TEAM
ENGINEERING & MANAGEMENT, INC.
P.O. Box 1265, Bishop, California 93515-1265
760-872-1033 fax 760-872-2131

Dr. Bob Harrington
Inyo County Water Department
135 South Jackson Street
Independence, CA 93526

July 6, 2010

RE: Summary of Hydrologic Monitoring Activities June 2010
Rose Valley, Inyo County, California
Hay Ranch Project Conditional Use Permit #2007-03

Dear Dr. Harrington:

This letter is intended to summarize hydrologic monitoring activities conducted in June 2010 by TEAM Engineering & Management, Inc. (TEAM), related to the Hay Ranch Water Extraction Project and CUP #2007-03.

Phase 2: Startup Monitoring and Reporting

With the initiation of pumping by Coso Operating Company on December 25, 2009, the Hay Ranch Water Extraction Project entered into the Phase 2 Startup Monitoring and Reporting period as outlined in the Hydrologic Monitoring and Mitigation Plan (HMMP).

During the June 2010 monthly hydrologic data collection event, static depth-to-water (DTW) measurements, one visual observation of the Little Lake Ranch Siphon Well Outflow and four sets of flow rates were collected by TEAM from 30 monitoring locations in the Rose Valley area, as summarized in the attached table (Table 1). Data for this monthly field event was collected on June 18 and 21. Pressure transducer data were downloaded from 24 units, including one "BaroTroll" measuring barometric pressure. On June 1, a DTW measurement at LADWP 816 Well was taken by LADWP personnel.

Coso Operating Company completed installation of a permanent water tank between the Hay Ranch North and South Wells in May and subsequently removed the temporary groundwater holding tank and associated infrastructure. With the completion of the permanent tank, groundwater flow from the Hay Ranch South Well is being recorded by a new totalizer; "HRS B Totalizer" measures Hay Ranch South flow into the permanent water tank. This totalizer went on-line May 12, 2010 with an initial reading of 0 gallons. The existing totalizer "HRS A Totalizer" which has been capturing all flow previously pumped from the Hay Ranch South Well was removed. The amount of groundwater captured by HRS A for the Hay Ranch Project was 245,294,000 gallons (753 acre feet). The Hay Ranch North Well is not operational as of June 18, but a totalizer for groundwater pumped from this well has been installed at the new permanent tank, HRN C Totalizer.

The HRS B Totalizer read 80,225,000 gallons at 14:20, June 18. The combined totals from HRS A and HRS B represent approximately 325,519,000 gallons (999 acre feet) of groundwater extracted from the Hay Ranch South Well since project initiation on December 25, 2009.

Figure 1 presents the combined amount of groundwater pumped from the Hay Ranch North and South wells in acre feet (AF) with a hypothetical pumping amount. The hypothetical pumping amount assumes a linear pumping rate (approximately 8.2 AF/day) which starts on December 25, 2009 and reaches 3000 AF on December 25, 2010.

Dunmovin Trigger Exceeded

In Table 3.1 of the HMMP for the Hay Ranch Project, Trigger Levels have been set for the 0.5-year time period at specific monitoring wells. Based on data collected by TEAM during the June 18 and 21 monitoring event, the 0.5-year Trigger Level for the Dunmovin well has been exceeded.

The baseline groundwater elevation (GWE) for Dunmovin, set by Inyo County Water Department (ICWD) in January 2010, is 3252.73 feet. The GWE at Dunmovin as measured at 9:02 on June 21 was 3252.28 feet. The 0.5-year Trigger Level for Dunmovin is 0.3 feet. The Dunmovin GWE has decreased by 0.45 feet compared to its baseline, exceeding its Trigger Level drawdown by 0.15 feet. The Dunmovin GWE was 2.35 feet above its Maximum Acceptable Drawdown level. The maximum GWE recorded at Dunmovin Well was 3253.60 and occurred on January 21, 2010. The minimum GWE recorded at the Dunmovin Well was 3252.07 and occurred on September 16, 2009. Inyo County Water Department and Coso Operating Company were notified by TEAM in a timely manner regarding this trigger level event.

Groundwater elevations are above 0.5-year Trigger Levels at all other Hay Ranch Project monitoring wells which have baseline and trigger levels established. Table 2 compares June groundwater elevations and the 0.5-year trigger levels for Hay Ranch Project monitoring points.

Quarterly Groundwater Monitoring

On June 18, 2010 groundwater samples were collected from the Hay Ranch South, Coso Junction Store #2, and Little Lake North wells and analyzed for total dissolved solids (TDS) as part of the quarterly monitoring activities specified in the HMMP. These groundwater samples were analyzed by TestAmerica, Inc. a California-Certified Analytical Laboratory. During sample collection, groundwater physical parameters were monitored by a Horriba U52 MPS hand-held unit. Lab results from TestAmerica are included with this report.

At the Hay Ranch South Well (HRS), approximately 5,400 gallons of groundwater were purged from the well preceding sample collection. The groundwater sample, HRS, was collected from the production outflow pipe at 14:33 hours. The laboratory analytical result from HRS was TDS 760 mg/L. The physical parameters of the groundwater from HRS outflow pipe immediately prior to sampling (14:31 hours) were as follows: temperature 24.9 C; specific conductivity 1130 uS/cm; TDS 724 mg/L. Readings from the Aqua Troll 200 pressure transducers installed in the

nearby Hay Ranch Cluster 2 wells (2A, 2B, 2C) ranged from: time 14:38 to 14:58, temperature 23.0 to 23.1 C, specific conductivity 1140 to 1341 uS/cm, TDS 741 to 871 mg/L.

At the Coso Junction Store #2 Well (CJS#2), the groundwater sample, CJS#2, was collected from the groundwater holding tank located 20 yards north of this active supply well. Approximately 15 minutes prior to sampling, CJS#2 pumped for one-minute (approximate) intervals at three different times from 14:51 to 14:58 hours. Water was purged from the holding tank's sample port until groundwater physical parameters stabilized; approximately 10 gallons of water was purged. The CJS#2 groundwater sample was collected from the holding tank's sample port at 15:07 hours. The laboratory analytical result from CJS#2 was TDS 500 mg/L. The physical parameters of the groundwater from CJS#2 holding tank immediately prior to sampling (15:05 hours) were as follows: temperature 25.3 C; specific conductivity 784 uS/cm; TDS 502 mg/L.

At the Little Lake Ranch North Well (LLR North), approximately 20 gallons of groundwater were purged from the well preceding sample collection. The groundwater sample, LLR North, was collected at 11:42 hours. The laboratory analytical result from LLR North was TDS 570 mg/L. The physical parameters of the LLR North groundwater immediately prior to sampling (11:41 hours) were as follows: temperature 23.7 C; specific conductivity 914 uS/cm; TDS 585 mg/L. Readings from the Aqua Troll 200 pressure transducer installed in the well were as follows: time 11:02, temperature 22.8 C, specific conductivity 937 uS/cm, TDS 609 mg/L. A quality assurance duplicate was also sampled from the Little Lake Ranch North Well at 11:43 hours and labeled QAMW. The laboratory analytical result from QAMW was TDS 550 mg/L.

Data Transmittal

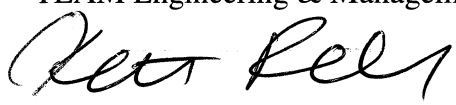
TEAM posted updates to the "Coso" database on the ICWD web server. New Hay Ranch Project hydrographs in PDF form were uploaded to the ICWD website. On June 28, 2010 a letter report from TEAM was submitted to ICWD which detailed the Dunmovin trigger level event. An electronic data package was transferred to the Hay Ranch Project groundwater modeler, Daniel B. Stephens & Associates.

* * * * * *

If you have any questions or require additional information, please contact TEAM at your convenience.

Sincerely,

TEAM Engineering & Management, Inc.



Keith Rainville
Staff Geologist

TABLE 1
Field Observations of Rose Valley Hydrologic Monitoring Points
June 18 and 21, 2010

Project Name:	**Hay Ranch Project HMMP**	Date: June 18 & 21, 2010
Location:	**Rose Valley, Inyo County**	
Observer(s):	K. Rainville	Page: 1 of 1

Well ID	Monitoring Point	Date	Time	DTW (ft)	Flow (cfs)	GWE (ft amsl)	Method	Transducer Log Interval	Notes
RV-10	Dews	6/21/10	12:49	231.90		3755.02	TEAM manual read	NA	
RV-20	LADWP 816	6/1/10	13:20	78.91		3436.15	LADWP manual read	NA	Data provided by LADWP
RV-30	Cal Pumice	6/18/10	15:23	248.35		3257.54	TEAM manual read	Hourly	
RV-40	Dunmovin	6/21/10	9:02	295.59		3252.28	TEAM manual read	NA	
RV-50	Hay Ranch North	6/18/10	14:22	NM	No	NM	TEAM manual read	NA	0 gallons (0 AF) pumped since 12/25/09
RV-60	Hay Ranch 1A	6/21/10	11:03	193.57		3238.60	TEAM manual read	Hourly	
RV-61	Hay Ranch 1B	6/21/10	10:57	206.41		3225.44	TEAM manual read	Hourly	
RV-62	Hay Ranch 1C	6/21/10	11:09	196.63		3234.87	TEAM manual read	Hourly	
RV-70	Hay Ranch South	6/18/10	14:20	NM	Yes	NM	TEAM manual read	NA	325,519,000 gallons (999 AF) pumped since 12/25/09
RV-80	Hay Ranch 2A	6/21/10	10:36	195.79		3237.21	TEAM manual read	Hourly	
RV-81	Hay Ranch 2B	6/21/10	10:29	212.72		3219.91	TEAM manual read	Hourly	
RV-82	Hay Ranch 2C	6/21/10	10:44	199.95		3232.15	TEAM manual read	Hourly	
RV-90	Coso Jct Ranch	6/18/10	8:35	171.42		3231.71	TEAM manual read	Hourly	
RV-100	Coso Jct Store #1	6/18/10	14:52	143.85		3228.27	TEAM manual read	Hourly	
RV-110	Davis Ranch North Well	6/21/10	11:42	6.47		3886.53	TEAM manual read	Hourly	
RV-111	Davis Ranch South Well	6/21/10	11:56	11.24		3886.76	TEAM manual read	Hourly	
RV-112	Davis Ranch South Flow	6/21/10	12:17	NA	0.014	NA	TEAM manual read	Hourly	
RV-120	Red Hill Well (BLM)	6/18/10	14:00	140.01		3200.82	TEAM manual read	Hourly	
RV-130	G-36	6/18/10	13:39	180.03		3199.99	TEAM manual read	NA	
RV-140	Lego	6/18/10	13:31	222.08		3200.77	TEAM manual read	Hourly	
RV-150	Cinder Road	6/18/10	12:15	190.95		3187.01	TEAM manual read	Hourly	
RV-160	18-28 GTH	6/18/10	13:09	173.88		3188.70	TEAM manual read	Hourly	
RV-170	Fossil Falls Campground	6/21/10	10:03	140.95		3175.82	TEAM manual read	NA	
RV-180	LLR North Well	6/18/10	11:02	39.99		3159.11	TEAM manual read	Hourly	
RV-210	LLR Dock Well	6/18/10	9:20	6.11		3148.03	TEAM manual read	Hourly	
RV-220	LLR Stilling Well (lake surface)	6/18/10	9:27	3.60		3147.44	TEAM manual read	Hourly	
RV-230	LLR Little Lake Outflow	6/18/10	10:10	NA	0.00	NA	TEAM manual read	Hourly	
RV-240	LLR Coso Springs Flow	6/18/10	9:47	NA	0.50	NA	TEAM manual read	Hourly	
RV-245	LLR North Culvert Flow	6/18/10	10:38	NA	3.41	NA	TEAM manual read	Hourly	
RV-250	LLR Siphon Discharge	6/18/10	10:25	NA	Yes	NA	TEAM visual read	NA	Discharging into Pond 2
RV-260	LLR Hotel Well	6/18/10	8:56	0.35		3138.43	TEAM manual read	Hourly	Pressure gauge reads 0.10 psi

NM - not measured; NA - not applicable; IO - Inoperative

DTW - Depth to water in feet below top of casing or other reference point; a negative DTW indicates that the groundwater elevation is above the surveyed reference point

GWE- Groundwater elevation in feet above mean sea level

TABLE 2
Hay Ranch Project Groundwater Baselines and Trigger Levels
June 2010

Well ID	Monitoring Point	Baseline GWE*	Recent Date	Recent GWE	Recent GWE Compared to Baseline	Recent GWE Above Max DD**	Trigger Level At .5 year elapsed	Recent GWE Compared to Trigger Level
RV-30	Cal Pumice	TBD***	6/18/10	3257.54	NA	NA	1.30	NA
RV-40	Dunmovin	3252.73	6/21/10	3252.28	-0.45	2.35	0.30	-0.15
RV-90	Coso Jct Ranch	3230.65	6/18/10	3231.71	1.06	3.56	0.40	1.46
RV-100	Coso Jct Store #1	3227.59	6/18/10	3228.27	0.68	2.98	0.30	0.98
RV-120	Red Hill Well	3200.66	6/18/10	3200.82	0.16	TBD****	TBD****	NA
RV-130	G-36	3198.35	6/18/10	3199.99	1.64	2.74	0.20	1.84
RV-140	Lego	3199.21	6/18/10	3200.77	1.56	2.66	0.20	1.76
RV-150	Cinder Road	3186.92	6/18/10	3187.01	0.09	0.79	0.20	0.29
RV-160	18-28 GTH	3187.67	6/18/10	3188.70	1.03	2.03	0.20	1.23
RV-180	LLR North Well	3158.88	6/18/10	3159.11	0.23	0.63	0.20	0.43

GWE Groundwater elevation in feet above mean sea level

* Baseline groundwater elevations set 1/25/10 and approved by Inyo County Water Department

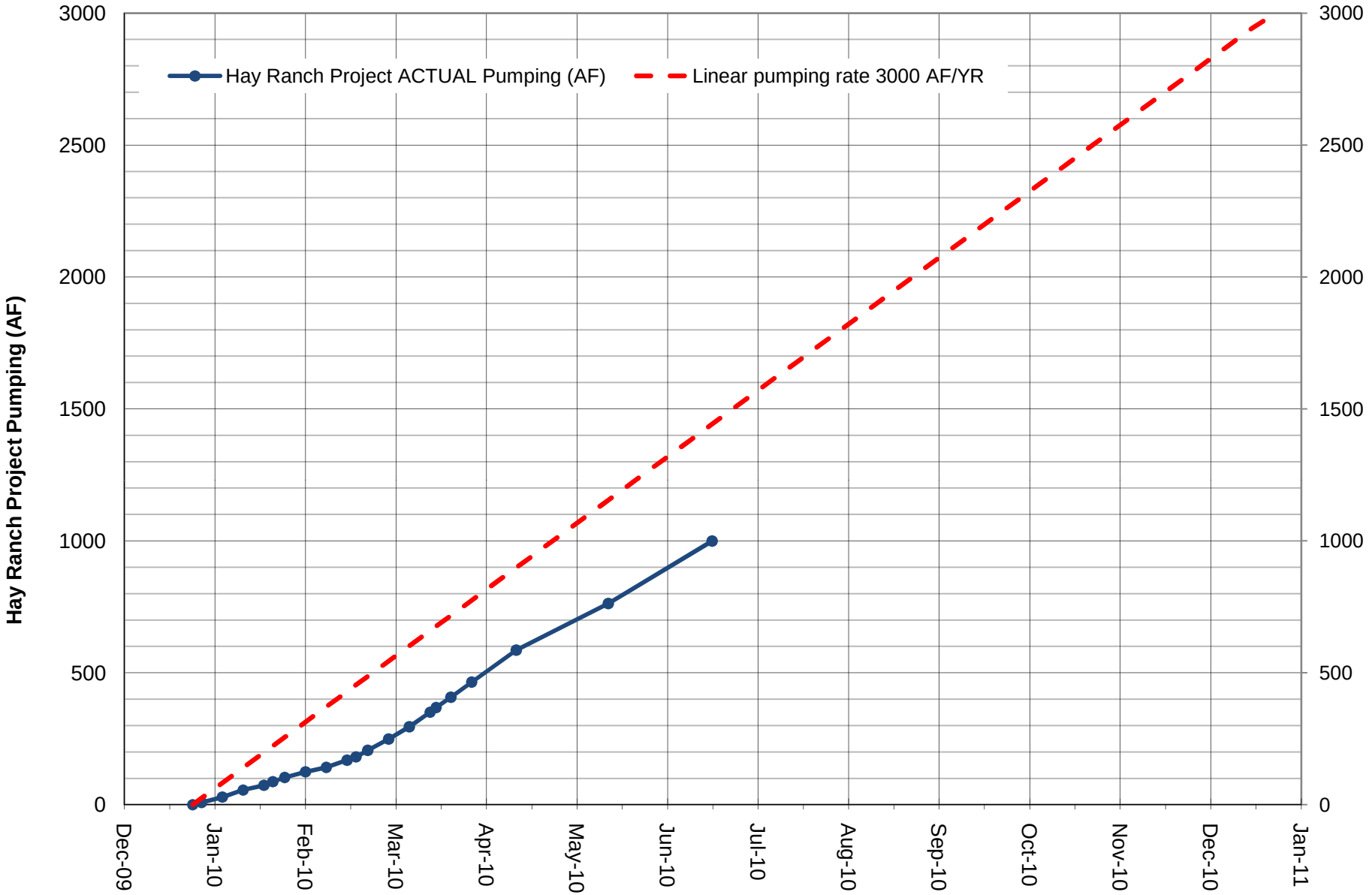
** Max DD: Maximum Acceptable Drawdown from HMMP Table 3-1

*** Cal Pumice Well baseline groundwater elevation has not been set

**** Trigger Levels and Maximum Acceptable Drawdown levels for Red Hill Well have not been set

FIGURE 1

HYPOTHETICAL AND ACTUAL HAY RANCH PROJECT PUMPING:



Note: Coso Operating Co. initiated Hay Ranch Project pumping on 12/25/09.
The "linear pumping rate" shown above is a hypothetical pumping rate that reaches 3000 Acre Feet (AF) in one year with pumping evenly distributed at 8.2 AF/day.

TEAM
ENGINEERING & MANAGEMENT, INC.
Bishop and Mammoth Lakes, California

6/22/2010

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 720-28882-1

Job Description: Hay Ranch, Rose Valley

For:
TEAM Engineering & Management, Inc.
PO BOX 1265
Bishop, CA 93515

Attention: Mr. Keith Rainville

Approved for release.
Dimple Sharma
Project Manager I
6/24/2010 4:41 PM

Dimple Sharma
Project Manager I
dimple.sharma@testamericainc.com
06/24/2010

CA ELAP Certification # 2496
The Chain(s) of Custody are included and are an integral part of this report.

A trip blank is required to be provided for volatile analyses. If trip blank results are not included in the report, either the trip blank was not submitted or requested to be analyzed.

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

General Chemistry
No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: TEAM Engineering & Management, Inc. Job Number: 720-28882-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-28882-1	**CJS#2**				
Total Dissolved Solids		500	20	mg/L	SM 2540C
720-28882-2	**HRS SOUTH**				
Total Dissolved Solids		760	20	mg/L	SM 2540C
720-28882-3	**LLR NORTH**				
Total Dissolved Solids		570	20	mg/L	SM 2540C
720-28882-4	**QAMW**				
Total Dissolved Solids		550	20	mg/L	SM 2540C

METHOD SUMMARY

Client: TEAM Engineering & Management, Inc. Job Number: 720-28882-1

Description	Lab Location	Method	Preparation Method
Matrix Water			
Solids, Total Dissolved (TDS)	TAL SF	SM SM 2540C	

Lab References:

TAL SF = TestAmerica San Francisco

Method References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

SAMPLE SUMMARY

Client: TEAM Engineering & Management, Inc. Job Number: 720-28882-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-28882-1	CJS#2	Water	06/18/2010 1507	06/22/2010 0945
720-28882-2	HRS SOUTH	Water	06/18/2010 1433	06/22/2010 0945
720-28882-3	LLR NORTH	Water	06/18/2010 1142	06/22/2010 0945
720-28882-4	QAMW	Water	06/18/2010 0000	06/22/2010 0945

General Chemistry

Client Sample ID: **CJS#2**

Lab Sample ID: 720-28882-1 Date Sampled: 06/18/2010 1507

Client Matrix: Water Date Received: 06/22/2010 0945

Analyte	Result	Qual	Units	RL	Dil	Method
Total Dissolved Solids	500		mg/L	20	1.0	SM 2540C

Analysis Batch: 720-73550 Date Analyzed: 06/22/2010 1435

General Chemistry

Client Sample ID: **HRS SOUTH**

Lab Sample ID: 720-28882-2 Date Sampled: 06/18/2010 1433

Client Matrix: Water Date Received: 06/22/2010 0945

Analyte	Result	Qual	Units	RL	Dil	Method
Total Dissolved Solids	760		mg/L	20	1.0	SM 2540C

Analysis Batch: 720-73550 Date Analyzed: 06/22/2010 1435

General Chemistry

Client Sample ID: **LLR NORTH**

Lab Sample ID: 720-28882-3 Date Sampled: 06/18/2010 1142

Client Matrix: Water Date Received: 06/22/2010 0945

Analyte	Result	Qual	Units	RL	Dil	Method
Total Dissolved Solids	570		mg/L	20	1.0	SM 2540C

Analysis Batch: 720-73550 Date Analyzed: 06/22/2010 1435

General Chemistry

Client Sample ID: **QAMW**

Lab Sample ID: 720-28882-4 Date Sampled: 06/18/2010 0000

Client Matrix: Water Date Received: 06/22/2010 0945

Analyte	Result	Qual	Units	RL	Dil	Method
Total Dissolved Solids	550		mg/L	20	1.0	SM 2540C

Analysis Batch: 720-73550 Date Analyzed: 06/22/2010 1435

DATA REPORTING QUALIFIERS

Lab Section	Qualifier	Description

Client: TEAM Engineering & Management, Inc. Job Number: 720-28882-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:720-73550					
LCS 720-73550/2	Lab Control Sample	T	Water	SM 2540C	
LCSD 720-73550/3	Lab Control Sample Duplicate	T	Water	SM 2540C	
MB 720-73550/1	Method Blank	T	Water	SM 2540C	
720-28882-1	CJS#2	T	Water	SM 2540C	
720-28882-2	HRS SOUTH	T	Water	SM 2540C	
720-28882-3	LLR NORTH	T	Water	SM 2540C	
720-28882-4	QAMW	T	Water	SM 2540C	

Report Basis
T = Total

Client: TEAM Engineering & Management, Inc. Job Number: 720-28882-1

Method Blank - Batch: 720-73550

Method: SM 2540C
Preparation: N/A

Lab Sample ID: MB 720-73550/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/22/2010 1435
Date Prepared: N/A

Analysis Batch: 720-73550
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Total Dissolved Solids	ND		20

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-73550

Method: SM 2540C
Preparation: N/A

LCS Lab Sample ID: LCS 720-73550/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/22/2010 1435
Date Prepared: N/A

Analysis Batch: 720-73550
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

LCSD Lab Sample ID: LCSD 720-73550/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/22/2010 1435
Date Prepared: N/A

Analysis Batch: 720-73550
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Total Dissolved Solids	100	99	85 - 115	1	20		

125212

720-28882

STL San Francisco
1220 Quarry Lane

Pleasanton, CA 94566
phone 925-484-1919 fax 925-484-1096

SEVERN TRENT STL

Chain of Custody Record

Severn Trent Laboratories, Inc.

Client Contact	Project Manager: Keith Rainville	Sampler: KR	Date: 6/21/10	COC No:
TEAM Engineering & Management, Inc.	Tel/Fax: 760-872-1033/872-2131	Lab Contact: Dimple Sharma	Carrier: FedEx	1 of 1 COCs
P.O. Box 1265	Analysis Turnaround Time			Job No.
Bishop, CA 93515	Calendar (C) or Work Days (W) W			
(760)872-1033 Phone	TAT if different from Below 5 day			SDG No.
(760)872-2131 FAX	☐ 2 weeks			
Project Name: Hay Ranch 2.6	☐ 1 week			
Site: Rose Valley	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	TDS EPA 160.1	Sample Specific Notes:
CJS#2	6/18/10	15:07	Poly	W	1	X	
HRS South	6/18/10	14:33	Poly	W	1	X	
LLR North	6/18/10	11:42	Poly	W	1	X	
QAMW	6/18/10	00:00	Poly	W	1	X	
						1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
■ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ■ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **Please send results (with COC) via email to keith@teambishop.com**

4.4°

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Keith Rainville	TEAM Eng. & Mgmt	6/21/10			6-22-10 945
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Login Sample Receipt Check List

Client: TEAM Engineering & Management, Inc.

Job Number: 720-28882-1

Login Number: 28882

List Source: TestAmerica San Francisco

Creator: Mullen, Joan

List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	True	