

**FNGINFFRING & MANAGEMENT, INC.** 

Mr. Bob Harrington Inyo County Water Department 135 South Jackson Street Independence, CA 93526 February 1, 2010

#### **RE:** Summary of Hydrologic Monitoring Activities

Rose Valley, Inyo County, California Hay Ranch Project Conditional Use Permit #2007-03

Dear Mr. Harrington:

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

#### **Baseline Data Collection**

On December 28, 2009 groundwater samples were collected from the Hay Ranch South and Coso Junction Store #2 Wells and analyzed for total dissolved solids (TDS). The groundwater samples were analyzed by TestAmerica, Inc. a California-Certified Analytical Laboratory. During sample collection, groundwater physical parameters were monitored by a YSI 556 MPS hand-held unit. Lab results from TestAmerica are included with this report.

At the Hay Ranch South Well (HRS), approximately 2.9 million gallons of groundwater were purged from the well preceding sample collection. The groundwater sample, HRS, was collected from the production outflow pipe at 13:15 hours. The laboratory analytical result from HRS was TDS 890 mg/L. The physical parameters of the groundwater from HRS outflow pipe immediately prior to sampling (13:13 hours) as recorded by the YSI 556 MPS unit were as follows: temperature 20.5 C; specific conductivity 1257 uS/cm; TDS 819 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 13:25 to 13:34, temperature 21.3 to 21.9 C, specific conductivity 1117 to 1241 uS/cm, TDS (calculated) 726 to 806 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 one half hour prior to sampling, CJS#2 pumped for one-minute (approximate) intervals at four different times from 11:50 to 12:14 hours. Water was purged from the holding tank's sample port until groundwater physical parameters stabilized; approximately 15 gallons of water was purged. The physical parameters of the groundwater from CJS#2 holding tank immediately prior to sampling (12:15 hours) as recorded by the YSI 556 MPS unit were as follows: temperature 19.8 C; specific conductivity 843 uS/cm; TDS 549 mg/L. The CJS#2 groundwater sample was collected from the holding tank's sample port at 12:17 hours. The laboratory analytical result from CJS#2 was TDS 550 mg/L. A quality assurance duplicate was also sampled at 12:17 hours and labeled QAMW. The laboratory analytical result from QAMW was TDS 580 mg/L.

In addition, DTW data provided by LADWP confirmed the notable drop in groundwater level in the Cal Pumice (RV030) well that occurred during the baseline data collection period on December 3, 2009.

#### **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. In addition to monthly ground and surface water data collection from all 30 monitoring points in Rose Valley, during the initial months of Phase 2 monitoring, weekly data is being collected from specific areas of Rose Valley.

During the January 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). Pressure transducer data were downloaded from 24 units, including one "BaroTroll" measuring barometric pressure. On January 12, a DTW measurement at LADWP 816 Well was taken by LADWP personnel. Data for this monthly field event was collected over three days during the week of January 18-25 due to inclement weather and well-accessibility issues relating to a series of large storms.

Weekly field events to the Hay Ranch Cluster Wells and Little Lake Ranch area occurred on January 4, 11, 18, and 25. During these weekly field events, 11 static depth-to-water (DTW) measurements, one visual observation of the Little Lake Ranch Siphon Well Outflow and three sets of flow rates were collected by TEAM from 16 monitoring locations in the Rose Valley area, as summarized in the attached tables (Tables 2-5). Pressure transducer data was downloaded from 15 units, including one "BaroTroll" measuring barometric pressure.

A Hay Ranch South Well pump totalizer reading of 775,389,000 gallons was taken by TEAM at 12:37, January 25. This reading represents approximately 33,589,000 gallons (103 Acre Feet) of groundwater extracted from the Hay Ranch South production well since project initiation on December 25, 2009.

#### **Data Transmittal**

ICWD supplied TEAM with revised project baseline levels on January 25. Using these baseline levels and the Maximum Acceptable Drawdown data from the Hay Ranch CUP Hydrologic Monitoring and Mitigation Plan Table 3-1, TEAM established a "Hay Ranch CUP 2009/10 Maximum Acceptable Drawdown" data sheet.

TEAM has posted updates to the "Coso" database on the ICWD web server. TEAM has also uploaded new Rose Valley hydrographs in PDF form to the ICWD website.

Sincerely,

TEAM Engineering & Management, Inc.

Keith Rainville Staff Geologist

# Table 1 Field Observations of Rose Valley Hydrologic Monitoring Points January 18-25, 2010

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

Well ID	Monitoring Point	Date	Time	DTW	Flow	GWE	Method	Transducer	Notes
				(ft)	(cfs)	(ft amsl)		Log Interval	
RV-10	Dews	01/21/10	9:27	231.04		3755.88	TEAM manual read	NA	
RV-20	LADWP 816	01/12/10	12:44	80.19		3434.87	LADWP manual read	NA	Data provided by LADWP
RV-30	Cal Pumice	01/18/10	13:46	245.80		3260.09	TEAM manual read	Hourly	
RV-40	Dunmovin	01/21/10	10:00	294.27		3253.60	TEAM manual read	NA	
RV-50	Hay Ranch North	NM	NM	NM		NM	TEAM manual read	NA	No DTW, well area under construction
RV-60	Hay Ranch 1A	01/18/10	13:20	189.03		3243.14	TEAM manual read	Hourly	
RV-61	Hay Ranch 1B	01/18/10	13:23	196.16		3235.69	TEAM manual read	Hourly	
RV-62	Hay Ranch 1C	01/18/10	13:28	189.21		3242.29	TEAM manual read	Hourly	
RV-70	Hay Ranch South	01/18/10	13:15	NM	Yes	NM	TEAM manual read	NA	33,589,000 gallons pumped since project initiation
RV-80	Hay Ranch 2A	01/18/10	13:05	192.22		3240.78	TEAM manual read	Hourly	
RV-81	Hay Ranch 2B	01/18/10	13:00	200.79		3231.84	TEAM manual read	Hourly	
RV-82	Hay Ranch 2C	01/18/10	13:10	191.51		3240.59	TEAM manual read	Hourly	
RV-90	Coso Jct Ranch	01/18/10	14:05	170.75		3232.38	TEAM manual read	Hourly	
RV-100	Coso Jct Store #1	01/18/10	14:18	142.27		3229.85	TEAM manual read	Hourly	
RV-110	Davis Ranch North Well	01/18/10	11:35	6.47		3886.53	TEAM manual read	Hourly	
RV-111	Davis Ranch South Well	01/18/10	11:40	11.23		3886.77	TEAM manual read	Hourly	
RV-112	Davis Ranch South Flume	01/18/10	11:45	NA	0.0148	NA	TEAM manual read	Hourly	
RV-120	Red Hill Well (BLM)	01/21/10	12:41	139.73		3201.10	TEAM manual read	Hourly	
RV-130	G-36	01/21/10	11:30	180.01		3200.01	TEAM manual read	NA	
RV-140	Lego	01/25/10	11:49	222.19		3200.66	TEAM manual read	Hourly	
RV-150	Cinder Road	01/21/10	10:52	190.80		3187.16	TEAM manual read	Hourly	
RV-160	18-28 GTH	01/25/10	11:24	174.02		3188.56	TEAM manual read	Hourly	
RV-170	Fossil Falls Campground	01/21/10	11:20	141.03		3175.74	TEAM manual read	NA	
RV-180	LLR North Well	01/18/10	9:24	40.05		3159.05	TEAM manual read	Hourly	
RV-210	LLR Dock Well	01/18/10	9:39	6.01		3148.13	TEAM manual read	Hourly	
RV-220	LLR Surface Level	01/18/10	9:44	3.57		3147.47	TEAM manual read	Hourly	
RV-230	LLR Little Lake Outflow	01/18/10	10:19	NA	1.44	NA	TEAM manual read	Hourly	
RV-240	LLR Coso Springs Flow	01/18/10	10:07	NA	0.56	NA	TEAM manual read	Hourly	
RV-245	LLR North Culvert Flow	01/18/10	10:42	NA	2.17	NA	TEAM manual read	Hourly	
RV-250	LLR Siphon Discharge	01/18/10	10:37	NA	Yes	NA	TEAM visual read	NA	Discharging into Pond 2
RV-260	LLR Hotel Well	01/18/10	10:56	0.05		3138.73	TEAM manual read	Hourly	Pressure gauge reads 0.25 psi

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

DTW - Depth to water in feet below top of casing or other reference point

# Table 2 Field Observations of Rose Valley Hydrologic Monitoring Points January 4, 2010

Project Name:	Hay Ranch Project HMMP	Date: January 4, 2010
Location:	Rose Valley, Inyo County	
Observer(s):	K. Rainville	Page: 1 of 1

Well ID	Monitoring Point	Date	Time	DTW	Flow	GWE	Method	Transducer	Notes
				(ft)	(cfs)	(ft amsl)		Log Interval	
RV-30	Cal Pumice	1/4/10	7:41	246.15		3259.74	TEAM manual read	Hourly	
RV-60	Hay Ranch 1A	1/4/10	8:32	188.59		3243.58	TEAM manual read	Hourly	
RV-61	Hay Ranch 1B	1/4/10	8:26	191.76		3240.09	TEAM manual read	Hourly	
RV-62	Hay Ranch 1C	1/4/10	8:39	187.59		3243.91	TEAM manual read	Hourly	
RV-70	Hay Ranch South	1/4/10	8:50	NA	Yes	NA	TEAM manual read	NA	9,469,000 gallons since project initiation
RV-80	Hay Ranch 2A	1/4/10	8:07	192.33		3240.67	TEAM manual read	Hourly	
RV-81	Hay Ranch 2B	1/4/10	8:01	197.15		3235.48	TEAM manual read	Hourly	
RV-82	Hay Ranch 2C	1/4/10	8:14	191.76		3240.34	TEAM manual read	Hourly	
RV-180	LLR North Well	1/4/10	9:55	40.07		3159.03	TEAM manual read	Hourly	
RV-210	LLR Dock Well	1/4/10	10:07	5.91		3148.23	TEAM manual read	Hourly	
RV-220	LLR Surface Level	1/4/10	10:13	3.38		3147.66	TEAM manual read	Hourly	
RV-230	LLR Little Lake Outflow	1/4/10	10:45	NA	1.23	NA	TEAM manual read	Hourly	
RV-240	LLR Coso Springs Flow	1/4/10	10:33	NA	0.56	NA	TEAM manual read	Hourly	
RV-245	LLR North Culvert Flow	1/4/10	11:05	NA	1.93	NA	TEAM manual read	Hourly	
RV-250	LLR Siphon Discharge	1/4/10	11:00	NA	Yes	NA	TEAM visual read	NA	Discharging into Pond 2
RV-260	LLR Hotel Well	1/4/10	9:36	0.12	•	3138.66	TEAM manual read	Hourly	

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

DTW - Depth to water in feet below top of casing or other reference point

# Table 3 Field Observations of Rose Valley Hydrologic Monitoring Points January 11, 2010

Project Name:	Hay Ranch Project HMMP	Date: January 11, 2010
Location:	Rose Valley, Inyo County	
Observer(s):	K. Rainville	Page: 1 of 1

Well ID	Monitoring Point	Date	Time	DTW	Flow	GWE	Method	Transducer	Notes
				(ft)	(cfs)	(ft amsl)		Log Interval	
RV-30	Cal Pumice	1/11/10	9:08	246.31		3259.58	TEAM manual read	Hourly	
RV-60	Hay Ranch 1A	1/11/10	9:53	189.15		3243.02	TEAM manual read	Hourly	
RV-61	Hay Ranch 1B	1/11/10	9:58	195.63		3236.22	TEAM manual read	Hourly	
RV-62	Hay Ranch 1C	1/11/10	10:03	189.34		3242.16	TEAM manual read	Hourly	
RV-70	Hay Ranch South	1/11/10	10:17	NA	Yes	NA	TEAM manual read	NA	18,101,000 gallons since project initiation
RV-80	Hay Ranch 2A	1/11/10	9:38	192.57		3240.43	TEAM manual read	Hourly	
RV-81	Hay Ranch 2B	1/11/10	9:33	200.83		3231.80	TEAM manual read	Hourly	
RV-82	Hay Ranch 2C	1/11/10	9:44	193.04		3239.06	TEAM manual read	Hourly	
RV-180	LLR North Well	1/11/10	10:45	40.05		3159.05	TEAM manual read	Hourly	
RV-210	LLR Dock Well	1/11/10	10:57	5.96		3148.18	TEAM manual read	Hourly	
RV-220	LLR Surface Level	1/11/10	11:04	3.48		3147.56	TEAM manual read	Hourly	
RV-230	LLR Little Lake Outflow	1/11/10	11:33	NA	1.89		TEAM manual read	Hourly	
RV-240	LLR Coso Springs Flow	1/11/10	11:21	NA	0.56		TEAM manual read	Hourly	
RV-245	LLR North Culvert Flow	1/11/10	12:02	NA	2.58		TEAM manual read	Hourly	
RV-250	LLR Siphon Discharge	1/11/10	11:55	NA	Yes	NA	TEAM visual read	NA	Discharging into Pond 2
RV-260	LLR Hotel Well	1/11/10	10:31	0.09	•	3138.69	TEAM manual read	Hourly	Pressure gauge reads 0.20 psi

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

DTW - Depth to water in feet below top of casing or other reference point

GWE- Groundwater elevation in feet above average mean sea level

# Table 4 Field Observations of Rose Valley Hydrologic Monitoring Points January 18, 2010

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

Well ID	Monitoring Point	Date	Time	DTW	Flow	GWE	Method	Transducer	Notes
				(ft)	(cfs)	(ft amsl)		Log Interval	
RV-30	Cal Pumice	1/18/10	13:46	245.80		3260.09	TEAM manual read	Hourly	
RV-60	Hay Ranch 1A	1/18/10	13:20	189.03		3243.14	TEAM manual read	Hourly	
RV-61	Hay Ranch 1B	1/18/10	13:23	196.16		3235.69	TEAM manual read	Hourly	
RV-62	Hay Ranch 1C	1/18/10	13:28	189.21		3242.29	TEAM manual read	Hourly	
RV-70	Hay Ranch South	1/18/10	13:15	NA	Yes	NA	TEAM manual read	NA	24,009,000 gallons since project initiation
RV-80	Hay Ranch 2A	1/18/10	13:05	192.22		3240.78	TEAM manual read	Hourly	
RV-81	Hay Ranch 2B	1/18/10	13:00	200.79		3231.84	TEAM manual read	Hourly	
RV-82	Hay Ranch 2C	1/18/10	13:10	191.51		3240.59	TEAM manual read	Hourly	
RV-180	LLR North Well	1/18/10	9:24	40.05		3159.05	TEAM manual read	Hourly	
RV-210	LLR Dock Well	1/18/10	9:39	6.01		3148.13	TEAM manual read	Hourly	
RV-220	LLR Surface Level	1/18/10	9:44	3.57		3147.47	TEAM manual read	Hourly	
RV-230	LLR Little Lake Outflow	1/18/10	10:19	NA	1.44	NA	TEAM manual read	Hourly	
RV-240	LLR Coso Springs Flow	1/18/10	10:07	NA	0.56	NA	TEAM manual read	Hourly	
RV-245	LLR North Culvert Flow	1/18/10	10:42	NA	2.17	NA	TEAM manual read	Hourly	
RV-250	LLR Siphon Discharge	1/18/10	10:37	NA	Yes	NA	TEAM visual read	NA	Discharging into Pond 2
RV-260	LLR Hotel Well	1/18/10	10:56	0.05		3138.73	TEAM manual read	Hourly	Pressure gauge reads 0.25 psi

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

DTW - Depth to water in feet below top of casing or other reference point

GWE- Groundwater elevation in feet above average mean sea level

# Table 5 Field Observations of Rose Valley Hydrologic Monitoring Points January 25, 2010

Project Name:	Hay Ranch Project HMMP	Date: January 25, 2010
Location:	Rose Valley, Inyo County	
Observer(s):	K. Rainville	Page: 1 of 1

Well ID	Monitoring Point	Date	Time	DTW	Flow	GWE	Method	Transducer	Notes
				(ft)	(cfs)	(ft amsl)		Log Interval	
RV-30	Cal Pumice	1/25/10	13:03	246.30		3259.59	TEAM manual read	Hourly	
RV-60	Hay Ranch 1A	1/25/10	12:48	189.49		3242.68	TEAM manual read	Hourly	
RV-61	Hay Ranch 1B	1/25/10	12:44	196.29		3235.56	TEAM manual read	Hourly	
RV-62	Hay Ranch 1C	1/25/10	12:52	189.68		3241.82	TEAM manual read	Hourly	
RV-70	Hay Ranch South	1/25/10	12:37	NA	Yes	NA	TEAM manual read	NA	33,589,000 gallons since project initiation
RV-80	Hay Ranch 2A	1/25/10	12:28	192.74		3240.26	TEAM manual read	Hourly	
RV-81	Hay Ranch 2B	1/25/10	12:25	201.18		3231.45	TEAM manual read	Hourly	
RV-82	Hay Ranch 2C	1/25/10	12:32	192.28		3239.82	TEAM manual read	Hourly	
RV-180	LLR North Well	1/25/10	9:46	40.02		3159.08	TEAM manual read	Hourly	
RV-210	LLR Dock Well	1/25/10	9:58	5.92		3148.22	TEAM manual read	Hourly	
RV-220	LLR Surface Level	1/25/10	10:03	3.40		3147.64	TEAM manual read	Hourly	
RV-230	LLR Little Lake Outflow	1/25/10	10:32	NA	1.35		TEAM manual read	Hourly	
RV-240	LLR Coso Springs Flow	1/25/10	10:20	NA	0.56		TEAM manual read	Hourly	
RV-245	LLR North Culvert Flow	1/25/10	10:51	NA	2.08		TEAM manual read	Hourly	
RV-250	LLR Siphon Discharge	1/25/10	10:50	NA	Yes	NA	TEAM visual read	NA	Discharging into Pond 2
RV-260	LLR Hotel Well	1/25/10	9:25	NA	Yes	NA	TEAM manual read	Hourly	Well sealed, pressure gauge reads 0.25 psi

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

DTW - Depth to water in feet below top of casing or other reference point

GWE- Groundwater elevation in feet above average mean sea level



### **ANALYTICAL REPORT**

Job Number: 720-24979-1

Job Description: Hay Ranch, Rose Valley

For:

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

Attention: Mr. Keith Rainville

Approved for relea Dimple Sharma Project Manager I 1/6/2010 5:26 PM

Dimple Sharma
Project Manager I
dimple.sharma@testamericainc.com
01/06/2010

#### CA ELAP Certification # 2496

The Chain(s) of Custody are included and are an integral part of this report.

The report shall not be reproduced except in full, without the written approval of the laboratory. The client, by accepting this report, also agrees not to alter any reports whether in the hard copy or electronic format and to use reasonable efforts to preserve the reports in the form and substance originally provided by TestAmerica.

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.

## Job Narrative 720-24979-1

#### 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**

Job Number: 720-24979-1

Client: TEAM Engineering & Management, Inc.

Lab Sample ID C Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-24979-1	CJS#2				
Total Dissolved Solids	3	550	50	mg/L	SM 2540C
700 04070 0	upo				
720-24979-2	HRS			_	
Total Dissolved Solids	3	890	50	mg/L	SM 2540C
720-24979-3	QAMW				
Total Dissolved Solids	3	580	50	mg/L	SM 2540C

#### **METHOD SUMMARY**

Job Number: 720-24979-1

Client: TEAM Engineering & Management, Inc.

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: 720-24979-1

			Date/Time	Date/Time
Lab Sample ID	Client Sample ID	Client Matrix	Sampled	Received
720-24979-1	CJS#2	Water	12/28/2009 1217	12/30/2009 1000
720-24979-2	HRS	Water	12/28/2009 1315	12/30/2009 1000
720-24979-3	QAMW	Water	12/28/2009 0000	12/30/2009 1000

Client: TEAM Engineering & Management, Inc. Job Number: 720-24979-1

**General Chemistry** 

Client Sample ID: CJS#2

Lab Sample ID: 720-24979-1 Date Sampled: 12/28/2009 1217 Client Matrix: Water

Date Received: 12/30/2009 1000

RL Analyte Result Units Dil Method Qual **Total Dissolved Solids** 550 mg/L 50 1.0 SM 2540C

Date Analyzed: 12/30/2009 1951 Analysis Batch: 720-63685

Client: TEAM Engineering & Management, Inc. Job Number: 720-24979-1

**General Chemistry** 

Client Sample ID: HRS

Lab Sample ID: 720-24979-2 Date Sampled: 12/28/2009 1315 Client Matrix: Water

Date Received: 12/30/2009 1000

RL Analyte Result Units Dil Method Qual **Total Dissolved Solids** 890 mg/L 50 1.0 SM 2540C

Date Analyzed: 12/30/2009 1951 Analysis Batch: 720-63685

Client: TEAM Engineering & Management, Inc. Job Number: 720-24979-1

**General Chemistry** 

Client Sample ID: **QAMW** 

Lab Sample ID: 720-24979-3 Date Sampled: 12/28/2009 0000 Client Matrix: Water

Date Received: 12/30/2009 1000

RL Analyte Result Units Dil Method Qual **Total Dissolved Solids** 580 mg/L 50 1.0 SM 2540C

> Analysis Batch: 720-63685 Date Analyzed: 12/30/2009 1951

### **DATA REPORTING QUALIFIERS**

Lab Section Qualifier Description

### **Quality Control Results**

Client: TEAM Engineering & Management, Inc. Job Number: 720-24979-1

### **QC Association Summary**

		Report			
Lab Sample ID	Client Sample ID	Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:720-6368	5				
LCS 720-63685/2	Lab Control Sample	Т	Water	SM 2540C	
LCSD 720-63685/3	Lab Control Sample Duplicate	Т	Water	SM 2540C	
MB 720-63685/1	Method Blank	Т	Water	SM 2540C	
720-24979-1	CJS#2	Т	Water	SM 2540C	
720-24979-2	HRS	Т	Water	SM 2540C	
720-24979-3	QAMW	Т	Water	SM 2540C	

#### Report Basis

T = Total

#### **Quality Control Results**

50 mL

Client: TEAM Engineering & Management, Inc. Job Number: 720-24979-1

Method Blank - Batch: 720-63685 Method: SM 2540C

Preparation: N/A

Lab Sample ID: MB 720-63685/1 Analysis Batch: 720-63685 Instrument ID: No Equipment Assigned

Client Matrix: Water Prep Batch: N/A Lab File ID: N/A

Dilution: 1.0 Units: mg/L Initial Weight/Volume:

12/30/2009 1951 Date Analyzed: Final Weight/Volume: 50 mL Date Prepared:

Analyte Result Qual RL

**Total Dissolved Solids** ND 50

Method: SM 2540C Lab Control Sample/ Lab Control Sample Duplicate Recovery Report - Batch: 720-63685 Preparation: N/A

LCS Lab Sample ID: LCS 720-63685/2 Analysis Batch: 720-63685 Instrument ID: No Equipment Assigned

Client Matrix: Water Prep Batch: N/A Lab File ID: N/A

Dilution: 1.0 Units: mg/L Initial Weight/Volume: 50 mL

12/30/2009 1951 Date Analyzed: Final Weight/Volume: 50 mL

Date Prepared: N/A

LCSD Lab Sample ID: LCSD 720-63685/3 Analysis Batch: 720-63685 Instrument ID: No Equipment Assigned

Client Matrix: Water Prep Batch: N/A Lab File ID: N/A

Dilution: 1.0 Units: mg/L Initial Weight/Volume: 50 mL

12/30/2009 1951 Date Analyzed: Final Weight/Volume: 50 mL Date Prepared: N/A

% Rec. LCS LCSD **RPD** RPD Limit LCS Qual LCSD Qual Analyte Limit

**Total Dissolved Solids** 103 105 85 - 115 2 20

N/A

STL San Francisco

[2] 4() Severn Trent Laboratories, Inc.

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4. Hert 6. Orlean	Project Manager: Keith Rollstein	mager: Ke	The Reservence		2	Sample: KR	KR	*************	· · · · · · · · · · · · · · · · · · ·	Dam:	Dam: 12/28/09		***************************************	CCC NG:	
TEAM Engineering & Management, Inc.	Truffas: 7	TeVEs: 760-872-1033/872-273F	4872.273F			MA CON	act: Ding	Lab Contact: Dauple Shama	at	Carriè	Carrier: Fedux				of1COC.
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Dishno, CA 83515	Calenda	Calendar (C.) or Work Days (W)	ork Days (V	: AS				•••••		· · · · · · · · · · · · · · · · · · ·		********			
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### **Login Sample Receipt Check List**

Job Number: 720-24979-1

Client: TEAM Engineering & Management, Inc.

Login Number: 24979 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