Preservatives: Ice  Ottles HaSoy in 1 bo
Sample No.	SL-DP-L  Sample Method: Grab Preservatives: lce  Ottles Preservatives: H <sub>2</sub> So <sub>4</sub> in 1 book  REMARKS
Sample No.  No. of Sample Bo	SL-DP-L Sample Method: Grab Preservatives: Ice  Preservatives: H2 SOy in 1 book  REMARKS  VMcCline - fook rese Samples at 1/2 Secchi depth
Sample No.  No. of Sample Bo  No. + Ho	SL-DP-H Sample Method: Grab Preservatives: Ice  Preservatives: Ita Soy in 1 book  REMARKS  rocline - took rese Samples at 1/2 Secchi depth  To tetal lake depth per pretocol.
Sample No.  No. of Sample Bo  No. they  and 80.	SL-DP-H Sample Method: Grab Preservatives: lce  Preservatives: H2 SOy in 1 bo  REMARKS  Mocline - took rese samples at 1/2 secchi depth  To total lake depth per petocol.  Point of Lake = 220 ft + 0.8 = 171/4+ = ~54m
Sample No.  No. of Sample Bo  No the  and 80  Jeogest  Secchi	SL-DP-H Sample Method: Grab Preservatives: Ice  Preservatives: H2504 in 1 be  REMARKS  recline - took rese samples at 1/2 secchi depth  for total lake depth per petrocol.  Point of Lake = 220 ft + 0.8 = 171/4t = ~54m  depth = 8.5 m × 0.5 = 4-25 m
Sample No.  No. of Sample Bo  No the  and 80  Jeogest  Secchi	SL-DP-H Sample Method: Grab Preservatives: Ice  pottles H Soy in 1 bo  REMARKS  reschie - fook rese samples at 1/2 secchi depth  for total lake depth per perforcel.  Point of 1-ak = 220 At 20.8 = 171/4+ = ~54m

Page \_\_ of \_2

### WATER TEMPERATURE AND DISSOLVED OXYGEN

Lake Profile DATA FORM

Location: 5041 Lake 7/28/20

220'

219

DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)	DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)
0.5	16.1	7.54	31	5.9	8.72
1	15.9	7.44	32	5.37	8.56
2	15.9	7.44	33	5.5	8.57
3	15.8	7.47	34	5.4	8.41
4	15.8	7.48	35	5.4	8.28
5	15. 8	7.49	36	5.2	8,19
6	15.8	7.48	37	5.1	8.15
7	15.3	7.48	38	5.1	8.11
8	15.7	7.52	39	5.1	3.05
9	15.3	7.74	40	5.0	8.00
10	15.2	7.67	41	5.0	7,91
11	15.0	8.09	42	4.9	7.85
12	14.5	8.32	43	4.9	7.84
13	14.º	8.44	44	4.9	7.67
14	13.3	8.62	45	4.9	7.63
15	12.8	8.76	46	4.9	7.59
16	12.3	2.88	47	4.9	7.54
17	11.7	9.06	48	4.9	7.51
18	11.1	9.23	49	4,9	7.45
19	10.4	9.40	50	4.9	7.42
20	9.9	9.45	51	4.9	7,39
21	9.4	9.43	52	4.9	7,25
22	8.9	9.41	53	5.7	0.06
23	2.3	9.39	54	5.9	0.03
24	8,0	9.30	55	6.0	0.01
25	7.4	9.27	56	6.1	0.01
26	7.3	9.19	57	4.3	0.00
27	6.9	9.06	58	6.3	0.00
28	6.5	8.95	59	6.5	6.0)
29	4.3	8.90	60	6.7	0.01
30	4.0	8.78	61	6.9	0,0

220

219'

225'

## WATER TEMPERATURE AND DISSOLVED OXYGEN LAKE PROFILE DATA FORM

Location: South Lake PROFILE DATA FORM

DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)	DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)
62	7.2	0.01	91		
63	7.4	0.02	92		
64	7.6	0.02	93		
65	7.7	0.03	94		
66	7.8	0.03	95		
67	7.8	0.63	96		
68	7.8	0.05	97		
69			98		
70			99		
71			100		
72	1		101		
73			102		
74			103		
75			104		
76			105		
77			106		
78			107		
79			108		
80			109		
81			110		
82			111		
83			112		
84			113		
85	***************************************		114		
86			115		
87		7-94	116		
88			117		
89			118		
90			119		1

275

SITE NAME: La	Le Sabrina	DATE: 7/2	9 20 TIME: 10:55a
DRAINAGE: Bisho	Creek INVESTIGATOR	es: TB o	73
PHYSICAL WATER QUAL	JTY PARAMETERS	WEATH	ER CONDITIONS
Water Temperature: 590	(2F or 2C)	Dissolved Oxygen:	see postib (mg/L),
	. υ 3 m <u>S</u> (μmhos/cm@25 s		
Turbidity: Seach	(NTUs) Air Ter	mperature 72 (F) or	°C) Baro. Pressure (in Hg)
			inSleetHailSnow
Secchi Disk: Depth	of Disappear: 12.5 meters		
Visual Condition of Stream			cchi Depth: 1 2 meters
Clear Floating Material	Cloudy Other:	Colored	•
Remarks: Lale i	5 9118.62 feet	eler per Paul	Schmidt-SCE
	Site Dra	ewing	
	341		
	3-1		
	141		
10:59	water quality	SAMPLE DATA	
	WATER QUALITY  DP - 16 Sample Meth	od: Grab Pre	servatives:  ce
	20 11	od: Grab Pre	servatives: lce servatives: Ha50y in 1 bo Ho
Sample No. $L\underline{5}$ – No. of Sample Bottles	DP-16 Sample Meth	ood: <u>Grab</u> Pre	servatives: Hasoy in 1 both
Sample No. $L\underline{5}$ – No. of Sample Bottles	DP-16 Sample Meth	ood: <u>Grab</u> Pre	servatives: Hasoy in 1 both
Sample No. $L\underline{5}$ – No. of Sample Bottles	DP-16 Sample Meth	ood: <u>Grab</u> Pre	servatives: Hasoy in 1 both
Sample No. $L\underline{5}$ – No. of Sample Bottles	DP-16 Sample Meth	ood: <u>Grab</u> Pre	servatives: Hasoy in 1 both
Sample No. $L\underline{5}$ – No. of Sample Bottles	DP-16 Sample Meth	ood: <u>Grab</u> Pre	servatives: Hasoy in 1 both

7/20/20 7/20/20 11:25
SITE NAME: Lake Sabrina DATE: 7/29/20 TIME: 11:250
DRAINAGE: Bishop Creek INVESTIGATORS: TB JB
PHYSICAL WATER QUALITY PARAMETERS WEATHER CONDITIONS
Water Temperature: <u>See profile</u> (% or ℃) Dissolved Oxygen: <u>See profile</u> (mg/L)
Conductivity: 0.02 mS(µmhos/cm@25 °C) Stream or Lake gage reading: 9118.62
Turbidity: <u>Sechi</u> (NTUs) Air Temperature 72 (F) or °C) Baro. Pressure 21.72 (in Hg
Winds 2= 4 (mph) Cloud cover 0 (%) Precipitation Fog Rain Sleet Hail Snow
Secchi Disk: Depth of Disappear: 12.5 meters Depth of Reappearance: 11.5 meters
Secchi Depth: 12 meters  Visual Condition of Stream (check all that apply):
Clear Cloudy Colored
Remarks: Lake elev. 13 9118.62 ft per Paul Schmidt-SCE
Remarks: Lake elev. 13 1110.02 47 Per Paul Schmidt-Ste
Sita Drawing
Sample No. L5-DP-7 Sample Method: Grab Preservatives: Ice  No. of Sample Bottles Hasay in 1 both  REMARKS  Sample collected above themseline at 7m depth.  Themseline @ ~ 9-14 m depth
SIGNED BY:

### WATER TEMPERATURE AND DISSOLVED OXYGEN

Location: Lake PROFILE DATA FORM

7

DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)	DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)
0.5	17.0	7.00	31	И.5	7.74
1	16.9	7.01	32	4.4	7.74
2	16.8	7.01	33	4.3	7.75
3	14.8	7.01	34	4.3	7.75
4	16.8	7.0)	35	4.2	7,74
5	Ne.7	7.03	36	4.2	7.72
6	16,6	7.04	37	4.2	7.69
7	16.5	7.05	38	4.1	7.65
8	14.0	7.22	39	4-1	7.58
至(9)	15.7	7.23	40	4.0	7.49
10	14.7	7.55	41	4.1	7.44
11	12.8	8.18	42	4.0	7.38
12	10.6	8.20	43	4.0	7.30
13	9.3	9,20	44	4.0	7.21
<del>- (14) -</del>	7.9	9.46	45	4.1	7-5
15	7.3	9,47	46	4.0	6.94
16	6.8	9.37	47	4-1	6.84
17	6.4	9,18	48	4.1	6.71
18	6-1	9.01	49	4.1	6.62
19	5.9	8.89	50	4.1	6.55
20	5.7	8.78	51	4-1	6.48
21	5.6	8.67	52	4.1	6.37
22	5.4	8.60	53	4-1	Le.31
23	5.3	8.53	54	4.1	6.26
24	5.1	8.38	55	4.1	6.21
25	5.0	8.34	56	4.1	6.10
26	4.9	8.24	57	4.1	6.01
27	4.8	8.16	58	4-1	5.97
28	4.7	80.8	59	4.1	5.91
29	4.6	3.04	60	4.1	禹5.72
30	И. 6	7.88	61	4.1	5.61

10.5 14.4 C 7.70

244

# WATER TEMPERATURE AND DISSOLVED OXYGEN LAKE PROFILE DATA FORM

Location: Lake PROFILE DATA FORM

Location: Lake Sabrina 7/29/20

DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)	DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)
62	4.1	5.54	91	According to the second	157
63	4-1	5.34	92		
64	4.1	5,20	93		
65	<b>Ч.</b> [	4,91	94		
66	4.1	4.52	95		
67	<b>Ч.</b>	4.10	96		
68	4.1	3.63	97		
69	4.1	2.95	98		
70	4.2	2.39	99		
71	4.2	1.85	100		
72			101		
73			102		
74			103		
75			104		
76			105		
77			106		
78			107		
79			108		
80			109		
81			110		
82			111		
83			112		
84			113		
85			114		
86			115		
87			116		
88			117		
89			118		
90			119		

DRAINAGE: B	ishop Creek	INVESTI	GATORS:	UT	TI	- Marie		
PHYSICAL WATER G	QUALITY PARAI	METERS		W	EATHER C	ONDITIONS	5	
Water Temperature:	15.1	_(°F or (C)	) D	issolved Ox	ygen:	3.80	(n	ng/L)
Conductivity:	0.05 m	مے (µmhos/cı	m@25 ºC) S	tream or La	ke gage rea	ading:		
Furbidity:	<b>-</b>	(NTUs)	Air Tempera	ture 70	⊕or°C)	Baro. Pres	sure	<u> 5</u> (in 1
Winds O-1 (mph)	Cloud cover_	0 (%)	Precipitation	Fog _	Rain	_SleetI	lail	Snov
Secchi Disk: NA D	epth of Disappe	ar:	meters	Depth o	f Reappear	rance:	m	eters
					Secchi [	Depth:		meters
Visual Condition of St Clear <u>X</u> Floating Material Remarks:	Cloudy			olored	-			
telliaiks.			Site Drawing					
			DIE DIEWING			· ·		
Sample No.	AJ A		JALITY SAM		Draconz	otivae	Inc	
Sample No.	NA		JALITY SAM ole Method: <u>C</u>			atives;		
						atives:		
Sample No.  No. of Sample Bottles			ole Method: <u>G</u>					

	BC-blw Pt		72 -	10 TI	
DRAINAGE:	Bishop Creek IN	VESTIGATORS: _	TO	) D	
PHYSICAL WATER	QUALITY PARAMETE	RS	WEATI	HER CONDITIO	NS
	16.6 (°F	_		1,2	
	0.05 mg (µn				
Furbidity: 1.1	<u>O</u> (NT	TUs) Air Temper	ature F	r 🏈 Baro. Pr	essure(in H
	Cloud coverO				
Secchi Disk: MA	Depth of Disappear:	meters	Depth of Re	appearance:	meters
		7.6	S	ecchi Depth:	meters
Visual Condition of : Clear	Stream (check all that ap Cloudy		Colored		
Floating Material	Ott	her:			
Remarks:					
		Site Drawing			
		ER QUALITY SAM			
Sample No.	<b>WAT</b> 3C-blw-PH6			reservatives: _	lce
	3C-blw-PH6		Grab P	reservatives:	
Sample No. \[ \big  \] No. of Sample Bottl	3C-blw-PH6		Grab P	_	3 F
	3C-blw-PH6	Sample Method: 0	Grab P	_	
	3C-blw-PH6	Sample Method: 0	Grab P	_	3 F
	3C-blw-PH6	Sample Method: 0	Grab P	_	3 F
	3C-blw-PH6	Sample Method: 0	Grab P	_	3 F
	3C-blw-PH6	Sample Method: 0	Grab P	_	± ₹

DRAINAGE: Bishop Cre	eek INVESTIGATORS: TB JB	
PHYSICAL WATER QUALITY	PARAMETERS WEATHER CONDITIONS	
Water Temperature: 14	9 (°F or °C) Dissolved Oxygen: 8.42 (mg/L)	
Conductivity:	(μmhos/cm@25 °C) Stream or Lake gage reading:	-1-151
Furbidity:	(NTUs) Air Temperature For °C) Baro. Pressure (in Hg	si = 25. 2
Winds (mph) Cloud		
Secchi Disk: $\mathcal{N} \mathrel{ buildrel{A}} Depth$ of D	Disappear:meters Depth of Reappearance:meters	
/isual Condition of Stream (che Clear Floating Material Remarks:	Secchi Depth:meters eck all that apply): Cloudy	
verilaiks.	Site Drawing	
	One Drawing	
	WATER QUALITY SAMPLE DATA	
Sample No	WATER QUALITY SAMPLE DATA  Sample Method: Grab Preservatives: Ice	
	Sample Method: Grab Preservatives: Ice	
	Sample Method: Grab Preservatives: Ice  Preservatives:	
Sample No	Sample Method: Grab Preservatives: Ice  Preservatives:	
	Sample Method: Grab Preservatives: Ice  Preservatives:	
	Sample Method: Grab Preservatives: Ice  Preservatives:	

	DATE: 7/30/20 TIME: 8:30 a
	reek INVESTIGATORS: TB JB
PHYSICAL WATER QUALITY	1
Vater Temperature:	(°F or (°C)) Dissolved Oxygen: 8,59 (mg/L)
	ν S (μmhos/cm@25 ºC) Stream or Lake gage reading:
urbidity: 0,36	(NTUs) Air Temperature 79 For Baro. Pressure (in Hg)
Vinds (mph) Cloud	cover (%) Precipitation Fog Rain Sleet Hail Snow
Secchi Disk: W/ Depth of D	Disappear:meters Depth of Reappearance:meters
(invol Condition of Stroom (ob)	Secchi Depth: meters
	Cloudy Colored
Floating Material	Other:
Remarks:	
	Site Drawing
Dr. hlu	✓ D) WATER QUALITY SAMPLE DATA
BC-blu	1,15
Sample No.	Sample Method: Grab Preservatives: Ice
Sample No.	Sample Method: Grab Preservatives: Ice  Preservatives: Hassian
Sample No.	Sample Method: Grab Preservatives: Ice
Sample No.	Sample Method: Grab Preservatives: Ice  Preservatives: Hassian
Sample No.	Sample Method: Grab Preservatives: Ice  Preservatives: Hassian
Sample No.	Sample Method: Grab Preservatives: Ice  Preservatives: Hassian
BC-blue Sample No.  No. of Sample Bottles	Sample Method: Grab Preservatives: Ice  Preservatives: Hassian
Sample No.	Sample Method: Grab Preservatives: Ice  Preservatives: Hassian

DRAINAGE: B	Sishop Creek	_ INVESTIGAT	ORS:	BJB		
PHYSICAL WATER O		ETERS		WEATHER	CONDITIONS	
Water Temperature:_	14:4	_(ºF or(ºC))	Disso	ved Oxygen:	8.68	(mg/L)
Conductivity:	-	_(µmhos/cm@2	25 ºC) Strear	n or Lake gage r	eading:	- 24
Turbidity:	-	(NTUs) Air	Temperature	82 OF Dr	Baro. Press	ure 12. (in H
Winds O ~ (mph)	Cloud cover(	(%) Pre	cipitation	Fog Rain	Sleet Ha	ail Snow
Secchi Disk: NIXD	epth of Disappear	r:met	ers [	Depth of Reappe	arance:	meters
				Secchi	Depth:	meters
Visual Condition of St Clear∠	ream (check all that Cloudy		Colore	ed		
-loating Material		Other:	_			
Remarks:						
		Site	Drawing			
	V Lc.A	VATER QUALIT				
Sample No.	NA		<b>TY SAMPLE</b> ethod: <u>Grab</u>	Preserv	vatives:	
	NA	_ Sample Me	ethod: <u>Grab</u>	Preserv	vatives:	
Sample No No. of Sample Bottles	NA	_ Sample Me		Preserv		

m@25 °C) Street Air Temperate Precipitation meters	solved Oxygeam or Lake ure 83 (F Fog Depth of F	gage reading: Baro. Rain Sleet Reappearance: Secchi Depth:	Pressure Hail	Snow
m@25 °C) Street Air Temperator Precipitation meters	eam or Lake ure 83 (£ Fog Depth of F	gage reading:  Rain Sleet Reappearance:	Pressure Hail r	2.24 (in Ho Snow
m@25 °C) Street Air Temperator Precipitation meters	eam or Lake ure 83 (£ Fog Depth of F	gage reading:  Rain Sleet Reappearance:	Pressure Hail r	(in He Snow meters
Air Temperator Precipitation meters Col	Fog Depth of F	Rain Sleet	Pressure t Hail	(in H
meters Col	Depth of F	Reappearance:	r	neters
meters Col	Depth of F	Reappearance:	r	neters
		Secchi Depth:		meters
	ored	_		
Site Drawing				
Site Drawing				
Site Drawing				
ALITY SAMPL				
	b	Preservatives:		<u>a</u>
e Method: Gra			11 (()	
e Method: <u>Gra</u> REMARKS		Preservatives:	Harry	10

DRAINAGE: B	Bishop Creek INVESTIGATORS: TB	
	QUALITY PARAMETERS WEATHER CONDITIONS	
Water Temperature:		
Conductivity:	— (µmhos/cm@25 °C) Stream or Lake gage reading: — (NTUs) Air Temperature 8 0 (°F) or °C) Baro. Pressure (in Hg)	o ic
Turbidity:	(NTUs) Air Temperature 80 (°F) r °C) Baro. Pressure (in Hg)	
Winds (mph)	Cloud cover C (%) Precipitation Fog Rain Sleet Hail Snow	
Secchi Disk: NA D	Depth of Disappear:meters	
1	Secchi Depth: meters	
Clear	Stream (check all that apply):  Cloudy Colored	
Floating Material	Other:	
Remarks:		
	Site Drawing	
	WATER QUALITY SAMPLE DATA	
Sample No.	WATER QUALITY SAMPLE DATA  MATER QUALITY SAMPLE DATA  Sample Method: Grab Preservatives: Ice	
	NA Sample Method: Grab Preservatives: Ice	
	Sample Method: Grab Preservatives: Ice	
	Sample Method: Grab Preservatives: Ice  Preservatives:	
Sample No.  No. of Sample Bottles	Sample Method: Grab Preservatives: Ice  Preservatives:	
	Sample Method: Grab Preservatives: Ice  Preservatives:	
	Sample Method: Grab Preservatives: Ice  Preservatives:	
	Sample Method: Grab Preservatives: Ice  Preservatives:	

destruction of the second	
DRAINAGE: Bishop Cree	ek INVESTIGATORS: TIS TIS
PHYSICAL WATER QUALITY F	PARAMETERS WEATHER CONDITIONS
Water Temperature: 14, -	(°F o(°C)) Dissolved Oxygen: 8.28 (mg/L)
Conductivity: 0.09	5 m 5 (µmhos/cm@25 °C) Stream on take gage reading: O . 65
Turbidity: O.60	(NTUs) Air Temperature 80 (For °C) Baro. Pressure (in Ho
Winds O (mph) Cloud co	over 6 (%) Precipitation Fog Rain Sleet Hail Snow
Secchi Disk: MA Depth of Dis	sappear:meters Depth of Reappearance:meters
Floating Material	Secchi Depth: meters  ck all that apply):  cloudy Colored  Other: Colored
remains. deg cor so	Site Drawing
	WATER QUALITY SAMPLE DATA  - PH3 Sample Method: Grab Preservatives: Ice  - Preservatives: H3 SOY 10
Sample No. BC-51w  No. of Sample Bottles	- PH3 Sample Method: Grab Preservatives: Ice

		P# 2	DATE:	130/20 TIM	ME: 10;00a~	
DRAINAGE: _E	Bishop Creek	INVESTIGATOR	is: TB	53		
PHYSICAL WATER	QUALITY PARAME	ETERS	W	EATHER CONDITION	NS	
Water Temperature:_		(°F or EC)		xygen: 8,21	(mg/L)	
Conductivity:	-	μmhos/cm@25 s	<sup>2</sup> C) Stream or La	ake gage reading:		23 27 10
Turbidity:	-	(NTUs) Air Ter	mperature 🐉	©For °C) Baro. Pre	ssure (in Hg)	
Winds 1 - 5 (mph)	Cloud cover C	O (%) Precip	itationFog	Rain Sleet	HailSnow	
Secchi Disk: NA [	epth of Disappear:			of Reappearance:		
Visual Condition of St Clear X Floating Material	Cloudy	Other:	Colored	Secchi Depth:	meters	
Remarks:		014 . 5				
		Site Dra	wing			
					1	
					1	
	W	ATER QUALITY S	SAMPLE DATA			
Sample No.	w NA	Sample Metho		Preservatives:	lce	
	NA			Preservatives:	lce	
	NA		od: <u>Grab</u>		lce	
	NA	Sample Metho	od: <u>Grab</u>		lce	
	NA	Sample Metho	od: <u>Grab</u>		Ice	
	NA	Sample Metho	od: <u>Grab</u>		Ice	
Sample No	NA	Sample Metho	od: <u>Grab</u>		Ice	

SITE NAME: BC blu		~	~		
DRAINAGE: Bishop Cre	eek INVESTIGATOR	s: <u>73</u>	5B		
PHYSICAL WATER QUALITY			ATHER CONDITIONS		
Vater Temperature: 12.0	(%F or (C))	Dissolved Oxy	gen: 8.4	(mg/L)	
Conductivity: 0.04	<u>~5</u> (μmhos/cm@25 º	C) Stream or Lake	e gage reading:	75'	13.27 in
Furbidity: 0.68	(NTUs) Air Ten	nperature $90$ (	(Eor °C) Baro. Pressu	ire 11, 43 (in Hg)	15.0
Vinds (mph) Cloud	cover (%) Precipi	itation Fog	_ RainSleetHa	ilSnow	
Secchi Disk: NA Depth of D	isappear:meters	Depth of	Reappearance:	meters	
/isual Condition of Stream (che Clear <u>V</u> Floating Material	eck all that apply): Cloudy Other:	Colored	Secchi Depth:	meters	
	Site Dra	wing			
				1 1	
				1 1	
	WATER QUALITY S	SAMPLE DATA			
Sample No. BC.h\uc.	211 0		Droopyotivos		
			Preservatives:	lce	
	PH2 Sample Metho	od: <u>Grab</u>	Preservatives:	lce Oy in	
	211 0	od: <u>Grab</u>		lce Oy in	
	PH2 Sample Metho	od: <u>Grab</u>		lce Oy in	
	PH2 Sample Metho	od: <u>Grab</u>		lce Oy in	
	PH2 Sample Metho	od: <u>Grab</u>		lce Oy in	
Sample No. BC-b\w.	PH2 Sample Metho	od: <u>Grab</u>		lce Oy in	

DRAINAGE:	Bishop Creek	INVECT	IGATORS:	4	B JB		
			IGATORS:	1			
PHYSICAL WATE					EATHER CONDI		
Water Temperature		(ºF or ºC)	) D	issolved Ox	ygen:		_ <sup>(mg/L)</sup>
Conductivity:		(µmhos/c	cm@25 ºC) S	tream or La	ke gage reading		10.41 ps
Turbidity:	-	(NTUs)	Air Tempera	ature 78	(F)or °C) Baro	. Pressure	in Hg
Winds 2 - 6 (mph	Cloud cover_	0 (%)	Precipitation	Fog_	RainSlee	tHail	Snow
Secchi Disk: $\mathcal{N}$ $\curlywedge$	Depth of Disappe	ar:	_meters	Depth o	f Reappearance		_meters
Visual Condition of	Stream (check all t	that annly):			Secchi Depth		meters
Clear Floating Material	Cloudy			olored			
		Outer.	-				
Remarks:							
			Site Drawing				
		WATER QU	JALITY SAMF	PLE DATA			
Sample No. 51			JALITY SAMF		Preservatives		Ice
	BR- \				Preservatives:		
No. of Sample Bottl	BR- \ es _ 2	Samp					
No. of Sample Bottl	BR- \ es _ 2	Samp	le Method: <u>G</u>				
Sample No. 51 No. of Sample Bottl  Weck	BR- \	Samp	le Method: <u>G</u>				
No. of Sample Bottl	BR- \ es _ 2	Samp	le Method: <u>G</u>				
No. of Sample Bottl	BR- \ es _ 2	Samp	le Method: <u>G</u>				

DRAINAGE:	Bishop Creek	INVESTI		ate: <u>7</u> 13	TB		11:40
PHYSICAL WATE	R QUALITY PARA		_	WE	ATHER CONDI	TIONS	
Water Temperature	: <u> </u>	(ºF or ºC)	Di		ygen:		(mg/L)
Conductivity:	4	(µmhos/c	m@25 ºC) St	ream or Lak	e gage reading:		
Turbidity:		_			For °C) Baro.		10.65 F
Winds 4-10 (mph	) Cloud cover_	0 (%)	Precipitation	Fog	RainSlee	Hail	Snow
Secchi Disk:	Depth of Disappe						
Clear Floating Material	Stream (check all t Cloudy			olored	Secchi Depth:		meters
Remarks:							
			Site Drawing				
			ALITY SAMP				
	5-BR-1		ALITY SAMP		Preservatives:	-0.0	Ice
	5-BR-1	Sampl			Preservatives:	-0.0	
Sample No. L No. of Sample Bottl \textbf{Weck}	S-BR-) les backi	Sampl	le Method: <u>G</u> i			-0.0	
No. of Sample Bottl	S-BR-) les hachi	Sampl	le Method: <u>G</u> i			-0.0	

DRAINAGE: Bishop Creek	2 Ke3. DATE: 7/30/20 1	
PHYSICAL WATER QUALITY PARA		ONS
Water Temperature:	(ºF or ºC) Dissolved Oxygen:	(mg/L)
Conductivity:	(μmhos/cm@25 ºC) Stream or Lake gage reading:	11 05 psi = 22,5 in
Turbidity:	(NTUs) Air Temperature 78 (Før °C) Baro. F	11.05 ps; = 22,3 iv
Winds 1-3 (mph) Cloud cover	(%) Precipitation Fog Rain Sleet	Hail Snow
Secchi Disk: // Depth of Disapp		meters
Visual Condition of Stream (check al Clear Cloud Floating Material		meters
Remarks:		
	Site Drawing	
	WATER QUALITY SAMPLE DATA	
Sample No. IMT2-RES-	WATER QUALITY SAMPLE DATA  Sample Method: Grab Preservatives:	Ice
	Sample Method: Grab Preservatives:  Preservatives:	Ice Nove
No. of Sample Bottles	Sample Method: Grab Preservatives:	7 - 3
	Sample Method: Grab Preservatives: Preservatives: REMARKS	7 - 3
No. of Sample Bottles  Weck back	Sample Method: Grab Preservatives: Preservatives: REMARKS	7 - 3

DRAINAGE:	Bishop Creek INVESTIGATORS: TB JB
PHYSICAL WATE	R QUALITY PARAMETERS WEATHER CONDITIONS
Water Temperatui	
	C. U3m5 (µmhos/cm@25 °C) Stream town control of the
Turbidity:	1.38 (NTUs) Air Temperature (F) or °C) Baro. Pressure (in F)
Winds O (mpl	h) Cloud cover <i>O</i> (%) Precipitation Fog Rain Sleet HailSnow
Secchi Disk:	Depth of Disappear:meters
Vigual Condition a	Secchi Depth: meters f Stream (check all that apply):
Clear _X	Cloudy Colored
Floating Material	Other:
Remarks: NF	flow measured at 14 cts.
	Site Drawing
Sample No.	WATER QUALITY SAMPLE DATA  BC-MF-1  Sample Mathadi Crob.  Proconstitues 149
	BC-NF- \ Sample Method: Grab Preservatives:   Ice
	BC-NF-   Sample Method: Grab   Preservatives: Ice    tiles   H Suy in   but
Sample No. No. of Sample Bot	BC-NF- \ Sample Method: Grab Preservatives:   Ice
	BC-NF-   Sample Method: Grab   Preservatives: Ice    tiles   H Suy in   but
	BC-NF-   Sample Method: Grab   Preservatives: Ice    tiles   H Suy in   but
	BC-NF-   Sample Method: Grab   Preservatives: Ice    tiles   H Suy in   but
	BC-NF-   Sample Method: Grab   Preservatives: Ice    tiles   H Suy in   but

SITE NAME: Middle Fork DATE: 7/31/20 TIME: 9:20a
DRAINAGE: Bishop Creek INVESTIGATORS: TS JB
PHYSICAL WATER QUALITY PARAMETERS  WEATHER CONDITIONS  Water Temperature: 15.7 (2F or 2C)  Dissolved Oxygen: 7.16 (mg/L)
Conductivity: (μmhos/cm@25 °C) Stream or Lake gage reading:
Turbidity: 1. 44 (NTUs) Air Temperature (P) or °C) Baro. Pressuré (in Hg)
Winds D (mph) Cloud cover D (%) Precipitation Fog Rain Sleet Hail Snow
Secchi Disk: N P Depth of Disappear:meters Depth of Reappearance:meters
Visual Condition of Stream (check all that apply):  Clear Cloudy Colored  Floating Material Other:
Remarks:
WATER QUALITY SAMPLE DATA
Sample No. BC-blw-LS Sample Method: Grab Preservatives: Ice
No. of Sample Bottles Preservatives: Hassy in \ butter  REMARKS
SIGNED BY: REVIEWED BY:

SITE NAME; DRAINAGE: Bishop	Creek INVESTIGAT	OPS: TB	73 TIM	
			<u> </u>	
PHYSICAL WATER QUAL			ATHER CONDITION	S
Water Temperature:	2. 7 (°F o(°C))	Dissolved Ox	ygen: <u>9.0</u>	(mg/L)
Conductivity: 0.	OU m 5 (µmhos/cm@2	25 ºC)√Stream or Lak	ce gage reading:	
Turbidity:	(NTUs) Air			
Winds $1-2$ (mph) Clo	oud cover O (%) Pre	cipitation Fog	Rain Sleet	HailSnow
Secchi Disk: WA Depth	of Disappear:met	ers Depth of	Reappearance:	meters
V51-O	v nestienuter ze v v		Secchi Depth:	meters
Visual Condition of Stream Clear 🗸	(check all that apply): Cloudy	Colored		
Floating Material	Other:		w.	
Remarks:				
	014-1	Drawing		
Sample No. 26-		Y SAMPLE DATA	Preservatives	lce
	WATER QUALIT b\w_ SL Sample Me		Preservatives:	lce
	blw-SL Sample Me	ethod: <u>Grab</u>	Preservatives:	
	blw-SL Sample Me		A I	
	blw-SL Sample Me	ethod: <u>Grab</u>	A I	
Sample No. 3C-,	blw-SL Sample Me	ethod: <u>Grab</u>	A I	
	blw-SL Sample Me	ethod: <u>Grab</u>	A I	
	blw-SL Sample Me	ethod: <u>Grab</u>	A I	

SITE NAME;				-0	73			
	Bishop Creek		IGATORS:	113	7B			
PHYSICAL WATER	QUALITY PARAME	TERS			WEATHER	CONDITIO	ONS	
Water Temperature:		(ºF or ºC	)	Dissolved	Oxygen:			(mg/L)
Conductivity:	-	(µmhos/c	cm@25 ºC)	Stream or	Lake gage r	eading:		0 40
Turbidity:		(NTUs)	Air Tempe	rature 🕼	8 <b>(</b> or °C)	Baro. Pi	ressure_	21. 75 (in F
Winds 4-12 (mph)	Cloud cover_C	(%)	Precipitation	on Fo	g Rain _	Sleet	_Hail _	Snow
	Depth of Disappear:							
Vieual Condition of	Stream (check all tha	t apply):			Secchi	Depth:		_meters
Clear	Cloudy			Colored				
Floating Material		Other:						
Remarks:								
			Site Drawin	ng				
	W	ATER QL	JALITY SAN	//PLE DA	ΓΑ			
Sample No.			JALITY SAM			vatives:	lo	ce
	51.BR-1				Presen	vatives:	1000	
	51.BR-1			Grab	Presen		1000	
No. of Sample Bottle	51.BR-1 es 2		ole Method:	Grab	Presen		1000	
No. of Sample Bottle	51.BR-1 es 2 badi		ole Method:	Grab	Presen		No.	
No. of Sample Bottle	51.BR-1 es 2		ole Method:	Grab	Presen		No.	
No. of Sample Bottle	51.BR-1 es 2 badi		ole Method:	Grab	Presen		No.	
No. of Sample Bottle	51.BR-1 es 2 badi		ole Method:	Grab	Presen		No.	

DRAINAGE:	Bishop Creek	INVESTIGA	ATORS:	TB	JB		
PHYSICAL WATE	R QUALITY PARAME	TERS		WE	ATHER CON	IDITIONS	
Water Temperature	e:	(ºF or ºC)	Dis	solved Oxy	/gen:	_	(mg/L)
Conductivity:		(μmhos/cm(	@25 ºC) Str	eam or Lak	e gage readi	ing:	
Turbidity:		(NTUs) A	ir Temperati	ure 75	(Eer°C) Ba	aro. Press	sure 21.7
Winds 1-5 (mph	) Cloud cover (	) (%) P	Precipitation	Fog	Rain S	leet H	lailSnow
Secchi Disk: NA	Depth of Disappear:	n	neters	Depth of	Reappearar	nce:	meters
Clear Floating Material	Stream (check all tha Cloudy	other:	Col	lored	Secchi De	oth:	meters
Remarks:						-	
		311	te Drawing				
	W	ATER QUAI	LITY SAMPI	E DATA			
Sample No.	W 15-BR-1		LITY SAMPI Method: <u>Gra</u>		Preservativ	/es:	Ice
	15-BR-1	Sample	Method: Gra		Preservativ Preservativ		
Sample No. No. of Sample Bot	15-BR-1 des 2	Sample	Method: Gra	ab	Preservativ	/es: <u>}</u>	
No. of Sample Bot	15-BR-1	Sample	Method: Gra	ab		/es: <u>}</u>	
No. of Sample Bot	15-BR-1 des 2	Sample	Method: Gra	ab	Preservativ	/es: <u>}</u>	

DRAINAGE:	Bishop Cree	k INVEST	TIGATORS:	TD	+B		
PHYSICAL WAT	. Carrier to			-	ATHER CONDI	TIONE	
							200
Water Temperat	ure:				ygen:		_ <sup>(mg/L)</sup>
Conductivity:		(µmhos/		-1	ke gage reading		22.51
Turbidity:		(NTUs)	Air Tempera	iture + f	⑥or °C) Baro	. Pressure	e (in H
WindsO-3 (m	ph) Cloud co	over O (%	) Precipitation	rFog	Rain Slee	t Hail	Snow
		appear:					
					Secchi Depth		meters
Clear	C	ck all that apply): loudy		olored			
Floating Materia		Other:					
Remarks:							
			Site Drawing				
					- (		
Sample No.	En 757 20		UALITY SAMP		Preservatives		Ice
			UALITY SAMI		Preservatives		Ice
			ple Method: <u>G</u>		Preservatives Preservatives		
No. of Sample B	ottles						
	ottles _	2 Sam	ple Method: <u>G</u>				
No. of Sample B	ottles _		ple Method: <u>G</u>				
No. of Sample B	ottles _	2 Sam	ple Method: <u>G</u>				

# Field Data Forms August 2020

DRAINAGE:		E: 11:00
A CONTRACTOR OF THE PROPERTY O	Bishop Creek INVESTIGATORS: JB TB	
PHYSICAL WATER	R QUALITY PARAMETERS WEATHER CONDITIONS	S
Water Temperature	:(ºF or ºC) Dissolved Oxygen:	(mg/L)
Conductivity:	(μmhos/cm@25 <sup>o</sup> C) Stream or Lake gage reading:	2114
Turbidity:	(NTUs) Air Temperature 77 (°F or °C) Baro. Pres	ssure(in H
Winds 0 - 2 (mph)	Cloud cover (%) Precipitation Fog Rain Sleet	HailSnow
Secchi Disk: NA	Depth of Disappear: meters	meters
Visual Condition of Clear Floating Material	Stream (check all that apply):  Cloudy  Other:  Secchi Depth:  Colored  Other:	meters
Remarks:	SUNNY	
	Site Drawing	
	÷	
	WATER QUALITY SAMPLE DATA	
	L-BR-  Sample Method: Grab Preservatives:	
	Sample Method: Grab Preservatives: Preservatives: Method: Meth	
No. of Sample Bottl	Sample Method: Grab Preservatives: Preservatives: No. REMARKS	

DRAINAGE:	Bishop Creek	INVESTIGATORS: _	15	7.5	
PHYSICAL WAT	ER QUALITY PARA	METERS	WE	ATHER CONDIT	IONS
Water Temperatu	re:	(ºF or ºC)	Dissolved Oxy	gen:	(mg/L)
Conductivity:	_	(μmhos/cm@25 ºC) s	Stream or Lake	e gage reading:	
Turbidity:	_	(NTUs) Air Temper	ature 76 (	°F or °C) Baro. I	Pressure 21,70
Winds 2-4 (mp	h) Cloud cover_	(%) Precipitation	n Fog	RainSleet	Hail Sno
Secchi Disk: NA		ar:meters			
/isual Condition o	of Stream (check all t	that apply):		Secchi Depth:	meters
Clear Value Toating Material	Cloudy		colored	_	
Remarks:	Sonn				
ionianto.	2010/00	Site Drawing			
		WATER QUALITY SAMI	PLE DATA		
sample No.	LS-BR-\	WATER QUALITY SAMI Sample Method: G		Preservatives:	lce
	LS-BR-1			Preservatives: _	
lo. of Sample Bo	LS-BR-\ tles				
lo. of Sample Bo	LS-BR-1	Sample Method: G			
lo. of Sample Bo	LS-BR-1 tiles = 3	Sample Method: G			

DRAINAGE: Bis	shop Creek IN	VESTIGATORS:	:	TB		
PHYSICAL WATER QU	JALITY PARAMETI	ERS	V	WEATHER CONDI	TIONS	
Water Temperature:	(ºl	F or <sup>o</sup> C)	Dissolved (	Oxygen:		_(mg/L)
Conductivity:	<b>-</b> (μ	mhos/cm@25°C	) Stream or L	_ake gage reading:		
Furbidity:				7_(°For°C) Baro		ZZ. 7
Winds O (mph)	Cloud coverC	(%) Precipita	tion Fog	Rain Slee	tHail	Snov
Secchi Disk: VA De						
7.				Secchi Depth		
Visual Condition/of Stre	am (check all that a Cloudy	pply):	Colored _			
loating Material		her:				
Remarks:	SUN	wy				
		Site Draw	ina			
Sample No.	WAT	ER QUALITY SA Sample Method		<b>A</b> Preservatives:		lce
No. of Sample Bottles	T2-RES-1	Sample Method	: <u>Grab</u>	Preservatives:	Nor	
No. of Sample Bottles	T2-RES-1	Sample Method	: <u>Grab</u>	Preservatives:	Nor	
No. of Sample Bottles	T2-RES-1	Sample Method	: <u>Grab</u>	Preservatives:	Nor	Ve .
	T2-RES-1	Sample Method	: <u>Grab</u>	Preservatives:	Nor	Ve .

SITE NAME:	South	Lake	DATE	E: 8/5	12020	TIME:	MADDAM
DRAINAGE:	Bishop Creek	INVESTIG	ATORS: J	B			
PHYSICAL WATER	QUALITY PAR	AMETERS		WEAT	HER CONDIT	TIONS	
Water Temperature		(ºF or ºC)	Disso	olved Oxyge	n:	-	_(mg/L)
Conductivity:		(μmhos/cm	@25 ºC) Strea	ım or Lake ç	jage reading:		
Turbidity:	_	(NTUs)	ir Temperature	e72 (°F	or °C) Baro.	Pressure	21.06 (in Hg
Winds 4-6 <sub>(mph)</sub>	Cloud cover	(%) F					
		oear:n					
Visual Condition of Clear X Floating Material Remarks:	Cloud	Other:		red	-		
		Sit	e Drawing				
W - Hoperstal	DOCK /	) press	4				
Sample No.	SL-BR-1		LITY SAMPLE Method: Grab		reservatives:		Ice
No. of Sample Bottle		2			reservatives:		
1 WECK		SOURCE	EMARKS MOL				
SIGNED BY:	TH Bu	/	REVIEWED	BY:			

DRAINAGE:	Bishop Creek	INVESTIGATORS:	J.B	
PHYSICAL WAT	ER QUALITY PAR	AMETERS	WEATHER CONDITIONS	
Water Temperatu	re:	(°F or °C) Dis	ssolved Oxygen:(mg/l	_)
Conductivity:		(μmhos/cm@25 ºC) Str	ream or Lake gage reading:	-5
Turbidity:	-	(NTUs) Air Temperat	ure 75 (°F or °C) Baro. Pressure	(in h
Winds 5-10 (mp	h) Cloud cover	(%) Precipitation	FogRainSleetHailS	Snov
Secchi Disk:	Depth of Disapp	pear:meters	Depth of Reappearance: mete	rs
Visual Condition Clear Floating Material Remarks:	of Stream (check a Cloud		Secchi Depth:me	leis
terrarks.		Site Drawing		
	₩1C FR	WATER QUALITY SAMP		
	\$15-BR-1	Sample Method: Gr	ab Preservatives: Ice	
Sample No. No. of Sample Bo		Sample Method: Gr		
	ottles	Sample Method: Gr	ab Preservatives: Ice	
No. of Sample Bo	ottles	Sample Method: Gr	ab Preservatives: Ice  Preservatives: More	
No. of Sample Bo	ottles	Sample Method: Gr	ab Preservatives: Ice  Preservatives: More	

SITE NAME:	<u>Intake</u>			8/5/2020	TIME:	
DRAINAGE:	Bishop Creek	INVESTIGAT	ORS:	JB		
PHYSICAL WAT	R QUALITY PARA	METERS		WEATHER CON	NDITIONS	
Water Temperatu	re:	(ºF or ºC)	Dissolv	ed Oxygen:	-	(mg/L)
Conductivity:	_	(µmhos/cm@2	25 ºC) Stream	or Lake gage read	ing: —	- 73(
Turbidity:		(NTUs) Air	Temperature_	(°F or °C) B	aro. Pressur	e ZZ. jin H
Winds 0 - 2 (mp	h) Cloud cover_	(%) Pre	ecipitation	FogRainS	leet Hail	Snov
Secchi Disk:	Depth of Disappe	ear:me	ters De	epth of Reappearar	nce:	meters
(i1 O dist	4 O / - k l ll	ALCO COLLA		Secchi De	pth:	meters
Clear X	of Stream (check all Cloudy	/	Colored			
Floating Material		Other:		2=20/0		71
Remarks:	ZUNN		FEW	DECITIE	10171	-
		Site	Drawing			
		WATER QUALIT	TY SAMPLE D	ATA		
Sample No.	I <u>NT</u> 2-RES-		TY SAMPLE D	ATA Preservativ	/es:	Ice
						lce c≠
Sample No.  No. of Sample Bo	ttles	Sample M	ethod: Grab	Preservativ		
No. of Sample Bo	ttles	Sample M	ethod: Grab	Preservativ		

DRAINAGE:	Bishop Creek	_ INVESTIGATO	RS: <u>K()</u>	\$ TB	
PHYSICAL WATE	R QUALITY PARA	METERS		WEATHER CONDITI	ONS
Water Temperatur	e: 14.6	(ºF or 😉)	Dissolv	ed Oxygen: 8.82	(mg/L)
Conductivity:		(µmhos/cm@25	ºC) Stream	or Lake gage reading:	
Turbidity:	-	(NTUs) Air Te	emperature_	71 (F)or °C) Baro. F	Pressure2538 (in F
Winds (mpt	) Cloud cover_	(%) Precip	pitation 🕒 l	Fog Rain Sleet :	Hail Snov
Secchi Disk: NA	Depth of Disappe	ar:meter	rs De	epth of Reappearance:_	meters
Visual Condition of Clear Visual Condition of Clear Visual Regions	Stream (check all Cloudy		Colored		meters
Remarks:					
		Site Dr	awing		
Sample No		WATER QUALITY			lce
Sample No.	NA	Sample Meth		Preservatives:	Ice
Sample No. No. of Sample Bot	NA		nod: <u>Grab</u>		Ice

DRAINAGE:	Bishop Creek	_ INVESTIG	GATORS:	KO	4 15		
PHYSICAL WATER	QUALITY PARAM	IETERS		N	EATHER CON	DITIONS	
Water Temperature	4.5	_(ºF or@C)	i y	Dissolved C	exygen: O	84	(mg/L)
Conductivity:		_(µmhos/cn	n@25 ºC)	Stream or L	ake gage readir	ng:	-
Turbidity:		(NTUs)	Air Tempe	rature1	⑥or °C) Ba	ro. Pressui	re25.36 (in l
Winds ↓ ↓ (mph)	Cloud cover_	0 (%)	Precipitation	on Fog	Rain Sle	eetHai	I _ Snov
Secchi Disk: NA	Depth of Disappea	or:	meters	Depth	of Reappearance	ce:	meters
Visual Condition of	Ctroom (abook all ti	not opply):			Secchi Dep	th:	meters
Clear /	Cloudy			Colored _			
Floating Material		Other:					
Remarks:							
		S	Site Drawin	g			
	N/A	WATER QU					
Sample No.	NA M.		ALITY SAM		Preservative	-	
	NA M.	Sample	e Method: _	Grab		-	
Sample No. No. of Sample Bottl	NA M.	Sample		Grab	Preservative	-	

	Tailwater			6 20 TI	
DRAINAGE:	Bishop Creek	INVESTIGATORS:	KD	7 TB	
PHYSICAL WATER	QUALITY PARA	METERS	WEA	THER CONDITIO	ONS
Water Temperature	13.8	(ºF or @C)	Dissolved Oxyg	gen: <u>8.58</u>	) (mg/L)
Conductivity:	_	(μmhos/cm@25 ºC)	Stream or Lake	gage reading:	
Turbidity:		(NTUs) Air Tempe	erature 71 6	F)or °C) Baro. Pr	ressure25.13(in H
Winds (mph)	Cloud cover_	(%) Precipitati	ion _ < Fog _ <	RainSleet _	Hail / Snow
Secchi Disk: NA	Depth of Disappe	ear:meters	Depth of F	Reappearance:	meters
Visual Condition of	Stream (check all	that apply):		Secchi Depth:	meters
Clear V	Cloudy		Colored	_	
Remarks:					
		Site Drawin	ng		
Sample No.	NA	WATER QUALITY SAI  Sample Method:		Preservatives:	Ice
Sample No. No. of Sample Bottl				Preservatives:	Ice
		Sample Method:	Grab		Ice

SITE NAME: BC		V	in & TB	
DRAINAGE:	Bishop Creek	INVESTIGATORS:	4D & TB	
PHYSICAL WATE	R QUALITY PARA		WEATHER CONDI	
Water Temperature	e: 13.8	(ºF o(ºC) Diss	solved Oxygen: 8,68	(mg/L)
Conductivity:		(μmhos/cm@25 °C) Stre	am or Lake gage reading:	
Turbidity:		(NTUs) Air Temperatu	re 1 (F) or °C) Baro	Pressure 2513 (in F
Winds 0 (mpt	) Cloud cover_	(%) Precipitation	Fog Rain Slee	tSnov
Secchi Disk: MA	_Depth of Disappe	ear:meters	Depth of Reappearance:	meters
Visual Condition of	Stream (check all	that apply):	Secchi Depth:	meters
Clear	Cloudy	/ Cold	ored	
Floating Material		Other:		
Remarks:				
		Site Drawing		
Sample No. No. of Sample Bot	NA Netles N	WATER QUALITY SAMPL Sample Method: Gral	b Preservatives	Ice

DRAINAGE:	Bishop Creek	INVESTIGATORS:	+713	
PHYSICAL WAT	ER QUALITY PARA	METERS	WEATHER CONDITIONS	
Water Temperat	ure: 13.9	(ºF or Ĉ) Dissolved	Oxygen: <b>8.</b> 72 (	mg/L)
Conductivity:		(μmhos/cm@25 ºC) Stream of	Lake gage reading:	_
Turbidity:		(NTUs) Air Temperature	©F)or ℃) Baro. Pressure	1.71 (in H
Winds O (m	ph) Cloud cover_	O (%) Precipitation Fo	g / Rain/ Sleet /Hail /	Snov
Secchi Disk: //	Depth of Disappe	ear:meters Dep	th of Reappearance:n	neters
; v	· · · · · · · · · · · · · · · · · · ·	ALC: COSTA	Secchi Depth:	meters
Visual Condition Clear V Floating Material	of Stream (check all Cloudy			
Remarks:	-	Outon.		
Remarks:		cast ratio is a		
		Site Drawing		
	A. A.	WATER QUALITY SAMPLE DA	TA	
Sample No.	NA	WATER QUALITY SAMPLE DA	ΓΑ Preservatives:los	e
Sample No. No. of Sample B	NA ottles	Sample Method: Grab		
	NA ottles		Preservatives: Ice	

DRAINAGE:	Bishop Creek	INVES	STIGATORS	:	Ψ.	18	
PHYSICAL WATE	R QUALITY PAR	RAMETERS		,	WEATHER C	ONDITIONS	
Water Temperatur	13.6	(ºF or(	3	Dissolved	Oxygen:	8.88	(mg/L)
Conductivity:		(µmho	s/cm@25 ºC	Stream or	_ake gage re	ading:	
Turbidity:	-	(NTUs	) Air Temp	perature 11	_(♣) or °C)	Baro. Press	ure 24.79 (in H
Winds (mpl	) Cloud cove	er_ 0(°	%) Precipita	ation Fog		Sleet _/H	ail ~ Snov
Secchi Disk: NA	Depth of Disap	pear:	meters	Depth	of Reappea	rance:	meters
,						Depth:	
Visual Condition of Clear Floating Material	Clou			Colored _			
tomuno.			Site Draw	ias			
				14			
Sample No. No. of Sample Bot	NA tles		QUALITY SA mple Method — REMARA	d: Grab	Preserv	atives:	Ice

	Tallmost			8/6/2020 TIM	E: <u>1-10</u>
DRAINAGE:	Bishop Creek	_ INVESTIGATOR	rs: <u>KD</u>	+ [	B
PHYSICAL WATE	R QUALITY PARAM	METERS	V	EATHER CONDITION	s
Water Temperature	B.5	(ºF or •©)	Dissolved C	0xygen: 8, 47	(mg/L)
Conductivity:		(μmhos/cm@25 º	C) Stream or L	ake gage reading:	
Turbidity:		(NTUs) Air Ter	mperature 3	For °C) Baro. Pres	ssure 23. 8 (in h
Winds 2.2 (mph	) Cloud cover_	(%) Precipi	itation Fog	RainSleet	HailSnov
Secchi Disk: NA	Depth of Disappe	ar:meters	Depth	of Reappearance:	meters
				Secchi Depth:	meters
Visual Condition of Clear	f Stream (check all t Cloudy	hat apply):	Colored		
Floating Material		Other:	E.O.O.C		
Remarks:					
		Site Dra			
		WATER QUALITY S	SAMPLE DATA		
Sample No.	NA				lan
Sample No.	NA.	WATER QUALITY S		Preservatives:	Ice
	_NA_				
	_NA_	Sample Metho	od: <u>Grab</u>	Preservatives:	
	_NA_		od: <u>Grab</u>	Preservatives:	
	_NA_	Sample Metho	od: <u>Grab</u>	Preservatives:	
	_NA_	Sample Metho	od: <u>Grab</u>	Preservatives:	
	_NA_	Sample Metho	od: <u>Grab</u>	Preservatives:	
Sample No. No. of Sample Botl	_NA_	Sample Metho	od: <u>Grab</u>	Preservatives:	
	_NA_	Sample Metho	od: <u>Grab</u>	Preservatives:	
	_NA_	Sample Metho	od: <u>Grab</u>	Preservatives:	
	_NA_	Sample Metho	od: <u>Grab</u>	Preservatives:	
	NA tles A	Sample Metho	od: <u>Grab</u>	Preservatives:	

DAIN!	B	110/2000	1/1/	) , ¬		
DRAINAGE:	Bishop Creek	_ INVESTIGATORS		4 1	D	
PHYSICAL WAT	ER QUALITY PARAM	METERS		ATHER CONI		
Nater Temperatu	re: <u>13.5</u>	_(°F o(°C))	Dissolved Oxy	/gen: 💍 🖔 .	44	(mg/L)
Conductivity:		_(µmhos/cm@25 ºC	) Stream c <del>ritick</del>	<del>e-</del> gage readin	g:0 . 6	5 ft
Turbidity:	J	(NTUs) Air Temp	perature 73	(F)or °C) Bar	o. Pressure	23.84(in H
Winds (mp	h) Cloud cover_	(%) Precipita	ation Fog	Rain Sle	etHail	Snow
Secchi Disk:	Pepth of Disappea	ar:meters	Depth of	Reappearand Secchi Dept		
Visual Condition Clear Floating Material	of Stream (check all to Cloudy	hat apply): Other:	Colored	_		
Remarks: 5+	eam gange	at weir	= 0.45	feet de	pth	
	0 0	Site Draw	ring			
		WATER QUALITY SA	AMPLE DATA			
Sample No.	NA	Sample Method		Preservative	s:	Ice
Sample No. No. of Sample Bo	NA	Sample Method	l: <u>Grab</u>	Preservative Preservative	-	Ice
	NA	Sample Method	l: <u>Grab</u>		-	Ice

DRAINAGE:		PH2	DATE: 8/6/2020 TIME:	7. 220
Di Guillia Car.	Bishop Creek	_ INVESTIGATORS:	KD+ TB	
PHYSICAL WATER	R QUALITY PARAM	METERS	WEATHER CONDITIONS	
Water Temperature	138	(°F or °C)	Dissolved Oxygen: 8.26	mg/L)
Conductivity:	-	_(µmhos/cm@25 ºC)	Stream or Lake gage reading:	
Turbidity:	-	_(NTUs) Air Temp	erature 70 (°F or °C) Baro. Pressure 2	3.11 (in Hg
Winds to (mph)	Cloud cover_	O (%) Precipitat	tion - Fog - Rain - Sleet - Hail -	Snow
Secchi Disk: NA	. Depth of Disappea	ar:meters	Depth of Reappearance:n	neters
Visual Condition of Clear Floating Material	Stream (check all the Cloudy	Other:	Secchi Depth:	meters
Remarks:				
		Site Drawi	ing	
Sample No. No. of Sample Bottl	NA	WATER QUALITY SA Sample Method:	Grab Preservatives: Ice	3

SITE NAME: BC	Below	PHI	_DATE: 2	16/2020_TIME:	9:45 M
DRAINAGE:	Bishop Creek	INVESTIGATORS	S:	KD+T	B
PHYSICAL WATER	QUALITY PARAI	METERS	V	VEATHER CONDITIONS	
Water Temperature:	14.0	_(ºF or (C))	Dissolved (	Oxygen: 817	(mg/L)
Conductivity:	-	(μmhos/cm@25 º0	C) Stream or L	ake gage reading: O,	15 4
Turbidity:		(NTUs) Air Tem	perature 68	(°F or °C) Baro. Press	ure 23 15(in Hg
Winds (mph)	Cloud cover_	(%) Precipit	ation Fog	RainSleetHa	ailSnow
Secchi Disk: NA	Depth of Disappe	ar:meters	Depth	of Reappearance: Secchi Depth:	
Visual Condition of S Clear Floating Material Remarks: Weir	Cloudy	Other:	Colored _ 		minicipal
	7 7	Site Drav	wing		
Counts No.	NA	WATER QUALITY S			(Free
Sample No.  No. of Sample Bottle		Sample Metho	d: Grab	Preservatives:	Ice
No. or cumple bottle		REMAR	RKS	reservatives.	
SIGNED BY:	All The	REV	/IEWED BY:		

		1-1-	DATE	: 8/6/ <b>20</b>	TIME:	10.20
DRAINAGE:	Bishop Creek	INVESTIG	ATORS:	TB + KD		
PHYSICAL WAT	ER QUALITY PAR	RAMETERS		WEATHER CO	NDITIONS	
Water Temperati	ure: 5.4	(ºF or €		lved Oxygen: 8		(mg/L)
Conductivity:		(μmhos/cm	@25 ºC) Stream	Flow m <del>or-Lake gage</del> read	ling: 기니	cfs
Turbidity:	-	(NTUs)	Air Temperature	(µ2 (⊕ or °C) B	aro. Pressure	21.43 (in H
Winds (m	ph) Cloud cove	r O (%) F	Precipitation	Fog - Rain - S	SleetHail	~ Snow
Secchi Disk:	A Depth of Disap	pear:r	meters [	Depth of Reappeara	nce:	_meters
Visual Condition Clear Floating Material Remarks: VF	N /	Other:	Colore at 14		epth:	meters
remarks.			te Drawing			
Consula Na	~ 1 / ^		LITY SAMPLE			
Sample No.	NA ottles		LITY SAMPLE  Method: Grab	Preservati	ves:	Ice
	ottles (A	Sample				Ice
Sample No. No. of Sample B	ottles(^	Sample	Method: Grab	Preservati		Ice
	ottles (N	Sample	Method: Grab	Preservati		Ice

DRAINAGE:				3/6/2020 TIME	10.45N
DIVAINAGE.	Bishop Creek	INVESTIGATOR	RS: K	PITB	
PHYSICAL WATER	QUALITY PARA	METERS		WEATHER CONDITIONS	
Water Temperature:	17	(ºF or��)	Dissolved	0xygen: 7.22	(mg/L)
Conductivity:	-	(μmhos/cm@25	<sup>o</sup> C) Stream or	Lake gage reading:	-
Turbidity:	~	(NTUs) Air Te	emperature 62	- (°F or °C) Baro. Press	ure 21,58 (in Hg
Winds (mph)	Cloud cover_	(%) Precip	oitation Fog	gRainSleetH	ailSnow
Secchi Disk:	Depth of Disappe	ar:meter	s Deptl	h of Reappearance:	meters
ا کا الا Visual Condition of S	Stream (check all	that apply)-		Secchi Depth:	meters
Clear V Floating Material	Cloudy		Colored		
		Outer.	_		
Remarks:		Site Dra			
		One Div	annig		
Sample No.	N/A	WATER QUALITY  Sample Meth	nod: <u>Grab</u>	Preservatives:	Ice

SITE NAME:			8/6/2020 TIME:	12:00
DRAINAGE:	Bishop Creek	INVESTIGATORS:	KD + TR	
PHYSICAL WATE	R QUALITY PARA	METERS	WEATHER CONDITIONS	
Water Temperatu	re: 8.9	(ºF or ⓒ Dissolve	d Oxygen: 8.62	_(mg/L)
Conductivity:		(µmhos/cm@25 ºC) Stream (	or Lake gage reading:	
Furbidity:	1	(NTUs) Air Temperature (	( Por °C) Baro. Pressure	21.15(in 1
Winds O (mp	h) Cloud cover_	(%) Precipitation F	og Rain Sleet Hail	- Snov
Secchi Disk:	Depth of Disappe	ear:meters De	oth of Reappearance:	_meters
1-11	Stream (check all		Secchi Depth:	meters
Clear V Floating Material Remarks:	Cloudy			
terrancs.				
		Site Drawing		
Sample No. No. of Sample Bo	NA	WATER QUALITY SAMPLE DA Sample Method: Grab  REMARKS	ATA Preservatives: Preservatives:	Ice

DRAINAGE:	Bishop Creek	INIVECT	IGATORS:	TR	JB		
			IGATORS:				
PHYSICAL WATER					WEATHER C	Α	
Water Temperature:					Oxygen: 🕹		(mg/L)
Conductivity:	0.04 m	$\int_{-\infty}^{\infty} (\mu mhos/c$	cm@25 ºC)	Stream or I	_ake gage rea	ading:	9115.
Turbidity: 5e	cehi	(NTUs)	Air Tempe	erature 68	(E) (°C)	Baro. Press	21.67 sure(in F
Winds $0 - 3$ (mph)	Cloud cover	60 (%)	Precipitat	ion Fog	Rain	Sleet H	ail Snov
Secchi Disk:	Depth of Disapp	ear: \\	_meters	Depth	of Reappear	rance:	meters
		24/25/25			Secchi [	Depth: 12	meters
Visual Condition of S Clear	Stream (check al Cloud			Colored			
Floating Material		Other:				4.	
Remarks: Lal	Elev = 91	115.53	feet p	ver Pa	ul Sch	midt (e	SCE
			Site Drawi	ng			
Sample No.	5-DP-17	WATER QU	JALITY SAI			atives:	Ice
					Preserva		
Sample No. L				Grab	Preserva		
			ole Method:	Grab	Preserva		lce Oy in on
			ole Method:	Grab	Preserva		
			ole Method:	Grab	Preserva		
			ole Method:	Grab	Preserva		

SITE NAME:	Lave Sal	INVESTIGA	TORS:	TB .	5B	_TIME:	1
PHYSICAL WATE	R QUALITY PARAM	ETERS		WEA	THER CONDI	TIONS	
Water Temperatur	e: See prof. 6	_(ºF or ºC)	Diss	olved Oxyg	gen: See ()	nt:6	(mg/L)
Conductivity:	0.03 ms	(µmhos/cm@	025 ºC) Stre	or Lake	gage reading	9115	
Turbidity:5	ecchi	_(NTUs) Ai	r Temperatu	re 6900	or °C) Baro	. Pressure	21.67 (in H
Winds 0-5(mp	n) Cloud cover	(%) PI	ecipitation_	Fog	Rain Slee	etHail	Snow
Secchi Disk:	Depth of Disappea	r:	eters	Depth of F	Reappearance	VA.	_meters
	f Stream (check all th	at apply):			Secchi Depth	:_10	meters
Clear Floating Material	Cloudy	Other:	Colo	ored	-		
Remarks: Lak	Flev. = 911	5.53	leet per	Paul	Schmid	65	Œ
		Site	Drawing				
	V	VATER QUAL	ITY SAMPLI	E DATA			
Sample No.	V L5-DP-8		ITY SAMPLI		Preservatives		Ice
Sample No. No. of Sample Bo	L5-DP-8			)	Preservatives Preservatives	1	lce Y in on
	L5-DP-8	Sample N		)		1	lce Y in on

#### WATER TEMPERATURE AND DISSOLVED OXYGEN LAKE PROFILE DATA FORM

Location: Lake Sabrina

Page 1 of 2
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			, ,		v
DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)	DEPTH FROM . WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVE OXYGEN (mg/L)
0.5	16.9	7.1	31	4.4	7.72
1	16.9	7.1	32	4.4	7.54
2	16.9	7.09	33	4.3	7.54
3	16.9	7.1	34	4.3	7.43
4	16.9	7.09	35	4.3	7.36
5	16.9	7.09	36	4.2	7.48
6	16.9	7.08	37	4.1	7.56
7	16.8	7.1	38	4.1	7.50
* 8	16.6	7.15	39	4.1	7.32
9	16.2	7.24	40	4.1	6.89
10	15.4	7.46	41	4.1	6.88
11 10.5	13.9 13.0 12.1	8.31	42	4.1	6.81
12 11.5	12.1	8.97 9.17	43	4.1	6.75
13	9,9	9.46	44	4.1	6.69
14	8.3	9.7	45	4.1	6.65
15	7,5	9.63	46	4.1	6.61
16	6.8	9.48	47	4.1	648
• 17	6.7	9.36	48	4.2	6.30
18	6.3	9.33	49	4.1	6.28
19	6.0	9.31	50	4.1	6.25
20	5.6	9,04	51	4.1	6.21
21	5.4	8.75	52	4.1	6.17
22	5.2	8,64	53	4.1	6.10
23	5.1	8.42	54	4.1	5.96
24	5.0	8,35	55	4.1	5.82
25	4.9	8,21	56	4.1	5.81
26	4.8	8.17	57	4.2	5.72
27	4.7	8.11	58	4.2	5.62
28	4.6	7.96	59	4.1	5.51
29	4.5	7.83	60	4.1	5.25
30	4.4	7.88	61	4.1	5.10

#### WATER TEMPERATURE AND DISSOLVED OXYGEN

LOCATION: LAKE SABRINA (AUG 24, 2026)

DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)	DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)
62	4.1	4.93	91		
63	4.1	4.74	92		
64	4.1	4.50	93		
65	4.1	3.87	94		
66	4.1	3.71	95		
67	4.1	2.82	96		
68	4.2	1.37	97		
69	4.2	1.05	98		
70	4.2	0.67	99		
71	4.2	0.10	100		
72	4.2	0.06	101		
73	4.2	0.05	102		
74			103		
75			104		
76			105		
77			106		
78			107		
79			108		
80			109		
81			110		
82			111		
83			112		
84			113		
85			114		
86			115		
87			116		
88			117		
89			118		
90			119		

DRAINAGE:	Bishop Creek	_ INVESTIGATOR	s: \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	TJ		
PHYSICAL WATER	QUALITY PARAM	ETERS		WEATHER CO	ONDITIONS	
Water Temperature:	17.2	(°F or °C)	Dissolved	Oxygen:	7.12	(mg/L)
Conductivity:	0.03m5	_(μmhos/cm@25 º	C) Stream or	Lake gage rea	ading:	70
Turbidity: 5	06	(NTUs) Air Ten	nperature 7	3 (F) or °C)	Baro. Pressur	e 21. 70 (in H
Winds (mph)	Cloud cover	75 (%) Precipi	tation Fo	g Rain	Sleet Hail	Snow
Secchi Disk:	Depth of Disappear	r:meters	Dept	h of Reappear	rance:	meters
Visual Condition of S	tream (chack all th	at apply):		Secchi D	Depth:	meters
Clear _ 🖟	Cloudy		Colored			
Floating Material		Other:	-			
Remarks:						
		Site Dra	wing			
Sample No. 30	1-61m-LS	VATER QUALITY S			utives:	Ice
	-blw-L5			Preserva	ntives:	lce
Sample No. Boutle	-blw-L5		od: Grab			Ice Dy in or
	-blw-L5	Sample Metho	od: Grab	Preserva		Ice Dy in or

Water Temperature: See profit (°F or °C) Dissolved Oxygen: See profit (mg/L)  Conductivity: () .0.7 m/ (s/mhos/cm@25 °C) Streamer-Lake gage reading: 9741.96  Furbidity: Secchi (NTUs) Air Temperature (b) (°Por °C) Baro. Pressure (in High Show Secchi Disk: Depth of Disappear: 12 meters Depth of Reappearance: 11.5 meters  Secchi Depth: 11.75 meters  Visual Condition of Stream (check all that apply): Clear Cloudy Other:  Cloudy Other: Colored Other:  Remarks: Lake elev = 9741.96 Aud per Paul Schmij (1 SCE)  Site Drawing  WATER QUALITY SAMPLE DATA  Sample No. SL-DP-20 Sample Method: Grab Preservatives: Ice		_
Conductivity: (pmhos/cm@25°C) Streemer-Lake gage reading: 9741,96  Turbidity: Succhi (NTUs) Air Temperature (pmor°C) Baro. Pressure (image): (image)  Winds 3 1 (mph) Cloud cover (pm) (%) Precipitation Fog Rain Sleet Hail Snow Secchi Disk: Depth of Disappear: 12 meters Depth of Reappearance: 11.5 meters  Visual Condition of Stream (check all that apply): Clear Cloudy Colored Floating Material Other:  Remarks: Lake Lake 9741.96 Late per Paul Schmidt SCE  Site Drawing  VATER QUALITY SAMPLE DATA  Sample No. 51-DP-20 Sample Method: Grab Preservatives: Ice  Preservatives: HSQuin one		
Turbidity: Secchi (NTUs) Air Temperature (For °C) Baro. Pressure (Image) (Imag	Nater Temperature: See pでがく (ºF or ºC) Dissolved Oxygen: See pでがく (mg/L)	
Winds 3   Amph) Cloud cover		
Secchi Disk: Depth of Disappear. 12 meters Depth of Reappearance: 15 meters  Secchi Depth: 11.75 meters  Visual Condition of Stream (check all that apply): Clear Cloudy Other.  Remarks: Lake elev = 9741.96 Let per Paul Schmij dt - SCE  Site Drawling  WATER QUALITY SAMPLE DATA  Sample No. 51 - DP - 20 Sample Method: Grab Preservatives: Ice  No. of Sample Bottles 4 Preservatives: H3504 in order	Furbidity: Secchi (NTUs) Air Temperature US (Por °C) Baro. Pressure (in	Hg)
Visual Condition of Stream (check all that apply):  Clear Cloudy Colored  Floating Material Other:  Remarks: Lake elev = 9741.96 Jet per Paul Schmij dt-SCE  Site Drawing  WATER QUALITY SAMPLE DATA  Sample No. 51-D9-20 Sample Method: Grab Preservatives: Ice  No. of Sample Bottles Preservatives: H2504 in order	Winds 3-1 (mph) Cloud cover (%) Precipitation Fog Rain Sleet Hail Sno	w
Visual Condition of Stream (check all that apply):  Clear Cloudy Colored  Floating Material Other.  Remarks: Lake elev = 9741.96 Lev per Paul Schmij dt -SCE  Site Drawing  VATER QUALITY SAMPLE DATA  Sample No. SL-DP-20 Sample Method: Grab Preservatives: Ice  No. of Sample Bottles Preservatives: H2504 in over		
Clear Floating Material Cloudy Other.  Remarks: Lake elev = 9741.96 Let per Paul Schmidt - SCE  Site Drawing  WATER QUALITY SAMPLE DATA  Sample No. 51-DP-20 Sample Method: Grab Preservatives: Ice  No. of Sample Bottles 4 Preservatives: HSOy in one		ß
Site Drawing  WATER QUALITY SAMPLE DATA  Sample No. 51-D9-20 Sample Method: Grab Preservatives: Ice  No. of Sample Bottles U Preservatives: H3504 in one		
Site Drawing  WATER QUALITY SAMPLE DATA  Sample No. 51-DP-20 Sample Method: Grab Preservatives: Ice  No. of Sample Bottles U Preservatives: H3504 in one	Remarks: Lake elev = 9741.96 Let Der Paul Schmidt-SCE	
WATER QUALITY SAMPLE DATA Sample No. ちレー DP - み〇 Sample Method: Grab Preservatives: Ice No. of Sample Bottles リ のい		
Sample No. SL-DP-20 Sample Method: Grab Preservatives: Ice  No. of Sample Bottles Preservatives: HSO4 in one		
No. of Sample Bottles 4 Preservatives: H3SO4 in one		
	WATER QUALITY SAMPLE DATA	
REMARKS		
	Sample No. <u>SL-DP-20</u> Sample Method: <u>Grab</u> Preservatives: <u>Ice</u>	
	Sample No. 31-DP-20 Sample Method: Grab Preservatives: Ice  No. of Sample Bottles Preservatives: H3504 in or	
	Sample No. 31-DP-20 Sample Method: Grab Preservatives: Ice  No. of Sample Bottles Preservatives: H3504 in or	

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SITE NAME:	200 - 200	er a sucularis incid	أسيد	3 20	
DRAINAGE:	Bishop Creek	INVESTIGATOR	RS:	ور د	
	R QUALITY PARA		W	EATHER CONDITIONS	
Water Temperatu	e: see prof. 6	(°F or °C)	Dissolved Ox	xygen: See Prafil	(mg/L)
Conductivity:	0.04 m			ike gage reading: 97	1114
Turbidity: 54	ichi	(NTUs) Air Ter	mperature 65	(F)or °C) Baro. Press	ure(in Hg
Vinds 3-12 (mp	h) Cloud cover	(%) Precip	itation Fog _	Rain Sleet H	ailSnow
Secchi Disk:	Depth of Disapp	pear: 12 meters	s Depth o	of Reappearance: 10.5	3
√isual Condition o Clear	f Stream (check al Cloud		Colored		
Floating Material		Other:		San Carlo	
Remarks: La	le Elev = "	9741.96	led per f	Paul Schmidt	- SCE
		Site Dra	wing		
		WATER QUALITY			
Sample No.	5L-DP-1		<b>SAMPLE DATA</b> od: <u>Grab</u>	Preservatives:	
			od: <u>Grab</u>		
Sample No. No. of Sample Bo		Sample Meth	od: <u>Grab</u>	Preservatives:	

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#### WATER TEMPERATURE AND DISSOLVED OXYGEN

Lake PROFILE DATA FORM
Location: South Lake 8/25/20

DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)	DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)
0.5	16.1	7.11	31	7.9	8.98
1	16.3	7.\	32	7.4	8.84
2	16.2	7.1	33	7.2	8,80
3	16.2	7.1	34	6.7	8.61
4	16.2	7.09	35	6.2	8.30
5	16.2	7.09	36	5.4	7.91
6	16.2	7.09	37	5.2	7.80
7	16.2	7.08	38	5.2	7.75
8	16.2	7.08	39	5.1	7.70
9	16.2	7.08	40	5.1	7.69
10	16.2	7.08	41	5.0	7.59
11	16.2	7.07	42	5.0	7.43
12	16.2	7.07	43	5.0	7.43
13	16.2	7.08	44	4.9	7,35
14	16.1	7.13	45	4.9	7.25
15 €	16.0	7.16	46	4.9	7.14
16	15.9	7.20	47	4.9	7.05
17	15.3	7.46	48	4.9	7.06
18 🗶	14.0	8,19	49	4.9	7.02
19	13,5	8.37	50	5.82	0.38
20 🕈	12.9	8.45	51	5.6	0,28
21	12.5	8.52	52	5.7	0.23
22	12.0	8.67	53	5.9	0.19
23	11.5	8.76	54	6.0	0.16
24	10.9	8.87	55	6.1	0.14
25	10.5	9.00	56	6.4	0.14
26	10.4	9.07	57	6.4	0.15
27	10.0	9.08	58	6.5	0.12
28	9.1	9.12	59	6.7	0111
29	8.7	9.11	60	6.9	0,07
30	8.3	9.05	61	7.4	0,06

#### WATER TEMPERATURE AND DISSOLVED OXYGEN LAKE PROFILE DATA FORM South Lake

Location:

DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)	DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)
62	7.5	0.05	91		
63	7.4	0.03	92		
64	7.7	0.03	93		
65			94		
66			95		
67			96		
68			97		
69			98		
70			99		
71			100		
72			101		
73			102		,
74			103		
75			104		
76			105		
77			106		
78			107		
79			108		
80			109		
81			110		
82			111		
83			112		
84			113		
85			114		
86			115		
87			116		
88			117		
89			118		
90			119		

ygen: 8 6 2 (mg/L)
ygen: _ <b>8</b> . 6 2 (mg/L)
to gago rodding.
(in Hg
Rain Sleet Hail Snow f Reappearance: meters
Secchi Depth: meters
Preservatives: Ice
Preservatives: Hysoy in one

DRAINAGE:	Bishop Creek	INVESTIGATOR	RS: TB	JB	
PHYSICAL WATE	R QUALITY PARA	METERS		WEATHER CONDIT	TIONS
Water Temperatur	e: 14.1	(ºF or Ĉ	Dissolved	Oxygen: 8,0	70 (mg/L)
Conductivity:	_	(μmhos/cm@25	ºC) Stream or	Lake gage reading:	-
Turbidity:	~	(NTUs) Air Tei	mperature 68	© (E) or °C) Baro.	Pressure 25.4
Winds 0 (mpl	n) Cloud cover	O (%) Precip	oitationFog	Rain Sleet	t Hail Sn
Secchi Disk: NA	Depth of Disappe	ear:meters	s Depti	of Reappearance:	meters
Visual Condition o	f Stream (check all	that annly):		Secchi Depth:	meter
Clear K	Cloudy		Colored _		
Remarks:					
		Site Dra	awing		
		WATER QUALITY	SAMPI E DAT	Δ	
Sample No.	NA	WATER QUALITY Sample Meth			Ice
Sample No. No. of Sample Bo		WATER QUALITY Sample Meth		Preservatives:	
			od: <u>Grab</u>		
Sample No. No. of Sample Bo	NAtles	Sample Meth	od: <u>Grab</u>	Preservatives:	

DRAINAGE: Bisho	Creek INV	ESTIGATORS:	10	315		
PHYSICAL WATER QUAL	ITY PARAMETER	RS		WEATHER C	ONDITIONS	
Water Temperature:	3.8 (ºF)	or <b>6</b>	Dissolved	Oxygen:	8.99	(mg/L)
Conductivity:	06 (µm)	hos/cm@25 ºC)	) Stream or	Lake gage re	ading: C	7.4
Turbidity: 3.04						
Winds (mph) Cle						
Secchi Disk: MA Depth						
				Secchi	Depth:	meters
Visual Condition of Stream Clear Floating Material	Cloudy Othe		Colored			
Remarks:						
		Site Draw	ing			
Sample No. BC-b	10.01	R QUALITY SA			atives:	Ice
Sample No. B <u>C - b</u> No. of Sample Bottles	10.01			Preserva		
	10.01		: <u>Grab</u>	Preserva		
	10.01	Sample Method:	: <u>Grab</u>	Preserva		lce Dy in on

DRAINAGE:	Bishop Creek	INVESTIG	ATORS:	TB	JB			
PHYSICAL WATE	R QUALITY PARA	METERS		W	EATHER C	ONDITION	IS	
Water Temperatui	e: 13.H	(ºF or (C))	Di	issolved O	xygen:	8.45		(mg/L)
Conductivity:			n@25 ºC) Si				-	
Turbidity:	<del>-</del>	(NTUs)	Air Tempera	ture U7	(For °C)	Baro. Pres	ssure c	25.19 in h
Winds (mp	h) Cloud cover_	O (%)	Precipitation	Fog_	Rain	Sleet	Hail _	Snov
Secchi Disk: $\mathcal{N}$	Depth of Disappe	ear:	meters	Depth	of Reappea	rance:		meters
Viewel Condition o	f Stream (check all	that apply			Secchi	Depth:		_meters
Clear 🔍	Cloudy		C	olored _				
Floating Material	-	Other:						
Remarks:								
		S	ite Drawing					
	11λ	WATER QUA						
Sample No.	_ NA		ALITY SAMI		Preserv	ratives:		
Sample No. No. of Sample Bo	NA	Sample			Preserv	ratives:		
		Sample	e Method: <u>G</u>		Preserv			

SITE NAME:				2.0	-			
DRAINAGE:	Bishop Creek	_ INVESTI	GATORS:	TB	IB			
PHYSICAL WATER	QUALITY PARA	METERS		١	WEATHER	CONDITION	IS	
Water Temperature	13.7	(ºF o(ºC)	)	Dissolved	Oxygen: 8	3.67		(mg/L)
Conductivity:	58	(µmhos/c						
Turbidity: 2	4	(NTUs)	Air Tempe	erature 6	For °C)	Baro. Pres	ssure.	25.19 (in H
Winds O (mph)	Cloud cover_	0 (%)	Precipitati	onFog	Rain _	Sleet	Hail _	Snow
Secchi Disk: NA	Depth of Disappe	ar:	_meters	Depth	of Reappea	arance:		meters
Visual Condition of	Stroom (chock all	that apply):			Secchi	Depth:		meters
Clear 📐	Cloudy			Colored				
Floating Material		Other:						
Remarks:								
			Site Drawi	ng				
Sample No. No. of Sample Bottl	3C-b\w-P) es	WATER QU		Grab	Preserv	vatives:	) <u>50</u>	ce Y in c

SITE NAME: $1$ DRAINAGE: $1$	shop Creek	INVESTIGAT	rors: T	BJB		
PHYSICAL WATER C				V. Carlotte	CONDITIONS	
Water Temperature:	13.2	_(ºF or ec)	Dissolv	ved Oxygen:	8.90	(mg/L)
Conductivity:	_			or Lake gage re		
Turbidity:	_	_ _(NTUs) Air	Temperature	99 (Fbr °C)	Baro. Pressu	24.81 ure (in H
Winds (mph)	Cloud cover_	~				
Secchi Disk: NA D	epth of Disappea	r:me	eters D	epth of Reappea	arance:	meters
					Depth:	
Visual Condition of St Clear Floating Material	eam (check all the Cloudy	Other:	Colore	d		
Remarks:						
		Site	Drawing			
		WATER QUALI	TY SAMPLE I	DATA		
Sample No.	NA		TY SAMPLE I		vatives:	Ice
	NA	Sample M	Method: Grab	Preserv		
Sample No.  No. of Sample Bottles	NA	Sample M		Preserv		Ice

SITE NAME:	Bishop Creek	INIVESTIGATORS	. TR	OB		
	QUALITY PARAM				CONDITIONS	
Water Temperature	13.3	_(ºF or €C)	Dissolved	Oxygen:	5.98	(mg/L)
	53					
Turbidity: 1.	14	(NTUs) Air Tem	nperature 6	9 <b>(</b> F) or °C)	Baro. Pressu	ire <sup>24.0</sup> /in H
Winds (mph)	Cloud cover	(%) Precipit	tationFog	JRain	_SleetHa	il Snow
Secchi Disk: NA	Depth of Disappear	:meters	Depth	of Reappea	arance:	meters
				Secchi	Depth:	meters
Clear _ 📉	Stream (check all th Cloudy	at apply):	Colored			
Floating Material		Other:	_			
Remarks:						
		Site Dra	wing			
Sample No.		VATER QUALITY S			vatives:	Ice
	BC-blw-PH1				vatives:vatives:	Ice Oy in or
	BC-blw-PH1		od: <u>Grab</u>		vatives: <u>場</u> ら	Ice Oy in or
Sample No.  No. of Sample Bott	BC-blw-PH1	Sample Metho	od: <u>Grab</u>		vatives:vatives:_ <u>Д</u> _S	Ice Oy in ar

SITE NAME:							
DRAINAGE:	Bishop Creek	INVESTIGA	ATORS:	+8	JB		
PHYSICAL WATE	R QUALITY PARA	AMETERS		W	EATHER CON	DITIONS	
Water Temperature	: 12.9	(ºF or €C)	Dis	ssolved Ox	xygen: 8.	62	(mg/L)
Conductivity:		(µmhos/cm(	@25 ºC) Sti	ream or La	ike gage readir	ng:	- 1
Turbidity:	~	(NTUs) A	ir Temperat	ure 75	(F)or °C) Ba	ro. Pressu	23. 8 c re(in H
Winds O (mph	) Cloud cover	O (%) P	Precipitation	Fog_	Rain Sl	eetHai	ISnow
Secchi Disk: $ u$ A	Depth of Disapp	ear:n	neters	Depth o	of Reappearance	ce:	meters
Visual Condition of	Stream (check al	I that apply):			Secchi Dep	th:	meters
Clear 💢	_ Cloud	у	Co	olored			
Floating Material		Other:					
Remarks:							
		Sit	e Drawing				
	1/\)	WATER QUA					
Sample No.	NA		LITY SAMP Method: <u>G</u>		Preservative		Ice
Sample No. No. of Sample Bot		Sample	Method: Gr				Ice
	NAtles	Sample			Preservative		Ice
	NA_	Sample	Method: Gr		Preservative		Ice
		Sample	Method: Gr		Preservative		Ice
	NAtles	Sample	Method: Gr		Preservative		Ice

	blw PH	INVESTIGATORS:		+R		
				<u> </u>		
PHYSICAL WATER Q				WEATHER C		
Water Temperature:						1
Conductivity:		(µmhos/cm@25 ºC)				
Turbidity: 1.3	7	(NTUs) Air Temp	erature_7	5 (CE or °C)	Baro. Pressu	re 3.0 (in H
Winds 0 - ) (mph)	Cloud cover C	) (%) Precipita	tionFog	Rain_	_SleetHai	ISnow
Secchi Disk: NA D	epth of Disappear:_	meters	Depti	n of Reappea	rance:	meters
Visual Condition of Str	/-bb11 161	and the		Secchi I	Depth:	meters
Clear	Cloudy		Colored			
Floating Material		Other:	-			
Remarks: Wair	at c.61	1 Leet				
		Site Draw	ing			
	WA	TER QUALITY SA	MPLE DAT	A		
Sample No. 3 <u>C</u>	WA - 61w- P#3	NTER QUALITY SA			atives:	Ice
Sample No. <u>BC</u> No. of Sample Bottles				Preserva	atives:	
			: Grab	Preserva	-	

DRAINAGE:	Bishop Creek			10	JB		
PHYSICAL WATE	R QUALITY PAR	AMETERS		W	EATHER CO	NDITIONS	
Water Temperatu	re: 12.7	(ºF or 🙆		oissolved O	xygen: _8	1.43	(mg/L)
Conductivity:		(µmhos/cn	n@25 ºC) S	Stream or La	ake gage rea	ding:	
Turbidity:	_	(NTUs)	Air Temper	ature 70	Øor°C) I	Baro. Pressi	ure 23.17 (in H
Winds O-1 (mp	h) Cloud cove	C (%)	Precipitatio	n Fog	Rain	Sleet Ha	ail Snow
Secchi Disk: NA	Depth of Disap	pear:	meters	Depth	of Reappeara	ance:	meters
							meters
Clear Loading Material	of Stream (check a	the state of the s		Colored			
Remarks:							
		S	site Drawing	1			
		WATER QUA	ALITY SAM	PLE DATA			
Sample No.	NA		ALITY SAM e Method: <u>C</u>			tives:	Ice
A. C.	₩ ttles	Sample	e Method: <u>G</u>				Ice
A. C. C.		Sample			Preservat		Ice
Sample No. No. of Sample Bo	NH ttles	Sample	e Method: <u>G</u>		Preservat		Ice

DRAINAGE:	Bishop Creek	INVESTIGATORS	:TB	JB		
PHYSICAL WATER	QUALITY PARAME	TERS		WEATHER CO	NDITIONS	
Water Temperature	11.9	(°F or C)	Dissolved	Oxygen: 8	.67	(mg/L)
Conductivity:		(μmhos/cm@25 ºC	) Stream 🕰	<b>Eake</b> gage rea	ding: 1.8	,
Turbidity:	1.63	(NTUs) Air Temp	perature 7	6 (Edor °C) 1	Baro. Pressur	23.17 (in H
	Cloud cover					
Secchi Disk: NA	Depth of Disappear:	meters	Dept	th of Reappeara	ance:	_meters
					epth:	
Clear/X	Stream (check all tha Cloudy		Colored			
Floating Material	1000	debris in b	1			
Remarks: 1. 2	H20 0.6			Well		
		Site Draw	/ing			
		/ATER QUALITY S/	AMPLE DA	TA		
Sample No.	M BC-blw-PH2			Preserva		Ice
Sample No. I	BC-61w-PH2	_ Sample Method	d: <u>Grab</u>	Preserva	tives: H2SC	Ice Dy in ov
	BC-61w-PH2		d: <u>Grab</u>	Preserva		Ice Dy in ov

	op Creek INVESTIGATORS: TB JB
PHYSICAL WATER QUA	LITY PARAMETERS WEATHER CONDITIONS  1.5 (°F or 6°C) Dissolved Oxygen: 8.23 (mg/L)
	No.
Conductivity: 40	(μmhos/cm@25 °C) Stream ertitle gage reading: 12 cfs (NTUs) Air Temperature 6 9 (°F) or °C) Baro. Pressure 21.50 (in
	loud cover O (%) Precipitation Fog Rain Sleet Hail Snor
Secchi Disk: NA Depti	n of Disappear:meters
Visual Condition of Strear Clear	n (check all that apply):
loating Material	Other:
Remarks: Cvass-5	ectional flow calculated at ~ 12 cts
	Site Drawing
AVE. UL	edienal area = 6.7 ft <sup>2</sup> 2 1.8 ftls
AVE. UE	~ 1.68 FF1S
	WATER QUALITY SAMPLE DATA
Sample No. BC-	WATER QUALITY SAMPLE DATA
Sample No. BC-	WATER QUALITY SAMPLE DATA  WF - \ Sample Method: Grab Preservatives: Ice
	WATER QUALITY SAMPLE DATA  WF - 1 Sample Method: Grab Preservatives: Ice  Preservatives: Hy Sample or

## Field Data Forms September 2020

DRAINAGE:	Bishop Creek	INVESTIGATORS		3/73		_
PHYSICAL WAT	ER QUALITY PARA	METERS	W	VEATHER CONDITI	ONS	
Water Temperat	ure: 12.2		Dissolved C	Oxygen: 9.6	1	(mg/L)
Conductivity:		(μmhos/cm@25 ºC	) Stream or L	ake gage reading: _		
Turbidity:	- 10-	(NTUs) Air Temp	perature <u>67</u>	_( <b>f</b> or °C) Baro. F	ressure_	15.5
Winds 2-4 (m	ph) Cloud cover_	(%) Precipita	ation Fog	RainSleet	Hail	Snow
Secchi Disk: N	Depth of Disapp	ear:meters	Depth	of Reappearance:		meters
Savel Candition	of Chrones (obsolvati	that applied		Secchi Depth: _		meters
Clear	of Stream (check all Cloud	у	Colored _			
Floating Material		Other:	-			
Remarks:	SMOKE	T/HAZY				
		Site Draw	ving			
	A . N	WATER QUALITY SA				
	NA			Preservatives:		
		Sample Method	d: Grab			
Sample No. No. of Sample B		Sample Method	d: <u>Grab</u>	Preservatives:		
No. of Sample B	ottles	Sample Method	d: <u>Grab</u>	Preservatives: _		

DRAINAGE:	Bishop Creek	INVESTIGATORS:	TB/TB
	ER QUALITY PARAI		WEATHER CONDITIONS
Water Temperatu			d Oxygen: 9.78 (mg/L)
Conductivity:	-	(μmhos/cm@25 °C) Stream o	or Lake gage reading:
Turbidity:	-	(NTUs) Air Temperature (	25,47 (°F)or °C) Baro. Pressure(in h
Winds 6-2 (mp	h) Cloud cover	(%) Precipitation Fo	og RainSleetHailSnov
			oth of Reappearance: meters
			Secchi Depth: meters
Clear	of Stream (check all t Cloudy	Colored	
Floating Material		Other:	
Remarks:	Smoke	Y HAZE	20.000
		Site Drawing	
		WATER QUALITY SAMPLE DA	ATA
Sample No.	NA_	WATER QUALITY SAMPLE DA	ATA  Preservatives: Ice
	WA_		Preservatives: Ice
No. of Sample Bo	MA ottles		Preservatives: Ice
Sample No. No. of Sample Bo	1	Sample Method: Grab	Preservatives: Ice Preservatives:
No. of Sample Bo	1	Sample Method: Grab	Preservatives: Ice Preservatives:

SITE NAME: LAILWATTER PH:#5 DATE: 9/20/2020 TIME: 6950
DRAINAGE: Bishop Creek INVESTIGATORS:
PHYSICAL WATER QUALITY PARAMETERS WEATHER CONDITIONS
Water Temperature: (°F or °C) Dissolved Oxygen: 8,88 (mg/L)
Conductivity: (μmhos/cm@25 °C) Stream or Lake gage reading:
Turbidity:(NTUs) Air Temperature 6 (F) or °C) Baro. Pressure 25 (in Hg
Winds 0-2 (mph) Cloud cover 0 (%) Precipitation Fog Rain Sleet Hail Snow
Secchi Disk: NA Depth of Disappear:meters Depth of Reappearance:meters
Visual Condition of Stream (check all that apply):  Secchi Depth: meters
Clear Cloudy Colored
Remarks: SMOKET / HAZY (1KTZ)
Site Drawing
No flow from Tail Race # (used in previous visits) so wastr taken from Tail Race # 2 (TR#2)
WATER QUALITY SAMPLE DATA
Sample No Sample Method: Grab Preservatives: Ice
No. of Sample Bottles Preservatives:
REMARKS
EAST Winns
CIONED TO SEMENTED THE
SIGNED BY:REVIEWED BY:

SITE NAME:					3			
DRAINAGE:	Bishop Creek	_ INVESTIG	GATORS: _	Tr	3/T	B		
PHYSICAL WATER	R QUALITY PARAI	METERS		w	EATHER (	CONDITION	NS	
Water Temperature	12.5	(ºF o(ºC))	C	issolved O	xygen:	9.04	1_	(mg/L)
Conductivity:			m@25 ºC) S					- 25
Turbidity:	_	(NTUs)	Air Temper	ature 68	(For °C)	Baro. Pre	essure_	25 (in I
Winds (mph)	) Cloud cover_	(%)	Precipitatio	n Fog _	Rain _	_Sleet	_Hail _	Snov
Secchi Disk: NA	Depth of Disappe	ar:	meters	Depth o	of Reappea	arance:		meters
Visual Condition of	Stream (check all s	that annly):			Secchi	Depth:		_ meters
Clear X	Cloudy		C	olored				
Floating Material		Other:	- 1		e) 1 d			
Remarks:	SU	OKE	1-117	24	2K	7-		···
		S	Site Drawing	J.				
		WATER OIL	ALITY SAM	DI E DATA				10/2011
Sample No.		WATER QUA				otivos		
	_NA		ALITY SAM e Method: <u>C</u>		Presen	vatives:		
	_NA	Sample	e Method: <u>C</u>		Presen	/atives:		
Sample No. No. of Sample Bott	NA	Sample	e Method: <u>C</u> REMARKS	irab	Presen			
	NA	Sample	e Method: <u>C</u> REMARKS	irab	Presen			
	NA	Sample	e Method: <u>C</u> REMARKS	irab	Presen			
	NA	Sample	e Method: <u>C</u> REMARKS	irab	Presen			
	NA	Sample	e Method: <u>C</u> REMARKS	irab	Presen			

DRAINAGE:	Bishop Creek	INVESTIGATORS:	B TB
PHYSICAL WAT	ER QUALITY PARAI	METERS	WEATHER CONDITIONS
Water Temperat	ure: 11, 7	(ºF or eC) Dissol	ved Oxygen: 9.29 (mg/L)
Conductivity:		(μmhos/cm@25 ºC) Stream	n or Lake gage reading:
Turbidity:	<del>-</del>	(NTUs) Air Temperature	72 For °C) Baro. Pressure 24 (ir
Winds 2-4 m	ph) Cloud cover_	(%) Precipitation	Fog RainSleetHailSne
Secchi Disk: N	Depth of Disappe	ear:meters D	epth of Reappearance: meters
Visual Condition	of Stream (check all	that apply):	Secchi Depth:meter
Clear Floating Material	Cloudy		d
Remarks:			(TR#2)
· comanto.	301	Site Drawing	CIRTO
		WATER QUALITY SAMPLE	DATA
Sample No.	_ WA	WATER QUALITY SAMPLE	
	NA		
	NA		Preservatives: lce
No. of Sample B	NA	Sample Method: Grab REMARKS	Preservatives: lce
No. of Sample B	ottles	Sample Method: Grab REMARKS	Preservatives: Ice Preservatives:
No. of Sample B	ottles	Sample Method: Grab REMARKS	Preservatives: Ice Preservatives:

DRAINAGE:	Bishop Creek	INVESTIGA	ATORS:	JB	TB			a superior
PHYSICAL WATE	R QUALITY PARA	METERS		WE	ATHER C	NOITION	S	
Water Temperatur	e: 11.3	(2F) or 2C)	Diss	solved Oxy	gen:	9.4	4	mg/L)
Conductivity:	_	(µmhos/cm(	@25 ºC) Stre	eam or Lak	e gage rea	ading:	-	
Turbidity:	~	(NTUs) A	ir Temperatu	re 72 (	For °C)	Baro. Pres	ssure_	4.9 (in l
Winds O (mpl	n) Cloud cover_	(%) P	recipitation _	Fog	_ Rain	_Sleet	Hail	Snov
Secchi Disk: NA	Depth of Disappe	ear:m	neters	Depth of	Reappear	ance:	r	neters
Vigual Condition o	f Ctroom (obook all	that applyly			Secchi [	Depth:		meters
Clear X	f Stream (check all Cloudy		Cole	ored				
Floating Material		Other:	_					
Remarks:	7	114.47	TAZ	E				
		Sit	e Drawing					
						1		
	*					·		
		WATER QUAL						
Sample No.	NA		LITY SAMPL Method: <u>Gra</u>			ntives:		
Sample No. No. of Sample Bot	NA_	Sample	Method: <u>Gra</u>			ntives:		
		Sample						

DRAINAGE:	Bishop Creek	INVESTIGATORS:	3 /TB
PHYSICAL WAT	ER QUALITY PARA	METERS	WEATHER CONDITIONS
Water Temperatu	ure: 11.4	(ºF or Ĉ) Dissolved	d Oxygen: 9.04 (mg/L)
Conductivity:	-	(μmhos/cm@25 ºC) Stream o	r Lake gage reading:
Turbidity:	-	(NTUs) Air Temperature	∏ (F) or °C) Baro. Pressure 23 (in
Winds (m)	oh) Cloud cover_	(%) Precipitation Fo	og RainSleetHailSno
Secchi Disk: N	Depth of Disappe		oth of Reappearance: meters
		western.	Secchi Depth: meters
Clear	of Stream (check all Cloudy	Colored	
Floating Material		Other:	
Remarks:	5L14+	IT HAZE	
		Site Drawing	
		WATER QUALITY SAMPLE DA	
Sample No.	_NA	WATER QUALITY SAMPLE DA Sample Method: Grab	TA Preservatives:
Sample No. No. of Sample B			
			Preservatives: Ice
		Sample Method: Grab	Preservatives: Ice
		Sample Method: Grab	Preservatives: Ice
		Sample Method: Grab	Preservatives: Ice
		Sample Method: Grab	Preservatives: Ice
		Sample Method: Grab	Preservatives: Ice

SITE NAME:	401			TO	10		
DRAINAGE;	Bishop Creek		ATORS:	TB	1715		
PHYSICAL WA	TER QUALITY PAR	AMETERS		WE	ATHER COND	ITIONS	
Water Temperat	ure: 11.8	(ºF or ºC)	Diss	olved Oxy	/gen: _ & /	13	(mg/L)
Conductivity:	-	(μmhos/cm(	@25 ºC) Strea	am o <del>r Lak</del>	e gage reading	:_ <u>0.</u>	7 9
Turbidity:	-	(NTUs) A	ir Temperatur	e 71 (	For °C) Bard	. Pressur	e 23 (in
Winds 0 - 2	ph) Cloud cover	<u>(%)</u> P	Precipitation _	Fog	_ RainSlee	etHail	Sno
Secchi Disk: N	♠ Depth of Disapr	oear:n	neters	Depth of	Reappearance	e:	meters
Vieual Condition	of Stream (check a	Il that annive			Secchi Depth	n:	meters
Clear	Cloud	dy	Colo	red			
Floating Materia		Other:		-			
Remarks:		SUG	HT	HA	72	· · · · · · · · · · · · · · · · · · ·	<del></del>
		Sit	te Drawing				
		WATER OUA	LITY SAMPL	F DATA			
Sample No	NΔ	WATER QUA			Preservative	S:	Ice
	NA A		LITY SAMPLI Method: <u>Grat</u>		Preservative:		
		Sample	Method: Grat		Preservatives Preservatives		
No. of Sample E	Sottles	Sample					
No. of Sample E	Sottles	Sample R	Method: <u>Grat</u>	<u>,                                     </u>	Preservatives	s:	
	Sottles	Sample R	Method: Grat	<u>,                                     </u>		s: M 21	EAR

SITE NAME: DRAINAGE:	Bishop Creek	INVESTIGATORS: TR	TR	
	R QUALITY PARA	<del></del>	EATHER CONDITIONS	
Water Temperatur	11/		a77	(mg/L)
Conductivity:		(μmhos/cm@25 ºC) Stream or La	ake gage reading:	
Turbidity:		(NTUs) Air Temperature 72	For °C) Baro. Pressure	23, LC
Winds 0-2 (mp	h) Cloud cover_	(%) Precipitation Fog _	RainSleetHail	Sno
Secchi Disk: NA	Depth of Disappe		of Reappearance:	
(i   O	£ Ot /-	M. Li La Li A.	Secchi Depth:	_ meters
Clear Floating Material	f Stream (check all Cloudy			
Remarks:		SLIGHT HAZ	25_	
		Site Drawing		
		WATER QUALITY SAMPLE DATA		
Sample No.	_ NA	WATER QUALITY SAMPLE DATA Sample Method: Grab		ce
Sample No. No. of Sample Bo				
			Preservatives: lo	

DRAINAGE:	Bishop Creek INVESTIGATORS: TB
	TER QUALITY PARAMETERS WEATHER CONDITIONS
Water Temperati	11 / 20 2.76
Conductivity:	(μmhos/cm@25 °C) Stream e <del>= Lake</del> gage reading:
Turbidity:	(NTUs) Air Temperature 72°For °C) Baro. Pressure 23° (in
Winds 0-2 (m	nph) Cloud cover(%) Precipitation Fog RainSleetHailSno
Secchi Disk: N	Depth of Disappear:meters Depth of Reappearance:meters
	Secchi Depth: meter
Visual Condition Clear	of Stream (check all that apply): Cloudy Colored
Floating Material	Other:
Remarks: 5	5C19H7 +1275
	Site Drawing
	WATER QUALITY SAMPLE DATA
Sample No.	WATER QUALITY SAMPLE DATA
No. of Sample B	Sample Method: Grab Preservatives: Ice  Preservatives: REMARKS
	Sample Method: Grab Preservatives: Ice  Preservatives: REMARKS
No. of Sample B	NA Sample Method: Grab Preservatives: Ice  Bottles Preservatives:  REMARKS  A Ø, 6 SED IMRA IN
Sample No. No. of Sample B	Sample Method: Grab Preservatives: Ice  Preservatives: REMARKS
No. of Sample B	NA Sample Method: Grab Preservatives: Ice  Bottles Preservatives:  REMARKS  A Ø, 6 SED IMRA IN

SITE NAME:	Di-h O	. INVECTION TOD	S: TB/TR
DRAINAGE:	Bishop Creek		
PHYSICAL WAT	ER QUALITY PA		WEATHER CONDITIONS
Water Temperat	ure: 0,5	(%F or (C))	Dissolved Oxygen: (mg/L)
Conductivity:		(μmhos/cm@25 º	C) Stream or Lake gage reading:
Turbidity:		(NTUs) Air Ten	mperature 64 (°F or °C) Baro. Pressure 216 (in
Winds $0^{-1}$ (m	ph) Cloud cov	/er(%) Precipi	itation Fog RainSleetHailSn
Secchi Disk: N	A Depth of Disa	appear:meters	Depth of Reappearance: meters
Viewel Condition	mf Otronor (abank	and stone and by	Secchi Depth: meter
ClearX		oudy	Colored
Floating Material	\	Other:	- A FI \
Remarks:	VERY	Minur +#	25 - Low How
		Site Dra	wing
		WATER QUALITY S	SAMPLE DATA
Sample No.	NA		
Sample No. No. of Sample B			
		Sample Metho	od: Grab Preservatives: Ice Preservatives:
	ottles	Sample Metho	Preservatives: Ice  Preservatives:

#### FIELD FORM

SITE NAME:  DRAINAGE:	Bishop Creek	INVESTIGATORS: JIS	LIR
	TER QUALITY PAR		WEATHER CONDITIONS
Water Temperat	ure:	)(ºF or(ºC)) Dissolved	d Oxygen: (mg/L)
Conductivity:		(μmhos/cm@25 °C) Stream o	-1 (0)
Turbidity:	-	(NTUs) Air Temperature (	25(F)r °C) Baro. Pressure (in H
Winds (m	ph) Cloud cove	erO(%) Precipitation Fo	ogRainSleetHailSnow
Secchi Disk: N	A Depth of Disap		oth of Reappearance: meters
			Secchi Depth: meters
Clear	of Stream (check a		
Floating Materia		Other:	
Remarks:	SLIGHT	HA 22	
		Site Drawing	
		WATER QUALITY SAMPLE DA	тA
Sample No.	_NA		TA Preservatives: lce
		WATER QUALITY SAMPLE DA	Preservatives: Ice
		WATER QUALITY SAMPLE DA Sample Method: Grab REMARKS	
Sample No. No. of Sample E		WATER QUALITY SAMPLE DA Sample Method: Grab REMARKS	Preservatives: Ice Preservatives:

SITE NAME: NORTH TORK DATE: 9/20/2020 TIME: 13	750
1-0	
DRAINAGE: Bishop Creek INVESTIGATORS: 315	
PHYSICAL WATER QUALITY PARAMETERS WEATHER CONDITIONS	
Water Temperature: 14.2 (°F or C) Dissolved Oxygen: 8.95 (	mg/L)
Conductivity: (µmhos/cm@25 °C) Stream colored gage reading: 8.4 c	451
Turbidity: (NTUs) Air Temperature 66 (P) or °C) Baro. Pressure 6	(in Hg)
Winds 35 (mph) Cloud cover (%) Precipitation Fog Rain Sleet Hail	Snow
Secchi Disk: NA Depth of Disappear: meters Depth of Reappearance: r	neters
Secchi Depth: Visual Condition of Stream (check all that apply):	meters
Clear Cloudy Colored Floating Material Other:	
Remarks: NF Flow field measured at 8.4 cfs	
Site Drawing	
	l
L	
WATER QUALITY SAMPLE DATA	
Sample No. NA Sample Method: Grab Preservatives: Ice	e
No. of Sample Bottles Preservatives:	and the second second second second
REMARKS	
Flow MEASUREMENT COMPLETED	
	1990
SIGNED BY:REVIEWED BY:	***************************************
THE VILLY LED DI.	

DDAINIAGE				TE: 9	21/20	. IIME:	11:16
DRAINAGE:	Bishop Creek	INVEST	IGATORS:	TB	JB		
	ER QUALITY PAI		) Die	WEA	THER CONDIT	TIONS	(mg/L)
		S. 15				9111	-(111g/L) 29 lu-
Conductivity:	1 .	23 (µmhos/c			gage reading: ∂r °C) Baro.		21.65
11 10	ecchi	(NTUs)					
	ph) Cloud cove	11	Precipitation		RainSleet Reappearance:		Snow
Secchi Disk:	Depth of Disa	ppear:1	_meters	Depth of I	Secchi Depth:		
Visual Condition	of Stream (check		Co	ored	Occum Depart.	10.00	_ motors
Floating Material		Other:		oreu			
Remarks: 5	molly a	Her a	11am				
	0		Site Drawing				
		-	JALITY SAMP	LE DATA			
	L5-DP.	WATER QU	JALITY SAMP ole Method: <u>Gr</u>		Preservatives:		ce
Sample No. No. of Sample B		WATER QU	ole Method: <u>Gra</u>		Preservatives: Preservatives:		
		WATER QU					
		WATER QU	ole Method: <u>Gra</u>				
		WATER QU	ole Method: <u>Gra</u>				
		WATER QU	ole Method: <u>Gra</u>				

	Lake Sabring DATE: 9/21/20 TIME: 11:50	عر
DRAINAGE:	Bishop Creek INVESTIGATORS: TS JB	-
PHYSICAL WAT	TER QUALITY PARAMETERS WEATHER CONDITIONS	
Vater Temperati	ure: See prof; (of or oc) Dissolved Oxygen: See prof; (mg/L)	1.
Conductivity:	(μmhos/cm@25 °C) Stream or Lake gage reading: 911.89 feech; (NTUs) Air Temperature 63 (°F) or °C) Baro. Pressure (in H	et
urbidity: S		
Vinds (m)	ph) Cloud coverO(%) Precipitation Fog Rain Sleet Hail Snow	
Secchi Disk:	Depth of Disappear: meters Depth of Reappearance: meters	
/isual Condition	Secchi Depth: 10-25 meters of Stream (check all that apply):	
Clear Floating Material	Cloudy Colored	
Remarks:	smoley afor all	3
	Site Drawing	1
	WATER QUALITY SAMPLE DATA	
	L5-DP-28 Sample Method: Grab Preservatives: Ice	
Sample No. No. of Sample B	L5-DP-28 Sample Method: Grab Preservatives: Ice	4
	ottles  Sample Method: Grab  Preservatives: Ice  Preservatives: HaSou in on-	4
	ottles  Sample Method: Grab  Preservatives: Ice  Preservatives: HaSou in on-	4
	ottles  Sample Method: Grab  Preservatives: Ice  Preservatives: HaSou in on-	4

Lake Sabrina 9/21/20: EC/pH readings from bottom

Depth
68m
38 pus 8.09
63m
36
7.72
LS-14
58m
29
7.54
234'
7
7
234'
7
7
7
38

#### WATER TEMPERATURE AND DISSOLVED OXYGEN LAKE PROFILE DATA FORM

Location: 9/21/20 8:30 am

					T	7
DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)	DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)	
0.5	14.3	7.75	31	4.4	7.83	
1	14.3	7.70	32	4.4	7.73	
2	14-4	7.67	33	4.3	7.79	×4.
3	14.3	7.66	34	4.3	7.89	-
4	14-4	7.65	35	4.2	7.93	
5	14.4	7.64	36	4.2.	7.76	
6	14.3	7.42	37	4.2	7.66	
(7)	14.3	7.62	38	4.1	7.66	
8	14.3	7.62	39	4,1	7.58	
9	14.3	7.62	40	4.1	7.37	no
10	14.2	7.68	41	4.1	7.21	-23
11	12.8	8.69	42	4.1	7.19	L56
12	11.9	9.68	43	4.1	7.04	
13	9.4	9.35	44	4-1	6.92	
14	8.2	9.97	45	4.1	6.88	
15	7.5	9,94	46	4.1	6.77	
16	7-1	9.34	47	4.1	6.74	
17	6.4	9.68	48	4.1	6.63	
18	١٠٠١	9.63	49	4.2	6.33	
19	5.9	9.59	50	4.2	6.28	
20	5.7	9.40	51	4-2	6.10	
21	5-6	9.20	52	4.2	5.91	
22	5.5	9.09	53	4.2	5,72	45
23	5.2	8.77	54	4.1	5.63	
24	5.1	2.63	55	4.2	5.35	
25	5.0	8.42	56	4.2	5.27	
26	4.9	8.28	57	4.2	5.20	
27	4.8	8.12	58	4.2	4.23	
(28)	4.6	7.86	59	4.2	4.83	
29	4.6	7.86	60	4.2	4.19	15
30	4.6	7.77	61	4.2	4.04	

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#### WATER TEMPERATURE AND DISSOLVED OXYGEN LAKE PROFILE DATA FORM

Location: Lale Sabring

0	DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)	DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)
-	62	LI. 2	3.67	91	('0)	(IIIg/L)
	63	4,2	3.48	92	The second second second	
	64	4. 2	3.415	93		
	65	4.2	3.15	94		
3-1	66	4-2	3.15	95		
0,-	67	4-2	2.36	96		
8 E	68	4.2	2.13	97		
	69	4.2	1.78	98		
, 1	70	4.2	1.58	99		
'	71	4.2	1.41	100		
12	72	4.2	0.80	101		
	73			102		
	74			103		
	75			104		
	76			105		
	77			106		
3 1	78			107		
	79			108		
	80	· ·		109		
	81			110		
	82			111		
	83			112		
	84			113		
	85			114		
	86			115		
	87			116	30.34	
	88			117		
	89			118		
	90			119		

SITE NAME:			DATE:	100	TIME:	
DRAINAGE:	Bishop Creek	INVESTIGATORS	· TR	+13		
				yν	C-65 8 47.	
	R QUALITY PARAME	~		WEATHER CO		
Water Temperatur	e: 8.0	(°F o(°C))	Dissolved	Oxygen: $9$	05	(mg/L)
Conductivity:	78	(μmhos/cm@25 º0	C) Stream or	Lake gage read	ling:	
Turbidity:	1.49	(NTUs) Air Tem	perature <u>5</u>	}_(F)or °C) E	Baro, Pressu	re(in Hg)
Winds 0 - 2 (mp	n) Cloud cover_5	(%) Precipit	ation Fo	] Rain	SleetHai	ISnow
Secchi Disk: $\mathcal{N}$ $\lambda$	Depth of Disappear:	meters	Dept	n of Reappeara	nce:	meters
				Secchi De	epth:	meters
Visual Condition o Clear           ✓	f Stream (check all that Cloudy	t apply):	Colored			
Floating Material		Other:	_			
Remarks:				nan wasanga an in the		
		Site Drav	wina			
Sample No. No. of Sample Bo	BC-blw-5L	ATER QUALITY S Sample Metho	d: <u>Grab</u>	Preservati	ives:	Ice

DRAINAGE: Bish	op Creek . INVES	STIGATORS:	TBJB		
PHYSICAL WATER QUA		· ·		ER CONDITIONS	-
Water Temperature:	14.9 (of or)	6) Di	ssolved Oxygen:	7.55	(mg/L)
	1	s/cm@25 ºC) St			
	2 (NTUs				ure 21.76
2 11	Cloud cover 25 (9				
Vinds (mph) Gecchi Disk: $\mathcal{N}$ Dep				ppearance:	
Becciii Disk. N H Deb	in or bisappear	meters		cchi Depth:	
Visual Condition of Streat Clear X Floating Material	m (check all that apply Cloudy Other:	Co	olored		
		-			
Remarks:					
		Site Drawing			-
	0	QUALITY SAMF			
	0	QUALITY SAMF	rab Pre	eservatives:	lce
Sample No.  No. of Sample Bottles	0		rab Pre	eservatives:	lce Dy in o
	0	mple Method: <u>G</u>	rab Pre	The state of the s	Ice Dy in o

SITE NAME: North Fork	DATE: 9/22/20 TIME: 11:45am
DRAINAGE: Bishop Creek INVESTIGATOR	es: JB JB
PHYSICAL WATER QUALITY PARAMETERS	WEATHER CONDITIONS
Water Temperature: (°F or ©C)	Dissolved Oxygen: 9.02 (mg/L)
Conductivity: 40 (µmhos/cm@25 9	2C) Stream <del>or Lake</del> gage reading: 8.5 cls
	mperature 64 (F)r °C) Baro. Pressure 21.5(in Hg)
Winds (mph) Cloud cover 20 (%) Precipi	
Secchi Disk: NA Depth of Disappear:meters	
Visual Condition of Stream (check all that apply): Clear Cloudy Floating Material Other:	Secchi Depth:meters  Colored
Remarks: NF flow field measur	red at 8.5 cts
Site Dra	wing
	ar Programme and the second
	N 17 72
	F N
WATER QUALITY S	SAMPLE DATA
Sample No. BCUF-) Sample Metho	od: Grab Preservatives: Ice
No. of Sample Bottles	Preservatives: Hasoy in and
REMAR	RKS
7.0	
SIGNED BY: RET	VIEWED BY:

	below PHZ	DATE: 9 22 20 1	
DRAINAGE: Bisho	D Creek INVESTIGATORS	3: TB JD	
PHYSICAL WATER QUAL	ITY PARAMETERS	WEATHER CONDITI	ONS
Water Temperature: 1	3. 9 (°F or C)	Dissolved Oxygen: 3.5	3 (mg/L)
Conductivity:	50 (µmhos/cm@25 º0	C) Stream or Lake gage reading: _	1.8
Furbidity: 1.65		perature(°F or °C) Baro. F	23 25
Vinds 1-2 (mph) Cl	oud cover (%) Precipit	ation Fog Rain Sleet	Hail Snow
Secchi Disk: NA Depth	of Disappear:meters	Depth of Reappearance:	meters
		Secchi Depth:	meters
/isual Condition of Stream Clear <u> </u>	(check all that apply): Cloudy	Colored	
Floating Material	Other:	_ )	
Remarks: ~ 6 - 8	s' sediment both	met weir	
	Site Drav	ving	
	WATER QUALITY S		
	WATER QUALITY S		Ice
	Nw-PH2 Sample Metho	d: <u>Grab</u> Preservatives: _ Preservatives: _	
		d: <u>Grab</u> Preservatives: _ Preservatives: _	
	Nw-PH2 Sample Metho	d: <u>Grab</u> Preservatives: _ Preservatives: _	
Sample No. B <u>C-b</u> No. of Sample Bottles	Nw-PH2 Sample Metho	d: <u>Grab</u> Preservatives: _ Preservatives: _	Ice
	Nw-PH2 Sample Metho	d: <u>Grab</u> Preservatives: _ Preservatives: _	

DRAINAGE:	Bishop Creek	INVESTIGATO	ORS:	rs J	13	
PHYSICAL WATE	R QUALITY PARA	METERS		WEATHER	CONDITIONS	
Water Temperatur	e: 12.4	(ºF or €C)	Dissolv	ed Oxygen:	8.71	(mg/L)
Conductivity:		(µmhos/cm@2	25 ºC) Stream	or Lake gage r	eading:	- 00
Turbidity:	-	(NTUs) Air T	Temperature_	12 (°F) or °C)	Baro. Pressi	23.28 ire(in F
Winds 1-2 (mpl	n) Cloud cover_	(%) Pred	cipitation	og Rain	Sleet Ha	ail Snow
Secchi Disk: 从A	Depth of Disappe	ear:mete	ers De	epth of Reappe	arance:	meters
Visual Condition o	f Stream (check all	that apply):		Secchi	Depth:	meters
Clear 🗸	Cloudy		Colorec	<u> </u>		
		Outer.				
Remarks:						
		Site L	Drawing			
		WATER QUALIT	TY SAMPLE D	ATA		
Sample No.	v_A		<b>TY SAMPLE</b> Dethod: <u>Grab</u>		vatives:	Ice
	w A	Sample Me	ethod: Grab	Presen	vatives:	
Sample No. No. of Sample Bo		Sample Me		Presen		

DRAINAGE:	Bishop Creek	INVESTIGATO	DRS:	B JB		
PHYSICAL WATE	R QUALITY PARA	METERS		WEATHER COND	ITIONS	
Water Temperatur	e: 12.2	_(ºF o(ºC))	Dissolve	d Oxygen: 8, 8	8	_(mg/L)
Conductivity:		(μmhos/cm@25	5 ºC) Stream o	or Lake gage reading	j:	
Turbidity:	-	(NTUs) Air T	emperature	74 (Fo)°C) Baro	. Pressure	23.97 (in H
Winds 1 - 2 (mpt	n) Cloud cover_	(%) Preci	ipitation F			
Secchi Disk: N	Depth of Disappe	ar:mete	ers Dep	oth of Reappearance	):	_meters
				Secchi Depth		
Visual Condition of Clear Note The C	f Stream (check all t Cloudy		Colored			
Remarks:						
		Site D	rawing			
	- 14	WATER QUALITY		TA		
Sample No.	_ NA		Y SAMPLE DA	.TA Preservatives	£	Ice
Sample No. No. of Sample Bot	NA	Sample Met	thod: Grab			
	NA	Sample Met		Preservatives		
	NA	Sample Met	thod: Grab	Preservatives		
	NA	Sample Met	thod: Grab	Preservatives		

DRAINAGE: Bishop	Creek INVESTIGATORS: TU JB
PHYSICAL WATER QUALIT	TY PARAMETERS WEATHER CONDITIONS
Water Temperature: 13	, 2 (°F or ©) Dissolved Oxygen: 8.78 (mg/L)
Conductivity: 5	2 (μmhos/cm@25 °C) Stream or Lake gage reading: O-70
Turbidity: \. \. \. \. \. \. \. \. \. \. \. \. \.	(NTUs) Air Temperature 7 (F) Por °C) Baro. Pressure 23.91
	ud cover O (%) Precipitation Fog Rain Sleet Hail Snow
	of Disappear:meters
	Secchi Depth: meters
Visual Condition of Stream ( Clear	Cloudy Colored
Floating Material	Other:
Remarks:	
	Site Drawing
Sample No. BC-h	WATER QUALITY SAMPLE DATA
	Nw-PH3 Sample Method: Grab Preservatives: Ice
Sample No. BC-b	\ 011.2
	Preservatives: Ice  Preservatives: Ice  Preservatives: Ice

SITE NAME:				9 23	199		
DRAINAGE:	Bishop Creek	_ INVESTIGAT	TORS:	BJB			
PHYSICAL WATER	we will also have been also the second	METERS		WEATHE	R CONDITI	ONS	
Water Temperature	see profile	(ºF or ºC)	Dissol	ved Oxygen:	see pro	h.b	(mg/L)
Conductivity:	37		25 ºC)_S <del>tream</del>				6.50
Turbidity: 54	echi	(NTUs) Air	Temperature	64 (F)or	°C) Baro. I	Pressure	21.26 (in t
Winds 1-5 (mph	) Cloud cover_	O (%) Pre	ecipitation	Fog Rai	n Sleet	Hail	Snow
Secchi Disk:	Depth of Disappe	ar: <u> <b>\ 0</b> </u>	eters D		pearance:_ chi Depth:_		. /
Visual Condition of Clear	Stream (check all t Cloudy	hat apply):	Colore				
Floating Material		Other:				,	
Remarks: LaV	e Elev = 9	736.5 he	ut per	Paul S	ichmid	4	SCE)
		Site	Drawing				
		WATER QUALI	TY SAMPLE I	DATA			
Sample No. 5	L-0P-20		TY SAMPLE I		servatives:		İce
Sample No. 5 No. of Sample Bottl	L-07-20	Sample M		Pres	ervatives:_		
	L-07-20	Sample M	lethod: Grab	Pres	· · · · · · · · · · · · · · · · · · ·		

SITE NAME:	South L	ake	_DATE: _	7/23/20 TIM	E: 12:50p
DRAINAGE:	Bishop Creek	INVESTIGATORS	TB_	JB	
PHYSICAL WATE	R QUALITY PARAME	ETERS	W	EATHER CONDITION	IS
Water Temperatur	e: see profib	_(ºF or ºC)	Dissolved C	oxygen: See prof.	6 (mg/L)
Conductivity:	_53	(μmhos/cm@25 °C	:) S <del>tream or</del> L	ake gage reading:	736.50
Turbidity: 5	ecchi	(NTUs) Air Temp	perature 6L	(°F)or °C) Baro. Pre	ssure 21.36 (in Hg
Winds 1-5(mpt	n) Cloud cover	(%) Precipita	ation Fog	RainSleet	HailSnow
Secchi Disk:	Depth of Disappear	:\O_meters	Depth	of Reappearance:	.5 meters
Visual Condition o Clear Floating Material Remarks:	f Stream (check all that Cloudy  Cloudy  Le LLU = 9 7	Other:	Colored _ _ - - - Der P	aul Schmi	H (SCE)
		Site Draw	i /ing		
	W				
0 1 11		ATER QUALITY SA	AMPLE DATA		
	5L-DP-42	ATER QUALITY SA		Preservatives:	
Sample No. No. of Sample Box	i ii	_ Sample Method	d: <u>Grab</u>		
	i ii		d: <u>Grab</u>	Preservatives:	

South Lake 9/23/20

Depth cond pt 2031/115 - 6.38

[ bottom 2331 6.43

58 ~ 2303 6.40

60th 2 53 2080 6.36

Windy # 48 1255 6.35

8-13 mp 48

43 6.40

48 6.40

STOK 10

## WATER TEMPERATURE AND DISSOLVED OXYGEN LAKE PROFILE DATA FORM

Location: South Lake 9/23/20

7	DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)	DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)
7	0.5	14.2	7.41	31	10.1	8.66
	1	14.3	7.39	32	9.5	8.68
	2	14.3	7.39	33	8.7	8.66
	3	14.3	7.38	34	7.8	8.52
	4	14.3	7.37	35	6.3	8.02
	5	14.4	7.37	36	5.8	7.78
	6	14.4	7.36	37	5.4	7.80
	7	14.4	7.36	38	5.2	7.64
	8	14.4	7.35	39	5.1	7.49
	9	14.4	7.35	40	5.0	7.38
>	10	14.4	7.35	41	5.0	7.30
	11	14.4	7.34	42 🖈	5.0	7.12
	12	14.4	7.34	43	5.0	6.99
	13	14.4	7.33	44	5.0	6.81
	14	14.4	7.33	45	5.0	6.73
	15	14.4	7.33	46	5.1	6.49
	16	14.4	7.33	47	5.1	6.18
	17	14.4	7.32	47.5	5.2	0,25
	18	14.4	7.32	49	5.7	0,23
	19	14.4	7.32	50	5.8	0.14
>	20 ★	14.3	7.32	51	6.0	0.09
	21	14.3	7.32	52	6.1	0.07
	22	14.3	7.32	53	6.2	0.06
	23	14.3	7.32	54	6.3	0.04
	24	14.2	7.33	55	6.4	0.03
	25	13.4	7.62	56	6.6	0.03
	26	12.7	7.90	57	6.8	0.03
	27	11.9	8.21	58	7.2	0.03
	28	11.5	8.32	59	7.4	0.03
	29	10.9	8.43	60	7.6	0.02
	30	10.4	8.58	61	7.7	0.02

#### WATER TEMPERATURE AND DISSOLVED OXYGEN LAKE PROFILE DATA FORM

Location: South Lake

DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)	DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)
62	7.8	6.01	91		
₿ 62.7	7.9	0.01	92		
64			93		
65			94	The state of the s	
66			95		
67			96		
68			97		
69			98		
70			99		
71			100		
72			101		
73			102		
74			103		
75			104		
76			105		
77			106		
78			107	7,000	
79			108		
80			109		
81			110		
82			111		
83			112		
84			113		
85			114		
86			115		
87			116		
88			117		
89			118		
90			119		

DRAINAGE:	Bishop Creek	INVESTIGATORS:	$B \supset B$	
PHYSICAL WATER	R QUALITY PARA	METERS	WEATHER CONDITIONS	
Water Temperature	: 11.7	(ºF or ºC) Dissolv	ed Oxygen: 9.46	(mg/L)
Conductivity:	-	(μmhos/cm@25 ºC) Stream	or Lake gage reading:	
Turbidity:		(NTUs) Air Temperature	69 (F)or °C) Baro. Pressu	15.57 (in H
Winds O~ (mph	) Cloud cover	SmoVLy (%) Precipitation	Fog Rain Sleet Ha	il Snow
Secchi Disk: VA	Depth of Disappe	ear:meters De	epth of Reappearance:	meters
Visual Condition of Clear Floating Material	Stream (check all Cloudy		Secchi Depth:	meters
Remarks: Thi	ex smal	Ke Air index a	250	
		Site Drawing		
		WATER QUALITY SAMPLE D	ATA	
Sample No.	NA	WATER QUALITY SAMPLE D Sample Method: Grab	ATA  Preservatives:	Ice
Sample No. No. of Sample Bott				Ice
			Preservatives:	lce

DRAINAGE:	Bishop Creek	INVESTIGATOR	s: †[	3 73		
PHYSICAL WATER				VEATHER CONDIT	IONS	-
Water Temperature:		(°F or C)		Dxygen: 9.5		(ma/L)
Conductivity:				ake gage reading:		(mg/L)
	115			.ake gage reading:		e- 11-
Turbidity: $\frac{2}{2}$ Winds $O = \frac{1}{2}$ (mph)	1.10					
Secchi Disk: NA	Depth of Disappear	:meters	Depth	Secchi Depth:		
Visual Condition of S Clear X Floating Material	Stream (check all that Cloudy	Other:	Colored _		-	
Remarks: Ar	5 molley					
	0	Site Dra	wing			
Sample No.		ATER QUALITY S				
	BC-blw-PH			Preservatives:		ce
Sample No.	BC-blw-PH		od: <u>Grab</u>			
	BC-blw-PH	Sample Metho	od: <u>Grab</u>	Preservatives:		

DRAINAGE:	Richan Crook	INVESTIGATORS: T	B JB	
	Little Little Control			
PHYSICAL WATER			WEATHER CONDITIONS	
Water Temperature	: 11.3	(ºF o �C) Dissolve	d Oxygen: 3.44	(mg/L)
Conductivity:		(µmhos/cm@25 ºC) Stream o		20
Turbidity:		(NTUs) Air Temperature	2 (F)or °C) Baro. Press	ure 25.30 (in
Winds (mph)	Cloud cover	Smolle (%) Precipitation F	ogRainSleetH	ailSnov
Secchi Disk: NA	Depth of Disappe	ar:meters Dep	oth of Reappearance:	meters
		and the second	Secchi Depth:	meters
Visual Condition of Clear	Stream (check all t Cloudy	Colored		
Floating Material		Other:	1 1	ال مواهد المسادا
Remarks: Ta	Irace #2	, no Plan from #	(used in previous	ous vis/
		Site Drawing		
Sample No.		WATER QUALITY SAMPLE DA	TA Preservatives:	Ice
Sample No. No. of Sample Bottl	NA			Ice
	NA		Preservatives:	Ice
	NA	Sample Method: Grab	Preservatives:	Ice
	NA	Sample Method: Grab	Preservatives:	Ice

DRAINAGE:	Bishop Creek	_ INVEST	IGATORS:		B J	13	
PHYSICAL WATER	QUALITY PARAM	ETERS			WEATHER	CONDITIONS	S
Water Temperature:	11-1	_(ºF or ºC	)	Dissolved	Oxygen:	9.23	(mg/L)
Conductivity:	59	_(µmhos/c	cm@25 ºC)	Stream or	Lake gage r	eading:	
Turbidity: $L$	.15	(NTUs)	Air Tempe	erature 6	[ (F) r °C;	) Baro. Pres	sure 25.3
Winds O (mph)	Cloud cover 5	nole (%)	Precipitation	on Fo	g Rain	Sleet H	Hail Snov
Secchi Disk: NA						arance:	meters
					Secch	i Depth:	meters
Visual Condition of S Clear X Floating Material	Stream (check all th Cloudy	Other:	_	Colored			
Remarks:							
			Site Drawir	20			
			JALITY SAM	MPLE DAT	·A		
Sample No. 36						votivov	laa
Sample No.	v - blw - PH s		JALITY SAM			vatives:	İce
	:-blw-PHS				Preser		
	:-blw-PHS		ole Method:	Grab	Preser		
	:-blw-PHS			Grab	Preser		lce 504 /n ov
	:-blw-PHS		ole Method:	Grab	Preser		
	:-blw-PHS		ole Method:	Grab	Preser		
	:-blw-PHS		ole Method:	Grab	Preser		
Sample No. 30	:-blw-PHS		ole Method:	Grab	Preser		
	:-blw-PHS		ole Method:	Grab	Preser		
	:-blw-PHS		ole Method:	Grab	Preser		
	:-blw-PHS		ole Method:	Grab	Preser		

SITE NAME:	To						
DRAINAGE:	Bishop Creek	INVESTIG	ATORS: _	TB	JB		
PHYSICAL WATE	R QUALITY PARA	AMETERS		WE	ATHER CO	ONDITIONS	3
Water Temperatur	e: // 나	(ºF or oco	Di	ssolved Ox	ygen:	9.44	(mg/L)
Conductivity:		μmhos/cm	@25 ºC) St	ream or La	ke gage rea	ding:	
Гurbidity:	-	(NTUs) A	Air Tempera	ture 64	(Por °C)	Baro. Press	sure 2 4. 9
Winds 1 - 2 (mpt	) Cloud cover	5mol(%) F	Precipitation	Fog_	Rain	SleetH	lailSno
	Depth of Disapp		neters	Depth o	f Reappear	ance:	meters
Visual Condition of Clear Floating Material Remarks:	f Stream (check all Cloud			olored	Secchi D	epth:	meter
Telliaiks.		0.0					
		Sn	te Drawing				
		WATER QUA	LITY SAMP	LE DATA			
Sample No.	_ NA		LITY SAMP Method: <u>Gr</u>		Preserva	tives:	Ice
							Ice
Sample No. No. of Sample Bot		Sample					
		Sample	Method: Gr				

	Bishop Creek	INVESTIGA	ATORS:	TB	JB		
	R QUALITY PARAM		.,,,,,,,		HER CONDI	TIONS	
			2.7				
Water Temperatur	re: 10.9						_ (mg/L)
Conductivity:		(µmhos/cm(					-1192
Turbidity:	3.69	(NTUs) A	ir Temperat	ure 64 6	or °C) Baro	. Pressure	avi. (in H
Winds O (mpl	h) Cloud cover_	SMO!(%) P	recipitation	Fog	RainSlee	tHail	Snow
Secchi Disk: WA	Depth of Disappe	ar:m	neters	Depth of R	eappearance:		_meters
		4-6-70-4-2			Secchi Depth:		meters
Visual Condition of Clear X X X X X X X X X X X X X X X X X X X	f Stream (check all t Cloudy		Co	lored			
Remarks:							
		0:4	e Drawing	(-A)			
		WATER QUAL	LITY SAMPI	LE DATA			
Sample No.		eT.			Process estimate		Ioo
	BC-blw-PH	eT.	_ITY SAMP! Method: <u>Gr</u>	ab F	Preservatives	11 /	Ice
	BC-blw-PH	eT.		ab F	Preservatives Preservatives	11 /	lce y in av
	BC-blw-PH	Sample	Method: <u>Gr</u>	ab F		11 /	lce y in ov
	BC-blw-PH	Sample		ab F		11 /	lce y in or
	BC-blw-PH	Sample	Method: <u>Gr</u>	ab F		11 /	Ice y in on
	BC-blw-PH	Sample	Method: <u>Gr</u>	ab F		11 /	lce Y i'n cu
Sample No. No. of Sample Bot	BC-blw-PH	Sample	Method: <u>Gr</u>	ab F		11 /	lce y in on
	BC-blw-PH	Sample	Method: <u>Gr</u>	ab F		11 /	lce Yin on
	BC-blw-PH	Sample	Method: <u>Gr</u>	ab F		11 /	lce y in on
	BC-blw-PH	Sample	Method: <u>Gr</u>	ab F		11 /	lce y in ov

# Field Data Forms October 2020

DRAINAGE:	Bishop Creek	INVESTIGATORS:	JBI	TB	
DHVSICAL WAT	ER QUALITY PARA			ATHER CONDITION	ONS
	ire: See pressib			ygen: 540 pro	
Conductivity:	-	(µmhos/cm@25 ºC)	Stream or Lak	e gage reading:	9734.02
Turbidity:	Secchi	(NTUs) Air Tempe	erature 50	or °C) Baro. P	ressure 21.10
Winds 0-6	oh) Cloud cover_	O (%) Precipitati		Rain Sleet	Hail Sno
Secchi Disk:	Depth of Disappe	ear: 12.5 meters	Depth of		1.5 meters
Visual Condition	of Stream (check all Cloudy		Colored	_	
Floating Material		Other:	. ,		
Remarks:	SMOKEY	- HAZY	NORT	THIN H	24
		Site Drawi	ng		
	leu. e 9,7				
		WATER QUALITY SAI			
Sample No.	NA-		MPLE DATA	Preservatives:	
		WATER QUALITY SAI Sample Method:	MPLE DATA	Preservatives:_	
Sample No. No. of Sample Be		WATER QUALITY SAI	MPLE DATA	Preservatives:_	Ice
		WATER QUALITY SAI Sample Method:	MPLE DATA	Preservatives:_	Ice

#### WATER TEMPERATURE AND DISSOLVED OXYGEN

LAKE PROFILE, DAŢA FORM

Location: South LAKE (JB/TB) ~ 0930 an 10/5/20

						71
DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)	DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)	
0.5	13.8	7.51	31	10.8	8,13	
1	13.9	7.49	32	10.3	8.25	*
2	13.9	7.48	33	8.7	8.25	*
3	13.9	7.46	34	7.1	7.90	
4	13.9	7.46	35	5.7	7.64	
5	13.9	7.45	36	5.4	7.60	
6	13.9	7.45	37	5.2	7.53	
7	13.9	7.44	38	5.1	7.43	
8	13.9	7.44	39	5.1	7.31	(SLII)
9	13.9	743	40	5.0	7.14	
10	13.9	7.43	41	5.0	6.98	
11	13.9	7.43	42	5.0	6.86	1
12	13.9	7.42	43	5.0	6,79	1
13	13.9	7.42	44	5.0	6.62	1
14	13.9	7.42	45	5.0	6.40	
15	13.9	7.41	46 5.1	25.1	6,13	15.80
16	13.9	7.41	46.5	5.2	2.02	
17	13.9	7.41	48	5.6	Ø.26	
18	13.8	7.41	49	5.8	Ø.16	1
19	13.8	7.39	50	5.9	Ø.12	
20	13.8	7, 39	51	6.0	Ø41Ø	1
21	13.8	7.39	52	6.2	0.09	1
22	13.8	7.39	53	6.3	0.07	
23	13.8	7.39	54	6.4	0.06	1
24	13.8	7.38	55	6.5	0.05	1
25	13.7	7.36	56	6.7	0.05	1
26	13.6	7.30	57	7.0	0.65	1
27	13.6	7.28	58	7.2	Ø.04	1
28	13.3	7.37	59	7.4	0.04	1
	1			1.		-li

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end of data

7.7

7.6

0.04

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DRAINAGE:	Bishop Creek	_ INVESTIGA	ATORS:		1)	الرغ		
PHYSICAL WATER	QUALITY PARA	METERS			WEAT	THER CON	DITIONS	
Water Temperature:	9.7	(ºF or (C))		Dissolve	ed Oxyg	en: 8.	16	(mg/L)
Conductivity:		(µmhos/cm	@25 ºC)	Stream	or Lake	gage readi	ng:	
Turbidity:	-	(NTUs) A	Air Tempe	erature (	60 G	or °C) Ba	iro. Pressi	ر الحي ure(in H
Winds O (mph)	Cloud cover_	O (%) F	Precipitat	ion F	og	Rain SI	eet Ha	ail Snow
Secchi Disk: NA	Depth of Disappe	ear:n	neters	De				meters
Visual Condition of	Stream (check all	that apply):				Secchi Dep	oth:	meters
Clear K	Cloudy			Colored				
Remarks: A		rocks						
hemaiks. 71	gae ore		te Drawi	ille.				
		- On	io Diawi	iig	_			
		WATER QUA	LITY SA	MPLE D	ATA			
Sample No.	NA		<b>LITY SA</b> Method:			Preservativ	es:	Ice
		Sample	Method:	Grab	_ 1	Preservativ Preservativ	-	
Sample No. No. of Sample Bottle		Sample		Grab	_ 1		-	

et Hail Snow e: 11.5 meters  h: 1) meters
mg/L) (mg/L) (mg
g: 9108.97 o. Pressure 21.60 et Hail Snov e: 11.5 meters h: 1) meters
et Hail Snowners  h: meters
et Hail Snowners  et II. Smeters  h: I) meters
e:
h: 1) meters
wind
wing
Minn
SCE
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s: lce
s:

#### WATER TEMPERATURE AND DISSOLVED OXYGEN

LOCATION: LAKE PROFILE DATA FORM

LOCATION: LAKE SARRINA (JB/TB) 1200 pm 10 5 /20

			- Continue	<del></del>	
DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)	DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)
0.5	14.0	7.88	31	4.3	7.87
1	13.8	7.85	32	4.3	7.90
2	137	7.86	33	4.3	7.66
3	13.7	7.86	34	4.2	7.74
4	13.7	7.86	35	4.1	7.68
5	13.6	7.85	36	4.1	7.73
6	13.6	7.85	37	4.1	7.63
7	13.6	7.85	38	4.1	7.50
8	13.6	7.84	39	4.1	7.43
9	13.6	7.84	40	4.1	7,33
10	13.4	7.92	41	4.1	7.27
11	12.3	8.64	42	4.1	7.09
12	10.0	9.87	43	4.1	6.95
13	8.4	10.03	44	4.1	6.85
14	7.6	9.94	45	4.1	6.78
15	7.0	9.80	46	4.1	6.55
16	6.7	9.72	47	4.1	646
17	6.4	9.62	48	4.1	6.38
18	6.0	9.69	49	4.1	6.32
19	5.7	9.55	50	4.1	6.27
20	5,5	9.31	51	4.1	6.16
21	5.3	9.07	52	4.1	6.06
22	5.2	8.65	53	4.\	5.77
23	5.1	8.44	54	4.1 4.1 4.2	5.72
24	5.0	8.35	55	4.2	5.62
25	4.9	8.18	56	4.2	5.40
26	4.8	7.95	57	4.2 4.2 4.2	5.25
27	4.6	7.70	58	4,2	5.07
28	4.6	7.6	59	4.2	4.85
29	4.4	7,68	60	4.2	4,52
30	4.4	2.79	61	4.2	4.25

(LS#13)

## WATER TEMPERATURE AND DISSOLVED OXYGEN

Location: Lake PROFILE DATA FORM

Location: Lake PROFILE DATA FORM

10/5/20

DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)	DEPTH FROM WATER SURFACE (meters)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN (mg/L)
62	4.2	4.05	91		
63	4.2	3.35	92		
64	4.2	2.90	93		
65	4.2	2.72	94		
66	4.2	2.44	95		
67	4.2	1.96	96		
68	4.2	1.32	97		
69	4.2	<b>6.71</b>	98		
369.5	4.2	0.27	99		
71			100		
72			101		
73			102		
74			103		
75			104		
76			105		
77			106	The state of the s	
78			107		
79			108		
80			109		
81			110		
82			111		
83			112		
84			113		
85		,	114		
86			115		
87			116		
88			117	pic	
89			118		
90			119		

SITE NAME:	Milage				
DRAINAGE:	Bishop Creek	INVESTIGATO	ORS:	3 523	
PHYSICAL WATE	R QUALITY PARA	AMETERS		WEATHER CONDIT	TONS
Water Temperatu	re: 14,	2 (°F or (°C))	Dissolved	Oxygen: 7. L	19 (mg/L)
Conductivity:		(µmhos/cm@2	5 ºC) Stream or	r Lake gage reading:	14/
Turbidity:	~	(NTUs) Air T	Temperature 1	For °C) Baro.	Pressure 21. 6 (in H
Winds F3 (mp	h) Cloud cover	○ (%) Pred	cipitation Fo	ogRainSleet	HailSnow
Secchi Disk: N	C Depth of Disapp	pear:mete	ers Dep	th of Reappearance:	meters
Viewal Candition	of Chun awa (alan ala al	II that anni. A		Secchi Depth:	meters
Clear	of Stream (check al Cloud	ly	Colored		
Floating Material		Other:			
Remarks:	Small	ey			
		Site D	Drawing		
		WATER QUALIT	Y SAMPLE DA	TA	
Sample No.	_NA		Y SAMPLE DA	TA Preservatives:	Ice
Sample No. No. of Sample Bo				Preservatives:	Ice
		Sample Me		Preservatives:	
		Sample Me	ethod: Grab	Preservatives:	

DRAINAGE:	Bishop Creek	_ INVEST	IGATORS:		B	<u> </u>		
PHYSICAL WATER	QUALITY PARA	METERS			WEATH	HER CONDI	TIONS	
Water Temperature:	10.9	(ºF or@C		Dissolve	ed Oxyger	1: 9.5	28	(mg/L)
Conductivity:	-					age reading:		
Turbidity:	-	(NTUs)	Air Temp	erature 5	50	or °C) Baro	. Pressur	e 25.5% (in I
Winds_0~\_(mph)	Cloud cover_	<b>(%)</b>	Precipitat	tion F	ogR	ain Slee	t Hail	ISnov
Secchi Disk: NA	Depth of Disappe	ar:	_meters	De	pth of Re	appearance		meters
Visual Condition of	Stream (check all	that annly):			S	ecchi Depth		meters
Clear K	Cloudy			Colored		_		
Floating Material		Other:	-	-				
Remarks: 5	moky							
Yes			Site Drawi	ing				
		WATER O	AP VTI IAI	MPI E DA	ΔΤΔ			QK.
Sample No	NA	WATER QU				reservativos		J.
Sample No.	NA		JALITY SA		_ Pr	eservatives		
Sample No. No. of Sample Bottle				: Grab	_ Pr	reservatives		lce
			ole Method:	: Grab	_ Pr			

SITE NAME: $\underline{\beta}$	ishop Creek	INVEST	IGATORS:	T	B 51	3		
- PHYSICAL WATER O					WEATHER		ONS	
Water Temperature:			7		Oxygen:			(ma/L)
_	-						)	_ (IIIg/L)
Conductivity:					Lake gage			2- 50
Turbidity:					© Dor ℃			
Winds (mph)								
Secchi Disk: NA D	epth of Disappe	ear:	_meters	Dept				
Visual Condition of St	ream (check all	that apply):			Secch	i Depth:		meters
Clear	Cloudy		-	Colored .				
	-V	Ouidi.		-				
Remarks: 5 m	o kry							
			Site Drawi	ing				
		WATER OF	MALUTY CA	MOLE DA				
Saveda Na	AI Å	WATER QU						
	NA		JALITY SA		Prese	rvatives:_		
Sample No. No. of Sample Bottles				Grab	Prese	rvatives:		
_			le Method:	Grab	Prese	_		

DRAINAGE:	Bishop Creek	INVESTIGATOR	RS: TB	JB	
PHYSICAL WATE	R QUALITY PARA	METERS	WE	EATHER CONDITION	NS
Water Temperature	e: 10.9	(ºF or (C))	Dissolved Ox	xygen: 9.06	(mg/L)
Conductivity:		(μmhos/cm@25 <sup>9</sup>	C) Stream or La	ke gage reading:	
Turbidity:	-	(NTUs) Air Ter	nperature 55	(F)or °C) Baro. Pre	essure 25. 25
Winds O (mph	) Cloud cover_	۵ (%) Precipi	itationFog _	RainSleet	Hail Snov
Secchi Disk: NA	- Depth of Disappe	ear:meters	Depth o	f Reappearance:	meters
Vigual Condition of	F Straom (abaak all	that annh A		Secchi Depth:	meters
Clear 🖔	f Stream (check all Cloudy	/	Colored		
Floating Material	<del></del>	Other:	_	-D 11 0	
Remarks: 5	mokey			R#2	
		Site Dra			
took	sample fro	y sampled	- +0,114	e (IK)	
took	Sample from			e (IK)	
		WATER QUALITY S	SAMPLE DATA		
Sample No.	_NA		SAMPLE DATA	Preservatives:	Ice
Sample No.	_NA	WATER QUALITY S	SAMPLE DATA od: <u>Grab</u>		Ice
Sample No.	_NA	WATER QUALITY S	SAMPLE DATA od: <u>Grab</u>	Preservatives:	Ice

20111100				-D -	-D		
	Bishop Creek		ATORS:		TB .		
PHYSICAL WATER	QUALITY PARA	METERS		WEAT	HER CONDITION	ONS	
Water Temperature	10.8	(ºF or 🖒	Diss	olved Oxyge	n: 9.20	1	(mg/L)
Conductivity:		(µmhos/cm	@25 ºC) Strea	am or Lake g	age reading:		
Turbidity:	-	(NTUs) A	Air Temperatur	e 55 F	or °C) Baro. P	ressure	25.25 (in 1-
Winds (mph)	Cloud cover_	O (%) F	Precipitation _	Fog F	RainSleet _	Hail	Snow
Secchi Disk: NA	Depth of Disappe	ear:n	neters	Depth of Re	appearance:_		meters
				S	ecchi Depth:		meters
Visual Condition of Clear	Stream (check all Cloud)	/	Colo	red			
Floating Material		Other:					
Remarks: 5	olley						
		Sit	te Drawing				
		WATER QUA	LITY SAMPLE	E DATA			
Sample No.	W.A.	WATER QUAI					
	NA		LITY SAMPLI Method: Grab	<u>)                                    </u>	reservatives:_		
Sample No. No. of Sample Bottl		Sample		<u>)                                    </u>	reservatives:_ reservatives:_		
		Sample	Method: Grab	<u>)                                    </u>			

DRAINAGE:	Bishop Creek	INVESTIGATOR	s: <u>TB</u>	JB	
PHYSICAL WATE	R QUALITY PARA	METERS	1	WEATHER CONDIT	IONS
Water Temperature	10.6	(ºF or (C))	Dissolved	Oxygen: 9,4	(mg/L)
Conductivity:		(μmhos/cm@25 º	C) Stream or	Lake gage reading:	
Turbidity:	-	(NTUs) Air Ten	nperature 5	7 <b>(F)</b> r °C) Baro. I	Pressure(i
Winds <b>O</b> (mph	) Cloud cover_	(%) Precipit	tation Fog	Rain Sleet	Hail Sn
Secchi Disk: NA	Depth of Disappe	ear:meters	Depth	of Reappearance:	meters
Vigual Condition of	Stroom (about all	that apply):		Secchi Depth:	mete
Visual Condition of Clear	Cloudy		Colored		
Floating Material		Other:	_		11.0
Remarks: 5°	nokey			TB	#2
		Site Dra	wing	Å. s.	
400K ;	sample h	rom other	tailra	ot flowing	
400℃;	sample h	rom other	tail ra	ce (TRJ)	
+~ o℃ ;		WATER QUALITYS			
ب ه لا ع	_NA		SAMPLE DATA		
Sample No.	_NA	WATER QUALITY S Sample Metho	SAMPLE DATA	A Preservatives:	
	_NA	WATER QUALITY S	SAMPLE DATA	A Preservatives:	lce
Sample No.	_NA	WATER QUALITY S Sample Metho	SAMPLE DATA	A Preservatives:	lce

SITE NAME;				
DRAINAGE:	Bishop Creek	INVESTIGATORS:	TB JB	
PHYSICAL WATER	QUALITY PARA	METERS	WEATHER CONDITION	VS
Water Temperature:	10.7	(ºF or C) Dis	ssolved Oxygen: _ 9.50	(mg/L)
Conductivity:	-	(μmhos/cm@25 ºC) Str	eam or Lake gage reading:	
Turbidity:	4	(NTUs) Air Temperati	ure 57 (F)r °C) Baro. Pre	ssure 24.90
Winds O (mph)	Cloud cover_	(%) Precipitation	FogRainSleet	_HailSnow
Secchi Disk: NA	Depth of Disappe	ear:meters		
C	and the land		Secchi Depth:	
Visual Condition of Scient Clear   Floating Material	Stream (check all Cloudy		lored	
Remarks: 5mc	, Key			
		Site Drawing		
		WATER QUALITY SAMPL	E DATA	
Sample No.	NA	WATER QUALITY SAMPL Sample Method: Gra		Ice
Sample No.				
			Preservatives:	

DRAINAGE:	Bishop Creek	INVEST	IGATORS:		TB	JB			
PHYSICAL WATE	R QUALITY PARA	METERS			WEA	THER C	ONDITIO	NS	
Water Temperatu	re: 10.5	(ºF or 🕲		Dissolve	ed Oxy	gen:	1.20		_(mg/L)
Conductivity:	_		cm@25 ºC)						
Turbidity:	-	(NTUs)	Air Temp	erature_(	636	F)or °C)	Baro. Pre	essure	23.90 (in
Winds (mp	h) Cloud cover_								
Secchi Disk: NA	Depth of Disapp	ear:	_meters	De	epth of I	Reappea	rance:		_meters
Visual Condition o	f Stream (check all	that apply				Secchi I	Depth:		meters
Clear	Cloud	/	_	Colored					
Floating Material		Other:		-					
Remarks: 5v	no key								Aberratus al como del martido de la como
			Site Drawi	ing					
	1/A	WATER QU			ATA				
	NA.		JALITY SA		ATA		atives:		
	-		ole Method:	: <u>Grab</u>	ATA				
Sample No. No. of Sample Bo	-			: <u>Grab</u>	ATA				Ice

DRAINAGE:	Bishop Creek	<b>INVESTIGATORS:</b>	TB JB	
PHYSICAL WATE	Tal. 74157		WEATHER CONDITION	s
Water Temperature	10.5	(°F o(°C)) Di	ssolved Oxygen: 9.15	(mg/L)
Conductivity:	-		ream or Lake gage reading:O	
Turbidity:	_	(NTUs) Air Tempera	ture 63 6 or °C) Baro. Pres	33.90 (in H
	) Cloud cove	r_ O (%) Precipitation	Fog RainSleet	HailSnow
			Depth of Reappearance:	
Vigual Condition of	: Stroom (obook s	all that apply	Secchi Depth:	meters
Visual Condition of	Clou	dy Co	olored	
Floating Material		Other:	in a daha's	
Remarks: 5	molly	, weir was a		
		Site Drawing		
			N.E. DATA	
Pomele Ne	N ( A-	WATER QUALITY SAME		
Sample No.	NA	WATER QUALITY SAMF	rab Preservatives:	
	***************************************			
Sample No. No. of Sample Bot	***************************************	Sample Method: Gi	rab Preservatives:	

	Bishop Creek		IGATORS:	<u>TB</u>		CONDITION	IC.	
PHYSICAL WATER					WEATHER			
Water Temperature:	10.8				Oxygen:			ig/L)
Conductivity:					Lake gage r			- 00
Furbidity:	-	(NTUs)	Air Tempe	erature 6	<b>2</b> (°F) or °C)	Baro. Pre	ssure	(in I
Winds 2-4 (mph)	Cloud cover_	<u>O_(%)</u>	Precipitat	ion Fo	g Rain _	Sleet	Hail	Snov
Secchi Disk: NA	Depth of Disappe	ar:	_meters	Dept	h of Reappe	arance:	m	eters
/isual Condition of S	Stroom (obook all t	that apply):			Secchi	Depth:		meters
Clear 💢	Cloudy		_	Colored				
Floating Material	<u></u>	Other:						
Remarks: 500	sky							
			Site Drawi	ng				
		WATER QU						
Sample No.	NA		JALITY SA ble Method:		Preser	vatives:		
Sample No. No. of Sample Bottle	and the second		ole Method:	Grab	Preser	vatives:		
	and the second			Grab	Preser			

DRAINAGE:	Bishop Creek	INVESTIGATORS: T	3 33	
PHYSICAL WATER	R QUALITY PARA	METERS	WEATHER CONDITIONS	
Water Temperature	9.5	(ºF or (ºC)) Dissolved	Oxygen: <u>9.10</u> (m	ig/L)
Conductivity:			Lake gage reading: 1. フみ	
Turbidity:	-	(NTUs) Air Temperature 6	Baro. Pressure	(in
Winds O (mph)	Cloud cover_	(%) Precipitation Fo		
Secchi Disk: NA	Depth of Disappe	ear:meters Dept	h of Reappearance:m	eters
Visual Condition of	Stroom (chook all	that apply):	Secchi Depth:	meters
Clear X	Cloudy	Colored		
Floating Material		Other:		
Remarks: 5	moley;			
		Site Drawing		
		WATER OHALITY SAMPLE DAT	ΓΔ	
Sample No	AI A-	WATER QUALITY SAMPLE DAT		
Sample No.	_ N A	Sample Method: Grab	Preservatives: Ice	
	(			
Sample No. No. of Sample Bottl	(	Sample Method: Grab	Preservatives: Ice	

SITE NAME:		Fork	DATE:	10/6/20	1 IIVIL	9:45
		INIVESTICATOR	DC. T	3 .TB		
DRAINAGE:		INVESTIGATOR	10: 1			
PHYSICAL WATER	R QUALITY PARA	METERS _		WEATHER CON	DITIONS	
Water Temperature	9.8			d Oxygen:		_ (mg/L)
Conductivity:	-	(μmhos/cm@25	ºC) Stream o	r Lake gage readii	ng: 7.8	2 cts
Turbidity:	-	(NTUs) Air Te	mperature_5	8 (For °C) Ba	ro. Pressur	e(in
Winds O (mph)	) Cloud cover_	O_(%) Precip				
Secchi Disk: NA	Depth of Disappe	ear:meter	s Dep	oth of Reappearan	ce:	meters
				Secchi Dep	oth:	meters
Visual Condition of Clear	Stream (check all Cloudy		Colored			
Floating Material		Other:				
Remarks: 125	s smoke	y; Flow as	+ NF o	neasured	@ 7.	a cfs
,	2	0		Western Commence		
-		Site Dr	awing			
	, t					
	7	WATER QUALITY	SAMPLE DA	.ТА		
Sample No.	NA	WATER QUALITY  Sample Meth		TA _ Preservativ	es:	lce
	<del></del>			Preservativ		
	<del></del>	Sample Meth	nod: <u>Grab</u>	Preservativ	es:	
	<del></del>		nod: <u>Grab</u>	Preservativ		
Sample No. No. of Sample Bottl	<del></del>	Sample Meth	nod: <u>Grab</u>	Preservativ		
	les	Sample Meth	nod: <u>Grab</u>	Preservativ		

## APPENDIX B LABORATORY REPORTS



**FINAL REPORT** 

**Work Orders:** 0F16038 **Report Date:** 6/29/2020

**Received Date:** 6/16/2020

Turnaround Time: Normal

Phones: (714) 751-7373

Fax: (714) 545-8883

P.O. #:

**Billing Code:** 

Attn: Michael P. Donavan

Project: 2KLE010101

Client: Psomas - Santa Ana, CA

3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

### ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015 • NV-DEP #NAC 445A • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

Dear Michael P. Donavan,

Enclosed are the results of analyses for samples received 6/16/20 with the Chain-of-Custody document. The samples were received in good condition, at 8.9 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

Reviewed by:

Chris Samatmanakit Project Manager

1: State











FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010101

Reported:

06/29/2020 16:47



#### Sample Summary

Sample Name	Sampled By	Lab ID	Matrix	Sampled	Qualifiers
SL-DP-5	Jim Burton, Todd Bear	0F16038-01	Water	06/15/20 09:15	
SL-DP-31.5	Jim Burton, Todd Bear	0F16038-02	Water	06/15/20 09:00	
BC-blw-SL	Jim Burton, Todd Bear	0F16038-03	Water	06/15/20 12:30	

Project Manager: Michael P. Donavan



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010101

Project Manager: Michael P. Donavan

Reported:

06/29/2020 16:47

Sample	Results
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	SL-DP-5				Sampled	d: 06/15	/20 9:15 by Jim Burto	n, Todd Bea
	0F16038-01 (Water)							
Analyte			Result	MRL	Units	Dil	Analyzed	Qualifie
nions by IC,	EPA Method 300.0							
Method: EP	A 300.0	Batch ID: W0F0975	Instr: LC12	Prepared: 06	5/16/20 09:23		Analyst: jna	
Nitrate as	5 N		ND	110	ug/l	1	06/17/20 02:53	
Conventional	Chemistry/Physical Parameters	by APHA/EPA/ASTM Methods						
Method: [C/	ALC]	Batch ID: [CALC]	Instr: [CALC]	Prepared: 06	5/19/20 16:46		Analyst: sar	
Nitrogen,	Total		ND	0.30	mg/l	1	06/22/20	
Method: EP	A 351.2	Batch ID: W0F1291	Instr: AA06	Prepared: 06	5/19/20 16:46		Analyst: ymt	
TKN			ND	0.10	mg/l	1	06/22/20	
Method: EP	A 365.3	Batch ID: W0F1057	Instr: UVVIS04	Prepared: 06	5/16/20 15:32		Analyst: sbn	
o-Phosph	ate as P		ND	0.010	mg/l	1	06/16/20 16:14	
Method: SN	1 2540C	Batch ID: W0F1124	Instr: OVEN01	Prepared: 06	5/17/20 12:24		Analyst: blg	
Total Diss	solved Solids		15	10	mg/l	1	06/17/20	
Analyte			ittesuit		Oilito	<b>D</b>	Allulyzeu	
Analyte			Result	MRL	Units	Dil	Analyzed	Qualifie
Analyte Conventional	Chemistry/Physical Parameters	by APHA/EPA/ASTM Methods						
	• •	by APHA/EPA/ASTM Methods  Batch ID: W0F0997	Instr: AA01	Prepared: 06	5/16/20 10:36		Analyst: sar	
Conventional	A 353.2	•		<b>Prepared:</b> 06	5/16/20 10:36 ug/l	1	<b>Analyst:</b> sar 06/16/20	
Method: EP	A 353.2 3 as N	•	Instr: AA01	•	ug/l		06/16/20	n. Todd Bea
Conventional	A 353.2 3 as N	•	Instr: AA01	•	ug/l		•	n, Todd Bea
Method: EP. NO2+NO3 Sample:	A 353.2 3 as N	•	Instr: AA01	200	ug/l Sampled	d: 06/15	06/16/20 /20 9:00 by Jim Burto	
Method: EP. NO2+NO: Sample: Analyte	A 353.2 3 as N SL-DP-31.5 0F16038-02 (Water)	•	Instr: AA01	•	ug/l		06/16/20	n, Todd Bea Qualifie
Method: EP. NO2+NO3 Sample: Analyte Anions by IC,	A 353.2 3 as N SL-DP-31.5 0F16038-02 (Water)	Batch ID: W0F0997	Instr: AA01 ND Result	200	ug/l Sampled <b>Units</b>	d: 06/15	06/16/20 /20 9:00 by Jim Burto Analyzed	
Method: EP. NO2+NO: Sample: Analyte	A 353.2 3 as N SL-DP-31.5 0F16038-02 (Water) EPA Method 300.0 A 300.0	Batch ID: W0F0997	Instr: AA01	200	ug/l Sampled	d: 06/15	06/16/20 /20 9:00 by Jim Burto	
Conventional Method: EP. NO2+NO3 Sample: Analyte Anions by IC, Method: EP. Nitrate as	A 353.2 3 as N SL-DP-31.5 0F16038-02 (Water) EPA Method 300.0 A 300.0	Batch ID: W0F0997  Batch ID: W0F0975	Instr: AA01  Result  Instr: LC12	MRL Prepared: 06	ug/l Samplec Units 5/16/20 09:23	d: 06/15	06/16/20 /20 9:00 by Jim Burto Analyzed Analyst: jna	
Method: EP. NO2+NO3 Sample: Analyte Anions by IC, Method: EP. Nitrate as	A 353.2 3 as N SL-DP-31.5 0F16038-02 (Water) EPA Method 300.0 A 300.0 N	Batch ID: W0F0997  Batch ID: W0F0975  by APHA/EPA/ASTM Methods	Instr: AA01  Result  Instr: LC12	MRL  Prepared: 06 110	ug/l Samplec <b>Units</b> 5/16/20 09:23 ug/l	d: 06/15	06/16/20  /20 9:00 by Jim Burto  Analyzed  Analyst: jna 06/17/20 03:47	
Conventional Method: EP. NO2+NO3 Sample: Analyte Anions by IC, Method: EP. Nitrate as	A 353.2 3 as N SL-DP-31.5 0F16038-02 (Water) EPA Method 300.0 A 300.0 S N Chemistry/Physical Parameters	Batch ID: W0F0997  Batch ID: W0F0975	Instr: AA01  Result  Instr: LC12	MRL  Prepared: 06 110	ug/l Samplec Units 5/16/20 09:23	d: 06/15	06/16/20 /20 9:00 by Jim Burto Analyzed Analyst: jna	
Conventional Method: EP. NO2+NO3 Sample: Analyte Anions by IC, Method: EP. Nitrate as Conventional Method: [C. Nitrogen,	A 353.2 3 as N  SL-DP-31.5  OF16038-02 (Water)  EPA Method 300.0 A 300.0 A 100.0 Chemistry/Physical Parameters  ALC] Total	Batch ID: W0F0997  Batch ID: W0F0975  by APHA/EPA/ASTM Methods Batch ID: [CALC]	Instr: AA01  Result  Instr: LC12  ND  Instr: [CALC]	MRL  Prepared: 06 110  Prepared: 06 0.30	ug/l Sampled Units 5/16/20 09:23 ug/l 5/16/20 17:10 mg/l	d: 06/15  Dil	06/16/20  /20 9:00 by Jim Burto  Analyzed  Analyst: jna 06/17/20 03:47  Analyst: YMT 06/18/20	
Conventional Method: EP. NO2+NO3 Sample: Analyte Anions by IC, Method: EP. Nitrate as Conventional Method: [C.	A 353.2 3 as N  SL-DP-31.5  OF16038-02 (Water)  EPA Method 300.0 A 300.0 A 100.0 Chemistry/Physical Parameters  ALC] Total	Batch ID: W0F0997  Batch ID: W0F0975  by APHA/EPA/ASTM Methods	Instr: AA01  Result  Instr: LC12  ND  Instr: [CALC]	MRL  Prepared: 06 110  Prepared: 06 0.30	ug/l Samplec Units 5/16/20 09:23 ug/l 5/16/20 17:10	d: 06/15  Dil	06/16/20  /20 9:00 by Jim Burto  Analyzed  Analyst: jna 06/17/20 03:47  Analyst: YMT	
Method: EP. NO2+NO3 Sample:  Analyte Anions by IC, Method: EP. Nitrate as Conventional Method: [C. Nitrogen, Method: EP. TKN	A 353.2 3 as N  SL-DP-31.5  0F16038-02 (Water)  EPA Method 300.0  A 300.0  N  Chemistry/Physical Parameters  ALC]  Total  A 351.2	Batch ID: W0F0997  Batch ID: W0F0975  by APHA/EPA/ASTM Methods Batch ID: [CALC]  Batch ID: W0F1074	Instr: AA01  Result  Instr: LC12  ND  Instr: [CALC]  ND  Instr: AA06	Prepared: 06 0.30  Prepared: 06 0.10	ug/l Sampled Units 5/16/20 09:23 ug/l 5/16/20 17:10 mg/l 5/16/20 17:10 mg/l	1: 06/15 Dil  1	06/16/20  /20 9:00 by Jim Burto  Analyzed  Analyst: jna 06/17/20 03:47  Analyst: YMT 06/18/20  Analyst: YMT 06/18/20	
Method: EP. Notational Method: EP. Notations by IC, Method: EP. Nitrate as Conventional Method: EV. Nitrogen, Method: EP.	A 353.2 3 as N  SL-DP-31.5  0F16038-02 (Water)  EPA Method 300.0 A 300.0 N  Chemistry/Physical Parameters  ALC] Total A 351.2	Batch ID: W0F0997  Batch ID: W0F0975  by APHA/EPA/ASTM Methods Batch ID: [CALC]	Instr: AA01  Result  Instr: LC12  ND  Instr: [CALC]  ND  Instr: AA06  ND	Prepared: 06 0.30  Prepared: 06 0.10	ug/l Samplec Units 5/16/20 09:23 ug/l 5/16/20 17:10 mg/l 5/16/20 17:10	1: 06/15 Dil  1	06/16/20  /20 9:00 by Jim Burto  Analyzed  Analyst: jna 06/17/20 03:47  Analyst: YMT 06/18/20  Analyst: YMT	
Conventional Method: EP. NO2+NO3 Sample: Analyte Anions by IC, Method: EP. Nitrate as Conventional Method: [C. Nitrogen, TKN Method: EP. TKN Method: EP. NO2+NO3	A 353.2 3 as N  SL-DP-31.5  0F16038-02 (Water)  EPA Method 300.0  A 300.0  Chemistry/Physical Parameters  ALC]  Total  A 351.2  A 353.2  3 as N	Batch ID: W0F0997  Batch ID: W0F0975  by APHA/EPA/ASTM Methods Batch ID: [CALC]  Batch ID: W0F1074  Batch ID: W0F0997	Instr: AA01  Result  Instr: LC12  ND  Instr: [CALC]  ND  Instr: AA06  ND  Instr: AA01  ND	Prepared: 06 0.30  Prepared: 06 0.10  Prepared: 06 0.200	ug/l Sampled Units 5/16/20 09:23 ug/l 5/16/20 17:10 mg/l 5/16/20 17:10 mg/l 5/16/20 10:36 ug/l	Dil 1	06/16/20  /20 9:00 by Jim Burto  Analyzed  Analyst: jna 06/17/20 03:47  Analyst: YMT 06/18/20  Analyst: YMT 06/18/20  Analyst: Sar 06/16/20	
Conventional Method: EP. NO2+NO3 Sample:  Analyte Anions by IC, Method: EP. Nitrate as Conventional Method: EV. TKN Method: EP. TKN	A 353.2 3 as N  SL-DP-31.5  0F16038-02 (Water)  EPA Method 300.0 A 300.0 IN  Chemistry/Physical Parameters  ALC]  Total  A 351.2  A 353.2 3 as N  A 365.3	Batch ID: W0F0997  Batch ID: W0F0975  by APHA/EPA/ASTM Methods Batch ID: [CALC]  Batch ID: W0F1074	Instr: AA01  Result  Instr: LC12  ND  Instr: [CALC]  ND  Instr: AA06  ND  Instr: AA01	Prepared: 06 0.30  Prepared: 06 0.10  Prepared: 06 0.200	ug/l Sampled Units 5/16/20 09:23 ug/l 5/16/20 17:10 mg/l 5/16/20 17:10 mg/l 5/16/20 10:36	Dil 1	06/16/20  /20 9:00 by Jim Burto  Analyzed  Analyst: jna 06/17/20 03:47  Analyst: YMT 06/18/20  Analyst: YMT 06/18/20  Analyst: Sar	
Conventional Method: EP. NO2+NO3 Sample:  Analyte Anions by IC, Method: EP. Nitrate as Conventional Method: [C. Nitrogen, Method: EP. TKN  Method: EP. NO2+NO3 Method: EP. NO2+NO3	A 353.2 3 as N  SL-DP-31.5  OF16038-02 (Water)  EPA Method 300.0 A 300.0 N  Chemistry/Physical Parameters  ALC] Total  A 351.2  A 353.2 3 as N  A 365.3 hate as P	Batch ID: W0F0997  Batch ID: W0F0975  by APHA/EPA/ASTM Methods Batch ID: [CALC]  Batch ID: W0F1074  Batch ID: W0F0997	Instr: AA01  Result  Instr: LC12  ND  Instr: [CALC]  ND  Instr: AA06  ND  Instr: AA01  ND  Instr: AA01  Instr: UVVIS04	Prepared: 06 0.30 Prepared: 06 0.10 Prepared: 06 200 Prepared: 06 0.010	ug/l  Sampled  Units  5/16/20 09:23 ug/l  5/16/20 17:10 mg/l  5/16/20 17:10 mg/l  5/16/20 10:36 ug/l  5/16/20 15:32	Dil 1 1 1 1 1	06/16/20  /20 9:00 by Jim Burto  Analyzed  Analyst: jna 06/17/20 03:47  Analyst: YMT 06/18/20  Analyst: YMT 06/18/20  Analyst: sar 06/16/20  Analyst: sbn	



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010101

Project Manager: Michael P. Donavan

Reported:

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Sample F

Sample Results	,
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(Continued)

Sample:	BC-blw-SL				Sampled	: 06/15/2	0 12:30 by Jim Burto	n, Todd Bea
	0F16038-03 (Water)							
Analyte			Result	MRL	Units	Dil	Analyzed	Qualifie
Anions by IC,	EPA Method 300.0							
Method: EPA	A 300.0	Batch ID: W0F0975	Instr: LC12	Prepared: 06	5/16/20 09:23		Analyst: jna	
Nitrate as	N		ND	110	ug/l	1	06/17/20 04:05	
Conventional	Chemistry/Physical Parameters	by APHA/EPA/ASTM Methods						
Method: [CA	ALC]	Batch ID: [CALC]	Instr: [CALC]	Prepared: 06	5/16/20 17:10	,	Analyst: YMT	
Nitrogen,	Total		<b>1.1</b>	0.30	mg/l	1	06/18/20	
Method: EPA	A 351.2	Batch ID: W0F1074	Instr: AA06	Prepared: 06	5/16/20 17:10	1	Analyst: YMT	
TKN			<b>1.1</b>	0.10	mg/l	1	06/18/20	
Method: EPA	A 353.2	Batch ID: W0F0997	Instr: AA01	Prepared: 06	5/16/20 10:36		Analyst: sar	
NO2+NO3	as N		ND	200	ug/l	1	06/16/20	
Method: EPA	A 365.3	Batch ID: W0F1057	Instr: UVVIS04	Prepared: 06	5/16/20 15:32		Analyst: sbn	
o-Phosph	ate as P		0.013	0.010	mg/l	1	06/16/20 16:17	
Method: SM	2540C	Batch ID: W0F1124	Instr: OVEN01	Prepared: 06	5/17/20 12:24		Analyst: blg	
Total Diss	olved Solids		33	10	mg/l	1	06/17/20	



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010101

Project Manager: Michael P. Donavan

Reported:

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#### **Quality Control Results**

ANA -										
Anions by IC, EPA Method 300.0										
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W0F0975 - EPA 300.0										
Blank (W0F0975-BLK1)				Prepared & A	nalyzed: 06/	16/20				
Nitrate as N	ND	110	ug/l							
LCS (W0F0975-BS1)				Prepared & A	nalyzed: 06/	16/20				
Nitrate as N	2070	110	ug/l	2000		104	90-110			
Matrix Spike (W0F0975-MS1)	Source: 0F15037-0	)4	Pre	pared: 06/16/2	0 Analyzed:	06/17/20	)			
Nitrate as N	20700	1100	ug/l	20000	330	102	84-115			
Matrix Spike (W0F0975-MS2)	Source: 0F15037-0	08	Pre	pared: 06/16/2	0 Analyzed:	06/17/20	)			
Nitrate as N	20600	1100	ug/l	20000	230	102	84-115			
Matrix Spike Dup (W0F0975-MSD1)	Source: 0F15037-0	)4	Pre	pared: 06/16/2	0 Analyzed:	06/17/20	)			
Nitrate as N	20900	1100	ug/l	20000	330	103	84-115	0.7	20	
Matrix Spike Dup (W0F0975-MSD2)	Source: 0F15037-0	08	Pre	pared: 06/16/2	0 Analyzed:	06/17/20	)			
Nitrate as N	20800	1100	ug/l	20000	230	103	84-115	0.9	20	

#### **Quality Control Results**

Conventional Chemistry/Physical Parameters	by APHA/EPA/ASTM Metl	hods								
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualific
atch: W0F0997 - EPA 353.2										
Plant (MOE0007 PLV1)				Prepared & A	nahrad: 06/	16/20				
Blank (W0F0997-BLK1) NO2+NO3 as N	ND	200	ug/l	riepaieu & A	naiyzeu. 00/	10/20				
	5		~9/-							
LCS (W0F0997-BS1)				Prepared & A	nalyzed: 06/					
NO2+NO3 as N	982	200	ug/l	1000		98	90-110			
Matrix Spike (W0F0997-MS1)	Source: 0F12010-	-02		Prepared & A	nalvzed: 06/	16/20				
NO2+NO3 as N		200	ug/l	2000	7930	94	90-110			
Matrix Spike (W0F0997-MS2)	Source: 0F15090-			Prepared & A	•					
NO2+NO3 as N	5260	200	ug/l	2000	3290	98	90-110			
Matrix Spike Dup (W0F0997-MSD1)	Source: 0F12010-	-02		Prepared & A	nalyzed: 06/	16/20				
NO2+NO3 as N	9910	200	ug/l	2000	7930	99	90-110	1	20	
						46.00				
Matrix Spike Dup (W0F0997-MSD2) NO2+NO3 as N	Source: 0F15090-	200	ug/l	Prepared & A 2000	3290	102	90-110	1	20	
NOZTNOS as N	3330	200	ug/i	2000	3290	102	30-110	'	20	
atch: W0F1057 - EPA 365.3										
Blank (W0F1057-BLK1)				Prepared & A	nalvzed: 06/	16/20				
o-Phosphate as P	· · · · · · · · · · · · ND	0.010	mg/l	. repaired ear.	y_ca 00,	. 0, _0				
·										
LCS (W0F1057-BS1)				Prepared & A	nalyzed: 06/					
o-Phosphate as P	0.192	0.010	mg/l	0.200		96	88-111			
Matrix Spike (W0F1057-MS1)	Source: 0F16038-	-01		Prepared & A	nalyzed: 06/	16/20				
o-Phosphate as P		0.010	mg/l	0.200	0.00700	96	85-112			
Matrix Spike Dup (W0F1057-MSD1)	Source: 0F16038-		m a /l	Prepared & A	•		0E 110	4	20	
o-Phosphate as P	0.203	0.010	mg/l	0.200	0.00700	98	85-112	1	20	

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**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010101

Project Manager: Michael P. Donavan

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Quality Control Results

(Continued)

Conventional Chemistry/Physical Parameters	by APHA/EPA/ASTM Meth	nods (Continue	d)							
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualific
etch: W0F1074 - EPA 351.2										
Blank (W0F1074-BLK1)				pared: 06/16/2	20 Analyzed	: 06/18/20	)			
TKN	· ND	0.10	mg/l							
Blank (W0F1074-BLK2)			Pre	pared: 06/16/2	20 Analyzed	: 06/18/20	)			
TKN	· ND	0.10	mg/l							
LCS (W0F1074-BS1)			Pre	pared: 06/16/2	20 Analyzed	: 06/18/20	)			
TKN	0.992	0.10	mg/l	1.00		99	90-110			
LCS (W0F1074-BS2)			Pre	pared: 06/16/2	20 Analyzed	: 06/18/20	)			
TKN	0.936	0.10	mg/l	1.00		94	90-110			
Duplicate (W0F1074-DUP1)	Source: 0F09093-	01	Pre	pared: 06/16/2	20 Analyzed	: 06/18/20	)			
TKN	0.0862	0.10	mg/l		0.0892			3	10	
Matrix Spike (W0F1074-MS1)	Source: 0F10057-	01	Pre	pared: 06/16/2	20 Analyzed	: 06/18/20	)			
TKN		0.10	mg/l	1.00	0.164	109				
Matrix Spike (W0F1074-MS2)	Source: 0F10057-	.02	Prei	pared: 06/16/2	20 Analyzed	: 06/18/20				
TKN		0.10	mg/l	1.00	0.139	101				
Matrix Spike Dup (W0F1074-MSD1)	Source: 0F10057-	.01	Droi	pared: 06/16/2	O Analyzod	. 06/18/20	1			
TKN		0.10	mg/l	1.00	0.164	109	90-110	0.5	10	
Matrix Spike Dup (W0F1074-MSD2)	Source: 0F10057-	02	Dwa	pared: 06/16/2	O Analysis	. 06/19/20				
TKN		0.10	mg/l	1.00	0.139	109	90-110	7	10	
atch: W0F1124 - SM 2540C										
Blank (W0F1124-BLK1) Total Dissolved Solids	ND	10	mg/l	Prepared & A	nalyzed: 06/	17/20				
Iotal Dissolved Collad	The state of the s	10	mg/i							
LCS (W0F1124-BS1) Total Dissolved Solids	840	10	ma/l	Prepared & A	nalyzed: 06/	<b>17/20</b> 102	96-102			
Iotal Dissolved Solids	040	10	mg/l	024		102	90-102			
Duplicate (W0F1124-DUP1)	Source: 0F16082-			Prepared & A	-	17/20			40	
Total Dissolved Solids	400	10	mg/l		396			1	10	
Duplicate (W0F1124-DUP2)	Source: 0F08011-			Prepared & A	•	17/20				
Total Dissolved Solids	528	10	mg/l		525			0.6	10	
atch: W0F1291 - EPA 351.2										
Blank (W0F1291-BLK1)			Pre	pared: 06/19/2	20 Analyzed	: 06/22/20	)			
TKN	ND	0.10	mg/l		•					
LCS (W0F1291-BS1)			Pre	pared: 06/19/2	20 Analyzed	: 06/22/20	)			
TKN	0.979	0.10	mg/l	1.00	,	98	90-110			
Matrix Spike (W0F1291-MS1)	Source: 0F17081-	09	Prei	pared: 06/19/2	20 Analyzed	: 06/22/20	)			
TKN	1.19	0.10	mg/l	1.00	0.207	98	90-110			
Matrix Spike Dup (W0F1291-MSD1)	Source: 0F17081-	.09	Dec	pared: 06/19/2	O Analyzod	. 06/22/20				
TIGGIA SPIRE DUP (TYOI 1231-IVISDI)	Jource. 0F 1700 1-	0.5	Fre	1.00	0.207	. 50, 22, 20		2	10	



**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010101

Project Manager: Michael P. Donavan

Reported:

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#### Notes and Definitions

%REC	Percent Recovery
Dil	Dilution
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ)
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
RPD	Relative Percent Difference
Source	Sample that was matrix spiked or duplicated.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

Weck Labs
14859 Clark Aw
Crty & Industry
Crty & Industry

# EXAMPLE

 $O_{F \setminus VO38}$  3 Fluton Collec Drive, Suite 200, Santa Ana, CA 92707 (714) 751-7373 FAX (714) 545-8883

| VAINIL | LE

Process   Continue	The continue Type   For Number   The Preservetion	II and A large of A defendance			Drojost/D	Stania C	- 1	AIN	CHAIN OF CUSTODY FORM	STO		E	≅		Analy	Analysis Required	pa.	Page	
Sample   Containe Type   Con	Sample   Container Type   Fact Number Type   Fact	ilen Neine-Address. SOMAS HUTTON CENTRE DRIVE, SUITE ANTA ANA, GA 92707	5 200		ZKLEO	10101	<u>.</u>			0.0081	t EPA			- Ocitella					THE PARTY OF THE P
Fact Number 7454546 9852   Fact Number 744546 9852   Fact Number 74546 9852   Fact Number 7546 98522   Fact Number 7546 98522   Fact Nu	Fact Number 74 5456 9823   Fact Number 74 5466	roject Manager:			Phone N	umbar.				роць	70dC			ا لنجار					
Sample   Container Type   Container Ty	Sentrole	IICHAEL P. DONOVAN		,	(714) 7	51-7373				M A9			2,1	nų del	fa ***				
Sampling Date   This Preservetion   This Preserv	20 mile by 1 mile by 1 mile by 1 mile preservation 2 mile by 1 m	ampler: Jim Burton, Todd Bear			Fax Num	ber: 714.	545.8883			9-N E			-NO3 oq 32.		So a.e.				
Note	75 5 5 5 5 5 5 5	Sample Description	Sample	Container Type	# of Cont.	Sampling		Time		ietiN			Metho						Special Instructions
None	Note	8	water	60 ml Poly	-	6 15	200	1:150	H	×								-	
Accorded by 1   Nore	North		water	250 mi Poly	-	H		1			×			$\dashv$				ഥ	ltered with 0.45μ
# 55    Weller   250 ml Poly   1   1,250 M   None   X   X   X   X   X   X   X   X   X	# 1		water	500 mi Poly	-			_	Norte			×	$\dashv$		-				
9-31.5 water 60 mi Poly 1 None X X X X X X X X X X X X X X X X X X X	9-31.5 water 60 mi Poly 1 None X X X X X X X X X X X X X X X X X X X		water	250 mi Poly	-								_					_	
9 - 31, 5         water         260 ml Poly         1         None         X<	None		water	60 mi Poly	-	_	<u>.</u>	1,000		×					_				
9-31.5         water         500 ml Poly         1         None         X <td>  P-31,5   water   500 ml Poly   1   None   X   X   X   X   X   X   X   X   X  </td> <td>SI- 00-31.5</td> <td>water</td> <td>250 ml Poly</td> <td>-</td> <td></td> <td></td> <td></td> <td>None</td> <td></td> <td>×</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>ĬĽ.</td> <td>itered with 0.45μ</td>	P-31,5   water   500 ml Poly   1   None   X   X   X   X   X   X   X   X   X	SI- 00-31.5	water	250 ml Poly	-				None		×							ĬĽ.	itered with 0.45μ
V → 31,5         water         250 mi Poly         1         H280A         X<	1251,5   water   250 ml Poly   1	5L-DP-31.5	water	500 ml Poly	-				None			×							
Weater         60 ml Poly         1         13°50         None         X	water         60 ml Poly         1         None         X	15-96-7	water	250 ml Poly	-			-	H2804										
None   X   X   X   X   X   X   X   X   X	Weater         550 ml Poly         1         None         X	86-614-51	water	60 ml Poly	-			3.50		×									
Marier   500 ml Poly 1	Water   500 ml Poly 1	•	water	250 ml Poly	-			1	None		×			$\dashv$	$\dashv$			正	ltered with 0.45µ
Weater         250 ml Poly         1         H2SO4         X	Water         250 ml Poly         1         H2804         X	86- blw-52	wafer	500 ml Poly	1			_	None			×		_	_				
water         250 m Poly         1         None         X	water         250 m Poly         1         None         X	- かくみ - つ	water	250 ml Poly	-	•		-	H2S04				$\dashv$	$\dashv$					
water         250 ml Poly         1         None         X	water         250 ml Poly         1         None         X		water	60 ml Poly	-				None	×				-	-				
water         500 ml Poly         1         None         X	water         500 ml Poly         1         None         X		water	250 ml Poly	+				None		×		-	_				<u>u</u>	Hered with 0.45 µ
water         250 ml Poly         1         H2SQ4         X	water         250 mi Poly         1         H2SQ4         X		water	500 ml Poly	ļ				Nane			×		$\dashv$	-				
water         60 ml Poly         1         None         X         A	water         60 ml Poly         1         None         X         Rocal color         X         None         X <th< td=""><td></td><td>water</td><td>250 ml Poly</td><td>+</td><td></td><td></td><td></td><td>H2SO4</td><td></td><td></td><td>_</td><td>-</td><td>ᅱ</td><td>ار</td><td></td><td></td><td></td><td></td></th<>		water	250 ml Poly	+				H2SO4			_	-	ᅱ	ار				
water         250 mi Poly         1         None         X	Warter         250 mi Poly         1         None         X		water	60 ml Poly	-				None	×				_				1	
Waster         5.00 mi Poly         1         H2SO4         X	Waster         6:00 mi Poly         1         H2:SC4         X		water	250 ml Poly	1				None		×	-	-		$\dashv$			<u>L</u>	Itered with 0.45μ
Marier   250 mi Poly   1	Warier   250 mi Poly   1		water	600 mi Poly	1				None			×	_	-				1	
MM USA Date Time: Received by:  Received by:  Received by:  Received by:  Received in Lights  Received in Lights  Date Time: Date Time: Sample Integrity:  Date Time: Sample Integrity: Integrity: Date Time: Sample Integrity: Integri	PART US 20 Received by:  CARA Date Time: Same Day Date Time: Same Day Turnaround Time: Same Day A Hours Date Time: CARA Date Time: Sample integrity: A Hours Sample integrity: Barmise integrity: A Hours Date Time: Sample integrity: A Hours Sample integrity: A Hours Sample integrity: A Hours Date Time: Sample integrity: A Hours Sample integrity: A Hours Date Time: Sample integrity: A Hours Date Time: Sample integrity: A Hours Date Time: Sample integrity: A Hours Date Time: Sample integrity: A Hours Date Time: Sample integrity: A Hours Date Time: Date Time: Sample integrity: A Hours Date Time: Date Time: Sample integrity: A Hours Date Time: Date Time: Sample integrity: A Hours Date Time: Date Time: Sample integrity: A Hours Date Time: Date Time: Sample integrity: A Hours Date Time: Date Time: Date Time: A Hours Date Time: Date Time: A Hours Date Time: Date Time: A Hours Date Time: Date Time: A Hours		water	250 mi Poly	+		-		H2SO4						بر			_	
Policy Time: Received by: 1 14/20 Time: 24 Hours  Policy Time: Sample Integrity: (Contextime: Date Time: Sample Integrity: (Contextime: Date Time: Sample Integrity: (Contextime: Date Time: Sample Integrity: (Contextime: Date Time: Sample Integrity: (Contextime: Sample Integr	FC & C   16/20 Date Time: Received by: 1/20 Date Time: 24 Hours Sample Integrity. (C Date Time: Sample Integrity. (C Date Time	alinquished By:	101	Date /Time		Received	J.Kg	,					ă	rte/Timi	ë		Turnaround 1 Same Day		Sheck) 72 Hours
Date/Time: Recalved in May Sample Integrity: (C	Date /Time: Received in Mary: Sample Integrity: (C Interference of the Mary: (C Interference of the Mar	·	-	Date /Time:		Received	.fq	L			3		2 2	te /Tim	100	5	24 Hours		5 Days
	9.8	₩		Date /Time:		Received	In Kapa				4	<u></u>	å	te /Tim		3	Sample Integ	ူဗ	neck)
		And the state of t		simulation and order of the same property of the same same same same same same same sam			3	THE RESIDENCE OF THE PERSON NAMED IN			ni spiran sa		ĺ			an address of the same	4	8	

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**FINAL REPORT** 

**Work Orders:** 0F17031 **Report Date:** 6/29/2020

Received Date: 6/17/2020

Turnaround Time: Normal

Phones: (714) 751-7373

Fax: (714) 545-8883

P.O. #:

**Billing Code:** 

Attn: Michael P. Donavan

Project: 2KLE010101

Client: Psomas - Santa Ana, CA

3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

#### ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015 • NV-DEP #NAC 445A • SCAOMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

Dear Michael P. Donavan,

Enclosed are the results of analyses for samples received 6/17/20 with the Chain-of-Custody document. The samples were received in good condition, at 4.8 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

Reviewed by:

Chris Samatmanakit Project Manager

1: State











FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010101

Project Manager: Michael P. Donavan

Reported:

06/29/2020 16:49



#### Sample Summary

Sample Name	Sampled By	Lab ID	Matrix	Sampled	Qualifiers
BC-NF-1	Client	0F17031-01	Water	06/16/20 08:00	
BC-b/w-L5	Client	0F17031-02	Water	06/16/20 07:15	
BC-b/w-PH2	Client	0F17031-03	Water	06/16/20 09:30	
BC-b/w-PH3	Client	0F17031-04	Water	06/16/20 10:40	
BC-b/w-PH4	Client	0F17031-05	Water	06/16/20 11:55	
BC-b/w-PH5	Client	0F17031-06	Water	06/16/20 12:25	
BC-b/w-PH6	Client	0F17031-07	Water	06/16/20 13:00	



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010101

Project Manager: Michael P. Donavan

Reported:

06/29/2020 16:49

Sample	Results
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Sample Resu	11.5						
Sample: BC-NF-1						Sampled: 06/16/20 8	00 by Clien
0F17031-01 (Wate	r)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifie
nions by IC, EPA Method 300.0							
Method: EPA 300.0	Batch ID: W0F1084	Instr: LC12	Prepared: 06	5/17/20 09:15		Analyst: jna	
Nitrate as N		ND	110	ug/l	1	06/17/20 23:20	
onventional Chemistry/Physical Pa	rameters by APHA/EPA/ASTM Methods						
Method: [CALC]	Batch ID: [CALC]	Instr: [CALC]	Prepared: 06	5/20/20 12:47		Analyst: ymt	
Nitrogen, Total		ND	0.30	mg/l	1	06/24/20	
Method: EPA 351.2	Batch ID: W0F1297	Instr: AA06	Prepared: 06	5/20/20 12:47		Analyst: ymt	
TKN		0.16	0.10	mg/l	1	06/24/20	
Method: EPA 353.2	Batch ID: W0F1138	Instr: AA01	Prepared: 06	5/17/20 14:36		Analyst: sar	
NO2+NO3 as N		ND	200	ug/l	1	06/18/20	
Method: EPA 365.3	Batch ID: W0F1129	Instr: UVVIS04	Prepared: 06	5/17/20 12:45		Analyst: sbn	
o-Phosphate as P		ND	0.010	mg/l	1	06/17/20 13:40	
Method: SM 2540C	Batch ID: W0F1187	Instr: OVEN01	Prepared: 06	5/18/20 10:19		Analyst: blg	
Total Dissolved Solids		<b>21</b>	10	mg/l	1	06/18/20	
Sample: BC-b/w-L5 0F17031-02 (Wate	r)					Sampled: 06/16/20 7	15 by Clien
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifie
nions by IC, EPA Method 300.0							
Method: EPA 300.0	Batch ID: W0F1084	Instr: LC12	Prepared: 06	5/17/20 09:15		Analyst: jna	
Nitrate as N		ND	110	ug/l	1	06/17/20 23:38	
onventional Chemistry/Physical Pa	rameters by APHA/EPA/ASTM Methods	•					
Method: [CALC]	Batch ID: [CALC]	Instr: [CALC]	Prepared: 06	5/20/20 12:47		Analyst: ymt	
Nitrogen, Total		0.41	0.30	mg/l	1	06/24/20	
Method: EPA 351.2	Batch ID: W0F1297	Instr: AA06	Prepared: 06	5/20/20 12:47		Analyst: ymt	
TKN		0.41	0.10	mg/l	1	06/24/20	
Method: EPA 353.2	Batch ID: W0F1138	Instr: AA01	Prepared: 06	5/17/20 14:36		Analyst: sar	
NO2+NO3 as N		ND	200	ug/l	1	06/18/20	
Method: EPA 365.3	<b>Batch ID:</b> W0F1129	Instr: UVVIS04	Prepared: 06	5/17/20 12:45		Analyst: sbn	
o-Phosphate as P		0.010	0.010	mg/l	1	06/17/20 13:41	
Method: SM 2540C	Batch ID: W0F1187	Instr: OVEN01	Prepared: 06	5/18/20 10:19		Analyst: blg	
Total Dissolved Solids		25	10	mg/l	1	06/18/20	



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010101

Project Manager: Michael P. Donavan

Reported:

06/29/2020 16:49

Sample Nesults		Sample	Results
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Sample Resu	lits					(0	Continued
Sample: BC-b/w-PH2						Sampled: 06/16/20 9	:30 by Clien
0F17031-03 (Wate	er)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualific
nions by IC, EPA Method 300.0							
Method: EPA 300.0	Batch ID: W0F1084	Instr: LC12	Prepared: 0	6/17/20 09:15		Analyst: jna	
Nitrate as N		ND	110	ug/l	1	06/18/20 00:32	
onventional Chemistry/Physical Page 1	arameters by APHA/EPA/ASTM Methods						
Method: [CALC]	Batch ID: [CALC]	Instr: [CALC]	Prepared: 0	6/20/20 12:47		Analyst: ymt	
Nitrogen, Total		ND	0.30	mg/l	1	06/24/20	
Method: EPA 351.2	Batch ID: W0F1297	Instr: AA06	Prepared: 0	6/20/20 12:47		Analyst: ymt	
TKN		<b>0.11</b>	0.10	mg/l	1	06/24/20	
Method: EPA 353.2	Batch ID: W0F1138	Instr: AA01	Prepared: 0	6/17/20 14:36		Analyst: sar	
NO2+NO3 as N		ND	200	ug/l	1	06/18/20	
Method: EPA 365.3	Batch ID: W0F1129	Instr: UVVIS04	Prepared: 0	6/17/20 12:45		Analyst: sbn	
o-Phosphate as P		ND	0.010	mg/l	1	06/17/20 13:42	
Method: SM 2540C	Batch ID: W0F1187	Instr: OVEN01	Prepared: 0	6/18/20 10:19		Analyst: blg	
Total Dissolved Solids		28	10	mg/l	1	06/18/20	
Sample: BC-b/w-PH3  0F17031-04 (Wate	er)	Result	MRL	Units	Dil	Sampled: 06/16/20 10  Analyzed	:40 by Clien  Qualifie
Anions by IC, EPA Method 300.0		Result	WIKL	Onits	υп	Allalyzeu	Quanne
<b>Method:</b> EPA 300.0	Batch ID: W0F1084	Instr: LC12	Prepared: 0	6/17/20 09:15		Analyst: jna	
Nitrate as N		ND	110	ug/l	1	06/18/20 00:50	
onventional Chemistry/Physical P	arameters by APHA/EPA/ASTM Methods						
Method: [CALC]	Batch ID: [CALC]	Instr: [CALC]	Prepared: 0	6/20/20 12:47		Analyst: ymt	
Nitrogen, Total		ND	0.30	mg/l	1	06/24/20	
Method: EPA 351.2	Batch ID: W0F1297	Instr: AA06	Propared: 0	6/20/20 12:47		Analyst: ymt	
TKN	Batti iD. WOF1237	<b>0.11</b>	0.10	mg/l	1	06/24/20	
	I I			, and the second			
Method: EPA 353.2	Batch ID: W0F1138	Instr: AA01	Prepared: 06	6/17/20 14:36		Analyst: sar	
NO2+NO3 as N		ND	200	ua/l	1	06/18/20	
NO2+NO3 as N		ND	200	ug/l	1	06/18/20	
Method: EPA 365.3	Batch ID: W0F1129	Instr: UVVIS04	Prepared: 0	6/17/20 12:45		Analyst: sbn	
	Batch ID: W0F1129				1		
Method: EPA 365.3	Batch ID: W0F1129  Batch ID: W0F1187	Instr: UVVIS04	<b>Prepared:</b> 00 0.010	6/17/20 12:45		Analyst: sbn	



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010101

Project Manager: Michael P. Donavan

Reported:

06/29/2020 16:49

Sample Results

(Continued)

AMN							
Sample: BC-b/w-PH4					9	Sampled: 06/16/20 11	:55 by Clier
0F17031-05 (Wate	er)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualific
nions by IC, EPA Method 300.0							
Method: EPA 300.0	Batch ID: W0F1084	Instr: LC12	Prepared: 06	5/17/20 09:15		Analyst: jna	
Nitrate as N		ND	110	ug/l	1	06/18/20 01:08	
onventional Chemistry/Physical Pa	arameters by APHA/EPA/ASTM Methods						
Method: [CALC]	Batch ID: [CALC]	Instr: [CALC]	Prepared: 06	5/20/20 12:47		Analyst: ymt	
Nitrogen, Total		ND	0.30	mg/l	1	06/24/20	
Method: EPA 351.2	<b>Batch ID:</b> W0F1297	Instr: AA06	Prepared: 06	5/20/20 12:47		Analyst: ymt	
TKN		ND	0.10	mg/l	1	06/24/20	
Method: EPA 353.2	<b>Batch ID:</b> W0F1138	Instr: AA01	Prepared: 06	5/17/20 14:36		Analyst: sar	
NO2+NO3 as N		ND	200	ug/l	1	06/18/20	
Method: EPA 365.3	Batch ID: W0F1129	Instr: UVVIS04	Prepared: 06	5/17/20 12:45		Analyst: sbn	
o-Phosphate as P		ND	0.010	mg/l	1	06/17/20 13:44	
Method: SM 2540C	Batch ID: W0F1187	Instr: OVEN01	Prepared: 06	5/18/20 10:19		Analyst: blg	
			•			•	
Total Dissolved Solids		35	10	mg/l	1	06/18/20	
Total Dissolved Solids  Sample: BC-b/w-PH5  0F17031-06 (Water	er)	35	-				:25 by Clier
Sample: BC-b/w-PH5	er)	Result	-			06/18/20	,
Sample: BC-b/w-PH5 0F17031-06 (Wate	er)		10	mg/l		06/18/20 Sampled: 06/16/20 12	,
Sample: BC-b/w-PH5 0F17031-06 (Wate	er)  Batch ID: W0F1084		10	mg/l		06/18/20 Sampled: 06/16/20 12	,
Sample: BC-b/w-PH5 0F17031-06 (Wate Analyte nions by IC, EPA Method 300.0		Result	10	mg/l Units		06/18/20 Sampled: 06/16/20 12 Analyzed	:25 by Clier <b>Qualifi</b> e
Sample: BC-b/w-PH5 0F17031-06 (Wate Analyte nions by IC, EPA Method 300.0 Method: EPA 300.0 Nitrate as N		Result Instr: LC12 ND	MRL Prepared: 06	mg/l Units 5/17/20 09:15	Dil	06/18/20  Sampled: 06/16/20 12  Analyzed  Analyst: jna	·
Sample: BC-b/w-PH5 0F17031-06 (Wate Analyte nions by IC, EPA Method 300.0 Method: EPA 300.0 Nitrate as N	Batch ID: W0F1084	Result Instr: LC12 ND	MRL  Prepared: 06 110	mg/l Units 5/17/20 09:15	Dil	06/18/20  Sampled: 06/16/20 12  Analyzed  Analyst: jna	,
Sample: BC-b/w-PH5 0F17031-06 (Water Analyte mions by IC, EPA Method 300.0 Method: EPA 300.0 Nitrate as N onventional Chemistry/Physical Page 1	Batch ID: W0F1084  arameters by APHA/EPA/ASTM Methods	Result  Instr: LC12  ND	MRL  Prepared: 06 110	mg/l  Units  5/17/20 09:15  ug/l	Dil	06/18/20  Sampled: 06/16/20 12  Analyzed  Analyst: jna 06/18/20 01:26	,
Sample: BC-b/w-PH5 0F17031-06 (Water Analyte mions by IC, EPA Method 300.0 Method: EPA 300.0 Nitrate as N onventional Chemistry/Physical Pa	Batch ID: W0F1084  arameters by APHA/EPA/ASTM Methods	Result  Instr: LC12  ND  Instr: [CALC]	MRL  Prepared: 06 110  Prepared: 06 0.30	mg/l  Units  5/17/20 09:15  ug/l  5/19/20 16:46	Dil 1	06/18/20  Sampled: 06/16/20 12  Analyzed  Analyst: jna 06/18/20 01:26  Analyst: ymt	,
Sample: BC-b/w-PH5 0F17031-06 (Water Analyte nions by IC, EPA Method 300.0 Method: EPA 300.0 Nitrate as N conventional Chemistry/Physical Pathod: [CALC] Nitrogen, Total	Batch ID: W0F1084  arameters by APHA/EPA/ASTM Methods  Batch ID: [CALC]	Result  Instr: LC12  ND  Instr: [CALC]	MRL  Prepared: 06 110  Prepared: 06 0.30	mg/l  Units  5/17/20 09:15  ug/l  5/19/20 16:46  mg/l	Dil 1	06/18/20  Sampled: 06/16/20 12  Analyzed  Analyst: jna 06/18/20 01:26  Analyst: ymt 06/22/20	,
Sample: BC-b/w-PH5 0F17031-06 (Water Analyte nions by IC, EPA Method 300.0 Method: EPA 300.0 Nitrate as N conventional Chemistry/Physical Pathod: [CALC] Nitrogen, Total Method: EPA 351.2	Batch ID: W0F1084  arameters by APHA/EPA/ASTM Methods  Batch ID: [CALC]	Result  Instr: LC12  ND  Instr: [CALC]  ND  Instr: AA06	MRL  Prepared: 06 110  Prepared: 06 0.30  Prepared: 06 0.10	mg/l  Units  5/17/20 09:15	<b>Dil</b> 1	06/18/20 Sampled: 06/16/20 12  Analyzed  Analyst: jna 06/18/20 01:26  Analyst: ymt 06/22/20  Analyst: ymt	,
Sample: BC-b/w-PH5 0F17031-06 (Water Analyte nions by IC, EPA Method 300.0 Method: EPA 300.0 Nitrate as N conventional Chemistry/Physical Pathod: [CALC] Nitrogen, Total Method: EPA 351.2 TKN	Batch ID: W0F1084  arameters by APHA/EPA/ASTM Methods  Batch ID: [CALC]  Batch ID: W0F1291	Result  Instr: LC12  Instr: [CALC]  Instr: AA06  ND	MRL  Prepared: 06 110  Prepared: 06 0.30  Prepared: 06 0.10	mg/l  Units  5/17/20 09:15 ug/l  5/19/20 16:46 mg/l  5/19/20 16:46 mg/l	<b>Dil</b> 1	06/18/20  Sampled: 06/16/20 12  Analyzed  Analyst: jna 06/18/20 01:26  Analyst: ymt 06/22/20  Analyst: ymt 06/22/20	,
Sample: BC-b/w-PH5 0F17031-06 (Water Analyte Inions by IC, EPA Method 300.0 Method: EPA 300.0 Nitrate as N Onventional Chemistry/Physical Pathod: [CALC] Nitrogen, Total Method: EPA 351.2 TKN Method: EPA 353.2	Batch ID: W0F1084  arameters by APHA/EPA/ASTM Methods  Batch ID: [CALC]  Batch ID: W0F1291	Result  Instr: LC12  Instr: [CALC]  Instr: AA06  Instr: AA06  Instr: AA01	MRL  Prepared: 06 110  Prepared: 06 0.30  Prepared: 06 0.10  Prepared: 06 200	mg/l  Units  5/17/20 09:15	1 1 1	06/18/20  Sampled: 06/16/20 12  Analyzed  Analyst: jna 06/18/20 01:26  Analyst: ymt 06/22/20  Analyst: ymt 06/22/20  Analyst: sar	,
Sample: BC-b/w-PH5 0F17031-06 (Water Analyte nions by IC, EPA Method 300.0 Method: EPA 300.0 Nitrate as N conventional Chemistry/Physical Parameters Method: [CALC] Nitrogen, Total Method: EPA 351.2 TKN Method: EPA 353.2 NO2+NO3 as N	Batch ID: W0F1084  arameters by APHA/EPA/ASTM Methods Batch ID: [CALC]  Batch ID: W0F1291  Batch ID: W0F1138	Result  Instr: LC12  Instr: [CALC]  Instr: AA06  Instr: AA06  Instr: AA01  Instr: AA01	MRL  Prepared: 06 110  Prepared: 06 0.30  Prepared: 06 0.10  Prepared: 06 200	mg/l  Units  5/17/20 09:15 ug/l  5/19/20 16:46 mg/l  5/19/20 16:46 mg/l  5/17/20 14:36 ug/l	1 1 1	06/18/20  Sampled: 06/16/20 12  Analyzed  Analyst: jna 06/18/20 01:26  Analyst: ymt 06/22/20  Analyst: ymt 06/22/20  Analyst: sar 06/18/20	,
Sample: BC-b/w-PH5 0F17031-06 (Water Analyte Inions by IC, EPA Method 300.0 Method: EPA 300.0 Nitrate as N Inions Method: [CALC] Nitrogen, Total Method: EPA 351.2 TKN Method: EPA 353.2 NO2+NO3 as N Method: EPA 365.3	Batch ID: W0F1084  arameters by APHA/EPA/ASTM Methods Batch ID: [CALC]  Batch ID: W0F1291  Batch ID: W0F1138	Result  Instr: LC12  Instr: [CALC]  Instr: AA06  Instr: AA01  Instr: AA01  Instr: UVVIS04	MRL  Prepared: 06 110  Prepared: 06 0.30  Prepared: 06 0.10  Prepared: 06 200  Prepared: 06 0.010	mg/l  Units  5/17/20 09:15 ug/l  6/19/20 16:46 mg/l  6/19/20 14:36 ug/l  6/17/20 12:45	1 1 1 1 1	06/18/20  Sampled: 06/16/20 12  Analyzed  Analyst: jna 06/18/20 01:26  Analyst: ymt 06/22/20  Analyst: ymt 06/22/20  Analyst: sar 06/18/20  Analyst: ssb	·



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010101

Project Manager: Michael P. Donavan

Reported:

06/29/2020 16:49

Sample Results

(Continued)

							,	
Sample:	BC-b/w-PH6					Sa	ampled: 06/16/20 13	:00 by Clien
	0F17031-07 (Water)							
Analyte			Result	MRL	Units	Dil	Analyzed	Qualifie
Anions by IC,	EPA Method 300.0							
Method: EPA	A 300.0	Batch ID: W0F1084	Instr: LC12	Prepared: 0	6/17/20 09:15		Analyst: jna	
Nitrate as	N		ND	110	ug/l	1	06/18/20 01:44	
Conventional	Chemistry/Physical Parameters	s by APHA/EPA/ASTM Methods						
Method: [CA	ALC]	Batch ID: [CALC]	Instr: [CALC]	Prepared: 0	6/19/20 16:46		Analyst: ymt	
Nitrogen,	Total		ND	0.30	mg/l	1	06/22/20	
Method: EPA	A 351.2	Batch ID: W0F1291	Instr: AA06	Prepared: 0	6/19/20 16:46	ı	Analyst: ymt	
TKN			ND	0.10	mg/l	1	06/22/20	
Method: EPA	A 353.2	Batch ID: W0F1138	Instr: AA01	Prepared: 0	6/17/20 14:36		Analyst: sar	
NO2+NO3	3 as N		ND	200	ug/l	1	06/18/20	
Method: EPA	A 365.3	Batch ID: W0F1129	Instr: UVVIS04	Prepared: 0	5/17/20 12:45		Analyst: sbn	
o-Phospha	ate as P		ND	0.010	mg/l	1	06/17/20 13:45	
Method: SM	1 2540C	Batch ID: W0F1187	Instr: OVEN01	Prepared: 0	5/18/20 10:19		Analyst: blg	
Total Diss	solved Solids		35	10	mg/l	1	06/18/20	



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010101

Project Manager: Michael P. Donavan

Reported:

06/29/2020 16:49



#### **Quality Control Results**

Anions by IC, EPA Method 300.0										
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W0F1084 - EPA 300.0										
Blank (W0F1084-BLK1)				Prepared & A	nalyzed: 06/	17/20				
Nitrate as N	ND	110	ug/l							
LCS (W0F1084-BS1)				Prepared & A	nalyzed: 06/	17/20				
Nitrate as N	2090	110	ug/l	2000	•	104	90-110			
Matrix Spike (W0F1084-MS1)	Source: 0F08011-01		Pre	pared: 06/17/2	0 Analyzed:	06/18/20	)			
Nitrate as N	23700	1100	ug/l	20000	4050	98	84-115			
Matrix Spike (W0F1084-MS2)	Source: 0F08011-03		Pre	pared: 06/17/2	0 Analyzed:	06/18/20	)			
Nitrate as N	21000	1100	ug/l	20000	786	101	84-115			
Matrix Spike Dup (W0F1084-MSD1)	Source: 0F08011-01		Pre	pared: 06/17/2	0 Analyzed:	06/18/20	)			
Nitrate as N	23800	1100	ug/l	20000	4050	99	84-115	0.5	20	
Matrix Spike Dup (W0F1084-MSD2)	Source: 0F08011-03		Pre	pared: 06/17/2	0 Analyzed:	06/18/20	)			
Nitrate as N		1100	ug/l	20000	786	100	84-115	0.6	20	
	-									

#### **Quality Control Results**

AVA										
Conventional Chemistry/Physical Parameters	by APHA/EPA/ASTM Met	hods								
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
atch: W0F1129 - EPA 365.3										
Blank (W0F1129-BLK1)				Prepared & A	nalyzed: 06/1	7/20				
o-Phosphate as P	ND	0.010	mg/l							
LCS (W0F1129-BS1)				Prepared & A	nalyzed: 06/1	7/20				
o-Phosphate as P	0.201	0.010	mg/l	0.200		100	88-111			
Matrix Spike (W0F1129-MS1)	Source: 0F17031	31-01 Prepared & Analyzed: 06/17/20								
o-Phosphate as P	0.207	0.010	mg/l	0.200	0.00500	101	85-112			
Matrix Spike Dup (W0F1129-MSD1)	Source: 0F17031	-01		Prepared & A	nalyzed: 06/1	7/20				
o-Phosphate as P	0.206	0.010	mg/l	0.200	0.00500	100	85-112	0.5	20	
atch: W0F1138 - EPA 353.2										
Blank (W0F1138-BLK1)			Pre	pared: 06/17/2	20 Analyzed:	06/18/20	)			
NO2+NO3 as N	ND	200	ug/l		•					
LCS (W0F1138-BS1)	Prepared: 06/17/20 Analyzed: 06/18/20									
NO2+NO3 as N	960	200	ug/l	1000		96	90-110			
Matrix Spike (W0F1138-MS1)	Source: 0E29004	-01	Pre	pared: 06/17/2	20 Analyzed:	06/18/20	)			
NO2+NO3 as N	2010	200	ug/l	2000	ND	100	90-110			
Matrix Spike (W0F1138-MS2)	Source: 0F01006	Pre	)							
NO2+NO3 as N	3190	200	ug/l	2000	1220	98	90-110			
Matrix Spike Dup (W0F1138-MSD1)	Source: 0E29004	-01	Pre	pared: 06/17/2	•					
NO2+NO3 as N	2010	200	ug/l	2000	ND	100	90-110	0	20	
Matrix Spike Dup (W0F1138-MSD2)	Source: 0F01006	-01RE1	Pre	pared: 06/17/2	20 Analyzed:	06/18/20	)			
NO2+NO3 as N	3190	200	ug/l	2000	1220	98	90-110	0	20	



**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010101

Project Manager: Michael P. Donavan

Reported:

06/29/2020 16:49

Quality

#### **Quality Control Results**

(Continued)

Conventional Chemistry/Physical Parameters	by APHA/EPA/ASTM Meth	ods (Continue	ed)							
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
atch: W0F1187 - SM 2540C										
Blank (W0F1187-BLK1)				Prepared & A	nalyzed: 06/1	8/20				
Total Dissolved Solids	ND	10	mg/l							
LCS (W0F1187-BS1)	Prepared & Analyzed: 06/18/20									
Total Dissolved Solids	828	10	mg/l	824		100	96-102			
Duplicate (W0F1187-DUP1)	Source: 0F01006-0	01		Prepared & A	nalyzed: 06/1	8/20				
Total Dissolved Solids	4760	10	mg/l		4680			2	10	
Duplicate (W0F1187-DUP2)	Source: 0F16039-0	01		Prepared & A	nalyzed: 06/1	8/20				
Total Dissolved Solids	36200	10	mg/l	•	36300			0.5	10	
atch: W0F1291 - EPA 351.2										
Blank (W0F1291-BLK1)			Pre	pared: 06/19/2	0 Analyzed:	06/22/20	)			
TKN	ND	0.10	mg/l		•					
LCS (W0F1291-BS1)			Pre	pared: 06/19/2	0 Analyzed:	06/22/20	)			
TKN	0.979	0.10	mg/l	1.00		98	90-110			
Matrix Spike (W0F1291-MS1)	Source: 0F17081-09 Prepared: 06/19/20 Analyzed: 06/22/20									
TKN	1.19	0.10	mg/l	1.00	0.207	98	90-110			
Matrix Spike Dup (W0F1291-MSD1)	Source: 0F17081-0	09	Prepared: 06/19/20 Analyzed: 06/22/20							
TKN	1.17	0.10	mg/l	1.00	0.207	96	90-110	2	10	
atch: W0F1297 - EPA 351.2										
Blank (W0F1297-BLK1)			Pre	pared: 06/20/2	0 Analyzed:	06/24/20	)			
TKN	ND	0.10	mg/l		•					
LCS (W0F1297-BS1)	Prepared: 06/20/20 Analyzed: 06/24/20									
TKN	0.988	0.10	mg/l	1.00	•	99	90-110			
Matrix Spike (W0F1297-MS1)	Source: 0F17081-0	07	Pre	pared: 06/20/2	0 Analyzed:	06/24/20	)			
TKN	1.23	0.10	mg/l	1.00	0.214	102	90-110			
Matrix Spike Dup (W0F1297-MSD1)	Source: 0F17081-0	07	Pre	pared: 06/20/2	0 Analyzed:	06/24/20	)			
TKN	1.24	0.10	mg/l	1.00	0.214	103		0.9	10	



**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010101

Project Manager: Michael P. Donavan

Reported:

06/29/2020 16:49



#### Notes and Definitions

%REC	Percent Recovery
Dil	Dilution
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.  The MRL is also known as Limit of Quantitation (LOQ)
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
RPD	Relative Percent Difference
Source	Sample that was matrix spiked or duplicated.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

Wack Lebs 14859 Clark Ave. GHZ Frdusty, CA 91745 EXAMPLE

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3 Hutton Couire Drive, Suite 200, Santa Ana, CA 92707 (714) 751-7373 FAX (714) 545-8883

Client Name/Address:			Prolect	Project/PO Number									Analysis Required	Required	-		
			2	) Stanlinger,					H	F	L		-				
PSOMAS 3 HUTTON CENTRE DRIVE, SUITE 200 SANTA ANA, CA 92707	5 200		ZKLE	2KLE010101	•			0.008		SMZ640C	boriteM.	nodelu			<u>/</u>	\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
Project Manager:			Phone	Phone Number:							∀d∃	celor					
MICHAEL P. DONOVAN			(714)	(714) 751-7373						AIN IH		eu pì		· · · · · ·			
Sampler: Jim Burton, Todd Bear			Fax Nu	Fax Number: 714,545.8883	8883				998 P	sbleį):	CON		. ,	<b></b>	-	····	
Sample Description	Sample	Container Type	# of Cont.	Sampling Date	le Time	<b> </b>	Preservation		Metho	letoT	363.2 NO2+		<del></del>			Special Instructions	Cfig Child
BC-NF-1	water	60 ml Poly	Ļ	10/14/20	5 8:00c	20	Nane	×									
	water	250 mt Poly	-	,			None		×							Filtered with 0.45µ	굸
11	water	500 ml Poly	-				None			×							
	water	250 ml Poly	-				H2SO4			X	×	×					
3C-10/w-12	water	60 ml Poly	1	06/11/0/20	0 7:15a	50	None	×									1
11	water	260 ml Poly	-	, 1			None		×				_		_	Filtered with 0.45µ	곮
	water	500 ml Poly	-				None			×							
1	water	250 mi Poly	-				H2SO4			×	×	×					
BC-61W- PH2	water	60 ml Poly	-	06/11/1/19		4,304	None	×					-				
11	water	250 ml Poly		` `	4		None		×	_						Filtered with 0.45µ	곮
16	water	500 ml Poly	<b>~</b> -				None			×							
11	water	250 ml Poly	1	, ,	_		H2804			×	×	×					
ると- 61~- 9743	wafer	60 ml Poly	1	06/01/19	on:a c	ر م	None	×									
1,4	water	250 ml Paly	-	,-			None		×		}					Filtered with 0.45 µ	곮
11	water	500 ml Poly	-				None			×	_						
11	water	250 ml Poly	-	,	-		H2\$04			~	×	×					
BC-61W-PHY	water	60 ml Poly	-	10/14/20	1.55	8	None	×		_							
1	water	250 ml Paly	-	, ,			None		×							Filtered with 0.45µ	곮
1 1	water	500 ml Paly	-				None			×							
2	water	260 mi Poly	+	_	_		H2S04			×	×	×					
Relinguished By	19	_	3	Received by:							Dafe	Date /Time		Turnaroun Same Day	Turnaround Time. Same Day	_ I	
Refinquished By: Follows	<u>.</u> و	<u> 277</u>									Date	Date Firms	~	24 Hours 48 Hours	S 8	5 Days Normel	IJ
Relinquished By:		Date /Time.		Received in Lab by	S G G						Date	Date (Time:		Sample	Sample Integrity:	(Check)	

1804170

# **EXAMPLE**

3 Hutton Centre Drive, Suite 200, Santa Ana, CA 92707 (714) 751-7573 FAX (714) 545-883

				i										
Client Name/Address;			Project	Project/PO Number:				ŀ	ŀ			Analysis Required	edniuea	\
PSOMAS 3 HUTTON CENTRE DRIVE, SUITE 200 SANTA ANA, CA 92707	E 200		ZKLE(	2KLE010101			0.0081		UPA ESV	borheM /	noitslu			
Project Manager:			Phone	Phone Number:						∀а∋	ojeo			
MICHAEL P. DONOVAN			(714)	(714) 751-7373					div ide		Aq uəf			
Sampler: Jim Burton, Todd Bear			Fax Nu	Fax Number: 714.545.8883	83			98 bo	Kjejq	FON-				
Sample Description	Sample	Container Type	Cont #	Sempling Date	Time	Preservation		Metho	[stoT	Metho 353.2				Special Instructions
RC- 61w- PHS	water	60 ml Poly		2/1/2	3.35	O None	×	-						
BC - 11/2 - 11/5	water	250 ml Poly	τ-	, 1,		L		×						Filtered with 0.45 µ
8( - bl PHS	water	500 ml Poly	1			None			×					
BC-61W-PHS	wafer	250 ml Poly	ļ .	, ,	-	H2SO4			×	×	×			
BC-61~- PH6	water	60 ml Poly	-	06/11/19	1.000	Nane	×	_						
BC-61- PHC	water	250 ml Poly	1	, ,	1	None		×						Filtered with 0.45 µ
BC-612- PIFL	water	500 ml Poly	+			Nane			×					
8c- 61w- PHC	water	250 ml Poly	-	1	1	H2SO4			$\stackrel{\times}{\parallel}$	×	×			
	water	60 ml Poly	,			Nane	×							
	water	250 ml Poly	-			Nane		×						Fillered with 0.45µ
	water	500 ml Poly	-			Nane		-	×	-		-		
	water	250 ml Poly	+			HZSO4			Ň	×	×			
	water	60 ml Poly	-			Nane	×			-				
	water	250 mt Poly	+			None		×						Fillered with 0.45µ
	water	500 ml Poly	-			None		1	×	_				
	water	250 ml Poly	~			H2S04			$\stackrel{\times}{\dashv}$	X	×			
	water	60 ml Poly	-			None	×	1						
	water	250 ml Paly	-			Nane		×	$\dashv$					Filtered with 0.45µ
	water	500 mt Poly	1			None			×	_				
	wafer	250 mt Poly	-			H2SO4			×	$\neg$	×			
Relinguished By:	Car	Date /Time.	1.30/	Received by:	-					Date	Date /Time:		Turnaround Time: Same Day	~ ı
Refinquished By:		Sate /Time:	١,	Received						CO.	Date /Time:		24 Hours 48 Hours	5 Days Normal X
Refinquished By:		Date (Time:		Received in Lab by	 *					Date	Date /Time:		Sample Integrity:	(Check) On toe
					The state of the s	thanks.	***************************************	i de la constanta de la consta					7 27 2	Tosa



**FINAL REPORT** 

**Work Orders:** 0F18018 **Report Date:** 6/29/2020

**Received Date:** 6/18/2020

Turnaround Time: Normal

**Phones:** (714) 751-7373

Fax: (714) 545-8883

P.O. #:

**Billing Code:** 

Attn: Michael P. Donavan

Project: 2KLE010101

Client: Psomas - Santa Ana, CA

3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

## ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015 • NV-DEP #NAC 445A • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

Dear Michael P. Donavan,

Enclosed are the results of analyses for samples received 6/18/20 with the Chain-of-Custody document. The samples were received in good condition, at 7.8 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

Reviewed by:

Chris Samatmanakit Project Manager

1: State











FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010101

Project Manager: Michael P. Donavan

Reported:

06/29/2020 16:53



Sample Name	Sampled By	Lab ID	Matrix	Sampled	Qualifiers
LS-DP-8	Jim Burton, Todd Bear	0F18018-01	Water	06/17/20 09:00	
LS-DP-15	Jim Burton, Todd Bear	0F18018-02	Water	06/17/20 09:30	

0F18018 Page 2 of 6



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010101

Project Manager: Michael P. Donavan

Reported:

06/29/2020 16:53

## Sample Results

Campic results							
Sample: LS-DP-8				Sampled	d: 06/17/	/20 9:00 by Jim Burto	n, Todd Bea
0F18018-01 (Water)							
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifi
nions by IC, EPA Method 300.0							
Method: EPA 300.0	Batch ID: W0F1161	Instr: LC12	Prepared: 06	5/18/20 12:03		Analyst: jna	
Nitrate as N		ND	110	ug/l	1	06/19/20 00:34	
onventional Chemistry/Physical Parameters	s by APHA/EPA/ASTM Methods						
Method: [CALC]	Batch ID: [CALC]	Instr: [CALC]	Prepared: 06	5/24/20 17:54		Analyst: ymt	
Nitrogen, Total		ND	0.30	mg/l	1	06/26/20	
Method: EPA 351.2	Batch ID: W0F1522	Instr: AA06	Prepared: 06	5/24/20 17:54		Analyst: ymt	
TKN		ND	0.10	mg/l	1	06/26/20	
Method: EPA 353.2	Batch ID: W0F1138	Instr: AA01	Prepared: 06	5/17/20 14:36		Analyst: sar	
		ND	200	ug/l	1	06/18/20	
NO2+NO3 as N			Propared: 06	5/18/20 13:32		Analyst: sbn	
NO2+NO3 as N	Batch ID: W0F1218	Instr: UVVIS04	riepaieu.	7 10/20 13.32			
	Batch ID: W0F1218	Instr: UVVIS04	0.010	mg/l	1	06/18/20 14:29	
Method: EPA 365.3	Batch ID: W0F1218  Batch ID: W0F1331		•	mg/l	1	•	
Method: EPA 365.3 o-Phosphate as P  Method: SM 2540C Total Dissolved Solids		ND	0.010	mg/l 5/22/20 10:24 mg/l	1	06/18/20 14:29 <b>Analyst:</b> blg 06/23/20	
Method: EPA 365.3 o-Phosphate as P  Method: SM 2540C Total Dissolved Solids  Sample: LS-DP-15 0F18018-02 (Water)		Instr: OVEN0116	0.010 <b>Prepared:</b> 06 10	mg/l 5/22/20 10:24 mg/l Samplec	1 d: 06/17/	06/18/20 14:29 <b>Analyst:</b> blg 06/23/20  /20 9:30 by Jim Burto	
Method: EPA 365.3 o-Phosphate as P  Method: SM 2540C Total Dissolved Solids  Sample: LS-DP-15 OF18018-02 (Water)  Analyte		Instr: OVEN01	0.010 <b>Prepared:</b> 06	mg/l 5/22/20 10:24 mg/l	1	06/18/20 14:29 <b>Analyst:</b> blg 06/23/20	
Method: EPA 365.3 o-Phosphate as P  Method: SM 2540C Total Dissolved Solids  Sample: LS-DP-15 OF18018-02 (Water)  Analyte		Instr: OVEN0116	0.010 <b>Prepared:</b> 06 10	mg/l 5/22/20 10:24 mg/l Sampled	1 d: 06/17/	06/18/20 14:29 <b>Analyst:</b> blg 06/23/20  /20 9:30 by Jim Burto	n, Todd Be Qualifi
Method: EPA 365.3 o-Phosphate as P  Method: SM 2540C Total Dissolved Solids  Sample: LS-DP-15 OF18018-02 (Water)  Analyte Inions by IC, EPA Method 300.0  Method: EPA 300.0		Instr: OVEN01  Result  Instr: LC12	0.010 Prepared: 06 10  MRL  Prepared: 06	mg/l 5/22/20 10:24 mg/l Sampled Units 5/18/20 12:03	1 d: 06/17/ <b>Dil</b>	06/18/20 14:29  Analyst: blg 06/23/20  /20 9:30 by Jim Burto  Analyzed  Analyst: jna	
Method: EPA 365.3 o-Phosphate as P  Method: SM 2540C Total Dissolved Solids  Sample: LS-DP-15 OF18018-02 (Water)  Analyte nions by IC, EPA Method 300.0	Batch ID: W0F1331	Instr: OVEN01 16 Result	0.010  Prepared: 06 10  MRL	mg/l 5/22/20 10:24 mg/l Sampled Units	1 d: 06/17/	06/18/20 14:29  Analyst: blg	
Method: EPA 365.3 o-Phosphate as P  Method: SM 2540C Total Dissolved Solids  Sample: LS-DP-15 OF18018-02 (Water)  Analyte nions by IC, EPA Method 300.0  Method: EPA 300.0 Nitrate as N	Batch ID: W0F1331  Batch ID: W0F1161	Instr: LC12	0.010 Prepared: 06 10  MRL  Prepared: 06	mg/l 5/22/20 10:24 mg/l Sampled Units 5/18/20 12:03	1 d: 06/17/ <b>Dil</b>	06/18/20 14:29  Analyst: blg 06/23/20  /20 9:30 by Jim Burto  Analyzed  Analyst: jna	
Method: EPA 365.3 o-Phosphate as P  Method: SM 2540C Total Dissolved Solids  Sample: LS-DP-15 OF18018-02 (Water)  Analyte nions by IC, EPA Method 300.0  Method: EPA 300.0 Nitrate as N	Batch ID: W0F1331  Batch ID: W0F1161	Instr: LC12	0.010  Prepared: 06 10  MRL  Prepared: 06 110	mg/l 5/22/20 10:24 mg/l Sampled Units 5/18/20 12:03	1 d: 06/17/ <b>Dil</b>	06/18/20 14:29  Analyst: blg 06/23/20  /20 9:30 by Jim Burto  Analyzed  Analyst: jna	
Method: EPA 365.3 o-Phosphate as P  Method: SM 2540C Total Dissolved Solids  Sample: LS-DP-15 OF18018-02 (Water)  Analyte mions by IC, EPA Method 300.0  Method: EPA 300.0 Nitrate as N  onventional Chemistry/Physical Parameters	Batch ID: W0F1331  Batch ID: W0F1161  s by APHA/EPA/ASTM Methods	Instr: OVEN01  Result  Instr: LC12	0.010  Prepared: 06 10  MRL  Prepared: 06 110	mg/l 5/22/20 10:24 mg/l Sampled Units 5/18/20 12:03 ug/l	1 d: 06/17/ <b>Dil</b>	06/18/20 14:29  Analyst: blg 06/23/20  /20 9:30 by Jim Burto  Analyzed  Analyst: jna 06/19/20 00:52	
Method: EPA 365.3 o-Phosphate as P  Method: SM 2540C Total Dissolved Solids  Sample: LS-DP-15 OF18018-02 (Water)  Analyte nions by IC, EPA Method 300.0  Method: EPA 300.0 Nitrate as N  onventional Chemistry/Physical Parameters Method: [CALC]	Batch ID: W0F1331  Batch ID: W0F1161  s by APHA/EPA/ASTM Methods	Instr: OVEN01  Result  Instr: LC12  ND  Instr: [CALC]	0.010  Prepared: 06 10  MRL  Prepared: 06 110  Prepared: 06 0.30	mg/l 5/22/20 10:24 mg/l Sampled Units 5/18/20 12:03 ug/l	1 d: 06/17/ <b>Dil</b>	06/18/20 14:29  Analyst: blg 06/23/20  /20 9:30 by Jim Burto  Analyzed  Analyst: jna 06/19/20 00:52  Analyst: ymt	
Method: EPA 365.3 o-Phosphate as P  Method: SM 2540C Total Dissolved Solids  Sample: LS-DP-15	Batch ID: W0F1331  Batch ID: W0F1161  s by APHA/EPA/ASTM Methods Batch ID: [CALC]	Instr: OVEN01  Result  Instr: LC12  ND  Instr: [CALC]  0.30	0.010  Prepared: 06 10  MRL  Prepared: 06 110  Prepared: 06 0.30	mg/l 6/22/20 10:24 mg/l Sampled Units 6/18/20 12:03 ug/l 6/24/20 17:54 mg/l	1 d: 06/17/ <b>Dil</b>	06/18/20 14:29  Analyst: blg 06/23/20  /20 9:30 by Jim Burto  Analyzed  Analyst: jna 06/19/20 00:52  Analyst: ymt 06/26/20	
Method: EPA 365.3 o-Phosphate as P  Method: SM 2540C Total Dissolved Solids  Sample: LS-DP-15 OF18018-02 (Water)  Analyte nions by IC, EPA Method 300.0  Method: EPA 300.0 Nitrate as N  onventional Chemistry/Physical Parameters Method: [CALC] Nitrogen, Total  Method: EPA 351.2	Batch ID: W0F1331  Batch ID: W0F1161  s by APHA/EPA/ASTM Methods Batch ID: [CALC]	Instr: OVEN01  Result  Instr: LC12  ND  Instr: [CALC]  0.30  Instr: AA06	0.010  Prepared: 06 10  MRL  Prepared: 06 110  Prepared: 06 0.30  Prepared: 06	mg/l 5/22/20 10:24 mg/l Sampled Units 5/18/20 12:03 ug/l 5/24/20 17:54 mg/l 6/24/20 17:54 mg/l	1 d: 06/17/ Dil 1	06/18/20 14:29  Analyst: blg 06/23/20  /20 9:30 by Jim Burto  Analyzed  Analyst: jna 06/19/20 00:52  Analyst: ymt 06/26/20  Analyst: ymt	
Method: EPA 365.3 o-Phosphate as P  Method: SM 2540C Total Dissolved Solids  Sample: LS-DP-15 OF18018-02 (Water)  Analyte nions by IC, EPA Method 300.0  Method: EPA 300.0 Nitrate as N  onventional Chemistry/Physical Parameters Method: [CALC] Nitrogen, Total  Method: EPA 351.2 TKN	Batch ID: W0F1331  Batch ID: W0F1161  s by APHA/EPA/ASTM Methods Batch ID: [CALC]  Batch ID: W0F1522	Instr: OVEN01  Result  Instr: LC12  ND  Instr: [CALC]  0.30  Instr: AA06  0.30	0.010  Prepared: 06 10  MRL  Prepared: 06 110  Prepared: 06 0.30  Prepared: 06 0.10	mg/l 5/22/20 10:24 mg/l Sampled Units 5/18/20 12:03 ug/l 5/24/20 17:54 mg/l 6/24/20 17:54 mg/l	1 d: 06/17/ Dil 1	06/18/20 14:29  Analyst: blg 06/23/20  /20 9:30 by Jim Burto  Analyzed  Analyst: jna 06/19/20 00:52  Analyst: ymt 06/26/20  Analyst: ymt 06/26/20	
Method: EPA 365.3 o-Phosphate as P  Method: SM 2540C Total Dissolved Solids  Sample: LS-DP-15	Batch ID: W0F1331  Batch ID: W0F1161  s by APHA/EPA/ASTM Methods Batch ID: [CALC]  Batch ID: W0F1522	Instr: OVEN01  Result  Instr: LC12  ND  Instr: [CALC]  0.30  Instr: AA06  0.30  Instr: AA01	0.010  Prepared: 06 10  MRL  Prepared: 06 110  Prepared: 06 0.30  Prepared: 06 0.10  Prepared: 06 200	mg/l 5/22/20 10:24 mg/l Sampled Units 5/18/20 12:03 ug/l 5/24/20 17:54 mg/l 5/24/20 17:54 mg/l	1 d: 06/17/  Dil   1	06/18/20 14:29  Analyst: blg 06/23/20  /20 9:30 by Jim Burto  Analyzed  Analyst: jna 06/19/20 00:52  Analyst: ymt 06/26/20  Analyst: ymt 06/26/20  Analyst: aa01	
Method: EPA 365.3 o-Phosphate as P  Method: SM 2540C Total Dissolved Solids  Sample: LS-DP-15	Batch ID: W0F1331  Batch ID: W0F1161  s by APHA/EPA/ASTM Methods Batch ID: [CALC]  Batch ID: W0F1522  Batch ID: W0F1346	Instr: OVEN01  Result  Instr: LC12  ND  Instr: [CALC]  0.30  Instr: AA06  0.30  Instr: AA01  ND	0.010  Prepared: 06 10  MRL  Prepared: 06 110  Prepared: 06 0.30  Prepared: 06 0.10  Prepared: 06 200	mg/l 6/22/20 10:24 mg/l Sampled Units 6/18/20 12:03 ug/l 6/24/20 17:54 mg/l 6/24/20 17:54 mg/l 6/22/20 12:27 ug/l	1 d: 06/17/  Dil   1	06/18/20 14:29  Analyst: blg 06/23/20  /20 9:30 by Jim Burto  Analysed  Analyst: jna 06/19/20 00:52  Analyst: ymt 06/26/20  Analyst: ymt 06/26/20  Analyst: aa01 06/23/20	
Method: EPA 365.3 o-Phosphate as P  Method: SM 2540C Total Dissolved Solids  Sample: LS-DP-15 OF18018-02 (Water)  Analyte Inions by IC, EPA Method 300.0  Method: EPA 300.0 Nitrate as N  Conventional Chemistry/Physical Parameters Method: [CALC] Nitrogen, Total  Method: EPA 353.2 TKN  Method: EPA 365.3	Batch ID: W0F1331  Batch ID: W0F1161  s by APHA/EPA/ASTM Methods Batch ID: [CALC]  Batch ID: W0F1522  Batch ID: W0F1346	Instr: OVEN01  Instr: OVEN01  Result  Instr: LC12  ND  Instr: [CALC]  0.30  Instr: AA06  0.30  Instr: AA01  ND  Instr: UVVIS04	0.010  Prepared: 06 10  MRL  Prepared: 06 110  Prepared: 06 0.30  Prepared: 06 0.10  Prepared: 06 200  Prepared: 06 0.010	mg/l 5/22/20 10:24 mg/l Sampled Units 5/18/20 12:03 ug/l 5/24/20 17:54 mg/l 5/22/20 12:27 ug/l 5/18/20 13:32	1 d: 06/17/ Dil 1 1 1	06/18/20 14:29  Analyst: blg 06/23/20  /20 9:30 by Jim Burto  Analysed  Analyst: jna 06/19/20 00:52  Analyst: ymt 06/26/20  Analyst: ymt 06/26/20  Analyst: aa01 06/23/20  Analyst: sbn	



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

LCS (W0F1331-BS1)

0F18018

Project Number: 2KLE010101

Project Manager: Michael P. Donavan

Reported:

Page 4 of 6

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Canta Ana, OA 32101	1 Toje	ot manager.	Michael	. Donavan						
Quality Control Res	ults									
Anions by IC, EPA Method 300.0										
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W0F1161 - EPA 300.0										
Blank (W0F1161-BLK1)				Prepared & A	nalyzed: 06/	18/20				
Nitrate as N	ND	110	ug/l							
LCS (W0F1161-BS1)				Prepared & A	nalyzed: 06/	18/20				
Nitrate as N	2080	110	ug/l	2000		104	90-110			
Matrix Spike (W0F1161-MS1)	Source: 0F18018-0	01	Pre	pared: 06/18/2	0 Analyzed:	06/19/20	0			
Nitrate as N	20000	1100	ug/l	20000	ND	100	84-115			
Matrix Spike Dup (W0F1161-MSD1)	Source: 0F18018-0	01	Pre	pared: 06/18/2	0 Analyzed:	06/19/20	0			
Nitrate as N	20300	1100	ug/l	20000	ND	102	84-115	1	20	
Quality Control Res	ults									
Conventional Chemistry/Physical Parameters	by APHA/EPA/ASTM Metho	ods								
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W0F1138 - EPA 353.2										
Blank (W0F1138-BLK1)			Pre	pared: 06/17/2	0 Analyzed:	06/18/20	0			
NO2+NO3 as N	ND	200	ug/l							
LCS (W0F1138-BS1)			Pre	pared: 06/17/2	0 Analyzed:	06/18/2	0			
NO2+NO3 as N	960	200	ug/l	1000		96	90-110			
Matrix Spike (W0F1138-MS1)	Source: 0E29004-0	01	Pre	pared: 06/17/2	0 Analyzed:	06/18/20	0			
NO2+NO3 as N	2010	200	ug/l	2000	ND	100	90-110			
Matrix Spike (W0F1138-MS2)	Source: 0F01006-0	D1RE1	Pre	pared: 06/17/2	0 Analyzed:	06/18/20	0			
NO2+NO3 as N	3190	200	ug/l	2000	1220	98	90-110			
Matrix Spike Dup (W0F1138-MSD1)	Source: 0E29004-0	01	Pre	pared: 06/17/2	0 Analyzed:	06/18/20	0			
NO2+NO3 as N	2010	200	ug/l	2000	ND	100	90-110	0	20	
Matrix Spike Dup (W0F1138-MSD2)	Source: 0F01006-0	11051	Dro	pared: 06/17/2	O Analyzod	06/19/20	0			
NO2+NO3 as N		200	ug/l	2000	1220	98	90-110	0	20	
Batch: W0F1218 - EPA 365.3										
						10/00				
Blank (W0F1218-BLK1) o-Phosphate as P	ND	0.010	mg/l	Prepared & A	nalyzed: 06/	18/20				
·										
LCS (W0F1218-BS1) o-Phosphate as P	0.192	0.010	mg/l	Prepared & A 0.200	nalyzed: 06/	<b>18/20</b> 96	88-111			
on nospilate as i	0.102	0.010	mg/i	0.200		30	00-111			
Matrix Spike (W0F1218-MS1)	Source: 0F18018-0		m a /l	Prepared & A	-		0E 110			
o-Phosphate as P	0.196	0.010	mg/l	0.200	ND	98	85-112			
Matrix Spike Dup (W0F1218-MSD1)	Source: 0F18018-0			Prepared & A	-		05		0.0	
o-Phosphate as P	0.202	0.010	mg/l	0.200	ND	101	85-112	3	20	
Batch: W0F1331 - SM 2540C										
Blank (W0F1331-BLK1)			Pre	pared: 06/22/2	0 Analyzed:	06/23/20	0			
Total Dissolved Solids	ND	10	mg/l							

Prepared: 06/22/20 Analyzed: 06/23/20



**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010101

Project Manager: Michael P. Donavan

Reported:

06/29/2020 16:53

Quality Control Results

	by APHA/EPA/ASTM Meth	·	,	C	C		0/ DEC		DDD	
Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifie
atch: W0F1331 - SM 2540C (Continued)	Result	IVIXE	Omts	Level	Result	JUNE	Lillits	KI D	Lilling	Quanne
LCS (W0F1331-BS1) Total Dissolved Solids	808	10	•	oared: 06/22/2 824	0 Analyzed:	: <b>06/23/20</b> 98	96-102			
Total Dissolved Solids		10	mg/l	024		90	90-102			
Duplicate (W0F1331-DUP1)	Source: 0F17012-		Prep	oared: 06/22/2	•	06/23/20	)			
Total Dissolved Solids	16900	10	mg/l		16300			3	10	
atch: W0F1346 - EPA 353.2										
Blank (W0F1346-BLK1)			Prep	oared: 06/22/2	0 Analyzed:	06/23/20	)			
NO2+NO3 as N	ND	50	ug/l							
LCS (W0F1346-BS1)			Pres	pared: 06/22/2	0 Analyzed:	: 06/23/20				
NO2+NO3 as N	991	50	ug/l	1000		99	90-110			
	5 0510017	••		1 06/00/0		06 (00 (00				
Matrix Spike (W0F1346-MS1) NO2+NO3 as N	Source: 0F19017-	<b>02</b> 50	ug/l	pared: 06/22/2 2000	V Analyzed: 7900		90-110			
1102-1100 40 11	0010	00	ug/i	2000	7000	102	00 110			
Matrix Spike (W0F1346-MS2)	Source: 0F22026-		-	oared: 06/22/2	-					
NO2+NO3 as N	5550	50	ug/l	2000	3590	98	90-110			
Matrix Spike Dup (W0F1346-MSD1)	Source: 0F19017-	02	Prep	oared: 06/22/2	0 Analyzed:	06/23/20	)			
NO2+NO3 as N	9940	50	ug/l	2000	7900	102	90-110	0	20	
Matrix Spike Dup (W0F1346-MSD2)	Source: 0F22026-	01	Pres	pared: 06/22/2	0 Analyzed:	: 06/23/20	)			
NO2+NO3 as N	5540	50	ug/l	2000	3590	98	90-110	0.2	20	
atch: W0F1522 - EPA 351.2										
Blank (W0F1522-BLK1)			Pres	pared: 06/24/2	0 Analyzed:	: 06/26/20	)			
TKN	ND	0.10	mg/l		•					
Blank (W0F1522-BLK2)			Dror	pared: 06/24/2	0 Analyzad	06/26/20	•			
TKN	ND	0.10	mg/l	Jareu. 00/24/2	o Allalyzeu.	. 00/20/20	,			
LCS (W0F1522-BS1) TKN	0.982	0.10	mg/l	oared: 06/24/2 1.00	0 Analyzed:	98	90-110			
1144	0.502	0.10	mg/i	1.00		30	30-110			
LCS (W0F1522-BS2)			-	oared: 06/24/2	0 Analyzed:					
TKN	0.952	0.10	mg/l	1.00		95	90-110			
Matrix Spike (W0F1522-MS1)	Source: 0F17081-	01	Prep	oared: 06/24/2	0 Analyzed:	06/26/20	)			
TKN	1.25	0.10	mg/l	1.00	0.181	107	90-110			
Matrix Spike (W0F1522-MS2)	Source: 0F17081-	02	Pres	pared: 06/24/2	0 Analyzed:	: 06/26/20	)			
TKN		0.10	mg/l	1.00	0.225	99	90-110			
Matrix Spike Dup (W0F1522-MSD1)	Source: 0F17081-	01	Pror	pared: 06/24/2	0 Analyzed	06/26/20	)			
TKN	1.23	0.10	mg/l	1.00	0.181	105	90-110	1	10	
	<u> </u>		-							
Matrix Spike Dup (W0F1522-MSD2)	<b>Source: 0F17081</b> -	<b>02</b> 0.10	Prep mg/l	oared: 06/24/2 1.00	0 Analyzed: 0.225	: <b>06/26/20</b> 96	90-110	2	10	



**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010101

Project Manager: Michael P. Donavan

Reported:

06/29/2020 16:53



## Notes and Definitions

%REC	Percent Recovery
Dil	Dilution
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ)
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
RPD	Relative Percent Difference
Source	Sample that was matrix spiked or duplicated.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

Weck Labs 14859 Clark Ave. City & Industry, CA

EXAMPLE

T d

3 Eduton Contre Drive, Suile 200, Santa Aun, CA 92707 (714) 751-7373 FAX (714) 545-8883

Land on some

Client Name/Address:		P.	Project/PO Number:	1				-				Analysis	Analysis Required		
PSOMAS 3 HUTTON CENTRE DRIVE, SUITE 200 SANTA ANA, CA 92707	UITE 200		2KLE010101	<del></del>			0.008		SM2540C	bortieM	uogeln			· ·	·
Project Manager:		Ph	Phone Number:	L						∀ď∃	ලාලා				
MICHAEL P. DONOVAN		(2)	(714) 751-7373	373					diN Me		leu pì				
Sampler: Jtm Burton, Todd Bear		Fer	(Number: 7	Fax Number: 714,545,8883	ez.			9£ pc	Kjelda	EON.					
Sample Description	Sample	Container Type	#of Sam	Sampling Date	Time	Preservation		oriteM	listoT	Metho 353.2 353.2				<del></del>	Special Instructions
.5-DP-8	water	60 ml Poly	3	3 20	9:00a	Nane	┿		╀						
	water	260 ml Poly			_	None		×							Filtered with 0.45µ
	water	ml Poly	~			None			×						
1	water		1	₽Ī	4	H2S04			×	×	×		-		
15-pp- 15	water		10	7/20	91300	None	×								
	water				1	None		×							Filtered with 0.45µ
	water	500 ml Poly	1		_	None			×						
-1	water		-	7	4	H2S04			×	×	×				
	water	60 ml Poly				None	×			_				-	
	wafer	250 mi Poly	1			None		×		_			-		Filtered with 0,45 µ
	water	500 ml Poly	_			None			×						
	water	250 ml Poly	1			H2S04			×	×	×				
	water	60 ml Poly	-			None	×		$\dashv$	_					
	water	250 ml Poly	_			None		×			_			-	Filtered with 0.45 µ
	water	500 ml Poly	_			None			×	_			_	-	
	water	250 ml Paly				H2S04			×	×	×			1	
	water	60 ml Poly	_			None	×		-	_				-	
	water	250 mi Poly	_			None		×	-	_				-	Filtered with 0.45µ
	water	500 ml Poly	_			None			×	_	_			$\dashv$	
	water	250 ml Poly	_	:		H2SO4			×		×				
Relinquished By:	1/01	/pate /Time: /2:10 p		Received by:	"					Date	Date /Time:		Turnaround Same Day	Turnaround Time: Same Day	(Check) 72 Hours
Relinquished By: Tey Dy	0//	Softe (Time:	_	Received by	7					Date	Date/Lime;	2	24 Hours 48 Hours	urs urs	5 Days Normal X
Refinguished By:			Dood							1	100		Ļ		

Tousy I.e.



FINAL REPORT

Analyst: ism

07/31/20

Work Orders: 0G29029 Report Date: 8/06/2020

**Received Date:** 7/29/2020

Turnaround Time: Normal

**Phones:** (714) 751-7373

Fax: (714) 545-8883

P.O. #:

**Billing Code:** 

Project: 2KLE010102

Attn: Michael P. Donovan

Client: Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200

Santa Ana, CA 92707

#### Dear Michael P. Donovan,

**Batch ID: W0G1659** 

**Total Dissolved Solids** 

Sample Results

Enclosed are the results of analyses for samples received 7/29/20 with the Chain-of-Custody document. The samples were received in good condition, at 4.0 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

Sample:	SL-DP-54			Sample	ed: 07/28/2	20 10:05 by Jim Burt	on, Todd Beai
	0G29029-01 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifie
Method: [CA	LC]		Instr: [CALC]				
Batch ID: [0	CALC]	Preparation: [CALC]	Prepared: 07/	31/20 16:03			Analyst: YM7
Nitrogen, 1	Total	5.2	0.40	mg/l	2	08/04/20	
Method: EPA	300.0		Instr: LC12				
Batch ID: V	V0G1515	Preparation: _NONE (LC)	Prepared: 07/	29/20 09:45			Analyst: jna
Nitrate as I	N	ND	110	ug/l	1	07/29/20 19:59	
Method: EPA	353.2		Instr: AA01				
Batch ID: V	V0G1518	Preparation: _NONE (WETCHEM)	Prepared: 07/	29/20 09:47			Analyst: sa
NO2+NO3	as N	ND	200	ug/l	1	07/29/20	
Method: EPA	365.3		Instr: UVVIS04	1			
Batch ID: V	V0G1523	Preparation: _NONE (WETCHEM)	Prepared: 07/	29/20 10:29			Analyst: sbr
o-Phospha	ate as P	0.17	0.010	mg/l	1	07/29/20 16:03	
Method: SM	25400		Instr: OVFN01				

Sample: SL-DP-54 Sampled: 07/28/20 10:05 by Jim Burton, Todd Bear 0G29029-01RE1 (Water) Analyte MRL Units Analyzed Qualifier Method: EPA 351.2 Instr: AA06 Batch ID: W0G1676 Preparation: \_NONE (WETCHEM) Prepared: 07/31/20 16:03 Analyst: YMT 0.20 08/04/20 **TKN** 5.2 mg/l

1100

Prepared: 07/31/20 11:31

10

Preparation: \_NONE (WETCHEM)

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FINAL REPORT

Sample Results (Continued)

Sample:	SL-DP-4			Sample	ad: 07/28/	20 10:30 by Jim Burto	on Todd Rear
Sample.				Sample	eu. 07/20/2	20 10.30 by 3111 burt	Jii, iodd beai
	0G29029-02 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifier
Method: [CA	ALC]		Instr: [CALC]				
Batch ID: [	=	Preparation: [CALC]	Prepared: 07,	/31/20 16:03			Analyst: YMT
Nitrogen, 1	Total	ND	0.30	mg/l	1	08/04/20	
Method: EPA	A 300.0		Instr: LC12				
Batch ID: \	W0G1515	Preparation: _NONE (LC)	Prepared: 07,	/29/20 09:45			Analyst: jna
Nitrate as	N	ND	110	ug/l	1	07/29/20 20:53	
Method: EPA	A 353.2		Instr: AA01				
Batch ID: \	W0G1518	Preparation: _NONE (WETCHEM)	Prepared: 07,	/29/20 09:47			Analyst: sar
NO2+NO3	as N	ND	200	ug/l	1	07/29/20	
Method: EPA	A 365.3		Instr: UVVISO	4			
Batch ID: \	W0G1523	Preparation: _NONE (WETCHEM)	Prepared: 07,	/29/20 10:29			Analyst: sbn
o-Phospha	ate as P	ND	0.010	mg/l	1	07/29/20 16:07	
Method: SM	2540C		Instr: OVEN0	1			
Batch ID: \	W0G1659	Preparation: _NONE (WETCHEM)	Prepared: 07,	/31/20 11:31			Analyst: ism
Total Disso	olved Solids	ND	10	mg/l	1	07/31/20	
Sample:	SL-DP-4			Sample	ed: 07/28/2	20 10:30 by Jim Burto	on, Todd Bear
	0G29029-02RE1 (Water)				,	,	
Analyte	,	Result	MRL	Units	Dil	Analyzed	Qualifier
Method: EPA	A 351.2		Instr: AA06				
Batch ID: \	W0G1676	Preparation: _NONE (WETCHEM)	Prepared: 07,	/31/20 16:03			Analyst: YMT
TKN		ND	0.10	mg/l	1	08/04/20	-

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FINAL REPORT



Anions by IC, EPA Method 300.0										
				Spike	Source	~	%REC		RPD	
Analyte atch: W0G1515 - NONE (LC)	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
				D		/20				
Blank (W0G1515-BLK1)  Nitrate as N	ND	110	ug/l	Prepared & A	nalyzed: 07/29	/20				
	· · <del>-</del>		-9							
LCS (W0G1515-BS1)  Nitrate as N	2200	110	ug/l	2000	nalyzed: 07/29	110	90-110			
			~g/.				00			
Matrix Spike (W0G1515-MS1)  Nitrate as N	<b>Source: 0G200</b>	1100	ug/l	20000	nalyzed: 07/29 2290	104	84-115			
			3							
Matrix Spike (W0G1515-MS2) Nitrate as N	<b>Source: 0G200</b>	1100	ug/l	20000	nalyzed: 07/29 356	106	84-115			
	2.000		ug/i				01 110			
Matrix Spike Dup (W0G1515-MSD1)  Nitrate as N	Source: 0G200	1100	ug/l	Prepared & A 20000	nalyzed: 07/29 2290	/ <b>20</b> 104	84-115	0.04	20	
			ug/i				04-110	0.04	20	
Matrix Spike Dup (W0G1515-MSD2)  Nitrate as N	<b>Source: 0G200</b>	<b>1100</b>	ug/l	Prepared & A 20000	nalyzed: 07/29 356	/ <b>20</b> 106	84-115	0.05	20	
			ug/i	20000	330	100	04-113	0.03	20	
Conventional Chemistry/Physical Parameters	s by APHA/EPA/ASTM Met	thods								
Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifie
atch: W0G1518 - NONE (WETCHEM)	Kesuit	IVIKL	Units	Levei	Kesuit	%REC	Limits	KPD	Limit	Qualifie
				Duamanad & A	nalyzed: 07/29	/20				
Blank (W0G1518-BLK1) NO2+NO3 as N	ND	200	ug/l	Prepared & A	maryzeu. 07/29	/20				
LCC (NOC4F40, RC4)			J	Dunnanad 9: A		/20				
LCS (W0G1518-BS1) NO2+NO3 as N	1040	200	ug/l	1000	nalyzed: 07/29	104	90-110			
Mark 1: Call - (MOCATAD MCA)	C 0C201	104.00	Ü	D 1 0: A		/20				
Matrix Spike (W0G1518-MS1) NO2+NO3 as N	<b>Source: 0G28</b> 1	200	ug/l	2000	nalyzed: 07/29 ND	106	90-110			
			3							
Matrix Spike Dup (W0G1518-MSD1) NO2+NO3 as N	<b>Source: 0G28</b> 1	200	ug/l	Prepared & A 2000	nalyzed: 07/29 ND	105	90-110	0.5	20	
	2100	200	ug/i	2000	,,,,	100	00 110	0.0	20	
atch: W0G1523NONE (WETCHEM)										
Blank (W0G1523-BLK1)	ND	0.040	/I	Prepared & A	nalyzed: 07/29	/20				
o-Phosphate as P	ND	0.010	mg/l							
LCS (W0G1523-BS1)			_	=	nalyzed: 07/29					
o-Phosphate as P	0.191	0.010	mg/l	0.200		96	88-111			
Matrix Spike (W0G1523-MS1)	Source: 0G280			•	nalyzed: 07/29					
o-Phosphate as P	0.304	0.010	mg/l	0.200	0.104	100	85-112			
Matrix Spike Dup (W0G1523-MSD1)	Source: 0G280			=	nalyzed: 07/29					
o-Phosphate as P	0.302	0.010	mg/l	0.200	0.104	99	85-112	0.7	20	
atch: W0G1659 - NONE (WETCHEM)										
Blank (W0G1659-BLK1)				Prepared & A	nalyzed: 07/31	/20				
Total Dissolved Solids	ND	10	mg/l							
LCS (W0G1659-BS1)				Prepared & A	nalyzed: 07/31	/20				
Total Dissolved Solids	804	10	mg/l	824		98	96-102			
Duplicate (W0G1659-DUP1)	Source: 0G281	101-05		Prepared & A	nalyzed: 07/31	/20				
Total Dissolved Solids	2190	10	mg/l		2160			1	10	
Duplicate (W0G1659-DUP2)	Source: 0G281	110-01		Prepared & A	nalyzed: 07/31	/20				
Total Dissolved Solids	1710	10	mg/l	•	1760			3	10	

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FINAL REPORT

Quality Control Results

ALUM										
Conventional Chemistry/Physical Parameters	by APHA/EPA/ASTM Meth	ods (Continue	d)							
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
Batch: W0G1676NONE (WETCHEM)										
Blank (W0G1676-BLK1)			P	repared: 07/31/2	0 Analyzed: 0	8/04/20				
TKN	ND	0.10	mg/l							
Blank (W0G1676-BLK2)			P	repared: 07/31/2	0 Analyzed: 0	8/04/20				
TKN	ND	0.10	mg/l							
LCS (W0G1676-BS1)			P	repared: 07/31/2	0 Analyzed: 0	8/04/20				
TKN	0.926	0.10	mg/l	1.00		93	90-110			
LCS (W0G1676-BS2)			Р	repared: 07/31/2	20 Analyzed: 0	8/04/20				
TKN	0.911	0.10	mg/l	1.00		91	90-110			
Matrix Spike (W0G1676-MS1)	Source: 0G2707	5-01	P	repared: 07/31/2	0 Analyzed: 0	8/04/20				
TKN	1.24	0.10	mg/l	1.00	0.246	99	90-110			
Matrix Spike (W0G1676-MS2)	Source: 0G2707	5-02	P	repared: 07/31/2	20 Analyzed: 0	8/04/20				
TKN	1.26	0.10	mg/l	1.00	0.269	99	90-110			
Matrix Spike Dup (W0G1676-MSD1)	Source: 0G2707	5-01	P	repared: 07/31/2	20 Analyzed: 0	8/04/20				
TKN	1.24	0.10	mg/l	1.00	0.246	99	90-110	80.0	10	
Matrix Spike Dup (W0G1676-MSD2)	Source: 0G2707	5-02	P	repared: 07/31/2	0 Analyzed:	8/04/20				
TKN	1.33	0.10	mg/l	1.00	0.269	106	90-110	5	10	



**FINAL REPORT** 



#### **Notes and Definitions**

Item	Definition
%REC	Percent Recovery
Dil	Dilution
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ)
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
RPD	Relative Percent Difference
Source	Sample that was matrix spiked or duplicated.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

1: State

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

#### Reviewed by:

Chris Samatmanakit Project Manager









ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015 • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

0G29029 Page 5 of 5

Weck Laboratories 14859 Clark Avenue City of Industry, CA 91745 (626) 336-2139 CHAIN OF CUSTODY FORM

Page \_

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Special Instructions Filtered with 0.45 µ Filtered with 0.45µ Filtered with 0.45 µ Filtered with 0.45µ Filtered with 0.45 µ 72 Hours 5 Days Normal 
 Same Day
 72 Hours

 24 Hours
 5 Days

 48 Hours
 Normal

 Sample Integrity: (Check)
 on loe
 On be Turnaround Time: (Check) Intact Analysis Required 7 2000 me 0005 X X Date /Time: Total Mitrogen by calculation × NO2+NO3 as N - EPA Method × × × AGE Kjeldani Mitrogenby EPA × × × OPO4 EPA Methoc 365.3 × Come (many) × 0.005 borteM A93 V-etsrtiV Preservation H2S04 H2S04 H2SO4 H2SO4 H2804 None None None None None None None Nane None Nane None None None 10:05 Am None 10; 30 am None 花堂子 Time Fax Number: 714.545.8883 Received in Lab by: 7/33/20 Sampling Date 2 Received by: Received by: 28 Project/PO Number: (714) 328-5234 2KLE010102 Phone Number Cont. Container Type 250 ml Poly 500 ml Poly 250 ml Paly 250 ml Paly 250 ml Poty 500 ml Paly 250 ml Poly 250 ml Poly 500 ml Poly 500 ml Poly 500 ml Poly 250 ml Poly 250 ml Paly 250 ml Poly 250 ml Poly 60 ml Poly 7/22/20 1: 30 pm Date Time: Date /Time: MICHAEL P. DONOVAN (mpdonovn@cox.net) Sample Matrix water 3 HUTTON CENTRE DRIVE, SUITE 200 SANTA ANA, CA 92707 Frate Sample Description Sampler: Jim Burton, Todd Bea 51-0P-54 5L-DP-4 Clent Name/Address: Project Manager: Relinquished By: Relinquished By: **PSOMAS** 

4.0°C 70234



FINAL REPORT

Work Orders: 0G30036 Report Date: 8/06/2020

**Received Date:** 7/29/2020

Project: 2KLE010102 Turnaround Time: Normal

Phones: (714) 751-7373

Fax: (714) 545-8883

P.O. #:

**Billing Code:** 

Attn: Michael P. Donovan

Client: Psomas - Santa Ana, CA

3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

#### Dear Michael P. Donovan,

Enclosed are the results of analyses for samples received 7/29/20 with the Chain-of-Custody document. The samples were received in good condition, at 13.7 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

## Sample Results

Sample:	LS-DP-16			Sample	ed: 07/29/2	20 10:55 by Jim Burt	on, Todd Bea
	0G30036-01 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifie
Method: [C/	ALC]		Instr: [CALC]				
Batch ID:	[CALC]	Preparation: [CALC]	Prepared: 07/	/31/20 16:03			Analyst: YM
Nitrogen,	Total	ND	0.30	mg/l	1	08/04/20	
Method: EP.	A 300.0		Instr: LC12				
Batch ID:	W0G1577	Preparation: _NONE (LC)	Prepared: 07/	/30/20 16:24			Analyst: jn
Nitrate as	3 N	ND	110	ug/l	1	07/30/20 17:37	
Method: EP	A 351.2		Instr: AA06				
Batch ID:	W0G1676	Preparation: _NONE (WETCHEM)	Prepared: 07/	/31/20 16:03			Analyst: YM
TKN		ND	0.10	mg/l	1	08/04/20	
Method: EP	A 353.2		Instr: AA01				
Batch ID:	W0G1562	Preparation: _NONE (WETCHEM)	Prepared: 07/	/29/20 16:42			Analyst: sa
NO2+NO	3 as N	ND	200	ug/l	1	07/30/20	
Method: EP.	A 365.3		Instr: UVVIS04	4			
Batch ID:	W0G1632	Preparation: _NONE (WETCHEM)	Prepared: 07/	/30/20 16:14			Analyst: sb
o-Phosph	ate as P	ND	0.010	mg/l	1	07/30/20 16:51	
Method: SN	И 2540C		Instr: OVEN01	1			
Batch ID:	W0G1659	Preparation: _NONE (WETCHEM)	Prepared: 07/	/31/20 11:31			Analyst: isr
Total Diss	solved Solids		10	mg/l	1	07/31/20	

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FINAL REPORT

Sample Results

Sample: LS-DP-7			Sample	d: 07/29/2	20 11:25 by Jim Burto	on, Todd Bear
0G30036-02 (Water)						
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Method: [CALC]		Instr: [CALC]				
Batch ID: [CALC]	Preparation: [CALC]	Prepared: 07/3	1/20 16:03			Analyst: YMT
Nitrogen, Total	ND	0.30	mg/l	1	08/04/20	
Method: EPA 300.0		Instr: LC12				
Batch ID: W0G1577	Preparation: _NONE (LC)	Prepared: 07/3	0/20 16:24			Analyst: jna
Nitrate as N	ND	110	ug/l	1	07/30/20 17:55	
Method: EPA 351.2		Instr: AA06				
Batch ID: W0G1676	Preparation: _NONE (WETCHEM)	Prepared: 07/3	1/20 16:03			Analyst: YMT
TKN	ND	0.10	mg/l	1	08/04/20	
Method: EPA 353.2		Instr: AA01				
Batch ID: W0G1562	Preparation: _NONE (WETCHEM)	Prepared: 07/2	9/20 16:42			Analyst: sar
NO2+NO3 as N	ND	200	ug/l	1	07/30/20	
Method: EPA 365.3		Instr: UVVIS04				
Batch ID: W0G1632	Preparation: _NONE (WETCHEM)	Prepared: 07/3	0/20 16:14			Analyst: sbn
o-Phosphate as P	ND	0.010	mg/l	1	07/30/20 16:53	
Method: SM 2540C		Instr: OVEN01				
Batch ID: W0G1659	Preparation: _NONE (WETCHEM)	Prepared: 07/3	1/20 11:31			Analyst: ism
Total Dissolved Solids	11	10	mg/l	1	07/31/20	



FINAL REPORT



			Spike	Source		%REC		RPD	
Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
ND	110	ua/l	Prepared & A	nalyzed: 07/3	0/20				
ND	110	ug/i							
2130	110	ua/l		nalyzed: 07/3		90-110			
2.00		ug/i				00 110			
		ua/l	-	=		84-115			
		J.							
	1100	ug/l	20000	ND	308	84-115			MS-0
	001 01	· ·	Droporod: 07/20/2	O Analyzadı (	7/21/20				
	1100	ug/l	20000	ND	102	84-115	0.5	20	
Source: 0G27	001_02		Propaged: 07/20/2	20. Analyzod: (	7/21/20				
	1100	ug/l	20000	ND	307	84-115	0.2	20	MS-0
ΡΗΔ/ΕΡΔ/ΔςΤΜ Μο	thods	-							
THAY ET AY ASTIVITIVE	tilous		Snike	Source		%RFC		RPD	
Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
			Prepared: 07/29/2	20 Analyzed: (	7/30/20				
ND	200	ug/l							
			=	20 Analyzed: (	7/30/20				
995	200	ug/l	1000		100	90-110			
			-	=					
3460	200	ug/l	2000	1400	103	90-110			
			=	=					
4940	200	ug/l	2000	2910	102	90-110			
			=	=					
3460	200	ug/l	2000	1400	103	90-110	0	20	
			-	=		00.440		00	
4930	200	ug/I	2000	2910	101	90-110	0.2	20	
			Prepared & A	nalyzed: 07/3	0/20				
ND	0.010	mg/l							
				nalyzed: 07/3					
0.194	0.010	mg/l	0.200		97	88-111			
				=		05.440			
0.195	0.010	mg/I	0.200	ND	97	85-112			
		/I		=		05 440	4	20	
U. 197	0.010	iiig/i	0.200	ND	98	00-112	1	20	
ND	40	ma //	Prepared & A	nalyzed: 07/3	1/20				
ND	10	mg/l							
		Ü							
	Source: 0G27 20400 Source: 0G27 20400 Source: 0G27 20500 Source: 0G27 61400 PHA/EPA/ASTM Me  Result  ND  995 Source: 0G27 3460 Source: 0G27 3460 Source: 0G28 4940 Source: 0G28 4930  ND  ND  0.194 Source: 0G30 0.195 Source: 0G30 0.197	2130 110  Source: 0G27001-01 20400 1100 Source: 0G27001-02 61500 1100 Source: 0G27001-01 20500 1100  Source: 0G27001-02 61400 1100  PHA/EPA/ASTM Methods  Result MRL  ND 200  Source: 0G27001-05 3460 200 Source: 0G27001-05 3460 200 Source: 0G27001-05 3460 200 Source: 0G27001-05 3460 200  Source: 0G27001-05 3460 200  Source: 0G28002-04 4940 200  Source: 0G28002-04 4930 200	ND 110 ug/l  2130 110 ug/l  Source: 0G27001-01 20400 1100 ug/l  Source: 0G27001-02 61500 1100 ug/l  Source: 0G27001-01 20500 1100 ug/l  Source: 0G27001-02 61400 1100 ug/l  PHA/EPA/ASTM Methods  Result MRL Units  ND 200 ug/l  Source: 0G27001-05 3460 200 ug/l  Source: 0G28002-04 4940 200 ug/l  Source: 0G27001-05 3460 200 ug/l  Source: 0G27001-05 3460 200 ug/l  Source: 0G28002-04 4940 0.010 mg/l  Source: 0G30036-01 0.195 0.010 mg/l  Source: 0G30036-01 0.197 0.010 mg/l	Result   MRL   Units   Level	Result	Result	NR   NR   Units   Level   Result   %REC   Limits	ND	Prepared & Analyzed: 07/30/20



FINAL REPORT

Quality Control Results

(Continued)

A MANAGEMENT AND A STATE OF THE										
Conventional Chemistry/Physical Paramete	rs by APHA/EPA/ASTM Metl	nods (Continue	ed)							
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualific
atch: W0G1659NONE (WETCHEM) (Continued)										
Duplicate (W0G1659-DUP1)	Source: 0G2810	01-05		Prepared & A	nalyzed: 07/31	1/20				
Total Dissolved Solids	2190	10	mg/l		2160			1	10	
Duplicate (W0G1659-DUP2)	Source: 0G281	10-01		Prepared & A	nalyzed: 07/31	1/20				
Total Dissolved Solids	1710	10	mg/l		1760			3	10	
Batch: W0G1676NONE (WETCHEM)										
Blank (W0G1676-BLK1)				Prepared: 07/31/2	20 Analyzed: 0	8/04/20				
TKN	ND	0.10	mg/l	•						
Blank (W0G1676-BLK2)				Prepared: 07/31/	20 Analyzed: 0	8/04/20				
TKN	ND	0.10	mg/l							
LCS (W0G1676-BS1)				Prepared: 07/31/	20 Analyzed: 0	8/04/20				
TKN	0.926	0.10	mg/l	1.00		93	90-110			
LCS (W0G1676-BS2)				Prepared: 07/31/	20 Analyzed: 0	8/04/20				
TKN	0.911	0.10	mg/l	1.00		91	90-110			
Matrix Spike (W0G1676-MS1)	Source: 0G270	75-01		Prepared: 07/31/	20 Analyzed: 0	8/04/20				
TKN	1.24	0.10	mg/l	1.00	0.246	99	90-110			
Matrix Spike (W0G1676-MS2)	Source: 0G270	75-02		Prepared: 07/31/	20 Analyzed: 0	8/04/20				
TKN	1.26	0.10	mg/l	1.00	0.269	99	90-110			
Matrix Spike Dup (W0G1676-MSD1)	Source: 0G270	75-01		Prepared: 07/31/2	20 Analyzed: 0	8/04/20				
TKN	1.24	0.10	mg/l	1.00	0.246	99	90-110	0.08	10	
Matrix Spike Dup (W0G1676-MSD2)	Source: 0G270	75-02		Prepared: 07/31/2	20 Analyzed: 0	8/04/20				
TKN	1.33	0.10	mg/l	1.00	0.269	106	90-110	5	10	

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Definition

## Certificate of Analysis

**FINAL REPORT** 



MRL

#### **Notes and Definitions**

MS-01	The spike recovery for this QC sample is outside of established control limits possibly due to sample matrix interference.
%REC	Percent Recovery
Dil	Dilution

The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

The MRL is also known as Limit of Quantitation (LOQ)

ND NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or

above the MDL.

RPD Relative Percent Difference

Source Sample that was matrix spiked or duplicated.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

State

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

#### Reviewed by:

Chris Samatmanakit Project Manager









ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015 • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

Weck Laboratories 14859 Clark Avenue City of Industry, CA-91745 (626) 336-2139

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Special Instructions Filtered with 0.45 µ Filtered with 0.45 µ Filtered with 0.45 µ Filtered with 0.45 µ Filtered with 0.45 µ 72 Hours 5 Days Normal O 100 Turnaround Time: (Check) Sample Integrity: (Check) Intact On lo∈ Same Day 24 Hours 48 Hours Analysis Required 730/70 13:34 Lotal Mitrogen by calculation × Date /Time: ON-SON 493 - N as SON+SON CHAIN OF CUSTODY FORM lotai Kjeldahi Nitrogenby EP Officophae-OPO4 EPA Method - Cangi Jum 0.00£ bortleM A93 N-ethod 300.0 Preservation H2SO4 H2SO4 H2S04 H2804 H2SO4 None Nane Nane None None None None None None None Nane Nane None 10:55 am None None None Feder 11:25a~ Time Received in Lab by: Fax Number: 714,545,8883 Sampling Date 129/20 7/29/20 Received by: Received by: Project/PO Number: (714) 328-5234 2KLE010102 hone Number: # of Cont. Container Type 500 ml Poly 500 ml Poly 500 ml Poly 250 ml Poly 250 ml Poly 250 ml Poly 250 ml Poly 500 mt Poly 250 ml Poty 500 ml Poly 250 ml Poly 250 mi Poly 250 ml Poly 250 ml Poly 250 ml Poly 60 ml Poly 1,60 m Date/Time: Date /Time: Date /Time: MICHAEL P. DONOVAN (mpdonovn@cox.net) Sample Matrix water 7/29/20 3 HUTTON CENTRE DRIVE, SUITE 200 SANTA ANA, CA 92707 Sample Description Sampler: Jim Burton, Todd Bear Ľ, S-DP--00-Client Name/Address: Project Manager: Relinquished By elinquished By **PSOMAS** 57

13.7°C 70234



**FINAL REPORT** 

Work Orders: 0G31035 Report Date: 8/20/2020

**Received Date:** 7/31/2020

Turnaround Time: Normal

**Phones:** (714) 751-7373

Fax: (714) 545-8883

P.O. #:

**Billing Code:** 

Attn: Michael P. Donovan

Project: 2KLE010102

Client: Psomas - Santa Ana, CA

3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

DoD-ISO ANAB # • ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015 • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

Dear Michael P. Donovan,

Enclosed are the results of analyses for samples received 7/31/20 with the Chain-of-Custody document. The samples were received in good condition, at 2.8 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

Reviewed by:

Chris Samatmanakit Project Manager

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FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:23



## Sample Summary

Sample Name	Sampled By	Lab ID	Matrix	Sampled	Qualifiers
BC-Blw-Ph6	Jim Burton, Todd Bear	0G31035-01	Water	07/30/20 07:45	
BC-Blw-Ph5	Jim Burton, Todd Bear	0G31035-02	Water	07/30/20 08:30	
BC-Blw-Ph4	Jim Burton, Todd Bear	0G31035-03	Water	07/30/20 09:00	
BC-Blw-Ph3	Jim Burton, Todd Bear	0G31035-04	Water	07/30/20 09:40	
BC-Blw-Ph2	Jim Burton, Todd Bear	0G31035-05	Water	07/30/20 10:15	
SL-BR-1	Jim Burton, Todd Bear	0G31035-06	Water	07/30/20 11:00	
LS-BR-1	Jim Burton, Todd Bear	0G31035-07	Water	07/30/20 11:40	
INT2-RES-1	Jim Burton, Todd Bear	0G31035-08	Water	07/30/20 12:00	



## **Analyses Accreditation Summary**

Analyte	CAS# No	ot By	ANAB
	NE	LAP	ISO 17025
SM 9223B in Water			
E. coli			

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FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

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Sample	Results
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Sample:	BC-Blw-Ph6			Sample	ed: 07/30/	20 7:45 by Jim Bur	ton, Todd Bea
	0G31035-01 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifie
nions by IC,	EPA Method 300.0						
Method: EPA	300.0		Instr: LC12				
Batch ID: V	W0G1662	Preparation: _NONE (LC)	Prepared: 07/3	1/20 12:21			Analyst: ja
Nitrate as	N	ND	110	ug/l	1	07/31/20 19:40	
onventional (	Chemistry/Physical Parameters	s by APHA/EPA/ASTM Methods					
Method: [CA	iLC]		Instr: [CALC]				
Batch ID: [	-	Preparation: [CALC]	Prepared: 08/0	7/20 16:24			Analyst: ym
Nitrogen, T	Fotal	ND	0.30	mg/l	1	08/13/20	•
Method: EPA	x 351.2		Instr: AA06				
Batch ID: V	W0H0415	Preparation: _NONE (WETCHEM)	Prepared: 08/0	7/20 16:24			Analyst: ym
TKN		ND	0.10	mg/l	1	08/13/20	
Method: EPA	353.2		Instr: AA01				
Batch ID: V	W0H0004	Preparation: _NONE (WETCHEM)	Prepared: 08/0	1/20 10:50			Analyst: SA
NO2+NO3	as N	ND	200	ug/l	1	08/01/20	
Method: EPA	365.3		Instr: UVVIS04				
Batch ID: V	W0G1660	Preparation: _NONE (WETCHEM)	Prepared: 07/3	1/20 11:32			Analyst: sb
o-Phospha	ate as P	ND	0.010	mg/l	1	07/31/20 12:16	
Method: SM	2540C		Instr: OVEN01				
Batch ID: V	W0H0065	Preparation: _NONE (WETCHEM)	Prepared: 08/0	3/20 15:48			Analyst: isn
Total Diss	olved Solids	38	10	mg/l	1	08/04/20	



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:23

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## Sample Results

A Gair	Tiple Nesults						(Continued
Sample: E	BC-Blw-Ph5			Sample	ed: 07/30/	/20 8:30 by Jim Bur	ton, Todd Bea
(	0G31035-02 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifie
nions by IC, EP/	A Method 300.0						
Method: EPA 30	00.0		Instr: LC12				
Batch ID: W0G	G1662	Preparation: _NONE (LC)	Prepared: 07/3	31/20 12:21			Analyst: ja
Nitrate as N		ND	110	ug/l	1	07/31/20 19:58	
onventional Che	emistry/Physical Parameter	s by APHA/EPA/ASTM Methods					
Method: [CALC]	]		Instr: [CALC]				
Batch ID: [CAL	LC]	Preparation: [CALC]	Prepared: 08/0	7/20 16:24			Analyst: yn
Nitrogen, Tota	al	ND	0.30	mg/l	1	08/13/20	
Method: EPA 35	51.2		Instr: AA06				
Batch ID: W0H	H0415	Preparation: _NONE (WETCHEM)	Prepared: 08/0	7/20 16:24			Analyst: yn
TKN		ND	0.10	mg/l	1	08/13/20	
Method: EPA 35	53.2		Instr: AA01				
Batch ID: W0H	H0004	Preparation: _NONE (WETCHEM)	Prepared: 08/0	1/20 10:50			Analyst: SA
NO2+NO3 as	s N	ND	200	ug/l	1	08/01/20	
Method: EPA 36	55.3		Instr: UVVIS04				
Batch ID: W0G	G1660	Preparation: _NONE (WETCHEM)	Prepared: 07/3	31/20 11:32			Analyst: sb
o-Phosphate a	as P	ND	0.010	mg/l	1	07/31/20 12:21	
Method: SM 254	340C		Instr: OVEN01				
Batch ID: W0H	H0065	Preparation: _NONE (WETCHEM)	Prepared: 08/0	3/20 15:48			Analyst: is
Total Dissolve	red Solids	<b>26</b>	10	mg/l	1	08/04/20	



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

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## Sample Results

Sample INC						(Continued)
Sample: BC-Blw-Ph4			Sample	ed: 07/30/	/20 9:00 by Jim Bur	ton, Todd Bea
0G31035-03	Water)					
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifie
nions by IC, EPA Method 30	).0					
Method: EPA 300.0		Instr: LC12				
Batch ID: W0G1662	Preparation: _NONE (LC)	Prepared: 07/3	31/20 12:21			Analyst: ja
Nitrate as N	ND	110	ug/l	1	07/31/20 20:16	
onventional Chemistry/Physic	cal Parameters by APHA/EPA/ASTM Methods					
Method: [CALC]		Instr: [CALC]				
Batch ID: [CALC]	Preparation: [CALC]	Prepared: 08/0	07/20 16:24			Analyst: ym
Nitrogen, Total	ND	0.30	mg/l	1	08/13/20	
Method: EPA 351.2		Instr: AA06				
Batch ID: W0H0415	Preparation: _NONE (WETCHEM)	Prepared: 08/0	07/20 16:24			Analyst: ym
TKN	ND	0.10	mg/l	1	08/13/20	
Method: EPA 353.2		Instr: AA01				
Batch ID: W0H0004	Preparation: _NONE (WETCHEM)	Prepared: 08/0	01/20 10:50			Analyst: SAI
NO2+NO3 as N	ND ND	200	ug/l	1	08/01/20	
Method: EPA 365.3		Instr: UVVIS04				
Batch ID: W0G1660	Preparation: _NONE (WETCHEM)	Prepared: 07/3	31/20 11:32			Analyst: sb
o-Phosphate as P	ND	0.010	mg/l	1	07/31/20 12:22	
Method: SM 2540C		Instr: OVEN01				
Batch ID: W0H0065	Preparation: _NONE (WETCHEM)	Prepared: 08/0	03/20 15:48			Analyst: ism
<b>Total Dissolved Solids</b>	27	10	mg/l	1	08/04/20	



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

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## Sample Results

AA O	ample Results						(Continued
Sample:	BC-Blw-Ph3			Sample	ed: 07/30/	/20 9:40 by Jim Bur	ton, Todd Bea
	0G31035-04 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifie
nions by IC,	EPA Method 300.0						
Method: EPA	A 300.0		Instr: LC12				
Batch ID:	W0G1662	Preparation: _NONE (LC)	Prepared: 07/3	31/20 12:21			Analyst: ja
Nitrate as	N	ND	110	ug/l	1	07/31/20 20:34	
onventional	Chemistry/Physical Paramete	ers by APHA/EPA/ASTM Methods					
Method: [CA	ALC]		Instr: [CALC]				
Batch ID:	[CALC]	Preparation: [CALC]	Prepared: 08/0	7/20 16:24			Analyst: ym
Nitrogen,	Total	ND	0.30	mg/l	1	08/13/20	
Method: EPA	A 351.2		Instr: AA06				
Batch ID:	W0H0415	Preparation: _NONE (WETCHEM)	Prepared: 08/0	7/20 16:24			Analyst: ym
TKN		ND	0.10	mg/l	1	08/13/20	
Method: EPA	A 353.2		Instr: AA01				
Batch ID:	W0H0004	Preparation: _NONE (WETCHEM)	Prepared: 08/0	1/20 10:50			Analyst: SA
NO2+NO3	3 as N	ND	200	ug/l	1	08/01/20	
Method: EPA	A 365.3		Instr: UVVIS04				
Batch ID:	W0G1660	Preparation: _NONE (WETCHEM)	Prepared: 07/3	31/20 11:32			Analyst: sb
o-Phospha	ate as P	ND	0.010	mg/l	1	07/31/20 12:23	
Method: SM	1 2540C		Instr: OVEN01				
Batch ID:	W0H0065	Preparation: _NONE (WETCHEM)	Prepared: 08/0	3/20 15:48			Analyst: isn
Total Diss	solved Solids	35	10	mg/l	1	08/04/20	



**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Reported:

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Sample Resul
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Project Manager: Michael P. Donovan

Sai	mple Results						(Continued
Sample:	BC-Blw-Ph2			Sampled	d: 07/30/	20 10:15 by Jim Bur	ton, Todd Bea
	0G31035-05 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifi
ions by IC, E	PA Method 300.0						
Method: EPA 3	300.0		Instr: LC12				
Batch ID: W	OG1662	Preparation: _NONE (LC)	Prepared: 07/3	31/20 12:21			Analyst: ja
Nitrate as N		ND	110	ug/l	1	07/31/20 20:52	
nventional Cl	nemistry/Physical Parameter	s by APHA/EPA/ASTM Methods					
Method: [CALC	C]		Instr: [CALC]				
Batch ID: [C/	ALC]	Preparation: [CALC]	Prepared: 08/0	7/20 16:24			Analyst: yr
Nitrogen, To	tal	ND	0.30	mg/l	1	08/13/20	
Method: EPA 3	351.2		Instr: AA06				
Batch ID: W	0H0415	Preparation: _NONE (WETCHEM)	Prepared: 08/0	7/20 16:24			Analyst: yr
TKN		ND	0.10	mg/l	1	08/13/20	
Method: EPA 3	353.2		Instr: AA01				
Batch ID: W	0H0004	Preparation: _NONE (WETCHEM)	Prepared: 08/0	1/20 10:50			Analyst: SA
NO2+NO3 a	as N	ND	200	ug/l	1	08/01/20	
Method: EPA 3	365.3		Instr: UVVIS04				
Batch ID: W	0G1660	Preparation: _NONE (WETCHEM)	Prepared: 07/3	31/20 11:32			Analyst: sl
o-Phosphate	e as P	ND	0.010	mg/l	1	07/31/20 12:25	
Method: SM 2	540C		Instr: OVEN01				
Batch ID: W	0H0065	Preparation: _NONE (WETCHEM)	Prepared: 08/0	3/20 15:48			Analyst: is
Total Dissol	ved Solids	<b>20</b>	10	mg/l	1	08/04/20	
Sample:	SL-BR-1			Sampled	d: 07/30/	20 11:00 by Jim Bur	ton, Todd Be
	0G31035-06 (Water)					•	
Analyte	,	Result	MRL	Units	Dil	Analyzed	Qualifi
crobiological	Parameters by Standard Me	thods					
Method: SM 9	223B		Instr: INC12				
Batch ID: W	0H0321	Preparation: _NONE (MICROBIOLOGY)	Prepared: 07/3	31/20 10:52			Analyst: an
E. coli		ND	1.0	MPN/100ml	1	08/01/20	-
ample:	LS-BR-1			Sampled	d: 07/30/	20 11:40 by Jim Bur	ton, Todd Be
,	0G31035-07 (Water)			•			
Analyte	ods 1033 of (water)	Result	MRL	Units	Dil	Analyzed	Qualifi
-	Parameters by Standard Me					<b>,</b>	
<b>Nethod:</b> SM 9	•		Instr: INC12				
Batch ID: W		Preparation: _NONE (MICROBIOLOGY)	Prepared: 07/3	31/20 10:52			Analyst: an
E. coli		ND	1.0	MPN/100ml	1	08/01/20	,



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

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Sample Results

(Continued)

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Sample:	INT2-RES-1			Sampled:	07/30/20	12:00 by Jim Bu	ırton, Todd Bear
	0G31035-08 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifier
Microbiologic	cal Parameters by Standard Met	hods					
Method: SM	И 9223B		Instr: INC12				
Batch ID:	W0H0321	Preparation: _NONE (MICROBIOLOGY)	Prepared: 07	/31/20 10:52			Analyst: amc
E. coli		6.3	1.0	MPN/100ml	1	08/01/20	



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Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

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## **Quality Control Results**

Anions by IC, EPA Method 300.0										
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W0G1662 - EPA 300.0										
Blank (W0G1662-BLK1)				Prepared & A	nalyzed: 07/31/	/20				
Nitrate as N	ND	110	ug/l		-					
LCS (W0G1662-BS1)				Prepared & A	nalyzed: 07/31/	/20				
Nitrate as N	2160	110	ug/l	2000		108	90-110			
LCS (W0G1662-BS2)				Prepared & A	nalyzed: 07/31/	/20				
Nitrate as N	2160	110	ug/l	2000		108	90-110			
LCS (W0G1662-BS3)				Prepared & A	nalyzed: 07/31/	/20				
Nitrate as N	2160	110	ug/l	2000		108	90-110			
LCS (W0G1662-BS4)				Prepared & A	nalyzed: 07/31/	/20				
Nitrate as N	2160	110	ug/l	2000		108	90-110			
LCS (W0G1662-BS5)				Prepared & A	nalyzed: 07/31/	/20				
Nitrate as N	2160	110	ug/l	2000		108	90-110			
Matrix Spike (W0G1662-MS1)	Source: 0G31002	-01		Prepared & A	nalyzed: 07/31/	/20				
Nitrate as N	20900	1100	ug/l	20000	ND	105	84-115			
Matrix Spike Dup (W0G1662-MSD1)	Source: 0G31002	-01		Prepared & A	nalyzed: 07/31/	/20				
Nitrate as N	20800	1100	ug/l	20000	ND	104	84-115	0.6	20	



## **Quality Control Results**

Conventional Chemistry/Physical Parameters by	APHA/EPA/ASTM Met	hods								
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W0G1660 - EPA 365.3										
Blank (W0G1660-BLK1)				Prepared & A	nalyzed: 07/3	31/20				
o-Phosphate as P	ND	0.010	mg/l							
LCS (W0G1660-BS1)				Prepared & A	nalyzed: 07/3	31/20				
o-Phosphate as P	0.203	0.010	mg/l	0.200		102	88-111			
Matrix Spike (W0G1660-MS1)	Source: 0G31035	-01		Prepared & A	nalyzed: 07/	31/20				
o-Phosphate as P	0.201	0.010	mg/l	0.200	0.00500	98	85-112			
Matrix Spike Dup (W0G1660-MSD1)	Source: 0G31035	-01		Prepared & A	nalyzed: 07/3	31/20				
o-Phosphate as P	0.199	0.010	mg/l	0.200	0.00500	97	85-112	1	20	
Batch: W0H0004 - EPA 353.2										
Blank (W0H0004-BLK1)				Prepared & A	nalyzed: 08/0	01/20				
NO2+NO3 as N	ND	200	ug/l							
LCS (W0H0004-BS1)				Prepared & A	nalyzed: 08/0	01/20				
NO2+NO3 as N	1010	200	ug/l	1000		101	90-110			
Matrix Spike (W0H0004-MS1)	Source: 0G31035	-01		Prepared & A	nalyzed: 08/0	01/20				
NO2+NO3 as N	2110	200	ug/l	2000	ND	106	90-110			
Matrix Spike (W0H0004-MS2)	Source: 0G31035	-02		Prepared & A	nalyzed: 08/0	01/20				
NO2+NO3 as N	2110	200	ug/l	2000	ND	106	90-110			



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

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Quality Control Results

Conventional Chemistry/Physical Parameters	by APHA/EPA/ASTM Met	hods (Continue	d)							
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
Batch: W0H0004 - EPA 353.2 (Continued)										
Matrix Spike Dup (W0H0004-MSD1)	Source: 0G31035	-01		Prepared & A	nalyzed: 08/	01/20				
NO2+NO3 as N	2110	200	ug/l	2000	ND	106	90-110	0	20	
Matrix Spike Dup (W0H0004-MSD2)	Source: 0G31035	-02		Prepared & A	nalyzed: 08/	01/20				
NO2+NO3 as N	2110	200	ug/l	2000	ND	106	90-110	0	20	
atch: W0H0065 - SM 2540C										
Blank (W0H0065-BLK1)			Pre	pared: 08/03/2	20 Analyzed:	08/04/2	0			
Total Dissolved Solids	ND	10	mg/l							
LCS (W0H0065-BS1)			Pre	pared: 08/03/2	20 Analyzed:	08/04/2	0			
Total Dissolved Solids	809	10	mg/l	824		98	96-102			
Duplicate (W0H0065-DUP1)	Source: 0G27001	-02	Pre	pared: 08/03/2	20 Analyzed:	08/04/2	0			
Total Dissolved Solids	1470	10	mg/l		1500			2	10	
Duplicate (W0H0065-DUP2)	Source: 0G27001	-04	Pre	pared: 08/03/2	-	08/04/2	0			
Total Dissolved Solids	7230	10	mg/l		7220			0.07	10	
atch: W0H0415 - EPA 351.2										
Blank (W0H0415-BLK1)				pared: 08/07/2	20 Analyzed:	08/13/2	0			
TKN	· ND	0.10	mg/l							
Blank (W0H0415-BLK2)			Pre	pared: 08/07/2	20 Analyzed:	08/13/2	0			
TKN	· ND	0.10	mg/l							
LCS (W0H0415-BS1)			Pre	pared: 08/07/2	20 Analyzed:	08/13/2	0			
TKN	0.958	0.10	mg/l	1.00		96	90-110			
LCS (W0H0415-BS2)			Pre	pared: 08/07/2	20 Analyzed:	08/13/2	0			
TKN	0.951	0.10	mg/l	1.00		95	90-110			
Matrix Spike (W0H0415-MS1)	Source: 0H05087	'- <b>01</b>	Pre	pared: 08/07/2	20 Analyzed:	08/13/2	0			
TKN	1.20	0.10	mg/l	1.00	0.173	103	90-110			
Matrix Spike (W0H0415-MS2)	Source: 0H05087	-02	Pre	pared: 08/07/2	20 Analyzed:	08/13/2	0			
TKN	1.19	0.10	mg/l	1.00	0.234	95	90-110			
Matrix Spike Dup (W0H0415-MSD1)	Source: 0H05087	-01	Pre	pared: 08/07/2	20 Analyzed:	08/13/2	0			
TKN	1.19	0.10	mg/l	1.00	0.173	102	90-110	1	10	
Matrix Spike Dup (W0H0415-MSD2)	Source: 0H05087	-02	Pre	pared: 08/07/2	20 Analyzed:	08/13/2	0			
TKN	1.23	0.10	mg/l	1.00	0.234	100	90-110	4	10	



**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:23

Quality Control Results

Microbiological Parameters by Standard Methods										
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W0H0321 - SM 9223B										
Blank (W0H0321-BLK2)			Prepa	ared: 07/25/2	0 Analyzed:	07/26/20				
E. coli	· ND	1.0	MPN/100ml							
Blank (W0H0321-BLK3)			F	Prepared & A	nalyzed: 07/2	27/20				
E. coli	ND	1.0	MPN/100ml		•					
Blank (W0H0321-BLK4)			Prepa	ared: 07/28/2	0 Analyzed:	07/29/20				
E. coli	ND	1.0	MPN/100ml		•					
Blank (W0H0321-BLK6)			Prepa	ared: 07/31/2	0 Analyzed:	08/01/20				
E. coli	ND	1.0	MPN/100ml		•					
Blank (W0H0321-BLK7)			Prepa	ared: 08/01/2	0 Analyzed:	08/02/20				
E. coli	ND	1.0	MPN/100ml		•					



**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:23



## Notes and Definitions

%REC	Percent Recovery
Dil	Dilution
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ)
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
RPD	Relative Percent Difference
Source	Sample that was matrix spiked or duplicated.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

Weck Laboratories 14859 Clark Avenue —City of Industry, CA-91745 (626) 336-2139

-043/03E

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	:			-		2	2	اد اد	5	<u>=</u>		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	la called	raye \ o	4
Client Name/Address:			Project/	Project/PO Number:				-				Analysis required	dalled		
PSOMAS								огла		]					
3-HUTTON CENTRE-DRIVE, SUITE-200 SANTA ANA, CA 92707	UITE-200		2XCEC	2KLE010102			300.0	M A93	SM254 493 Ydr	Method	notistu				
Project Manager:			Phone Number	\umber:				tod.		∀d∃	calor				
MICHAEL P. DONOVAN (mpdonovn@cox.net)	novn@cox.net)		(714)	328-5234				U-esn	···		eu pà				
Sampler: Jim Burton, Todd Bear			Fax Nur	Fax Number: 714,545,8883	883			dsoud		198 P	goriiV				
Sample Description	Sample	Container Type	# of Cont.	Sampling Date	Time	Preservation		965.3						Special Instructions	rotions
8C- blw - PH6	water	60 ml Poly	-	7 30 20	7:45a	None	×								
	water	250 ml Poly	-					×						Filtered with 0.45µ	ης
	water	500 ml Poly	-			None			×						
	water	250 ml Poly	-	7	7	H2SO4				×	×				
BC-612-945	water	60 ml Poly	~	7 30 20	8.3cm	None N	×								
	water	250 ml Poly	τ-	1		None		×						Filtered with 0.45µ	T.C.
	water	500 ml Poly	1			None			×						
	water	250 ml Poly	1	7	7	H2SO4			×	×	Х				
8C- 614- PH4	water	60 ml Poly	-	2/30 30	4,000	None	×								
	water	250 ml Poly	1	, ,		None		×						Filtered with 0.45µ	η̈́ς
	water	500 ml Poly	1	-		None			×						
-1	water	250 ml Poly	1	<b>-</b>	ન	H2SO4			×	×	×				
BC-612-PH3	water	60 ml Poly	1	7/30/30	cd:HDo	None	×		_						
	water	250 ml Poly	1	`	_	None		×						Filtered with 0.45µ	Ţ,
	water	500 ml Poly	+			None			×						
	water	250 ml Poly	Ţ	-1	-1	H2S04		-	<u> </u>	×	×				
BC-61w-1H3	water	60 ml Paly	1	7 30 30	10:150	None	×								
-	water	250 ml Paly	<b>—</b>	-		None		×	-	_				Filtered with 0.45 µ	μc
	water	500 ml Poly	-			None			×						:
1	water	250 ml Poly	1	-(	4	H2SO4			×		×				
Relinquished By:	2/30/20	Date /Time:	ξ	Received by:	Feder	<u>-</u> د				Date	Date /Time:		Turnaround Time: Same Day	ne: (Cheok) 72 Hours	
Relinquished By:		Date /Time:		Received by:		Cwydwy			,	<b>1</b> 3	7 31 7 1030	8	24 Hours 48 Hours	5 Days Normal X	
Relinquished By:		Date /Time;		Received in Lab by:						Date	Date /Time:		Sample Integrity:	(Check)	
													# HGUS	22112	

2.0% 70230

Weck Laboratories 14859 Clark Avenue City of Industry, CA 91745 (626) 336-2139

				O	HAIN	CHAIN OF CUSTODY FORM	STOD	Y FC	RM				Page	£ 23	
Olient Name/Address:			Project/F	Project/PO Number:							Analysis Required	Required	  -    -		
PSOMAS 13 HUTTON CENTRE DRIVE: SUITE 200	TE 200		2KLE010102	10102											
SANTA ANA, CA 92707							κq (g				<u>                                      </u>				<u> </u>
Project Manager:			Phone Number:	umber:			[00 <u>-</u>								
MICHAEL P. DONOVAN (mpdonovn@cox.net)	vn@cox.net		(714)3	(714) 328-5234			(a) iloo								
Sampler: Jim Burton, Todd Bear			Fax Num	Fax Number: 714,545.8883	83		sirchia 2238								
Sample Description	Sample	Container Type	# of Cont	Sampling Date	Time	Preservation	26 WS ∋ups∃						edS	Special instructions	
5L-88-1	water	125 ml poly	-	7/30/20	11:009	Sterile- None	×						24-Ho	24-Hour Hold time*	
L5-BR-1	water	125 ml poly	-	-	11, 400	11; Hod Sterile-None	×						24-Hai	24-Haur Hald time*	-
INT3-RES-1	water	125 ml poly	-	7	12.00	1 2; de 1 Sterile- None	×						24-Ho	24-Hour Hold time*	
															-
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Then 7	130/20	2		Received by:	Fedex	<b>*</b> 5				Date /Time:		Turnaround Time: Same Day		ours	
Reinquished By.		- Date /Time,		Received by:	[	and m		n		731/20 10%		24 Hours 48 Hours	5 Days Normal	& <u>a</u>	-
Relinquished By:		Date /Time:		Received in Lab by:	χ.				Da	Date /Tlme:		Sample Integrity:	ĮΨ	a	
* Doe Lebenday Curface Meter Ambient Monitoring Descreen (SMAMD) for embient water	politoring Drogs	an (CMANA) for as	ch troide	j		:						- TOTAL	2		7
" Per Loranian Sunace vyater Annymin ny		ATT (SVVANINI) IN CI	ווטומוו אמ	<u>D</u>								ر ان ان ان	20°C - 10°C		



**FINAL REPORT** 

**Work Orders:** 0H03016 **Report Date:** 8/20/2020

Received Date: 8/1/2020

Turnaround Time: Normal

**Phones:** (714) 751-7373

Fax: (714) 545-8883

P.O. #:

**Billing Code:** 

Attn: Michael P. Donovan

Project: 2KLE010102

Client: Psomas - Santa Ana, CA

3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

DoD-ISO ANAB # • ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 •

NELAP-OR #4047 • NJ-DEP #CA015 • SCAOMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

Dear Michael P. Donovan,

Enclosed are the results of analyses for samples received 8/01/20 with the Chain-of-Custody document. The samples were received in good condition, at 2.1 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

Reviewed by:

Chris Samatmanakit Project Manager

1: State











FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:28



### Sample Summary

Sample Name	Sampled By	Lab ID	Matrix	Sampled	Qualifiers
BC-NF-1	Jim Burton, Todd Bear	0H03016-01	Water	07/31/20 09:00	
BC-blw-LS	Jim Burton, Todd Bear	0H03016-02	Water	07/31/20 09:20	
BC-blw-SL	Jim Burton, Todd Bear	0H03016-03	Water	07/31/20 10:00	
SL-BR-1	Jim Burton, Todd Bear	0H03016-04	Water	07/31/20 11:00	
LS-BR-1	Jim Burton, Todd Bear	0H03016-05	Water	07/31/20 11:35	
INT2-RES-1	Jim Burton, Todd Bear	0H03016-06	Water	07/31/20 11:50	



### **Analyses Accreditation Summary**

Analyte	CAS#	Not By NELAP	ANAB ISO 17025
SM 9223B in Water E. coli		NELAP	130 17023

0H03016 Page 2 of 10



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:28

Sample:	BC-NF-1			Sample	ed: 07/31/	'20 9:00 by Jim Bur	ton, Todd Bea
	0H03016-01 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifie
nions by IC, E	EPA Method 300.0						
Method: EPA 3	300.0		Instr: LC12				
Batch ID: W	/0H0036	Preparation: _NONE (LC)	Prepared: 08/0	03/20 12:30			Analyst: ja
Nitrate as N		ND	110	ug/l	1	08/03/20 17:36	O-1
onventional C	hemistry/Physical Parameter	s by APHA/EPA/ASTM Methods					
Method: [CAL	.C]		Instr: [CALC]				
Batch ID: [C	CALC]	Preparation: [CALC]	Prepared: 08/1	12/20 17:08			Analyst: YM
Nitrogen, To	otal	ND	0.30	mg/l	1	08/17/20	
Method: EPA 3	351.2		Instr: AA06				
Batch ID: W	/0H0714	Preparation: _NONE (WETCHEM)	Prepared: 08/1	12/20 17:08			Analyst: YM
TKN		0.12	0.10	mg/l	1	08/17/20	
Method: EPA 3	353.2		Instr: AA01				
Batch ID: W	/0H0004	Preparation: _NONE (WETCHEM)	Prepared: 08/0	01/20 10:50			Analyst: sa
NO2+NO3 a	as N	ND	200	ug/l	1	08/01/20	
Method: EPA 3	365.3		Instr: UVVIS04				
Batch ID: W	/0H0002	Preparation: _NONE (WETCHEM)	Prepared: 08/0	01/20 14:32			Analyst: sa
o-Phosphat	te as P	0.044	0.010	mg/l	1	08/01/20 15:15	
Method: SM 2	2540C		Instr: OVEN01				
Batch ID: W	/0H0065	Preparation: _NONE (WETCHEM)	Prepared: 08/0	03/20 15:48			Analyst: isr
Total Disso	lved Solids	<b> 28</b>	10	mg/l	1	08/04/20	



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA, 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:28

Santa Ana, CA 92707

Sample Results

AA Gan	Tiple Nesulis						(Continued
Sample:	BC-blw-LS			Sample	ed: 07/31/	/20 9:20 by Jim Bur	ton, Todd Bea
	0H03016-02 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifie
nions by IC, EP	PA Method 300.0						
Method: EPA 30	00.0		Instr: LC12				
Batch ID: WO	H0036	Preparation: _NONE (LC)	Prepared: 08/0	3/20 12:30			Analyst: jar
Nitrate as N		ND	110	ug/l	1	08/03/20 18:32	O-14
onventional Che	emistry/Physical Parameter	s by APHA/EPA/ASTM Methods					
Method: [CALC]	]		Instr: [CALC]				
Batch ID: [CA	ALC]	Preparation: [CALC]	Prepared: 08/1	2/20 17:08			Analyst: YM
Nitrogen, Tota	al	ND	0.30	mg/l	1	08/17/20	
Method: EPA 35	51.2		Instr: AA06				
Batch ID: WO	H0714	Preparation: _NONE (WETCHEM)	Prepared: 08/1	2/20 17:08			Analyst: YM
TKN		ND	0.10	mg/l	1	08/17/20	
Method: EPA 35	53.2		Instr: AA01				
Batch ID: WO	H0004	Preparation: _NONE (WETCHEM)	Prepared: 08/0	1/20 10:50			Analyst: sa
NO2+NO3 as	s N	ND	200	ug/l	1	08/01/20	
Method: EPA 36	65.3		Instr: UVVIS04				
Batch ID: WO	H0002	Preparation: _NONE (WETCHEM)	Prepared: 08/0	1/20 14:32			Analyst: sa
o-Phosphate	e as P	0.017	0.010	mg/l	1	08/01/20 15:15	
Method: SM 25	540C		Instr: OVEN01				
Batch ID: WO	H0065	Preparation: _NONE (WETCHEM)	Prepared: 08/0	3/20 15:48			Analyst: ism
Total Dissolv	ved Solids	<b>12</b>	10	mg/l	1	08/04/20	



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Reported:

08/20/2020 16:28

CA 92707 Project Manager: Michael P. Donovan

Sample Results						(Continued)
Sample: BC-blw-SL			Sampled	: 07/31/2	20 10:00 by Jim Bur	ton, Todd Bear
0H03016-03 (Water)						
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Anions by IC, EPA Method 300.0						
Method: EPA 300.0		Instr: LC12				
Batch ID: W0H0036	Preparation: _NONE (LC)	Prepared: 08/0	3/20 12:30			Analyst: jan
Nitrate as N	ND	110	ug/l	1	08/03/20 20:02	O-14
Conventional Chemistry/Physical Parameter	rs by APHA/EPA/ASTM Methods					
Method: [CALC]	•	Instr: [CALC]				
Batch ID: [CALC]	Preparation: [CALC]	Prepared: 08/1	2/20 17:08			Analyst: YMT
Nitrogen, Total	ND	0.30	mg/l	1	08/17/20	• •
Method: EPA 351.2		Instr: AA06				
<b>Batch ID:</b> W0H0714	Preparation: _NONE (WETCHEM)	Prepared: 08/1	2/20 17:08			Analyst: YMT
TKN	ND	0.10	mg/l	1	08/17/20	•
Method: EPA 353.2		Instr: AA01				
<b>Batch ID:</b> W0H0004	Preparation: _NONE (WETCHEM)	Prepared: 08/0	1/20 10:50			Analyst: sar
NO2+NO3 as N	ND	200	ug/l	1	08/01/20	•
Method: EPA 365.3		Instr: UVVIS04				
Batch ID: W0H0002	Preparation: _NONE (WETCHEM)	Prepared: 08/0	1/20 14:32			Analyst: sar
o-Phosphate as P	0.043	0.010	mg/l	1	08/01/20 15:15	
Method: SM 2540C		Instr: OVEN01				
Batch ID: W0H0065	Preparation: _NONE (WETCHEM)	Prepared: 08/0	3/20 15:48			Analyst: ism
Total Dissolved Solids	17	10	mg/l	1	08/04/20	
Sample: SL-BR-1			Sampled	: 07/31/2	20 11:00 by Jim Bur	ton, Todd Bear
0H03016-04 (Water)						
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Microbiological Parameters by Standard Me	ethods					
Method: SM 9223B		Instr: INC12				
<b>Batch ID:</b> W0H0321	Preparation: _NONE (MICROBIOLOGY)	Prepared: 08/0	1/20 09:33			Analyst: atd
E. coli	ND	1.0	MPN/100ml	1	08/02/20	
Sample: LS-BR-1			Sampled	: 07/31/2	20 11:35 by Jim Bur	ton, Todd Bear
0H03016-05 (Water)						
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Microbiological Parameters by Standard Me	ethods					
Method: SM 9223B		Instr: INC12				
Batch ID: W0H0321	Preparation: _NONE (MICROBIOLOGY)	Prepared: 08/0	1/20 09:33			Analyst: atd
E. coli	ND	1.0	MPN/100ml	1	08/02/20	

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FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:28

Sample Results

(Continued)

AVA						,
Sample: INT2-RES-1			Sampled:	07/31/20	11:50 by Jim Bu	rton, Todd Bear
0H03016-06 (	Nater)					
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Microbiological Parameters by	Standard Methods					
Method: SM 9223B		Instr: INC12				
Batch ID: W0H0321	Preparation: _NONE (MICROBIOLOGY)	Prepared: 08	3/01/20 09:33			Analyst: atd
F coli	6.3	1.0	MPN/100ml	1	08/02/20	

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FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:28



### **Quality Control Results**

AMA										
Anions by IC, EPA Method 300.0										
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W0H0036 - EPA 300.0										
Blank (W0H0036-BLK1)				Prepared & Ar	nalyzed: 08/0	3/20				
Nitrate as N	ND	110	ug/l							
LCS (W0H0036-BS1)				Prepared & Ar	nalyzed: 08/0	3/20				
Nitrate as N	2150	110	ug/l	2000		108	90-110			
Matrix Spike (W0H0036-MS1)	Source: 0H03026-0	)3		Prepared & Ar	nalyzed: 08/0	3/20				
Nitrate as N	29500	1100	ug/l	20000	8200	106	84-115			
Matrix Spike (W0H0036-MS2)	Source: 0H03026-0	)4		Prepared & Ar	nalyzed: 08/0	3/20				
Nitrate as N	29600	1100	ug/l	20000	8140	107	84-115			
Matrix Spike Dup (W0H0036-MSD1)	Source: 0H03026-0	)3		Prepared & Ar	nalyzed: 08/0	3/20				
Nitrate as N	29500	1100	ug/l	20000	8200	107	84-115	0.2	20	
Matrix Spike Dup (W0H0036-MSD2)	Source: 0H03026-0	)4		Prepared & Ar	nalyzed: 08/0	3/20				
Nitrate as N	29600	1100	ug/l	20000	8140	107	84-115	0.03	20	

### **Quality Control Results**

				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
atch: W0H0002 - EPA 365.3										
Blank (W0H0002-BLK1)				Prepared & A	nalyzed: 08/0	01/20				
o-Phosphate as P	ND	0.010	mg/l							
LCS (W0H0002-BS1)				Prepared & A	nalyzed: 08/	01/20				
o-Phosphate as P	0.211	0.010	mg/l	0.200	-	106	88-111			
Matrix Spike (W0H0002-MS1)	Source: 0H03016	-01		Prepared & A	nalyzed: 08/	01/20				
o-Phosphate as P	0.251	0.010	mg/l	0.200	0.0440	104	85-112			
Matrix Spike Dup (W0H0002-MSD1)	Source: 0H03016	-01		Prepared & Analyzed: 08/01/20						
o-Phosphate as P	0.251	0.010	mg/l	0.200	0.0440	104	85-112	0	20	
Batch: W0H0004 - EPA 353.2										
Blank (W0H0004-BLK1)				Prepared & A	nalyzed: 08/	01/20				
NO2+NO3 as N	ND	200	ug/l	•						
LCS (W0H0004-BS1)				Prepared & A	nalyzed: 08/	01/20				
NO2+NO3 as N	1010	200	ug/l	1000		101	90-110			
Matrix Spike (W0H0004-MS1)	Source: 0G31035	-01		Prepared & A	nalyzed: 08/0	01/20				
NO2+NO3 as N	2110	200	ug/l	2000	ND	106	90-110			
Matrix Spike (W0H0004-MS2)	Source: 0G31035	-02		Prepared & A	nalyzed: 08/0	01/20				
NO2+NO3 as N	2110	200	ug/l	2000	ND	106	90-110			
Matrix Spike Dup (W0H0004-MSD1)	Source: 0G31035	-01		Prepared & A	nalyzed: 08/0	01/20				
NO2+NO3 as N	2110	200	ug/l	2000	ND	106	90-110	0	20	
Matrix Spike Dup (W0H0004-MSD2)	Source: 0G31035	-02		Prepared & A	nalyzed: 08/0	01/20				
NO2+NO3 as N		200	ug/l	2000	ND	106	90-110	0	20	

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**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:28

### **Quality Control Results**

Quality Control Nes									(0,	Juliuea
Conventional Chemistry/Physical Parameters	s by APHA/EPA/ASTM Meth	ods (Continue	d)							
				Spike	Source		%REC		RPD	
Analyte atch: W0H0065 - SM 2540C	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
atcn: WUHUU65 - SWI 2540C										
Blank (W0H0065-BLK1)				oared: 08/03/2	0 Analyzed:	08/04/20				
Total Dissolved Solids	ND	10	mg/l							
LCS (W0H0065-BS1)			Prep	oared: 08/03/2	0 Analyzed:	08/04/20	)			
Total Dissolved Solids	809	10	mg/l	824		98	96-102			
Duplicate (W0H0065-DUP1)	Source: 0G27001-	02	Prep	pared: 08/03/2	0 Analyzed:	08/04/20	)			
Total Dissolved Solids	1470	10	mg/l		1500			2	10	
Duplicate (W0H0065-DUP2)	Source: 0G27001-	04	Prep	pared: 08/03/2	0 Analyzed:	08/04/20	)			
Total Dissolved Solids	7230	10	mg/l		7220			0.07	10	
atch: W0H0714 - EPA 351.2										
Blank (W0H0714-BLK1)			Prep	oared: 08/12/2	0 Analyzed:	08/17/20	)			
TKN	ND	0.10	mg/l							
Blank (W0H0714-BLK2)			Prep	oared: 08/12/2	0 Analyzed:	08/17/20	)			
TKN	ND	0.10	mg/l							
LCS (W0H0714-BS1)			Prep	oared: 08/12/2	0 Analyzed:	08/17/20	)			
TKN	0.992	0.10	mg/l	1.00		99	90-110			
LCS (W0H0714-BS2)			Prep	oared: 08/12/2	0 Analyzed:	08/17/20	)			
TKN	0.974	0.10	mg/l	1.00		97	90-110			
Matrix Spike (W0H0714-MS1)	Source: 0H11101-	01	Prep	oared: 08/12/2	0 Analyzed:	08/17/20	)			
TKN	1.28	0.10	mg/l	1.00	0.221		90-110			
Matrix Spike (W0H0714-MS2)	Source: 0H11101-	02	Prep	pared: 08/12/2	0 Analyzed:	08/17/20	)			
TKN	1.21	0.10	mg/l	1.00	0.239	97	90-110			
Matrix Spike Dup (W0H0714-MSD1)	Source: 0H11101-	01	Prep	oared: 08/12/2	0 Analyzed:	08/17/20	)			
TKN	1.24	0.10	mg/l	1.00	0.221	102	90-110	3	10	
Matrix Spike Dup (W0H0714-MSD2)	Source: 0H11101-	02	Prep	oared: 08/12/2	0 Analyzed:	08/17/20	)			
TKN	1.30	0.10	mg/l	1.00	0.239	106	90-110	7	10	



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:28

Qua

### **Quality Control Results**

Microbiological Parameters by Standard Met	thods									
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W0H0321 - SM 9223B										
Blank (W0H0321-BLK2)			Prepa	ared: 07/25/2	0 Analyzed:	07/26/20				
E. coli	ND	1.0	MPN/100ml							
Blank (W0H0321-BLK3)			F	Prepared & Ar	nalyzed: 07/2	27/20				
E. coli	ND	1.0	MPN/100ml							
Blank (W0H0321-BLK4)			Prepa	ared: 07/28/2	0 Analyzed:	07/29/20				
E. coli	ND	1.0	MPN/100ml							
Blank (W0H0321-BLK6)			Prepa	ared: 07/31/2	0 Analyzed:	08/01/20				
E. coli	ND	1.0	MPN/100ml		•					
Blank (W0H0321-BLK7)			Prepa	ared: 08/01/2	0 Analyzed:	08/02/20				
E. coli	ND	1.0	MPN/100ml		•					



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:28



### Notes and Definitions

O-14	This analysis was requested by the client after the holding time was exceeded.
%REC	Percent Recovery
Dil	Dilution
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ)
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
RPD	Relative Percent Difference
Source	Sample that was matrix spiked or duplicated.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

Weck Laboratories 14859 Clark Avenue City of Industry, CA 91745 (626) 336-2139

(626) 336-2139	5-2139					CHA	C Z	CHAIN OF CUSTODY FORM	TOL	Έ	S. S.	_		0H03016		
Client Name/Address	dress:			Project	Project/PO Number:									Analysis Required		
PSOMAS 3 HUTTON C	PSOMAS 3 HUTTON CENTRE DRIVE, SUITE 200	TE 200		2KLE	E010102			1	Method		Aq	po				
SANTA ANA,	CA 92707										ıpλ Ei	rtiəM .	nobelu			
Project Manager:	-			Phone	Phone Number:						.ođei	EPA	olso			
MICHAEL P.	MICHAEL P. DONOVAN (mpdonovn@cox.net)	ovn@cox.net)		(714)	(714) 328-5234					S bevi	πN Idε S.	- N ss	leu pì			
Sampler: Jim Burton, Todd Bear	rton, Todd Bear			Fax Nu	Fax Number: 714.545.8883	.8883					sblej> ras b		gonfil/			
San	Sample Description	Sample	Container Type	Cont.	Sampling Date	ate Time	$\vdash$	Preservation	Mitrate JorithO	£.29£	Total I oriteM		l istoT			Special instructions
BC-NF	1-1	water	60 mi Poly	-	7/31/2	30 9:00 a	ر و	None	×							
		water	250 ml Poly	-	, 1			None		×						Filtered with 0.45 μ
		water	500 ml Poly	-				None		×						
1		water	250 ml Poly	1	1	7		H2S04			×	X	×			
BC- 612	w-L5	water	60 ml Poly	-	6/18/1	30 9:30a	S,	Nane	×							
		water	250 ml Poly	1	,			None		×						Filtered with 0.45µ
		water	500 ml Poly	-				None		×						
1	,	water	250 ml Poly	+	-4	7		H2SO4			×	×	×			
BC- 61w	w - 5L	water	60 ml Poly	-	7 31 30	5 10,00 a	8	None	×							
		water	250 ml Poly	ν-	-	1	4	None		×						Filtered with 0.45µ
		water	500 ml Poly	-				None	:	×						
1		water	250 ml Poly	-	4	-1	_	H2SO4			×	×	×			
:		water	60 ml Poly	-				None	×							
		water	250 ml Poly	+				None		×						Filtered with 0.45 μ
		water	500 ml Poty	-				None		<u> </u>					-	
		water	250 ml Poly	1				H2SO4			×	×	×			
		water	60 ml Paly	1				None	×							
		water	250 ml Poly	-				None		×						Filtered with 0.45µ
		water	500 ml Poly	-				None		×						
		water	250 ml Poly	1			_	H2SO4			×	×	×			
Relinquished By:	(D) (B)	04/18/2	Date /Time: 1:35_0m	(V)	Received by:					KVM	_	Date /Time:	te /Fime: B / t I≥ o 9	7,9% L	Turnaround Time: Same Day	(Check) 72 Hours
Relinquished By:			Date /Time:		Received by:							Date /Time:	1			5 Days
Relinquished By:			Date /Time:		Received in Lab by:	ab by:						Date /Time:	me:	Sample Integrity:	III	
														Intact	) 	On loe

Weck Laboratories 14859 Clark Avenue City of Industry, CA 91745 (626) 336-2139

(626) 336-2139										ي	CLAMANI	, )(Ç	
					HAIN	CHAIN OF CUSTODY FORM	STO	DY FC	)RM	ノ 	)     		Page 2
Cilent Name/Address:			Project/F	Project/PO Number:						Anatysi	Analysis Required	_	
PSOMAS 3 HUTTON CENTRE DRIVE, SUITE 200 SANTA ANA, CA 92707	TE 200		2KLE010102	10102			(i) by	<del>.</del>		<u>-</u>			
Project Manager;			Phone Number:	umber:			∞ :∃						
MICHAEL P. DONOVAN (mpdonovn@cox.net)	vn@cox.net)		(714) 3	(714) 328-5234			l) il∞ i						
Sampler: Jim Burton, Todd Bear			Fax Nun	Fax Number: 714.545.8883	383		sidohis 8238						
Sample Description	Sample Matrix	Container Type	o d #	Sampling Date	Time	Preservation	T						Special Instructions
5L-BR-1	water	125 ml poly	-	7 31 30	31 30 11:00A	Sterile- None	×						24-Hour Hold time*
LS- BA-1	water	125 ml poly	1	, 1	11:35a		×						24-Hour Hold time*
IMB-RES-1	water	125 ml poly	+	~	11:50A		×						24-Haur Hold time"
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Valuable Administration and supplies the supplies of the suppl				i									
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Relinguished By:	1/3"	Date /Time:	35 m	Received by:				KWI	Date / Ime;	9:17	7-6230 Tur 2.1'C Sar	Turnaround Time: Same Day	(Check) 72 Hours
Relinquished By:	1			Received by:					Date //	ime:	22 88	24 Hours	5 Days
Refinquished By:		Date /Time:		Received in Lab by:	.xq				Date /Time:	ime:	Sampl	e Integrity.	(Check)
* Per Lohantan Surface Water Ambient Monitoring Program (SWAMP) for ambient water	onitoring Progra	m (SWAMP) for a	mbient wa	ja	3	÷					1140	2	8



FINAL REPORT

**Work Orders:** 0H25045 **Report Date:** 9/10/2020

Received Date: 8/25/2020

Turnaround Time: Normal

Phones: (714) 751-7373

Fax: (714) 545-8883

P.O. #:

**Billing Code:** 

Project: 2KLE010102

Attn: Michael P. Donovan

Client: Psomas - Santa Ana, CA

3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

#### Dear Michael P. Donovan,

Enclosed are the results of analyses for samples received 8/25/20 with the Chain-of-Custody document. The samples were received in good condition, at 3.5 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

### Sample Results

Sample:	LS-DP-17				Sample	ed: 08/24/2	0 12:05 by Jim Burto	on, Todd Bear
	0H25045-01 (Water)							
Analyte		Resu	ult	MRL	Units	Dil	Analyzed	Qualifier
Method: [CA	ALC]		I	Instr: [CALC]				
Batch ID:	[CALC]	Preparation: [CALC]	F	Prepared: 08/	/27/20 16:37			Analyst: YMT
Nitrogen,	, Total	0.5	52	0.30	mg/l	1	08/31/20	
Method: EPA	A 300.0		ı	Instr: LC12				
Batch ID:	W0H1379	Preparation: _NONE (LC)	F	Prepared: 08/	/25/20 10:53			Analyst: jan
Nitrate as	3 N		ID	110	ug/l	1	08/25/20 15:38	
Method: EP/	A 351.2		ı	Instr: AA06				
Batch ID:	W0H1560	Preparation: _NONE (WETCHEM)	F	Prepared: 08/	/27/20 16:37			Analyst: YMT
TKN		0.5	52	0.10	mg/l	1	08/31/20	
Method: EPA	A 353.2		ı	Instr: AA01				
Batch ID:	W0H1403	Preparation: _NONE (WETCHEM)	F	Prepared: 08/	/25/20 13:01			Analyst: sar
NO2+NO3	3 as N		ID	200	ug/l	1	08/25/20	
Method: EP/	A 365.3		ı	Instr: UVVIS04	4			
Batch ID:	W0H1415	Preparation: _NONE (WETCHEM)	F	Prepared: 08/	/25/20 15:58			Analyst: sbn
o-Phosph	nate as P		ID	0.010	mg/l	1	08/25/20 17:41	
Method: SM	И 2540C		ı	Instr: OVEN01	I			
Batch ID:	W0H1499	Preparation: _NONE (WETCHEM)	F	Prepared: 08/	/26/20 17:38			Analyst: ism
Total Diss	solved Solids		39	10	mg/l	1	08/27/20	

0H25045 Page 1 of 5



FINAL REPORT

Sample Results

n Burton, Todd	20 12:30 by Jim Burt	ed: 08/24/2	Sample			Sample: LS-DP-8
						0H25045-02 (Water)
ed Qua	Analyzed	Dil	Units	MRL	Result	Analyte
				Instr: [CALC]		Method: [CALC]
Analyst:			3/27/20 16:37	Prepared: 08/	Preparation: [CALC]	Batch ID: [CALC]
20	08/31/20	1	mg/l	0.30	ND	Nitrogen, Total
				Instr: LC12		Method: EPA 300.0
Analys			3/25/20 10:53	Prepared: 08/	Preparation: _NONE (LC)	Batch ID: W0H1379
15:56	08/25/20 15:56	1	ug/l	110	ND	Nitrate as N
				Instr: AA06		Method: EPA 351.2
Analyst:			3/27/20 16:37	Prepared: 08/	Preparation: _NONE (WETCHEM)	Batch ID: W0H1560
20	08/31/20	1	mg/l	0.10	ND	TKN
				Instr: AA01		Method: EPA 353.2
Analys			3/26/20 12:24	Prepared: 08/	Preparation: _NONE (WETCHEM)	Batch ID: W0H1477
20	08/26/20	1	ug/l	200	ND	NO2+NO3 as N
			)4	Instr: UVVIS04		Method: EPA 365.3
Analyst			3/25/20 15:58	Prepared: 08/	Preparation: _NONE (WETCHEM)	Batch ID: W0H1415
17:41	08/25/20 17:41	1	mg/l	0.010	ND	o-Phosphate as P
			1	Instr: OVEN01		Method: SM 2540C
Analyst			3/26/20 17:38	Prepared: 08/	Preparation: _NONE (WETCHEM)	Batch ID: W0H1499
20	08/27/20 20 12:55 by Jim Burt	1 ed: 08/24/2	mg/l	<b>Prepared:</b> 08/ 10	Preparation: _NONE (WETCHEM)	Total Dissolved Solids  Sample: BC-Blw-LS
20 n Burton, Todd			mg/l	•	·	Total Dissolved Solids
20 n Burton, Todd	20 12:55 by Jim Burt	ed: 08/24/2	mg/l Sample	10	31	Total Dissolved Solids  Sample: BC-Blw-LS 0H25045-03 (Water)  Analyte
20 n Burton, Todd	20 12:55 by Jim Burt	ed: 08/24/2	mg/l Sample Units	MRL	31	Total Dissolved Solids  Sample: BC-Blw-LS 0H25045-03 (Water)  Analyte
n Burton, Todd ed Qua	20 12:55 by Jim Burt	ed: 08/24/2	mg/l Sample Units	MRL Instr: [CALC]	Result	Total Dissolved Solids  Sample: BC-Blw-LS 0H25045-03 (Water)  Analyte  Method: [CALC]
n Burton, Todd ed Qua	20 12:55 by Jim Burt Analyzed	ed: 08/24/2 <b>Dil</b>	mg/l Sample Units 6/27/20 16:37	MRL Instr: [CALC] Prepared: 08/	Result Preparation: [CALC]	Total Dissolved Solids  Sample: BC-Blw-LS 0H25045-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total
n Burton, Todd ed Qua Analyst:	20 12:55 by Jim Burt Analyzed	ed: 08/24/2 <b>Dil</b>	mg/l Sample Units 6/27/20 16:37 mg/l	MRL Instr: [CALC] Prepared: 08/ 0.30 Instr: LC12	Result  Preparation: [CALC]	Total Dissolved Solids  Sample: BC-Blw-LS 0H25045-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0
n Burton, Todd ed Qua Analyst:	20 12:55 by Jim Burt Analyzed	ed: 08/24/2 <b>Dil</b>	mg/l Sample Units 6/27/20 16:37 mg/l	MRL Instr: [CALC] Prepared: 08/ 0.30	Result Preparation: [CALC]	Total Dissolved Solids  Sample: BC-Blw-LS 0H25045-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total
n Burton, Todd ed Qua Analyst:	20 12:55 by Jim Burt  Analyzed  08/31/20	ed: 08/24/2 <b>Dil</b> 1	mg/l Sample Units 5/27/20 16:37 mg/l	MRL Instr: [CALC] Prepared: 08/ 0.30 Instr: LC12 Prepared: 08/	Result  Preparation: [CALC]  ND  Preparation: _NONE (LC)	Total Dissolved Solids  Sample: BC-Blw-LS 0H25045-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1379 Nitrate as N
n Burton, Todd ed Qua Analyst:	20 12:55 by Jim Burt  Analyzed  08/31/20	ed: 08/24/2 <b>Dil</b> 1	mg/l Sample Units 5/27/20 16:37 mg/l 6/25/20 10:53 ug/l	MRL Instr: [CALC] Prepared: 08/ 0.30 Instr: LC12 Prepared: 08/ 110	Result  Preparation: [CALC]  ND  Preparation: _NONE (LC)	Total Dissolved Solids  Sample: BC-Blw-LS 0H25045-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1379 Nitrate as N
20 n Burton, Todd ed Qua Analyst: 20 Analys 16:14 Analyst:	20 12:55 by Jim Burt  Analyzed  08/31/20	ed: 08/24/2 <b>Dil</b> 1	mg/l Sample Units 5/27/20 16:37 mg/l 6/25/20 10:53 ug/l	MRL Instr: [CALC] Prepared: 08/ 0.30 Instr: LC12 Prepared: 08/ 110 Instr: AA06	Preparation: [CALC] ND  Preparation: _NONE (LC) ND	Total Dissolved Solids  Sample: BC-Blw-LS 0H25045-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1379 Nitrate as N  Method: EPA 351.2
20 n Burton, Todd ed Qua Analyst: 20 Analys 16:14 Analyst:	20 12:55 by Jim Burt  Analyzed  08/31/20  08/25/20 16:14	ed: 08/24/2 <b>Dil</b> 1	mg/l  Sample  Units  3/27/20 16:37  mg/l  3/25/20 10:53  ug/l	MRL Instr: [CALC] Prepared: 08/ 0.30 Instr: LC12 Prepared: 08/ 110 Instr: AA06 Prepared: 08/	Preparation: [CALC] ND  Preparation: _NONE (LC) ND  Preparation: _NONE (WETCHEM)	Total Dissolved Solids  Sample: BC-Blw-LS 0H25045-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1379 Nitrate as N  Method: EPA 351.2  Batch ID: W0H1560
20 n Burton, Todd ed Qua Analyst: 20 Analys 16:14 Analyst:	20 12:55 by Jim Burt  Analyzed  08/31/20  08/25/20 16:14	ed: 08/24/2 <b>Dil</b> 1	mg/l  Sample  Units  3/27/20 16:37  mg/l  3/25/20 10:53  ug/l  3/27/20 16:37  mg/l	MRL Instr: [CALC] Prepared: 08/ 0.30 Instr: LC12 Prepared: 08/ 110 Instr: AA06 Prepared: 08/ 0.10	Preparation: [CALC] ND  Preparation: _NONE (LC) ND  Preparation: _NONE (WETCHEM)	Total Dissolved Solids  Sample: BC-Blw-LS 0H25045-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1379 Nitrate as N  Method: EPA 351.2  Batch ID: W0H1560 TKN
20 n Burton, Todd ed Qua Analyst: 20 Analys 16:14 Analyst: 20 Analys	20 12:55 by Jim Burt  Analyzed  08/31/20  08/25/20 16:14	ed: 08/24/2 <b>Dil</b> 1	mg/l  Sample  Units  3/27/20 16:37  mg/l  3/25/20 10:53  ug/l  3/27/20 16:37  mg/l	MRL Instr: [CALC] Prepared: 08/ 0.30 Instr: LC12 Prepared: 08/ 110 Instr: AA06 Prepared: 08/ 0.10 Instr: AA01	Preparation: [CALC]  Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)  ND	Total Dissolved Solids  Sample: BC-Blw-LS 0H25045-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1379 Nitrate as N  Method: EPA 351.2  Batch ID: W0H1560 TKN  Method: EPA 353.2
20 n Burton, Todd ed Qua Analyst: 20 Analys 16:14 Analyst: 20 Analys	20 12:55 by Jim Burt  Analyzed  08/31/20  08/25/20 16:14	ed: 08/24/2 <b>Dil</b> 1	mg/l  Sample  Units  3/27/20 16:37  mg/l  3/25/20 10:53  ug/l  3/27/20 16:37  mg/l  4/26/20 12:24  ug/l	MRL Instr: [CALC] Prepared: 08/ 0.30 Instr: LC12 Prepared: 08/ 110 Instr: AA06 Prepared: 08/ 0.10 Instr: AA01 Prepared: 08/	Preparation: [CALC]  Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)  Preparation: _NONE (WETCHEM)	Total Dissolved Solids  Sample: BC-Blw-LS 0H25045-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1379 Nitrate as N  Method: EPA 351.2  Batch ID: W0H1560  TKN  Method: EPA 353.2  Batch ID: W0H1477
20 n Burton, Todd ed Qua Analyst: 20 Analys 16:14 Analyst: 20 Analys	20 12:55 by Jim Burt  Analyzed  08/31/20  08/25/20 16:14	ed: 08/24/2 <b>Dil</b> 1	mg/l  Sample  Units  3/27/20 16:37 mg/l  3/25/20 10:53 ug/l  3/27/20 16:37 mg/l  3/26/20 12:24 ug/l	MRL Instr: [CALC] Prepared: 08/ 0.30 Instr: LC12 Prepared: 08/ 110 Instr: AA06 Prepared: 08/ 0.10 Instr: AA01 Prepared: 08/ 200	Preparation: [CALC]  Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)  Preparation: _NONE (WETCHEM)	Total Dissolved Solids  Sample: BC-Blw-LS 0H25045-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1379 Nitrate as N  Method: EPA 351.2  Batch ID: W0H1560 TKN  Method: EPA 353.2  Batch ID: W0H1477 NO2+NO3 as N
20 n Burton, Todd ed Qua Analyst: 20 Analyst: 20 Analyst: 20 Analyst	20 12:55 by Jim Burt  Analyzed  08/31/20  08/25/20 16:14	ed: 08/24/2 <b>Dil</b> 1	mg/l  Sample  Units  3/27/20 16:37 mg/l  3/25/20 10:53 ug/l  3/27/20 16:37 mg/l  3/26/20 12:24 ug/l	MRL Instr: [CALC] Prepared: 08/ 0.30 Instr: LC12 Prepared: 08/ 110 Instr: AA06 Prepared: 08/ 0.10 Instr: AA01 Prepared: 08/ 200 Instr: UVVIS04	Preparation: [CALC]  ND  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)  ND  Preparation: _NONE (WETCHEM)	Total Dissolved Solids  Sample: BC-Blw-LS 0H25045-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0 Batch ID: W0H1379 Nitrate as N  Method: EPA 351.2 Batch ID: W0H1560 TKN  Method: EPA 353.2 Batch ID: W0H1477 NO2+NO3 as N  Method: EPA 365.3
20 n Burton, Todd ed Qua Analyst: 20 Analyst: 20 Analyst: 20 Analyst	20 12:55 by Jim Burt  Analyzed  08/31/20  08/25/20 16:14  08/31/20  08/26/20	ed: 08/24/2  Dil  1  1	mg/l  Sample  Units  3/27/20 16:37 mg/l  3/25/20 10:53 ug/l  3/27/20 16:37 mg/l  3/26/20 12:24 ug/l  3/4  3/25/20 15:58 mg/l	MRL Instr: [CALC] Prepared: 08/ 0.30 Instr: LC12 Prepared: 08/ 110 Instr: AA06 Prepared: 08/ 0.10 Instr: AA01 Prepared: 08/ 200 Instr: UVVIS04 Prepared: 08/	Preparation: [CALC]  Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)  Preparation: _NONE (WETCHEM)  ND  Preparation: _NONE (WETCHEM)	Total Dissolved Solids  Sample: BC-Blw-LS 0H25045-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1379 Nitrate as N  Method: EPA 351.2  Batch ID: W0H1560 TKN  Method: EPA 353.2  Batch ID: W0H1477 NO2+NO3 as N  Method: EPA 365.3  Batch ID: W0H1415 o-Phosphate as P
20 n Burton, Todd ed Qua Analyst: 20 Analyst: 20 Analyst: 20 Analyst	20 12:55 by Jim Burt  Analyzed  08/31/20  08/25/20 16:14  08/31/20  08/26/20	ed: 08/24/2  Dil  1  1	mg/l  Sample  Units  3/27/20 16:37 mg/l  3/25/20 10:53 ug/l  3/27/20 16:37 mg/l  3/26/20 12:24 ug/l  3/4  3/25/20 15:58 mg/l	MRL Instr: [CALC] Prepared: 08/ 0.30 Instr: LC12 Prepared: 08/ 110 Instr: AA06 Prepared: 08/ 0.10 Instr: AA01 Prepared: 08/ 200 Instr: UVVISO4 Prepared: 08/ 0.010	Preparation: [CALC]  Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)  Preparation: _NONE (WETCHEM)  ND  Preparation: _NONE (WETCHEM)	Total Dissolved Solids  Sample: BC-Blw-LS 0H25045-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1379 Nitrate as N  Method: EPA 351.2  Batch ID: W0H1560 TKN  Method: EPA 353.2  Batch ID: W0H1477 NO2+NO3 as N  Method: EPA 365.3  Batch ID: W0H1415



0H25045

## Certificate of Analysis

FINAL REPORT

Page 3 of 5



Quality Control Resu	110									
Anions by IC, EPA Method 300.0										
				Spike	Source		%REC		RPD	
Analyte atch: W0H1379NONE (LC)	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
				Dramanad & A	analyzed: 08/2!	E /20				
Blank (W0H1379-BLK1)  Nitrate as N	ND	110	ug/l	Prepareu & A	maryzeu. 00/2:	5/20				
LCS (W0H1379-BS1)				Prenared & A	analyzed: 08/2!	5/20				
Nitrate as N	2080	110	ug/l	2000	maryzeu. 00/2.	104	90-110			
Matrix Spike (W0H1379-MS1)	Source: 0H210	63-04		Prenared & A	nalyzed: 08/2!	5/20				
Nitrate as N		1100	ug/l	20000	250	103	84-115			
Matrix Spike (W0H1379-MS2)	Source: 0H240	27-04		Prepared & A	nalyzed: 08/2!	5/20				
Nitrate as N		1100	ug/l	20000	270	107	84-115			
Matrix Spike Dup (W0H1379-MSD1)	Source: 0H210	63-04		Prepared & A	nalyzed: 08/2!	5/20				
Nitrate as N	20800	1100	ug/l	20000	250	103	84-115	0.05	20	
Matrix Spike Dup (W0H1379-MSD2)	Source: 0H240	27-04	ı	Prepared: 08/25/2	20 Analyzed: 0	08/26/20				
Nitrate as N		1100	ug/l	20000	270	107	84-115	0.3	20	
Conventional Chemistry/Physical Parameters b	y APHA/EPA/ASTM Met	hods								
	-			Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
Batch: W0H1403NONE (WETCHEM)										
Blank (W0H1403-BLK1)	NB	000		Prepared & A	nalyzed: 08/2	5/20				
NO2+NO3 as N	ND	200	ug/l							
LCS (W0H1403-BS1)	004	200		=	nalyzed: 08/2!		00.440			
NO2+NO3 as N	931	200	ug/l	1000		93	90-110			
Matrix Spike (W0H1403-MS1) NO2+NO3 as N	<b>Source: 0H170</b>	<b>10-07</b> 200	//	Prepared & A	nalyzed: 08/2! 4210	<b>5/20</b> 91	90-110			
INOZTINOS dS IN		200	ug/l	2000	4210	91	90-110			
Matrix Spike (W0H1403-MS2) NO2+NO3 as N	<b>Source: 0H170</b>	<b>18-07</b> 200	ug/l	Prepared & A 2000	nalyzed: 08/2! 5870	<b>5/20</b> 86	90-110			MS-02
			ug/i				30-110			1010-02
Matrix Spike Dup (W0H1403-MSD1) NO2+NO3 as N	<b>Source: 0H170</b>	<b>10-07</b> 200	ug/l	Prepared & A 2000	nalyzed: 08/2! 4210	<b>5/20</b> 90	90-110	0.2	20	
			ugn				30-110	0.2	20	
Matrix Spike Dup (W0H1403-MSD2) NO2+NO3 as N	<b>Source: 0H170</b>	1 <b>18-07</b> 200	ug/l	Prepared & A 2000	inalyzed: 08/2! 5870	<b>5/20</b> 86	90-110	0.1	20	MS-02
	. 555	200	~g/.	2000	00.0		00	0		
Batch: W0H1415 - NONE (WETCHEM)										
Blank (W0H1415-BLK1) o-Phosphate as P	ND	0.010	mg/l	Prepared & A	inalyzed: 08/2!	5/20				
·		0.010	mg/i							
LCS (W0H1415-BS1) o-Phosphate as P	0.204	0.010	mg/l	Prepared & A 0.200	nalyzed: 08/2!	<b>5/20</b> 102	88-111			
·			9							
Matrix Spike (W0H1415-MS1)  o-Phosphate as P	Source: 0H240	0.010	mg/l	0.200	nalyzed: 08/2! 0.114	100	85-112			
·			9							
Matrix Spike Dup (W0H1415-MSD1) o-Phosphate as P	Source: 0H240	0.010	mg/l	0.200	nalyzed: 08/2! 0.114	100	85-112	0	20	
·			Ü							
Batch: W0H1477 - NONE (WETCHEM)						c (26				
Blank (W0H1477-BLK1)	ND	200	ug/l	Prepared & A	inalyzed: 08/20	6/20				
NO2+NO3 as N										
NO2+NO3 as N LCS (W0H1477-BS1)		200	~g/.	Duana d C . *	analyzed: 08/20	c /20				



FINAL REPORT

Quality Control Results

Conventional Chemistry/Physical Parameters	by APHA/EPA/ASTM Met	hods (Continue	ed)							
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
tch: W0H1477 - NONE (WETCHEM) (Continued)										
Matrix Spike (W0H1477-MS1)	Source: 0H260			-	Analyzed: 08/2	6/20				
NO2+NO3 as N	3000	200	ug/l	2000	945	103	90-110			
Matrix Spike (W0H1477-MS2)	Source: 0H260	46-02		Prepared & A	Analyzed: 08/2	6/20				
NO2+NO3 as N	2910	200	ug/l	2000	773	107	90-110			
Matrix Spike Dup (W0H1477-MSD1)	Source: 0H260	46-01		Prepared & A	Analyzed: 08/2	6/20				
NO2+NO3 as N	3000	200	ug/l	2000	945	103	90-110	0	20	
Matrix Spike Dup (W0H1477-MSD2)	Source: 0H260	46-02		Prenared & A	Analyzed: 08/2	6/20				
NO2+NO3 as N		200	ug/l	2000	773	106	90-110	0.7	20	
			Ü							
atch: W0H1499NONE (WETCHEM)										
Blank (W0H1499-BLK1)				Prepared: 08/26/	20 Analyzed: (	08/27/20				
Total Dissolved Solids	ND	10	mg/l							
LCS (W0H1499-BS1)				Prepared: 08/26/	20 Analyzed: (	08/27/20				
Total Dissolved Solids	836	10	mg/l	824		101	96-102			
Duplicate (W0H1499-DUP1)	Source: 0H260	90-01		Prepared: 08/26/	20 Analyzed: (	08/27/20				
Total Dissolved Solids	1320	10	mg/l	.,,	1280			3	10	
Duplicate (W0H1499-DUP2)	Source: 0H260	00-05		Prepared: 08/26/	20 Analyzod: (	10/27/20				
Total Dissolved Solids	1390	10	mg/l	rrepared: 00/20/	20 Analyzed: 0 1370	00/21/20		1	10	
			3.							
atch: W0H1560NONE (WETCHEM)										
Blank (W0H1560-BLK1)				Prepared: 08/27/	20 Analyzed: (	08/31/20				
TKN	· · · · · · · · · · ND	0.10	mg/l							
Blank (W0H1560-BLK2)				Prepared: 08/27/	20 Analyzed: (	08/31/20				
TKN	ND	0.10	mg/l							
LCS (W0H1560-BS1)				Prepared: 08/27/	20 Analyzed: (	08/31/20				
TKN	0.983	0.10	mg/l	1.00	-	98	90-110			
LCS (W0H1560-BS2)				Prepared: 08/27/	20 Analyzod: (	18/31/20				
TKN	0.978	0.10	mg/l	1.00	zo Anaryzeu. C	98	90-110			
			3.							
Matrix Spike (W0H1560-MS1)	Source: 0H240		ma/l	Prepared: 08/27/	=		00 110			
TKN	1.28	0.10	mg/l	1.00	0.293	99	90-110			
Matrix Spike (W0H1560-MS2)	Source: 0H240			Prepared: 08/27/	=					
TKN	1.29	0.10	mg/l	1.00	0.262	103	90-110			
Matrix Spike Dup (W0H1560-MSD1)	Source: 0H240	91-04		Prepared: 08/27/	20 Analyzed: (	08/31/20				
TKN	1.29	0.10	mg/l	1.00	0.293	100	90-110	0.6	10	
Matrix Spike Dup (W0H1560-MSD2)	Source: 0H240	91-05		Prepared: 08/27/	20 Analyzed: (	08/31/20				
TKN	1.29	0.10	mg/l	1.00	0.262	102	90-110	0.2	10	



FINAL REPORT



### **Notes and Definitions**

ltem	Definition
MS-02	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
%REC	Percent Recovery
Dil	Dilution
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ)
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or

above the MDL.

RPD Relative Percent Difference

Source Sample that was matrix spiked or duplicated.

: State

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

#### Reviewed by:

Chris Samatmanakit Project Manager









DoD-ISO ANAB # • ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015 • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

OH15045

Weck Laboratories 14859 Clark Avenue City of Industry, CA 91745 (626) 336-2139

				J	HAIN	CHAIN OF CUSTODY FORM	STO	PYF	ÖR	Σ				Page 1 of	_
Olient Name/Address:			Project/	Project/PO Number:				  - 			Ana	Analysis Required	ired		
PSOMAS										I	,				
3 HUTTON CENTRE DRIVE, SUITE 200 SANTA ANA, CA 92707	.500		ZKLE010102	10102			i	EPA Ma	SM254i	porteM	- uogejn				
Project Manager:			Phone Number:	lumber:						∀d∃	csici				
MICHAEL P. DONOVAN (mpdonovn@cox.net)	(@cox.net)		(714)	(714) 328-5234					diN Ide	_ Z.I - M as	leu pà	-			
Sampler: Jim Burton, Todd Bear	:	- Ain-Parents	Fax Nun	Fax Number: 714,545.8883	883				Kjelda	EON-	gorjiN				
Sample Description	Sample	Container Type	Cont.	Sampling Date	Time	Preservation	*****	E.28E	• IstoT		Total			Special Instructions	ons
7-00-57	water	60 ml Poly	,	8/24/20	20.00	) None	×								
	water	250 ml Poly	+			None		×						Filtered with 0.45 μ	
	water	500 ml Poly	-			None			×	-					
	water	250 ml Poly	-		-	H2SO4			×	×	×				
LS-00-8	water	60 ml Poly	~	8/24 20	13.30	None	×								
	water	250 ml Poly	-	, ,	_	None		×				ĺ		Filtered with 0.45µ	
	water	500 ml Poly	1			None			×						
	water	250 ml Poly	1	4	7	H2SO4			<u>×</u>	×	×				
BC-61w-LS	water	60 ml Poly	٦	S 124 30	12:55	Ø None	×								}
	wafer	250 ml Poly	,	, ,		None		×						Filtered with 0.45µ	
	water	500 ml Poly	1			None			×						
	water	250 ml Poly	1	-1,	Ť	H2SO4			×	×	×				
	water	60 ml Poly	1			None	×								
	water	250 ml Poly	1			None		×						Filtered with 0.45µ	
P	water	500 ml Poly	ĵ			None			×						
	water	250 ml Poly	1			H2SO4			<u>~</u>	×	×				
	water	60 ml Poly	-			None	×								
	water	250 ml Poly	-			None		×						Filtered with 0.45μ	
	water	500 ml Poly	-			None			×						
The state of the s	water	250 ml Poly	-			H2SO4			×	×	×				
Relinguished By:	45/8	Date /Time:	30,0	Received by:						Date /Time:	lme:		Turnaround Time: Same Day	ັ	
Refinduished By:		Date /Time:	-	Received by:	A		,				lme		24 Hours	l	1
1-866							2/3	12/20	4:5	M			48 Hours	- 11	
Relinquished By:		Date /Fime:		Received in Latic by	.id					Date / I Ime	ime:		Sample Integrity: Intact	y: (Check) On loe	
									ļ				1056	11	

45.5°C 7.0294



FINAL REPORT

**Work Orders:** 0H26029 **Report Date:** 9/10/2020

**Received Date:** 8/26/2020

Project: 2KLE010102 Turnaround Time: Normal

Phones: (714) 751-7373

Fax: (714) 545-8883

P.O. #:

Billing Code:

Attn: Michael P. Donovan

Client: Psomas - Santa Ana, CA

3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

#### Dear Michael P. Donovan,

Enclosed are the results of analyses for samples received 8/26/20 with the Chain-of-Custody document. The samples were received in good condition, at 2.0 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

### Sample Results

Sample: SL-DP-20			Sample	ed: 08/25/2	20 11:55 by Jim Burto	on, Todd Bear
0H26029-01 (Water)						
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifie
Method: [CALC]		Instr: [CALC]				
Batch ID: [CALC]	Preparation: [CALC]	Prepared: 08/	27/20 16:37			Analyst: YM
Nitrogen, Total	ND	0.30	mg/l	1	08/31/20	
Method: EPA 300.0		Instr: LC12				
Batch ID: W0H1443	Preparation: _NONE (LC)	Prepared: 08/	26/20 10:30			Analyst: ja
Nitrate as N	ND	110	ug/l	1	08/26/20 18:22	
Method: EPA 351.2		Instr: AA06				
Batch ID: W0H1560	Preparation: _NONE (WETCHEM)	Prepared: 08/	27/20 16:37			Analyst: YM
TKN	ND	0.10	mg/l	1	08/31/20	
Method: EPA 353.2		Instr: AA01				
Batch ID: W0H1477	Preparation: _NONE (WETCHEM)	Prepared: 08/	26/20 12:24			Analyst: sa
NO2+NO3 as N	ND	200	ug/l	1	08/26/20	
Method: EPA 365.3		Instr: UVVIS04	1			
Batch ID: W0H1483	Preparation: _NONE (WETCHEM)	Prepared: 08/	26/20 12:53			Analyst: sb
o-Phosphate as P	ND	0.010	mg/l	1	08/26/20 13:23	
Method: SM 2540C		Instr: OVEN01				
Batch ID: W0H1499	Preparation: _NONE (WETCHEM)	Prepared: 08/	26/20 17:38			Analyst: isr
Total Dissolved Solids	33	10	mg/l	1	08/27/20	

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FINAL REPORT

Sample Results

Sample: SL-DP-15 0H26029-02 (Water)			Sample	ed: 08/25/2	20 12:20 by Jim Burto	on, Todd Bea
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifie
Method: [CALC]		Instr: [CALC]				
Batch ID: [CALC]	Preparation: [CALC]	<b>Prepared:</b> 08/27/	/20 16:37			Analyst: YM
Nitrogen, Total	ND	0.30	mg/l	1	08/31/20	
Method: EPA 300.0		Instr: LC12				
Batch ID: W0H1443	Preparation: _NONE (LC)	<b>Prepared:</b> 08/26/	/20 10:30			Analyst: ja
Nitrate as N	ND	110	ug/l	1	08/26/20 18:40	
Method: EPA 351.2		Instr: AA06				
Batch ID: W0H1560	Preparation: _NONE (WETCHEM)	<b>Prepared:</b> 08/27/	/20 16:37			Analyst: YM
TKN	ND	0.10	mg/l	1	08/31/20	
Method: EPA 353.2		Instr: AA01				
Batch ID: W0H1477	Preparation: _NONE (WETCHEM)	<b>Prepared:</b> 08/26/	/20 12:24			Analyst: sa
NO2+NO3 as N	ND	200	ug/l	1	08/26/20	
Method: EPA 365.3		Instr: UVVIS04				
Batch ID: W0H1483	Preparation: _NONE (WETCHEM)	<b>Prepared:</b> 08/26/	/20 12:53			Analyst: sb
o-Phosphate as P	ND	0.010	mg/l	1	08/26/20 13:24	
Method: SM 2540C		Instr: OVEN01				
						A continue de
Batch ID: W0H1499	Preparation: _NONE (WETCHEM)	<b>Prepared:</b> 08/26/	/20 17:38			Analyst: isn
Batch ID: W0H1499 Total Dissolved Solids	Preparation: _NONE (WETCHEM) 30	<b>Prepared:</b> 08/26/ 10	mg/l	1 ed: 08/25/2	08/27/20 20 12:45 by Jim Burto	
Batch ID: W0H1499 Total Dissolved Solids	<u> </u>	•	mg/l			on, Todd Bea
Batch ID: W0H1499 Total Dissolved Solids  Sample: BC-BLW-SL 0H26029-03 (Water)  Analyte	30	10	mg/l Sample	ed: 08/25/2	20 12:45 by Jim Burto	on, Todd Bea
Batch ID: W0H1499 Total Dissolved Solids  Sample: BC-BLW-SL 0H26029-03 (Water)  Analyte	30	10	mg/l Sample Units	ed: 08/25/2	20 12:45 by Jim Burto	on, Todd Bea
Batch ID: W0H1499 Total Dissolved Solids  Sample: BC-BLW-SL 0H26029-03 (Water)  Analyte  Method: [CALC]	30 Result	MRL Instr: [CALC]	mg/l Sample Units	ed: 08/25/2	20 12:45 by Jim Burto	on, Todd Bea Qualifie
Batch ID: W0H1499 Total Dissolved Solids  Sample: BC-BLW-SL 0H26029-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total	Result Preparation: [CALC]	MRL Instr: [CALC] Prepared: 08/27,	mg/l Sample Units /20 16:37	ed: 08/25/2 Dil	20 12:45 by Jim Burto Analyzed	on, Todd Bea
Batch ID: W0H1499 Total Dissolved Solids  Sample: BC-BLW-SL 0H26029-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total	Result Preparation: [CALC]	MRL Instr: [CALC] Prepared: 08/27/ 0.30	mg/l Sample Units /20 16:37 mg/l	ed: 08/25/2 Dil	20 12:45 by Jim Burto Analyzed	On, Todd Bea
Batch ID: W0H1499 Total Dissolved Solids  Sample: BC-BLW-SL 0H26029-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0	Result  Preparation: [CALC]	MRL Instr: [CALC] Prepared: 08/27/ 0.30 Instr: LC12	mg/l Sample Units /20 16:37 mg/l	ed: 08/25/2 Dil	20 12:45 by Jim Burto Analyzed	On, Todd Bea
Batch ID: W0H1499 Total Dissolved Solids  Sample: BC-BLW-SL 0H26029-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1443  Nitrate as N	Result  Preparation: [CALC]  ND  Preparation: _NONE (LC)	MRL Instr: [CALC] Prepared: 08/27/ 0.30 Instr: LC12 Prepared: 08/26/	mg/l Sample Units /20 16:37 mg/l	ed: 08/25/2 <b>Dil</b>	20 12:45 by Jim Burto  Analyzed  08/31/20	On, Todd Bea
Batch ID: W0H1499 Total Dissolved Solids  Sample: BC-BLW-SL 0H26029-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1443  Nitrate as N	Result  Preparation: [CALC]  ND  Preparation: _NONE (LC)	MRL Instr: [CALC] Prepared: 08/27/ 0.30 Instr: LC12 Prepared: 08/26/ 110	mg/l Sample Units /20 16:37 mg/l /20 10:30 ug/l	ed: 08/25/2 <b>Dil</b>	20 12:45 by Jim Burto  Analyzed  08/31/20	Qualifie Analyst: YM Analyst: ja
Batch ID: W0H1499 Total Dissolved Solids  Sample: BC-BLW-SL 0H26029-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1443 Nitrate as N  Method: EPA 351.2	Result  Preparation: [CALC]  ND  Preparation: _NONE (LC)  ND	MRL Instr: [CALC] Prepared: 08/27/ 0.30 Instr: LC12 Prepared: 08/26/ 110 Instr: AA06	mg/l Sample Units /20 16:37 mg/l /20 10:30 ug/l	ed: 08/25/2 <b>Dil</b>	20 12:45 by Jim Burto  Analyzed  08/31/20	On, Todd Bea Qualifie Analyst: YM Analyst: ja
Batch ID: W0H1499 Total Dissolved Solids  Sample: BC-BLW-SL 0H26029-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1443 Nitrate as N  Method: EPA 351.2  Batch ID: W0H1560	Result  Preparation: [CALC]  ND  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)	MRL Instr: [CALC] Prepared: 08/27/ 0.30 Instr: LC12 Prepared: 08/26/ 110 Instr: AA06 Prepared: 08/27/	mg/l Sample Units /20 16:37 mg/l /20 10:30 ug/l /20 16:37	ed: 08/25/2  Dil  1	20 12:45 by Jim Burto Analyzed  08/31/20  08/26/20 18:58	
Batch ID: W0H1499 Total Dissolved Solids  Sample: BC-BLW-SL 0H26029-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1443 Nitrate as N  Method: EPA 351.2  Batch ID: W0H1560 TKN	Result  Preparation: [CALC]  ND  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)	MRL Instr: [CALC] Prepared: 08/27/ 0.30 Instr: LC12 Prepared: 08/26/ 110 Instr: AA06 Prepared: 08/27/ 0.10	mg/l  Sample  Units  /20 16:37  mg/l  /20 10:30  ug/l  /20 16:37  mg/l	ed: 08/25/2  Dil  1	20 12:45 by Jim Burto Analyzed  08/31/20  08/26/20 18:58	Qualifie Analyst: YM Analyst: ja
Batch ID: W0H1499 Total Dissolved Solids  Sample: BC-BLW-SL 0H26029-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1443 Nitrate as N  Method: EPA 351.2  Batch ID: W0H1560 TKN  Method: EPA 353.2	Result  Preparation: [CALC]  ND  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)	MRL Instr: [CALC] Prepared: 08/27/ 0.30 Instr: LC12 Prepared: 08/26/ 110 Instr: AA06 Prepared: 08/27/ 0.10 Instr: AA01	mg/l  Sample  Units  /20 16:37  mg/l  /20 10:30  ug/l  /20 16:37  mg/l	ed: 08/25/2  Dil  1	20 12:45 by Jim Burto Analyzed  08/31/20  08/26/20 18:58	Qualifie Analyst: YM Analyst: ja
Batch ID: W0H1499 Total Dissolved Solids  Sample: BC-BLW-SL 0H26029-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1443 Nitrate as N  Method: EPA 351.2  Batch ID: W0H1560 TKN  Method: EPA 353.2  Batch ID: W0H1477	Result  Preparation: [CALC]  ND  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)  ND	MRL Instr: [CALC] Prepared: 08/27/ 0.30 Instr: LC12 Prepared: 08/26/ 110 Instr: AA06 Prepared: 08/27/ 0.10 Instr: AA01 Prepared: 08/26/	mg/l Sample Units /20 16:37 mg/l /20 10:30 ug/l /20 16:37 mg/l /20 12:24	ed: 08/25/2  Dil  1  1	20 12:45 by Jim Burto Analyzed  08/31/20  08/26/20 18:58	Qualifie Analyst: YM Analyst: ja
Batch ID: W0H1499 Total Dissolved Solids  Sample: BC-BLW-SL 0H26029-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1443 Nitrate as N  Method: EPA 351.2  Batch ID: W0H1560 TKN  Method: EPA 353.2  Batch ID: W0H1477 NO2+NO3 as N  Method: EPA 365.3  Batch ID: W0H1483	Preparation: [CALC]  ND  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)  ND  Preparation: _NONE (WETCHEM)	MRL Instr: [CALC] Prepared: 08/27/ 0.30 Instr: LC12 Prepared: 08/26/ 110 Instr: AA06 Prepared: 08/27/ 0.10 Instr: AA01 Prepared: 08/26/ 200 Instr: UVVIS04 Prepared: 08/26/	mg/l Sample Units /20 16:37 mg/l /20 10:30 ug/l /20 16:37 mg/l /20 12:24 ug/l	ed: 08/25/2  Dil  1  1  1	20 12:45 by Jim Burto Analyzed  08/31/20  08/26/20 18:58  08/31/20	Qualifie Analyst: YM Analyst: ja Analyst: YM
Batch ID: W0H1499 Total Dissolved Solids  Sample: BC-BLW-SL 0H26029-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1443 Nitrate as N  Method: EPA 351.2  Batch ID: W0H1560 TKN  Method: EPA 353.2  Batch ID: W0H1477 NO2+NO3 as N  Method: EPA 365.3	Preparation: [CALC]  ND  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)  ND  Preparation: _NONE (WETCHEM)	MRL Instr: [CALC] Prepared: 08/27/ 0.30 Instr: LC12 Prepared: 08/26/ 110 Instr: AA06 Prepared: 08/27/ 0.10 Instr: AA01 Prepared: 08/26/ 200 Instr: UVVIS04	mg/l  Sample  Units  /20 16:37  mg/l  /20 10:30  ug/l  /20 16:37  mg/l  /20 12:24  ug/l	ed: 08/25/2  Dil  1  1	20 12:45 by Jim Burto Analyzed  08/31/20  08/26/20 18:58	Qualifie Analyst: YM Analyst: ja Analyst: YM
Batch ID: W0H1499 Total Dissolved Solids  Sample: BC-BLW-SL 0H26029-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1443 Nitrate as N  Method: EPA 351.2  Batch ID: W0H1560 TKN  Method: EPA 353.2  Batch ID: W0H1477 NO2+NO3 as N  Method: EPA 365.3  Batch ID: W0H1483 o-Phosphate as P	Preparation: [CALC]  ND  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)  ND  Preparation: _NONE (WETCHEM)	MRL Instr: [CALC] Prepared: 08/27/ 0.30 Instr: LC12 Prepared: 08/26/ 110 Instr: AA06 Prepared: 08/27/ 0.10 Instr: AA01 Prepared: 08/26/ 200 Instr: UVVIS04 Prepared: 08/26/	mg/l Sample Units /20 16:37 mg/l /20 10:30 ug/l /20 16:37 mg/l /20 12:24 ug/l	ed: 08/25/2  Dil  1  1  1	20 12:45 by Jim Burto Analyzed  08/31/20  08/26/20 18:58  08/31/20	On, Todd Bea Qualifie Analyst: YM Analyst: ja
Batch ID: W0H1499 Total Dissolved Solids  Sample: BC-BLW-SL 0H26029-03 (Water)  Analyte  Method: [CALC] Batch ID: [CALC] Nitrogen, Total  Method: EPA 300.0  Batch ID: W0H1443 Nitrate as N  Method: EPA 351.2  Batch ID: W0H1560 TKN  Method: EPA 353.2  Batch ID: W0H1477 NO2+NO3 as N  Method: EPA 365.3  Batch ID: W0H1483	Preparation: [CALC]  ND  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)  ND  Preparation: _NONE (WETCHEM)	MRL Instr: [CALC] Prepared: 08/27/ 0.30 Instr: LC12 Prepared: 08/26/ 110 Instr: AA06 Prepared: 08/27/ 0.10 Instr: AA01 Prepared: 08/26/ 200 Instr: UVVIS04 Prepared: 08/26/ 0.010	mg/l  Sample  Units  /20 16:37 mg/l  /20 10:30 ug/l  /20 16:37 mg/l  /20 12:24 ug/l  /20 12:53 mg/l	ed: 08/25/2  Dil  1  1  1	20 12:45 by Jim Burto Analyzed  08/31/20  08/26/20 18:58  08/31/20	Qualifie Analyst: YM Analyst: ja Analyst: YM



FINAL REPORT



Anions by IC, EPA Method 300.0										
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
atch: W0H1443 - NONE (LC)										
Blank (W0H1443-BLK1)	ND	440		Prepared & A	nalyzed: 08/20	6/20				
Nitrate as N	· ND	110	ug/l							
LCS (W0H1443-BS1)				-	nalyzed: 08/20					
Nitrate as N	2090	110	ug/l	2000		105	90-110			
Matrix Spike (W0H1443-MS1)	Source: 0H25			-	nalyzed: 08/20					
Nitrate as N	24000	1100	ug/l	20000	2970	105	84-115			
Matrix Spike (W0H1443-MS2)	Source: 0H25	084-02		-	nalyzed: 08/20	6/20				
Nitrate as N	23700	1100	ug/l	20000	3000	103	84-115			
Matrix Spike Dup (W0H1443-MSD1)	Source: 0H25	084-01		Prepared & A	nalyzed: 08/20	6/20				
Nitrate as N	24000	1100	ug/l	20000	2970	105	84-115	0.04	20	
Matrix Spike Dup (W0H1443-MSD2)	Source: 0H25	084-02		Prepared & A	nalyzed: 08/20	6/20				
Nitrate as N	23600	1100	ug/l	20000	3000	103	84-115	0.4	20	
Conventional Chemistry/Physical Parameters by	/ APHA/EPA/ASTM Me	thods								
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
atch: W0H1477NONE (WETCHEM)										
Blank (W0H1477-BLK1)				Prepared & A	nalyzed: 08/20	6/20				
NO2+NO3 as N	ND	200	ug/l							
LCS (W0H1477-BS1)				Prepared & A	nalyzed: 08/20	6/20				
NO2+NO3 as N	1020	200	ug/l	1000		102	90-110			
Matrix Spike (W0H1477-MS1)	Source: 0H26	046-01		Prepared & A	nalyzed: 08/20	6/20				
NO2+NO3 as N	3000	200	ug/l	2000	945	103	90-110			
Matrix Spike (W0H1477-MS2)	Source: 0H26	046-02		Prepared & A	nalyzed: 08/20	6/20				
NO2+NO3 as N	2910	200	ug/l	2000	773	107	90-110			
Matrix Spike Dup (W0H1477-MSD1)	Source: 0H26	046-01		Prepared & A	nalyzed: 08/20	6/20				
NO2+NO3 as N	3000	200	ug/l	2000	945	103	90-110	0	20	
Matrix Spike Dup (W0H1477-MSD2)	Source: 0H26	046-02		Prepared & A	nalyzed: 08/20	6/20				
NO2+NO3 as N	2890	200	ug/l	2000	773	106	90-110	0.7	20	
atch: W0H1483 - NONE (WETCHEM)										
Blank (W0H1483-BLK1)				Dronound 9: A	mah.mad. 00/2/	6/20				
o-Phosphate as P	ND	0.010	mg/l	Prepared & A	nalyzed: 08/20	0/20				
·			Ü	D		c (20				
ucs (W0H1483-BS1) o-Phosphate as P	0.200	0.010	mg/l	0.200	nalyzed: 08/20	100	88-111			
·			9							
Matrix Spike (W0H1483-MS1)  o-Phosphate as P	<b>Source: 0H25</b>	0.010 0.010	mg/l	0.200	.nalyzed: 08/20 0.108	<b>6/20</b> 98	85-112			
·			1119/1				00-112			
Matrix Spike Dup (W0H1483-MSD1)  o-Phosphate as P	<b>Source: 0H25</b>	0.010 0.010	ma/l	Prepared & A 0.200	.nalyzed: 08/20 0.108	<b>6/20</b> 100	85-112	1	20	
·	0.001	0.010	mg/l	0.200	0.700	100	00-112	1	20	
atch: W0H1499 - NONE (WETCHEM)										
Blank (W0H1499-BLK1)				Prepared: 08/26/2	20 Analyzed: 0	08/27/20				
Total Dissolved Solids	ND	10	mg/l							
				Prepared: 08/26/2	O Analyzod: (	19/27/20				
LCS (W0H1499-BS1)				riepaieu. 00/20/2	o Allalyzeu.	00/21/20				



FINAL REPORT

Quality Control Results

(Continued)

				C	<b>C</b>		0/ DEC		000	
Austral	Danile	MDI	Huita	Spike	Source	% DEC	%REC	DDD	RPD	0
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
satch: W0H1499 - NONE (WETCHEM) (Continued)										
Duplicate (W0H1499-DUP1)	Source: 0H260			repared: 08/26/2	-	8/27/20				
Total Dissolved Solids	1320	10	mg/l		1280			3	10	
Duplicate (W0H1499-DUP2)	Source: 0H260	90-05	F	Prepared: 08/26/2	20 Analyzed: 0	8/27/20				
Total Dissolved Solids	1390	10	mg/l		1370			1	10	
Batch: W0H1560NONE (WETCHEM)										
Blank (W0H1560-BLK1)			F	Prepared: 08/27/2	20 Analyzed: 0	8/31/20				
TKN	ND	0.10	mg/l							
Blank (W0H1560-BLK2)			F	Prepared: 08/27/2	20 Analyzed: 0	8/31/20				
TKN	ND	0.10	mg/l							
LCS (W0H1560-BS1)			F	Prepared: 08/27/2	20 Analyzed: 0	8/31/20				
TKN	0.983	0.10	mg/l	1.00		98	90-110			
LCS (W0H1560-BS2)			F	Prepared: 08/27/2	20 Analyzed: 0	8/31/20				
TKN	0.978	0.10	mg/l	1.00		98	90-110			
Matrix Spike (W0H1560-MS1)	Source: 0H240	91-04	F	Prepared: 08/27/2	20 Analyzed: 0	8/31/20				
TKN	1.28	0.10	mg/l	1.00	0.293	99	90-110			
Matrix Spike (W0H1560-MS2)	Source: 0H240	91-05	F	Prepared: 08/27/2	20 Analyzed: 0	8/31/20				
TKN	1.29	0.10	mg/l	1.00	0.262	103	90-110			
Matrix Spike Dup (W0H1560-MSD1)	Source: 0H240	91-04	F	Prepared: 08/27/2	20 Analyzed: 0	8/31/20				
TKN	1.29	0.10	mg/l	1.00	0.293	100	90-110	0.6	10	
Matrix Spike Dup (W0H1560-MSD2)	Source: 0H240	91-05	F	Prepared: 08/27/2	20 Analyzed: 0	8/31/20				
TKN	1.29	0.10	mg/l	1.00	0.262	102	90-110	0.2	10	

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FINAL REPORT



### **Notes and Definitions**

item	Definition
%REC	Percent Recovery
Dil	Dilution
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ)
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
RPD	Relative Percent Difference
Source	Sample that was matrix spiked or duplicated.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

i State

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

#### Reviewed by:

Chris Samatmanakit Project Manager









DoD-ISO ANAB # • ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 •

NELAP-OR #4047 • NJ-DEP #CA015 • SCAOMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

Weck Laboratories 14859 Clark Avenue City of Industry, CA 91745 (626) 336-2139

(0.12 000 (0.10)				O	HAIN	CHAIN OF CUSTODY FORM	JSTC	DY	0.1	Σ		Ĭ	CN26029	0	
Client Name/Address:			Project/	Project/PO Number:							1	Analysis Required	Required		
PSOMAS 3 HUTTON CENTRE DRIVE, SUITE 200 SANTA ANA, CA 92707	DRIVE, SUITE 200 07		2KLE(	.E010102			0.008	borttaM A93	Py EPA SM2540C	bortieM	lation				
Project Manager:			Phone I	Phone Number:			роц	—			sicn	<u>.</u>			
MICHAEL P. DONOV	MICHAEL P. DONOVAN (mpdonovn@cox.net)		(714)	(714) 328-5234			teM A			2	su pà c			-	
Sampler: Jim Burton, Todd Bear	Bear		Fax Nu	Fax Number: 714,545,8883	383		 			19E P	) Jiftoge				
	iption Sample Matrix	Container Type	# of Cont.	Sampling Date	Time	Preservation	ή —	5,385		OdiaM					Special instructions
Sr- 00-75	water	60 ml Poly	1	8 25 26	11:55a	None	×					-			
	water	250 ml Poly	~	\		Nane		×						Li	Filtered with 0.45μ
	water	500 ml Poly	1	_		None			×						
	water	250 ml Poly	1	-(		H2SO4			_	×	X				
ST - DD- 15	water	60 ml Poly	-	8/35/30	12:30	None	X								
	water	250 ml Poly	-	-		None		×						L	Filtered with 0.45µ
	water	500 ml Paly	<b>-</b>			None			×						
4	water	250 ml Poly	1	4	7	H2SO4				×	×				
BC-61~51	water	60 ml Poly	-	3 25/20	37.61	) None	×								
	water	250 ml Poly	-		_	None		×	Щ					Ŀ	Filtered with 0.45µ
	water	500 ml Poly	-			None			×						
	water	250 ml Poly	-	4	-4	H2S04			X	×	×				
	water	60 ml Poly				None	×								
All the section	water	250 ml Poly	-			None		×						证	Filtered with 0.45 μ
	water	500 ml Poly	-			None			×						
	water	250 ml Poly	-			H2SO4			×	×	×				
	water	60 ml Poly	-			None	×								
	water	250 ml Poly	~			None		×						ഥ	Filtered with 0.45μ
	wafer	500 ml Poly	-			None			×						
	water	250 ml Poly	1			H2S04			×	×	×				
Relinquished By:	90	Date (Time:	. 35.7.	Received by:						Date	Date /Time:		Turnaround Time:	2	(Cheok) 72 Hours
Relinquished By:	Taller	Date Ciffic W/V	_	Received P.						Date Alge	à S		24 Hours		5 Days
Refinquished By:		Date /Time:		Received in Lab by:	y:					Date	Date /Time:		Sample Integrity.	0	~
														١	

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**FINAL REPORT** 

**Work Orders:** 0H27029 **Report Date:** 9/10/2020

Received Date: 8/27/2020

Project: 2KLE010102 Turnaround Time: Normal

Phones: (714) 751-7373

Fax: (714) 545-8883

P.O. #:

**Billing Code:** 

Attn: Michael P. Donovan

Client: Psomas - Santa Ana, CA

3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

#### Dear Michael P. Donovan,

Enclosed are the results of analyses for samples received 8/27/20 with the Chain-of-Custody document. The samples were received in good condition, at 3.4 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

### Sample Results

Sample:	BC-blw-PH6				Sampl	ed: 08/26/2	20 7:35 by Jim Burto	n, Todd Bear
	0H27029-01 (Water)							
Analyte		1	Result	MRL	Units	Dil	Analyzed	Qualifie
Method: [CA	ALC]			Instr: [CALC]				
Batch ID: [	[CALC]	Preparation: [CALC]		Prepared: 08/2	28/20 17:07			Analyst: ym
Nitrogen,	Total		ND	0.30	mg/l	1	08/31/20	
Method: EPA	A 300.0			Instr: LC12				
Batch ID: \	W0H1556	Preparation: _NONE (LC)		Prepared: 08/2	27/20 12:00			Analyst: jar
Nitrate as	N		ND	110	ug/l	1	08/28/20 00:25	
Method: EPA	A 351.2			Instr: AA06				
Batch ID: \	W0H1621	Preparation: _NONE (WETCHEM)		Prepared: 08/2	28/20 17:07			Analyst: ym
TKN			ND	0.10	mg/l	1	08/31/20	
Method: EPA	A 353.2			Instr: AA01				
Batch ID: \	W0H1543	Preparation: _NONE (WETCHEM)		Prepared: 08/2	27/20 12:08			Analyst: sa
NO2+NO3	3 as N		ND	200	ug/l	1	08/27/20	
Method: EPA	A 365.3			Instr: UVVIS04				
Batch ID: \	W0H1546	Preparation: _NONE (WETCHEM)		Prepared: 08/2	27/20 12:44			Analyst: sbi
o-Phospha	ate as P		ND	0.010	mg/l	1	08/27/20 14:09	
Method: SM	1 2540C			Instr: OVEN01				
Batch ID: \	W0H1653	Preparation: _NONE (WETCHEM)		Prepared: 08/3	31/20 09:23			Analyst: ism
Total Diss	solved Solids		27	10	mg/l	1	08/31/20	-



FINAL REPORT

Sample Results

Qualifi Analyst: yr Analyst: ja
Analyst: yı  Analyst: j
Analyst: j 0:43
Analyst: j.
<b>Analyst:</b> j 0:43
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Analyst: v
Analyst: v
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Analyst: s
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Analyst: sl
4:12
Analyst: is
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Quain
Analyst: Y
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Analyst: j
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<b>Analyst:</b> YN
Analyst: YN
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Analyst: YN Analyst: :
Analyst: YN Analyst: :
Analyst: YN  Analyst: s
Analyst: YN  Analyst: s
0 0 1



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Sample Results

•	BC-blw-PH3				Samp	led: 08/26/2	0 9:40 by Jim Burto	on, Todd Bea
(	0H27029-04 (Water)							
nalyte			Result	MRL	Units	Dil	Analyzed	Qualifi
thod: [CALC]				Instr: [CALC]				
atch ID: [CAL		Preparation: [CALC]		Prepared: 09/01				Analyst: YM
itrogen, Tota	al		- ND	0.30	mg/l	1	09/03/20	
thod: EPA 30	0.0			Instr: LC12				
atch ID: W0H	H1556	Preparation: _NONE (LC)		Prepared: 08/27	7/20 12:00			Analyst: j
itrate as N			ND	110	ug/l	1	08/28/20 01:19	
thod: EPA 35	1.2			Instr: AA06				
atch ID: W010	0084	Preparation: _NONE (WETCHEM)		Prepared: 09/01	/20 15:56			Analyst: YN
KN			ND	0.10	mg/l	1	09/03/20	
thod: EPA 35	33.2			Instr: AA01				
atch ID: W0H	H1543	Preparation: _NONE (WETCHEM)		Prepared: 08/27	7/20 12:08			Analyst: s
O2+NO3 as	N		ND	200	ug/l	1	08/27/20	
thod: EPA 36	55.3			Instr: UVVIS04				
atch ID: W0H	H1546	Preparation: _NONE (WETCHEM)		Prepared: 08/27	7/20 12:44			Analyst: sl
-Phosphate a	as P		ND	0.010	mg/l	1	08/27/20 14:13	•
	40 <i>C</i>			Instr: OVEN01				
thod: SM 254								
		Preparation: NONE (WETCHEM)		Prepared: 08/31	/20 09:23			Analyst: IS
atch ID: W0F otal Dissolve nple:	H1653 ed Solids BC-blw-PH2	Preparation: _NONE (WETCHEM)	- 20	<b>Prepared:</b> 08/31	mg/l	1 ed: 08/26/2	08/31/20 0 10:15 by Jim Burto	•
atch ID: W0F otal Dissolve nple:	H1653 ed Solids		- 20 Result	•	mg/l			on, Todd Be
atch ID: W0H otal Dissolve nple: E	ed Solids BC-blw-PH2 0H27029-05 (Water)			10	mg/l Sampl	ed: 08/26/2	0 10:15 by Jim Burto	on, Todd Be
atch ID: W0H otal Dissolve nple: E	ed Solids BC-blw-PH2 0H27029-05 (Water)			10	mg/l Sampl Units	ed: 08/26/2	0 10:15 by Jim Burto	on, Todd Be Qualifi
atch ID: WOHotal Dissolve  nple: E  ( nalyte thod: [CALC]	H1653  ed Solids  BC-blw-PH2  0H27029-05 (Water)			MRL Instr: [CALC]	mg/l Sampl Units	ed: 08/26/2	0 10:15 by Jim Burto	on, Todd Be Qualifi
atch ID: WOHotal Dissolven  nple: E  (nalyte thod: [CALC] atch ID: [CALC	H1653 ed Solids BC-blw-PH2 0H27029-05 (Water) LC]		Result	MRL Instr: [CALC] Prepared: 09/01	mg/l Sampl Units /20 15:56	ed: 08/26/20	O 10:15 by Jim Burto	on, Todd Be Qualifi
nple: E nple: ( nalyte thod: [CALC] atch ID: [CAL	H1653  ed Solids  BC-blw-PH2  0H27029-05 (Water)  LC]  al		Result	MRL Instr: [CALC] Prepared: 09/01 0.30	mg/l Sampl Units /20 15:56 mg/l	ed: 08/26/20	O 10:15 by Jim Burto	On, Todd Be Qualifi Analyst: YN
atch ID: W0Hotal Dissolvenple: E  (malyte thod: [CALC] atch ID: [CAL itrogen, Total thod: EPA 300	H1653  ed Solids  BC-blw-PH2  0H27029-05 (Water)  LC]  al	Preparation: [CALC]	Result	MRL Instr: [CALC] Prepared: 09/01 0.30 Instr: LC12	mg/l Sampl Units /20 15:56 mg/l	ed: 08/26/20	O 10:15 by Jim Burto	On, Todd Be Qualifi Analyst: YN
nple: E nple: [CALC] atch ID: [CALC] atch ID: [CALC] thod: EPA 300 atch ID: WOH	H1653  ed Solids  BC-blw-PH2  0H27029-05 (Water)  LC]  al	Preparation: [CALC]	Result · ND	MRL Instr: [CALC] Prepared: 09/01 0.30 Instr: LC12 Prepared: 08/27	mg/l Sampl Units //20 15:56 mg/l	ed: 08/26/20 <b>Dil</b> 1	0 10:15 by Jim Burto  Analyzed  09/03/20	Analyst: is  On, Todd Be  Qualifi  Analyst: YM  Analyst: ja
atch ID: WOHotal Dissolvenple: E  conalyte thod: [CALC] atch ID: [CAL itrogen, Tota thod: EPA 300 atch ID: WOH itrate as N	H1653  ed Solids  BC-blw-PH2  0H27029-05 (Water)  LC] al  10.0  H1556	Preparation: [CALC]	Result · ND	MRL Instr: [CALC] Prepared: 09/01 0.30 Instr: LC12 Prepared: 08/27 110	mg/l Sampl Units  //20 15:56 mg/l  //20 12:00 ug/l	ed: 08/26/20 <b>Dil</b> 1	0 10:15 by Jim Burto  Analyzed  09/03/20	On, Todd Be  Qualifi  Analyst: YM  Analyst: j:
atch ID: WOHotal Dissolvenple: E  (malyte thod: [CALC] atch ID: [CAL itrogen, Total thod: EPA 300 atch ID: WOH itrate as N	H1653  ed Solids  BC-blw-PH2  0H27029-05 (Water)  LC] al  10.0  H1556	Preparation: [CALC]  Preparation: _NONE (LC)	Result · ND	MRL Instr: [CALC] Prepared: 09/01 0.30 Instr: LC12 Prepared: 08/27 110 Instr: AA06	mg/l Sampl Units  //20 15:56 mg/l  //20 12:00 ug/l	ed: 08/26/20 <b>Dil</b> 1	0 10:15 by Jim Burto  Analyzed  09/03/20	On, Todd Be  Qualifi  Analyst: YM  Analyst: j:
nple: E nple: E nple: ( nalyte thod: [CALC] atch ID: [CAL itrogen, Tota thod: EPA 300 atch ID: WOH itrate as N thod: EPA 350 atch ID: WOH	H1653 ed Solids BC-blw-PH2 0H27029-05 (Water) LC] al H1556 G1.2 0084	Preparation: [CALC]  Preparation: _NONE (LC)	Result  ND	MRL Instr: [CALC] Prepared: 09/01 0.30 Instr: LC12 Prepared: 08/27 110 Instr: AA06 Prepared: 09/01	mg/l Sampl Units //20 15:56 mg/l //20 12:00 ug/l	ed: 08/26/20  Dil  1	0 10:15 by Jim Burto  Analyzed  09/03/20  08/28/20 01:37	On, Todd Be Qualifi Analyst: YM
nple: E  nple: E  nple: ( nalyte  thod: [CALC]  atch ID: [CAL  itrogen, Tota  thod: EPA 30  atch ID: WOH  itrate as N  thod: EPA 35  atch ID: WOIG  KN	H1653 ed Solids BC-blw-PH2 0H27029-05 (Water) LC] al 10.0 H1556 11.2 0084	Preparation: [CALC]  Preparation: _NONE (LC)	Result  ND	MRL Instr: [CALC] Prepared: 09/01 0.30 Instr: LC12 Prepared: 08/27 110 Instr: AA06 Prepared: 09/01 0.10	mg/l Sampl Units //20 15:56 mg/l //20 12:00 ug/l //20 15:56 mg/l	ed: 08/26/20  Dil  1	0 10:15 by Jim Burto  Analyzed  09/03/20  08/28/20 01:37	Qualifi Analyst: YN Analyst: j: Analyst: YN
atch ID: WOHotal Dissolve  nple: E  (nalyte thod: [CALC] atch ID: [CAL itrogen, Tota thod: EPA 300 atch ID: WOH itrate as N thod: EPA 35 atch ID: WOK KN	H1653 ed Solids BC-blw-PH2 0H27029-05 (Water) LC] al 100.0 H1556 11.2 0084	Preparation: [CALC]  Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)	Result  ND	MRL Instr: [CALC] Prepared: 09/01 0.30 Instr: LC12 Prepared: 08/27 110 Instr: AA06 Prepared: 09/01 0.10 Instr: AA01	mg/l Sampl Units //20 15:56 mg/l //20 12:00 ug/l //20 15:56 mg/l	ed: 08/26/20  Dil  1	0 10:15 by Jim Burto  Analyzed  09/03/20  08/28/20 01:37	Qualifi Analyst: YN Analyst: j: Analyst: YN
atch ID: WOHotal Dissolve  nple: E  (nalyte  thod: [CALC]  atch ID: [CAL  itrogen, Total  thod: EPA 300  atch ID: WOH  itrate as N  thod: EPA 35:  atch ID: WOH  kN  thod: EPA 35:  atch ID: WOH	H1653 ed Solids BC-blw-PH2 0H27029-05 (Water)  LCJ al 100.0 H1556 41.2 0084 43.2 H1543	Preparation: [CALC]  Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)	Result ND ND	MRL Instr: [CALC] Prepared: 09/01 0.30 Instr: LC12 Prepared: 08/27 110 Instr: AA06 Prepared: 09/01 0.10 Instr: AA01 Prepared: 08/27	mg/l Sampl Units //20 15:56 mg/l //20 12:00 ug/l //20 15:56 mg/l	ed: 08/26/20  Dil  1  1	0 10:15 by Jim Burto Analyzed  09/03/20  08/28/20 01:37	Qualifi Analyst: YN Analyst: j: Analyst: YN
atch ID: WOHotal Dissolvenple: E  (malyte thod: [CALC] atch ID: [CAL itrogen, Tota thod: EPA 30 atch ID: WOH itrate as N  thod: EPA 35 atch ID: WOH CO2+NO3 as	H1653 ed Solids BC-blw-PH2 0H27029-05 (Water) LC] al 100.0 H1556 11.2 0084 13.2 H1543 N	Preparation: [CALC]  Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)	Result ND ND	MRL Instr: [CALC] Prepared: 09/01 0.30 Instr: LC12 Prepared: 08/27 110 Instr: AA06 Prepared: 09/01 0.10 Instr: AA01 Prepared: 08/27 200	mg/l Sampl Units //20 15:56 mg/l //20 12:00 ug/l //20 15:56 mg/l //20 12:08 ug/l	ed: 08/26/20  Dil  1  1	0 10:15 by Jim Burto Analyzed  09/03/20  08/28/20 01:37	Qualifi Analyst: YN Analyst: YN Analyst: YN Analyst: YN
atch ID: WOHotal Dissolve  nple: E  (nalyte  thod: [CALC]  atch ID: [CAL  itrogen, Total  thod: EPA 300  atch ID: WOHotirate as N  thod: EPA 355  atch ID: WOHO  CX  thod: EPA 355  atch ID: WOHO  O2+NO3 as  thod: EPA 365	H1653 ed Solids BC-blw-PH2 0H27029-05 (Water) LC] al 00.0 H1556 61.2 0084 63.2 H1543 N	Preparation: [CALC]  Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)  Preparation: _NONE (WETCHEM)	Result ND ND	MRL Instr: [CALC] Prepared: 09/01 0.30 Instr: LC12 Prepared: 08/27 110 Instr: AA06 Prepared: 09/01 0.10 Instr: AA01 Prepared: 08/27 200 Instr: UVVIS04	mg/l Sampl Units //20 15:56 mg/l //20 12:00 ug/l //20 15:56 mg/l //20 12:08 ug/l	ed: 08/26/20  Dil  1  1	0 10:15 by Jim Burto Analyzed  09/03/20  08/28/20 01:37	Qualifi Analyst: YN Analyst: YN Analyst: YN Analyst: YN
atch ID: WOHotal Dissolve nple: E  (nalyte thod: [CALC] atch ID: [CAL iitrogen, Tota thod: EPA 300 atch ID: WOH iitrate as N thod: EPA 35. atch ID: WOH O2+NO3 as thod: EPA 36. atch ID: WOH	H1653 ed Solids BC-blw-PH2 0H27029-05 (Water)  LC] al 10.0 H1556  11.2 0084 13.2 H1543 N 15.3 H1546 as P	Preparation: [CALC]  Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)  Preparation: _NONE (WETCHEM)	Result  ND  ND  0.13	MRL Instr: [CALC] Prepared: 09/01 0.30 Instr: LC12 Prepared: 08/27 110 Instr: AA06 Prepared: 09/01 0.10 Instr: AA01 Prepared: 08/27 200 Instr: UVVIS04 Prepared: 08/27	mg/l Sampl Units //20 15:56 mg/l //20 12:00 ug/l //20 15:56 mg/l //20 12:08 ug/l	ed: 08/26/20  Dil  1  1  1	0 10:15 by Jim Burto  Analyzed  09/03/20  08/28/20 01:37  09/03/20  08/27/20	Qualifi Analyst: YM
atch ID: WOHotal Dissolven nple: E  (malyte thod: [CALC] atch ID: [CAL ditrogen, Total thod: EPA 300 atch ID: WOHotal thod: EPA 35: atch ID: WOHO C2+NO3 as thod: EPA 36: atch ID: WOH-Phosphate Atch ID: WOH-Phosphate Atch ID: WOH-Phosphate Atch ID: WOH-Phosphate Atch ID: WOH-Phosphate Atch ID: WOH-Phosphate Atch ID: WOH-Phosphate Atch ID: WOH-Phosphate Atch ID: WOH-Phosphate Atch ID: WOH-Phosphate Atch ID: WOH-	H1653  ed Solids  BC-blw-PH2  0H27029-05 (Water)  LC] al  00.0  H1556  31.2  0084  33.2  H1543  N  55.3  H1546  as P	Preparation: [CALC]  Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)  Preparation: _NONE (WETCHEM)	Result  ND  ND  0.13	MRL Instr: [CALC] Prepared: 09/01 0.30 Instr: LC12 Prepared: 08/27 110 Instr: AA06 Prepared: 09/01 0.10 Instr: AA01 Prepared: 08/27 200 Instr: UVVIS04 Prepared: 08/27 0.010	mg/l Sampl Units //20 15:56 mg/l //20 12:00 ug/l //20 15:56 mg/l //20 12:08 ug/l //20 12:44 mg/l	ed: 08/26/20  Dil  1  1  1	0 10:15 by Jim Burto  Analyzed  09/03/20  08/28/20 01:37  09/03/20  08/27/20	Qualifi Analyst: YN Analyst: YN Analyst: YN Analyst: YN



FINAL REPORT

Sample Results

Sample:	BC-NF-1			Sample	ed: 08/26/2	20 11:40 by Jim Burto	on, Todd Bea
	0H27029-06 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifie
Method: [C/	ALC]		Instr: [CALC]				
Batch ID:	[CALC]	Preparation: [CALC]	Prepared: 09/	01/20 15:56			Analyst: YM
Nitrogen,	Total	ND	0.30	mg/l	1	09/03/20	
Method: EP/	A 300.0		Instr: LC12				
Batch ID:	W0H1556	Preparation: _NONE (LC)	Prepared: 08/	27/20 12:00			Analyst: ja
Nitrate as	N	ND	110	ug/l	1	08/28/20 01:55	
Method: EP/	A 351.2		Instr: AA06				
Batch ID:	W0I0084	Preparation: _NONE (WETCHEM)	Prepared: 09/	01/20 15:56			Analyst: YM
TKN		0.10	0.10	mg/l	1	09/03/20	
Method: EP/	A 353.2		Instr: AA01				
Batch ID:	W0H1543	Preparation: _NONE (WETCHEM)	Prepared: 08/	27/20 12:08			Analyst: sa
NO2+NO3	3 as N	ND	200	ug/l	1	08/27/20	
Method: EPA	A 365.3		Instr: UVVIS04	1			
Batch ID:	W0H1546	Preparation: _NONE (WETCHEM)	Prepared: 08/	27/20 12:44			Analyst: sb
o-Phosph	ate as P	ND	0.010	mg/l	1	08/27/20 14:14	
Method: SM	И 2540C		Instr: OVEN01				
Batch ID:	W0H1653	Preparation: _NONE (WETCHEM)	Prepared: 08/	31/20 09:23			Analyst: isr
Total Diss	solved Solids	11	10	mg/l	1	08/31/20	



0H27029

## **Certificate of Analysis**

FINAL REPORT

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Anions by IC, EPA Method 300.0										
Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifie
atch: W0H1556 - NONE (LC)	Result	IVIKL	Onits	Level	Result	/OREC	Lillits	KPD	LIIIII	Qualifie
Blank (W0H1556-BLK1)				Dropared & A	nalyzed: 08/27	7/20				
Nitrate as N	ND	110	ug/l	Frepared & A	naiyzeu. 00/2/	/20				
LCC (MOUATEC DCA)				Droporod, 09/27/2	O Analyzadi O	0/20/20				
LCS (W0H1556-BS1)  Nitrate as N	2120	110	ug/l	Prepared: 08/27/2 2000	o Analyzed: 0	106	90-110			
			J.	D		0 (20 (20				
Matrix Spike (W0H1556-MS1)  Nitrate as N	<b>Source: 0H14</b>	1100	ug/l	Prepared: 08/27/2 20000	ND	110	84-115			
			J.							
Matrix Spike (W0H1556-MS2)  Nitrate as N	<b>Source: 0H14</b>	1100	ug/l	Prepared: 08/27/2 20000	0 Analyzed: 0 ND	110	84-115			
			ug/i				01 110			
Matrix Spike Dup (W0H1556-MSD1)  Nitrate as N	Source: 0H14	0 <b>10-01</b> 1100	ug/l	Prepared: 08/27/2 20000	0 Analyzed: 0 ND	<b>8/28/20</b> 110	84-115	0.2	20	
		1100	ug/i				04-110	0.2	20	
Matrix Spike Dup (W0H1556-MSD2)	<b>Source: 0H14</b>		//	Prepared: 08/27/2	=		04 115	0.1	20	
Nitrate as N		1100	ug/l	20000	ND	110	84-115	0.1	20	
Conventional Chemistry/Physical Parameters	by APHA/EPA/ASTM Me	thods								
Auda	Develo	MDI	11-24-	Spike	Source	0/ DEC	%REC	222	RPD	0
Analyte atch: W0H1543NONE (WETCHEM)	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
				D 10: A		. (20				
Blank (W0H1543-BLK1) NO2+NO3 as N	ND	200	ug/l	Prepared & A	nalyzed: 08/27	//20				
			9							
LCS (W0H1543-BS1) NO2+NO3 as N	1030	200	ug/l	Prepared & A	nalyzed: 08/27	7 <b>/20</b> 103	90-110			
			ug/i				00 110			
Matrix Spike (W0H1543-MS1) NO2+NO3 as N	<b>Source: 0H26</b>	1 <b>09-03</b> 200	ug/l	Prepared & A	nalyzed: 08/27 1800	7 <b>/20</b> 108	90-110			
			ug/i				00 110			
Matrix Spike (W0H1543-MS2) NO2+NO3 as N	<b>Source: 0H26</b>	<b>109-06</b> 200	ug/l	Prepared & A 2000	nalyzed: 08/27 3620	7/ <b>20</b> 106	90-110			
		200	ug/i	2000	3020	100	90-110			
Matrix Spike Dup (W0H1543-MSD1) NO2+NO3 as N	Source: 0H26		//	Prepared & A	nalyzed: 08/27		00 110	0.2	20	
NO2+NO3 as N	3980	200	ug/l	2000	1800	109	90-110	0.3	20	
Matrix Spike Dup (W0H1543-MSD2)	Source: 0H26			•	nalyzed: 08/27					
NO2+NO3 as N	5760	200	ug/l	2000	3620	107	90-110	0.2	20	
atch: W0H1546 - NONE (WETCHEM)										
Blank (W0H1546-BLK1)				Prepared & A	nalyzed: 08/27	7/20				
o-Phosphate as P	ND	0.010	mg/l							
LCS (W0H1546-BS1)				Prepared & A	nalyzed: 08/27	7/20				
o-Phosphate as P	0.197	0.010	mg/l	0.200		98	88-111			
Matrix Spike (W0H1546-MS1)	Source: 0H26	086-01		Prepared & A	nalyzed: 08/27	7/20				
o-Phosphate as P	0.283	0.010	mg/l	0.200	0.0900	96	85-112			
Matrix Spike Dup (W0H1546-MSD1)	Source: 0H26	086-01		Prepared & A	nalyzed: 08/27	7/20				
o-Phosphate as P	0.288	0.010	mg/l	0.200	0.0900	99	85-112	2	20	
atch: W0H1621NONE (WETCHEM)										
Blank (W0H1621-BLK1)				Prepared: 08/28/2	20 Analyzed · 0	8/31/20				
	· · · · · · · · · · · ND	0.10	mg/l		yzeu. U	-, - 1, 20				
TKN	ND	0.10	1119/1							
TKN Blank (W0H1621-BLK2)	ND	0.10	mgn	Prepared: 08/28/2	10 AII	0 /24 /20				



FINAL REPORT

Quality Control Results

Conventional Chemistry/Physical Parameters by APHA	/EPA/ASTM Method	ds (Continue	ed)							
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
atch: W0H1621NONE (WETCHEM) (Continued)										
LCS (W0H1621-BS1)			ı	Prepared: 08/28/	20 Analyzed: 0	08/31/20				
TKN	1.00	0.10	mg/l	1.00		100	90-110			
LCS (W0H1621-BS2)			ı	Prepared: 08/28/	20 Analyzed: 0	08/31/20				
TKN	0.976	0.10	mg/l	1.00		98	90-110			
Matrix Spike (W0H1621-MS1)	Source: 0H25093-	01		Prepared: 08/28/	20 Analyzed: (	08/31/20				
TKN	1.40	0.10	mg/l	1.00	0.318	108	90-110			
Matrix Chiles (MOLITE21 MC2)	Source: 0H25093-	no.		Dramarad: 00/20/	20 Analyzadi (	00/21/20				
Matrix Spike (W0H1621-MS2) TKN		0.10	mg/l	Prepared: 08/28/7 1.00	0.251	99	90-110			
			-							
Matrix Spike Dup (W0H1621-MSD1) TKN	Source: 0H25093-	0.10		Prepared: 08/28/7 1.00	20 Analyzed: 0 0.318	105	90-110	2	10	
Irin	1.37	0.10	mg/l	1.00	0.316	105	90-110	2	10	
Matrix Spike Dup (W0H1621-MSD2)	Source: 0H25093-			Prepared: 08/28/2	=					
TKN	1.25	0.10	mg/l	1.00	0.251	100	90-110	0.3	10	
Batch: W0H1653NONE (WETCHEM)										
Blank (W0H1653-BLK1)				Prepared & A	Analyzed: 08/3	1/20				
Total Dissolved Solids	· ND	10	mg/l	•	•					
LCS (W0H1653-BS1)				Prenared & A	Analyzed: 08/3	1/20				
Total Dissolved Solids	817	10	mg/l	824	maryzeu. 00/3	99	96-102			
- II										
Duplicate (W0H1653-DUP1) Total Dissolved Solids	Source: 0H26099-	10	mg/l	Prepared & P	Analyzed: 08/3 <sup>-</sup> 2310	1/20		0.3	10	
			1119/1					0.0	.0	
Duplicate (W0H1653-DUP2)	Source: 0H26099-		/l	Prepared & A	Analyzed: 08/3	1/20		0.0	40	
Total Dissolved Solids	2340	10	mg/l		2310			0.9	10	
atch: W0I0084NONE (WETCHEM)										
Blank (W0I0084-BLK1)			ı	Prepared: 09/01/2	20 Analyzed: 0	09/03/20				
TKN	ND	0.10	mg/l							
Blank (W0I0084-BLK2)			ı	Prepared: 09/01/2	20 Analyzed: 0	09/03/20				
TKN	ND	0.10	mg/l	.,,.,	, , , , , , , ,					
LCS (W010084-BS1)				Prepared: 09/01/2	20 Analyzadi (	00/02/20				
TKN	- 0.985	0.10	mg/l	1.00	zo Analyzeu. C	98	90-110			
LCS (W010084-BS2)	0.000	0.10		Prepared: 09/01/2	20 Analyzed: (		00 110			
TKN	- 0.982	0.10	mg/l	1.00		98	90-110			
Matrix Spike (W0I0084-MS1)	Source: 0H27029-		ı	Prepared: 09/01/	=					
TKN	· 1.07	0.10	mg/l	1.00	0.0791	99	90-110			
Matrix Spike (W010084-MS2)	Source: 0H27029-	05		Prepared: 09/01/2	20 Analyzed: 0	9/03/20				
TKN	· 1.13	0.10	mg/l	1.00	0.128	100	90-110			
Matrix Spike Dup (W0I0084-MSD1)	Source: 0H27029-	04	ı	Prepared: 09/01/2	20 Analyzed: 0	09/03/20				
TKN	1.03	0.10	mg/l	1.00	0.0791	95	90-110	4	10	
	Source: 0H27029-	ne .		Prepared: 09/01/2	20 Analumasi (	00/02/20				
Matrix Spike Dup (W0I0084-MSD2)										



FINAL REPORT



### **Notes and Definitions**

item	Definition
%REC	Percent Recovery
Dil	Dilution
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ)
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
RPD	Relative Percent Difference
Source	Sample that was matrix spiked or duplicated.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

i State

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

#### Reviewed by:

Chris Samatmanakit Project Manager









DoD-ISO ANAB # • ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015 • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

Weck Laboratories 14859 Clark Avenue City of Industry, CA 91745 (626) 336-2139

(626) 336-2139											(	6			
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Olient Name/Address:			Project/	Project/PO Number:				p				Analysis Required	ednired		T
PSOMAS 3 HUTTON CENTRE DRIVE, SUITE 200 SANTA ANA, CA 92707	TE 200		2KLE0	E010102 ·			.0.008	EPA Method	8MS240C	A93 ydr Method	notistu			: : :	:
Project Manager:			Phone !	Phone Number:			роць	<del>}</del> 0d			csicr			<del></del>	
MICHAEL P. DONOVAN (mpdonovn@cox.net)	ıvn@cox.net,	_	(714) ;	(714) 328-5234			əM Aq	O-esh		2.1	leu pl				
Sampler: Jim Burton, Todd Bear			Fax Nur	Fax Number: 714,545,8883	383		∃ N-€			4003 90 32.					
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Time	Preservation		orthO 6.23£		Metinc +SOM	353.2 Total			Special Instructions	tructions
RC-01-046	water	60 ml Poly	-	8 24 30	7.35a	None	×								
	water	250 ml Poly	-		_			×						Filtered with 0.45 μ	45µ
	water	500 ml Poly	1			None			×						
+	water	250 ml Poly	-	-1	+	H2SO4				×	×				
BC- N/W- 0HS	water	60 ml Poly	-	8 26 20	2:15	None	×								
	water	250 ml Poly	+		-			×						Filtered with 0.45 µ	45µ
	water	500 ml Poly	-			None			×						
4	water	250 ml Poly	-	1	-1	H2SO4				×	×				
BC-61~- PH4	water	60 ml Paly	-	8/26/20	8:40	ار ا	×								
	water	250 ml Poly	1	, 1	1	None		×						Filtered with 0.45 $\mu$	45µ
	water	500 ml Poly	-			None			×						
The state of the s	water	250 ml Poly	-	4	7	H2804				×	×				
BC- hlw- PH3	water	60 ml Paly	-	8/26/20	9:400	ا ا	×								
	water	250 ml Poly	-			None		×						Filtered with 0.45µ	45µ
	water	500 ml Poly	1			None			×						
7	water	250 ml Poly	1	7	+	H2S04				×	×				
BC-614-9173	water	60 ml Poly	1	8/24/20	SI:01	Sk None	×								
	water	250 ml Poly	1	, 1	-	None		×						Filtered with 0.45µ	45µ
	water	500 ml Poly	1			None			×						
	water	250 ml Poly	+	4	7	H2S04				×	×				
Relinguished By:	!	Date /Time:	1.2×	Received by:						Dat	Date /Time:		Turnaround Time:	ime: (Check) 72 Hours	
Relinquished By:		e C	10.0	Received by						\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Date /Time:		24 Hours	5 Days	,
Relinquished By:		Date /Time:		Received in Lab by:	Đ.:						Date /Time:		Sample Integrity:	(Check)	
				7	,		İ					:	Intaot	On Ice	155
													ָרֶ ל	, 4	``

Sir Tarox

Weck Laboratories 14859 Clark Avenue City of Industry, CA 91745 (626) 336-2139

					S.	A N	CHAIN OF CUSTODY FORM	STC		Ä	Σ	Ō	727	XXXXX		Page	رو	
Client Name/Address:			Project/	Project/PO Number	١								Analysis	Analysis Required				
PSOMAS 3 HUTTON CENTRE DRIVE, SUITE 200 SANTA ANA, CA 92707	TE 200		2KLE(	2KLE010102				300.0	EPA Method	SM2540C	borheM.	uogein		· 		:	:	
Project Manager:			Phone	Phone Number:								csici						
MICHAEL P. DONOVAN (mpdonovn@cox.net)	vn@cox.net)		(714)	(714) 328-5234							7"!	eu pì						
Sampler. Jim Burton, Todd Bear			Fax Nu	Number: 714.545.8883	45.8883						100 PQ							
Sample Description	Sample Matrix	Container Type	Cont.	Sampling Date	<u> </u>	Time	Preservation		£.28£		отрем					Spe	Special Instructions	
BC-NF-1	water	60 ml Poly	_	198 8	30 11.	11:40am	None	×										
	water	250 ml Poly	1	,			None		×							Filtered	Filtered with 0.45 µ	
	water	500 ml Poly	-				None			×			_					
-4	water	250 ml Poly	-	-		7	H2SO4				×	×						
	water	60 ml Poly	1				None	×										
	water	250 ml Poly	-				None		×							Filtered	Filtered with 0.45 μ	
	water	500 ml Poly	1				None			×								
	water	250 ml Poly	1				H2SO4				×	×						
	water	60 ml Poly	1				None	×										
	water	250 ml Poły	1				None		×					-		Filtered	Filtered with 0.45μ	
	water	500 ml Poly	-				None			×								
	water	250 ml Poly	1				H2SO4				×	×						
	water	60 ml Poly	-				None	×				_						
	water	250 ml Poly	1				None		×			_				Filtered	Filtered with 0.45 μ	
	water	500 ml Poly	-				None			×			***					
	water	250 ml Poly	1			-	H2SO4				×	×						
	water	60 ml Poly	1				None	×										
	water	250 ml Poty	1				None		×							Filtered	Filtered with 0.45 μ	
	water	500 ml Poly	1				None			×								
	water	250 ml Poly	1				H2SO4				X	×						
Relinquished By:	8/2	Date/Time:	1,350	Received by	<u>;</u>		:				Date	Date /Time:		Turn	Turnaround Time: Same Day	e: (Check) 72 Hours	SI.	
Relinquished By:	1	1		Received by							Date	Date /Time:	1	24 H	24 Hours	5 Days		
		-			-							į		48 Hours	ours	ĦĒ	X	
Relinquished By:		Date / I ime:		Keceived in Lab by:	- Sign (2):						Cate	Date / Ime;		Samp	Sample Integrity: Intact	: (Check) On loe		
	- Michigan Architectural Company			Andreas														



FINAL REPORT

Work Orders: 0122063 Report Date: 10/05/2020

**Received Date:** 9/22/2020

Turnaround Time: Normal

Phones: (714) 751-7373

Fax: (714) 545-8883

P.O. #:

**Billing Code:** 

Project: 2KLE010102

Attn: Michael P. Donovan

Client: Psomas - Santa Ana, CA

3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

#### Dear Michael P. Donovan,

Enclosed are the results of analyses for samples received 9/22/20 with the Chain-of-Custody document. The samples were received in good condition, at 2.6 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

### Sample Results

Sample: LS-DP-7				Sample	ed: 09/21/2	20 11:10 by Jim Burto	on, Todd Bear
0122063	-01 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifie
Method: [CALC]			Instr: [CALC]				
Batch ID: [CALC]	Prepara	tion: [CALC]	Prepared: 09/	24/20 16:11			Analyst: YM
Nitrogen, Total		ND	0.30	mg/l	1	09/28/20	
Method: EPA 300.0			Instr: LC12				
Batch ID: W0I1210	Prepara	tion: _NONE (LC)	Prepared: 09/	22/20 11:30			Analyst: jar
Nitrate as N		ND	110	ug/l	1	09/22/20 21:55	
Method: EPA 351.2			Instr: AA06				
Batch ID: W0I1374	Prepara	tion: _NONE (WETCHEM)	Prepared: 09/	24/20 16:11			Analyst: YM
TKN		ND	0.10	mg/l	1	09/28/20	
Method: EPA 353.2			Instr: AA01				
<b>Batch ID:</b> W0I1182	Prepara	tion: _NONE (WETCHEM)	Prepared: 09/	22/20 12:44			Analyst: sa
NO2+NO3 as N		ND	200	ug/l	1	09/23/20	
Method: EPA 365.3			Instr: UVVIS04	ŀ			
<b>Batch ID:</b> W0I1174	Prepara	tion: _NONE (WETCHEM)	Prepared: 09/	22/20 12:07			Analyst: sbr
o-Phosphate as P		0.022	0.010	mg/l	1	09/22/20 13:00	
Method: SM 2540C			Instr: OVEN01				
Batch ID: W0I1259	Prepara	tion: _NONE (WETCHEM)	Prepared: 09/	23/20 11:28			Analyst: ism
Total Dissolved Solid	s		10	mg/l	1	09/23/20	

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FINAL REPORT

Sample Results

(Continued)

Nitrogen, Total         ND         0.30         mg/l         1         09/28/20           Method: EPA 300.0         Instr: LC12         Batch ID: W0I1210         Preparation: _NONE (LC)         Prepared: 09/22/20 11:30         An an an an an an an an an an an an an an	- E 1/2 EN							
Manlyte         Result         MRL         Units         Dil         Analyzed           Method: [CALC]         Instr: [CALC]         Instr: [CALC]         Prepared: 09/24/20 16:11         Analyzed           Batch ID: [CALC]         Preparation: [CALC]         Prepared: 09/24/20 16:11         09/28/20           Method: EPA 300.0         Instr: LC12         Instr: LC12           Batch ID: W011210         Preparation: _NONE (LC)         Prepared: 09/22/20 11:30         09/22/20 22:13           Method: EPA 351.2         Instr: AA06         Instr: AA06           Batch ID: W011374         Preparation: _NONE (WETCHEM)         Prepared: 09/24/20 16:11         09/28/20           Method: EPA 353.2         Instr: AA01         1         09/28/20           Method: EPA 353.2         Instr: AA01         Analyzed         Analyzed           Method: EPA 353.2         Instr: AA01         Analyzed         Analyzed           Method: EPA 353.2         Instr: UVVISUA         Analyzed         Analyzed           Method: EPA 365.3         Instr: UVVISUA         Analyzed         Analyzed           Method: EPA 365.3         Instr: UVVISUA         Analyzed         Analyzed           Method: EPA 365.3         Instr: UVVISUA         Analyzed         Analyzed           Batch ID: W011	Sample:	LS-DP-28			Sample	ed: 09/21/2	20 11:50 by Jim Burto	on, Todd Bea
Method: [CALC]		0122063-02 (Water)						
Batch ID: (CALC)         Preparation: [CALC]         Prepared: 09/24/20 16:11         Analogo (Notal)           Nitrogen, Total         ND         0.30         mg/l         1         09/28/20           Method: EPA 300.0         Instr: LC12         Instr: LC12           Batch ID: W011210         Preparation: _NONE (LC)         Prepared: 09/22/20 11:30         Analogo (No. 20)         Analogo (No. 20)	Analyte		Result	MRL	Units	Dil	Analyzed	Qualifier
NItrogen, Total	Method: [C/	ALC]		Instr: [CALC]				
Method: EPA 300.0  Batch ID: W011210  Preparation: _NONE (LC)  ND  110  110  110  110  110  110  110	Batch ID:	[CALC]	Preparation: [CALC]	Prepared: 09/2	24/20 16:11			Analyst: YM
Batch ID: W0I1210         Preparation: _NONE (LC)         Prepared: 09/22/20 11:30         An Op/22/20 22:13           Method: EPA 351.2         Instr: AA06           Batch ID: W0I1374         Preparation: _NONE (WETCHEM)         Prepared: 09/24/20 16:11         Ana Op/28/20           Method: EPA 353.2         Instr: AA01         Method: EPA 353.2         Instr: AA01           Batch ID: W0I1182         Preparation: _NONE (WETCHEM)         Prepared: 09/22/20 12:44         Ana Op/23/20           Method: EPA 365.3         Instr: UVVISO4         Method: EPA 365.3         Instr: UVVISO4           Batch ID: W0I1174         Preparation: _NONE (WETCHEM)         Prepared: 09/22/20 12:07         Ana Op/22/20 13:00           Method: SM 2540C         Instr: OVEN01         Instr: OVEN01         Prepared: 09/23/20 11:28         Ana Op/23/20 11:28	Nitrogen,	Total	ND	0.30	mg/l	1	09/28/20	
Nitrate as N         ND         110         ug/l         1         09/22/20 22:13           Method: EPA 351.2         Instr: AA06         Instr: AA06           Batch ID: W0l1374         Preparation: _NONE (WETCHEM)         Prepared: 09/24/20 16:11	Method: EP	A 300.0		Instr: LC12				
Method: EPA 351.2         Instr: AA06           Batch ID: W0I1374         Preparation: _NONE (WETCHEM)         Prepared: 09/24/20 16:11         Anal 1           TKN         0.11         0.10         mg/l         1         09/28/20           Method: EPA 353.2         Instr: AA01         Prepared: 09/22/20 12:44         All 1           MO2+NO3 as N         ND         200         ug/l         1         09/23/20           Method: EPA 365.3         Instr: UVVISO4         Batch ID: W0I1174         Preparation: _NONE (WETCHEM)         Prepared: 09/22/20 12:07         Anal 1           0-Phosphate as P         ND         0.010         mg/l         1         09/22/20 13:00           Method: SM 2540C         Instr: OVEN01         Prepared: 09/23/20 11:28         Anal 25/20 11	Batch ID:	W0I1210	Preparation: _NONE (LC)	Prepared: 09/2	22/20 11:30			Analyst: jan
Batch ID: W0I1374         Preparation: _NONE (WETCHEM)         Prepared: 09/24/20 16:11         Analogo	Nitrate as	N	ND	110	ug/l	1	09/22/20 22:13	
TKN         0.11         0.10         mg/l         1         09/28/20           Method: EPA 353.2         Instr: AA01         Prepared: 09/22/20 12:44         An An An An An An An An An An An An An A	Method: EP	A 351.2		Instr: AA06				
Method: EPA 353.2         Instr: AA01           Batch ID: W0I1182         Preparation: _NONE (WETCHEM)         Prepared: 09/22/20 12:44         Aa           NO2+NO3 as N         ND         200         ug/l         1         09/23/20           Method: EPA 365.3         Instr: UVVIS04         Prepared: 09/22/20 12:07         An           o-Phosphate as P         ND         0.010         mg/l         1         09/22/20 13:00           Method: SM 2540C         Instr: OVEN01         Prepared: 09/23/20 11:28         An           Batch ID: W0I1259         Preparation: _NONE (WETCHEM)         Prepared: 09/23/20 11:28         An	Batch ID:	W0I1374	Preparation: _NONE (WETCHEM)	Prepared: 09/2	24/20 16:11			Analyst: YMT
Batch ID: W0I1182         Preparation: _NONE (WETCHEM)         Prepared: 09/22/20 12:44         Ar           NO2+NO3 as N         ND         200         ug/l         1         09/23/20           Method: EPA 365.3         Instr: UVVIS04         Prepared: 09/22/20 12:07         An           o-Phosphate as P         ND         0.010         mg/l         1         09/22/20 13:00           Method: SM 2540C         Instr: OVEN01           Batch ID: W0I1259         Preparation: _NONE (WETCHEM)         Prepared: 09/23/20 11:28         An	TKN		0.11	0.10	mg/l	1	09/28/20	
NO2+NO3 as N         ND         200         ug/l         1         09/23/20           Method: EPA 365.3         Instr: UVVIS04         Prepared: 09/22/20 12:07         An           o-Phosphate as P         ND         0.010         mg/l         1         09/22/20 13:00           Method: SM 2540C         Instr: OVEN01           Batch ID: W0I1259         Preparation: _NONE (WETCHEM)         Prepared: 09/23/20 11:28         An	Method: EP	A 353.2		Instr: AA01				
Method: EPA 365.3         Instr: UVVIS04           Batch ID: W0I1174         Preparation: _NONE (WETCHEM)         Prepared: 09/22/20 12:07         An 09/22/20 13:00           O-Phosphate as P         ND         0.010         mg/l         1         09/22/20 13:00           Method: SM 2540C         Instr: OVEN01           Batch ID: W0I1259         Preparation: _NONE (WETCHEM)         Prepared: 09/23/20 11:28         An	Batch ID:	W0I1182	Preparation: _NONE (WETCHEM)	Prepared: 09/2	22/20 12:44			Analyst: sa
Batch ID: W0I1174         Preparation: _NONE (WETCHEM)         Prepared: 09/22/20 12:07         An o-Phosphate as P         ND         0.010         mg/l         1         09/22/20 13:00           Method: SM 2540C         Instr: OVEN01           Batch ID: W0I1259         Preparation: _NONE (WETCHEM)         Prepared: 09/23/20 11:28         An	NO2+NO3	3 as N	ND	200	ug/l	1	09/23/20	
o-Phosphate as P         ND         0.010         mg/l         1         09/22/20         13:00           Method: SM 2540C         Instr: OVEN01           Batch ID: W0I1259         Preparation: _NONE (WETCHEM)         Prepared: 09/23/20 11:28         An	Method: EP	A 365.3		Instr: UVVIS04				
Method: SM 2540C         Instr: OVEN01           Batch ID: W0I1259         Preparation: _NONE (WETCHEM)         Prepared: 09/23/20 11:28         An	Batch ID:	W0I1174	Preparation: _NONE (WETCHEM)	Prepared: 09/2	22/20 12:07			Analyst: sbr
Batch ID: W0I1259 Preparation: _NONE (WETCHEM) Prepared: 09/23/20 11:28 An	o-Phosph	ate as P	ND	0.010	mg/l	1	09/22/20 13:00	
4	Method: SM	1 2540C		Instr: OVEN01				
Total Dissolved Solids         25         10         mg/l         1         09/23/20	Batch ID:	W0I1259	Preparation: _NONE (WETCHEM)	Prepared: 09/2	23/20 11:28			Analyst: ism
	Total Diss	solved Solids	25	10	mg/l	1	09/23/20	

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## Certificate of Analysis

FINAL REPORT



Anions by IC, EPA Method 300.0										
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
atch: W0I1210NONE (LC)										
Blank (W011210-BLK1)	ND	440		Prepared & A	nalyzed: 09/22	2/20				
Nitrate as N	· ND	110	ug/l							
LCS (W0I1210-BS1)				-	nalyzed: 09/22					
Nitrate as N	2110	110	ug/l	2000		105	90-110			
Matrix Spike (W0I1210-MS1)	Source: 011400	7-01	P	Prepared: 09/22/2	20 Analyzed: 0	9/23/20				
Nitrate as N	24700	1100	ug/l	20000	2140	113	84-115			
Matrix Spike (W0I1210-MS2)	Source: 011400	7-02	P	Prepared: 09/22/2	20 Analyzed: 0	9/23/20				
Nitrate as N	22000	1100	ug/l	20000	427	108	84-115			
Matrix Spike Dup (W0I1210-MSD1)	Source: 011400	17-01	P	Prepared: 09/22/2	20 Analyzed: 0	9/23/20				
Nitrate as N		1100	ug/l	20000	2140	113	84-115	0.2	20	
			-							
Matrix Spike Dup (W0I1210-MSD2)  Nitrate as N	Source: 011400	1100	ug/l	Prepared: 09/22/2 20000	20 Analyzed: 0 427	108	84-115	0	20	
			~g/·	20000		.00	0			
Conventional Chemistry/Physical Parameters by A	APHA/EPA/ASTM Met	nods								
Austra	B!	8401	11	Spike	Source	0/ 856	%REC	222	RPD	0
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifi
atch: W0I1174 - NONE (WETCHEM)										
Blank (W0I1174-BLK1) o-Phosphate as P	ND	0.010	ma/l	Prepared & A	nalyzed: 09/22	2/20				
0-Filospilate as F	IND	0.010	mg/l							
LCS (W0I1174-BS1)	0.400	0.040		-	nalyzed: 09/22		00.444			
o-Phosphate as P	0.198	0.010	mg/l	0.200		99	88-111			
Matrix Spike (W0I1174-MS1)	Source: 012109	1-01		-	nalyzed: 09/22	2/20				
o-Phosphate as P	0.203	0.010	mg/l	0.200	0.00700	98	85-112			
Matrix Spike Dup (W0I1174-MSD1)	Source: 012109	1-01		Prepared & A	nalyzed: 09/22	2/20				
o-Phosphate as P	0.207	0.010	mg/l	0.200	0.00700	100	85-112	2	20	
satch: W0I1182 - NONE (WETCHEM)										
Blank (W0I1182-BLK1)			р	Prepared: 09/22/2	20 Analyzed: 0	19/23/20				
NO2+NO3 as N	ND	50	ug/l	1cpaica. 03/22/1	zo zalatyżca. o	,3,23,20				
1.55 (1.01/1.100 7.51)										
NO2+NO3 as N	1030	50	ug/l	Prepared: <b>09/22/</b> 1000	20 Analyzea: 0	103	90-110			
			-				00 110			
Matrix Spike (W0I1182-MS1)	Source: 012206			Prepared: 09/22/2			00 110			
NO2+NO3 as N	2140	50	ug/l	2000	ND	107	90-110			
Matrix Spike (W0I1182-MS2)	Source: 012206			Prepared: 09/22/2						
NO2+NO3 as N	2180	50	ug/l	2000	83.5	105	90-110			
Matrix Spike Dup (W0I1182-MSD1)	Source: 012206	3-01	P	Prepared: 09/22/2	20 Analyzed: 0	9/23/20				
NO2+NO3 as N	2130	50	ug/l	2000	ND	106	90-110	0.5	20	
Matrix Spike Dup (W0I1182-MSD2)	Source: 012206	3-02	P	repared: 09/22/2	20 Analyzed: 0	9/23/20				
NO2+NO3 as N	2180	50	ug/l	2000	83.5	105	90-110	0	20	
atch: W0I1259 - NONE (WETCHEM)										
				Duana and C. C		. /20				
Blank (W0I1259-BLK1) Total Dissolved Solids	ND	10	mg/l	Prepared & A	analyzed: 09/23	5/20				
		10	9/1							
LCS (W011259-BS1) Total Dissolved Solids	836	10	mg/l	Prepared & A	analyzed: 09/2	3 <b>/20</b> 101	96-102			



FINAL REPORT

Quality Control Results

(Continued)

Carried and Character (Physical Parameter	TO DO A DULA (EDA (A CTA A MANI	h - d - (C - m4:m	٦١.							
Conventional Chemistry/Physical Paramete	rs by APHA/EPA/ASTM Meti	nods (Continue	a)							
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
atch: W0I1259NONE (WETCHEM) (Continued)										
Duplicate (W0I1259-DUP1)	Source: 0I22120-01			Prepared & Analyzed: 09/23/20						
Total Dissolved Solids	3070	10	mg/l		3100			1	10	
Duplicate (W0I1259-DUP2)	Source: 0I22103-01			Prepared & Analyzed: 09/23/20						
Total Dissolved Solids	36500	100	mg/l		37000			1	10	
Batch: W0I1374NONE (WETCHEM)										
Blank (W0I1374-BLK1)				Prepared: 09/24/2	0 Analyzed: 0	9/28/20				
TKN	ND	0.10	mg/l							
Blank (W0I1374-BLK2)				Prepared: 09/24/2	0 Analyzed: 0	9/28/20				
TKN	· · · · · · · · · · · · · · ND	0.10	mg/l							
LCS (W0I1374-BS1)				Prepared: 09/24/2	20 Analyzed: 0	9/28/20				
TKN	0.966	0.10	mg/l	1.00		97	90-110			
LCS (W0I1374-BS2)				Prepared: 09/24/20 Analyzed: 09/28/20						
TKN	0.962	0.10	mg/l	1.00		96	90-110			
Matrix Spike (W0I1374-MS1)	Source: 0I22063-01			Prepared: 09/24/20 Analyzed: 09/28/20						
TKN	1.07	0.10	mg/l	1.00	0.0637	100	90-110			
Matrix Spike (W0I1374-MS2)	Source: 0122063-02			Prepared: 09/24/20 Analyzed: 09/28/20						
TKN	1.09	0.10	mg/l	1.00	0.109	98	90-110			
Matrix Spike Dup (W0I1374-MSD1)	Source: 0I22063-01			Prepared: 09/24/20 Analyzed: 09/28/20						
TKN	1.07	0.10	mg/l	1.00	0.0637	101	90-110	0.7	10	
Matrix Spike Dup (W0I1374-MSD2)	Source: 012206		Prepared: 09/24/20 Analyzed: 09/28/20							
TKN	1.08	0.10	mg/l	1.00	0.109	97	90-110	8.0	10	

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FINAL REPORT



#### **Notes and Definitions**

Item	Definition
%REC	Percent Recovery
Dil	Dilution
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ)
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
RPD	Relative Percent Difference
Source	Sample that was matrix spiked or duplicated.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

#### Reviewed by:

Chris Samatmanakit
Project Manager









DoD-ISO ANAB # • ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015 • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

Weck Laboratories 14859 Clark Avenue City of Industry, CA 91745 (626) 336-2139

Page of	aduired					Special Instructions		Filtered with 0.45μ				Filtered with 0.45μ				Filtered with 0.45 µ				Filtered with 0.45µ				Filtered with 0.45 µ		- 1	id Time: ((	5 Days	48 Hours Normal X	Intract On toe (1/2)
!	Analysis Required	s SM2540C • suby EPA  Method	egon ,4∃ -	iV Ida . S.n N as	K]elq	Total Meth NO2 353			×	×××			×	× × ×			×	×××			-+	×××			×	X X X	Date /Time:	Date /Time:	4178170	Date Filling.
STODY F		• 0.00£ t borteM A93 to	OqC	phae-C	-∓ ( Isoud	OrthO 365.3	×	×	-		×	×			×	×			×	×			×	×				12	0/6	
CHAIN OF CUSTODY FORM					3	Time Preservation	11:10am None	None	None	H2SO4	11: 60 am None	None	None	H2SO4	None	None	None	H2SO4	None	None	None	H2S04	None	None	Nane	H2SO4	,	4	12	Y. f
	Project/PO Number	2KLE010102	Phone Number:	(714) 328-5234	Fax Number: 714,545,8883	Sampling Date	9 20 30		:		9 21 20			7													Received by:	Received by:		Received in Lab by:
	Project	2 KLE	Phone	(714)	Fax Nr	Container Type # of Cont.	60 ml Poly 1	250 mi Poly 1	500 ml Poly 1	250 ml Poly 1	60 ml Poly 1	250 ml Poly 1	500 ml Poly 1	250 ml Poly 1	60 ml Polv 1	250 ml Poly 1	500 ml Poly 1	250 mt Poly 1	60 ml Poly 1	250 ml Poly 1	500 ml Poly 1	250 ml Poly 1	60 ml Poly 1	250 ml Poly 1	500 ml Poly 1	250 ml Poly 1	Date /Time:	te /Time:		.Date./Time:
		TE 200		ovn@cox.net)		Sample	water	water	water	water	water	water	water	water	water	water	water	water	water	water	water	water	water	water	water	water				, , ,
		Client Name/Address: PSOMAS 3 HUTTON CENTRE DRIVE, SUITE 200 SANTA ANA, CA 92707	Project Manager:	MICHAEL P. DONOVAN (mpdonovn@cox.net)	Sampler: Jim Burton, Todd Bear	Sample Description	7-0V-57			1	15-00-28			***************************************						A. A. A. A. A. A. A. A. A. A. A. A. A. A		The same state of the same sta					Relinquished By:	Relinquished By:	A PO	Refinquished By:

2.6°C (0034



FINAL REPORT

Work Orders: 0123024 Report Date: 10/05/2020

**Received Date:** 9/23/2020

Turnaround Time: Normal

Phones: (714) 751-7373

Fax: (714) 545-8883

P.O. #:

**Billing Code:** 

Project: 2KLE010102

Attn: Michael P. Donovan

Client: Psomas - Santa Ana, CA

3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

#### Dear Michael P. Donovan,

Enclosed are the results of analyses for samples received 9/23/20 with the Chain-of-Custody document. The samples were received in good condition, at 2.2 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

# Sample Results

Qualifie	Analyzed	Dil	Units	MRL	Result	0I23024-01 (Water)
Qualifier	Anaryzeu	Dii	Onits	Instr: [CALC]	Result	thod: [CALC]
Amalustus			DE /20 17-20	Prepared: 09/	Proporation [CALC]	atch ID: [CALC]
Analyst: sa	09/28/20	1	25/20 17:38 mg/l	0.30	Preparation: [CALC]	
	09/20/20	'	mg/i	0.30	ND	illogen, Iotal
				Instr: LC12		thod: EPA 300.0
Analyst: ja			23/20 12:56	Prepared: 09/	Preparation: _NONE (LC)	atch ID: W0I1257
	09/23/20 13:57	1	ug/l	110	ND	litrate as N
				Instr: AA06		<b>thod:</b> EPA 351.2
Analyst: YM			25/20 17:38	Prepared: 09/	Preparation: _NONE (WETCHEM)	atch ID: W0I1435
	09/28/20	1	mg/l	0.10	ND	KN
				Instr: UVVIS04		<b>thod:</b> EPA 365.3
Analyst: sb			23/20 15:31	Prepared: 09/	Preparation: _NONE (WETCHEM)	atch ID: W0I1287
	09/23/20 16:30	1	mg/l	0.010	ND	-Phosphate as P
				Instr: OVEN01		thod: SM 2540C
Analyst: blo			27/20 13:28	Prepared: 09/	Preparation: _NONE (WETCHEM)	atch ID: W0I1463
	09/27/20	1	mg/l	10	ND	otal Dissolved Solids

0I23024-01RE1 (Water) Analyte Result MRL Units Analyzed Qualifier Method: EPA 353.2 Instr: AA01 Batch ID: W0I1275 Preparation: \_NONE (WETCHEM) Prepared: 09/23/20 12:40 Analyst: sar NO2+NO3 as N 200 09/23/20 ug/l

0123024 Page 1 of 6



FINAL REPORT

Sample Results

Sample:	BC-blw-LS 0I23024-02 (Water)			Sample	ed: 09/22/2	0 11:00 by Jim Burto	on, Todd Bea
Analyte	,	Result	MRL	Units	Dil	Analyzed	Qualifi
/lethod: [CAL	.C]		Instr: [CALC]				
Batch ID: [C	CALC]	Preparation: [CALC]	Prepared: 09/2	5/20 17:38			Analyst: YN
Nitrogen, To		ND	0.30	mg/l	1	09/28/20	•
/lethod: EPA	300.0		Instr: LC12				
Batch ID: W		Preparation: _NONE (LC)	Prepared: 09/2	3/20 12:56			Analyst: ja
Nitrate as N		ND	110	ug/l	1	09/23/20 14:15	Analysta
Method: EPA	351.2		Instr: AA06				
Batch ID: W	/0I1435	Preparation: _NONE (WETCHEM)	Prepared: 09/2	5/20 17:38			Analyst: YN
TKN			0.10	mg/l	1	09/28/20	
Method: EPA	353.2		Instr: AA01				
Batch ID: W	/011275	Preparation: _NONE (WETCHEM)	Prepared: 09/2	3/20 12:40			Analyst: s
NO2+NO3	as N	ND	200	ug/l	1	09/23/20	,
Method: EPA	365.3		Instr: UVVIS04				
Batch ID: W		Preparation: _NONE (WETCHEM)	Prepared: 09/2	3/20 15:31			Analyst: sl
o-Phosphat		······································	0.010	mg/l	1	09/23/20 16:33	· · · · · · · · · · · · · · · · · · ·
	2540C		Instr: OVEN01				
Method: SM 2							Aa l
	/0I1463	Preparation: NONE (WETCHEM)	Prepared: 09/2	7/20 13:28			Analyst: D
Batch ID: W	BC-NF-1	Preparation: _NONE (WETCHEM)10	<b>Prepared:</b> 09/2 10	mg/l	1 ed: 09/22/2	09/27/20 0 11:45 by Jim Burto	
Batch ID: W Total Disso	olved Solids	·	•	mg/l			on, Todd Be
Batch ID: W Total Disso Sample:	BC-NF-1 0123024-03 (Water)		10	mg/l Sample	ed: 09/22/2	0 11:45 by Jim Burto	on, Todd Be
Batch ID: W Total Disso Sample:	BC-NF-1 0123024-03 (Water)		10	mg/l Sample Units	ed: 09/22/2	0 11:45 by Jim Burto	on, Todd Be Qualif
Batch ID: W Total Disso Sample: Analyte Method: [CAL	BC-NF-1 0123024-03 (Water)	10 Result	MRL Instr: [CALC]	mg/l Sample Units	ed: 09/22/2	0 11:45 by Jim Burto	on, Todd Be Qualif
Batch ID: W Total Disso Sample: Analyte Method: [CAL Batch ID: [C Nitrogen, To	BC-NF-1 0123024-03 (Water)  CCJ CALCJ otal	Result Preparation: [CALC]	MRL Instr: [CALC] Prepared: 09/2	mg/l Sample Units 5/20 17:38	ed: 09/22/2 <b>Dil</b>	0 11:45 by Jim Burto	on, Todd Be Qualif
Batch ID: W Total Disso Sample:  Analyte Method: [CAL Batch ID: [C Nitrogen, To	BC-NF-1 0123024-03 (Water)  CCI CALCI otal	Result Preparation: [CALC]	MRL Instr: [CALC] Prepared: 09/2 0.30	mg/l Sample Units 5/20 17:38 mg/l	ed: 09/22/2 <b>Dil</b>	0 11:45 by Jim Burto	On, Todd Be Qualif Analyst: YM
Batch ID: W Total Disso Sample: Analyte Method: [CAL Batch ID: [C Nitrogen, To	BC-NF-1 0123024-03 (Water) CC] CALC] otal 300.0	Result Preparation: [CALC]	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12	mg/l Sample Units 5/20 17:38 mg/l	ed: 09/22/2 <b>Dil</b>	0 11:45 by Jim Burto	On, Todd Be Qualif Analyst: YM
Batch ID: W Total Disso Sample:  Analyte Method: [CAL Batch ID: [C Nitrogen, To Method: EPA Batch ID: W	BC-NF-1 0123024-03 (Water)  CCI CALCI 0101257	Preparation: [CALC]  Preparation: _NONE (LC)	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2	mg/l Sample Units 5/20 17:38 mg/l	<b>Dil</b>	0 11:45 by Jim Burto  Analyzed  09/28/20	On, Todd Be Qualif Analyst: YM
Batch ID: W Total Disso Sample:  Analyte Method: [CAL Batch ID: [C Nitrogen, Tc Method: EPA Batch ID: W Nitrate as N	BC-NF-1 0123024-03 (Water)  CCI CALCI otal 300.0 7011257	Preparation: [CALC]  Preparation: _NONE (LC)	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2 110	mg/l Sample Units 5/20 17:38 mg/l 3/20 12:56 ug/l	<b>Dil</b>	0 11:45 by Jim Burto  Analyzed  09/28/20	Qualif Analyst: YN Analyst: j
Batch ID: W Total Disso Sample:  Analyte Method: [CAL Batch ID: [C Nitrogen, To Method: EPA Batch ID: W Nitrate as N	BC-NF-1 0123024-03 (Water)  CCI CALCI otal 300.0 7011257	Preparation: [CALC]  Preparation: _NONE (LC)  ND	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2 110 Instr: AA06	mg/l Sample Units 5/20 17:38 mg/l 3/20 12:56 ug/l	<b>Dil</b>	0 11:45 by Jim Burto  Analyzed  09/28/20	Qualif Analyst: YN Analyst: j
Batch ID: W Total Disso Sample:  Analyte Method: [CAL Batch ID: [C Nitrogen, To Method: EPA Batch ID: W Nitrate as N Method: EPA Batch ID: W	BC-NF-1 0123024-03 (Water)  CC] CALC] otal 300.0 (011257	Preparation: [CALC]  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2 110 Instr: AA06 Prepared: 09/2	mg/l Sample Units 5/20 17:38 mg/l 3/20 12:56 ug/l	ed: 09/22/2  Dil  1	0 11:45 by Jim Burto  Analyzed  09/28/20  09/23/20 14:33	On, Todd Be Qualifi Analyst: YN Analyst: j
Batch ID: W Total Disso Sample:  Analyte Method: [CAL Batch ID: [C Nitrogen, Tc Method: EPA Batch ID: W Nitrate as N Method: EPA Batch ID: W TKN	BC-NF-1 0123024-03 (Water)  CCJ CALC] otal 300.0 7011257 351.2 7011435	Preparation: [CALC]  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2 110 Instr: AA06 Prepared: 09/2 0.10	mg/l Sample Units 5/20 17:38 mg/l 3/20 12:56 ug/l 5/20 17:38 mg/l	ed: 09/22/2  Dil  1	0 11:45 by Jim Burto  Analyzed  09/28/20  09/23/20 14:33	Qualif Analyst: YM Analyst: j
Analyte  Method: [CAL Batch ID: W Method: EPA Batch ID: W Nitrate as N Method: EPA Batch ID: W Method: EPA Method: EPA Method: EPA Method: EPA Method: EPA Method: EPA	BC-NF-1 0123024-03 (Water)  CCI CALCI otal 300.0 //011257 V 351.2 //011435	Preparation: [CALC]  ND  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)  0.23	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2 110 Instr: AA06 Prepared: 09/2 0.10 Instr: AA01	mg/l Sample Units 5/20 17:38 mg/l 3/20 12:56 ug/l 5/20 17:38 mg/l	ed: 09/22/2  Dil  1	0 11:45 by Jim Burto  Analyzed  09/28/20  09/23/20 14:33	Qualif Analyst: YM Analyst: j
Batch ID: W Total Disso Sample:  Analyte  Method: [CAL Batch ID: [C Nitrogen, To Method: EPA Batch ID: W Nitrate as N Method: EPA Batch ID: W TKN  Method: EPA Batch ID: W TKN	BC-NF-1 0123024-03 (Water)  CC] CALC] otal 300.0 7011257  351.2 7011435	Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)  Preparation: _NONE (WETCHEM)	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2 110 Instr: AA06 Prepared: 09/2 0.10 Instr: AA01 Prepared: 09/2	mg/l Sample Units  5/20 17:38 mg/l  3/20 12:56 ug/l  5/20 17:38 mg/l	Dil  1  1	0 11:45 by Jim Burto  Analyzed  09/28/20  09/23/20 14:33	Qualif Analyst: YM Analyst: j
Batch ID: W Total Disso Sample:  Analyte Method: [CAL Batch ID: [C Nitrogen, To Method: EPA Batch ID: W Nitrate as N Method: EPA Batch ID: W TKN  Method: EPA Batch ID: W TKN  Method: EPA Batch ID: W TKN	BC-NF-1 0123024-03 (Water)  CCI CALCI otal 300.0 /011257  V 351.2 /011435	Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)  Preparation: _NONE (WETCHEM)	MRL Instr: [CALC] Prepared: 09/2	mg/l Sample Units  5/20 17:38 mg/l  3/20 12:56 ug/l  5/20 17:38 mg/l  3/20 12:40 ug/l	Dil  1  1	0 11:45 by Jim Burto  Analyzed  09/28/20  09/23/20 14:33	Qualif Analyst: YM Analyst: YM Analyst: YM Analyst: S
Batch ID: W Total Disso Sample:  Analyte  Method: [CAL Batch ID: [C Nitrogen, To Method: EPA Batch ID: W Nitrate as N Method: EPA Batch ID: W TKN  Method: EPA Batch ID: W NO2+NO3: Method: EPA	BC-NF-1 0I23024-03 (Water)  CCI CALCI Dtal 300.0 //0I1257  V 3551.2 //0I1435  353.2 //0I1275 as N 365.3	Preparation: [CALC]  ND  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)  0.23  Preparation: _NONE (WETCHEM)	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2 110 Instr: AA06 Prepared: 09/2 0.10 Instr: AA01 Prepared: 09/2 200 Instr: UVVIS04	mg/l Sample Units  5/20 17:38 mg/l  3/20 12:56 ug/l  5/20 17:38 mg/l  3/20 12:40 ug/l	Dil  1  1	0 11:45 by Jim Burto  Analyzed  09/28/20  09/23/20 14:33	Qualif Analyst: YM Analyst: YM Analyst: YM Analyst: S
Batch ID: W Total Disso  fample:  Analyte  Method: [CAL Batch ID: [C Nitrogen, To Method: EPA Batch ID: W Nitrate as N  Method: EPA Batch ID: W TKN  Method: EPA Batch ID: W NO2+NO3:  Method: EPA Batch ID: W NO2+NO3:  Method: EPA Batch ID: W NO2+NO3:	BC-NF-1 0I23024-03 (Water)  CCI CALCI otal 300.0 7011257  351.2 7011435  353.2 7011275 as N 365.3 7011287 de as P	Preparation: [CALC]  ND  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)  0.23  Preparation: _NONE (WETCHEM)	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2 110 Instr: AA06 Prepared: 09/2 0.10 Instr: AA01 Prepared: 09/2 200 Instr: UVVIS04 Prepared: 09/2	mg/l Sample Units  5/20 17:38 mg/l  3/20 12:56 ug/l  5/20 17:38 mg/l  3/20 12:40 ug/l	Dil  1  1  1	0 11:45 by Jim Burto Analyzed  09/28/20  09/23/20 14:33  09/28/20  09/23/20	Analyst: b  On, Todd Be  Qualifi  Analyst: YN  Analyst: YN  Analyst: S  Analyst: S
Batch ID: W Total Disso  Sample:  Analyte  Method: [CAL Batch ID: [C Nitrogen, To Method: EPA Batch ID: W Nitrate as N  Method: EPA Batch ID: W TKN  Method: EPA Batch ID: W NO2+NO3 : Method: EPA Batch ID: W NO2+NO3 : Method: EPA Batch ID: W	BC-NF-1 0I23024-03 (Water)  CCI CALCI Dtal 300.0 7011257  V 351.2 7011275 as N 365.3 7011287 te as P	Preparation: [CALC]  ND  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)  0.23  Preparation: _NONE (WETCHEM)	MRL Instr: [CALC] Prepared: 09/2	mg/l Sample Units  5/20 17:38 mg/l  3/20 12:56 ug/l  5/20 17:38 mg/l  3/20 12:40 ug/l  3/20 15:31 mg/l	Dil  1  1  1	0 11:45 by Jim Burto Analyzed  09/28/20  09/23/20 14:33  09/28/20  09/23/20	Qualif Analyst: YM Analyst: YM Analyst: YM Analyst: S



FINAL REPORT

Sample Results

Sample:	BC-Blw-PH2			Sample	ed: 09/22/2	20 12:20 by Jim Burto	on, Todd Bea
Analyte	0I23024-04 (Water)	Result	MRL	Units	Dil	Analyzed	Qualifi
-	10	Result		Onits	Dii	Analyzeu	Qualifi
Method: [CAl		Preparation: [CALC]	Instr: [CALC]	E /20 17:20			Amaluati VIV
Batch ID: [0 Nitrogen, T		ND	Prepared: 09/25 0.30	mg/l	1	09/28/20	Analyst: YN
-		1,12		1119/1	,	00/20/20	
Method: EPA	300.0		Instr: LC12				
Batch ID: V		Preparation: _NONE (LC)	Prepared: 09/23		4	00/00/00 44.54	Analyst: ja
Nitrate as N	<b>V</b>	ND	110	ug/l	1	09/23/20 14:51	
Method: EPA	351.2		Instr: AA06				
Batch ID: V	V0I1435	Preparation: _NONE (WETCHEM)	Prepared: 09/25	5/20 17:38			Analyst: YM
TKN		ND	0.10	mg/l	1	09/28/20	
Method: EPA	353.2		Instr: AA01				
Batch ID: V	V0I1275	Preparation: _NONE (WETCHEM)	Prepared: 09/23	3/20 12:40			Analyst: sa
NO2+NO3	as N	ND	200	ug/l	1	09/23/20	
Method: EPA	365 3		Instr: UVVIS04				
Batch ID: V		Preparation: _NONE (WETCHEM)	Prepared: 09/23	3/20 15:31			Analyst: sb
o-Phospha		ND	0.010	mg/l	1	09/23/20 16:36	7
			In atra 0\/FN101				
Made ad CM			Instr: OVEN01				
Method: SM		Decree of the ANONE (ANETCHEAD)	D 1 00/2	7/20 12:20			A I I . I
Batch ID: V Total Disso	v011463 <b>olved Solids</b> BC-Blw-PH3	Preparation: _NONE (WETCHEM)	<b>Prepared:</b> 09/27 10	mg/l	1 ed: 09/22/2	09/27/20 20 12:55 by Jim Burto	
Batch ID: V Total Disso	V0I1463 Dived Solids	·	•	mg/l			on, Todd Be
Batch ID: V Total Disso Sample: Analyte	v011463 plved Solids BC-Blw-PH3 0123024-05 (Water)	24	10	mg/l Sample	ed: 09/22/2	20 12:55 by Jim Burto	on, Todd Bea
Batch ID: V Total Disso Sample: Analyte	v011463 plved Solids BC-Blw-PH3 0123024-05 (Water)	. 24 Result	MRL Instr: [CALC]	mg/l Sample Units	ed: 09/22/2	20 12:55 by Jim Burto	on, Todd Bea
Batch ID: V Total Disso Sample: Analyte Method: [CAI	v011463 plved Solids  BC-Blw-PH3 0123024-05 (Water)  LC] EALC]	24	10	mg/l Sample Units	ed: 09/22/2	20 12:55 by Jim Burto	on, Todd Bea
Batch ID: V Total Disso Sample: Analyte Method: [CAl Batch ID: [G	VOI1463 plved Solids  BC-Blw-PH3 0123024-05 (Water)  LC] CALC] otal	Result Preparation: [CALC]	MRL Instr: [CALC] Prepared: 09/25	mg/l Sample Units 5/20 17:38	ed: 09/22/2	20 12:55 by Jim Burto	on, Todd Bea
Batch ID: V Total Disso Sample: Analyte Method: [CAl Batch ID: [G	vol1463 plved Solids  BC-Blw-PH3 0l23024-05 (Water)  LC] EALC] otal 300.0	Result Preparation: [CALC]	MRL Instr: [CALC] Prepared: 09/2! 0.30 Instr: LC12	mg/l Sample Units 5/20 17:38 mg/l	ed: 09/22/2	20 12:55 by Jim Burto	On, Todd Bea
Batch ID: V Total Disso Sample: Analyte Method: [CAl Batch ID: [G Nitrogen, T	vol1463 plved Solids  BC-Blw-PH3 0l23024-05 (Water)  LC] CALC] otal 300.0 vol1257	Result Preparation: [CALC]	MRL Instr: [CALC] Prepared: 09/25	mg/l Sample Units 5/20 17:38 mg/l	ed: 09/22/2	20 12:55 by Jim Burto	On, Todd Bea
Batch ID: V Total Disso Sample:  Analyte Method: [CA  Batch ID: [C Nitrogen, T Method: EPA Batch ID: V Nitrate as N	VOI1463 plved Solids  BC-Blw-PH3 0I23024-05 (Water)  LC] CALC] otal 300.0 VOI1257	Preparation: [CALC]  Preparation: _NONE (LC)	MRL Instr: [CALC] Prepared: 09/25 0.30 Instr: LC12 Prepared: 09/25 110	mg/l Sample Units 5/20 17:38 mg/l	ed: 09/22/2 <b>Dil</b>	20 12:55 by Jim Burto Analyzed 09/28/20	On, Todd Bea
Batch ID: W Total Disso Sample:  Analyte Method: [CAI Batch ID: [C Nitrogen, T Method: EPA Batch ID: W Nitrate as N	V011463 plved Solids  BC-Blw-PH3 0123024-05 (Water)  LC] CALC] otal 300.0 V011257 N 351.2	Preparation: [CALC]  Preparation: _NONE (LC)  ND	MRL Instr: [CALC] Prepared: 09/2! 0.30 Instr: LC12 Prepared: 09/2: 110 Instr: AA06	mg/l Sample Units 5/20 17:38 mg/l 3/20 12:56 ug/l	ed: 09/22/2 <b>Dil</b>	20 12:55 by Jim Burto Analyzed 09/28/20	Qualifi Qualifi Analyst: YM Analyst: ja
Batch ID: V Total Disso Sample:  Analyte Method: [CA  Batch ID: [C Nitrogen, T Method: EPA Batch ID: V Nitrate as N	V011463 plved Solids  BC-Blw-PH3 0123024-05 (Water)  LC] CALC] otal 300.0 V011257 N 351.2	Preparation: [CALC]  Preparation: _NONE (LC)	MRL Instr: [CALC] Prepared: 09/25 0.30 Instr: LC12 Prepared: 09/25 110	mg/l Sample Units 5/20 17:38 mg/l 3/20 12:56 ug/l	ed: 09/22/2 <b>Dil</b>	20 12:55 by Jim Burto Analyzed 09/28/20	Qualific Analyst: YM Analyst: ja
Batch ID: V Total Disso Sample:  Analyte Method: [CAl Batch ID: [C Nitrogen, T Method: EPA Batch ID: V Nitrate as N Method: EPA Batch ID: V TKN	V011463 plved Solids  BC-Blw-PH3 0123024-05 (Water)  LC] CALC] otal 300.0 V011257 N 351.2	Preparation: [CALC]  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)	MRL Instr: [CALC] Prepared: 09/29 0.30 Instr: LC12 Prepared: 09/29 110 Instr: AA06 Prepared: 09/29 0.10	mg/l Sample Units 5/20 17:38 mg/l 3/20 12:56 ug/l	ed: 09/22/2 <b>Dil</b> 1	20 12:55 by Jim Burto Analyzed 09/28/20 09/23/20 15:09	Qualific Analyst: YM Analyst: ja
Batch ID: W Total Disso Sample:  Analyte Method: [CAI Batch ID: [C Nitrogen, T Method: EPA Batch ID: W Nitrate as N Method: EPA Batch ID: W TKN  Method: EPA	V011463 plved Solids  BC-Blw-PH3 0123024-05 (Water)  LC] CALC] total 300.0 V011257 N 351.2 V011435	Preparation: [CALC]  Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)  ND	MRL Instr: [CALC] Prepared: 09/25 0.30 Instr: LC12 Prepared: 09/25 110 Instr: AA06 Prepared: 09/25 0.10 Instr: AA01	mg/l Sample Units 5/20 17:38 mg/l 3/20 12:56 ug/l 5/20 17:38 mg/l	ed: 09/22/2 <b>Dil</b> 1	20 12:55 by Jim Burto Analyzed 09/28/20 09/23/20 15:09	Qualific Analyst: YM Analyst: ja
Batch ID: W Total Disso Sample:  Analyte  Method: [CAI Batch ID: [C Nitrogen, T  Method: EPA Batch ID: W Nitrate as N  Method: EPA Batch ID: W TKN  Method: EPA Batch ID: W TKN	V011463 plved Solids  BC-Blw-PH3 0123024-05 (Water)  LC] CALC] total 300.0 V011257 N 351.2 V011435	Preparation: [CALC]  ND  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)  ND  Preparation: _NONE (WETCHEM)	MRL Instr: [CALC] Prepared: 09/25 0.30 Instr: LC12 Prepared: 09/25 110 Instr: AA06 Prepared: 09/25 0.10 Instr: AA01 Prepared: 09/25	mg/l Sample Units  5/20 17:38 mg/l  3/20 12:56 ug/l  5/20 17:38 mg/l	ed: 09/22/2  Dil  1  1	Analyzed  09/28/20  09/23/20 15:09	Qualific Analyst: YM Analyst: ja
Batch ID: W Total Disso  Sample:  Analyte  Method: [CAI Batch ID: [C Nitrogen, T  Method: EPA Batch ID: W Nitrate as N  Method: EPA Batch ID: W TKN  Method: EPA Batch ID: W TKN  Method: EPA Batch ID: W NO2+NO3	V011463 plved Solids  BC-Blw-PH3 0123024-05 (Water)  LC] EALC] otal 300.0 V011257 N 351.2 V011435	Preparation: [CALC]  Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)  ND	MRL Instr: [CALC] Prepared: 09/2!	mg/l Sample Units 5/20 17:38 mg/l 3/20 12:56 ug/l 5/20 17:38 mg/l	ed: 09/22/2 <b>Dil</b> 1	20 12:55 by Jim Burto Analyzed 09/28/20 09/23/20 15:09	Qualifie Analyst: YM Analyst: ja
Batch ID: W Total Disso Sample:  Analyte Method: [CAI Batch ID: [C Nitrogen, T Method: EPA Batch ID: W Nitrate as N Method: EPA Batch ID: W TKN  Method: EPA Batch ID: W TKN  Method: EPA Batch ID: W TKN  Method: EPA Batch ID: W NO2+NO3	V011463 plved Solids  BC-Blw-PH3 0123024-05 (Water)  LC] CALC] total 300.0 V011257 N 351.2 V011435 353.2 V011275 as N 365.3	Preparation: [CALC]  ND  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)  ND  Preparation: _NONE (WETCHEM)  ND	MRL Instr: [CALC] Prepared: 09/25 0.30 Instr: LC12 Prepared: 09/25 110 Instr: AA06 Prepared: 09/25 0.10 Instr: AA01 Prepared: 09/25 200 Instr: UVVIS04	mg/l Sample Units  5/20 17:38 mg/l  3/20 12:56 ug/l  5/20 17:38 mg/l  3/20 12:40 ug/l	ed: 09/22/2  Dil  1  1	Analyzed  09/28/20  09/23/20 15:09	Qualific Analyst: YM Analyst: ja Analyst: YM Analyst: YM
Batch ID: W Total Disso  Sample:  Analyte  Method: [CAI Batch ID: [C Nitrogen, T  Method: EPA Batch ID: W Nitrate as N  Method: EPA Batch ID: W TKN  Method: EPA Batch ID: W NO2+NO3  Method: EPA Batch ID: W NO2+NO3	V011463 plved Solids  BC-Blw-PH3 0123024-05 (Water)  LC] CALC] otal 300.0 V011257 N 351.2 V011435  353.2 V011275 as N 365.3 V011287	Preparation: [CALC]  ND  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)  ND  Preparation: _NONE (WETCHEM)  ND	MRL Instr: [CALC] Prepared: 09/25 0.30 Instr: LC12 Prepared: 09/25 110 Instr: AA06 Prepared: 09/25 0.10 Instr: AA01 Prepared: 09/25 200 Instr: UVVIS04 Prepared: 09/25	mg/l Sample Units  5/20 17:38 mg/l  3/20 12:56 ug/l  5/20 17:38 mg/l  3/20 12:40 ug/l	ed: 09/22/2  Dil  1  1	Analyzed  09/28/20  09/23/20 15:09  09/28/20	Qualific Analyst: YM Analyst: YM Analyst: YM Analyst: YM
Batch ID: W Total Disso  Sample:  Analyte  Method: [CAI Batch ID: [C Nitrogen, T  Method: EPA Batch ID: W Nitrate as N  Method: EPA Batch ID: W TKN  Method: EPA Batch ID: W TKN  Method: EPA Batch ID: W NO2+NO3	V011463 plved Solids  BC-Blw-PH3 0123024-05 (Water)  LC] CALC] otal 300.0 V011257 N 351.2 V011435  353.2 V011275 as N 365.3 V011287	Preparation: [CALC]  ND  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)  ND  Preparation: _NONE (WETCHEM)  ND	MRL Instr: [CALC] Prepared: 09/25 0.30 Instr: LC12 Prepared: 09/25 110 Instr: AA06 Prepared: 09/25 0.10 Instr: AA01 Prepared: 09/25 200 Instr: UVVIS04	mg/l Sample Units  5/20 17:38 mg/l  3/20 12:56 ug/l  5/20 17:38 mg/l  3/20 12:40 ug/l	ed: 09/22/2  Dil  1  1	Analyzed  09/28/20  09/23/20 15:09	Qualific Analyst: YM Analyst: ja Analyst: YM Analyst: YM
Batch ID: W Total Disso Sample:  Analyte  Method: [CAI Batch ID: [C Nitrogen, T  Method: EPA Batch ID: W TKN  Method: EPA Batch ID: W TKN  Method: EPA Batch ID: W TKN  Method: EPA Batch ID: W NO2+NO3  Method: EPA Batch ID: W NO2+NO3	V011463 plved Solids  BC-Blw-PH3 0123024-05 (Water)  LC] CALC] otal 300.0 V011257 N 351.2 V011435 353.2 V011275 as N 365.3 V011287 te as P	Preparation: [CALC]  ND  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)  ND  Preparation: _NONE (WETCHEM)  ND	MRL Instr: [CALC] Prepared: 09/25 0.30 Instr: LC12 Prepared: 09/25 110 Instr: AA06 Prepared: 09/25 0.10 Instr: AA01 Prepared: 09/25 200 Instr: UVVIS04 Prepared: 09/25	mg/l Sample Units  5/20 17:38 mg/l  3/20 12:56 ug/l  5/20 17:38 mg/l  3/20 12:40 ug/l	ed: 09/22/2  Dil  1  1	Analyzed  09/28/20  09/23/20 15:09  09/28/20	Qualific Analyst: YM Analyst: ja Analyst: YM Analyst: YM
Batch ID: W Total Disso  Sample:  Analyte  Method: [CAI Batch ID: [C Nitrogen, T  Method: EPA Batch ID: W Nitrate as N  Method: EPA Batch ID: W TKN  Method: EPA Batch ID: W NO2+NO3  Method: EPA Batch ID: W NO2+NO3	V011463 plved Solids  BC-Blw-PH3 0123024-05 (Water)  LC] CALC] otal 300.0 V011257 N 351.2 V011435 353.2 V011275 as N 365.3 V011287 te as P	Preparation: [CALC]  ND  Preparation: _NONE (LC)  ND  Preparation: _NONE (WETCHEM)  ND  Preparation: _NONE (WETCHEM)  ND	MRL Instr: [CALC] Prepared: 09/2!	mg/l Sample Units  5/20 17:38 mg/l  3/20 12:56 ug/l  5/20 17:38 mg/l  3/20 12:40 ug/l  3/20 15:31 mg/l	ed: 09/22/2  Dil  1  1	Analyzed  09/28/20  09/23/20 15:09  09/28/20	Analyst: bl  On, Todd Bea  Qualifie  Analyst: YM  Analyst: YM  Analyst: Sa  Analyst: sb



FINAL REPORT



Quality Control Results										
Anions by IC, EPA Method 300.0										
				Spike 	Source	0/ DEC	%REC		RPD	0 110
Analyte atch: W0I1257NONE (LC)	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
Blank (W0I1257-BLK1)				Prepared & Ana	lvzed: 09/2	3/20				
Nitrate as N	· ND	110	ug/l	riepared & Alla	iyzeu. 05/2	3/20				
LCS (W0I1257-BS1)				Prepared & Ana	lyzed: 09/2	3/20				
Nitrate as N	2150	110	ug/l	2000		108	90-110			
Matrix Spike (W0I1257-MS1)	Source: 0123020-01			Prepared & Ana	lyzed: 09/2	3/20				
Nitrate as N	23600	1100	ug/l	20000	2060	108	84-115			
Matrix Spike (W0I1257-MS2)	Source: 0I14016-01			Prepared & Ana	lyzed: 09/2	3/20				
Nitrate as N	31100	1100	ug/l	20000	8050	115	84-115			
Matrix Spike Dup (W0I1257-MSD1)	Source: 0123020-01			Prepared & Ana	lyzed: 09/2	3/20				
Nitrate as N	23800	1100	ug/l	20000	2060	109	84-115	0.5	20	
Matrix Spike Dup (W0l1257-MSD2)	Source: 0114016-01			Prepared & Ana	lyzed: 09/2	3/20				
Nitrate as N	31100	1100	ug/l	20000	8050	115	84-115	0	20	
Conventional Chemistry/Physical Parameters by APH	A/EPA/ASTM Method	S								
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
atch: W011275 - NONE (WETCHEM)				D		2 /20				
Blank (W0I1275-BLK1) NO2+NO3 as N	· ND	200	ug/l	Prepared & Ana	lyzed: 09/2	3/20				
ICC (MOI127E PC1)			J	Dramarad & Ana	hd- 00/2	2 /20				
LCS (W011275-BS1) NO2+NO3 as N	1010	200	ug/l	Prepared & Ana 1000	iyzea: 09/2	101	90-110			
Matrix Spike (W0I1275-MS1)	Source: 0I23020-01		J	Prepared & Ana	hrzod: 00/2	2/20				
NO2+NO3 as N	3860	200	ug/l	2000	1830	102	90-110			
Matrix Spike (W0I1275-MS2)	Source: 0I23037-01			Prepared & Ana	lvzed: 09/2	3/20				
NO2+NO3 as N	2140	200	ug/l	2000	94.6	102	90-110			
Matrix Spike Dup (W0I1275-MSD1)	Source: 0123020-01			Prepared & Ana	lvzed: 09/2	3/20				
NO2+NO3 as N	3860	200	ug/l	2000	1830	102	90-110	0	20	
Matrix Spike Dup (W0I1275-MSD2)	Source: 0123037-01			Prepared & Ana	lyzed: 09/2	3/20				
NO2+NO3 as N	2130	200	ug/l	2000	94.6	102	90-110	0.5	20	
atch: W0I1287NONE (WETCHEM)										
Blank (W0I1287-BLK1)				Prepared & Ana	lyzed: 09/2	3/20				
o-Phosphate as P	ND	0.010	mg/l	·	-					
LCS (W0I1287-BS1)				Prepared & Ana	lyzed: 09/2	3/20				
o-Phosphate as P	0.194	0.010	mg/l	0.200		97	88-111			
Matrix Spike (W0I1287-MS1)	Source: 0I22120-01			Prepared & Ana	lyzed: 09/2	3/20				
o-Phosphate as P	- 0.232	0.010	mg/l	0.200	0.0300	101	85-112			
Matrix Spike Dup (W0I1287-MSD1)	Source: 0122120-01			Prepared & Ana	lyzed: 09/2	3/20				
o-Phosphate as P	- 0.229	0.010	mg/l	0.200	0.0300	100	85-112	1	20	
atch: W0I1435NONE (WETCHEM)										
				Dramarad, 00/25/20	Analyzod: (	19/28/20				
Blank (W0I1435-BLK1)				Prepared: 09/25/20	Allalyzeu.	3, 20, 20				
Blank (W011435-BLK1) TKN	ND	0.10	mg/l	Prepared: 05/25/20	Analyzeu.	33,20,20				
	ND	0.10	mg/l	Prepared: 09/25/20						



FINAL REPORT

Quality Control Results

A B Mark										
Conventional Chemistry/Physical Parameters by	y APHA/EPA/ASTM Met	hods (Continue	d)							
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
atch: W0I1435NONE (WETCHEM) (Continued)										
LCS (W0I1435-BS1)			Pi	repared: 09/25/2	20 Analyzed: 0	9/28/20				
TKN	0.963	0.10	mg/l	1.00		96	90-110			
LCS (W0I1435-BS2)			Pi	repared: 09/25/2	20 Analyzed: 0	9/28/20				
TKN	0.944	0.10	mg/l	1.00		94	90-110			
Duplicate (W0I1435-DUP1)	Source: 012302	24-01	Pi	repared: 09/25/2	20 Analyzed: 0	9/28/20				
TKN	0.0422	0.10	mg/l		0.0310			30	10	R-03
Matrix Spike (W0I1435-MS1)	Source: 012110	9-01	Pi	repared: 09/25/2	20 Analyzed: 0	9/28/20				
TKN	1.03	0.10	mg/l	1.00	ND	103	90-110			
Matrix Spike (W0I1435-MS2)	Source: 012110	9-02	Pi	repared: 09/25/2	20 Analyzed: 0	9/28/20				
TKN	0.931	0.10	mg/l	1.00	ND	93	90-110			
Matrix Spike Dup (W0I1435-MSD1)	Source: 012110	9-01	Pi	repared: 09/25/2	20 Analyzed: 0	9/28/20				
TKN	0.979	0.10	mg/l	1.00	ND	98	90-110	5	10	
Matrix Spike Dup (W0I1435-MSD2)	Source: 012110	9-02	Pi	repared: 09/25/2	20 Analyzed: 0	9/28/20				
TKN	1.02	0.10	mg/l	1.00	ND	102	90-110	9	10	
atch: W0I1463 - NONE (WETCHEM)										
Blank (W0I1463-BLK1)				Prepared & A	nalyzed: 09/27	7/20				
Total Dissolved Solids	ND	10	mg/l	·						
LCS (W0I1463-BS1)				Prepared & A	nalyzed: 09/27	7/20				
Total Dissolved Solids	828	10	mg/l	824		100	96-102			
Duplicate (W0I1463-DUP1)	Source: 012300	11-02		Prepared & A	nalyzed: 09/27	7/20				
Total Dissolved Solids	1560	10	mg/l		1530			2	10	
Duplicate (W0I1463-DUP2)	Source: 012300	01-04		Prepared & A	nalyzed: 09/27	7/20				
Total Dissolved Solids	8110	10	mg/l	•	8020			1	10	



**FINAL REPORT** 



#### Notes and Definitions

iteiii	Definition
R-03	The RPD is not applicable for result below the reporting limit (either ND or J value).
%REC	Percent Recovery
Dil	Dilution
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ)
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or

above the MDL.

RPD Relative Percent Difference

Source Sample that was matrix spiked or duplicated.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

State

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

#### Reviewed by:

Chris Samatmanakit Project Manager









DoD-ISO ANAB # • ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015 • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

Weck Laboratories 14859 Clark Avenue City of Industry, CA 91745 (626) 336-2139

				U	HAIN	CHAIN OF CUSTODY FORM	STC	DY F	OR.	>	<i>C</i>		V.	Page of	
Olient Name/Address:			Project/P(	Project/PO Number:							Anal	Analysis Required			
PSOMAS 3 HUTTON CENTRE DRIVE, SUITE 200 SANTA ANA, CA 92707	UITE 200		2KLE010102	0102			0.008	SM2540C	AGE VO	porteM	notisi				
Project Manager:			Phone Number:	mber:	-		pou			Αď	noje:				
MICHAEL P. DONOVAN (mpdonovn@cox.net)	novn@cox.net		(714) 32	328-5234			b∋M A		onjiW le		o Va u				
Sampler: Jim Burton, Todd Bear			Fax Numb	Fax Number: 714,545,8883	383		'd∃ N-		jelda <b>i</b>		egortil				
Sample Description	Sample	Container Type	# of Cont.	Sampling Date	Time	Preservation	L Mitrate	£.38£			1 listoT			   Special Instructions	SUS
BC-61w-5L	water	60 ml Poly	<del>,</del>	9 32 20	8:55,	None	×								
	water	250 ml Poly	٦			None		×						Filtered with 0.45µ	
	water	500 ml Poly	-			None		×							
	water	250 ml Poly	-	-(-	4	H2SO4			×	×	×				
BC-6/w- 45	water	60 ml Poly	ا ا	122 30	1):00 or		×								
	water	250 ml Poly	1	1 1	)	None		×						Filtered with 0.45µ	
	water	500 ml Poly	1			None		×							
-	water	250 ml Poly	1	T '	-¥	H2804			X	×	×				
BC- NF- 1	water	60 ml Poly	1	933 30	11:45	W.None	X								
	water	250 ml Poly	1	, 4	_	None		×						Filtered with 0.45µ	
	water	500 ml Poly	1			None		X							
-	water	250 ml Poly	1	٦,	4	H2S04			×	X	×				
BC- blw- PH2	water	60 ml Poly	1 9	92230	12:30	) W_None	×								
	water	250 ml Poly		<u>,</u>		None		×						Filtered with 0.45µ	
	water	500 ml Poly	1			None		×							
7	water	250 ml Paly	1	7	•	H2SO4			×	×	×				
BC-61W-PH3	water	60 ml Poly	1	oe ec	55 BI	الم None	×								
	water	250 ml Poly	-	-	_	None		×	:					Filtered with 0.45µ	
	water	500 ml Poly	-			None		×							
¥	water	250 ml Poly	~	1	-	H2SO4			×	×	×				
Relinquished By:	9/20/20	Date /Time:	<u>~</u>	Received by:						Date /Time:	me:	Tum	Turnaround Time:	(Check)	
	00,00	0	+	4.5						1	-	Ost	Same Day		
Kelinquisned By: FML		7/22/20	<u> </u>	Keepwee Dr.								24 F	24 Hours 48 Hours	5 Days Normal X	. !
Relinquished By:		Date /Tune:	2	Received in Lab by	. <b>/</b> c					Date /Time:	me;	Samp	le Integrity:	(Check)	
													-		

to 39 23.



FINAL REPORT

Work Orders: 0124028 Report Date: 10/05/2020

**Received Date:** 9/24/2020

Turnaround Time: Normal

Phones: (714) 751-7373

Fax: (714) 545-8883

P.O. #:

**Billing Code:** 

Project: 2KLE010102

Attn: Michael P. Donovan

Client: Psomas - Santa Ana, CA

3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

#### Dear Michael P. Donovan,

Enclosed are the results of analyses for samples received 9/24/20 with the Chain-of-Custody document. The samples were received in good condition, at 2.0 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

### Sample Results

Sample:	SL-DP-20			Sample	ed: 09/23/2	20 12:05 by Jim Burto	on, Todd Bea
	0I24028-01 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifie
Method: [C/	ALC]		Instr: [CALC]				
Batch ID:	[CALC]	Preparation: [CALC]	Prepared: 09/	/25/20 17:38			Analyst: YM
Nitrogen,	Total	ND	0.30	mg/l	1	09/28/20	
Method: EP	A 300.0		Instr: LC12				
Batch ID:	W0I1314	Preparation: _NONE (LC)	Prepared: 09/	/24/20 10:30			Analyst: ja
Nitrate as	s N	ND	110	ug/l	1	09/24/20 15:36	
Method: EP	A 351.2		Instr: AA06				
Batch ID:	W0I1435	Preparation: _NONE (WETCHEM)	Prepared: 09/	/25/20 17:38			Analyst: YM
TKN		ND	0.10	mg/l	1	09/28/20	
Method: EP	A 353.2		Instr: AA01				
Batch ID:	W0I1376	Preparation: _NONE (WETCHEM)	Prepared: 09/	/24/20 16:13			Analyst: sa
NO2+NO3	3 as N	ND	200	ug/l	1	09/26/20	
Method: EP	A 365.3		Instr: UVVIS04	4			
Batch ID:	W0I1327	Preparation: _NONE (WETCHEM)	Prepared: 09/	/24/20 10:06			Analyst: sb
o-Phosph	ate as P	ND	0.010	mg/l	1	09/24/20 13:21	
Method: SM	Л 2540C		Instr: OVEN01	I			
Batch ID:	W0I1463	Preparation: _NONE (WETCHEM)	Prepared: 09/	/27/20 13:28			Analyst: blo
Total Diss	solved Solids		10	mg/l	1	09/27/20	



FINAL REPORT

Sample Results

Sample:	SL-DP-42				Sample	ed: 09/23/2	20 12:50 by Jim Burto	on, Todd Bear
	0124028-02 (Wa	ater)						
Analyte			Result	MRL	Units	Dil	Analyzed	Qualifie
Method: [CAI	LC]			Instr: [CALC]				
Batch ID: [0	CALC]	Preparation: [CALC]		Prepared: 09/2	5/20 17:38			Analyst: YM7
Nitrogen, T	otal		ND	0.30	mg/l	1	09/28/20	
Method: EPA	300.0			Instr: LC12				
Batch ID: W	V0I1314	Preparation: _NONE (LC)		Prepared: 09/2	4/20 10:30			Analyst: jar
Nitrate as N	ν		ND	110	ug/l	1	09/24/20 15:54	
Method: EPA	351.2			Instr: AA06				
Batch ID: W	V0I1435	Preparation: _NONE (WETCHEM)		Prepared: 09/2	5/20 17:38			Analyst: YM7
TKN			ND	0.10	mg/l	1	09/28/20	
Method: EPA	353.2			Instr: AA01				
Batch ID: W	V0I1376	Preparation: _NONE (WETCHEM)		Prepared: 09/2	4/20 16:13			Analyst: sa
NO2+NO3	as N		ND	200	ug/l	1	09/26/20	
Method: EPA	365.3			Instr: UVVIS04				
Batch ID: W	V0I1327	Preparation: _NONE (WETCHEM)		Prepared: 09/2	4/20 10:06			Analyst: sbi
o-Phospha	te as P		ND	0.010	mg/l	1	09/24/20 13:22	
Method: SM	2540C			Instr: OVEN01				
Batch ID: W	V0I1463	Preparation: _NONE (WETCHEM)		Prepared: 09/2	7/20 13:28			Analyst: blg
Total Disso	olved Solids		31	10	mg/l	1	09/27/20	



0124028

# Certificate of Analysis

FINAL REPORT

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Quality Control Resu	11.5									
Anions by IC, EPA Method 300.0										
				Spike	Source	0/5=5	%REC		RPD	
Analyte  atch: W0I1314NONE (LC)	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifier
				Dramarad 91	Smalumodi 00/2/	4/20				
Blank (W0I1314-BLK1)  Nitrate as N	ND	110	ug/l	Prepared & A	Analyzed: 09/24	+/20				
LCS (W0I1314-BS1)				Prepared & A	Analyzed: 09/24	4/20				
Nitrate as N	2160	110	ug/l	2000	.,	108	90-110			
Matrix Spike (W0I1314-MS1)	Source: 012304	1-01		Prepared & A	Analyzed: 09/24	4/20				
Nitrate as N	21200	1100	ug/l	20000	165	105	84-115			
Matrix Spike (W0I1314-MS2)	Source: 012304	4-04		Prepared & A	Analyzed: 09/24	4/20				
Nitrate as N	22200	1100	ug/l	20000	280	109	84-115			
Matrix Spike Dup (W0I1314-MSD1)	Source: 012304				Analyzed: 09/24					
Nitrate as N	21600	1100	ug/l	20000	165	107	84-115	2	20	
Matrix Spike Dup (W0I1314-MSD2)	Source: 012304		/1	-	Analyzed: 09/24		04 445	0.4	20	
Nitrate as N		1100	ug/l	20000	280	109	84-115	0.1	20	
Conventional Chemistry/Physical Parameters by	y APHA/EPA/ASTM Meth	nods			_					
Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W0I1327 - NONE (WETCHEM)										
Blank (W0I1327-BLK1)				Prepared & A	Analyzed: 09/24	4/20				
o-Phosphate as P	ND	0.010	mg/l							
LCS (W0I1327-BS1)				Prepared & A	Analyzed: 09/24	4/20				
o-Phosphate as P	0.200	0.010	mg/l	0.200		100	88-111			
Matrix Spike (W0I1327-MS1)	Source: 012308				Analyzed: 09/24		05.440			
o-Phosphate as P	0.234	0.010	mg/l	0.200	0.0390	98	85-112			
Matrix Spike Dup (W0I1327-MSD1) o-Phosphate as P	<b>Source: 012308</b> 0	0.010	mg/l	Prepared & A 0.200	Analyzed: 09/24 0.0390	<b>4/20</b> 99	85-112	1	20	
·	0.207	0.010	mg/i	0.200	0.0390	33	00-112		20	
atch: W0I1376NONE (WETCHEM)										
Blank (W0I1376-BLK1) NO2+NO3 as N	ND	200	ug/l	Prepared: 09/24/	20 Analyzed: 0	9/26/20				
			9	Dunnanada 00/24/	20. Amelioned 0	0.726.720				
LCS (W0I1376-BS1) NO2+NO3 as N	1000	200	ug/l	1000	20 Analyzed: U	100	90-110			
Matrix Spike (W0I1376-MS1)	Source: 012506	2-01		Prepared: 09/24/	20 Analyzed: 0	19/26/20				
NO2+NO3 as N	19700	800	ug/l	8000	11200	106	90-110			
Matrix Spike Dup (W0I1376-MSD1)	Source: 012506	2-01		Prepared: 09/24/	20 Analyzed: 0	9/26/20				
NO2+NO3 as N	19700	800	ug/l	8000	11200	106	90-110	0	20	
atch: W0I1435NONE (WETCHEM)										
Blank (W0I1435-BLK1)				Prepared: 09/25/	20 Analyzed: 0	9/28/20				
TKN	ND	0.10	mg/l							
Blank (W0I1435-BLK2)				Prepared: 09/25/	20 Analyzed: 0	9/28/20				
TKN	ND	0.10	mg/l							
LCS (W0I1435-BS1)			_	Prepared: 09/25/	20 Analyzed: 0					
TKN	0.963	0.10	mg/l	1.00		96	90-110			
LCS (W0I1435-BS2)	0.044	0.40	ma = /1	Prepared: 09/25/	20 Analyzed: 0		00 440			
TKN	0.944	0.10	mg/l	1.00		94	90-110			



FINAL REPORT

Quality Control Results

				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
atch: W0I1435NONE (WETCHEM) (Continue	d)									
Duplicate (W0I1435-DUP1)	Source: 012302	4-01	P	Prepared: 09/25/2	20 Analyzed:	09/28/20				
TKN	0.0422	0.10	mg/l		0.0310			30	10	R-0
Matrix Spike (W0I1435-MS1)	Source: 012110	9-01	P	Prepared: 09/25/2	20 Analyzed:	09/28/20				
TKN	1.03	0.10	mg/l	1.00	ND	103	90-110			
Matrix Spike (W0I1435-MS2)	Source: 0I2110	9-02	P	Prepared: 09/25/2	20 Analyzed:	09/28/20				
TKN	0.931	0.10	mg/l	1.00	ND	93	90-110			
Matrix Spike Dup (W0I1435-MSD1)	Source: 0I2110	9-01	Р	repared: 09/25/2	20 Analyzed:	09/28/20				
TKN	0.979	0.10	mg/l	1.00	ND	98	90-110	5	10	
Matrix Spike Dup (W0I1435-MSD2)	Source: 0I2110	9-02	Р	repared: 09/25/2	20 Analyzed:	09/28/20				
TKN	1.02	0.10	mg/l	1.00	ND	102	90-110	9	10	
atch: W0I1463 - NONE (WETCHEM)										
Blank (W0I1463-BLK1)				Prepared & A	nalyzed: 09/2	7/20				
Total Dissolved Solids	ND	10	mg/l							
LCS (W0I1463-BS1)				Prepared & A	nalyzed: 09/2	7/20				
Total Dissolved Solids	828	10	mg/l	824		100	96-102			
Duplicate (W0I1463-DUP1)	Source: 012300	1-02		Prepared & A	nalyzed: 09/2	7/20				
Total Dissolved Solids	1560	10	mg/l		1530			2	10	
Duplicate (W0I1463-DUP2)	Source: 012300	1-04		Prepared & A	nalyzed: 09/2	7/20				
Total Dissolved Solids	8110	10	mg/l	-	8020			1	10	



**FINAL REPORT** 



#### **Notes and Definitions**

iteiii	Definition
R-03	The RPD is not applicable for result below the reporting limit (either ND or J value).
%REC	Percent Recovery
Dil	Dilution

MRL The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

The MRL is also known as Limit of Quantitation (LOQ)

ND NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or

above the MDL.

RPD Relative Percent Difference

Source Sample that was matrix spiked or duplicated.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

State

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

#### Reviewed by:

Chris Samatmanakit Project Manager









DoD-ISO ANAB # • ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015 • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

Weck Laboratories 14859 Clark Avenue City of Industry, CA 91745 (626) 336-2139

						CH	CHAIN OF CUSTODY FORM	SOS	JOT:	Y F	OR	≥	Ù	SHO N		Page	์ ช 
Client Name/Address:	ress:			Project	Project/PO Number:			ľ						Analysis Required	Required		
PSOMAS 3 HUTTON CENTRE DI SANTA ANA, CA 92707	PSOMAS 3 HUTTON CENTRE DRIVE, SUITE 200 SANTA ANA, CA 92707	IITE 200		2KLE	E010102				300.0 EPA Method	SMZ540C	A93 ydi	Method	lation				
Project Manager:				Phone	Phone Number:							∀d∃	oslec	1	 		
MICHAEL P. C	MICHAEL P. DONOVAN (mpdonovn@cox.net)	ovn@cox.net	•	(714)	(714) 328-5234						ntil/I Iri		eu pà c				
Sampler: Jlm Burton, Todd Bear	ton, Todd Bear			Fax Nu	Number: 714.545.8883	5,8883					sbləi	€ EON					
Sam	Sample Description	Sample	Container Type	Cont.	Sampling Date	$\vdash$	Time Prese	Preservation		5.295	l listoT	Metho NO2+ 353.2					Special Instructions
SL-10	J- 20	water	60 ml Poly	-	20,00	8	12:05 nm None		<del>                                     </del>		-	<u> </u>	┝	-			
		water	250 ml Poly	7	•		N N	None		×						Filk	Filtered with 0.45µ
		water	500 ml Poly	-			Z	None		×							
		water	250 ml Poly	1		-	THE T	H2SO4			×	×	×				
2T-0P	C7-	water	60 ml Poly	-	9/33/20		12:50 pr None	one	×								
	,	water	250 mi Poly	1			Ż	None		×				:		Filk	Filtered with 0.45 μ
		water	500 ml Poly	1			N	None		X							
		water	250 ml Poly	1	<b>T</b>		<sup>ZH</sup> 1	H2SO4			×	×	×				
		water	60 ml Poly	-			Ż	None	×								
		water	250 ml Poly	τ-			Ž	None		×						#1.	Filtered with 0.45µ
		water	500 ml Poly	-			Z	None		×							
		water	250 ml Poly	-			H2	H2SO4		_	<u>×</u>	×	×				
		water	60 ml Poly	-			Ź	None	×								
		water	250 mi Poly	-			Ź	None		×						Filte	Filtered with 0.45µ
		water	500 ml Poly				Ž	None		×	_						
		water	250 ml Poly	÷			H2	H2SO4			×	×	×				
		water	60 ml Poly	-			Ž	None	×								
		water	250 ml Poly	-			Ž	None		×						墨	Filtered with 0.45µ
		water	500 ml Poly	₹~		_	Ž	None		×							
		water	250 ml Poly	_			HZ	H2S04			×	×	×				
Relinquished By:	To But	1/20/2	Date /Time:	/C. / m	Received by:							Date /Time:	Time:		Turnaround Time:	S	Sheck) 72 Hours
Relinquished By:	50/01	100	Date Filme:		Received My							Date	Date Il'ime;		24 Hours		5 Days
	to lot		12.60.6	7	7							)	3		48 Hours	Š	Normal X
Relinquished By:	_		Date /Time:		Regelved in Lab by:	ab by:						Date /Time:	Time;		Sample Integrity: Intaot	õ	heck)
															ì		

osrel



FINAL REPORT

Work Orders: 0125019 Report Date: 10/05/2020

**Received Date:** 9/25/2020

Turnaround Time: Normal

**Phones:** (714) 751-7373

Fax: (714) 545-8883

P.O. #:

**Billing Code:** 

Project: 2KLE010102

Attn: Michael P. Donovan

Client: Psomas - Santa Ana, CA

3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

#### Dear Michael P. Donovan,

Enclosed are the results of analyses for samples received 9/25/20 with the Chain-of-Custody document. The samples were received in good condition, at 1.2 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

### Sample Results

Sample:	BC-blw-PH6			Sampl	ed: 09/24/	20 8:05 by Jim Burto	on, Todd Bear
	0I25019-01 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifier
Method: [C	ALC]		Instr: [CALC]				
Batch ID:	[CALC]	Preparation: [CALC]	Prepared: 09/	/29/20 18:01			Analyst: YMT
Nitrogen,	Total	ND	0.30	mg/l	1	10/02/20	
Method: EP	A 300.0		Instr: LC12				
Batch ID:	W0I1410	Preparation: _NONE (LC)	Prepared: 09/	/25/20 11:37			Analyst: jan
Nitrate as	N	ND	110	ug/l	1	09/25/20 15:10	
Method: EP	A 351.2		Instr: AA06				
Batch ID:	W0I1643	Preparation: _NONE (WETCHEM)	Prepared: 09/	/29/20 18:01			Analyst: YMT
TKN		ND	0.10	mg/l	1	10/02/20	
Method: EP	A 353.2		Instr: AA01				
Batch ID:	W0I1376	Preparation: _NONE (WETCHEM)	Prepared: 09/	/24/20 16:13			Analyst: sar
NO2+NO	3 as N	ND	200	ug/l	1	09/26/20	
Method: EP	A 365.3		Instr: UVVIS04	4			
Batch ID:	W0I1414	Preparation: _NONE (WETCHEM)	Prepared: 09/	/25/20 12:21			Analyst: ymt
o-Phosph	ate as P	ND	0.010	mg/l	1	09/25/20 17:04	
Method: SN	1 2540C		Instr: OVEN01	1			
Batch ID:	W0I1463	Preparation: _NONE (WETCHEM)	Prepared: 09/	/27/20 13:28			Analyst: blg
Total Diss	solved Solids	41	10	mg/l	1	09/27/20	

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FINAL REPORT

Sample Results

	blw-PH5				Sampl	ed: 09/24/2	20 8:50 by Jim Burto	on, Todd Bea
	5019-02 (Water)		Decula	MRL	Unite	D:I	Amahanad	0!!
lyte			Result		Units	Dil	Analyzed	Qualifi
od: [CALC]		Drawaystian [CALC]		Instr: [CALC]	0/20 10:01			A a la at \/\
ch ID: [CALC] rogen, Total		Preparation: [CALC]	0.37	<b>Prepared:</b> 09/2 0.30	9/20 18:01 mg/l	1	10/02/20	Analyst: YN
ogen, rotar			0.07	0.50	1119/1	'	10/02/20	
<b>od:</b> EPA 300.0				Instr: LC12				
<b>ch ID:</b> W0I1410	)	Preparation: _NONE (LC)		Prepared: 09/2				Analyst: ja
ate as N			- ND	110	ug/l	1	09/25/20 15:28	
<b>od:</b> EPA 351.2				Instr: AA06				
<b>ch ID:</b> W0I1643	3	Preparation: _NONE (WETCHEM)		Prepared: 09/2	9/20 18:01			Analyst: YN
N			0.37	0.10	mg/l	1	10/02/20	
<b>od:</b> EPA 353.2				Instr: AA01				
<b>ch ID:</b> W0I1376	5	Preparation: _NONE (WETCHEM)		Prepared: 09/2	4/20 16:13			Analyst: s
2+NO3 as N			ND	200	ug/l	1	09/26/20	
<b>od:</b> EPA 365.3				Instr: UVVIS04				
<b>ch ID:</b> W0I1414	1	Preparation: _NONE (WETCHEM)		Prepared: 09/2	5/20 12:21			Analyst: yn
hosphate as F			. ND	0.010	mg/l	1	09/25/20 17:04	Allalyst. y
'					3'			
				Instr: OVEN01				
od: SM 2540C								
ch ID: W0I1463 al Dissolved S	Solids blw-PH4	Preparation: _NONE (WETCHEM)	37	<b>Prepared:</b> 09/2 10	mg/l	1 ed: 09/24/2	09/27/20 20 9:40 by Jim Burto	
ch ID: W011463 al Dissolved S ble: BC-I	Solids	Preparation: _NONE (WETCHEM)		10	mg/l Sampl	ed: 09/24/2	20 9:40 by Jim Burto	on, Todd Be
ch ID: W011463 al Dissolved S ble: BC-I 0125	Solids blw-PH4	Preparation: _NONE (WETCHEM)	37 Result	10	mg/l			on, Todd Be
ch ID: W011463 al Dissolved \$ ble: BC-I 0125 lyte od: [CALC]	Solids blw-PH4			MRL Instr: [CALC]	mg/l Sampl Units	ed: 09/24/2	20 9:40 by Jim Burto	on, Todd Be Qualifi
ch ID: W011463 al Dissolved \$ ble: BC-I 0125 lyte od: [CALC] ch ID: [CALC]	Solids blw-PH4	Preparation: _NONE (WETCHEM)  Preparation: [CALC]	Result	MRL Instr: [CALC] Prepared: 09/2	mg/l Sampl Units 9/20 18:01	ed: 09/24/2	20 9:40 by Jim Burto	Analyst: b  On, Todd Be  Qualifi  Analyst: YM
ch ID: W0I1463 al Dissolved \$ ble: BC-I 0I25 lyte od: [CALC] ch ID: [CALC]	Solids blw-PH4			MRL Instr: [CALC] Prepared: 09/2 0.30	mg/l Sampl Units	ed: 09/24/2	20 9:40 by Jim Burto	on, Todd Be Qualifi
ch ID: W011463 al Dissolved \$ ble: BC-I 0125 lyte od: [CALC] ch ID: [CALC] ogen, Total od: EPA 300.0	Solids blw-PH4 5019-03 (Water)	Preparation: [CALC]	Result	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12	mg/l Sampl Units  9/20 18:01 mg/l	ed: 09/24/2	20 9:40 by Jim Burto	On, Todd Be Qualifi Analyst: YN
ch ID: W011463 al Dissolved S ble: BC-I 0125 lyte od: [CALC] ch ID: [CALC] ogen, Total od: EPA 300.0 ch ID: W011416	Solids blw-PH4 5019-03 (Water)		Result ND	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2	mg/l Sampl Units  9/20 18:01 mg/l  5/20 11:37	ed: 09/24/2 <b>Dil</b> 1	20 9:40 by Jim Burto  Analyzed  10/02/20	On, Todd Be Qualifi Analyst: YN
ch ID: W011463 al Dissolved \$ ble: BC-I 0125 lyte od: [CALC] ch ID: [CALC] ogen, Total od: EPA 300.0	Solids blw-PH4 5019-03 (Water)	Preparation: [CALC]	Result	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12	mg/l Sampl Units  9/20 18:01 mg/l	ed: 09/24/2	20 9:40 by Jim Burto	on, Todd Be Qualifi
ch ID: W011463 al Dissolved S ble: BC-I 0125 lyte od: [CALC] ch ID: [CALC] ogen, Total od: EPA 300.0 ch ID: W011416	Solids blw-PH4 5019-03 (Water)	Preparation: [CALC]	Result ND	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2	mg/l Sampl Units  9/20 18:01 mg/l  5/20 11:37	ed: 09/24/2 <b>Dil</b> 1	20 9:40 by Jim Burto  Analyzed  10/02/20	On, Todd Be Qualifi Analyst: YM
ch ID: W011463 al Dissolved S ble: BC-I 0125 lyte od: [CALC] ch ID: [CALC] ogen, Total od: EPA 300.0 ch ID: W011410 ate as N od: EPA 351.2 ch ID: W011643	Solids blw-PH4 6019-03 (Water)	Preparation: [CALC]	Result  ND  ND	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2 110 Instr: AA06 Prepared: 09/2	mg/l Sampl Units  9/20 18:01 mg/l  5/20 11:37 ug/l	ed: 09/24/2  Dil  1	20 9:40 by Jim Burto Analyzed  10/02/20  09/25/20 15:46	Qualifi Analyst: YM Analyst: j:
ch ID: W011463 al Dissolved S ble: BC-I 0125 lyte od: [CALC] ch ID: [CALC] ogen, Total od: EPA 300.0 ch ID: W011410 ate as N od: EPA 351.2	Solids blw-PH4 6019-03 (Water)	Preparation: [CALC] Preparation: _NONE (LC)	Result ND	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2 110 Instr: AA06	mg/l Sampl Units  9/20 18:01 mg/l  5/20 11:37 ug/l	ed: 09/24/2 <b>Dil</b> 1	20 9:40 by Jim Burto  Analyzed  10/02/20	Qualifi Analyst: YM Analyst: j:
ch ID: W011463 al Dissolved S ble: BC-I 0125 lyte od: [CALC] ch ID: [CALC] ogen, Total od: EPA 300.0 ch ID: W011410 ate as N od: EPA 351.2 ch ID: W011643	Solids blw-PH4 6019-03 (Water)	Preparation: [CALC] Preparation: _NONE (LC)	Result  ND  ND	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2 110 Instr: AA06 Prepared: 09/2	mg/l Sampl Units  9/20 18:01 mg/l  5/20 11:37 ug/l	ed: 09/24/2  Dil  1	20 9:40 by Jim Burto Analyzed  10/02/20  09/25/20 15:46	Qualifi Analyst: YM
ch ID: W011463 al Dissolved S  ble: BC-I  0125  lyte  od: [CALC]  ch ID: [CALC]  ogen, Total  od: EPA 300.0  ch ID: W011410  ate as N  od: EPA 351.2  ch ID: W011643	Solids blw-PH4 6019-03 (Water)	Preparation: [CALC] Preparation: _NONE (LC)	Result  ND  ND	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2 110 Instr: AA06 Prepared: 09/2 0.10	mg/l Sampl Units  9/20 18:01 mg/l  5/20 11:37 ug/l  9/20 18:01 mg/l	ed: 09/24/2  Dil  1	20 9:40 by Jim Burto Analyzed  10/02/20  09/25/20 15:46	Qualifi Analyst: YM Analyst: ja
ch ID: W011463 al Dissolved S ble: BC-I 0125 lyte od: [CALC] ch ID: [CALC] ogen, Total od: EPA 300.0 ch ID: W011410 ate as N od: EPA 351.2 ch ID: W011643 N od: EPA 353.2	Solids blw-PH4 6019-03 (Water)	Preparation: [CALC]  Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)	Result  ND  ND	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2 110 Instr: AA06 Prepared: 09/2 0.10 Instr: AA01	mg/l Sampl Units  9/20 18:01 mg/l  5/20 11:37 ug/l  9/20 18:01 mg/l	ed: 09/24/2  Dil  1	20 9:40 by Jim Burto Analyzed  10/02/20  09/25/20 15:46	Qualifi Analyst: YN Analyst: j: Analyst: YN
ch ID: W011463 al Dissolved S ble: BC-I 0125 lyte od: [CALC] ch ID: [CALC] ogen, Total od: EPA 300.0 ch ID: W011410 ate as N od: EPA 351.2 ch ID: W01643 N od: EPA 353.2 ch ID: W01376	Solids blw-PH4 6019-03 (Water)	Preparation: [CALC]  Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)  Preparation: _NONE (WETCHEM)	Result  ND  ND	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2 110 Instr: AA06 Prepared: 09/2 0.10 Instr: AA01 Prepared: 09/2	mg/l Sampl Units  9/20 18:01 mg/l  5/20 11:37 ug/l  9/20 18:01 mg/l	ed: 09/24/2  Dil  1  1	Analyzed  10/02/20  09/25/20 15:46	Qualifi Analyst: YN Analyst: j:
ch ID: W011463 al Dissolved S  ble: BC-I 0125  lyte  od: [CALC] ch ID: [CALC] ogen, Total  od: EPA 300.0 ch ID: W011410 ate as N  od: EPA 351.2 ch ID: W01643 N  od: EPA 353.2 ch ID: W01376 2+NO3 as N	Solids blw-PH4 5019-03 (Water)	Preparation: [CALC]  Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)  Preparation: _NONE (WETCHEM)	Result  ND  ND	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2 110 Instr: AA06 Prepared: 09/2 0.10 Instr: AA01 Prepared: 09/2 200	mg/l Sampl Units  9/20 18:01 mg/l  5/20 11:37 ug/l  9/20 18:01 mg/l  4/20 16:13 ug/l	ed: 09/24/2  Dil  1  1	Analyzed  10/02/20  09/25/20 15:46	Qualifi Analyst: YN Analyst: YN Analyst: YN
ch ID: W011463 al Dissolved S ble: BC-I 0125 lyte od: [CALC] ch ID: [CALC] ogen, Total od: EPA 300.0 ch ID: W011410 ate as N od: EPA 351.2 ch ID: W011643 N od: EPA 353.2 ch ID: W011376 2+NO3 as N od: EPA 365.3	Solids blw-PH4 5019-03 (Water)	Preparation: [CALC]  Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)  Preparation: _NONE (WETCHEM)	Result  ND  ND	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2 110 Instr: AA06 Prepared: 09/2 0.10 Instr: AA01 Prepared: 09/2 200 Instr: UVVIS04	mg/l Sampl Units  9/20 18:01 mg/l  5/20 11:37 ug/l  9/20 18:01 mg/l  4/20 16:13 ug/l	ed: 09/24/2  Dil  1  1	Analyzed  10/02/20  09/25/20 15:46	Qualifi Analyst: YN Analyst: YN Analyst: YN Analyst: YN
ch ID: W011463 al Dissolved S  ble: BC-I 0125 lyte  od: [CALC] ch ID: [CALC] ogen, Total  od: EPA 300.0 ch ID: W011410 ate as N  od: EPA 351.2 ch ID: W011643 N  od: EPA 353.2 ch ID: W011376 2+NO3 as N  od: EPA 365.3 ch ID: W01414 hosphate as F	Solids blw-PH4 5019-03 (Water)	Preparation: [CALC]  Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)  Preparation: _NONE (WETCHEM)	Result  ND  ND  ND	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2 110 Instr: AA06 Prepared: 09/2 0.10 Instr: AA01 Prepared: 09/2 200 Instr: UVVIS04 Prepared: 09/2 0.010	mg/l Sampl Units  9/20 18:01 mg/l  5/20 11:37 ug/l  9/20 18:01 mg/l  4/20 16:13 ug/l	ed: 09/24/2  Dil  1  1	Analyzed  10/02/20  09/25/20 15:46  10/02/20	On, Todd Be Qualifi Analyst: YM
ch ID: W011463 al Dissolved S  ble: BC-I 0125  lyte  od: [CALC] ch ID: [CALC] ogen, Total  od: EPA 300.0 ch ID: W011410 ate as N  od: EPA 351.2 ch ID: W011643 N  od: EPA 353.2 ch ID: W011376 2+NO3 as N  od: EPA 365.3 ch ID: W011414	Solids blw-PH4 5019-03 (Water)	Preparation: [CALC]  Preparation: _NONE (LC)  Preparation: _NONE (WETCHEM)  Preparation: _NONE (WETCHEM)	Result  ND  ND  ND	MRL Instr: [CALC] Prepared: 09/2 0.30 Instr: LC12 Prepared: 09/2 110 Instr: AA06 Prepared: 09/2 0.10 Instr: AA01 Prepared: 09/2 200 Instr: UVVIS04 Prepared: 09/2	mg/l  Sampl  Units  9/20 18:01 mg/l  5/20 11:37 ug/l  9/20 18:01 mg/l  4/20 16:13 ug/l  5/20 12:21 mg/l	ed: 09/24/2  Dil  1  1	Analyzed  10/02/20  09/25/20 15:46  10/02/20  09/26/20	Qualifi Analyst: YN Analyst: YN Analyst: YN Analyst: YN



FINAL REPORT



Anions by IC, EPA Method 300.0										
Accelerate	D It	8451	11-14-	Spike	Source	0/ DEC	%REC	222	RPD	0
Analyte atch: W0I1410 - NONE (LC)	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
Blank (W0I1410-BLK1)				Propared & A	nalyzed: 09/25	/20				
Nitrate as N	ND	110	ug/l	r repareu & A	maryzeu. 03/23	,20				
LCS (W0I1410-BS1)				Prepared & A	nalyzed: 09/25	/20				
Nitrate as N	2180	110	ug/l	2000		109	90-110			
Matrix Spike (W0I1410-MS1)	Source: 0125065	-02		Prepared & A	nalyzed: 09/25	/20				
Nitrate as N	26300	1100	ug/l	20000	4340	110	84-115			
Matrix Spike (W0I1410-MS2)	Source: 0125065	-03		Prepared & A	nalyzed: 09/25	/20				
Nitrate as N	25700	1100	ug/l	20000	4440	106	84-115			
Matrix Spike Dup (W0I1410-MSD1)	Source: 0125065	-02		Prepared & A	nalyzed: 09/25	/20				
Nitrate as N	26400	1100	ug/l	20000	4340	110	84-115	0.5	20	
Matrix Spike Dup (W0I1410-MSD2)	Source: 0125065	-03		Prepared & A	nalyzed: 09/25	/20				
Nitrate as N	25700	1100	ug/l	20000	4440	106	84-115	0.2	20	
Conventional Chemistry/Physical Parameters	s by APHA/EPA/ASTM Meth	ods								
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
atch: W0I1376 - NONE (WETCHEM)										
Blank (W0I1376-BLK1) NO2+NO3 as N	ND	200		Prepared: 09/24/2	20 Analyzed: 09	9/26/20				
NOZ+NO3 as N	ND	200	ug/l							
LCS (W0I1376-BS1) NO2+NO3 as N	1000	200		Prepared: 09/24/2 1000	20 Analyzed: 09	<b>9/26/20</b> 100	90-110			
NOZTNOS as IV	1000	200	ug/l	1000		100	90-110			
Matrix Spike (W0I1376-MS1) NO2+NO3 as N	<b>Source: 0125062</b>	- <b>01</b> 800	ug/l	Prepared: <b>09/24/2</b> 8000	20 Analyzed: 09 11200	<b>9/26/20</b> 106	90-110			
							30-110			
Matrix Spike Dup (W0I1376-MSD1) NO2+NO3 as N	<b>Source: 0125062</b>	- <b>01</b> 800	ug/l	Prepared: <b>09/24/2</b> 8000	20 Analyzed: 09 11200	<b>9/26/20</b> 106	90-110	0	20	
	10700	000	ug/i	0000	77200	100	30-110	Ü	20	
atch: W0I1414 - NONE (WETCHEM)										
Blank (W0I1414-BLK1) o-Phosphate as P	ND	0.010	mg/l	Prepared & A	nalyzed: 09/25	/20				
·	IND	0.010	mg/i							
under the control of	0.215	0.010	mg/l	Prepared & A 0.200	nalyzed: 09/25	/ <b>20</b> 108	88-111			
·			mg/i				00-111			
Matrix Spike (W0I1414-MS1)  o-Phosphate as P	<b>Source: 0125019</b>	- <b>01</b> 0.010	mg/l	Prepared & A 0.200	0.00300	<b>/20</b> 102	85-112			
·			mg/i				00 112			
Matrix Spike Dup (W0I1414-MSD1)  o-Phosphate as P	<b>Source: 0125019</b>	- <b>01</b> 0.010	mg/l	0.200	0.00300	/ <b>20</b> 104	85-112	2	20	
•			J.							
atch: W0I1463 - NONE (WETCHEM)										
Blank (W0I1463-BLK1) Total Dissolved Solids	ND	10	mg/l	Prepared & A	nalyzed: 09/27	/20				
	2			D	h1 00 /5-	/20				
LCS (W0I1463-BS1) Total Dissolved Solids	828	10	mg/l	Prepared & A 824	nalyzed: 09/27	/ <b>20</b> 100	96-102			
			···-g/·		h1 00 /5-					
Duplicate (W0I1463-DUP1) Total Dissolved Solids	<b>Source: 0123001</b>	- <b>02</b> 10	mg/l	Prepared & A	nalyzed: 09/27 1530	/20		2	10	
Duplicate (W0I1463-DUP2)			···-g/·	D		/20		_		
Dunicato (MOI 162-DHD)	Source: 0123001	-04		Prepared & A	nalyzed: 09/27	/20				



FINAL REPORT

Quality Control Results

A MARK										
Conventional Chemistry/Physical Parameter	s by APHA/EPA/ASTM Metho	ods (Continue	d)							
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W0I1643 - NONE (WETCHEM)										
Blank (W0I1643-BLK1)			P	repared: 09/29/2	0 Analyzed: 10	0/02/20				
TKN	ND	0.10	mg/l							
Blank (W0I1643-BLK2)			Р	repared: 09/29/2	20 Analyzed: 10	0/02/20				
TKN	ND	0.10	mg/l							
LCS (W0I1643-BS1)			Р	repared: 09/29/2	20 Analyzed: 10	0/02/20				
TKN	1.08	0.10	mg/l	1.00		108	90-110			
LCS (W0I1643-BS2)			P	repared: 09/29/2	20 Analyzed: 10	0/02/20				
TKN	1.06	0.10	mg/l	1.00		106	90-110			
Matrix Spike (W0I1643-MS1)	Source: 0128100	-01	P	repared: 09/29/2	20 Analyzed: 10	0/02/20				
TKN	1.21	0.10	mg/l	1.00	0.255	96	90-110			
Matrix Spike (W0I1643-MS2)	Source: 0128100	-02	Р	repared: 09/29/2	20 Analyzed: 10	0/02/20				
TKN	1.42	0.10	mg/l	1.00	0.425	100	90-110			
Matrix Spike Dup (W0I1643-MSD1)	Source: 0128100	-01	Р	repared: 09/29/2	20 Analyzed: 10	0/02/20				
TKN	1.20	0.10	mg/l	1.00	0.255	95	90-110	0.8	10	
Matrix Spike Dup (W0I1643-MSD2)	Source: 0128100	-02	P	repared: 09/29/2	20 Analyzed: 10	0/02/20				
TKN	1.39	0.10	mg/l	1.00	0.425	97	90-110	2	10	



**FINAL REPORT** 



#### **Notes and Definitions**

Item	Definition
%REC	Percent Recovery
Dil	Dilution
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ)
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
RPD	Relative Percent Difference
Source	Sample that was matrix spiked or duplicated.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

i State

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

#### Reviewed by:

Chris Samatmanakit Project Manager









DoD-ISO ANAB # • ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015 • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

Weck Laboratories 14859 Clark Avenue City of Industry, CA 91745 (626) 336-2139

(626) 336-2139						L	È	2	(	× 4		NC202719	0	_	
Client Name/Address:			Project/P	Project/PO Number:		CHAIN OF COSTODY FORM	<u> </u>	ב	2		١	Analysis Required		Page of	
PSOMAS 3 HUTTON CENTRE DRIVE, SUITE 200 SANTA ANA, CA 92707	·E 200		ZKLE010102	0102			0.005	EPA Method	Py EPA SM2640C	Method	noitel				
Project Manager:			Phone Number	:upper:			роц	<b>‡</b> O¢	1		naje				i
MICHAEL P. DONOVAN (mpdonovn@cox.net)	m@cox.net)		714) 3	(714) 328-5234			 } }eM A9	O-esrlo	i	ि	leu pà				
Sampler: Jim Burton, Todd Bear			ax Num	Fax Number: 714,545,8883	3883		I∃ N <del>r≎</del>			403 9q 324					
Sample Description	Sample	Container Type	Cont.	Sampling Date	emiT	Preservation	<del></del>	orthO 8.385		Metho	2.63.6   IstoT			Special Instructions	
BC-61W-PH6	water	60 mi Poly	1	7 24 2	& 3,	9 24 20 8:05 m None	×								
	water	250 ml Poly	-		-	None		×						Filtered with 0.45 u	
	water	500 ml Poly	-	_		None			×						1
7	water	250 ml Poly	1	<b>T</b>	1	H2SO4				×	×				
BC-DIW-PHS	water	60 ml Poly	1	5 HE L	20 8:5	8:50 pm/None	×							:	
	water	250 ml Poly	-	1		None		×						Filtered with 0.45µ	
	water	500 ml Poly	1	-		None			×					:	
	water	250 ml Poly	1	7	-	H2SO4				x x	×				
BC- 61W- PHY	water	60 ml Poly	-	9 24 20		9: War None	×								
	water	250 ml Poly	-	/ / /		None		×						Filtered with 0.45µ	_
	water	500 ml Poly	۴.			None			×						
	water	250 ml Poly	<u>_</u>	4	4	H2SO4				×	×				_
	water	60 ml Poly	-			None	×								
	water	250 ml Poly	-			None		×						Filtered with 0.45µ	
	water	500 mi Poly	-			None			×						
	water	250 ml Poly	-			H2SO4				×	×				$\neg$
	water	80 ml Poly	-			None	×								
	water	250 ml Poty	7			None		×						Filtered with 0.45µ	]
	water	500 ml Poly	1			None			×						
		250 ml Poly	1			H2SO4				×	×				
Relinquished By 9/2	04/46	Date /Time;		Received by:						Date	Date /Time:	Ėω	Turnaround Time: Same Day	(Check) 72 Hours	
Relinquished By:	1	Date/Time: /2		Received by:	1					100 mg	Bate Time:	2 4	24 Hours	5 Days Normal X	
Relinquished By:		Date /Time:	<u>K</u>	Received in Lab by:	. py:					Date	Date /Time:	S E	Sample Integrity:	(Check)	<u> </u>
			1									7. 6. 7	( )	VI 150	٦

1.2° m39



FINAL REPORT

**Work Orders:** 0G14035 **Report Date:** 8/06/2020

**Received Date:** 7/14/2020

Turnaround Time: Normal

Phones: (714) 751-7373

Fax: (714) 545-8883

P.O. #:

**Billing Code:** 

Project: 2KLE010102

Attn: Michael P. Donovan

Client: Psomas - Santa Ana, CA

3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

#### Dear Michael P. Donovan:

Enclosed are the results of analyses for samples received 7/14/2020 with the Chain-of-Custody document. The samples were received in good condition, at 17.4 °C and on ice. All analysis met the method criteria except as noted in the case narrative or in the report with data qualifiers.



#### Case Narrative

Samples were received outside of method temperature range.

### Sample Results

	ample results						
Sample:	SL-BR-1			Sample	d: 07/13/20	0 11:05 by Jim Bur	ton, Todd Bea
	0G14035-01 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualific
Method: SM	1 9223B		Instr: INC12	!			
Batch ID:	W0G0955	Preparation: _NONE (MICROBIOLOGY)	Prepared: 0	7/14/20 11:14			Analyst: am
E. coli		ND	1.0	MPN/100ml	1	07/15/20	
Sample:	LS-BR-1			Sample	d: 07/13/20	0 11:55 by Jim Bur	ton, Todd Bea
	0G14035-02 (Water)						,
	0014033-02 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifie
Method: SM	1 9223B		Instr: INC12				
Batch ID:	W0G0955	Preparation: _NONE (MICROBIOLOGY)	Prepared: 0	7/14/20 11:14			Analyst: am
E. coli		ND	1.0	MPN/100ml	1	07/15/20	
Sample:	Int2-RES-1			Sample	d: 07/13/20	) 12:25 by Jim Bur	ton, Todd Bea
	0G14035-03 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualific
Method: SM	1 9223B		Instr: INC12	!			
Batch ID:	W0G0955	Preparation: _NONE (MICROBIOLOGY)	Prepared: 0	7/14/20 11:14			Analyst: am
F coli		24	1.0	MPN/100ml	1	07/15/20	•

0G14035 Page 1 of 2



**FINAL REPORT** 



ND

#### Notes and Definitions

**Definition** %REC Percent Recovery

Dil Dilution

MRL The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

The MRL is also known as Limit of Quantitation (LOQ)

NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or

above the MDL.

RPD Relative Percent Difference

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.



### **Analyses Accreditation Summary**

Analyte	CAS#	Not By NELAP	ANAB ISO 17025
SM 9223B in Water E. coli			

Reviewed by:

1: 5 th Chris Samatmanakit









Project Manager

ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015 • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

0G14035 Page 2 of 2

Weck Labs 14859 Clark Ave., City & Industry, CA 91745

OG14035

9					CHAIN	CHAIN OF CUSTODY FORM	STO	OY FC	NK.					Page of	
Client Name/Address:			Project/	Project/PO Number:							Analysis Required	Required			
PSOMAS 3 HUTTON CENTRE DRIVE, SUITE 200 SANTA ANA, CA 92707	E 200		2KL.E010102	10102			(j) pà					<del></del>			
Project Manager:			Phone Number:	umber:			oo 1 <u>=</u>								
MICHAEL P. DONOVAN (mpdonovn@cox.net)	/n@cox.net)		(714)	(714) 328-5234			၂၀၁ (၉	······································						·	<del></del>
Sampler, Jim Burton, Todd Bear			Fax Nun	Fax Number: 714,545,8883	,8883		richia 8523	·					•••		•
Sample Description	Sample	Container Type	# of Cont.	Sampling Date	Ite Time	Preservation	,	<del>,</del>					:	Special Instructions	lions
5L-BR-1	water	125 ml poly	-	7 13/20	5 11:0Sa	Sterile-None	×							24-Hour Hold time*	*.
L5-8R-1	water	125 ml poly	-	<b>-</b>	11:554		×							24-Hour Hold time*	*
In+2-RES-1	water	125 ml poly	-	-	12.25	12:250 Sterile-None	×							24-Hour Hold time*	*
						•									
												_			
								1		-					
										-			$\pm$		
Relinquished By:		Date /Time:		Received by:					Ö	Date /Time:		Tum Sem	Turnaround Time: Same Day	ie: (Check) 72 Hours	
Relinquished By: [QUU		Date/Time:		Received by:	#O#		<u>-</u>	17.41	ā <del></del>	Date /Time.	:	24 H 48 H	24 Hours 48 Hours	5 Days Normal X	1
Refinquished By:	معمدات برانسان مساور بسياد و مهمدات	Date /Time:		Received in Lab by	i i i	W.C.	:		ď	ate /Time:		Sampl	Sample Integrity:	: (Check) On les	
		and a security of the security		Population of the least of the						0.000		1100		2010	

\* Per Lohantan Surface Water Ambient Monitoring Program (SWAMP) for ambient water \*\* \* i ce packs went not trypa . UMP \* \*/!!



**FINAL REPORT** 

**Work Orders:** 0G17046 **Report Date:** 8/12/2020

Received Date: 7/17/2020

Turnaround Time: Normal

**Phones:** (714) 751-7373

Fax: (714) 545-8883

P.O. #:

**Billing Code:** 

Project: 2KLE010102

Attn: Michael P. Donovan

Client: Psomas - Santa Ana, CA

3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

#### Dear Michael P. Donovan:

Enclosed are the results of analyses for samples received 7/17/2020 with the Chain-of-Custody document. The samples were received in good condition, at 5.3 °C and on ice. All analysis met the method criteria except as noted in the case narrative or in the report with data qualifiers.

Sa	ample Results						
Sample:	SL-BR-1			Sample	d: 07/16/20	11:00 by Jim Bur	rton, Todd Bear
	0G17046-01 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifier
Method: SM	1 9223B		Instr: INC12				
Batch ID:	W0G0955	Preparation: _NONE (MICROBIOLOGY)	Prepared: 07	7/17/20 11:20			Analyst: amc
E. coli		1.0	1.0	MPN/100ml	1	07/18/20	
Sample:	LS-BR-1			Sampled	d: 07/16/20	) 12:00 by Jim Bur	rton, Todd Bear
	0G17046-02 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifier
Method: SM	1 9223B		Instr: INC12				
Batch ID:	W0G0955	Preparation: _NONE (MICROBIOLOGY)	Prepared: 07	7/17/20 11:20			Analyst: amc
E. coli		ND	1.0	MPN/100ml	1	07/18/20	
Sample:	Int2-RES-1			Sample	d: 07/16/20	) 12:30 by Jim Bur	rton, Todd Bear
Sample:	Int2-RES-1 0G17046-03 (Water)			Sampled	d: 07/16/20	) 12:30 by Jim Bur	rton, Todd Bear
Sample:		Result	MRL	Sampled Units	d: 07/16/20	) 12:30 by Jim Bur Analyzed	ton, Todd Bear
·	0G17046-03 (Water)	Result	MRL Instr: INC12	·		•	
Analyte	0G17046-03 (Water)	Result  Preparation: _NONE (MICROBIOLOGY)	Instr: INC12	·		•	

0G17046 Page 1 of 2



**FINAL REPORT** 



ND

#### Notes and Definitions

**Definition** %REC Percent Recovery

Dil Dilution

MRL The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

The MRL is also known as Limit of Quantitation (LOQ)

NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or

above the MDL.

RPD Relative Percent Difference

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.



### **Analyses Accreditation Summary**

Analyte	CAS#	Not By NELAP	ANAB ISO 17025
SM 9223B in Water E. coli			

Reviewed by:

1: Stole Chris Samatmanakit









Project Manager

DoD-ISO ANAB # • ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015 • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

0G17046 Page 2 of 2

Weck Labs 14859 Clark Ave. City of Industry, CA 917415 (626) 336-2139

6) 236-2139	<u>.                                    </u>	)		, O	HAIN	CHAIN OF CUSTODY FORM	STODY	FOR	∑	B	3/40/F1BC	Page	Jo ,
Client Name/Address:			Project/	Project/PO Number:						Analysis Required	tequired		
PSOMAS 3 HUTTON CENTRE DRIVE, SUITE 200 SANTA ANA, CA 92707	= 200		2KLE010102	10102			λq (ŋ						
Project Manager:			Phone Number:	lumber:			:° col	· .					
MICHAEL P. DONOVAN (mpdonovn@cox.net)	n@cox.net)		(714)	(714) 328-5234			3) (Joo		,				
Sampler: Jim Burton, Todd Bear			Fax Nur	Fax Number: 714.545.8883	183		erichia 8523						
Sample Description	Sample Matrix	Container Type	Cont.	Sampling Date	Time	Preservation	2W 85					Special	Special Instructions
SL-BR-1	water	125 ml poly	1	7/16/20	11:000	#;oca Sterile-None	×					24-Hour Hold time*	ld time*
LS-BR-1	water	125 ml poly		-	13,000	Sterile-None	×					24-Hour Hold time*	ıld time*
IN+3-RES-1	water	125 ml poly	Ψ.		0 2.51	Sterile-None	×					24-Hour Hold time*	id time*
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				-			A CONTRACTOR OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED		-	A.		, demonstrates	

\* Per Lohantan Surface Water Ambient Monitoring Program (SWAMP) for ambient water

5.3,670234



FINAL REPORT

**Work Orders:** 0G28078 **Report Date:** 8/12/2020

**Received Date:** 7/28/2020

Turnaround Time: Normal

Phones: (714) 751-7373

Fax: (714) 545-8883

P.O. #:

**Billing Code:** 

Project: 2KLE010102

Attn: Michael P. Donovan

Client: Psomas - Santa Ana, CA

3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

#### Dear Michael P. Donovan:

Enclosed are the results of analyses for samples received 7/28/2020 with the Chain-of-Custody document. The samples were received in good condition, at 4.3 °C and on ice. All analysis met the method criteria except as noted in the case narrative or in the report with data qualifiers.

Sa	ample Results						
Sample:	SL-BR-1			Sampled	d: 07/27/20	0 11:15 by Jim Bur	ton, Todd Bear
	0G28078-01 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifier
Method: SM	1 9223B		Instr: INC12				
Batch ID:	W0H0321	Preparation: _NONE (MICROBIOLOGY)	Prepared: 07	7/28/20 09:51			Analyst: amc
E. coli		ND	1.0	MPN/100ml	1	07/29/20	
Sample:	LS-BR-1			Sampled	d: 07/27/20	0 12:05 by Jim Bur	ton, Todd Bear
	0G28078-02 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifier
Method: SM	1 9223B		Instr: INC12				
Batch ID:	W0H0321	Preparation: _NONE (MICROBIOLOGY)	Prepared: 07	7/28/20 09:51			Analyst: amc
E. coli		ND	1.0	MPN/100ml	1	07/29/20	
Sample:	Int2-RES-1			Sampled	d: 07/27/20	0 12:35 by Jim Bur	ton, Todd Bear
	0G28078-03 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifier
Method: SM	1 9223B		Instr: INC12				
Batch ID: \	W/0H0321	Preparation: _NONE (MICROBIOLOGY)	Prepared: 07	7/28/20 09:51			Analyst: amc
	VV0110321	reparation: _NONE (MICROBIOLOGI)	r repareu. or	/ 20/ 20 03.31			Analyst. and

0G28078 Page 1 of 2



**FINAL REPORT** 



#### Notes and Definitions

**Definition** %REC Percent Recovery

Dil Dilution

MRL The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

The MRL is also known as Limit of Quantitation (LOQ)

ND NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or

above the MDL.

RPD Relative Percent Difference

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.



### **Analyses Accreditation Summary**

Analyte	Not By NELAP	ANAB ISO 17025
SM 9223B in Water		
E. coli	<b>-</b>	

Reviewed by:

1: 5 th Chris Samatmanakit









Project Manager

DoD-ISO ANAB # • ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015 • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

0G28078 Page 2 of 2

Weck Laboratories 14859 Clark Avenue City of Industry, CA 91745 (626)-336-2139

Project/PO Number:   Project	(020)					CHAI	CHAIN OF CUSTODY FORM (	JSTC	DY F	ORM	3	SERRY	2	Page	 0 	1
Piece Parke, SUTE 200   Piece Number:   Ch. 92701   Piec	Client Name/Address;			Project/	PO Number:							Analysis R	equired			
Total Board	PSOMAS 3 HUTTON CENTRE DRIVE SANTA ANA, CA 92707	:, SUITE 200		2KLEG	10102			Λo					<u></u>			<u> </u>
Concentration   Concentratio								(II								<u> </u>
10   10   10   10   10   10   10   10	Project Manager:			Phone	dumber:			∞ <u>=</u>			_					
10   10   10   10   10   10   10   10	MICHAEL P. DONOVAN (mj	pdonovn@cox.ne	<del>Q</del>	(714)	328-5234			(E					_			<u></u>
Sample   Sample   Sample   Sample   Sample   Time   Preservator   Sample	Sampler: Jim Burton, Todd Bear			Fax Nur	nber: 714.54	3.8883		ichia 23B								
RR-1   water 125 mi poly 1   7/21   20   Sterie None   X	Sample Description	Sample Matrix	<b>-</b> -	Cont.	Sampling D	-	<b>—</b>	euos <u>-</u>				-			cuciforate of factors	
10   10   10   10   10   10   10   10	88	water	Н	1	12/2	N:15					-			24-	lour Hold time*	1
### 125 ml poly 1 1 12:35 Sterie Name X	LS-BR- 1	water	125 ml poly	-	-	0.20	_	L				_		24-H	our Hold time*	
	INTA-RES-1	wafer	125 ml poly	1	_	13.3	Sterile- Nane	<u> </u>						24-H	our Hold time*	Т -
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	reinquished by.		Date /Time:		Received in La	b by:				Ω	ate /Time:		Sample Inte	gritty: (Check	>	

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**FINAL REPORT** 

Work Orders: 0G31035 Report Date: 8/20/2020

**Received Date:** 7/31/2020

Turnaround Time: Normal

**Phones:** (714) 751-7373

Fax: (714) 545-8883

P.O. #:

**Billing Code:** 

Attn: Michael P. Donovan

Project: 2KLE010102

Client: Psomas - Santa Ana, CA

3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

DoD-ISO ANAB # • ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015 • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

Dear Michael P. Donovan,

Enclosed are the results of analyses for samples received 7/31/20 with the Chain-of-Custody document. The samples were received in good condition, at 2.8 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

Reviewed by:

Chris Samatmanakit Project Manager

1: State











FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:23



### Sample Summary

Sample Name	Sampled By	Lab ID	Matrix	Sampled	Qualifiers
BC-Blw-Ph6	Jim Burton, Todd Bear	0G31035-01	Water	07/30/20 07:45	
BC-Blw-Ph5	Jim Burton, Todd Bear	0G31035-02	Water	07/30/20 08:30	
BC-Blw-Ph4	Jim Burton, Todd Bear	0G31035-03	Water	07/30/20 09:00	
BC-Blw-Ph3	Jim Burton, Todd Bear	0G31035-04	Water	07/30/20 09:40	
BC-Blw-Ph2	Jim Burton, Todd Bear	0G31035-05	Water	07/30/20 10:15	
SL-BR-1	Jim Burton, Todd Bear	0G31035-06	Water	07/30/20 11:00	
LS-BR-1	Jim Burton, Todd Bear	0G31035-07	Water	07/30/20 11:40	
INT2-RES-1	Jim Burton, Todd Bear	0G31035-08	Water	07/30/20 12:00	



### **Analyses Accreditation Summary**

Analyte	CAS# No	ot By	ANAB
	NE	LAP	ISO 17025
SM 9223B in Water			
E. coli			

0G31035 Page 2 of 12



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:23

Sample	Results
--------	---------

Sample:	BC-Blw-Ph6			Sample	ed: 07/30/	20 7:45 by Jim Bur	ton, Todd Bea
	0G31035-01 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifie
nions by IC,	EPA Method 300.0						
Method: EPA	300.0		Instr: LC12				
Batch ID: V	W0G1662	Preparation: _NONE (LC)	Prepared: 07/3	1/20 12:21			Analyst: ja
Nitrate as	N	ND	110	ug/l	1	07/31/20 19:40	
onventional (	Chemistry/Physical Parameters	s by APHA/EPA/ASTM Methods					
Method: [CA	iLC]		Instr: [CALC]				
Batch ID: [	-	Preparation: [CALC]	Prepared: 08/0	7/20 16:24			Analyst: ym
Nitrogen, T	Fotal	ND	0.30	mg/l	1	08/13/20	•
Method: EPA	x 351.2		Instr: AA06				
Batch ID: V	W0H0415	Preparation: _NONE (WETCHEM)	Prepared: 08/0	7/20 16:24			Analyst: ym
TKN		ND	0.10	mg/l	1	08/13/20	
Method: EPA	353.2		Instr: AA01				
Batch ID: V	W0H0004	Preparation: _NONE (WETCHEM)	Prepared: 08/0	1/20 10:50			Analyst: SA
NO2+NO3	as N	ND	200	ug/l	1	08/01/20	
Method: EPA	365.3		Instr: UVVIS04				
Batch ID: V	W0G1660	Preparation: _NONE (WETCHEM)	Prepared: 07/3	1/20 11:32			Analyst: sb
o-Phospha	ate as P	ND	0.010	mg/l	1	07/31/20 12:16	
Method: SM	2540C		Instr: OVEN01				
Batch ID: V	W0H0065	Preparation: _NONE (WETCHEM)	Prepared: 08/0	3/20 15:48			Analyst: isn
Total Diss	olved Solids	38	10	mg/l	1	08/04/20	



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:23

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### Sample Results

A Gair	Tiple Nesults						(Continued
Sample: E	BC-Blw-Ph5			Sample	ed: 07/30/	/20 8:30 by Jim Bur	ton, Todd Bea
(	0G31035-02 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifie
nions by IC, EP/	A Method 300.0						
Method: EPA 30	00.0		Instr: LC12				
Batch ID: W0G	G1662	Preparation: _NONE (LC)	Prepared: 07/3	31/20 12:21			Analyst: ja
Nitrate as N		ND	110	ug/l	1	07/31/20 19:58	
onventional Che	emistry/Physical Parameter	s by APHA/EPA/ASTM Methods					
Method: [CALC]	]		Instr: [CALC]				
Batch ID: [CAL	LC]	Preparation: [CALC]	Prepared: 08/0	7/20 16:24			Analyst: yn
Nitrogen, Tota	al	ND	0.30	mg/l	1	08/13/20	
Method: EPA 35	51.2		Instr: AA06				
Batch ID: W0H	H0415	Preparation: _NONE (WETCHEM)	Prepared: 08/0	7/20 16:24			Analyst: yn
TKN		ND	0.10	mg/l	1	08/13/20	
Method: EPA 35	53.2		Instr: AA01				
Batch ID: W0H	H0004	Preparation: _NONE (WETCHEM)	Prepared: 08/0	1/20 10:50			Analyst: SA
NO2+NO3 as	s N	ND	200	ug/l	1	08/01/20	
Method: EPA 36	55.3		Instr: UVVIS04				
Batch ID: W0G	G1660	Preparation: _NONE (WETCHEM)	Prepared: 07/3	31/20 11:32			Analyst: sb
o-Phosphate a	as P	ND	0.010	mg/l	1	07/31/20 12:21	
Method: SM 254	340C		Instr: OVEN01				
Batch ID: W0H	H0065	Preparation: _NONE (WETCHEM)	Prepared: 08/0	3/20 15:48			Analyst: is
Total Dissolve	red Solids	<b>26</b>	10	mg/l	1	08/04/20	



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:23

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### Sample Results

Sample INC						(Continued)
Sample: BC-Blw-Ph4			Sample	ed: 07/30/	/20 9:00 by Jim Bur	ton, Todd Bea
0G31035-03	Water)					
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifie
nions by IC, EPA Method 30	).0					
Method: EPA 300.0		Instr: LC12				
Batch ID: W0G1662	Preparation: _NONE (LC)	Prepared: 07/3	31/20 12:21			Analyst: ja
Nitrate as N	ND	110	ug/l	1	07/31/20 20:16	
onventional Chemistry/Physic	cal Parameters by APHA/EPA/ASTM Methods					
Method: [CALC]		Instr: [CALC]				
Batch ID: [CALC]	Preparation: [CALC]	Prepared: 08/0	07/20 16:24			Analyst: ym
Nitrogen, Total	ND	0.30	mg/l	1	08/13/20	
Method: EPA 351.2		Instr: AA06				
Batch ID: W0H0415	Preparation: _NONE (WETCHEM)	Prepared: 08/0	07/20 16:24			Analyst: ym
TKN	ND	0.10	mg/l	1	08/13/20	
Method: EPA 353.2		Instr: AA01				
Batch ID: W0H0004	Preparation: _NONE (WETCHEM)	Prepared: 08/0	01/20 10:50			Analyst: SAI
NO2+NO3 as N	ND	200	ug/l	1	08/01/20	
Method: EPA 365.3		Instr: UVVIS04				
Batch ID: W0G1660	Preparation: _NONE (WETCHEM)	Prepared: 07/3	31/20 11:32			Analyst: sb
o-Phosphate as P	ND	0.010	mg/l	1	07/31/20 12:22	
Method: SM 2540C		Instr: OVEN01				
Batch ID: W0H0065	Preparation: _NONE (WETCHEM)	Prepared: 08/0	03/20 15:48			Analyst: ism
<b>Total Dissolved Solids</b>	27	10	mg/l	1	08/04/20	



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA, 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:23

Santa /	Ana, CA 92707	
W	Sample	F

### Sample Results

AVA	ampie i teedite						(Oorianaca)		
Sample:	BC-Blw-Ph3	Sampled: 07/30/20 9:40 by Jim Burton, Todd Bear							
	0G31035-04 (Water)								
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifie		
nions by IC,	EPA Method 300.0								
Method: EPA	A 300.0		Instr: LC12						
Batch ID:	W0G1662	Preparation: _NONE (LC)	Prepared: 07/31	1/20 12:21			Analyst: jar		
Nitrate as	N	ND	110	ug/l	1	07/31/20 20:34			
onventional	Chemistry/Physical Parameters	by APHA/EPA/ASTM Methods							
Method: [CA	ALC]		Instr: [CALC]						
Batch ID:	[CALC]	Preparation: [CALC]	Prepared: 08/07	7/20 16:24			Analyst: ym		
Nitrogen,	Total	ND	0.30	mg/l	1	08/13/20			
Method: EPA	A 351.2		Instr: AA06						
Batch ID:	W0H0415	Preparation: _NONE (WETCHEM)	Prepared: 08/07	7/20 16:24			Analyst: ym		
TKN		ND	0.10	mg/l	1	08/13/20			
Method: EPA	A 353.2		Instr: AA01						
Batch ID:	W0H0004	Preparation: _NONE (WETCHEM)	Prepared: 08/01	1/20 10:50			Analyst: SAF		
NO2+NO3	3 as N	ND	200	ug/l	1	08/01/20			
Method: EPA	A 365.3		Instr: UVVIS04						
Batch ID:	W0G1660	Preparation: _NONE (WETCHEM)	Prepared: 07/31	1/20 11:32			Analyst: sbr		
o-Phospha	ate as P	ND	0.010	mg/l	1	07/31/20 12:23			
Method: SM	Л 2540C		Instr: OVEN01						
Batch ID:	W0H0065	Preparation: _NONE (WETCHEM)	Prepared: 08/03	3/20 15:48			Analyst: ism		
Total Diss	solved Solids		10	mg/l	1	08/04/20			



**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Reported:

08/20/2020 16:23

Sample Resul
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Project Manager: Michael P. Donovan

Sai	mple Results						(Continued
Sample:	BC-Blw-Ph2			Sampled	d: 07/30/	20 10:15 by Jim Bur	ton, Todd Bea
	0G31035-05 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifi
ions by IC, E	PA Method 300.0						
Method: EPA 3	300.0		Instr: LC12				
Batch ID: W	OG1662	Preparation: _NONE (LC)	Prepared: 07/3	31/20 12:21			Analyst: ja
Nitrate as N		ND	110	ug/l	1	07/31/20 20:52	
nventional Cl	nemistry/Physical Parameter	s by APHA/EPA/ASTM Methods					
Method: [CALC	C]		Instr: [CALC]				
Batch ID: [C/	ALC]	Preparation: [CALC]	Prepared: 08/0	7/20 16:24			Analyst: yr
Nitrogen, To	tal	ND	0.30	mg/l	1	08/13/20	
Method: EPA 3	351.2		Instr: AA06				
Batch ID: W	0H0415	Preparation: _NONE (WETCHEM)	Prepared: 08/0	7/20 16:24			Analyst: yr
TKN		ND	0.10	mg/l	1	08/13/20	
Method: EPA 3	353.2		Instr: AA01				
Batch ID: W	0H0004	Preparation: _NONE (WETCHEM)	Prepared: 08/0	1/20 10:50			Analyst: SA
NO2+NO3 a	as N	ND	200	ug/l	1	08/01/20	
Method: EPA 3	365.3		Instr: UVVIS04				
Batch ID: W	0G1660	Preparation: _NONE (WETCHEM)	Prepared: 07/3	31/20 11:32			Analyst: sl
o-Phosphate	e as P	ND	0.010	mg/l	1	07/31/20 12:25	
Method: SM 2	540C		Instr: OVEN01				
Batch ID: W	0H0065	Preparation: _NONE (WETCHEM)	Prepared: 08/0	3/20 15:48			Analyst: is
Total Dissol	ved Solids	<b>20</b>	10	mg/l	1	08/04/20	
Sample:	SL-BR-1			Sampled	d: 07/30/	20 11:00 by Jim Bur	ton, Todd Be
	0G31035-06 (Water)					•	
Analyte	,	Result	MRL	Units	Dil	Analyzed	Qualifi
crobiological	Parameters by Standard Me	thods					
Method: SM 9	223B		Instr: INC12				
Batch ID: W	0H0321	Preparation: _NONE (MICROBIOLOGY)	Prepared: 07/3	31/20 10:52			Analyst: an
E. coli		ND	1.0	MPN/100ml	1	08/01/20	-
ample:	LS-BR-1			Sampled	d: 07/30/	20 11:40 by Jim Bur	ton, Todd Be
,	0G31035-07 (Water)			'			
Analyte	ods 1033 of (water)	Result	MRL	Units	Dil	Analyzed	Qualifi
-	Parameters by Standard Me					<b>,</b>	
<b>Nethod:</b> SM 9	•		Instr: INC12				
Batch ID: W		Preparation: _NONE (MICROBIOLOGY)	Prepared: 07/3	31/20 10:52			Analyst: an
E. coli		ND	1.0	MPN/100ml	1	08/01/20	,



FINAL REPORT

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:23

Sample Results

(Continued)

4000	•						
Sample:	INT2-RES-1			Sampled:	07/30/20	12:00 by Jim Bu	ırton, Todd Bear
	0G31035-08 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifier
Microbiologio	cal Parameters by Standard Met	hods					
Method: SM	И 9223B		Instr: INC12				
Batch ID:	W0H0321	Preparation: _NONE (MICROBIOLOGY)	Prepared: 07	/31/20 10:52			Analyst: amc
E. coli		6.3	1.0	MPN/100ml	1	08/01/20	



**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:23



## Quality Control Results

Anions by IC, EPA Method 300.0										
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result 9	6REC	Limits	RPD	Limit	Qualifie
ntch: W0G1662 - EPA 300.0										
Blank (W0G1662-BLK1)				Prepared & A	nalyzed: 07/31/	20				
Nitrate as N	ND	110	ug/l							
.CS (W0G1662-BS1)				Prepared & A	nalyzed: 07/31/	20				
Nitrate as N	2160	110	ug/l	2000		108	90-110			
.CS (W0G1662-BS2)				Prepared & A	nalyzed: 07/31/	20				
Nitrate as N	2160	110	ug/l	2000		108	90-110			
.CS (W0G1662-BS3)				Prepared & A	nalyzed: 07/31/	20				
Nitrate as N	2160	110	ug/l	2000		108	90-110			
CS (W0G1662-BS4)				Prepared & A	nalyzed: 07/31/2	20				
Nitrate as N	2160	110	ug/l	2000		108	90-110			
.CS (W0G1662-BS5)				Prepared & A	nalyzed: 07/31/2	20				
Nitrate as N	2160	110	ug/l	2000		108	90-110			
Matrix Spike (W0G1662-MS1)	Source: 0G31002	-01		Prepared & A	nalyzed: 07/31/2	20				
Nitrate as N	20900	1100	ug/l	20000	ND	105	84-115			
Matrix Spike Dup (W0G1662-MSD1)	Source: 0G31002	-01		Prepared & A	nalyzed: 07/31/2	20				
Nitrate as N	20800	1100	ug/l	20000	ND	104	84-115	0.6	20	

Conventional Chemistry/Physical Parameters by	y APHA/EPA/ASTM Meth	nods								
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W0G1660 - EPA 365.3										
Blank (W0G1660-BLK1)				Prepared & A	nalyzed: 07/3	31/20				
o-Phosphate as P	ND	0.010	mg/l							
LCS (W0G1660-BS1)				Prepared & A	nalyzed: 07/3	31/20				
o-Phosphate as P	0.203	0.010	mg/l	0.200		102	88-111			
Matrix Spike (W0G1660-MS1)	Source: 0G31035	-01		Prepared & A	nalyzed: 07/3	31/20				
o-Phosphate as P	0.201	0.010	mg/l	0.200	0.00500	98	85-112			
Matrix Spike Dup (W0G1660-MSD1)	Source: 0G31035	-01		Prepared & A	nalyzed: 07/3	31/20				
o-Phosphate as P	0.199	0.010	mg/l	0.200	0.00500	97	85-112	1	20	
Batch: W0H0004 - EPA 353.2										
Blank (W0H0004-BLK1)				Prepared & A	nalyzed: 08/0	01/20				
NO2+NO3 as N	ND	200	ug/l							
LCS (W0H0004-BS1)				Prepared & A	nalyzed: 08/0	01/20				
NO2+NO3 as N	1010	200	ug/l	1000		101	90-110			
Matrix Spike (W0H0004-MS1)	Source: 0G31035	-01		Prepared & A	nalyzed: 08/0	01/20				
NO2+NO3 as N	2110	200	ug/l	2000	ND	106	90-110			
Matrix Spike (W0H0004-MS2)	Source: 0G31035	-02		Prepared & A	nalyzed: 08/0	01/20				
NO2+NO3 as N	2110	200	ug/l	2000	ND	106	90-110			



**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

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Quality Control Results

(Continued)

Conventional Chemistry/Physical Parameters	by APHA/EPA/ASTM Met	hods (Continue	d)							
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
Batch: W0H0004 - EPA 353.2 (Continued)										
Matrix Spike Dup (W0H0004-MSD1)	Source: 0G31035	-01		Prepared & A	nalyzed: 08/	01/20				
NO2+NO3 as N	2110	200	ug/l	2000	ND	106	90-110	0	20	
Matrix Spike Dup (W0H0004-MSD2)	Source: 0G31035	-02		Prepared & A	nalyzed: 08/	01/20				
NO2+NO3 as N	2110	200	ug/l	2000	ND	106	90-110	0	20	
atch: W0H0065 - SM 2540C										
Blank (W0H0065-BLK1)			Pre	pared: 08/03/2	20 Analyzed:	08/04/2	0			
Total Dissolved Solids	ND	10	mg/l							
LCS (W0H0065-BS1)			Pre	pared: 08/03/2	20 Analyzed:	08/04/2	0			
Total Dissolved Solids	809	10	mg/l	824		98	96-102			
Duplicate (W0H0065-DUP1)	Source: 0G27001	-02	Pre	pared: 08/03/2	20 Analyzed:	08/04/2	0			
Total Dissolved Solids	1470	10	mg/l		1500			2	10	
Duplicate (W0H0065-DUP2)	Source: 0G27001	-04	Pre	pared: 08/03/2	-	08/04/2	0			
Total Dissolved Solids	7230	10	mg/l		7220			0.07	10	
atch: W0H0415 - EPA 351.2										
Blank (W0H0415-BLK1)				pared: 08/07/2	20 Analyzed:	08/13/2	0			
TKN	· ND	0.10	mg/l							
Blank (W0H0415-BLK2)			Pre	pared: 08/07/2	20 Analyzed:	08/13/2	0			
TKN	· ND	0.10	mg/l							
LCS (W0H0415-BS1)			Pre	pared: 08/07/2	20 Analyzed:	08/13/2	0			
TKN	0.958	0.10	mg/l	1.00		96	90-110			
LCS (W0H0415-BS2)			Pre	pared: 08/07/2	20 Analyzed:	08/13/2	0			
TKN	0.951	0.10	mg/l	1.00		95	90-110			
Matrix Spike (W0H0415-MS1)	Source: 0H05087	'- <b>01</b>	Pre	pared: 08/07/2	20 Analyzed:	08/13/2	0			
TKN	1.20	0.10	mg/l	1.00	0.173	103	90-110			
Matrix Spike (W0H0415-MS2)	Source: 0H05087	-02	Pre	pared: 08/07/2	20 Analyzed:	08/13/2	0			
TKN	1.19	0.10	mg/l	1.00	0.234	95	90-110			
Matrix Spike Dup (W0H0415-MSD1)	Source: 0H05087	-01	Pre	pared: 08/07/2	20 Analyzed:	08/13/2	0			
TKN	1.19	0.10	mg/l	1.00	0.173	102	90-110	1	10	
Matrix Spike Dup (W0H0415-MSD2)	Source: 0H05087	-02	Pre	pared: 08/07/2	20 Analyzed:	08/13/2	0			
TKN	1.23	0.10	mg/l	1.00	0.234	100	90-110	4	10	



**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:23

**Quality Control Results** 

(Continued)

AVA										
Microbiological Parameters by Standard Metho	ds									
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
Batch: W0H0321 - SM 9223B										
Blank (W0H0321-BLK2)			Prepa	red: 07/25/2	0 Analyzed:	07/26/20				
E. coli	ND	1.0	MPN/100ml							
Blank (W0H0321-BLK3)			P	repared & A	nalyzed: 07/2	27/20				
E. coli	· · ND	1.0	MPN/100ml		_					
Blank (W0H0321-BLK4)			Prepa	red: 07/28/2	0 Analyzed:	07/29/20				
E. coli	ND	1.0	MPN/100ml							
Blank (W0H0321-BLK6)			Prepa	red: 07/31/2	0 Analyzed:	08/01/20				
E. coli	· ND	1.0	MPN/100ml							
Blank (W0H0321-BLK7)			Prepa	red: 08/01/2	0 Analyzed:	08/02/20				
E. coli	ND	1.0	MPN/100ml		•					



**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:23



### Notes and Definitions

%REC	Percent Recovery
Dil	Dilution
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ)
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
RPD	Relative Percent Difference
Source	Sample that was matrix spiked or duplicated.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

Weck Laboratories 14859 Clark Avenue City of Industry, CA 91745 (626) 336-2139

				O	HAIN	CHAIN OF CUSTODY FORM	STOD	Y FC	RM				Page	£ 23	
Olient Name/Address:			Project/F	Project/PO Number:							Analysis Required	Required	  -    -		
PSOMAS 13 HUTTON CENTRE DRIVE, SUITE 200	TE 200		2KLE010102	10102											
SANTA ANA, CA 92707							κq (g				<u>                                      </u>				<u> </u>
Project Manager:			Phone Number:	umber:			[00 <u>-</u>								
MICHAEL P. DONOVAN (mpdonovn@cox.net)	vn@cox.net		(714)3	(714) 328-5234			(a) iloo								
Sampler: Jim Burton, Todd Bear			Fax Num	Fax Number: 714,545.8883	83		sirchia 2238								
Sample Description	Sample	Container Type	# of Cont	Sampling Date	Time	Preservation	26 WS ∋ups∃						edS	Special instructions	
5L-88-1	water	125 ml poly	-	7/30/20	11:000	Sterile- None	×						24-Ho	24-Hour Hold time*	
L5-BR-1	water	125 ml poly	-	-	11, 400	11; Hod Sterile-None	×						24-Hai	24-Haur Hald time*	-
INT3-RES-1	water	125 ml poly	-	7	12.00	1 2; de 1 Sterile- None	×						24-Ho	24-Hour Hold time*	
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Then 7	130/20	2		Received by:	Fedex	<b>*</b> 5				Date /Time:		Turnaround Time: Same Day		ours	
Reinquished By.		- Date /Time,		Received by:	[	and m		n		731/20 10%		24 Hours 48 Hours	5 Days Normal	& <u>a</u>	-
Relinquished By:		Date /Time:		Received in Lab by:	χ.				Da	Date /Tlme:		Sample Integrity:	ĮΨ	a	
* Doe Lebenday Curface Meter Ambient Monitoring Descreen (SMAMD) for embient water	politoring Drogs	an (CMANA) for as	chi coido	j		:						- TOTAL	2		7
" Per Loranian Sunace vyater Annymin ny		ATT (SVVANIVITY IN CI	ווטומוו אמ	<u>D</u>								ر ان ان ان	20°C - 40°E		



**FINAL REPORT** 

**Work Orders:** 0H03016 **Report Date:** 8/20/2020

Received Date: 8/1/2020

Turnaround Time: Normal

**Phones:** (714) 751-7373

Fax: (714) 545-8883

P.O. #:

**Billing Code:** 

Attn: Michael P. Donovan

Project: 2KLE010102

Client: Psomas - Santa Ana, CA

3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

DoD-ISO ANAB # • ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 •

NELAP-OR #4047 • NJ-DEP #CA015 • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

Dear Michael P. Donovan,

Enclosed are the results of analyses for samples received 8/01/20 with the Chain-of-Custody document. The samples were received in good condition, at 2.1 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

Reviewed by:

Chris Samatmanakit Project Manager

1: State











**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:28



## Sample Summary

Sample Name	Sampled By	Lab ID	Matrix	Sampled	Qualifiers
BC-NF-1	Jim Burton, Todd Bear	0H03016-01	Water	07/31/20 09:00	
BC-blw-LS	Jim Burton, Todd Bear	0H03016-02	Water	07/31/20 09:20	
BC-blw-SL	Jim Burton, Todd Bear	0H03016-03	Water	07/31/20 10:00	
SL-BR-1	Jim Burton, Todd Bear	0H03016-04	Water	07/31/20 11:00	
LS-BR-1	Jim Burton, Todd Bear	0H03016-05	Water	07/31/20 11:35	
INT2-RES-1	Jim Burton, Todd Bear	0H03016-06	Water	07/31/20 11:50	



## **Analyses Accreditation Summary**

Analyte	CAS#	Not By NELAP	ANAB ISO 17025
SM 9223B in Water E. coli		NELAP	130 17023

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**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:28

Sample:	BC-NF-1			Sample	ed: 07/31/	'20 9:00 by Jim Bur	ton, Todd Bea
	0H03016-01 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifie
nions by IC, E	EPA Method 300.0						
Method: EPA 3	300.0		Instr: LC12				
Batch ID: W	/0H0036	Preparation: _NONE (LC)	Prepared: 08/0	03/20 12:30			Analyst: ja
Nitrate as N		ND	110	ug/l	1	08/03/20 17:36	O-1
onventional C	hemistry/Physical Parameter	s by APHA/EPA/ASTM Methods					
Method: [CAL	.C]		Instr: [CALC]				
Batch ID: [C	CALC]	Preparation: [CALC]	Prepared: 08/1	12/20 17:08			Analyst: YM
Nitrogen, To	otal	ND	0.30	mg/l	1	08/17/20	
Method: EPA 3	351.2		Instr: AA06				
Batch ID: W	/0H0714	Preparation: _NONE (WETCHEM)	Prepared: 08/1	12/20 17:08			Analyst: YM
TKN		0.12	0.10	mg/l	1	08/17/20	
Method: EPA 3	353.2		Instr: AA01				
Batch ID: W	/0H0004	Preparation: _NONE (WETCHEM)	Prepared: 08/0	01/20 10:50			Analyst: sa
NO2+NO3 a	as N	ND	200	ug/l	1	08/01/20	
Method: EPA 3	365.3		Instr: UVVIS04				
Batch ID: W	/0H0002	Preparation: _NONE (WETCHEM)	Prepared: 08/0	01/20 14:32			Analyst: sa
o-Phosphat	te as P	0.044	0.010	mg/l	1	08/01/20 15:15	
Method: SM 2	2540C		Instr: OVEN01				
Batch ID: W	/0H0065	Preparation: _NONE (WETCHEM)	Prepared: 08/0	03/20 15:48			Analyst: isr
Total Disso	lved Solids	<b> 28</b>	10	mg/l	1	08/04/20	



**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA, 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:28

Santa Ana, CA 92707

Sample Results

(Continued)

AA Gan	Tiple Nesulis						(Continued
Sample:	BC-blw-LS			Sample	ed: 07/31/	/20 9:20 by Jim Bur	ton, Todd Bea
	0H03016-02 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifie
nions by IC, EP	PA Method 300.0						
Method: EPA 30	00.0		Instr: LC12				
Batch ID: WO	H0036	Preparation: _NONE (LC)	Prepared: 08/0	3/20 12:30			Analyst: jar
Nitrate as N		ND	110	ug/l	1	08/03/20 18:32	O-14
onventional Che	emistry/Physical Parameter	s by APHA/EPA/ASTM Methods					
Method: [CALC]	]		Instr: [CALC]				
Batch ID: [CA	ALC]	Preparation: [CALC]	Prepared: 08/1	2/20 17:08			Analyst: YM
Nitrogen, Tota	al	ND	0.30	mg/l	1	08/17/20	
Method: EPA 35	51.2		Instr: AA06				
Batch ID: WO	H0714	Preparation: _NONE (WETCHEM)	Prepared: 08/1	2/20 17:08			Analyst: YM
TKN		ND	0.10	mg/l	1	08/17/20	
Method: EPA 35	53.2		Instr: AA01				
Batch ID: WO	H0004	Preparation: _NONE (WETCHEM)	Prepared: 08/0	1/20 10:50			Analyst: sa
NO2+NO3 as	s N	ND	200	ug/l	1	08/01/20	
Method: EPA 36	65.3		Instr: UVVIS04				
Batch ID: WO	H0002	Preparation: _NONE (WETCHEM)	Prepared: 08/0	1/20 14:32			Analyst: sa
o-Phosphate	e as P	0.017	0.010	mg/l	1	08/01/20 15:15	
Method: SM 25	540C		Instr: OVEN01				
Batch ID: WO	H0065	Preparation: _NONE (WETCHEM)	Prepared: 08/0	3/20 15:48			Analyst: ism
Total Dissolv	ved Solids	<b>12</b>	10	mg/l	1	08/04/20	



**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Reported:

08/20/2020 16:28

CA 92707 Project Manager: Michael P. Donovan

Sample Results						(Continued)
Sample: BC-blw-SL			Sampled	: 07/31/2	20 10:00 by Jim Bur	ton, Todd Bear
0H03016-03 (Water)						
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Anions by IC, EPA Method 300.0						
Method: EPA 300.0		Instr: LC12				
Batch ID: W0H0036	Preparation: _NONE (LC)	Prepared: 08/0	3/20 12:30			Analyst: jan
Nitrate as N	ND	110	ug/l	1	08/03/20 20:02	O-14
Conventional Chemistry/Physical Parameter	rs by APHA/EPA/ASTM Methods					
Method: [CALC]	•	Instr: [CALC]				
Batch ID: [CALC]	Preparation: [CALC]	Prepared: 08/1	2/20 17:08			Analyst: YMT
Nitrogen, Total	ND	0.30	mg/l	1	08/17/20	• •
Method: EPA 351.2		Instr: AA06				
<b>Batch ID:</b> W0H0714	Preparation: _NONE (WETCHEM)	Prepared: 08/1	2/20 17:08			Analyst: YMT
TKN	ND	0.10	mg/l	1	08/17/20	•
Method: EPA 353.2		Instr: AA01				
<b>Batch ID:</b> W0H0004	Preparation: _NONE (WETCHEM)	Prepared: 08/0	1/20 10:50			Analyst: sar
NO2+NO3 as N	ND	200	ug/l	1	08/01/20	•
Method: EPA 365.3		Instr: UVVIS04				
Batch ID: W0H0002	Preparation: _NONE (WETCHEM)	Prepared: 08/0	1/20 14:32			Analyst: sar
o-Phosphate as P	0.043	0.010	mg/l	1	08/01/20 15:15	
Method: SM 2540C		Instr: OVEN01				
Batch ID: W0H0065	Preparation: _NONE (WETCHEM)	Prepared: 08/0	3/20 15:48			Analyst: ism
Total Dissolved Solids	17	10	mg/l	1	08/04/20	
Sample: SL-BR-1			Sampled	: 07/31/2	20 11:00 by Jim Bur	ton, Todd Bear
0H03016-04 (Water)						
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Microbiological Parameters by Standard Me	ethods					
Method: SM 9223B		Instr: INC12				
<b>Batch ID:</b> W0H0321	Preparation: _NONE (MICROBIOLOGY)	Prepared: 08/0	1/20 09:33			Analyst: atd
E. coli	ND	1.0	MPN/100ml	1	08/02/20	
Sample: LS-BR-1			Sampled	: 07/31/2	20 11:35 by Jim Bur	ton, Todd Bear
0H03016-05 (Water)						
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Microbiological Parameters by Standard Me	ethods					
Method: SM 9223B		Instr: INC12				
Batch ID: W0H0321	Preparation: _NONE (MICROBIOLOGY)	Prepared: 08/0	1/20 09:33			Analyst: atd
E. coli	ND	1.0	MPN/100ml	1	08/02/20	

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08/02/20

**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Reported:

08/20/2020 16:28

Sample Results

Project Manager: Michael P. Donovan

(Continued)

							(
Sample:	INT2-RES-1			Sample	d: 07/31/20	11:50 by Jim Bu	rton, Todd Bear
	0H03016-06 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifier
Microbiologica	al Parameters by Standard Method	ls					
Method: SM	9223B		Instr: INC12				
Batch ID: V	W0H0321	Preparation: _NONE (MICROBIOLOGY)	Prepared: 08/0	01/20 09:33			Analyst: atd

1.0

MPN/100ml



**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:28



## **Quality Control Results**

Anions by IC, EPA Method 300.0										
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifier
Batch: W0H0036 - EPA 300.0										
Blank (W0H0036-BLK1)				Prepared & Ar	nalyzed: 08/	03/20				
Nitrate as N	ND	110	ug/l							
LCS (W0H0036-BS1)				Prepared & Ar	nalyzed: 08/	03/20				
Nitrate as N	2150	110	ug/l	2000	•	108	90-110			
Matrix Spike (W0H0036-MS1)	Source: 0H03026	-03		Prepared & Ar	nalyzed: 08/	03/20				
Nitrate as N	29500	1100	ug/l	20000	8200	106	84-115			
Matrix Spike (W0H0036-MS2)	Source: 0H03026	-04		Prepared & Ar	nalyzed: 08/	03/20				
Nitrate as N	29600	1100	ug/l	20000	8140	107	84-115			
Matrix Spike Dup (W0H0036-MSD1)	Source: 0H03026	-03		Prepared & Ar	nalyzed: 08/	03/20				
Nitrate as N	29500	1100	ug/l	20000	8200	107	84-115	0.2	20	
Matrix Spike Dup (W0H0036-MSD2)	Source: 0H03026	-04		Prepared & Ar	nalyzed: 08/	03/20				
Nitrate as N	29600	1100	ug/l	20000	8140	107	84-115	0.03	20	
	-									

## XX C

## **Quality Control Results**

				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
Batch: W0H0002 - EPA 365.3										
Blank (W0H0002-BLK1)				Prepared & A	nalvzed: 08/	01/20				
o-Phosphate as P	ND	0.010	mg/l		,	,				
LCS (W0H0002-BS1)				Prepared & A	nalyzed: 08/	01/20				
o-Phosphate as P	0.211	0.010	mg/l	0.200	•	106	88-111			
Matrix Spike (W0H0002-MS1)	Source: 0H03016	-01		Prepared & A	nalyzed: 08/	01/20				
o-Phosphate as P	0.251	0.010	mg/l	0.200	0.0440	104	85-112			
Matrix Spike Dup (W0H0002-MSD1)	Source: 0H03016	-01		Prepared & A	nalyzed: 08/	01/20				
o-Phosphate as P	0.251	0.010	mg/l	0.200	0.0440	104	85-112	0	20	
Batch: W0H0004 - EPA 353.2										
Blank (W0H0004-BLK1)				Prepared & A	nalyzed: 08/	01/20				
NO2+NO3 as N	ND	200	ug/l							
LCS (W0H0004-BS1)				Prepared & A	nalyzed: 08/	01/20				
NO2+NO3 as N	1010	200	ug/l	1000	-	101	90-110			
Matrix Spike (W0H0004-MS1)	Source: 0G31035	-01		Prepared & A	nalyzed: 08/	01/20				
NO2+NO3 as N	2110	200	ug/l	2000	ND	106	90-110			
Matrix Spike (W0H0004-MS2)	Source: 0G31035	-02		Prepared & A	nalyzed: 08/	01/20				
NO2+NO3 as N	2110	200	ug/l	2000	ND	106	90-110			
Matrix Spike Dup (W0H0004-MSD1)	Source: 0G31035	-01		Prepared & A	nalyzed: 08/	01/20				
NO2+NO3 as N	2110	200	ug/l	2000	ND	106	90-110	0	20	
Matrix Spike Dup (W0H0004-MSD2)	Source: 0G31035	-02		Prepared & A	nalyzed: 08/	01/20				
NO2+NO3 as N	2110	200	ug/l	2000	ND	106	90-110	0	20	

0H03016 Page 7 of 10



**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:28

## **Quality Control Results**

(Continued)

Quality Control Nes									(0,	Juliuea
Conventional Chemistry/Physical Parameters	s by APHA/EPA/ASTM Meth	ods (Continue	d)							
				Spike	Source		%REC		RPD	
Analyte atch: W0H0065 - SM 2540C	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
atcn: WUHUU65 - SWI 2540C										
Blank (W0H0065-BLK1)			•	oared: 08/03/2	0 Analyzed:	08/04/20				
Total Dissolved Solids	ND	10	mg/l							
LCS (W0H0065-BS1)			Prep	oared: 08/03/2	0 Analyzed:	08/04/20	)			
Total Dissolved Solids	809	10	mg/l	824		98	96-102			
Duplicate (W0H0065-DUP1)	Source: 0G27001-	02	Prep	pared: 08/03/2	0 Analyzed:	08/04/20	)			
Total Dissolved Solids	1470	10	mg/l		1500			2	10	
Duplicate (W0H0065-DUP2)	Source: 0G27001-	04	Prep	pared: 08/03/2	0 Analyzed:	08/04/20	)			
Total Dissolved Solids	7230	10	mg/l		7220			0.07	10	
atch: W0H0714 - EPA 351.2										
Blank (W0H0714-BLK1)			Prep	oared: 08/12/2	0 Analyzed:	08/17/20	)			
TKN	ND	0.10	mg/l							
Blank (W0H0714-BLK2)			Prep	oared: 08/12/2	0 Analyzed:	08/17/20	)			
TKN	ND	0.10	mg/l							
LCS (W0H0714-BS1)			Prep	oared: 08/12/2	0 Analyzed:	08/17/20	)			
TKN	0.992	0.10	mg/l	1.00		99	90-110			
LCS (W0H0714-BS2)			Prep	oared: 08/12/2	0 Analyzed:	08/17/20	)			
TKN	0.974	0.10	mg/l	1.00		97	90-110			
Matrix Spike (W0H0714-MS1)	Source: 0H11101-	01	Prep	oared: 08/12/2	0 Analyzed:	08/17/20	)			
TKN	1.28	0.10	mg/l	1.00	0.221		90-110			
Matrix Spike (W0H0714-MS2)	Source: 0H11101-	02	Prep	pared: 08/12/2	0 Analyzed:	08/17/20	)			
TKN	1.21	0.10	mg/l	1.00	0.239	97	90-110			
Matrix Spike Dup (W0H0714-MSD1)	Source: 0H11101-	01	Prep	oared: 08/12/2	0 Analyzed:	08/17/20	)			
TKN	1.24	0.10	mg/l	1.00	0.221	102	90-110	3	10	
Matrix Spike Dup (W0H0714-MSD2)	Source: 0H11101-	02	Prep	oared: 08/12/2	0 Analyzed:	08/17/20	)			
TKN	1.30	0.10	mg/l	1.00	0.239	106	90-110	7	10	



**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:28

**Quality Control Results** 

(Continued)

AVA										
Microbiological Parameters by Standard Metho	ds									
				Spike	Source		%REC		RPD	
Analyte	Result	MRL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifie
Batch: W0H0321 - SM 9223B										
Blank (W0H0321-BLK2)			Prepa	red: 07/25/2	0 Analyzed:	07/26/20				
E. coli	ND	1.0	MPN/100ml							
Blank (W0H0321-BLK3)			P	repared & A	nalyzed: 07/2	27/20				
E. coli	· · ND	1.0	MPN/100ml		_					
Blank (W0H0321-BLK4)			Prepa	red: 07/28/2	0 Analyzed:	07/29/20				
E. coli	ND	1.0	MPN/100ml							
Blank (W0H0321-BLK6)			Prepa	red: 07/31/2	0 Analyzed:	08/01/20				
E. coli	· ND	1.0	MPN/100ml							
Blank (W0H0321-BLK7)			Prepa	red: 08/01/2	0 Analyzed:	08/02/20				
E. coli	ND	1.0	MPN/100ml		•					



**FINAL REPORT** 

Psomas - Santa Ana, CA 3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707 Project Number: 2KLE010102

Project Manager: Michael P. Donovan

Reported:

08/20/2020 16:28



#### Notes and Definitions

O-14	This analysis was requested by the client after the holding time was exceeded.
%REC	Percent Recovery
Dil	Dilution
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ)
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
RPD	Relative Percent Difference
Source	Sample that was matrix spiked or duplicated.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

Weck Laboratories 14859 Clark Avenue City of Industry, CA 91745 (626) 336-2139

(626) 336-2139	5-2139					CHA	C Z	CHAIN OF CUSTODY FORM	TOL	Έ	S. S.	_		0H03016		
Client Name/Address	dress:			Project	Project/PO Number:									Analysis Required		
PSOMAS 3 HUTTON C	PSOMAS 3 HUTTON CENTRE DRIVE, SUITE 200	TE 200		2KLE	E010102			1	Method		Aq	po				
SANTA ANA,	CA 92707										ıpλ Ei	rtiəM .	nobelu			
Project Manager:	-			Phone	Phone Number:						.ođei	EPA	olso			
MICHAEL P.	MICHAEL P. DONOVAN (mpdonovn@cox.net)	ovn@cox.net)		(714)	(714) 328-5234					S bevi	πN Idε S.	- N ss	leu pì			
Sampler: Jim Burton, Todd Bear	rton, Todd Bear			Fax Nu	Fax Number: 714.545.8883	.8883					sblej> ras b		gonfil/			
San	Sample Description	Sample	Container Type	Cont.	Sampling Date	ate Time	$\vdash$	Preservation	Mitrate JorithO	£.29£	Total I oriteM		l istoT			Special instructions
BC-NF	1-1	water	60 ml Poly	-	7/31/2	30 9:00 a	ر و	None	×							
		water	250 ml Poly	-	, 1			None		×						Filtered with 0.45 μ
		water	500 ml Poly	-				None		×						
1		water	250 ml Poly	1	1	7		H2S04			×	X	×			
BC- 612	w-L5	water	60 ml Poly	-	6/18/1	30 9:30a	S,	Nane	×							
		water	250 ml Poly	1	,			None		×						Filtered with 0.45µ
		water	500 ml Poly	-				None		×						
1	,	water	250 ml Poly	+	-4	7		H2SO4			×	×	×			
BC- 61w	w - 5L	water	60 ml Poly	-	7 31 30	5 10,00 a	8	None	×							
		water	250 ml Poly	ν-	-	1	4	None		×						Filtered with 0.45µ
		water	500 ml Poly	-				None	:	×						
1		water	250 ml Poly	-	4	-1	_	H2SO4			×	×	×			
:		water	60 ml Poly	-				None	×							
		water	250 ml Poly	+				None		×						Filtered with 0.45 μ
		water	500 ml Poty	-				None		<u> </u>					-	
		water	250 ml Poly	1				H2SO4			×	×	×			
		water	60 ml Paly	1				None	×							
		water	250 ml Poly	-				None		×						Filtered with 0.45µ
		water	500 ml Poly	-				None		×						
		water	250 ml Poly	1			_	H2SO4			×	×	×			
Relinquished By:	(D) (B)	08/18/2	Date /Time: 1:35_0m	(V)	Received by:					KVM	_	Date /Time:	te /Fime: B / t I≥ o 9	7,9% L	Turnaround Time: Same Day	(Check) 72 Hours
Relinquished By:			Date /Time:		Received by:							Date /Time:	1			5 Days
Relinquished By.			Date /Time:		Received in Lab by:	ab by:						Date /Time:	me:	Sample Integrity:	III	
														Intact	) 	On loe

Weck Laboratories 14859 Clark Avenue City of Industry, CA 91745 (626) 336-2139

					CHAIN	CHAIN OF CUSTODY FORM	JSTO	Y. F.	ORN			<b>三</b>	SE SE SE SE SE SE SE SE SE SE SE SE SE S	Page 2 of D	<b>E</b>
Ollent Name/Address:			Project/	Project/PO Number:				-		-	Analy	Analysis Required	Led Led		
PSOMAS 3 HUTTON CENTRE DRIVE, SUITE 200 SANTA ANA, CA 92707	TE 200		2KLEC	2KLE010102			(I) by		· · · · · · · · · · · · · · · · · · ·		<del></del> -	, ,			<u></u>
Project Manager:			Phone	Phone Number:			∞ <u>=</u>				<del></del>			•	
MICHAEL P. DONOVAN (mpdonovn@cox.net)	vn@cox.net)		(714)	(714) 328-5234			I coli (E								
Sampler: Jim Burton, Todd Bear			Fax Nur	Fax Number: 714.545.8883	.8883		sirichia BESSB							-	
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	te Time	Preservation	T							Specit	Special Instructions
5L-BR-1	water	125 ml poly	1	7 31 3	31 30 11:00A	Sterile- None	×							24-Hour	24-Hour Hold time*
LS-BA-1	water	125 ml poly	1	, 1	11:35a	Sterile- None	X							24-Hour	24-Hour Hold time*
INTA-RES-1	water	125 ml poly	4	~	11:504	Sterile- None	×							24-Hour	24-Hour Hold time*
										,					
		•									_				
								-							
								-							
														_	,
											_				
								-		_	_				
					-						+				
Relinquished By:	-	Date /Time:		Received by:				<u> </u>		Date /Time;		0120-1	Turnaround Time:	-{~	
None of the second	Ē	- 1	3500					Y.		07 1 1	1	31.6	Same Day	72 Hours	
Relinquished By:	-	Date /Time;	-	Received by:						Date /Timk	to:		24 Hours 48 Hours	5 Days Normal	×
Refinquished By:		Date /Time;		Received in Lab by:	ib by:					Date /Time:			Sample Integrity:	/: (Cheok) On toe	
* Per Lohantan Surface Water Ambient Monitoring Program (SWAMP) for	onitoring Progra	m (SWAMP) for an	ambient water	ater	:										



FINAL REPORT

**Work Orders:** 0H04045 **Report Date:** 8/20/2020

Received Date: 8/4/2020

Project: 2KLE010102 Turnaround Time: Normal

Phones: (714) 751-7373

Fax: (714) 545-8883

P.O. #:

**Billing Code:** 

Attn: Michael P. Donovan

Client: Psomas - Santa Ana, CA

3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

#### Dear Michael P. Donovan:

Enclosed are the results of analyses for samples received 8/4/2020 with the Chain-of-Custody document. The samples were received in good condition, at 4.3 °C and on ice. All analysis met the method criteria except as noted in the case narrative or in the report with data qualifiers.

Sa	ample Results						
Sample:	SL-BR-1			Sample	d: 08/03/20	0 11:00 by Jim Bui	rton, Todd Bear
	0H04045-01 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifier
Method: SM	1 9223B		Instr: INC12				
Batch ID:	W0H0997	Preparation: _NONE (MICROBIOLOGY)	Prepared: 08	8/04/20 10:56			Analyst: amc
E. coli		ND	1.0	MPN/100ml	1	08/05/20	
Sample:	LS-BR-1			Sampled	d: 08/03/20	0 11:25 by Jim Bui	rton, Todd Bear
	0H04045-02 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifier
Method: SM	1 9223B		Instr: INC12				
Batch ID:	W0H0997	Preparation: _NONE (MICROBIOLOGY)	Prepared: 08	8/04/20 10:56			Analyst: amc
E. coli		ND	1.0	MPN/100ml	1	08/05/20	
Sample:	Int2-RES-1			Sample	d: 08/03/20	0 11:45 by Jim Bui	rton, Todd Bear
	0H04045-03 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifier
Method: SM	1 9223B		Instr: INC12				
Method: SM Batch ID:		Preparation: _NONE (MICROBIOLOGY)		8/04/20 10:56			Analyst: amc

0H04045 Page 1 of 2



**FINAL REPORT** 



ND

#### **Notes and Definitions**

 Item
 Definition

 %REC
 Percent Recovery

Dil Dilution

MRL The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

The MRL is also known as Limit of Quantitation (LOQ)

NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or

above the MDL.

RPD Relative Percent Difference

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.



## **Analyses Accreditation Summary**

Analyte	CAS#	Not By NELAP	ANAB ISO 17025
SM 9223B in Water E. coli		<b>✓</b>	

Reviewed by:

Chris Samatmanakit









Project Manager

DoD-ISO ANAB # • ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015 • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

Weck Laboratories 14859 Clark Avenue City of Industry, CA 91745 (626) 336-2139

				O	HAIN	CHAIN OF CUSTODY FORM	STO	DY F(	ORM		C C	CH040-12		jo
Client Name/Address:			Project	Project/PO Number:				-			Analysis	Analysis Required		
PSOMAS 3 HITTON CENTRE DRIVE SHITE 200	000		2KI E	2KLE010102					<u>.</u>					
SANTA ANA, CA 92707	9		1				yd (ile	: : :	!	   				
Project Manager:			Phone	Phone Number:			E. co							
MICHAEL P. DONOVAN (mpdonovn@cox.net)	@cox.net)		(714)	(714) 328-5234			i) iloo i							
Sampler: Jim Burton, Todd Bear	:		Fax Nu	Fax Number: 714.545.8883	983		stichia 223B							
Sample Description	Sample Matrix	Container ⊺ype	Cont tu	Sampling Date	Time	Preservation	ZW SZ Escµe	·		<b>.</b>			S	Special Instructions
SL-8R-1	water	125 ml poly	_	8 3 20	1):00 A00:	Sterile-None	×						24-H	24-Hour Hold time*
1-2-84-1	water	125 ml pofy	-	,,	11:25	11:25a Sterile-None	×						24-H	24-Hour Hold time*
INT3-RES-1	water	125 ml poly		7	5h : 11	11:45a Sterile-None	×						24-H	24-Hour Hold time*
7										_				
														***************************************
	:													
													- 1	
Relinquished By.	ý	Date /Time:	ξ	Received by:					-	Date /Time:		Turnaround Time: Same Day	ت ا	Check) 72 Hours
× Dale		X de Wine:		Received UK						Jake (Tinge)	.3	24 Hours 48 Hours	15 No	5 Days Normal X
Relinquished By.		Date /Time:		Received In Lab by:	by:					Date /Time:		Sample Integrity: Intact	9	Sheok) On Ice
* Per Lohantan Surface Water Ambient Monitoring Program (SWAMP) for ambient water	toring Progra	im (SWAMP) for a	mbient w	ater									! !	112.

ohantan Surface Water Amblent Monitoring Program (SWAMP) for ambient water

porso us



**FINAL REPORT** 

**Work Orders:** 0H06028 **Report Date:** 8/20/2020

Received Date: 8/6/2020

Turnaround Time: Normal

Phones: (714) 751-7373

Fax: (714) 545-8883

P.O. #:

**Billing Code:** 

Project: 2KLE010102

Attn: Michael P. Donovan

Client: Psomas - Santa Ana, CA

3 Hutton Centre Dr., Ste. 200 Santa Ana, CA 92707

#### Dear Michael P. Donovan:

Enclosed are the results of analyses for samples received 8/6/2020 with the Chain-of-Custody document. The samples were received in good condition, at 3.8 °C and on ice. All analysis met the method criteria except as noted in the case narrative or in the report with data qualifiers.

Sa	ample Results						
Sample:	SL-BR-1			Sample	d: 08/05/2	0 11:00 by Jim Bui	rton, Todd Bear
	0H06028-01 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifier
Method: SM	1 9223B		Instr: INC12				
Batch ID:	W0H0997	Preparation: _NONE (MICROBIOLOGY)	Prepared: 08	8/06/20 10:48			Analyst: amc
E. coli		ND	1.0	MPN/100ml	1	08/07/20	
Sample:	LS-BR-1			Sample	d: 08/05/2	0 11:40 by Jim Bui	rton, Todd Bear
	0H06028-02 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifier
Method: SM	1 9223B		Instr: INC12				
Batch ID:	W0H0997	Preparation: _NONE (MICROBIOLOGY)	Prepared: 08	8/06/20 10:48			Analyst: amc
E. coli		3.1	1.0	MPN/100ml	1	08/07/20	
Sample:	Int2-RES-1			Sample	d: 08/05/2	0 12:00 by Jim Bui	rton, Todd Bear
	0H06028-03 (Water)						
Analyte		Result	MRL	Units	Dil	Analyzed	Qualifier
Method: SM	1 9223B		Instr: INC12				
Batch ID:	W0H0997	Preparation: _NONE (MICROBIOLOGY)	Prepared: 08	8/06/20 10:48			Analyst: amc

0H06028 Page 1 of 2



**FINAL REPORT** 



#### Notes and Definitions

ItemDefinition%RECPercent Recovery

Dil Dilution

MRL The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

The MRL is also known as Limit of Quantitation (LOQ)

ND NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or

above the MDL.

RPD Relative Percent Difference

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.



## **Analyses Accreditation Summary**

Analyte	Not By NELAP	ANAB ISO 17025
SM 9223B in Water		
E. coli	<b>✓</b>	

Reviewed by:

Samatmanakit









Chris Samatmanakit Project Manager

DoD-ISO ANAB # • ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 • NELAP-OR #4047 • NJ-DEP #CA015 • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

Weck Labs 14859 Clark Ave City & Industry, cA 91745 (6026) 336-2139

CENTRE DRIVE, SUITE 200   CHENTOR   CONSTRUCTION   CHENTOR   CHE	Second   Consider the continue of the contin	(60-6) 336-2139			Project/	Project/PO Number:	HAIN	CHAIN OF CUSTODY FORM	JST(	à	FO -	≥		HOGANALISE Required	X-106028 Page.		of of	: <del>[ [ </del>
Sample   Corteiner Type   Continue Triumber    Sample   Container Type   Fact Number   714.45.85834   Signature   14.546.85834   Signature   14.546.85834   Signature   14.546.85834   Signature   14.546.85831   Signature   November   155 mil poly   1   Signature   1   Signature   Signature   November   Novemb	I CENTRE DRIVE, SUII IA, CA 92707	TE 200		ZKLE0	10102			yd (ik			· · · · · · · · · · · · · · · · · · ·			-				
Pack Number 714,545,5833   Pack Number 714,545,5833   Pack Number 714,545,5833   Pack Number 714,545,5833   Pack Number 714,545,5833   Pack Number 714,545,5833   Pack Number 714,546,5833   Pack Number 714,540   Pack Number 715,540   Pack Nu	Pack Number 114,0326-6234   Pack Number 114,046-8893   Pack Number 115 mi poly   Pack Number 115 mi poly   Pack Number 125 mi poly   Pack Numb	iger:			Phone N	lumber:			æ.⊒									
Sample   Container Type   Ear Number 714,546,6883   Ear Number 714,546,6883   Ear Number 714,546,6883   Ear Number 714,546,6883   Ear Number 7125 mil poly   1   8   5   2020   1100   M	Sample   Containor Type   Gent   Sample   Date   Time   Preservetton   Sample   Date   Time   P. DONOVAN (mpdono	vn@cox.net,	_	(714) 3	328-5234			) ilos e										
Secondary   Sample   Container Type   #   Secondary	Reservation   Sample   Container Type   Carl   Sampling Date   Time   Preservation   Carl   Sample   Time   Preservation   Carl   Sample   Time   Preservation   Carl   Sample   Time   Preservation   Sample	n Burton, Todd Bear			Fax Nun	nber: 714.545.88	83		223B Shichia Shichia									
Received by:   Rece	Received to the page of the	Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Time	Preservation					,				Special Instructions	
Received by:   Rece	RESC-  water 125 mi poly 1   8   5   2052   11-00 M   Sterie None   X   Resched Note   Resched by   1   8   5   2052   11-00 M   Sterie None   X   Resched by   1   8   5   2052   11-00 M   Resched by   Resched b	BR-1	water	125 ml poly									-				24-Hour Hold fime*	
RES - 1   water 125 ml poly 1   8   5   2.005   103.000   Sterie. Note   X	RESS-1   water 125 ml poly 1   8   5   2005   D2000    5-BR-1	water	125 ml poly	1			Sterile- Non									24-Hour Hold time*	Ţ	
	Checked by   Date /Time;   Date /Time;   Date /Time;   Date /Time;   Date /Time;   Date /Time;   Same Day   72	2-RES-1	water	125 ml poly	-	5	19:00.E										24-Hour Hold time*	
Part (15) 2020 1.30 PM Received to Lab by:    All Controls   Received in Lab by:   Date /Time:   Date /Time:   Sample integrity: (Check)   Infact   On los   Infact   On los	Same Day 72 H   Same Day 72 H   Same Day 72 H   Same Day 72 H   Same Day 72 H   Same Day 72 H   Same Day 72 H   Same Day 72 H   Sample integrity. (Check Date / Time: Date / Time: Date / Time: Sample integrity: (Check Date / Time: Date / Time: Sample integrity: (Check Date / Time: Sample integrity: (Check Date / Time: Sample integrity: (Check Date / Time: Date / Time: Sample integrity: (Check Date / Time: Date / Time: Sample integrity: (Check Date / Time: Date / Time: Sample integrity: (Check Date / Time:	A BA				Dozwined by						Dak	, Time:		Timemi.T		Check	
Pate Time: Received in Lab by: Date Time: 5 Days 24 Hours 5 Days Sample integrity: (Check)   Date Time: Sample integrity: (Check)   Intact On Ice	Pate Time: Date Time: Sample integrity: (Check Undece Water Ambient Monttoring Program (SWAMP) for ambient water	inquisited by.	8/5/202			Received by.	***								Same Day	- 1	72 Hours	
Date /Time: Received in Lab by: Date /Time: Sample integrity: {Check}   Intact On Ice	Date /Time: Received in Lab by: Date /Time: Sample integrity: (Check urface Water Ambient Monttoring Program (SWAMP) for ambient water	Relinquished By: Alf Dy		Date (Time: $S/C/\mathcal{U}$		Received	Y					Ž	James Colon		24 Hours 48 Hours		5 Days Normal X	
	ふらい ambient water ろうち	Refinquished By:		Date /Time;		Received in Lab	:kc					Date	·/Time:		Sample fr	•	9	i

# APPENDIX C LAKE VERTICAL PROFILE DATA SHEETS

## SOUTH LAKE DISSOLVED OXYGEN AND WATER TEMPERATURE PROFILE

Date of Profile: 6/15/2020 Estimated

Lake Surface Elevation: 9738.5 Barometric
Pressure (in 21.2

Hg)

<<Outlet

Outlet Pipe Elevation (ft/msl): 9621

	Depth of M	leasurement		Change in	116/	
Water Surface	•		Water	Water	Dissolved	
Elevation			Temperature	Temperature	Oxygen	% O <sub>2</sub>
(ft msl)	Feet	Meters	(deg C)	(deg C)	(mg/L)	Saturation*
9738.5	0.0	0				
9736.9	1.6	0.5	10.3		8.45	106.9%
9735.2	3.3	1	10.2	0.1	8.47	107.2%
9731.9	6.6	2	10.1	0.1	8.49	107.4%
9728.7	9.8	3	10.0	0.1	8.49	107.4%
9725.4	13.1	4	10.0	0.0	8.49	107.4%
9722.1	16.4	5	9.9	0.1	8.50	105.1%
9718.8	19.7	6	9.8	0.1	8.52	105.3%
9715.5	23.0	7	9.8	0.0	8.52	105.3%
9712.3	26.2	8	9.7	0.1	8.54	105.5%
9709.0	29.5	9	9.6	0.1	8.56	105.8%
9705.7	32.8	10	9.4	0.2	8.65	106.9%
9702.4	36.1	11	9.3	0.1	8.69	107.4%
9699.1	39.4	12	8.6	0.7	8.93	107.7%
9695.8	42.7	13	8.4	0.2	9.02	108.8%
9692.6	45.9	14	8.0	0.4	9.16	110.5%
9689.3	49.2	15	7.5	0.5	9.40	110.6%
9686.0	52.5	16	7.1	0.4	9.46	111.3%
9682.7	55.8	17	6.6	0.5	9.56	109.7%
9679.4	59.1	18	6.5	0.1	9.61	110.3%
9676.2	62.3	19	6.1	0.4	9.56	109.7%
9672.9	65.6	20	5.9	0.2	9.60	107.4%
9669.6	68.9	21	5.7	0.2	9.43	105.5%
9666.3	72.2	22	5.5	0.2	9.33	104.4%
9663.0	75.5	23	5.4	0.1	9.24	103.4%
9659.8	78.7	24	5.3	0.1	9.19	102.8%
9656.5	82.0	25	5.3	0.0	9.09	101.7%
9653.2	85.3	26	5.2	0.1	9.04	101.1%
9649.9	88.6	27	5.1	0.1	9.02	100.9%
9646.6	91.9	28	5.1	0.0	8.94	100.0%
9643.4	95.1	29	5.0	0.1	8.93	99.9%
9640.1	98.4	30	5.0	0.0	8.87	99.2%
9636.8	101.7	31	4.9	0.1	8.81	96.0%
9633.5	105.0	32	4.9	0.0	8.78	95.7%
9630.2	108.3	33	4.8	0.1	8.74	95.3%
9627.0	111.5	34	4.8	0.0	8.70	94.8%
9623.7	114.8	35	4.8	0.0	8.65	94.3%
9620.4	118.1	36	4.8	0.0	8.61	93.8%

TABLE C-1
SOUTH LAKE DISSOLVED OXYGEN AND WATER TEMPERATURE PROFILE

Date of Profile: 6/15/2020

Lake Surface Elevation: 9738.5

Outlet Pipe Elevation (ft/msl): 9621

Estimated

Barometric

Pressure (in

Hg)

	P = =:0:0:0:0	311 (16, 11131).			Hg)	
	Depth of N	leasurement		Change in		
Water Surface			Water	Water	Dissolved	
Elevation			Temperature	Temperature	Oxygen	% O <sub>2</sub>
(ft msl)	Feet	Meters	(deg C)	(deg C)	(mg/L)	Saturation*
9617.1	121.4	37	4.7	0.1	8.55	93.2%
9613.8	124.7	38	4.7	0.0	8.49	92.5%
9610.5	128.0	39	4.7	0.0	8.47	92.3%
9607.3	131.2	40	4.7	0.0	8.45	92.1%
9604.0	134.5	41	4.7	0.0	8.40	91.6%
9600.7	137.8	42	4.7	0.0	8.34	90.9%
9597.4	141.1	43	4.7	0.0	8.31	90.6%
9594.1	144.4	44	4.7	0.0	8.30	90.5%
9590.9	147.6	45	4.7	0.0	8.28	90.2%
9587.6	150.9	46	4.7	0.0	8.27	90.1%
9584.3	154.2	47	4.7	0.0	8.26	90.0%
9581.0	157.5	48	4.7	0.0	8.19	89.3%
9577.7	160.8	49	5.1	-0.4	0.80	8.9%
9574.5	164.0	50	5.6	-0.5	0.21	2.3%
9572.8	165.7	50.5	5.8	-0.2	0.13	1.5%
		Maximum	10.30		9.61	111.3%
		Minimum	4.70		0.13	1.5%

<sup>\* -</sup> Saturation based on calculated DO saturation at reported water temperature and ambient barometric pressure.

# TABLE C-2 SOUTH LAKE DISSOLVED OXYGEN AND WATER TEMPERATURE PROFILE

Date of Profile: 7/28/2020 Barometric
Lake Surface Elevation: 9747.82 Pressure (in

21.21

Outlet Pipe Elevation (ft/msl): 9621

	•	leasurement	9021	Change in		
Water Surface	Deptiloliv	leasurement	Water	Water	Dissolved	% O <sub>2</sub>
Elevation			Temperature	Temperature	Oxygen	Saturation
(ft msl)	Feet	Meters	(deg C)	(deg C)	(mg/L)	*
9747.82			(ueg c)	(ueg c)	(IIIg/ L)	
9746.2	1.6	0.5	16.1		7.54	109.1%
9744.5	3.3	1	15.9	0.2	7.44	105.4%
9741.3	6.6	2	15.9	0.2	7.44	105.4%
9738.0	9.8	3	15.8	0.0	7.44	105.4%
9734.7	13.1	4	15.8	0.0	7.47	105.8%
9734.7	16.4	5	15.8	0.0	7.48	106.1%
9728.1	19.7	6	15.8	0.0	7.48	106.0%
9724.9	23.0	7	15.8	0.0	7.48	106.0%
9724.9	26.2	8	15.7	0.0	7.52	106.5%
9718.3	29.5	9	15.3	0.1	7.76	100.5%
9715.0	32.8	10	15.2	0.4	7.67	109.5%
9713.0	36.1	11	15.0	0.1	8.09	114.6%
9708.5	39.4	12	14.5	0.2	8.32	115.3%
9705.2	42.7	13	14.0	0.5	8.44	117.0%
9703.2	45.9	14	13.3	0.5	8.62	116.9%
9698.6	49.2	15	12.8	0.7	8.76	116.5%
9695.3	52.5	16	12.3	0.5	8.88	117.7%
9692.0	55.8	17	11.7	0.5	9.06	129.1%
9688.8	59.1	18	11.7	0.6	9.22	131.4%
9685.5	62.3	19	10.4	0.0	9.40	119.0%
9682.2	65.6	20	9.9	0.7	9.45	116.8%
9678.9	68.9	21	9.4	0.5	9.43	116.5%
9675.6	72.2	22	8.9	0.5	9.41	113.5%
9672.4	75.5	23	8.3	0.6	9.39	113.3%
9669.1	78.7	24	8.0	0.3	9.30	112.2%
9665.8	82.0	25	7.6	0.4	9.27	109.1%
9662.5	85.3	26	7.3	0.3	9.19	103.1%
9659.2	88.6	27	6.9	0.4	9.06	104.0%
9656.0	91.9	28	6.5	0.4	8.95	102.7%
9652.7	95.1	29	6.3	0.2	8.90	102.1%
9649.4	98.4	30	6.0	0.3	8.78	100.8%
9646.1	101.7	31	5.9	0.1	8.72	97.6%
9642.8	105.0	32	5.7	0.1	8.56	95.8%
9639.6	103.0	33	5.5	0.2	8.57	95.9%
9636.3	111.5	34	5.4	0.1	8.41	94.1%
9633.0	114.8	35	5.4	0.0	8.28	92.6%
9033.0	114.0	JJ	5.4	0.0	0.20	32.070

**TABLE C-2** 

#### SOUTH LAKE DISSOLVED OXYGEN AND WATER TEMPERATURE PROFILE

Date of Profile: 7/28/2020 Barometric

Lake Surface Elevation: 9747.82 Pressure (in 21.21

Outlet Pipe Elevation (ft/msl): 9621 Hg)

	Depth of M	leasurement		Change in			
Water Surface			Water	Water	Dissolved	% O <sub>2</sub>	
Elevation			Temperature	Temperature	Oxygen	Saturation	
(ft msl)	Feet	Meters	(deg C)	(deg C)	(mg/L)	*	
9629.7	118.1	36	5.2	0.2	8.19	91.6%	
9626.4	121.4	37	5.1	0.1	8.15	91.2%	1
9623.1	124.7	38	5.1	0.0	8.11	90.7%	1
9619.9	128.0	39	5.1	0.0	8.05	90.1%	< <outlet< td=""></outlet<>
9616.6	131.2	40	5.0	0.1	8.00	89.5%	1
9613.3	134.5	41	5.0	0.0	7.91	88.5%	1
9610.0	137.8	42	4.9	0.1	7.85	85.6%	1
9606.7	141.1	43	4.9	0.0	7.84	85.5%	1
9603.5	144.4	44	4.9	0.0	7.67	83.6%	1
9600.2	147.6	45	4.9	0.0	7.63	83.2%	
9596.9	150.9	46	4.9	0.0	7.59	82.7%	1
9593.6	154.2	47	4.9	0.0	7.54	82.2%	1
9590.3	157.5	48	4.9	0.0	7.51	81.9%	1
9587.1	160.8	49	4.9	0.0	7.45	81.2%	
9583.8	164.0	50	4.9	0.0	7.42	80.9%	
9580.5	167.3	51	4.9	0.0	7.39	80.5%	1
9577.2	170.6	52	4.9	0.0	7.25	79.0%	1
9573.9	173.9	53	5.7	-0.8	0.06	0.7%	1
9570.7	177.2	54	5.9	-0.2	0.03	0.3%	1
9567.4	180.4	55	6.0	-0.1	0.01	0.1%	1
9564.1	183.7	56	6.1	-0.1	0.01	0.1%	1
9560.8	187.0	57	6.3	-0.2	0.00	0.0%	1
9557.5	190.3	58	6.3	0.0	0.00	0.0%	1
9554.3	193.6	59	6.5	-0.2	0.01	0.1%	1
9551.0	196.8	60	6.7	-0.2	0.01	0.1%	1
9547.7	200.1	61	6.9	-0.2	0.01	0.1%	1
9544.4	203.4	62	7.2	-0.3	0.01	0.1%	
9541.1	206.7	63	7.4	-0.2	0.02	0.2%	
9537.8	210.0	64	7.6	-0.2	0.02	0.2%	
9534.6	213.3	65	7.7	-0.1	0.03	0.4%	
9531.3	216.5	66	7.8	-0.1	0.03	0.4%	
9528.0	219.8	67	7.8	0.0	0.03	0.4%	
9524.7	223.1	68	7.8	0.0	0.05	0.6%	
		Maximum	16.10		9.45	131.4%	
		Minimum	4.90		0.00	0.0%	

<sup>\* -</sup> Saturation based on calculated DO saturation at reported water temperature and ambient barometric pressure.

TABLE C-3
SOUTH LAKE DISSOLVED OXYGEN AND WATER TEMPERATURE PROFILE

Date of Profile: 8/25/2020 Barometric
Lake Surface Elevation: 9741.96 Pressure

21.14

Outlet Pipe Elevation (ft/msl): 9621 (in Hg)

	Depth of M	leasurement		Change in		
Water Surface			Water	Water	Dissolved	% O <sub>2</sub>
Elevation			Temperature	Temperature	Oxygen	Saturation
(ft msl)	Feet	Meters	(deg C)	(deg C)*	(mg/L)	**
9741.96	0.0	0				
9740.3	1.6	0.5	16.1		7.11	102.9%
9738.7	3.3	1	16.3	-0.2	7.10	102.8%
9735.4	6.6	2	16.2	0.1	7.10	102.8%
9732.1	9.8	3	16.2	0.0	7.10	102.8%
9728.8	13.1	4	16.2	0.0	7.09	102.6%
9725.6	16.4	5	16.2	0.0	7.09	102.6%
9722.3	19.7	6	16.2	0.0	7.09	102.6%
9719.0	23.0	7	16.2	0.0	7.08	102.5%
9715.7	26.2	8	16.2	0.0	7.08	102.5%
9712.4	29.5	9	16.2	0.0	7.08	102.5%
9709.2	32.8	10	16.2	0.0	7.08	102.5%
9705.9	36.1	11	16.2	0.0	7.07	102.3%
9702.6	39.4	12	16.2	0.0	7.07	102.3%
9699.3	42.7	13	16.2	0.0	7.08	102.5%
9696.0	45.9	14	16.1	0.1	7.13	103.2%
9692.7	49.2	15	16.0	0.1	7.16	103.6%
9689.5	52.5	16	15.9	0.1	7.20	102.0%
9686.2	55.8	17	15.3	0.6	7.46	105.7%
9682.9	59.1	18	14.0	1.3	8.19	113.5%
9679.6	62.3	19	13.5	0.5	8.37	113.5%
9676.3	65.6	20	12.9	0.6	8.45	112.0%
9673.1	68.9	21	12.5	0.4	8.52	112.9%
9669.8	72.2	22	12.0	0.5	8.67	114.9%
9666.5	75.5	23	11.5	0.5	8.76	124.8%
9663.2	78.7	24	10.9	0.6	8.87	112.3%
9659.9	82.0	25	10.5	0.4	9.00	113.9%
9656.7	85.3	26	10.4	0.1	9.07	114.8%
9653.4	88.6	27	10.0	0.4	9.08	114.9%
9650.1	91.9	28	9.1	0.9	9.12	112.7%
9646.8	95.1	29	8.7	0.4	9.11	109.9%
9643.5	98.4	30	8.3	0.4	9.05	109.2%
9640.3	101.7	31	7.9	0.4	8.98	105.7%
9637.0	105.0	32	7.4	0.5	8.84	104.0%
9633.7	108.3	33	7.2	0.2	8.80	103.6%
9630.4	111.5	34	6.7	0.5	8.61	98.8%
9627.1	114.8	35	6.2	0.5	8.30	95.3%
9623.9	118.1	36	5.4	0.8	7.91	88.5%

TABLE C-3
SOUTH LAKE DISSOLVED OXYGEN AND WATER TEMPERATURE PROFILE

Date of Profile: 8/25/2020 Barometric
Lake Surface Elevation: 9741.96 Pressure

Outlet Pipe Elevation (ft/msl): 9621 (in Hg)

	Depth of M	leasurement		Change in		
Water Surface			Water	Water	Dissolved	% O <sub>2</sub>
Elevation			Temperature	Temperature	Oxygen	Saturation
(ft msl)	Feet	Meters	(deg C)	(deg C)*	(mg/L)	**
9620.6	121.4	37	5.2	0.2	7.80	87.3%
9617.3	124.7	38	5.2	0.0	7.75	86.7%
9614.0	128.0	39	5.1	0.1	7.70	86.1%
9610.7	131.2	40	5.1	0.0	7.69	86.0%
9607.4	134.5	41	5.0	0.1	7.59	84.9%
9604.2	137.8	42	5.0	0.0	7.43	83.1%
9600.9	141.1	43	5.0	0.0	7.43	83.1%
9597.6	144.4	44	4.9	0.1	7.35	80.1%
9594.3	147.6	45	4.9	0.0	7.25	79.0%
9591.0	150.9	46	4.9	0.0	7.14	77.8%
9587.8	154.2	47	4.9	0.0	7.05	76.8%
9584.5	157.5	48	4.9	0.0	7.06	76.9%
9581.2	160.8	49	4.9	0.0	7.02	76.5%
9577.9	164.0	50	5.2	-0.3	0.38	4.3%
9574.6	167.3	51	5.6	-0.4	0.28	3.1%
9571.4	170.6	52	5.7	-0.1	0.23	2.6%
9568.1	173.9	53	5.9	-0.2	0.19	2.1%
9564.8	177.2	54	6.0	-0.1	0.16	1.8%
9561.5	180.4	55	6.1	-0.1	0.14	1.6%
9558.2	183.7	56	6.4	-0.3	0.14	1.6%
9555.0	187.0	57	6.4	0.0	0.15	1.7%
9551.7	190.3	58	6.5	-0.1	0.12	1.4%
9548.4	193.6	59	6.7	-0.2	0.11	1.3%
9545.1	196.8	60	6.9	-0.2	0.07	0.8%
9541.8	200.1	61	7.4	-0.5	0.06	0.7%
9538.5	203.4	62	7.5	-0.1	0.05	0.6%
9535.3	206.7	63	7.4	0.1	0.03	0.4%
9532.0	210.0	64	7.7	-0.3	0.03	0.4%
		Maximum	16.30		9.12	124.8%
		Minimum	4.90		0.03	0.4%

<sup>\* -</sup> **Bold** values indicate thermocline (1 deg change in one meter).

<<Outlet

21.14

<sup>\*\* -</sup> Saturation based on calculated DO saturation at reported water temperature and ambient barometric pressure.

## SOUTH LAKE DISSOLVED OXYGEN, WATER TEMPERATURE AND CONDUCTIVITY PROFILE

Date of Profile: 9/23/2020 Barometric 9736.5 Lake Surface Elevation: Pressure

(in Hg) Outlet Pine Flevation (ft/msl)

Outlet Pipe			9621			(in Hg)		_
	-	oth of		Char !				
Water Surface Elevation (ft msl)	Feet	rement Meters	Water Temperature (deg C)	Change in Water Temperature (deg C)*	Dissolved Oxygen (mg/L)	Conductivity (μS/cm)**	% O <sub>2</sub> Saturation ***	
9736.5	0.0	0	14.2	(ueg c)	7.41	37		-
9734.9	1.6	0.5	14.2		7.41	37	101.3%	
9733.2	3.3	1	14.3	-0.1	7.39	37	101.0%	
9729.9	6.6	2	14.3	0.0	7.39	37	101.0%	-
9726.7	9.8	3	14.3	0.0	7.38	37	100.9%	1
9723.4	13.1	4	14.3	0.0	7.37	37	100.7%	
9720.1	16.4	5	14.4	-0.1	7.37	37	100.7%	
9716.8	19.7	6	14.4	0.0	7.36	37	100.6%	-
9713.5	23.0	7	14.4	0.0	7.36	37	100.6%	
9710.3	26.2	8	14.4	0.0	7.35	37	100.4%	
9707.0	29.5	9	14.4	0.0	7.35	37	100.4%	1
9703.7	32.8	10	14.4	0.0	7.35	37	100.4%	1
9700.4	36.1	11	14.4	0.0	7.34	37	100.3%	
9697.1	39.4	12	14.4	0.0	7.34	37	100.3%	1
9693.8	42.7	13	14.4	0.0	7.33	37	100.2%	1
9690.6	45.9	14	14.4	0.0	7.33	37	100.2%	
9687.3	49.2	15	14.4	0.0	7.33	37	100.2%	1
9684.0	52.5	16	14.4	0.0	7.33	37	100.2%	-
9680.7	55.8	17	14.4	0.0	7.32	37	100.0%	
9677.4	59.1	18	14.4	0.0	7.32	37	100.0%	1
9674.2	62.3	19	14.4	0.0	7.32	37	100.0%	-
9670.9	65.6	20	14.3	0.1	7.33	37	100.2%	
9667.6	68.9	21	14.3	0.0	7.32	38	100.0%	
9664.3	72.2	22	14.3	0.0	7.32	38	100.0%	1
9661.0	75.5	23	14.3	0.0	7.32	39	100.0%	
9657.8	78.7	24	14.2	0.1	7.33	40	100.2%	
9654.5	82.0	25	13.4	0.8	7.62	41	101.9%	
9651.2	85.3	26	12.7	0.7	7.90	41	103.2%	
9647.9	88.6	27	11.9	0.8	8.21	42	115.3%	
9644.6	91.9	28	11.5	0.4	8.32	43	116.9%	
9641.4	95.1	29	10.9	0.6	8.43	44	105.2%	
9638.1	98.4	30	10.4	0.5	8.58	44	107.1%	
9634.8	101.7	31	10.1	0.3	8.66	45	108.1%	
9631.5	105.0	32	9.5	0.6	8.68	46	105.8%	
9628.2	108.3	33	8.7	0.8	8.66	46	103.0%	
9625.0	111.5	34	7.8	0.9	8.52	47	98.9%	1
9621.7	114.8	35	6.3	1.5	8.02	48	90.8%	< <out< td=""></out<>
9618.4	118.1	36	5.8	0.5	7.78	49	85.8%	1
9615.1	121.4	37	5.4	0.4	7.80	49	86.0%	1
9611.8	124.7	38	5.2	0.2	7.64	50	84.3%	1
9608.5	128.0	39	5.1	0.1	7.49	51	82.6%	1
9605.3	131.2	40	5.0	0.1	7.38	52	81.4%	1
9602.0	134.5	41	5.0	0.0	7.30	52	80.5%	1
9598.7	137.8	42	5.0	0.0	7.12	53	78.5%	1
9595.4	141.1	43	5.0	0.0	6.99	48	77.1%	1
9592.1	144.4	44	5.0	0.0	6.81	249	75.1%	1
	<del>1</del>	1	1	<del></del>				1

21.26

TABLE C-4
SOUTH LAKE DISSOLVED OXYGEN, WATER TEMPERATURE AND CONDUCTIVITY PROFILE

Date of Profile: 9/23/2020

Lake Surface Elevation: 9736.5

Barometric
Pressure 21.26

Outlet Pipe Elevation (ft/msl): 9621 (in Hg)

	Dep	oth of					
	Measu	ırement		Change in			
Water Surface			Water	Water	Dissolved		% O <sub>2</sub>
Elevation			Temperature	Temperature	Oxygen	Conductivity	Saturation
(ft msl)	Feet	Meters	(deg C)	(deg C)*	(mg/L)	(μS/cm)**	***
9588.9	147.6	45	5.0	0.0	6.73	450	74.2%
9585.6	150.9	46	5.1	-0.1	6.49	652	71.6%
9582.3	154.2	47	5.1	0.0	6.18	853	68.2%
9580.7	155.8	47.5	5.1	0.0	5.32	1054	58.7%
9579.0	157.5	48	5.2	-0.1	0.25	1255	2.8%
9575.7	160.8	49	5.7	-0.5	0.23	1420	2.5%
9572.5	164.0	50	5.8	-0.1	0.14	1585	1.5%
9569.2	167.3	51	6.0	-0.2	0.09	1750	1.0%
9565.9	170.6	52	6.1	-0.1	0.07	1915	0.8%
9562.6	173.9	53	6.2	-0.1	0.06	2080	0.7%
9559.3	177.2	54	6.3	-0.1	0.04	2125	0.5%
9556.1	180.4	55	6.4	-0.1	0.03	2169	0.3%
9552.8	183.7	56	6.6	-0.2	0.03	2214	0.3%
9549.5	187.0	57	6.8	-0.2	0.03	2258	0.3%
9546.2	190.3	58	7.2	-0.4	0.03	2303	0.3%
9542.9	193.6	59	7.4	-0.2	0.03	2309	0.3%
9539.7	196.8	60	7.6	-0.2	0.02	2314	0.2%
9536.4	200.1	61	7.7	-0.1	0.02	2320	0.2%
9533.1	203.4	62	7.8	-0.1	0.01	2325	0.1%
9530.8	205.7	62.7	7.9	-0.1	0.01	2331	0.1%
		Maximum	14.40		8.68		116.9%
		Minimum	5.00		0.01		0.1%

<sup>\* -</sup> **Bold** values indicate thermocline (1 deg change in one meter).

<sup>\*\* -</sup> Italized values are extropolated values for plotting purposes.

<sup>\*\*\* -</sup> Saturation based on calculated DO saturation at reported water temperature and ambient barometric pressure.

TABLE C-5
SOUTH LAKE DISSOLVED OXYGEN AND WATER TEMPERATURE PROFILE

Date of Profile: 10/5/2020 Barometric

Lake Surface Elevation: 9734.02 Pressure 21.10

Outlet Pipe Elevation (ft/msl): 9621 (in Hg)

		leasurement		Change in		
Water Surface	Deptil of iv	icasarcinicit	Water	Water	Dissolved	% O <sub>2</sub>
Elevation			Temperature	Temperature	Oxygen	Saturation
(ft msl)	Feet	Meters	(deg C)	(deg C)*	(mg/L)	**
9734.02	0.0	0	13.8		7.51	
9732.4	1.6	0.5	13.8		7.51	101.8%
9730.7	3.3	1	13.9	-0.1	7.48	101.4%
9727.5	6.6	2	13.9	0.0	7.48	101.4%
9724.2	9.8	3	13.9	0.0	7.46	101.1%
9720.9	13.1	4	13.9	0.0	7.46	101.1%
9717.6	16.4	5	13.9	0.0	7.45	101.0%
9714.3	19.7	6	13.9	0.0	7.45	101.0%
9711.1	23.0	7	13.9	0.0	7.44	100.9%
9707.8	26.2	8	13.9	0.0	7.44	100.9%
9704.5	29.5	9	13.9	0.0	7.43	100.7%
9701.2	32.8	10	13.9	0.0	7.43	100.7%
9697.9	36.1	11	13.9	0.0	7.43	100.7%
9694.7	39.4	12	13.9	0.0	7.42	100.6%
9691.4	42.7	13	13.9	0.0	7.42	100.6%
9688.1	45.9	14	13.9	0.0	7.42	100.6%
9684.8	49.2	15	13.9	0.0	7.41	100.5%
9681.5	52.5	16	13.9	0.0	7.41	100.5%
9678.2	55.8	17	13.9	0.0	7.41	100.5%
9675.0	59.1	18	13.8	0.1	7.41	100.5%
9671.7	62.3	19	13.8	0.0	7.39	100.2%
9668.4	65.6	20	13.8	0.0	7.39	100.2%
9665.1	68.9	21	13.8	0.0	7.39	100.2%
9661.8	72.2	22	13.8	0.0	7.39	100.2%
9658.6	75.5	23	13.8	0.0	7.39	100.2%
9655.3	78.7	24	13.8	0.0	7.38	100.1%
9652.0	82.0	25	13.7	0.1	7.36	99.8%
9648.7	85.3	26	13.6	0.1	7.30	99.0%
9645.4	88.6	27	13.6	0.0	7.28	98.7%
9642.2	91.9	28	13.3	0.3	7.37	99.9%
9638.9	95.1	29	12.2	1.1	7.70	102.1%
9635.6	98.4	30	11.3	0.9	8.05	114.7%
9632.3	101.7	31	10.8	0.5	8.13	102.9%
9629.0	105.0	32	10.3	0.5	8.25	104.4%
9625.8	108.3	33	8.7	1.6	8.25	99.5%
9622.5	111.5	34	7.1	1.6	7.90	93.0%

<<Outlet

TABLE C-5
SOUTH LAKE DISSOLVED OXYGEN AND WATER TEMPERATURE PROFILE

Date of Profile: 10/5/2020 Barometric

Lake Surface Elevation: 9734.02 Pressure 21.10

Outlet Pipe Elevation (ft/msl): 9621 (in Hg)

	Depth of M	leasurement		Change in		
Water Surface	-		Water	Water	Dissolved	% O <sub>2</sub>
Elevation			Temperature	Temperature	Oxygen	Saturation
(ft msl)	Feet	Meters	(deg C)	(deg C)*	(mg/L)	**
9619.2	114.8	35	5.7	1.4	7.64	85.5%
9615.9	118.1	36	5.4	0.3	7.60	85.0%
9612.6	121.4	37	5.2	0.2	7.53	84.2%
9609.3	124.7	38	5.1	0.1	7.43	83.1%
9606.1	128.0	39	5.1	0.0	7.31	81.8%
9602.8	131.2	40	5.0	0.1	7.14	79.9%
9599.5	134.5	41	5.0	0.0	6.98	78.1%
9596.2	137.8	42	5.0	0.0	6.86	76.7%
9592.9	141.1	43	5.0	0.0	6.79	76.0%
9589.7	144.4	44	5.0	0.0	6.62	74.1%
9586.4	147.6	45	5.0	0.0	6.40	71.6%
9583.1	150.9	46	5.1	-0.1	6.13	68.6%
9581.5	152.6	46.5	5.1	0.0	5.80	64.9%
9579.8	154.2	47	5.2	0.0	2.02	22.6%
9576.5	157.5	48	5.6	-0.1	0.26	2.9%
9573.3	160.8	49	5.8	-0.4	0.16	1.8%
9570.0	164.0	50	5.9	-0.2	0.12	1.3%
9566.7	167.3	51	6.0	-0.1	0.10	1.1%
9563.4	170.6	52	6.2	-0.1	0.09	1.0%
9560.1	173.9	53	6.3	-0.2	0.07	0.8%
9556.9	177.2	54	6.4	-0.1	0.06	0.7%
9553.6	180.4	55	6.5	-0.1	0.05	0.6%
9550.3	183.7	56	6.7	-0.1	0.05	0.6%
9547.0	187.0	57	7.0	-0.2	0.05	0.6%
9543.7	190.3	58	7.2	-0.3	0.04	0.5%
9540.5	193.6	59	7.4	-0.2	0.04	0.5%
9537.2	196.8	60	7.6	-0.2	0.04	0.5%
9535.5	198.5	60.5	7.7	-0.2	0.04	0.5%
		Maximum	13.90		8.25	114.7%
		Minimum	5.00		0.04	0.5%

<sup>\* -</sup> **Bold** values indicate thermocline (1 deg change in one meter).

<sup>\*\* -</sup> Saturation based on calculated DO saturation at reported water temperature and ambient barometric pressure.

# TABLE C-6 LAKE SABRINA DISSOLVED OXYGEN AND WATER TEMPERATURE PROFILE

Date of Profile: 6/17/2020

Lake Surface Elevation: 9116.2

Outlet Pipe Elevation (ft/msl): 9068

Estimated
Barometric
Pressure
(in Hg)

	ripe Lievati		3008		(in Hg)	1	Ī
Water	Depth of Me	easurement		Change in			
Surface			Water	Water	Dissolved	% O <sub>2</sub>	
Elevation			Temperature	Temperature	Oxygen	Saturation	
(ft msl)	Feet	Meters	(deg C)	(deg C)*	(mg/L)	**	
9116.2	0.0	0					
9114.6	1.6	0.5	11.2		9.20	127.4%	
9112.9	3.3	1	11.2	0.0	8.89	123.1%	
9109.6	6.6	2	11.2	0.0	8.83	122.3%	
9106.4	9.8	3	11.2	0.0	8.80	121.9%	
9103.1	13.1	4	11.2	0.0	8.78	121.6%	
9099.8	16.4	5	11.1	0.1	8.77	121.5%	
9096.5	19.7	6	11.0	0.1	8.83	122.3%	
9093.2	23.0	7	10.6	0.4	8.99	110.6%	
9090.0	26.2	8	10.5	0.1	8.86	109.0%	
9086.7	29.5	9	10.3	0.2	8.92	109.8%	
9083.4	32.8	10	10.0	0.3	9.03	111.1%	
9080.1	36.1	11	9.3	0.7	9.30	111.7%	
9076.8	39.4	12	8.0	1.3	9.64	113.1%	
9073.5	42.7	13	7.7	0.3	9.78	111.9%	
9070.3	45.9	14	6.9	0.8	9.80	109.4%	
9067.0	49.2	15	6.0	0.9	9.75	108.8%	< <outlet< td=""></outlet<>
9063.7	52.5	16	5.9	0.1	9.72	105.7%	
9060.4	55.8	17	5.8	0.1	9.62	104.6%	
9057.1	59.1	18	5.7	0.1	9.58	104.2%	
9053.9	62.3	19	5.5	0.2	9.42	102.5%	
9050.6	65.6	20	5.3	0.2	9.35	101.7%	
9047.3	68.9	21	5.3	0.0	9.30	101.1%	
9044.0	72.2	22	5.1	0.2	9.22	100.3%	
9040.7	75.5	23	5.0	0.1	9.17	99.7%	
9037.5	78.7	24	4.8	0.2	9.03	95.7%	
9034.2	82.0	25	4.7	0.1	8.91	94.4%	
9030.9	85.3	26	4.6	0.1	8.83	93.6%	
9027.6	88.6	27	4.6	0.0	8.81	93.4%	
9024.3	91.9	28	4.5	0.1	8.76	92.8%	
9021.1	95.1	29	4.4	0.1	8.75	92.7%	
9017.8	98.4	30	4.4	0.0	8.86	93.9%	
9014.5	101.7	31	4.3	0.1	8.63	91.4%	
9011.2	105.0	32	4.2	0.1	8.57	90.8%	
9007.9	108.3	33	4.2	0.0	8.54	90.5%	
9004.7	111.5	34	4.2	0.0	8.60	91.1%	
9001.4	114.8	35	4.2	0.0	8.60	91.1%	
8998.1	118.1	36	4.1	0.1	8.54	90.5%	

TABLE C-6

LAKE SABRINA DISSOLVED OXYGEN AND WATER TEMPERATURE PROFILE

Date of Profile: 6/17/2020

Lake Surface Elevation: 9116.2

Outlet Pipe Elevation (ft/msl): 9068

Estimated
Barometric
Pressure
(in Hg)

	· ·pe zierati		3000		(In Hg)	
Water	Depth of M	easurement		Change in		
Surface			Water	Water	Dissolved	% O <sub>2</sub>
Elevation			Temperature	Temperature	Oxygen	Saturation
(ft msl)	Feet	Meters	(deg C)	(deg C)*	(mg/L)	**
8994.8	121.4	37	4.1	0.0	8.46	89.6%
8991.5	124.7	38	4.0	0.1	8.37	88.7%
8988.2	128.0	39	4.0	0.0	8.31	88.1%
8985.0	131.2	40	4.0	0.0	8.28	87.7%
8981.7	134.5	41	4.0	0.0	8.24	87.3%
8978.4	137.8	42	4.0	0.0	8.20	86.9%
8975.1	141.1	43	4.0	0.0	8.19	86.8%
8971.8	144.4	44	4.0	0.0	8.15	86.4%
8968.6	147.6	45	4.0	0.0	8.16	86.5%
8965.3	150.9	46	4.0	0.0	8.15	86.4%
8962.0	154.2	47	4.0	0.0	8.09	85.7%
8958.7	157.5	48	4.0	0.0	8.06	85.4%
8955.4	160.8	49	4.0	0.0	7.91	83.8%
8952.2	164.0	50	4.0	0.0	7.90	83.7%
		Maximum	11.2		9.80	127.4%
		Minimum	4.0		7.90	83.7%

<sup>\* -</sup> **Bold** values indicate thermocline (1 deg change in one meter).

<sup>\*\* -</sup> Saturation based on calculated DO saturation at reported water temperature and ambient barometric pressure.

#### LAKE SABRINA DISSOLVED OXYGEN AND WATER TEMPERATURE PROFILE

Date of Profile: 7/29/2020 Barometric
Lake Surface Elevation: 9118.62 Pressure

Outlet Pipe Elevation (ft/msl): 9068 (in Hg)

Outlet Pi	<u>pe Elevatio</u>	on (ft/msl):	9068		(III ng)	
	Depth of M	leasurement		Change in		
Water Surface			Water	Water	Dissolved	% O <sub>2</sub>
Elevation			Temperature	Temperature	Oxygen	Saturation
(ft msl)	Feet	Meters	(deg C)	(deg C)*	(mg/L)	**
9118.62	0.0	0				
9117.0	1.6	0.5	17.0		7.00	100.6%
9115.3	3.3	1	16.9	0.1	7.01	98.6%
9112.1	6.6	2	16.8	0.1	7.01	98.6%
9108.8	9.8	3	16.8	0.0	7.01	98.6%
9105.5	13.1	4	16.8	0.0	7.01	98.6%
9102.2	16.4	5	16.7	0.1	7.03	98.9%
9098.9	19.7	6	16.6	0.1	7.04	99.1%
9095.7	23.0	7	16.5	0.1	7.05	99.2%
9092.4	26.2	8	16.0	0.5	7.22	101.6%
9089.1	29.5	9	15.7	0.3	7.23	99.6%
9085.8	32.8	10	14.7	1.0	7.55	101.7%
9084.2	34.4	10.5	14.4	0.3	7.70	103.8%
9082.5	36.1	11	12.8	1.6	8.18	105.4%
9080.9	37.7	11.5	11.7	1.1	8.43	116.8%
9079.3	39.4	12	10.6	1.1	8.80	108.3%
9076.0	42.7	13	9.3	1.3	9.20	110.5%
9072.7	45.9	14	7.9	1.4	9.46	108.2%
9069.4	49.2	15	7.3	0.6	9.47	108.4%
9066.1	52.5	16	6.8	0.5	9.37	104.6%
9062.8	55.8	17	6.4	0.4	9.18	102.4%
9059.6	59.1	18	6.1	0.3	9.01	100.5%
9056.3	62.3	19	5.9	0.2	8.89	96.7%
9053.0	65.6	20	5.7	0.2	8.78	95.5%
9049.7	68.9	21	5.6	0.1	8.67	94.3%
9046.4	72.2	22	5.4	0.2	8.60	93.5%
9043.2	75.5	23	5.3	0.1	8.53	92.8%
9039.9	78.7	24	5.1	0.2	8.38	91.1%
9036.6	82.0	25	5.0	0.1	8.34	90.7%
9033.3	85.3	26	4.9	0.1	8.24	87.3%
9030.0	88.6	27	4.8	0.1	8.16	86.5%
9026.8	91.9	28	4.7	0.1	8.08	85.6%
9023.5	95.1	29	4.6	0.1	8.04	85.2%
9020.2	98.4	30	4.6	0.0	7.88	83.5%
9016.9	101.7	31	4.5	0.1	7.74	82.0%
9013.6	105.0	32	4.4	0.1	7.74	82.0%
9010.4	108.3	33	4.3	0.1	7.75	82.1%
9007.1	111.5	34	4.3	0.0	7.75	82.1%
9003.8	114.8	35	4.2	0.1	7.74	82.0%
9000.5	118.1	36	4.2	0.0	7.72	81.8%
8997.2	121.4	37	4.2	0.0	7.69	81.5%

<<Outlet

21.72

# TABLE C-7 LAKE SABRINA DISSOLVED OXYGEN AND WATER TEMPERATURE PROFILE

Date of Profile: 7/29/2020 Barometric
Lake Surface Elevation: 9118.62 Pressure 21.72

Outlet Pipe Elevation (ft/msl): 9068 (in Hg)

	Depth of N	leasurement		Change in		
Water Surface			Water	Water	Dissolved	% O <sub>2</sub>
Elevation			Temperature	Temperature	Oxygen	Saturation
(ft msl)	Feet	Meters	(deg C)	(deg C)*	(mg/L)	**
8993.9	124.7	38	4.1	0.1	7.65	81.1%
8990.7	128.0	39	4.1	0.0	7.58	80.3%
8987.4	131.2	40	4.0	0.1	7.49	79.4%
8984.1	134.5	41	4.1	-0.1	7.44	78.8%
8980.8	137.8	42	4.0	0.1	7.38	78.2%
8977.5	141.1	43	4.0	0.0	7.30	77.4%
8974.3	144.4	44	4.0	0.0	7.21	76.4%
8971.0	147.6	45	4.1	-0.1	7.13	75.6%
8967.7	150.9	46	4.0	0.1	6.94	73.5%
8964.4	154.2	47	4.1	-0.1	6.84	72.5%
8961.1	157.5	48	4.1	0.0	6.71	71.1%
8957.9	160.8	49	4.1	0.0	6.62	70.1%
8954.6	164.0	50	4.1	0.0	6.55	69.4%
8951.3	167.3	51	4.1	0.0	6.48	68.7%
8948.0	170.6	52	4.1	0.0	6.37	67.5%
8944.7	173.9	53	4.1	0.0	6.31	66.9%
8941.5	177.2	54	4.1	0.0	6.26	66.3%
8938.2	180.4	55	4.1	0.0	6.21	65.8%
8934.9	183.7	56	4.1	0.0	6.10	64.6%
8931.6	187.0	57	4.1	0.0	6.01	63.7%
8928.3	190.3	58	4.1	0.0	5.97	63.3%
8925.1	193.6	59	4.1	0.0	5.91	62.6%
8921.8	196.8	60	4.1	0.0	5.72	60.6%
8918.5	200.1	61	4.1	0.0	5.61	59.4%
8915.2	203.4	62	4.1	0.0	5.54	58.7%
8911.9	206.7	63	4.1	0.0	5.34	56.6%
8908.6	210.0	64	4.1	0.0	5.20	55.1%
8905.4	213.3	65	4.1	0.0	4.91	52.0%
8902.1	216.5	66	4.1	0.0	4.52	47.9%
8898.8	219.8	67	4.1	0.0	4.10	43.4%
8895.5	223.1	68	4.1	0.0	3.63	38.5%
8892.2	226.4	69	4.1	0.0	2.95	31.3%
8889.0	229.7	70	4.2	-0.1	2.39	25.3%
8885.7	232.9	71	4.2	0.0	1.85	19.6%
		Maximum	17.0		9.47	116.8%
		Minimum	4.0		1.85	19.6%

<sup>\* -</sup> **Bold** values indicate thermocline (1 deg change in one meter).

<sup>\*\* -</sup> Saturation based on calculated DO saturation at reported water temperature and ambient barometric pressure.

### LAKE SABRINA DISSOLVED OXYGEN AND WATER TEMPERATURE PROFILE

Date of Profile: 8/24/2020 Barometric

Lake Surface Elevation: 9115.53 Pressure 21.67
Outlet Pipe Elevation (ft msl): 9068

		- ( · · · /				
	Depth of M	leasurement		Change in		
Water Surface			Water	Water	Dissolved	% O <sub>2</sub>
Elevation			Temperature	Temperature	Oxygen	Saturation
(ft msl)	Feet	Meters	(deg C)	(deg C)*	(mg/L)	**
9115.53	0.0	0				
9113.9	1.6	0.5	16.9		7.10	99.9%
9112.2	3.3	1	16.9	0.0	7.10	99.9%
9109.0	6.6	2	16.9	0.0	7.09	99.8%
9105.7	9.8	3	16.9	0.0	7.10	99.9%
9102.4	13.1	4	16.9	0.0	7.09	99.8%
9099.1	16.4	5	16.9	0.0	7.09	99.8%
9095.8	19.7	6	16.9	0.0	7.08	99.6%
9092.6	23.0	7	16.8	0.1	7.10	99.9%
9089.3	26.2	8	16.6	0.2	7.15	100.6%
9086.0	29.5	9	16.2	0.4	7.24	101.9%
9082.7	32.8	10	15.4	0.8	7.46	102.7%
9081.1	34.4	10.5	13.9	1.5	8.31	109.5%
9079.4	36.1	11	13.0	0.9	8.69	114.5%
9077.8	37.7	11.5	12.1	0.9	8.97	115.6%
9076.2	39.4	12	11.4	0.7	9.17	127.0%
9072.9	42.7	13	9.9	1.5	9.46	113.7%
9069.6	45.9	14	8.3	1.6	9.70	113.8%
9066.3	49.2	15	7.5	0.8	9.63	110.2%
9063.0	52.5	16	6.8	0.7	9.48	105.8%
9059.8	55.8	17	6.7	0.1	9.36	104.4%
9056.5	59.1	18	6.3	0.4	9.33	104.1%
9053.2	62.3	19	6.0	0.3	9.31	103.9%
9049.9	65.6	20	5.6	0.4	9.04	98.3%
9046.6	68.9	21	5.4	0.2	8.75	95.2%
9043.4	72.2	22	5.2	0.2	8.64	94.0%
9040.1	75.5	23	5.1	0.1	8.42	91.6%
9036.8	78.7	24	5.0	0.1	8.35	90.8%
9033.5	82.0	25	4.9	0.1	8.21	87.0%
9030.2	85.3	26	4.8	0.1	8.17	86.6%
9026.9	88.6	27	4.7	0.1	8.11	85.9%
9023.7	91.9	28	4.6	0.1	7.96	84.3%
9020.4	95.1	29	4.5	0.1	7.83	83.0%
9017.1	98.4	30	4.4	0.1	7.88	83.5%
9013.8	101.7	31	4.4	0.0	7.72	81.8%
9010.5	105.0	32	4.4	0.0	7.54	79.9%
9007.3	108.3	33	4.3	0.1	7.54	79.9%
9004.0	111.5	34	4.3	0.0	7.43	78.7%
9000.7	114.8	35	4.3	0.0	7.36	78.0%
8997.4	118.1	36	4.2	0.1	7.48	79.3%
8994.1	121.4	37	4.1	0.1	7.56	80.1%
-	•					•

<<Outlet

#### LAKE SABRINA DISSOLVED OXYGEN AND WATER TEMPERATURE PROFILE

Date of Profile: 8/24/2020

Barometric

Lake Surface Elevation: 9115.53

Pressure

21.67

Outlet Pipe Elevation (ft msl): 9068 (in Hg)

	Depth of M	leasurement		Change in		
Water Surface			Water	Water	Dissolved	% O₂
Elevation			Temperature	Temperature	Oxygen	Saturation
(ft msl)	Feet	Meters	(deg C)	(deg C)*	(mg/L)	**
8990.9	124.7	38	4.1	0.0	7.50	79.5%
8987.6	128.0	39	4.1	0.0	7.32	77.6%
8984.3	131.2	40	4.1	0.0	6.89	73.0%
8981.0	134.5	41	4.1	0.0	6.88	72.9%
8977.7	137.8	42	4.1	0.0	6.81	72.2%
8974.5	141.1	43	4.1	0.0	6.75	71.5%
8971.2	144.4	44	4.1	0.0	6.69	70.9%
8967.9	147.6	45	4.1	0.0	6.65	70.5%
8964.6	150.9	46	4.1	0.0	6.61	70.0%
8961.3	154.2	47	4.1	0.0	6.48	68.7%
8958.1	157.5	48	4.2	-0.1	6.36	67.4%
8954.8	160.8	49	4.1	0.1	6.28	66.5%
8951.5	164.0	50	4.1	0.0	6.25	66.2%
8948.2	167.3	51	4.1	0.0	6.21	65.8%
8944.9	170.6	52	4.1	0.0	6.17	65.4%
8941.6	173.9	53	4.1	0.0	6.10	64.6%
8938.4	177.2	54	4.1	0.0	5.96	63.2%
8935.1	180.4	55	4.1	0.0	5.82	61.7%
8931.8	183.7	56	4.1	0.0	5.81	61.6%
8928.5	187.0	57	4.2	-0.1	5.72	60.6%
8925.2	190.3	58	4.2	0.0	5.62	59.6%
8922.0	193.6	59	4.1	0.1	5.51	58.4%
8918.7	196.8	60	4.1	0.0	5.25	55.6%
8915.4	200.1	61	4.1	0.0	5.10	54.0%
8912.1	203.4	62	4.1	0.0	4.93	52.2%
8908.8	206.7	63	4.1	0.0	4.74	50.2%
8905.6	210.0	64	4.1	0.0	4.50	47.7%
8902.3	213.3	65	4.1	0.0	3.87	41.0%
8899.0	216.5	66	4.1	0.0	3.71	39.3%
8895.7	219.8	67	4.1	0.0	2.82	29.9%
8892.4	223.1	68	4.2	-0.1	1.37	14.5%
8889.2	226.4	69	4.2	0.0	1.05	11.1%
8885.9	229.7	70	4.2	0.0	0.67	7.1%
8882.6	232.9	71	4.2	0.0	0.10	1.1%
8879.3	236.2	72	4.2	0.0	0.06	0.6%
8876.0	239.5	73	4.2	0.0	0.05	0.5%
		Maximum	16.9		9.70	127.0%
		Minimum	4.1		0.05	0.5%

<sup>\* -</sup> **Bold** values indicate thermocline (1 deg change in one meter).

<sup>\*\* -</sup> Saturation based on calculated DO saturation at reported water temperature and ambient barometric pressure.

### LAKE SABRINA DISSOLVED OXYGEN AND WATER TEMPERATURE PROFILE

Date of Profile: 9/21/2020 Barometric Lake Surface Elevation: 9111.89

Pressure

21.65

Outlet Pine Flevation (ft msl): (in Hg)

Outlet Pi	ipe Elevati	on (ft msl):	9068	(in Hg)			
	Depth of N	1easurement		Change in			
Water Surface			Water	Water	Dissolved	% O <sub>2</sub>	
Elevation			Temperature	Temperature	Oxygen	Saturation	
(ft msl)	Feet	Meters	(deg C)	(deg C)*	(mg/L)	**	
9111.89	0.0	0	14.3		7.75		
9110.2	1.6	0.5	14.3		7.75	104.4%	
9108.6	3.3	1	14.3	0.0	7.70	103.8%	
9105.3	6.6	2	14.4	-0.1	7.67	103.4%	
9102.0	9.8	3	14.3	0.1	7.66	103.2%	
9098.8	13.1	4	14.4	-0.1	7.65	103.1%	
9095.5	16.4	5	14.4	0.0	7.64	103.0%	
9092.2	19.7	6	14.3	0.1	7.62	102.7%	
9088.9	23.0	7	14.3	0.0	7.62	102.7%	
9085.6	26.2	8	14.3	0.0	7.62	102.7%	
9082.4	29.5	9	14.3	0.0	7.62	102.7%	
9079.1	32.8	10	14.2	0.1	7.68	103.5%	
9075.8	36.1	11	12.8	1.4	8.69	112.0%	
9072.5	39.4	12	11.9	0.9	9.68	134.1%	
9069.2	42.7	13	9.4	2.5	9.85	118.4%	
9066.0	45.9	14	8.2	1.2	9.97	116.9%	
9062.7	49.2	15	7.5	0.7	9.94	113.7%	
9059.4	52.5	16	7.1	0.4	9.84	112.6%	
9056.1	55.8	17	6.4	0.7	9.68	108.0%	
9052.8	59.1	18	6.1	0.3	9.63	107.5%	
9049.6	62.3	19	5.9	0.2	9.59	104.3%	
9046.3	65.6	20	5.7	0.2	9.40	102.2%	
9043.0	68.9	21	5.6	0.1	9.20	100.1%	
9039.7	72.2	22	5.5	0.1	9.09	98.9%	
9036.4	75.5	23	5.2	0.3	8.77	95.4%	
9033.2	78.7	24	5.1	0.1	8.62	93.8%	
9029.9	82.0	25	5.0	0.1	8.42	91.6%	
9026.6	85.3	26	4.9	0.1	8.28	87.7%	
9023.3	88.6	27	4.8	0.1	8.12	86.0%	
9020.0	91.9	28	4.6	0.2	7.86	83.3%	
9016.7	95.1	29	4.6	0.0	7.86	83.3%	
9013.5	98.4	30	4.6	0.0	7.77	82.3%	
9010.2	101.7	31	4.4	0.2	7.83	83.0%	
9006.9	105.0	32	4.4	0.0	7.73	81.9%	
9003.6	108.3	33	4.3	0.1	7.79	82.5%	
9000.3	111.5	34	4.3	0.0	7.89	83.6%	
8997.1	114.8	35	4.2	0.1	7.93	84.0%	
8993.8	118.1	36	4.2	0.0	7.76	82.2%	
8990.5	121.4	37	4.2	0.0	7.66	81.2%	
8987.2	124.7	38	4.1	0.1	7.66	81.2%	
8983.9	128.0	39	4.1	0.0	7.58	80.3%	

<Outlet

#### LAKE SABRINA DISSOLVED OXYGEN AND WATER TEMPERATURE PROFILE

Date of Profile: 9/21/2020 Barometric
Lake Surface Elevation: 9111.89 Pressure

21.65

Outlet Pipe Elevation (ft msl): 9068 (in Hg)

	Depth of N	leasurement		Change in		
Water Surface	•		Water	Water	Dissolved	% O <sub>2</sub>
Elevation			Temperature	Temperature	Oxygen	Saturation
(ft msl)	Feet	Meters	(deg C)	(deg C)*	(mg/L)	**
8980.7	131.2	40	4.1	0.0	7.37	78.1%
8977.4	134.5	41	4.1	0.0	7.21	76.4%
8974.1	137.8	42	4.1	0.0	7.19	76.2%
8970.8	141.1	43	4.1	0.0	7.04	74.6%
8967.5	144.4	44	4.1	0.0	6.92	73.3%
8964.3	147.6	45	4.1	0.0	6.88	72.9%
8961.0	150.9	46	4.1	0.0	6.77	71.7%
8957.7	154.2	47	4.1	0.0	6.74	71.4%
8954.4	157.5	48	4.1	0.0	6.63	70.3%
8951.1	160.8	49	4.2	-0.1	6.33	67.1%
8947.8	164.0	50	4.2	0.0	6.28	66.5%
8944.6	167.3	51	4.2	0.0	6.10	64.6%
8941.3	170.6	52	4.2	0.0	5.91	62.6%
8938.0	173.9	53	4.2	0.0	5.72	60.6%
8934.7	177.2	54	4.1	0.1	5.63	59.7%
8931.4	180.4	55	4.2	-0.1	5.35	56.7%
8928.2	183.7	56	4.2	0.0	5.27	55.8%
8924.9	187.0	57	4.2	0.0	5.20	55.1%
8921.6	190.3	58	4.2	0.0	4.83	51.2%
8918.3	193.6	59	4.2	0.0	4.40	46.6%
8915.0	196.8	60	4.2	0.0	4.19	44.4%
8911.8	200.1	61	4.2	0.0	4.04	42.8%
8908.5	203.4	62	4.2	0.0	3.67	38.9%
8905.2	206.7	63	4.2	0.0	3.48	36.9%
8901.9	210.0	64	4.2	0.0	3.45	36.6%
8898.6	213.3	65	4.2	0.0	3.15	33.4%
8895.4	216.5	66	4.2	0.0	3.15	33.4%
8892.1	219.8	67	4.2	0.0	2.36	25.0%
8888.8	223.1	68	4.2	0.0	2.13	22.6%
8885.5	226.4	69	4.2	0.0	1.78	18.9%
8882.2	229.7	70	4.2	0.0	1.58	16.7%
8879.0	232.9	71	4.2	0.0	1.41	14.9%
8875.7	236.2	72	4.2	0.0	0.80	8.5%
		Maximum	14.4		9.97	134.1%
		Minimum	4.1		0.80	8.5%

<sup>\* -</sup> **Bold** values indicate thermocline (1 deg change in one meter).

<sup>\*\* -</sup> Saturation based on calculated DO saturation at reported water temperature and ambient barometric pressure.

## LAKE SABRINA DISSOLVED OXYGEN AND WATER TEMPERATURE PROFILE

Date of Profile: 10/5/2020 Barometric
Lake Surface Elevation: 9108.97 Pressure

Outlet Pipe Elevation (ft/msl): 9068 (in Hg)

		leasurement	9000	Change in		
Water Surface	Веринон и	leasarement	Water	Water	Dissolved	% O <sub>2</sub>
Elevation			Temperature	Temperature	Oxygen	Saturation
(ft msl)	Feet	Meters	(deg C)	(deg C)*	(mg/L)	**
9108.97	0.0	0	14		7.88	
9107.3	1.6	0.5	14.0		7.88	106.2%
9105.7	3.3	1	13.8	0.2	7.85	103.5%
9102.4	6.6	2	13.7	0.1	7.86	103.6%
9099.1	9.8	3	13.7	0.0	7.86	103.6%
9095.8	13.1	4	13.7	0.0	7.86	103.6%
9092.6	16.4	5	13.6	0.1	7.85	103.5%
9089.3	19.7	6	13.6	0.0	7.85	103.5%
9086.0	23.0	7	13.6	0.0	7.85	103.5%
9082.7	26.2	8	13.6	0.0	7.84	103.3%
9079.4	29.5	9	13.6	0.0	7.84	103.3%
9076.2	32.8	10	13.4	0.2	7.92	104.4%
9072.9	36.1	11	12.3	1.1	8.64	111.3%
9069.6	39.4	12	10.0	2.3	9.87	121.4%
9066.3	42.7	13	8.4	1.6	10.03	117.6%
9063.0	45.9	14	7.6	0.8	9.94	113.7%
9059.8	49.2	15	7.0	0.6	9.80	112.1%
9056.5	52.5	16	6.7	0.3	9.72	108.5%
9053.2	55.8	17	6.4	0.3	9.62	107.3%
9049.9	59.1	18	6.0	0.4	9.69	108.1%
9046.6	62.3	19	5.7	0.3	9.55	103.9%
9043.4	65.6	20	5.5	0.2	9.31	101.3%
9040.1	68.9	21	5.3	0.2	9.07	98.6%
9036.8	72.2	22	5.2	0.1	8.65	94.1%
9033.5	75.5	23	5.1	0.1	8.44	91.8%
9030.2	78.7	24	5.0	0.1	8.35	90.8%
9026.9	82.0	25	4.9	0.1	8.18	86.7%
9023.7	85.3	26	4.8	0.1	7.95	84.2%
9020.4	88.6	27	4.6	0.2	7.70	81.6%
9017.1	91.9	28	4.6	0.0	7.61	80.6%
9013.8	95.1	29	4.4	0.2	7.68	81.4%
9010.5	98.4	30	4.4	0.0	7.79	82.5%
9007.3	101.7	31	4.3	0.1	7.87	83.4%
9004.0	105.0	32	4.3	0.0	7.90	83.7%
9000.7	108.3	33	4.3	0.0	7.66	81.2%
8997.4	111.5	34	4.2	0.1	7.74	82.0%
8994.1	114.8	35	4.1	0.1	7.68	81.4%
8990.9	118.1	36	4.1	0.0	7.73	81.9%
8987.6	121.4	37	4.1	0.0	7.63	80.9%
8984.3	124.7	38	4.1	0.0	7.50	79.5%
8981.0	128.0	39	4.1	0.0	7.43	78.7%
		· ·				

<<Outlet

21.60

#### LAKE SABRINA DISSOLVED OXYGEN AND WATER TEMPERATURE PROFILE

Date of Profile: 10/5/2020 Barometric
Lake Surface Elevation: 9108.97 Pressure

21.60

Outlet Pipe Elevation (ft/msl): 9068 (in Hg)

	Depth of Measurement			Change in		
Water Surface	-		Water	Water	Dissolved	% O <sub>2</sub>
Elevation			Temperature	Temperature	Oxygen	Saturation
(ft msl)	Feet	Meters	(deg C)	(deg C)*	(mg/L)	**
8977.7	131.2	40	4.1	0.0	7.33	77.7%
8974.5	134.5	41	4.1	0.0	7.27	77.0%
8971.2	137.8	42	4.1	0.0	7.09	75.1%
8967.9	141.1	43	4.1	0.0	6.95	73.6%
8964.6	144.4	44	4.1	0.0	6.85	72.6%
8961.3	147.6	45	4.1	0.0	6.78	71.8%
8958.1	150.9	46	4.1	0.0	6.55	69.4%
8954.8	154.2	47	4.1	0.0	6.46	68.5%
8951.5	157.5	48	4.1	0.0	6.38	67.6%
8948.2	160.8	49	4.1	0.0	6.32	67.0%
8944.9	164.0	50	4.1	0.0	6.27	66.4%
8941.6	167.3	51	4.1	0.0	6.16	65.3%
8938.4	170.6	52	4.1	0.0	6.06	64.2%
8935.1	173.9	53	4.1	0.0	5.77	61.1%
8931.8	177.2	54	4.1	0.0	5.72	60.6%
8928.5	180.4	55	4.2	-0.1	5.62	59.6%
8925.2	183.7	56	4.2	0.0	5.40	57.2%
8922.0	187.0	57	4.2	0.0	5.25	55.6%
8918.7	190.3	58	4.2	0.0	5.07	53.7%
8915.4	193.6	59	4.2	0.0	4.85	51.4%
8912.1	196.8	60	4.2	0.0	4.52	47.9%
8908.8	200.1	61	4.2	0.0	4.25	45.0%
8905.6	203.4	62	4.2	0.0	4.05	42.9%
8902.3	206.7	63	4.2	0.0	3.35	35.5%
8899.0	210.0	64	4.2	0.0	2.90	30.7%
8895.7	213.3	65	4.2	0.0	2.72	28.8%
8892.4	216.5	66	4.2	0.0	2.44	25.9%
8889.2	219.8	67	4.2	0.0	1.96	20.8%
8885.9	223.1	68	4.2	0.0	1.32	14.0%
8882.6	226.4	69	4.2	0.0	0.71	7.5%
8881.0	228.0	69.5	4.2	0.0	0.27	2.9%
Maximum			14.0		10.03	121.4%
Minimum			4.1		0.27	2.9%

<sup>\* -</sup> **Bold** values indicate thermocline (1 deg change in one meter).

<sup>\*\* -</sup> Saturation based on calculated DO saturation at reported water temperature and ambient barometric pressure.