June 15, 2015

State Water Resources Control Board
Office of Chief Counsel
Adriana Crowl, Staff Services Analyst
PO Box 100
Sacramento, CA 95812-0100

Subject: Petition for review of the Executive Order 5-01-233
Upper Sacramento, McCloud, and Lower Pit River Regional Water Management Group (USR RWMG) resolution for review of Executive Order 5-01-233

Dear Ms.Crowl:

Thank you for considering this appeal to the State Water Resources Control Board. Our appeal is focused on the review and amendment of Executive Order number 5-01-233.

1) Petitioner:
Trout Unlimited, Inc.
c/o 1345 E. Broadway
Long Beach, CA 90802
Robert Blankenship, South Coast Chapter President
562.355.2876
Bob@HREMCleanup.com

2) The inaction being appealed is the CVRWQCB refusal to appropriately review and amend the Waste Discharge Requirements (WDR's) contained in Executive Order 5-01-233 (hereafter, the EO). This petition holds that that EO may have been transferred inappropriately, requires no treatment of the industrial waste before it is discharged to a drinking water aquifer, and apparently violates the anti-degradation provisions of SWRCB Resolution 68-16. Further this petition holds that State water code section 13267 authorizes the CVRWQCB to investigate the evidence of DEHP impact in groundwater beneath the site and no action has been taken in this regard to date.

3) The date the CVRWQCB was requested to act by the petitioner was May 20, 2015. On April 24, 2015, a request for review was submitted by the Upper Sacramento, McCloud, and Lower Pit River Regional Water Management Group (USR RWMG) and is included as an attachment. This petition is submitted by Trout Unlimited, Inc., as a member in good standing of the USR RWMG. In correspondence dated May 28, 2015, the CVRWQCB detailed their response to our request and the rationale behind those responses. We respectfully disagree with those conclusions and detail our considerations herein.

4) The CVRWQCB refusal to review and update the EO is inappropriate because an unauthorized release of DEHP, or Bis (2-ethylhexyl) phthalate, has occurred at the site. DEHP is a plasticizer specific to plastic production and is not commonly available to the general public. Its presence in a well beneath the discharging facility strongly suggests the untreated waste discharge as the source. DEHP was detected at a concentration of 250 ug/l in November of 2012, and continues to be present in concentrations near the MCL in more recent analyses.

5) The petitioner is aggrieved by the absence of review and amendment of the EO after both administrative and technical violations. The untreated waste discharge provides no protection from discharge impacts to the local drinking water aquifer and is not subject to regular review as an NPDES permit would be.

6) The petitioner requests that the SWRCB take the following actions:

Review the transfer of the EO to ensure that it was an appropriate action. The EO was originally issued to Danone Waters North America (DWNA) in 2001 and was transferred to Crystal Geyser in 2013. The invoice for SWRCB fees dated April 13, 2010 notes that "… the transfer of ownership … requires a new Waste Discharge Permit". TU requests that the SWRCB determine if the transfer of this permit was appropriate, or if a new waste discharge permit should be required due to the transfer of ownership stated in the SWRCB invoice.

If the EO transfer was valid, require appropriate treatment of the waste discharge. The waste discharge authorized in the EO is spread into a leach field (a land discharge) that drains directly into a drinking water aquifer. That aquifer has been shown, by the contract monitoring of DWNA, to have been impacted with DEHP, or Bis (2-ethylhexyl) phthalate. DEHP has a drinking water MCL of 6 ppb as established by the USEPA; a concentration of 250 ppb was observed in a monitoring well beneath the site. Appropriate treatment of the waste discharge could be accomplished through an in line carbon treatment system that would not require large wastewater treatment ponds.

The CVRWQCB asserts that the discharge to the leachfield is relatively pollutant free, which is entirely true. Our concern is that the discharge must be >99.999999% pollutant free to meet the maximum contaminant level (MCL) for DEHP in drinking water. The CVRWQCB response of May 28, 2015 repeated earlier speculation on what may have been the source of that contamination but did not consider the production of plastic bottles and the untreated discharge of the rinse of those bottles. Further, we could not ascertain a direct line of reasoning from the CVRWQCB for allowing the discharge to continue entirely untreated.

If the waste discharge is treatable, reconsider the volume of waste discharge appropriate for site. The current WDR's allow for 108,000 gallons of 'bottle rinse' water and 'floor water' to be discharged daily. The original Mitigated Negative Declaration (MND) compiled by CH2M Hill in 2001 addressed only the bottle rinse water, and the WDR's for this facility note that "A very small volume of spillage and floor wash is also mixed with the bottle rinse wastewater". The current holder of the WDR's, Crystal Geyser, stated in a recent article in the *Los Angeles Times:*

> "… the plant will rinse its plastic bottles with air, not water, and use a type of plastic softener that does not break down into phthalates, which have been shown to cause health problems, the company said ".

Given that the discharger has stated publicly it will not use water to rinse its site-produced plastic bottles, and that bottle rinse water constituted the overwhelming volume of the historical waste discharge, a permit revision to allow a very small volume of the current wastewater discharge would be evidently acceptable to the discharger. A link to the article that contains the discharger's statement is presented here.

http://www.latimes.com/local/california/la-me-shasta-bottled-water-20150510-story.html#page=1

Revise the monitoring and sampling requirements contained in the Monitoring and Reporting Program (MRP) contained in the WDR's. The current MRP requires laboratory analysis of wastewater samples for metals and organics annually. Other land discharges in the area (e.g., the City of Mt. Shasta) require those analyses on a quarterly basis. Given the allowable discharge of over 3,000,000 gallons per month from the leachfield it would seem prudent to follow the City of Mt. Shasta precedent and impose a more thorough MRP equivalent to the City's.

The MRP currently requires quarterly groundwater monitoring, but the laboratory analyses required on a quarterly basis are for pH, temperature, electrical conductivity, etc. Quarterly analysis of the water samples by EPA methods 624 and 625 (volatile and semi-volatile organic compounds) is not currently required; those analyses are prudent for early detection of any discharge issues and would impose only a tiny financial burden on the discharger. Indeed, the CVRWQCB uses the logic of additional sampling to dismiss the concern of DEHP presence on page 2 of it's response; one can only infer that the CVRWQCB views this as an effective waste discharge evaluation tool.

The CVRWQCB also states that comparing the discharge of municipal sewage and bottle rinse and floor drain water is inappropriate because municipal wastewater has a far greater potential to impact groundwater quality than the water bottling facility. We would prefer the CVRWQCB utilize science as opposed to hypothetical speculation. Evidence shows that the aquifer beneath the Crystal Geyser facility has been contaminated with phthalates and that issue, in and of itself, warrants the greater protection offered by a complete suite of analyses on a quarterly interval.

Initiate site assessment work to determine the vertical and lateral extent of DEHP contamination in the area of the impacted well. After the presence of DEHP was detected in 2013, no investigative or remedial action was directed by the CVRWQCB. State water code section 13267, and precedent with other local dischargers, would dictate that, at a minimum, investigation into the extent of that release is completed. Upon completion of that investigative work a course of action for site remediation should be identified.

7) This petition holds that the untreated industrial waste discharge allowed under the EO inherently violates the anti-degradation provisions of SWRCB resolution 68-16. The primary legal reference for investigation of the unauthorized release of DEHP is State water code section 13267.

8) Copies of this petition have been sent to the Central Valley Regional Water Quality Control Board and Crystal Geyser, the current holder of the waste discharge permit.

9) The issues raised in this petition have been presented to the Central Valley Regional Water Quality Control Board and no action has been taken.

Sincerely,

Robert Blankenship, B.A.
President
South Coast Chapter – Trout Unlimited

Cc: Ms. Pamela Creedon, Executive Officer, CVRWQCB
Mr. Richard Weklych, Crystal Geyser Water Company

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. 5-01-233

WASTE DISCHARGE REQUIREMENTS
FOR
DANONE WATERS OF NORTH AMERICA
DANNON NATURAL SPRING WATER BOTTLING FACILITY
SISKIYOU COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Board) finds that:

1. Danone Waters of North America, hereafter Discharger, submitted a Report of Waste Discharge dated 16 April 2001 and two supplementary characterization/design reports dated 12 June 2001 and 3 July 2001. The Discharger requested waste discharge requirements to discharge up to 72,000 gallons per day (gpd) of bottle rinse water from an existing water bottling facility, and an additional 36,000 gpd from a proposed expansion, to a subsurface leachfield.

2. The Discharger owns and operates a water bottling facility, Dannon Natural Spring Water Bottling Facility, (Assessor's Parcel No. 037-140-010), immediately to the north of the city limits of the City of Mt. Shasta in Siskiyou County in Section 9, T40 N, R4W, MDB&M, as shown on Attachment A, a part of this Order. The water bottling facility lies within the Upper Sacramento Hydrologic Unit (No. 525), Spring Creek Hydrologic Subarea (No. 525.24), as depicted on the interagency hydrologic maps prepared by the California Department of Water Resources in August 1986. Surface water drainage is to Cold Creek, a tributary of the Sacramento River.

3. The Discharger operates an existing natural spring water bottling facility that involves groundwater extraction, water bottling, and equipment cleaning. The facility's water supply is pumped from a well approximately 2,000 feet north of the bottling facility. Water is also hauled to the bottling facility by truck from Mosbrae Springs in Dunsmuir. Water bottling operations consist of water processing, blow molding of plastic bottles, washing bottles, and filling bottles with processed water. Water processing includes proprietary micro-filtration, ozonation, and ultraviolet treatment. Approximately 12 percent of individual bottle volume of ozonated water is flushed through the bottle to wash the bottles clean of any residue left from the blow molding process. A very small volume of spillage and floor wash is also mixed with the bottle rinse wastewater. The Discharger presently operates two bottling lines that discharge an average of 20,000 gpd with peak discharges up to 36,000 gpd of bottle rinse/floor wash wastewater per bottling line. The Discharger is currently discharging the bottle rinse/floor wash wastewater to the City of Mt. Shasta (City) wastewater treatment system. The City has determined that it cannot accept long term discharge of bottle rinse/floor wash wastewater because of concerns with the collection system and treatment plant capacity. The Discharger has stated that over the next 5 years the operations could be expanded by one additional bottling line. The proposed third line is estimated to have an average discharge of 20,000 gpd with a maximum peak discharge of

36,000 gpd. The expansion would result in a total average flow of 60,000 gpd and a total maximum flow of 108,000 gpd for the three lines. The Report of Waste Discharge describes the discharge as follows:

Constituent	Bottle Rinse Water	Floor Water
Specific Conductance	95 µmhos/cm	113 µmhos/cm
Total Dissolved Solids	100 mg/l	140 mg/l
pH	7.2	6.9
COD	--	64 mg/l
Acetone	--	109 µg/l
Arsenic, Total	1.2 µg/l	--
2-Butanone	--	11 µg/l
Zinc, Total	--	29 µg/l

Analyses of the bottle rinse water and floor water for priority pollutant metals and organics indicated no other constituents were detected.

4. The proposed leachfield is located immediately to the south of the existing bottling facility as shown on Attachment B, a part of this order. The leachfield will initially consist of 1,683 lineal feet (9 lengths of 187 ft) of 4-inch diameter perforated polyethylene leachline about 16 inches below ground surface. The initial leachfield area is approximately 0.55 acres and will be designed to handle the maximum 72,000 gpd discharge. The Discharger has made provision in the leachfield design to accommodate the additional 36,000 gpd maximum discharge for a total maximum flow of 108,000 gpd. If the third bottling line were installed, the leachfield would expand to 14 lengths of leachline (2,520 lineal feet) and comprise approximately 0.83 acres. Flow to the leachfield would be by gravity and will be measured by a turbine type flow meter immediately upstream from the leachfield. From October through March, discharge to the leachfield will average 50 % below capacity. The system will have the capacity for one portion of the leachfield to be shut off for a "rest period". The flow to each system area can be changed at the splitter box located at the head of the system. Specific leach line flow can be controlled at each distribution box.

5. Soils in the leachfield area consist of compact loams over extremely cobbly moderately hard sandy loam to loamy sand. The percentage of cobbles, stones and boulders increases with depth. No restrictive layers have been encountered. Percolation rates in the area of the leachfield range from 6-14 minutes per inch. The level of groundwater in the vicinity of the leachfield is approximately 40 ft below ground surface (bgs).

6. Four piezometers (shallow groundwater monitoring wells) will be installed within the leachfield to monitor groundwater levels resulting from leachfield operations. The Discharger is proposing to install two down gradient monitoring wells, screened at a depth to monitor the quality of the groundwater resulting from leachfield operations. An existing

well located up gradient from the leachfield will be used to monitor background water quality. The locations of the monitoring wells designated MW-1, MW-2, and MW-3 are shown on Attachment B.

7. Cleaning operations are performed on the bottle filling water lines within the facility using clean-in-place (CIP) procedures. The CIP process consists of a 300-gallon tank to which a cleaning powder called "oxonia" is mixed into solution. The resulting solution is 1-percent peroxide and 1.5-percent peracetic acid. The cleaning solution is circulated separately through the water pipelines, filler unit, and storage tanks. The CIP is used approximately once per week with an estimated discharge from the cleaning operations of approximately 2,000 gallons per week. The CIP wastewater is currently discharged to the City's sanitary sewer and will continue to be discharged to the City's sanitary sewer. The City required installation of a flow meter to measure the volume discharged to the sewer system. The Discharger submitted the following analyses for the CIP wastewater:

Constituent	CIP Wastewater
Specific Conductance	115 µmhos/cm
Total Dissolved Solids	140 mg/l
pH	4.1
COD	750 mg/l
Arsenic, Total	1.3 µg/l
Benzoic Acid	62 µg/l
Methyl Chloride	4.5µg/l

8. When the pipeline from the production well to the facility was first brought online it was filled with chlorinated water to disinfect the pipeline. The concentration of residual chlorine was approximately 50 milligrams per liter (mg/L). The total quantity of water held in the pipeline is approximately 25,000 gallons. The Discharger disposed of this water to the City's sanitary sewer after adding sodium sulfite to neutralize the chlorine. The Discharger indicates that treatment of the pipeline with chlorine should not be necessary in the future. However, should this cleaning procedure be needed again the wastewater would be discharged to the City's sanitary sewer.

9. Hazardous materials stored onsite are limited to small quantities of paint, thinners, gearbox oil, synthetic condenser oil, and solid lubricants. All such materials are stored and handled within the maintenance shop within a designated storage area. The shop has no floor drains and all minor spills would be cleaned up using dry cleaning methods.

10. Domestic wastewater from the facility is currently discharged to the City's sanitary sewer and will continue to discharge to the City's collection and treatment system. Domestic wastewater will not discharge to the proposed leachfield.

11. The average annual rainfall is 36 inches; evaporation is approximately 50 inches per year.

12. The United States Environmental Protection Agency (USEPA), on 16 November 1990, promulgated storm water regulations (40 CFR Parts 122, 123, and 124) which require specific categories of industries which discharge storm water to obtain NPDES permits and to implement Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to reduce or eliminate industrial storm water pollution. The regulations provide that discharges of storm water to surface waters from construction projects and specific categories of industrial facilities are prohibited unless the discharge is in compliance with an NPDES Permit.

13. The State Water Resources Control Board (SWRCB) adopted Order No. 97-03-DWQ (General Permit No. CAS000001), on 17 April 1997, specifying waste discharge requirements for discharge of storm water associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent (NOI) by industries covered under the permit. The Discharger submitted a NOI dated 23 February 2001 and has obtained coverage under General Permit No. CAS000001, (ID# 5R47S016440). Storm water flows are collected and held in two retention basins as shown on Attachment B. The larger retention basin drains through a 5-inch pipe to the City's storm drain system, which drains into North Fork Cold Creek.

14. The SWRCB adopted Order No. 98-08-DWQ (General Permit No. CAS000002), on 19 August 1999, specifying waste discharge requirements for discharge of storm water associated with construction projects and requiring submittal of a NOI to obtain coverage under the permit for construction activity that disturbs five acres or more. The Discharger submitted a NOI dated 4 April 2000 and obtained coverage under General Permit No. CAS000002 for construction of the water bottling facility (ID# 5R47S313145). This permit is still active and the Discharger will be required to update the Storm Water Pollution Prevention Plan (SWPPP) to include best management practices (BMP) for construction of the leachfield.

15. The beneficial uses of the underlying groundwater are agricultural, domestic and industrial supply.

16. The Board adopted a Water Quality Control Plan, Fourth Edition, for the Sacramento River Basin and the San Joaquin River Basin, (hereafter Basin Plan) which designates beneficial uses, establishes water quality objectives, and describes an implementation program and policies to achieve those objectives for all waters of the Basin. The Basin Plan includes plans and policies adopted by the SWRCB and incorporated by reference, such as Resolution 68-16 Statement of Policy with respect to Maintaining High Quality Of Waters in California (Antidegradation Policy). These requirements implement the Basin Plan.

17. The discharge of bottle rinse and floor wash at this facility is consistent with the antidegradation provisions of State Water Resources Control Board Resolution No. 68-16. The project as proposed will not result in degradation of groundwater quality. The bottle rinse water/floor wash discharge contains negligible concentrations of contaminants. Further, these waste discharge requirements do not allow degradation of groundwater beneath the leachfield. Groundwater monitoring is proposed to ensure that the discharge of waste does not cause groundwater to contain waste constituents in concentrations statistically greater than background water quality.

18. On 7 September 2001 the Board, acting as lead agency, adopted a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the Discharger's existing water bottling facility, and the proposed increase from two to three bottling lines, in accordance with the California Environmental Quality Act, (Pub. Resources Code, section 21000 et seq.) (CEQA). The Board determined that the project, particularly the discharge of bottle rinse/floor wash to the leachfield, would not have a significant effect on the environment. The Board determined that the potentially significant short-term water quality impact from construction of the leachfield would be mitigated by compliance with the general construction stormwater permit (General Order 99-08-DWQ) so long as the Discharger submits an updated stormwater pollution prevention plan (SWPPP) that includes best management practices for construction of the leachfield.

19. The Basin Plan encourages reclamation and requires that each Report of Waste Discharge for land disposal operation justify why reclamation is not practiced or proposed. The bottle wash generated at the facility is surplus to any requirements for irrigation and is serving as a source of recharge to the Big Springs Creek aquifer. If in the future additional irrigation water were required the Discharger would consider the use of bottle wash for this purpose.

20. This discharge is exempt from the requirements of *Consolidated Regulations for Treatment Storage, Processing, or Disposal of Solid Waste*, as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 20005, et seq., (hereafter Title 27). The exemption, pursuant to Section 20090(b), is based on the following:

    a. The Board is issuing waste discharge requirements,

    b. The Discharge complies with the Basin Plan,

    c. The wastewater does not need to be managed according to 22 CCR, Division 4.5, Chapter 11, as a hazardous waste.

21. The Board has considered the information in the attached Information Sheet in developing the Findings of this Order. The attached Information Sheet is part of this Order.

22. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

23. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Danone Waters of North America, it's agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Discharge Prohibitions:

1. The discharge of bottle rinse water, floor wash water, CIP wastewater, pipeline disinfection water, and domestic wastewater to surface waters or surface water drainage courses is prohibited.

2. The discharge of CIP wastewater, pipeline disinfection water, and domestic wastewater to the on-site leachfield is prohibited.

3. The discharge of hazardous or toxic substances including solvents, oil, grease, or other petroleum products, is prohibited.

4. Discharge of waste classified as 'hazardous,' as defined in Section 2521(a) of Title 23, CCR, Section 2510, et seq., (hereafter Chapter 15), or 'designated,' as defined in Section 13173 of the California Water Code, is prohibited.

B. Discharge Specifications:

1. Neither the treatment nor the discharge shall cause a nuisance or condition of pollution as defined by the California Water Code, Section 13050.

2. The discharge shall not cause degradation of any water supply.

3. The discharge shall remain within the designated disposal area at all times.

4. The discharge shall remain underground at all times.

5. The daily maximum flow to the leachfield from the two existing bottling lines shall not exceed 72,000 gpd.

6. The daily maximum flow to the leachfield after expansion for a third bottling line shall not exceed 108,000 gpd.

7. The treatment facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

C. Sludge Disposal:

Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner that is consistent with Title 27 and approved by the Executive Officer.

D. Groundwater Quality Limitations:

The discharge, in combination with other sources, shall not cause groundwater underlying the wastewater disposal area to contain waste constituents statistically greater than background water quality.

E. Provisions:

1. The Discharger shall comply with Monitoring and Reporting Program No. 5-01-233, which is a part of this Order, and any revisions thereto as ordered by the Executive Officer.

2. The Discharger shall comply with all the items of the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements," dated 1 March 1991, which are a part of this Order. This attachment and its individual paragraphs are referred to as "Standard Provision(s)."

3. The Discharger shall install and survey the two monitoring wells and install the four Piezometers referenced in the consultant's report prior to the discharge of bottle rinse and floor wash to the leachfield. (Surveying of the Piezometers is not required.) The design and specifications of the monitoring wells and Piezometers shall be submitted to the Regional Board for review prior to installation.

4. The Discharger shall submit plans and specifications to both the Board and the California Department of Fish and Game for the installation of a stream gauge in Big Springs Creek by **15 October 2001**. The installation of the stream gauge shall be completed upon obtaining the necessary permits from any Local, State, or Federal Governmental Agency.

5. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer.

Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.

6. The Discharger shall report promptly to the Board any material change or proposed change in the character, location, or volume of the discharge.

7. In the event of any change in control or ownership of land or waste discharge facilities described herein, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.

   To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Board, and a statement. The statement shall comply with the signatory paragraph of Standard Provision B.3 and state that the proposed owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code. Transfer shall be approved or disapproved by the Executive Officer.

8. A copy of this Order and its attachments shall be maintained at the bottling facility for reference by key operating personnel. Key operating personnel shall be familiar with its contents.

9. The Board will review this Order periodically and will revise requirements when necessary.

I, GARY M. CARLTON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 7 September 2001.

GARY M. CARLTON, Executive Officer

JFR:DCW

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 5-01-233
FOR
DANONE WATERS OF NORTH AMERICA
DANNON NATURAL SPRING WATER BOTTLING FACILITY
SISKIYOU COUNTY

EFFLUENT MONITORING

The discharge of bottle rinse/floor wash wastewater to the leachfield shall be monitored as follows:

Parameter	Units	Type of Sample	Sampling Freguency
Flow	gallons per day	Flow meter	Daily
Specific Conductance	µmhos/cm	Grab	Weekly[1]
Total Dissolved Solids	mg/l	Grab	Weekly[1]
pH	units	Grab	Weekly[1]
Chemical Oxygen Demand (COD)	mg/l	Grab	Weekly[1]
Total Coliform Organisms	MPN/100 ml	Grab	Weekly[1]
Priority Pollutants-Metals	µg/l	Grab	Annually
Priority Pollutants-Organics	µg/l	Grab	Annually

[1] The sampling frequency may be reduced to monthly after one year of sampling upon approval of the Executive Officer.

GROUND WATER MONITORING

Piezometers

Each of the Piezometers within the leachfield shall be monitored for depth to groundwater from the surface as follows:

Parameter	Units	Type of measurement	Measurement Frequency
Depth beneath surface	feet	Visual	Weekly

Monitoring Wells (MW-1, MW-2, MW-3)

Prior to sampling or purging, equilibrated groundwater elevations shall be measured to the nearest 0.01 foot. The wells shall be purged at least three well volumes until pH and electrical conductivity have stabilized. Sample collection shall follow standard analytical method protocols. Groundwater monitoring shall include, at a minimum, the following:

Parameter	Units	Type of Sample	Sampling Frequency
Groundwater Elevation	feet	Measurement	Quarterly
Specific Conductance	µmhos/cm	Grab	Quarterly
Total Dissolved Solids	mg/l	Grab	Quarterly
pH	units	Grab	Quarterly
Chemical Oxygen Demand (COD)	mg/l	Grab	Quarterly
Total Coliform Organisms	MPN/100 ml	Grab	Quarterly
Priority Pollutants-Metals	µg/l	Grab	Annually
Priority Pollutants-Organics	µg/l	Grab	Annually

LEACHFIELD MONITORING

The leachfield shall be visually monitored on a weekly basis. Leachfield monitoring will consist of visual inspection of the leachfield and nearby area for the presence of wet areas or groundwater seepage. Leachfield monitoring results shall be included with all monthly monitoring reports.

STREAM GAUGE MONITORING

The Discharger shall install a stream gauge on Big Springs Creek and report gauge readings at least weekly. The stream data shall be submitted with the monthly monitoring report.

REPORTING

Monitoring results shall be submitted to the Regional Board by the **1st day of the second month** following sample collection, (i.e., the January Report is due by 1 March). Quarterly and annual monitoring results shall be submitted by the **1st day of the second month** following each calendar quarter and year, respectively.

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner to illustrate clearly whether the discharge complies with waste discharge requirements

If the Discharger monitors any pollutant at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the calculation and reporting of the values required in the discharge monitoring report form. Such increased frequency shall be indicated on the discharge monitoring report form.

The Discharger may also be requested to submit an annual report to the Board with both tabular and graphical summaries of the monitoring data obtained during the previous year. Any such request shall be made in writing. The report shall discuss the compliance record. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.

The Discharger shall have available for Board inspection data that includes the monthly volume pumped from DEX-6 and the monthly volume delivered to the bottling facility from Mossbrae Springs.

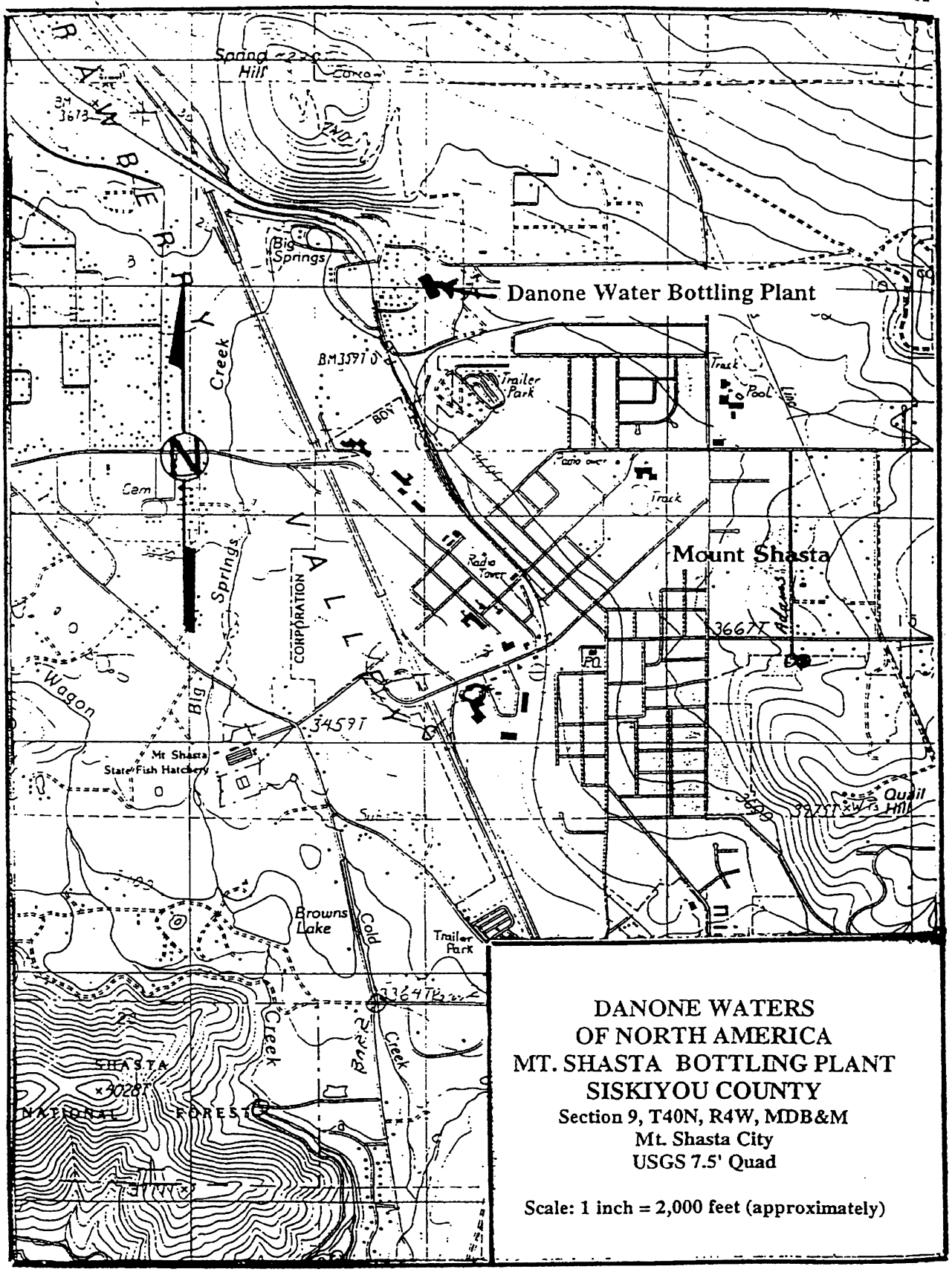
All reports submitted in response to this Order shall comply with the signatory requirements of Standard Provisions D.6.

Ordered by: _____
GARY M. CARLTON, Executive Officer

7 September 2001
(Date)

JFR:DCW

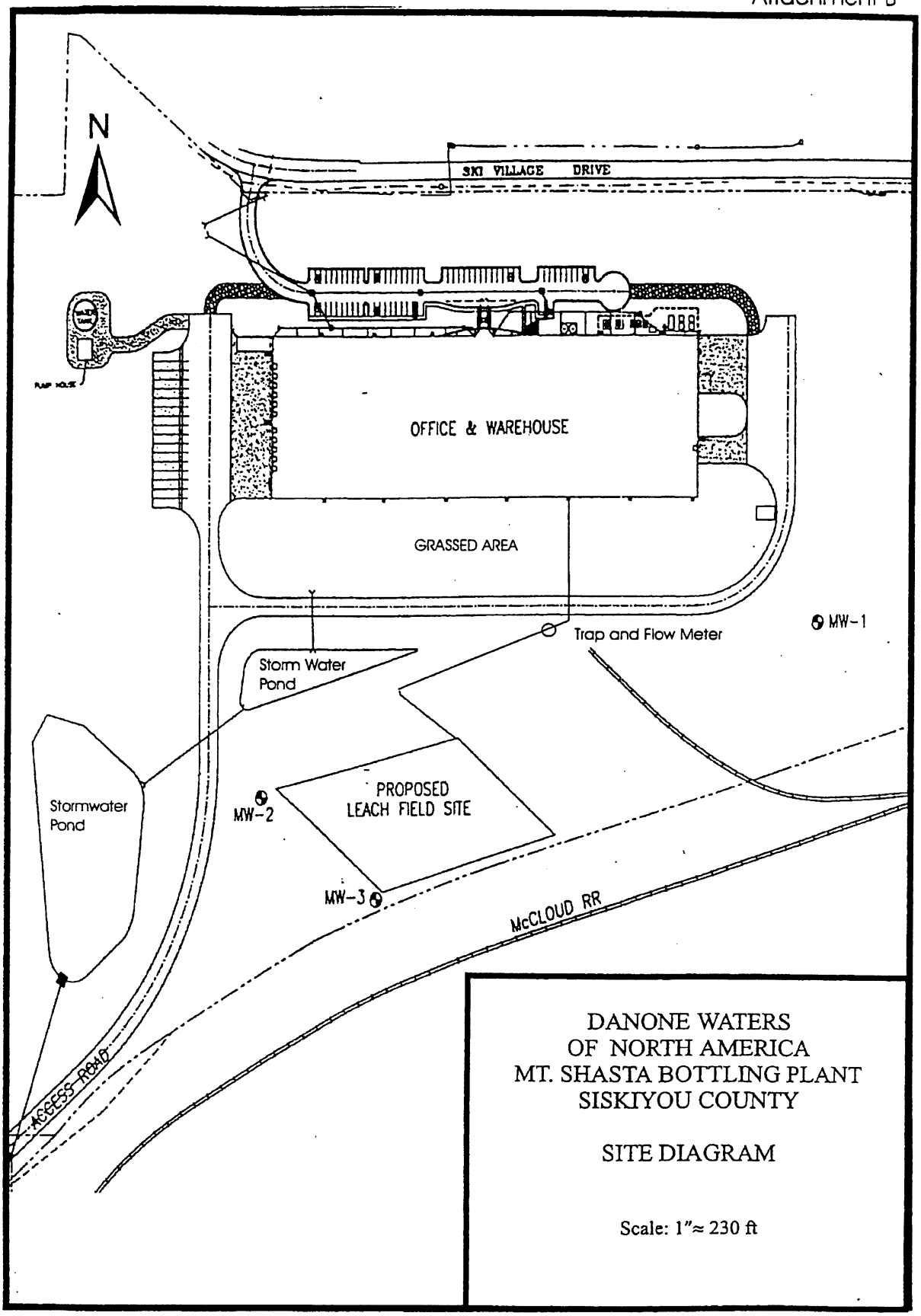
ATTACHMENT A



DANONE WATERS OF NORTH AMERICA
MT. SHASTA BOTTLING PLANT
SISKIYOU COUNTY
Section 9, T40N, R4W, MDB&M
Mt. Shasta City
USGS 7.5' Quad

Scale: 1 inch = 2,000 feet (approximately)

Attachment B



DANONE WATERS
OF NORTH AMERICA
MT. SHASTA BOTTLING PLANT
SISKIYOU COUNTY

SITE DIAGRAM

Scale: 1"≈ 230 ft

INFORMATION SHEET

ORDER NO. 5-01-233
DANONE WATERS OF NORTH AMERICA
DANNON NATURAL SPRING WATER BOTTLING FACILITY
SISKIYOU COUNTY

GENERAL INFORMATION

Danone Waters of North America owns and operates the Dannon Natural Spring Water Bottling Facility, (Assessors Parcel No. 037-140-010), immediately to the north of the City of Mt. Shasta (City) in Siskiyou County in Section 9, T40 N, R4W, MDB&M. The Discharger has requested waste discharge requirements to discharge up to 72,000 gallons per day (gpd) of bottle rinse water from an existing water bottling facility, and an additional 36,000 gpd from a proposed expansion, to a proposed subsurface leachfield. Discharges of bottle rinse water to the proposed leach field require issuance of Waste Discharge Requirements (WDRs) from the Board and compliance with the California Environmental Quality Act (CEQA). Since no previous CEQA document was completed for the facility, the Board is acting as the Lead Agency under CEQA.

Site Description

The Dannon site encompasses approximately 250 acres and is located in Siskiyou County, at an approximate elevation of 3,660 feet above mean sea level. The site comprises 20 parcels, four of which have been partially developed as part of the bottling facility construction. The actual water bottling site encompasses approximately 18 acres located on the south side of Ski Village Drive where approximately 10 acres are occupied by the actual facility, roads and driveways, and parking areas. P&M Cedar Products formerly owned the facility site and operated a lumber mill from approximately 1958 to 1990. Much of the existing site was used for mill operations including paved areas, roads, and cleared areas.

Existing Facility and Current Operations

The existing water bottling operation consists of a natural spring water bottling facility and associated support facilities (parking lots, water tanks, etc.). The water bottling facility's source of spring water is a single production well, located on the northern portion of the Dischargers property that draws water from the Big Springs aquifer. Depth to water within the Big Springs aquifer ranges from 46 to 240 feet below ground surface (bgs). The water bottling facility also bottles water originating from Mossbrae Spring in Dunsmuir. Water from Mossbrae Spring is trucked to the bottling facility for bottling using 6,200-gallon potable water truck trailers dedicated to hauling spring water. The Discharger receives approximately 24 truck deliveries per week from the Mossbrae location, totaling approximately 148,800 gallons of water per week.

The Discharger presently operates two bottling lines and current water bottling production at the facility requires a groundwater pumping rate of approximately 60 gallons per minute (gpm) per bottling line, with a periodic maximum rate of 150 gpm per bottling line during the spring and summer months. Groundwater withdrawals of up to 150 gpm are episodic in nature and

individually occur for no more than a constant 8-hour period. Because the bottling lines do not operate on a continuous basis, the average annual pumping rate is slightly less than 120 gpm over the entire year for the existing facility (two bottling lines). The projected annual average draw per bottling line is approximately 20.5 million gallons (62.9 acre-feet) for the current facility. The Discharger has stated that over the next 5 years the operations could be expanded by one additional bottling line. If the additional bottling line were added the average pumping rate would be about 180 gpm with a maximum rate of 450 gpm.

WASTEWATER SOURCES AND CHARACTERISTICS

Water Bottling

Water bottling operations consist of water processing, blow molding of plastic bottles, washing bottles, and filling bottles with processed water. Water processing includes proprietary micro-filtration, ozonation, and ultraviolet treatment. Approximately 12 percent of individual bottle volume of ozonated water is flushed through the bottle to wash the bottles clean of any residue left from the blow molding process. A very small volume of spillage and floor wash is also mixed with the bottle rinse wastewater. The Report of Waste Discharge describes the discharge as follows:

Constituent	Production Well	Bottle Rinse Water	Floor Water
Specific Conductance	93 µmhos/cm	95 µmhos/cm	113 µmhos/cm
Total Dissolved Solids	130 mg/l	100 mg/l	140 mg/l
PH	7.2	7.2	6.9
COD	--	--	64 mg/l
Acetone	--	--	109 µg/l
Arsenic, Total	1.2 µg/l	1.2 µg/l	--
2-Butanone	--	--	11 µg/l
Zinc, Total	--	--	29 µg/l

Analyses of the production well water, bottle rinse water and floor water for priority pollutant metals and organics indicated no other constituents were detected.

Equipment Cleaning

Cleaning operations are performed on the bottle filling water lines within the facility using clean-in-place (CIP) procedures. The CIP procedure consists of a 300-gallon tank to which the cleaning chemicals are added. The CIP process involves introducing a cleaning solution called "oxonia" into the system. Oxonia is a powder that is mixed into solution so that resultant concentrations are 1-percent peroxide and 1.5-percent peracetic acid. The cleaning solution is circulated separately through the water pipelines, filler unit, and storage tanks. The CIP method is used approximately once per week as a precautionary measure against contamination.

Estimated discharge from the cleaning operations is approximately 2,000 gallons per week of CIP acid wash water. The Discharger submitted the following analyses for the CIP wastewater:

Constituent	CIP Wastewater
Specific Conductance	115 µmhos/cm
Total Dissolved Solids	140 mg/l
PH	4.1
COD	750 mg/l
Arsenic, Total	1.3 µg/l
Benzoic Acid	62 µg/l
Methyl Chloride	4.5µg/l

When the pipeline from the production well to the facility was first brought online it was filled with chlorinated water to disinfect the pipeline. The concentration of residual chlorine was approximately 50 milligrams per liter (mg/L). The total quantity of water held in the pipeline is approximately 25,000 gallons. The Discharger disposed of this water to the City's sanitary sewer after adding sodium sulfite to neutralize the chlorine. The Discharger indicates that treatment of the pipeline with chlorine should not be necessary in the future. However, should this cleaning procedure be needed again the same disposal method is proposed.

Domestic Wastewater and Other Potential Sources

Approximately 600 gpd of domestic wastewater from the facility is currently discharged to the City's sanitary sewer. Hazardous materials stored onsite are limited to small quantities of paint, thinners, gearbox oil, synthetic condenser oil, and solid lubricants. All such materials are stored and handled within the maintenance shop within a designated storage area. The shop has no floor drains and all minor spills would be cleaned up using dry cleaning methods.

WASTEWATER DISPOSAL

The Discharger is currently discharging the bottle rinse/floor wash wastewater, equipment cleaning wastewater, and domestic wastewater to the City's sanitary sewer system. The City has determined that it cannot accept long term discharge of the high volume bottle rinse/floor wash wastewater because of concerns with the collection system and treatment plant capacity. The Discharger is proposing to discharge the bottle rinse/ floor wash wastewater to proposed on-site leachfield. The domestic wastewater and CIP acid wash wastewater will continue to be discharged to the City's sanitary sewer.

Bottle Rinse/Floor Wash Water

With the current operation of two bottling lines, and the proposed third bottling line, the volume of bottle rinse/floor wash water used to design the proposed leachfield is shown in the following table:

Dannon Monthly Leach Field Flows-Bottling Rinse and Floor Wash Flow

Month	Days/Week	Hours/Day	Hours/Week	Hours/Month	Gallons/Month (2 Lines) + Spills	Gallons/Month (3 Lines) + Spills
Jan	5	16	80	320	960,000	1,440,000
Feb	5	16	80	320	960,000	1,440,000
Mar	5	16	80	320	960,000	1,440,000
Apr	5	24	120	480	1,440,000	2,160,000
May	6	24	144	576	1,728,000	2,592,000
Jun	7	24	168	672	2,016,000	3,024,000
Jul	7	24	168	672	2,016,000	3,024,000
Aug	6	24	144	576	1,728,000	2,592,000
Sep	5	24	120	480	1,440,000	2,160,000
Oct	5	16	80	320	960,000	1,440,000
Nov	5	16	80	320	960,000	1,440,000
Dec	5	16	80	320	960,000	1,440,000
Total				5,376	16,128,000	24,192,000

Leachfield

The proposed leachfield is located immediately to the south of the existing bottling facility as shown on Attachment B. The leachfield will initially consist of 1,683 lineal feet (9 lengths of 187 ft) of 4-inch diameter perforated polyethylene leachline about 16 inches below ground surface. The initial leachfield area is approximately 0.55 acres and will be designed to handle a maximum 72,000 gpd discharge. The Discharger has made provision in the leachfield design to accommodate the additional 36,000 gpd maximum discharge for a total maximum design flow of 108,000 gpd. If the third bottling line were installed, the leachfield would expand to 14 lengths of leachline (2,520 lineal feet) and comprise approximately 0.83 acres. Flow to the leachfield would be by gravity and will be measured by a turbine type flow meter immediately upstream from the leachfield. From October through March, discharge to the leachfield will average 50 % below capacity. The system will have the capacity for one portion of the leachfield to be shut off

for a "rest period". The flow to each system area can be changed at the splitter box located at the head of the system. Specific leach line flow can be controlled at each distribution box.

Soils in the leachfield area consist of compact loams over extremely cobbly moderately hard sandy loam to loamy sand. The percentage of cobbles, stones and boulders increases with depth. No restrictive layers have been encountered. Percolation rates in the area of the leachfield range from 6-14 minutes per inch. The level of groundwater in the vicinity of the leachfield is approximately 40 ft bgs.

DISCHARGE PROHIBITIONS AND SPECIFICATIONS

The waste discharge requirements prohibit the discharge of bottle rinse water, floor wash water, CIP wastewater, and domestic wastewater to surface waters or surface water drainage courses. The discharge of hazardous or toxic substances including solvents, oil, grease, or other petroleum products, is prohibited. Discharges to the leachfield other than bottle rinse water and floor wash water are prohibited. The requirements limit the daily maximum flow to the leachfield from the two existing bottling lines to 72,000 gpd and limit the daily maximum flow to the leachfield after expansion for a third bottling line to 108,000 gpd.

ANTIDEGRADATION AND CEQA CONSIDERATIONS

The discharge of bottle rinse and floor wash at this facility is consistent with the antidegradation provisions of State Water Resources Control Board Resolution No. 68-16. The project as proposed will not result in degradation of ground water quality. The bottle rinse water/floor wash discharge contains negligible concentrations of contaminants. Further, these waste discharge requirements do not allow degradation of groundwater beneath the leachfield. Groundwater monitoring is proposed to ensure that the discharge of waste does not cause groundwater to contain waste constituents in concentrations statistically greater than background water quality.

The Board, acting as lead agency, adopted a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the Dischargers existing water bottling facility, and the proposed increase from two to three bottling lines, in accordance with the California Environmental Quality Act, Pub. Resources Code section 21000, et seq.). The Board determined that the project, in particular the discharge of bottle rinse/floor wash to the leachfield, would not have a significant effect on the environment. The Board determined there would be a potential short-term construction impact for the leachfield. The Board determined that the Discharger has submitted a NOI to comply with General Order 99-08-DWQ, and updating the SWPPP to include BMP for construction of the leachfield would reduce construction impacts too less than a significant level.

MONITORING PROGRAM

Effluent

The requirements include monitoring for daily flow to the leachfield and monitoring for constituents identified in the Report of Waste Discharge for the effluent. The required weekly frequency for specific conductance, total dissolved solids, pH, COD, and total coliform organisms may be reduced to monthly upon approval of the Executive Officer after one year of monitoring data is submitted. Annual monitoring for priority pollutant metals and organics is required.

Groundwater

Four piezometers (shallow groundwater monitoring wells) will be installed within the leachfield to monitor groundwater levels resulting from leachfield operations. The Discharger is proposing to install two down gradient monitoring wells, screened at a depth to monitor the quality of the groundwater resulting from leachfield operations. An existing well located up gradient from the leachfield will be used to monitor background water quality. The locations of the monitoring wells designated MW-1, MW-2, and MW-3 are shown on Attachment B. The requirements prescribe quarterly monitoring for groundwater elevation and the constituents identified in the effluent monitoring program.

STORMWATER CONSIDERATIONS

Stormwater flows are collected and held in two retention basins capable of withstanding a 100-year, 30-minute rainfall event. The retention basins hold water flowing across the impervious portion of the site to contain flows onsite. The basin then drains via a 5-inch pipe, located at the southernmost end of the basin, along a ditch and discharge into the City drainage system, eventually discharging into North Fork Cold Creek. Minimal quantities of fuel, oil, and lubricants associated with truck and passenger vehicle use that could be mobilized by storm flows are contained by a central sand trap prior to water entering the detention basin. The Discharger submitted a NOI dated 23 February 2001 and has obtained coverage under General Industrial Storm Water Permit No. CAS000001. The General Permit requires development and implementation of a SWPPP and a monitoring program to sample stormwater locations. Monitoring would be required of the discharge of storm water from the 5-inch pipe and would include at a minimum total suspended solids, pH, specific conductance, and oil and grease.

Linda S. Adams
Secretary for Environmental Protection

State Water Resources Control Board

Division of Administrative Services
1001 I Street * Sacramento, California 95814 * (916) 341-5247
Mailing Address: P.O. Box 1888 * Sacramento, California 95812-1888

Arnold Schwarzenegger
Governor

April 13, 2010

CCDA WATERS LLC
210 SKI VILLAGE DR
JAMES L PETERSON
MT SHASTA, CA 96067

NOTICE OF VIOLATION
FOR FACILITY ID: 5A472001001

This is a **NOTICE OF VIOLATION** for failure to pay the required annual fee issued for CCDA WATERS LLC facility, located at 210 SKI VILLAGE DR MOUNT SHASTA, CA. Failure to pay the required fee is a violation under California law (Water Code Section 13261) and could result in criminal prosecution as well as a civil liability assessment of up to $1000 per day for each day that fees go unpaid and/or rescission of your permit. Failure to comply will make you potentially liable for the full amount of a civil liability assessment from the date of the first invoice in addition to the original invoice amount. **The Regional Board that has jurisdiction over your facility has been notified and may issue an Administrative Civil Liability complaint pursuant to Water Code Section 13261.**

If you have questions about why you are being regulated or other questions related to the above mentioned permit, please call the Regional Board or Fee Unit at the phone number on the attached invoice.

Sincerely,

David Ceccarelli

David Ceccarelli
Fee Branch Manager

State Water Resources Control Board

Division of Administrative Services
1001 I Street * Sacramento, California 95814 * (916) 341-5247
Mailing Address: P.O. Box 1888 * Sacramento, California 95812-1888

Date: 4/13/2010
Facility ID: 5A472001001
Facility Name: CCDA WATERS LLC
210 SKI VILLAGE DR
MOUNT SHASTA, CA 96067

Fiscal Year: 2009/10
Invoice Number: WD-0012271
Billing Period: 07/01/09 - 06/30/10
Invoice Date: 12/9/2009
Amount Past Due: $ 1,226.00
Region: 5R
Index Number: 062496

CCDA WATERS LLC
JAMES L PETERSON
210 SKI VILLAGE DR
MT SHASTA, CA 96067

For details please refer to the original invoice

NOTICE OF VIOLATION
OF WASTE DISCHARGE REQUIREMENTS

THIS IS A FORMAL NOTICE OF VIOLATION on the above delinquent invoice. Our accounting office records indicate that you have failed to pay the required annual fee. Failure to pay the required fee is considered a misdemeanor under California law (Water Code Section 13261) and could result in a civil liability assessment of up to $1000 per day for each day that fees go unpaid. The Regional Board has been notified of your delinquent account and may issue a complaint that may result in administrative civil liability.

Please note that a transfer of ownership or relocation of a facility requires a new Waste Discharge Permit. If you are no longer discharging, please submit a letter to the regional board requesting termination of your permit.

If you have any questions about this invoice, please call your
Regional Water Quality Control Board at 530-224-4859.

For payment status of your invoice, please go to the "Stormwater and Wastewater Permit Fee Information" link at
http://water101.waterboards.ca.gov/dwqdas/feeunit/search/DischargerInvoiceInfo.asp

Retain this portion for your records

Please detach and return this portion with your payment

Region: 5R **Fiscal Year:** 2009/10

Invoice Number: WD-0012271

Index Number: 062496

(Please print the above number on check or money order)

RM #: 148456

CCDA WATERS LLC
JAMES L PETERSON
210 SKI VILLAGE DR
MT SHASTA, CA 96067

SWRCB
PO BOX 1888
SACRAMENTO, CA 95812-1888

Amount Due: $ 1,226.00
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Facility ID: 5A472001001
Facility Name: CCDA WATERS LLC
210 SKI VILLAGE DR
MOUNT SHASTA, CA 96067

Left phone message
4-27-10
KHI call 4-28-10
mailed CK 4-20-10
CK# 1193024 CH:

April 30, 2013 123-97477

Ann Macdonald
Coca-Cola Refreshments
1551 Atlantic Street
Union City, CA 94587

RE: FOURTH QUARTER 2012 GROUNDWATER MONITORING REPORT
THE COCA-COLA COMPANY BOTTLING FACILITY
210 SKI VILLAGE DRIVE
MT SHASTA, CALIFORNIA 96067

Ms. Macdonald:

Golder Associates Inc. (Golder) is pleased to present this letter report documenting the results of the fourth quarter 2012 quarterly monitoring event conducted at The Coca-Cola Company (TCCC) Bottling Facility located in Mount Shasta, California.

During operation the spring water bottling facility operated under Waste Discharge Requirements (WDR) No. 5-01-233. The spring water bottling facility ceased operations in late 2010 and groundwater monitoring stopped at that time. TCCC conducted post production monitoring at the site beginning in the fourth quarter 2012.

1.0 FOURTH QUARTER 2012 SITE VISIT

Golder representatives (Amy Ha and Robert McCarthy) visited the site on November 13 and 14, 2012. Mr. Frank Christina of TCCC provided access to the various monitoring points including: DEX-1, DEX-3A, the Production Well, Lower Well (MW-1), MW-2, MW-3, two stilling wells (Stream Well, Irrigation Ditch), and the leachfield piezometers (P-1 to P-4). The approximate location of each monitoring point is shown on Figure 1. The site visit activities included downloading data from the electronic dataloggers that record water levels and temperature and collecting groundwater samples. The site activities are detailed in following sections.

1.1 Electronic Dataloggers Data Collection

Electronic dataloggers are installed at monitoring locations DEX1, DEX-3A, the Production Well, Lower Well (MW-1), MW-2, MW-3, and the two stilling wells (Stream Well, Irrigation Ditch). Water levels and water temperatures are recorded at each monitoring point using a combination of Troll 4000™, MiniTroll™, Level Troll™, and Leveloggers™ electronic dataloggers manufactured by In-Situ™ and Solinst. Data is downloaded from the dataloggers memory onto a laptop computer using Win-Situ™ software provided by In-Situ and computer software provided by Solinst. The data is imported into Microsoft Excel® for tabulation and analysis.

The computer cables could not be located to download the data from DEX-1 and DEX-3A. New computer cables could not be obtained from In-Situ because these electronic dataloggers are legacy units and are no longer supported by the company. Data from these monitoring points is not included in this report.

The cumulative temperature and water level data for monitoring points DEX-1, DEX-3A, Irrigation Ditch, Stream Well, Production Well, Lower Well, MW-2 and MW-3 are plotted on graphs in Figures 2 through 11. Table 1 presents a summary of the data collected from each of the monitoring points including the data collection period and observed trends in water levels and groundwater temperatures. The

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transducers were removed from the Lower Well (MW-1), MW-2, and MW-3 quarterly for groundwater sampling. Table 2 lists the dates these wells were sampled. The volume of data from the monitoring points exceeds 100 printed pages. In order to be sustainable and reduce printing and shipping costs, the data has been downloaded onto a compact disc, which is included with the report.

1.2 Leachfield Piezometer Inspection

The leachfield piezometers (P-1 through P-4) were visually inspected for wet areas and groundwater seepage. Golder personnel attempted to record the depth to water using an electric sounder within the leachfield piezometers; however, all of the leachfield piezometers were dry.

1.3 Groundwater Sampling

Groundwater samples were collected from MW-2 and MW-3 during the fourth quarter 2012 monitoring event. A sample could not be collected from the Lower Well (MW-1) because there was not enough water for a laboratory analysis within the well to collect a sample. The sampling procedures are described in detail below.

Prior to purging and sampling the wells, the static water level was measured in the groundwater monitoring wells. The depth-to-water and total depth measurements were collected using an electric sounder with cable markings stamped at a 0.01 foot increments. By using the depth-to-water measurement and the total well depth, the volume of water present in each well casing was calculated. Three casing volumes were purged from each well prior to collecting the groundwater sample. Field measurements for pH, specific conductance, dissolved oxygen (DO), temperature, and turbidity were recorded during purging on field data sheets. Copies of the field data sheets are located in Attachment A.

Down hole dedicated pumps are permanently installed in each well, but a dedicated pump was only used to attempt to purge MW-1 during this event. The sampling systems used to purge the wells during the fourth quarter 2012 sampling event are summarized below:

- **MW-1:** A bailer, 2-inch Grundfos™ pump, and the MW-1 dedicated pump were used to attempt to purge MW-1. There was only approximately one foot of water within the well and the well did not recharge sufficiently to compete the purge. Consequently, a groundwater sample was not collected from this location.
- **MW-2:** The MW-2 dedicated pump was functional; however, MW-2 was purged using a 2-inch Grundfos™ pump and disposable tubing. Three casing volumes were purged from the well and a groundwater sample was collected.
- **MW-3:** The MW-3 dedicated pump did not function properly and was removed along with the tubing; therefore, a 2-inch Grundfos™ pump was used to purge the well. After two casing volumes were purged, the well did not recharge sufficiently within the well to purge the final casing volume. The well was allowed to recharge for approximately 1-hour and a groundwater sample was collected using a disposable bailer.

Groundwater samples from MW-2, MW-3, and a duplicate from MW-2 were transferred into sample containers provided by the laboratory. The sample containers were filled and capped. All sample containers were labeled immediately following sample collection. Water samples were kept cool with ice in insulated coolers until delivery to the laboratory.

Each sample was logged on a chain-of-custody record, which accompanied the samples through collection and delivery to the analytical laboratory. The samples were delivered to Basic Laboratory located in Redding, California. Basic Laboratory analyzed the groundwater samples for Total Coliform, COD, TDS, Specific Conductance, pH and priority pollutants. Copies of the analytical results are located in Attachment B.

The 4Q2012 results were detected below the drinking water limits set by the United States Environmental Protection Agency (EPA) maximum contaminant levels (MCLs) and the secondary drinking water

standards, with the exception of Bis(2-ethylhexyl)phthalate (DEPH). There was a detection of DEPH in MW-3 during the fourth quarter 2012 sampling event. DEPH is a plasticizer that is commonly found in polyvinyl chloride (PVC). The dedicated pump and PVC tubing was removed from MW-3 because the pump was not functioning. The detection of DEPH may be attributed to the disturbance of the PVC tubing within the well casing. The analytical results and associated MCLs or secondary drinking water standards are summarized in Table 3.

2.0 PROPOSED ACTIVITIES FOR THE FIRST QUARTER 2013

- TCCC will repair the dedicated pump in MW-3 for future sampling events;
- Golder and TCCC will continue to trouble shoot a solution to obtain data from DEX-1 and DEX-3A;
- Golder will conduct the First Quarter 2013 data download in March 2013. Golder will contact Frank Christina to schedule our site visit;
- Golder will import the groundwater data (water levels and temperatures) collected during each quarterly visit into a Microsoft Excel® spreadsheet and produce graphs for each monitoring point showing fluctuations in water levels and temperature;
- Golder will submit a draft quarterly report to TCCC at a minimum of 10 days prior to the report deadline. Golder will incorporate any proposed revisions to the draft and will submit a final version to TCCC for submission to the Regional Water Quality Control Board on May 1, 2013; and,

Golder Associates appreciates the opportunity provide environmental services to The Coca-Cola Company on this project. Please contact us if you have any questions or require additional information (916) 786-2424.

GOLDER ASSOCIATES INC.

Amy Ha, P.E.
Senior Project Engineer

Stephen T. Loftholm, P.G.
Senior Consultant/Associate

Attachments: Table 1 - Summary of Cumulative Data from CCDA Monitoring Points
Table 2 - CCDA Quarterly Groundwater Sampling Events
Table 3 - Fourth Quarter 2012 Groundwater Sampling Results

Figure 1 - Well Location Map
Figure 2 - Well DEX-1 Water Level and Temperature Data
Figure 3 - Well DEX-3A Water Level and Temperature Data
Figure 4 - Stream Well Water Level and Temperature Data
Figure 5 - Irrigation Ditch Water Level and Temperature Data (2002-2007)
Figure 6 - Irrigation Ditch Water Level and Temperature Data (2008-Present)
Figure 7 - Production Well Water Level and Temperature Data
Figure 8 - Lower Well Water Level and Temperature Data (2002-2003)
Figure 9 - Lower Well Water Level and Temperature Data (2006-Present)
Figure 10 - MW-2 Water Level and Temperature Data
Figure 11 - MW-3 Water Level and Temperature Data

Attachment A – Field Data Sheets
Attachment B – Analytical Laboratory Results

Compact Disk with Cumulative Monitoring Data

TABLE 1. Summary of Cumulative Data from CCDA Monitoring Points

Well	Data Collection Period	Water Level Trends	Water Temperature Trends	Comments
DEX-1 (Figure 2)	August 1998 to December 2008,November 2012	Water levels have continued to increase (with seasonal fluctuation) approximately 1.4 feet since the lowest water level was measured in March 2000. The highest water levels typically occur in September and October and the lowest in January through March. Water levels declined between December 2005 and July 2006 but have since rebounded to match the historical high water level measured in 2005. The magnitude of the seasonal water level fluctuations vary and range from approximately 0.2 feet to over 1.20 feet.	Water temperatures were stable from September 1998 through February 2000 and then increased approximately 0.2°C. Water temperatures remained stable (with some seasonal fluctuations) from approximately April 2000 through January 2003. Water temperatures have since increased in a step-wise manner with temperatures increasing from 0.1°C to 0.3°C annually.	Data could not be downloaded from this transducer because the computer data cable was lost after the plant shut down and computer cables are no longer manufactured for this model of datalogger.
DEX-3A (Figure 3)	August 1998 to present	Water levels generally declined from approximately August 1998 (date data was first collected) through April 2001. Water levels rebounded beginning in April 2001 and generally increased through October 2003. The highest recorded water levels measured in DEX-3A occurred in October 2003. Water levels have fluctuated seasonally November 2003 through October 2005. Water levels declined approximately 4.0 feet beginning in approximately October 2005 and extending through March 2007. Water levels have since increased approximately 2.0 feet and Stabilized in October 2007. The plot shows a 1-foot increase in water level on December 11, 2007 because the transducer was removed from the well and reinstalled at a slightly different elevation to change the battery. Since December 2007, water levels increased approximately 2.5 feet.	Water temperature has increased approximately 0.07°C from September 1998. Between April and June 2006, temperatures spiked approximately 0.48°C to their highest recorded temperatures. The reason for this anomalous spike has not been determined. Water temperatures decreased rapidly after June 2006 and have stabilized at approximately 0.5°C above the pre-peak levels. The temperature curve shows a large spike on December 11, 2008 when the transducer was removed from the well to change the battery.	Data could not be downloaded from this transducer because the computer data cable was lost after the plant shut down and computer cables are no longer manufactured for this model of datalogger.

TABLE 1. Summary of Cumulative Data from CCDA Monitoring Points

Well	Data Collection Period	Water Level Trends	Water Temperature Trends	Comments
Stream Well (Figure 4)	May 2002 to May 2003, and October 2003 to present.	The water level data collected from a stilling well, installed (Stream Well) downstream from the spring, shows a general consistent water level of 1.25 feet with seasonal variations of approximately 0.2 feet.	Temperature fluctuations of approximately 3.0°C are apparent between the summer and winter months. Accounting for seasonal differences, water temperatures have remained generally stable.	No data was collected from 8/12/07 to 9/21/07 due to a battery failure in the transducer. No data was collected from 01/09/12 to November 2012 due to a battery failure in the transducer. A new battery was installed in November 2012.
Irrigation Ditch (Figure 5)	May 2002 to July 2003 and October 2003 to August 2007	Water levels in a stilling well (Irrigation Ditch) installed in an irrigation ditch near the western boundary of the city park has exhibited quite a bit of fluctuation (probably in response to seasonal irrigation needs). Water levels dropped approximately 2.8 feet on May 15, 2006 and an additional 0.9 feet on September 11, 2006. In between these dates, the water levels appear to exhibit the typical seasonal fluctuations observed at this monitoring point. These sudden fluctuations suggest that the flow rate through the irrigation ditch was altered by upstream activities. Since September 2006, the water levels have exhibited fluctuations of approximately 0.5 feet.	Temperatures exhibit a seasonal decline of approximately 1.5°C during the winter months. The temperatures were approximately 0.5°C higher during the winter of 2007 than previous winters; the 2007 summer water temperatures were consistent with previous summer water temperatures. The elevated temperature reading recorded on November 13, 2012 was recorded when the transducer was removed from the water and is not representative of water temperature.	The transducer in the irrigation ditch well was vandalized during the Third Quarter 2007. As a result, no data was collected from August 15, 2007 through July 22, 2008 after a new transducer was reinstalled and re-secured. The data from the new transducer is presented in Figure 6.

TABLE 1. Summary of Cumulative Data from CCDA Monitoring Points

Well	Data Collection Period	Water Level Trends	Water Temperature Trends	Comments
Irrigation Ditch (Figure 6)	July 2008 to present	Water level shows considerable scatter and variance. Typical water level fluctuations to approximately one foot, which suggests variable volumetric flow in the irrigation ditch.	Water temperature remains relatively stable at 7.0°C with seasonal fluctuations of approximately 0.5°C.	A new transducer was installed and re-secured on July 22, 2008. The irrigation ditch well casing was discovered damaged again in December 2008. The data indicates the irrigation ditch well was damaged in October 2008.
Production Well (DEX-6) (Figure 7)	February 2004 to present	From 2004 to 2010, water levels show daily fluctuations of approximately 0.5 foot. Seasonal fluctuations vary approximately from 0.5 to 1.0 feet. with the highest water levels typically observed in March and the lowest during September. Since closure of the water bottling facility in December 2012, daily water level fluctuations were not observed. Seasonal water level fluctuations ranged from approximately 0.5 to 1.0 feet. In August 2012, the water level dropped to zero for five days and remained stable at approximately 31.8 feet. This anomaly is associated with the work conducted to the pump house and pumping tests performed during this time frame.	From 2004 to 2010, daily water temperatures fluctuate as much as 0.40°C, but generally temperatures remained stable at approximately 8.1°C. Since closure of the plant in December 2010, daily water temperature fluctuations were not observed. Water temperatures remained stable at approximately 7.8°C. In August 2012, the water temperature increased to 18.5°C for five days and dropped back down to approximately 7.8°C. This anomaly is associated with the work conducted to the pump house and pumping tests performed during this time frame.	

TABLE 1. Summary of Cumulative Data from CCDA Monitoring Points

Well	Data Collection Period	Water Level Trends	Water Temperature Trends	Comments
Lower Well (MW-1) (Figure 8 and Figure 9)	May 2002 to December 2003 and July 2006 to present	Water levels show seasonal fluctuations of approximately 2 to 5 feet with an average water level of approximately 5 feet. The highest water levels typically occur in January through March and the lowest in September and October.	Temperatures decreased approximately one degree between May through November 2002. Since then (through the end of the recording cycle in July 2006), water temperatures remained generally stable. Temperatures have fluctuated approximately 0.8°C since July 2006. Temperatures spiked on 11/14/06, 1/23/07, and 5/21/07, 11/7/07, 3/26/08, 11/13/08, and 11/13/12 coinciding with groundwater monitoring and sampling events. Temperatures dropped in April 2011 and March 2012 corresponding to increases in water levels.	Datalogger removed from well during Fourth Quarter 2003. Datalogger reinstalled during Second Quarter 2006. CCDA removes the transducer quarterly for sampling; the change in water levels may be due to the transducer installed at a different elevation after sampling.

TABLE 1. Summary of Cumulative Data from CCDA Monitoring Points

Well	Data Collection Period	Water Level Trends	Water Temperature Trends	Comments
MW-2 (Figure 10)	July 2006 to present	Water levels show seasonal fluctuations of approximately 5 to 10 feet with an average water level of approximately 10 feet. The highest water levels typically occur in January through March and the lowest in September and October.	Temperatures fluctuate from approximately 0.5°C to 2.8°C due to seasonal fluctuations, peaking in March at 9.4°C to 11.8°C and colder temperatures typically observed in September from 9.4°C to 10.0°C. The temperature dropped approximately 3°C on January 4, 2008. The reason for the drop in temperature is unknown and may be attributed to a transducer malfunction. Temperatures spiked on 11/13/12 coinciding with groundwater monitoring and sampling events.	Datalogger installed during Second Quarter 2006. CCDA removed the transducer quarterly for sampling; the change in water levels may be due to the transducer installed at a different elevation after sampling.

TABLE 1. Summary of Cumulative Data from CCDA Monitoring Points

Well	Data Collection Period	Water Level Trends	Water Temperature Trends	Comments
MW-3 (Figure 11)	July 2006 to present	Water levels show seasonal fluctuations of approximately 2 to 6 feet with an average water level of approximately 2 feet. The highest water levels typically occur in January through March and the lowest in September and October. Water levels spiked on 9/25/06, 10/3/06, 11/14/06, 1/23/07, 5/21/07, 8/15/07, 10/29/07,11/7/07, 3/12/08, 4/30/08 coinciding with monitoring and sampling events.	Temperature data reveals seasonal fluctuations of approximately 0.2°C since July 2006. A general cooling trend of approximately 0.2°C is observed from the peak in 2011 until present day. Temperature spikes on 9/25/06, 10/3/06, 11/14/06, 1/23/07, 5/21/07, 8/15/07, 10/29/07, 11/7/07, 3/12/08, 04/30/08, 8/6/08, 11/13/08, and 11/13/2012 coincide with groundwater monitoring and sampling events.	Datalogger installed during Second Quarter 2006 CCDA removed the transducer quarterly for sampling; the change in water levels may be due to the transducer installed at a different elevation after sampling. Dedicated pump removed in 4Q2012 for inspection.

Table 2
Quarterly Groundwater Sampling Events
TCCC Mt. Shasta Bottling Facility
123-97477

Year	Sampling Event	Date
2012	Fourth Quarter/Annual	November 14, 2012
2010	Fourth Quarter/Annual	November 3, 2010 & November 4, 2010
	Third Quarter	NS
	Second Quarter	June 15, 2010
	First Quarter	March 26, 2010
2009	Fourth Quarter/Annual	December 2, 2009
	Maintenance	September 24, 2009
	Third Quarter	September 22, 2009
	Second Quarter	June 22, 2009
	First Quarter	March 30, 2009
2008	Fourth Quarter	November 13, 2008
	Third Quarter	August 6, 2008
	Second Quarter	April 30, 2008
	First Quarter	March 12, 2008
2007	Annual	October 29, 2007
	Fourth Quarter	November 7, 2007
	Third Quarter	August 15, 2007
	Second Quarter	May 21, 2007
	First Quarter	January 23, 2007
2006	Fourth Quarter	November 14, 2006
	Third Quarter	July 14, 2006
	Second Quarter	June 5, 2006

Notes:
NS - Not Sampled

Table 3
Fourth Quarter 2012 Groundwater Sampling Results
TCCC Mt. Shasta Bottling Facility
123-97477

Analyte	Units	MW-2	MW-2 (DUP)	MW-3	USEPA Drinking Water Limit[1]
Hardness	mg/l	42	38	114	
pH	pH Units	6.91	6.96	8.14	6.5 to 8.5
Specific Conductance	umhos/cm	116	116	384	
Total Dissolved Solids	mg/l	120	126	261	500
Chemical Oxygen Demand	mg/l	7	ND	28	
Cyanide-Total[2]	ug/l	ND	ND	ND	200
Total Coliforms	MPN/100ml	<2	<2	<2	5%
Antimony	ug/l	ND	ND	0.6	6
Arsenic	ug/l	ND	ND	0.4 J	10
Beryllium	ug/l	ND	ND R-08	ND	4
Cadmium	ug/l	ND	ND	ND	5
Chromium	ug/l	0.4 J	2 R-08, J	1.2	100
Chromium, Hexavalent	ug/l	ND	ND	ND R-08	
Chromium, Trivalent	ug/l	ND	ND	ND	
Copper	ug/l	0.5	0.8 R-08, J	9.9	1,000
Lead	ug/l	ND	0.2 J	6.8	15
Mercury	ug/l	0.00042 J	0.00053	0.0105 QC-08, R-08	2
Mercury Field Blank	ug/l	0.00033 J	ND	ND	
Nickel	ug/l	0.3 J, QR-04	ND QR-04, J	1.8 QR-04	
Selenium	ug/l	ND	ND	ND	50
Silver	ug/l	ND	ND	ND	100
Thallium	ug/l	ND	ND	ND	2
Zinc	ug/l	2.3 QR-04	3.4 QR-04	211 QR-04	5,000
VOCs					
Benzene	ug/l	ND	ND	0.13 J	5
Chlorobenzene	ug/l	ND	ND	0.06 J	100
Naphthalene	ug/l	0.07 J	0.07 J	0.08 J	
Toluene	ug/l	ND	ND	0.07 J	1,000
All other VOCs not detected					
SVOCs[1]					
Bis(2-ethylhexyl)phthalate (DEPH)	ug/l	ND	ND	250 R-01	6
Phenol	ug/l	ND	ND	0.6 J	
All other SVOCs not detected					
PESTICIDES					
All pesticides not detected					

Notes:

ND - Analyte not detected at or above the detection limit.

J-Detected but below the Reporting Limit; therefore, result is an estimated concentration.

QR-04 - Duplicate results are within one reporting limit and pass all necessary QC criteria.

QM-05 - The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.

R-01 - The reporting limit and detection limit for this analyte have been raised due to necessary sample dilution.

R-08 - The sample was diluted due to sample matrix resulting in elevated reporting limits.

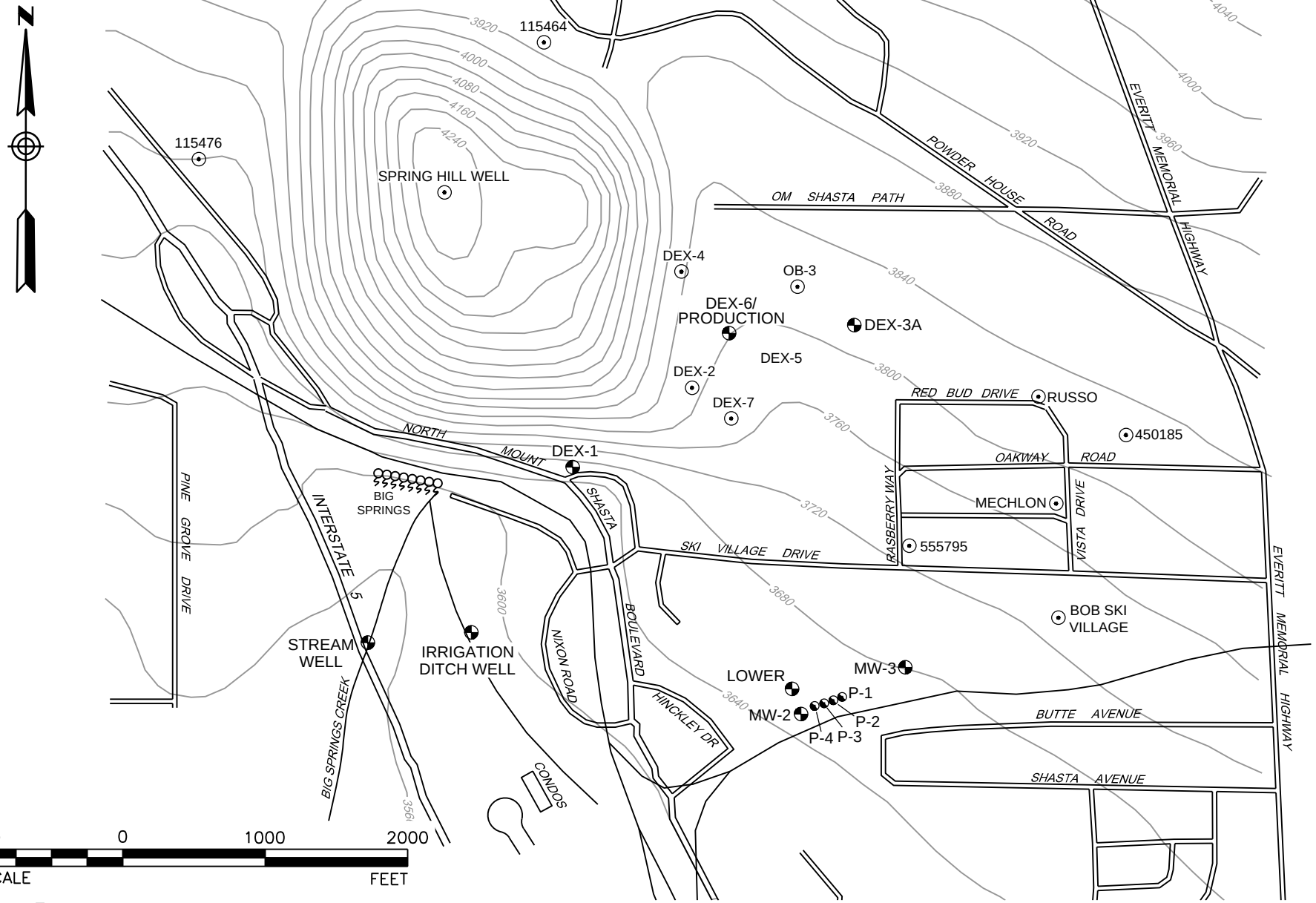
QC-08 - An increased concentration of BrCl was necessary to fully oxidize this sample. As required by EPA 1631E, a laboratory method blank containing the additional BrCl was analyzed with the sample.

1. USEPA drinking water limits include maximum contaminant limits (MCLs) and secondary drinking water standards. Secondary drinking water standards are listed for pH, TDS, Copper, Silver, & Zinc. All the remaining limits shown are MCLs.

2. No more than 5.0% samples total coliform-positive in a month. (For water systems that collect fewer than 40 routine samples per month, no more than one sample can be total coliform-positive per month.) Every sample that has total coliform must be analyzed for either fecal coliform or E. coli if two consecutive TC-positive samples, and one is also positive for E. coli fecal coliforms, system has an acute MCL violation.

FIGURES

Drawing file: 12397477-F1-SITEVIC.dwg Mar 05, 2013 - 1:39pm



LEGEND

DEX-3A	MONITORING WELLS PART OF QUARTERLY MONITORING PROGRAM
450185	OTHER MONITORING WELLS
P-1	LEACHFIELD PIEZOMETER

SITE VICINITY MAP

FIGURE 1

Golder Associates
Sacramento, CA

PROJECT No. 12397477 FILE No. F1-SITEVIC CADD JDR DATE 03/05/13

FIGURE 2. WELL DEX-1
WATER LEVEL AND TEMPERATURE DATA
MT SHASTA, CALIFORNIA

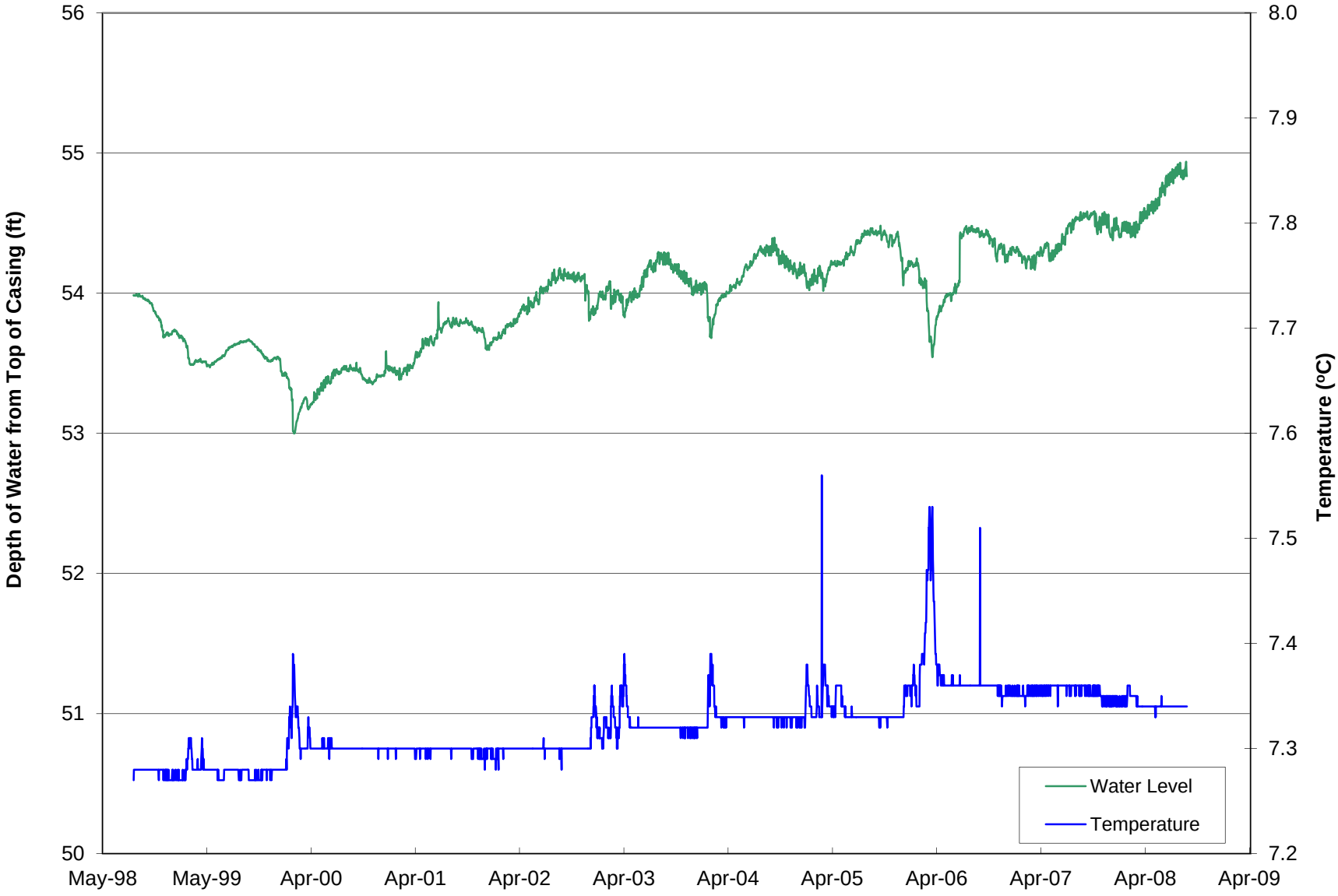


FIGURE 3. WELL DEX-3A
WATER LEVEL AND TEMPERATURE DATA
MT SHASTA, CALIFORNIA

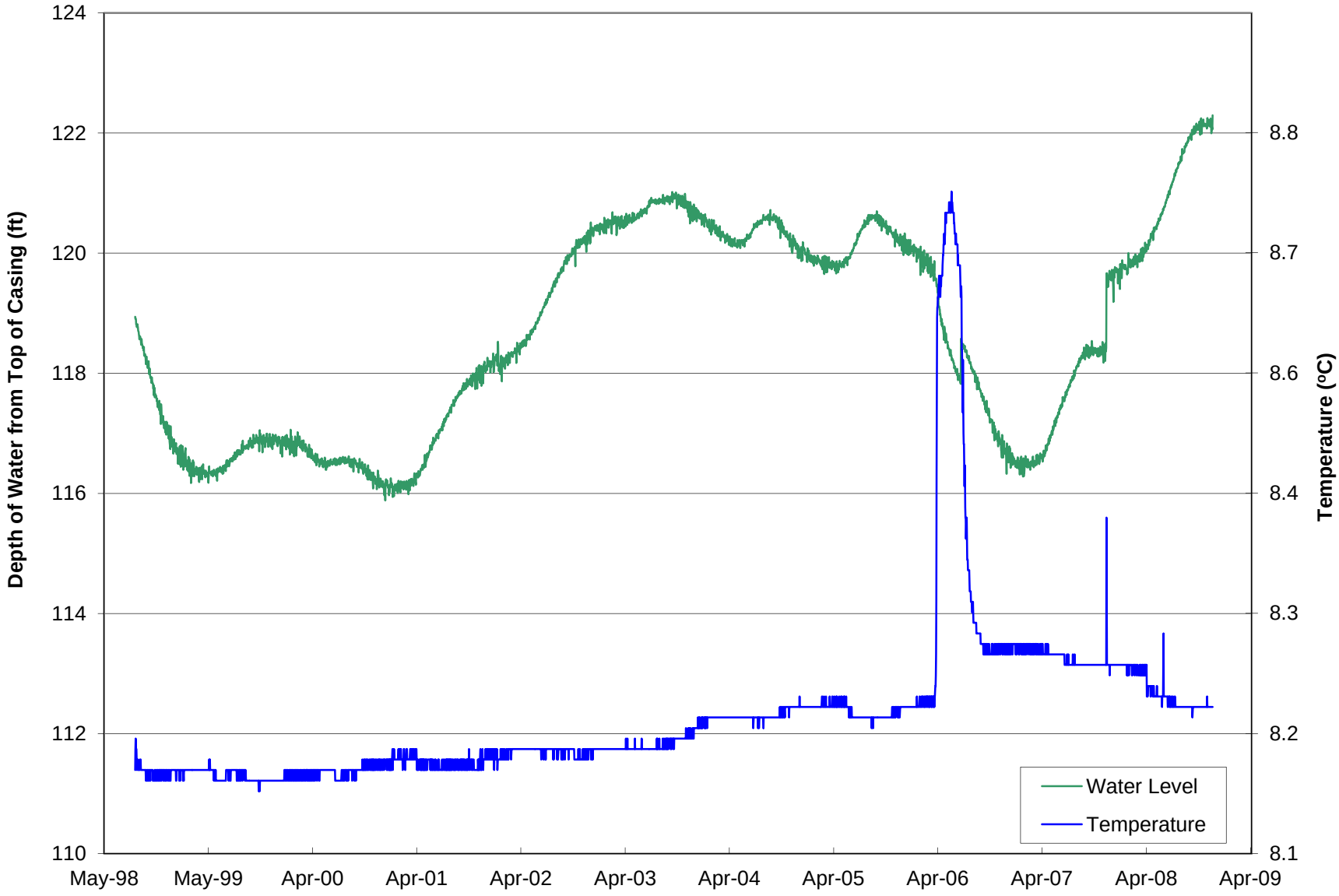


FIGURE 4. STREAM WELL
WATER LEVEL AND TEMPERATURE DATA
MT SHASTA, CALIFORNIA

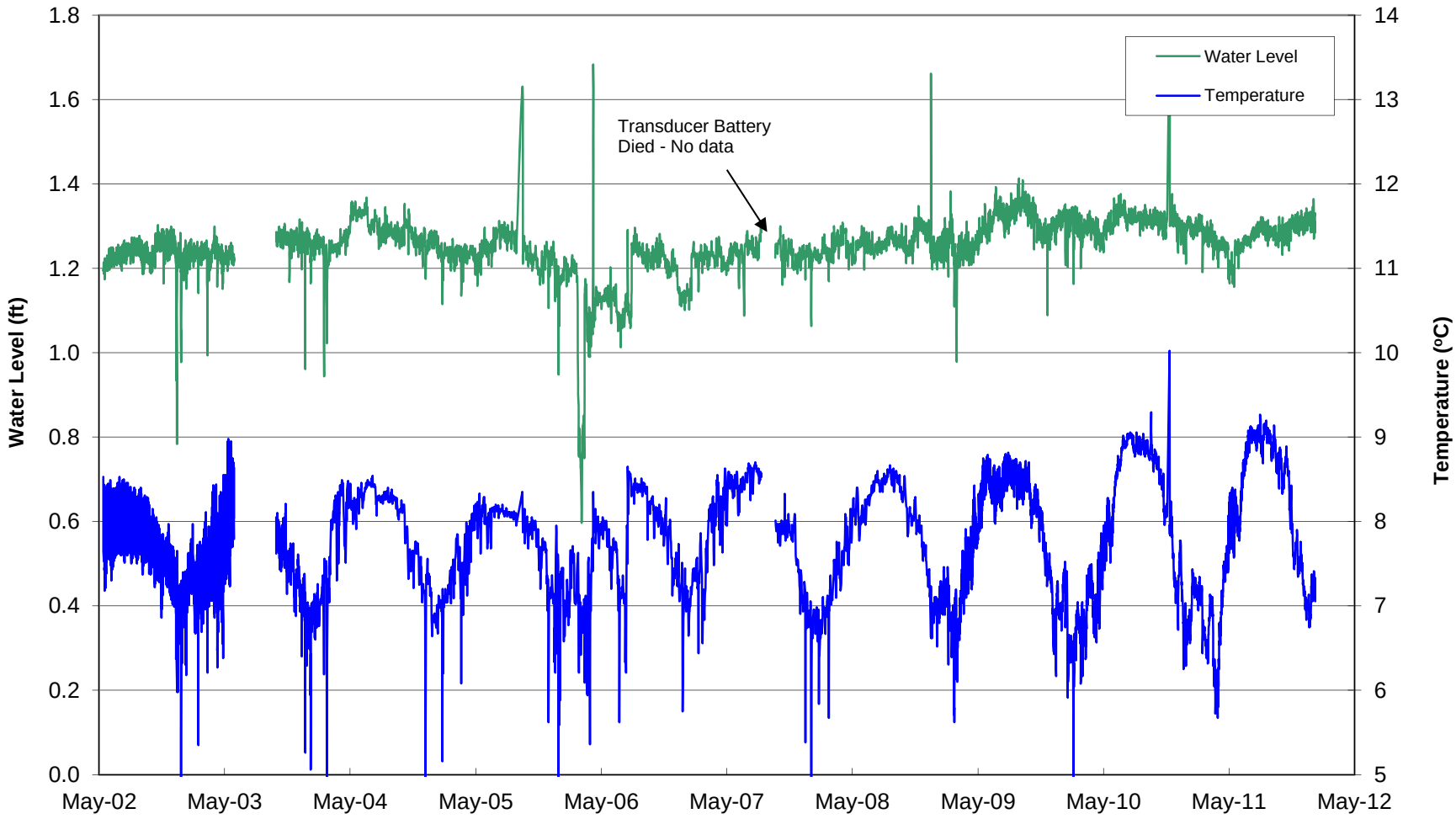


FIGURE 5. IRRIGATION DITCH WELL
WATER LEVEL AND TEMPERATURE DATA 2002 - 2007
MT SHASTA, CALIFORNIA

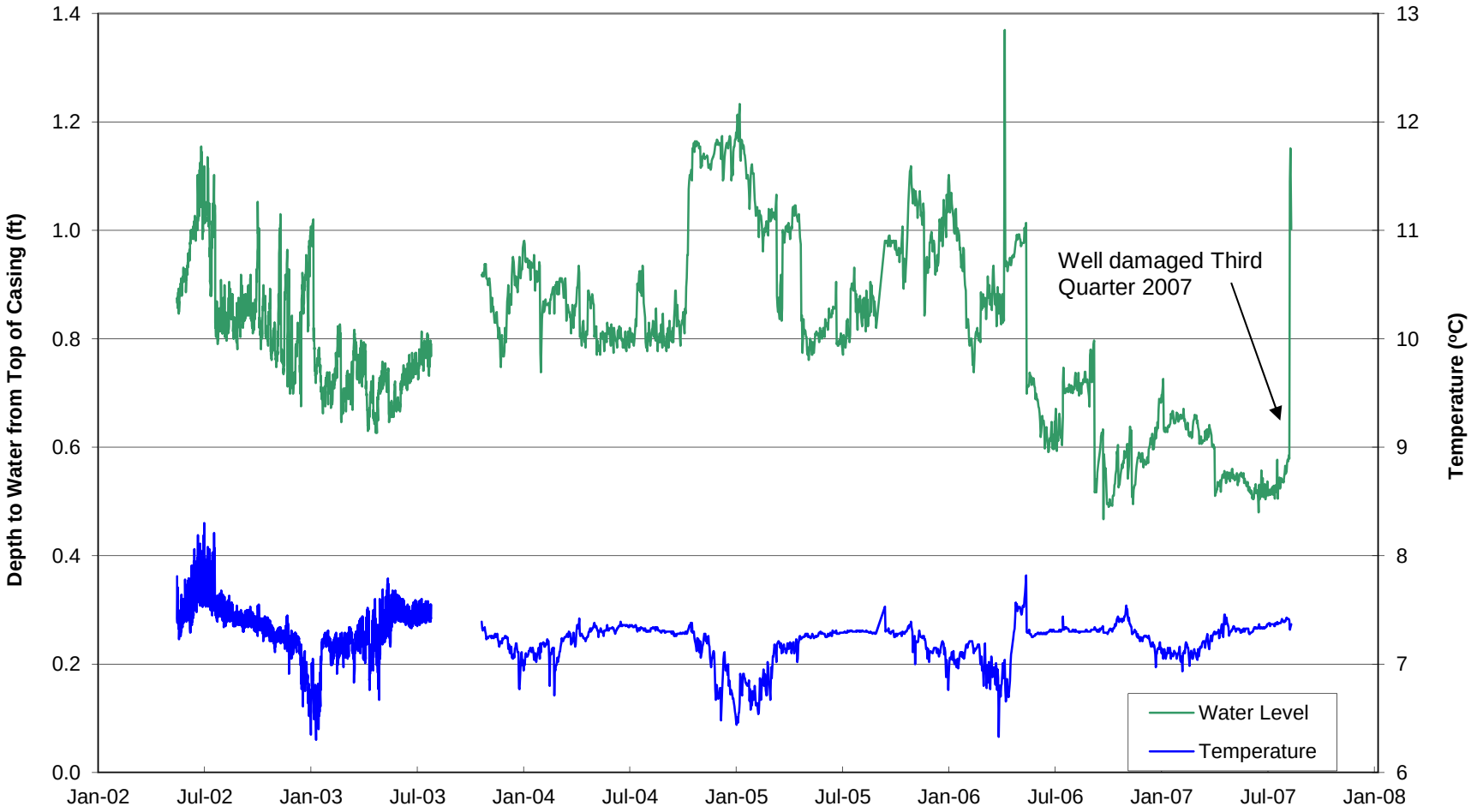


FIGURE 6. IRRIGATION DITCH WELL
WATER LEVEL AND TEMPERATURE DATA JULY 2008 - PRESENT
MT SHASTA, CALIFORNIA

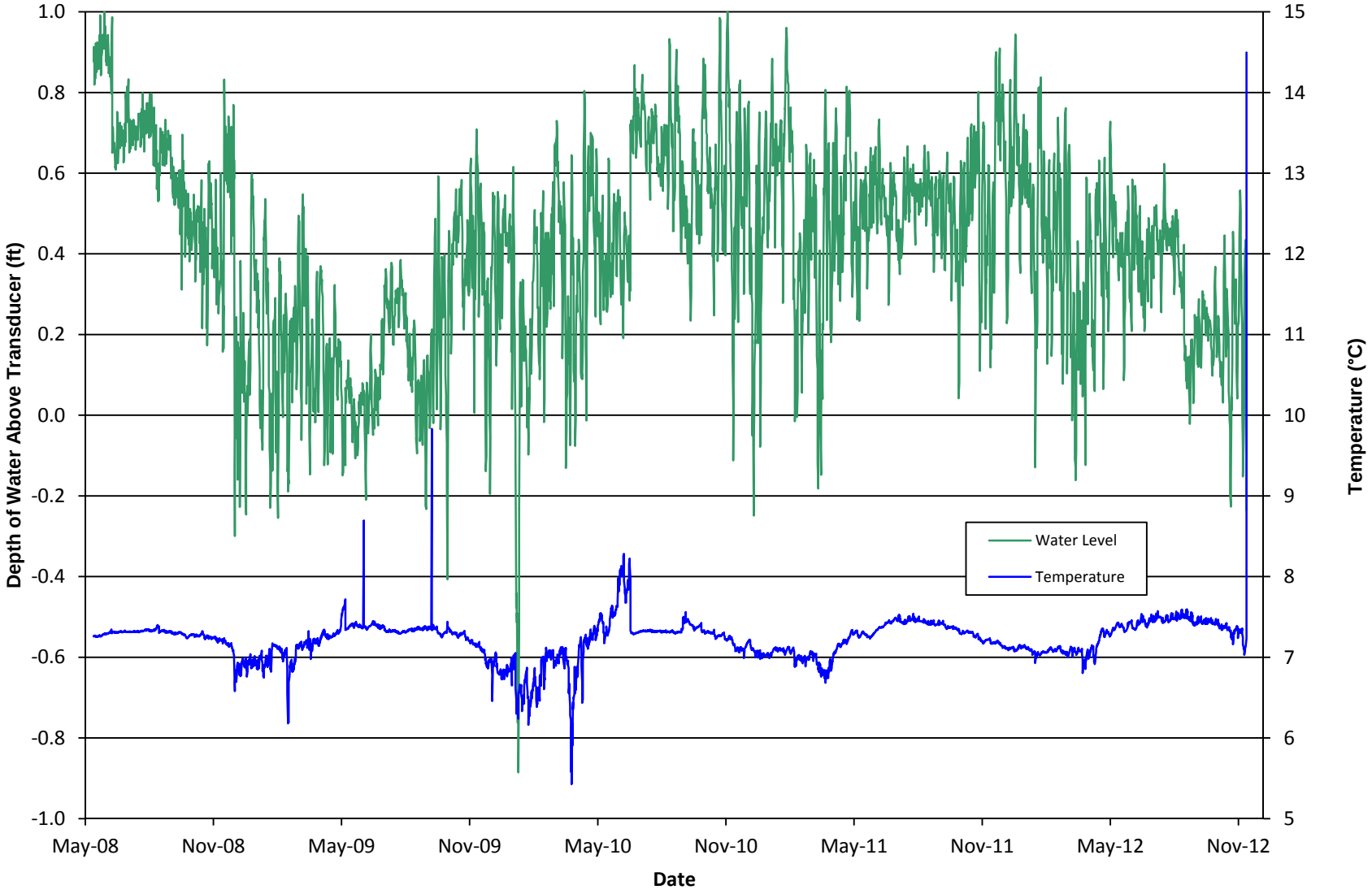


FIGURE 7. PRODUCTION WELL (DEX-6)
WATER LEVEL AND TEMPERATURE DATA
MT SHASTA, CALIFORNIA

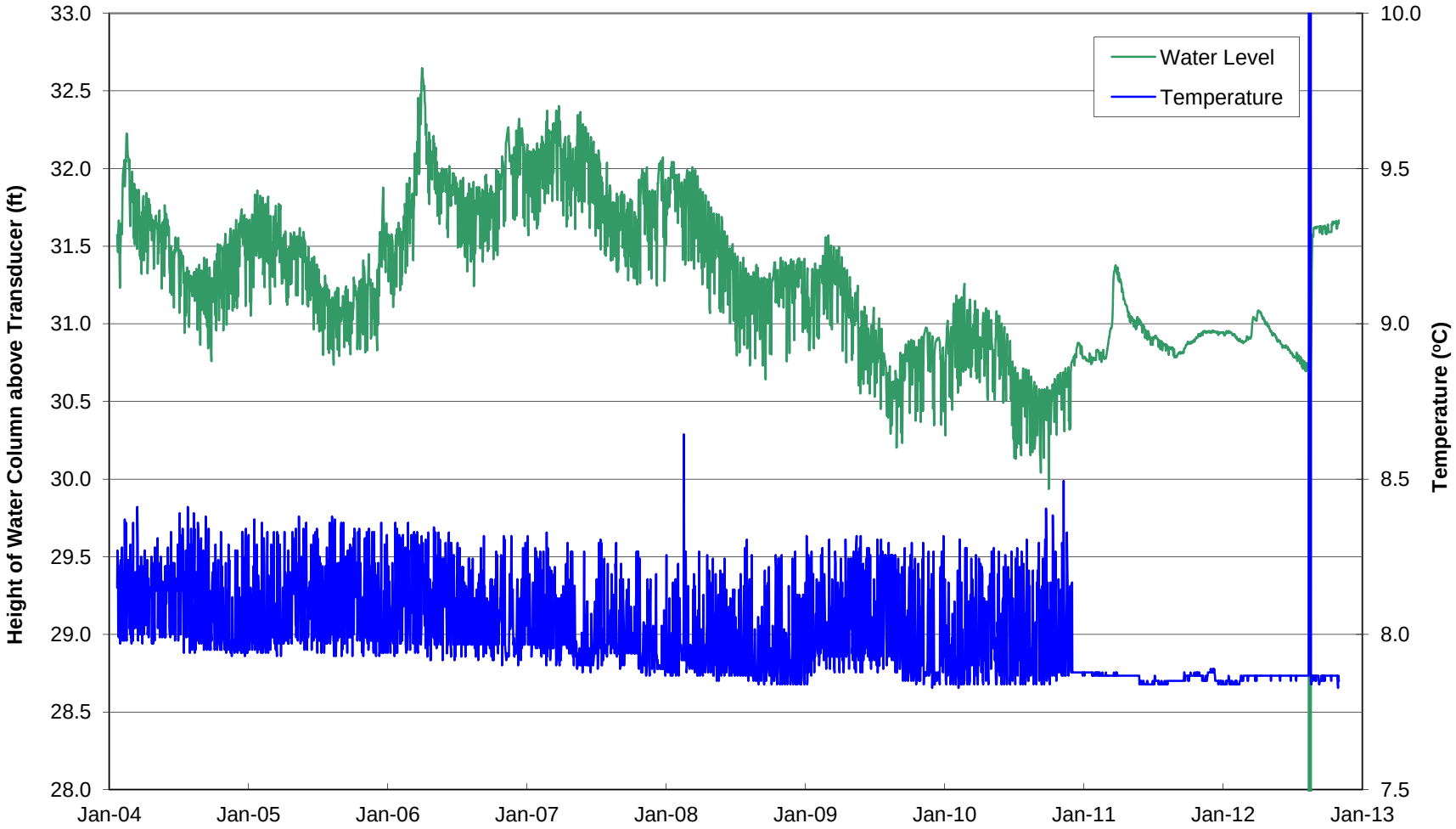


FIGURE 8. LOWER WELL (MW-1)
WATER LEVEL AND TEMPERATURE DATA 2002 - 2003
MT SHASTA, CALIFORNIA

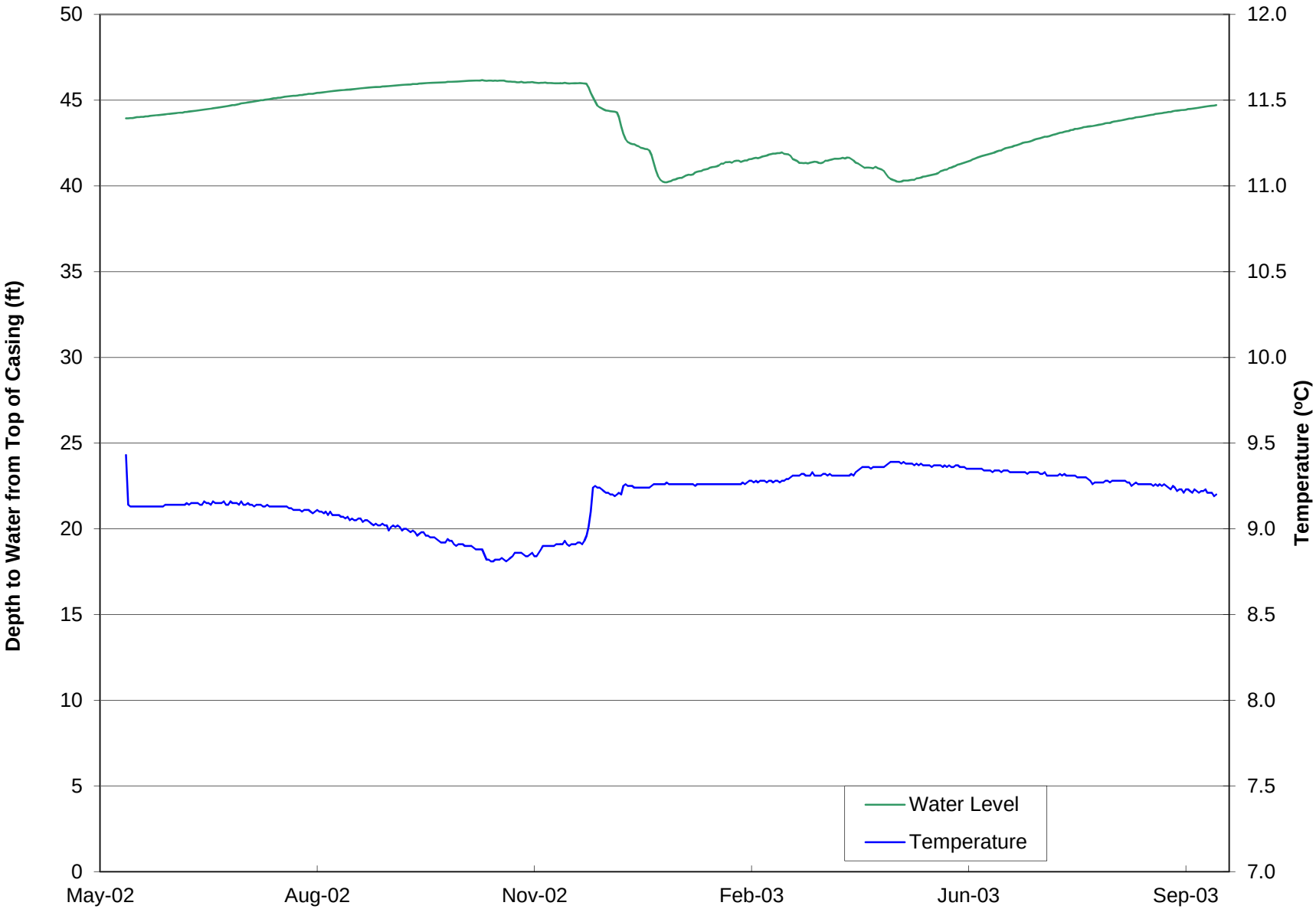


FIGURE 9. LOWER WELL (MW-1)
WATER LEVEL AND TEMPERATURE DATA 2006 - PRESENT
MT SHASTA, CALIFORNIA

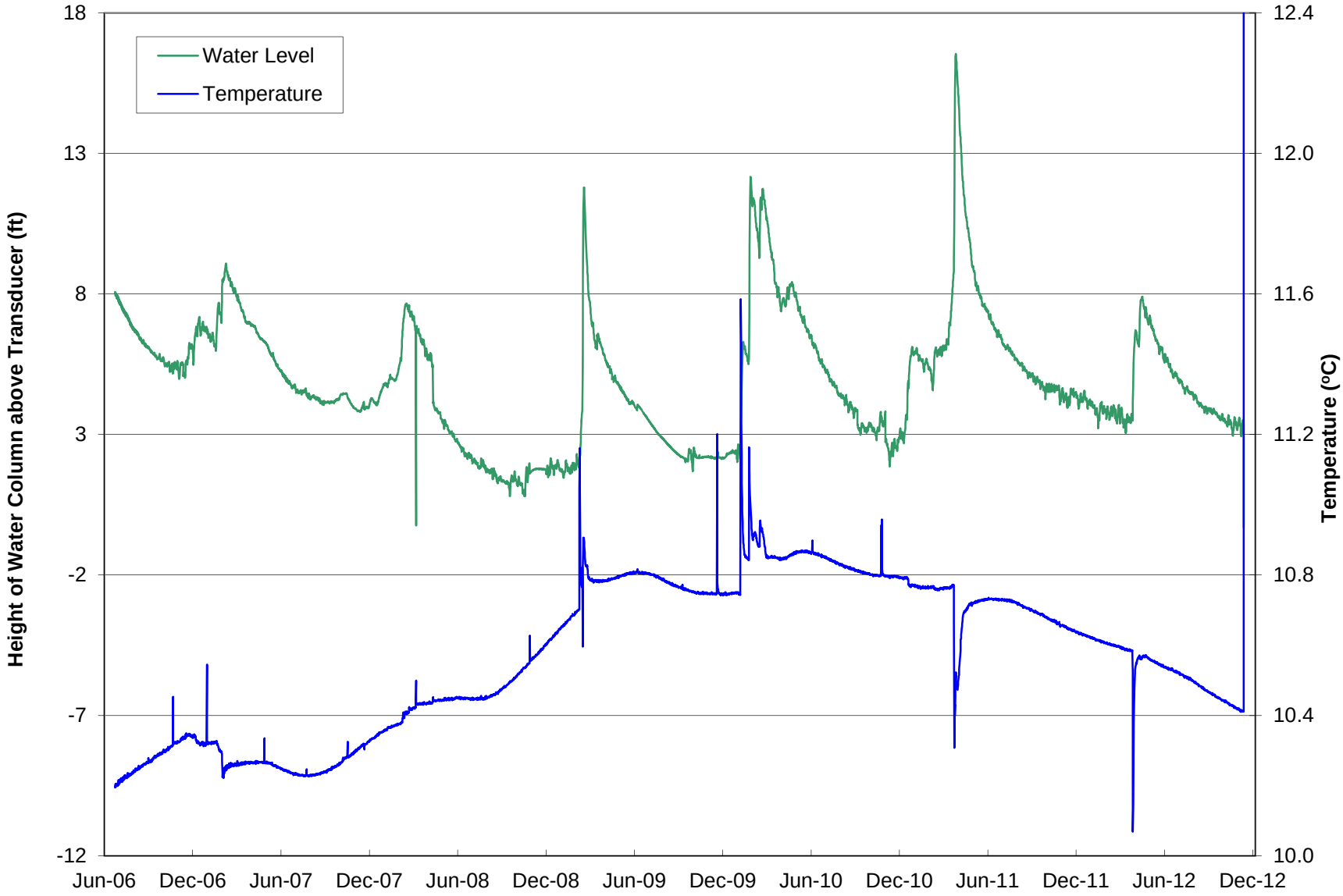


FIGURE 10. MW-2
WATER LEVEL AND TEMPERATURE DATA
MT SHASTA, CALIFORNIA

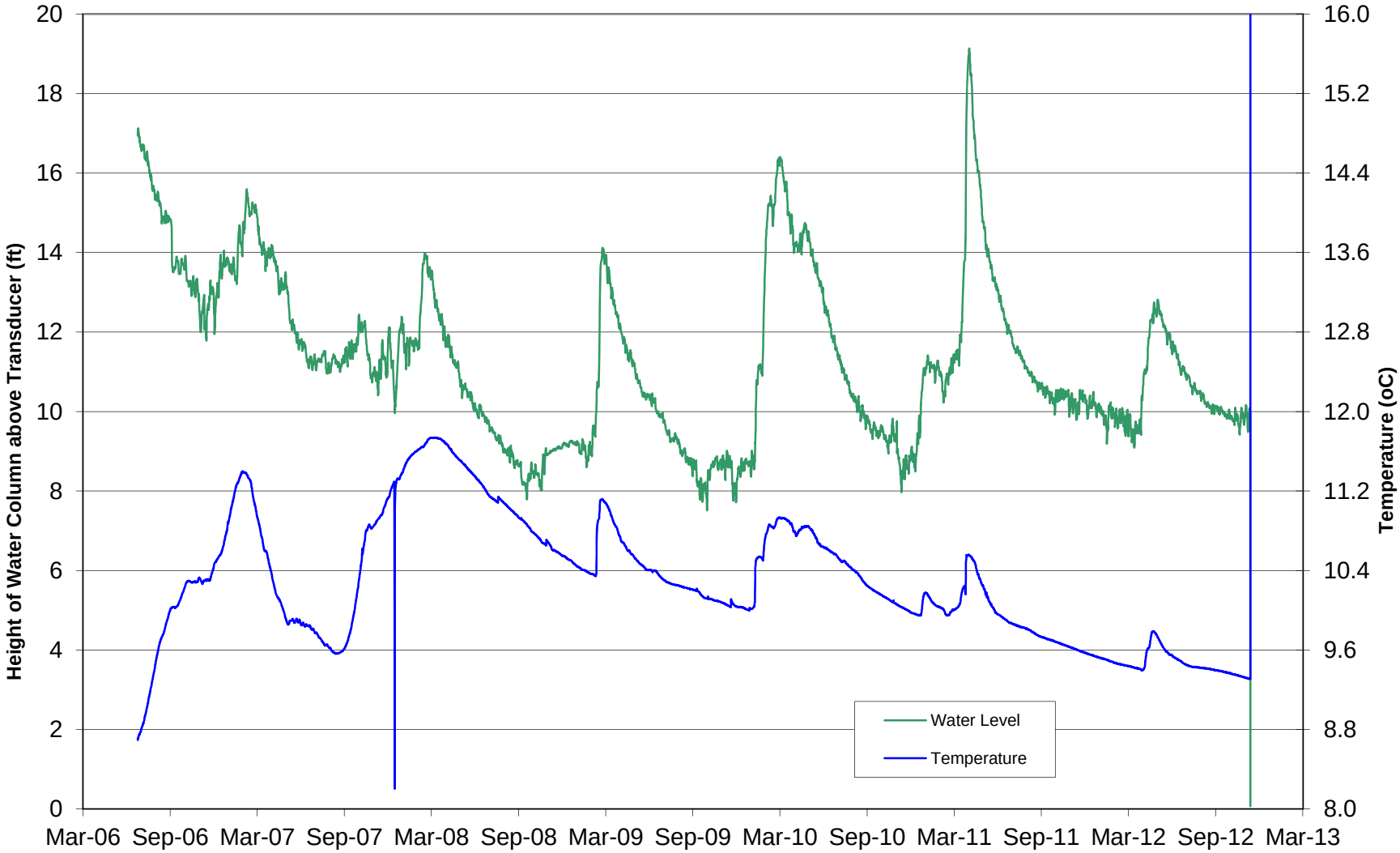
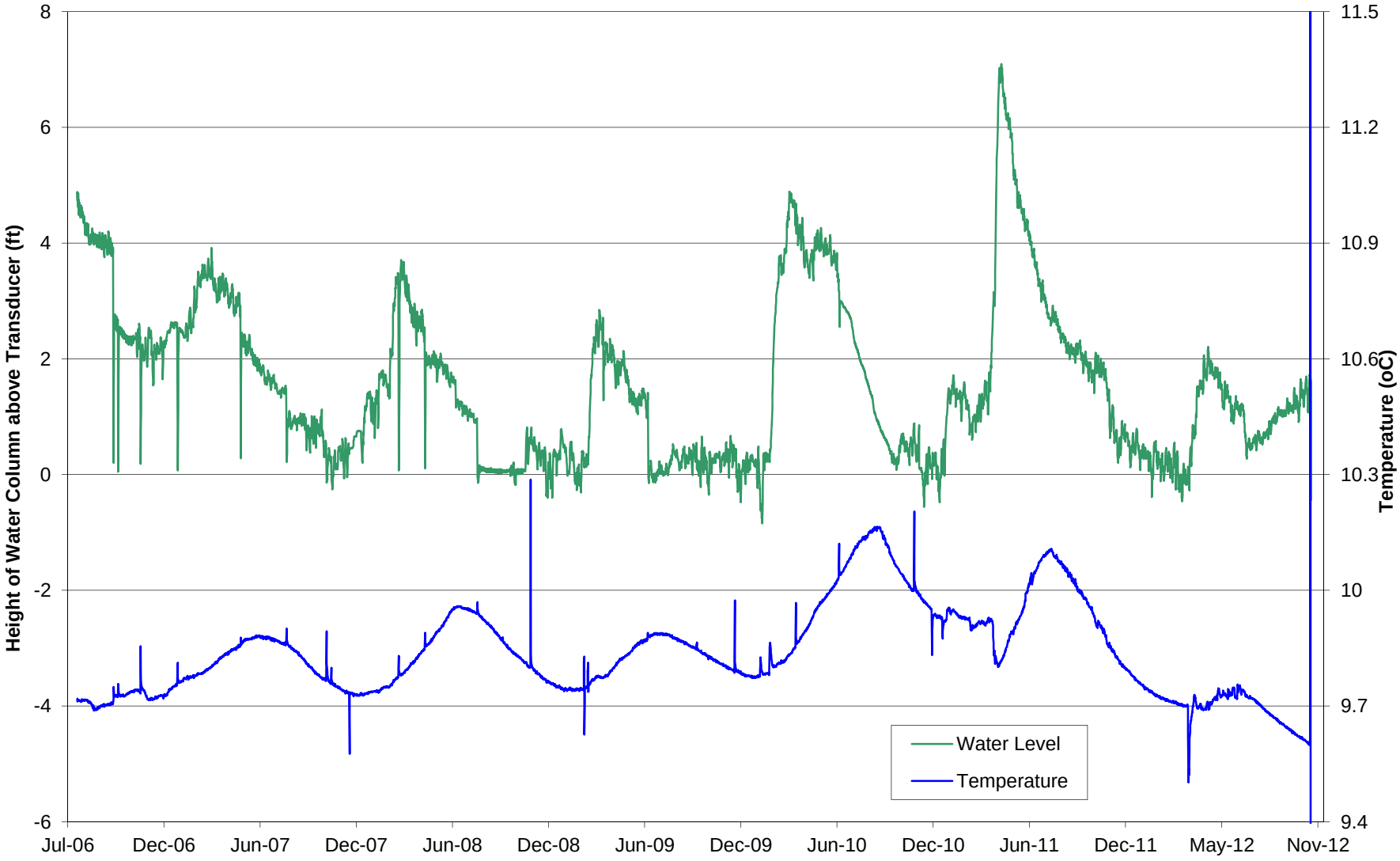


FIGURE 11. MW-3
WATER LEVEL AND TEMPERATURE DATA
MT SHASTA, CALIFORNIA



ATTACHMENT A
FIELD DATA SHEETS

WATER LEVEL DATA SHEET

Golder Associates

Project: SHASTA

Project No.: 123-97477

Date(s): 11/14/12

Technician: R. McCARTHY

Weather: SUNNY + COOL **Sounder #:** 35330

Well	Date	Time	DTW (TOC)	Well Depth	Measured by	Comments
MW-2	11/14/12	1049	40.61	48.02	RM	
LOGGER(MW-1)	〃	1110	46.55	47.60	RM	
MW-3	〃	1246	46.90	50.1	RM	

NOTES:

Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: SHASTA SAMPLE ID: Lower (MW-1)

PROJECT NO: 123-97477 SAMPLED BY: R. McCARTY

SAMPLE TYPE: Groundwater _____ Surface Water _____ Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4___ 1___ 2___ 4 X 4.5___ 6___ 8___ Other___

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 47.6 Volume in Casing (gal): 0.7 - 2.7 Liters

Depth to Water (ft): 46.55 Calculated Purge (volumes / gal.): 2.1

Height of Water Column (ft): 1.05 Actual Pre-Sampling Purge (gal): _____

PURGE:

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump X Dedicated X Other_____

Purge Water Containment: _____

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____Other _____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
DNS/FREE PHASE WATER TO PURGE AND SAMPLE								

Purge Date: _____

SAMPLE:

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____Electric Submersible Pump_____ Dedicated_____ Other_____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)

Sheen: _____ Odor: _____ Sample Date: _____

Field Measurement Devices: Horiba: _____ YSI: _____ Oakton Turbidity: _____ Other: _____

Meter Calibration Date:_____ Time:_____ Location:_____ Ins. # _____

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____ NTU)

REMARKS: _____

SIGNATURE: _____ **DATE:** 11/15/12

224-2317

Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: SHASTA SAMPLE ID: MW-2

PROJECT NO: 123-97477 SAMPLED BY: R. McCARTY

SAMPLE TYPE: Groundwater _____ Surface Water _____ Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4___ 1___ 2___ 4 X 4.5___ 6___ 8___ Other___

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 48.1 Volume in Casing (gal): 5.0

Depth to Water (ft): 40.61 Calculated Purge (volumes / gal.): 15.0

Height of Water Column (ft): 7.49 Actual Pre-Sampling Purge (gal): _____

PURGE:

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump X Dedicated _____ Other_____

Purge Water Containment: _____

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____Other _____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	~~Other~~ ORP	Observation
1155	5.0	11.3	182	6.28	clear	9	24.2	
1158	10.0	10.6	124	6.17	clear	5	36.5	
1203	15.0	10.5	118	6.13	clear	3	41.6	

Purge Date: 11/14/12

SAMPLE:

Device (Depth of Intake from TOC): Disp. Bailer_____Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____Electric Submersible Pump_____ Dedicated_____ Other_____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1220	10.5	118	6.13	~~clear~~	clear	2	

Sheen: _____ Odor: _____ Sample Date: 11/14/12

Field Measurement Devices: Horiba: _____ YSI: X Oakton Turbidity: X Other: _____

Meter Calibration Date:_____ Time:_____ Location:_____ Ins. # _____

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____NTU)

REMARKS: _____

SIGNATURE: _____ **DATE:** 11/14/12

WATER SAMPLE FIELD DATA

LOCATION: SHASTA SAMPLE ID: MW-3
PROJECT NO: 123-97477 SAMPLED BY: R. McCARTHY
SAMPLE TYPE: Groundwater X Surface Water ____ Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ____ 4 X 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 50.1	Volume in Casing (gal): 2.2
Depth to Water (ft): 46.90	Calculated Purge (volumes / gal.): 6.6
Height of Water Column (ft): 3.2	Actual Pre-Sampling Purge (gal):

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump X Dedicated ____ Other ____
Purge Water Containment: NONE - GROUND
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	~~Other~~ ORP	Observation
1305	2.2	13.1	388	7.87	Cloudy yellowish	Med.	-37.8	
1310	4.4	13.2	395	7.66	"	Med	-99.7	
~~1314~~	WELL DEWATERED AT 4.5 gallons							

Purge Date: 11/14/12

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump X Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
~~1315~~ 1400							

Sheen: — Odor: — Sample Date: 11/14/12

Field Measurement Devices: Horiba: ____ YSI: ____ Oakton Turbidity: ____ Other: ____

Meter Calibration Date:____ Time:____ Location:____ Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

REMARKS: ALLOWED WELL TO RECHARGE TO

SIGNATURE: [signature] **DATE:** 11/14/12

ATTACHMENT B
ANALYTICAL LAB REPORTS

basic laboratory

www.basiclab.com

2218 Railroad Avenue
Redding, California 96001
voice 530.243.7234
fax 530.243.7494

3860 Morrow Lane, Suite F
Chico, California 95928
voice 530.894.8966
fax 530.894.5143

December 13, 2012

Lab ID: 2110610

AMY HA
GOLDER & ASSOCIATES
100 ENTERPRISE WAY, STE 190
ROSEVILLE, CA 95678
RE: TCCC-MT SHASTA ANNUAL MONITORING 123-97477 PHASE 002

Dear AMY HA ,

Enclosed are the analysis results for Work Order number 2110610. All analysis were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

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

Sincerely,

For

Ricky D. Jensen
Laboratory Director
California ELAP Certification Number 1677

basic laboratory

www.basiclab.com

2218 Railroad Avenue
Redding, California 96001
voice 530.243.7234
fax 530.243.7494

3860 Morrow Lane, Suite F
Chico, California 95928
voice 530.894.8966
fax 530.894.5143

Report To: GOLDER & ASSOCIATES
100 ENTERPRISE WAY, STE 190
ROSEVILLE, CA 95678
Attention: AMY HA
Project: TCCC-MT SHASTA ANNUAL MONITORING 123-97477 PHASE 002

Lab No: 2110610
Reported: 12/13/12
Phone: (530) 243-7234
P.O. #

General Chemistry

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
MW-2 Water (2110610-01)	**Sampled:11/14/12 12:20**		**Received:11/14/12 15:53**						
Hardness	mg/l	**42**		3	5	SM 2340C	11/16/12	11/16/12	B2K0429
pH (see note 2)	pH Units	**6.91**		0.01	0.01	SM 4500H+B	11/14/12	11/14/12	B2K0364
Specific Conductance	umhos/cm	**116**		2	10	SM 2510B	11/14/12	11/14/12	B2K0363
Total Dissolved Solids	mg/l	**120**		3	6	SM 2540C	11/15/12	11/15/12	B2K0405
Chemical Oxygen Demand	"	**7**		3	7	SM 5220D	11/20/12	11/20/12	B2K0520
Cyanide - Total	ug/l	ND		1	5	SM 4500CN E	11/15/12	11/15/12	B2K0368
MW-3 Water (2110610-02)	**Sampled:11/14/12 14:00**		**Received:11/14/12 15:53**						
Hardness	mg/l	**114**		3	5	SM 2340C	11/16/12	11/16/12	B2K0429
pH (see note 2)	pH Units	**8.14**		0.01	0.01	SM 4500H+B	11/14/12	11/14/12	B2K0364
Specific Conductance	umhos/cm	**384**		2	10	SM 2510B	11/14/12	11/14/12	B2K0363
Total Dissolved Solids	mg/l	**261**		3	6	SM 2540C	11/15/12	11/15/12	B2K0405
Chemical Oxygen Demand	"	**28**		3	7	SM 5220D	11/20/12	11/20/12	B2K0520
Cyanide - Total	ug/l	ND		1	5	SM 4500CN E	11/15/12	11/15/12	B2K0368
DUP Water (2110610-03)	**Sampled:11/14/12 12:30**		**Received:11/14/12 15:53**						
Hardness	mg/l	**38**		3	5	SM 2340C	11/16/12	11/16/12	B2K0429
pH (see note 2)	pH Units	**6.96**		0.01	0.01	SM 4500H+B	11/14/12	11/14/12	B2K0364
Specific Conductance	umhos/cm	**116**		2	10	SM 2510B	11/14/12	11/14/12	B2K0363
Total Dissolved Solids	mg/l	**126**		3	6	SM 2540C	11/15/12	11/15/12	B2K0405
Chemical Oxygen Demand	"	ND		3	7	SM 5220D	11/20/12	11/20/12	B2K0520
Cyanide - Total	ug/l	ND		1	5	SM 4500CN E	11/15/12	11/15/12	B2K0368

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Report To: GOLDER & ASSOCIATES
100 ENTERPRISE WAY, STE 190
ROSEVILLE, CA 95678
Attention: AMY HA
Project: TCCC-MT SHASTA ANNUAL MONITORING 123-97477 PHASE 002

Lab No: 2110610
Reported: 12/13/12
Phone: (530) 243-7234
P.O. #

Microbiology

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
MW-2 Water (2110610-01)	**Sampled:11/14/12 12:20**		**Received:11/14/12 15:53**						
Total Coliforms	MPN/100 ml	<2			2	SM 9221B	11/18/12	11/14/12	B2K0476
MW-3 Water (2110610-02)	**Sampled:11/14/12 14:00**		**Received:11/14/12 15:53**						
Total Coliforms	MPN/100 ml	<2			2	SM 9221B	11/18/12	11/14/12	B2K0476
DUP Water (2110610-03)	**Sampled:11/14/12 12:30**		**Received:11/14/12 15:53**						
Total Coliforms	MPN/100 ml	<2			2	SM 9221B	11/18/12	11/14/12	B2K0476

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Lab No: 2110610
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Metals - Total

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
MW-2 Water (2110610-01) Sampled:11/14/12 12:20 Received:11/14/12 15:53									
Antimony	ug/l	ND		0.1	0.5	EPA 200.8	11/29/12	11/26/12	B2K0490
Arsenic	"	ND		0.1	0.5	"	"	"	"
Beryllium	"	ND		0.1	0.5	"	"	"	"
Cadmium	"	ND		0.05	0.25	"	"	"	"
Chromium	"	**0.4**	J	0.1	0.5	"	"	"	"
Chromium, Hexavalent (CrVI)	"	ND		2	5	SM 3500-Cr	11/15/12	11/15/12	B2K0374
Chromium, Trivalent	"	ND			5.0	EPA 200.8	11/29/12	11/26/12	[CALC]
Copper	"	**0.5**		0.1	0.5	"	"	"	B2K0490
Lead	"	ND		0.1	0.5	"	"	"	"
Mercury	ng/l	**0.42**	J	0.20	0.50	EPA 1631E	11/21/12	11/21/12	B2K0611
Mercury Field Blank	"	**0.33**	J	0.20	0.50	"	"	"	"
Nickel	ug/l	**0.3**	QR-04, J	0.2	1.0	EPA 200.8	11/29/12	11/26/12	B2K0490
Selenium	"	ND		0.4	2.0	"	"	"	"
Silver	"	ND		0.1	0.5	"	11/28/12	11/27/12	B2K0561
Thallium	"	ND		0.2	1.0	"	11/29/12	11/26/12	B2K0490
Zinc	"	**2.3**	QR-04	0.4	2.0	"	"	"	"
MW-3 Water (2110610-02) Sampled:11/14/12 14:00 Received:11/14/12 15:53									
Antimony	ug/l	**0.6**		0.1	0.5	EPA 200.8	11/29/12	11/26/12	B2K0490
Arsenic	"	**0.4**	J	0.1	0.5	"	"	"	"
Beryllium	"	ND		0.1	0.5	"	"	"	"
Cadmium	"	ND		0.05	0.25	"	"	"	"
Chromium	"	**1.2**		0.1	0.5	"	"	"	"
Chromium, Hexavalent (CrVI)	"	ND	R-08	10	25	SM 3500-Cr	11/15/12	11/15/12	B2K0374
Chromium, Trivalent	"	ND			25.0	EPA 200.8	11/29/12	11/26/12	[CALC]
Copper	"	**9.9**		0.1	0.5	"	"	"	B2K0490
Lead	"	**6.8**		0.1	0.5	"	"	"	"
Mercury	ng/l	**10.5**	QC-08, R-08	1.00	2.50	EPA 1631E	11/21/12	11/21/12	B2K0611
Mercury Field Blank	"	ND		0.20	0.50	"	"	"	"
Nickel	ug/l	**1.8**	QR-04	0.2	1.0	EPA 200.8	11/29/12	11/26/12	B2K0490
Selenium	"	ND		0.4	2.0	"	"	"	"
Silver	"	ND		0.1	0.5	"	11/28/12	11/27/12	B2K0561
Thallium	"	ND		0.2	1.0	"	11/29/12	11/26/12	B2K0490
Zinc	"	**211**	QR-04	0.4	2.0	"	"	"	"
DUP Water (2110610-03) Sampled:11/14/12 12:30 Received:11/14/12 15:53									
Antimony	ug/l	ND		0.1	0.5	EPA 200.8	11/29/12	11/26/12	B2K0490
Arsenic	"	ND		0.1	0.5	"	"	"	"
Beryllium	"	ND	R-08	0.5	2.5	"	"	"	"
Cadmium	"	ND		0.05	0.25	"	"	"	"
Chromium	"	**2.0**	R-08, J	0.5	2.5	"	"	"	"
Chromium, Hexavalent (CrVI)	"	ND		2	5	SM 3500-Cr	11/15/12	11/15/12	B2K0374
Chromium, Trivalent	"	ND			5.0	EPA 200.8	11/29/12	11/26/12	[CALC]
Copper	"	**0.8**	R-08, J	0.5	2.5	"	"	"	B2K0490
Lead	"	**0.2**	J	0.1	0.5	"	"	"	"
Mercury	ng/l	**0.53**		0.20	0.50	EPA 1631E	11/21/12	11/21/12	B2K0611
Mercury Field Blank	"	ND		0.20	0.50	"	"	"	"
Nickel	ug/l	ND	QR-04, R-08	1.0	5.0	EPA 200.8	11/29/12	11/26/12	B2K0490
Selenium	"	ND		0.4	2.0	"	"	"	"
Silver	"	ND		0.1	0.5	"	11/28/12	11/27/12	B2K0561
Thallium	"	ND		0.2	1.0	"	11/29/12	11/26/12	B2K0490
Zinc	"	**3.4**	QR-04	0.4	2.0	"	"	"	"

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Report To: GOLDER & ASSOCIATES
100 ENTERPRISE WAY, STE 190
ROSEVILLE, CA 95678
Attention: AMY HA
Project: TCCC-MT SHASTA ANNUAL MONITORING 123-97477 PHASE 002

Lab No: 2110610
Reported: 12/13/12
Phone: (530) 243-7234
P.O. #

Volatile Organic Compounds

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
MW-2 Water (2110610-01) Sampled:11/14/12 12:20 Received:11/14/12 15:53									
Acrolein	ug/l	ND		2.00	5.00	EPA 624	11/15/12	11/15/12	B2K0437
Acrylonitrile	"	ND		0.15	0.50	"	"	"	"
Benzene	"	ND		0.07	0.50	"	"	"	"
Bromodichloromethane	"	ND		0.08	0.50	"	"	"	"
Bromoform	"	ND		0.05	0.50	"	"	"	"
Bromomethane	"	ND		0.10	0.50	"	"	"	"
Carbon tetrachloride	"	ND		0.05	0.50	"	"	"	"
Chlorobenzene	"	ND		0.06	0.50	"	"	"	"
Chloroethane	"	ND		0.09	0.50	"	"	"	"
2-Chloroethylvinyl ether	"	ND		0.11	0.50	"	"	"	"
Chloroform	"	ND		0.07	0.50	"	"	"	"
Chloromethane	"	ND		0.12	0.50	"	"	"	"
Dibromochloromethane	"	ND		0.06	0.50	"	"	"	"
1,2-Dichlorobenzene (o-DCB)	"	ND		0.09	0.50	"	"	"	"
1,3-Dichlorobenzene (m-DCB)	"	ND		0.07	0.50	"	"	"	"
1,4-Dichlorobenzene (p-DCB)	"	ND		0.05	0.50	"	"	"	"
1,1-Dichloroethane (1,1-DCA)	"	ND		0.08	0.50	"	"	"	"
1,2-Dichloroethane (1,2-DCA)	"	ND		0.08	0.50	"	"	"	"
1,1-Dichloroethene (1,1-DCE)	"	ND		0.06	0.50	"	"	"	"
trans-1,2-Dichloroethene (t-1,2-DCE)	"	ND		0.05	0.50	"	"	"	"
1,3-Dichloropropane	"	ND		0.07	0.50	"	"	"	"
1,1-Dichloropropene	"	ND		0.08	0.50	"	"	"	"
cis-1,3-Dichloropropene	"	ND		0.08	0.50	"	"	"	"
trans-1,3-Dichloropropene	"	ND		0.08	0.50	"	"	"	"
1,3-Dichloropropene (total)	"	ND		0.16	1.00	"	"	"	"
Dichloromethane (Methylene Chloride)	"	ND		0.29	0.50	"	"	"	"
1,2-Dichloropropane	"	ND		0.06	0.50	"	"	"	"
Ethylbenzene	"	ND		0.06	0.50	"	"	"	"
Hexachlorobutadiene	"	ND		0.05	0.50	"	"	"	"
Methyl tert-Butyl Ether (MTBE)	"	ND		0.08	0.50	"	"	"	"
Naphthalene	"	**0.07**	J	0.07	0.50	"	"	"	"
1,1,2,2-Tetrachloroethane	"	ND		0.07	0.50	"	"	"	"
Tetrachloroethene (PCE)	"	ND		0.08	0.50	"	"	"	"
Toluene	"	ND		0.07	0.50	"	"	"	"
1,2,4-Trichlorobenzene	"	ND		0.07	0.50	"	"	"	"
1,1,1-Trichloroethane (1,1,1-TCA)	"	ND		0.09	0.50	"	"	"	"
1,1,2-Trichloroethane (1,1,2-TCA)	"	ND		0.07	0.50	"	"	"	"
Trichloroethene (TCE)	"	ND		0.09	0.50	"	"	"	"
Vinyl chloride	"	ND		0.10	0.50	"	"	"	"
Surrogate: 1,2-Dichloroethane-d4		*102 %*		*78.5-114*		"	"	"	"
Surrogate: Toluene-d8		*94.8 %*		*79.8-128*		"	"	"	"
Surrogate: 4-Bromofluorobenzene		*105 %*		*71.4-123*		"	"	"	"
MW-3 Water (2110610-02) Sampled:11/14/12 14:00 Received:11/14/12 15:53									
Acrolein	ug/l	ND		2.00	5.00	EPA 624	11/15/12	11/15/12	B2K0437
Acrylonitrile	"	ND		0.15	0.50	"	"	"	"
Benzene	"	**0.13**	J	0.07	0.50	"	"	"	"
Bromodichloromethane	"	ND		0.08	0.50	"	"	"	"
Bromoform	"	ND		0.05	0.50	"	"	"	"
Bromomethane	"	ND		0.10	0.50	"	"	"	"
Carbon tetrachloride	"	ND		0.05	0.50	"	"	"	"
Chlorobenzene	"	**0.06**	J	0.06	0.50	"	"	"	"
Chloroethane	"	ND		0.09	0.50	"	"	"	"

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100 ENTERPRISE WAY, STE 190
ROSEVILLE, CA 95678
Attention: AMY HA
Project: TCCC-MT SHASTA ANNUAL MONITORING 123-97477 PHASE 002

Lab No: 2110610
Reported: 12/13/12
Phone: (530) 243-7234
P.O. #

Volatile Organic Compounds

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
MW-3 Water (2110610-02)	**Sampled:11/14/12 14:00**		**Received:11/14/12 15:53**						
2-Chloroethylvinyl ether	"	ND		0.11	0.50	"	"	11/15/12	"
Chloroform	"	ND		0.07	0.50	"	"	"	"
Chloromethane	"	ND		0.12	0.50	"	"	"	"
Dibromochloromethane	"	ND		0.06	0.50	"	"	"	"
1,2-Dichlorobenzene (o-DCB)	"	ND		0.09	0.50	"	"	"	"
1,3-Dichlorobenzene (m-DCB)	"	ND		0.07	0.50	"	"	"	"
1,4-Dichlorobenzene (p-DCB)	"	ND		0.05	0.50	"	"	"	"
1,1-Dichloroethane (1,1-DCA)	"	ND		0.08	0.50	"	"	"	"
1,2-Dichloroethane (1,2-DCA)	"	ND		0.08	0.50	"	"	"	"
1,1-Dichloroethene (1,1-DCE)	"	ND		0.06	0.50	"	"	"	"
trans-1,2-Dichloroethene (t-1,2-DCE)	"	ND		0.05	0.50	"	"	"	"
1,3-Dichloropropane	"	ND		0.07	0.50	"	"	"	"
1,1-Dichloropropene	"	ND		0.08	0.50	"	"	"	"
cis-1,3-Dichloropropene	"	ND		0.08	0.50	"	"	"	"
trans-1,3-Dichloropropene	"	ND		0.08	0.50	"	"	"	"
1,3-Dichloropropene (total)	"	ND		0.16	1.00	"	"	"	"
Dichloromethane (Methylene Chloride)	"	ND		0.29	0.50	"	"	"	"
1,2-Dichloropropane	"	ND		0.06	0.50	"	"	"	"
Ethylbenzene	"	ND		0.06	0.50	"	"	"	"
Hexachlorobutadiene	"	ND		0.05	0.50	"	"	"	"
Methyl tert-Butyl Ether (MTBE)	"	ND		0.08	0.50	"	"	"	"
Naphthalene	"	**0.08**	J	0.07	0.50	"	"	"	"
1,1,2,2-Tetrachloroethane	"	ND		0.07	0.50	"	"	"	"
Tetrachloroethene (PCE)	"	ND		0.08	0.50	"	"	"	"
Toluene	"	**0.07**	J	0.07	0.50	"	"	"	"
1,2,4-Trichlorobenzene	"	ND		0.07	0.50	"	"	"	"
1,1,1-Trichloroethane (1,1,1-TCA)	"	ND		0.09	0.50	"	"	"	"
1,1,2-Trichloroethane (1,1,2-TCA)	"	ND		0.07	0.50	"	"	"	"
Trichloroethene (TCE)	"	ND		0.09	0.50	"	"	"	"
Vinyl chloride	"	ND		0.10	0.50	"	"	"	"
Surrogate: 1,2-Dichloroethane-d4		*98.9 %*		*78.5-114*		"	"	"	"
Surrogate: Toluene-d8		*94.9 %*		*79.8-128*		"	"	"	"
Surrogate: 4-Bromofluorobenzene		*103 %*		*71.4-123*		"	"	"	"
DUP Water (2110610-03)	**Sampled:11/14/12 12:30**		**Received:11/14/12 15:53**						
Acrolein	ug/l	ND		2.00	5.00	EPA 624	11/15/12	11/15/12	B2K0437
Acrylonitrile	"	ND		0.15	0.50	"	"	"	"
Benzene	"	ND		0.07	0.50	"	"	"	"
Bromodichloromethane	"	ND		0.08	0.50	"	"	"	"
Bromoform	"	ND		0.05	0.50	"	"	"	"
Bromomethane	"	ND		0.10	0.50	"	"	"	"
Carbon tetrachloride	"	ND		0.05	0.50	"	"	"	"
Chlorobenzene	"	ND		0.06	0.50	"	"	"	"
Chloroethane	"	ND		0.09	0.50	"	"	"	"
2-Chloroethylvinyl ether	"	ND		0.11	0.50	"	"	"	"
Chloroform	"	ND		0.07	0.50	"	"	"	"
Chloromethane	"	ND		0.12	0.50	"	"	"	"
Dibromochloromethane	"	ND		0.06	0.50	"	"	"	"
1,2-Dichlorobenzene (o-DCB)	"	ND		0.09	0.50	"	"	"	"
1,3-Dichlorobenzene (m-DCB)	"	ND		0.07	0.50	"	"	"	"
1,4-Dichlorobenzene (p-DCB)	"	ND		0.05	0.50	"	"	"	"
1,1-Dichloroethane (1,1-DCA)	"	ND		0.08	0.50	"	"	"	"
1,2-Dichloroethane (1,2-DCA)	"	ND		0.08	0.50	"	"	"	"

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Volatile Organic Compounds

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
DUP Water (2110610-03) Sampled:11/14/12 12:30 Received:11/14/12 15:53									
1,1-Dichloroethene (1,1-DCE)	"	ND		0.06	0.50	"	"	11/15/12	"
trans-1,2-Dichloroethene (t-1,2-DCE)	"	ND		0.05	0.50	"	"	"	"
1,3-Dichloropropane	"	ND		0.07	0.50	"	"	"	"
1,1-Dichloropropene	"	ND		0.08	0.50	"	"	"	"
cis-1,3-Dichloropropene	"	ND		0.08	0.50	"	"	"	"
trans-1,3-Dichloropropene	"	ND		0.08	0.50	"	"	"	"
1,3-Dichloropropene (total)	"	ND		0.16	1.00	"	"	"	"
Dichloromethane (Methylene Chloride)	"	ND		0.29	0.50	"	"	"	"
1,2-Dichloropropane	"	ND		0.06	0.50	"	"	"	"
Ethylbenzene	"	ND		0.06	0.50	"	"	"	"
Hexachlorobutadiene	"	ND		0.05	0.50	"	"	"	"
Methyl tert-Butyl Ether (MTBE)	"	ND		0.08	0.50	"	"	"	"
Naphthalene	"	**0.07**	J	0.07	0.50	"	"	"	"
1,1,2,2-Tetrachloroethane	"	ND		0.07	0.50	"	"	"	"
Tetrachloroethene (PCE)	"	ND		0.08	0.50	"	"	"	"
Toluene	"	ND		0.07	0.50	"	"	"	"
1,2,4-Trichlorobenzene	"	ND		0.07	0.50	"	"	"	"
1,1,1-Trichloroethane (1,1,1-TCA)	"	ND		0.09	0.50	"	"	"	"
1,1,2-Trichloroethane (1,1,2-TCA)	"	ND		0.07	0.50	"	"	"	"
Trichloroethene (TCE)	"	ND		0.09	0.50	"	"	"	"
Vinyl chloride	"	ND		0.10	0.50	"	"	"	"
Surrogate: 1,2-Dichloroethane-d4		*101 %*		*78.5-114*		"	"	"	"
Surrogate: Toluene-d8		*95.5 %*		*79.8-128*		"	"	"	"
Surrogate: 4-Bromofluorobenzene		*103 %*		*71.4-123*		"	"	"	"
TRIP BLANK Blank (2110610-04) Sampled:11/14/12 00:00 Received:11/14/12 15:53									
Acetone	ug/l	**1.0**	J	0.6	2.5	EPA 624	11/15/12	11/15/12	B2K0437
Acrolein	"	ND		2.0	5.0	"	"	"	"
Acrylonitrile	"	ND		0.2	0.5	"	"	"	"
tert-Amyl Methyl Ether (TAME)	"	ND		0.07	0.5	"	"	"	"
Benzene	"	ND		0.07	0.5	"	"	"	"
Bromochloromethane	"	ND		0.1	0.5	"	"	"	"
Bromodichloromethane	"	ND		0.08	0.5	"	"	"	"
Bromoform	"	ND		0.05	0.5	"	"	"	"
Bromomethane	"	ND		0.1	0.5	"	"	"	"
2-Butanone (MEK)	"	ND		0.4	2.5	"	"	"	"
tert-Butyl Alcohol (TBA)	"	ND		0.7	5.0	"	"	"	"
Carbon disulfide	"	ND		0.06	0.5	"	"	"	"
Carbon tetrachloride	"	ND		0.05	0.5	"	"	"	"
Chlorobenzene	"	ND		0.06	0.5	"	"	"	"
Chloroethane	"	ND		0.09	0.5	"	"	"	"
2-Chloroethylvinyl ether	"	ND		0.1	0.5	"	"	"	"
Chloroform	"	ND		0.07	0.5	"	"	"	"
Chloromethane	"	ND		0.1	0.5	"	"	"	"
Dibromochloromethane	"	ND		0.06	0.5	"	"	"	"
1,2-Dibromo-3-chloropropane (DBCP)	"	ND		0.1	0.5	"	"	"	"
1,2-Dibromoethane (EDB)	"	ND		0.07	0.5	"	"	"	"
Dibromomethane	"	ND		0.09	0.5	"	"	"	"
1,2-Dichlorobenzene (o-DCB)	"	ND		0.09	0.5	"	"	"	"
1,3-Dichlorobenzene (m-DCB)	"	ND		0.07	0.5	"	"	"	"
1,4-Dichlorobenzene (p-DCB)	"	ND		0.05	0.5	"	"	"	"
Dichlorodifluoromethane (CFC 12)	"	ND		0.09	0.5	"	"	"	"
1,1-Dichloroethane (1,1-DCA)	"	ND		0.08	0.5	"	"	"	"

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Report To: GOLDER & ASSOCIATES
100 ENTERPRISE WAY, STE 190
ROSEVILLE, CA 95678
Attention: AMY HA
Project: TCCC-MT SHASTA ANNUAL MONITORING 123-97477 PHASE 002

Lab No: 2110610
Reported: 12/13/12
Phone: (530) 243-7234
P.O. #

Volatile Organic Compounds

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
TRIP BLANK Blank (2110610-04)	**Sampled:11/14/12 00:00 Received:11/14/12 15:53**								
1,2-Dichloroethane (1,2-DCA)	"	ND		0.08	0.5	"	"	11/15/12	"
1,1-Dichloroethene (1,1-DCE)	"	ND		0.06	0.5	"	"	"	"
cis-1,2-Dichloroethene (c-1,2-DCE)	"	ND		0.06	0.5	"	"	"	"
trans-1,2-Dichloroethene (t-1,2-DCE)	"	ND		0.05	0.5	"	"	"	"
Trichlorotrifluoroethane (Freon 113)	"	ND		0.1	0.5	"	"	"	"
Dichloromethane (Methylene Chloride)	"	ND		0.3	0.5	"	"	"	"
1,2-Dichloropropane	"	ND		0.06	0.5	"	"	"	"
1,3-Dichloropropane	"	ND		0.07	0.5	"	"	"	"
2,2-Dichloropropane	"	ND		0.1	0.5	"	"	"	"
1,1-Dichloropropene	"	ND		0.08	0.5	"	"	"	"
cis-1,3-Dichloropropene	"	ND		0.08	0.5	"	"	"	"
trans-1,3-Dichloropropene	"	ND		0.08	0.5	"	"	"	"
1,3-Dichloropropene (total)	"	ND		0.2	1.0	"	"	"	"
Di-Isopropyl Ether (DIPE)	"	ND		0.06	0.5	"	"	"	"
Ethylbenzene	"	ND		0.06	0.5	"	"	"	"
Ethyl tert-Butyl Ether (ETBE)	"	ND		0.06	0.5	"	"	"	"
Hexachlorobutadiene	"	ND		0.05	0.5	"	"	"	"
2-Hexanone	"	ND		0.3	2.0	"	"	"	"
4-Methyl-2-pentanone (MIBK)	"	ND		0.1	1.0	"	"	"	"
Methyl tert-Butyl Ether (MTBE)	"	ND		0.08	0.5	"	"	"	"
Naphthalene	"	**0.2**	J	0.07	0.5	"	"	"	"
Styrene	"	ND		0.05	0.5	"	"	"	"
1,1,1,2-Tetrachloroethane	"	ND		0.1	0.5	"	"	"	"
1,1,2,2-Tetrachloroethane	"	ND		0.07	0.5	"	"	"	"
Tetrachloroethene (PCE)	"	ND		0.08	0.5	"	"	"	"
Toluene	"	ND		0.07	0.5	"	"	"	"
1,2,4-Trichlorobenzene	"	**0.1**	J	0.07	0.5	"	"	"	"
1,1,1-Trichloroethane (1,1,1-TCA)	"	ND		0.09	0.5	"	"	"	"
1,1,2-Trichloroethane (1,1,2-TCA)	"	ND		0.07	0.5	"	"	"	"
Trichloroethene (TCE)	"	ND		0.09	0.5	"	"	"	"
Trichlorofluoromethane (Freon 11)	"	ND		0.06	0.5	"	"	"	"
1,2,3-Trichloropropane	"	ND		0.09	0.5	"	"	"	"
Vinyl chloride	"	ND		0.1	0.5	"	"	"	"
Xylenes (total)	"	ND		0.1	1.0	"	"	"	"
Surrogate: 1,2-Dichloroethane-d4		*101 %*		*78.5-114*		"	"	"	"
Surrogate: Toluene-d8		*98.0 %*		*79.8-128*		"	"	"	"
Surrogate: 4-Bromofluorobenzene		*103 %*		*71.4-123*		"	"	"	"

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Report To: GOLDER & ASSOCIATES
100 ENTERPRISE WAY, STE 190
ROSEVILLE, CA 95678
Attention: AMY HA
Project: TCCC-MT SHASTA ANNUAL MONITORING 123-97477 PHASE 002

Lab No: 2110610
Reported: 12/13/12
Phone: (530) 243-7234
P.O. #

Semi Volatile Organic Compounds

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
MW-2 Water (2110610-01)	**Sampled:11/14/12 12:20**		**Received:11/14/12 15:53**						
Acenaphthene	ug/l	ND		0.5	1.0	EPA 625	11/28/12	11/16/12	B2K0422
Acenaphthylene	"	ND		1.0	5.0	"	"	"	"
Anthracene	"	ND		1.0	5.0	"	"	"	"
Benzidine	"	ND		1.0	5.0	"	"	"	"
Benzo (a) anthracene	"	ND		1.0	5.0	"	"	"	"
Benzo (a) pyrene	"	ND		1.0	5.0	"	"	"	"
Benzo (b) fluoranthene	"	ND		1.0	5.0	"	"	"	"
Benzo (g,h,i) perylene	"	ND		1.0	5.0	"	"	"	"
Benzo (k) fluoranthene	"	ND		2.0	5.0	"	"	"	"
Bis(2-chloroethyl)ether	"	ND		0.5	1.0	"	"	"	"
Bis(2-chloroethoxy)methane	"	ND		1.0	5.0	"	"	"	"
Bis(2-chloroisopropyl)ether	"	ND		1.0	2.0	"	"	"	"
Bis(2-ethylhexyl)phthalate (DEHP)	"	ND		2.0	5.0	"	"	"	"
4-Bromophenyl phenyl ether	"	ND		1.0	5.0	"	"	"	"
Butyl benzyl phthalate	"	ND		1.0	5.0	"	"	"	"
4-Chloro-3-methylphenol	"	ND		0.5	1.0	"	"	"	"
2-Chloronaphthalene	"	ND		1.0	2.0	"	"	"	"
2-Chlorophenol	"	ND		1.0	5.0	"	"	"	"
4-Chlorophenyl phenyl ether	"	ND		1.0	5.0	"	"	"	"
Chrysene	"	ND		1.0	5.0	"	"	"	"
Dibenz (a,h) anthracene	"	ND		1.0	5.0	"	"	"	"
3,3'-Dichlorobenzidine	"	ND		0.4	5.0	"	"	"	"
2,4-Dichlorophenol	"	ND		1.0	2.0	"	"	"	"
Diethyl phthalate	"	ND		1.0	2.0	"	"	"	"
2,4-Dimethylphenol	"	ND		1.0	2.0	"	"	"	"
Dimethyl phthalate	"	ND		1.0	5.0	"	"	"	"
Di-n-butyl phthalate	"	ND		1.0	5.0	"	"	"	"
Di-n-octyl phthalate	"	ND		1.0	5.0	"	"	"	"
4,6-Dinitro-2-methylphenol	"	ND		1.0	5.0	"	"	"	"
2,4-Dinitrophenol	"	ND		1.0	5.0	"	"	"	"
2,4-Dinitrotoluene	"	ND		1.0	5.0	"	"	"	"
2,6-Dinitrotoluene	"	ND		1.0	5.0	"	"	"	"
1,2-Diphenylhydrazine	"	ND		0.2	1.0	"	"	"	"
Fluoranthene	"	ND		0.5	1.0	"	"	"	"
Fluorene	"	ND		2.0	5.0	"	"	"	"
Hexachlorobenzene	"	ND		0.5	1.0	"	"	"	"
Hexachlorocyclopentadiene	"	ND		1.0	2.0	"	"	"	"
Indeno (1,2,3-cd) pyrene	"	ND		1.0	5.0	"	"	"	"
Hexachloroethane	"	ND		0.5	1.0	"	"	"	"
Isophorone	"	ND		0.5	1.0	"	"	"	"
Nitrobenzene	"	ND		0.5	1.0	"	"	"	"
2-Nitrophenol	"	ND		1.0	5.0	"	"	"	"
4-Nitrophenol	"	ND		1.0	5.0	"	"	"	"
N-Nitrosodi-n-propylamine	"	ND		1.0	5.0	"	"	"	"
N-Nitrosodimethylamine	"	ND		0.1	2.0	"	"	"	"
N-Nitrosodiphenylamine	"	ND		1.0	2.0	"	"	"	"
Pentachlorophenol (PCP)	"	ND		0.5	5.0	"	"	"	"
Phenanthrene	"	ND		1.0	5.0	"	"	"	"
Phenol	"	ND		0.5	1.0	"	"	"	"
Pyrene	"	ND		1.0	5.0	"	"	"	"
2,4,6-Trichlorophenol	"	ND		1.0	5.0	"	"	"	"
Surrogate: 2-Fluorophenol		*33.6 %*		*19.9-67.1*		"	"	"	"

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Report To: GOLDER & ASSOCIATES
100 ENTERPRISE WAY, STE 190
ROSEVILLE, CA 95678
Attention: AMY HA
Project: TCCC-MT SHASTA ANNUAL MONITORING 123-97477 PHASE 002

Lab No: 2110610
Reported: 12/13/12
Phone: (530) 243-7234
P.O. #

Semi Volatile Organic Compounds

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
MW-2 Water (2110610-01) Sampled:11/14/12 12:20 Received:11/14/12 15:53									
Surrogate: Phenol-d5		*25.6 %*		*16.9-52.2*		"	"	*11/16/12*	"
Surrogate: 2,4,6-Tribromophenol		*122 %*		*56.8-138*		"	"	"	"
Surrogate: Nitrobenzene-d5		*98.4 %*		*41.3-100*		"	"	"	"
Surrogate: 2-Fluorobiphenyl		*105 %*	*S-BN*	*47-103*		"	"	"	"
Surrogate: Terphenyl-dl4		*125 %*		*51.6-126*		"	"	"	"
MW-3 Water (2110610-02) Sampled:11/14/12 14:00 Received:11/14/12 15:53									
Acenaphthene	ug/l	ND		0.5	1.0	EPA 625	11/28/12	11/16/12	B2K0422
Acenaphthylene	"	ND		1.0	5.0	"	"	"	"
Anthracene	"	ND		1.0	5.0	"	"	"	"
Benzidine	"	ND		1.0	5.0	"	"	"	"
Benzo (a) anthracene	"	ND		1.0	5.0	"	"	"	"
Benzo (a) pyrene	"	ND		1.0	5.0	"	"	"	"
Benzo (b) fluoranthene	"	ND		1.0	5.0	"	"	"	"
Benzo (g,h,I) perylene	"	ND		1.0	5.0	"	"	"	"
Benzo (k) fluoranthene	"	ND		2.0	5.0	"	"	"	"
Bis(2-chloroethyl)ether	"	ND		0.5	1.0	"	"	"	"
Bis(2-chloroethoxy)methane	"	ND		1.0	5.0	"	"	"	"
Bis(2-chloroisopropyl)ether	"	ND		1.0	2.0	"	"	"	"
Bis(2-ethylhexyl)phthalate (DEHP)	"	**250**	R-01	40.0	100	"	11/30/12	"	"
4-Bromophenyl phenyl ether	"	ND		1.0	5.0	"	11/28/12	"	"
Butyl benzyl phthalate	"	ND		1.0	5.0	"	"	"	"
4-Chloro-3-methylphenol	"	ND		0.5	1.0	"	"	"	"
2-Chloronaphthalene	"	ND		1.0	2.0	"	"	"	"
2-Chlorophenol	"	ND		1.0	5.0	"	"	"	"
4-Chlorophenyl phenyl ether	"	ND		1.0	5.0	"	"	"	"
Chrysene	"	ND		1.0	5.0	"	"	"	"
Dibenz (a,h) anthracene	"	ND		1.0	5.0	"	"	"	"
3,3'-Dichlorobenzidine	"	ND		0.4	5.0	"	"	"	"
2,4-Dichlorophenol	"	ND		1.0	2.0	"	"	"	"
Diethyl phthalate	"	ND		1.0	2.0	"	"	"	"
2,4-Dimethylphenol	"	ND		1.0	2.0	"	"	"	"
Dimethyl phthalate	"	ND		1.0	5.0	"	"	"	"
Di-n-butyl phthalate	"	ND		1.0	5.0	"	"	"	"
Di-n-octyl phthalate	"	ND		1.0	5.0	"	"	"	"
4,6-Dinitro-2-methylphenol	"	ND		1.0	5.0	"	"	"	"
2,4-Dinitrophenol	"	ND		1.0	5.0	"	"	"	"
2,4-Dinitrotoluene	"	ND		1.0	5.0	"	"	"	"
2,6-Dinitrotoluene	"	ND		1.0	5.0	"	"	"	"
1,2-Diphenylhydrazine	"	ND		0.2	1.0	"	"	"	"
Fluoranthene	"	ND		0.5	1.0	"	"	"	"
Fluorene	"	ND		2.0	5.0	"	"	"	"
Hexachlorobenzene	"	ND		0.5	1.0	"	"	"	"
Hexachlorocyclopentadiene	"	ND		1.0	2.0	"	"	"	"
Indeno (1,2,3-cd) pyrene	"	ND		1.0	5.0	"	"	"	"
Hexachloroethane	"	ND		0.5	1.0	"	"	"	"
Isophorone	"	ND		0.5	1.0	"	"	"	"
Nitrobenzene	"	ND		0.5	1.0	"	"	"	"
2-Nitrophenol	"	ND		1.0	5.0	"	"	"	"
4-Nitrophenol	"	ND		1.0	5.0	"	"	"	"
N-Nitrosodi-n-propylamine	"	ND		1.0	5.0	"	"	"	"
N-Nitrosodimethylamine	"	ND		0.1	2.0	"	"	"	"
N-Nitrosodiphenylamine	"	ND		1.0	2.0	"	"	"	"

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Report To: GOLDER & ASSOCIATES
100 ENTERPRISE WAY, STE 190
ROSEVILLE, CA 95678
Attention: AMY HA
Project: TCCC-MT SHASTA ANNUAL MONITORING 123-97477 PHASE 002

Lab No: 2110610
Reported: 12/13/12
Phone: (530) 243-7234
P.O. #

Semi Volatile Organic Compounds

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
MW-3 Water (2110610-02)	**Sampled:11/14/12 14:00**		**Received:11/14/12 15:53**						
Pentachlorophenol (PCP)	"	ND		0.5	5.0	"	"	11/16/12	"
Phenanthrene	"	ND		1.0	5.0	"	"	"	"
Phenol	"	**0.6**	J	0.5	1.0	"	"	"	"
Pyrene	"	ND		1.0	5.0	"	"	"	"
2,4,6-Trichlorophenol	"	ND		1.0	5.0	"	"	"	"
Surrogate: 2-Fluorophenol		*21.0 %*		*19.9-67.1*		"	"	"	"
Surrogate: Phenol-d5		*16.6 %*	*S-AC*	*16.9-52.2*		"	"	"	"
Surrogate: 2,4,6-Tribromophenol		*92.0 %*		*56.8-138*		"	"	"	"
Surrogate: Nitrobenzene-d5		*53.5 %*		*41.3-100*		"	"	"	"
Surrogate: 2-Fluorobiphenyl		*58.0 %*		*47-103*		"	"	"	"
Surrogate: Terphenyl-d14		*88.5 %*		*51.6-126*		"	"	"	"
DUP Water (2110610-03)	**Sampled:11/14/12 12:30**		**Received:11/14/12 15:53**						
Acenaphthene	ug/l	ND		0.5	1.0	EPA 625	11/28/12	11/16/12	B2K0422
Acenaphthylene	"	ND		1.0	5.0	"	"	"	"
Anthracene	"	ND		1.0	5.0	"	"	"	"
Benzidine	"	ND		1.0	5.0	"	"	"	"
Benzo (a) anthracene	"	ND		1.0	5.0	"	"	"	"
Benzo (a) pyrene	"	ND		1.0	5.0	"	"	"	"
Benzo (b) fluoranthene	"	ND		1.0	5.0	"	"	"	"
Benzo (g,h,i) perylene	"	ND		1.0	5.0	"	"	"	"
Benzo (k) fluoranthene	"	ND		2.0	5.0	"	"	"	"
Bis(2-chloroethyl)ether	"	ND		0.5	1.0	"	"	"	"
Bis(2-chloroethoxy)methane	"	ND		1.0	5.0	"	"	"	"
Bis(2-chloroisopropyl)ether	"	ND		1.0	2.0	"	"	"	"
Bis(2-ethylhexyl)phthalate (DEHP)	"	ND		2.0	5.0	"	"	"	"
4-Bromophenyl phenyl ether	"	ND		1.0	5.0	"	"	"	"
Butyl benzyl phthalate	"	ND		1.0	5.0	"	"	"	"
4-Chloro-3-methylphenol	"	ND		0.5	1.0	"	"	"	"
2-Chloronaphthalene	"	ND		1.0	2.0	"	"	"	"
2-Chlorophenol	"	ND		1.0	5.0	"	"	"	"
4-Chlorophenyl phenyl ether	"	ND		1.0	5.0	"	"	"	"
Chrysene	"	ND		1.0	5.0	"	"	"	"
Dibenz (a,h) anthracene	"	ND		1.0	5.0	"	"	"	"
3,3´-Dichlorobenzidine	"	ND		0.4	5.0	"	"	"	"
2,4-Dichlorophenol	"	ND		1.0	2.0	"	"	"	"
Diethyl phthalate	"	ND		1.0	2.0	"	"	"	"
2,4-Dimethylphenol	"	ND		1.0	2.0	"	"	"	"
Dimethyl phthalate	"	ND		1.0	5.0	"	"	"	"
Di-n-butyl phthalate	"	ND		1.0	5.0	"	"	"	"
Di-n-octyl phthalate	"	ND		1.0	5.0	"	"	"	"
4,6-Dinitro-2-methylphenol	"	ND		1.0	5.0	"	"	"	"
2,4-Dinitrophenol	"	ND		1.0	5.0	"	"	"	"
2,4-Dinitrotoluene	"	ND		1.0	5.0	"	"	"	"
2,6-Dinitrotoluene	"	ND		1.0	5.0	"	"	"	"
1,2-Diphenylhydrazine	"	ND		0.2	1.0	"	"	"	"
Fluoranthene	"	ND		0.5	1.0	"	"	"	"
Fluorene	"	ND		2.0	5.0	"	"	"	"
Hexachlorobenzene	"	ND		0.5	1.0	"	"	"	"
Hexachlorocyclopentadiene	"	ND		1.0	2.0	"	"	"	"
Indeno (1,2,3-cd) pyrene	"	ND		1.0	5.0	"	"	"	"
Hexachloroethane	"	ND		0.5	1.0	"	"	"	"
Isophorone	"	ND		0.5	1.0	"	"	"	"

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Chico, California 95928 fax 530.894.5143

Report To: GOLDER & ASSOCIATES
100 ENTERPRISE WAY, STE 190
ROSEVILLE, CA 95678
Attention: AMY HA
Project: TCCC-MT SHASTA ANNUAL MONITORING 123-97477 PHASE 002

Lab No: 2110610
Reported: 12/13/12
Phone: (530) 243-7234
P.O. #

Semi Volatile Organic Compounds

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
DUP Water (2110610-03) Sampled:11/14/12 12:30 Received:11/14/12 15:53									
Nitrobenzene	"	ND		0.5	1.0	"	"	11/16/12	"
2-Nitrophenol	"	ND		1.0	5.0	"	"	"	"
4-Nitrophenol	"	ND		1.0	5.0	"	"	"	"
N-Nitrosodi-n-propylamine	"	ND		1.0	5.0	"	"	"	"
N-Nitrosodimethylamine	"	ND		0.1	2.0	"	"	"	"
N-Nitrosodiphenylamine	"	ND		1.0	2.0	"	"	"	"
Pentachlorophenol (PCP)	"	ND		0.5	5.0	"	"	"	"
Phenanthrene	"	ND		1.0	5.0	"	"	"	"
Phenol	"	ND		0.5	1.0	"	"	"	"
Pyrene	"	ND		1.0	5.0	"	"	"	"
2,4,6-Trichlorophenol	"	ND		1.0	5.0	"	"	"	"
Surrogate: 2-Fluorophenol		*34.2 %*		*19.9-67.1*		"	"	"	"
Surrogate: Phenol-d5		*24.8 %*		*16.9-52.2*		"	"	"	"
Surrogate: 2,4,6-Tribromophenol		*115 %*		*56.8-138*		"	"	"	"
Surrogate: Nitrobenzene-d5		*101 %*	*S-BN*	*41.3-100*		"	"	"	"
Surrogate: 2-Fluorobiphenyl		*102 %*		*47-103*		"	"	"	"
Surrogate: Terphenyl-dl4		*119 %*		*51.6-126*		"	"	"	"

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

basic laboratory
www.basiclab.com
2218 Railroad Avenue, Redding, California 96001, voice 530.243.7234, fax 530.243.7494
3860 Morrow Lane, Suite F, Chico, California 95928, voice 530.894.8966, fax 530.894.5143

Report To: GOLDER & ASSOCIATES
100 ENTERPRISE WAY, STE 190
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Lab No: 2110610
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Pesticides

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
MW-2 Water (2110610-01) Sampled:11/14/12 12:20 Received:11/14/12 15:53									
Aldrin	ug/l	ND		0.003	0.005	EPA 608	12/01/12	11/15/12	B2K0373
alpha-BHC	"	ND		0.002	0.010	"	"	"	"
beta-BHC	"	ND		0.002	0.005	"	"	"	"
gamma-BHC (Lindane)	"	ND		0.002	0.010	"	"	"	"
delta-BHC	"	ND		0.002	0.005	"	"	"	"
Chlordane (tech)	"	ND		0.090	0.500	"	"	"	"
4,4'-DDE	"	ND		0.002	0.010	"	"	"	"
4,4'-DDD	"	ND		0.002	0.020	"	"	"	"
4,4'-DDT	"	ND		0.002	0.010	"	"	"	"
Dieldrin	"	ND		0.002	0.010	"	"	"	"
Endosulfan I	"	ND		0.002	0.010	"	"	"	"
Endosulfan II	"	ND		0.002	0.010	"	"	"	"
Endosulfan sulfate	"	ND		0.002	0.020	"	"	"	"
Endrin	"	ND		0.003	0.010	"	"	"	"
Endrin aldehyde	"	ND		0.005	0.010	"	"	"	"
Heptachlor	"	ND		0.002	0.010	"	"	"	"
Heptachlor epoxide	"	ND		0.002	0.010	"	"	"	"
Methoxychlor	"	ND		0.002	0.010	"	"	"	"
Toxaphene	"	ND		0.060	0.500	"	"	"	"
PCB-1016	"	ND	QR-05	0.050	0.200	"	"	"	"
PCB-1221	"	ND		0.050	0.200	"	"	"	"
PCB-1232	"	ND		0.050	0.200	"	"	"	"
PCB-1242	"	ND		0.050	0.200	"	"	"	"
PCB-1248	"	ND		0.050	0.200	"	"	"	"
PCB-1254	"	ND		0.050	0.200	"	"	"	"
PCB-1260	"	ND		0.050	0.200	"	"	"	"
PCB-1262	"	ND		0.100	0.500	"	"	"	"
Surrogate: Tetrachloro-meta-xylene		*55.0 %*		*14.2-103*		"	"	"	"
Surrogate: Decachlorobiphenyl		*73.9 %*		*27.7-133*		"	"	"	"
MW-3 Water (2110610-02) Sampled:11/14/12 14:00 Received:11/14/12 15:53									
Aldrin	ug/l	ND		0.003	0.005	EPA 608	12/01/12	11/15/12	B2K0373
alpha-BHC	"	ND		0.002	0.010	"	"	"	"
beta-BHC	"	ND		0.002	0.005	"	"	"	"
gamma-BHC (Lindane)	"	ND		0.002	0.010	"	"	"	"
delta-BHC	"	ND		0.002	0.005	"	"	"	"
Chlordane (tech)	"	ND		0.090	0.500	"	"	"	"
4,4'-DDE	"	ND		0.002	0.010	"	"	"	"
4,4'-DDD	"	ND		0.002	0.020	"	"	"	"
4,4'-DDT	"	ND		0.002	0.010	"	"	"	"
Dieldrin	"	ND		0.002	0.010	"	"	"	"
Endosulfan I	"	ND		0.002	0.010	"	"	"	"
Endosulfan II	"	ND		0.002	0.010	"	"	"	"
Endosulfan sulfate	"	ND		0.002	0.020	"	"	"	"
Endrin	"	ND		0.003	0.010	"	"	"	"
Endrin aldehyde	"	ND		0.005	0.010	"	"	"	"
Heptachlor	"	ND		0.002	0.010	"	"	"	"
Heptachlor epoxide	"	ND		0.002	0.010	"	"	"	"
Methoxychlor	"	ND		0.002	0.010	"	"	"	"
Toxaphene	"	ND		0.060	0.500	"	"	"	"
PCB-1016	"	ND	QR-05	0.050	0.200	"	"	"	"
PCB-1221	"	ND		0.050	0.200	"	"	"	"
PCB-1232	"	ND		0.050	0.200	"	"	"	"

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Report To: GOLDER & ASSOCIATES
100 ENTERPRISE WAY, STE 190
ROSEVILLE, CA 95678
Attention: AMY HA
Project: TCCC-MT SHASTA ANNUAL MONITORING 123-97477 PHASE 002

Lab No: 2110610
Reported: 12/13/12
Phone: (530) 243-7234
P.O. #

Pesticides

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
MW-3 Water (2110610-02) Sampled:11/14/12 14:00 Received:11/14/12 15:53									
PCB-1242	"	ND		0.050	0.200	"	"	11/15/12	"
PCB-1248	"	ND		0.050	0.200	"	"	"	"
PCB-1254	"	ND		0.050	0.200	"	"	"	"
PCB-1260	"	ND		0.050	0.200	"	"	"	"
PCB-1262	"	ND		0.100	0.500	"	"	"	"
Surrogate: Tetrachloro-meta-xylene		*26.8 %*		*14.2-103*		"	"	"	"
Surrogate: Decachlorobiphenyl		*51.2 %*		*27.7-133*		"	"	"	"
DUP Water (2110610-03) Sampled:11/14/12 12:30 Received:11/14/12 15:53									
Aldrin	ug/l	ND		0.003	0.005	EPA 608	12/01/12	11/15/12	B2K0373
alpha-BHC	"	ND		0.002	0.010	"	"	"	"
beta-BHC	"	ND		0.002	0.005	"	"	"	"
gamma-BHC (Lindane)	"	ND		0.002	0.010	"	"	"	"
delta-BHC	"	ND		0.002	0.005	"	"	"	"
Chlordane (tech)	"	ND		0.090	0.500	"	"	"	"
4,4'-DDE	"	ND		0.002	0.010	"	"	"	"
4,4'-DDD	"	ND		0.002	0.020	"	"	"	"
4,4'-DDT	"	ND		0.002	0.010	"	"	"	"
Dieldrin	"	ND		0.002	0.010	"	"	"	"
Endosulfan I	"	ND		0.002	0.010	"	"	"	"
Endosulfan II	"	ND		0.002	0.010	"	"	"	"
Endosulfan sulfate	"	ND		0.002	0.020	"	"	"	"
Endrin	"	ND		0.003	0.010	"	"	"	"
Endrin aldehyde	"	ND		0.005	0.010	"	"	"	"
Heptachlor	"	ND		0.002	0.010	"	"	"	"
Heptachlor epoxide	"	ND		0.002	0.010	"	"	"	"
Methoxychlor	"	ND		0.002	0.010	"	"	"	"
Toxaphene	"	ND		0.060	0.500	"	"	"	"
PCB-1016	"	ND	QR-05	0.050	0.200	"	"	"	"
PCB-1221	"	ND		0.050	0.200	"	"	"	"
PCB-1232	"	ND		0.050	0.200	"	"	"	"
PCB-1242	"	ND		0.050	0.200	"	"	"	"
PCB-1248	"	ND		0.050	0.200	"	"	"	"
PCB-1254	"	ND		0.050	0.200	"	"	"	"
PCB-1260	"	ND		0.050	0.200	"	"	"	"
PCB-1262	"	ND		0.100	0.500	"	"	"	"
Surrogate: Tetrachloro-meta-xylene		*54.1 %*		*14.2-103*		"	"	"	"
Surrogate: Decachlorobiphenyl		*76.2 %*		*27.7-133*		"	"	"	"

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Report To: GOLDER & ASSOCIATES
100 ENTERPRISE WAY, STE 190
ROSEVILLE, CA 95678
Attention: AMY HA
Project: TCCC-MT SHASTA ANNUAL MONITORING 123-97477 PHASE 002

Lab No: 2110610
Reported: 12/13/12
Phone: (530) 243-7234
P.O. #

Notes and Definitions

S-BN	Base/Neutral surrogate recovery outside of control limits. The data was accepted based on valid recovery of remaining two base/neutral surrogates.
S-AC	Acid surrogate recovery outside of control limits. The data was accepted based on valid recovery of remaining two acid surrogates.
R-08	The sample was diluted due to sample matrix resulting in elevated reporting limits.
R-01	The Reporting Limit and Detection Limit for this analyte have been raised due to necessary sample dilution.
QR-05	The RPD result for the LCS/LCSD exceeded the QC control limit; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QR-04	Duplicate results are within one reporting limit and pass all necessary QC criteria.
QC-08	An increased concentration of BrCl was necessary to fully oxidize this sample. As required by EPA 1631E, a laboratory method blank containing the additional BrCl was analyzed with the sample.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). The J flag is equivalent to the DNQ Estimated Concentration flag.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
<	Less than reporting limit
≤	Less than or equal to reporting limit
>	Greater than reporting limit
≥	Greater than or equal to reporting limit
MDL	Method Detection Limit
RL/ML	Minimum Level of Quantitation
MCL/AL	Maxium Contaminant Level/Action Level
mg/kg	Results reported as wet weight
TTLC	Total Threshold Limit Concentration
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leachate Procedure
Note 1	Received Temperature - according to EPA guidelines, samples for most chemistry methods should be held at ≤6 degrees C after collection, including during transportation, unless the time from sampling to delivery is <2 hours. Regulating agencies may invalidate results if temperature requirements are not met.
Note 2	According to 40 CFR Part 136 Table II, the following tests should be analyzed in the field within 15 minutes of sampling: pH, chlorine, dissolved oxygen, and sulfite.

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

2110610 Due 12.3.12

Golder Associates
1000 Enterprise Way, Suite 190
Roseville, CA 95678
Phone: 916-786-2424
Fax: 916-786-2434

Page 1 of 1

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Amy Ha & Ken Haskell

California EDF Report? ☐ Yes ☑ No

Lab: Basic Laboratory Inc
Address: 2218 Railroad Avenue, Redding CA 96001
Phone No.: 530-243-7234 Fax No.: 530-243-7494
Project Name: TCCC-Mt. Shasta Annual Monitoring

Global ID:
Sample Company ID:
Deliverable To (Email Address): aha@golder.com, khaskell@golder.com
Project Number: 123-97477
Phase Number: 002
Sampler Signature:

Project Address: 210 Ski Village Drive, Mt. Shasta, CA 96067

Sample Designation	Sampling: Date	Sampling: Time	Container: 40 ml VOA	Container: SLEEVE	Container: POLY	Container: AMBER	Container: GLASS	Container: PLASTIC BAG	Preservative: HCl	Preservative: HNO_3	Preservative: ICE	Preservative: NONE	Matrix: WATER	Matrix: SOIL	Matrix: AIR	Analysis Request: Total Coliform (SM9221B/E)	Chemical Oxygen Demand (SM5220)	Total Dissolved Solids (SM2540C)	Specific Conductance (SM2510B)	pH (4500-H+)	Hardness (SM2340C)	Priority Pollutant Total Metals* (EPA 200.8)	Hex & Tri Chromium (SM3500Cr)	Cyanide (4500CN-E)	VOC (EPA624)	SVOC (EPA 625)	Pesticides/PCBs (EPA 608)	TAT: 12 Hr	24 Hr	48 Hr	72 Hr	1 Wk	2 Wk	For Lab Use Only	
~~MW-1~~																X	X	X	X	X	X	X	X	X	X	X	X						STD		
MW-2	11/14/12	1220											X			X	X	X	X	X	X	X	X	X	X	X	X						STD		10.5
MW-3	11/14/12	1400											X			X	X	X	X	X	X	X	X	X	X	X	X						STD		8.8
DUP	11/14/12	1230											X			X	X	X	X	X	X	X	X	X	X	X	X						STD		7.8
																																	STD		9.7
																																	STD		
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																																	STD		
																																	STD		
																																	STD		

Relinquished by:	Date	Time	Received by:
Amy Ha	11/14/12	1600	
Relinquished by:	Date	Time	Received by:
			P. Collins 11-14-12 15:53
Relinquished by:	Date	Time	Received by Laboratory:
	11-14-12	1630	Christi Wolff

Remarks:
*Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Nickel, Selenium, Silver, Thallium, Zinc, Hg 1631
see attached email - aw

Bill to: Golder Associates, Inc.

This work will be completed in accordance to the Master's Services Agreement between Golder Associates Inc and Basic Laboratory Inc dated November 11, 2012.

Regional Water Management Group (RWMG)
5727 Dunsmuir Avenue,
Dunsmuir, CA 96025

Ms. Pamela Creedon
Executive Officer
CA Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6114

April 24, 2015

Re: USR RWMG Resolution re CVRWQCB Exec Order 5-01-233

Dear Ms Creedon,

The Upper Sacramento, McCloud, Lower Pit Regional Water Management Group (USR RWMG) submits for your information and review our March 19, 2015 Resolution regarding the Central Valley Regional Water Quality Control Board (CVRWQCB) Executive Order 5-01-233.

The membership of the USR RWMG is a result of the direction and mandate of the California Department of Water Resources to invite participation of a wide range of stakeholders that include Statutory Authorities, Resource Management Interests and Tribal Authorities.

Our Integrated Regional Water Management Plan (IRWMP) identifies goals and objectives for research, educational programs and projects that can benefit the health of our watershed while maintaining and enhancing high quality water. Additionally our Plan supports the sustainable storage and production of water while respecting the larger physical and cultural environment.

Trout Unlimited, as a member, presented to the USR RWMG an apparent regulatory violation and discrepancy of the Waste Water Discharge permit currently owned by Crystal Geyser, Inc. in Mount Shasta (CVRWQCB Exec Order 5-01-233). Trout Unlimited, in conjunction with other members of the USR RWMG and a local citizen group, is currently conducting a well monitoring project in the vicinity of the proposed Crystal Geyser water bottling plant.

After in depth discussion, the USR RWMG agreed that the apparent permit violation and discrepancy could allow a significant pollution threat to the Big Springs aquifer. The Big Springs aquifer is the source of drinking water for hundreds of area households and is thought to have a direct connection to the surface water system of the Upper Sacramento River.

The USR RWMG therefore adopted our March 19, 2015 Resolution that is transmitted with this letter.

The USR RWM Group encourages the Central Valley Regional Water Quality Control Board to review Executive Order 5-01-233 and consider the effects of your permit on local citizens who reside within the USR and the member organizations of the USR RWMG.

We request that you inform the RWM Group of any action your Board takes on this matter. Thank you for your consideration.

Sincerely,

Mark Miyoshi

Mark Miyoshi
Mount Shasta District Representative
Winnemem Wintu Tribe
Chair Pro Tem, RWMG
USR RWMG

Regional Water Management Group (RWMG)
5727 Dunsmuir Avenue,
Dunsmuir, CA 96025

UPPER SACRAMENTO, McCLOUD, & LOWER PITT RIVERS REGIONAL WATER MANAGEMENT GROUP
RESOLUTION IN REGARDS TO THE
CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD
EXECUTIVE ORDER 5-01-233
March 19, 2015

WHEREAS the USR RWMG was founded under the auspices of California Water Code (CWC) Sec. 10540 for the purpose of supporting collaborative efforts to manage all aspects of water resources in a region. Integrated Regional Water Management crosses jurisdictional, watershed, and political boundaries; involves multiple agencies, stakeholders, individuals, and groups; and attempts to address the issues and differing perspectives of all the entities involved through mutually beneficial solutions;

WHEREAS the USR RWMG collaborated extensively for many years to develop and adopt an Integrated Regional Water Management Plan (IRWMP);

WHEREAS the USR RWMG desires to continue its efforts to coordinate and collaborate among stakeholders in one of California's most important source water areas encompassing the Upper Sacramento River, McCloud River and Lower Pitt River region;

WHEREAS the parties to the USR IRWMP seek to implement a long-term collaborative program in the region that will be closely coordinated with other planning efforts and land and water resource management interests and agencies;

WHEREAS the USR RWMG is an independent, self-governing and self-sustaining body;

WHEREAS the Central Valley Regional Water Quality Control Board issued Executive Order 5-01-233 on September 7, 2001, to Danone Waters of North America for a waste discharge at its facility adjacent to the City of Mt. Shasta;

WHEREAS Executive Order 5-01-233 was transferred from Danone Waters of North America to the Crystal Geyser Water Company on or about October 13, 2013;

WHEREAS Section E. Provision 2, of Executive Order 5-01-233 states: The Discharger shall comply with all the items of the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements* dated March 1, 1991, which are a part of this Order;

WHEREAS Section E. Provision 4 of Executive Order 5-01-233 states: … Violations may result in … revision or rescission of this Order;

WHEREAS Section E. Provision 8, of Executive Order 5-01-233 states: The Board will review this Order periodically and will revise requirements when necessary;

WHEREAS the report entitled *Fourth Quarter 2012 Groundwater Monitoring Report*, dated April 30, 2013 and compiled by Golder Associates, Inc., indicates the presence of Bis(2-ethylhexyl)phthalate in a concentration of 250 micrograms per liter in the drinking water aquifer beneath the discharging facility. The maximum contaminant level of Bis(2-ethylhexyl)phthalate in drinking water is 6 micrograms per liter;

NOW THEREFORE BE IT RESOLVED THAT the Upper Sacramento, McCloud, Lower Pit River Regional Water Management Group:

Encourages the Central Valley Regional Water Quality Control Board and other appropriate regulatory agencies to review Executive Order 5-01-233 and ensure that it meets the criteria of SWRCB Resolution No. 68-16 and AB 685, the human right to water.

Respectfully, USR RWMG

I HEREBY CERTIFY that the foregoing resolution was adopted by roll call vote after discussion of the item at a meeting of the USR RWMG, duly noticed and held according to USR RWMG bylaws, on the day of March 19, 2015.

AYES: 8
NOES: 0
ABSENT: 6
ABSTAIN: 2
DATED: March 19, 2015

ATTEST: Mark Miyoshi Date: 4-24-15

Mark Miyoshi, RWMG Chair Pro Tem