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

March 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 February 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. 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 February 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 February 15 and 18. Pressure transducer data were downloaded from 24 units, including one "BaroTroll" measuring barometric pressure. On February 2, a DTW measurement at LADWP 816 Well was taken by LADWP personnel.

Weekly field events to the Hay Ranch area and Little Lake Ranch area occurred on February 1, 8, 15, and 22. 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 809,048,000 gallons was taken by TEAM at 12:15, February 22. This reading represents approximately 67,248,000 gallons (206 Acre Feet) of groundwater extracted from the Hay Ranch South production well since project initiation on December 25, 2009.

Installation and Maintenance

The pressure transducer installed in the Davis Ranch South Well (RV111) was experiencing sporadic but re-occurring technical difficulties in December and January. Therefore, it was replaced on February 1, 2010, and a back-up transducer was installed in RV111. The malfunctioning unit is being refurbished.

Data Transmittal

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

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

Sincerely,

TEAM Engineering & Management, Inc.

Keith Rainville
Staff Geologist

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Table 1
Field Observations of Rose Valley Hydrologic Monitoring Points
February 15-18, 2010

Project Name:	**Hay Ranch Project HMMP**	Date: February 15-18, 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	2/18/10	9:19	231.29		3755.63	TEAM manual read	NA	
RV-20	LADWP 816	2/2/10	15:10	79.90		3435.16	LADWP manual read	NA	Data provided by LADWP
RV-30	Cal Pumice	2/15/10	14:52	246.26		3259.63	TEAM manual read	Hourly	
RV-40	Dunmovin	2/18/10	8:42	294.67		3253.20	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	2/15/10	14:29	189.28		3242.89	TEAM manual read	Hourly	
RV-61	Hay Ranch 1B	2/15/10	14:34	192.28		3239.57	TEAM manual read	Hourly	
RV-62	Hay Ranch 1C	2/15/10	14:40	188.33		3243.17	TEAM manual read	Hourly	
RV-70	Hay Ranch South	2/15/10	14:28	NA	Yes	NA	TEAM manual read	NA	55,035,000 gallons pumped since project initiation
RV-80	Hay Ranch 2A	2/15/10	14:11	192.99		3240.01	TEAM manual read	Hourly	
RV-81	Hay Ranch 2B	2/15/10	14:06	198.46		3234.17	TEAM manual read	Hourly	
RV-82	Hay Ranch 2C	2/15/10	14:17	192.70		3239.40	TEAM manual read	Hourly	
RV-90	Coso Jct Ranch	2/15/10	13:34	170.99		3232.14	TEAM manual read	Hourly	
RV-100	Coso Jct Store #1	2/15/10	13:47	142.56		3229.56	TEAM manual read	Hourly	
RV-110	Davis Ranch North Well	2/15/10	12:32	6.46		3886.54	TEAM manual read	Hourly	
RV-111	Davis Ranch South Well	2/15/10	11:40	11.23		3886.77	TEAM manual read	Hourly	
RV-112	Davis Ranch South Flume	2/15/10	12:57	NA	0.0148	NA	TEAM manual read	Hourly	
RV-120	Red Hill Well (BLM)	2/18/10	10:52	139.99		3200.84	TEAM manual read	Hourly	
RV-130	G-36	2/18/10	10:35	180.11		3199.91	TEAM manual read	NA	
RV-140	Lego	2/18/10	10:24	222.11		3200.74	TEAM manual read	Hourly	
RV-150	Cinder Road	2/15/10	12:07	190.97		3186.99	TEAM manual read	Hourly	
RV-160	18-28 GTH	2/18/10	10:09	174.04		3188.54	TEAM manual read	Hourly	
RV-170	Fossil Falls Campground	2/15/10	11:57	141.08		3175.69	TEAM manual read	NA	
RV-180	LLR North Well	2/15/10	9:53	40.00		3159.10	TEAM manual read	Hourly	
RV-210	LLR Dock Well	2/15/10	10:03	5.94		3148.20	TEAM manual read	Hourly	
RV-220	LLR Surface Level	2/15/10	10:09	3.41		3147.63	TEAM manual read	Hourly	
RV-230	LLR Little Lake Outflow	2/15/10	10:33	NA	0.09	NA	TEAM manual read	Hourly	
RV-240	LLR Coso Springs Flow	2/15/10	10:22	NA	0.56	NA	TEAM manual read	Hourly	
RV-245	LLR North Culvert Flow	2/15/10	11:07	NA	0.88	NA	TEAM manual read	Hourly	
RV-250	LLR Siphon Discharge	2/15/10	10:37	NA	Yes	NA	TEAM visual read	NA	Discharging into Pond 2
RV-260	LLR Hotel Well	2/15/10	11:25	0.03		3138.89	TEAM manual read	Hourly	Pressure gauge reads 0.25-0.30 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 2
Field Observations of Rose Valley Hydrologic Monitoring Points
February 1, 2010

Project Name:	**Hay Ranch Project HMMP**	Date: February 1, 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-30	Cal Pumice	2/1/10	8:54	246.31		3259.58	TEAM manual read	Hourly	
RV-60	Hay Ranch 1A	2/1/10	9:35	189.12		3243.05	TEAM manual read	Hourly	
RV-61	Hay Ranch 1B	2/1/10	9:39	191.43		3240.42	TEAM manual read	Hourly	
RV-62	Hay Ranch 1C	2/1/10	9:43	187.73		3243.77	TEAM manual read	Hourly	
RV-70	Hay Ranch South	2/1/10	9:12	NA	Yes	NA	TEAM manual read	NA	40,633,000 gallons since project initiation
RV-80	Hay Ranch 2A	2/1/10	9:20	192.88		3240.12	TEAM manual read	Hourly	
RV-81	Hay Ranch 2B	2/1/10	9:16	197.21		3235.42	TEAM manual read	Hourly	
RV-82	Hay Ranch 2C	2/1/10	9:25	192.12		3239.98	TEAM manual read	Hourly	
RV-110	Davis Ranch North Well	2/1/10	13:18	6.46		3886.54	TEAM manual read	Hourly	
RV-111	Davis Ranch South Well	2/1/10	15:07	11.24		3886.76	TEAM manual read	Hourly	
RV-180	LLR North Well	2/1/10	10:07	39.99		3159.11	TEAM manual read	Hourly	
RV-210	LLR Dock Well	2/1/10	10:17	5.95		3148.19	TEAM manual read	Hourly	
RV-220	LLR Surface Level	2/1/10	10:22	3.51		3147.53	TEAM manual read	Hourly	
RV-230	LLR Little Lake Outflow	2/1/10	11:22	NA	2.27	NA	TEAM manual read	Hourly	
RV-240	LLR Coso Springs Flow	2/1/10	11:11	NA	0.56	NA	TEAM manual read	Hourly	
RV-245	LLR North Culvert Flow	2/1/10	11:40	NA	2.90	NA	TEAM manual read	Hourly	
RV-250	LLR Siphon Discharge	2/1/10	11:36	NA	Yes	NA	TEAM visual read	NA	Discharging into Pond 2
RV-260	LLR Hotel Well	2/1/10	12:10	0.05		3138.87	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 3
Field Observations of Rose Valley Hydrologic Monitoring Points
February 8, 2010

Project Name:	**Hay Ranch Project HMMP**	Date: February 8, 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-30	Cal Pumice	2/8/10	12:28	246.37		3259.52	TEAM manual read	Hourly	
RV-60	Hay Ranch 1A	2/8/10	12:06	189.43		3242.74	TEAM manual read	Hourly	
RV-61	Hay Ranch 1B	2/8/10	12:11	193.06		3238.79	TEAM manual read	Hourly	
RV-62	Hay Ranch 1C	2/8/10	12:16	188.41		3243.09	TEAM manual read	Hourly	
RV-70	Hay Ranch South	2/8/10	11:35	NA	Yes	NA	TEAM manual read	NA	46,049,000 gallons since project initiation
RV-80	Hay Ranch 2A	2/8/10	11:49	193.00		3240.00	TEAM manual read	Hourly	
RV-81	Hay Ranch 2B	2/8/10	11:43	199.02		3233.61	TEAM manual read	Hourly	
RV-82	Hay Ranch 2C	2/8/10	11:56	192.06		3240.04	TEAM manual read	Hourly	
RV-180	LLR North Well	2/8/10	9:47	40.00		3159.10	TEAM manual read	Hourly	
RV-210	LLR Dock Well	2/8/10	9:56	6.01		3148.13	TEAM manual read	Hourly	
RV-220	LLR Surface Level	2/8/10	10:01	3.55		3147.49	TEAM manual read	Hourly	
RV-230	LLR Little Lake Outflow	2/8/10	10:26	NA	0.04	NA	TEAM manual read	Hourly	
RV-240	LLR Coso Springs Flow	2/8/10	10:16	NA	0.56	NA	TEAM manual read	Hourly	
RV-245	LLR North Culvert Flow	2/8/10	10:47	NA	2.53	NA	TEAM manual read	Hourly	
RV-250	LLR Siphon Discharge	2/8/10	10:50	NA	Yes	NA	TEAM visual read	NA	Discharging into Pond 2
RV-260	LLR Hotel Well	2/8/10	11:15	0.05		3138.87	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 4
Field Observations of Rose Valley Hydrologic Monitoring Points
February 15, 2010

Project Name:	**Hay Ranch Project HMMP**	Date: February 15, 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-30	Cal Pumice	2/15/10	14:52	246.26		3259.63	TEAM manual read	Hourly	
RV-60	Hay Ranch 1A	2/15/10	14:29	189.28		3242.89	TEAM manual read	Hourly	
RV-61	Hay Ranch 1B	2/15/10	14:34	192.28		3239.57	TEAM manual read	Hourly	
RV-62	Hay Ranch 1C	2/15/10	14:40	188.33		3243.17	TEAM manual read	Hourly	
RV-70	Hay Ranch South	2/15/10	14:28	NA	Yes	NA	TEAM manual read	NA	55,035,000 gallons since project initiation
RV-80	Hay Ranch 2A	2/15/10	14:11	192.99		3240.01	TEAM manual read	Hourly	
RV-81	Hay Ranch 2B	2/15/10	14:06	198.46		3234.17	TEAM manual read	Hourly	
RV-82	Hay Ranch 2C	2/15/10	14:17	192.70		3239.40	TEAM manual read	Hourly	
RV-180	LLR North Well	2/15/10	9:53	40.00		3159.10	TEAM manual read	Hourly	
RV-210	LLR Dock Well	2/15/10	10:03	5.94		3148.20	TEAM manual read	Hourly	
RV-220	LLR Surface Level	2/15/10	10:09	3.41		3147.63	TEAM manual read	Hourly	
RV-230	LLR Little Lake Outflow	2/15/10	10:33	NA	0.09	NA	TEAM manual read	Hourly	
RV-240	LLR Coso Springs Flow	2/15/10	10:22	NA	0.56	NA	TEAM manual read	Hourly	
RV-245	LLR North Culvert Flow	2/15/10	11:07	NA	0.88	NA	TEAM manual read	Hourly	
RV-250	LLR Siphon Discharge	2/15/10	11:05	NA	Yes	NA	TEAM visual read	NA	Discharging into Pond 2
RV-260	LLR Hotel Well	2/15/10	11:25	0.03		3138.89	TEAM manual read	Hourly	Pressure gauge reads 0.25-0.30 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
February 22, 2010

Project Name:	**Hay Ranch Project HMMP**	Date: February 22, 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-30	Cal Pumice	2/22/10	12:38	246.72		3259.17	TEAM manual read	Hourly	
RV-60	Hay Ranch 1A	2/22/10	12:17	190.06		3242.11	TEAM manual read	Hourly	
RV-61	Hay Ranch 1B	2/22/10	12:22	195.76		3236.09	TEAM manual read	Hourly	
RV-62	Hay Ranch 1C	2/22/10	12:27	190.21		3241.29	TEAM manual read	Hourly	
RV-70	Hay Ranch South	2/22/10	12:15	NA	Yes	NA	TEAM manual read	NA	67,248,000 gallons since project initiation
RV-80	Hay Ranch 2A	2/22/10	11:59	193.50		3239.50	TEAM manual read	Hourly	
RV-81	Hay Ranch 2B	2/22/10	11:54	202.62		3230.01	TEAM manual read	Hourly	
RV-82	Hay Ranch 2C	2/22/10	12:04	194.74		3237.36	TEAM manual read	Hourly	
RV-180	LLR North Well	2/22/10	10:00	40.00		3159.10	TEAM manual read	Hourly	
RV-210	LLR Dock Well	2/22/10	10:12	5.91		3148.23	TEAM manual read	Hourly	
RV-220	LLR Surface Level	2/22/10	10:19	3.36		3147.68	TEAM manual read	Hourly	
RV-230	LLR Little Lake Outflow	2/22/10	10:41	NA	0.48		TEAM manual read	Hourly	
RV-240	LLR Coso Springs Flow	2/22/10	10:33	NA	0.56		TEAM manual read	Hourly	
RV-245	LLR North Culvert Flow	2/22/10	11:02	NA	1.07		TEAM manual read	Hourly	
RV-250	LLR Siphon Discharge	2/22/10	10:57	NA	Yes	NA	TEAM visual read	NA	Discharging into Pond 2
RV-260	LLR Hotel Well	2/22/10	11:22	0.03		3138.89	TEAM manual read	Hourly	Pressure gauge reads 0.25-0.30 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