Annual Water Quality Monitoring Program Report, March – September 2006

Mokelumne River Project (FERC No. 137)

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1 INTRODUCTION

1.1 Background

This report presents data collected during the 2006 water quality monitoring study at the Mokelumne River Hydroelectric Project, Federal Energy Regulatory Commission (FERC) No. 137 (Project). This 2006 data report presents the second year (Year 2) of water quality data collected for the 5 to 15-year monitoring period required by Condition No. 11 of the FERC Project license issued on October 11, 2001. The focus of the study is to document water quality conditions in Project-affected streams under new operating guidelines mandated by the FERC license.

As part of the FERC relicensing process for the Project, a Settlement Agreement (Settlement) was developed by Pacific Gas and Electric Company (PG&E) and nine other parties representing Federal and State agencies and non-government organizations, here referred to as the Parties, to resolve among the Parties all streamflow issues for ecological purposes and river-based recreational use in support of the U.S. Forest Service (FS) issuing its Final 4(e) Conditions and FERC issuing a new Project License. The Settlement was executed by the Parties effective July 21, 2000 (PG&E, 2000). Among other things, the Settlement included: 1) a new set of minimum streamflow requirements in Project-affected stream reaches for the protection of aquatic resources; 2) development of a Stream Ecology Monitoring Program (SEMP) in support of an adaptive management approach designed to protect stream ecology in the Project area; and 3) establishment of an Ecological Resources Committee (ERC) to assist PG&E in the performance of the SEMP and the adaptive management program (ERC membership was identified as the original signatory parties to the Settlement, except the FS, which would participate as a liaison to the ERC). On October 11, 2001, FERC issued an "Order Approving Settlement Agreement and Issuing New License" for the Project. The Settlement was incorporated into the license with minor modifications. Also incorporated into the license were the FS 4(e) Conditions.

Water quality data have been collected in the Project area from 2000 to 2005 (PG&E, 2002a, 2002b, 2003, 2004a, 2004b, 2005, and 2006). A general water quality monitoring plan (Plan) was developed by PG&E and submitted to the ERC, and the FS and was adopted in May 2001 (PG&E, 2001). The Plan states that monitoring will be conducted prior to the initial streamflow modification. Recognizing the need for water quality data under existing streamflow conditions, PG&E initiated data collection during the summer of 2000. Data collected between July 2000 and December 2001, therefore, represent "baseline" conditions under streamflow requirements in effect prior to the issuance of the new FERC license. General water quality monitoring was discontinued after May 2002, by decision of the ERC and FS, to allow for completion of construction activities implementing the required changes in streamflows. However, limited *in-situ* monitoring continued in order to determine if dissolved oxygen levels for coldwater stream reaches, as designated in the Settlement Agreement, were being met. Data collected

between 2002 and 2004 represent a range of conditions from “baseline” to “new license”, depending on the stream reach and year. The new license allowed 3 years for PG&E to complete necessary facility modifications to meet the new streamflow requirements, but also mandated that PG&E make a good faith effort to meet the new license conditions within the limitations of existing flow release structures. Additionally, PG&E requested and FERC granted a time extension of one year to finalize and perform the testing of the automated equipment associated with the facility modifications. In most stream reaches, the releases in 2002 through 2004 fully met the new minimum streamflow requirements in multiple years; thus, these data are representative of the “new license” condition. In cases where the releases did not fully meet the new license requirements, the data represent “interim” conditions. Facility modifications were sufficiently completed by early 2005 (Year 1) to allow the new streamflow requirements to be met. Thus, water quality monitoring results from 2006 represent Year 2 conditions as defined by the Settlement and the FERC license.

The 2006 water quality monitoring results will supplement existing data and will be used by the ERC and FS to evaluate water quality in Project-affected stream reaches relative to climatic conditions, changes in streamflow regime, and reservoir operations. The water quality monitoring data will be used in conjunction with the results of other resource investigations (fish, macroinvertebrates, water temperature, amphibian, riparian, geomorphology, etc.) to determine the overall effect of the Project flow regimes on the environmental resources of the Project area. For more detailed information on temperature trends and streamflow conditions during the 2006 study period, please refer to the annual monitoring report for water temperature (Stillwater Sciences, 2006). Collectively, data from these monitoring programs will guide the ERC and FS in setting appropriate flow regimes as specified under the adaptive management program of the Settlement and FERC license.

1.2 Project Area

The Project is located on the Mokelumne River, North Fork Mokelumne River (NFMR), Bear River, and associated tributaries in Alpine, Amador, and Calaveras counties, California. Project features extend over a wide range of elevations in the Sierra Nevada Mountains, from over 8,600 feet to less than 800 feet. Portions of the Project occupy lands within the Stanislaus National Forest and the El Dorado National Forest, as well as lands managed by the U.S. Department of the Interior's Bureau of Land Management (BLM). The existing Project consists of seven storage reservoirs, four powerhouses, and numerous diversions, forebays, and conduits.

Farthest upstream are four natural lakes of the Project which have been enlarged by the addition of dams to form small storage reservoirs: Upper Blue Lake, Lower Blue Lake, Twin Lake, and Meadow Lake. Outflow from the Blue Lakes connects with the NFMR via Blue and Deer creeks, and outflow of Twin Lake

and Meadow Lake drains into the NFMR via Meadow Creek (Figure 1). The Project has four power developments downstream of these lakes.

Salt Springs Development. On the NFMR approximately 15 miles downstream from the four upper lakes is the Salt Springs Development (Figure 1). It includes three storage reservoirs: Salt Springs Reservoir on the NFMR, and Upper Bear River Reservoir and Lower Bear River Reservoir on Bear River. Water stored in Salt Springs Reservoir is diverted through Salt Springs Powerhouse Unit No.1, located immediately below Salt Springs Reservoir Dam. Upper and Lower Bear River reservoirs divert water from the Bear River drainage through a tunnel and penstock for use at Salt Springs Powerhouse Unit No. 2. Water is also diverted from upper Cole Creek into this tunnel, where the tunnel crosses under the creek.

Tiger Creek Development. The Tiger Creek Development is located below the Salt Springs Development on the NFMR (Figure 1). At Salt Springs Powerhouse tailrace, discharges from both units are made directly into the upper section of the Tiger Creek Canal and transported 17.8 miles to Tiger Creek Regulator Reservoir. Diversions on three small tributary streams (Cole Creek, Bear River, and Tiger Creek) feed additional water into Tiger Creek Canal along its course. From Tiger Creek Regulator, water travels 2.5 miles in the lower section of Tiger Creek Canal to Tiger Creek Forebay and ultimately to Tiger Creek Powerhouse.

West Point Development. The West Point Development is located just downstream from the Tiger Creek Development (Figure 1). The water discharged through Tiger Creek Powerhouse is returned to the NFMR and impounded in Tiger Creek Afterbay for diversion into the West Point Tunnel. Water diverted into this tunnel feeds West Point Powerhouse, 2.6 miles downstream.

Electra Development. The Electra Development receives diversion flows from West Point Powerhouse Tailrace and water diverted by the Electra Diversion Dam, located on the NFMR immediately upstream from the West Point Powerhouse (Figure 1). The combined flows enter the Electra Tunnel for transport to the Electra Powerhouse forebay (Lake Tabeaud) for use at Electra Powerhouse, located on the mainstem of the Mokelumne River 11.5 miles downstream of Electra Diversion Dam.

2 METHODS

2.1 Monitoring Program

2.1.1 Station locations

Water quality was measured at thirteen (13) locations throughout the Project area as outlined in the Plan (PG&E, 2001). Waters associated with the water quality monitoring program include Blue Creek,

Meadow Creek, NFMR, Bear River, Tiger Creek, and the mainstem Mokelumne (Figure 1). Sampling was conducted at the following locations.

BC1	Blue Creek below Upper Blue Lake Dam
BC2	Blue Creek below Lower Blue Lake Dam
MC1	Meadow Creek below Twin Lake Dam
MC2	Meadow Creek below Meadow Lake Dam
NFMR1	NFMR above Salt Springs Reservoir
NFMR2	NFMR below Salt Springs Reservoir Dam
CC0	Cole Creek below Bear River Tunnel Diversion
BR1	Bear River below Lower Bear River Reservoir Dam
BR2	Bear River above Salt Springs Road near Licensee Gage M-32
TC1	Tiger Creek below Tiger Creek Regulator Dam
NFMR3	NFMR above Tiger Creek Afterbay at Licensee Gage M-38
NFMR5	NFMR below Electra Diversion Dam
MR1	Mokelumne River above Electra Powerhouse

Table 1 lists these sampling locations and the rationale for their selection. The spatial locations of the sampling sites are presented in Figure 1.

2.1.2 Monitoring period

The Settlement and FERC license require that monitoring will be conducted in the year prior to the initial implementation of the streamflow change requirements, as well as years 1, 2, 4, 6, 9, 11, and 14 following the change. During the first three years (the year prior to initial streamflow change, and Years 1 and 2), monitoring is required eight times per year (March, May, June, July, August, September, first winter storm of the season, and December). In subsequent years, monitoring is required on a quarterly basis (March, June, September, and December). During each sampling event all 13 stations are sampled as weather and access permit.

This report presents data collected in Year 2 for March through September of 2006. December water quality samples were collected on December 15, 16, and 18, 2006. The December water quality samples have been submitted to the analytical laboratories and results are pending and therefore will not be included in this report. A monitoring event is planned for the first significant winter storm of the season, and will most likely occur in 2007. The first winter storm of the season is defined as the first rain event that results in 3 inches of precipitation (as measured at the Tiger Creek and Salt Springs rain gages) within a 2-day period, with the additional stipulation that measured streamflows at stream gage M-38 (located on the North Fork above Tiger Creek Afterbay) exceed a 200 cfs instantaneous flow.

2.1.3 Water quality

In-situ and analytical water quality monitoring were performed in 2006 per the requirements of the Settlement and FERC license at each of the stations in a representative portion of the stream channel, with the exception of limited access to remote sites due to heavy precipitation or snow events. Date, time, station number, and *in-situ* water quality data were recorded in a standard field notebook and later transcribed to electronic format.

In-situ sampling only occurred at Blue Creek below Upper Blue Lake (BC1), Meadow Creek below Twin Lake (MC1), Cole Creek below Bear River Tunnel Diversion (CC0), NFMR above Salt Springs Reservoir (NFMR1), and Bear River above Salt Springs Road near Licensee Gage M-32 (BR2). As specified in section 7 of the Settlement Agreement (Water Quality Monitoring Requirements), these stations were monitored for turbidity, water temperature, dissolved oxygen (DO), DO percent saturation, specific conductivity (SpC), Total Suspended Solids (TSS), and pH. The remaining 8 stations were sampled for both *in-situ* and analytical parameters (hardness, alkalinity, nitrate, dissolved copper [Cu], and total suspended sediments [TSS]).

Turbidity, water temperature, DO, DO percent saturation, SpC, and pH were measured in the field using a HydroLab Quanta® multi-parameter water analyzer (Hach Environmental, Loveland, CO, USA). The HydroLab meter was calibrated in the laboratory prior to each field visit per manufacturer's instructions (a calibration certificate for 2006 is included as Appendix B).

During March and April it was observed that the HydroLab required longer equilibration times for the pH measurement in the field and that the measurements were periodically lower than historically recorded. Therefore in May and June 2006, a Corning 313 pH meter (± 0.01 s.u.; Corning Incorporated Life Sciences, Acton, MA) was used to measure pH at all river stations as a backup to the HydroLab. Field pH measurements that were recorded in May and June were also periodically lower than historical pH measurements. It is believed that the low ionic strength of the ambient waters may have affected solution activity and probe performance. Measuring pH in low conductivity waters such as those found in the Mokelumne River Project Area can be problematic, as the instrument may require longer equilibration times and typically displays greater variability in reported values. Subsequent laboratory bench tests using a low ionic strength solution were conducted, comparing the Corning 313 measurements to those from two Orion pH meters (± 0.005 s.u.; Thermo Electron Corp., Waltham, MA, USA). A low bias in the Corning meter pH readings was confirmed (Appendix B), and pH values determined with the Corning meter are reported with flags in Table 2 and in Table A1 in Appendix A. The HydroLab was used for the remainder of the monitoring program and was calibrated with low ionic strength solution prior to each field visit. The pH probe was housed in low ionic strength solution when not in use. There were no more problems associated with pH measurements for the remainder of the monitoring program.

Due to failure of the DO probe on the HydroLab Quanta®, a YSI 85 DO probe (YSI Incorporated, Yellow Springs, OH, USA) was used to measure DO concentration and percent saturation from June, 2006 through the end of the 2006 monitoring period. No other probe failures were noted. The YSI 85 meter was re-calibrated at every station based on local elevation, per manufacturer's instructions.

Water samples collected for laboratory analysis were sent to the Department of Fish and Game's (DF&G) Water Pollution Control Laboratory (WPCL), the DF&G Marine Pollution Studies Laboratory (MPSL), and Sierra Foothill Laboratory, Inc. (SFHL). Hardness, alkalinity, nitrate, and TSS were analyzed by WPCL. Dissolved copper samples were analyzed by MPSL using "clean" lab techniques and U. S. Environmental Protection Agency (USEPA) Method 1638, *Determination of Trace Elements in Ambient Waters by Inductively Coupled Plasma-Mass Spectrometry* (USEPA 1996a). In addition, samples collected for dissolved copper analysis were collected in the field using USEPA Method 1669, *Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels* (USEPA 1996b). Bacteriological samples collected for total and fecal coliform testing were delivered to SFHL for analysis within 9 hours of collection.

2.1.4 Streamflow

In addition to water quality, streamflow was measured continuously at twelve (12) Licensee maintained and two (2) East Bay Municipal Utility District (EBMUD) maintained locations during the monitoring program. A complete list of the streamflow monitoring stations is presented below.

M3 Blue Creek below Lower Blue Dam
M6 Meadow Creek below Meadow Lake Dam
M66 Blue Creek below Upper Blue Lake Dam
M68 Meadow Creek below Twin Lakes Dam
M10 Cole Creek below Bear River Tunnel Diversion
M11 NFMR below Salt Springs Dam
M49 Bear River below Lower Bear River Reservoir Dam
M32 Bear River above Salt Springs Road
M89 Bear River below Salt Springs Road near Tiger Creek Canal
M76 Tiger Creek below Regulator Dam
M38 NFMR above Tiger Creek Afterbay
M46 NFMR below Electra Diversion Dam
USGS 7000 Middle Fork Mokelumne River above the confluence with South Fork Mokelumne River (EBMUD operated, USGS 11317000)
USGS 8500 South Fork Mokelumne River below the confluence with the Middle Fork Mokelumne River (EBMUD operated, USGS 11318500)

All streamflow data are presented as daily average flow data in cubic feet per second (cfs) and are preliminary and subject to revision until final review of the data at the end of each calendar year (Appendix C).

Per the requirements of the Mokelumne License, the Licensee is required to make a monthly forecast each February through May of the water year type, and to operate each month based on that month's forecast. The May forecast is used to establish the final water year type for the remaining months of the year until the next February, when forecasting begins again. The forecasts for February through May 2006 all suggested a "Wet" water year type, except for March. Although the forecast for March was for an "Above Normal" water year, operations were maintained as for "Wet" conditions. The final 2006 water year designation was for a "Wet" water year.

3.0 WATER QUALITY MONITORING RESULTS

3.1 *In-situ* Water Quality

Table A1 in Appendix A presents the 2006 and historical *in-situ* water quality data. Table 2 presents a summary of the annual maximum and minimum values for *in-situ* monitoring parameters presented in Appendix A, for all stations in 2000 through 2006.

Turbidity and Specific Conductance

Water at the higher elevation stations (MC1, MC2, BC1, and BC2) tended to be clear with low specific conductance and turbidity measurements, with a few exceptions. Turbidity at BC2 was elevated in September (12.6 NTU), despite relatively constant streamflow. The same was true at MC1 in September (8.3 NTU) and at MC2 in July (18.7 NTU). Turbidity measurements were generally low throughout the study area, while specific conductance measurements tended to increase in a downstream direction. Turbidity in the Project area ranged from 0.0 NTU at various stations and months to 21.6 NTU at station NFMR2 in June (flow at gage M11 was 1,541.3 cfs; Appendix C), and averaged 4.5 NTU over the entire Project area during the monitoring program. There does not appear to have been a strong correlation between turbidity measurements and streamflow. Specific conductance ranged from 10 uS/cm at station MC2 in June to 67 u*S*/cm at station MR1 in September (Table A1), and averaged 26 u*S*/cm in the Project area during the monitoring program. Weather conditions observed during the monitoring period are shown in Table 3.

pH

Measurements of pH during the 2006 monitoring program ranged from 5.8 $\pm$0.2 units (suspect result, see discussion below) at station CC1 in May (flow at gage M10 during this event was 384.5 cfs; Appendix C)

to 8.3 ±0.2 units at MR1 in September (Table A1). The Central Valley Regional Water Quality Control Board Basin Plan (Basin Plan) objective for pH states that pH must not be less than 6.5 units and not greater than 8.5 units (CVRWQCB 1998). pH was less than 6.5 in May at stations BC1 (6.1), BC2 (6.2), BR1 (6.4), BR2 (5.8), TC1 (6.4), and CC1 (5.8), NFMR3 (6.4) and MR1 (6.4). These results are suspect, however, as laboratory testing later confirmed a low bias (-1 to -1.3 s.u.) in readings taken with the instrument used to measure pH at all stations in May. pH was below 8.5 at all stations during all sampling events, and averaged 7.1 units during the 2006 monitoring period.

Dissolved Oxygen

DO concentrations ranged from a minimum of 6.5 ±0.3 mg/L at station TC1 in July (67 percent saturation) to a maximum of 12.2 ±0.3 mg/L (103 percent saturation) at station NFMR5 in March. The Basin Plan states that the monthly median of the mean daily DO concentration shall not fall below 85 percent of saturation in the main water mass, or below 7.0 mg/L. During the 2006 monitoring program, DO concentrations were less than the 7.0 mg/L Basin Plan minimum objective at stations TC1 (6.5 ±0.3 mg/L and 67 percent saturation in July), MC1 (6.8 ±0.3 mg/L and 97 percent saturation in July), and CC0 (6.8 ±0.3 mg/L and 76 percent saturation in September; Figure 2). DO averaged 9.5 mg/L over the entire Project area. DO percent saturation ranged from 67 percent (6.5 mg/L) at station TC1 in July to 119 percent at station MC2 in July (Table A1), and averaged 99 percent over the entire Project area during the monitoring program.

3.2 Analytical Water Quality

Table A2 in Appendix A presents the 2006 and historical chemical analytical laboratory data. Table 4 presents a summary of the annual maximum and minimum values for analytical monitoring parameters presented in Appendix A, for all stations from 2000 through 2006.

Hardness

Hardness measurements throughout the Project area in 2006 ranged from 3.6 mg/L at station MC2 in June to 25.2 mg/L at station MR1 in September (Table A2). The average hardness value for the entire Project area was 11.5 mg/L.

TSS

TSS measurements in the Project area during 2006 ranged from a minimum of <0.1 mg/L (i.e. below laboratory detection limits) at stations BC2 and BR1 in June and July, respectively, to a maximum of 7.0 mg/L at station MR1 in May (Table A2). The average TSS value for the Project area was 1.5 mg/L.

Alkalinity

Total alkalinity measurements in the Project area during 2006 ranged from 3.3 mg/L at stations BR1 and MC2 in March and August, respectively, to 28.0 mg/L at station MR1 in September (Table A2). Total alkalinity measurements were less than 20 mg/L during most 2006 monitoring events. Average total alkalinity for the Project area was 9.5 mg/L.

Nitrate

Total nitrate measured as nitrogen was less than <0.01 mg/L (i.e. below specified laboratory detection limits) in 80% of samples collected during 2006 (Table A2). The highest nitrate value observed was 0.15 mg/L at station BC2 in May (Table A2), and the average nitrate concentration for the Project area in 2006 was 0.01 mg/L.

Coliform

Two measurement methods were used to detect coliform bacteria. Total coliform measurements targeted all coliform bacteria, regardless of origin. Fecal coliform assays targeted only those coliform bacteria originating from the waste products of warm-blooded animal species. The concentration of coliform bacteria is reported as the most probable number per 100 mL (MPN/100 mL).

Total coliform measurements in 2006 ranged from a minimum of less than 2 MPN/100 mL at many stations, to a maximum of 240 MPN/100 mL at station MR1 in July (Table A2). Fecal coliform measurements ranged from a minimum of less than 2 MPN/100 mL at all stations, to a maximum of 50 MPN/100 mL at station MR1 in July (Table A2).

Basin Plan objectives for coliform state that, in waters designated for contact recreation, the fecal coliform concentration based on a minimum of not less than five samples in any 30-day period shall not exceed a geometric mean of 200 MPN/100 mL, nor shall more than ten percent of the total number of the samples taken during any 30-day period exceed 400 MPN/100 mL. A single sample was collected at each station during each sampling event of the monitoring program and none of the fecal coliform concentrations exceeded the Basin Plan criteria during the 2006 monitoring program.

Copper

Dissolved copper concentrations ranged from a minimum of 0.03 ug/L at station TC1 in May to a maximum of 1.09 ug/L at station BR1 in July (Table A2). As in 2005, the observed dissolved copper concentrations under the new FERC required flow regime in 2006 were reduced compared to recent historical values directly below the Lower Bear River Reservoir (BR1). All of the 2006 dissolved copper concentrations at station BR1 were near the observed, natural background levels.

Historical dissolved copper and total copper concentrations measured between July 2000 and May 2002 were analyzed by Severn Trent Laboratory (STL) in Pleasanton California (Table A2). The best achievable reporting limit (5 ug/L) for the method used by STL for measuring total and dissolved copper concentrations during this period was greater than the actual concentrations in the water samples and was also greater than the hardness based water quality criteria specified by the California Toxics Rule (USEPA, 2000). As a result, a majority of the dissolved and total copper sample concentrations reported by STL (i.e., concentration was less than 5 ug/L) were flagged as estimates (with an associated error of approximately 60%). Based upon discussions with the State Water Resources Control Board staff (October 2006) it was determined that these historical data did not meet State Board monitoring requirements outlined in their Water Quality Control Policy for Developing California's Clean Water Act Section 303 (d) List (refer to Section 6.1.5.5 of the policy), (SWRCB 2004). Starting in 2005, dissolved copper water samples were analyzed by the DF&G Marine Pollution Studies Laboratory, a trace clean laboratory. The best achievable reporting limit for the ultra clean method used by this lab was 0.03 ug/L and was sufficient to satisfy the monitoring requirements required by the State Board. Therefore, all dissolved copper and total copper data collected between July 2000 and May 2002 are considered inaccurate and obsolete and cannot be used to make any determinations about the quality of the waters in the Project area.

3.3 Streamflow

Plots of daily average streamflow data are presented in Appendix C. All streamflow data are considered preliminary and subject to revision until the final review of data has been completed at the end of the calendar year. The 2006 water year has been classified as a "Wet" water year type. The first significant storm of the season has not occurred as of the time of writing. For additional discussion regarding streamflow and water temperature, refer to the (Mokelumne River Project) Water Temperature Monitoring Report for 2006 (Stillwater Sciences 2006).

4.0 CONCLUSION

Water quality in the Project area met most applicable Basin Plan objectives and criteria during the 2006 monitoring program. Measurements for *in-situ* parameters did not vary greatly between the seven monitoring program years (2000 through 2006). Laboratory-measured analytical parameters did vary during the four years in which they were measured, however. Observed dissolved copper levels at station BR1 were generally low in 2005 (Year 1, following facility and streamflow modifications) and were further reduced in 2006 (Year 2). Observed nitrate levels were also reduced in 2006, with the maximum concentration (0.15 mg/L) measured at station BC2 in May. Increasing concentrations of turbidity and SpC were observed during periods of elevated precipitation and runoff (spring and winter) in all years prior to 2006. In 2006, measured turbidity and SpC did not differ significantly between spring and

summer sampling events (p=0.35 and 0.96, respectively, for one-way ANOVAs). Lower dissolved oxygen concentrations (<7.0 mg/L) were recorded in warmer months at some middle to high elevation stations (TC1, CC0, and MC1). This is to be expected since warm water holds less oxygen, and since less oxygen is present at higher altitudes. The percent saturation at these stations when DO was less than 7.0 mg/L was 67, 76, and 97 percent, respectively, indicating genuinely low-oxygen conditions on only two occasions.

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Table 1. Water Quality Sampling Locations in 2006 – Mokelumne River Project (FERC No. 137)

Station	Location	Rationale
BC1	Blue Creek below Upper Blue Lake Dam	Temperature monitoring station. Dissolved oxygen compliance site.
BC2*	Blue Creek below Lower Blue Lake Dam	Defines water quality in Blue Creek below Lower Blue Lake, and is representative of water quality in upper Blue Creek.
MC1	Meadow Creek below Twin Lake Dam	Temperature monitoring station. Dissolved oxygen compliance site.
MC2*	Meadow Creek below Meadow Lake Dam	Defines water quality in Meadow Creek below Meadow Lake, and is representative of water quality in upper Meadow Creek.
NFMR1	NFMR above Salt Springs Reservoir	Temperature monitoring station. Dissolved oxygen compliance site.
NFMR2*	NFMR below Salt Springs Reservoir Dam	Defines water quality in the NFMR at the head of the reach between Salt Springs Reservoir Dam and Tiger Creek Afterbay.
CC0	Cole Creek below Bear River Tunnel Diversion Dam	Temperature monitoring station. Dissolved oxygen compliance site.
CC1	Cole Creek above Salt Springs road bridge	Temperature monitoring station. Dissolved oxygen compliance site for 2002 while CC0 was inaccessible during the new weir construction.
BR1*	Bear River below Lower Bear River Reservoir Dam	Defines water quality in Bear River below Lower Bear River Reservoir.
BR2	Bear River above Salt Springs Road near Licensee gage M-32	Temperature monitoring station. Serves as back up for BR1, should it be inaccessible.
TC1*	Tiger Creek below Tiger Creek Regulator Dam	Defines water quality in Tiger Creek below Tiger Creek Regulator Dam.
NFMR3*	NFMR above Tiger Creek Afterbay at Licensee gage M-38	Defines water quality in the NFMR at the end of the reach between Salt Springs Reservoir Dam and Tiger Creek Afterbay.
NFMR5*	NFMR below Electra Diversion Dam	Defines water quality in the NFMR at the head of the reach between Electra Diversion Dam and Electra Powerhouse, and is representative of water quality in the reach between Tiger Creek Afterbay Dam and Electra Diversion Dam.
MR1*	Mokelumne River above Electra Powerhouse	Defines water quality in the Mokelumne River at the end of the reach between Electra Diversion Dam and Electra Powerhouse.

* Water quality and temperature monitoring stations

Table 2. Historical and 2006 Maximum and Minimum Values for In-Situ Water Quality Monitoring Parameters
Mokelumne River Project (FERC No. 137)

Station	Year		Flow		Temp		DO		DO Sat.		SpC		pH[1]		Turbidity	
			min	max	min	max	min	max	min	max	min	max	min	max	min	max
BC1	2001	Baseline	3.3	21.5	1.2	16.0	7.2	10.1	72	98	25	31	6.6	7.4	0.1	4.2
BC1	2002	Interim	3.9	13.2	1.2	20.4	8.0	9.3	85	95	23	35	6.5	7.0	<1	2.2
BC1	2003	Interim	5.5	11.7	0.8	18.3	6.7	7.8	69	98	30	40	7.0	7.6	<1	2.8
BC1	2004	Interim	0.9	15.1	9.4	16.3	7.1	8.0	84	98	28	38	7.1	8.0	<1	2.1
BC1	2005	Year 1	6.2	14.1	0.4	22.0	5.7	9.4	80	95	22	35	6.1	7.6	0.5	11.1
BC1	**2006**	**Year 2**	**12.2**	**12.2**	**2.0**	**17.0**	**7.0**	**9.6**	**73**	**110**	**20**	**37**	**6.1**	**7.6**	**<1.0**	**4.1**
BC2	2000	Baseline	5.4	28.0	2.0	19.2	7.0	9.8	85	97	22	31	6.7	7.5	0.4	2.8
BC2	2001	Baseline	2.0	24.0	1.0	18.7	6.8	9.9	85	100	16	30	6.5	7.5	0.8	7.6
BC2	2002	Interim	2.0	14.7	0.9	14.1	7.3	9.7	83	100	27	30	6.8	7.3	<1	1.5
BC2	2003	Interim	5.9	44.5	1.6	17.7	6.8	9.1	83	102	20	30	6.9	7.9	<1	3.6
BC2	2004	Interim	7.2	11.9	5.9	17.1	7.1	9.4	88	100	22	32	7.1	8.7	<1	5.9
BC2	2005	Year 1	5.9	54.6	0.8	18.5	6.4	10.1	82	99	18	34	6.6	7.5	0.0	4.5
BC2	**2006**	**Year 2**	**27.6**	**73.0**	**0.6**	**17.1**	**7.2**	**10.1**	**93**	**106**	**22**	**25**	**6.2**	**7.1**	**0.0**	**12.6**
MC1	2001	Baseline	2.0	3.4	0.3	17.5	7.0	7.4	64	100	9	17	6.6	7.1	0.6	1.6
MC1	2002	Interim	1.6	2.5	0.5	20.3	7.5	9.4	82	95	18	21	6.7	7.3	<1	2.2
MC1	2003	Interim	1.5	2.0	0.1	18.1	6.4	8.3	77	90	10	40	6.8	7.6	<1	10.6
MC1	2004	Interim	1.6	6.0	9.9	17.4	7.1	7.8	89	99	8	13	6.8	8.0	0.1	2.0
MC1	2005	Year 1	1.7	2.1	0.9	19.5	6.2	10.2	83	99	12	14	6.1	7.1	0.2	4.5
MC1	**2006**	**Year 2**	**1.7**	**2.0**	**4.4**	**17.8**	**6.8**	**9.5**	**93**	**108**	**11**	**12**	**7.1**	**7.3**	**0.8**	**8.3**
MC2	2000	Baseline	12.0	33.6	1.2	14.4	6.7	10.5	94	101	9	18	6.7	7.3	0.4	8.0
MC2	2001	Baseline	6.7	20.7	0.6	17.9	7.3	10.1	88	100	8	22	6.9	7.3	0.4	12.4
MC2	2002	Interim	9.5	30.7	1.4	13.3	7.4	9.7	93	100	13	25	7.1	7.9	1.9	3.0
MC2	2003	Interim	28.0	55.2	0.8	7.8	8.7	11.4	95	103	10	20	7.8	7.8	0.1	0.1
MC2	2004	Interim	3.3	12.7	12.6	16.6	7.0	7.5	87	98	13	15	7.1	7.2	0.6	2.5
MC2	2005	Year 1	5.9	150.2	1.1	11.9	7.8	9.0	85	95	10	13	6.7	7.4	<1	3.0
MC2	**2006**	**Year 2**	**28.1**	**131.0**	**5.7**	**12.9**	**7.3**	**10.6**	**93**	**119**	**10**	**12**	**6.8**	**7.3**	**<1**	**18.7**

Table 2. Historical and 2006 Maximum and Minimum Values for In-Situ Water Quality Monitoring Parameters
Mokelumne River Project (FERC No. 137)

Station	Year		Flow		Temp		DO		DO Sat.		SpC		pH[1]		Turbidity	
			min	max	min	max	min	max	min	max	min	max	min	max	min	max
NFMR1	**2006**	**Year 2**	**118.8**	**2753.3**	**3.2**	**18.0**	**8.4**	**10.7**	**95**	**110**	**18**	**35**	**6.6**	**7.5**	**0.8**	**21.6**
NFMR2	2000	Baseline	26.2	36.7	7.0	13.1	9.0	11.0	92	104	17	28	6.8	7.3	0.2	3.4
NFMR2	2001	Baseline	21.0	33.0	5.2	15.1	8.5	10.8	88	100	17	57	6.6	7.4	<1	7.1
NFMR2	2002	Interim	22.7	227.8	3.4	15.1	7.8	11.3	87	102	11	42	6.6	7.3	0.8	3.4
NFMR2	2003	Interim	23.2	2287.0	6.9	11.2	8.3	10.7	81	98	20	40	6.8	7.9	<1	6.6
NFMR2	2004	Interim	22.7	117.2	7.8	14.9	8.0	9.7	83	95	15	22	7.2	8.3	<1	4.7
NFMR2	2005	Year 1	28.3	1692.7	5.4	11.9	8.0	11.0	83	107	15	37	6.9	8.3	0.0	46.2
NFMR2	**2006**	**Year 2**	**37.4**	**2361.6**	**3.9**	**10.2**	**7.7**	**11.4**	**76**	**104**	**16**	**25**	**6.5**	**7.7**	**0.0**	**21.6**
CC1	2001	Baseline	0.5	53.0	5.2	19.5	7.3	10.9	83	98	16	18	6.8	7.2	0.6	0.6
CC1	2002	Interim	0.5	161.0	5.9	18.1	8.4	10.7	87	95	14	99	6.6	7.6	1.2	2.0
CC0	2003	Interim	1.1	383.8	3.0	17.6	7.1	11.1	90	101	12	64	6.8	7.9	<1	3.3
CC0	2004	Interim	0.5	98.2	6.0	16.6	7.4	9.8	82	100	6	33	6.9	8.1	0.2	7.0
CC0	2005	Year 1	0.2	602.7	5.2	20.1	6.3	10.1	82	101	10	28	6.7	8.3	0.0	5.4
CC0	**2006**	**Year 2**	**0.0**	**384.5**	**9.3**	**17.1**	**6.8**	**10.1**	**76**	**110**	**11**	**31**	**6.7**	**7.4**	**0.1**	**5.1**
BR1	2000	Baseline	2.4	5.1	3.8	8.8	9.3	10.9	98	106	14	16	6.5	7.2	0.4	6.9
BR1	2001	Baseline	3.0	5.1	1.6	9.5	9.0	12.1	83	110	12	29	6.5	7.7	0.5	13.6
BR1	2002	Interim	5.7	8.0	5.4	7.0	8.7	11.0	85	96	19	21	7.0	7.1	1.4	2.4
BR1	2003	Interim	5.2	365.0	5.9	14.9	7.5	9.9	90	100	10	30	6.7	7.1	<1	2.0
BR1	2004	Interim	5.6	29.5	5.6	13.7	7.5	9.6	73	100	11	21	6.6	7.8	<1	7.2
BR1	2005	Year 1	5.4	368.5	2.1	12.7	8.1	12.0	79	114	13	26	5.1	7.9	0.0	8.5
BR1	**2006**	**Year 2**	**20.1**	**127.4**	**2.5**	**8.4**	**9.4**	**10.9**	**92**	**109**	**15**	**17**	**6.4**	**7.3**	**0.0**	**5.0**
BR2	2001	Baseline	3.0	5.0	4.8	14.9	7.4	10.7	85	92	27	28	6.8	7.5	0.4	0.4
BR2	2002	Interim	6.3	8.0	4.1	15.2	8.1	11.6	88	96	28	32	7.5	7.8	1.0	1.2
BR2	2003	Interim	5.2	376.9	6.1	18.4	7.9	10.6	89	95	20	30	6.6	7.8	0.1	2.5
BR2	2004	Interim	5.5	32.5	7.6	16.7	7.5	9.5	83	94	15	29	7.4	8.2	<1	5.8
BR2	2005	Year 1	7.7	295.1	4.3	19.9	7.3	11.7	89	104	17	38	7.1	8.2	0.0	48.9
BR2	**2006**	**Year 2**	**26.5**	**199.5**	**2.0**	**12.1**	**8.6**	**10.5**	**93**	**110**	**22**	**30**	**5.8**	**7.5**	**0.4**	**12.2**

Table 2. Historical and 2006 Maximum and Minimum Values for In-Situ Water Quality Monitoring Parameters
Mokelumne River Project (FERC No. 137)

Station	Year		Flow		Temp		DO		DO Sat.		SpC		pH[1]		Turbidity	
			min	max	min	max	min	max	min	max	min	max	min	max	min	max
TC1	2000	Baseline	5.5	10.7	7.1	12.4	9.0	10.3	96	104	14	29	6.7	7.3	0.5	1.7
TC1	2001	Baseline	5.4	10.8	4.2	16.1	7.7	10.9	85	109	11	54	6.6	7.5	0.4	17.4
TC1	2002	Interim	3.4	10.4	4.3	12.2	9.6	10.2	89	100	18	28	6.8	7.3	1.5	2.3
TC1	2003	Interim	4.1	10.7	5.9	11.8	7.2	10.1	75	90	14	30	7.0	7.9	0.4	3.1
TC1	2004	Interim	3.5	11.1	6.9	12.8	8.1	9.3	84	92	12	20	7.0	8.5	<1	4.8
TC1	2005	Year 1	3.2	23.4	4.3	13.6	8.3	11.5	89	105	17	27	6.8	8.1	0.0	10.2
TC1	**2006**	**Year 2**	**3.6**	**11.1**	**3.4**	**12.4**	**6.5**	**11.4**	**67**	**103**	**17**	**40**	**6.4**	**7.3**	**0.0**	**13.7***
NFMR3	2000	Baseline	58.4	64.8	2.5	21.6	6.8	12.9	76	104	44	56	7.2	7.5	0.4	1.6
NFMR3	2001	Baseline	50.7	106.2	2.9	21.0	7.4	12.3	95	102	42	62	7.0	7.8	0.1	7.2
NFMR3	2002	Interim	38.8	495.2	5.9	23.6	7.7	10.2	67	101	25	53	7.1	7.6	0.5	3.7
NFMR3	2003	Interim	59.7	3479.3	6.8	20.5	7.6	11.0	92	101	18	51	7.1	7.7	<1	3.0
NFMR3	2004	Interim	39.2	347.0	11.1	23.5	7.0	9.7	76	99	29	50	7.4	8.4	<1	4.1
NFMR3	2005	Year 1	70.7	2104.3	3.5	14.4	8.3	13.5	86	114	19	50	7.0	8.1	0.0	13.4
NFMR3	**2006**	**Year 2**	**108.5**	**3294.6**	**4.3**	**16.1**	**9.8**	**11.9**	**100**	**112**	**23**	**52**	**6.4**	**7.5**	**0.2**	**5.2**
NFMR5	2000	Baseline	13.1	17.5	5.3	15.0	10.1	11.7	99	110	24	36	6.9	7.3	0.3	0.9
NFMR5	2001	Baseline	12.0	17.9	4.2	19.0	7.3	11.5	79	100	20	62	6.7	7.6	<1	11.8
NFMR5	2002	Interim	98.0	272.2	5.8	13.3	9.6	10.2	88	99	28	39	7.2	7.5	2.3	2.5
NFMR5	2003	Interim	30.0	2982.6	6.3	16.2	7.1	12.0	73	123	19	38	7.0	7.9	<1	3.6
NFMR5	2004	Interim	23.5	309.8	10.4	17.3	7.9	10.0	77	96	19	30	7.0	8.1	<1	6.8
NFMR5	2005	Year 1	25.4	1813.5	5.9	14.9	7.9	11.8	83	99	20	42	7.0	8.0	0.0	18.3
NFMR5	**2006**	**Year 2**	**43.1**	**2723.9**	**5.0**	**14.8**	**9.3**	**12.2**	**100**	**107**	**23**	**52**	**6.5**	**7.7**	**0.1**	**8.4**

Table 2. Historical and 2006 Maximum and Minimum Values for In-Situ Water Quality Monitoring Parameters
Mokelumne River Project (FERC No. 137)

Station	Year		Flow		Temp		DO		DO Sat.		SpC		pH[1]		Turbidity	
			min	max	min	max	min	max	min	max	min	max	min	max	min	max
MR1	2000	Baseline	35.0	61.0	3.3	21.7	7.8	13.7	89	104	70	82	7.2	7.6	0.7	1.8
MR1	2001	Baseline	34.0	136.0	5.5	26.5	7.6	12.5	95	107	59	76	7.0	8.6	0.4	10.8
MR1	2002	Interim	30.0	397.0	8.6	27.8	7.0	10.0	87	118	37	54	7.7	7.9	1.6	2.8
MR1	2003	Interim	8.7	2366.0	8.3	25.5	7.2	11.0	90	104	20	51	6.8	7.9	<1	9.6
MR1	2004	Interim	23.5	309.8	14.6	27.2	7.7	9.0	87	106	31	52	7.4	8.7	<1	5.0
MR1	2005	Year 1	46.2	2201.5	5.7	25.9	7.5	12.3	83	101	25	60	7.1	8.6	0.0	22.5
MR1	**2006**	**Year 2**	**NA**	**NA**	**7.0**	**21.6**	**7.8**	**11.4**	**90**	**104**	**29**	**67**	**6.4**	**8.3**	**0.0**	**14.4**

1 = For all stations except CC0, the instrument with which minimum pH values were measured was later determined to have a low bias. All pH data from March through June have been flagged for low bias. A low bias is not suspected for data collected after June 2006.

--- = Not Sampled
NA = Data not available at time of review
Flow (cfs)
Temp = Temperature (°C)
DO = Dissolved Oxygen (mg/L)

DO Sat = Dissolved Oxygen Saturation (%)
SpC = Specific Conductance (umhos/cm)
pH (units)
* Water appeared clear. Possible interference from disturbed sediment.

Table 3. Weather Conditions During the 2006 Sampling Period – Mokelumne River Project (FERC No. 137)

Month of Sampling Event	Weather Conditions at Salt Springs Powerhouse[1]	Daily Average Precipitation[2] (inches)	Daily Average Air Temperature[3] (°C)
March	Scattered clouds	0.40	3.2
April	Partly cloudy	0.38	9.1
May	Clear	0.05	15.2
June	Clear	0.01	19.2
July	Clear	0.0	24.0[4]
August	Clear	0.0	20.9[4]
September	Clear	0.0	18.8[4]

1 Weather conditions observed during each sampling event.

2 Mean daily average precipitation for each month during the monitoring period. Data from Salt Springs Powerhouse.

3 Mean daily average air temperature for each month during the monitoring period. Data from Salt Springs Powerhouse.

4 Data not available for Salt Springs Powerhouse. Data from Calaveras Reservoir (elevation 3360 ft) reported instead.

Table 4. 2006 and Historical Summary of Concentration Ranges for Analytical Water Quality Monitoring Parameters
Mokelumne River FERC Project No. 137

Station	Year		Flow		Hardness		TSS		Total Cu[1]		Diss Cu[1]		Total Alk		Total N		Total Col		Fecal Col	
			min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max
BC2	2000	Baseline	5.4	28	9	14	<1	2.6	<0.53	1.5	---	---	10	14	<0.05	<0.05	<2	16	<2	2
BC2	2001	Baseline	2.0	8.5	9	18	<1	3.2	<1	3.3	<1	3.7	8	14	<0.05	0.06	<2	17	<2	13
BC2	2002	Interim	2.0	7.0	9	14	<1.0	9	<0.3	1.6	<0.3	<0.3	10	14	<0.10	0.11	<2	8	<2	<2
BC2	2005	Year 1	6.1	54.6	9	13.4	<0.5	1.2	---	---	0.16	0.18	7	12.2	<0.005	0.065	2	22	<2	2
BC2	**2006**	**Year 2**	**27.6**	**73.0**	**7.6**	**20.6**	**<0.1**	**<1**	---	---	**0.12**	**0.63**	**6.4**	**8.6**	**<0.01**	**0.15**	**<2**	**22**	**<2**	**<2**
MC2	2000	Baseline	6.7	33.6	3	7	<1	1.0	<0.53	1.8	---	---	6	10	<0.05	<0.05	<2	<2	<2	<2
MC2	2001	Baseline	6.7	20.7	4	11	<1	5.7	0.6	2.7	<0.3	<1	7	14	<0.05	<0.05	<2	50	<2	4
MC2	2002	Interim	10.0	12.0	4	10	1	3	<0.3	5.0	<0.3	<0.3	<5	15	<0.10	0.12	<2	2	<2	<2
MC2	2005	Year 1	5.9	150.2	3	5.5	<0.5	1.4	---	---	0.07	0.11	<3	5.3	<0.005	0.045	<2	17	<2	<2
MC2	**2006**	**Year 2**	**28.1**	**131**	**3.6**	**6.1**	**0.2**	**3.0**	---	---	**0.05**	**0.11**	**3.3**	**9.8**	**<0.01**	**<0.01**	**<2**	**4**	**<2**	**<2**
NFMR2	2000	Baseline	21.4	36.7	6	11	<1	1.6	<0.53	<0.53	---	---	8	12	<0.05	<0.05	<2	30	<2	<2
NFMR2	2001	Baseline	21.5	33.0	6	16	<1	5.2	0.99	2.7	<1	8.7	7	11	<0.05	0.17	<2	30	<2	23
NFMR2	2002	Interim	76.0	229.0	3	10	2	8	1.2	1.9	<0.3	<0.3	<5	11	<0.10	0.18	22	30	<2	4
NFMR2	2005	Year 1	28.3	1692.7	6	9.4	<0.5	8	---	---	0.20	0.30	6.0	11.3	0.006	0.03	<2	140	<2	13
NFMR2	**2006**	**Year 2**	**37.4**	**2361.6**	**6.1**	**20.6**	**0.4**	**3.8**	**---**	**---**	**0.12**	**0.28**	**4.7**	**7.3**	**<0.01**	**0.02**	**<2**	**50**	**<2**	**8**
BR1	2000	Baseline	2.4	5.1	5	12	<1	1.4	1.1	7.1	---	---	6	14	<0.05	0.07	<2	170	<2	<2
BR1	2001	Baseline	3.0	5.1	8	13	<1	5	2.1	40	<0.3	23	<5	10	<0.05	0.08	<2	300	<2	23
BR1	2002	Interim	8.0	8.0	5	7	1	12	14	27	12	19	<5	6	0.09	<0.10	<2	<2	<2	<2
BR1	2005	Year 1	5.4	368.5	4.5	10.1	0.3	1.7	---	---	0.49	7.4	4.6	7.4	0.0054	0.054	4	1600	<2	<2
BR1	**2006**	**Year 2**	**20.1**	**127.4**	**5.2**	**18.5**	**<0.1**	**4.8**	---	---	**0.39**	**1.09**	**3.3**	**5.4**	**<0.01**	**0.012**	**<2**	**22**	**<2**	**<2**

Table 4. 2006 and Historical Summary of Concentration Ranges for Analytical Water Quality Monitoring Parameters
Mokelumne River FERC Project No. 137

Station	Year		Flow		Hardness		TSS		Total Cu[1]		Diss Cu[1]		Total Alk		Total N		Total Col		Fecal Col	
			min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max
TC1	2000	Baseline	5.5	10.7	6	16	<1	2.8	<0.53	1.9	---	---	6	28	<0.05	<0.05	2	23	<2	4
TC1	2001	Baseline	5.4	10.8	8	11	<1	4.8	0.8	3.8	<0.3	3.2	6	10	<0.05	<0.05	13	220	<2	13
TC1	2002	Interim	8.0	10.0	5	8	4	10	<0.3	<0.5	<0.3	<0.3	<5	10	<0.10	0.13	12	70	<2	<2
TC1	2005	Year 1	3.2	23.4	5.9	9.4	<0.5	9.8	---	---	0.17	0.39	6.0	9.9	0.006	0.11	26	170	<2	23
TC1	**2006**	**Year 2**	**3.6**	**11.1**	**6.0**	**23.7**	**0.8**	**3.4**	**---**	**---**	**0.03**	**0.85**	**4.5**	**17.6**	**<.01**	**0.02**	**6**	**23**	**<2**	**11**
NFMR3	2000	Baseline	58.4	105.6	17	24	<1	2.4	<0.53	2.8	---	---	20	28	<0.05	<0.05	13	300	<2	22
NFMR3	2001	Baseline	50.7	106.2	18	24	<1	1.8	0.8	4.9	0.7	0.8	17	31	<0.05	<0.05	32	300	<2	80
NFMR3	2002	Interim	289.0	495.0	8	19	2	6	<0.3	2	<0.3	<0.3	<5	23	<0.10	0.14	14	50	<2	7
NFMR3	2005	Year 1	70.7	2104.3	8	22.2	<0.5	16.4	---	---	0.24	0.40	9.5	22.2	<0.005	0.0977	14	300	2	23
NFMR3	**2006**	**Year 2**	**108.5**	**3294.6**	**8.2**	**20.0**	**0.6**	**4.7**	---	---	**0.18**	**0.48**	**7.0**	**20.1**	**<0.01**	**0.014**	**7**	**130**	**<2**	**4**
NFMR5	2000	Baseline	12.7	17.5	8	18	<1	15	<0.53	3.2	---	---	11	20	<0.05	<0.05	<2	500	<2	17
NFMR5	2001	Baseline	12.0	17.9	11	17	<1	2.4	0.6	5.4	<0.3	1.3	8	22	<0.05	<0.05	<2	300	<2	14
NFMR5	2002	Interim	98.0	272.0	9	13	3	6	<0.3	3	<0.3	10	7	16	<0.10	0.16	140	900	<2	4
NFMR5	2005	Year 1	25.4	1813.5	7.5	14.6	0.2	4.6	---	---	0.25	0.38	8.4	18.4	<0.005	0.074	21	220	<2	13
NFMR5	**2006**	**Year 2**	**43.1**	**2723.9**	**8.5**	**20.0**	**0.7**	**6.3**	---	---	**0.18**	**0.44**	**6.1**	**21.1**	**<0.01**	**0.011**	**21**	**70**	**<2**	**30**
MR1	2000	Baseline	35.0	166.0	9	33	<1	9.7	<0.53	1.3	---	---	31	37	<0.05	<0.05	23	2,400	17	80
MR1	2001	Baseline	34.0	136.0	25	35	<1	2.4	0.6	38	0.8	1.5	20	33	<0.05	<0.05	14	1,600	2	70
MR1	2002	Interim	360	397	13	22	2	21	<0.3	1.8	<0.3	0.8	7	26	<0.10	0.10	12	131	<2	8
MR1	2005	Year 1	46	2201	10	24.2	<0.5	14.5	---	---	0.29	0.41	11.5	23.7	<0.005	0.038	21	>2400	2	50
MR1	**2006**	**Year 2**	**NA**	**NA**	**10.2**	**25.2**	**0.4**	**7.0**	---	---	**0.26**	**0.4**	**10.4**	**28.0**	**<0.01**	**0.016**	**13**	**240**	**<2**	**50**

1 = For both Total and Dissolved Copper, data collected prior to 2005 are considered obsolete due to sub-standard field and analytical techniques, per discussions with the SWRCB (October, 2006).
--- = Not Sampled
Flow (cfs)
Hardness (mg/L)
Temp = Temperature (°C)
DO = Dissolved Oxygen (mg/L)
DO Sat = Dissolved Oxygen Saturation (%)
TSS = Total Suspended Solids (mg/L)
NA = data not available at time of report preparation
Total Alk = Total Alkalinity (mg/L)
Total N = Total Nitrate as Nitrogen (mg/L)
Total Col = Total Coliform (MPN/100 mL)
Fecal Col = Fecal Coliform (MPN/100 mL)
Total Cu = Total Copper (ug/L or ppb)
Diss Cu = Dissolved Copper (ug/L or ppb)

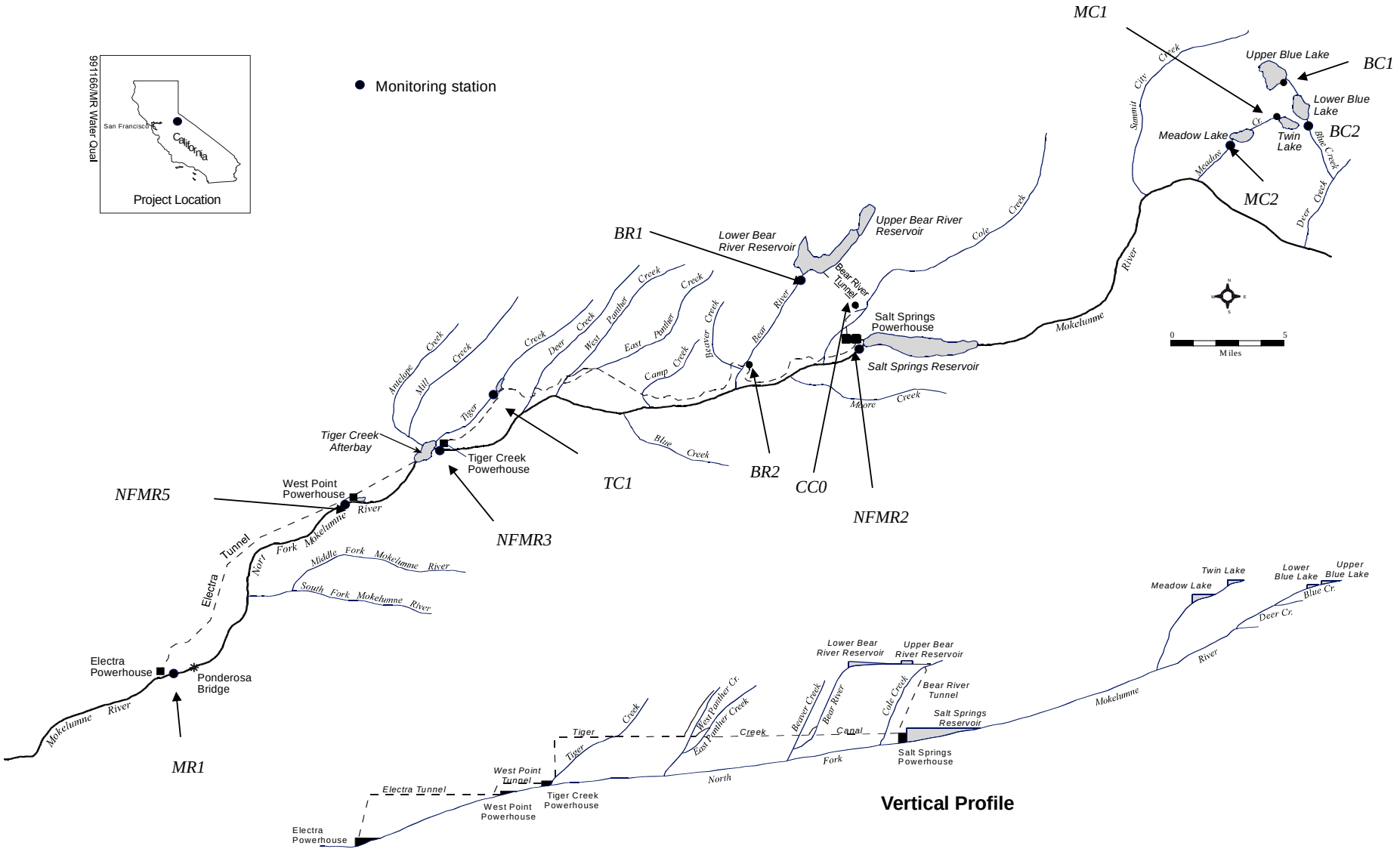


Figure 1. Water Quality Monitoring Station Locations in 2006 – Mokelumne River Project (FERC No. 137).

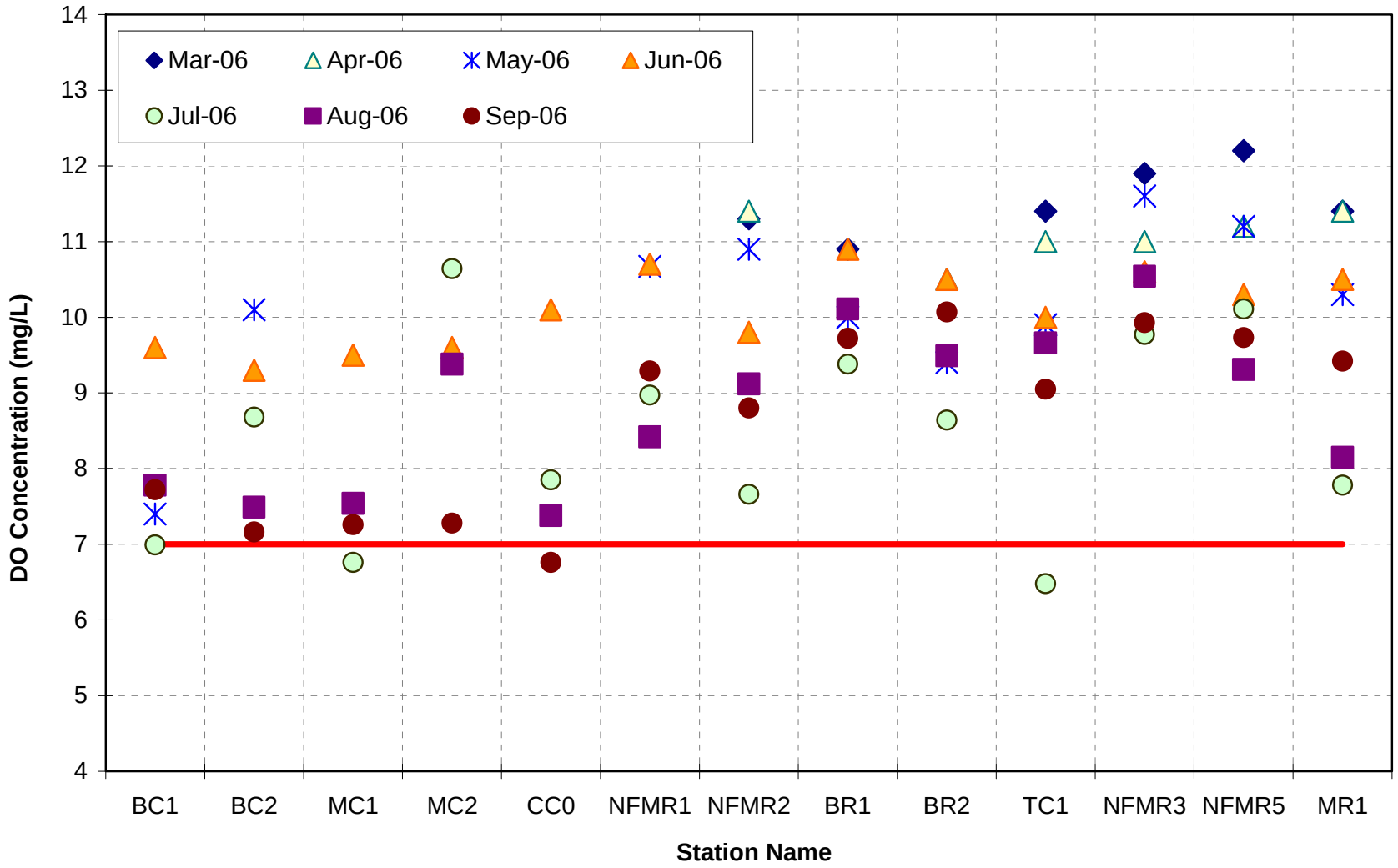


Figure 2. Dissolved Oxygen Concentrations Measured at each Station During 2006 Sampling Events – Mokelumne River Project (FERC No. 137).

Appendix A

Mokelumne River Project (FERC No. 137)
Year 2006 and Historical Field and Laboratory Data

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
BC1	3/15/01	Baseline	14:44	2477	M66	3.3	0.5	1.2	10.1	95	30.2	6.6	4.2
BC1	5/30/01	Baseline	11:50	2477	M66	19.5	0.5	10.8	8.2	82	25.0	7.4	0.5
BC1	6/18/01	Baseline	11:38	2477	M66	21.5	0.5	16.0	7.3	98	26.3	6.9	1.2
BC1	7/24/01	Baseline	8:38	2477	M66	8.0	0.5	15.8	7.2	72	30.6	7.1	0.1
BC1	8/14/01	Baseline	---	2477	---	---	---	---	---	---	---	---	---
BC1	9/27/01	Baseline	---	2477	---	---	---	---	---	---	---	---	---
BC1	11/26/01 [(1)]	Baseline	---	2477	---	---	---	---	---	---	---	---	---
BC1	12/19/01	Baseline	---	2477	---	---	---	---	---	---	---	---	---
BC1	3/27/02	Interim	11:15	2477	M66	3.9	0.5	1.2	9.3	95	34.7	7.0	<1
BC1	5/15/02	Interim	10:17	2477	M66	13.2	0.5	1.3	9.3	85	23.0	6.5	2.2
BC1	7/16/02	Interim	13:09	2477	M66	7.5	0.5	20.4	6.4	71	---	---	---
BC1	9/25/02	Interim	9:04	2477	M66	7.1	0.5	13.5	8.0	74	---	---	---
BC1	5/6/03	Interim	9:40	2477	M66	11.6	0.5	0.8	7.3	69	40.0	7.6	0.1
BC1	7/8/03	Interim	9:17	2477	M66	5.5	0.5	13.7	7.8	98	30.0	7.1	0.2
BC1	8/20/03	Interim	9:15	2477	M66	11.7	0.5	18.3	6.8	95	30.0	7.1	0.0
BC1	9/10/03	Interim	11:39	2477	M66	10.8	0.5	15.1	6.7	87	30.0	7.0	2.8
BC1	6/3/04	Interim	9:35	2477	M66	7.7	0.5	10.6	8.0	95	28.0	8.0	2.1
BC1	7/15/04	Interim	9:30	2477	M66	15.1	0.5	16.3	7.1	95	34.0	7.2	1.7
BC1	8/26/04	Interim	9:10	2477	M66	1.2	0.5	14.9	7.6	98	36.0	7.5	0.4
BC1	9/22/04	Interim	8:53	2477	M66	0.9	0.1	9.4	7.4	84	38.0	7.1	0.0
BC1	3/22/05	Year 1	---	2476	M66	NA			Heavy snowstorm, no access				
BC1	5/25/05	Year 1	12:15	2477	M66	11.7	0.5	0.4	---	---	---	---	---
BC1	6/22/05	Year 1	11:45	2477	M66	14.1	0.5	2.2	8.3	80	22.0	6.1	0.5
BC1	7/20/05	Year 1	13:10	2477	M66	6.6	0.5	22.0	5.7	84	30.0	7.2	3.3
BC1	8/11/05	Year 1	10:30	2477	M66	6.3	0.5	12.1	8.9	94	31.0	7.6	11.1
BC1	9/27/05	Year 1	11:40	2477	M66	6.2	0.5	11.6	7.9	95	33.0	7.5	0.7
BC1	12/8/05 [1]	Year 1	13:20	2477	M66	6.7	0.5	2.7	9.4	89	35.0	7.1	<1

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
BC1	**3/22/06**	**Year 2**	**---**	**2477**	**M66**	**NA**	**No safe access to stream; too much snow present**						
BC1	**5/10/06**	**Year 2**	**10:05**	**2477**	**M66**	**NA**	**1.0**	**2.0**	**7.4**	**73**	**37**	**6.1[11]**	**<1.0**
BC1	**6/21/06**	**Year 2**	**9:55**	**2477**	**M66**	**12.2**	**0.5**	**4.1**	**9.6**	**100**	**20**	**7.0[11]**	**2.0**
BC1	**7/19/06**	**Year 2**	**12:47**	**2477**	**M66**	**12.2**	**0.2**	**15.9**	**7.0**	**96**	**22**	**7.6**	**3.8**
BC1	**8/17/06**	**Year 2**	**11:50**	**2477**	**M66**	**12.2**	**0.3**	**17.0**	**7.8**	**110**	**24**	**7.2**	**2.0**
BC1	**9/21/06**	**Year 2**	**11:38**	**2477**	**M66**	**12.2**	**0.2**	**12.1**	**7.7**	**98**	**30**	**7.2**	**4.1**

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow 3 (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
BC2	7/26/00	Baseline	13:52	2446	M3	22.1	0.5	18.7	7.0	95	22.3	7.5	0.9
BC2	8/8/00	Baseline	12:30	2446	M3	22.1	0.5	19.2	7.0	97	24.0	7.4	2.8
BC2	9/20/00	Baseline	11:30	2446	M3	28.0	0.5	15.0	7.7	85	26.6	7.2	0 [(2)] (0.4)
BC2	12/27/00	Baseline	11:51	2446	M3	5.4	0.5	2.0	9.8	97	30.9	6.7	0.8
BC2	1/11/01 [(1)]	Baseline	---	2446	M3	5.4	---	---	---	---	---	---	---
BC2	3/15/01	Baseline	14:25	2446	M3	5.4	0.5	1.0	9.9	93	29.4	6.5	7.6
BC2	5/30/01	Baseline	12:55	2446	M3	24.0	0.5	13.5	7.4	94	16.2	7.4	2.9
BC2	6/18/01	Baseline	12:31	2446	M3	8.0	0.5	16.9	7.1	98	21.0	7.0	0.8
BC2	7/23/01	Baseline	9:58	2446	M3	8.5	0.5	17.3	7.0	95	27.1	7.3	7.3
BC2	8/14/01	Baseline	10:53	2446	M3	8.5	1.0	18.7	6.8	92	26.3	7.5	6.0
BC2	9/27/01	Baseline	9:11	2446	M3	8.2	1.0	14.2	7.8	100	29.0	7.3	1.9
BC2	11/26/01 [(1)]	Baseline	---	2446	M3	2.0	---	---	---	---	---	---	---
BC2	12/19/01	Baseline	9:55	2446	M3	2.0	0.5	1.2	8.0	85	30.4	7.0	1.7
BC2	3/27/02	Interim	10:36	2446	M3	2.0	0.5	0.9	9.2	83	30.4	6.8	<1
BC2	5/15/02	Interim	9:46	2446	M3	6.9	0.5	1.7	9.7	89	27.0	7.3	1.5
BC2	7/16/02	Interim	12:50	2446	M3	14.4	0.5	11.3	8.4	100	---	---	---
BC2	9/25/02	Interim	9:21	2446	M3	14.7	0.5	14.1	7.3	93	---	---	---
BC2	5/6/03	Interim	10:58	2446	M3	8.9	1.0	1.6	9.0	83	30.0	7.9	0.5
BC2	7/8/03	Interim	9:02	2446	M3	44.5	1.0	8.6	9.1	102	30.0	6.9	0.2
BC2	8/20/03	Interim	9:05	2446	M3	28.3	1.0	17.7	6.8	93	20.0	7.0	0.0
BC2	9/10/03	Interim	11:24	2446	M3	5.9	1.0	14.4	7.0	89	30.0	7.0	3.6
BC2	6/3/04	Interim	10:03	2446	M3	7.3	1.0	5.9	9.4	99	22.0	8.7	5.9
BC2	7/15/04	Interim	9:55	2446	M3	11.9	1.0	17.1	7.1	97	31.0	7.3	1.6
BC2	8/26/04	Interim	9:32	2446	M3	7.2	0.5	9.9	8.8	100	27.0	7.6	3.2
BC2	9/22/04	Interim	9:25	2446	M3	7.3	0.5	12.7	7.2	88	32.0	7.1	0.0
BC2	3/22/05	Year 1	---	2446	M3	NA			Heavy snowstorm, no access				
BC2	5/25/05	Year 1	12:50	2446	M3	10.1	---	0.8	---	---	---	---	---

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow 3 (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
BC2	6/22/05	Year 1	12:10	2446	M3	28.7	1.0	3.2	8.2	82	18.0	6.6	1.2
BC2	7/20/05	Year 1	13:40	2446	M3	53.1	0.5	8.2	9.0	99	22.0	6.9	---
BC2	8/11/05	Year 1	11:00	2446	M3	54.6	1.0	18.5	6.4	90	23.0	7.5	0.0
BC2	9/27/05	Year 1	12:03	2446	M3	5.9	0.5	10.9	8.0	95	27.0	7.3	3.0
BC2	12/8/05 [1]	Year 1	13:45	2446	M3	6.1	0.5	1.8	10.1	93	34.0	7.1	4.5
BC2	**3/22/06**	**Year 2**	**---**	**2446**	**M3**	**NA**		**No safe access to stream; too much snow present**					
BC2	**5/10/06**	**Year 2**	**10:30**	**2446**	**M3**	**NA**	**1.0**	**0.6**	**10.1**	**95**	**24**	**6.2[11]**	**0.5**
BC2	**6/21/06**	**Year 2**	**10:20**	**2446**	**M3**	**27.6**	**0.5**	**4.9**	**9.3**	**98**	**22**	**6.7[11]**	**5.5**
BC2	**7/19/06**	**Year 2**	**13:16**	**2446**	**M3**	**73.0**	**0.3**	**9.5**	**8.7**	**103**	**22**	**7.0**	**4.1**
BC2	**8/17/06**	**Year 2**	**12:13**	**2446**	**M3**	**33.6**	**1.0**	**17.1**	**7.5**	**106**	**22**	**7.1**	**0.0**
BC2	**9/21/06**	**Year 2**	**12:00**	**2446**	**M3**	**30.5**	**0.2**	**13.5**	**7.2**	**93**	**25**	**7.0**	**12.6**

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
MC1	3/15/01	Baseline	13:30	2474	M68	3.4	0.5	0.3	7.0	64	17.2	6.6	---
MC1	5/30/01	Baseline	13:40	2474	M68	2.2	0.5	14.0	7.1	91	8.6	7.1	0.6
MC1	6/18/01	Baseline	13:15	2474	M68	2.2	0.5	16.4	7.4	100	8.6	6.7	1.6
MC1	7/24/01	Baseline	11:13	2474	M68	2.0	0.5	17.5	7.2	96	---	---	---
MC1	8/14/01	Baseline	---	2474	---	2.0	---	---	---	---	---	---	---
MC1	9/27/01	Baseline	9:38	2474	---	2.0	0.5	12.2	7.3	91	---	---	---
MC1	11/26/01 [(1)]	Baseline	---	2474	---	---	---	---	---	---	---	---	---
MC1	12/19/01	Baseline	---	2474	---	---	---	---	---	---	---	---	---
MC1	3/27/02	Interim	9:55	2474	M68	1.6	0.5	0.5	9.4	88	21.1	6.7	<1
MC1	5/15/02	Interim	9:17	2474	M68	2.0	0.5	1.0	9.1	82	18.0	7.3	2.2
MC1	7/16/02	Interim	12:22	2474	M68	2.0	0.5	20.3	6.4	93	---	---	---
MC1	9/25/02	Interim	9:38	2474	M68	2.5	0.5	13.7	7.5	95	---	---	---
MC1	5/6/03	Interim	9:15	2474	M68	2.0	0.3	0.1	8.3	77	40.0	7.6	10.6
MC1	7/8/03	Interim	9:34	2474	M68	1.5	0.3	16.0	6.7	88	10.0	6.9	1.8
MC1	8/19/03	Interim	8:52	2474	M68	1.5	0.3	18.1	6.4	90	10.0	7.0	0.0
MC1	9/10/03	Interim	11:13	2474	M68	1.5	0.3	14.4	6.8	88	10.0	6.8	1.5
MC1	6/3/04	Interim	11:07	2474	M68	6.0	0.5	10.9	7.8	94	8.0	8.0	2.0
MC1	7/15/04	Interim	10:23	2474	M68	3.7	0.5	17.4	7.1	96	12.0	7.0	0.9
MC1	8/26/04	Interim	9:55	2474	M68	3.0	0.5	15.5	7.6	99	13.0	7.1	0.1
MC1	9/22/04	Interim	10:00	2474	M68	1.6	0.1	9.9	7.7	89	13.0	6.8	0.2
MC1	3/22/05	Year 1	---	2474	M68	NA			Heavy snowstorm, no access				
MC1	5/25/05	Year 1	13:25	2474	M68	1.7	---	0.9	---	---	---	---	---
MC1	6/22/05	Year 1	12:45	2474	M68	1.8	0.5	3.7	8.3	83	13.0	6.1	0.2
MC1	7/20/05	Year 1	14:07	2474	M68	2.1	0.3	15.3	7.1	92	12.0	6.9	<1
MC1	8/11/05	Year 1	11:20	2474	M68	1.8	0.3	19.5	6.2	89	12.0	7.1	0.5
MC1	9/27/05	Year 1	12:40	2474	M68	2.1	0.3	11.4	7.7	90	13.0	7.1	2.9
MC1	12/8/05 [1]	Year 1	14:20	2474	M68	2.0	0.5	3.2	10.2	99	14.0	7.1	4.5

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
MC1	**3/22/06**	**Year 2**	**---**	**2474**	**M68**	**NA**	**No safe access to stream; too much snow present**						
MC1	**5/10/06**	**Year 2**	**11:15**	**2474**	**M68**	**NA**	**No safe access; stream covered by snow drifts**						
MC1	**6/21/06**	**Year 2**	**11:35**	**2474**	**M68**	**1.8**	**0.5**	**4.4**	**9.5**	**100**	**11**	**7.1[11]**	**0.8**
MC1	**7/19/06**	**Year 2**	**14:00**	**2474**	**M68**	**1.7**	**0.2**	**17.8**	**6.8**	**97**	**12**	**7.1**	**4.5**
MC1	**8/17/06**	**Year 2**	**12:50**	**2474**	**M68**	**1.8**	**1.0**	**17.5**	**7.5**	**108**	**11**	**7.3**	**1.6**
MC1	**9/21/06**	**Year 2**	**12:40**	**2474**	**M68**	**2.0**	**0.1**	**12.6**	**7.3**	**93**	**12**	**7.1**	**8.3**

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
MC2	7/26/00	Baseline	15:00	2377	M6	31.2	0.5	8.4	8.6	99	8.6	6.9	1.2
MC2	8/8/00	Baseline	14:10	2377	M6	33.6	0.5	10.5	8.7	99	8.5	7.3	8.0
MC2	9/20/00	Baseline	14:05	2377	M6	31.5	0.5	14.4	6.7	101	9.8	7.0	0 [(2)] (0.4)
MC2	12/27/00	Baseline	11:25	2377	M6	12.0	0.5	1.2	10.5	94	18.0	6.7	0.5
MC2	1/11/01 [(1)]	Baseline	---	2377	M6	6.7	---	---	---	---	---	---	---
MC2	3/15/01	Baseline	13:30	2377	M6	6.7	0.5	0.6	9.4	88	19.6	7.3	12.4
MC2	5/30/01	Baseline	14:40	2377	M6	20.7	0.5	7.4	8.3	90	8.4	7.0	0.5
MC2	6/18/01	Baseline	14:35	2377	M6	20.3	0.5	9.2	8.6	99	8.8	7.0	0.4
MC2	7/23/01	Baseline	12:27	2377	M6	17.0	0.3	16.6	7.3	95	10.1	6.9	7.7
MC2	8/14/01	Baseline	9:21	2377	M6	19.1	0.5	17.9	7.5	94	9.8	7.2	0.5
MC2	9/27/01	Baseline	10:45	2377	M6	9.5	1.0	13.5	8.0	100	12.3	7.3	4.6
MC2	11/26/01 [(1)]	Baseline	---	2377	M6	11.6	1.0	---	---	---	---	---	---
MC2	12/19/01	Baseline	9:20	2377	M6	11.6	0.5	0.7	10.1	91	21.7	7.0	2.0
MC2	3/27/02	Interim	9:00	2377	M6	12.0	0.5	1.4	7.4	93	24.6	7.1	1.9
MC2	5/15/02	Interim	8:31	2377	M6	9.5	0.5	2.0	9.7	90	13.0	7.9	3.0
MC2	7/16/02	Interim	11:15	2377	M6	30.7	0.5	7.9	9.1	99	---	---	---
MC2	9/25/02	Interim	9:58	2377	M6	20.0	0.5	13.3	8.1	100	---	---	---
MC2	5/6/03	Interim	9:00	2377	M6	28.0	0.5	0.8	11.4	103	20.0	7.8	0.1
MC2	7/9/03	Interim	8:32	2377	M6	51.9	1.0	7.8	8.7	95	10.0	7.8	0.1
MC2	8/20/03	Interim	8:43	2377	M6	55.2	1.0	17.7	7.1	98	9.7	6.8	<1.0
MC2	9/10/03	Interim	11:04	2377	M6	40.0	1.0	13.1	7.2	88	15.0	6.7	122 [(7)]
MC2	7/15/04	Interim	11:30	2377	M6	12.7	1.5	15.0	7.5	98	13.0	7.2	0.6
MC2	8/26/04	Interim	11:00	2377	M6	3.3	0.5	16.6	7.1	94	14.0	7.2	1.4
MC2	9/22/04	Interim	11:29	2377	M6	3.5	0.5	12.6	7.0	87	15.0	7.1	2.5
MC2	3/22/05	Year 1	---	2377	M6	NA			Heavy snowstorm, no access				
MC2	5/25/05	Year 1	13:50	2377	M6	24.5	0.5	1.1	---	---	---	---	---
MC2	6/22/05	Year 1	13:06	2377	M6	150.2	0.5	4.0	8.5	85	10.0	6.7	0.4

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
MC2	7/20/05	Year 1	14:25	2377	M6	28.8	0.5	6.4	9.0	95	12.0	7.1	<1
MC2	8/11/05	Year 1	11:38	2377	M6	28.6	0.5	8.3	8.3	94	11.0	7.4	1.4
MC2	9/27/05	Year 1	14:05	2377	M6	28.1	0.5	11.9	7.8	94	13.0	7.1	3.0
MC2	12/8/05 [1]	Year 1	14:45	2377	M6	5.9		Clouds and fog, unable to land helicopter, no samples collected					
MC2	**3/22/06**	**Year 2**	**---**	**2377**	**M6**	**NA**		**No safe access to stream; too much snow present**					
MC2	**5/10/06**	**Year 2**	**11:45**	**2377**	**M6**	**NA**		**No safe access due to avalanche danger**					
MC2	**6/21/06**	**Year 2**	**11:55**	**2377**	**M6**	**131.0**	**0.2**	**5.7**	**9.6**	**103**	**10**	**6.8[11]**	**<1.0**
MC2	**7/19/06**	**Year 2**	**14:20**	**2377**	**M6**	**33.7**	**0.2**	**7.4**	**10.6**	**119**	**10**	**7.3**	**18.7**
MC2	**8/17/06**	**Year 2**	**13:10**	**2377**	**M6**	**28.1**	**0.3**	**11.6**	**9.4**	**116**	**10**	**7.3**	**2.9**
MC2	**9/21/06**	**Year 2**	**13:05**	**2377**	**M6**	**41.0**	**0.1**	**12.9**	**7.3**	**93**	**12**	**7.2**	**4.4**

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow[3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
NFMR1	**3/21/06**	**Year 2**	**12:30**	**1189**	**(10)**	**474.4**	**1.0**	**3.2**	**---**	**---**	**---**	**---**	**---**
NFMR1	**4/26/06**	**Year 2**	**---**	**1189**	**(10)**	**1583.2**				**No safe access**			
NFMR1	**5/10/06**	**Year 2**	**9:20**	**1189**	**(10)**	**2753.3**	**2.5**	**4.3**	**10.7**	**95**	**19**	**6.6[11]**	**3.0**
NFMR1	**6/21/06**	**Year 2**	**9:30**	**1189**	**(10)**	**2036.8**	**0.5**	**8.1**	**10.7**	**105**	**18**	**7.3[11]**	**21.6**
NFMR1	**7/19/06**	**Year 2**	**12:07**	**1189**	**(10)**	**450.0**	**0.2**	**18.0**	**9.0**	**110**	**23**	**7.5**	**17.0**
NFMR1	**8/17/06**	**Year 2**	**11:20**	**1189**	**(10)**	**251.6**	**0.5**	**15.6**	**8.4**	**98**	**35**	**7.4**	**0.8**
NFMR1	**9/21/06**	**Year 2**	**11:10**	**1189**	**(10)**	**118.8**	**0.3**	**12.6**	**9.3**	**101**	**32**	**7.3**	**4.0**

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
NFMR2	7/26/00	Baseline	12:15	1119	M11	36.1	0.5	10.5	9.0	93	17.1	6.9	0.8
NFMR2	8/8/00	Baseline	13:36	1119	M11	36.6	0.5	11.3	9.9	103	17.4	7.3	3.4
NFMR2	9/20/00	Baseline	12:46	1119	M11	36.7	0.5	13.1	8.5	92	19.3	6.9	0 [(2)] (0.3)
NFMR2	12/27/00	Baseline	13:40	1119	M11	26.2	0.5	7.0	11.0	104	28.0	6.8	0.2
NFMR2	1/11/01 [(1)]	Baseline	11:45	1119	M11	21.4	0.5	5.2	10.2	92	36.0	6.7	3.4
NFMR2	3/14/01	Baseline	11:40	1119	M11	21.8	0.5	5.8	10.3	94	56.9	6.6	0.0
NFMR2	5/31/01	Baseline	10:45	1119	M11	33.0	0.5	9.3	9.0	88	17.6	7.1	0.6
NFMR2	6/19/01	Baseline	13:15	1119	M11	32.6	0.5	10.5	9.1	93	16.9	7.1	1.2
NFMR2	7/23/01	Baseline	16:15	1119	M11	32.3	0.5	11.7	8.9	100	19.0	7.0	7.1
NFMR2	8/13/01	Baseline	9:57	1119	M11	32.9	0.4	11.6	8.6	88	18.0	6.9	0.3
NFMR2	9/26/01	Baseline	9:57	1119	M11	32.3	0.5	15.1	8.5	96	22.4	6.7	0.3
NFMR2	11/26/01 [(1)]	Baseline	---	1119	M11	21.2	0.5	---	---	---	---	---	---
NFMR2	12/19/01	Baseline	11:00	1119	M11	21.0	0.5	5.3	10.8	97	37.4	7.4	2.0
NFMR2	3/27/02	Interim	12:00	1119	M11	75.0	0.5	7.3	11.2	102	41.8	7.0	3.4
NFMR2	5/14/02	Interim	9:22	1119	M11	227.8	0.5	3.4	11.3	95	11.0	7.3	0.8
NFMR2	7/12/02	Interim	9:55	1119	M11	33.6	0.5	11.3	8.7	87	---	6.6	---
NFMR2	9/25/02	Interim	10:57	1119	M11	22.7	0.5	15.1	7.8	87	---	---	---
NFMR2	3/11/03	Interim	16:11	1119	M11	60.5	0.5	7.3	9.9	92	40.0	7.9	0.8
NFMR2	5/6/03	Interim	11:47	1119	M11	369.8	0.8	7.0	10.7	98	30.0	6.9	0.0
NFMR2	6/3/03	Interim	8:20	1119	M11	2287.0	0.5	6.9	9.9	93	20.0	6.8	0.6
NFMR2	7/9/03	Interim	14:14	1119	M11	35.8	1.0	10.1	9.8	97	20.0	7.5	3.0
NFMR2	8/21/03	Interim	10:50	1119	M11	23.2	1.0	11.2	8.3	81	20.0	7.2	0.0
NFMR2	9/10/03	Interim	12:22	1119	M11	33.9	1.0	11.2	8.3	85	20.0	6.8	6.6
NFMR2	4/12/04	Interim	10:42	1119	M11	110.0	1.0	7.8	9.2	90	19.0	8.2	4.6
NFMR2	5/18/04	Interim	12:55	1119	M11	39.4	0.5	8.6	8.6	83	15.0	8.0	4.7
NFMR2	6/2/04	Interim	12:15	1119	M11	117.2	1.0	9.3	9.7	95	17.0	8.3	4.7
NFMR2	7/13/04	Interim	12:20	1119	M11	24.4	1.0	12.9	8.8	92	22.0	7.2	3.5

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
NFMR2	8/24/04	Interim	12:05	1119	M11	37.4	1.0	12.1	8.4	87	22.0	7.3	0.8
NFMR2	9/21/04	Interim	12:41	1119	M11	22.7	0.5	14.9	8.0	89	21.0	7.3	0.0
NFMR2	3/22/05	Year 1	9:15	1119	M11	315.6	1.0	5.4	11.0	101	37.0	7.1	7.4
NFMR2	4/12/05	Year 1	9:17	1119	M11	190.8	1.0	7.0	10.6	98	36.0	7.0	10.5
NFMR2	5/23/05	Year 1	11:30	1119	M11	724.2	1.0	6.4	10.5	96	18.0	8.3	46.2
NFMR2	6/21/05	Year 1	8:22	1119	M11	1692.7	1.0	9.0	9.9	97	15.0	6.9	21.0
NFMR2	7/19/05	Year 1	9:00	1119	M11	443.1	0.5	8.2	10.2	97	18.0	7.2	4.0
NFMR2	8/10/05	Year 1	12:00	1119	M11	322.7	0.5	8.8	9.4	91	18.0	7.9	0.0
NFMR2	9/29/05	Year 1	14:05	1119	M11	28.3	0.5	11.9	8.0	83	20.0	7.4	1.1
NFMR2	12/7/05 [1]	Year 1	11:55	1119	M11	36.6	0.5	8.9	11.2	107	27.0	6.9	2.5
NFMR2	**3/21/06**	**Year 2**	**14:30**	**1119**	**M11**	**692.1**	**0.2**	**3.9**	**11.3**	**99**	**25**	**6.9[11]**	**4.0**
NFMR2	**4/25/06**	**Year 2**	**12:25**	**1119**	**M11**	**1289.1**	**0.8**	**4.9**	**11.4**	**102**	**25**	**7.1[11]**	**3.4**
NFMR2	**5/9/06**	**Year 2**	**13:20**	**1119**	**M11**	**2361.6**	**0.5**	**6.0**	**10.9**	**101**	**23**	**6.5[11]**	**2.4**
NFMR2	**6/21/06**	**Year 2**	**9:30**	**1119**	**M11**	**1541.3**	**0.5**	**8.1**	**10.7**	**104**	**18**	**7.3[11]**	**21.6**
NFMR2	**7/20/06**	**Year 2**	**8:15**	**1119**	**M11**	**541.9**	**0.7**	**8.7**	**7.7**	**76**	**17**	**7.7**	**4.5**
NFMR2	**8/15/06**	**Year 2**	**8:40**	**1119**	**M11**	**369.9**	**0.5**	**9.9**	**9.1**	**92**	**16**	**7.3**	**0.0**
NFMR2	**9/19/06**	**Year 2**	**8:40**	**1119**	**M11**	**37.4**	**0.8**	**10.2**	**8.8**	**90**	**19**	**7.3**	**3.2**

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
CC0	5/6/03	Baseline	11:25	1771	M10	105.1	1.0	3.0	11.1	101	12.0	7.9	1.2
CC0	6/2/03	Baseline	9:27	1771	M10	383.8	1.0	4.3	10.1	96	64.0	6.8	0.0
CC0	7/9/03	Baseline	14:30	1771	M10	260.2	0.5	17.0	7.3	91	20.0	7.9	0.0
CC0	8/19/03	Baseline	13:30	1771	M10	1.5	0.5	17.6	7.1	90	27.8	6.8	3.3
CC0	9/11/03	Baseline	9:02	1771	M10	1.1	0.5	12.4	8.1	92	30.0	7.2	2.0
CC0	5/18/04	Baseline	11:11	1771	M10	98.2	1.0	6.0	9.8	95	7.0	8.1	7.0
CC0	6/3/04	Baseline	14:30	1771	M10	72.0	1.0	13.8	8.2	96	6.0	7.4	2.7
CC0	7/14/04	Baseline	13:25	1771	M10	11.6	0.5	16.6	7.6	95	26.0	6.9	0.5
CC0	8/25/04	Baseline	12:25	1771	M10	0.5	0.5	16.4	8.1	100	32.0	7.1	0.2
CC0	9/22/04	Baseline	14:11	1771	M10	0.5	0.1	11.1	7.4	82	33.0	7.0	0.4
CC0	3/22/05	Year 1	---	1771	M10	54.9			Heavy snowstorm, no access				
CC0	5/23/05	Year 1	---	1771	M10	602.7			No access, road closed due to snow				
CC0	6/23/05	Year 1	10:50	1771	M10	265.9	0.5	5.2	10.1	96	10.0	6.7	0.0
CC0	7/21/05	Year 1	9:20	1771	M10	9.2	1.0	17.6	8.0	101	19.0	7.1	2.5
CC0	8/8/05	Year 1	14:35	1771	M10	0.7	0.5	20.1	6.3	82	28.0	8.3	0.0
CC0	9/28/05	Year 1	10:50	1771	M10	0.2	0.5	9.0	8.5	89	27.0	7.3	5.4
CC0	**3/21/06**	**Year 2**	**---**	**1771**	**M10**	**NA**			**Five feet of new snow; no safe access**				
CC0	**4/25/06**	**Year 2**	**---**	**1771**	**M10**	**NA**			**No safe access due to snow**				
CC0	**5/9/06**	**Year 2**	**---**	**1771**	**M10**	**384.5**			**No safe access due to snow**				
CC0	**6/19/06**	**Year 2**	**13:50**	**1771**	**M10**	**172.8**	**0.2**	**9.3**	**10.1**	**110**	**11**	**7.4[11]**	**<1.0**
CC0	**7/18/06**	**Year 2**	**8:00**	**1771**	**M10**	**4.5**	**0.2**	**17.1**	**7.9**	**102**	**21**	**6.8**	**4.5**
CC0	**8/16/06**	**Year 2**	**8:15**	**1771**	**M10**	**0.2**	**0.3**	**12.9**	**7.4**	**87**	**31**	**6.8**	**0.1**
CC0	**9/20/06**	**Year 2**	**8:45**	**1771**	**M10**	**0.1**	**0.2**	**10.6**	**6.8**	**76**	**31**	**6.7**	**5.1**

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
CC1	3/14/01	Baseline	12:25	1041	M10	8.0	0.5	5.2	10.9	98	15.9	6.8	---
CC1	5/31/01	Baseline	11:20	1041	M10	53.0	0.5	15.1	7.7	84	17.6	7.2	0.6
CC1	6/18/01	Baseline	---	1041	M10	10.0	---	---	---	---	---	---	---
CC1	7/24/01	Baseline	16:51	1041	M10	0.5	0.5	19.5	7.3	87	---	---	---
CC1	8/14/01	Baseline	---	1041	---	---	---	---	---	---	---	---	---
CC1	9/26/01	Baseline	10:25	1041	---	---	---	14.4	7.4	83	---	---	---
CC1	11/26/01 [(1)]	Baseline	---	1041	---	---	---	---	---	---	---	---	---
CC1	12/19/01	Baseline	---	1041	---	---	---	---	---	---	---	---	---
CC1	3/26/02	Interim	11:55	1041	M10	33.2	0.5	5.9	10.7	88	20.3	7.6	2.0
CC1	5/14/02	Interim	9:58	1041	M10	161.0	0.5	8.0	10.0	95	14.0	7.3	1.2
CC1	7/12/02	Interim	10:18	1041	M10	6.4	0.5	18.1	8.4	88	99.1	6.6	---
CC1	9/25/02	Interim	11:18	1041	M10	0.5	0.5	16.0	8.7	87	---	---	---
CC1	3/22/05	Year 1	9:47	1041	M10	54.9	1.0	3.5	11.9	101	22.0	7.3	8.8
CC1	4/12/05	Year 1	9:20	1041	M10	111.5	1.0	3.6	11.5	98	15.0	7.0	3.1
CC1	5/23/05	Year 1	12:50	1041	M10	602.7	1.0	7.2	11.3	102	12.0	8.3	4.0
CC1	6/21/05	Year 1	8:48	1041	M10	296.3	0.5	8.7	9.9	95	12.0	7.0	1.0
CC1	7/19/05	Year 1	9:46	1041	M10	13.6	0.5	18.8	7.7	93	21.0	7.6	3.2
CC1	8/8/05	Year 1	15:35	1041	M10	0.7	0.5	19.5	7.6	100	37.0	8.2	0.0
CC1	9/29/05	Year 1	14:20	1041	M10	0.2	0.5	14.9	7.8	88	46.0	7.7	4.9
CC1	**3/21/06**	**Year 2**	**15:00**	**1041**	**M10**	**NA**	**0.5**	**3.3**	**No other data collected; recorder install only event**				
CC1	**4/25/06**	**Year 2**	**12:45**	**1041**	**M10**	**NA**	**1.0**	**5.3**	**11.4**	**102**	**17**	**6.9[11]**	**1.2**
CC1	**5/9/06**	**Year 2**	**13:50**	**1041**	**M10**	**384.5**	**0.5**	**6.9**	**10.2**	**95**	**13**	**5.8[11]**	**<1.0**
CC1	**6/20/06**	**Year 2**	**12:05**	**1041**	**M10**	**172.8**	**0.5**	**10.5**	**10.2**	**104**	**12**	**7.5[11]**	**<1.0**
CC1	**7/20/06**	**Year 2**	**9:00**	**1041**	**M10**	**4.5**	**0.5**	**18.0**	**8.6**	**104**	**26**	**7.1**	**3.0**
CC1	**8/15/06**	**Year 2**	**9:50**	**1041**	**M10**	**0.2**	**0.2**	**15.5**	**8.9**	**102**	**40**	**7.3**	**0.0**
CC1	**9/19/06**	**Year 2**	**9:30**	**1041**	**M10**	**0.1**	**0.5**	**13.0**	**7.9**	**86**	**46**	**7.2**	**2.1**

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
BR1	7/26/00	Baseline	10:43	1699	M49	4.9	0.5	8.8	9.3	98	13.6	7.1	1.4
BR1	8/8/00	Baseline	17:18	1699	M49	4.7	0.5	8.8	10.1	106	14.5	7.2	6.9
BR1	9/20/00	Baseline	17:07	1699	M49	5.1	0.5	8.2	9.9	102	14.8	6.6	0 [(2)] (0.4)
BR1	12/27/00	Baseline	12:51	1699	M49	2.4	0.5	3.8	10.9	102	16.3	6.5	1.8
BR1	1/11/01 [(1, 6)]	Baseline	11:05	1699	M49	2.5	0.5	1.6	11.2	99	26.9	6.7	4.2
BR1	3/15/01	Baseline	15:00	1699	M49	3.0	0.5	3.7	12.0	110	28.8	6.5	13.6
BR1	5/30/01	Baseline	9:25	1699	M49	5.0	0.5	6.6	9.0	83	14.3	7.7	1.2
BR1	6/18/01	Baseline	17:35	1699	M49	4.7	0.5	8.2	9.0	99	13.0	6.9	1.3
BR1	7/23/01	Baseline	15:05	1699	M49	4.5	0.5	9.5	9.1	98	13.4	6.6	6.1
BR1	8/14/01	Baseline	8:44	1699	M49	5.1	0.5	6.6	9.8	97	12.2	6.8	0.5
BR1	9/27/01	Baseline	13:25	1699	M49	4.7	0.5	8.5	9.2	97	12.4	7.1	2.5
BR1	11/26/01 [(1, 6)]	Baseline	10:40	1699	M49	3.1	1.0	1.9	12.1	99	24.7	6.5	1.8
BR1	12/19/01	Baseline	10:40	1699	M49	3.3	0.5	3.0	11.2	100	15.4	7.4	1.9
BR1	3/27/02	Interim	12:35	1699	M49	8.0	1.0	5.4	8.7	85	21.2	7.0	1.4
BR1	5/15/02	Interim	11:55	1699	M49	7.6	0.5	7.0	8.7	86	19.0	7.1	2.4
BR1	7/16/02	Interim	14:40	1699	M49	5.7	0.5	6.6	11.0	90	---	---	---
BR1	8/29/02	Interim	8:35	1699	M49	6.6	0.5	5.8	10.0	96	---	---	---
BR1	5/6/03	Interim	11:43	1699	M49	6.9	1.0	5.9	9.9	90	30.0	6.7	0.2
BR1	6/2/03	Interim	11:05	1699	M49	365.0	0.1	14.9	7.5	99	---	6.8	---
BR1	7/1/03	Interim	11:08	1699	M49	8.3	1.0	8.6	9.7	100	---	7.1	0.9
BR1	8/19/03	Interim	12:15	1699	M49	6.1	1.0	8.9	8.7	92	10.0	6.7	0.0
BR1	9/9/03	Interim	11:30	1699	M49	5.2	1.0	7.3	9.2	92	20.0	6.9	2.0
BR1	4/22/04	Interim	11:44	1699	M49	6.8	0.2	5.6	7.5	73	21.0	7.0	2.8
BR1	5/18/04	Interim	10:08	1699	M49	14.3	0.5	8.6	9.6	99	13.0	7.0	7.2
BR1	6/3/04	Interim	15:00	1699	M49	29.5	0.5	13.7	8.7	100	11.0	7.8	2.1
BR1	7/14/04	Interim	12:50	1699	M49	6.5	0.5	8.2	9.4	97	17.0	6.8	2.9
BR1	8/25/04	Interim	12:55	1699	M49	7.0	0.5	8.4	9.3	96	17.0	7.4	0.0

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
BR1	9/22/04	Interim	14:43	1699	M49	5.6	0.5	8.0	7.6	81	18.0	6.6	0.9
BR1	3/23/05	Year 1	9:15	1699	M49	181.9	0.5	2.8	10.5	79 [5]	20.0	7.1	3.1
BR1	4/13/05	Year 1	9:35	1699	M49	10.8	0.5	2.1	10.7	93	26.0	6.7	2.5
BR1	5/24/05	Year 1	8:40	1699	M49	149.1	0.5	4.7	10.7	100	18.0	5.1	8.5
BR1	6/22/05 [8]	Year 1	15:20	1699	M49	368.5	0.5	12.7	8.1	92	13.0	7.0	0.1
BR1	7/21/05	Year 1	8:25	1699	M49	5.4	0.7	7.1	10.7	100	19.0	6.8	2.4
BR1	8/10/05	Year 1	14:40	1699	M49	5.7	0.5	8.9	8.8	91	18.0	7.9	0.0
BR1	9/28/05	Year 1	11:35	1699	M49	6.1	0.5	7.7	9.3	94	18.0	7.0	1.8
BR1	12/7/05 [1]	Year 1	10:40	1699	M49	17.0	0.5	6.4	12.0	114	17.0	6.9	2.1
BR1	**3/21/06**	**Year 2**	**13:15**	**1699**	**M49**	**95.0**	**0.3**	**2.5**	**10.9**	**98**	**15.0**	**7.1[11]**	**4.3**
BR1	**4/26/06**	**Year 2**	**---**	**1699**	**M49**	**95.0**		**No safe access due to snow; helicopter could not fly in**					
BR1	**5/10/06**	**Year 2**	**12:10**	**1699**	**M49**	**95.0**	**0.3**	**3.3**	**10.0**	**92**	**17**	**6.4[11]**	**1.2**
BR1	**6/19/06**	**Year 2**	**14:40**	**1699**	**M49**	**127.4**	**0.5**	**6.4**	**10.9**	**109**	**16**	**7.1[11]**	**1.0**
BR1	**7/18/06**	**Year 2**	**9:00**	**1699**	**M49**	**36.9**	**0.1**	**6.9**	**9.4**	**95**	**15**	**7.3**	**4.9**
BR1	**8/16/06**	**Year 2**	**9:05**	**1699**	**M49**	**20.9**	**0.3**	**7.3**	**10.1**	**103**	**15**	**7.2**	**0.0**
BR1	**9/20/06**	**Year 2**	**9:45**	**1699**	**M49**	**20.1**	**0.2**	**8.4**	**9.7**	**102**	**16**	**7.0**	**5.0**

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
BR2	3/14/01	Baseline	13:00	1188	M49	3.0	0.5	4.8	10.7	95	28.2	6.8	---
BR2	5/31/01	Baseline	11:55	1188	M49	5.0	0.5	14.9	7.4	85	26.9	7.5	0.4
BR2	6/18/01	Baseline	---	1188	M49	4.7	---	---	---	---	---	---	---
BR2	7/24/01	Baseline	---	1188	M49	4.6	---	---	---	---	---	---	---
BR2	8/14/01	Baseline	---	1188	---	---	---	---	---	---	---	---	---
BR2	9/26/01	Baseline	10:47	1188	M49	5.0	0.5	12.7	8.6	92	---	---	---
BR2	11/26/01 [1]	Baseline	---	1188	---	---	---	---	---	---	---	---	---
BR2	12/19/01	Baseline	---	1188	---	---	---	---	---	---	---	---	---
BR2	3/26/02	Baseline	11:30	1188	M49	8.0	0.5	4.1	11.6	88	27.6	7.5	1.0
BR2	5/14/02	Baseline	10:25	1188	M49	7.6	1.5	8.6	10.0	96	32.0	7.6	1.2
BR2	7/12/02	Baseline	10:38	1188	M49	6.3	1.0	18.2	8.1	96	---	6.8	---
BR2	8/28/02	Baseline	11:48	1188	M49	6.6	1.0	15.2	8.4	92	---	7.8	---
BR2	3/11/03	Interim	16:52	1188	M49	6.4	0.5	6.3	9.8	89	30.0	7.8	2.5
BR2	5/6/03	Interim	12:30	1188	M49	6.9	1.0	6.1	10.6	95	30.0	7.2	0.4
BR2	6/3/03	Interim	12:00	1188	M49	376.9	0.2	16.4	8.0	92	---	6.6	---
BR2	7/1/03	Interim	13:54	1188	M49	8.3	0.5	15.5	8.2	92	---	7.2	0.1
BR2	8/19/03	Interim	14:09	1188	M49	6.1	1.0	18.4	7.9	94	20.0	7.1	1.3
BR2	9/9/03	Interim	14:26	1188	M49	5.2	1.0	14.1	8.7	94	20.0	7.0	0.7
BR2	4/12/04	Interim	11:49	1188	M49	6.6	1.0	7.6	9.0	85	29.0	8.1	3.7
BR2	5/18/04	Interim	13:30	1188	M49	14.3	1.0	11.6	9.1	94	22.0	8.2	5.8
BR2	6/2/04	Interim	12:55	1188	M49	32.5	0.5	14.0	8.5	92	15.0	7.7	3.7
BR2	7/13/04	Interim	13:00	1188	M49	6.8	0.5	16.7	8.0	92	23.0	7.4	0.9
BR2	8/24/04	Interim	13:00	1188	M49	7.0	0.5	15.7	7.5	83	20.0	7.4	0.0
BR2	9/21/04	Interim	13:16	1188	M49	5.5	0.5	9.2	9.5	93	23.0	7.8	0.0
BR2	3/22/05	Year 1	10:14	1188	M89	64.2	1.5	4.5	11.7	104	34.0	7.8	48.9
BR2	4/12/05	Year 1	9:45	1188	M89	51.7	1.0	4.3	10.9	95	33.0	7.3	6.7
BR2	5/23/05	Year 1	13:15	1188	M89	295.1	1.0	9.3	9.8	96	24.0	7.7	22.0

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
BR2	6/21/05	Year 1	9:25	1188	M89	156.2	2.0	10.2	9.2	92	17.0	7.1	8.6
BR2	7/19/05	Year 1	10:12	1188	M89	13.8	1.0	18.4	7.4	89	38.0	7.8	0.7
BR2	8//8/05	Year 1	16:05	1188	M89	11.1	1.0	19.9	7.3	90	37.0	8.2	0.0
BR2	9/29/05	Year 1	14:45	1188	M89	7.7	1.0	13.4	7.7	96	33.0	7.7	1.8
BR2	**3/22/06**	**Year 2**	**8:45**	**1188**	**M89**	**119.2**	**1.0**	**2.0**	**Temp recorder install only; no other data collected**				
BR2	**4/25/06**	**Year 2**	**13:15**	**1188**	**M89**	**199.5**	**0.5**	**7.0**	**10.5**	**100**	**30**	**6.6[11]**	**2.7**
BR2	**5/9/06**	**Year 2**	**14:14**	**1188**	**M89**	**199.3**	**2.0**	**8.6**	**9.4**	**93**	**26**	**5.8[11]**	**12.2**
BR2	**6/20/06**	**Year 2**	**12:45**	**1188**	**M89**	**104.3**	**0.3**	**10.7**	**10.5**	**110**	**26**	**7.3[11]**	**6.1**
BR2	**7/20/06**	**Year 2**	**9:50**	**1188**	**M89**	**46.5**	**0.3**	**12.1**	**8.6**	**93**	**22**	**7.5**	**4.3**
BR2	**8/15/06**	**Year 2**	**10:46**	**1188**	**M89**	**28.8**	**1.0**	**11.6**	**9.5**	**101**	**24**	**7.4**	**0.4**
BR2	**9/19/06**	**Year 2**	**10:00**	**1188**	**M89**	**26.5**	**0.5**	**9.7**	**10.1**	**103**	**22**	**7.2**	**4.4**

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
TC1	7/26/00	Baseline	14:56	1061	M76	10.7	0.5	10.1	10.0	101	14.4	7.1	1.0
TC1	8/8/00	Baseline	12:15	1061	M76	10.7	0.5	11.1	10.0	104	14.5	7.3	1.1
TC1	9/20/00	Baseline	11:30	1061	M76	10.7	0.5	12.4	9.0	96	18.0	7.0	0 [(2)] (0.5)
TC1	12/27/00	Baseline	14:20	1061	M76	5.5	0.5	7.1	10.3	97	29.0	6.7	1.7
TC1	1/11/01 [(1)]	Baseline	9:50	1061	M76	5.5	0.5	4.8	10.6	95	38.5	6.6	3.7
TC1	3/14/01	Baseline	14:10	1061	M76	5.5	0.5	5.9	9.8	89	54.0	6.8	17.4
TC1	5/31/01	Baseline	13:00	1061	M76	10.5	0.5	10.6	9.0	91	11.2	7.2	0.9
TC1	6/19/01	Baseline	12:00	1061	M76	10.5	0.5	9.6	8.9	88	13.5	7.2	1.2
TC1	7/24/01	Baseline	9:50	1061	M76	10.7	0.1	9.6	10.9	109	14.7	6.9	8.2
TC1	8/13/01	Baseline	11:10	1061	M76	10.8	1.0	10.8	8.4	83	16.8	7.0	0.4
TC1	9/26/01	Baseline	11:40	1061	M76	10.8	1.0	16.1	7.7	89	16.0	7.1	0.5
TC1	11/26/01 [(1)]	Baseline	11:55	1061	M76	5.5	1.0	9.7	8.7	85	29.9	7.0	4.0
TC1	12/19/01	Baseline	11:55	1061	M76	5.4	1.0	4.2	10.4	92	28.0	7.5	1.7
TC1	3/26/02	Interim	8:15	1061	M76	10.4	0.5	4.3	10.2	90	28.1	6.8	2.3
TC1	5/14/02	Interim	11:25	1061	M76	7.6	0.5	7.9	9.6	90	18.0	7.2	1.5
TC1	7/12/02	Interim	11:28	1061	M76	5.7	0.5	9.9	9.9	89	---	7.3	---
TC1	8/28/02	Interim	14:55	1061	M76	3.4	0.5	12.2	9.6	100	---	---	---
TC1	3/10/03	Interim	14:20	1061	M76	10.7	0.5	5.9	10.1	90	30.0	7.9	3.1
TC1	7/9/03	Interim	15:32	1061	M76	6.6	1.0	10.2	8.2	82	20.0	7.5	0.9
TC1	8/19/03	Interim	15:04	1061	M76	4.1	1.0	11.1	7.6	79	14.4	7.0	1.9
TC1	9/10/03	Interim	14:39	1061	M76	4.1	1.0	11.8	7.2	75	15.0	7.0	0.4
TC1	4/12/04	Interim	13:24	1061	M76	11.1	1.0	6.9	9.3	84	14.0	8.5	3.7
TC1	5.18/04	Interim	14:23	1061	M76	8.2	0.5	10.8	9.2	92	12.0	7.6	4.8
TC1	6/3/04	Interim	16:15	1061	M76	7.9	0.5	10.0	9.2	91	14.0	7.5	3.0
TC1	7/13/04	Interim	14:15	1061	M76	5.7	1.0	11.6	9.0	92	20.0	7.0	3.4
TC1	8/24/04	Interim	14:03	1061	M76	3.5	1.0	12.1	8.3	87	19.0	7.3	0.2
TC1	9/21/04	Interim	14:05	1061	M76	3.5	0.5	12.8	8.1	86	21.0	7.5	0.0

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
TC1	3/22/05	Year 1	11:15	1061	M76	23.4	0.5	4.3	11.3	89 [5]	27.0	7.4	10.2
TC1	4/12/05	Year 1	11:57	1061	M76	11.0	1.0	4.9	11.3	98	27.0	7.6	4.3
TC1	5/23/05	Year 1	14:25	1061	M76	8.6	0.5	8.6	9.7	96	19.0	7.7	8.2
TC1	6/21/05	Year 1	10:30	1061	M76	5.5	0.5	8.8	9.2	89	17.0	6.8	4.1
TC1	7/19/05	Year 1	11:25	1061	M76	5.5	0.5	9.7	9.3	93	18.0	7.2	4.4
TC1	8/9/05	Year 1	10:50	1061	M76	3.5	1.0	9.9	8.7	86	20.0	8.1	0.0
TC1	9/28/05	Year 1	13:20	1061	M76	3.2	0.5	13.6	8.3	96	19.0	7.1	0.0
TC1	12/7/05 [1]	Year 1	13:30	1061	M76	5.5	0.5	8.1	11.5	105	24.0	6.8	2.7
TC1	**3/22/06**	**Year 2**	**9:45**	**1061**	**M76**	**11.1**	**0.6**	**3.4**	**11.4**	**98**	**24**	**6.7[11]**	**13.7 [9]**
TC1	**4/25/06**	**Year 2**	**11:46**	**1061**	**M76**	**11.1**	**1.0**	**6.4**	**11.0**	**102**	**35**	**7.3[11]**	**4.3**
TC1	**5/8/06**	**Year 2**	**11:00**	**1061**	**M76**	**7.7**	**0.5**	**9.6**	**9.9**	**99**	**40**	**6.4[11]**	**0.7**
TC1	**6/21/06**	**Year 2**	**13:25**	**1061**	**M76**	**5.5**	**0.3**	**10.4**	**10.0**	**102**	**20**	**6.9[11]**	**1.7**
TC1	**7/17/06**	**Year 2**	**14:07**	**1061**	**M76**	**5.5**	**0.2**	**11.3**	**6.5**	**67**	**17**	**7.0**	**6.2**
TC1	**8/15/06**	**Year 2**	**12:20**	**1061**	**M76**	**3.6**	**0.5**	**12.4**	**9.7**	**103**	**17**	**7.3**	**0.0**
TC1	**9/19/06**	**Year 2**	**11:25**	**1061**	**M76**	**3.6**	**1.0**	**11.6**	**9.1**	**95**	**23**	**7.3**	**3.2**

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
NFMR3	7/26/00	Baseline	14:15	716	M38	63.4	0.5	21.6	8.0	98	47.2	7.3	1.6
NFMR3	8/8/00	Baseline	8:25	716	M38	62.9	0.5	19.7	8.2	97	43.9	7.5	1.6
NFMR3	9/20/00	Baseline	10:50	716	M38	58.4	0.5	16.6	6.8 [5]	76	46.7	7.4	0 [(2)] (0.5)
NFMR3	12/27/00	Baseline	10:57	716	M38	64.8	0.5	2.5	12.9	104	55.9	7.2	0.4
NFMR3	1/11/01 [(1)]	Baseline	9:11	716	M38	105.6	0.5	3.3	12.2	98	56.4	7.0	3.2
NFMR3	3/14/01	Baseline	11:00	716	M38	106.2	0.5	6.1	10.0	87	62.2	7.1	2.6
NFMR3	5/30/01	Baseline	10:00	716	M38	77.6	0.5	17.6	8.3	97	45.2	7.8	0.1
NFMR3	6/19/01	Baseline	10:50	716	M38	50.7	1.0	19.7	8.0	95	47.0	7.5	2.4
NFMR3	7/25/01	Baseline	10:30	716	M38	62.7	1.5	21.0	7.4	98	47.2	7.4	7.2
NFMR3	8/13/01	Baseline	11:51	716	M38	60.5	0.5	20.7	8.0	96	41.8	7.5	1.2
NFMR3	9/26/01	Baseline	12:24	716	M38	52.8	1.0	15.8	9.3	101	42.0	7.6	1.0
NFMR3	11/26/01 [(1)]	Baseline	12:25	716	M38	85.6	1.0	4.1	12.3	102	47.6	7.1	0.5
NFMR3	12/19/01	Baseline	8:10	716	M38	77.7	0.5	2.9	11.1	98	53.3	7.5	1.4
NFMR3	3/26/02	Interim	9:10	716	M38	289.0	1.0	5.9	7.7	67	51.4	7.2	1.1
NFMR3	5/14/02	Interim	12:19	716	M38	495.2	0.5	10.2	10.2	98	25.0	7.5	3.7
NFMR3	7/12/02	Interim	11:56	716	M38	63.7	0.5	23.6	7.6	97	---	7.6	---
NFMR3	8/22/02	Interim	15:30	716	M38	47.0	0.5	21.5	8.1	99	---	---	---
NFMR3	9/25/02	Interim	14:28	716	M38	38.8	0.5	16.6	9.1	101	---	---	---
NFMR3	3/10/03	Interim	13:38	716	M38	193.7	0.5	6.8	11.0	97	51.0	7.7	3.0
NFMR3	5/6/03	Interim	13:16	716	M38	917.9	2.0	8.1	10.9	99	34.0	7.5	0.4
NFMR3	6/4/03	Interim	11:10	716	M38	3479.3	1.0	13.6	9.7	101	18.0	7.1	1.3
NFMR3	7/9/03	Interim	11:00	716	M38	89.7	1.0	14.6	9.5	101	---	7.3	0.2
NFMR3	8/20/03	Interim	10:58	716	M38	78.3	1.0	20.5	7.6	92	49.2	7.3	0.0
NFMR3	9/10/03	Interim	14:01	716	M38	59.7	0.5	16.0	8.9	97	38.0	7.4	0.0
NFMR3	4/12/04	Interim	14:03	716	M38	346.9	1.0	11.1	7.8	76	33.0	8.4	2.9
NFMR3	5/18/04	Interim	15:05	716	M38	131.2	2.0	15.8	8.5	91	34.0	7.4	3.7
NFMR3	6/1/04	Interim	13:32	716	M38	194.3	1.5	16.8	8.1	89	29.0	8.4	4.1

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
NFMR3	7/13/04	Interim	14:42	716	M38	51.0	1.5	23.5	7.0	90	49.0	7.7	0.0
NFMR3	8/24/04	Interim	14:31	716	M38	54.8	2.0	20.5	7.8	93	39.0	7.5	0.0
NFMR3	9/21/04	Interim	14:39	716	M38	39.2	0.5	13.0	9.7	99	50.0	7.5	0.0
NFMR3	3/22/05	Year 1	11:58	716	M38	1024.2	1.5	6.3	11.2	90 [5]	46.0	7.4	13.4
NFMR3	4/12/05	Year 1	11:30	716	M38	755.7	1.5	6.8	10.9	96	42.0	7.5	5.2
NFMR3	5/23/05	Year 1	15:15	716	M38	2104.3	2.0	10.5	10.4	101	24.0	7.1	12.3
NFMR3	6/21/05	Year 1	11:15	716	M38	1835.8	1.0	10.7	9.9	96	19.0	7.0	3.2
NFMR3	7/19/05	Year 1	12:15	716	M38	474.7	1.5	13.7	11.9	114	27.0	7.5	3.6
NFMR3	8/9/05	Year 1	13:07	716	M38	309.1	1.5	14.4	8.3	86	28.0	8.1	0.0
NFMR3	9/28/05	Year 1	13:12	716	M38	70.7	1.5	14.3	8.3	86	21.0	8.1	1.0
NFMR3	12/7/05 [1]	Year 1	14:10	716	M38	127.6	0.5	3.5	13.5	114	50.0	7.4	3.5
NFMR3	**3/22/06**	**Year 2**	**10:35**	**716**	**M38**	**1025.2**	**1.2**	**4.3**	**11.9**	**100**	**38**	**7.2[11]**	**4.3**
NFMR3	**4/25/06**	**Year 2**	**14:50**	**716**	**M38**	**2483.7**	**1.0**	**7.5**	**11.0**	**100**	**38**	**6.7[11]**	**4.4**
NFMR3	**5/8/06**	**Year 2**	**11:55**	**716**	**M38**	**3294.6**	**1.0**	**7.8**	**11.6**	**106**	**28**	**6.4[11]**	**4.3**
NFMR3	**6/21/06**	**Year 2**	**8:20**	**716**	**M38**	**1942.6**	**0.5**	**10.7**	**10.6**	**104**	**23**	**7.4[11]**	**5.2**
NFMR3	**7/17/06**	**Year 2**	**15:14**	**716**	**M38**	**512.7**	**1.0**	**16.1**	**9.8**	**109**	**29**	**7.3**	**3.0**
NFMR3	**8/15/06**	**Year 2**	**13:15**	**716**	**M38**	**371.5**	**0.5**	**14.0**	**10.5**	**112**	**28**	**7.3**	**0.2**
NFMR3	**9/19/06**	**Year 2**	**12:20**	**716**	**M38**	**108.5**	**1.7**	**12.8**	**9.9**	**103**	**52**	**7.5**	**2.6**

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
NFMR5	7/26/00	Baseline	8:30	637	M46	17.5	0.5	15.0	10.1	108	33.7	7.3	0.9
NFMR5	8/8/00	Baseline	8:25	637	M46	17.5	0.5	14.2	10.5	110	25.1	7.2	0.6
NFMR5	9/20/00	Baseline	8:30	637	M46	17.2	0.5	15.0	10.2	109	23.7	6.9	0 [(2)] (0.5)
NFMR5	12/27/00	Baseline	15:18	637	M46	13.1	0.5	5.3	11.7	99	35.7	6.9	0.3
NFMR5	1/11/01 [(1)]	Baseline	8:20	637	M46	12.7	0.5	5.4	11.0	93	50.1	6.7	7.8
NFMR5	3/14/01	Baseline	15:00	637	M46	12.1	0.5	7.1	11.2	98	62.4	7.3	11.8
NFMR5	5/30/01	Baseline	17:15	637	M46	17.7	0.5	19.0	7.9	93	33.9	7.6	0.0
NFMR5	6/19/01	Baseline	9:24	637	M46	17.8	1.0	14.7	8.7	92	23.4	7.1	1.3
NFMR5	7/25/01	Baseline	11:38	637	M46	17.7	0.8	15.5	9.3	100	21.3	7.2	5.1
NFMR5	8/13/01	Baseline	12:33	637	M46	17.9	1.0	15.7	7.3	79	19.6	7.1	0.2
NFMR5	9/26/01	Baseline	13:37	637	M46	17.3	1.5	15.2	8.9	96	23.0	7.2	1.1
NFMR5	11/26/01 [(1)]	Baseline	13:05	637	M46	12.0	1.5	7.6	9.3	83	39.7	7.1	0.5
NFMR5	12/19/01	Baseline	12:30	637	M46	12.0	1.0	4.2	11.5	99	47.6	7.2	2.0
NFMR5	3/26/02	Interim	10:00	637	M46	98.0	1.5	5.8	10.2	88	39.0	7.2	2.3
NFMR5	5/14/02	Interim	13:50	637	M46	272.2	0.5	13.3	9.6	99	28.0	7.5	2.5
NFMR5	3/10/03	Interim	12:10	637	M46	92.8	1.5	6.3	11.0	96	38.0	7.9	2.9
NFMR5	5/6/03	Interim	14:16	637	M46	267.2	1.0	9.4	11.0	105	36.0	7.5	0.1
NFMR5	6/3/03	Interim	14:11	637	M46	2982.6	1.0	13.5	12.0	123	20.0	7.3	3.6
NFMR5	7/9/03	Interim	16:20	637	M46	39.5	1.0	16.2	7.8	89	23.0	7.3	0.2
NFMR5	8/20/03	Interim	12:05	637	M46	30.0	0.5	15.0	9.8	103	19.8	7.0	0.0
NFMR5	9/10/03	Interim	16:10	637	M46	NA	0.5	13.9	7.1	73	19.0	7.0	1.2
NFMR5	4/12/04	Interim	14:47	637	M46	145.2	1.0	10.4	8.2	77	23.0	7.8	5.9
NFMR5	5/18/04	Interim	16:05	637	M46	309.8	1.5	16.4	8.7	96	30.0	8.0	6.8
NFMR5	6/1/04	Interim	1:12	637	M46	92.1	1.0	15.2	8.2	85	19.0	8.1	4.6
NFMR5	7/13/04	Interim	15:30	637	M46	23.5	2.0	17.3	8.7	95	25.0	7.3	1.6
NFMR5	8/24/04	Interim	15:15	637	M46	24.6	1.0	---	7.9	87	---	7.3	0.0
NFMR5	9/21/04	Interim	15:33	637	M46	28.5	1.0	12.2	10.0	95	26.0	7.0	0.0

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
NFMR5	3/22/05	Year 1	13:20	637	M46	836.9	1.0	6.3	11.8	96 [5]	42.0	7.4	6.8
NFMR5	4/12/05	Year 1	12:20	637	M46	742.4	2.0	7.8	10.9	99	41.0	7.5	6.8
NFMR5	5/24/05	Year 1	14:30	637	M46	1813.5	1.0	8.5	10.4	95	27.0	7.1	18.3
NFMR5	6/21/05	Year 1	12:40	637	M46	1170.3	1.0	11.1	9.9	96	20.0	7.0	8.6
NFMR5	7/19/05	Year 1	14:00	637	M46	176.3	2.0	14.9	8.7	93	23.0	7.5	2.1
NFMR5	8/9/05	Year 1	13:55	637	M46	26.1	2.0	13.7	8.8	91	22.0	8.0	0.0
NFMR5	9/30/05	Year 1	7:45	637	M46	25.4	1.0	14.8	7.9	83	25.0	7.3	0.0
NFMR5	12/7/05 [1]	Year 1	15:00	637	M46	52.0	0.5	5.9	10.3	91	32.0	7.0	4.3
NFMR5	**3/22/06**	**Year 2**	**12:00**	**637**	**M46**	**657.1**	**1.0**	**5.0**	**12.2**	**103**	**39**	**7.4[11]**	**3.5**
NFMR5	**4/25/06**	**Year 2**	**15:50**	**637**	**M46**	**1905.7**	**1.0**	**7.7**	**11.2**	**102**	**39**	**6.7[11]**	**7.3**
NFMR5	**5/8/06**	**Year 2**	**11:15**	**637**	**M46**	**2723.9**	**1.0**	**8.3**	**11.2**	**103**	**29**	**6.5[11]**	**3.0**
NFMR5	**6/20/06**	**Year 2**	**15:00**	**637**	**M46**	**1684.2**	**1.3**	**12.1**	**10.3**	**104**	**23**	**7.7[11]**	**2.3**
NFMR5	**7/18/06**	**Year 2**	**14:22**	**637**	**M46**	**162.7**	**0.2**	**14.5**	**10.1**	**107**	**24**	**7.6**	**8.4**
NFMR5	**8/15/06**	**Year 2**	**14:45**	**637**	**M46**	**43.1**	**1.0**	**14.8**	**9.3**	**100**	**23**	**7.2**	**0.1**
NFMR5	**9/19/06**	**Year 2**	**13:45**	**637**	**M46**	**68.2**	**1.2**	**14.2**	**9.7**	**103**	**52**	**7.7**	**1.9**

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
MR1	7/26/00	Baseline	7:59	206	(4)	44.0	0.5	21.0	7.8	89	70.2	7.5	1.3
MR1	8/8/00	Baseline	7:58	206	(4)	38.0	0.5	21.7	8.2	95	73.8	7.6	1.8
MR1	9/20/00	Baseline	7:45	206	(4)	35.0	0.5	19.7	8.2	92	74.5	7.4	0 [(2)] (0.7)
MR1	12/27/00	Baseline	7:45	206	(4)	61.0	0.5	3.3	13.7	104	81.7	7.2	1.3
MR1	1/11/01 [(1)]	Baseline	7:45	206	(4)	166.0	0.5	6.1	11.7	96	73.7	7.0	10.8
MR1	3/14/01	Baseline	7:40	206	(4)	136.0	0.5	8.0	12.5	106	67.5	7.0	8.4
MR1	5/30/01	Baseline	18:35	206	(4)	54.0	1.0	24.2	7.6	99	63.3	8.6	0.7
MR1	6/19/01	Baseline	7:22	206	(4)	42.0	0.3	21.3	8.1	95	63.7	7.3	1.5
MR1	7/23/01	Baseline	16:15	206	(4)	35.0	0.5	26.5	8.1	107	68.2	8.6	7.6
MR1	8/13/01	Baseline	13:34	206	(4)	34.0	1.0	25.7	8.6	106	59.1	8.4	1.5
MR1	9/26/01	Baseline	14:42	206	(4)	34.0	0.5	22.4	8.9	100	59.2	8.3	3.4
MR1	11/26/01 [(1)]	Baseline	14:00	206	(4)	88.0	0.5	8.2	11.5	98	69.2	7.4	0.4
MR1	12/19/01	Baseline	6:55	206	(4)	119.0	0.5	5.5	11.4	99	75.7	7.2	3.7
MR1	3/26/02	Interim	11:10	206	(4)	397.0	0.5	8.6	10.0	87	54.3	7.7	2.8
MR1	5/14/02	Interim	14:50	206	(4)	360.0	0.5	15.4	9.5	99	37.0	7.7	1.6
MR1	7/12/02	Interim	13:55	206	(4)	58.0	0.5	27.8	7.0	94	---	7.9	---
MR1	8/28/02	Interim	17:05	206	(4)	31.0	0.5	24.8	9.8	118	---	---	---
MR1	9/25/02	Interim	16:19	206	(4)	30.0	0.5	22.1	8.1	95	---	---	---
MR1	3/10/03	Interim	11:10	206	(4)	178.0	0.5	8.3	11.0	97	50.0	7.7	5.2
MR1	5/5/03	Interim	14:50	206	(4)	935.0	0.5	11.0	10.3	96	39.0	7.8	3.8
MR1	6/2/03	Interim	15:27	206	(4)	2366.0	0.5	15.1	10.0	104	19.8	6.8	9.6
MR1	7/8/03	Interim	15:00	206	(4)	68.0	0.5	23.4	8.2	97	49.0	7.0	0.0
MR1	8/20/03	Interim	13:08	206	(4)	40.0	0.5	25.5	7.2	94	50.6	7.9	0.0
MR1	9/11/03	Interim	7:16	206	(4)	8.7	0.5	18.9	8.1	90	45.0	7.1	5.7
MR1	4/12/04	Interim	15:57	206	(4)	145.2	1.0	14.6	9.0	90	35.0	8.3	4.1
MR1	5/18/04	Interim	17:00	206	(4)	309.8	2.0	18.2	8.9	96	35.0	7.5	5.0
MR1	6/1/04	Interim	16:00	206	(4)	92.1	1.0	20.2	8.2	92	31.0	7.6	4.6

Table A1. Year 2006 and Historical Water Quality Results for *In Situ* Measurements
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Elevation (m)	Gage ID	Flow [3] (cfs)	Depth (m)	Water Temperature (^{o}C)	DO (mg/L)	Saturation (%)	Specific Conductance (uS/cm)	pH (s.u.)	Turbidity (NTU)
MR1	7/13/04	Interim	16:30	206	(4)	23.5	1.0	27.2	8.2	106	49.0	8.7	0.2
MR1	8/24/04	Interim	9:49	206	(4)	24.6	1.0	21.5	7.7	90	46.0	7.5	0.0
MR1	9/21/04	Interim	10:27	206	(4)	28.5	1.0	15.1	8.5	87	52.0	7.4	0.0
MR1	3/22/05	Year 1	14:31	206	(4a)	1951.9	1.0	8.6	9.7	85 [5]	49.0	7.5	21.5
MR1	4/12/05	Year 1	13:47	206	(4a)	1257.4	1.0	10.0	9.7	88	36.0	7.6	6.4
MR1	5/24/05	Year 1	15:40	206	(4a)	2201.5	2.0	12.6	8.9	87	28.0	7.2	18.2
MR1	6/21/05	Year 1	14:10	206	(4a)	1297.3	1.0	14.7	8.6	87	25.0	7.1	22.5
MR1	7/19/05	Year 1	15:10	206	(4a)	227.3	2.0	21.7	7.5	87	37.0	7.7	0.5
MR1	8/9/05	Year 1	14:50	206	(4a)	57.1	2.0	25.9	7.9	100	57.0	8.6	0.0
MR1	9/30/05	Year 1	8:50	206	(4a)	46.2	2.0	16.9	7.5	83	60.0	7.6	1.2
MR1	12/8/05 [1]	Year 1	---	206	(4a)	NA	0.5	5.7	12.3	101	58.0	7.2	3.5
MR1	**3/22/06**	**Year 2**	**13:15**	**206**	**(4a)**	**NA**	**1.0**	**7.0**	**11.4**	**96**	**54**	**7.7[11]**	**4.7**
MR1	**4/25/06**	**Year 2**	**16:55**	**206**	**(4a)**	**NA**	**2.0**	**9.8**	**11.4**	**103**	**46**	**6.8[11]**	**14.4**
MR1	**5/8/06**	**Year 2**	**14:50**	**206**	**(4a)**	**NA**	**1.5**	**11.2**	**10.3**	**96**	**33**	**6.4[11]**	**6.3**
MR1	**6/21/06**	**Year 2**	**6:45**	**206**	**(4a)**	**NA**	**0.5**	**13.6**	**10.5**	**104**	**29**	**7.4[11]**	**5.9**
MR1	**7/18/06**	**Year 2**	**13:50**	**206**	**(4a)**	**NA**	**0.2**	**21.2**	**7.8**	**90**	**44**	**7.6**	**2.1**
MR1	**8/16/06**	**Year 2**	**14:30**	**206**	**(4a)**	**NA**	**1.8**	**21.6**	**8.2**	**95**	**60**	**7.9**	**0.0**
MR1	**9/19/06**	**Year 2**	**15:10**	**206**	**(4a)**	**NA**	**2.2**	**17.9**	**9.4**	**102**	**67**	**8.3**	**1.8**

1 = First significant winter storm of the season.

2 = Data suspect, second value is from laboratory turbidity screening for metals.

3 = Daily flow estimated from data collected at Pacific Gas and Electric maintained gaging stations; 2005 and 2006 data are preliminary and provisional.

4 = Flow equals combined flow at gage M46 plus flow at EBMUD gaging station 11317000 (middle fork Mokelumne)
plus flow at EBMUD gaging station 11318500 (south fork Mokelumne).

4a = All EBMUD flow data for 2005 is Preliminary and subject to revision.

5= Hand-held YSI DO meter used to determine dissolved oxygen measurement.

6= BR1 was inaccessible during this event; sample was collected downstream on the Bear River near gaging station M-32 above Salt Springs Road.

7= The outlet valve at MC2 was being replaced during site visit. Sample was from leak around old valve casement.

8= Lower Bear River Reservoir was spilling during this sampling event.

9=Water appeared clear despite high turbidity. Disturbance of sediments may have occurred.

10=Flow equals combined flow at gage 902A plus flow at gage M3 plus flow at gage M6.

11=Low bias is suspected for pH instruments used in March through June, 2006. For the Corning pH meter used in May and June, 2006, the low bias was verified in laboratory bench tests.

Table A2. Year 2006 and Historical Water Quality Results for Analytical Water Chemistry Parameters
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Gage ID	Flow [(2)] (cfs)	Total Hardness (mg/L)	TSS (mg/L)	Total Copper (ug/L)	Dissolved Copper * (ug/L)	Total Alkalinity (mg/L)	Total Nitrate as N (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)
BC2	7/26/00	Baseline	13:52	M3	22.1	9	1	<0.53	NS	12	<0.05	16	<2
BC2	8/8/00	Baseline	12:30	M3	22.1	10	<1.0	<0.53	NS	10	<0.05	4	2
BC2	9/20/00	Baseline	11:30	M3	28.0	11	<1.0	1.5 [J]	NS	12	<0.05	4	<2
BC2	12/27/00	Baseline	11:51	M3	5.4	14	2.6	<0.53	NS	14	<0.05	<2	<2
BC2	1/11/01 [1]	Baseline	---	M3	5.4	---	---	---	NS	---	---	---	---
BC2	3/15/01	Baseline	14:25	M3	5.4	10	1.2	<1.0	<1.0	14	0.06	2	<2
BC2	5/30/01	Baseline	12:55	M3	24.0	9	3.2	1.6 [J]	2.7 [J]	9	<0.05	<2	<2
BC2	6/18/01	Baseline	12:31	M3	8.0	12	2.4	<1.0	<1.0	11	<0.05	4	<2
BC2	7/23/01	Baseline	9:58	M3	8.5	15	1	1.7 [J]	<1.0	9	<0.05	11	<2
BC2	8/14/01	Baseline	10:53	M3	8.5	13	1.8	<1.0	<1.0	13	<0.05	13	<2
BC2	9/27/01	Baseline	9:11	M3	8.2	18	1.4	2.6 [J]	<1.0	13	<0.05	6	<2
BC2	11/26/01 [1]	Baseline	---	M3	2.0	---	---	---	---	---	---	---	---
BC2	12/19/01	Baseline	9:55	M3	2.0	12	<1.0	3.3 [J]	3.7 [J]	8	<0.05	17	13
BC2	3/27/02	Interim	10:36	M3	2.0	14	<1.0	1.6 [J]	<0.3	14	0.11	<2	<2
BC2	5/15/02	Interim	9:46	M3	6.9	9	9	<0.3	<0.3	10	<0.10	8	<2
BC2	3/22/05	Year 1	---	M3	NA	Heavy snowstorm, no access							
BC2	5/25/05	Year 1	12:50	M3	10.1	9	1.2	---	0.17	9.7 [H]	0.065	22	<2
BC2	6/22/05	Year 1	12:11	M3	28.7	8.5	0.9 [DNQ]	---	0.16	8.0	0.036	5.5	<2
BC2	7/20/05	Year 1	13:40	M3	53.1	9.8	0.5 [DNQ]	---	0.16	7.0 [DNQ]	<0.005	4	<2
BC2	8/11/05	Year 1	11:00	M3	54.6	9	<0.5	---	0.18	7.8 [DNQ]	<0.005	4	<2
BC2	9/27/05	Year 1	12:15	M3	5.9	10.1	1.0	---	0.17	8.6 [DNQ]	0.0055 [DNQ]	13	2
BC2	12/8/05 [1]	Year 1	13:45	M3	6.1	13.4	0.77 [DNQ]	---	0.31	12.2	0.0095 [DNQ]	2	<2
BC2	**3/21/06**	**Year 2**	**---**	**M3**	**NA**	**No safe access to sample water, too much snow present**							
BC2	**5/10/06**	**Year 2**	**10:45**	**M3**	**NA**	**20.6**	**<1.0**	**---**	**0.13**	**8.1[DNQ]**	**0.15**	**22**	**<2**
BC2	**6/21/06**	**Year 2**	**10:20**	**M3**	**27.6**	**9.2**	**<0.1**	**---**	**0.12**	**8.6[DNQ]**	**0.011[DNQ]**	**4**	**<2**
BC2	**7/19/06**	**Year 2**	**13:20**	**M3**	**73.0**	**7.6**	**<1.0**	**---**	**0.24**	**7.6[DNQ]**	**<0.01**	**<2**	**<2**
BC2	**8/17/06**	**Year 2**	**12:30**	**M3**	**33.6**	**8.0**	**0.5[DNQ]**	**---**	**0.63**	**6.4[DNQ]**	**<0.01**	**11**	**<2**
BC2	**9/21/06**	**Year 2**	**12:15**	**M3**	**30.5**	**9.4**	**<1.0**	**---**	**0.17**	**7.6[DNQ]**	**<0.01**	**4**	**<2**

Table A2. Year 2006 and Historical Water Quality Results for Analytical Water Chemistry Parameters
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Gage ID	Flow [(2)] (cfs)	Total Hardness (mg/L)	TSS (mg/L)	Total Copper (ug/L)	Dissolved Copper * (ug/L)	Total Alkalinity (mg/L)	Total Nitrate as N (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)
MC2	7/26/00	Baseline	15:00	M6	31.2	4	<1.0	<0.53	NS	6	<0.05	<2	<2
MC2	8/8/00	Baseline	14:10	M6	33.6	3	<1.0	<0.53	NS	8	<0.05	<2	<2
MC2	9/20/00	Baseline	14:05	M6	31.5	4	<1.0	1.8 [J]	NS	6	<0.05	<2	<2
MC2	12/27/00	Baseline	11:25	M6	6.7	7	1	<0.53	NS	10	<0.05	<2	<2
MC2	1/11/01 [1]	Baseline	---	M6	6.7	---	---	---	NS	---	---	---	---
MC2	3/15/01	Baseline	13:30	M6	6.7	6	3.1	0.6 [J]	<1.0	14	<0.05	4	<2
MC2	5/30/01	Baseline	14:40	M6	20.7	4	1.4	2.7 [J]	<1.0	7	<0.05	50	4
MC2	6/18/01	Baseline	14:35	M6	20.3	11	<1.0	<1.0	<1.0	9	<0.05	<2	<2
MC2	7/23/01	Baseline	12:27	M6	17.0	6	1.2	<1.0	<1.0	9	<0.05	<2	<2
MC2	8/14/01	Baseline	9:21	M6	19.1	7	<1.0	<1.0	<1.0	9	<0.05	<2	<2
MC2	9/27/01	Baseline	10:45	M6	9.5	4	<1.0	0.8 [J]	<1.0	9	<0.05	13	<2
MC2	11/26/01 [1]	Baseline	---	M6	11.6	---	---	---	---	---	---	---	---
MC2	12/19/01	Baseline	9:20	M6	11.6	<10	5.7	1.1 [J]	<0.3	8	<0.05	<2	<2
MC2	3/27/02	Interim	9:00	M6	12.0	10	3	5	<0.3	15	0.12	<2	<2
MC2	5/15/02	Interim	8:31	M6	9.5	4	1	<0.3	<0.3	<5	<0.10	2	<2
MC2	3/22/05	Year 1	---	M6	NA	Heavy snowstorm, no access							
MC2	5/25/05	Year 1	13:50	M6	24.5	5.5	1.4	---	0.1	<3.0 [H]	0.045	17	<2
MC2	6/22/05	Year 1	13:06	M6	150.2	4.0	0.4 [DNQ]	---	0.07	5.3 [DNQ]	0.022	2	<2
MC2	7/20/05	Year 1	14:25	M6	28.8	4.9	0.5 [DNQ]	---	0.08	3.8 [DNQ]	<0.005	<2	<2
MC2	8/11/05	Year 1	11:38	M6	28.6	3.0	<0.5	---	0.09	4.4 [DNQ]	<0.005	<2	<2
MC2	9/27/05	Year 1		M6	28.1	4.0	1.4	---	0.11	4.9 [DNQ]	<0.005	4	<2
MC2	12/8/05 [1]	Year 1	14:45	M6	5.9	Clouds and fog, unable to land helicopter, no samples							
MC2	**3/21/06**	**Year 2**	**---**	**M6**	**NA**	**No safe access to sample water, too much snow present**							
MC2	**5/10/06**	**Year 2**	**11:45**	**M6**	**NA**	**No safe access due to avalanche danger**							
MC2	**6/21/06**	**Year 2**	**11:55**	**M6**	**131.0**	**3.6**	**3.0**	**---**	**0.05**	**9.8[DNQ]**	**<0.01**	**4**	**<2**
MC2	**7/19/06**	**Year 2**	**14:25**	**M6**	**33.7**	**6.1**	**<1.0**	**---**	**0.09**	**3.8[DNQ]**	**<0.01**	**2**	**<2**
MC2	**8/17/06**	**Year 2**	**13:30**	**M6**	**28.1**	**5.0**	**0.2[DNQ]**	**---**	**0.05**	**3.3[DNQ]**	**<0.01**	**<2**	**<2**
MC2	**9/21/06**	**Year 2**	**13:20**	**M6**	**41.0**	**4.2**	**<1.0**	**---**	**0.11**	**4.6[DNQ]**	**<0.01**	**2**	**<2**

Table A2. Year 2006 and Historical Water Quality Results for Analytical Water Chemistry Parameters
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Gage ID	Flow [(2)] (cfs)	Total Hardness (mg/L)	TSS (mg/L)	Total Copper (ug/L)	Dissolved Copper * (ug/L)	Total Alkalinity (mg/L)	Total Nitrate as N (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)
NFMR2	7/26/00	Baseline	12:15	M11	36.1	6	NR	<0.53	NS	8	<0.05	<2	<2
NFMR2	8/8/00	Baseline	13:36	M11	36.6	6	<1.0	<0.53	NS	12	<0.05	<2	<2
NFMR2	9/20/00	Baseline	12:46	M11	36.7	7	<1.0	<0.53	NS	8	<0.05	7	<2
NFMR2	12/27/00	Baseline	13:40	M11	26.2	9	1.6	<0.53	NS	10	<0.05	<2	<2
NFMR2	1/11/01 [1]	Baseline	11:45	M11	21.4	11	1.4	<0.53	NS	12	<0.05	30	<2
NFMR2	3/14/01	Baseline	11:40	M11	21.8	10	5.2	1 [J]	<1.0	10	<0.05	14	<2
NFMR2	5/31/01	Baseline	10:45	M11	33.0	6	1.2	1.4 [J]	2.5 [J]	11	<0.05	14	<2
NFMR2	6/19/01	Baseline	13:15	M11	32.6	12	<1.0	<1.0	<1.0	7	<0.05	7	2
NFMR2	7/23/01	Baseline	16:15	M11	32.3	16	1	<1.0	<1.0	9	0.17	<2	<2
NFMR2	8/13/01	Baseline	9:57	M11	32.9	12	<1.0	<1.0	<1.0	9	<0.05	<2	<2
NFMR2	9/26/01	Baseline	9:57	M11	32.3	12	<1.0	2.7 [J]	<1.0	9	<0.05	23	2
NFMR2	11/26/01 [1]	Baseline	---	M11	21.8	---	---	---	--	---	---	---	---
NFMR2	12/19/01	Baseline	11:00	M11	21.5	<10	1.4	0.99 [J]	8.7	8	<0.05	30	23
NFMR2	3/27/02	Interim	12:00	M11	76.1	10	2	1.9 [J]	<0.3	11	0.18	30	<2
NFMR2	5/14/02	Interim	9:22	M11	228.8	3	8	1.2 [J]	<0.3	<5	<0.10	22	4
NFMR2	3/22/05	Year 1	9:15	M11	315.6	9.4	3.2	---	0.30	11.3	0.017* [DNQ]	14	<2
NFMR2	5/23/05	Year 1	11:30	M11	724.2	6.0	8.0	---	0.28	7.5 [H, DNQ]	0.029	110	4
NFMR2	6/21/05	Year 1	8:22	M11	1692.7	6.0	1.5	---	0.21	7.4 [DNQ]	<0.01	13	4
NFMR2	7/19/05	Year 1	9:00	M11	443.1	7.9	0.6 [DNQ]	---	0.22	6.2 [DNQ]	0.016	8	<2
NFMR2	8/10/05	Year 1	12:00	M11	322.7	6.0	<0.5	---	0.20	6.8 [DNQ]	0.006 [DNQ]	<2	<2
NFMR2	9/29/05	Year 1	14:00	M11	28.3	6.1	0.1 [DNQ]	---	0.24	6.0 [DNQ]	0.024	9	<2
NFMR2	12/7/05 [1]	Year 1	11:55	M11	36.6	8.9	1.5 [DNQ]	---	0.43	7.8 [DNQ]	0.02	140	13
NFMR2	**3/21/06**	**Year 2**	**14:30**	**M11**	**692.1**	**7.2**	**0.7 [DNQ]**	---	**0.22**	**7.3 [DNQ]**	**<0.01**	**2**	**<2**
NFMR2	**5/9/06**	**Year 2**	**13:30**	**M11**	**2361.6**	**20.6**	**3.8**	---	**0.12**	**6.29 [DNQ]**	**<0.01**	**8**	**<2**
NFMR2	**6/20/06**	**Year 2**	**11:35**	**M11**	**1541.3**	**7.1**	**<1.0**	---	**0.15**	**7.0[DNQ]**	**<0.01**	**4**	**<2**
NFMR2	**7/20/06**	**Year 2**	**8:20**	**M11**	**541.9**	**6.1**	**<1.0**	---	**0.20**	**5.9[DNQ]**	**<0.01**	**50**	**8**
NFMR2	**8/15/06**	**Year 2**	**8:45**	**M11**	**369.9**	**7.5**	**0.4[DNQ]**	**---**	**0.14**	**4.7[DNQ]**	**<0.01**	**<2**	**<2**
NFMR2	**9/19/06**	**Year 2**	**8:40**	**M11**	**37.4**	**6.3**	**<1.0**	**---**	**0.28**	**6.7[DNQ]**	**0.02**	**17**	**2**

Table A2. Year 2006 and Historical Water Quality Results for Analytical Water Chemistry Parameters
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Gage ID	Flow [(2)] (cfs)	Total Hardness (mg/L)	TSS (mg/L)	Total Copper (ug/L)	Dissolved Copper * (ug/L)	Total Alkalinity (mg/L)	Total Nitrate as N (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)
BR1	7/26/00	Baseline	10:43	M49	4.9	6	NR	6.9	NS	6	<0.05	<2	<2
BR1	8/8/00	Baseline	17:18	M49	4.7	5	<1.0	7.1	NS	6	<0.05	2	<2
BR1	9/20/00	Baseline	17:07	M49	5.1	6	<1.0	5.7	NS	6	0.07	4	<2
BR1	12/27/00	Baseline	12:51	M49	2.4	6	1.4	1.1 [J]	NS	8	<0.05	<2	<2
BR1	1/11/01 [1,4]	Baseline	11:05	M49	2.5	12	<1.0	1.1 [J]	NS	14	<0.05	170	<2
BR1	3/15/01	Baseline	15:00	M49	3.0	9	5	40	23	8	<0.05	2	<2
BR1	5/30/01	Baseline	9:25	M49	5.0	10	1.6	20	20 (18)	<5.0	0.07	2	<2
BR1	6/18/01	Baseline	17:35	M49	4.7	9	1.4	12	5.2 (6.4)	5	<0.05	<2	<2
BR1	7/23/01	Baseline	15:05	M49	4.5	10	1	4.8 [J]	3.8 [J] (4.8) [J]	9	<0.05	2	<2
BR1	8/14/01	Baseline	8:44	M49	5.1	9	<1.0	5.9	4.0 [J] (2.8) [J]	4	0.06	<2	<2
BR1	9/27/01	Baseline	13:25	M49	4.7	8	<1.0	2.1 [J]	0.8 [J] (2.1) [J]	7	0.08	4	<2
BR1	11/26/01 [1,4]	Baseline	10:40	M49	3.1	13	1	6.4	4.2 [J] (5.0)	10	<0.05	300	7
BR1	12/19/01	Baseline	10:40	M49	3.3	<10	1.6	14	<0.3	5	<0.05	23	23
BR1	3/27/02	Interim	12:35	M49	7.8	7	1	27	19	6	0.09	<2	<2
BR1 (dup)	3/27/02	Interim	12:35	M49	---	---	---	---	22.4	---	---	---	---
BR1	5/15/02	Interim	11:55	M49	7.6	5	12	14	12	<5	<0.10	<2	<2
BR1 (dup)	5/15/02	Interim	11:55	M49	---	---	---	---	12.2	---	---	---	---
BR1	3/23/05	Year 1	9:15	M49	181.9	6.2	1.7 [DNQ]	---	2.4	7.4 [DNQ]	0.054*	4	<2
BR1	5/24/05	Year 1	8:40	M49	149.1	9.0	0.6 [DNQ]	---	1.2	6.0 [H, DNQ]	0.023	4	<2
BR1	6/22/05 [5]	Year 1	15:20	M49	368.5	4.5	0.3 [DNQ]	---	0.49	6.9 [DNQ]	<0.01	8	<2
BR1	7/21/05	Year 1	8:25	M49	5.4	8.9	<0.5	---	7.39 [F]	5.1 [DNQ]	0.021	4	<2
BR1	8/10/05	Year 1	14:40	M49	5.7	5.0	0.6 [DNQ]	---	5.8 [F]	4.7 [DNQ]	0.022	4	<2
BR1	9/28/05	Year 1	11:25	M49	6.1	10.1	0.5 [DNQ]	---	1.9	4.6 [DNQ]	0.029	1,600	<2
BR1	12/7/05 [1]	Year 1	10:40	M49	17.0	5.9	0.59 [DNQ]	---	3.25	4.8 [DNQ]	0.0054 [DNQ]	170	<2
BR1	**3/21/06**	**Year 2**	**13:15**	M49	**95.0**	**8.2**	**4.8**	**---**	**0.64**	**3.3 [DNQ]**	**0.012 [DNQ]**	**<2**	**<2**
BR1	**5/10/06**	**Year 2**	**12:10**	M49	**95.0**	**18.5**	**<1.0**	**---**	**0.65**	**4.0 [DNQ]**	**0.011 [DNQ]**	**8**	**<2**
BR1	**6/19/06**	**Year 2**	**14:45**	M49	**127.4**	**6.1**	**<1.0**	**---**	**0.39**	**4.2 [DNQ]**	**<0.01**	**8**	**<2**
BR1	**7/18/06**	**Year 2**	**9:10**	M49	**36.9**	**6.6**	**<0.1**	**---**	**1.09**	**4.3 [DNQ]**	**<0.01**	**22**	**<2**
BR1	**8/16/06**	**Year 2**	**9:20**	M49	**20.9**	**5.5**	**0.4 [DNQ]**	**---**	**1.02**	**4.1 [DNQ]**	**<0.01**	**2**	**<2**
BR1	**9/20/06**	**Year 2**	**10:00**	M49	**20.1**	**5.2**	**<1.0**	**---**	**0.70**	**5.4 [DNQ]**	**<0.01**	**2**	**<2**

Table A2. Year 2006 and Historical Water Quality Results for Analytical Water Chemistry Parameters
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Gage ID	Flow [(2)] (cfs)	Total Hardness (mg/L)	TSS (mg/L)	Total Copper (ug/L)	Dissolved Copper * (ug/L)	Total Alkalinity (mg/L)	Total Nitrate as N (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)
TC1	7/26/00	Baseline	14:56	M76	10.7	6	NR	<0.53	NS	8	<0.05	2	<2
TC1	8/8/00	Baseline	12:15	M76	10.7	6	<1.0	<0.53	NS	6	<0.05	2	2
TC1	9/20/00	Baseline	11:30	M76	10.7	6	<1.0	1.9 J	NS	9	<0.05	8	4
TC1	12/27/00	Baseline	14:20	M76	5.5	8	1.4	<0.53	NS	28	<0.05	2	<2
TC1	1/11/01 [1]	Baseline	9:50	M76	5.5	16	2.8	<0.53	NS	10	<0.05	23	<2
TC1	3/14/01	Baseline	14:10	M76	5.5	9	4.8	0.8 J	<1.0	10	<0.05	50	2
TC1	5/31/01	Baseline	13:00	M76	10.5	8	1.1	1.7 J	3.2 J	6	<0.05	17	4
TC1	6/19/01	Baseline	12:00	M76	10.5	9	4.8	0.8 J	<1.0	7	<0.05	90	13
TC1	7/24/01	Baseline	9:50	M76	10.7	11	<1.0	<1.0	<1.0	7	<0.05	17	<2
TC1	8/13/01	Baseline	11:10	M76	10.8	9	2.2	<1.0	<1.0	9	<0.05	22	2
TC1	9/26/01	Baseline	11:40	M76	10.8	10	1	3.8 J	<1.0	9	<0.05	13	<2
TC1	11/26/01 [1]	Baseline	11:55	M76	5.5	10	3	2.5 J	1.1 J	10	<0.05	220	4
TC1	12/19/01	Baseline	11:55	M76	5.4	<10	<1.0	3.2 J	<0.3	8	<0.05	50	<2
TC1	3/26/02	Interim	8:15	M76	10.3	8	4	<0.5	<0.3	10	0.13	12	<2
TC1	5/14/02	Interim	11:25	M76	7.6	5	10	<0.3	<0.3	<5	<0.10	70	<2
TC1	3/22/05	Year 1	11:15	M76	23.4	9.4	9.8	---	0.17	9.9	0.019* DNQ	80	2
TC1	5/23/05	Year 1	14:25	M76	8.6	7.5	3.9	---	Not received	6.4 H, DNQ	0.107	110	2
TC1	6/21/05	Year 1	10:30	M76	5.5	7.0	1.5	---	0.23	7.3 DNQ	<0.01	28	<2
TC1	7/19/05	Year 1	11:25	M76	5.5	7.9	0.7 DNQ	---	0.39	6.0 DNQ	0.010 DNQ	26	8
TC1	8/9/05	Year 1	10:50	M76	3.5	6.0	<0.5	---	0.23	7.6 DNQ	0.006 DNQ	50	13
TC1	9/28/05	Year 1	13:15	M76	3.2	6.1	0.7 DNQ	---	0.21	6.6 DNQ	0.012	70	23
TC1	12/7/05 [1]	Year 1	13:30	M76	5.5	5.9	1.5 DNQ	---	0.30	8.0 DNQ	0.0166	170	13
TC1	**3/22/06**	**Year 2**	**9:45**	**M76**	**11.1**	**7.2**	**0.8 DNQ**	**---**	**0.20**	**6.3 DNQ**	**<0.01**	**7**	**<2**
TC1	**5/8/06**	**Year 2**	**11:10**	**M76**	**7.7**	**23.7**	**<1.0**	**---**	**0.03**	**17.6**	**<0.01**	**23**	**<2**
TC1	**6/21/06**	**Year 2**	**13:25**	**M76**	**5.5**	**7.1**	**<1.0**	**---**	**0.20**	**6.6DNQ**	**<0.01**	**6**	**<2**
TC1	**7/17/06**	**Year 2**	**14:10**	**M76**	**5.5**	**6.1**	**<1.0**	**---**	**0.20**	**6.8DNQ**	**<0.01**	**17**	**11**
TC1	**8/15/06**	**Year 2**	**12:40**	**M76**	**3.6**	**6.0**	**3.4**	**---**	**0.85**	**4.5DNQ**	**<0.01**	**17**	**2**
TC1	**9/19/06**	**Year 2**	**11:30**	**M76**	**3.6**	**7.4**	**<1.0**	**---**	**0.27**	**8.3DNQ**	**0.02**	**21**	**4**

Table A2. Year 2006 and Historical Water Quality Results for Analytical Water Chemistry Parameters
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Gage ID	Flow [(2)] (cfs)	Total Hardness (mg/L)	TSS (mg/L)	Total Copper (ug/L)	Dissolved Copper * (ug/L)	Total Alkalinity (mg/L)	Total Nitrate as N (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)
NFMR3	7/26/00	Baseline	14:15	M38	63.4	18	NR	<0.53	NS	22	<0.05	17	<2
NFMR3	8/8/00	Baseline	8:25	M38	62.9	17	1.8	2.8 [J]	NS	20	<0.05	110	2
NFMR3	9/20/00	Baseline	10:50	M38	58.4	19	<1.0	1.7 [J]	NS	21	<0.05	22	<2
NFMR3	12/27/00	Baseline	10:57	M38	64.8	23	1.1	<0.53	NS	28	<0.05	13	4
NFMR3	1/11/01 [1]	Baseline	9:11	M38	105.6	24	2.4	0.8 [J]	NS	26	<0.05	300	22
NFMR3	3/14/01	Baseline	11:00	M38	106.2	22	<1.0	<1.0	<1.0	31	<0.05	33	<2
NFMR3	5/30/01	Baseline	10:00	M38	77.6	18	<1.0	3.6 [J]	<1.0	24	<0.05	130	17
NFMR3	6/19/01	Baseline	10:50	M38	50.7	21	<1.0	0.8 [J]	<1.0	24	<0.05	300	80
NFMR3	7/25/01	Baseline	10:30	M38	62.7	20	<1.0	1.5 [J]	<1.0	20	<0.05	220	13
NFMR3	8/13/01	Baseline	11:51	M38	60.5	19	<1.0	<1.0	<1.0	17	<0.05	32	<2
NFMR3	9/26/01	Baseline	12:24	M38	52.8	20	<1.0	1.4 [J]	0.8 [J]	22	<0.05	80	13
NFMR3	11/26/01 [1]	Baseline	12:25	M38	85.6	20	1.8	4.9 [J]	0.7 [J]	25	<0.05	300	17
NFMR3	12/19/01	Baseline	8:10	M38	77.7	24	<1.0	1.2	0.7 [J]	23	<0.05	300	<2
NFMR3	3/26/02	Interim	9:10	M38	289.0	19	2	2 [J]	<0.3	23	0.14	14	<2
NFMR3	5/14/02	Interim	12:19	M38	495.0	8	6	<0.3	<0.3	<5	<0.10	50	7
NFMR3	3/22/05	Year 1	11:58	M38	1024.2	17.2	16.4	---	0.36	18.1	0.031*	170	13
NFMR3	5/23/05	Year 1	15:15	M38	2104.3	9.5	5.4	---	0.40	9.6 [H]	0.016 [DNQ]	14	2
NFMR3	6/21/05	Year 1	11:15	M38	1835.8	8.0	4.6	---	0.30	9.5	<0.01	33	4
NFMR3	7/19/05	Year 1	12:15	M38	474.7	11.8	0.6 [DNQ]	---	0.26	10.6	<0.005	14	7
NFMR3	8/9/05	Year 1	13:07	M38	309.1	9.5	<0.5	---	0.24	11.4	<0.005	14	4
NFMR3	9/28/05	Year 1	14:00	M38	70.7	22.2	14.4	---	0.37	22.2	0.006 [DNQ]	280	23
NFMR3	12/7/05 [1]	Year 1	14:10	M38	127.6	14.8	0.80 [DNQ]	---	0.61	18.1	0.0977	300	8
NFMR3	**3/22/06**	**Year 2**	**10:35**	**M38**	**1025.2**	**12.9**	**1.6**	**---**	**0.29**	**12.8**	**0.014 [DNQ]**	**130**	**4**
NFMR3	**5/8/06**	**Year 2**	**11:50**	**M38**	**3294.6**	**17.5**	**4.7**	**---**	**0.33**	**9.24 [DNQ]**	**<0.01**	**11**	**<2**
NFMR3	**6/21/06**	**Year 2**	**8:20**	**M38**	**1942.6**	**8.2**	**1.5**	**---**	**0.18**	**7.0 [DNQ]**	**<0.01**	**7**	**<2**
NFMR3	**7/17/06**	**Year 2**	**15:15**	**M38**	**512.7**	**13.3**	**<1.0**	**---**	**0.24**	**10.7**	**<0.01**	**50**	**4**
NFMR3	**8/15/06**	**Year 2**	**13:30**	**M38**	**371.5**	**9.5**	**0.6 [DNQ]**	**---**	**0.48**	**9.0 [DNQ]**	**<0.01**	**7**	**<2**
NFMR3	**9/19/06**	**Year 2**	**12:35**	**M38**	**108.5**	**20.0**	**<1.0**	**---**	**0.32**	**20.1**	**<0.01**	**17**	**2**

Table A2. Year 2006 and Historical Water Quality Results for Analytical Water Chemistry Parameters
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Gage ID	Flow [(2)] (cfs)	Total Hardness (mg/L)	TSS (mg/L)	Total Copper (ug/L)	Dissolved Copper * (ug/L)	Total Alkalinity (mg/L)	Total Nitrate as N (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)
NFMR5	7/26/00	Baseline	8:30	M46	17.5	14	NR	<0.53	NS	18	<0.05	220	4
NFMR5	8/8/00	Baseline	8:25	M46	17.5	10	15	3.2 [J]	NS	14	<0.05	50	17
NFMR5	9/20/00	Baseline	8:30	M46	17.2	8	<1.0	2.6 [J]	NS	11	<0.05	30	17
NFMR5	12/27/00	Baseline	15:18	M46	13.1	12	<1.0	<0.53	NS	14	<0.05	<2	<2
NFMR5	1/11/01 [1]	Baseline	8:20	M46	12.7	18	6.4	0.8 [J]	NS	20	<0.05	500	11
NFMR5	3/14/01	Baseline	15:00	M46	12.1	17	2.4	0.7 [J]	<1.0	22	<0.05	8	2
NFMR5	5/30/01	Baseline	17:15	M46	17.7	14	<1.0	3.8 [J]	1.3 [J]	17	<0.05	<2	<2
NFMR5	6/19/01	Baseline	9:24	M46	17.8	12	<1.0	0.6 [J]	<1.0	9	<0.05	50	8
NFMR5	7/25/01	Baseline	11:38	M46	17.7	13	<1.0	<1.0	<1.0	11	<0.05	11	2
NFMR5	8/13/01	Baseline	12:33	M46	17.9	11	<1.0	<1.0	<1.0	9	<0.05	50	4
NFMR5	9/26/01	Baseline	13:37	M46	17.3	12	<1.0	5.4	1.2 [J]	13	<0.05	50	8
NFMR5	11/26/01 [1]	Baseline	13:05	M46	12.0	16	1.6	1.7 [J]	1.1 [J]	17	<0.05	300	14
NFMR5	12/19/01	Baseline	12:30	M46	12.0	16	<1.0	1.6 [J]	<0.3	8	<0.05	280	9
NFMR5	3/26/02	Interim	10:00	M46	98.2	13	3	3 [J]	<0.3	16	0.16	900	<2
NFMR5	5/14/02	Interim	13:50	M46	272.0	9	6	<0.3	10	7	<0.10	140	4
NFMR5	3/22/05	Year 1	13:20	M46	836.9	14.6	4.0	---	0.38	18.4	0.030*	140	13
NFMR5	5/24/05	Year 1	14:30	M46	1813.5	11.0	4.6	---	0.37	11.4 [H]	0.022	110	4
NFMR5	6/21/05	Year 1	12:40	M46	1170.3	8.0	3.4	---	0.33	10.1	0.074	90	<2
NFMR5	7/19/05	Year 1	14:00	M46	176.3	9.8	0.7 [DNQ]	---	0.28	8.4 [DNQ]	<0.005	40	8
NFMR5	8/9/05	Year 1	13:55	M46	26.1	7.5	0.5 [DNQ]	---	0.25	8.4 [DNQ]	<0.005	170	4
NFMR5	9/30/05	Year 1	7:45	M46	25.4	13.1	0.2 [DNQ]	---	0.36	9.4 [DNQ]	0.017	21	<2
NFMR5	12/7/05 [1]	Year 1	15:00	M46	52.0	10.9	0.96 [DNQ]	---	1.20	10.8	0.0443	220	8
NFMR5	**3/22/06**	**Year 2**	**12:00**	**M46**	**657.1**	**18.5**	**1.1**	**---**	**0.44**	**17.5**	**<0.01**	**50**	**2**
NFMR5	**5/8/06**	**Year 2**	**13:35**	**M46**	**2723.9**	**19.6**	**6.3**	**---**	**0.25**	**9.0 [DNQ]**	**0.011 [DNQ]**	**23**	**<2**
NFMR5	**6/20/06**	**Year 2**	**15:00**	**M46**	**1684.2**	**8.7**	**1.1**	**---**	**0.18**	**6.1 [DNQ]**	**<0.01**	**21**	**<2**
NFMR5	**7/18/06**	**Year 2**	**14:30**	**M46**	**162.7**	**8.7**	**<1.0**	**---**	**0.33**	**9.6 [DNQ]**	**<0.01**	**50**	**30**
NFMR5	**8/15/06**	**Year 2**	**15:00**	**M46**	**43.1**	**8.5**	**0.7 [DNQ]**	**---**	**0.28**	**8.1 [DNQ]**	**<0.01**	**70**	**13**
NFMR5	**9/19/06**	**Year 2**	**13:55**	**M46**	**68.2**	**20.0**	**<1.0**	**---**	**0.32**	**21.1**	**<0.01**	**21**	**4**

Table A2. Year 2006 and Historical Water Quality Results for Analytical Water Chemistry Parameters
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Gage ID	Flow [(2)] (cfs)	Total Hardness (mg/L)	TSS (mg/L)	Total Copper (ug/L)	Dissolved Copper * (ug/L)	Total Alkalinity (mg/L)	Total Nitrate as N (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)
MR1	7/26/00	Baseline	7:59	(3)	44.0	28	NR	<0.53	NS	31	<0.05	500	23
MR1	8/8/00	Baseline	7:58	(3)	38.0	9	1.4	1.2 [J]	NS	33	<0.05	300	80
MR1	9/20/00	Baseline	7:45	(3)	35.0	30	1	1.3 [J]	NS	34	<0.05	1,600	17
MR1	12/27/00	Baseline	7:45	(3)	61.0	33	<1.0	<0.53	NS	37	<0.05	23	23
MR1	1/11/01 [1]	Baseline	7:45	(3)	166.0	30	9.7	<0.53	NS	33	<0.05	2,400	80
MR1	3/14/01	Baseline	7:40	(3)	136.0	25	<1.0	<1.0	<1.0	32	<0.05	14	11
MR1	5/30/01	Baseline	18:35	(3)	54.0	26	1.3	38	<1.0	33	<0.05	240	11
MR1	6/19/01	Baseline	7:22	(3)	42.0	29	1	0.6 [J]	<1.0	29	<0.05	280	70
MR1	7/23/01	Baseline	16:15	(3)	35.0	35	1.6	0.61 [J]	<1.0	31	<0.05	1,600	17
MR1	8/13/01	Baseline	13:34	(3)	34.0	28	2.4	<1.0	<1.0	27	<0.05	220	4
MR1	9/26/01	Baseline	14:42	(3)	34.0	29	<1.0	0.8 [J]	<1.0	26	<0.05	90	2
MR1	11/26/01 [1]	Baseline	14:00	(3)	88.0	32	2.4	1.5 [J]	0.8 [J]	31	<0.05	500	30
MR1	12/19/01	Baseline	6:55	(3)	119.0	31	1.2	1.1 [J]	1.5 [J]	20	<0.05	900	23
MR1	3/26/02	Interim	11:10	(3)	397.0	22	2	1.8 [J]	<0.3	26	0.10	12	<2
MR1	5/14/02	Interim	14:50	(3)	360.0	13	21	<0.3	0.81 [J]	7	<0.10	131	8
MR1	3/22/05	Year 1	14:31	(3)	1951.9	19.8	14.5	---	0.33	21.3	0.024*	240	50
MR1	5/24/05	Year 1	15:40	(3)	2201.5	10.0	5.0	---	0.32	11.5 [H]	0.019 [DNQ]	>2,400	4
MR1	6/21/05	Year 1	14:10	(3)	1297.3	10.5	7.0	---	0.29	12.2	<0.01	21	2
MR1	7/19/05	Year 1	15:10	(3)	227.3	14.8	0.6 [DNQ]	---	0.33	15.0	<0.005	500	8
MR1	8/9/05	Year 1	14:50	(3)	57.1	21.5	<0.5	---	0.35	23.7	<0.005	280	14
MR1	9/30/05	Year 1	8:45	(3)	46.2	24.2	1.8	---	0.41	22.8	0.038	1,600	50
MR1	12/8/05 [1]	Year 1	---	(3)	NA	20.8	0.53 [DNQ]	---	0.54	21.7	0.0283	170	17
MR1	**3/22/06**	**Year 2**	**13:15**	**(3)**	**NA**	**20.6**	**1.9**	**---**	**0.35**	**19.7**	**0.016 [DNQ]**	**40**	**<2**
MR1	**5/8/06**	**Year 2**	**15:00**	**(3)**	**NA**	**20.6**	**7.0**	**---**	**0.4**	**12.0**	**<0.01**	**13**	**2**
MR1	**6/21/06**	**Year 2**	**6:45**	**(3)**	**NA**	**10.2**	**<1.0**	**---**	**0.35**	**10.4**	**<0.01**	**80**	**8**
MR1	**7/18/06**	**Year 2**	**16:00**	**(3)**	**NA**	**17.8**	**<1.0**	**---**	**0.31**	**18.1**	**<0.01**	**240**	**50**
MR1	**8/16/06**	**Year 2**	**15:00**	**(3)**	**NA**	**22.0**	**0.4 [DNQ]**	**---**	**0.26**	**24.3**	**<0.01**	**23**	**4**
MR1	**9/19/06**	**Year 2**	**15:25**	**(3)**	**NA**	**25.2**	**1.1**	**---**	**0.30**	**28.0**	**<0.01**	**50**	**23**

Table A2. Year 2006 and Historical Water Quality Results for Analytical Water Chemistry Parameters
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Station	Sampling Date	Year Classification	Time	Gage ID	Flow [(2)] (cfs)	Total Hardness (mg/L)	TSS (mg/L)	Total Copper (ug/L)	Dissolved Copper * (ug/L)	Total Alkalinity (mg/L)	Total Nitrate as N (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)
Blank	3/22/05	Year 1	16:00	---	---	<1.0	---	---	<0.01	---	0.015* DNQ	---	---
Blank	5/24/05	Year 1	16:20	---	---	<1.0	---	---	<0.01	---	<0.01	---	---
Blank	6/21/05	Year 1	16:45	---	---	<1.0	---	---	<0.01	---	<0.01	---	---
Blank	7/19/05	Year 1	16:20	---	---	<1.0	---	---	0.24	---	<0.005	---	---
Blank	8/9/05	Year 1	16:15	---	---	<1.0	---	---	0.18	---	---	---	---
Blank	9/30/05	Year 1	16:00	---	---	<1.0	---	---	<0.01	---	0.010 DNQ	---	---
Blank	12/7/05 [1]	Year 1	9:15	---	---	<1.0	---	---	0.05	---	0.0062 DNQ	---	---
Blank	**3/22/06**	**Year 2**	**14:20**	**---**	**---**	**<1.0**	**---**	**---**	**0.02[J]**	**---**	**<0.01**	**---**	**---**
Blank	**5/10/06**	**Year 2**	**13:30**	**---**	**---**	**<1.0**	**---**	**---**	**<0.01**	**---**	**0.045 [6]**	**---**	**---**
Blank	**6/20/06**	**Year 2**	**16:00**	**---**	**---**	**<1.0**	**---**	**---**	**0.02[J]**	**---**	**<0.01**	**---**	**---**
Blank	**7/18/06**	**Year 2**	**17:00**	**---**	**---**	**<1.0**	**---**	**---**	**<0.01**	**---**	**<0.01**	**---**	**---**
Blank	**8/16/06**	**Year 2**	**16:00**	**---**	**---**	**<1.0**	**---**	**---**	**<0.01**	**---**	**<0.01**	**---**	**---**
Blank	**9/19/06**	**Year 2**	**15:25**	**---**	**---**	**<1.0**	**---**	**---**	**0.03**	**---**	**<0.01**	**---**	**---**

Notes:

--- = Data not collected.

NS = Year 2000 Copper measurements are reported as total copper only.

NA = Data unavailable at time of report production

( ) = Second value in parantheses for dissolved copper measurements represents field filtered sample.

DNQ = "Detected but not quantified," or detected above the method detection limit, but not quantified by analytical laboratory.

J = Estimated value below the reporting limit and above method detection limit.

* Samples were overacidified in the field creating a pH effect, values are estimations by laboratory.

F = New FERC flows were not achieved during these two sampling events at station BR1 (July and August of 2005).

H = samples were analyzed by the analytical laboratory out of holding time. They were received on time, but run late by lab inadvertently.

dup = duplicate sample collected from this station and analyzed by Department of Fish and Game, Water Pollution Laboratory (Standard Methods 3113).

1 = First significant winter storm of the season.

2 = Daily flow estimated from data collected at Pacific Gas and Electric maintained gaging stations. 2005 and 2006 data are preliminary and provisional.

3 = Flow equals combined flow at gage M46 plus flow at EBMUD gaging station 11317000 (middle fork Mokelumne) plus flow at EBMUD gaging station 11318500.

4 = BR1 was inaccessible during this event, sample was collected downstream on the Bear River near Licensee maintained gaging station M-32 above Salt Springs Road.

5 = Lower Bear River Reservoir was spilling during this sampling event.

Table A2. Year 2006 and Historical Water Quality Results for Analytical Water Chemistry Parameters
Pacific Gas and Electric Company's Mokelumne River Project (FERC 137)

Notes continued:

6 = The nitrate sample was analyzed in duplicate in two separate autosampler vials. There appears to be contamination in the original sample.

STL = Severn Trent Laboratories. Samples were analyzed by this lab from July 2000 through May 2002. Reporting limits for STL as of March 2002 were 0.3 ug/L for MDL and 5.0 ug/L for the RL.

MPSL = Marine Pollution Studies Laboratory, Moss Landing CA, Department of Fish and Game. Analyzed dissolved copper samples using ultraclean method for the remainder of the study, March 2005 to the present. Reporting limits for MPSL, Dept of Fish and Game, were 0.01 ug/L = MDL and 0.03 ug/L for RL (Ultra Clean Methodology).

WPCL = Water Pollution Control Lab, Rancho Cordova CA, Department of Fish and Game. This lab provided the rest of the analytical measurements from March 2005 to the present.

SFHL = Sierra Foothill Laboratory. Analyzed total and fecal coliform samples for the Project.

Appendix B

Mokelumne River Project (FERC No. 137)
2006 Water Quality Meter Calibration Certificate and Correspondence

Memorandum

Date: December 8, 2006 **File #:**

To: ENVIRONMENTAL SERVICES

From: TECHNICAL AND LAND SERVICES

Subject: Hyddrolab Instrument 2006 Calibration Report

Pacific Gas and Electric Company

CHARLES WHITE
ELIZABETH FRANTZ

I certify that between March and December, 2006 the Hydrolab® multi-parameter water quality analyzers listed below were calibrated prior to each field deployment or monthly at PG&E's Technical and Land Services Department (TLS) or at the Hach/Hydrolab Loveland, Colorado repair department using manufacturer's calibration procedures. In the event that any specific sensor probe was found to be out of tolerance, a calibrated backup meter was deployed.

These are field instruments for in-situ readings and although a log documenting monthly calibrations is maintained in the Chemistry Laboratory (Room 155) at TLS, most of the instruments were calibrated by qualified PG&E personnel in the field more often than that depending on deployment schedules.

Instrument Identification:
Hydrolab Quanta®. #1 S/N 01310/01277
Hydrolab Quanta® #2 S/N 01943/02100
Hydrolab Quanta® #3 S/N 01602/02089
Hydrolab Data Sonde 4a® S/N 37743
Hydrolab Data Sonde 5® S/N 42706

ERIC KENZLER
Technologist, TLS

EMKenzler(251-5806)
Pc: Ed Cheslak
Scott Tu

From: Hintze, Ray
Sent: Friday, July 14, 2006 9:53 AM
To: Frantz, Elizabeth
Cc: Kenzler, Eric; Da Silva, Clement; Tilly, Daniel J
Subject: Field pH meters

Elizabeth,

At your request, I did some investigation into the performance of two field pH meters, a Corning 313 and an Orion 290 (donated by HPPP).

Both meters responded well to standard buffers, and were within normal calibration parameters. Eric provided me with the instructions for the Corning, as well as filling me in on the difficulties he has been having in the field. Since the meters are typically used on low conductivity surface waters, I prepared two synthetic low conductivity water from lab deionized water plus about 5-10% tap water. pH electrodes have the easiest time reading water with high conductivity. Low conductivity water usually requires longer equilibration times and shows greater variablity. Also, with low conductivity water there is very little natural buffering, and natural absorption of atmospheric carbon dioxide will lower pH through the hydrolysis of the resulting carbonic acid.

In addition to synthetic low conductivity water,I also measured straight tap water with the two pH meters and compared their readings to my laboratory meter, an Orion 520A+

Below are my readings:

Water source	Orion 520A+	Corning 313	Orion 290
Low cond #1	6.93	5.81	6.75
Low cond #2	7.06	5.73	7.05
Tap	9.07	8.30	9.02

As you can see, the two Orion meters agree pretty well, but the Corning meter is biased low. I don't recommend using the Corning meter in the field, but the Orion meter should perfom well.

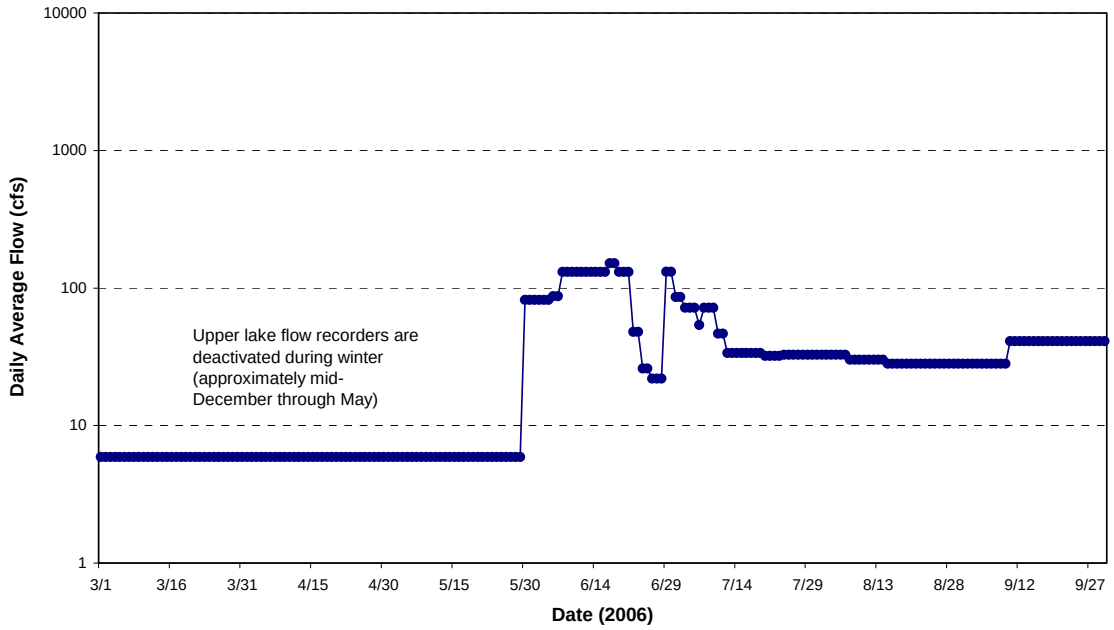
Ray

Appendix C

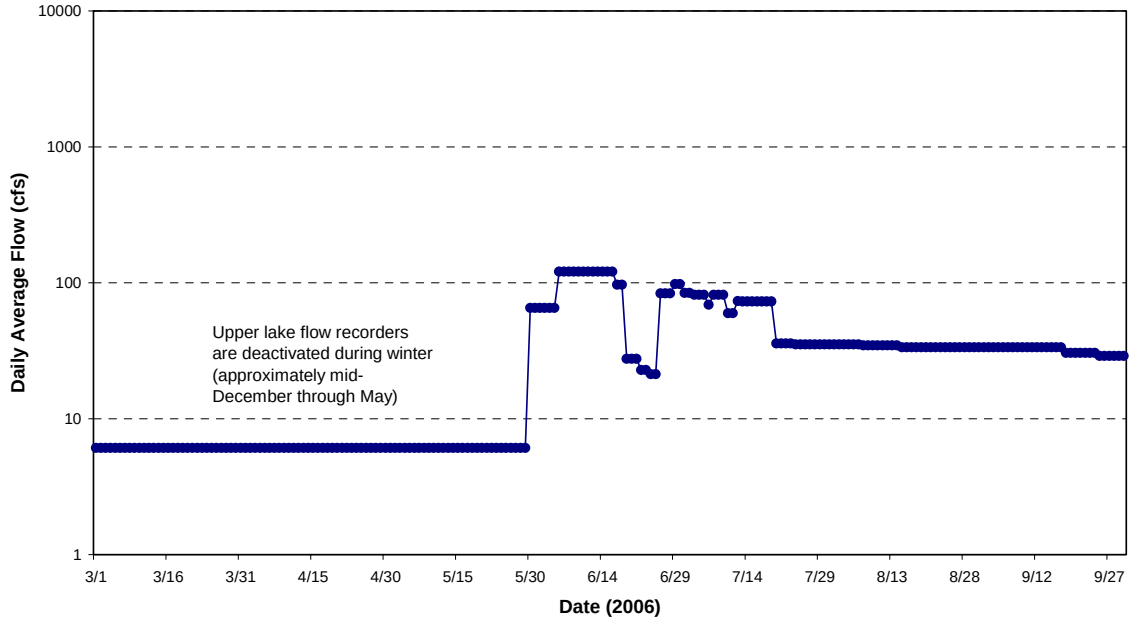
Mokelumne River Project (FERC No. 137)
2006 Daily Average Stream Flow Plots

All 2006 flow data are preliminary and subject to change

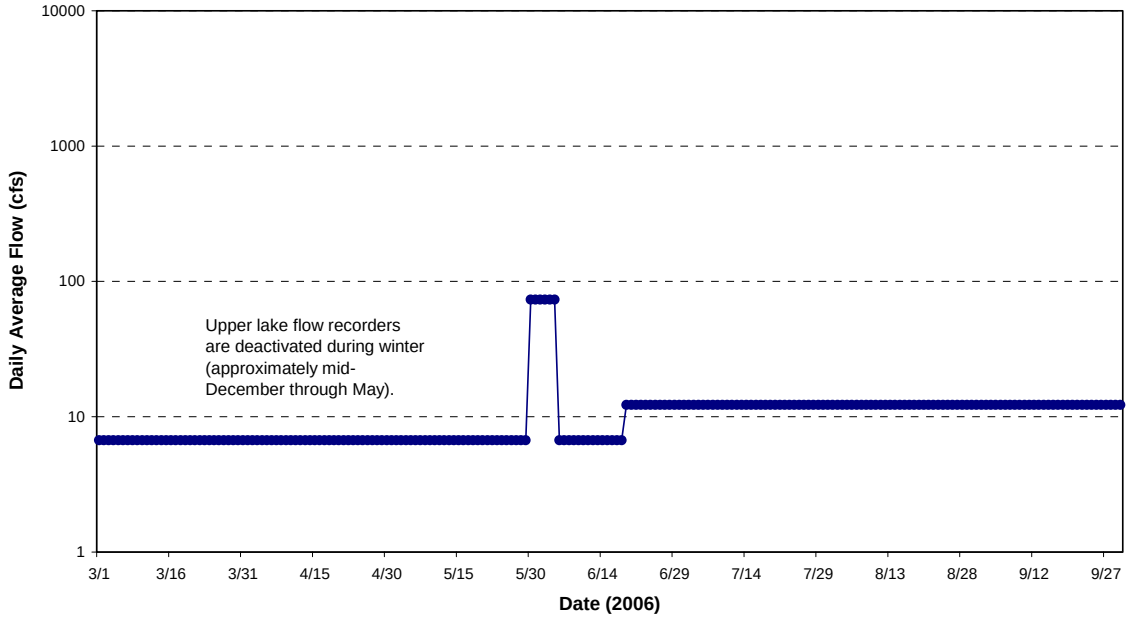
M6
Meadow Creek below Meadow Lake Dam



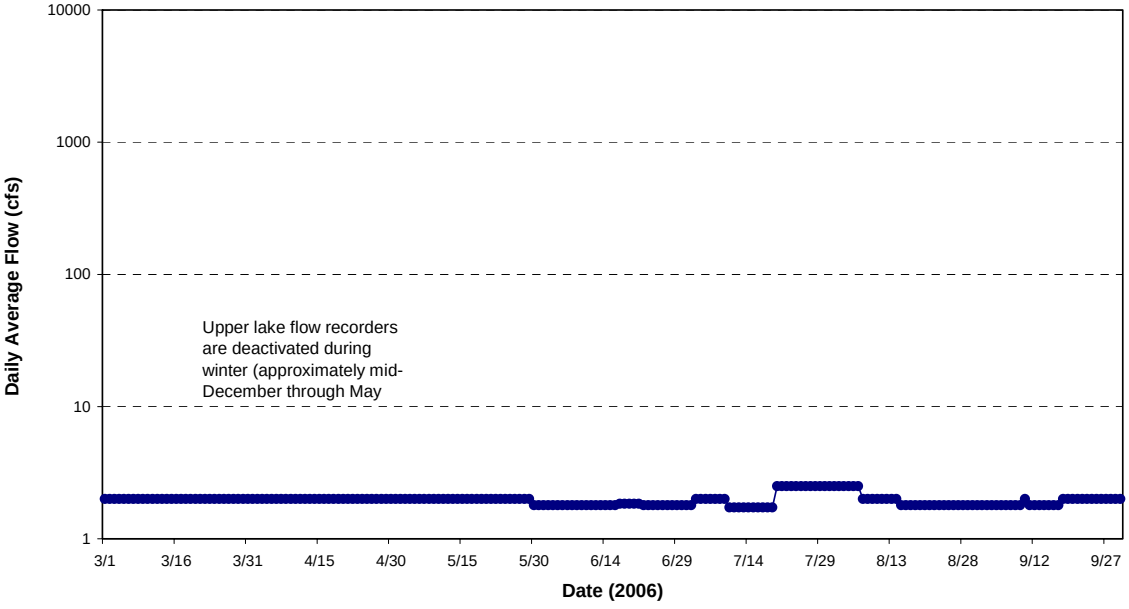
M3
Blue Creek below Lower Blue Dam



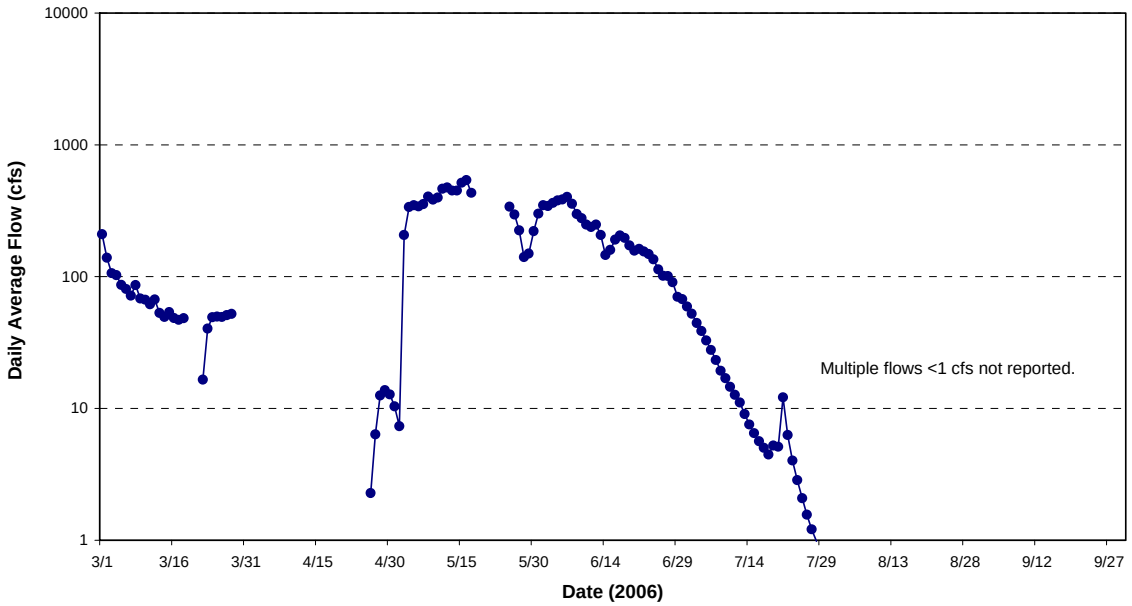
M66
Blue Creek below Upper Blue Creek Dam



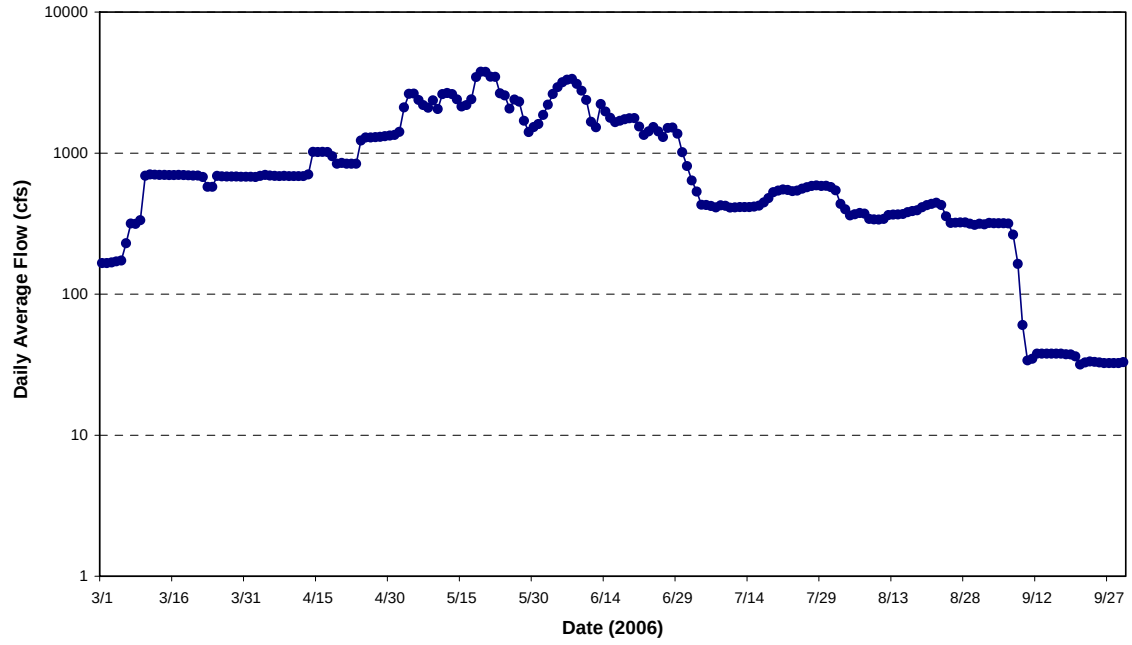
M68
Meadow Creek below Twin Lakes Dam



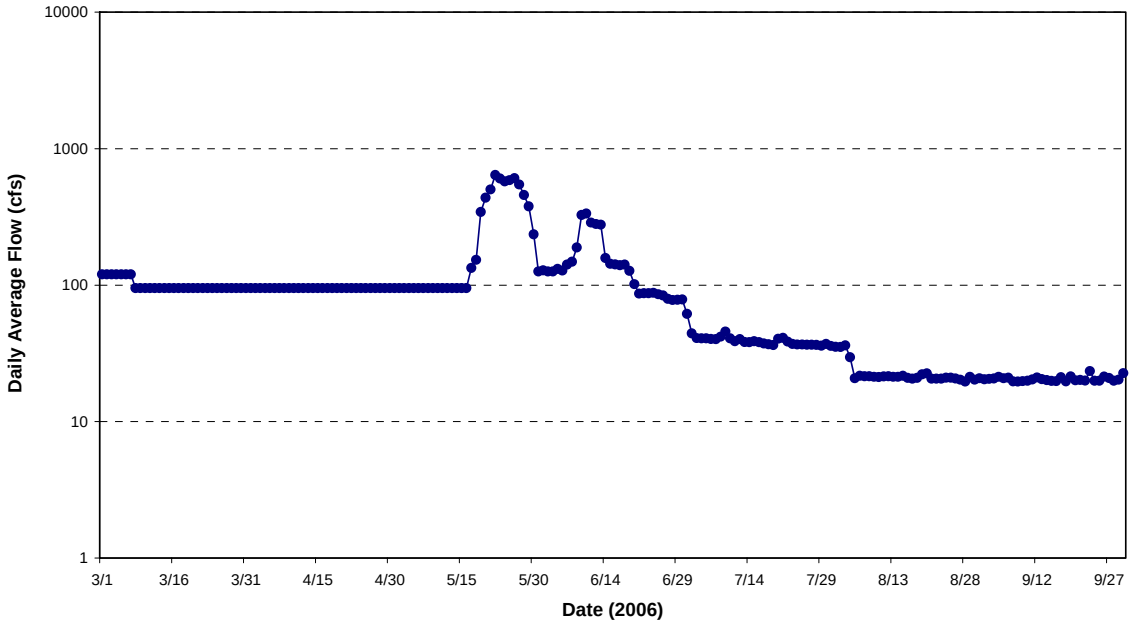
M10
Cole Creek below Bear River Tunnel Diversion



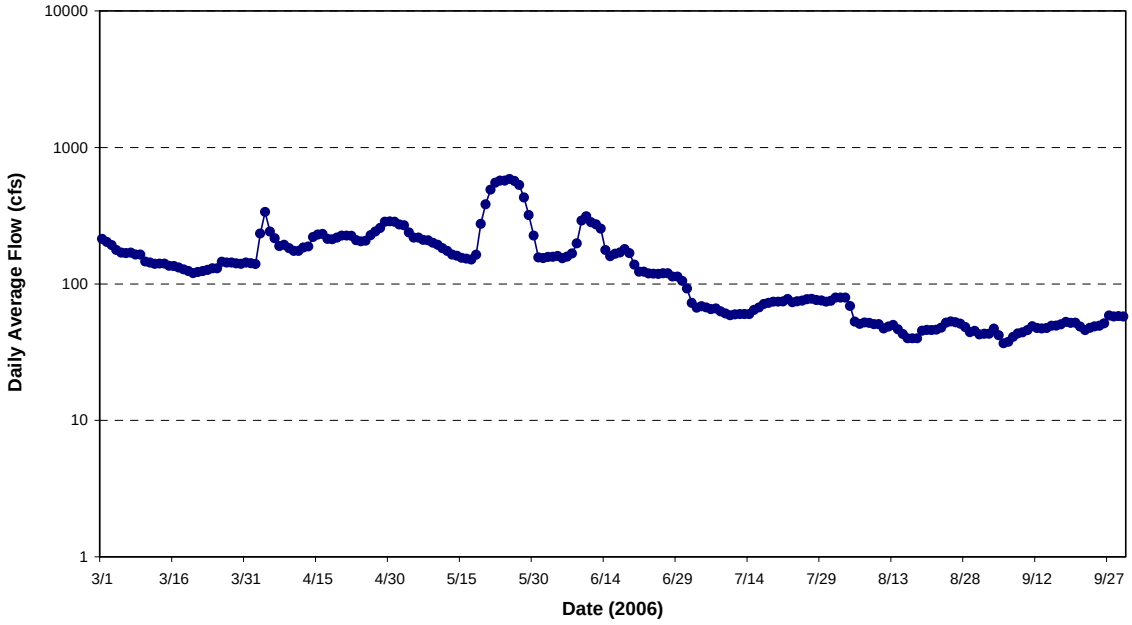
M11
North Fork Mokelumne River below Salt Springs Dam



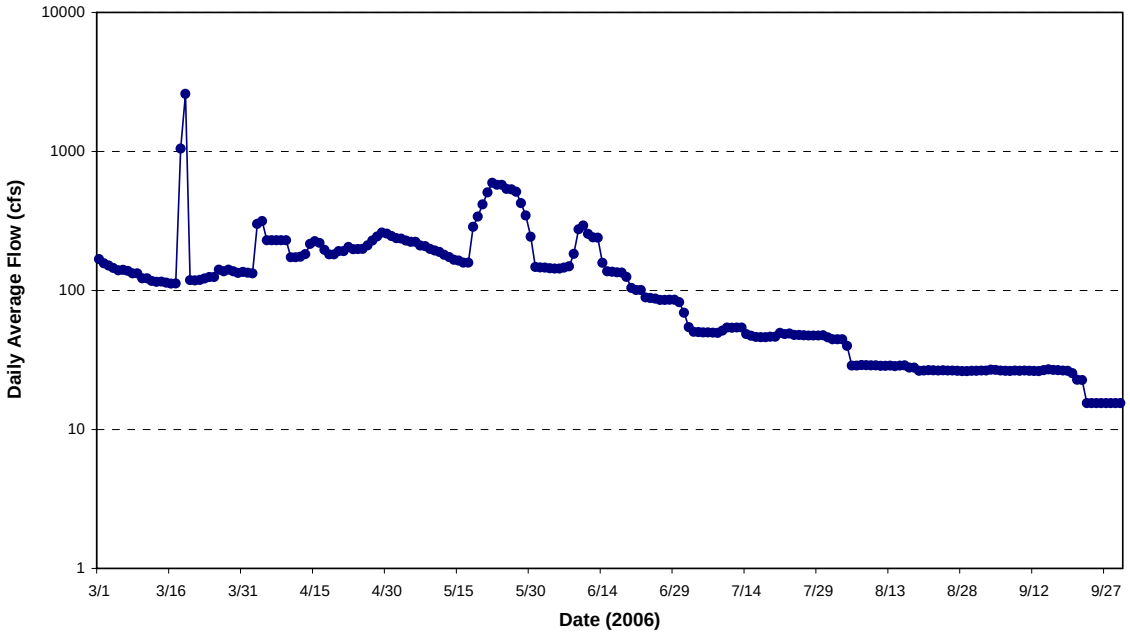
M49
Bear River below Lower Bear River Reservoir Dam



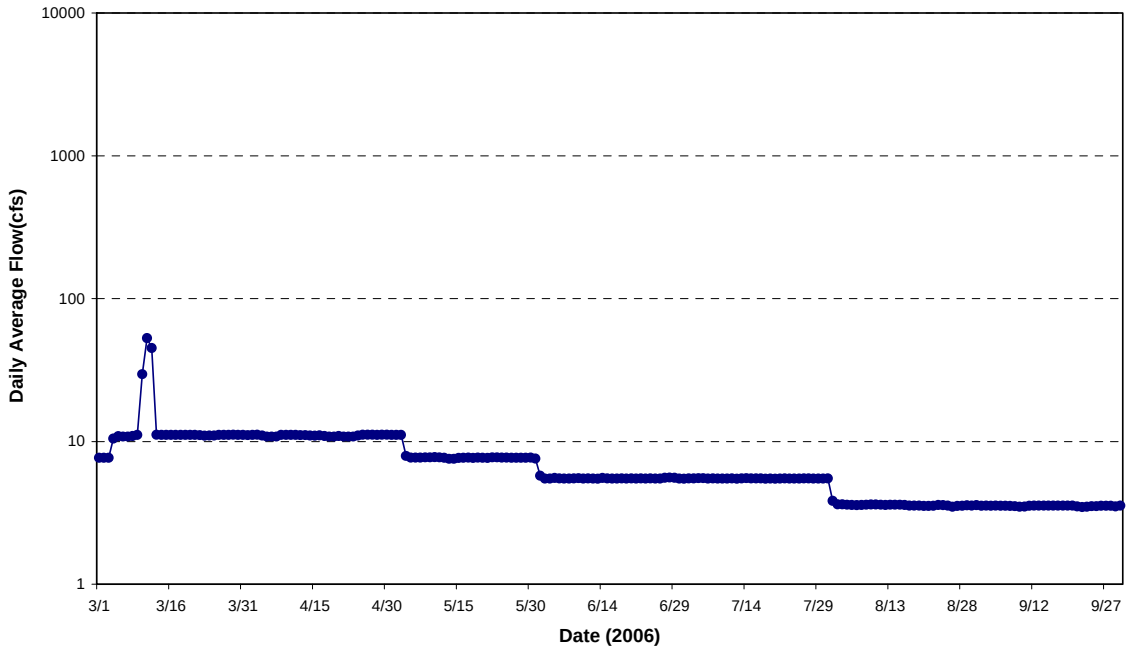
M32
Bear River above Salt Springs Road



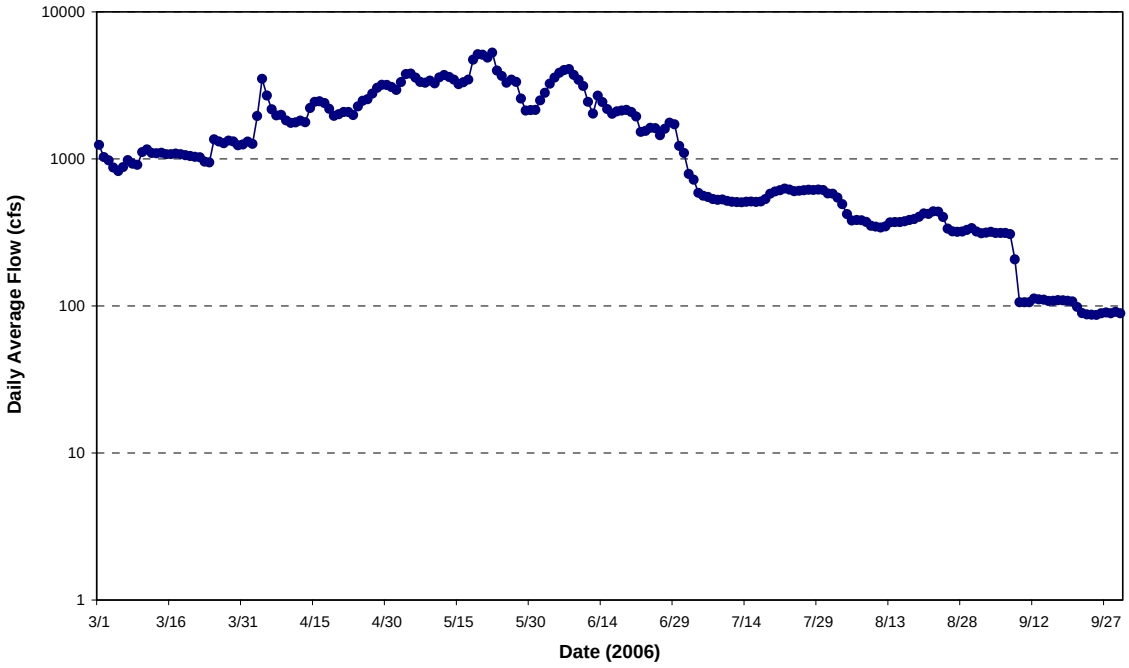
M89
Bear River below Salt Springs Road near Tiger Creek Canal



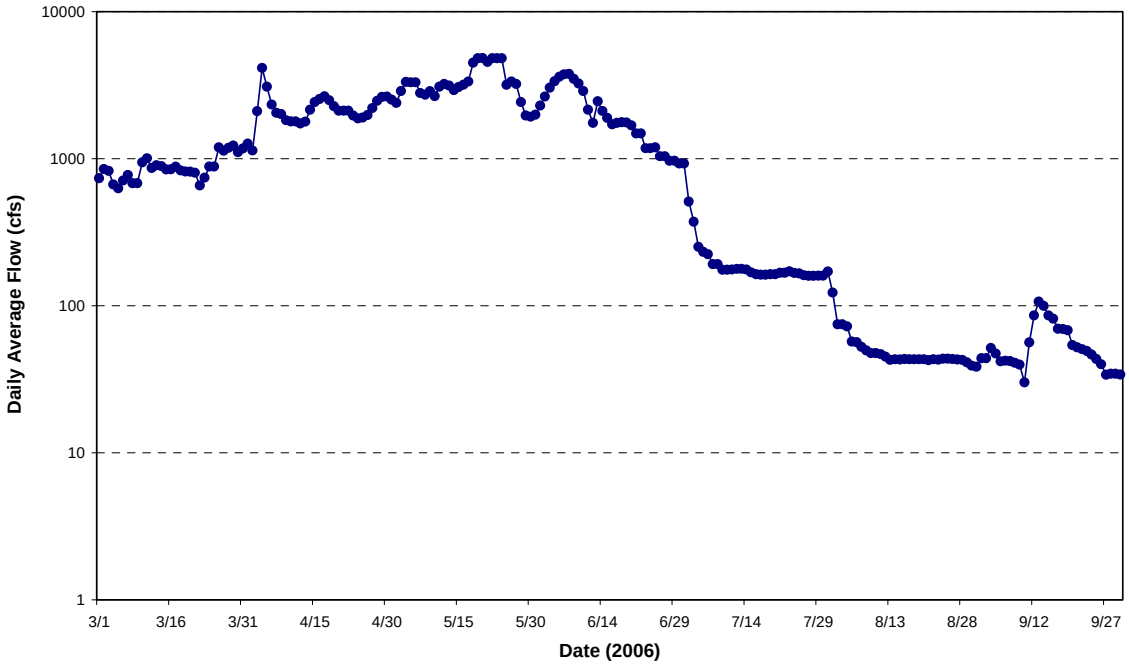
M76
Tiger Creek below Regulator Dam



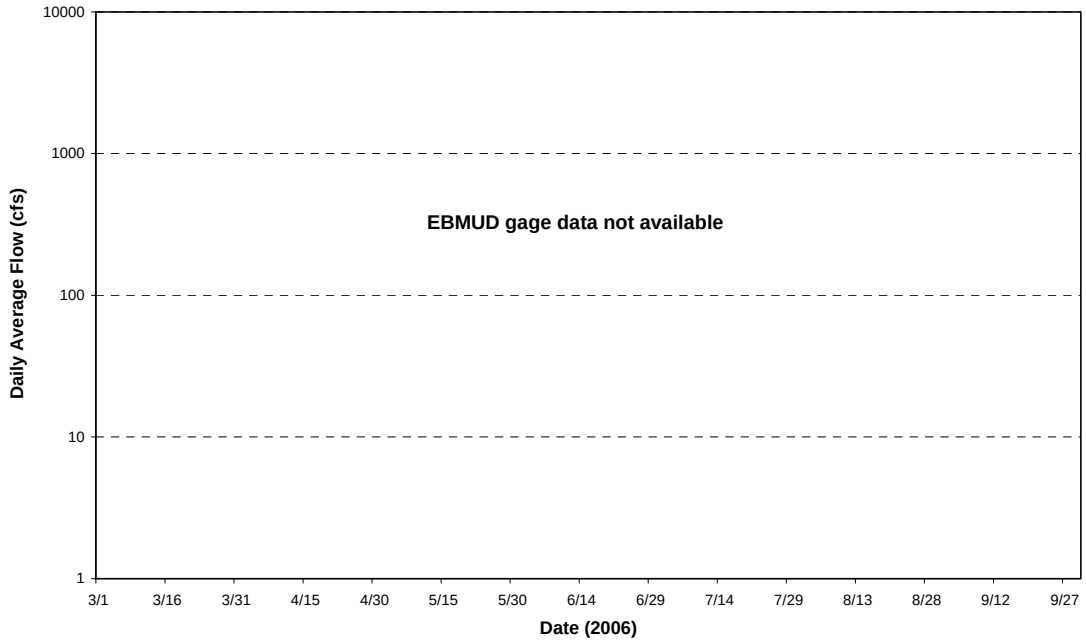
M38
North Fork Mokelumne River above Tiger Creek Afterbay



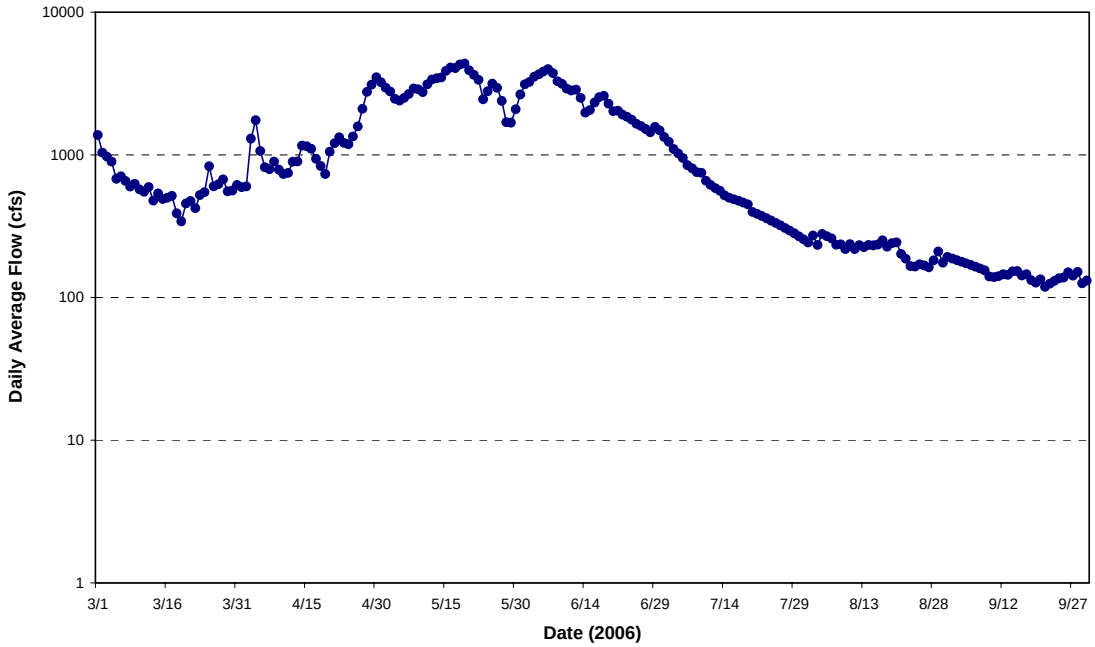
M46
North Fork Mokelumne River below Electra Diversion Dam



M46 flow + EBMUD 11317000 flow + EBMUD 11318500 flow
North Fork Mokelumne River near Water Quality Station MR1



902A flow + M3 flow + M6 flow
North Fork Mokelumne River above Salt Springs Reservoir



Appendix D

Mokelumne River Project (FERC No. 137)
Laboratory Analytical Reports and Chain of Custody Records

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Report Date: 03/28/2006

Client: **PG&E**

PG&E
Elizabeth Frantz
3400 Crow Canyon Rd
San Ramon, CA 94583-

Project Report: **132746**

Results for Project 132746

597632 **Mokelumne R Project: BR1 G W 80813** Liquid Taken: 03/21/2006 1330 By: KENZLER Rec:03/21/2006

Parameter	*Result*	*Unit*	*Flag*	*RL*	*Method*	*Analyzed*	*By*	*CAS*
Total Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221B	03/21/2006 1700	MG	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	03/21/2006 1700	MG	

597633 **Mokelumne R Project: NFMR2 G W 80815** Liquid Taken: 03/21/2006 1430 By: KENZLER Rec:03/21/2006

Parameter	*Result*	*Unit*	*Flag*	*RL*	*Method*	*Analyzed*	*By*	*CAS*
Total Coliform Bacteria, 15 t	2	#/100ml		2	SM9221B	03/21/2006 1700	MG	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	03/21/2006 1700	MG	

ELAP Certificate #1113

Sandy Nurse

Sandy Nurse, Lab Director

Sierra Foothill Laboratory, Inc.
255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642
Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

Lab. Reference Number: 36620

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To: **Sierra Foothill Laboratory**
255 Scottsville Dr
Jackson CA 95642

Attention: Richard Nurse | Phone: (209) 223-2800 | (209) 223-2747 Fax | Page 1 of 1

WO# 10211166
SWIM# 05836 WQS

Project Name: Mokelumne WQ

Project Manager: Eliz. Frantz (925) 866-5472

Field Team Leader: Eric Kenzler (925) 866-5806

Samplers: (signature) Eric Kenzler

Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles	[NP]	[NP]	Total and Fecal Coliform [NP]	[NP]					Remarks
~~MC2~~			~~Water~~	~~river water~~										~~Standard TAT~~
~~RC2~~			~~Water~~	~~river water~~										~~Standard TAT~~
BR1 (80813)	3/21/06	13.30	Water	river water	1	5976320-01		1						Standard TAT
NFMR2 (80815)	3/21/06	14.30	Water	river water	1	5976350-01		1						Standard TAT
~~TC1~~			~~Water~~	~~river water~~	1			1						Standard TAT
~~NFMR3~~			~~Water~~	~~river water~~	1			1						Standard TAT
~~NFMR5~~			~~Water~~	~~river water~~	1			1						Standard TAT
~~MR1~~			~~Water~~	~~river water~~	1			1						Standard TAT
														Standard TAT
ASK FOR BOTTLES FOR NEXT MONTH'S SAMPLING!														
			Total		6	0	0	6		0	0	0	0	

Relinquished by:	Date/Time:	Received by:	Date/Time:	Ship via
Eric Kenzler	3-21-06 1645	Sara Bottaro	3/21/06 16:45	
Relinquished by:	Date/Time:	Received by:	Date/Time:	BI /Air Bill Number
Relinquished by:	Date/Time:	Received by:	Date/Time:	Date

TB 3-21-06

11.8C on ice

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

597635 LEAVE BLANK

PURVEYOR AND ADDRESS: PG&E
COUNTY:
DATE AND HOUR COLLECTED: 3/21/06 14:30
SAMPLING POINT: NFMR2
SYSTEM NUMBER: [ ][ ]X[ ][ ][ ]
COLLECTED BY: KENZLER
BOTTLE NUMBER: 80815

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM ☐ SPC TC15 ☒ FECAL COLIFORM ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					0.1					COLIFORM MPN/100ml	
PORTIONS IN ML (LOGS)	1	1	1	1	1												
PRESUMPTIVE 1340 HOURS 24	+	+	−	+	−	−	−	−	−	−	−	−	−	−	−	2	
TEST 1500 48			+		+	−	−	−	−	−	−	−	−	−	−	E. C. MPN/100ml	
CONFIRMED 1440 24	−	−	+	−	−	−	−	−	−	−	−	−	−	−	−	<2	
TEST 1435 48	−	−		−	−	−	−	−	−	−	−	−	−	−	−	SPC/ml AT 35° C.	Cl, RES. mg/liter
E. C. 24	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−		

LABORATORY REMARKS
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE
1500DS 1700 mg 252576 14955 3-21-06
ANALYST

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

597632 LEAVE BLANK

PURVEYOR AND ADDRESS: PG&E
COUNTY:
DATE AND HOUR COLLECTED: 3/21/06 13:30
SAMPLING POINT: BR1
SYSTEM NUMBER: [ ][ ]X[ ][ ][ ]
COLLECTED BY: KENZLER
BOTTLE NUMBER: 80813

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM ☐ SPC TC15 ☒ FECAL COLIFORM ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					0.1					COLIFORM MPN/100ml	
PORTIONS IN ML (LOGS)	1	1	1	1	1												
PRESUMPTIVE 1340 HOURS 24	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	<2	
TEST 1500 48	+	+	−	+	−	−	−	−	−	−	−	−	−	−	−	E. C. MPN/100ml	
CONFIRMED 1440 24	−	−		+		−	−	−	−	−	−	−	−	−	−	<2	
TEST 1435 48	−	−				−	−	−	−	−	−	−	−	−	−	SPC/ml AT 35° C.	Cl, RES. mg/liter
E. C. 24	−	−		−		−	−	−	−	−	−	−	−	−	−		

LABORATORY REMARKS
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE
1500DS 1700 mg 252576 14955 3-21-06
ANALYST

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Report Date: 03/28/2006

Client: **PG&E**

PG&E
Elizabeth Frantz
3400 Crow Canyon Rd
San Ramon, CA 94583-

Project Report: **132782**

Results for Project 132782

597698 Mokelumne R Project: TC1 G W 80816 — Liquid Taken: 03/22/2006 0945 By: KENZLER — Rec:03/22/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	7	#/100ml		2	SM9221B	03/22/2006 1600	MG	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	03/22/2006 1600	MG	

597699 Mokelumne R Project: NFMR3 G W 80812 — Liquid Taken: 03/22/2006 1030 By: KENZLER — Rec:03/22/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	130	#/100ml		2	SM9221B	03/22/2006 1610	MG	
Fecal Coliform Bacteria, 15 t	4	#/100ml		2	SM9221E	03/22/2006 1610	MG	

597700 Mokelumne R Project: NFMR5 G W 80814 — Liquid Taken: 03/22/2006 1200 By: KENZLER — Rec:03/22/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	50	#/100ml		2	SM9221B	03/22/2006 1610	MG	
Fecal Coliform Bacteria, 15 t	2	#/100ml		2	SM9221E	03/22/2006 1610	MG	

597701 Mokelumne R Project: MR1 G W 120207 — Liquid Taken: 03/22/2006 1330 By: KENZLER — Rec:03/22/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	40	#/100ml		2	SM9221B	03/22/2006 1600	MG	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	03/22/2006 1600	MG	

ELAP Certificate #1113

Sandy Nurse

Sandy Nurse, Lab Director

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

3.22.06

Lab. Reference Number: 36620

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To: **Sierra Foothill Laboratory**
255 Scottsville Dr
Jackson CA 95642

Attention: Richard Nurse | Phone: (209) 223-2800 | (209) 223-2747 Fax | Page 1 of 1

WO# 10211166
SWIM# 05836 WQS

Project Name: **Mokelumne WQ**

Project Manager: **Eliz. Frantz (925) 866-5472**

Field Team Leader: **Eric Kenzler (925) 866-5806**

Samplers: (signature) Eric Kenzler

Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles	(NP)	(NP)	Total and Fecal Coliform (NP)	(NP)					Remarks
~~MC2~~			~~Water~~	~~river water~~										~~Standard TAT~~
~~BC2~~			~~Water~~	~~river water~~										~~Standard TAT~~
~~BR1~~			~~Water~~	~~river water~~	1			1						Standard TAT
~~NFMR2~~			~~Water~~	~~river water~~	1			1						Standard TAT
TC1 80816	3-22-06	9:45	Water	river water	1	597698-01		1						Standard TAT
NFMR3 80812	3-22-06	10:40	Water	river water	1	597699-01		1						Standard TAT
NFMR5 80814	3-22-06	12:00	Water	river water	1	597700-01		1						Standard TAT
MR1 120207	3-22	13:30	Water	river water	1	597701-01		1						Standard TAT
														Standard TAT
ASK FOR BOTTLES FOR NEXT MONTH'S SAMPLING!														
				Total	6	0	0	6		0	0	0	0	

Relinquished by: Eric Kenzler	Date/Time: 3-22-06 14:10	Received by:	Date/Time: 3-22-06 / 1410	Ship via
Relinquished by:	Date/Time:	Received by:	Date/Time:	BL/Air Bill Number
Relinquished by:	Date/Time:	Received by:	Date/Time:	Date

TB 3-22-06

Sierra Foothill Laboratory, Inc.
255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642
Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

597698 LEAVE BLANK

PURVEYOR AND ADDRESS: PG&E | COUNTY: | DATE AND HOUR COLLECTED: 3-22-06/0945

SAMPLING POINT: TC1 | SYSTEM NUMBER: X | COLLECTED BY: Kreyler | BOTTLE NUMBER: 80816

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ___ COUNTY HEALTH ___ OTHER ___

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS		10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)		1	1	1	1	1											7
PRESUMPTIVE TEST 1625 1435	HOURS 24																E. C. MPN/100ml
	48	+	+	+	+	−	−	−	−	+	+	−	+	−	−	−	<2
CONFIRMED TEST 1635 1150	24									−	−		+				SPC/ml AT 35° C. / Cl, RES. mg/liter
	48	+	−	+	−					−	−						
E. C.	24	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	

LABORATORY REMARKS

☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE 2525NW 1495S 1500S 1600 mg 3-22-06

ANALYST

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

597699 LEAVE BLANK

PURVEYOR AND ADDRESS: PG&E | COUNTY: | DATE AND HOUR COLLECTED: 32206/1030

SAMPLING POINT: NFMR3 | SYSTEM NUMBER: X | COLLECTED BY: Kreyler | BOTTLE NUMBER: 80812

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ___ COUNTY HEALTH ___ OTHER ___

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS		10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)		1	1	1	1	1											130
PRESUMPTIVE TEST 1630 1450	HOURS 24	+	+	+	+	+	−	+	−	−							E. C. MPN/100ml
	48						+	+	+	+	+	−					4
CONFIRMED TEST 1435 1150	24	−	−	−	+	+	−	−	−	−							SPC/ml AT 35° C. / Cl, RES. mg/liter
	48	+	+	+			−	+	+	+	−						
E. C.	24	−	−	−	+	+	−	−	−	−							

LABORATORY REMARKS

☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE 2525NW 1535S 1500S 1610 mg 3-22-06

ANALYST

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

597700 LEAVE BLANK

PURVEYOR AND ADDRESS: PG+E | COUNTY: | DATE AND HOUR COLLECTED: 3-22-06/1200

SAMPLING POINT: MR5 | SYSTEM NUMBER: [ ][ ]X[ ][ ][ ] | COLLECTED BY: Krengler | BOTTLE NUMBER: 80814

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM ☑ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					.01					
PORTIONS IN ML (LOGS)	1	1	1	1	1											
PRESUMPTIVE 24 HOURS	+	+	+	+	+	−	+	−	−	−	−	−	−	−	−	−
TEST 1625 1445 48						+	+	+	−	+	−	−	−	−	−	−
CONFIRMED 24	−	+	+	−	+	−	+	−	−	−	−	−	−	−	−	−
TEST 1435 1150 48	+			+		−	−	−	−	−	−	−	−	−	−	+
E. C. 24	−	−	−	−	+	−	−	−	−	−	−	−	−	−	−	−

COLIFORM MPN/100ml: 50
E. C. MPN/100ml: 2
SPC/ml AT 35° C.:
Cl, RES. mg/liter:

LABORATORY REMARKS

☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE 2525TW 1500S 1610 mg 14955 3-22-06

ANALYST: [signature]

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

597701 LEAVE BLANK

PURVEYOR AND ADDRESS: PG+E | COUNTY: | DATE AND HOUR COLLECTED: 3-22-06/1330

SAMPLING POINT: MR1 | SYSTEM NUMBER: [ ][ ]X[ ][ ][ ] | COLLECTED BY: Krengler | BOTTLE NUMBER: 120207

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					.01					
PORTIONS IN ML (LOGS)	1	1	1	1	1											
PRESUMPTIVE 24 HOURS	+	−	+	+	−	−	+	−	−	−	−	−	−	−	−	−
TEST 1620 1435 48		−			+	+		+	+	+	−	−	+	−	+	
CONFIRMED 24	+		−	−	−	+	−	+	−	+			−		+	
TEST 1435 1150 48			+	+	+		+	−					−			
E. C. 24	−		−	−	−	−	−	−	−	−			−		−	

COLIFORM MPN/100ml: 40
E. C. MPN/100ml: <2
SPC/ml AT 35° C.:
Cl, RES. mg/liter:

LABORATORY REMARKS

☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE 2525TW 1500S 1600 mg 14955 3-22-06

ANALYST: [signature]

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Report Date: 05/15/2006

Client: **PG&E**

PG&E
Elizabeth Frantz
3400 Crow Canyon Rd
San Ramon, CA 94583-

Project Report: **134292**

Results for Project 134292

600578 Mokelumne R Project: NFMR5 G W 120203 Liquid Taken: 05/08/2006 1335 By: KENZLER Rec:05/08/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	23	#/100ml		2	SM9221B	05/09/2006 1640	DS	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	05/09/2006 1640	DS	

600579 MR1 G W 120208 Liquid Taken: 05/08/2006 1500 By: KENZLER Rec:05/08/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	13	#/100ml		2	SM9221B	05/08/2006 1625	DS	
Fecal Coliform Bacteria, 15 t	2	#/100ml		2	SM9221E	05/08/2006 1625	DS	

600580 NFMR3 G W 120201 Liquid Taken: 05/08/2006 1150 By: KENZLER Rec:05/08/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	11	#/100ml		2	SM9221B	05/08/2006 1640	DS	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	05/08/2006 1640	DS	

600581 TC1 G W Liquid Taken: 05/08/2006 1110 By: KENZLER Rec:05/08/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	23	#/100ml		2	SM9221B	05/08/2006 1625	DS	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	05/08/2006 1625	DS	

ELAP Certificate #1113

Sandy Nurse

Sandy Nurse, Lab Director

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

LAB #_____

SIERRA FOOTHILL LABORATORY
P.O. Box 1268 • 255 Scottsville Blvd.
Jackson, CA 95642
(209) 223-2800

DATE RECEIVED: 5-8-06 TIME RECEIVED: _____

CUSTOMER NAME: PG&E BILL TO: _____

ADDRESS: _____ ADDRESS: _____

CITY, STATE, ZIP: _____ CITY, STATE, ZIP: _____

ATTENTION: _____ ATTENTION: _____

PREPAID: _____ CHECK/RECEIPT #: _____ P.O. #: _____ REQUISITION #: _____

ID #	SOURCE DESCRIPTION	ANALYSIS	SAMPLING & CONTAINER INFORMATION: G/C	W, WW, S	P/G	DATE/HR COLLECTED	BY
600578-01	NEMR5 120203	FC15	G	W	P	5-8-06 / 1335	Kemper
600579-01	MR1 120208	FC15				/ 1500	
600580-01	NEMR3 120201	FC15				/ 1150	
600581-01	TC1 120205	FC15				/ 1110	
	will ship in 2 on 5-9-06	2 on 5-10-06					
	and will pay when furnished						
	20.00 MOVE						

RELINQUISHED BY: _____ DATE/TIME: 5-8-06 / 1530

RECEIVED BY: _____ DATE/TIME: 5-8-06 / 1530

RELINQUISHED BY: _____ DATE/TIME: _____

RECEIVED BY: _____ DATE/TIME: _____

DATA ENTERED: _____

Date: 5/9/06 Time: _____

COC FORMS

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

600578 LEAVE BLANK

PURVEYOR AND ADDRESS: PG+E | COUNTY: | DATE AND HOUR COLLECTED: 5-8-06 / 1335

SAMPLING POINT: NFMR5 | SYSTEM NUMBER: XX | COLLECTED BY: Krengler | BOTTLE NUMBER: 120203

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)	1	1	1	1	1											23
PRESUMPTIVE TEST 1540 HOURS 24	−	+	+	+	+											E. C. MPN/100ml
PRESUMPTIVE TEST 1650 HOURS 48	+					+	+	+	−				+	−		<2
CONFIRMED TEST 1335 HOURS 24	+															SPC/ml AT 35° C. / Cl, RES. mg/liter
CONFIRMED TEST 1430 HOURS 48		+	+	+	+											
E. C. 24	−															

LABORATORY REMARKS

☐ LEAKED IN TRANSIT ☐ INSUFFICIENT SAMPLE 260620 −3555 −3305 1640 5·8·06 ds

ANALYST

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

600579 LEAVE BLANK

PURVEYOR AND ADDRESS: PG+E | COUNTY: | DATE AND HOUR COLLECTED: 5·8·06 / 1500

SAMPLING POINT: MR1 | SYSTEM NUMBER: XX | COLLECTED BY: Krengler | BOTTLE NUMBER: 120208

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)	1	1	1	1	1											13
PRESUMPTIVE TEST 1560 HOURS 24	−	+	−	−	+	−	+									E. C. MPN/100ml
PRESUMPTIVE TEST 1640 HOURS 48	−		+	+		+		+	+	+	−		+	−		2
CONFIRMED TEST 1335 HOURS 24		+	−	+	+	−	−						−			SPC/ml AT 35° C. / Cl, RES. mg/liter
CONFIRMED TEST HOURS 48			+			−										
E. C. 24		+	−													

LABORATORY REMARKS

☐ LEAKED IN TRANSIT ☐ INSUFFICIENT SAMPLE 260620 −35 55 −33 05 1625 5·8·06 ds

ANALYST

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

600580 LEAVE BLANK

PURVEYOR AND ADDRESS: PG&E
COUNTY:
DATE AND HOUR COLLECTED: 5806/1150
SAMPLING POINT: NFMR3
SYSTEM NUMBER: [ ][ ] X [ ][ ][ ]
COLLECTED BY: Kenyon
BOTTLE NUMBER: 120201

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)	1	1	1	1	1											11
PRESUMPTIVE TEST 1535 1650 1335 HOURS 24	−	+	−	+	+	−										E. C. MPN/100ml
48	+		+			−	+	+	+	+	+					<2
CONFIRMED TEST 24	−	−						−	−	−	+					SPC/ml AT 35° C.
48	+	−	−	+	+		+				−					Cl, RES. mg/liter
E. C. 24	−	−														

LABORATORY REMARKS
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE
260620W-35SS 1640
-33DS 5·8·06 ds

ANALYST: [illegible]

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

600581 LEAVE BLANK

PURVEYOR AND ADDRESS: PG&E
COUNTY:
DATE AND HOUR COLLECTED: 5·8·06/1110
SAMPLING POINT: TC1
SYSTEM NUMBER: [ ][ ] X [ ][ ][ ]
COLLECTED BY: Kenyon
BOTTLE NUMBER: 120205

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)	1	1	1	1	1											23
PRESUMPTIVE TEST 1540 1645 1330 HOURS 24	−	+	+	+	+	+	+	−	+							E. C. MPN/100ml
48	+	+				−										<2
CONFIRMED TEST 24	−	−	+	−	−				−							SPC/ml AT 35° C.
48	+	+		+	+				−							Cl, RES. mg/liter
E. C. 24	−	−							−							

LABORATORY REMARKS
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE
260620W-35SS 1625
-33DS 5·8·06 ds

ANALYST: [illegible]

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Report Date: 05/15/2006

Client: **PG&E**

PG&E
Elizabeth Frantz
3400 Crow Canyon Rd
San Ramon, CA 94583-

Project Report: **134327**

Results for Project 134327

600620 Mokelumne R Project: NFMR2 G W 120209 Liquid Taken: 05/09/2006 1330 By: KENZLER Rec:05/09/2006

Parameter	*Result*	*Unit*	*Flag*	*RL*	*Method*	*Analyzed*	*By*	*CAS*
Total Coliform Bacteria, 15 t	8	#/100ml		2	SM9221B	05/09/2006 1650	DS	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	05/09/2006 1650	DS	

ELAP Certificate #1113

Sandy Nurse

Sandy Nurse, Lab Director

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

LAB #

SIERRA FOOTHILL LABORATORY
P.O. Box 1268 • 255 Scottsville Blvd.
Jackson, CA 95642
(209) 223-2800

DATE RECEIVED: 5/9/06 TIME RECEIVED:

CUSTOMER NAME: PG+E BILL TO:

ADDRESS: ADDRESS:

CITY, STATE, ZIP: CITY, STATE, ZIP:

ATTENTION: ATTENTION:

PREPAID: CHECK/RECEIPT #: P.O. #: REQUISITION #:

ID #	SOURCE DESCRIPTION	ANALYSIS	SAMPLING & CONTAINER INFORMATION: G/C	W, WW, S	P/G	DATE/HR COLLECTED	BY
6006200-01	NFm 2 120209	FC15	G	W	P	5/9/06 1330	KONZLER

17.1C 1cl ON

RELINQUISHED BY: DATE/TIME: 5/9/06 16:13

RECEIVED BY: Inna Bortaro DATE/TIME: ✓ ✓

RELINQUISHED BY: DATE/TIME:

RECEIVED BY: DATE/TIME:

DATA ENTERED: TB

Date: 5/9/06 Time:

COC FORMS

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642

SAMPLE FOR MICROBIOLOGICAL EXAMINATION

600620 LEAVE BLANK

PURVEYOR AND ADDRESS: PG+E MOKE RIVER PROJECT

COUNTY:

DATE AND HOUR COLLECTED: 5/9/06 13:30

SAMPLING POINT: NFMR 2

SYSTEM NUMBER: [ ][ ] X [ ][ ][ ]

COLLECTED BY: RENZLER

BOTTLE NUMBER: 120209

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS		10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)		1	1	1	1	1											8
PRESUMPTIVE TEST 1010 1540 1345	HOURS 24	+	+	—	+		—	—	—	—	—	—	—	—	+	—	E. C. MPN/100ml
	48			—	+		—	—	—	—	—	—	—	—	—	—	<2
CONFIRMED TEST (22)	24	—	—	—	+										—		SPC/ml AT 35° C. / Cl, RES. mg/liter
	48	+	+	—											—		
E. C.	24	—	—	—	—										—		

LABORATORY REMARKS

☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE

260620W = 3855 3705

1650 5.9.06 ds

ANALYST

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Report Date: 05/15/2006

Client: **PG&E**

PG&E
Elizabeth Frantz
3400 Crow Canyon Rd
San Ramon, CA 94583-

Project Report: **134368**

Results for Project 134368

600690 Mokelumne R Project: BR1 G W 120202 Liquid Taken: 05/10/2006 1210 By: KENZLER Rec:05/10/2006

Parameter	*Result*	*Unit*	*Flag*	*RL*	*Method*	*Analyzed*	*By*	*CAS*
Total Coliform Bacteria, 15 t	8	#/100ml		2	SM9221B	05/10/2006 1450	DS	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	05/10/2006 1450	DS	

600691 BC2 G W 120217 Liquid Taken: 05/10/2006 1045 By: KENZLER Rec:05/10/2006

Parameter	*Result*	*Unit*	*Flag*	*RL*	*Method*	*Analyzed*	*By*	*CAS*
Total Coliform Bacteria, 15 t	22	#/100ml		2	SM9221B	05/10/2006 1450	DS	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	05/10/2006 1450	DS	

ELAP Certificate #1113

Sandy Nurse

Sandy Nurse, Lab Director

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

LAB #_____

5-10-06

SIERRA FOOTHILL LABORATORY
P.O. Box 1268 • 255 Scottsville Blvd.
Jackson, CA 95642
(209) 223-2800

DATE RECEIVED: 5-10-06 TIME RECEIVED: _____

CUSTOMER NAME: PG&E BILL TO: _____

ADDRESS: _____ ADDRESS: _____

CITY, STATE, ZIP: _____ CITY, STATE, ZIP: _____

ATTENTION: _____ ATTENTION: _____

PREPAID: 490.00 CHECK/RECEIPT #: credit card P.O. #: _____ REQUISITION #: _____

ID #	SOURCE DESCRIPTION	ANALYSIS	SAMPLING & CONTAINER INFORMATION: G/C	W, WW, S	P/G	DATE/HR COLLECTED	BY
600690-01	BR1 120202	FC15	G	W	P	5-10-06/1210	Kenyon
600691-01	BC2 120217	FC15	G	W	P	5-10-06/1045	Kenyon
	70.00 x (7) = 490.00						

14 °C on ice

RELINQUISHED BY: Eric Kenyon DATE/TIME: 5-10-06 /1330

RECEIVED BY: _____ DATE/TIME: 5-10-06 /1330

RELINQUISHED BY: _____ DATE/TIME: _____

RECEIVED BY: _____ DATE/TIME: _____

DATA ENTERED: TB

Date: 5/10/06 Time: _____

COC FORMS

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

600690 LEAVE BLANK

PURVEYOR AND ADDRESS: PG&E
COUNTY:
DATE AND HOUR COLLECTED: 5-10-06/1210
SAMPLING POINT: BR1
SYSTEM NUMBER:
COLLECTED BY: Kreyler
BOTTLE NUMBER: 120202

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM ☒ FECAL COLIFORM
☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)	1	1	1	1	1											8
PRESUMPTIVE 1445 HOURS 24	+	—	—	+	+	—	—	—	—	—	—	—	—	—	—	E. C. MPN/100ml
TEST 1925 48		+	+			—	—	—	—	—	+	—	—	—	—	<2
CONFIRMED 1933 24	+	—	—	+	+	—	—	—	—	—	—	—	—	—	—	SPC/ml AT 35° C.
TEST 2225 48		—	—			—	—	—	—	—	—	—	—	—	—	
E. C. 24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Cl, RES. mg/liter

LABORATORY REMARKS
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE
260062W-3655-33DS 1450 5-10-06 ds
ANALYST: [illegible]

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

600691 LEAVE BLANK

PURVEYOR AND ADDRESS: PG&E
COUNTY:
DATE AND HOUR COLLECTED: 5-10-06/1045
SAMPLING POINT: BC2
SYSTEM NUMBER:
COLLECTED BY: Kreyler
BOTTLE NUMBER: 120217

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM ☒ FECAL COLIFORM
☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)	1	1	1	1	1											22
PRESUMPTIVE 1440 HOURS 24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	E. C. MPN/100ml
TEST 1930 48	+			+	+	+	+	+	—	+	+	+	—	—	—	<2
CONFIRMED 1933 24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	SPC/ml AT 35° C.
TEST 2225 48	+	+	—	+	+	+	—									
E. C. 24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Cl, RES. mg/liter

LABORATORY REMARKS
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE
260062W-3655-33DS 1450 5-10-06 ds
ANALYST: [illegible]

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Report Date: 06/23/2006

Client: **PG&E**

PG&E
Elizabeth Frantz
3400 Crow Canyon Rd
San Ramon, CA 94583-

Project Report: **135573**

Results for Project 135573

602892 **Mokelumne R Project: BR1 G W 120214** Liquid Taken: 06/19/2006 1445 By: Client Rec:06/19/2006

Parameter	*Result*	*Unit*	*Flag*	*RL*	*Method*	*Analyzed*	*By*	*CAS*
Total Coliform Bacteria, 15 t	8	#/100ml		2	SM9221B	06/19/2006 1615	DS	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	06/19/2006 1615	DS	

ELAP #1113 NELAP #06245CA

Sandy Nurse

Sandy Nurse, Lab Director

Sierra Foothill Laboratory, Inc.
255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642
Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

Lab. Reference Number: 36620

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To:	Sierra Foothill Laboratory		
	255 Scottsville Dr		
	Jackson CA 95642		
Attention: Richard Nurse	Phone: (209) 223-2800	(209) 223-2747 Fax	Page 1 of 1

WO# 10211166 SWIM# 05836 WQS	Project Name: Mokelumne WQ	Project Manager: Eliz. Frantz (925) 866-5472										
Samplers: (signature)		Field Team Leader: Eric Kenzler (925) 866-5806						Total and Fecal Coliform				
Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles	(NP)	(NP)	(NP)	(NP)				Remarks
~~MC2~~			~~Water~~	~~river water~~	1			1					Standard TAT
~~BR2~~			~~Water~~	~~river water~~	1			1					Standard TAT
BR1	6/19/06	1415	Water	river water	1			1	602892 01				Standard TAT
~~MRMR2~~			~~Water~~	~~river water~~	1			1					Standard TAT
~~LC1~~			~~Water~~	~~river water~~	1			1					Standard TAT
~~MRMR3~~			~~Water~~	~~river water~~	1			1					Standard TAT
~~MRMR3~~			~~Water~~	~~river water~~	1			1					Standard TAT
~~MR1~~			~~Water~~	~~river water~~	1			1					Standard TAT
													Standard TAT
ASK FOR BOTTLES FOR NEXT MONTH'S SAMPLING!													
				Total	8	0	0	8		0	0	0	0	

Relinquished by:	Date/Time:	Received by:	Date/Time:	Ship via
Gerard Frantz	6/19/06 1611		6/19/06 1611	
Relinquished by:	Date/Time:	Received by:	Date/Time:	BL/Air Bill Number
Relinquished by:	Date/Time:	Received by:	Date/Time:	Date

13.3c on ice

TB
6/20/06

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

602892 LEAVE BLANK

PURVEYOR AND ADDRESS: PG+E

COUNTY:

DATE AND HOUR COLLECTED: 6/19/06 1445

SAMPLING POINT: BR1

SYSTEM NUMBER: X

COLLECTED BY: Kenzler

BOTTLE NUMBER: 120214

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY) Bear River below Low. Bear Rv. Res

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM ☒ FECAL COLIFORM

☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS		10				1.0				0.1					
PORTIONS IN ML (LOGS)		1	1	1	1	1									
PRESUMPTIVE TEST	HOURS 24	+	+	+	+	+	—	—	—	+	—	—	—	—	—
	48														
CONFIRMED TEST	24	—	+	—						—					
	48	+		—	+	—				—					
E. C.	24	—								—					

1445 1535 1535

COLIFORM MPN/100ml: 8

E. C. MPN/100ml: <2 ~~<1~~ JR

SPC/ml AT 35° C.:

Cl, RES. mg/liter:

LABORATORY REMARKS

☐ LEAKED IN TRANSIT

☐ INSUFFICIENT SAMPLE

260620W-8555 1615
83DS 6.19.06 dr

ANALYST: JB

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Report Date: 06/26/2006

Client: **PG&E**

PG&E
Elizabeth Frantz
3400 Crow Canyon Rd
San Ramon, CA 94583-

Project Report: **135603**

Results for Project 135603

602948 **Mokelumne R Project: NFMR2 G W 120215** Liquid Taken: 06/20/2006 1135 By: KENZLER Rec:06/20/2006

Parameter	*Result*	*Unit*	*Flag*	*RL*	*Method*	*Analyzed*	*By*	*CAS*
Total Coliform Bacteria, 15 t	4	#/100ml		2	SM9221B	06/20/2006 1610	DS	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	06/20/2006 1610	DS	

602949 **Mokelumne R Project: NFMR5 G W 120216** Liquid Taken: 06/20/2006 1500 By: KENZLER Rec:06/20/2006

Parameter	*Result*	*Unit*	*Flag*	*RL*	*Method*	*Analyzed*	*By*	*CAS*
Total Coliform Bacteria, 15 t	21	#/100ml		2	SM9221B	06/20/2006 1610	DS	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	06/20/2006 1610	DS	

ELAP #1113 NELAP #06245CA

Sandy Nurse

Sandy Nurse, Lab Director

Sierra Foothill Laboratory, Inc.
255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642
Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

Lab. Reference Number: 36620

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To: **Sierra Foothill Laboratory**
255 Scottsville Dr
Jackson CA 95642

Attention: Richard Nurse | Phone: (209) 223-2800 | (209) 223-2747 Fax | Page 1 of 1

WO# 10211166 SWIM# 05836 WQS	Project Name: Mokelumne WQ	Project Manager: Eliz. Frantz (925) 866-5472
Samplers: (signature)		Field Team Leader: Eric Kenzler (925) 866-5806

Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles	[NP]	[NP]	FC15 Total and Fecal Coliform [NP]	[NP]				Remarks
~~MC2~~			~~Water~~	~~river water~~	1			1					Standard TAT
~~BC2~~			Water	river water	1			1					Standard TAT
~~BR1~~ 602948-01			Water	river water	1			1					Standard TAT
NFMR2 6/20/06	1135	(120215)	Water	river water	1			1					Standard TAT
~~FC1~~			Water	river water	1			1					Standard TAT
~~NFMR3~~ 602949-01			Water	river water	1			1					Standard TAT
NFMR5 6/20/06	1500	(120216)	Water	river water	1			1					Standard TAT
~~MR1~~			Water	river water	1			1					Standard TAT
													Standard TAT
ASK FOR BOTTLES FOR NEXT MONTH'S SAMPLING!													
				Total	8	0	0	8		0	0	0	0

Relinquished by:	Date/Time:	Received by:	Date/Time:	Ship via
[signature]	6/20/06 1600	[signature]	6/20/06 1600	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Bl/Air Bill Number
Relinquished by:	Date/Time:	Received by:	Date/Time:	Date

RECEIVED 2 SAMPLES ONLY. TB

TB 6/20/06

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

1002948 LEAVE BLANK

PURVEYOR AND ADDRESS: PG&E
COUNTY:
DATE AND HOUR COLLECTED: 6/20/06 11:35
SAMPLING POINT: NFMR 2
SYSTEM NUMBER: X
COLLECTED BY: KENZLER
BOTTLE NUMBER: 120215

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☑ COLIFORM ☑ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)	1	1	1	1	1											4
PRESUMPTIVE TEST H35 1415 H40	24	–	+	+												E. C. MPN/100ml <2
	48	+			+	+	+									
CONFIRMED TEST 1340	24	–														SPC/ml AT 35° C. / Cl₂ RES. mg/liter
	48	–			+	+										
E. C.	24	–														

LABORATORY REMARKS
☐ LEAKED IN TRANSIT ☐ INSUFFICIENT SAMPLE
260626W - 8855 1610
8905 6/20/06 ds
ANALYST

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

1002949 LEAVE BLANK

PURVEYOR AND ADDRESS: PG&E
COUNTY:
DATE AND HOUR COLLECTED: 6/20/06 15:00
SAMPLING POINT: NFMR5
SYSTEM NUMBER: X
COLLECTED BY: KENZLER
BOTTLE NUMBER: 120216

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☑ COLIFORM ☑ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)	1	1	1	1	1											21
PRESUMPTIVE TEST H35 1425 H40	24	+	+	–	+	+	–	+								E. C. MPN/100ml <2
	48			+			+		+	+	–	+	+			
CONFIRMED TEST 1335	24			–			–		–	–	+					SPC/ml AT 35° C. / Cl₂ RES. mg/liter
	48	+	+	–	+	–	+	–	+			+	–			
E. C.	24	–	–	–			–									

LABORATORY REMARKS
☐ LEAKED IN TRANSIT ☐ INSUFFICIENT SAMPLE
260626W - 8855 1610
8905 6/20/06 ds
ANALYST

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Report Date: 06/26/2006

Client: **PG&E**

PG&E
Elizabeth Frantz
3400 Crow Canyon Rd
San Ramon, CA 94583-

Project Report: **135644**

Results for Project 135644

603026 Mokelumne R Project: MC2 G W 85026 — Liquid Taken: 06/21/2006 1155 By: Client — Rec:06/21/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	4	#/100ml		2	SM9221B	06/21/2006 1545	DS	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	06/21/2006 1545	DS	

603027 Mokelumne R Project: BC2 G W 120204 — Liquid Taken: 06/21/2006 1020 By: Client — Rec:06/21/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	4	#/100ml		2	SM9221B	06/21/2006 1530	DS	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	06/21/2006 1530	DS	

603028 Mokelumne R Project: TC1 G W 1200213 — Liquid Taken: 06/21/2006 1325 By: Client — Rec:06/21/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	6.1	#/100ml		2	SM9221B	06/21/2006 1545	DS	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	06/21/2006 1545	DS	

603029 Mokelumne R Project: NFMR3 G W 120211 — Liquid Taken: 06/21/2006 0820 By: Client — Rec:06/21/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	7	#/100ml		2	SM9221B	06/21/2006 1440	DS	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	06/21/2006 1440	DS	

603030 Mokelumne R Project: MR1 G W 120206 — Liquid Taken: 06/21/2006 0645 By: Client — Rec:06/21/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	80	#/100ml		2	SM9221B	06/21/2006 1440	DS	
Fecal Coliform Bacteria, 15 t	8	#/100ml		2	SM9221E	06/21/2006 1440	DS	

ELAP #1113 NELAP #06245CA

Sandy Nurse

Sandy Nurse, Lab Director

Sierra Foothill Laboratory, Inc.
255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642
Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

PAID 6/21/06

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

Lab. Reference Number: 36620

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To: **Sierra Foothill Laboratory**
255 Scottsville Dr
Jackson CA 95642

Attention: Richard Nurse | Phone: (209) 223-2800 | (209) 223-2747 Fax | Page 1 of 1

WO# 10211166 SWIM# 05836 WQS	Project Name: Mokelumne WQ	Project Manager: Eliz. Frantz (925) 866-5472
Samplers: (signature)		Field Team Leader: Eric Kenzler (925) 866-5806

Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles			FC Total and Fecal Coliform					Remarks
MC2	6/21/06	11:55	Water	river water	1			1	6030226-01				Standard TAT
BC2	6/21/06	10:20	Water	river water	1			1	6030227-01				Standard TAT
~~DR1~~			~~Water~~	~~river water~~	~~1~~			1					Standard TAT
~~NFMR2~~			~~Water~~	~~river water~~	~~1~~			1					Standard TAT
TC1	6/21/06	13:25	Water	river water	1			1	6030228-01				Standard TAT
NFMR3	6/21/06	8:20	Water	river water	1			1	6030229-01				Standard TAT
~~MR1~~			~~Water~~	~~river water~~	~~1~~			1					Standard TAT
MR1	6/21/06	6:45	Water	river water	1			1	6030230-01				Standard TAT
													Standard TAT
				ASK FOR BOTTLES FOR NEXT MONTH'S SAMPLING!									
				Total	8	0	0	8		0	0	0	0

Relinquished by:	Date/Time:	Received by:	Date/Time:	Ship via
E Baker for Frantz	6/21/06 1432	J Hrabcsek	6/21/06 1432	
Relinquished by:	Date/Time:	Received by:	Date/Time:	BL/Air Bill Number
Relinquished by:	Date/Time:	Received by:	Date/Time:	Date

19.3c mpl
SFL bottle #
TC1 - 1200213
NFMR3 - 120211
BC2 - 120204
MR1 - 120206
MC2 - 850216

TB 6/21/06

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

6003026 LEAVE BLANK

PURVEYOR AND ADDRESS: PGE
COUNTY:
DATE AND HOUR COLLECTED: 6/21/06 1155
SAMPLING POINT: MC2
SYSTEM NUMBER: [ ][ ] X [ ][ ][ ]
COLLECTED BY: Kenzler
BOTTLE NUMBER: 8 S026

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM ☒ FECAL COLIFORM
☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS		10					1.0					0.1					COLIFORM MPN/100ml	
PORTIONS IN ML (LOGS)		1	1	1	1	1											4	
PRESUMPTIVE TEST 1655 / 1520	HOURS 24					+											E. C. MPN/100ml	
	48	+	+	+	−												<2	
CONFIRMED TEST 1350 / 1320	24		+			−											SPC/ml AT 35° C.	Cl, RES. mg/liter
	48	−		−		+												
E. C.	24	−				−												

LABORATORY REMARKS
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE
26062W -9055 -89DS 1545 6.21.06 dr

ANALYST: JL

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

6003027 LEAVE BLANK

PURVEYOR AND ADDRESS: PGE
COUNTY:
DATE AND HOUR COLLECTED: 6/21/06 1020
SAMPLING POINT: BC2
SYSTEM NUMBER: [ ][ ] X [ ][ ][ ]
COLLECTED BY: Kenzler
BOTTLE NUMBER: 120204

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM TC15 ☒ FECAL COLIFORM FC15
☐ SPC ☐ OTHER

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS		10					1.0					0.1					COLIFORM MPN/100ml	
PORTIONS IN ML (LOGS)		1	1	1	1	1											4	
PRESUMPTIVE TEST 1635 / 1440	HOURS 24																E. C. MPN/100ml	
	48	−	+	−	+							+					<2	
CONFIRMED TEST 1345 / 1330	24		+		+							−					SPC/ml AT 35° C.	Cl, RES. mg/liter
	48											−						
E. C.	24	−			−							−						

LABORATORY REMARKS
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE
26062W -8655 -83DS 1530 6.21.06 dr

ANALYST: JL

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

603028 LEAVE BLANK

PURVEYOR AND ADDRESS: PGE / TC1

COUNTY:

DATE AND HOUR COLLECTED: 6/21/06 1325

SAMPLING POINT: Tiger Crk below T.C. Reg.

SYSTEM NUMBER:

COLLECTED BY: Kenzler

BOTTLE NUMBER: 12043

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS		10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)		1	1	1	1	1											6.1
PRESUMPTIVE TEST 1150 1330	HOURS 24	+	+	+	+	+											E. C. MPN/100ml
	48						+	+	+	+							<2
CONFIRMED TEST 1330	24						+	-	+								SPC/ml AT 35° C.
	48	+					-		-								Cl₂ RES. mg/liter
E. C.	24																

LABORATORY REMARKS

☐ LEAKED IN TRANSIT ☐ INSUFFICIENT SAMPLE 260620W-9055 8905 1545 6.21.06 ds

ANALYST: 2

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

603029 LEAVE BLANK

PURVEYOR AND ADDRESS: PGE

COUNTY:

DATE AND HOUR COLLECTED: 6/21/06 0820

SAMPLING POINT: NFMR3

SYSTEM NUMBER:

COLLECTED BY: Kenzler

BOTTLE NUMBER: 12021

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM TC15 ☒ FECAL COLIFORM FC15 ☐ SPC ☐ OTHER

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS		10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)		1	1	1	1	1											7
PRESUMPTIVE TEST 1130 1305 1350	HOURS 24	+	+	+	+	+	+										E. C. MPN/100ml
	48						+	+	-	+		-		+	+	+	<2
CONFIRMED TEST 1330	24						-										SPC/ml AT 35° C.
	48		+	+			-			+							Cl₂ RES. mg/liter
E. C.	24						-		-								

LABORATORY REMARKS

☐ LEAKED IN TRANSIT ☐ INSUFFICIENT SAMPLE 260620W-8655 8305 1440 6.21.06 ds

ANALYST: 2

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642

603030 LEAVE BLANK

SAMPLE FOR MICROBIOLOGICAL EXAMINATION

PURVEYOR AND ADDRESS	COUNTY	DATE AND HOUR COLLECTED
PGE		6/21/06 0645

SAMPLING POINT	SYSTEM NUMBER	COLLECTED BY	BOTTLE NUMBER
MR1	[ ][ ] X [ ][ ][ ]	Kemzler	120206

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS		1.0					0.1					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)		1	1	1	1	1											80
PRESUMPTIVE TEST (1300)	HOURS 24	+	+	+	+	+	—		+	+	+	—					E. C. MPN/100ml
	48						+	+				+	—				8
CONFIRMED TEST 330	24	+	+	+	—	+	—	+	—			—					SPC/ml AT 35° C. / Cl, RES. mg/liter
	48				+		+		—			+	—				
E. C.	24	+	+	—	—	+	—		—			—					

LABORATORY REMARKS

☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE

260626W-8655 1440
8305 6/21/06 dr

ANALYST

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Report Date: 07/24/2006

Client: **PG&E**

PG&E
Elizabeth Frantz
3400 Crow Canyon Rd
San Ramon, CA 94583-

Project Report: **136487**

Results for Project 136487

604600 **Mokelumne R Project: TC1 G W** Liquid Taken: 07/17/2006 1410 By: Client Rec:07/17/2006

NO BOTTLE NUMBER ON COC; MAY BE IN CLIENT CONTAINERS.

Parameter	*Result*	*Unit*	*Flag*	*RL*	*Method*	*Analyzed*	*By*	*CAS*
Total Coliform Bacteria, 15 t	17	#/100ml		2	SM9221B	07/18/2006 1700	TN	
Fecal Coliform Bacteria, 15 t	11	#/100ml		2	SM9221E	07/17/2006 1700	TN	

604601 **Mokelumne R Project: NFMR3 G W** Liquid Taken: 07/17/2006 1515 By: Client Rec:07/17/2006

NO BOTTLE NUMBER ON COC; MAY BE CLIENT-SUPPLIED BOTTLE.

Parameter	*Result*	*Unit*	*Flag*	*RL*	*Method*	*Analyzed*	*By*	*CAS*
Total Coliform Bacteria, 15 t	50	#/100ml		2	SM9221B	07/17/2006 1700	TN	
Fecal Coliform Bacteria, 15 t	4	#/100ml		2	SM9221E	07/17/2006 1700	TN	

ELAP #1113 NELAP #06245CA

Sandy Nurse

Sandy Nurse, Lab Director

Sierra Foothill Laboratory, Inc.
255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642
Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

Lab. Reference Number: 36620

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To: **Sierra Foothill Laboratory**
255 Scottsville Dr
Jackson CA 95642

Attention: Richard Nurse | Phone: (209) 223-2800 | (209) 223-2747 Fax | Page 1 of 1

WO# 10211166 SWIM# 05836 WQS	Project Name: Mokelumne WQ	Project Manager: Eliz. Frantz (925) 866-5472
Samplers: (signature)		Field Team Leader: Eric Kenzler (925) 866-5806

Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles	[NP]	[NP]	Total and Fecal Coliform [NP]	[NP]				Remarks
~~MC2~~			Water	river water	1			1					Standard TAT
~~BC2~~			Water	river water	1			1					Standard TAT
~~DR1~~			Water	river water	1			1					Standard TAT
~~NFMR2~~			Water	river water	1			1					Standard TAT
TC1	7-17-06	1410	Water	river water	1			1	604600-01				Standard TAT
NFMR3	7-17-06	1515	Water	river water	1			1	604601-02				Standard TAT
~~NFMR3~~			Water	river water	1			1					Standard TAT
~~MR1~~			Water	river water	1			1					Standard TAT
													Standard TAT
ASK FOR BOTTLES FOR NEXT MONTH'S SAMPLING!													
			Total		8	0	0	8		0	0	0	0	

Relinquished by:	Date/Time:	Received by:	Date/Time:	Ship via
Kenzler	7-17-06 1645	Strabtree	7/17/06 1645	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Bl./Air Bill Number
Relinquished by:	Date/Time:	Received by:	Date/Time:	Date

TB 7-18-06

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

604601 LEAVE BLANK

PURVEYOR AND ADDRESS: PGE
COUNTY:
DATE AND HOUR COLLECTED: 7/17/06 1515
SAMPLING POINT: NFMR3
SYSTEM NUMBER: X
COLLECTED BY: Client
BOTTLE NUMBER: 50159

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS		10					1.0					0.1					COLIFORM MPN/100ml	
PORTIONS IN ML (LOGS)		1	1	1	1	1												
PRESUMPTIVE TEST 1505 1525	HOURS 24	+	+	+	+	+					+						50	
	48						−	+	−			−					E. C. MPN/100ml	
CONFIRMED TEST 1536	24	−	+	+	+			+		+							4	
	48	+	+														SPC/ml AT 35° C.	Cl_2 RES. mg/liter
E. C.	24	−	−	+	+		−		−									

LABORATORY REMARKS: 62W-1141D1 7.17.06 1700h
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE 62W-1165J

ANALYST: JL

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

604600 LEAVE BLANK

PURVEYOR AND ADDRESS: PGE
COUNTY:
DATE AND HOUR COLLECTED: 7/17/06 1410
SAMPLING POINT: TC1
SYSTEM NUMBER: X
COLLECTED BY: Client
BOTTLE NUMBER: 50161

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS		10					1.0					0.1					COLIFORM MPN/100ml	
PORTIONS IN ML (LOGS)		1	1	1	1	1												
PRESUMPTIVE TEST 1505 1525	HOURS 24	+	+	+	+	+	+										17	
	48						−					−	+	−	+		E. C. MPN/100ml	
CONFIRMED TEST 1536 1606	24	−	+	+	+		+										11	
	48	−	+														SPC/ml AT 35° C.	Cl_2 RES. mg/liter
E. C.	24	−	−	+	+	+	+											

LABORATORY REMARKS: 62W-1141D5 7-17-06 1702h
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE 62W-1165J

ANALYST: JL

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Report Date: 07/24/2006

Client: **PG&E**

PG&E
Elizabeth Frantz
3400 Crow Canyon Rd
San Ramon, CA 94583-

Project Report: **136528**

Results for Project 136528

604703 Mokelumne R Project: BR1 G W 50162

Liquid Taken: 07/18/2006 0910 By: Client Rec:07/18/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	22	#/100ml		2	SM9221B	07/18/2006 1705	TN	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	07/18/2006 1705	TN	

604704 Mokelumne R Project: NFMR5 G W 50163

Liquid Taken: 07/18/2006 1430 By: Client Rec:07/18/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	50	#/100ml		2	SM9221B	07/18/2006 1705	TN	
Fecal Coliform Bacteria, 15 t	30	#/100ml		2	SM9221E	07/18/2006 1705	TN	

604705 Mokelumne R Project: MR1 G W 50160

Liquid Taken: 07/18/2006 1600 By: Client Rec:07/18/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	240	#/100ml		2	SM9221B	07/18/2006 1705	TN	
Fecal Coliform Bacteria, 15 t	50	#/100ml		2	SM9221E	07/18/2006 1705	TN	

ELAP #1113 NELAP #06245CA

Sandy Nurse

Sandy Nurse, Lab Director

Sierra Foothill Laboratory, Inc.
255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642
Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

Lab. Reference Number: 36620

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To:	Sierra Foothill Laboratory		
	255 Scottsville Dr		
	Jackson CA 95642		
Attention: Richard Nurse	Phone: (209) 223-2800	(209) 223-2747 Fax	Page 1 of 1

WO# 10211166 SWIM# 05836 WQS	Project Name: Mokelumne WQ	Project Manager: Eliz. Frantz (925) 866-5472
Samplers: (signature)		Field Team Leader: Eric Kenzler (925) 866-5806

Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles	[NP]	[NP]	Total and Fecal Coliform [NP]	[NP]					Remarks
~~MC2~~	~~7-18~~		Water	river water	1			1						Standard TAT
~~MC2~~			Water	river water	1			1						Standard TAT
BR1 50162	7-18	0910	Water	river water	1	604703-01		1						Standard TAT
~~NFMR2~~			Water	river water	1			1						Standard TAT
~~FC1~~			Water	river water	1			1						Standard TAT
~~NFMR3~~			Water	river water	1			1						Standard TAT
NFMR5 50163	7-18	1130	Water	river water	1	604704-01								Standard TAT
MR1 50160	7-18	1600	Water	river water	1	604705-01								Standard TAT
ASK FOR BOTTLES FOR NEXT MONTH'S SAMPLING!														
				Total	8	0	0	8		0	0	0	0	

Relinquished by: Eric Kenzler	Date/Time: 7-18-06 1645	Received by: Tina Barrans	Date/Time: 7/19/06 16:45	Ship via
Relinquished by:	Date/Time:	Received by:	Date/Time:	Bl./Air Bill Number
Relinquished by:	Date/Time:	Received by:	Date/Time:	Date

1540

TA 7-18-06

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

604703 LEAVE BLANK

PURVEYOR AND ADDRESS: PG&E
COUNTY:
DATE AND HOUR COLLECTED: 7/18/06 09:10
SAMPLING POINT: BR1
SYSTEM NUMBER: [ ][ ] X [ ][ ][ ]
COLLECTED BY: BK
BOTTLE NUMBER: 50162

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☒ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM TC15 ☒ FECAL COLIFORM FC15
☐ SPC ☐ OTHER

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS		10					1.0				0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)		1	1	1	1	1										22
PRESUMPTIVE TEST 1645 1600	HOURS 24	−	+	+	+	+										E. C. MPN/100ml
	48	+														<2
CONFIRMED TEST 1720 1745	24	−	−	+	+	−										SPC/ml AT 35° C. / CI, RES. mg/liter
	48	−	+			+										
E. C.	24	−														

LABORATORY REMARKS: 0624-1/4 DS 7-18-06 1705 [signature]
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE 0624-1/8 SJ

ANALYST: [signature]

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

604704 LEAVE BLANK

PURVEYOR AND ADDRESS: PG&E
COUNTY:
DATE AND HOUR COLLECTED: 7/18/06 14:30
SAMPLING POINT: NFMR5
SYSTEM NUMBER: [ ][ ] X [ ][ ][ ]
COLLECTED BY: BK
BOTTLE NUMBER: 50163

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☒ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM TC15 ☒ FECAL COLIFORM FC15
☐ SPC ☐ OTHER

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS		10					1.0				0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)		1	1	1	1	1										50
PRESUMPTIVE TEST 1645 1600	HOURS 24	+	+	+	+	+	−	−	−	+						E. C. MPN/100ml
	48						−	+	−							30
CONFIRMED TEST 1945 1920	24	+	+	+	+	+		−		+						SPC/ml AT 35° C. / CI, RES. mg/liter
	48							+								
E. C.	24	+	+	+	+	+		−		+						

LABORATORY REMARKS: 0624-1/9 DS 7-18-06 1705 [signature]
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE 0624-1/20 SJ

ANALYST: [signature]

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

604705 LEAVE BLANK

PURVEYOR AND ADDRESS: PG&E

COUNTY:

DATE AND HOUR COLLECTED: 7/18/06 16:00

SAMPLING POINT: MR1

SYSTEM NUMBER: [ ][ ]X[ ][ ][ ]

COLLECTED BY: BK

BOTTLE NUMBER: 50160

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☒ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM TC15 ☒ FECAL COLIFORM FC15

☐ SPC ☐ OTHER

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS		10				1.0				0.1									
PORTIONS IN ML (LOGS)		1	1	1	1	1													
PRESUMPTIVE TEST	HOURS 24	+	+	+	+	+	−	+	−	+	−	−	−	−	−	−	−	−	−
	48						+		+	+								+	
CONFIRMED TEST	24	+	+	+	+	+	−	+	−	+	−	−	−	−	−	−	−	−	−
	48						+		+	+								−	
E. C.	24	+	+	+	+	+	−	+	−	+	−	−	−	−	−	−	−	−	−

1605 1605 1620 1342

COLIFORM MPN/100ml: 240

E. C. MPN/100ml: 50

SPC/ml AT 35° C.:

Cl, RES. mg/liter:

LABORATORY REMARKS: 0620-1/4 BS 7-18-06 0624 7/18 SI 1705 A

☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE

ANALYST: A

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Report Date: 07/24/2006

Client: **PG&E**

PG&E
Elizabeth Frantz
3400 Crow Canyon Rd
San Ramon, CA 94583-

Project Report: **136637**

Results for Project 136637

604901 MC2 G W

Liquid Taken: 07/19/2006 1425 By: Client Rec:07/19/2006

Parameter	*Result*	*Unit*	*Flag*	*RL*	*Method*	*Analyzed*	*By*	*CAS*
Total Coliform Bacteria, 15 t	2	#/100ml		2	SM9221B	07/19/2006 1740	TN	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	07/19/2006 1740	TN	

604902 BC2 G W

Liquid Taken: 07/19/2006 1320 By: Client Rec:07/19/2006

Parameter	*Result*	*Unit*	*Flag*	*RL*	*Method*	*Analyzed*	*By*	*CAS*
Total Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221B	07/19/2006 1740	TN	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	07/19/2006 1740	TN	

ELAP #1113 NELAP #06245CA

Sandy Nurse

Sandy Nurse, Lab Director

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

Lab. Reference Number: 36620

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To: **Sierra Foothill Laboratory**
255 Scottsville Dr
Jackson CA 95642

Attention: Richard Nurse | Phone: (209) 223-2800 (209) 223-2747 Fax | Page 1 of 1

WO# 10211166 SWIM# 05836 WQS	Project Name Mokelumne WQ	Project Manager Eliz. Frantz (925) 866-5472
Samplers: (signature)		Field Team Leader Eric Kenzler (925) 866-5806

Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles	(NP)	(NP)	Total and Fecal Coliform (NP)	(NP)				Remarks
MC2 604901-01	7/19/06	1425	Water	river water	1			1					Standard TAT
HC2 -902-01	7/19/06	1320	Water	river water	1			1					Standard TAT
~~GR1~~			Water	river water	1			1					Standard TAT
~~MMH2~~			Water	river water	1			1					Standard TAT
~~TC1~~			Water	river water	1			1					Standard TAT
~~MMR5~~			Water	river water	1			1					Standard TAT
~~NEM5~~			Water	river water	1			1					Standard TAT
~~SR4~~			Water	river water	1			1					Standard TAT
ASK FOR BOTTLES FOR NEXT MONTH'S SAMPLING!													
				Total	8	0	0	8		0	0	0	0	

Relinquished by:	Date/Time:	Received by:	Date/Time:	Ship via
Eric Kenzler	7/19/06 1636	[illegible]	7/19/06 1636	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Bl/Air Bill Number
Relinquished by:	Date/Time:	Received by:	Date/Time:	Date

T2 7/20/06

Sierra Foothill Laboratory, Inc.
255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642
Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

604901 LEAVE BLANK

PURVEYOR AND ADDRESS: PGE | COUNTY: | DATE AND HOUR COLLECTED: 7/19/06 1320

SAMPLING POINT: MC2 | SYSTEM NUMBER: [ ][ ]X[ ][ ][ ] | COLLECTED BY: Kinzler | BOTTLE NUMBER: 120212

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)	1	1	1	1	1											2
PRESUMPTIVE TEST 1720 1410 1355 HOURS 24	—	—	—	+	+	—	—	—	—	—	—	—	—	—	—	E. C. MPN/100ml
48	+	+	—													<2
CONFIRMED TEST 24	—			—												SPC/ml AT 35° C.
48	+	—		—												CI, RES. mg/liter
E. C. 24	—			—												

LABORATORY REMARKS
☐ LEAKED IN TRANSIT ☐ INSUFFICIENT SAMPLE 260620W-12155 1740 7·19·06 ds ANALYST JL

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

604902 LEAVE BLANK

PURVEYOR AND ADDRESS: PGE | COUNTY: | DATE AND HOUR COLLECTED: 7/19/06

SAMPLING POINT: BC2 | SYSTEM NUMBER: [ ][ ]X[ ][ ][ ] | COLLECTED BY: Kinzler | BOTTLE NUMBER: 50156 1425

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)	1	1	1	1	1											<2
PRESUMPTIVE TEST 1720 1635 1463 HOURS 24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	E. C. MPN/100ml
48	+	—	+	+	—											<2
CONFIRMED TEST 1355 24	—			—												SPC/ml AT 35° C.
48	—			—												CI, RES. mg/liter
E. C. 24	—			—												

LABORATORY REMARKS
☐ LEAKED IN TRANSIT ☐ INSUFFICIENT SAMPLE 260620W-12155 1740 7·19·06 ds ANALYST JL

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Report Date: 07/24/2006

Client: **PG&E**

PG&E
Elizabeth Frantz
3400 Crow Canyon Rd
San Ramon, CA 94583-

Project Report: **136632**

Results for Project 136632

604896 NFMR2 G W Liquid Taken: 07/20/2006 0820 By: Client Rec:07/20/2006

Parameter	*Result*	*Unit*	*Flag*	*RL*	*Method*	*Analyzed*	*By*	*CAS*
Total Coliform Bacteria, 15 t	50	#/100ml		2	SM9221B	07/20/2006 1345	TN	
Fecal Coliform Bacteria, 15 t	8	#/100ml		2	SM9221E	07/20/2006 1345	TN	

ELAP #1113 NELAP #06245CA

Sandy Nurse

Sandy Nurse, Lab Director

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

Lab. Reference Number: 36620

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To:	**Sierra Foothill Laboratory**		
	255 Scottsville Dr		
	Jackson CA 95642		
Attention: Richard Nurse	Phone: (209) 223-2800	(209) 223-2747 Fax	Page 1 of 1

WO# 10211166 SWIM# 05836 WQS	Project Name **Mokelumne WQ**	Project Manager **Eliz. Frantz (925) 866-5472**
Samplers: (signature)		Field Team Leader **Eric Kenzler (925) 866-5806**

Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles	[NP]	[NP]	Total and Fecal Coliform [NP]	[NP]				Remarks
~~MC2~~			Water	river water	1			1					Standard TAT
~~BC2~~			Water	river water	1			1					Standard TAT
~~ART~~			Water	river water	1			1					Standard TAT
~~NFMR2~~ NFMR2	7-20-6	820	Water	river water	1			1					Standard TAT
~~FC1~~ 6048876-01			Water	river water	1			1					Standard TAT
~~NFMR3~~			Water	river water	1			1					Standard TAT
~~NFMR5~~			Water	river water	1			1					Standard TAT
~~MR1~~			Water	river water	1			1					Standard TAT
ASK FOR BOTTLES FOR NEXT MONTH'S SAMPLING!													
				Total	8	0	0	8		0	0	0	0

Relinquished by:	Date/Time:	Received by:	Date/Time:	Ship via
	7-20-06 1:15		7-20-06 / 1115	
Relinquished by:	Date/Time:	Received by:	Date/Time:	BL/Air Bill Number
Relinquished by:	Date/Time:	Received by:	Date/Time:	Date

T2 7/20/06

PAID 7-20-06
8 x $70.00 = $560
Credit card

Sierra Foothill Laboratory, Inc.
255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642
Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

604896 LEAVE BLANK

PURVEYOR AND ADDRESS: PG&E

COUNTY:

DATE AND HOUR COLLECTED: 7/20/06 0920

SAMPLING POINT: NFM62

SYSTEM NUMBER: [ ][ ]X[ ][ ][ ]

COLLECTED BY: Kenyon

BOTTLE NUMBER: 50164

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM TC15 ☒ FECAL COLIFORM FC15 ☐ SPC ☐ OTHER

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0				0.1										COLIFORM MPN/100ml	
PORTIONS IN ML (LOGS)	1	1	1	1	1															50	
PRESUMPTIVE TEST 1535 1352 HOURS 24	+	+	+	+	+	—	+	+	—	—	—	—	—	—	—	—	—	—	—	E. C. MPN/100ml	
48						+			—	—	—	—	—	—	—	—	—	—	—	8	
CONFIRMED TEST 1345 1305 24	+	+	+	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	SPC/ml AT 35° C.	CI, RES. mg/liter
48				+	+	+	—	+	—	—	—	—	—	—	—	—	—	—	—		
E. C. 24	+	+	+	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

LABORATORY REMARKS

☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE

26062W = 1215S 1345
1190S 7.20.06 ds

ANALYST

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Report Date: 08/21/2006

Client: **PG&E**

PG&E
Elizabeth Frantz
3400 Crow Canyon Rd
San Ramon, CA 94583-

Project Report: **137488**

Results for Project 137488

606479 Mokelumne R Project: NFMR2 G W 601127 Liquid Taken: 08/15/2006 0845 By: Client Rec:08/15/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221B	08/15/2006 1640	MG	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	08/15/2006 1640	MG	

606480 Mokelumne R Project:TC1 G W 601268 Liquid Taken: 08/15/2006 1240 By: Client Rec:08/15/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	17	#/100ml		2	SM9221B	08/15/2006 1645	MG	
Fecal Coliform Bacteria, 15 t	2	#/100ml		2	SM9221E	08/15/2006 1645	MG	

606481 Mokelumne R Project:NFMR3 G W 60102 Liquid Taken: 08/15/2006 1330 By: Client Rec:08/15/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	7	#/100ml		2	SM9221B	08/15/2006 1640	MG	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	08/15/2006 1640	MG	

606482 Mokelumne R Project: NFMR5 G W 601271 Liquid Taken: 08/15/2006 1500 By: Client Rec:08/15/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	70	#/100ml		2	SM9221B	08/15/2006 1645	MG	
Fecal Coliform Bacteria, 15 t	13	#/100ml		2	SM9221E	08/15/2006 1645	MG	

ELAP #1113 NELAP #06245CA

Sandy Nurse

Sandy Nurse, Lab Director

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

Lab. Reference Number: 36620

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To: **Sierra Foothill Laboratory**
255 Scottsville Dr
Jackson CA 95642

Attention. Richard Nurse | Phone: (209) 223-2800 (209) 223-2747 Fax | Page 1 of 1

WO# 10211166 SWIM# 05836 WQS	Project Name: Mokelumne WQ	Project Manager: Eliz. Frantz (925) 866-5472
Samplers. (signature)		Field Team Leader: Eric Kenzler (925) 866-5806

Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles			Total and Fecal Coliform							Remarks
~~MC2~~			Water	river water	1										Standard TAT
~~BC2~~			Water	river water	1			235							Standard TAT
~~BR1~~			Water	river water	1										Standard TAT
NFMR2 ~~606479-01~~	8-15-06	8:45	Water	601127 river water	1										Standard TAT
TC1 ~ 480-01	"	12:40	Water	601218 river water	1										Standard TAT
NFMR3 ~ 481-01	"	13:30	Water	60102 river water	1										Standard TAT
NFMR5 ~ 482-01	"	15:00	Water	601271 river water	1										Standard TAT
~~MR1~~			Water	river water	1										Standard TAT
															Standard TAT
															Standard TAT
ASK FOR BOTTLES FOR NEXT MONTH'S SAMPLING!															
				Total	8	0	0	8		0	0	0	0		

Relinquished by:	Date/Time:	Received by:	Date/Time:	Ship via
	8-15-06 15:45		8-15-06/1545	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Bl./Air Bill Number
Relinquished by:	Date/Time:	Received by:	Date/Time:	Date

* Will Pay Thursday
T 8/16/06

172 e. coli

Sierra Foothill Laboratory, Inc.
255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642
Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

6006479 LEAVE BLANK

PURVEYOR AND ADDRESS: PG&E | COUNTY: | DATE AND HOUR COLLECTED: 8/15/06 0845

SAMPLING POINT: NFMR2 | SYSTEM NUMBER: X | COLLECTED BY: Kengler | BOTTLE NUMBER: 601127

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:

☑ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS		10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)		1	1	1	1	1											<2
PRESUMPTIVE TEST 1640	HOURS 24	+	+	−	+	+	−	−	−	−	−	−	−	−	−	−	E. C. MPN/100ml
	48			−			−	−	+	−	−						<2
CONFIRMED TEST 1455	24	−	−		−	−	−	−	−								SPC/ml AT 35° C.
	48	−	−		−	−	−	−	−								Cl₂ RES. mg/liter
E. C.	24	−	−		−	−	−	−	−								

LABORATORY REMARKS

☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE 2600620 15355 1500S 1640 8-15-06 mg

ANALYST

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

6006480 LEAVE BLANK

PURVEYOR AND ADDRESS: PG&E | COUNTY: | DATE AND HOUR COLLECTED: 8-15-06/1240

SAMPLING POINT: TC1 | SYSTEM NUMBER: X | COLLECTED BY: Kengler | BOTTLE NUMBER: 601268

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:

☑ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS		10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)		1	1	1	1	1											17
PRESUMPTIVE TEST 1645	HOURS 24	+	+	+	−	−	−	−	−	−	−	−	−	−	−	−	E. C. MPN/100ml
	48				+	+	−	+	+	−	−	+	−	+	+		2
CONFIRMED TEST 1455	24	+	+	+	−	+		−	−			−		−	−		SPC/ml AT 35° C.
	48				+		−	+				−		−	−		Cl₂ RES. mg/liter
E. C.	24	−	+	−	−	−		−	−			−		−	−		

LABORATORY REMARKS

☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE 2600620 15355 1500S 1645 8-15-06 mg

ANALYST

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

6006481 (6006479) LEAVE BLANK

PURVEYOR AND ADDRESS: PG&E | COUNTY: | DATE AND HOUR COLLECTED: 8-15-06 / 1330

SAMPLING POINT: NFMR3 | SYSTEM NUMBER: X | COLLECTED BY: Kemper | BOTTLE NUMBER: 60102

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0				0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)	1	1	1	1	1										7
PRESUMPTIVE TEST 1640 HOURS 24	+	+	+	−	+	−	−	−	−	−	−	−	−	−	E. C. MPN/100ml <2
PRESUMPTIVE TEST 1640 HOURS 48				+		−	+	−	−	+	+	−	+	+	
CONFIRMED TEST 1445 24	−	−	−	−	−	−		−	−	+	−				SPC/ml AT 35° C.
CONFIRMED TEST 1455 48	+	−	−	−	+	−		−			−				Cl, RES. mg/liter
E. C. 24	−	−	−	−	−	−		−	−	−	−				

LABORATORY REMARKS

☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE

150DS 1640 2W062W 1535S 8-15-06 mg

ANALYST: JL

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

6006482 LEAVE BLANK

PURVEYOR AND ADDRESS: PG&E | COUNTY: | DATE AND HOUR COLLECTED: 8-15-06 / 1500

SAMPLING POINT: NFMR5 | SYSTEM NUMBER: X | COLLECTED BY: Kemper | BOTTLE NUMBER: 60127

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0				0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)	1	1	1	1	1										70
PRESUMPTIVE TEST 1645 HOURS 24	+	+	+	+	+	−	+	−	−	−	−	+			E. C. MPN/100ml 13
PRESUMPTIVE TEST 1645 HOURS 48						−	+	−	+	+	−	−			
CONFIRMED TEST 1445 24	+	−	+	+	+		−	−	+	−		−			SPC/ml AT 35° C.
CONFIRMED TEST 1455 48		+					−	+		+		−			Cl, RES. mg/liter
E. C. 24	+	−	+	+	+		−	−	−	−		−			

LABORATORY REMARKS

☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE

150DS 1645 mg 2W062W 1535S 8-15-06

ANALYST: JL

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Report Date: 08/21/2006

Client: **PG&E**

PG&E
Elizabeth Frantz
3400 Crow Canyon Rd
San Ramon, CA 94583-

Project Report: **137555**

Results for Project 137555

606609 Mokelumne R Project: BR1 G W 60106 Liquid Taken: 08/16/2006 0920 By: Client Rec:08/16/2006

Parameter	*Result*	*Unit*	*Flag*	*RL*	*Method*	*Analyzed*	*By*	*CAS*
Total Coliform Bacteria, 15 t	2	#/100ml		2	SM9221B	08/16/2006 1705	MG	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	08/16/2006 1705	MG	

606610 Mokelumne R Project: MR1 G W 60110 Liquid Taken: 08/16/2006 1500 By: Client Rec:08/16/2006

Parameter	*Result*	*Unit*	*Flag*	*RL*	*Method*	*Analyzed*	*By*	*CAS*
Total Coliform Bacteria, 15 t	23	#/100ml		2	SM9221B	08/16/2006 1705	TN	
Fecal Coliform Bacteria, 15 t	4	#/100ml		2	SM9221E	08/16/2006 1705	TN	

ELAP #1113 NELAP #06245CA

Sandy Nurse

Sandy Nurse, Lab Director

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

Lab. Reference Number: 36620

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To: **Sierra Foothill Laboratory**
255 Scottsville Dr
Jackson CA 95642

Attention: Richard Nurse | Phone: (209) 223-2800 | (209) 223-2747 Fax | Page 1 of 1

WO# 10211166
SWIM# 05836 WQS

Project Name: **Mokelumne WQ**

Project Manager: **Eliz. Frantz (925) 866-5472**

Field Team Leader: **Eric Kenzler (925) 866-5806**

Samplers: (signature)

Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles			Total and Fecal Coliform					Remarks
						(SC)	(SP)	(SP)	(SP)				
~~ACC2~~			Water	river water	1			1					Standard TAT
~~DC2~~			Water	river water	1			1					Standard TAT
606609 -01 BR1	8-16-06	0920	Water	160166 river water	1			1					Standard TAT
~~MEMR2~~			Water	river water	1			1					Standard TAT
~~TC1~~			Water	river water	1			1					Standard TAT
~~MEMR3~~			Water	river water	1			1					Standard TAT
~~MEMR5~~			Water	river water	1			1					Standard TAT
610 -01 MR1	8-16-06	1500	Water	160110 river water	1			1					Standard TAT
ASK FOR BOTTLES FOR NEXT MONTH'S SAMPLING!													
				Total	8	0	0	8		0	0	0	0

Relinquished by:	Date/Time: 81606 1530	Received by:	Date/Time: 81606 / 1530	Ship via	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Bl./Air Bill Number	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Date	

TC 8/17/06

8.4C
ondl
-4

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

060609 LEAVE BLANK

PURVEYOR AND ADDRESS: PG+E
COUNTY:
DATE AND HOUR COLLECTED: 8-16-06 / 0920
SAMPLING POINT: BR1
SYSTEM NUMBER: XX
COLLECTED BY: Krengler
BOTTLE NUMBER: 60106

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☑ COLIFORM ☑ FECAL COLIFORM
☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					0.1					COLIFORM MPN/100ml	
PORTIONS IN ML (LOGS)	1	1	1	1	1											2	
PRESUMPTIVE TEST 1525 HOURS 24	—	+	—	+		—	—	—	—	—	—	—	—	—	—	E. C. MPN/100ml	
48	+	+	—			+	—	+	—	—	—	—	—	—	—	<2	
CONFIRMED TEST 1525 1530 24	—	—	—			—	—	—			—	—	—	—	—	SPC/ml AT 35° C.	Cl₂ RES. mg/liter
48	—	+	—			—	—	—			—	—	—	—	—		
E. C. 24	—	—	—			—	—	—			—	—	—	—	—		

LABORATORY REMARKS: 0624-157D) 8-16-06
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE 0624-156S) 1705 h

ANALYST: JL

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

060610 LEAVE BLANK

PURVEYOR AND ADDRESS: PG+E
COUNTY:
DATE AND HOUR COLLECTED: 8-16-06/1500
SAMPLING POINT: MR1
SYSTEM NUMBER: XX
COLLECTED BY: Krengler
BOTTLE NUMBER: 60110

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☑ COLIFORM ☑ FECAL COLIFORM
☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					0.1					COLIFORM MPN/100ml	
PORTIONS IN ML (LOGS)	1	1	1	1	1											23	
PRESUMPTIVE TEST 1530 HOURS 24	+	+	+	+	+	—	—	—	—	—	—	—	—	—	—	E. C. MPN/100ml	
48																4	
CONFIRMED TEST 1505 24	—	+	—	—	+											SPC/ml AT 35° C.	Cl₂ RES. mg/liter
48	+		+	+													
E. C. 24	—	+	—	—	+												

LABORATORY REMARKS: 0624-154D) 8-16-06
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE 0624-156S) 1705 h

ANALYST: JL

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Report Date: 08/22/2006

Client: **PG&E**

PG&E
Elizabeth Frantz
3400 Crow Canyon Rd
San Ramon, CA 94583-

Project Report: **137594**

Results for Project 137594

606672 Mokelumne R Project:MC2 G W 601122 Liquid Taken: 08/17/2006 1330 By: Client Rec:08/17/2006

Parameter	*Result*	*Unit*	*Flag*	*RL*	*Method*	*Analyzed*	*By*	*CAS*
Total Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221B	08/17/2006 1725	DS	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	08/17/2006 1725	DS	

606673 Mokelumne R Project: BC2 G W 60111 Liquid Taken: 08/17/2006 1230 By: Client Rec:08/17/2006

Parameter	*Result*	*Unit*	*Flag*	*RL*	*Method*	*Analyzed*	*By*	*CAS*
Total Coliform Bacteria, 15 t	11	#/100ml		2	SM9221B	08/17/2006 1725	DS	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	08/17/2006 1725	DS	

ELAP #1113 NELAP #06245CA

Sandy Nurse

Sandy Nurse, Lab Director

Sierra Foothill Laboratory, Inc.
255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642
Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

Lab. Reference Number: 36620

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To: **Sierra Foothill Laboratory**
255 Scottsville Dr
Jackson CA 95642

Attention: Richard Nurse | Phone: (209) 223-2800 | (209) 223-2747 Fax | Page 1 of 1

WO# 10211166 SWIM# 05836 WQS	Project Name: Mokelumne WQ	Project Manager: Ellz. Frantz (925) 866-5472
Samplers: (signature)		Field Team Leader: Eric Kenzler (925) 866-5806

Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles	[NP]	[NP]	Total and Fecal Coliform [DP]	[DP]				Remarks
606672 MC2	8-17-06	13:36	Water	river water	1			1					Standard TAT
673-01 BC2	8-17-06	12:30	Water	river water	1			1					Standard TAT
~~BR1~~			Water	river water	1			1					Standard TAT
~~NFMR2~~			Water	river water	1			1					Standard TAT
~~TC1~~			Water	river water	1			1					Standard TAT
~~NFMR3~~			Water	river water	1			1					Standard TAT
~~NFMR5~~			Water	river water	1			1					Standard TAT
~~MR1~~			Water	river water	1			1					Standard TAT
ASK FOR BOTTLES FOR NEXT MONTH'S SAMPLING!													
				Total	8	0	0	8		0	0	0	0	

Relinquished by:	Date/Time:	Received by:	Date/Time:	Ship via
Eric Kenzler	8-17-06 1610	Tammie Craft	8/17/06 1610	
Relinquished by:	Date/Time:	Received by:	Date/Time:	BL/Air Bill Number
Relinquished by:	Date/Time:	Received by:	Date/Time:	Date

Raid samples 8/15/06 8/16/06 & 8/17/06

TR 8/16/06

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

600672 LEAVE BLANK

PURVEYOR AND ADDRESS: PG+E
COUNTY:
DATE AND HOUR COLLECTED: 8/17/06 1330
SAMPLING POINT: MC2
SYSTEM NUMBER: X
COLLECTED BY: Kenzler
BOTTLE NUMBER: 601122

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)	1	1	1	1	1											
PRESUMPTIVE HOURS 24																<2
TEST 1615 48	-	+	+	+	+	-					-					E. C. MPN/100ml
CONFIRMED 24																<2
TEST 1620 48		-	-	-	-											SPC/ml AT 35° C. / Cl, RES. mg/liter
E. C. 24		-	-	-	-											

LABORATORY REMARKS
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE
26062W-159 SS 1725
-158 DS 8.17.06 ds
ANALYST

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

600673 LEAVE BLANK

PURVEYOR AND ADDRESS: PG+E
COUNTY:
DATE AND HOUR COLLECTED: 8/17/06 1230
SAMPLING POINT: BC2
SYSTEM NUMBER: X
COLLECTED BY: Kenzler
BOTTLE NUMBER: 60111

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)	1	1	1	1	1											
PRESUMPTIVE HOURS 24		+														11
TEST 1605 48	-		+	+	+	-	+	-			-	+				E. C. MPN/100ml
CONFIRMED 24		+					-					-				<2
TEST 1620 48		+	+	+	-		+					-				SPC/ml AT 35° C. / Cl, RES. mg/liter
E. C. 24		-					-					-				

LABORATORY REMARKS
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE
26062W-159 SS 1725
-158 DS 8.17.06 ds
ANALYST

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Report Date: 09/26/2006

Client: **PG&E**

PG&E
Elizabeth Frantz
3400 Crow Canyon Rd
San Ramon, CA 94583-

Project Report: **138655**

Results for Project 138655

608754 Mokelumne R Project: NFMR2 G W 706222 — Liquid Taken: 09/19/2006 0840 By: KENZLER — Rec:09/19/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	17	#/100ml		2	SM9221B	09/19/2006 1740	ARN	
Fecal Coliform Bacteria, 15 t	2	#/100ml		2	SM9221E	09/19/2006 1740	ARN	

608755 TC1 G W 706219 — Liquid Taken: 09/19/2006 1130 By: KENZLER — Rec:09/19/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	21	#/100ml		2	SM9221B	09/19/2006 1750	ARN	
Fecal Coliform Bacteria, 15 t	4	#/100ml		2	SM9221E	09/19/2006 1750	ARN	

608756 NFMR3 G W 706223 — Liquid Taken: 09/19/2006 1235 By: KENZLER — Rec:09/19/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	17	#/100ml		2	SM9221B	09/19/2006 1750	ARN	
Fecal Coliform Bacteria, 15 t	2	#/100ml		2	SM9221E	09/19/2006 1750	ARN	

608757 NFMR5 G W 706220 — Liquid Taken: 09/19/2006 1355 By: KENZLER — Rec:09/19/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	21	#/100ml		2	SM9221B	09/19/2006 1750	ARN	
Fecal Coliform Bacteria, 15 t	4	#/100ml		2	SM9221E	09/19/2006 1750	ARN	

608758 MR1 G W 706218 — Liquid Taken: 09/19/2006 1525 By: KENZLER — Rec:09/19/2006

Parameter	Result	Unit	Flag	RL	Method	Analyzed	By	CAS
Total Coliform Bacteria, 15 t	50	#/100ml		2	SM9221B	09/19/2006 1740	ARN	
Fecal Coliform Bacteria, 15 t	23	#/100ml		2	SM9221E	09/19/2006 1740	ARN	

ELAP #1113 NELAP #06245CA

Sandy Nurse

Sandy Nurse, Lab Director

Sierra Foothill Laboratory, Inc.
255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642
Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

Lab. Reference Number: 36620

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To: **Sierra Foothill Laboratory**
255 Scottsville Dr
Jackson CA 95642

Attention: Richard Nurse | Phone: (209) 223-2800 | (209) 223-2747 Fax | Page 1 of 1

WO# 10211166
SWIM# 05836 WQS

Project Name: **Mokelumne WQ**

Project Manager: **Eliz. Frantz (925) 866-5472**

Samplers: (signature)

Field Team Leader: **Eric Kenzler (925) 866-5806**

Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles			Total and Fecal Coliform					Remarks
~~MC2~~			Water	river water	1			1					Standard TAT
~~BC2~~			Water	river water	1			1					Standard TAT
~~BR1~~			Water	river water	1			1					Standard TAT
NFMR2 706222	9-19	0840	Water	river water	1	608754-01		1					Standard TAT
TC1 706219	9-19	1130	Water	river water	1	608755-01		1					Standard TAT
NFMR3 706223	9-19	1235	Water	river water	1	608756-01		1					Standard TAT
NFMR5 706220	9-19	1355	Water	river water	1	608757-01		1					Standard TAT
MR1 706218	9-19	1525	Water	river water	1	608758-01		1					Standard TAT
													Standard TAT
ASK FOR BOTTLES FOR NEXT MONTH'S SAMPLING!													
				Total	8	0	0	8		0	0	0	0	

Relinquished by:	Date/Time:	Received by:	Date/Time:	Ship via
[signature]	9-19-06 15:55	[signature]	9/19/06 @ 15 55	
Relinquished by:	Date/Time:	Received by:	Date/Time:	BL/Air Bill Number
Relinquished by:	Date/Time:	Received by:	Date/Time:	Date

11.8C +6 on ice

TB 9-19-06

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

608754 LEAVE BLANK

PURVEYOR AND ADDRESS: PG+E
COUNTY:
DATE AND HOUR COLLECTED: 9/19/06 0840
SAMPLING POINT: NFMR2
SYSTEM NUMBER: X
COLLECTED BY: KENZLER
BOTTLE NUMBER: 706222

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS		10				1.0				0.1				
PORTIONS IN ML (LOGS)		1	1	1	1	1								
PRESUMPTIVE TEST 1645	HOURS 24	+		+		+								
	48	+	+	+	+	—		+	+	+				
CONFIRMED TEST 1435 / 1305	24	—	—	—		+		—		+				
	48	+	+	—	+	—		+						
E. C.	24	—	—	—		+		—		—				

COLIFORM MPN/100ml: 17
E. C. MPN/100ml: 2
SPC/ml AT 35° C.:
Cl, RES. mg/liter:

LABORATORY REMARKS: 0624w-15771 9-19-06 1740

☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE 0624w-15555

ANALYST: JB

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

608755 LEAVE BLANK

PURVEYOR AND ADDRESS: PG+E
COUNTY:
DATE AND HOUR COLLECTED: 9/19/06 11:30
SAMPLING POINT: TC1
SYSTEM NUMBER: X
COLLECTED BY: KENZLER
BOTTLE NUMBER: 706219

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS		10				1.0				0.1				
PORTIONS IN ML (LOGS)		1	1	1	1	1								
PRESUMPTIVE TEST 1650 / 1655	HOURS 24	+	+			—		+		—				
	48			+	+	+		—		+				
CONFIRMED TEST 1440 / 1305	24	+	—	+	+	—		+	—					
	48		+			—			+					
E. C.	24	+	—	—		—		+	—					

COLIFORM MPN/100ml: 21
E. C. MPN/100ml: 4
SPC/ml AT 35° C.:
Cl, RES. mg/liter:

LABORATORY REMARKS: 0624w-15771 9-19-06 1750

☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE 0624w-15551

ANALYST: JB

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

608756 LEAVE BLANK

PURVEYOR AND ADDRESS: PG+E
COUNTY:
DATE AND HOUR COLLECTED: 9/19/06 12:35
SAMPLING POINT: NFMR3
SYSTEM NUMBER: [ ][ ]X[ ][ ][ ]
COLLECTED BY: KENZLER
BOTTLE NUMBER: 706223

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					0.1				
PORTIONS IN ML (LOGS)	1	1	1	1	1										
PRESUMPTIVE (163) HOURS 24	+				+	−									
TEST 1705 48	+	+	+		+	+					−				
CONFIRMED (1442) 24	−			+	−	−									
TEST 1300 48	+	+	+	−	+						−				
E. C. 24	−	−	−	+	−	−					−				

COLIFORM MPN/100ml: 17
E. C. MPN/100ml: 2
SPC/ml AT 35° C.:
Cl, RES. mg/liter:

LABORATORY REMARKS: 062W-157171 9-15-06 1150h
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE 062W-15551

ANALYST: JB

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

608757 LEAVE BLANK

PURVEYOR AND ADDRESS: PG+E
COUNTY:
DATE AND HOUR COLLECTED: 9/19/06 13:55
SAMPLING POINT: NFMR5
SYSTEM NUMBER: [ ][ ]X[ ][ ][ ]
COLLECTED BY: KENZLER
BOTTLE NUMBER: 706220

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					0.1				
PORTIONS IN ML (LOGS)	1	1	1	1	1										
PRESUMPTIVE (1635) HOURS 24	+	+	+	−	+	−					−				
TEST 1705 48				−		+	+	−			+				
CONFIRMED (1461) 24	−		+		+	−	−				+				
TEST 1300 48	+	+				+	−								
E. C. 24	−	−	+	+		−	−				−				

COLIFORM MPN/100ml: 21
E. C. MPN/100ml: 4
SPC/ml AT 35° C.:
Cl, RES. mg/liter:

LABORATORY REMARKS: 062W-157171 9-15-06 1150h
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE 062W-15551

ANALYST: JB

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642

SAMPLE FOR MICROBIOLOGICAL EXAMINATION 608758 LEAVE BLANK

PURVEYOR AND ADDRESS: PG+E		COUNTY	DATE AND HOUR COLLECTED: 9/19/06 1525
SAMPLING POINT: MR1	SYSTEM NUMBER: [ ][ ]X[ ][ ][ ]	COLLECTED BY: KENZLER	BOTTLE NUMBER: 706218

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM ☒ FECAL COLIFORM

☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS		10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)		1	1	1	1	1											50
PRESUMPTIVE TEST 1645	HOURS 24	+	+	+	+	+	−					+					E. C. MPN/100ml
	48																23
CONFIRMED (1357) TEST	24	+	+	+	+	+	−	+	−								SPC/ml AT 35° C. / CI, RES. mg/liter
	48						−		±								
E. C.	24	+	+	+	+	+	−	−	−								

LABORATORY REMARKS: 0624-1757 9-15-06

☐ LEAKED IN TRANSIT

☐ INSUFFICIENT SAMPLE 0624-1755 1740h

ANALYST: JB

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Report Date: 09/26/2006

Client: **PG&E**

PG&E
Elizabeth Frantz
3400 Crow Canyon Rd
San Ramon, CA 94583-

Project Report: **138693**

Results for Project 138693

608843 Mokelumne R Project: BR1 G W 706224 Liquid Taken: 09/20/2006 1000 By: KENZLER Rec:09/20/2006

Parameter	*Result*	*Unit*	*Flag*	*RL*	*Method*	*Analyzed*	*By*	*CAS*
Total Coliform Bacteria, 15 t	2	#/100ml		2	SM9221B	09/20/2006 1525	ARN	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	09/20/2006 1525	ARN	

ELAP #1113 NELAP #06245CA

Sandy Nurse

Sandy Nurse, Lab Director

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

Lab. Reference Number: _____ 36620

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To: **Sierra Foothill Laboratory**
255 Scottsville Dr
Jackson CA 95642

Attention: Richard Nurse | Phone: (209) 223-2800 (209) 223-2747 Fax | Page 1 of 1

WO# 10211166 SWIM# 05836 WQS	Project Name: Mokelumne WQ	Project Manager: Eliz. Frantz (925) 866-5472
Samplers: (signature)		Field Team Leader: Eric Kenzler (925) 866-5806

Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles			Total and Fecal Coliform (INV)	(INV)				Remarks
~~MC2~~			Water	river water	1			1					Standard TAT
~~BG2~~			Water	river water	1			1					Standard TAT
BR1 (706234)	9-20	10:00	Water	river water	1	6088	43-01	1					Standard TAT
~~NFMR2~~			Water	river water	1			1					Standard TAT
~~IC1~~			Water	river water	1			1					Standard TAT
~~NFMR3~~			Water	river water	1			1					Standard TAT
~~NFMR5~~			Water	river water	1			1					Standard TAT
~~MR3~~			Water	river water	1			1					Standard TAT
ASK FOR BOTTLES FOR NEXT MONTH'S SAMPLING!													
				Total	8	0	0	8		0	0	0	0

Relinquished by:	Date/Time:	Received by:	Date/Time:	Ship via
Eric M. Kenzler	9-20-06 14:15	Tina Bottaro	9/20/06 14:15	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Bl/Air Bill Number
Relinquished by:	Date/Time:	Received by:	Date/Time:	Date

15.3°C on ice

TB 9-20-06

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642

SAMPLE FOR MICROBIOLOGICAL EXAMINATION 608843 LEAVE BLANK

PURVEYOR AND ADDRESS: PG&E

COUNTY:

DATE AND HOUR COLLECTED: 9/20/06 10:00

SAMPLING POINT: BR1

SYSTEM NUMBER: X

COLLECTED BY: KENZLER

BOTTLE NUMBER: 706224

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS		10					1.0					0.1					COLIFORM MPN/100ml
PORTIONS IN ML (LOGS)		1	1	1	1	1											2
PRESUMPTIVE TEST 1525 / 450	HOURS 24	+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	E. C. MPN/100ml
	48				+			+									<2
CONFIRMED TEST 1525 / 1150	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	48	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	SPC/ml AT 35° C.
E. C.	24	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	Cl, RES. mg/liter

LABORATORY REMARKS: 062W-2231 M) 9-22-06

☐ LEAKED IN TRANSIT

☐ INSUFFICIENT SAMPLE 062W-2025J 1525/LC

ANALYST: JB

Sierra Foothill Laboratory, Inc.

255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642

Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

Report Date: 09/26/2006

Client: **PG&E**

PG&E
Elizabeth Frantz
3400 Crow Canyon Rd
San Ramon, CA 94583-

Project Report: **138758**

Results for Project 138758

608957 Mokelumne R Project: MC2 G W 706221 Liquid Taken: 09/21/2006 1320 By: KENZLER Rec:09/21/2006

Parameter	*Result*	*Unit*	*Flag*	*RL*	*Method*	*Analyzed*	*By*	*CAS*
Total Coliform Bacteria, 15 t	2	#/100ml		2	SM9221B	09/21/2006 1545	ARN	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	09/21/2006 1545	ARN	

608958 Mokelumne R Project: BC2 G W 706217 Liquid Taken: 09/21/2006 1215 By: KENZLER Rec:09/21/2006

Parameter	*Result*	*Unit*	*Flag*	*RL*	*Method*	*Analyzed*	*By*	*CAS*
Total Coliform Bacteria, 15 t	4	#/100ml		2	SM9221B	09/21/2006 1545	ARN	
Fecal Coliform Bacteria, 15 t	<2	#/100ml		2	SM9221E	09/21/2006 1545	ARN	

ELAP #1113 NELAP #06245CA

Sandy Nurse

Sandy Nurse, Lab Director

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

Lab. Reference Number: 36620

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To: **Sierra Foothill Laboratory**
255 Scottsville Dr
Jackson CA 95642

Attention: Richard Nurse | Phone: (209) 223-2800 | (209) 223-2747 Fax | Page 1 of 1

WO# 10211166 SWIM# 05836 WQS	Project Name: Mokelumne WQ	Project Manager: Eliz. Frantz (925) 866-5472
Samplers: (signature)		Field Team Leader: Eric Kenzler (925) 866-5806

Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles			FC15 Total and Fecal Coliform					Remarks
						(NP)	(NP)	(NP)	(NP)				
MC2 706221	9-21	1320	Water	river water	1	6089570-01		1					Standard TAT
BC2 706217	9-21	1215	Water	river water	1	6089578-01		1					Standard TAT
BR1			Water	river water	1			1					Standard TAT
NFMR2			Water	river water	1			1					Standard TAT
TC1			Water	river water	1			1					Standard TAT
NFMR3			Water	river water	1			1					Standard TAT
NFMR5			Water	river water	1			1					Standard TAT
MR1			Water	river water	1			1					Standard TAT
ASK FOR BOTTLES FOR NEXT MONTH'S SAMPLING!													
				Total	8	0	0	8		0	0	0	0	

Relinquished by:	Date/Time:	Received by:	Date/Time:	Ship via
[signature]	9-21-06 1530	[signature]	9/21/06 15:30	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Bl/Air Bill Number
Relinquished by:	Date/Time:	Received by:	Date/Time:	Date

16.6 miles

TB 9-21-06

Sierra Foothill Laboratory, Inc.
255 Scottsville Blvd
PO Box 1268
Jackson, CA 95642
Phone 209/223-2800
Fax 209/223-2747
Email info@sierralab.com

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

608957 LEAVE BLANK

PURVEYOR AND ADDRESS: PG+E
COUNTY:
DATE AND HOUR COLLECTED: 9/21/06 13:20
SAMPLING POINT: MC 2
SYSTEM NUMBER: X
COLLECTED BY: KENZLER
BOTTLE NUMBER: 706221

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					0.1					
PORTIONS IN ML (LOGS)	1	1	1	1	1											
PRESUMPTIVE TEST 1523 / 1315 — HOURS 24	+	+	+	+												
PRESUMPTIVE TEST 1523 / 1315 — HOURS 48		+	−			+										
CONFIRMED TEST 1145 / 1430 — 24	−	−	−	−		−										
CONFIRMED TEST 1145 / 1430 — 48	−	+	−	−		−										
E. C. 24	−	−	−	−		−										

COLIFORM MPN/100ml: 2
E. C. MPN/100ml: <2
SPC/ml AT 35° C.:
Cl, RES. mg/liter:

LABORATORY REMARKS: 0624-20185 9-21-06 1545h
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE 0624-23355

ANALYST: JB

SIERRA FOOTHILL LABORATORY
255 SCOTTSVILLE BLVD. • P.O. BOX 1268, JACKSON, CA 95642
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

608958 LEAVE BLANK

PURVEYOR AND ADDRESS: PG+E
COUNTY:
DATE AND HOUR COLLECTED: 9/21/06 12:15
SAMPLING POINT: BC 2
SYSTEM NUMBER: X
COLLECTED BY: KENZLER
BOTTLE NUMBER: 706217

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

SEND REPORT TO: DEPT. HEALTH AT ____ COUNTY HEALTH ____ OTHER ____

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM ☒ FECAL COLIFORM ☐ SPC TC15 ☐ OTHER FC15

RESULTS (TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	10					1.0					0.1					
PORTIONS IN ML (LOGS)	1	1	1	1	1											
PRESUMPTIVE TEST 1520 / 1315 — HOURS 24		+														
PRESUMPTIVE TEST 1520 / 1315 — HOURS 48	+		+	+	+	+					+					
CONFIRMED TEST 1145 / 1430 — 24	−	−	−	−	+	−					−					
CONFIRMED TEST 1145 / 1430 — 48	−	−	+	−		−					−					
E. C. 24	−	−	−	−		−					−					

COLIFORM MPN/100ml: 4
E. C. MPN/100ml: <2
SPC/ml AT 35° C.:
Cl, RES. mg/liter:

LABORATORY REMARKS: 0624-20185 9-21-06 1545h
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE 0624-23351

ANALYST: JB

Fish & Game
RESOURCES AGENCY CALIFORNIA DEPARTMENT FISH & GAME
OSPR

DEPARTMENT OF FISH AND GAME
FISH AND WILDLIFE
WATER POLLUTION CONTROL LABORATORY
2005 NIMBUS ROAD
RANCHO CORDOVA, CA 95670
PHONE (916) 358-2858 ATSS 8-434-2858 FAX (916) 985-4301

LABORATORY REPORT

Name: Elizabeth Frantz
Agency: PG & E-Technical and Ecological
Address: 3400 Crow Canyon Road
City: San Ramon CA 94583
Phone Number: 925-866-5806
CC:

Lab Number: L-166-06
Customer : PG & E-T AND E Services
Index-PCA Code:

Sample Number: L-166-06-01
Sample Location:
Customer reference: BR1
Sample Collection Date: 3/21/2006 Time: 13:30
Lab Submittal Date: 3/24/2006

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3, EDTA	8.2	mg/L		3/24/2006	CO	1.0	1.0	SM 2340C
Alkalinity as CaCO3	3.3	mg/L	DNQ	3/27/2006	CO	10.0	3	QC 10303311A
Nitrate as N	0.0122	mg/L	DNQ	3/27/2006	CO	0.0200	0.010	QC 10107041B
Total Suspended Solids, 1L	4.8	mg/L		3/24/2006	WD	1.0	0.1	EPA 160.2

Sample Comments:

Sample Number: L-166-06-02
Sample Location:
Customer reference: NFMR2
Sample Collection Date: 3/21/2006 Time: 14:30
Lab Submittal Date: 3/24/2006

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3, EDTA	7.2	mg/L		3/24/2006	CO	1.0	1.0	SM 2340C
Alkalinity as CaCO3	7.3	mg/L	DNQ	3/27/2006	CO	10.0	3	QC 10303311A
Nitrate as N	ND	mg/L		3/27/2006	CO	0.0200	0.010	QC 10107041B
Total Suspended Solids, 1L	0.7	mg/L	DNQ	3/24/2006	WD	1.0	0.1	EPA 160.2

Sample Comments:

DNQ = Detected not Quantified
H = Holding Time Exceeded
ND = Not Detected

Tuesday, April 11, 2006 08:32

Sample Number: L-166-06-03
Sample Location:
Customer reference: TC1

Sample Collection Date: 3/22/2006 Time: 9:45
Lab Submittal Date: 3/24/2006

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3, EDTA	7.2	mg/L		3/24/2006	CO	1.0	1.0	SM 2340C
Alkalinity as CaCO3	6.3	mg/L	DNQ	3/27/2006	CO	10.0	3	QC 10303311A
Nitrate as N	ND	mg/L		3/27/2006	CO	0.0200	0.010	QC 10107041B
Total Suspended Solids, 1L	0.8	mg/L	DNQ	3/24/2006	WD	1.0	0.1	EPA 160.2

Sample Comments:

Sample Number: L-166-06-04
Sample Location:
Customer reference: NFMR3

Sample Collection Date: 3/22/2006 Time: 10:30
Lab Submittal Date: 3/24/2006

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3, EDTA	12.9	mg/L		3/24/2006	CO	1.0	1.0	SM 2340C
Alkalinity as CaCO3	12.8	mg/L		3/27/2006	CO	10.0	3	QC 10303311A
Nitrate as N	0.0143	mg/L	DNQ	3/27/2006	CO	0.0200	0.010	QC 10107041B
Total Suspended Solids, 1L	1.6	mg/L		3/24/2006	WD	1.0	0.1	EPA 160.2

Sample Comments:

Sample Number: L-166-06-05
Sample Location:
Customer reference: NFMR5

Sample Collection Date: 3/22/2006 Time: 12:00
Lab Submittal Date: 3/24/2006

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3, EDTA	18.5	mg/L		3/24/2006	CO	1.0	1.0	SM 2340C
Alkalinity as CaCO3	17.5	mg/L		3/27/2006	CO	10.0	3	QC 10303311A
Nitrate as N	ND	mg/L		3/27/2006	CO	0.0200	0.010	QC 10107041B
Total Suspended Solids, 1L	1.1	mg/L		3/24/2006	WD	1.0	0.1	EPA 160.2

Sample Comments:

DNQ = Detected not Quantified
H = Holding Time Exceeded
ND = Not Detected

Sample Number: L-166-06-06
Sample Location:
Customer reference: MR1

Sample Collection Date: 3/22/2006 Time: 13:30
Lab Submittal Date: 3/24/2006

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3, EDTA	20.6	mg/L		3/24/2006	CO	1.0	1.0	SM 2340C
Alkalinity as CaCO3	19.7	mg/L		3/27/2006	CO	10.0	3	QC 10303311A
Nitrate as N	0.0162	mg/L	DNQ	3/27/2006	CO	0.0200	0.010	QC 10107041B
Total Suspended Solids, 1L	1.9	mg/L		3/24/2006	WD	1.0	0.1	EPA 160.2

Sample Comments:

Sample Number: L-166-06-07
Sample Location:
Customer reference: BLANK

Sample Collection Date: 3/22/2006 Time: 14:20
Lab Submittal Date: 3/24/2006

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3	ND	mg/L		3/24/2006	CO		1.0	SM 2340C
Nitrate as N	ND	mg/L		3/27/2006	CO	0.0200	0.010	QC 10107041B

Sample Comments:

Patty Buckner 4/11/06
Reviewed by **Date**

DB Cox 4/13/06
Laboratory Director **Date**

DNQ = Detected not Quantified
H = Holding Time Exceeded
ND = Not Detected

Tuesday, April 11, 2006 08:32

DEPARTMENT OF FISH AND GAME
FISH AND WILDLIFE
WATER POLLUTION CONTROL LABORATORY
2005 NIMBUS ROAD
RANCHO CORDOVA, CA 95670
PHONE (916) 358-2858 ATSS 8-434-2858 FAX (916) 985-4301

Name: Elizabeth Frantz
Agency: Pacific Gas and Electric
Address: 3400 Crow Canyon Rd
City: San Ramon, CA 9458

WPCL LABORATORY QUALITY CONTROL REPORT **LABORATORY NUMBER: L-166-06-1-7**

BatchName:	ALK_FIA-96	QA Parameter	Result	Units
	ALK_FIA	Alkalinity as CaCO3	3.3	mg/L
	ALK_FIA	Blank	ND	mg/L
	ALK_FIA	Dilution Factor	1	
	ALK_FIA	Expected Spike	28.2	mg/L
	ALK_FIA	Precision	2.15	%
	ALK_FIA	Recovery of Spike	99.8	%
	ALK_FIA	Recovery of Spike Dup	97.7	%
	ALK_FIA	Recovery Ref Std	100	%
	ALK_FIA	Reference Standard	89.0	mg/L
	ALK_FIA	Spike Amount	25.0	mg/L
	ALK_FIA	Spike Duplicate	27.6	mg/L
	ALK_FIA	Spiked Result	28.2	mg/L
	ALK_FIA	True Value Ref Std	89.0	mg/L
	ALK_FIA	Value of Sample Spiked	3.26	mg/L

QASampleID: AA14601

BatchName:	HARDEDTA-97	QA Parameter	Result	Units
	HARDEDTA	Blank	ND	mg/L
	HARDEDTA	Hardness as CaCO3	<1.0	mg/L
	HARDEDTA	Precision	0.00	%
	HARDEDTA	Recovery Ref Std	104	%
	HARDEDTA	Reference Standard	92.7	mg/L
	HARDEDTA	Sample Duplicate	<1.0	mg/L
	HARDEDTA	True Value Ref Std	88.8	mg/L

QASampleID: AA14607

Quality Control Acceptance Criteria
Duplicate Precision 0-20
Recovery of Spike 80-120
Recovery Reference Standard 80-120%
Method Blank <RL

Tuesday, April 11, 2006 12:28

WPCL LABORATORY QUALITY CONTROL REPORT

LABORATORY NUMBER: L-166-06-1-7

BatchName:	NO3_FIA-121	QA Parameter	Result	Units
	NO3_FIA	Blank	ND	mg/L
	NO3_FIA	Dilution Factor	1	
	NO3_FIA	Expected Spike	0.027	mg/L
	NO3_FIA	Nitrate as N	0.0122	mg/L
	NO3_FIA	Precision	3.55	%
	NO3_FIA	Recovery of Spike	103	%
	NO3_FIA	Recovery of Spike Dup	106	%
	NO3_FIA	Recovery Ref Std	105	%
	NO3_FIA	Reference Standard	0.223	mg/L
	NO3_FIA	Spike Amount	0.015	mg/L
	NO3_FIA	Spike Duplicate	0.0287	mg/L
	NO3_FIA	Spiked Result	0.0277	mg/L
	NO3_FIA	True Value Ref Std	0.212	mg/L
	NO3_FIA	Value of Sample Spiked	0.012	mg/L

QASampleID: AA14601

BatchName:	TSSHATCH-102	QA Parameter	Result	Units
	TSSHATCH	Blank	ND	mg/L
	TSSHATCH	Precision	2.44	%
	TSSHATCH	Recovery Ref Std	87.2	%
	TSSHATCH	Reference Standard	32.8	mg/L
	TSSHATCH	Sample Duplicate	4456	mg/L
	TSSHATCH	Total Suspended Solids	4566	mg/L
	TSSHATCH	True Value Ref Std	37.6	mg/L

QASampleID: AA14597

Patty Buchanell 4/11/06

Reviewed By: Date:

DB Crane 4/13/06

Laboratory Director: Date:

Quality Control Acceptance Criteria

Duplicate Precision 0-20

Recovery of Spike 80-120

Recovery Reference Standard 80-120%

Method Blank <RL

Tuesday, April 11, 2006 12:28

2006

DFG REQUEST FOR ANALYSIS AND CHAIN OF CUSTODY RECORD

Page 1 of 1

Sampler Eric Kenzler, Ph # 925-866-5806	**Send Samples To** Patty Bucknell 916-358-0318, WATER POLLUTION CONTROL LABORATORY	**Lab Number** LT 166-06
Address 3400 CROW CANYON ROAD	**Address** 2005 NIMBUS ROAD	**Field Number**
City SAN RAMON, **Zip** 94583, **CA**	**City** RANCHO CORDOVA, **Zip** 95670, **CA**	**Lab Storage** WPCL iR7
Date Required/Reason STANDARD LABORATORY TURN-AROUND	**Analytical Results TO** Elizabeth Frantz (925-866-5472)	**Spill Title**
Shipped Via UPS	**Address** 3400 Crow Canyon Road	**Suspect**
	City San Ramon, **Zip** 94526, **CA**	**Index-PCA**

☐ Fish & Wildlife Loss Date:_____ Region:_____

☐ DFG Code Violation:_____

☐ Suspected or Potential Problem

⊠ Routine Analysis

Water Temp: F or C pH: DO: mg/L Conductivity: u mhos/cm

	Sample Identification/Location (Draw map on separate sheet if necessary)	Collection Date	Collection Time	TSS	HARDNESS	NITRATE-TOTAL (field filtered)	ALKALINITY				Sample Type: Water	Sample Type: Filtered Water	Sample Type: Soil	Sample Type: Tissue	Number of Containers: Plastic	Number of Containers: Glass	Number of Containers: VOA Vial		Preservation: Temp	Preservation: Acid	
~~MC2~~				~~X~~	~~X~~	~~X~~	~~X~~				~~X~~	~~1~~			~~3~~					~~2~~	
~~BC2~~				~~X~~	~~X~~	~~X~~	~~X~~				~~X~~	~~1~~			~~3~~					~~2~~	
1	BR1	3-21	1330	X	X	X	X				X	1			3					2	
2	NFMR2	3-21	1430	X	X	X	X				X	1			3					2	
3	TC1	3-22	0945	X	X	X	X				X	1			3					2	
4	NFMR3	3-22	1030	X	X	X	X				X	1			3					2	
5	NFMR5	3-22	1200	X	X	X	X				X	1			3					2	
6	MR1	3-22	1330	X	X	X	X				X	1			3					2	
7	BLANK	3-22	1420		X	X					X	1			2					2	

Problem Description

Suspect/Incident Location

Comments/Special Instructions: PLEASE SEND RESULTS TO E. FRANTZ (eag0@pge.com)

Pollution Action Kit: Yes☐ No☐

Glove Size: Large ☐ Medium ☐

Hazmat Shipper Requested: Yes☐ No☐

Samples Reliquished By (Signature)	Print Name	Date	Received By (Signature)	Print Name	Date
Eric Kenzler	ERIC KENZLER	3-22-06 12:00	Shipper	CONSTANCE CERASELA OMETA	3/24/06

Pesticide Investigations Lab
1701 Nimbus Road
Rancho Cordova, CA 95670
(916) 358-2950

Petroleum Chemistry Lab
1995 Nimbus Road
Rancho Cordova, CA 95670
(916) 358-2803

Water Pollution Control Lab
2005 Nimbus Road
Rancho Cordova, CA 95670
(916) 358-2858

DEPARTMENT OF FISH AND GAME

FISH AND WILDLIFE

WATER POLLUTION CONTROL LABORATORY

2005 NIMBUS ROAD

RANCHO CORDOVA, CA 95670

PHONE (916) 358-2858 ATSS 8-434-2858 FAX (916) 985-4301

LABORATORY REPORT

Name: ELIZABETH FRANTZ
Agency: PG & E-Technical and Ecological
Address: 3400 Crow Canyon Road
City: San Ramon CA 94583
eag0@pge.com
Phone Number: 925-866-5806
CC:

Lab Number: L-242-06
Customer : PG & E-T AND E Services
Index-PCA Code:
Spill Title:

Sample Number: L-242-06-01
Sample Location:
Customer reference: BC2

Sample Collection Date: 5/10/2006 Time: 10:45
Lab Submittal Date: 5/12/2006

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFIER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3	20.6	mg/L		5/26/2006	VB	1.0	1.0	SM 2340C
Nitrate + Nitrite as N by FIA	0.150	mg/L		5/16/2006	KP	0.0200	0.010	EPA 353.2
Alkalinity as CaCO3	8.13	mg/L	DNQ	5/19/2006	CO	10.0	3	QC 10303311A
Total Suspended Solids, 1L	<RL	mg/L		5/12/2006	VB	1.0	0.1	EPA 160.2

Sample Comments:

Sample Number: L-242-06-02
Sample Location:
Customer reference: BR1

Sample Collection Date: 5/10/2006 Time: 12:10
Lab Submittal Date: 5/12/2006

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFIER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3	18.5	mg/L		5/26/2006	VB	1.0	1.0	SM 2340C
Nitrate + Nitrite as N by FIA	0.0114	mg/L	DNQ	5/16/2006	KP	0.0200	0.010	EPA 353.2
Alkalinity as CaCO3	3.95	mg/L	DNQ	5/19/2006	CO	10.0	3	QC 10303311A
Total Suspended Solids, 1L	<RL	mg/L		5/12/2006	VB	1.0	0.1	EPA 160.2

Sample Comments:

DNQ = Detected not Quantified
H = Holding Time Exceeded
ND = Not Detected
Lab Number L-242-06

Sample Number: L-242-06-03
Sample Location:
Sample Collection Date: 5/9/2006 Time: 13:30
Lab Submittal Date: 5/12/2006
Customer reference: NFMR2

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFIER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3	20.6	mg/L		5/26/2006	VB	1.0	1.0	SM 2340C
Nitrate + Nitrite as N by FIA	-0.010	mg/L	ND	5/16/2006	KP	0.0200	0.010	EPA 353.2
Alkalinity as CaCO3	6.29	mg/L	DNQ	5/19/2006	CO	10.0	3	QC 10303311A
Total Suspended Solids, 1L	3.8	mg/L		5/12/2006	VB	1.0	0.1	EPA 160.2

Sample Comments:

Sample Number: L-242-06-04
Sample Location:
Sample Collection Date: 5/8/2006 Time: 11:10
Lab Submittal Date: 5/12/2006
Customer reference: TC1

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFIER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3	23.7	mg/L		5/26/2006	VB	1.0	1.0	SM 2340C
Nitrate + Nitrite as N by FIA	-0.010	mg/L	ND	5/16/2006	KP	0.0200	0.010	EPA 353.2
Alkalinity as CaCO3	17.6	mg/L		5/19/2006	CO	10.0	3	QC 10303311A
Total Suspended Solids, 1L	<RL	mg/L		5/12/2006	VB	1.0	0.1	EPA 160.2

Sample Comments:

Sample Number: L-242-06-05
Sample Location:
Sample Collection Date: 5/8/2006 Time: 11:50
Lab Submittal Date: 5/12/2006
Customer reference: NFMR3

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFIER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3	17.5	mg/L		5/26/2006	VB	1.0	1.0	SM 2340C
Nitrate + Nitrite as N by FIA	-0.010	mg/L	ND	5/16/2006	KP	0.0200	0.010	EPA 353.2
Alkalinity as CaCO3	9.24	mg/L		5/19/2006	CO	10.0	3	QC 10303311A
Total Suspended Solids, 1L	4.7	mg/L		5/12/2006	VB	1.0	0.1	EPA 160.2

Sample Comments:

Sample Number: L-242-06-06
Sample Location:
Sample Collection Date: 5/8/2006 Time: 13:35
Lab Submittal Date: 5/12/2006
Customer reference: NFMR5

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFIER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3	19.6	mg/L		5/26/2006	VB	1.0	1.0	SM 2340C
Nitrate + Nitrite as N by FIA	0.0105	mg/L	DNQ	5/16/2006	KP	0.0200	0.010	EPA 353.2
Alkalinity as CaCO3	8.99	mg/L		5/19/2006	CO	10.0	3	QC 10303311A
Total Suspended Solids, 1L	6.3	mg/L		5/12/2006	VB	1.0	0.1	EPA 160.2

Sample Comments:

DNQ = Detected not Quantified
H = Holding Time Exceeded
ND = Not Detected
Lab Number L-242-06

Sample Number: L-242-06-07
Sample Location:

Sample Collection Date: 5/8/2006 Time: 15:00
Lab Submittal Date: 5/12/2006

Customer reference: MR1

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFIER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3	20.6	mg/L		5/26/2006	VB	1.0	1.0	SM 2340C
Nitrate + Nitrite as N by FIA	-0.010	mg/L	ND	5/16/2006	KP	0.0200	0.010	EPA 353.2
Alkalinity as CaCO3	12.0	mg/L		5/19/2006	CO	10.0	3	QC 10303311A
Total Suspended Solids, 1L	7.0	mg/L		5/12/2006	VB	1.0	0.1	EPA 160.2

Sample Comments:

Sample Number: L-242-06-08
Sample Location:

Sample Collection Date: 5/9/2006 Time: 13:30
Lab Submittal Date: 5/12/2006

Customer reference: BLANK

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFIER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3	<1.0	mg/L		5/26/2006	VB	1.0	1.0	SM 2340C
Nitrate + Nitrite as N by FIA	0.0448	mg/L		5/16/2006	KP	0.0200	0.010	EPA 353.2

Sample Comments: The nitrate sample was analyzed in duplicate in two separate autosampler vials. There appears to be contamination with the original sample container.

Patty Buckner 6/8/06 — Reviewed by — Date

DB Crane 6/12/06 — Laboratory Director — Date

Total Lab Analysis Price: $930.00

DNQ = Detected not Quantified
H = Holding Time Exceeded
ND = Not Detected
Lab Number L-242-06

LABORATORY #: L-242-06

QUALITY CONTROL SUMMARY
CA DEPT of FISH and GAME WPCL

PG&E
3400 CROW CANYON RD.
SAN RAMON CA 94583

	Alkalinity as $CaCO_3$, mg/L	Nitrate + Nitrite as N, mg/L	Hardness as $CaCO_3$, mg/L	Solids, Total Suspended, mg/L
LabBatch	WPCL_060906_W_ALK	WPCL_051606_W_NO3+2	WPCL_052606_W_HARD	WPCL_052606_W_TSS
Reference Standard ID	IPS-MIN-05-39A	IPS-anion-mix-05-45	IPS-HARD-06-10D	IPS-HARD-06-10B
True Value Ref Std	89.0	0.212	335	55.7
Laboratory Result	94.4	0.218	350	48.8
% Recovery Ref Std	106	103	104	87.6
Dilution of Reference Standard			1/5	
Spiked Sample ID	L-242-06-1	L-242-06-1		
MS actual value	12.6	0.296		
MSD actual value	13.8	0.291		
MS/MSD expected value	14.0	0.298		
MS % of expected value	90.0	99.3		
MSD % of expected value	98.6	97.7		
RPD	9.09	1.70		
Sample Dilution for Spike	249/250	195/200		
Sample Duplicate ID	L-242-06-2	L-242-05-2	L-242-06-1	IPS-HARD-06-10B
Sample Value	3.95	0.0114	20.6	48.8
Duplicate Value	4.11	0.0116	20.6	50.2
Average Sample Value	4.03	0.0115	20.6	49.5
RPD	3.97	1.74	0.00	2.83

DFG REQUEST FOR ANALYSIS AND CHAIN OF CUSTODY RECORD

Page 1 of 1

Sampler Eric Kenzler **Ph #** 925-866-5806	**Send Samples To** Patty Bucknell 916-358-0318 WATER POLLUTION CONTROL LABORATORY	**Lab Number** L-242-06
Address 3400 CROW CANYON ROAD	**Address** 2005 NIMBUS ROAD	**Field Number**
City SAN RAMON **Zip** 94583 **CA**	**City** RANCHO CORDOVA **Zip** 95670 **CA**	**Lab Storage**
Date Required/Reason STANDARD LABORATORY TURN-AROUND	**Analytical Results TO** Elizabeth Frantz (925-866-5472)	**Spill Title**
Shipped Via UPS	**Address** 3400 Crow Canyon Road	**Suspect**
	City San Ramon **Zip** 94526 **CA**	**Index-PCA**

☐ Fish & Wildlife Loss Date:_____ Region:_____

☐ DFG Code Violation:_____

☐ Suspected or Potential Problem

✻ Routine Analysis

Water Temp: F or C pH: DO: mg/L Conductivity: *u*mhos/cm

	Sample Identification/Location (Draw map on separate sheet if necessary)	Collection Date	Collection Time	TSS	HARDNESS	NITRATE-TOTAL (field filtered)	ALKALINITY	Sample Type: Water	Sample Type: Filtered Water	Sample Type: Soil	Sample Type: Tissue	Number of Containers: Plastic	Number of Containers: Glass	Number of Containers: VOA Vial	Preservation: Temp	Preservation: Acid
	~~MC2~~	~~5-10~~	~~10:45~~	X	X	X	X	X	1			3				2
1	BC2	5-10	10:45	X	X	X	X	X	1			3				2
2	BR1	5-10	12:10	X	X	X	X	X	1			3				2
3	NFMR2	5-9	1330	X	X	X	X	X	1			3				2
4	TC1	5-8	11:10	X	X	X	X	X	1			3				2
5	NFMR3	5-8	11:50	X	X	X	X	X	1			3				2
6	NFMR5	5-8	~~15:30~~ 13:35	X	X	X	X	X	1			3				2
7	MR1	5-8	1500	X	X	X	X	X	1			3				2
8	BLANK	5-9	1330		X	X		X	1			2				2

Analysis Requested >>>

Problem Description	Pollution Action Kit: Yes☐ No☐
Suspect/Incident Location	Glove Size: Large☐ Medium☐
Comments/Special Instructions PLEASE SEND RESULTS TO E. FRANTZ (eag0@pge.com)	Hazmat Shipper Requested: Yes☐ No☐

Samples Relinquished By (Signature)	Print Name	Date	Received By (Signature)	Print Name	Date
Eric Kenzler	ERIC KENZLER	5-11-06 1200	Jennifer Riley	Jennifer Riley	5/12/06

Pesticide Investigations Lab
1701 Nimbus Road
Rancho Cordova, CA 95670
(916) 358-2950 ☐

Petroleum Chemistry Lab
1995 Nimbus Road
Rancho Cordova, CA 95670
(916) 358-2803 ☐

Water Pollution Control Lab
2005 Nimbus Road
Rancho Cordova, CA 95670
(916) 358-2858 ☒

DEPARTMENT OF FISH AND GAME
FISH AND WILDLIFE
WATER POLLUTION CONTROL LABORATORY

2005 NIMBUS ROAD
RANCHO CORDOVA, CA 95670
PHONE (916) 358-2858 ATSS 8-434-2858 FAX (916) 985-4301

LABORATORY REPORT

Name: ELIZABETH FRANTZ
Agency: PG & E-Technical and Ecological
Address: 3400 Crow Canyon Road
City: San Ramon CA 94583
eag0@pge.com
Phone Number: 925-866-5806
CC:

Lab Number: L-326-06
Customer : PG & E-T AND E Services
Index-PCA Code:
Spill Title:

Sample Number: L-326-06-01
Sample Location:
Customer reference: MC2
Sample Collection Date: 6/21/2006 Time: 11:55
Lab Submittal Date: 6/23/2006

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFIER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3	3.6	mg/L		7/10/2006	KP	1.0	1.0	SM 2340C
Nitrate + Nitrite as N by FIA	-0.0100	mg/L	ND	6/29/2006	KP	0.0200	0.0100	EPA 353.2
Alkalinity as CaCO3	9.8	mg/L	DNQ	7/3/2006	KP	10.0	3.0	QC 10303311A
Total Suspended Solids, 1L	3.0	mg/L		6/26/2006	JR	1.0	0.1	EPA 160.2

Sample Comments:

Sample Number: L-326-06-02
Sample Location:
Customer reference: BC2
Sample Collection Date: 6/21/2006 Time: 10:20
Lab Submittal Date: 6/23/2006

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFIER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3	9.2	mg/L		7/10/2006	KP	1.0	1.0	SM 2340C
Nitrate + Nitrite as N by FIA	0.0111	mg/L	DNQ	6/29/2006	KP	0.0200	0.0100	EPA 353.2
Alkalinity as CaCO3	8.6	mg/L	DNQ	7/3/2006	KP	10.0	3.0	QC 10303311A
Total Suspended Solids, 1L	ND	mg/L		6/26/2006	JR	1.0	0.1	EPA 160.2

Sample Comments:

DNQ = Detected not Quantified
H = Holding Time Exceeded
ND = Not Detected
Lab Number L-326-06

Sample Number: L-326-06-03 Sample Collection Date: 6/19/2006 Time: 14:45
Sample Location: Lab Submittal Date: 6/23/2006
Customer reference: BR1

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFIER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3	6.1	mg/L		7/10/2006	KP	1.0	1.0	SM 2340C
Nitrate + Nitrite as N by FIA	-0.0100	mg/L	ND	6/29/2006	KP	0.0200	0.0100	EPA 353.2
Alkalinity as CaCO3	4.2	mg/L	DNQ	7/3/2006	KP	10.0	3.0	QC 10303311A
Total Suspended Solids, 1L	<RL	mg/L		6/26/2006	JR	1.0	0.1	EPA 160.2

Sample Comments:

Sample Number: L-326-06-04 Sample Collection Date: 6/20/2006 Time: 11:35
Sample Location: Lab Submittal Date: 6/23/2006
Customer reference: NFMR2

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFIER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3	7.1	mg/L		7/10/2006	KP	1.0	1.0	SM 2340C
Nitrate + Nitrite as N by FIA	-0.0100	mg/L	ND	6/29/2006	KP	0.0200	0.0100	EPA 353.2
Alkalinity as CaCO3	7.0	mg/L	DNQ	7/3/2006	KP	10.0	3.0	QC 10303311A
Total Suspended Solids, 1L	<RL	mg/L		6/26/2006	JR	1.0	0.1	EPA 160.2

Sample Comments:

Sample Number: L-326-06-05 Sample Collection Date: 6/21/2006 Time: 13:25
Sample Location: Lab Submittal Date: 6/23/2006
Customer reference: TC1

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFIER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3	7.1	mg/L		7/10/2006	KP	1.0	1.0	SM 2340C
Nitrate + Nitrite as N by FIA	-0.0100	mg/L	ND	6/29/2006	KP	0.0200	0.0100	EPA 353.2
Alkalinity as CaCO3	6.6	mg/L	DNQ	7/3/2006	KP	10.0	3.0	QC 10303311A
Total Suspended Solids, 1L	<RL	mg/L		6/26/2006	JR	1.0	0.1	EPA 160.2

Sample Comments:

Sample Number: L-326-06-06 Sample Collection Date: 6/21/2006 Time: 8:20
Sample Location: Lab Submittal Date: 6/23/2006
Customer reference: NFMR3

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFIER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3	8.2	mg/L		7/10/2006	KP	1.0	1.0	SM 2340C
Nitrate + Nitrite as N by FIA	-0.0100	mg/L	ND	6/29/2006	KP	0.0200	0.0100	EPA 353.2
Alkalinity as CaCO3	7.0	mg/L	DNQ	7/3/2006	KP	10.0	3.0	QC 10303311A
Total Suspended Solids, 1L	1.5	mg/L		6/26/2006	JR	1.0	0.1	EPA 160.2

Sample Comments:

DNQ = Detected not Quantified
H = Holding Time Exceeded
ND = Not Detected
Lab Number L-326-06

Sample Number: L-326-06-07 Sample Collection Date: 6/20/2006 Time: 15:00
Sample Location: Lab Submittal Date: 6/23/2006
Customer reference: NFMR5

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFIER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3	8.7	mg/L		7/10/2006	KP	1.0	1.0	SM 2340C
Nitrate + Nitrite as N by FIA	-0.0100	mg/L	ND	6/29/2006	KP	0.0200	0.0100	EPA 353.2
Alkalinity as CaCO3	6.1	mg/L	DNQ	7/3/2006	KP	10.0	3.0	QC 10303311A
Total Suspended Solids, 1L	1.1	mg/L		6/26/2006	JR	1.0	0.1	EPA 160.2

Sample Comments:

Sample Number: L-326-06-08 Sample Collection Date: 6/21/2006 Time: 6:45
Sample Location: Lab Submittal Date: 6/23/2006
Customer reference: MR1

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFIER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3	10.2	mg/L		7/10/2006	KP	1.0	1.0	SM 2340C
Nitrate + Nitrite as N by FIA	-0.0100	mg/L	ND	6/29/2006	KP	0.0200	0.0100	EPA 353.2
Alkalinity as CaCO3	10.4	mg/L		7/3/2006	KP	10.0	3.0	QC 10303311A
Total Suspended Solids, 1L	<RL	mg/L		6/26/2006	JR	1.0	0.1	EPA 160.2

Sample Comments:

Sample Number: L-326-06-09 Sample Collection Date: 6/20/2006 Time: 16:00
Sample Location: Lab Submittal Date: 6/23/2006
Customer reference: BLANK

ANALYSIS NAME	TEST RESULT	UNITS	QUALIFIER	ANALYSIS DATE	ANALYZED BY	REPORTING LIMIT (RL)	DETECTION LIMIT (MDL)	METHOD REFERENCE
Hardness as CaCO3	-1.0	mg/L	ND	7/10/2006	KP	1.0	1.0	SM 2340C
Nitrate + Nitrite as N by FIA	-0.0100	mg/L	ND	6/29/2006	KP	0.0200	0.0100	EPA 353.2

Sample Comments:

Patty Buckwell 7/24/06 RB Crane 7/24/06
Reviewed by **Date** **Laboratory Director** **Date**

Total Lab Analysis Price: $1,054.00

DNQ = Detected not Quantified
H = Holding Time Exceeded
ND = Not Detected
Lab Number L-326-06

DEPARTMENT OF FISH AND GAME
FISH AND WILDLIFE
WATER POLLUTION CONTROL LABORATORY
2005 NIMBUS ROAD
RANCHO CORDOVA, CA 95670
PHONE (916) 358-2858 ATSS 8-434-2858 FAX (916) 985-4301

Name: Elizabeth Frantz
Agency: PG & E
Address: 3400 Crow Canyon Road
City: San Ramon, CA 94583

WPCL LABORATORY QUALITY CONTROL REPORT **LABORATORY NUMBER:** **L-326-06**

Batch Name	Quality Control Code	Quality Control Parameter	Result	Units
ALK_FIA-726	A_ALK_FIA	Spike Amount	25.0	mg/L as CaCO3
	ALK_FIA	Alkalinity as CaCO3	3.2	mg/L
	B_ALK_FIA	Blank for Alkalinity by FIA	-3.0	mg/L
	D_ALK_FIA	Spike Duplicate	29.0	mg/L as CaCO3
	DIL_ALK_FIA	Dilution Factor	0.990	
	E_ALK_FIA	Expected Spike	28.3	mg/L
	F_ALK_FIA	Recovery of Spike Dup	102	%
	I_ALK_FIA	Recovery Ref Std	99.4	%
	L_ALK_FIA	Reference Standard	88.5	mg/L as CaCO3
	P_ALK_FIA	Precision	0.692	%
	R_ALK_FIA	Recovery of Spike	102	%
	S_ALK_FIA	Spiked Result	28.8	mg/L as CaCO3
	SD_ALK_FIA	Duplicate Result	3.4	mg/L
	SDP_ALK_FIA	Precision	8.46	%
	T_ALK_FIA	True Value Ref Std	89.0	mg/L as CaCO3
	V_ALK_FIA	Value of Sample Spiked	3.31	mg/L as CaCO3

Batch Name	Quality Control Code	Quality Control Parameter	Result	Units
HARDEDTA-708	B_HARDEDTA	Blank	-1.0	mg/L
	HARDEDTA	Hardness as CaCO3	5.6	mg/L
	I_HARDEDTA	Recovery Ref Std	103	%
	L_HARDEDTA	Reference Standard	271	mg/L
	SD_HARDEDTA	Sample Duplicate	5.6	mg/L
	SDP_HARDEDTA	Precision of Sample Dup	0.00	%
	T_HARDEDTA	True Value Ref Std	264	mg/L

Batch Name	Quality Control Code	Quality Control Parameter	Result	Units
HARDEDTA-708A	HARDEDTA	Hardness as CaCO3	7.1	mg/L
	SD_HARDEDTA	Sample Duplicate	7.1	mg/L
	SDP_HARDEDTA	Precision of Sample Dup	0.00	%

Quality Control Acceptance Criteria
Duplicate Precision 0-20
Recovery of Spike 80-120
Recovery Reference Standard 80-120%
Method Blank <RL

Monday, July 24, 2006 09:18

WPCL LABORATORY QUALITY CONTROL REPORT **LABORATORY NUMBER:** L-326-06

Batch Name	Quality Control Code	Quality Control Parameter	Result	Units
NO2_NO3_FIA-734	A_NO2_NO3_FIA	Spike Amount	0.0250	mg/L
	B_NO2_NO3_FIA	Blank for Nitrate	-0.0100	mg/L
	D_NO2_NO3_FIA	Spike Duplicate	0.0255	mg/L
	DIL_NO2_NO3_FI	Dilution Factor	0.975	
	E_NO2_NO3_FIA	Expected Spike	0.0265	mg/L
	F_NO2_NO3_FIA	Recovery of Spike Dup	96.2	%
	I_NO2_NO3_FIA	Recovery Ref Std	105	%
	L_NO2_NO3_FIA	Reference Standard	0.222	mg/L
	NO2_NO3_FIA	Nitrate + Nitrite as N by FIA	-0.0100	mg/L
	P_NO2_NO3_FIA	Precision	0.79	%
	R_NO2_NO3_FIA	Recovery of Spike	95.5	%
	S_NO2_NO3_FIA	Spiked Result	0.0253	mg/L
	SD_NO2_NO3_FIA	Sample Duplicate	-0.0100	mg/L
	SDP_NO2_NO3_FI	Precision for Sample Duplicate	0.00	mg/L
	T_NO2_NO3_FIA	True Value Ref Std	0.212	mg/L
	V_NO2_NO3_FIA	Value of Sample Spiked for Nitrate + Nit	0.00156	mg/L

Batch Name	Quality Control Code	Quality Control Parameter	Result	Units
TSSHATCH_1L-735	B_TSSHATCH_1L	Blank for TSS	ND	mg/L
	I_TSSHATCH_1L	Recovery of Ref Std	103	%
	L_TSSHATCH_1L	Reference Standard	49.8	mg/L
	SD_TSSHATCH_1	Sample Duplicate	<RL	mg/L
	SDP_TSSHATCH_	Precision of Sample Dup	0.00	%
	T_TSSHATCH_1L	True Value Ref Std	48.3	mg/L
	TSSHATCH_1L	Total Suspended Solids, 1L	<RL	mg/L

Patty Buckner 7/24/06
Reviewed By: **Date:**

Laboratory Director: 7/24/06 **Date:**

Quality Control Acceptance Criteria

Duplicate Precision 0-20
Recovery of Spike 80-120
Recovery Reference Standard 80-120%
Method Blank <RL

Monday, July 24, 2006 09:18

DFG REQUEST FOR ANALYSIS AND CHAIN OF CUSTODY RECORD

Page_____ of _____

Sampler Eric Kenzler **Ph #** 925-866-5806	**Send Samples To** Patty Bucknell 916-358-0318 WATER POLLUTION CONTROL LABORATORY	**Lab Number** L-3206-06
Address 3400 CROW CANYON ROAD	**Address** 2005 NIMBUS ROAD	**Field Number**
City SAN RAMON **Zip** 94583 CA	**City** RANCHO CORDOVA **Zip** 95670 CA	**Lab Storage**
	Analytical Results TO Elizabeth Frantz (925-866-5472)	**Spill Title**
Date Required/Reason STANDARD LABORATORY TURN-AROUND	**Address** 3400 Crow Canyon Road	**Suspect**
Shipped Via UPS 75°F	**City** San Ramon **Zip** CA 94526	**Index-PCA**

☐ Fish & Wildlife Loss Date:_____ Region:_____

☐ DFG Code Violation:_____

☐ Suspected or Potential Problem

⊠ Routine Analysis

2006 Analysis Requested >>>

Water Temp: F or C pH: DO: mg/L Conductivity: umhos/cm

	Sample Identification/Location (Draw map on separate sheet if necessary)	Collection Date	Collection Time	TSS	HARDNESS	NITRATE-TOTAL (field filtered)	ALKALINITY	Sample Type: Water	Filtered Water	Soil	Tissue	Number of Containers: Plastic	Glass	VOA Vial	Preservation: Temp	Acid
1	MC2	6-21	11:55	X	X	X	X	X	1			3				2
2	BC2	6-21	10:20	X	X	X	X	X	1			3				2
3	BR1	6-19-06	14:45	X	X	X	X	X	1			3				2
4	NFMR2	6-20	11:35	X	X	X	X	X	1			3				2
5	TC1	6-21	13:25	X	X	X	X	X	1			3				2
6	NFMR3	6-21	8:20	X	X	X	X	X	1			3				2
7	NFMR5	6-20	15:00	X	X	X	X	X	1			3				2
8	MR1	6-21	06:48	X	X	X	X	X	1			3				2
9	BLANK	6-20	16:00		X	X		X	1			2				2

COPY

Problem Description

Suspect/Incident Location

Comments/Special Instructions PLEASE SEND RESULTS TO E. FRANTZ (eag0@pge.com)

Pollution Action Kit: Yes☐ No☐

Glove Size: Large ☐ Medium ☐

Hazmat Shipper Requested: Yes☐ No☐

Samples Relinquished By (Signature)	Print Name	Date	Received By (Signature)	Print Name	Date
Eric Kenzler	ERIC KENZLER	6-22-06	Shipper / K Paxton	KELLEY PAXTON	6/23/06

Pesticide Investigations Lab
1701 Nimbus Road
Rancho Cordova, CA 95670
(916) 358-2950

☐

Petroleum Chemistry Lab
1995 Nimbus Road
Rancho Cordova, CA 95670
(916) 358-2803

☐

Water Pollution Control Lab
2005 Nimbus Road
Rancho Cordova, CA 95670
(916) 358-2858

☒

DEPARTMENT OF FISH AND GAME
FISH AND WILDLIFE
WATER POLLUTION CONTROL LABORATORY
2005 NIMBUS ROAD
RANCHO CORDOVA, CA 95670
PHONE (916) 358-2858 ATSS 8-434-2858 FAX (916) 985-4301

LABORATORY REPORT

Name:	Elizabeth Frantz	**Lab Number:**	L-392-06
Agency:	Pacific Gas & Electric Company	**Other Number:**	
Address:	3400 Crow Canyon Rd.	**Date Sampled:**	07/17-20/06
City:	San Ramon, CA 94583	**Date Received:**	07/24/06
		Date Completed:	08/01/06
		Index-PCA Code:	

RE: Water Quality

RESULTS OF CHEMICAL ANALYSIS:

See attached spreadsheets for analytical results and QA summary.

CC: Lauri Park – SJSU Foundation

Cost of Analysis: $ 1054.00

POLLUTION ACTION KIT (IF USED): $110.00 AND HAZMAT SHIPPER (IF USED): $25.00
Deposit recovery costs to the Fish and Wildlife Pollution Account with "cost of analysis" identified separately.

Analyst: KP, JR, CO

Patty Buchanan — **Inorganic Section Leader**
10/12/06 — **Date**
[signature] — **Laboratory Director**
10/12/06 — **Date**

PG E
3400 Crow Canyon Road
San Ramon, CA 94583
Attn: Elizabeth Frantz

Water Pollution Control Laboratory Data
L-392-06, July 17-20, 2006

Ca Dept. of Fish and Game
2005 Nimbus Road
Rancho Cordova, CA 95670

LabSampleID	Sample IDfLocation	SampleDate	SampleTime	ProjectID	AgencyCode	Preparation	Lab Submittal Date	LabBatch	Analysis Date	Method	Analyte Name	Unit	Lab Result	Qualifier	MDL	RL
L-392-06-01	MC2	19/Jul/2006	14:25	MOKELUMNE RIVER ANNUAL	DFG-WPCL	FieldAcidified	24/Jul/2006	080106-HARD	01/Aug/2006	SM 2340 C	Hardness as CaCO3	mg/L	5.1		1.0	1.0
L-392-06-01	MC2	19/Jul/2006	14:25	MOKELUMNE RIVER ANNUAL	DFG-WPCL	FieldFiltered, FieldAcidified	24/Jul/2006	080106-NO3+NO2	01/Aug/2006	QC 10107041B	Nitrate + Nitrite as N	mg/L	ND		0.0100	0.0200
L-392-06-01	MC2	19/Jul/2006	14:25	MOKELUMNE RIVER ANNUAL	DFG-WPCL	LabFiltered	24/Jul/2006	072706-Alk	27/Jul/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	3.8	DNQ	3.0	10.0
L-392-06-01	MC2	19/Jul/2006	14:25	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	24/Jul/2006	072406-TSS	24/Jul/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	<RL		0.1	1.0
L-392-06-02	BC2	19/Jul/2006	13:20	MOKELUMNE RIVER ANNUAL	DFG-WPCL	FieldAcidified	24/Jul/2006	080106-HARD	01/Aug/2006	SM 2340 C	Hardness as CaCO3	mg/L	7.8		1.0	1.0
L-392-06-02	BC2	19/Jul/2006	13:20	MOKELUMNE RIVER ANNUAL	DFG-WPCL	FieldFiltered, FieldAcidified	24/Jul/2006	080106-NO3+NO2	01/Aug/2006	QC 10107041B	Nitrate + Nitrite as N	mg/L	ND		0.0100	0.0200
L-392-06-02	BC2	19/Jul/2006	13:20	MOKELUMNE RIVER ANNUAL	DFG-WPCL	LabFiltered	24/Jul/2006	072706-Alk	27/Jul/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	7.8	DNQ	3.0	10.0
L-392-06-02	BC2	19/Jul/2006	13:20	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	24/Jul/2006	072406-TSS	24/Jul/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	<RL		0.1	1.0
L-392-06-03	BR1	18/Jul/2006	9:10	MOKELUMNE RIVER ANNUAL	DFG-WPCL	FieldAcidified	24/Jul/2006	080106-HARD	01/Aug/2006	SM 2340 C	Hardness as CaCO3	mg/L	6.6		1.0	1.0
L-392-06-03	BR1	18/Jul/2006	9:10	MOKELUMNE RIVER ANNUAL	DFG-WPCL	FieldFiltered, FieldAcidified	24/Jul/2006	080106-NO3+NO2	01/Aug/2006	QC 10107041B	Nitrate + Nitrite as N	mg/L	ND		0.0100	0.0200
L-392-06-03	BR1	18/Jul/2006	9:10	MOKELUMNE RIVER ANNUAL	DFG-WPCL	LabFiltered	24/Jul/2006	072706-Alk	27/Jul/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	4.3	DNQ	3.0	10.0
L-392-06-03	BR1	18/Jul/2006	9:10	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	24/Jul/2006	072406-TSS	24/Jul/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	ND		0.1	1.0
L-392-06-04	NFMR2	20/Jul/2006	8:20	MOKELUMNE RIVER ANNUAL	DFG-WPCL	FieldAcidified	24/Jul/2006	080106-HARD	01/Aug/2006	SM 2340 C	Hardness as CaCO3	mg/L	6.1		1.0	1.0
L-392-06-04	NFMR2	20/Jul/2006	8:20	MOKELUMNE RIVER ANNUAL	DFG-WPCL	FieldFiltered, FieldAcidified	24/Jul/2006	080106-NO3+NO2	01/Aug/2006	QC 10107041B	Nitrate + Nitrite as N	mg/L	ND		0.0100	0.0200
L-392-06-04	NFMR2	20/Jul/2006	8:20	MOKELUMNE RIVER ANNUAL	DFG-WPCL	LabFiltered	24/Jul/2006	072706-Alk	27/Jul/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	5.9	DNQ	3.0	10.0
L-392-06-04	NFMR2	20/Jul/2006	8:20	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	24/Jul/2006	072406-TSS	24/Jul/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	<RL		0.1	1.0
L-392-06-05	TC1	17/Jul/2006	14:10	MOKELUMNE RIVER ANNUAL	DFG-WPCL	FieldAcidified	24/Jul/2006	080106-HARD	01/Aug/2006	SM 2340 C	Hardness as CaCO3	mg/L	9.1		1.0	1.0
L-392-06-05	TC1	17/Jul/2006	14:10	MOKELUMNE RIVER ANNUAL	DFG-WPCL	FieldFiltered, FieldAcidified	24/Jul/2006	080106-NO3+NO2	01/Aug/2006	QC 10107041B	Nitrate + Nitrite as N	mg/L	ND		0.0100	0.0200
L-392-06-05	TC1	17/Jul/2006	14:10	MOKELUMNE RIVER ANNUAL	DFG-WPCL	LabFiltered	24/Jul/2006	072706-Alk	27/Jul/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	9.8	DNQ	3.0	10.0
L-392-06-05	TC1	17/Jul/2006	14:10	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	24/Jul/2006	072406-TSS	24/Jul/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	<RL		0.1	1.0
L-392-06-06	NFMR3	17/Jul/2006	15:15	MOKELUMNE RIVER ANNUAL	DFG-WPCL	FieldAcidified	24/Jul/2006	080106-HARD	01/Aug/2006	SM 2340 C	Hardness as CaCO3	mg/L	13.3		1.0	1.0
L-392-06-06	NFMR3	17/Jul/2006	15:15	MOKELUMNE RIVER ANNUAL	DFG-WPCL	FieldFiltered, FieldAcidified	24/Jul/2006	080106-NO3+NO2	01/Aug/2006	QC 10107041B	Nitrate + Nitrite as N	mg/L	ND		0.0100	0.0200
L-392-06-06	NFMR3	17/Jul/2006	15:15	MOKELUMNE RIVER ANNUAL	DFG-WPCL	LabFiltered	24/Jul/2006	072706-Alk	27/Jul/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	10.7		3.0	10.0
L-392-06-06	NFMR3	17/Jul/2006	15:15	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	24/Jul/2006	072406-TSS	24/Jul/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	<RL		0.1	1.0
L-392-06-07	NFMR5	18/Jul/2006	14:30	MOKELUMNE RIVER ANNUAL	DFG-WPCL	FieldAcidified	24/Jul/2006	080106-HARD	01/Aug/2006	SM 2340 C	Hardness as CaCO3	mg/L	8.7		1.0	1.0
L-392-06-07	NFMR5	18/Jul/2006	14:30	MOKELUMNE RIVER ANNUAL	DFG-WPCL	FieldFiltered, FieldAcidified	24/Jul/2006	080106-NO3+NO2	01/Aug/2006	QC 10107041B	Nitrate + Nitrite as N	mg/L	ND		0.0100	0.0200
L-392-06-07	NFMR5	18/Jul/2006	14:30	MOKELUMNE RIVER ANNUAL	DFG-WPCL	LabFiltered	24/Jul/2006	072706-Alk	27/Jul/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	9.6	DNQ	3.0	10.0
L-392-06-07	NFMR5	18/Jul/2006	14:30	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	24/Jul/2006	072406-TSS	24/Jul/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	<RL		0.1	1.0
L-392-06-08	MR1	18/Jul/2006	16:00	MOKELUMNE RIVER ANNUAL	DFG-WPCL	FieldAcidified	24/Jul/2006	080106-HARD	01/Aug/2006	SM 2340 C	Hardness as CaCO3	mg/L	17.8		1.0	1.0
L-392-06-08	MR1	18/Jul/2006	16:00	MOKELUMNE RIVER ANNUAL	DFG-WPCL	FieldFiltered, FieldAcidified	24/Jul/2006	080106-NO3+NO2	01/Aug/2006	QC 10107041B	Nitrate + Nitrite as N	mg/L	ND		0.0100	0.0200
L-392-06-08	MR1	18/Jul/2006	16:00	MOKELUMNE RIVER ANNUAL	DFG-WPCL	LabFiltered	24/Jul/2006	072706-Alk	27/Jul/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	18.1		3.0	10.0
L-392-06-08	MR1	18/Jul/2006	16:00	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	24/Jul/2006	072406-TSS	24/Jul/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	<RL		0.1	1.0
L-392-06-09	BLANK	18/Jul/2006	17:00	MOKELUMNE RIVER ANNUAL	DFG-WPCL	FieldAcidified	24/Jul/2006	080106-HARD	01/Aug/2006	SM 2340 C	Hardness as CaCO3	mg/L	ND		1.0	1.0
L-392-06-09	BLANK	18/Jul/2006	17:00	MOKELUMNE RIVER ANNUAL	DFG-WPCL	FieldFiltered, FieldAcidified	24/Jul/2006	080106-NO3+NO2	01/Aug/2006	QC 10107041B	Nitrate + Nitrite as N	mg/L	ND		0.0100	0.0200

ND = Not detected
DNQ = DetectedNot Quantified

PG E
3400 Crow Canyon Road
San Ramon, CA 94583

Water Pollution Control Laboratory Quality Control Data
L-392-06

Ca. Dept. of Fish and Game
2005 Nimbus Road
Rancho Cordova, CA

LabSampleID	Sample ID/Location	SampleDate	SampleTime	ProjectID	AgencyCode	Preparation	Lab Submittal Date	LabBatch	Analysis Date	Method	QA/QC Parameter	Unit	Result	Qualifier	MDL	RL	LabResultComments
Method Blank	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	NA	072406-TSS	24/Jul/2006	EPA 160.2	Blank	mg/L	ND		0.1	1.0	
IPS-Hard-06-22A	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	NA	NA	072406-TSS	24/Jul/2006	EPA 160.2	True Value Ref Std	mg/L	48.3		0.1	1.0	
IPS-Hard-06-22A	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	NA	072406-TSS	24/Jul/2006	EPA 160.2	Reference Standard	mg/L	35.8		0.1	1.0	
IPS-Hard-06-22A	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Calculated	NA	072406-TSS	24/Jul/2006	EPA 160.2	Recovery Ref Std	%	17.0		NA	NA	
IPS-Hard-06-22A Duplicate	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Calculated	NA	072406-TSS	24/Jul/2006	EPA 160.2	Recovery Ref Std Dup	%	74.1		NA	NA	
IPS-Hard-06-22A Duplicate	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	NA	072406-TSS	24/Jul/2006	EPA 160.2	Ref Std Duplicate	mg/L	30.2		0.1	1.0	
IPS-Hard-06-22A	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	NA	072406-TSS	24/Jul/2006	EPA 160.2	Reference Standard	mg/L	35.8		0.1	1.0	
IPS-Hard-06-22A	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	NA	072406-TSS	24/Jul/2006	EPA 160.2	Reference Standard	mg/L	30.2		0.1	1.0	
IPS-Hard-06-22A	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	NA	072406-TSS	24/Jul/2006	EPA 160.2	Recovery Ref Std	%	74.1		NA	NA	Outside of Control Limit of 80-120%
IPS-Hard-06-22A	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	NA	072406-TSS	24/Jul/2006	EPA 160.2	Recovery Ref Std	%	62.5		NA	NA	Outside of Control Limit of 80-120%
L-392-06-01 Duplicate	MC2	19/Jul/2006	14:25	MOKELUMNE RIVER ANNUAL	DFG-WPCL	LabFiltered, LabAcidified	24/Jul/2006	080106-NO3+NO2	01/Aug/2006	QC 10107041B	Sample Duplicate	mg/L	ND		0.0100	0.0200	
L-392-06-01 MS	MC2	19/Jul/2006	14:25	MOKELUMNE RIVER ANNUAL	DFG-WPCL	LabFiltered, LabAcidified	24/Jul/2006	080106-NO3+NO2	01/Aug/2006	QC 10107041B	Spiked Result	mg/L	0.0493		0.0100	0.0200	
L-392-06-01 MSD	MC2	19/Jul/2006	14:25	MOKELUMNE RIVER ANNUAL	DFG-WPCL	LabFiltered, LabAcidified	24/Jul/2006	080106-NO3+NO2	01/Aug/2006	QC 10107041B	Spike Duplicate	mg/L	0.0497		0.0100	0.0200	
Method Blank	MC2	19/Jul/2006	14:25	MOKELUMNE RIVER ANNUAL	DFG-WPCL	LabFiltered, LabAcidified	24/Jul/2006	080106-NO3+NO2	01/Aug/2006	QC 10107041B	Blank	mg/L	ND		0.0100	0.0200	
IPS-Anions-06-9	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	NA	NA	080106-NO3+NO2	01/Aug/2006	QC 10107041B	True Value Ref Std	mg/L	0.212		0.0100	0.0200	
IPS-Anions-06-9	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	NA	080106-NO3+NO2	01/Aug/2006	QC 10107041B	Reference Standard	mg/L	0.228		0.0100	0.0200	
IPS-Anions-06-9	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Calculated	NA	080106-NO3+NO2	01/Aug/2006	QC 10107041B	Recovery Ref Std	%	106		NA	NA	
L-392-06-01	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Calculated	NA	080106-NO3+NO2	01/Aug/2006	QC 10107041B	Recovery of Spike Dup	%	99.4		NA	NA	
L-392-06-01	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Calculated	NA	080106-NO3+NO2	01/Aug/2006	QC 10107041B	Precision of MS/MSD	%	0.80		NA	NA	
L-392-06-01	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Calculated	NA	080106-NO3+NO2	01/Aug/2006	QC 10107041B	Recovery of Spike	%	98.8		NA	NA	
L-392-06-01	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Calculated	NA	080106-NO3+NO2	01/Aug/2006	QC 10107041B	Expected Spike	mg/L	0.0500		0.0100	0.0200	
L-392-06-01	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Calculated	NA	080106-NO3+NO2	01/Aug/2006	QC 10107041B	Precision of Sample Duplicate	%	0.00		NA	NA	
L-392-06-01 MS	MC2	19/Jul/2006	14:25	MOKELUMNE RIVER ANNUAL	DFG-WPCL	LabFiltered	24/Jul/2006	072706-Alk	27/Jul/2006	QC 10303311A	Spiked Result	mg/L	13.5		3.0	10.0	
L-392-06-01 MSD	MC2	19/Jul/2006	14:25	MOKELUMNE RIVER ANNUAL	DFG-WPCL	LabFiltered	24/Jul/2006	072706-Alk	27/Jul/2006	QC 10303311A	Spike Duplicate	mg/L	12.4		3.0	10.0	
L-392-06-02	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Calculated	NA	072706-Alk	27/Jul/2006	QC 10303311A	Precision of Sample Duplicate	%	0.53		NA	NA	
L-392-06-02 Duplicate	BC2	19/Jul/2006	13:20	MOKELUMNE RIVER ANNUAL	DFG-WPCL	LabFiltered	24/Jul/2006	072706-Alk	27/Jul/2006	QC 10303311A	Sample Duplicate	mg/L	7.61		3.0	10.0	
Method Blank	MC2	19/Jul/2006	14:25	MOKELUMNE RIVER ANNUAL	DFG-WPCL	LabFiltered	24/Jul/2006	072706-Alk	27/Jul/2006	QC 10303311A	Blank	mg/L	ND		3.0	10.0	
IPS-Min-05-39A	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	NA	NA	072706-Alk	27/Jul/2006	QC 10303311A	True Value Ref Std	mg/L	89.0		3.0	10.0	
IPS-Min-05-39A	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	NA	072706-Alk	27/Jul/2006	QC 10303311A	Reference Standard	mg/L	90.5		3.0	10.0	
IPS-Min-05-39A	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Calculated	NA	072706-Alk	27/Jul/2006	QC 10303311A	Recovery Ref Std	%	102		NA	NA	
L-392-06-01	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Calculated	NA	072706-Alk	27/Jul/2006	QC 10303311A	Recovery of Spike Dup	%	90.3		NA	NA	
L-392-06-01	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Calculated	NA	072706-Alk	27/Jul/2006	QC 10303311A	Precision of MS/MSD	%	8.49		NA	NA	
L-392-06-01	NA	NA	NA	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Calculated	NA	072706-Alk	27/Jul/2006	QC 10303311A	Recovery of Spike	%	98.5		NA	NA	
L-392-06-01	NA	NA	NA	LBRR DAM PROJECT	DFG-WPCL	Calculated	NA	072706-Alk	27/Jul/2006	QC 10303311A	Expected Spike	mg/L	13.7		3.0	10.0	
L-392-06-01 Duplicate	MC2	19/Jul/2006	14:25	LBRR DAM PROJECT	DFG-WPCL	FieldAcidified	24/Jul/2006	080106-HARD	01/Aug/2006	SM 2340 C	Sample Duplicate	mg/L	5.1		1.0	1.0	
Method Blank	MC2	19/Jul/2006	14:25	LBRR DAM PROJECT	DFG-WPCL	Acidified	24/Jul/2006	080106-HARD	01/Aug/2006	SM 2340 C	Blank	mg/L	ND		1.0	1.0	
IPS-Hard-06-22D	NA	NA	NA	LBRR DAM PROJECT	DFG-WPCL	NA	NA	080106-HARD	01/Aug/2006	SM 2340 C	True Value Ref Std	mg/L	264		1.0	1.0	
IPS-Hard-06-22D	NA	NA	NA	LBRR DAM PROJECT	DFG-WPCL	None	NA	080106-HARD	01/Aug/2006	SM 2340 C	Reference Standard	mg/L	250		1.0	1.0	
IPS-Hard-06-22D	NA	NA	NA	LBRR DAM PROJECT	DFG-WPCL	Calculated	NA	080106-HARD	01/Aug/2006	SM 2340 C	Recovery Ref Std	%	94.7		NA	NA	
L-392-06-01	NA	NA	NA	LBRR DAM PROJECT	DFG-WPCL	Calculated	NA	080106-HARD	01/Aug/2006	SM 2340 C	Precision of Sample Duplicate	%	17.9		NA	NA	

DFG REQUEST FOR ANALYSIS AND CHAIN OF CUSTODY RECORD

Page 1 of 1

Sampler	Ph #	Send Samples To		Lab Number
Eric Kenzler		Patty Bucknell	916-358-0318	L-392-06
925-866-5806		WATER POLLUTION CONTROL LABORATORY		
Address		**Address**		**Field Number**
3400 CROW CANYON ROAD		2005 NIMBUS ROAD		
City	**Zip**	**City**	**Zip**	**Lab Storage**
SAN RAMON	94583	RANCHO CORDOVA	95670	
CA		CA		
Date Required/Reason		**Analytical Results TO**		**Spill Title**
STANDARD LABORATORY TURN-AROUND		Elizabeth Frantz (925-866-5472)		
Shipped Via		**Address**		**Suspect**
		3400 Crow Canyon Road		
		City	**Zip**	**Index-PCA**
		San Ramon	94526	
			CA	

☐ Fish & Wildlife Loss Date:_____ Region:_____

☐ DFG Code Violation:_____

☐ Suspected or Potential Problem

⊛ Routine Analysis

Water Temp: F or C pH: DO: mg/L Conductivity: umhos/cm

	Sample Identification/Location (Draw map on separate sheet if necessary)	Collection Date	Collection Time	TSS	HARDNESS	[illegible]	ALKALINITY				Sample Type: Water	Sample Type: Filtered Water	Sample Type: Soil	Sample Type: Tissue	Number of Containers: Plastic	Number of Containers: Glass	Number of Containers: VOA Vial	Preservation: Temp	Preservation: Acid
1	MC2	7-19	14:25	X	X	X	X				X	1			3				2
2	BC2	7-19	1320	X	X	X	X				X	1			3				2
3	BR1	7-18-06	0910	X	X	X	X				X	1			3				2
4	NFMR2	7-20-06	8:20	X	X	X	X				X	1			3				2
5	TC1	7-17	14:10	X	X	X	X				X	1			3				2
6	NFMR3	7-17	15: 15	X	X	X	X				X	1			3				2
7	NFMR5	7-18	14: 30	X	X	X	X				X	1			3				2
8	MR1	7-18	1600	X	X	X	X				X	1			3				2
9	BLANK	7-18	17:00		X	X					X	1			2				2

Problem Description TSS failed due to QC failure. Called client. Will put a corrective action on the report.

Suspect/Incident Location

Comments/Special Instructions PLEASE SEND RESULTS TO E. FRANTZ (eag0@pge.com)

Pollution Action Kit: Yes☐ No☐

Glove Size: Large ☐ Medium ☐

Hazmat Shipper Requested: Yes☐ No☐

Samples Relinquished By (Signature)	Print Name	Date	Received By (Signature)	Print Name	Date
Eric Kenzler	Eric Kenzler	7-21-06 10:00	to Shipper Jennifer Riley	Jennifer Riley	7/24/06

Pesticide Investigations Lab
1701 Nimbus Road
Rancho Cordova, CA 95670
(916) 358-2950

Petroleum Chemistry Lab
1995 Nimbus Road
Rancho Cordova, CA 95670
(916) 358-2803

Water Pollution Control Lab
2005 Nimbus Road
Rancho Cordova, CA 95670
(916) 358-2858

DEPARTMENT OF FISH AND GAME
FISH AND WILDLIFE
WATER POLLUTION CONTROL LABORATORY
2005 NIMBUS ROAD
RANCHO CORDOVA, CA 95670
PHONE (916) 358-2858 ATSS 8-434-2858 FAX (916) 985-4301

LABORATORY REPORT

Name:	Elizabeth Frantz	**Lab Number:**	L-448-06
Agency:	Pacific Gas & Electric Company	**Other Number:**	
Address:	3400 Crow Canyon Rd.	**Date Sampled:**	08/15-17/06
City:	San Ramon, CA 94583	**Date Received:**	08/21/06
		Date Completed:	08/24/06
		Index-PCA Code:	

RE: Water Quality

RESULTS OF CHEMICAL ANALYSIS:

See attached spreadsheets for analytical results and QA summary.

CC: Lauri Park – SJSU Foundation

Cost of Analysis: $ 1054.00

POLLUTION ACTION KIT (IF USED): $110.00 AND HAZMAT SHIPPER (IF USED): $25.00
Deposit recovery costs to the Fish and Wildlife Pollution Account with "cost of analysis" identified separately.

Analyst: KP, JR, CO

Patty Burkhart — **Inorganic Section Leader** — 10/12/06 **Date**

DB Cameron — **Laboratory Director** — 10/12/06 **Date**

PGE
3400 Crow Canyon Road
San Ramon CA, 94583
Attn: Elizabeth Frantz

WPCL Laboratory Report
L-448-06

CA. Dept. of Fish and Game
2005 Nimbus Road
Rancho Cordova, CA 95670

LabSampleID	Sample ID/Location	SampleDate	SampleTime	ProjectID	AgencyCode	Preparation	Lab Submittal Date	LabBatch	Analysis Date	Method	Analyte Name	Unit	Lab Result	Qualifier	MDL	RL
L-448-06-01	MC2	17/Aug/2006	13:30	MOKELUMNE RIVER ANNI	DFG-WPCL	FieldAcidified	21/Aug/2006	082106-HARD	21/Aug/2006	SM 2340 C	Hardness as CaCO3	mg/L	5.0		1.0	1.0
L-448-06-01	MC2	17/Aug/2006	13:30	MOKELUMNE RIVER ANNI	DFG-WPCL	Lab Filtered, Lab Acidified	21/Aug/2006	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	Nitrate + Nitrite as N by FIA	mg/L	ND		0.0100	0.0200
L-448-06-01	MC2	17/Aug/2006	13:30	MOKELUMNE RIVER ANNI	DFG-WPCL	Lab Filtered	21/Aug/2006	082406-Alk	24/Aug/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	3.3	DNQ	3.0	10.0
L-448-06-01	MC2	17/Aug/2006	13:30	MOKELUMNE RIVER ANNI	DFG-WPCL	None	21/Aug/2006	082106-TSS	21/Aug/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	0.2	DNQ	0.1	1.0
L-448-06-02	BC2	17/Aug/2006	12:30	MOKELUMNE RIVER ANNI	DFG-WPCL	FieldAcidified	21/Aug/2006	082106-HARD	21/Aug/2006	SM 2340 C	Hardness as CaCO3	mg/L	8.0		1.0	1.0
L-448-06-02	BC2	17/Aug/2006	12:30	MOKELUMNE RIVER ANNI	DFG-WPCL	Lab Filtered, Lab Acidified	21/Aug/2006	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	Nitrate + Nitrite as N by FIA	mg/L	ND		0.0100	0.0200
L-448-06-02	BC2	17/Aug/2006	12:30	MOKELUMNE RIVER ANNI	DFG-WPCL	Lab Filtered	21/Aug/2006	082406-Alk	24/Aug/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	6.4	DNQ	3.0	10.0
L-448-06-02	BC2	17/Aug/2006	12:30	MOKELUMNE RIVER ANNI	DFG-WPCL	None	21/Aug/2006	082108-TSS	21/Aug/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	0.5	DNQ	0.1	1.0
L-448-06-03	BR1	16/Aug/2006	9:20	MOKELUMNE RIVER ANNI	DFG-WPCL	FieldAcidified	21/Aug/2006	082106-HARD	21/Aug/2006	SM 2340 C	Hardness as CaCO3	mg/L	5.5		1.0	1.0
L-448-06-03	BR1	16/Aug/2006	9:20	MOKELUMNE RIVER ANNI	DFG-WPCL	Lab Filtered, Lab Acidified	21/Aug/2006	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	Nitrate + Nitrite as N by FIA	mg/L	ND		0.0100	0.0200
L-448-06-03	BR1	16/Aug/2006	9:20	MOKELUMNE RIVER ANNI	DFG-WPCL	Lab Filtered	21/Aug/2006	082406-Alk	24/Aug/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	4.1	DNQ	3.0	10.0
L-448-06-03	BR1	16/Aug/2006	9:20	MOKELUMNE RIVER ANNI	DFG-WPCL	None	21/Aug/2006	082108-TSS	21/Aug/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	0.4	DNQ	0.1	1.0
L-448-06-04	NFMR2	15/Aug/2006	8:45	MOKELUMNE RIVER ANNI	DFG-WPCL	FieldAcidified	21/Aug/2006	082106-HARD	21/Aug/2006	SM 2340 C	Hardness as CaCO3	mg/L	7.5		1.0	1.0
L-448-06-04	NFMR2	15/Aug/2006	8:45	MOKELUMNE RIVER ANNI	DFG-WPCL	Lab Filtered, Lab Acidified	21/Aug/2006	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	Nitrate + Nitrite as N by FIA	mg/L	ND		0.0100	0.0200
L-448-06-04	NFMR2	15/Aug/2006	8:45	MOKELUMNE RIVER ANNI	DFG-WPCL	Lab Filtered	21/Aug/2006	082406-Alk	24/Aug/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	4.7	DNQ	3.0	10.0
L-448-06-04	NFMR2	15/Aug/2006	8:45	MOKELUMNE RIVER ANNI	DFG-WPCL	None	21/Aug/2006	082108-TSS	21/Aug/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	0.4	DNQ	0.1	1.0
L-448-06-05	TC1	15/Aug/2006	12:40	MOKELUMNE RIVER ANNI	DFG-WPCL	FieldAcidified	21/Aug/2006	082106-HARD	21/Aug/2006	SM 2340 C	Hardness as CaCO3	mg/L	6.0		1.0	1.0
L-448-06-05	TC1	15/Aug/2006	12:40	MOKELUMNE RIVER ANNI	DFG-WPCL	Lab Filtered, Lab Acidified	21/Aug/2006	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	Nitrate + Nitrite as N by FIA	mg/L	ND		0.0100	0.0200
L-448-06-05	TC1	15/Aug/2006	12:40	MOKELUMNE RIVER ANNI	DFG-WPCL	Lab Filtered	21/Aug/2006	082406-Alk	24/Aug/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	4.5	DNQ	3.0	10.0
L-448-06-05	TC1	15/Aug/2006	12:40	MOKELUMNE RIVER ANNI	DFG-WPCL	None	21/Aug/2006	082108-TSS	21/Aug/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	3.4		0.1	1.0
L-448-06-06	NFMR3	15/Aug/2006	13:30	MOKELUMNE RIVER ANNI	DFG-WPCL	FieldAcidified	21/Aug/2006	082106-HARD	21/Aug/2006	SM 2340 C	Hardness as CaCO3	mg/L	9.5		1.0	1.0
L-448-06-06	NFMR3	15/Aug/2006	13:30	MOKELUMNE RIVER ANNI	DFG-WPCL	Lab Filtered, Lab Acidified	21/Aug/2006	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	Nitrate + Nitrite as N by FIA	mg/L	ND		0.0100	0.0200
L-448-06-06	NFMR3	15/Aug/2006	13:30	MOKELUMNE RIVER ANNI	DFG-WPCL	Lab Filtered	21/Aug/2006	082406-Alk	24/Aug/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	9.0	DNQ	3.0	10.0
L-448-06-06	NFMR3	15/Aug/2006	13:30	MOKELUMNE RIVER ANNI	DFG-WPCL	None	21/Aug/2006	082108-TSS	21/Aug/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	0.6	DNQ	0.1	1.0
L-448-06-07	NFMR5	15/Aug/2006	15:00	MOKELUMNE RIVER ANNI	DFG-WPCL	FieldAcidified	21/Aug/2006	082106-HARD	21/Aug/2006	SM 2340 C	Hardness as CaCO3	mg/L	8.5		1.0	1.0
L-448-06-07	NFMR5	15/Aug/2006	15:00	MOKELUMNE RIVER ANNI	DFG-WPCL	Lab Filtered, Lab Acidified	21/Aug/2006	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	Nitrate + Nitrite as N by FIA	mg/L	ND		0.0100	0.0200
L-448-06-07	NFMR5	15/Aug/2006	15:00	MOKELUMNE RIVER ANNI	DFG-WPCL	Lab Filtered	21/Aug/2006	082406-Alk	24/Aug/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	8.1	DNQ	3.0	10.0
L-448-06-07	NFMR5	15/Aug/2006	15:00	MOKELUMNE RIVER ANNI	DFG-WPCL	None	21/Aug/2006	082108-TSS	21/Aug/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	0.7	DNQ	0.1	1.0
L-448-06-08	MR1	16/Aug/2006	16:00	MOKELUMNE RIVER ANNI	DFG-WPCL	FieldAcidified	21/Aug/2006	082106-HARD	21/Aug/2006	SM 2340 C	Hardness as CaCO3	mg/L	22.0		1.0	1.0
L-448-06-08	MR1	16/Aug/2006	16:00	MOKELUMNE RIVER ANNI	DFG-WPCL	Lab Filtered, Lab Acidified	21/Aug/2006	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	Nitrate + Nitrite as N by FIA	mg/L	ND		0.0100	0.0200
L-448-06-08	MR1	16/Aug/2006	16:00	MOKELUMNE RIVER ANNI	DFG-WPCL	Lab Filtered	21/Aug/2006	082406-Alk	24/Aug/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	24.3		3.0	10.0
L-448-06-08	MR1	16/Aug/2006	16:00	MOKELUMNE RIVER ANNI	DFG-WPCL	None	21/Aug/2006	082108-TSS	21/Aug/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	0.4	DNQ	0.1	1.0
L-448-06-09	BLANK	16/Aug/2006	16:00	MOKELUMNE RIVER ANNI	DFG-WPCL	FieldAcidified	21/Aug/2006	082106-HARD	21/Aug/2006	SM 2340 C	Hardness as CaCO3	mg/L	ND		1.0	1.0
L-448-06-09	BLANK	16/Aug/2006	16:00	MOKELUMNE RIVER ANNI	DFG-WPCL	Lab Filtered, Lab Acidified	21/Aug/2006	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	Nitrate + Nitrite as N by FIA	mg/L	ND		0.0100	0.0200

ND = Not Detected
NA = Not Applicable
DNQ = Detected, Not Quantified

PGE
3400 Crow Canyon Road
San Ramon, CA 94583

WPCL Quality Control Report
L-448-06

CA Dept. of Fish and Game
2005 Nimbus Road
Rancho Cordova, CA 95670

LabSampleID	Sample ID/Location	SampleDate	SampleTime	ProjectID	AgencyCode	Preparation	Lab Submitted Date	LabBatch	Analysis Date	Method	QA/QC Parameter	Unit	Result	MDL	RL
Method Blank	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Lab Acidified	NA	082106-HARD	21/Aug/2006	SM 2340 C	Blank	mg/L	ND	1.0	1.0
IPS-HARD-06-22F	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	None	NA	082106-HARD	21/Aug/2006	SM 2340 C	True Value Ref Std	mg/L	264	1.0	1.0
IPS-HARD-06-22F	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	None	NA	082106-HARD	21/Aug/2006	SM 2340 C	Reference Standard	mg/L	265	1.0	1.0
IPS-HARD-06-22F	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Calculated	NA	082106-HARD	21/Aug/2006	SM 2340 C	Recovery Ref Std	%	100	NA	NA
L-448-06-01 Duplicate	MC2	17/Aug/2006	13:30	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	FieldAcidified	21/Aug/2006	082106-HARD	21/Aug/2006	SM 2340 C	Sample Duplicate	mg/L	5.0	1.0	1.0
L-448-06-01 Duplicate	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Calculated	NA	082106-HARD	21/Aug/2006	SM 2340 C	Precision of Sample Duplicate	%	0.00	NA	NA
Method Blank	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	None	NA	082106-TSS	21/Aug/2006	EPA 160.2	Blank	mg/L	ND	0.1	1.0
IPS-HARD-06-22E	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	None	NA	082106-TSS	21/Aug/2006	EPA 160.2	True Value Ref Std	mg/L	46.3	0.1	1.0
IPS-HARD-06-22E	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	None	NA	082106-TSS	21/Aug/2006	EPA 160.2	Reference Standard	mg/L	44.0	0.1	1.0
IPS-HARD-06-22E	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Calculated	NA	082106-TSS	21/Aug/2006	EPA 160.2	Recovery Ref Std	%	91.1	NA	NA
IPS-HARD-06-22E Duplicate	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	None	NA	082106-TSS	21/Aug/2006	EPA 160.2	Ref Std Duplicate	mg/L	45.8	0.1	1.0
IPS-HARD-06-22E Duplicate	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Calculated	NA	082106-TSS	21/Aug/2006	EPA 160.2	Precision Ref Std	%	4.01	NA	NA
Method Blank	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Lab Filtered, Lab Acidified	NA	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	Blank	mg/L	ND	0.0100	0.0200
L-448-06-01	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Calculated	NA	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	Expected Spike	mg/L	0.05	0.0100	0.0200
L-448-06-01 MS	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Calculated	NA	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	Recovery of Spike	%	102	NA	NA
L-448-06-01 MSD	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Calculated	NA	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	Recovery of Spike Dup	%	104	NA	NA
L-448-06-01 MS	MC2	17/Aug/2006	13:30	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Lab Filtered, Lab Acidified	21/Aug/2006	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	Spiked Result	mg/L	0.051	0.0100	0.0200
L-448-06-01 MSD	MC2	17/Aug/2006	13:30	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Lab Filtered, Lab Acidified	21/Aug/2006	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	Spike Duplicate	mg/L	0.052	0.0100	0.0200
L-448-06-01	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Calculated	NA	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	Precision of MS/MSD	%	1.94	NA	NA
IPS-Anions-mix-06-9	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	None	NA	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	True Value Ref Std	mg/L	0.212	0.0100	0.0200
IPS-Anions-mix-06-9	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	None	NA	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	Reference Standard	mg/L	0.227	0.0100	0.0200
IPS-Anions-mix-06-9	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Calculated	NA	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	Recovery Ref Std	%	107	NA	NA
L-448-06-01 Duplicate	MC2	17/Aug/2006	13:30	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Lab Filtered, Lab Acidified	21/Aug/2006	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	Sample Duplicate	mg/L	ND	0.0100	0.0200
L-448-06-01 Duplicate	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Calculated	NA	082306-3-NO3+NO2	23/Aug/2006	QC 10107041B	Precision of Sample Duplicate	%	0.00	NA	NA
Method Blank	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Lab Filtered	NA	082406-Alk	24/Aug/2006	QC 10303311A	Blank	mg/L	ND	3.0	10.0
L-448-06-02	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Calculated	21/Aug/2006	082406-Alk	24/Aug/2006	QC 10303311A	Expected Spike	mg/L	16.4	3.0	10.0
L-448-06-02 MS	BC2	17/Aug/2006	12:30	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Lab Filtered	21/Aug/2006	082406-Alk	24/Aug/2006	QC 10303311A	Spiked Result	mg/L	15.3	3.0	10.0
L-448-06-02 MSD	BC2	17/Aug/2006	12:30	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Lab Filtered	21/Aug/2006	082406-Alk	24/Aug/2006	QC 10303311A	Spike Duplicate	mg/L	15.3	3.0	10.0
L-448-06-02 MS	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Calculated	NA	082406-Alk	24/Aug/2006	QC 10303311A	Recovery of Spike	%	93.4	NA	NA
L-448-06-02 MSD	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Calculated	NA	082406-Alk	24/Aug/2006	QC 10303311A	Recovery of Spike Dup	%	93.3	NA	NA
L-448-06-02	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Calculated	NA	082406-Alk	24/Aug/2006	QC 10303311A	Precision of MS/MSD	%	0.00	NA	NA
IPS-MIN-05-39E	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	None	NA	082406-Alk	24/Aug/2006	QC 10303311A	True Value Ref Std	mg/L	89.0	3.0	10.0
IPS-MIN-05-39E	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	None	NA	082406-Alk	24/Aug/2006	QC 10303311A	Reference Standard	mg/L	88.8	3.0	10.0
IPS-MIN-05-39E	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Calculated	NA	082406-Alk	24/Aug/2006	QC 10303311A	Recovery Ref Std	%	99.8	NA	NA
L-448-06-01 Duplicate	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Calculated	NA	082406-Alk	24/Aug/2006	QC 10303311A	Precision of Sample Duplicate	%	0.00	NA	NA
L-448-06-01 Duplicate	MC2	17/Aug/2006	13:30	MOKELUMNE RIVER ANNUAL SAMPLI	DFG-WPCL	Lab Filtered	21/Aug/2006	082406-Alk	24/Aug/2006	QC 10303311A	Sample Duplicate	mg/L	ND	3.0	10.0

ND = Not Detected
NA = Not Applicable

DFG REQUEST FOR ANALYSIS AND CHAIN OF CUSTODY RECORD

Page_____ of _____

Sampler Eric Kenzler **Ph #** 925-866-5806	**Send Samples To** Patty Bucknell 916-358-0318 WATER POLLUTION CONTROL LABORATORY	**Lab Number** L-448-06
Address 3400 CROW CANYON ROAD	**Address** 2005 NIMBUS ROAD	**Field Number**
City SAN RAMON **Zip** 94583 CA	**City** RANCHO CORDOVA **Zip** 95670 CA	**Lab Storage** WALK IN #2
	Analytical Results TO Elizabeth Frantz (925-866-5472)	**Spill Title**
Date Required/Reason STANDARD LABORATORY TURN-AROUND	**Address** 3400 Crow Canyon Road	**Suspect**
Shipped Via UPS Next DAY	**City** San Ramon **Zip** CA 94526	**Index-PCA**

☐ Fish & Wildlife Loss Date:_____ Region:_____

☐ DFG Code Violation:_____

☐ Suspected or Potential Problem

☒ Routine Analysis

Water Temp: F or C pH: DO: mg/L Conductivity: u mhos/cm

	Sample Identification/Location (Draw map on separate sheet if necessary)	Collection Date	Collection Time	TSS	HARDNESS	NITRATE, TOTAL (as N) filtered	ALKALINITY	Sample Type: Water	Sample Type: Filtered Water	Sample Type: Soil	Sample Type: Tissue	Number of Containers: Plastic	Number of Containers: Glass	Number of Containers: VOA Vial	Preservation: Temp	Preservation: Acid
1	MC2	8-17	1350	X	X	X	X	X	1			3				2
2	BC2	8-17	1230	X	X	X	X	X	1			3				2
3	BR1	8-16	0920	X	X	X	X	X	1			3				2
4	NFMR2	8-15	0845	X	X	X	X	X	1			3				2
5	TC1	8-15	1240	X	X	X	X	X	1			3				2
6	NFMR3	8-15	1330	X	X	X	X	X	1			3				2
7	NFMR5	8-15	1500	X	X	X	X	X	1			3				2
8	MR1	8-16	1600	X	X	X	X	X	1			3				2
9	BLANK	8-16	1600		X	X		X	1			2				2

Problem Description

Suspect/Incident Location

Comments/Special Instructions PLEASE SEND RESULTS TO E. FRANTZ (eag0@pge.com)

Pollution Action Kit: Yes☐ No☐

Glove Size: Large ☐ Medium ☐

Hazmat Shipper Requested: Yes☐ No☐

Samples Relinquished By (Signature)	Print Name	Date	Received By (Signature)	Print Name	Date
Eric Kenzler	Eric Kenzler	8-17-06	Shipping Dept	CERTIFIED MAIL TA	8/21/06
		1100			

Pesticide Investigations Lab
1701 Nimbus Road
Rancho Cordova, CA 95670
(916) 358-2950

☐

Petroleum Chemistry Lab
1995 Nimbus Road
Rancho Cordova, CA 95670
(916) 358-2803

☐

Water Pollution Control Lab
2005 Nimbus Road
Rancho Cordova, CA 95670
(916) 358-2858

☒

DEPARTMENT OF FISH AND GAME
FISH AND WILDLIFE
WATER POLLUTION CONTROL LABORATORY
2005 NIMBUS ROAD
RANCHO CORDOVA, CA 95670
PHONE (916) 358-2858 ATSS 8-434-2858 FAX (916) 985-4301

LABORATORY REPORT

Name:	Elizabeth Frantz	**Lab Number:**	L-534-06
Agency:	Pacific Gas & Electric Company	**Other Number:**	
Address:	3400 Crow Canyon Rd.	**Date Sampled:**	09/19-21/06
City:	San Ramon, CA 94583	**Date Received:**	09/25/06
		Date Completed:	10/11/06
		Index-PCA Code:	

RE: Water Quality

RESULTS OF CHEMICAL ANALYSIS:

See attached spreadsheets for analytical results and QA summary.

CC: Lauri Park – SJSU Foundation

Cost of Analysis: $ 1054.00

POLLUTION ACTION KIT (IF USED): $110.00 AND HAZMAT SHIPPER (IF USED): $25.00
Deposit recovery costs to the Fish and Wildlife Pollution Account with "cost of analysis" identified separately.

Analyst: KP, JR, CO

Inorganic Section Leader — Date: 10/27/06

Laboratory Director — Date: 10/30/06

PGE
3400 Crow Canyon Road
San Ramon, CA 94583

Water Pollution Control Laboratory Data
L-534-06

Ca. Dept. of Fish and Game
2005 Nimbus Road
Rancho Cordova, CA 95670

LabSampleID	Sample ID/Location	SampleDate	SampleTime	ProjectID	AgencyCode	Preparation	Lab Submittal Date	LabBatch	Analysis Date	Method	QA/QC Parameter	Unit	Result	Qualifier	MDL	RL
L-534-06-01	MC2	21/Sep/2006	13:20	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Acidified	25/Sep/2006	101106-HARD	11/Oct/2006	SM 2340 C	Hardness as CaCO3	mg/L	4.2		1.0	1.0
L-534-06-01	MC2	21/Sep/2006	13:20	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Filtered, Lab Acidified	25/Sep/2006	092506-NO3+NO2	25/Sep/2006	QC 10107041B	Nitrate + Nitrite as N by FIA	mg/L	ND		0.010	0.0200
L-534-06-01	MC2	21/Sep/2006	13:20	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Filtered	25/Sep/2006	100206-ALK	02/Oct/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	4.6	DNQ	3.0	10.0
L-534-06-01	MC2	21/Sep/2006	13:20	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	25/Sep/2006	092506-TSS	25/Sep/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	<RL		0.1	1.0
L-534-06-02	BC2	21/Sep/2006	12:15	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Acidified	25/Sep/2006	101106-HARD	11/Oct/2006	SM 2340 C	Hardness as CaCO3	mg/L	9.4		1.0	1.0
L-534-06-02	BC2	21/Sep/2006	12:15	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Filtered, Lab Acidified	25/Sep/2006	092506-NO3+NO2	25/Sep/2006	QC 10107041B	Nitrate + Nitrite as N by FIA	mg/L	ND		0.010	0.0200
L-534-06-02	BC2	21/Sep/2006	12:15	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Filtered	25/Sep/2006	100206-ALK	02/Oct/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	7.6	DNQ	3.0	10.0
L-534-06-02	BC2	21/Sep/2006	12:15	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	25/Sep/2006	092506-TSS	25/Sep/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	<RL		0.1	1.0
L-534-06-03	BR1	20/Sep/2006	10:00	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Acidified	25/Sep/2006	101106-HARD	11/Oct/2006	SM 2340 C	Hardness as CaCO3	mg/L	5.2		1.0	1.0
L-534-06-03	BR1	20/Sep/2006	10:00	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Filtered, Lab Acidified	25/Sep/2006	092506-NO3+NO2	25/Sep/2006	QC 10107041B	Nitrate + Nitrite as N by FIA	mg/L	ND		0.010	0.0200
L-534-06-03	BR1	20/Sep/2006	10:00	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Filtered	25/Sep/2006	100206-ALK	02/Oct/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	5.4	DNQ	3.0	10.0
L-534-06-03	BR1	20/Sep/2006	10:00	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	25/Sep/2006	092506-TSS	25/Sep/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	<RL		0.1	1.0
L-534-06-04	NFMR2	19/Sep/2006	8:40	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Acidified	25/Sep/2006	101106-HARD	11/Oct/2006	SM 2340 C	Hardness as CaCO3	mg/L	6.3		1.0	1.0
L-534-06-04	NFMR2	19/Sep/2006	8:40	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Filtered, Lab Acidified	25/Sep/2006	092506-NO3+NO2	25/Sep/2006	QC 10107041B	Nitrate + Nitrite as N by FIA	mg/L	0.0217		0.010	0.0200
L-534-06-04	NFMR2	19/Sep/2006	8:40	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Filtered	25/Sep/2006	100206-ALK	02/Oct/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	6.7	DNQ	3.0	10.0
L-534-06-04	NFMR2	19/Sep/2006	8:40	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	25/Sep/2006	092506-TSS	25/Sep/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	<RL		0.1	1.0
L-534-06-05	TC1	19/Sep/2006	11:30	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Acidified	25/Sep/2006	101106-HARD	11/Oct/2006	SM 2340 C	Hardness as CaCO3	mg/L	7.4		1.0	1.0
L-534-06-05	TC1	19/Sep/2006	11:30	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Filtered, Lab Acidified	25/Sep/2006	092506-NO3+NO2	25/Sep/2006	QC 10107041B	Nitrate + Nitrite as N by FIA	mg/L	0.0200		0.010	0.0200
L-534-06-05	TC1	19/Sep/2006	11:30	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Filtered	25/Sep/2006	100206-ALK	02/Oct/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	8.3	DNQ	3.0	10.0
L-534-06-05	TC1	19/Sep/2006	11:30	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	25/Sep/2006	092506-TSS	25/Sep/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	<RL		0.1	1.0
L-534-06-06	NFMR3	19/Sep/2006	12:35	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Acidified	25/Sep/2006	101106-HARD	11/Oct/2006	SM 2340 C	Hardness as CaCO3	mg/L	20.0		1.0	1.0
L-534-06-06	NFMR3	19/Sep/2006	12:35	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Filtered, Lab Acidified	25/Sep/2006	092506-NO3+NO2	25/Sep/2006	QC 10107041B	Nitrate + Nitrite as N by FIA	mg/L	ND		0.010	0.0200
L-534-06-06	NFMR3	19/Sep/2006	12:35	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Filtered	25/Sep/2006	100206-ALK	02/Oct/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	20.1		3.0	10.0
L-534-06-06	NFMR3	19/Sep/2006	12:35	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	25/Sep/2006	092506-TSS	25/Sep/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	<RL		0.1	1.0
L-534-06-07	NFMR5	19/Sep/2006	13:55	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Acidified	25/Sep/2006	101106-HARD	11/Oct/2006	SM 2340 C	Hardness as CaCO3	mg/L	20.0		1.0	1.0
L-534-06-07	NFMR5	19/Sep/2006	13:55	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Filtered, Lab Acidified	25/Sep/2006	092506-NO3+NO2	25/Sep/2006	QC 10107041B	Nitrate + Nitrite as N by FIA	mg/L	ND		0.010	0.0200
L-534-06-07	NFMR5	19/Sep/2006	13:55	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Filtered	25/Sep/2006	100206-ALK	02/Oct/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	21.1		3.0	10.0
L-534-06-07	NFMR5	19/Sep/2006	13:55	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	25/Sep/2006	092506-TSS	25/Sep/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	<RL		0.1	1.0
L-534-06-08	MR1	19/Sep/2006	15:25	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Acidified	25/Sep/2006	101106-HARD	11/Oct/2006	SM 2340 C	Hardness as CaCO3	mg/L	25.2		1.0	1.0
L-534-06-08	MR1	19/Sep/2006	15:25	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Filtered, Lab Acidified	25/Sep/2006	092506-NO3+NO2	25/Sep/2006	QC 10107041B	Nitrate + Nitrite as N by FIA	mg/L	ND		0.010	0.0200
L-534-06-08	MR1	19/Sep/2006	15:25	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Filtered	25/Sep/2006	100206-ALK	02/Oct/2006	QC 10303311A	Alkalinity as CaCO3	mg/L	28.0		3.0	10.0
L-534-06-08	MR1	19/Sep/2006	15:25	MOKELUMNE RIVER ANNUAL	DFG-WPCL	None	25/Sep/2006	092506-TSS	25/Sep/2006	EPA 160.2	Total Suspended Solids, 1L	mg/L	1.1		0.1	1.0
L-534-06-09	BLANK	20/Sep/2006	14:20	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Acidified	25/Sep/2006	101106-HARD	11/Oct/2006	SM 2340 C	Hardness as CaCO3	mg/L	-1.0	ND	1.0	1.0
L-534-06-09	BLANK	20/Sep/2006	14:20	MOKELUMNE RIVER ANNUAL	DFG-WPCL	Lab Filtered, Lab Acidified	25/Sep/2006	092506-NO3+NO2	25/Sep/2006	QC 10107041B	Nitrate + Nitrite as N by FIA	mg/L	ND		0.010	0.0200

DNQ = Detected, Not Quantified
ND = Not Detected
RL = Reporting Limit

PGE
2400 Crow Canyon Road
San Ramon, CA 94583
Attn: Elizabeth Frantz

Water Pollution Control Laboratory Quality Control Data
L-534-06

Ca. Dept. of Fish and Game
2005 NImbus Road
Rancho Cordova, CA 95670

LabSampleID	Sample ID/Location	SampleDate	SampleTime	ProjectID	AgencyCode	Preparation	Lab Submittal Date	LabBatch	Analysis Date	Method	QA/QC Parameter	Unit	Result	MDL	RL
L-534-06-01	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Calculation	NA	092506-NO3+NO2	25/Sep/2006	QC 10107041B	Precision of MS/MSD	%	2.08	NA	NA
L-534-06-01	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Calculation	NA	092506-NO3+NO2	25/Sep/2006	QC 10107041B	Expected Spike	mg/L	0.100	0.010	0.0200
L-534-06-01	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Calculation	NA	092506-NO3+NO2	25/Sep/2006	QC 10107041B	Precision of Sample Duplicate	%	0.00	NA	NA
L-534-06-01	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Calculation	NA	092506-NO3+NO2	25/Sep/2006	QC 10107041B	Recovery of Spike 9/1/06	%	90.4	NA	NA
L-534-06-01	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Calculation	NA	092506-NO3+NO2	25/Sep/2006	QC 10107041B	Recovery of Spike Dup 9/1/06	%	92.3	NA	NA
L-534-06-01 Duplicate	MC2	21/Sep/2006	13:20	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Lab Filtered, Lab Acidified	25/Sep/2006	092506-NO3+NO2	25/Sep/2006	QC 10107041B	Sample Duplicate	mg/L	ND	0.010	0.0200
L-534-06-01 MS	MC2	21/Sep/2006	13:20	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Lab Filtered, Lab Acidified	25/Sep/2006	092506-NO3+NO2	25/Sep/2006	QC 10107041B	Spiked Result	mg/L	0.0904	0.010	0.0200
L-534-06-01 MSD	MC2	21/Sep/2006	13:20	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Lab Filtered, Lab Acidified	25/Sep/2006	092506-NO3+NO2	25/Sep/2006	QC 10107041B	Spike Duplicate	mg/L	0.0923	0.010	0.0200
Method Blank	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Lab Filtered, Lab Acidified	NA	092506-NO3+NO2	25/Sep/2006	QC 10107041B	Blank	mg/L	ND	0.010	0.0200
IPS-ANIONS-MIX-06-9	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	None	NA	092506-NO3+NO2	25/Sep/2006	QC 10107041B	True Value Ref Std	mg/L	0.212	0.010	0.0200
IPS-ANIONS-MIX-06-9	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	None	NA	092506-NO3+NO2	25/Sep/2006	QC 10107041B	Reference Standard	mg/L	0.223	0.010	0.0200
IPS-ANIONS-MIX-06-9	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Calculation	NA	092506-NO3+NO2	25/Sep/2006	QC 10107041B	Recovery Ref Std	%	105	NA	NA
Method Blank	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	None	NA	092506-TSS	25/Sep/2006	EPA 160.2	Blank	mg/L	ND	0.1	1.0
IPS-HARD-06-43	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	None	NA	092506-TSS	25/Sep/2006	EPA 160.2	True Value Ref Std	mg/L	37.2	0.1	1.0
IPS-HARD-06-43	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	None	NA	092506-TSS	25/Sep/2006	EPA 160.2	Reference Standard	mg/L	35.0	0.1	1.0
IPS-HARD-06-43	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Calculation	NA	092506-TSS	25/Sep/2006	EPA 160.2	Recovery Ref Std	%	94.1	NA	NA
L-534-06-07	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Calculation	NA	100206-ALK	02/Oct/2006	QC 10303311A	Precision of Sample Duplicate	%	0.94	NA	NA
L-534-06-07 Duplicate	NFMR5	19/Sep/2006	13:55	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Lab Filtered	25/Sep/2006	100206-ALK	02/Oct/2006	QC 10303311A	Sample Duplicate	mg/L	21.3	3.0	10.0
L-534-06-08	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Calculation	NA	100206-ALK	02/Oct/2006	QC 10303311A	Precision of MS/MSD	%	0.98	NA	NA
L-534-06-08	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Calculation	NA	100206-ALK	02/Oct/2006	QC 10303311A	Expected Spike	mg/L	53.0	3.0	10.0
L-534-06-08	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Calculation	NA	100206-ALK	02/Oct/2006	QC 10303311A	Recovery of Spike 9/1/06	%	91.6	NA	NA
L-534-06-08	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Calculation	NA	100206-ALK	02/Oct/2006	QC 10303311A	Recovery of Spike Dup 9/1/06	%	93.6	NA	NA
L-534-06-08 MS	MR1	19/Sep/2006	15:25	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Lab Filtered	25/Sep/2006	100206-ALK	02/Oct/2006	QC 10303311A	Spiked Result	mg/L	50.9	3.0	10.0
L-534-06-08 MSD	MR1	19/Sep/2006	15:25	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Lab Filtered	25/Sep/2006	100206-ALK	02/Oct/2006	QC 10303311A	Spike Duplicate	mg/L	51.4	3.0	10.0
Method Blank	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Lab Filtered	NA	100206-ALK	02/Oct/2006	QC 10303311A	Blank	mg/L	ND	3.0	10.0
IPS-MIN-06-35	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	None	NA	100206-ALK	02/Oct/2006	QC 10303311A	True Value Ref Std	mg/L	110	3.0	10.0
IPS-MIN-06-35	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	None	NA	100206-ALK	02/Oct/2006	QC 10303311A	Reference Standard	mg/L	111	3.0	10.0
IPS-MIN-06-35	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Calculation	NA	100206-ALK	02/Oct/2006	QC 10303311A	Recovery Ref Std	%	101	NA	NA
L-534-06-01	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Calculation	NA	101106-HARD	11/Oct/2006	SM 2340 C	Precision of Sample Duplicate	%	0.00	NA	NA
L-534-06-01 Duplicate	MC2	21/Sep/2006	13:20	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Lab Acidified	25/Sep/2006	101106-HARD	11/Oct/2006	SM 2340 C	Sample Duplicate	mg/L	4.2	1.0	1.0
Method Blank	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Lab Acidified	NA	101106-HARD	11/Oct/2006	SM 2340 C	Blank	mg/L	ND	1.0	1.0
IPS-HARD-06-22E	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	None	NA	101106-HARD	11/Oct/2006	SM 2340 C	True Value Ref Std	mg/L	264	1.0	1.0
IPS-HARD-06-22E	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	None	NA	101106-HARD	11/Oct/2006	SM 2340 C	Reference Standard	mg/L	259	1.0	1.0
IPS-HARD-06-22E	NA	NA	NA	MOKELUMNE RIVER ANNUAL SAMPLIN	DFG-WPCL	Calculation	NA	101106-HARD	11/Oct/2006	SM 2340 C	Recovery Ref Std	%	98.1	NA	NA

NA = Not Applicable
ND = Not Detected
MDL = Method Detection Limit
RL = Reporting Limt

2006

DFG REQUEST FOR ANALYSIS AND CHAIN OF CUSTODY RECORD

Page 1 of 1

Sampler Eric Kenzler **Ph #** 925-866-5806	**Send Samples To** Patty Bucknell 916-358-0318 WATER POLLUTION CONTROL LABORATORY	**Lab Number** L-534-06
Address 3400 CROW CANYON ROAD	**Address** 2005 NIMBUS ROAD	**Field Number**
City SAN RAMON **Zip** 94583 CA	**City** RANCHO CORDOVA **Zip** 95670 CA	**Lab Storage**
Date Required/Reason STANDARD LABORATORY TURN-AROUND	**Analytical Results TO** Elizabeth Frantz (925-866-5472)	**Spill Title**
Shipped Via UPS NEXT DAY	**Address** 3400 Crow Canyon Road	**Suspect**
	City San Ramon **Zip** CA 94526	**Index-PCA**

☐ Fish & Wildlife Loss Date:_____ Region:_____

☐ DFG Code Violation:_____

☐ Suspected or Potential Problem

✻ Routine Analysis

Water Temp: F or C pH: DO: mg/L Conductivity: u mhos/cm

	Sample Identification/Location (Draw map on separate sheet if necessary)	Collection Date	Collection Time	TSS	HARDNESS	NITRATE(TOTAL) as Nitrogen	ALKALINITY	Sample Type: Water	Filtered Water	Soil	Tissue	Number of Containers: Plastic	Glass	VOA Vial	Preservation: Temp	Acid
1	MC2	9-21	13:20	X	X	X	X	X	1			3				2
2	BC2	9-21	12:15	X	X	X	X	X	1			3				2
3	BR1	9-20	10:00	X	X	X	X	X	1			3				2
4	NFMR2	9-19	8:40	X	X	X	X	X	1			3				2
5	TC1	9-19	11:30	X	X	X	X	X	1			3				2
6	NFMR3	9-19	12:35	X	X	X	X	X	1			3				2
7	NFMR5	9-19	13:55	X	X	X	X	X	1			3				2
8	MR1	9-19	15:25	X	X	X	X	X	1			3				2
9	BLANK	9-20	14:20		X	X		X	1			2				2

Analysis Requested >>>

Problem Description

Suspect/Incident Location

Comments/Special Instructions PLEASE SEND RESULTS TO E. FRANTZ (eag0@pge.com)

Pollution Action Kit: Yes☐ No☐

Glove Size: Large ☐ Medium ☐

Hazmat Shipper Requested: Yes☐ No☐

Samples Relinquished By (Signature)	Print Name	Date	Received By (Signature)	Print Name	Date
Eric Kenzler	ERIC KENZLER	9-22-06	Jennifer Shopper		
			Jennifer Riley	Jennifer Riley	9/25/06

Pesticide Investigations Lab
1701 Nimbus Road
Rancho Cordova, CA 95670
(916) 358-2950

Petroleum Chemistry Lab
1995 Nimbus Road
Rancho Cordova, CA 95670
(916) 358-2803

Water Pollution Control Lab
2005 Nimbus Road
Rancho Cordova, CA 95670
(916) 358-2858

Marine Pollution Studies Laboratories
Department of Fish and Game
Moss Landing Marine Laboratories
7544 Sandholdt Road
Moss Landing, CA 95039

Project Manager: Autumn Bonnema
Phone: 831-771-4175
Fax: 831-633-0805
e-mail: bonnema@mlml.calstate.edu

Project Name: PG&E Mokelumne
Parameter: Cu
Report Number: TM06-0030
Project Number: 143
Matrix: Filtered Water
Report Date: 04-24-06

QA/QC SUMMARY

SAMPLE CUSTODY

Seven water samples were received in good condition on March 24, 2006. Samples were acidified prior to transfer to MPSL to a final concentration of 1% nitric.

QA/QC DATA QUALITY OBJECTIVES (DQO)

Analyte	Reference Method	Range of Recovery	Relative Precision	Detection Limit	Reporting Limit
Cu	EPA 1638 M	±25%	±25%	0.01 ng/mL	0.03 ng/mL

METHOD

Samples were analyzed using Modified EPA 1638: Determination of Trace Metals in Ambient Waters by ICP-MS.

HOLDING TIME

Samples were analyzed on the 7th of April 2006. All samples were analyzed within the EPA holding time of 6 months from collection.

CALIBRATION VERIFICATION

Initial Calibration Verification (ICV) and all Continuing Calibration Verification (CCV) were within DQO of ±10% for each batch.

DETECTION LIMIT

All detection limits listed in the table above were achieved.

METHOD BLANKS

One method blank was analyzed with each batch of samples. All elements were below detection limits. Samples are blank corrected with the blank value for that batch.

REPLICATES

One pair of analytical duplicates selected at random was analyzed with each batch of samples. All RPDs met the DQO of ±25%.

MATRIX SPIKES

One matrix spike/matrix spike duplicate (MS/MSD) pair was analyzed with each batch of samples. All recoveries and RPDs met the DQO of ±25%

STANDARD REFERENCE MATERIAL

One SRM NIST-1640 was analyzed with each batch of samples. All recoveries met the DQO of ±25%.

REFERENCES

US Environmental Protection Agency Method 1638. 1996. Determination of Trace Elements in Ambient Waters by Inductively Coupled Plasma- Mass Spectrometry. US Environmental Protection Agency, Washington, DC.

Marine Pollution Studies Laboratories
Department of Fish and Game
Moss Landing Marine Laboratories
7544 Sandholdt Road
Moss Landing, CA 95039

Project Manager: **Autumn Bonnema**
Phone: **831-771-4175**
Fax: **831-633-0805**
Email: bonnema@mlml.calstate.edu

Trace Metal Results

Project Name: PG&E Mokelumne
Project Number: 143
Analyst: Jon Goetzl

Report #: TM06-0030
Report Date: 4/24/2006

Lab Number	Station Name	Sample Type	Date Collected	Time Collected	Date Received	Batch Number	Cu ng/mL
2006-2005	BR1	river water	3/21/2006	13:30	3/24/2006	ICP040706	0.64
2006-2006	NFMR2	river water	3/21/2006	14:30	3/24/2006	ICP040706	0.22
2006-2007	TC1	river water	3/22/2006	9:45	3/24/2006	ICP040706	0.20
2006-2008	NFMR3	river water	3/22/2006	10:30	3/24/2006	ICP040706	0.29
2006-2009	NFMR5	river water	3/22/2006	12:00	3/24/2006	ICP040706	0.44
2006-2010	MR1	river water	3/22/2006	13:30	3/24/2006	ICP040706	0.35
2006-2011	BLANK	river water	3/22/2006	14:20	3/24/2006	ICP040706	0.02
						MDL	0.01
						RL	0.03

Method: modified EPA 1638 M

Values below the MDL are reported as negative the MDL (ie -0.01 for Cu)

Marine Pollution Studies Laboratories
Department of Fish and Game
Moss Landing Marine Laboratories
7544 Sandholdt Road
Moss Landing, CA 95039

Project Manager: **Autumn Bonnema**
Phone: **831-771-4175**
Fax: **831-633-0805**
Email: **bonnema@mlml.calstate.edu**

Quality Assurance/ Quality Control for **PG&E Mokelumne** **Report: TM06-0030**

Batch Number	Lab Number	Station Code	Type	Cu ng/mL	Flag
ICP040706			Method Blank	-0.01	
		1640(10x)	SRM (true value 10x)	8.52	
			SRM	8.64	
			% Recovery	101%	
	2006-2007	RC1 945	Native	0.20	
	2006-2007-d	RC1 945 dup	Duplicate	0.19	
			RPD	5.0%	
			Spike Value	1.25	
	2006-2010	MR1	Native	0.35	
	2006-2010-ms	MR1 spike	Matrix Spike	1.57	
	2006-2010-msd	MR1 spike dup	Matrix Spike Duplicate	1.56	
			% Recovery MS	98%	
			% Recovery MSD	97%	
			RPD	1.00%	
			MDL	0.01	
			RL	0.03	

Method: modified EPA 1638

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

Lab. Reference Number: 36620

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To:	**MPSL**
	7544 Sandholdt Rd
	Moss Landing, CA 95039
Attention: **Autumn Bonnema**	Phone: **(831) 771-4175** (831) 633-0805 Fax

Page 1 of 1

WO# 10211166 SWIM# 05836 WQS	Project Name **Mokelumne WQ**	Project Manager **Eliz. Frantz (925) 866-5472**
Samplers: (signature) Eric Kenzler		Field Team Leader **Eric Kenzler 925-866-5806**

Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles	(NP)	(NP)	Dissolved COPPER Field Filtered (Diss Metals) (60 ml) (NP)	PRESERVED IN FIELD (NP)				Remarks
~~MC2~~			~~Water~~	~~river water~~									Standard TAT
~~DC2~~			~~Water~~	~~river water~~									Standard TAT
BR1	3 21	13:36	Water	river water	1			1	yes				Standard TAT
NFMR2	3·21	1430	Water	river water	1			1	yes				Standard TAT
TC1	3-22	09:45	Water	river water	1			1	yes				Standard TAT
NFMR3	3·22	10:30	Water	river water	1			1	yes				Standard TAT
NFMR5	3·22	1200	Water	river water	1			1	yes				Standard TAT
MR1	3·22	1330	Water	river water	1			1	yes				Standard TAT
Blank	3·22	1420	Water	MQ water blank	1			1	yes				Standard TAT
	Field sampler to fill in date and time												
	as a check to make sure all bottles accounted for												
				Total	7	0	0	7		0	0	0	0

Relinquished by:	Date/Time:	Received by:	Date/Time:	Ship via
Eric Kenzler	3-23-06 1200	Shipped		
Relinquished by:	Date/Time:	Received by:	Date/Time: 3-24-06 @17:00	Bl/Air Bill Number
Relinquished by:	Date/Time:	Received by:	Date/Time:	Date

March

Marine Pollution Studies Laboratories
Department of Fish and Game
Moss Landing Marine Laboratories
7544 Sandholdt Road
Moss Landing, CA 95039

Project Manager: Autumn Bonnema
Phone: 831-771-4175
Fax: 831-633-0805
e-mail: bonnema@mlml.calstate.edu

Project Name: Mokelumne May06
Parameter: Cu
Report Number: TM06-0033

Project Number: 143
Matrix: Filtered Water
Report Date: 08-28-06

QA/QC SUMMARY

SAMPLE CUSTODY

Eight water samples were received in good condition on May 12, 2006. Samples were acidified prior to transfer to MPSL to a final concentration of 1% nitric.

QA/QC DATA QUALITY OBJECTIVES (DQO)

Analyte	Reference Method	Range of Recovery	Relative Precision	Detection Limit	Reporting Limit
Cu	EPA 1638 M	±25%	±25%	0.01 ng/mL	0.03 ng/mL

METHOD

Samples were analyzed using Modified EPA 1638: Determination of Trace Metals in Ambient Waters by ICP-MS.

HOLDING TIME

Samples were analyzed on the 17th of May 2006. All samples were analyzed within the EPA holding time of 6 months from collection.

CALIBRATION VERIFICATION

Initial Calibration Verification (ICV) and all Continuing Calibration Verification (CCV) were within DQO of ±10% for each batch.

DETECTION LIMIT

All detection limits listed in the table above were achieved.

METHOD BLANKS

One method blank was analyzed with each batch of samples. Cu was at the reporting limit, however, not below detection limits. Samples are blank corrected with the blank value for that batch.

REPLICATES

One pair of analytical duplicates selected at random was analyzed with each batch of samples. All RPDs met the DQO of ±25%.

MATRIX SPIKES

One matrix spike/matrix spike duplicate (MS/MSD) pair was analyzed with each batch of samples. All recoveries and RPDs met the DQO of ±25%

STANDARD REFERENCE MATERIAL

One SRM NIST-1640 was analyzed with each batch of samples. All recoveries met the DQO of ±25%.

REFERENCES

US Environmental Protection Agency Method 1638. 1996. Determination of Trace Elements in Ambient Waters by Inductively Coupled Plasma- Mass Spectrometry. US Environmental Protection Agency, Washington, DC.

Marine Pollution Studies Laboratories
Department of Fish and Game
Moss Landing Marine Laboratories
7544 Sandholdt Road
Moss Landing, CA 95039

Project Manager: **Autumn Bonnema**
Phone: **831-771-4175**
Fax: **831-633-0805**
Email: bonnema@mlml.calstate.edu

Trace Metal Results

Project Name: Mokelumne May06 Report #: **TM06-0033**
Project Number: 143
Analyst: Jon Goetzl Report Date: 8/28/2006

Lab Number	Station Name	Sample Type	Date Collected	Time Collected	Date Received	Batch Number	Cu ng/mL
2006-3239	BC2	river water	5/10/2006	10:45	5/12/2006	ICP051706	0.13
2006-3240	BR1	river water	5/10/2006	12:10	5/12/2006	ICP051706	0.65
2006-3241	NFMR2	river water	5/9/2006	13:30	5/12/2006	ICP051706	0.12
2006-3242	TC1	river water	5/8/2006	11:10	5/12/2006	ICP051706	0.03
2006-3243	NFMR3	river water	5/8/2006	11:50	5/12/2006	ICP051706	0.33
2006-3244	NFMR5	river water	5/8/2006	13:35	5/12/2006	ICP051706	0.25
2006-3245	MR1	river water	5/8/2006	15:00	5/12/2006	ICP051706	0.40
2006-3246	BLANK	river water	5/9/2006	BLANK	5/12/2006	ICP051706	-0.01
						MDL	0.01
						RL	0.03

Method: modified EPA 1638 M

Values below the MDL are reported as negative the MDL (ie -0.01 for Cu)

Marine Pollution Studies Laboratories
Department of Fish and Game
Moss Landing Marine Laboratories
7544 Sandholdt Road
Moss Landing, CA 95039

Project Manager: **Autumn Bonnema**
Phone: **831-771-4175**
Fax: **831-633-0805**
Email: **bonnema@mlml.calstate.edu**

Quality Assurance/ Quality Control for **Mokelumne May06** **Report: TM06-0033**

Batch Number	Lab Number	Station Code	Type	Cu ng/mL	Flag
ICP051706			Method Blank	0.03	
		1640(10x)	SRM (true value 10x)	8.52	
			SRM	8.53	
			% Recovery	100.1%	
	2006-3006	715CRIDG1	Native	5.95	
	2006-3006-d	715CRIDG1 DUP	Duplicate	6.20	
			RPD	4.0%	
			Spike Value	12.5	
	2006-3003	713CRNVBD	Native	5.94	
	2006-3003sp	713CRNVBD spike	Matrix Spike	19.9	
	2006-3003spd	713CRNVBD spike dup	Matrix Spike Duplicate	20.0	
			% Recovery MS	112%	
			% Recovery MSD	112%	
			RPD	0.50%	
			MDL	0.01	
			RL	0.03	

Method: modified EPA 1638

5-11-06

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

Lab. Reference Number: 36620

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To: **MPSL**
7544 Sandholdt Rd
Moss Landing, CA 95039

Attention: **Autumn Bonnema** | Phone: (831) 771-4175 | (831) 633-0805 Fax | Page 1 of 1

WO# 10211166 SWIM# 05836 WQS	Project Name: Mokelumne WQ	Project Manager: Liz. Franz (925) 866-5472
Samplers: (signature)		Field Team Leader: Eric Kenzler 925-866-5806

Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles	(HP)	(HP)	Dissolved COPPER Field Filtered (Diss Metals) (60 ml) (NP)	PRESERVED IN FIELD (NP)				Remarks
~~MC2~~			~~Water~~	~~river water~~									
BC2	5-10	1045	Water	river water	1			1	Yes				Standard TAT
BR1	5-10	1710	Water	river water	1			1	yes				Standard TAT
NFMR2	5-9	1330	Water	river water	1			1	yes				Standard TAT
TC1	5-8	1110	Water	river water	1			1	yes				Standard TAT
NFMR3	5-8	1150	Water	river water	1			1	yes				Standard TAT
NFMR5	5-8	1335	Water	river water	1			1	yes				Standard TAT
MR1	5-8	1500	Water	river water	1			1	yes				Standard TAT
Blank	5-9	1330	Water	MQ water blank	1			1	yes				Standard TAT
	Field sampler to fill in date and time												
	as a check to make sure all bottles accounted for												
				Total	7	0	0	7		0	0	0	0	

Relinquished by:	Date/Time:	Received by:	Date/Time:	Ship via
	5-11-06 1200	Shipper		
Relinquished by:	Date/Time:	Received by: Amanda Gerke 5-12-06	Date/Time: @ 13:36	BL/Air Bill Number
Relinquished by:	Date/Time:	Received by:	Date/Time:	Date

samples rec'd @ room temp

#143

Mary

Marine Pollution Studies Laboratories
Department of Fish and Game
Moss Landing Marine Laboratories
7544 Sandholdt Road
Moss Landing, CA 95039

Project Manager: Autumn Bonnema
Phone: 831-771-4175
Fax: 831-633-0805
e-mail: bonnema@mlml.calstate.edu

Project Name: Mokelumne Jun06
Parameter: Cu
Report Number: TM06-0035
Project Number: 143
Matrix: Filtered Water
Report Date: 08-28-06

QA/QC SUMMARY

SAMPLE CUSTODY

Nine water samples were received in good condition on June 23, 2006. Samples were acidified prior to transfer to MPSL to a final concentration of 1% nitric.

QA/QC DATA QUALITY OBJECTIVES (DQO)

Analyte	Reference Method	Range of Recovery	Relative Precision	Detection Limit	Reporting Limit
Cu	EPA 1638 M	±25%	±25%	0.01 ng/mL	0.03 ng/mL

METHOD

Samples were analyzed using Modified EPA 1638: Determination of Trace Metals in Ambient Waters by ICP-MS.

HOLDING TIME

Samples were analyzed on the 17th of July 2006. All samples were analyzed within the EPA holding time of 6 months from collection.

CALIBRATION VERIFICATION

Initial Calibration Verification (ICV) and all Continuing Calibration Verification (CCV) were within DQO of ±10% for each batch.

DETECTION LIMIT

All detection limits listed in the table above were achieved.

METHOD BLANKS

One method blank was analyzed with each batch of samples. All elements were below detection limits. Samples are blank corrected with the blank value for that batch.

REPLICATES

One pair of analytical duplicates selected at random was analyzed with each batch of samples. All RPDs met the DQO of ±25%.

MATRIX SPIKES

One matrix spike/matrix spike duplicate (MS/MSD) pair was analyzed with each batch of samples. All recoveries and RPDs met the DQO of ±25%

STANDARD REFERENCE MATERIAL

One SRM NIST-1640 was analyzed with each batch of samples. All recoveries met the DQO of ±25%.

REFERENCES

US Environmental Protection Agency Method 1638. 1996. Determination of Trace Elements in Ambient Waters by Inductively Coupled Plasma- Mass Spectrometry. US Environmental Protection Agency, Washington, DC.

Marine Pollution Studies Laboratories
Department of Fish and Game
Moss Landing Marine Laboratories
7544 Sandholdt Road
Moss Landing, CA 95039

Project Manager: **Autumn Bonnema**
Phone: **831-771-4175**
Fax: **831-633-0805**
Email: bonnema@mlml.calstate.edu

Trace Metal Results

Project Name: Mokelumne Jun06 Report #: TM06-0035
Project Number: 143
Analyst: Jon Goetzl Report Date: 8/28/2006

Lab Number	Station Name	Sample Type	Date Collected	Time Collected	Date Received	Batch Number	Cu ng/mL
2006-4072	BC2	river water	6/21/2006	10:20	6/23/2006	ICP071706	0.12
2006-4079	blank	river water	6/20/2006	16:00	6/23/2006	ICP071706	0.02
2006-4073	BR1	river water	6/19/2006	14:45	6/23/2006	ICP071706	0.39
2006-4071	MC2	river water	6/21/2006	11:55	6/23/2006	ICP071706	0.05
2006-4078	MR1	river water	6/21/2006	6:45	6/23/2006	ICP071706	0.35
2006-4074	NFMR2	river water	6/20/2006	11:35	6/23/2006	ICP071706	0.15
2006-4076	NFMR3	river water	6/21/2006	8:20	6/23/2006	ICP071706	0.18
2006-4077	NFMR5	river water	6/20/2006	15:00	6/23/2006	ICP071706	0.18
2006-4075	TC1	river water	6/21/2006	13:25	6/23/2006	ICP071706	0.20
						MDL	0.01
						RL	0.03

Method: modified EPA 1638 M

Values below the MDL are reported as negative the MDL (ie -0.01 for Cu)

Marine Pollution Studies Laboratories
Department of Fish and Game
Moss Landing Marine Laboratories
7544 Sandholdt Road
Moss Landing, CA 95039

Project Manager: **Autumn Bonnema**
Phone: **831-771-4175**
Fax: **831-633-0805**
Email: **bonnema@mlml.calstate.edu**

Quality Assurance/ Quality Control for **Mokelumne Jun06** **Report: TM06-0035**

Batch Number	Lab Number	Station Code	Type	Cu ng/mL
ICP071706			Method Blank	<.01
		1640(10x)	SRM (true value 10x)	8.52
			SRM	8.57
			% Recovery	101%
	2006-4078	MR1	Native	0.35
	2006-4078-d	MR1 DUP	Duplicate	0.35
			RPD	0.0%
			Spike Value	1.25
	2006-4071	MC2	Native	0.05
	2006-4071sp	MC2 spike	Matrix Spike	1.30
	2006-4071spd	MC2 spike dup	Matrix Spike Duplicate	1.32
			% Recovery MS	100%
			% Recovery MSD	102%
			RPD	2.0%
			MDL	0.01
			RL	0.03

Method: modified EPA 1638

2006

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

Lab. Reference Number: _____ 36620

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To: **MPSL**
7544 Sandholdt Rd
Moss Landing, CA 95039

Attention: **Autumn Bonnema** | Phone: **(831) 771-4175** {831} 633-0805 Fax | Page 1 of 1

WO# 10211166 SWIM# 05836 WQS	Project Name **Mokelumne WQ**	Project Manager **Eliz. Frantz (925) 866-5472**
Samplers: (signature) Eric Kenzler		Field Team Leader **Eric Kenzler 925-866-5806**

Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles			Dissolved COPPER Field Filtered (Diss Metals) (60 ml) (NP)	PRESERVED IN FIELD (NP)					Remarks
MC2	6-21	11:55	Water	river water	1			1	yes					Standard TAT
BC2	6-21	10:20	Water	river water	1			1	yes					Standard TAT
BR1 10-PI	6-16	14:45	Water	river water	1			1	yes					Standard TAT
NFMR2	6-20	11:35	Water	river water	1			1	yes					Standard TAT
TCT	6-21	13:25	Water	river water	1			1	yes					Standard TAT
NFMR3	6-21	8:20	Water	river water	1			2	yes					Standard TAT
NFMR5	6-20	15:00	Water	river water	1			1	yes					Standard TAT
MR1	6-21	06:45	Water	river water	1			1	yes					Standard TAT
Blank	6:20	16:00	Water	MQ water blank	1			1	yes					Standard TAT
	Field sampler to fill in date and time													
	as a check to make sure all bottles accounted for													
				Total	9	0	0	9		0	0	0	0	

Relinquished by:	Date/Time:	Received by:	Date/Time:	Ship via
Eric Kenzler	6-22-06 11:00	Shipper		UPS Next Day
Relinquished by:	Date/Time:	Received by: Jennifer Mattay	Date/Time: 6/23/06 @ 12:37	BL/Air Bill Number
Relinquished by:	Date/Time:	Received by:	Date/Time: Cooler T°: 20.3°C	Date 6-22-06

Also Returned 1L. teflon Bottle.

Sample BR1 changed to sample date 6/19/06 per Elizabeth Frantz.

June

Marine Pollution Studies Laboratories
Department of Fish and Game
Moss Landing Marine Laboratories
7544 Sandholdt Road
Moss Landing, CA 95039

Project Manager: Autumn Bonnema
Phone: 831-771-4175
Fax: 831-633-0805
e-mail: bonnema@mlml.calstate.edu

Project Name: Mokelumne Jul06
Parameter: Cu
Report Number: TM06-0034
Project Number: 143
Matrix: Filtered Water
Report Date: 08-29-06

QA/QC SUMMARY

SAMPLE CUSTODY

Nine water samples were received in good condition on July 24, 2006. Samples were acidified prior to transfer to MPSL to a final concentration of 1% nitric.

QA/QC DATA QUALITY OBJECTIVES (DQO)

Analyte	Reference Method	Range of Recovery	Relative Precision	Detection Limit	Reporting Limit
Cu	EPA 1638 M	±25%	±25%	0.01 ng/mL	0.03 ng/mL

METHOD

Samples were analyzed using Modified EPA 1638: Determination of Trace Metals in Ambient Waters by ICP-MS.

HOLDING TIME

Samples were analyzed on the 16th of August 2006. All samples were analyzed within the EPA holding time of 6 months from collection.

CALIBRATION VERIFICATION

Initial Calibration Verification (ICV) and all Continuing Calibration Verification (CCV) were within DQO of ±10% for each batch.

DETECTION LIMIT

All detection limits listed in the table above were achieved.

METHOD BLANKS

One method blank was analyzed with each batch of samples. Cu is below detection limits. Samples are blank corrected with the blank value for that batch.

REPLICATES

One pair of analytical duplicates selected at random was analyzed with each batch of samples. All RPDs met the DQO of ±25%.

MATRIX SPIKES

One matrix spike/matrix spike duplicate (MS/MSD) pair was analyzed with each batch of samples. All recoveries and RPDs met the DQO of ±25%

STANDARD REFERENCE MATERIAL

One SRM NIST-1640 was analyzed with each batch of samples. All recoveries met the DQO of ±25%.

REFERENCES

US Environmental Protection Agency Method 1638. 1996. Determination of Trace Elements in Ambient Waters by Inductively Coupled Plasma- Mass Spectrometry. US Environmental Protection Agency, Washington, DC.

Marine Pollution Studies Laboratories
Department of Fish and Game
Moss Landing Marine Laboratories
7544 Sandholdt Road
Moss Landing, CA 95039

Project Manager: **Autumn Bonnema**
Phone: **831-771-4175**
Fax: **831-633-0805**
Email: bonnema@mlml.calstate.edu

Trace Metal Results

Project Name: Mokelumne Jul06 Report #: TM06-0034
Project Number: 143
Analyst: Jon Goetzl Report Date: 8/29/2006

Lab Number	Station Name	Sample Type	Date Collected	Time Collected	Date Received	Batch Number	Cu ng/mL
2006-4577	BC2	river water	7/19/2006	13:20	7/24/2006	ICP081606	0.24
2006-4584	BLANK	river water	7/18/2006	17:00	7/24/2006	ICP081606	-0.01
2006-4578	BR1	river water	7/18/2006	9:10	7/24/2006	ICP081606	1.09
2006-4576	MC2	river water	7/19/2006	14:25	7/24/2006	ICP081606	0.09
2006-4583	MR1	river water	7/18/2006	16:00	7/24/2006	ICP081606	0.31
2006-4579	NFMR2	river water	7/20/2006	8:20	7/24/2006	ICP081606	0.20
2006-4581	NFMR3	river water	7/17/2006	15:15	7/24/2006	ICP081606	0.24
2006-4582	NFMR5	river water	7/18/2006	14:30	7/24/2006	ICP081606	0.33
2006-4580	TC1	river water	7/17/2006	14:10	7/24/2006	ICP081606	0.20
						MDL	0.01
						RL	0.03

Method: modified EPA 1638 M

Values below the MDL are reported as negative the MDL (ie -0.01 for Cu)

Marine Pollution Studies Laboratories
Department of Fish and Game
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Project Manager: **Autumn Bonnema**
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Fax: **831-633-0805**
Email: **bonnema@mlml.calstate.edu**

Quality Assurance/ Quality Control for **Mokelumne Jul06** **Report: TM06-0034**

Batch Number	Lab Number	Station Code	Type	Cu ng/mL	Flag
ICP081606			Method Blank	<.01	
		1640(10x)	SRM (true value 10x)	8.52	
			SRM	8.68	
			% Recovery	102%	
	2006-4582	NFMR5 + .01	Native	0.47	
	2006-4582-d	NFMR5 +.01 dup	Duplicate	0.46	
			RPD	2.0%	
			Spike Value	1.25	
	2006-4582	NFMR5	Native	0.33	
	2006-4582sp	NFMR5 SPIKE	Matrix Spike	1.59	
	2006-4582spd	NFMR7 SPIKE DUP	Matrix Spike Duplicate	1.61	
			% Recovery MS	101%	
			% Recovery MSD	102%	
			RPD	1.0%	
			MDL	0.01	
			RL	0.03	

Method: modified EPA 1638

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

Lab. Reference Number: _____ 30020

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To: **MPSL**
7544 Sandholdt Rd
Moss Landing, CA 95039

Attention: **Autumn Bonnema** | Phone: (831) 771-4175 (831) 633-0805 Fax | Page 1 of 1

WO# 10211166
SWIM# 05836 WQS

Project Name: **Mokelumne WQ**

Project Manager: **Eliz. Frantz (925) 866-5472**

Field Team Leader: **Eric Kenzler 925-866-5806**

Samplers: (signature) Eric Kenzler

Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles			Dissolved COPPER Field Filtered (Diss Metals) (60 ml) (PC)	PRESERVED IN FIELD (HF)					Remarks
						(NP)	(NP)							
MC2	7-19-06	14:35	Water	river water	1			1	yes					Standard TAT
BC2	7-19	1320	Water	river water	1			1	yes					Standard TAT
BR1	7-18	9:10	Water	river water	1			1	yes					Standard TAT
NFMR2	7-20	8:20	Water	river water	1			1	yes					Standard TAT
TC1	7-17	14:10	Water	river water	1			1	yes					Standard TAT
NFMR3	7-17	15:15	Water	river water	1			1	yes					Standard TAT
NFMR5	7-18	14:30	Water	river water	1			1	yes					Standard TAT
MR1	7-18	1600	Water	river water	1			1	yes					Standard TAT
Blank	7-18	17:00	Water	MQ water blank	1			1	yes					Standard TAT
	Field sampler to fill in date and time													
	as a check to make sure all bottles accounted for													
				Total	9	0	0	9		0	0	0	0	

Relinquished by:	Date/Time:	Received by:	Date/Time:	Ship via
Eric Kenzler	7-21-06 10:00	to Shipper	7/24/06 Charles Hawley	
Relinquished by:	Date/Time:	Received by:	Date/Time:	B/Air Bill Number
Relinquished by:	Date/Time:	Received by:	Date/Time:	Date

July

Marine Pollution Studies Laboratories
Department of Fish and Game
Moss Landing Marine Laboratories
7544 Sandholdt Road
Moss Landing, CA 95039

Project Manager: Autumn Bonnema
Phone: 831-771-4175
Fax: 831-633-0805
e-mail: bonnema@mlml.calstate.edu

Project Name: Mokelumne Aug06
Parameter: Cu
Report Number: TM06-0040
Project Number: 143
Matrix: Filtered Water
Report Date: 10-23-06

QA/QC SUMMARY

SAMPLE CUSTODY

Nine water samples were received in good condition on August 21, 2006. Samples were acidified prior to transfer to MPSL to a final concentration of 1% nitric.

QA/QC DATA QUALITY OBJECTIVES (DQO)

Analyte	Reference Method	Range of Recovery	Relative Precision	Detection Limit	Reporting Limit
Cu	EPA 1638 M	±25%	±25%	0.01 ng/mL	0.03 ng/mL

METHOD

Samples were analyzed using Modified EPA 1638: Determination of Trace Metals in Ambient Waters by ICP-MS.

HOLDING TIME

Samples were analyzed on the 1st of September 2006. All samples were analyzed within the EPA holding time of 6 months from collection.

CALIBRATION VERIFICATION

Initial Calibration Verification (ICV) and all Continuing Calibration Verification (CCV) were within DQO of ±10% for each batch.

DETECTION LIMIT

All detection limits listed in the table above were achieved.

METHOD BLANKS

One method blank was analyzed with each batch of samples. All elements were below detection limits. Samples are blank corrected with the blank value for that batch.

REPLICATES

One pair of analytical duplicates selected at random was analyzed with each batch of samples. All RPDs met the DQO of ±25%.

MATRIX SPIKES

One matrix spike/matrix spike duplicate (MS/MSD) pair was analyzed with each batch of samples. All recoveries and RPDs met the DQO of ±25%

STANDARD REFERENCE MATERIAL

One SRM NIST-1640 was analyzed with each batch of samples. All recoveries met the DQO of ±25%.

REFERENCES

US Environmental Protection Agency Method 1638. 1996. Determination of Trace Elements in Ambient Waters by Inductively Coupled Plasma- Mass Spectrometry. US Environmental Protection Agency, Washington, DC.

Marine Pollution Studies Laboratories
Department of Fish and Game
Moss Landing Marine Laboratories
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Moss Landing, CA 95039

Project Manager: **Autumn Bonnema**
Phone: **831-771-4175**
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Email: bonnema@mlml.calstate.edu

Trace Metal Results

Project Name: PG&E Cu
Project Number: 143
Analyst: Jon Goetzl
Report #: TM06-0040
Report Date: 10/23/2006

Lab Number	Station Name	Sample Type	Date Collected	Time Collected	Date Received	Batch Number	Cu ng/mL
2006-5193	MC2	river water	8/17/2006	13:30	8/21/2006	ICP090106	0.05
2006-5194	BC2	river water	8/17/2006	12:30	8/21/2006	ICP090106	0.63
2006-5195	BR1	river water	8/16/2006	9:20	8/21/2006	ICP090106	1.02
2006-5196	NFMR2	river water	8/15/2006	8:45	8/21/2006	ICP090106	0.14
2006-5197	TC1	river water	8/15/2006	12:40	8/21/2006	ICP090106	0.85
2006-5198	NFMR3	river water	8/15/2006	13:30	8/21/2006	ICP090106	0.48
2006-5199	NFMR5	river water	8/15/2006	15:00	8/21/2006	ICP090106	0.28
2006-5200	MR1	river water	8/16/2006	15:00	8/21/2006	ICP090106	0.26
2006-5201	blank	river water	8/16/2006	16:00	8/21/2006	ICP090106	-0.01
						MDL	0.01
						RL	0.03

Method: modified EPA 1638 M

Values below the MDL are reported as negative the MDL (ie -0.01 for Cu)

Marine Pollution Studies Laboratories
Department of Fish and Game
Moss Landing Marine Laboratories
7544 Sandholdt Road
Moss Landing, CA 95039

Project Manager: **Autumn Bonnema**
Phone: **831-771-4175**
Fax: **831-633-0805**
Email: **bonnema@mlml.calstate.edu**

Quality Assurance/ Quality Control for **PG&E Cu** **Report:** **TM06-0040**

Batch Number	Lab Number	Station Code	Type	Cu ng/mL
ICP090106			Method Blank	-0.01
		1640(10x)	SRM (true value 10x)	8.52
			SRM	8.27
			% Recovery	97%
	2006-5197	TC1 945	Native	0.85
	2006-5197-d	TC1 945 dup	Duplicate	0.89
			RPD	5.0%
			Spike Value	0.125
	2006-5193	MC2	Native	0.046
	2006-5193-ms	MC2 spike	Matrix Spike	0.195
	2006-5193-msd	MC2 spike dup	Matrix Spike Duplicate	0.195
			% Recovery MS	119%
			% Recovery MSD	119%
			RPD	0.00%
			MDL	0.01
			RL	0.03

Method: modified EPA 1638

2000

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

Lab. Reference Number: _____ 30020

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To: **MPSL**
7544 Sandholdt Rd
Moss Landing, CA 95039

Attention: **Autumn Bonnema** | Phone: **(831) 771-4175** (831) 633-0805 Fax | Page 1 of 1

WO# 10211166 SWIM# 05836 WQS	Project Name **Mokelumne WQ**	Project Manager **Eliz. Frantz (925) 866-5472**
Samplers: (signature)		Field Team Leader **Eric Kenzler 925-866-5806**

Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles	(NP)	(NP)	Dissolved COPPER Field Filtered (Diss Metals) (60 ml) (NP)	(NP)					Remarks
MC2	8-17-00	1330	Water	river water	1			1	yes					Standard TAT
BC2	8-17	12:30	Water	river water	1			1	yes					Standard TAT
BR1	8-16	09:20	Water	river water	1			1	yes					Standard TAT
NFMR2	8-15	08:45	Water	river water	1			1	yes					Standard TAT
TC1	8-15	12:40	Water	river water	1			1	yes					Standard TAT
NFMR3	8-15	13:30	Water	river water	1			1	yes					Standard TAT
NFMR5	8-15	15:00	Water	river water	1			1	yes					Standard TAT
MR1	8-16	1600	Water	river water	1			1	yes					Standard TAT
Blank	8-16	1600	Water	MQ water blank	1			1	yes					Standard TAT
	Field sampler to fill in date and time													
	as a check to make sure all bottles accounted for													
				Total	9	0	0	9		0	0	0	0	

Relinquished by:	Date/Time:	Received by:	Date/Time:	Ship via
Eric Kenzler	8-18-00 11:00	Shipper		
Relinquished by:	Date/Time:	Received by:	Date/Time:	Bl/Air Bill Number
Relinquished by:	Date/Time:	Received by:	Date/Time: 8/21/00 @ 13:00 cooler: 21.6°C	Date

August

Marine Pollution Studies Laboratories
Department of Fish and Game
Moss Landing Marine Laboratories
7544 Sandholdt Road
Moss Landing, CA 95039

Project Manager: Autumn Bonnema
Phone: 831-771-4175
Fax: 831-633-0805
e-mail: bonnema@mlml.calstate.edu

Project Name: Mokelumne Sept06
Parameter: Cu
Report Number: TM06-0041
Project Number: 143
Matrix: Filtered Water
Report Date: 10/19/06

QA/QC SUMMARY

SAMPLE CUSTODY

Nine water samples were received in good condition on 25 September 2006. Samples were acidified prior to transfer to MPSL to a final concentration of 1% nitric.

QA/QC DATA QUALITY OBJECTIVES (DQO)

Analyte	Reference Method	Range of Recovery	Relative Precision	Detection Limit	Reporting Limit
Cu	EPA 1638 M	±25%	±25%	0.001 ng/mL	0.005 ng/mL

METHOD

Samples were analyzed using Modified EPA 1638: Determination of Trace Metals in Ambient Waters by ICP-MS.

HOLDING TIME

Samples were analyzed on 17 October 2006. All samples were analyzed within the EPA holding time of 6 months from collection.

CALIBRATION VERIFICATION

Initial Calibration Verification (ICV) and all Continuing Calibration Verification (CCV) were within DQO of ±10% for each batch.

DETECTION LIMIT

All detection limits listed in the table above were achieved.

METHOD BLANKS

One method blank was analyzed with each batch of samples. A small blank was detected. Sample results are blank corrected with the blank value for that batch.

REPLICATES

One pair of analytical duplicates selected at random was analyzed with each batch of samples. All RPDs met the DQO of ±25%.

MATRIX SPIKES

One matrix spike/matrix spike duplicate (MS/MSD) pair was analyzed with each batch of samples. All recoveries and RPDs met the DQO of ±25%

STANDARD REFERENCE MATERIAL

One SRM NIST-1640 was analyzed with each batch of samples. All recoveries met the DQO of ±25%.

REFERENCES

US Environmental Protection Agency Method 1638. 1996. Determination of Trace Elements in Ambient Waters by Inductively Coupled Plasma- Mass Spectrometry. US Environmental Protection Agency, Washington, DC.

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Department of Fish and Game
Moss Landing Marine Laboratories
7544 Sandholdt Road
Moss Landing, CA 95039

Project Manager: **Autumn Bonnema**
Phone: **831-771-4175**
Fax: **831-633-0805**
Email: bonnema@mlml.calstate.edu

Trace Metal Results

Project Name: Mokelumne Sept 06 Report #: TM06-0041
Project Number: 143
Analyst: Mike Gordon Report Date: 10/19/2006

Lab Number	Station Name	Sample Type	Date Collected	Time Collected	Date Received	Batch Number	Cu ng/mL
2006-5959	MC2	raw water	9/21/2006	13:20	9/25/2006	HiResICP101706	0.11
2006-5960	BC2	raw water	9/21/2006	12:15	9/25/2006	HiResICP101706	0.17
2006-5961	BR1	raw water	9/20/2006	10:00	9/25/2006	HiResICP101706	0.70
2006-5962	NFMR2	raw water	9/19/2006	8:40	9/25/2006	HiResICP101706	0.28
2006-5963	TC1	raw water	9/19/2006	11:30	9/25/2006	HiResICP101706	0.27
2006-5964	NFMR3	raw water	9/19/2006	12:35	9/25/2006	HiResICP101706	0.32
2006-5965	NFMR5	raw water	9/19/2006	13:55	9/25/2006	HiResICP101706	0.32
2006-5966	MR1	raw water	9/19/2006	15:25	9/25/2006	HiResICP101706	0.30
2006-5967	Blank	raw water	9/20/2006	14:20	9/25/2006	HiResICP101706	0.03
						MDL	0.001
						RL	0.005

Method: modified EPA 1638 M

Values below the MDL are reported as negative the MDL (ie -0.01 for Cu)

Marine Pollution Studies Laboratories
Department of Fish and Game
Moss Landing Marine Laboratories
7544 Sandholdt Road
Moss Landing, CA 95039

Project Manager: **Autumn Bonnema**
Phone: **831-771-4175**
Fax: **831-633-0805**
Email: **bonnema@mlml.calstate.edu**

Quality Assurance/ Quality Control for **Mokelumne Sept 06** **Report: TM06-0041**

Batch Number	Lab Number	Station Code	Type	Cu ng/mL
HiResICP101706			Method Blank	0.020
		1640(20x)	SRM (true value 10x)	4.38
			SRM	4.26
			% Recovery	103%
	2006-5959	MC2	Native	0.11
	2006-5959 Dup	MC2 Duplicate	Duplicate	0.11
			RPD	0.0%
			Spike Value	1.00
	2006-5963	TC1	Native	0.27
	2006-5963-ms	TC1 Matrix Spike	Matrix Spike	1.30
	2006-5963-msd	TC1 Matrix Spike Dup	Matrix Spike Duplicate	1.28
			% Recovery MS	102%
			% Recovery MSD	101%
			RPD	1.55%
			MDL	0.001
			RL	0.005

Method: modified EPA 1638

Pacific Gas and Electric Company
CHAIN OF CUSTODY RECORD

2006

Lab. Reference Number: 36620

From: *PG&E - TES*
Environmental Engineering and Chemical Analysis Unit
3400 Crow Canyon Road
San Ramon, CA. 94583

Ship To: **MPSL**
7544 Sandholdt Rd
Moss Landing, CA 95039

Attention: **Autumn Bonnema** | Phone: **(831) 771-4175** (831) 633-0805 Fax | Page 1 of 1

WO# 10211166 SWIM# 05836 WQS	Project Name **Mokelumne WQ**	Project Manager **Eliz. Frantz (925) 866-5472**
Samplers: (signature) Eric Kenzler		Field Team Leader **Eric Kenzler 925-866-5806**

Sample Number	Date	Time	Sample Type	Sample Information	No. of Bottles			Dissolved COPPER Field Filtered (Diss Metals) (60 ml) (NP)	[redacted] (NP)					Remarks
MC2	9-21	13:20	Water	river water	1			1	yes					Standard TAT
BC2	9-21	12:15	Water	river water	1			1	yes					Standard TAT
BR1	9-20	10:00	Water	river water	1			1	yes					Standard TAT
NFMR2	9-19	8:40	Water	river water	1			1	yes					Standard TAT
TC1	9-19	11:30	Water	river water	1			1	yes					Standard TAT
NFMR3	9-19	12:35	Water	river water	1			1	yes					Standard TAT
NFMR5	9-19	13:55	Water	river water	1			1	yes					Standard TAT
MR1	9-19	15:25	Water	river water	1			1	yes					Standard TAT
Blank	9-20	14:20	Water	MQ water blank	1			1	yes					Standard TAT
	Field sampler to fill in date and time													
	as a check to make sure all bottles accounted for													
				Total	9	0	0	9		0	0	0	0	

Relinquished by:	Date/Time:	Received by:	Date/Time:	Ship via
Eric Kenzler	9-22-06 09:30	Shipper		
Relinquished by:	Date/Time:	Received by: KYLE SKAFF	Date/Time: 9/25/06 12:45	Bl/Air Bill Number
Relinquished by:	Date/Time:	Received by:	Date/Time:	Date

September