

DeltaKeeper

A PROJECT OF SAN FRANCISCO BAYKEEPER

14 May 2001

Mr. Jerry Bruns
Chief, Standards, Policies, and Special Studies Section
Mr. Joe Karkoski
303(d) List Update Coordinator
Central Valley Regional Water Quality Control Board
3443 Routier Road, Suite A
Sacramento, CA 95827-3003

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RE: DeltaKeeper Comments on Section 303(d) List Update.

Dear Messrs. Bruns and Karkoski:

Thank you for the opportunity to provide information to support the update of the Section 303(d) List as required by the federal Clean Water Act. These comments are submitted on behalf of DeltaKeeper, WaterKeepers Northern California and the California Sportfishing Protection Alliance. (hereinafter "DeltaKeeper"). DeltaKeeper appreciates the considerable work that staff has accomplished in updating the list of waterbodies that will fail to meet water quality standards even if point sources are regulated.

1. The San Francisco-Sacramento-San Joaquin Bay Delta Estuary has been described as one of the most "invaded" estuaries in the world with respect to introduction of exotic, non-native species. During the last 303(d) update, the San Francisco Regional Board listed San Francisco Bay as impaired because of exotic species. Non-native species are considered a "pollutant" under the federal Clean Water Act. Clearly, the Sacramento-San Joaquin Delta should be listed as impaired, because of exotic species, on the 303(d) list. We reference: *Nonindigenous Aquatic Species in a United States Estuary; A Case Study of the Biological Invasions of the San Francisco Bay and Delta; A Report for the United States Fish and Wildlife Service; Andrew N. Cohen and James T. Carlton; 1995.* We also reference a number of articles in the Interagency Ecological Program for the Sacramento-San Joaquin Delta Newsletter including: Vol. 13 No. 4, *Freshwater Invasion of *Eurytemora affinis** and Vol. 13, No. 3, *Reproduction in the Chinese Mitten Crabs*; Vol. 13, No. 1, *Recent Historical Evidence of Centrarchid Increases and Tule Perch Decrease in the Delta* (p. 23) and *Examining the Relative Predation Risks of Juvenile Chinook Salmon in Shallow Habit: The Effect of Submerged Aquatic Vegetation* (p. 57); Vol. 12 No. 2, *Long-term Trends in Mysid*

DeltaKeeper, 303(d) Update, 14 May 2001, Page 1.

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Shrimp and Zooplankton; Vol. 12, No. 4, Fall 1999, More Non-indigenous Species? First Records of one Amphipod and Two Isopods in the Delta: Vol. 12, No. 1, What is the Impact of the Introduced Brazilian Waterweed *Egeria densa* to the Delta Ecosystem?; Vol. 10, No. 3, neomysis/Zooplankton Abundance; Vol. 10, No. 1, Chinese Mitten Crabs in the Delta; Vol. 9, No. 4, Invasion of the Estuary by Oriental and European Crabs.

2. Recent monitoring has increased our understanding of the magnitude and extent of mercury impairment. The following waterbodies should be added to the list as impaired because of mercury: Consumes River, Mokelumne River, Calaveras River, San Joaquin River, Stanislaus River, Merced River, Tuolumne River, Mud Slough, Lindsey Slough, Minor Slough, Sacramento Ship Channel. We reference 1) Delta Wetlands Restoration and the Mercury Question: Year 2 Findings of the CALFED UC Davis Delta Mercury Study by Darell G. Slotton, Thomas H. Suchanek, and Shaun M. Ayers as reported in IEP Newsletter, Vol. 13, No. 4, Fall 2000 and 2) Contaminant Concentrations in Fish from the Sacramento-San Joaquin Delta and Lower San Joaquin River by Jay A. Davis and Michael D. May, San Francisco Estuary Institute, 1998.

Lake Englebright, Scotts Flat Reservoir, Rollins Reservoir, Lake Combie, Camp Far West Reservoir, and the South Yuba River, Deer Creek and Bear River should be added as impaired because of mercury contamination based on mercury concentrations in fish tissue. We reference; Mercury Bioaccumulation in Fish in a Region Affected by Historic Gold Mining: The South Yuba River, Deer Creek, and Bear River Watersheds. California. 1999 by Jason T. May, Roger L. Hothem, Charles N. Alpers and Matu.

Black Butte Reservoir should be listed as impaired because of mercury contamination based on concentrations in fish tissue. We reference: a) Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health Designed Screening Study, Final Project Report, by Robert K. Brodberg and Gerald A. Pollock, June 1999, Pesticide and Environmental Toxicology Section, Office of Environmental Health Hazard Assessment, Cal. EPA and the Draft Evaluation of Potential Health Effects of eating Fish From Black Butte Reservoir (Glenn and Tehama Counties) and b) Guidelines For Sport Fish Consumption, Pesticide and Environmental Toxicology Section, Office of Environmental Health Hazard Assessment, Cal. EPA.

3. Concentrations of Dieldrin in fish caught in the Sacramento River exceed screening values that led to consumption advisories in San Francisco Bay. Consequently, the Sacramento River should be listed as impaired because of Dieldrin. We reference: Contaminant Concentrations in Fish from the Sacramento-San Joaquin Delta and Lower San Joaquin River by Jay A. Davis and Michael D. May, San Francisco Estuary Institute, 1998.

4. Significant PCB contamination exceeding values that led to consumption advisories in San Francisco Bay has been identified in the Sacramento River, North and South Delta, and Smith

Canal. Extremely high concentrations of PCBs have been documented in Smith Canal. Accordingly, these waterbodies should be listed as impaired. We reference: Contaminant Concentrations in Fish from the Sacramento-San Joaquin Delta and Lower San Joaquin River by Jay A. Davis and Michael D. May, San Francisco Estuary Institute, 1998.

5. Over the last five years, DeltaKeeper has continued monitoring Stockton area waterways following storms. This monitoring continued a Regional Board investigation of urban runoff in 1994-95. Accordingly, the Calaveras River, Smith Canal, Mormon Slough and French Camp Slough should be added as impaired because of diazinon and chlorpyrifos. We reference: Review of the City of Stockton Urban Stormwater Runoff Aquatic Life Toxicity Studies Conducted by the CVRWQCB, DeltaKeeper and the University of California, Davis, Aquatic Toxicology Laboratory between 1994 and 2000 by G. Fred Lee, PhD, DEE and Anne Jones-Lee, PhD, April 2001. This report is attached to these comments.

6. Over the last five years, DeltaKeeper has monitored Stockton area waterways following storms. The data demonstrates that severe, prolonged dissolved oxygen sags occur in local waterways after rainfall. DeltaKeeper staff and volunteers have been trained by CVRWQCB and SWRCB staff and DeltaKeeper's QA/QC has been approved by the SWRCB. Accordingly, Mosher Slough, Five-Mile Slough, the Calaveras River, Smith Canal, Mormon Slough and French Camp Slough should be listed as impaired because of low dissolved oxygen caused by urban runoff. We reference: Dissolved Oxygen Depletion in the Stockton Sloughs, Report prepared for DeltaKeeper by G. Fred Lee & Associates, August 2000. Additional data collected in the Fall of 2000 by DeltaKeeper. This information is attached to these comments. We also reference: Stockton Fish Kills Associated With Urban Storm Runoff: The Role Of Low Dissolved Oxygen, a report prepared for the Regional Water Quality Control Board, June 1998, by Valerie Connor (Regional Board) and Karen Larsen, Kristy Cortright, Pacienca Young, Linda Deanovic and David Hinton (UCD) and Application of Stockton's Water Quality Model to Evaluate Stormwater Impact on Smith Canal, a report prepared for the City of Stockton by Carl W. Chen, Wangteng Tsai, Systech Engineering, February 1999. The Regional Board has a copy of these reports.

7. Over the last year, DeltaKeeper has been monitoring bacteria levels (total coliform and *e-coli*) in local waterways and throughout the Delta. DeltaKeeper staff was trained by USEPA (Richmond Laboratory). Staff and volunteers have been trained by SWRCB staff. CVRWQCB and SWRCB staff have joined DeltaKeeper on several collection trips. SWRCB staff, at the request of CVRWQCB staff, analyzed DeltaKeeper data, collection and analytical methods. Data was found to be acceptable and conservative. Results demonstrate routine exceedance of Region 5 Basin Plan standards, USEPA Ambient Water Quality Criteria for Bacteria, USEPA Great Lakes Freshwater Standard, the California Code of Regulations and proposed bacteria standards by the California Department of Health Services. The data are attached to these comments. Accordingly, Mosher

Slough, Five-Mile Slough, Calaveras River, Smith Canal, Mormon Slough, French Camp Slough, Lower San Joaquin River and Delta waterways should be listed as impaired because of bacteria.

8. Review of the Summary Statistics for Monitoring Data: SRWP, USGS NAWQA, Sacramento River CMP and City of Redding contained in Appendix F of the 1998-99 Annual Monitoring Report of the Sacramento River Watershed Program reveals that copper, lead, zinc, arsenic, nickel, cadmium, turbidity, phosphorus, giardia, iron, manganese, sodium and specific conductance exceed relevant criteria. The Regional Board has a copy of this report.

a. Copper: The Sacramento watershed monitoring data shows that maximum ambient concentration of total copper is 14.5 µg/l. The minimum hardness of the river is 19 mg/l at Freeport. Based on this hardness value, the acute and chronic criteria for copper are 2.8 µg/l and 2.2 µg/l, respectively. These differences become even more significant when compared to ambient concentrations of dissolved metals. The ambient concentration of dissolved copper exceeds both the acute and chronic copper criterion. The Sacramento River has no remaining assimilative capacity for copper - dissolved or total.

b. Lead: The Sacramento watershed monitoring data reveals that the maximum ambient concentration of total lead is 3.0 µg/l and dissolved lead is 0.5 µg/l. The minimum river hardness is 19 mg/l at Freeport. The chronic aquatic life criteria for lead at this hardness value is 0.4 µg/l. The Sacramento River has no remaining assimilative capacity for lead - dissolved or total.

c. Zinc: The Sacramento River monitoring data shows that the maximum ambient concentration of total zinc is 29 µg/l at Freeport (and 52 µg/l at River Mile 44). Dissolved zinc has been reported as high as 27 µg/l. At 19 mg/l hardness, the acute and chronic criteria for zinc are both 29.0 µg/l. These differences become significant when compared to the ambient concentrations of dissolved zinc which, at 27 µg/l, almost exceeds both the acute and chronic criterion of 29 µg/l. Considering that Regional Board studies have established that copper and zinc are additive, there is no question that zinc is present at toxic levels.

d. Arsenic: The Sacramento watershed monitoring data reports that dissolved arsenic concentration at Freeport has been as high as 2.0 µg/l and total arsenic has been found at 3.6 µg/l. Total arsenic is reported as high as 3.07 µg/l at River Mile 44. Arsenic is a bioaccumulative compound and it is inappropriate to adjust to percent dissolved. Arsenic at Freeport and River Mile 44 exceeds the USEPA Integrated Risk Information System (IRIS) Reference Dose as a Drinking Water Level of 2.1 µg/l and various one-in-a-million criteria including; the Cal/EPA Cancer Potency Factor as a Drinking Water Level of 0.023 µg/l, the USEPA IRIS of 0.02 µg/l and the USEPA Drinking Water Health Advisory or SNARL of 0.02 µg/l. The Sacramento River is clearly impaired because of arsenic.

e. Nickel: The Sacramento watershed monitoring data shows that total nickel was detected at Freeport at 18 µg/l and at River Mile 44 at 17 µg/l. Using the EPA conversion factor of 0.998 and a hardness value of 19 mg/l, nickel exceeds the chronic aquatic life criteria.

f. Cadmium: The Sacramento watershed monitoring data reports total cadmium as high as 0.35 µg/l at Freeport and 0.37 µg/l at River Mile 44. Dissolved cadmium concentrations are reported at 0.04 µg/l at both Freeport and River Mile 44. These concentrations exceed the Cal/EPA Cancer Potency Factor as a Drinking Water Level of 0.023 µg/l.

g. Turbidity: The Sacramento watershed monitoring data shows that turbidity of 45.2 NTU at Freeport and 53.4 at River Mile 44 exceed the California Department of Health Services Secondary MCL of 5 NTU and the USEPA Primary MCL of 1.0/0.5/0.3 NTU.

h. Phosphorus: The Sacramento watershed monitoring data demonstrates that phosphorus concentrations at Freeport of 0.21 mg/l (210 µg/l) and 1.09 mg/l (1,090 µg/l) at River Mile 44 exceed the USEPA Integrated Risk Information System (IRIS) Reference Dose as a Drinking Water Level of 0.14 µg/l and the USEPA Drinking Water Health Advisory or Suggested No-Adverse-Response Level (SNARL) for toxicity other than cancer risk of 0.1 µg/l.

i. Giardia: The Sacramento watershed monitoring data shows that concentrations of giardia at Freeport ranged between 9.3 and 30.6 cysts/100 L. We suspect this is above levels that are identified as causing impairment.

j. Coliform: The Sacramento watershed monitoring data shows that total coliform in the American River at Discovery Park exceeds both the fecal and total coliform criteria.

k. Iron and Manganese: The Sacramento watershed monitoring data shows that iron in Arcade Creek of 360 µg/l exceeds the Secondary MCL for iron. Concentrations of dissolved manganese at 106 µg/l exceed the Secondary MCL of 50 µg/l.

l. Sodium: The Sacramento watershed monitoring data shows sodium concentrations at Freeport as high as 11.0 mg/l (11000 µg/l). This concentration exceeds the USEPA Drinking Water Health Advisory or Suggested No-Adverse-Response Level (SNARL) for toxicity other than cancer risk of 2000 µg/l. Indeed, almost all of the monitored waterways (Yuba, Feather Arcade Creek, etc.) exceeded sodium at even the 50th or 75 median percentile.

m. Specific Conductance: Sacramento watershed monitoring shows that Colusa Basin Drain levels of EC ranged as high as 765 µmhos/cm (90th percentile of 714 µmhos/cm). These exceed the agricultural water quality goal of 700 µmhos/cm.

9. Review of the City of Stockton's Ambient Water Quality Monitoring Program on the San Joaquin River (Bowman Road, above the POTW) reveals that copper, lead, arsenic, turbidity, phosphorus, ammonia, coliform and conductivity exceed relevant criteria. Minimum river hardness is 38 mg/l. The Regional Board has a copy of this data.

a. Copper: Total copper concentrations ranged as high as 7.2 µg/l. Other copper concentrations were 7.0 µg/l, 6.4 µg/l, 5.4 µg/l, and 4.5 µg/l. At a hardness of 40 mg/l, the chronic criteria is 4.1 µg/l and the acute criteria is 5.7 µg/l. In fact, in July 1995, the ambient concentration of copper was 7 µg/l at a hardness of 38 mg/l. Using the conversion factor contained in the California Toxics Rule and the State Implementation Plan, the copper concentration exceeds both acute and chronic aquatic life criteria. Consequently, the San Joaquin River has no remaining assimilative capacity for copper.

b. Arsenic: Total arsenic concentrations ranged as high as 4.4 µg/l with other reported levels of 3.7 µg/l and 3.0 µg/l. Arsenic is a bioaccumulative compound and it is inappropriate to adjust to percent dissolved. Arsenic in the San Joaquin River exceeds the USEPA Integrated Risk Information System (IRIS) Reference Dose as a Drinking Water Level of 2.1 µg/l and various one-in-a-million criteria including; the Cal/EPA Cancer Potency Factor as a Drinking Water Level of 0.023 µg/l, the USEPA IRIS of 0.02 µg/l and the USEPA Drinking Water Health Advisory or SNARL of 0.02 µg/l. The San Joaquin River is clearly impaired because of arsenic.

c. Lead: Total lead concentrations ranged as high as 3.5 µg/l. Other lead concentrations are reported at 1.4 µg/l, 1.3 µg/l and 1.2 µg/l. The chronic aquatic life criteria for lead is at a hardness of 40 mg/l is 0.92 µg/l. The San Joaquin River is clearly impaired because of chronic concentrations of lead.

d. Bis (2-ethylhexyl) phthalate: Concentrations of bis (2-ethylhexyl) phthalate were found at 15 µg/l and 23 µg/l. The California Primary MCL is 4 µg/l. The USEPA Primary MCL is 6 µg/l. Various one-in-a-million criteria including; the Cal/EPA Cancer Potency Factor as a Drinking Water Level of 12 µg/l, the USEPA IRIS of 3 µg/l and the USEPA Drinking Water Health Advisory or SNARL of 3 µg/l were exceeded. The San Joaquin River is impaired because of bis (2-ethylhexyl) phthalate.

e. Phosphorus. Total phosphorus concentrations were as high as .39 mg/l (390 µg/l) and .37 mg/l (370 µg/l). Dissolved phosphorus concentrations were as high as 0.29 mg/l (290 µg/l). These exceed the USEPA Integrated Risk Information System (IRIS) Reference Dose as a Drinking Water Level of 0.14 µg/l and the USEPA Drinking Water Health Advisory or Suggested No-Adverse-Response Level (SNARL) for toxicity other than cancer risk of 0.1 µg/l.

f. Conductivity: EC levels at Bowman Road ranged as high as 821 mg/l, 828 mg/l and 1026 mg/l. The specific conductance agricultural goal is 700. We identify EC because it has been suggested that EC impairment on the San Joaquin River doesn't extend to Stockton.

g. Turbidity: Turbidity is reported as 57, 42, 45, 39, etc. Units are reported as mg/l. Frankly, we are not sure how this translates to NTUs, but suspect the turbidity criteria is exceeded.

h. Ammonia: Ammonia was found as high as 1.8 mg/l. San Joaquin River temperatures have been reported as high as 28 C (82.4 F). The pH has been reported as high as 8.22. The San Joaquin River has a reasonable potential to exceed the chronic aquatic life criteria for ammonia.

i. Coliform: As our attached data on total coliform concentrations demonstrates, the river exceeds the criteria for total coliform.

10. The American River (Sacramento County), San Joaquin River, Tuolumne River and Merced River should be listed for simazine. We reference Water Woes; An Analysis of Pesticide Concentrations in California Surface Water by Teresa M. Olle, Stephan Orme and Brad Heavner, California Public Interest Research Group and Pesticide Action Network, 2000. The report was based on an analysis of the Department of Pesticide Regulation's Surface Water Database. Simazine interacts synergistically with OP pesticides and these waterways are already listed for diazinon. The Regional Board has a copy of this report.

11. Avena Drain: Avena Drain receives stormwater runoff and illegal dumping of dairy wastes. Regional Board files are pregnant with data on EC and ammonia concentrations in Avena Drain (check with Louie Pratt). We have attached coliform data showing that the Drain is impaired because of coliform. We have also attached a number of field parameter monitoring data sheets that demonstrate that EC levels are regularly above criteria. Avena Drain must be identified as impaired because EC and coliform concentrations caused by discharges dairy wastes.

12. The Mokelumne River should be listed for unknown toxicity. In 1991-1992 Val Connor (Regional Board staff) and Linda Deavonic (UCD) found unknown toxicity to fathead minnows during part of a Basin Metals Implementation Plan project. That information was report in 1994. More recently, DeltaKeeper found unknown toxicity to fathead minnows during a CalFed funded study of toxicity in the Delta (Sacramento-San Joaquin Delta Toxicity Test Monitoring Report:1998-99. The Final Report For DeltaKeeper by the Aquatic Toxicology Laboratory, University California, Davis). The Regional Board has both of these reports.

During low water cycles, resuspension events in Camanche Reservoir cause high concentrations of metals and turbidity to be discharged into the Lower Mokelumne River. While

much has been accomplished in eliminating the major (but not the only) source of metals to Camanche Reservoir, a heavy metal sink behind Camanche Dam remains. The Mokelumne River listings for copper and zinc should be maintained. In addition, the river should be listed for aluminum, cadmium, low dissolved oxygen, turbidity and temperature. During an eight day evidentiary hearing by the State Water Resources Control Board in 1992, East Bay Municipal Utility District was required to provide data on metals sampling in the Mokelumne River. We are including that data, a report on Mokelumne River water quality by State Board staff and the USFWS final briefing document to that hearing. We also reference DFG's Lower Mokelumne River Fisheries Management Plan that is at the Regional Board.

13. Inexplicably, the Pitt River is the only river in the entire Central Valley identified as impaired because of temperature. Yet, inadequate temperature, caused by altered flow regimes and increased loading of high temperature, has been identified as one of the major reasons for the decline of fisheries throughout the Central Valley. Data on inadequate temperatures can be found in numerous documents including, but not limited to; the CalFed EIR/EIS, the Restoration Plan for the Anadromous Fish Restoration Program of the Central Valley Project Improvement Act, the DFG's Lower Mokelumne River Fisheries Management Plan (November 1991), the State Water Board's Bay-Delta Hearing, Mokelumne River and Yuba River Hearing records and various EIR/EISs conducted by the Federal Energy Regulatory Commission including those on the Tuolumne, Mokelumne, Yuba and Feather rivers. Additional evidence can be found in the findings of various Regional Board issued NPDES permits.

For example; the CalFed EIR/EIS states that the mainstem of the San Joaquin River between the Merced River confluence and Vernalis in the fall and spring often exceed stressful or lethal levels for upstream and downstream migrating fall-run chinook salmon. When the Vernalis flow is 5,000 cfs or less in May, water temperatures are at levels of chronic stress. Increased water temperature is identified as one of principal causes of declining chinook salmon populations in the San Joaquin River in the September 1998 EIR/EIS titled Meeting Flow Objectives for the San Joaquin River Agreement 1999-2010 (VAMP Agreement). The City of Stockton's Ambient Water Quality Monitoring Program on the San Joaquin River (in Regional Board files) shows that temperatures during the September migration of chinook salmon reach 74.3 F (23.5 C).

The CalFed EIR/EIS states that "[i]n late April and May, stream temperature often exceeds stressful levels for emigrating smolts (Merced River)" and "[r]esults of the stream temperature modeling study indicate that in May, and at times in late April, smolts emigrating from the Tuolumne River encounter stressful or lethal water temperatures... new schedules will not ease temperature problems,... especially in the lower portion of the river..." and that flows in the Stanislaus River "... exceed critical temperatures for salmon spawning and egg incubation.."

The CalFed EIR/EIS states that in the American River, temperatures in summer and fall are often "above 70 F." With respect to the Sacramento River, the CalFed EIR/EIS observes that high temperatures "cause the loss of many adult salmon and eggs spawned in the river." For Delta channels, the CalFed EIR/EIS observes that "[d]uring spring and fall, Delta channels are used by anadromous fish for migrating between rivers and the Pacific Ocean and are used as rearing areas as well. Untimely high water temperatures stress migrating fish by delaying their movement or by causing mortality."

Finding No. 32 of the Sacramento Regional Wastewater Treatment Facility NPDES permit states that "[s]tudies by the National Marine Fisheries Service and the U.S. Bureau of Reclamation have identified the Sacramento Chinook Salmon as a species that is affected by elevated temperatures in the Sacramento River. There are adults and juveniles in portions of the River every month of the year. Juvenile salmon show signs of adverse effects at River temperatures of 65 F. Migration of adults is usually delayed when River temperatures reach 70 F. At 72 F, adult mortality may occur." The February 1998 Thermal Plan Compliance Report by Sacramento Regional County Sanitation District (part of the hearing record) shows that the Sacramento River exceeds 65 F: 49.2% of the time between April-June, 99.9% of the time between July-August and 38.6% of the time between September-November. The report shows that the River exceeds 69 F; 24.5% of the time between April-June, 92.8% of the time between July-August and 18.5% of the time between September-November.

State Water Board Decision 1644, Decision Regarding Protection of Fishery Resources and Other Issues Relating to Diversion and Use of Water From the Lower Yuba River, conclusively establishes that the Yuba River exceeds criteria for temperature. Indeed, the State Board decision states that "[t]he SWRCB recognizes that compliance with requirements to provide suitable water temperatures year-round for all lifestages of chinook salmon and steelhead is not feasible in the lower Yuba River." The Yuba River must be listed as impaired because of temperature to ensure that additional loadings of high temperature do not occur.

Waterbodies that have been identified as having temperatures above acute or stressful levels include, but are not limited to: the San Joaquin River, Stanislaus River, Merced River, Tuolumne River, Calaveras River, Mokelumne River, Bear River, Sacramento River, Yuba River, Feather River, Colusa Basin Drain, American River, Clear Creek and Deer Creek.

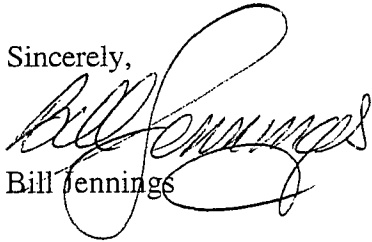
During previous 303(d) List updates, Regional Board staff have made only minimal effort to identify waterways impaired by temperature. In previous 303(d) update submittals, resource agencies have identified numerous waterways as impaired because of high temperatures. Virtually all Central Valley waterways below major impoundments are identified Critical Habitat for species listed pursuant to state and federal Endangered Species Acts. Virtually all of these same waterways

are identified as having temperatures above levels that are protective of salmonids. Regional Board staff can no longer ignore the enormous degradation cause by excessive temperatures. They must make a concerted effort to identify and list temperature impaired waterways.

14. There are several other waterways that have been identified as impaired during development of NPDES permits. Deer Creek (tributary to the Consumes River) is impaired because of coliform and temperature (see Richard McHenry). Morrison Creek (Sacramento) is impaired because of temperature (see Patricia Leary).

Thank you for this opportunity to comment on the revised 303(d) list update. If you have any questions regarding these comments, please feel free to contact me (209) 464-5090.

Sincerely,

A handwritten signature in black ink, appearing to read "Bill Jennings", written over the printed name.

Bill Jennings

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Site	Date	Collect time	Sample ID	Start Temp	Start Time	Start Date	End Temp	End Time	End Date	Ratio	Large Wells Total	Small Wells Total	MPN Total	Large Wells E. coli	Small Wells E. coli	MPN E. coli	Nothing	Wasting
2				Listing of Blanks that were run along with the samples															
3	Blank	10-Jan-00	13:00	COL100101BLNK-MB1	35.00	13:00	10-Jan-00	35.00	8:45	11-Jan-00	20:1	0	0	<20	0	0	<20		
4	Blank	11-Jan-00	17:00	COL110101BLNK-MB1	34.50	17:30	11-Jan-00	34.50	13:30	12-Jan-00	10:1	0	0	<10	0	0	<10		
5	Blank	12-Jan-00	10:45	COL120101BLNK-MB1	35.00	11:30	12-Jan-00	35.00	7:15	13-Jan-01	20:1	0	0	<20	0	0	<20		
6	Blank	23-Oct-00	10:50	COL231000BLNK-MB1	35.00	15:35	23-Oct-00	35.60	13:30	24-Oct-00	10:1	0	0	<10	0	0	<10		
7	Blank	30-Oct-00	16:45	COL301000BLNK-MB1	35.00	16:45	30-Oct-00	35.00	13:00	31-Oct-00	1:1	0	0	<1	0	0	<1		
8	Blank	02-Nov-00	11:25	COL021100BLNK-SH1	35.00	12:25	02-Nov-00	34.50	9:00	03-Nov-00	10:1	0	0	<10	0	0	<10		
9	Blank	07-Nov-00	13:00	COL071100BLNK-MB1	35.00	15:00	07-Nov-00	35.00	13:00	08-Nov-00	10:1	0	0	<10	0	0	<10		
10	Blank	09-Nov-00	12:50	COL091100BLNK-SH1	35.00	14:30	09-Nov-00	35.00	9:30	10-Nov-00	10:1	0	0	<10	0	0	<10		
11	Blank	10-Nov-00	12:00	COL101100BLNK-MB1	35.00	13:00	10-Nov-00	34.50	9:15	11-Nov-00	10:1	0	0	<10	0	0	<10		
12	Blank	11-Nov-00	10:44	COL111100BLNK-MB1	34.00	12:00	11-Nov-00	35.00	8:00	12-Nov-00	10:1	0	0	<10	0	0	<10		
13	Blank	14-Nov-00	12:45	COL141100BLNK-MB1	35.00	13:35	14-Nov-00	35.00	9:30	15-Nov-00	10:1	0	0	<10	0	0	<10		
14	Blank	15-Nov-00	11:20	COL151100BLNK-MB1	35.00	12:30	15-Nov-00	35.00	8:15	16-Nov-00	50:1	0	0	<50	0	0	<50		
15	Blank	16-Nov-00	10:30	COL161100BLNK-SH1	35.00	13:40	16-Nov-00	35.00	9:30	17-Nov-00	10:1	0	0	<10	0	0	<10		
16	Blank	20-Nov-00	10:45	COL201100BLNK-MB1	35.00	12:15	20-Nov-00	35.00	8:00	21-Nov-00	10:1	0	0	<10	0	0	<10		
17	Blank	21-Nov-00	10:25	COL211100BLNK-SH1	35.00	13:05	21-Nov-00	35.00	9:05	22-Nov-00	10:1	0	0	<10	0	0	<10		
18	Blank	22-Nov-00	10:40	COL221100BLNK-MB1	35.00	12:05	22-Nov-00	35.00	8:05	23-Nov-00	10:1	0	0	<10	0	0	<10		
19	Blank	28-Nov-00	11:30	COL281100BLNK-MB1	36.00	14:20	28-Nov-00	35.00	10:20	29-Nov-00	10:1	0	0	<10	0	0	<10		
20	Blank	30-Nov-00	14:00	DAI301100BLNK-MB1	35.00	14:45	30-Nov-00	35.00	10:45	01-Dec-00	10:1	0	0	<10	0	0	<10		
21	Blank	05-Dec-00	15:50	COL051200BLNK-MB1	35.00	16:45	05-Dec-00	35.00	12:45	06-Dec-00	10:1	0	0	<10	0	0	<10		
22	Blank	06-Dec-00	14:50	COL061200BLNK-MB1	35.00	15:30	06-Dec-00	35.00	11:30	07-Dec-00	10:1	0	0	<10	0	0	<10		
23	Blank	08-Jan-01	15:05	COL080101BLNK-MB1	35.00	16:10	08-Jan-01	35.00	12:00	09-Jan-01	10:1	0	0	<10	0	0	<10		
24	Blank	24-Jan-01	13:10	COL240101BLNK-MB1	35.00	14:00	24-Jan-01	35.00	9:30	25-Jan-01	10:1	0	0	<10	0	0	<10		
25	Blank	25-Jan-01	11:40	COL250101BLNK-MB1	35.00	13:20	25-Jan-01	35.00	9:00	26-Jan-01	10:1	0	0	<10	0	0	<10		
26	Blank	27-Jan-01	11:45	COL270101BLNK-MB1	34.00	12:00	27-Jan-01	35.00	8:00	28-Jan-01	10:1	0	0	<10	0	0	<10		
27	Blank	10-Feb-01	12:45	COL100201BLNK-LC1	35.00	14:20	10-Feb-01	35.00	10:20	11-Feb-01	20:1	0	0	<20	0	0	<20		
28	Blank	11-Feb-01	13:20	COL110201BLNK-LC1	35.00	14:00	11-Feb-01	35.00	10:00	12-Feb-01	20:1	0	0	<20	0	0	<20		
29	Blank	02-Mar-01	15:38	COL020201BLNK-LC1	35.00	16:30	02-Mar-01	35.00	13:00	03-Mar-01	20:1	0	0	<20	0	0	<20		
30	Blank	14-Mar-01	15:15	COL140301BLNK-LC1	35.00	15:40	14-Mar-01	35.00	9:50	15-Mar-01	20:1	0	0	<20	0	0	<20		
31	Blank	20-Mar-01	12:40	COL200301BLNK-LC1	35.00	12:45	20-Mar-01	35.00	10:30	21-Mar-01	10:1	0	0	<20	0	0	<20		
32	Blank	26-Mar-01	13:30	COL260301BLNK-LC1	35.00	17:30	26-Mar-01	35.00	13:30	27-Mar-01	20:1	0	0	<20	0	0	<20		
33	Blank	12-Apr-01	13:25	COL120401BLNK-LC1	35.00	17:00	12-Apr-01	35.00	13:00	13-Apr-01	20:1	0	0	<1	0	0	<1		
34	Blank	21-Apr-01	15:50	COL210401BLNK-LC1	35.00	16:30	21-Apr-01	35.00	12:30	22-Apr-01	20:1	0	0	<20	0	0	<20		
35	Blank @ Turner Cut	21-Mar-01	11:00	COL210301BLNK-LC1	35.00	13:30	21-Mar-01	35.00	10:30	22-Mar-01	20:1	0	0	<20	0	0	<20		
36																			

255-5

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Site	Date	Collect Time	Sample ID#	Start Temp	Start Time	Start Date	End Temp	End Time	End Date	Ratio	Large Wellb Total	Small Wellb Total	MPN Total	Large Wellb E. coli	Small Wellb E. coli	MPN E. coli	Northings	Westings
37				List of Urban Sites around Stockton, CA															
38	Calaveras River @ DeltaKeeper's Dock	12-Apr-00	15:49	COL120400CLVR-SF	35.00	16:00	12-Apr-00	35.00	10:00	13-Apr-00	1:1	49	32	686.7	21	9	38.6		
39	Calaveras River @ DeltaKeeper's Dock	26-Apr-00	9:30	COL260400CLVR-RK	36.00	15:09	26-Apr-00	35.00	9:21	27-Apr-00	1:1	49	48	>2419.2	48	12	193.5		
40	Calaveras River @ DeltaKeeper's Dock	27-Apr-00	9:40	COL270400CLVR-RK	35.00	11:50	27-Apr-00	35.00	8:20	28-Apr-00	1:1	49	46	1986.28	9	1	10.1		
41	Calaveras River @ DeltaKeeper's Dock	10-May-00	18:00	COL100500CLVR-RK	35.00	18:20	10-May-00	35.00	14:30	11-May-00	1:1	49	48	>2419.2	31	3	51.2		
42	Calaveras River @ DeltaKeeper's Dock	24-May-00	10:49	COL240500CLVR-RK	36.00	11:15	24-May-00	35.50	8:30	25-May-00	1:1	49	48	>2419.2	49	15	261.3		
43	Calaveras River @ DeltaKeeper's Dock	01-Jun-00	11:10	COL010600CLVR-RK	35.00	11:30	01-Jun-00	35.00	7:10	02-Jun-00	1:1	49	48	>2419.2	31	11	65.1		
44	Calaveras River @ DeltaKeeper's Dock	21-Jun-00	15:15	COL210600CLVR-JF1	35.00	15:30	21-Jun-00	35.00	10:00	22-Jun-00	1:1	49	48	>2419.2	29	3	46.6		
45	Calaveras River @ DeltaKeeper's Dock	28-Jul-00	12:00	COL280700CLVR-JL1	35.00	12:30	28-Jul-00	35.00	9:30	29-Jul-00	1:1	49	48	>2419.2	24	5	75.3		
46	Calaveras River @ DeltaKeeper's Dock	18-Aug-00	14:49	COL180800CLVR-MB	35.00	15:00	18-Aug-00	35.00	11:30	19-Aug-00	1:1	49	48	>2419.2	21	0	26.5		
47	Calaveras River @ DeltaKeeper's Dock	12-Sep-00	11:20	COL120900CLVR-MB1	36.00	11:35	12-Sep-00	35.50	9:30	13-Sep-00	1:1	49	48	>2419.2	31	3	51.2		
48	Calaveras River @ DeltaKeeper's Dock	03-Oct-00	12:38	COL031000CLVR-MB1	35.00	13:52	03-Oct-00	34.50	10:00	04-Oct-00	10:1	47	17	2063	7	2	96	37*58.134'	121*21.337'
49	Calaveras River @ UOP footbridge	14-Aug-00	11:52	COL140800CLVR-JF1	35.50	13:40	14-Aug-00	35.00	9:40	15-Aug-00	1:1	49	48	>2419.2	42	8	107.6	37*58.884'	121*18.841'
50	Calaveras River @ UOP footbridge	22-Aug-00	14:11	COL220800CLVR-JL	35.00	16:00	22-Aug-00	34.60	13:00	23-Aug-00	1:1	49	48	>2419.2	47	17	206.3		
51	Calaveras River @ UOP footbridge	28-Aug-00	11:40	COL280800CLVR-MB1	34.50	13:15	28-Aug-00	35.50	9:15	29-Aug-00	1:1	49	48	>2419.2	48	22	298.7		
52	Calaveras River @ UOP footbridge	20-Sep-00	10:55	COL200900CLVR-MB1	36.00	14:00	20-Sep-00	35.00	11:00	21-Sep-00	1:1	49	48	>2419.2	40	10	98.5		
53	Calaveras River @ UOP footbridge	20-Sep-00	10:55	COL200900CLVR-MB	35.00	13:30	20-Sep-00	35.00	13:30	21-Sep-00	1:1	outside	lab	>2419.2	outside	lab	50		
54	Calaveras River @ UOP footbridge	04-Oct-00	11:55	COL041000CLVR-MB1	35.50	13:30	04-Oct-00	35.00	9:30	05-Oct-00	10:1	49	30	6131	9	1	109	37*58.883'	121*18.838'
55	Calaveras River @ UOP footbridge	11-Oct-00	10:00	COL111000CLVR-DW1	35.00	14:00	11-Oct-00	35.00	9:30	12-Oct-00	20:1	49	48	>48384	49	45	34657.4		
56	Calaveras River @ UOP footbridge	19-Oct-00	15:55	COL191000CLVR-MB1	35.50	17:20	19-Oct-00	35.00	15:30	20-Oct-00	10:1	49	41	12033.1	6	2	84	37*58.882'	121*18.839'
57	Calaveras River @ UOP footbridge	30-Oct-00	14:59	COL301000CLVR-LC1	35.00	16:45	30-Oct-00	35.00	13:00	31-Oct-00	50:1	49	48	>120960	37	14	4670	37*58.884'	121*18.845'
58	Calaveras River @ UOP footbridge	11-Nov-00	11:00	COL111100CLVR-MB1	34.00	12:00	11-Nov-00	35.00	8:00	12-Nov-00	10:1	49	37	9208	9	2	120	37*58.878'	121*18.835'
59	Calaveras River @ UOP footbridge	21-Nov-00	9:30	COL211100CLVR-SH2	35.00	13:00	21-Nov-00	35.00	9:00	22-Nov-00	10:1	49	30	6131	7	3	107	37*58.888'	121*18.843'
60	Calaveras River @ UOP footbridge	21-Nov-00	9:30	COL211100CLVR-SH1	35.00	13:05	21-Nov-00	35.00	9:05	22-Nov-00	10:1	49	33	7270	3	0	31	37*58.888'	121*18.843'
61	Calaveras River @ UOP footbridge	28-Nov-00	11:50	COL281100CLVR-SH1	36.00	14:20	28-Nov-00	35.00	10:20	29-Nov-00	10:1	49	46	19862.8	14	0	185	37*58.884'	121*18.842'
62	Calaveras River @ UOP footbridge	06-Dec-00	13:40	COL061200CLVR-MB1	35.00	15:30	06-Dec-00	35.00	11:30	07-Dec-00	10:1	42	6	988	1	0	10	37*58.881'	121*18.838'
63	Calaveras River @ UOP footbridge	08-Jan-01	14:10	COL080101CLVR-MB1	35.00	16:10	08-Jan-01	35.00	12:00	09-Jan-01	10:1	49	48	>2419.2	49	12	2249	37*58.880'	121*18.843'
64	Calaveras River @ UOP footbridge	11-Jan-01	16:15	COL110101CLVR-MB1	34.50	17:30	11-Jan-01	34.50	13:30	12-Jan-01	10:1	49	48	>2419.2	41	9	1014		
65	Calaveras River @ UOP footbridge	24-Jan-01	12:10	COL240101CLVR-MB1	35.00	14:00	24-Jan-01	35.00	9:30	25-Jan-01	10:1	49	48	>2419.2	44	34	2507	37*58.875'	121*18.838'
66	Calaveras River @ UOP footbridge	10-Feb-01	11:40	COL100201CLVR-LC1	35.00	14:20	10-Feb-01	35.00	10:20	11-Feb-01	20:1	49	48	>48384	31	3	1024		
67	Calaveras River @ UOP footbridge	11-Feb-01	12:05	COL110201CLVR-LC1	35.00	14:00	11-Feb-01	35.00	10:00	12-Feb-01	20:1	49	48	>48384	35	14	1694		
68	Calaveras River @ UOP footbridge	05-Mar-01	14:32	COL050301CLVR-LC1	35.00	17:30	05-Mar-01	35.00	15:00	06-Mar-01	20:1	49	46	39725.6	49	23	8212		
69	Calaveras River @ UOP footbridge	14-Mar-01	13:07	COL140301CLVR-LC1	35.00	15:40	14-Mar-01	35.00	9:50	15-Mar-01	20:1	27	5	900	2	0	40		
70	Calaveras River @ UOP footbridge	20-Mar-01	10:27	COL200301CLVR-LC1	35.00	12:45	20-Mar-01	35.00	10:30	21-Mar-01	10:1	49	17	2909	6	0	63		
71	Calaveras River @ UOP footbridge	26-Mar-01	14:12	COL260301CLVR-LC1	35.00	17:30	26-Mar-01	35.00	13:30	27-Mar-01	20:1	49	48	>48384	39	8	1768	37*58.885'	121*18.840'
72	Calaveras River @ UOP footbridge	12-Apr-01	9:30	COL120401CLVR-LC1	35.00	17:00	12-Apr-01	35.00	13:00	13-Apr-01	20:1	49	36	17328	4	1	104		
73	Calaveras River @ UOP footbridge	21-Apr-01	13:12	COL210401CLVR-LC1	35.00	16:30	21-Apr-01	35.00	12:30	22-Apr-01	20:1	49	48	>48384	31	11	1302		
74	Calaveras River @ UOP footbridge	07-Aug-01	13:06	COL070800CLVR-JL1	35.00	15:38	07-Aug-01	35.00	12:00	08-Aug-00	1:1	49	48	>2419.2	40	9	95.9	37*58.877'	121*18.838'
75	Five-Mile Slough @ Alexandria	26-Apr-00	13:30	COL260400FVML-RK	36.00	15:09	26-Apr-00	35.00	9:21	27-Apr-00	1:1	49	47	2419.17	19	1	24.6		
76	Five-Mile Slough @ Alexandria	07-Aug-00	12:45	COL070800FVML-JL2	35.00	15:38	07-Aug-00	35.00	12:00	08-Aug-00	1:1	49	48	>2419.2	12	2	15.8	38*00.744'	121*20.399'
77	Five-Mile Slough @ Alexandria	02-Feb-01	13:26	COL020201FVML-LC1	35.00	16:30	02-Feb-01	35.00	13:00	03-Feb-01	20:1	49	30	12262	11	0	244		
78	Five-Mile Slough @ Plymouth	10-May-00	15:10	COL100500FVML-RK	35.00	15:30	10-May-00	35.00	14:30	11-May-00	1:1	49	48	>2419.2	48	27	378.4		
79	Five-Mile Slough @ Plymouth	07-Aug-00	12:28	COL070800FVML-JL1	35.00	15:38	07-Aug-00	35.50	12:00	08-Aug-00	1:1	49	47	2419.17	22	4	33.6	38*00.829'	121*21.159'
80	Five-Mile Slough @ Plymouth	14-Aug-00	11:29	COL140800FVML-JF1	35.50	13:40	14-Aug-00	35.00	9:40	15-Aug-00	1:1	49	48	>2419.2	30	2	47.1	38*00.830'	121*21.160'
81	Five-Mile Slough @ Plymouth	18-Aug-00	14:00	COL180800FVML-JL	35.50	15:00	18-Aug-00	35.50	11:30	19-Aug-00	1:1	49	48	>2419.2	5	0	5.2		
82	Five-Mile Slough @ Plymouth	22-Aug-00	13:50	COL220800FVML-JL	35.00	16:00	22-Aug-00	34.60	13:00	23-Aug-00	1:1	49	47	2419.17	7	4	7.4		
83	Five-Mile Slough @ Plymouth	28-Aug-00	11:15	COL280800FVML-MB1	34.50	13:00	28-Aug-00	35.00	9:15	29-Aug-00	1:1	49	48	>2419.2	34	4	61.3		
84	Five-Mile Slough @ Plymouth	20-Sep-00	10:25	COL200900FVML-MB1	36.00	14:00	20-Sep-00	35.00	11:00	21-Sep-00	1:1	49	48	>2419.2	9	1	10.9		
85	Five-Mile Slough @ Plymouth	04-Oct-00	11:25	COL041000FVML-MB1	35.00	13:30	04-Oct-00	35.00	9:30	05-Oct-00	10:1	49	48	>2419.2	0	0	<10	38*00.824'	121*21.178'
86	Five-Mile Slough @ Plymouth	10-Oct-00	16:30	COL101000FVML-MB1	35.50	17:10	10-Oct-00	35.00	13:10	11-Oct-00	10:1	49	48	>2419.2	49	40	1198.5		
87	Five-Mile Slough @ Plymouth	11-Oct-00	9:30	COL111000FVML-DW1	35.00	14:00	11-Oct-00	35.00	9:30	12-Oct-00	20:1	49	48	>48384	49	48	>48384	38*00.824'	121*21.234'
88	Five-Mile Slough @ Plymouth	19-Oct-00	15:30	COL191000FVML-MB1	35.50	17:20	19-Oct-00	35.00	15:30	20-Oct-00	10:1	49	38	9804	15	3	211	38*00.823'	121*21.226'
89	Five-Mile Slough @ Plymouth	30-Oct-00	14:20	COL301000FVML-MB1	35.00	16:45	30-Oct-00	35.00	13:00	31-Oct-00	50:1	49	42	64982.5	13	2	855	38*00.826'	121*21.229'
90	Five-Mile Slough @ Plymouth	11-Nov-00	10:35	COL111100FVML-MB1	34.00	12:00	11-Nov-00	35.00	8:00	12-Nov-00	10:1	48	23	3130	2	0	20	38*00.824'	121*21.219'
91	Five-Mile Slough @ Plymouth	21-Nov-00	9:10	COL211100FVML-SH1	35.00	13:05	21-Nov-00	35.00	9:05	22-Nov-00	10:1	36	5	697	2	0	20	38*00.823'	121*21.234'

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Site	Date	Collect time	Sample ID#	Start Temp	Start Time	Start Date	End Temp	End Time	End Date	Ratio	Large Wells Total	Small Wells Total	MPN total	Large Wells E. coli	Small Wells E. coli	MPN E. coli	Northing	Westing
92	Five-Mile Slough @ Plymouth	21-Nov-00	9:10	COL211100FVML-SH2	35.00	13:00	21-Nov-00	35.00	9:00	22-Nov-00	10:1	36	7738		0	0	<10	38*00.823'	121*21.234'
93	Five-Mile Slough @ Plymouth	28-Nov-00	10:40	COL281100FVML-SH1	36.00	14:20	28-Nov-00	35.00	10:20	29-Nov-00	10:1	23	3341		0	0	<10	38*00.821'	121*21.231'
94	Five-Mile Slough @ Plymouth	05-Dec-00	16:05	COL051200FVML-MB1	35.00	16:45	05-Dec-00	35.00	12:45	06-Dec-00	10:1	27	3419		0	0	<10	38*00.825'	121*21.232'
95	Five-Mile Slough @ Plymouth	08-Jan-01	13:15	COL081010FVML-MB1	35.00	16:10	08-Jan-01	35.00	12:00	09-Jan-01	10:1	49	48>24192		49	33	7270	38*00.819'	121*21.233'
96	Five-Mile Slough @ Plymouth	10-Jan-01	16:30	COL100101FVML-MB1	35.00	17:30	10-Jan-01	35.00	13:30	11-Jan-01	10:1	49	48>24192		49	46	19862		
97	Five-Mile Slough @ Plymouth	24-Jan-01	11:45	COL240101FVML-MB1	35.00	14:00	24-Jan-01	35.00	9:30	25-Jan-01	10:1	49	48>24192		24	7	416.0	38*00.826'	121*21.163'
98	Five-Mile Slough @ Plymouth	27-Jan-01	10:15	COL270101FVML-MB1	34.00	12:00	27-Jan-01	35.00	8:00	28-Jan-01	10:1	49	223873		12	1	146	38*00.829'	121*21.160'
99	Five-Mile Slough @ Plymouth	10-Feb-01	11:15	COL100201FVML-LC1	35.00	14:20	10-Feb-01	35.00	10:20	11-Feb-01	20:1	49	4022397		9	0	196		
100	Five-Mile Slough @ Plymouth	11-Feb-01	11:45	COL110201FVML-LC1	35.00	14:00	11-Feb-01	35.00	10:00	12-Feb-01	20:1	49	4215996		29	2	896		
101	Five-Mile Slough @ Plymouth	05-Mar-01	13:57	COL050301FVML-LC1	35.00	17:30	05-Mar-01	35.00	15:00	06-Mar-01	20:1	49	4748383.4		24	2	34.5		
102	Five-Mile Slough @ Plymouth	14-Mar-01	12:34	COL140301FVML-LC1	35.00	15:40	14-Mar-01	35.00	9:50	15-Mar-01	20:1	49	3718416		16	5	500		
103	Five-Mile Slough @ Plymouth	20-Mar-01	10:00	COL200301FVML-LC1	35.00	12:45	20-Mar-01	35.00	10:30	21-Mar-01	10:1	48	212851		1	0	10		
104	Five-Mile Slough @ Plymouth	26-Mar-01	13:40	COL260301FVML-LC1	35.00	17:30	26-Mar-01	35.00	13:30	27-Mar-01	20:1	49	48>48384		43	10	2356		
105	Five-Mile Slough @ Plymouth	12-Apr-01	10:15	COL120401FVML-LC1	35.00	17:00	12-Apr-01	35.00	13:00	13-Apr-01	20:1	49	4225993		2	2	82		
106	Five-Mile Slough @ Plymouth	21-Apr-01	12:31	COL210401FVML-LC1	35.00	16:30	21-Apr-01	35.00	12:30	22-Apr-01	20:1	49	4848384		41	14	2320		
107	McCleod Lake	24-Aug-00	10:22	COL240800MCCL-DW1	35.00	12:00	24-Aug-00	35.50	9:00	25-Aug-00	1:1	49	48>2419.2		17	2	22.8		
108	McCleod Lake	05-Oct-00	10:35	COL051000MCCL-SH1	35.00	12:00	05-Oct-00	35.00	9:15	06-Oct-00	10:1	47	101607		2	0	20	37*57.305'	121*17.670'
109	McCleod Lake	19-Oct-00	11:35	COL191000MCCL-MB1	35.00	12:30	19-Oct-00	35.00	8:00	20-Oct-00	10:1	49	275172		8	0	86	37*57.326'	121*17.680'
110	McCleod Lake	23-Oct-00	12:00	COL231000MCCL-MB1	35.00	15:35	23-Oct-00	35.60	13:30	24-Oct-00	10:1	49	4724191.7		12	7	216	37*57.387'	121*17.590'
111	McCleod Lake	29-Oct-00	7:10	COL291000MCCL-MB1	35.00	7:40	29-Oct-00	35.00	5:20	30-Oct-00	50:1	49	48>120960		30	5	2600		
112	McCleod Lake	29-Oct-00	7:10	COL291000MCCL-MB2	35.00	7:40	29-Oct-00	35.00	5:20	30-Oct-00	50:1	49	48>120960		32	6	2955		
113	McCleod Lake	31-Oct-00	10:15	COL311000MCCL-SH1	35.00	13:00	31-Oct-00	35.00	10:40	01-Nov-00	50:1	49	48>120960		30	2	2355	37*57.354'	121*17.579'
114	McCleod Lake	30-Nov-00	9:15	COL301100MCCL-MB1	35.00	11:50	30-Nov-00	35.00	9:00	01-Dec-00	10:1	49	347701		14	2	185	37*57.332'	121*17.572'
115	McCleod Lake	02-Feb-01	14:20	COL020201MCCL-LC1	35.00	16:30	02-Feb-01	35.00	13:00	03-Feb-01	20:1	49	48>48384		49	17	5818		
116	McCleod Lake	07-Mar-01	10:20	COL070301MCCL-LC1	35.00	13:15	07-Mar-01	35.00	10:30	08-Mar-01	20:1	49	3819608		28	1	790		
117	McCleod Lake	15-Mar-01	12:20	COL150301MCCL-LC1	35.00	14:30	15-Mar-01	35.00	9:30	16-Mar-01	20:1	49	3112976		5	0	104		
118	McCleod Lake	22-Mar-01	11:00	COL220301MCCL-LC1	35.00	12:50	22-Mar-01	35.00	9:50	23-Mar-01	10:1	30	1439		1	0	10		
119	McCleod Lake	26-Mar-01	14:55	COL260301MCCL-LC1	35.00	17:30	26-Mar-01	35.00	13:30	27-Mar-01	20:1	49	48>48384		43	11	2422	37*57.367'	121*17.564'
120	McCleod Lake	12-Apr-01	10:10	COL120401MCCL-LC1	35.00	17:00	12-Apr-01	35.00	13:00	13-Apr-01	20:1	49	3012262		3	1	82		
121	Morelli Park	12-Oct-00	15:50	COL121000MRLL-MB1	35.00	17:30	12-Oct-00	35.00	13:30	13-Oct-00	20:1	49	48>48384		49	44	31061.4	37*57.173'	121*18.386'
122	Morelli Park	13-Oct-00	12:00	COL131000MRLL-MB1	35.00	13:55	13-Oct-00	35.00	10:00	14-Oct-00	20:1	49	48>48384		49	38	19608	37*57.181'	121*18.385'
123	Morelli Park	14-Oct-00	16:50	COL141000MRLL-MB1	35.00	17:20	14-Oct-00	35.00	14:45	15-Oct-00	20:1	49	4748384		34	10	1456		
124	Morelli Park	15-Oct-00	9:30	COL151000MRLL-MB1	35.00	9:30	15-Oct-00	35.00	7:00	16-Oct-00	20:1	49	4124066.2		27	4	870		
125	Morelli Park	17-Oct-00	16:30	COL171000MRLL-MB1	33.50	17:25	17-Oct-00	36.00	14:45	18-Oct-00	10:1	49	4314136		21	1	278	37*57.183'	121*18.358'
126	Morelli Park	29-Oct-00	7:00	COL291000MRLL-MB1	35.00	7:40	29-Oct-00	35.00	5:20	30-Oct-00	50:1	49	48>120960		29	3	2320		
127	Morelli Park	31-Oct-00	10:40	COL311000MRLL-SH1	35.00	13:00	31-Oct-00	35.00	10:40	01-Nov-00	50:1	49	1714545		7	0	350	37*57.179'	121*18.388'
128	Morelli Park	10-Nov-00	11:45	COL101100MRLL-MB1	35.00	13:00	10-Nov-00	34.50	9:15	11-Nov-00	10:1	47	172063		5	0	52	37*57.143'	121*18.369'
129	Morelli Park	30-Nov-00	9:30	COL301100MRLL-MB1	35.00	11:50	30-Nov-00	35.00	9:00	01-Dec-00	10:1	29	5496		4	0	41	37*57.184'	121*18.381'
130	Morelli Park	02-Feb-01	14:40	COL020201MRLL-MB1	35.00	16:30	02-Feb-01	35.00	13:00	03-Feb-01	20:1	49	104092		17	0	406		
131	Morelli Park	07-Feb-01	10:45	COL070201MRLL-LC1	35.00	13:15	07-Feb-01	35.00	10:30	08-Feb-01	20:1	49	196510		16	3	452		
132	Morelli Park	15-Mar-01	12:45	COL150301MRLL-LC1	35.00	14:30	15-Mar-01	35.00	9:30	16-Mar-01	20:1	27	6930		3	0	62		
133	Morelli Park	22-Mar-01	10:30	COL220301MRLL-LC1	35.00	12:50	22-Mar-01	35.00	9:50	23-Mar-01	10:1	18	1231		0	1	10		
134	Morelli Park	12-Apr-01	10:25	COL120401MRLL-LC1	35.00	17:00	12-Apr-01	35.00	13:00	13-Apr-01	20:1	49	196510		3	0	62		
135	Mormon Slough @ Lincoln	06-Jun-00	10:55	COL060600MRMN-RK	36.00	11:30	06-Jun-00	35.50	9:30	07-Jun-00	1:1	49	48>2419.2		17	1	21.6		
136	Mormon Slough @ Lincoln	08-Jun-00	10:42	COL080600MRMN-RK	35.00	11:45	08-Jun-00	35.00	9:00	09-Jun-00	1:1	49	48>2419.2		24	2	34.5		
137	Mormon Slough @ Lincoln	09-Jun-00	10:55	COL090600MRMN-RK1	35.00	11:45	09-Jun-00	35.00	9:30	10-Jun-00	1:1	49	48>2419.2		15	0	17.5		
138	Mormon Slough @ Lincoln	07-Aug-00	14:05	COL070800MRMN-JL1	35.00	15:38	07-Aug-00	35.00	12:00	08-Aug-00	1:1	49	48>2419.2		21	10	40	37*56.862'	121*17.787'
139	Mormon Slough @ Lincoln	14-Aug-00	12:30	COL140800MRMN-JF1	35.50	13:40	14-Aug-00	35.00	9:40	15-Aug-00	1:1	49	48>2419.2		49	20	344.8	37*56.862'	121*17.790'
140	Mormon Slough @ Lincoln	18-Aug-00	14:30	COL180800MRMN-JF	35.50	15:00	18-Aug-00	35.00	11:30	19-Aug-00	1:1	49	48>2419.2		49	31	648.8		
141	Mormon Slough @ Lincoln	22-Aug-00	14:38	COL220800MRMN-JL	35.00	16:00	22-Aug-00	34.60	13:00	23-Aug-00	1:1	49	48>2419.2		49	30	613.1		
142	Mormon Slough @ Lincoln	28-Aug-00	12:15	COL280800MRMN-LC1	34.50	13:15	28-Aug-00	35.00	9:15	29-Aug-00	1:1	49	48>2419.2		49	19	325.5		
143	Mormon Slough @ Lincoln	20-Sep-00	11:45	COL200900MRMN-MB1	36.00	14:00	20-Sep-00	35.00	11:00	21-Sep-00	1:1	49	48>2419.2		38	4	74.9		
144	Mormon Slough @ Lincoln	29-Sep-00	11:25	COL290900MRMN-MB1	35.00	12:20	29-Sep-00	35.00	8:06	30-Sep-00	10:1	49	4619862.8		31	5	546		
145	Mormon Slough @ Lincoln	04-Oct-00	12:30	COL041000MRMN-MB1	35.50	13:30	04-Oct-00	35.00	9:30	05-Oct-00	10:1	49	368664		14	0	161	37*56.869'	121*17.794'
146	Mormon Slough @ Lincoln	11-Oct-00	10:40	COL111000MRMN-DW1	35.00	14:00	11-Oct-00	35.00	9:30	12-Oct-00	20:1	49	48>48384		49	48	>48384	37*56.872'	121*17.789'

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Site	Date	Collect time	Sample ID#	Start Temp	Start Time	Start Date	End Temp	End Time	End Date	Ratio	Large Wells Total	Small Wells Total	MPN (u/ml)	Large Wells Col	Small Wells Col	MPN (u/ml)	Northing	Wasting
147	Mormon Slough @ Lincoln	19-Oct-00	16:25	COL191000MRMN-MB1	35.50	17:20	19-Oct-00	35.00	15:30	20-Oct-00	10:1	49	48	>24192	40	10	9850	37*56.862'	121*17.788'
148	Mormon Slough @ Lincoln	30-Oct-00	15:43	COL301000MRMN-MB1	35.00	16:45	30-Oct-00	35.00	13:00	31-Oct-00	50:1	49	48	>120,960	49	35	40820	37*56.865'	121*17.785'
149	Mormon Slough @ Lincoln	11-Nov-00	11:20	COL111100MRMN-MB1	34.00	12:00	11-Nov-00	35.00	8:00	12-Nov-00	10:1	49	46	19862.8	35	3	624	37*56.861'	121*17.792'
150	Mormon Slough @ Lincoln	21-Nov-00	10:10	COL211100MRMN-SH1	35.00	13:05	21-Nov-00	35.00	9:05	22-Nov-00	10:1	49	29	5794	13	1	160	37*56.862'	121*17.790'
151	Mormon Slough @ Lincoln	21-Nov-00	10:10	COL211100MRMN-SH2	35.00	13:00	21-Nov-00	35.00	9:00	22-Nov-00	10:1	49	28	5475	11	3	156	37*56.862'	121*17.790'
152	Mormon Slough @ Lincoln	22-Nov-00	10:35	COL221100MRMN-MB1	35.00	12:05	22-Nov-00	35.00	8:05	23-Nov-00	10:1	49	48	>24192	49	48	>24192	37*56.865'	121*17.791'
153	Mormon Slough @ Lincoln	06-Dec-00	14:30	COL061200MRMN-MB1	35.00	15:30	06-Dec-00	35.00	11:30	07-Dec-00	10:1	45	15	1576	12	1	146	37*56.861'	121*17.784'
154	Mormon Slough @ Lincoln	08-Jan-01	14:45	COL080101MRMN-MB1	35.00	16:10	08-Jan-01	35.00	12:00	09-Jan-01	10:1	49	48	>24192	49	35	8164	37*56.863'	121*17.784'
155	Mormon Slough @ Lincoln	11-Jan-01	16:40	COL110101MRMN-MB1	34.50	17:30	11-Jan-01	34.50	13:30	12-Jan-01	10:1	49	48	>24192	49	28	5475		
156	Mormon Slough @ Lincoln	24-Jan-01	12:45	COL240101MRMN-MB1	35.00	14:00	24-Jan-01	35.00	9:30	25-Jan-01	10:1	49	48	>24192	49	31	6488	37*56.865'	121*17.791'
157	Mormon Slough @ Lincoln	02-Feb-01	14:55	COL020201MRMN-LC1	35.00	16:30	02-Feb-01	35.00	13:00	03-Feb-01	20:1	49	48	>48384	49	43	28272		
158	Mormon Slough @ Lincoln	10-Feb-01	12:35	COL100201MRMN-LC1	35.00	14:20	10-Feb-01	35.00	10:20	11-Feb-01	20:1	49	48	>48384	49	13	4718		
159	Mormon Slough @ Lincoln	11-Feb-01	13:00	COL110201MRMN-LC1	35.00	14:00	11-Feb-01	35.00	10:00	12-Feb-01	20:1	49	48	>48384	48	23	6260		
160	Mormon Slough @ Lincoln	05-Mar-01	15:23	COL050301MRMN-LC1	35.00	17:30	05-Mar-01	35.00	15:00	06-Mar-01	20:1	49	48	>48384	49	30	12262		
161	Mormon Slough @ Lincoln	14-Mar-01	13:51	COL140301MRMN-LC1	35.00	15:40	14-Mar-01	35.00	9:50	15-Mar-01	20:1	49	43	28272	49	15	5226		
162	Mormon Slough @ Lincoln	20-Mar-01	11:05	COL200301MRMN-LC1	35.00	12:45	20-Mar-01	35.00	10:30	21-Mar-01	10:1	49	38	9804	47	11	1664		
163	Mormon Slough @ Lincoln	26-Mar-01	15:13	COL260301MRMN-LC1	35.00	17:30	26-Mar-01	35.00	13:30	27-Mar-01	20:1	49	48	>48384	49	32	13734		
164	Mormon Slough @ Lincoln	12-Apr-01	10:45	COL120401MRMN-LC1	35.00	17:00	12-Apr-01	35.00	13:00	13-Apr-01	20:1	49	48	48,384	19	6	623		
165	Mormon Slough @ Lincoln	21-Apr-01	13:55	COL210401MRMN-LC1	35.00	16:30	21-Apr-01	35.00	12:30	22-Apr-01	20:1	49	48	48,384	49	48	48384		
166	Mosher Slough @ Kelley Dr.	08-May-00	14:30	COL080500MSHR-RK	36.00	15:30	08-May-00	35.50	13:30	09-May-00	1:1	49	48	>2419.2	49	41	236.1		
167	Mosher Slough @ Kelley Dr.	24-May-00	14:45	COL240500MSHR-RK	35.50	15:15	24-May-00	35.50	10:30	25-May-00	1:1	49	48	>2419.2	49	24	435.2		
168	Mosher Slough @ Kelley Dr.	07-Aug-00	12:11	COL070800MSHR-LC1	35.00	15:38	07-Aug-00	35.00	12:00	08-Aug-00	1:1	49	48	>2419.2	45	9	131.3	38*01.954'	121*21.811'
169	Mosher Slough @ Kelley Dr.	14-Aug-00	11:13	COL140800MSHR-JF1	35.50	13:40	14-Aug-00	35.00	11:40	15-Aug-00	1:1	49	48	>2419.2	49	26	488.4	38*01.953'	121*21.809'
170	Mosher Slough @ Kelley Dr.	18-Aug-00	13:50	COL180800MSHR-JL	35.50	15:00	18-Aug-00	35.00	11:30	19-Aug-00	1:1	49	48	>2419.2	43	17	143		
171	Mosher Slough @ Kelley Dr.	22-Aug-00	13:39	COL220800MSHR-JL	35.00	16:00	22-Aug-00	34.60	13:00	23-Aug-00	1:1	49	48	>2419.2	43	13	124.6		
172	Mosher Slough @ Kelley Dr.	28-Aug-00	11:57	COL280800MSHR-LC1	34.50	13:15	28-Aug-00	35.00	9:15	29-Aug-00	1:1	49	48	>2419.2	49	16	275.5		
173	Mosher Slough @ Kelley Dr.	20-Sep-00	10:00	COL200900MSHR-MB1	36.00	14:00	20-Sep-00	35.00	11:00	21-Sep-00	1:1	49	48	>2419.2	49	31	648.8		
174	Mosher Slough @ Kelley Dr.	04-Oct-00	11:05	COL041000MSHR-MB1	35.50	13:30	04-Oct-00	35.00	9:30	05-Oct-00	10:1	49	44	15530.7	24	0	317	38*01.952'	121*21.812'
175	Mosher Slough @ Kelley Dr.	19-Oct-00	15:10	COL191000MSHR-MB1	35.50	17:20	19-Oct-00	35.00	15:30	20-Oct-00	10:1	49	42	12996.5	24	4	373	38*01.954'	121*21.806'
176	Mosher Slough @ Kelley Dr.	11-Nov-00	10:25	COL111100MSHR-MB1	34.00	12:00	11-Nov-00	35.00	8:00	12-Nov-00	10:1	49	48	>2419.2	15	1	187	38*01.952'	121*21.774'
177	Mosher Slough @ Kelley Dr.	21-Nov-00	8:50	COL211100MSHR-SH1	35.00	13:05	21-Nov-00	35.00	9:05	22-Nov-00	10:1	44	16	1497	14	5	221	38*01.950'	121*21.810'
178	Mosher Slough @ Kelley Dr.	21-Nov-00	8:50	COL211100MSHR-SH2	35.00	13:00	21-Nov-00	35.00	9:00	22-Nov-00	10:1	49	15	2613	10	2	132	38*01.950'	121*21.810'
179	Mosher Slough @ Kelley Dr.	22-Nov-00	9:50	COL221100MSHR-MB1	35.00	12:05	22-Nov-00	35.00	8:05	23-Nov-00	10:1	49	48	>2419.2	49	48	>2419.2	38*01.954'	121*21.809'
180	Mosher Slough @ Kelley Dr.	28-Nov-00	11:20	COL281100MSHR-SH1	36.00	14:20	28-Nov-00	35.00	10:20	29-Nov-00	10:1	48	10	1789	7	1	85	38*01.958'	121*21.808'
181	Mosher Slough @ Kelley Dr.	05-Dec-00	15:45	COL051200MSHR-MB1	35.00	16:45	05-Dec-00	35.00	12:45	06-Dec-00	10:1	45	16	1624	9	1	109	38*01.951'	121*21.807'
182	Mosher Slough @ Kelley Dr.	08-Jan-01	13:00	COL080101MSHR-MB1	35.00	16:10	08-Jan-01	35.00	12:00	09-Jan-01	10:1	49	48	>2419.2	49	23	4106	38*01.953'	121*21.808'
183	Mosher Slough @ Kelley Dr.	11-Jan-01	15:55	COL110101MSHR-MB1	34.50	17:30	11-Jan-01	34.50	13:30	12-Jan-01	10:1	49	48	>2419.2	49	28	3968	38*01.953'	121*21.810'
184	Mosher Slough @ Kelley Dr.	24-Jan-01	11:30	COL240101MSHR-MB1	35.00	14:00	24-Jan-01	35.00	9:30	25-Jan-01	10:1	48	48	10111	47	24	2700	38*01.950'	121*21.804'
185	Mosher Slough @ Kelley Dr.	10-Feb-01	11:00	COL100201MSHR-LC1	35.00	14:20	10-Feb-01	35.00	10:20	11-Feb-01	20:1	49	48	>48384	41	8	1974		
186	Mosher Slough @ Kelley Dr.	11-Feb-01	11:30	COL110201MSHR-LC1	35.00	14:00	11-Feb-01	35.00	10:00	12-Feb-01	20:1	49	48	>48384	42	3	2402		
187	Mosher Slough @ Mariner's Dr.	11-Oct-00	9:10	COL111000MSHR-DW1	35.00	14:00	11-Oct-00	35.00	9:30	12-Oct-00	20:1	49	48	>48384	49	47	>48383	38*01.951'	121*21.889'
188	Mosher Slough @ Mariner's Dr.	30-Oct-00	13:32	COL301000MSHR-LC1	35.00	16:45	30-Oct-00	35.00	13:00	31-Oct-00	50:1	49	48	>120960	34	9	3540	38*01.951'	121*21.889'
189	Mosher Slough @ Mariner's Dr.	05-Mar-01	13:38	COL050301MSHR-LC1	35.00	17:30	05-Mar-01	35.00	15:00	06-Mar-01	20:1	49	48	>48384	49	31	12976		
190	Mosher Slough @ Mariner's Dr.	14-Mar-01	11:58	COL140301MSHR-LC1	35.00	15:40	14-Mar-01	35.00	9:50	15-Mar-01	20:1	44	9	2446	1	0	20		
191	Mosher Slough @ Mariner's Dr.	20-Mar-01	9:40	COL200301MSHR-LC1	35.00	12:45	20-Mar-01	35.00	10:30	21-Mar-01	10:1	49	31	6488	16	6	262		
192	Mosher Slough @ Mariner's Dr.	26-Mar-01	13:10	COL260301MSHR-LC1	35.00	17:30	26-Mar-01	35.00	13:30	27-Mar-01	20:1	49	48	>48384	49	48	>48384	38*01.953'	121*21.886'
193	Mosher Slough @ Mariner's Dr.	12-Apr-01	10:28	COL120401MSHR-LC1	35.00	17:00	12-Apr-01	35.00	13:00	13-Apr-01	20:1	49	48	>48384	30	8	1142		
194	Mosher Slough @ Mariner's Dr.	21-Apr-01	12:02	COL210401MSHR-LC1	35.00	16:30	21-Apr-01	35.00	12:30	22-Apr-01	20:1	49	48	>48384	49	27	10344		
195	Mosher Slough @ Sandman Park	09-May-00	15:30	COL090500MSHR-RK	35.50	16:00	09-May-00	35.00	13:30	10-May-00	1:1	49	48	>2419.2	49	24	435.2		
196	Mosher Slough @ Sandman Park	12-Jun-00	15:30	COL120600MSHR-RK	35.00	14:00	12-Jun-00	35.00	12:45	13-Jun-00	1:1	49	48	>2419.2	48	17	238.2		
197	Smith Canal @ I-5	27-Apr-00	10:55	COL270400SMTH-RK2	35.00	11:50	27-Apr-00	35.50	8:20	28-Apr-00	1:1	49	43	1413.6	29	5	49.6		
198	Smith Canal @ I-5	10-May-00	16:30	COL100500SMTH-RK1	35.00	18:20	10-May-00	35.00	14:30	11-May-00	1:1	49	48	>2419.2	49	33	727		
199	Smith Canal @ I-5	06-Jun-00	10:35	COL060600SMTH-RK1	36.00	11:30	06-Jun-00	35.50	9:30	07-Jun-00	1:1	49	48	>2419.2	33	4	58.3		
200	Smith Canal @ I-5	08-Jun-00	10:10	COL080600SMTH-RK1	35.00	11:45	08-Jun-00	35.50	9:00	09-Jun-00	1:1	49	48	>2419.2	32	5	57.3		
201	Smith Canal @ I-5	09-Jun-00	10:15	COL090600SMTH-RK1	35.00	11:45	09-Jun-00	35.50	9:30	10-Jun-00	1:1	49	48	>2419.2	30	1	43.9		

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Site	Date	Collect time	Sample ID#	Start Temp	Start Time	Start Date	End Temp	End Time	End Date	Ratio	Large Wells Total	Small Wells Total	MPN Total	Large Wells Coli	Small Wells Coli	MPN Coli	Northings	Westings
202	Smith Canal @ I-5	21-Jun-00	12:30	COL210600SMTH-JF1	35.50	14:00	21-Jun-00	35.00	10:00	22-Jun-00	1:1	48	47	960.6	29	2	44.8		
203	Smith Canal @ I-5	06-Jul-00	10:35	COL060700SMTH-JF	35.00	12:00	06-Jul-00	35.00	9:45	07-Jul-00	1:1	49	48	>2419.2	48	21	285.1		
204	Smith Canal @ I-5	28-Jul-00	11:30	COL280700SMTH-JL1	35.00	12:30	28-Jul-00	35.00	9:30	29-Jul-00	1:1	49	48	>2419.2	39	7	86		
205	Smith Canal @ I-5	07-Aug-00	13:49	COL070900SMTH-JL1	35.00	15:38	07-Aug-00	35.50	12:00	08-Aug-00	1:1	49	48	>2419.2	29	1	43.2	37*57.635'	121*20.105'
206	Smith Canal @ I-5	05-Sep-00	11:20	COL050900SMTH-MB1	35.00	12:00	05-Sep-00	35.00	9:10	06-Sep-00	1:1	49	48	>2419.2	43	10	117.8		
207	Smith Canal @ Pershing Ave.	10-May-00	17:00	COL100500SMTH-RK2	35.00	18:20	10-May-00	35.50	14:30	11-May-00	1:1	49	48	>2419.2	49	45	1732.87		
208	Smith Canal @ Pershing Ave.	11-Oct-00	10:20	COL111000SMTH-DW1	35.00	14:00	11-Oct-00	35.00	9:30	12-Oct-00	20:1	49	48	>48384	48	45	34657.4	37*57.981'	121*18.826'
209	Smith Canal @ Pershing Ave.	30-Oct-00	15:26	COL301000SMTH-MB1	35.00	16:45	30-Oct-00	35.00	12:45	31-Oct-00	50:1	49	48	>120960	45	11	6980	37*57.980'	121*18.827'
210	Smith Canal @ Pershing Ave.	02-Feb-01	13:55	COL020201SMTH-LC1	35.00	16:30	02-Feb-01	35.00	13:00	03-Feb-01	20:1	49	48	>48384.0	48	10	3578		
211	Smith Canal @ Yosemite Lake	27-Apr-00	10:45	COL270400SMTH-RK1	35.00	11:50	27-Apr-00	35.50	8:20	28-Apr-00	1:1	49	44	1553.07	29	5	49.6		
212	Smith Canal @ Yosemite Lake	08-Jul-00	12:11	COL140800SMTH-LC1	35.50	13:40	08-Jul-00	35.50	11:00	08-Aug-00	1:1	49	48	>2419.2	49	23	410.6	37*58.078	121*18.078
213	Smith Canal @ Yosemite Lake	07-Aug-00	13:22	COL070800SMTH-JL1	35.00	15:38	07-Aug-00	35.50	12:00	08-Aug-00	1:1	49	48	>2419.2	49	15	261.3	37*58.067	121*18.406'
214	Smith Canal @ Yosemite Lake	18-Aug-00	14:15	COL180800SMTH-JF	35.50	15:00	18-Aug-00	35.50	11:30	19-Aug-00	1:1	49	48	>2419.2	47	21	240		
215	Smith Canal @ Yosemite Lake	22-Aug-00	14:24	COL220800SMTH-JL	35.00	16:00	22-Aug-00	34.60	13:00	23-Aug-00	1:1	49	48	>2419.2	42	5	98.8		
216	Smith Canal @ Yosemite Lake	28-Aug-00	11:55	COL280800SMTH-LC1	34.50	13:15	28-Aug-00	35.00	9:15	29-Aug-00	1:1	49	48	>2419.2	49	24	435.2		
217	Smith Canal @ Yosemite Lake	20-Sep-00	11:10	COL200900SMTH-MB1	36.00	14:00	20-Sep-00	35.00	11:00	21-Sep-00	1:1	49	48	>2419.2	47	12	172.3		
218	Smith Canal @ Yosemite Lake	29-Sep-00	11:45	COL290900SMTH-MB1	35.00	12:20	29-Sep-00	35.00	8:06	30-Sep-00	10:1	49	33	7270	14	2	185		
219	Smith Canal @ Yosemite Lake	04-Oct-00	12:10	COL041000SMTH-MB1	35.50	13:30	04-Oct-00	35.00	9:30	05-Oct-00	10:1	49	25	4611	29	1	432	37*58.077'	121*18.422'
220	Smith Canal @ Yosemite Lake	10-Oct-00	15:45	COL101000SMTH-MB1	35.50	17:10	10-Oct-00	35.00	13:10	11-Oct-00	10:1	49	48	>2419.2	49	41	12033.1		
221	Smith Canal @ Yosemite Lake	19-Oct-00	16:10	COL191000SMTH-MB1	35.50	17:20	19-Oct-00	35.00	15:30	20-Oct-00	10:1	49	47	24191.7	46	13	1616	37*58.077'	121*18.414'
222	Smith Canal @ Yosemite Lake	11-Nov-00	11:10	COL111100SMTH-MB1	34.00	12:00	11-Nov-00	35.00	8:00	12-Nov-00	10:1	49	48	>2419.2	49	25	4611	37*58.077'	121*18.416'
223	Smith Canal @ Yosemite Lake	21-Nov-00	9:55	COL211100SMTH-SH2	35.00	13:00	21-Nov-00	35.00	9:00	22-Nov-00	10:1	49	45	17329	29	12	612	37*58.079'	121*18.418'
224	Smith Canal @ Yosemite Lake	21-Nov-00	9:55	COL211100SMTH-SH1	35.00	13:05	21-Nov-00	35.00	9:05	22-Nov-00	10:1	49	32	6867	31	2	495	37*58.079'	121*18.418'
225	Smith Canal @ Yosemite Lake	22-Nov-00	10:25	COL221100SMTH-MB1	35.00	12:05	22-Nov-00	35.00	8:05	23-Nov-00	10:1	49	48	>2419.2	48	14	2098	37*58.077'	121*18.416'
226	Smith Canal @ Yosemite Lake	28-Nov-00	11:50	COL281100SMTH-SH1	36.00	14:20	28-Nov-00	35.00	10:20	29-Nov-00	10:1	49	31	6488	4	0	41	37*58.078'	121*18.418'
227	Smith Canal @ Yosemite Lake	06-Dec-00	14:05	COL061200SMTH-MB1	35.00	15:30	06-Dec-00	35.00	11:30	07-Dec-00	10:1	49	48	>2419.2	16	5	250	37*58.078'	121*18.416'
228	Smith Canal @ Yosemite Lake	08-Jan-01	14:30	COL080101SMTH-MB1	35.00	16:10	08-Jan-01	35.00	12:00	09-Jan-01	10:1	49	48	>2419.2	49	43	14136	37*58.075'	121*18.416'
229	Smith Canal @ Yosemite Lake	10-Jan-01	16:45	COL100101SMTH-MB1	35.40	17:30	10-Jan-01	35.00	13:30	11-Jan-01	10:1	49	48	>2419.2	49	29	5794		
230	Smith Canal @ Yosemite Lake	24-Jan-01	12:30	COL240101SMTH-MB1	35.00	14:00	24-Jan-01	35.00	9:30	25-Jan-01	10:1	49	48	>2419.2	46	14	1669	37*58.078'	121*18.419'
231	Smith Canal @ Yosemite Lake	27-Jan-01	10:50	COL270101SMTH-MB1	34.00	12:00	27-Jan-01	35.00	8:00	28-Jan-01	10:1	49	48	>2419.2	49	15	2613	37*58.078'	121*18.420'
232	Smith Canal @ Yosemite Lake	10-Feb-01	12:22	COL100201SMTH-LC1	35.00	14:20	10-Feb-01	35.00	10:20	11-Feb-01	20:1	49	48	>48384	40	12	2078		
233	Smith Canal @ Yosemite Lake	11-Feb-01	12:20	COL110201SMTH-LC1	35.00	14:00	11-Feb-01	35.00	10:00	12-Feb-01	20:1	49	48	>48384	44	9	2446		
234	Smith Canal @ Yosemite Lake	05-Mar-01	14:50	COL050301SMTH-LC1	35.00	17:30	05-Mar-01	35.00	15:00	06-Mar-01	20:1	49	48	>48384	49	46	39725.6		
235	Smith Canal @ Yosemite Lake	14-Mar-01	13:29	COL140301SMTH-LC1	35.00	15:40	14-Mar-01	35.00	9:50	15-Mar-01	20:1	45	14	3058	6	1	148		
236	Smith Canal @ Yosemite Lake	20-Mar-01	10:47	COL200301SMTH-LC1	35.00	12:45	20-Mar-01	35.00	10:30	21-Mar-01	10:1	49	23	4106	8	0	86		
237	Smith Canal @ Yosemite Lake	26-Mar-01	14:36	COL260301SMTH-LC1	35.00	17:30	26-Mar-01	35.00	13:30	27-Mar-01	20:1	49	48	>48384	49	28	10950	37*58.076'	121*18.412'
238	Smith Canal @ Yosemite Lake	12-Apr-01	9:50	COL120401SMTH-LC1	35.00	17:00	12-Apr-01	35.00	13:00	13-Apr-01	20:1	49	48	>48384	28	1	820		
239	Smith Canal @ Yosemite Lake	21-Apr-01	13:31	COL210401SMTH-LC1	35.00	16:30	21-Apr-01	35.00	12:30	22-Apr-01	20:1	49	48	>48384	49	46	39725.6		
240	Walker Slough @ Manthey Rd.	11-Oct-00	11:00	COL111000WLKR-DW1	35.00	14:00	11-Oct-00	35.00	9:30	12-Oct-00	20:1	49	48	>48384	49	23	8212	37*55.019'	121*17.490'
241	Walker Slough @ Manthey Rd.	30-Oct-00	16:05	COL301000WLKR-MB1	35.00	16:45	30-Oct-00	35.00	13:00	31-Oct-00	50:1	49	48	>120960	43	11	6055	37*55.018'	121*17.491'
242	Walker Slough @ Manthey Rd.	06-Dec-00	14:45	COL061200WLKR-MB1	35.00	15:30	06-Dec-00	35.00	11:30	07-Dec-00	10:1	25	3	379	3	0	31	37*55.015'	121*17.480'
243	Walker Slough @ Manthey Rd.	08-Jan-01	15:00	COL080101WLKR-MB1	35.00	16:10	08-Jan-01	35.00	12:00	09-Jan-01	10:1	49	48	>2419.2	49	13	2359	37*55.012'	121*17.490'
244	Walker Slough @ Manthey Rd.	11-Jan-01	16:55	COL110101WLKR-MB1	34.50	17:30	11-Jan-01	34.50	13:30	12-Jan-01	10:1	49	48	>2419.2	49	23	4106		
245	Walker Slough @ Manthey Rd.	24-Jan-01	13:00	COL240101WLKR-MB1	35.00	14:00	24-Jan-01	35.00	9:30	25-Jan-01	10:1	49	48	>2419.2	41	5	906.0	37*55.004'	121*17.497'
246	Walker Slough @ Manthey Rd.	10-Feb-01	12:35	COL100201WLKR-LC1	35.00	14:20	10-Feb-01	35.00	10:20	11-Feb-01	20:1	49	48	>48384	17	3	480		
247	Walker Slough @ Manthey Rd.	11-Feb-01	13:15	COL110201WLKR-LC1	35.00	14:00	11-Feb-01	35.00	10:00	12-Feb-01	20:1	49	48	>48384	47	14	3700		
248	Walker Slough @ Manthey Rd.	05-Mar-01	16:28	COL050301WLKR-LC1	35.00	17:30	05-Mar-01	35.00	15:00	06-Mar-01	20:1	49	48	>48384	49	44	31061.4		
249	Walker Slough @ Manthey Rd.	14-Mar-01	14:13	COL140301WLKR-LC1	35.00	15:40	14-Mar-01	35.00	9:50	15-Mar-01	20:1	45	8	2548	11	0	244		
250	Walker Slough @ Manthey Rd.	20-Mar-01	11:23	COL200301WLKR-LC1	35.00	12:45	20-Mar-01	35.00	10:30	21-Mar-01	10:1	49	17	2909	8	0	86		
251	Walker Slough @ Manthey Rd.	26-Mar-01	15:35	COL260301WLKR-LC1	35.00	17:30	26-Mar-01	35.00	13:30	27-Mar-01	20:1	49	48	>48384	49	17	5818		
252	Walker Slough @ Manthey Rd.	12-Apr-01	11:00	COL120401WLKR-LC1	35.00	17:00	12-Apr-01	35.00	13:00	13-Apr-01	20:1	49	33	14,540	6	2	168		
253	Walker Slough @ Manthey Rd.	21-Apr-01	14:14	COL210401WLKR-LC1	35.00	16:30	21-Apr-01	35.00	12:30	22-Apr-01	20:1	49	48	>48384	23	3	682		
254	Walker Slough @ Turnpike Rd.	04-May-00	17:30	COL040500WLKR-RK	35.00	17:30	04-May-00	35.50	11:30	05-May-00	1:1	49	48	>2419.2	49	14	248		
255	Walker Slough @ Turnpike Rd.	07-Aug-00	14:20	COL070800WLKR-JL1	35.00	15:38	07-Aug-00	35.50	12:00	08-Aug-00	1:1	49	48	>2419.2	49	22	387.3	37*55.015'	121*17.416'
256	Walker Slough @ Turnpike Rd.	14-Aug-00	12:47	COL140800WLKR-JF1	35.50	13:40	14-Aug-00	35.50	10:00	15-Aug-00	1:1	49	48	>2419.2	47	23	259.5	37*55.030'	121*17.423'

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Site	Date	Collect Time	Sample ID	Start Temp	Start Time	Start Date	End Temp	End Time	End Date	Ratio	Large Wells Total	Small Wells Total	MPN Total	Large Wells col	Small Wells col	MPN col	Northing	Westing
257	Walker Slough @ Turnpike Rd.	18-Aug-00	14:45	COL188900WLKR-JF	35.50	15:00	18-Aug-00	35.50	11:30	19-Aug-00	1:1	49	48	>2419.2	49	37	920.8		
258	Walker Slough @ Turnpike Rd.	22-Aug-00	15:05	COL228000WLKR-JL	35.00	16:00	22-Aug-00	34.60	13:00	23-Aug-00	1:1	49	48	>2419.2	44	12	133.2		
259	Walker Slough @ Turnpike Rd.	28-Aug-00	12:30	COL280800WLKR-MB1	34.00	13:15	28-Aug-00	35.00	9:15	29-Aug-00	1:1	49	48	>2419.2	49	19	325.5		
260	Walker Slough @ Turnpike Rd.	20-Sep-00	12:00	COL200900WLKR-MB1	36.00	14:00	20-Sep-00	35.00	11:00	21-Sep-00	1:1	49	48	>2419.2	49	21	365.4		
261	Walker Slough @ Turnpike Rd.	04-Oct-00	12:45	COL041000WLKR-MB1	35.50	13:30	04-Oct-00	35.00	9:30	05-Oct-00	10:1	49	48	>24192	23	3	341	37*55.017'	121*17.422'
262	Walker Slough @ Turnpike Rd.	10-Oct-00	16:09	COL101000WLKR-MB1	35.50	17:10	10-Oct-00	35.00	13:10	11-Oct-00	10:1	49	48	>24192	49	46	19862.8		
263	Walker Slough @ Turnpike Rd.	19-Oct-00	16:40	COL191000WLKR-MB1	35.50	17:20	19-Oct-00	35.00	15:30	20-Oct-00	10:1	49	47	24191.7	42	10	1106	37*55.017'	121*17.419'
264	Walker Slough @ Turnpike Rd.	11-Nov-00	11:30	COL111100WLKR-MB1	34.00	12:00	11-Nov-00	35.00	8:00	12-Nov-00	10:1	49	35	8164	19	0	233	37*55.013'	121*17.425'
265	Walker Slough @ Turnpike Rd.	21-Nov-00	10:25	COL211100WLKR-SH2	35.00	13:00	21-Nov-00	35.00	9:00	22-Nov-00	10:1	49	16	2755	4	0	41	37*55.015'	121*17.423'
266	Walker Slough @ Turnpike Rd.	21-Nov-00	10:25	COL211100WLKR-SH1	35.00	13:05	21-Nov-00	35.00	9:05	22-Nov-00	10:1	49	13	2359	10	0	110	37*55.015'	121*17.423'
267	Walker Slough @ Turnpike Rd.	28-Nov-00	13:15	COL281100WLKR-SH1	36.00	14:20	28-Nov-00	35.00	10:20	29-Nov-00	10:1	49	22	3873	5	0	52	37*55.017'	121*17.420'
268																			

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Site	Date	Collect time	Sample IDs	Start Temp	Start Time	Start Date	End Temp	End Time	End Date	Ratio	Large Wells Total	Small Wells Total	MPN Total	Large Wells 1 col	Small Wells 2 col	MPN 1 col	Northings	Westings
269	Listing of sites outside Stockton, CA																		
270	Avena Drain @ Avena Rd.	10-Jan-01	12:00	COL100101AVND-SH1	35.00	13:00	10-Jan-01	35.00	8:45	11-Jan-01	20:1	49	48	>48384	49	48	>48384		
271	Avena Drain @ Avena Rd.	12-Jan-01	10:30	COL120101AVND-MB1	35.00	11:30	12-Jan-01	35.00	7:15	13-Jan-01	20:1	49	48	>48384	49	40	22397		
272	Avena Drain @ Brennan Rd.	03-Nov-00	12:00	COL031100AVND-MB1	33.50	13:00	03-Nov-00	35.00	9:00	04-Nov-00	100:1	49	48	>241920	3	1410			
273	Avena Drain @ Carrolton Rd.	25-Oct-00	10:55	DRY251000AVND-MB3	35.50	12:05	25-Oct-00	35.00	9:05	26-Oct-00	1:1	49	48	>2419.2	49	48	>2419.2		
274	Avena Drain @ Carrolton Rd.	08-Nov-00	11:00	DRY081100AVND-MB2	35.00	12:30	08-Nov-00	35.00	8:30	09-Nov-00	100:1	49	48	>241920	46	12	15650	37°50.781'	121°04.316'
275	Avena Drain @ Carrolton Rd.	12-Jan-01	10:15	DRY120101AVND-MB1	35.00	11:30	12-Jan-01	35.00	7:15	13-Jan-01	20:1	49	48	>48384	49	30	12262		
276	Avena Drain @ Jack Tone Rd.	25-Oct-00	10:30	DRY251000AVND-MB1	35.50	12:05	25-Oct-00	35.00	9:05	26-Oct-00	1:1	49	48	>2419.2	49	45	1732.87		
277	Avena Drain @ Jack Tone Rd.	03-Nov-00	10:50	DRY031100AVND-MB1	33.50	13:00	03-Nov-00	35.00	9:00	04-Nov-00	100:1	49	22	38730	7	0	740		
278	Avena Drain @ Murphy Rd.	25-Oct-00	10:45	DRY251000AVND-MB2	35.50	12:05	25-Oct-00	35.00	9:05	26-Oct-00	1:1	49	48	>2419.2	49	48	>2419.2		
279	Avena Drain @ Murphy Rd.	03-Nov-00	11:05	DRY031100AVND-MB2	33.50	13:00	03-Nov-00	35.00	9:00	04-Nov-00	100:1	49	48	>241920	23	4	3540		
280	Avena Drain @ Murphy Rd.	08-Nov-00	10:45	DRY081100AVND-MB1	35.00	12:30	08-Nov-00	35.00	8:30	09-Nov-00	100:1	49	43	141360	1	0	100	37°51.049'	121°06.513'
281	Avena Drain @ Van Allen Rd.	03-Nov-00	11:45	COL031100AVND-MB2	33.50	13:00	03-Nov-00	35.00	9:00	04-Nov-00	100:1	49	48	>241920	22	7	3770		
282	Avena Drain @ Van Allen Rd.	08-Nov-00	11:30	COL081100AVND-MB1	35.00	12:30	08-Nov-00	35.00	8:30	09-Nov-00	100:1	49	47	241917	12	0	1350	37°50.272'	121°03.209'
283	Avena Drain @ Van Allen Rd.	12-Jan-01	10:35	COL120101AVND-MB2	35.00	11:30	12-Jan-01	35.00	7:15	13-Jan-01	20:1	49	48	>48384	49	37	18416		
284	Bear Creek @ I-5	08-Jan-01	12:50	COL080101BRCR-MB1	35.00	16:10	08-Jan-01	35.00	12:00	09-Jan-01	10:1	20	6	328	3	0	31	38°02.610'	121°22.249'
285	Bear Creek @ Thornton Rd.	05-Dec-00	15:20	COL051200BRCR-MB1	35.00	16:45	05-Dec-00	35.00	12:45	06-Dec-00	10:1	49	27	5172	27	0	374		
286	Bear Creek @ Thornton Rd.	12-Apr-01	10:00	COL120401BRCR-LC1	35.00	17:00	12-Apr-01	35.00	13:00	13-Apr-01	20:1	49	23	8,212	0	0	<20		
287	Beaver Slough @ Blossom Road	14-Nov-00	12:40	COL141100BVRS-MB1	35.00	13:35	14-Nov-00	35.00	9:30	15-Nov-00	10:1	22	3	323	0	0	0	38°12.307'	121°26.845'
288	Bethany Reservoir State Rec. A rea	07-Nov-00	11:40	COL071100BTHN-MB1	35.00	15:00	07-Nov-00	35.00	13:00	08-Nov-00	10:1	45	10	1354	17	0	203	37°46.866'	121°36.953'
289	Bethel Island @ Bethel Harbor	09-Nov-00	11:30	COL091100BTHL-SH1	35.00	14:30	09-Nov-00	35.00	9:30	10-Nov-00	10:1	13	2	171	2	0	20	38°02.035'	121°37.236'
290	Bethel Island @ Frank's Cove	09-Nov-00	12:15	COL091100BTHL-SH4	35.00	14:30	09-Nov-00	35.00	9:30	10-Nov-00	10:1	19	5	298	4	0	41	38°01.295'	121°36.569'
291	Bethel Island @ Russo's Marina	09-Nov-00	11:50	COL091100BTHL-SH3	35.00	14:30	09-Nov-00	35.00	9:30	10-Nov-00	10:1	13	2	171	2	0	20	38°02.035'	121°37.236'
292	Bethel Island @ Russo's Marina	09-Nov-00	11:50	COL091100BTHL-SH2	35.00	14:30	09-Nov-00	35.00	9:30	10-Nov-00	10:1	16	1	201	1	0	10	38°02.035'	121°37.236'
293	Buckley Cove	25-Apr-00	10:15	COL250400BCKL-JF	34.00	12:20	25-Apr-00	35.00	8:10	26-Apr-00	1:1	49	40	1119.85	34	2	57.6		
294	Buckley Cove	02-May-00	12:03	COL020500BCKL-RK1	35.50	13:30	02-May-00	35.50	9:30	03-May-00	1:1	49	45	1732.87	24	3	35.9		
295	Buckley Cove	13-Jun-00	11:40	COL130600BCKL-JF1	35.00	13:00	13-Jun-00	35.00	11:00	14-Jun-00	1:1	49	48	>2419.2	38	8	88.4		
296	Buckley Cove	09-Aug-00	14:15	COL090800BCKL-JL2	35.00	16:30	09-Aug-00	35.50	13:40	10-Aug-00	1:1	49	48	>2419.2	29	4	48	37°58.633'	121°22.476'
297	Buckley Cove	09-Aug-00	12:30	COL090800BCKL-JL1	35.00	16:30	09-Aug-00	35.50	13:40	10-Aug-00	1:1	49	47	2419.17	27	8	49.6	37°58.639'	121°22.476'
298	Buckley Cove	18-Sep-00	10:20	COL180900BCKL-MB1	35.00	12:00	18-Sep-00	35.00	9:00	19-Sep-00	1:1	49	47	2419.17	24	0	31.7		
299	Buckley Cove	10-Nov-00	11:15	COL101100BCKL-MB1	35.00	13:00	10-Nov-00	34.50	9:15	11-Nov-00	10:1	44	5	1086	2	2	41	37°58.637'	121°22.505'
300	Devil's Isle	12-Oct-00	11:45	COL121000DVLS-MB1	35.00	15:10	12-Oct-00	35.00	11:10	13-Oct-00	20:1	28	5	944	1	0	20	38°05.507'	121°29.514'
301	Disappointment Slough	29-Aug-00	11:50	COL290800DSPP-MB1	35.00	14:00	29-Aug-00	35.50	10:00	30-Aug-00	1:1	49	48	>2419.2	24	0	31.7	38°02.670'	121°26.834'
302	Disappointment Slough	29-Aug-00	12:00	COL290800DSPP-MB2	35.00	14:00	29-Aug-00	35.50	10:00	30-Aug-00	1:1	49	47	2419.17	21	13	44.1	38°02.496'	121°26.697'
303	Disappointment Slough	29-Aug-00	12:15	COL290800DSPP-MB3	35.00	14:00	29-Aug-00	35.50	10:00	30-Aug-00	1:1	49	47	2419.17	6	2	8.2	38°02.527'	121°26.357'
304	Dredger cut	15-Aug-00	11:40	COL150800DRDG-JL1	35.00	14:20	15-Aug-00	34.50	10:30	16-Aug-00	1:1	49	48	>2419.2	30	9	58.8	38°05.220'	121°24.327'
305	Duck Creek @ Pock Lane	07-Aug-00	14:38	COL070800DCKC-JL	35.00	15:38	07-Aug-00	35.00	12:00	08-Aug-00	1:1	49	48	>2419.2	40	12	103.9	37°55.621'	121°14.636'
306	Duck Creek @ Pock Lane	12-Apr-01	11:30	COL120401DCKC-LC1	35.00	17:00	12-Apr-01	35.00	13:00	13-Apr-01	20:1	45	9	2,626	0	0	<20		
307	Dutch Slough @ Bethel Island	09-Nov-00	12:25	COL091100DTCH-SH1	35.00	14:30	09-Nov-00	35.00	9:30	10-Nov-00	10:1	28	5	472	0	0	<10	38°00.781'	121°38.468'
308	Fourteen Mile Slough	04-Jul-00	13:20	COL040700FRTN-BJ	35.50	16:45	04-Jul-00	35.50	14:30	05-Jul-00	1:1	49	48	>2419.2	45	16	162.4		
309	Fourteen Mile Slough	16-Jul-00	10:35	COL160700FRTN-BJ	35.00	14:30	16-Jul-00	35.50	12:00	17-Jul-00	1:1	49	48	>2419.2	37	4	71.2		
310	Fourteen Mile Slough	09-Aug-00	13:09	COL090800FRTN-JL1	35.00	16:30	09-Aug-00	35.50	13:40	10-Aug-00	1:1	49	48	>2419.2	25	2	35	38°00.803'	121°23.038'
311	Fourteen Mile Slough	09-Aug-00	14:51	COL090800FRTN-JL2	35.00	16:30	09-Aug-00	35.50	13:40	10-Aug-00	1:1	49	48	>2419.2	17	4	25.3	38°00.807'	121°23.041'
312	Fourteen Mile Slough	12-Sep-00	10:54	COL120900FRTN-MB1	36.00	11:35	12-Sep-00	35.00	9:30	13-Sep-00	1:1	49	48	>2419.2	31	4	52.9		
313	Fourteen Mile Slough	21-Sep-00	11:01	COL210900FRTN-MB1	35.50	12:45	21-Sep-00	35.00	9:00	22-Sep-00	1:1	49	48	>2419.2	18	2	24.3	37°59.802'	121°24.643'
314	Fourteen Mile Slough	02-Nov-00	11:15	COL021100FRTN-MB1	35.00	12:25	02-Nov-00	34.50	9:00	03-Nov-00	10:1	49	14	2481	5	0	52	37°59.809'	121°24.631'
315	Fourteen-Mile Slough @ Feather River Dr.	06-Dec-00	13:15	COL061200FRTN-MB1	35.00	15:30	06-Dec-00	35.00	11:30	07-Dec-00	10:1	22	2	309	6	1	74	37°59.731'	121°21.007'
316	Fourteen-Mile Slough @ Feather River Dr.	08-Jan-01	13:55	COL080101FRTN-MB1	35.00	16:10	08-Jan-01	35.00	12:00	09-Jan-01	10:1	49	24	4350	16	2	213	37°59.729'	121°21.010'
317	Fourteen-Mile Slough @ Feather River Dr.	12-Apr-01	10:15	COL120401FRTN-LC1	35.00	17:00	12-Apr-01	35.00	13:00	13-Apr-01	20:1	49	27	10344	1	0	20		
318	French Camp Slough	11-Sep-00	10:15	COL110900FRNC-MB1	35.00	14:00	11-Sep-00	35.00	10:00	12-Sep-00	1:1	49	48	>2419.2	49	18	307.6	37°55.071'	121°18.917'
319	French Camp Slough	26-Sep-00	10:10	COL260900FRNC-MB1	35.00	12:30	26-Sep-00	35.00	9:00	27-Sep-00	10:1	49	44	15530.7	20	2	226	37°55.112'	121°19.009'
320	French Camp Slough	09-Oct-00	10:50	COL091000FRNC-MB1	35.00	12:40	09-Oct-00	34.50	10:00	10-Oct-00	10:1	49	41	12033.1	29	5	496	37°55.116'	121°19.010'
321	French Camp Slough	31-Oct-00	11:05	COL311000FRNC-SH1	35.00	13:00	31-Oct-00	35.00	10:40	01-Nov-00	20:1	46	10	7335	0	0	0	37°55.217'	121°19.133'
322	Grant Line Canal	07-Nov-00	13:00	COL071100GRNT-MB1	35.00	15:00	07-Nov-00	35.00	13:00	08-Nov-00	10:1	40	3	809	2	1	30	37°49.152'	121°27.029'
323	Haven Acres	19-Sep-00	12:15	COL190900HVNC-MB1	35.00	14:00	19-Sep-00	35.00	10:00	20-Sep-00	1:1	49	48	>2419.2	6	0	6.3	37°51.030'	121°19.316'

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Sta.	Date	Collect time	Sample ID	Start Temp.	Start Time	Start Date	End Temp.	End Time	End Date	Ratio	Large Well Total	Small Well Total	MPN Total	Large Well Total	Small Well Total	MPN Total	Northing	Westing
324	Herman & Helens	04-Jul-00	14:48	COL040700HRMN-BJ	35.00	16:45	04-Jul-00	35.00	14:30	05-Jul-00	1:1	49	48	>2419.2	16	2	21.3		
325	Herman & Helens	12-Oct-00	13:29	COL131000HRMN-MB2	35.00	15:10	12-Oct-00	35.00	11:10	13-Oct-00	20:1	22	4	672	0	0	0	38°03.540'	121°30.061'
326	Herman & Helens	12-Oct-00	13:29	COL121000HRMN-MB1	35.00	15:10	12-Oct-00	35.00	11:10	13-Oct-00	20:1	18	7	614	0	0	0	38°03.540'	121°30.061'
327	Herman & Helens	14-Oct-00	16:20	COL141000HRMN-MB1	35.00	17:20	14-Oct-00	35.00	14:45	15-Oct-00	20:1	49	39	20924.8	30	2	942		
328	Herman & Helens	13-Nov-00	11:30	COL131000HRMN-MB1	35.00	13:55	13-Nov-00	35.00	10:00	14-Nov-00	20:1	25	2	728	2	0	40	38°03.634'	121°29.993'
329	King Island Resort	10-Mar-00	11:00	COL031000KNCS-SH1	35.00	13:52	10-Mar-00	34.50	10:00	10-Apr-00	10:1	35	7	703	0	0	<1	38°03.306'	121°27.548'
330	King Island Resort	13-Jun-00	10:57	COL130600KNCS-JF1	35.00	13:00	13-Jun-00	35.00	10:00	14-Jun-00	1:1	49	40	1119.85	4	0	4.1		
331	King Island Resort	04-Jul-00	14:45	COL040700KNCS-BJ	35.00	14:25	04-Jul-00	35.50	16:45	05-Jul-00	1:1	49	38	980.4	10	3	14.3		
332	King Island Resort	29-Aug-00	11:25	COL290800KNCS-MB1	35.00	14:00	29-Aug-00	35.00	9:15	30-Aug-00	1:1	49	43	1413.6	16	2	21.3		
333	King Island Resort	17-Oct-00	15:15	COL171000KNCS-MB1	33.50	17:25	17-Oct-00	36.00	14:45	18-Oct-00	10:1	20	7	341	2	1	30	38°03.295'	121°27.567'
334	Lazy M Marina	07-Nov-00	11:15	COL071100LZYM-MB1	35.00	15:00	07-Nov-00	35.00	13:00	08-Nov-00	10:1	44	17	1541	1	4	50	37°56.223'	121°36.214'
335	Lincoln Village West	25-Apr-00	11:00	COL250400LNVW-JF	34.00	12:20	25-Apr-00	35.00	8:10	26-Apr-00	1:1	49	29	579.4	23	4	58.5		
336	Lincoln Village West	02-May-00	12:35	COL020500LNVW-RK1	35.50	13:30	02-May-00	35.00	9:30	03-May-00	1:1	49	42	1299.65	38	20	113.9		
337	Lincoln Village West	24-May-00	10:45	COL240500LNVW-RK	35.10	11:30	24-May-00	35.00	8:45	25-May-00	1:1	49	42	1299.65	19	5	29.8		
338	Lincoln Village West	01-Jun-00	10:30	COL010600LNVW-RK	35.00	11:30	01-Jun-00	35.00	7:10	02-Jun-00	1:1	49	45	1732.87	44	13	137.4		
339	Lincoln Village West	13-Jun-00	10:14	COL130600LNVW-JF1	35.00	13:00	13-Jun-00	35.00	10:00	14-Jun-00	1:1	49	47	2419.17	49	21	365.4		
340	Lincoln Village West	21-Jun-00	11:31	COL210600LNVW-JF	35.50	14:00	21-Jun-00	35.00	10:00	22-Jun-00	1:1	49	41	1203.31	38	8	83.9		
341	Lincoln Village West	30-Jun-00	10:50	COL300600LNVW-JF	35.50	12:00	30-Jun-00	35.00	9:45	01-Jul-00	1:1	49	45	1732.87	20	3	28.8		
342	Lincoln Village West	04-Jul-00	13:45	COL040700LNVW-BJ	35.00	16:45	04-Jul-00	35.00	14:30	05-Jul-00	1:1	49	48	>2419.2	49	10	125.9		
343	Lincoln Village West	16-Jul-00	10:50	COL160700LNVW-BJ	35.00	14:30	16-Jul-00	35.00	12:00	17-Jul-00	1:1	49	44	1553.07	35	11	78.4		
344	Lincoln Village West	29-Aug-00	10:24	COL290800LNVW-MB1	35.00	12:30	29-Aug-00	35.00	9:00	30-Aug-00	1:1	49	48	>2419.2	36	8	75.9		
345	Lincoln Village West	12-Sep-00	10:36	COL120900LNVW-MB1	36.00	11:35	12-Sep-00	35.00	9:30	13-Sep-00	1:1	49	37	920.8	19	7	32.4		
346	Lincoln Village West	21-Sep-00	10:36	COL210900LNVW-MB1	35.50	12:45	21-Sep-00	35.00	9:00	22-Sep-00	1:1	49	48	>2419.2	48	17	238.2	38°00.008'	121°22.185'
347	Lincoln Village West	03-Oct-00	11:54	COL031000LNVW-MB1	35.00	13:52	03-Oct-00	34.50	10:00	04-Oct-00	10:1	49	25	4611	5	0	52		
348	Lincoln Village West	02-Nov-00	10:45	COL021100LNVW-SH1	35.00	12:25	02-Nov-00	34.50	9:00	03-Nov-00	10:1	45	11	1396	4	1	52	37°59.963'	121°22.190'
349	Lincoln Village West	10-Nov-00	10:40	COL101100LNVW-MB1	35.00	13:00	10-Nov-00	34.50	9:15	11-Nov-00	10:1	48	16	2282	6	2	84	38°00.009'	121°22.185'
350	Lincoln Village West	30-Nov-00	10:15	COL301100LNVW-MB1	35.00	11:50	30-Nov-00	35.00	9:00	01-Dec-00	10:1	22	6	364	2	1	30	38°00.078'	121°22.181'
351	Lincoln Village West	25-Jan-01	11:36	COL250101LNVW-MB1	35.00	13:20	25-Jan-01	35.00	9:00	26-Jan-01	10:1	25	3	379	8	0	86	38°00.077'	121°22.201'
352	Lost Isle	30-Jun-00	10:30	COL030600LSTS-JF	35.50	12:00	30-Jun-00	35.00	9:45	01-Jul-00	1:1	49	48	>2419.2	18	1	23.1		
353	Lost Isle	04-Jul-00	13:25	COL040700LSTS-BJ	35.00	16:45	04-Jul-00	35.00	14:30	05-Jul-00	1:1	49	45	1732.87	32	9	64.5		
354	Lost Isle	17-Oct-00	15:45	COL171000LSTS-MB1	33.50	17:25	17-Oct-00	36.00	14:45	18-Oct-00	10:1	43	10	117.8	1	0	10	37°59.964'	121°27.012'
355	Mokelumne River @ B & W Marina	14-Nov-00	11:10	COL141100MKLM-MB1	35.00	13:35	14-Nov-00	35.00	9:30	15-Nov-00	10:1	30	13	657	3	0	31	38°07.640'	121°34.792'
356	Mossdale Marina	19-Sep-00	11:45	COL190900MSSD-MB1	35.00	14:00	19-Sep-00	35.00	10:00	20-Sep-00	1:1	49	48	>2419.2	14	0	16.1	37°47.185'	121°18.446'
357	Oakwood lake	19-Sep-00	11:20	COL190900OKWD-MB1	35.00	14:00	19-Sep-00	35.00	10:00	20-Sep-00	1:1	49	47	2419.17	16	2	21.3		
358	Old River @ Heinbockle Harbor	07-Nov-00	13:10	COL071100OLDR-MB1	35.00	15:00	07-Nov-00	35.00	13:00	08-Nov-00	10:1	49	32	6867	3	0	31	37°48.292'	121°26.976'
359	Old River @ Holland Riverside	09-Nov-00	12:50	COL091100OLDR-SH1	35.00	14:30	09-Nov-00	35.00	9:30	10-Nov-00	10:1	21	0	265	3	0	31	37°58.352'	121°34.928'
360	Old River @ Rock Barrier	16-Nov-00	9:50	COL161100OLDR-SH1	0.57	0:00	16-Nov-00	0.40	0:00	17-Nov-00	10:1	46	10	1467	1	1	20	37°48.469'	121°19.672'
361	Old River @ Rock Barrier	16-Nov-00	9:50	COL161100OLDR-SH2	0.54	0:00	16-Nov-00	0.38	0:00	17-Nov-00	10:1	49	16	2755	4	0	41	37°48.469'	121°19.672'
362	Old River @ Stewart Rd.	16-Nov-00	10:25	COL161100OLDR-SH4	35.00	13:00	16-Nov-00	35.00	9:00	17-Nov-00	10:1	49	22	3873	1	0	10	37°48.874'	121°22.893'
363	Old River @ Stewart Rd.	16-Nov-00	10:25	COL161100OLDR-SH3	35.00	13:40	16-Nov-00	35.00	9:30	17-Nov-00	10:1	43	8	1112	2	0	20	37°48.874'	121°22.893'
364	Paradise Cut @ Paradise Cut Road	16-Nov-00	10:45	COL161100PRDS-SH2	35.00	13:00	16-Nov-00	35.00	9:00	17-Nov-00	10:1	49	15	2613	3	1	41	37°48.068'	121°22.039'
365	Paradise Cut @ Paradise Cut Road	16-Nov-00	10:45	COL161100PRDS-SH1	35.00	13:40	16-Nov-00	35.00	9:30	17-Nov-00	10:1	37	7	776	5	1	63	37°48.068'	121°22.039'
366	Paradise Point Marina	04-Jul-00	14:10	COL040700PRDS-BJ	35.00	16:45	04-Jul-00	35.00	14:30	05-Jul-00	1:1	49	48	>2419.2	8	0	8.6		
367	Paradise Point Marina	16-Jul-00	11:35	COL160700PRDS-BJ	35.00	14:30	16-Jul-00	35.00	12:00	17-Jul-00	1:1	49	45	1732.87	9	0	9.8		
368	Paradise Point Marina	15-Aug-00	11:06	COL150800PRDS-JL1	35.00	14:20	15-Aug-00	35.00	10:30	16-Aug-00	1:1	49	48	>2419.2	14	3	19.7	38°02.671'	121°25.166'
369	Paradise Point Marina	29-Aug-00	12:30	COL290800PRDS-MB1	35.00	14:00	29-Aug-00	35.50	10:00	30-Aug-00	1:1	49	48	>2419.2	37	8	79.8		
370	Paradise Point Marina	03-Oct-00	11:26	COL031000PRDS-SH1	35.00	13:52	03-Oct-00	34.50	10:00	04-Oct-00	10:1	45	9	1313	0	0	0	38°02.576'	121°25.043'
371	Potato Slough	12-Oct-00	12:05	COL121000PTTS-MB1	35.00	15:10	12-Oct-00	35.00	11:10	13-Oct-00	20:1	17	10	658	0	0	0	38°05.045'	121°32.293'
372	Sacramento River @ Rio Vista Boat Launch	14-Nov-00	10:45	COL141100SCRM-MB1	35.00	13:35	14-Nov-00	35.00	9:30	15-Nov-00	10:1	34	8	689	3	0	3.1	38°09.267'	121°41.403'
373	San Joaquin River @ Beach	08-Jun-00	10:35	COL080600SNJQ-RK1	35.00	11:45	08-Jun-00	35.00	9:00	09-Jun-00	1:1	49	48	>2419.2	13	0	14.8		
374	San Joaquin River @ Beach	09-Jun-00	10:55	COL090600SNJQ-RK1	35.00	11:45	09-Jun-00	35.00	9:30	10-Jun-00	1:1	49	48	>2419.2	17	3	24		
375	San Joaquin River @ Beach	11-Sep-00	10:00	COL110900SNJQ-MB1	35.00	14:00	11-Sep-00	35.00	10:00	12-Sep-00	1:1	49	48	>2419.2	7	0	7.4		
376	San Joaquin River @ Confluence of French Camp Slough	23-Oct-00	11:03	COL231000SNJQ-MB2	35.00	15:35	23-Oct-00	35.60	13:30	24-Oct-00	10:1	49	36	8660	13	1	160	37°55.217'	121°19.128'

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Site	Date	Collect time	Sample ID#	Start Temp	Start Time	Start Date	End Temp	End Time	End Date	Ratio	Large Wells Total	Small Wells Total	MPN Total	Large Wells coll.	Small Wells coll.	MPN coll.	Northings	Westings
377	San Joaquin River @ Confluence of French Camp Slough	17-Nov-00	10:30	COL171100SNJQ-MB1	35.00	11:45	17-Nov-00	35.50	8:45	18-Nov-00	10:1	42	16	1301	2	0	20	37°55.213'	121°19.129'
378	San Joaquin River @ MUD Downstream	05-Sep-00	10:35	COL050900SNJQ-MB2	35.00	12:10	05-Sep-00	35.00	9:10	06-Sep-00	1:1	49	48	>2419.2	42	11	113.7		
379	San Joaquin River @ MUD Downstream	11-Sep-00	10:30	COL110900SNJQ-MB2	35.00	12:15	11-Sep-00	35.00	9:00	12-Sep-00	1:1	49	48	>2419.2	29	0	41.6	37°56.353'	121°20.611'
380	San Joaquin River @ MUD Downstream	19-Sep-00	12:45	COL190900SNJQ-MB1	35.00	13:30	19-Sep-00	35.00	9:30	20-Sep-00	1:1	49	48	>2419.2	29	2	44.8		
381	San Joaquin River @ MUD Downstream	09-Oct-00	11:15	COL091000SNJQ-MB3	34.00	12:40	09-Oct-00	34.50	10:00	10-Oct-00	10:1	49	47	24191.7	5	3	84	37°56.498'	121°20.748'
382	San Joaquin River @ MUD Downstream	31-Oct-00	11:25	COL311000SNJQ-SH3	35.00	13:00	31-Oct-00	35.00	10:30	01-Nov-00	20:1	49	24	8704	10	4	310	37°56.572'	121°20.708'
383	San Joaquin River @ MUD Downstream	17-Nov-00	10:55	COL171100SNJQ-MB4	35.00	11:45	17-Nov-00	35.00	8:45	18-Nov-00	10:1	40	9	959	2	0	20	37°56.530'	121°20.758'
384	San Joaquin River @ MUD Downstream	17-Nov-00	10:55	COL171100SNJQ-MB3	35.00	11:45	17-Nov-00	35.00	8:45	18-Nov-00	10:1	44	13	1374	2	1	30	37°56.530'	121°20.758'
385	San Joaquin River @ MUD Outfall	24-May-00	9:58	COL240500SNJQ-RK1	36.00	11:15	24-May-00	35.50	8:30	25-May-00	1:1	49	48	>2419.2	27	7	48.1		
386	San Joaquin River @ MUD Outfall	17-Aug-00	11:03	COL170800SNJQ-JL1	35.00	11:25	17-Aug-00	35.00	10:30	18-Aug-00	1:1	49	48	>2419.2	11	0	12.2	37°56.130'	121°19.860'
387	San Joaquin River @ MUD Outfall	24-Aug-00	10:57	COL240800SNJQ-DW1	35.00	12:13	24-Aug-00	35.00	8:50	25-Aug-00	1:1	49	48	>2419.2	24	4	37.3	37°58.293'	121°20.146'
388	San Joaquin River @ MUD Outfall	26-Sep-00	10:40	COL260900SNJQ-DR1	35.00	12:30	26-Sep-00	35.00	9:00	27-Sep-00	10:1	49	45	17328.7	6	0	63	37°56.295'	121°20.159'
389	San Joaquin River @ MUD Outfall	09-Oct-00	11:10	COL091000SNJQ-MB2	34.00	12:40	09-Oct-00	34.50	10:00	10-Oct-00	10:1	49	47	24191.7	6	1	74	37°56.283'	121°20.136'
390	San Joaquin River @ MUD Outfall	23-Oct-00	10:45	COL231000SNJQ-MB1	35.00	15:35	23-Oct-00	35.60	13:30	24-Oct-00	10:1	49	39	10462.4	2	0	20	37°56.307'	121°20.150'
391	San Joaquin River @ MUD Outfall	31-Oct-00	11:15	COL311000SNJQ-SH2	35.00	13:00	31-Oct-00	35.00	10:30	01-Nov-00	20:1	49	24	8704	3	0	60	37°56.283'	121°20.146'
392	San Joaquin River @ MUD Outfall	31-Oct-00	11:15	COL311000SNJQ-SH1	35.00	13:00	31-Oct-00	35.00	10:30	01-Nov-00	20:1	49	16	5510	1	1	40	37°56.283'	121°20.146'
393	San Joaquin River @ MUD Outfall	17-Nov-00	10:45	COL171100SNJQ-MB2	35.00	11:45	17-Nov-00	35.50	8:45	18-Nov-00	10:1	47	19	2224	2	0	20	37°56.289'	121°20.137'
394	San Joaquin River @ MUD Outfall	15-Mar-01	11:50	COL150301SNJQ-LC1	35.00	14:30	15-Mar-01	35.00	9:30	16-Mar-01	20:1	21	4	636	2	0	40		
395	San Joaquin River @ MUD Upstream	24-May-00	10:03	COL240500SNJQ-RK2	36.00	11:15	24-May-00	35.50	8:30	25-May-00	1:1	49	48	>2419.2	32	3	53.8		
396	San Joaquin River @ MUD Upstream	05-Sep-00	10:30	COL050900SNJQ-MB1	35.00	12:10	05-Sep-00	35.00	9:10	06-Sep-00	1:1	49	48	>2419.2	40	9	95.9		
397	San Joaquin River @ MUD Upstream	09-Oct-00	11:00	COL091000SNJQ-MB1	34.00	12:40	09-Oct-00	34.50	10:00	10-Oct-00	10:1	49	46	19862.8	5	0	52	37°55.780'	121°19.675'
398	San Joaquin River @ Navy Drive	30-Nov-00	9:45	COL301100SNJQ-MB1	35.00	11:50	30-Nov-00	35.00	9:00	01-Dec-00	10:1	49	44	15530.7	47	12	1723	37°56.803'	121°20.314'
399	San Joaquin River @ Port	17-Oct-00	18:15	COL171000SNJQ-MB1	33.50	17:25	17-Oct-00	36.00	14:45	18-Oct-00	10:1	49	42	12996.5	5	0	52	37°57.054'	121°20.143'
400	South Fork Mokelumne @ Westgate	14-Nov-00	11:35	COL141100MKLM-MB2	35.00	13:35	14-Nov-00	35.00	9:30	15-Nov-00	10:1	17	2	228	0	0	<10	38°07.390'	121°39.544'
401	Sycamore @ Guard Rd.	14-Nov-00	12:00	COL141100SYCM-MB1	35.00	13:35	14-Nov-00	35.00	9:30	15-Nov-00	10:1	48	14	2098	12	1	146	38°08.270'	121°25.276'
402	Telephone Cut	15-Aug-00	12:16	COL150800TLPH-JL1	35.00	14:20	15-Aug-00	34.50	10:30	16-Aug-00	1:1	49	48	>2419.2	18	1	23.1	38°04.346'	121°23.552'
403	Temple @ Mariposa	15-Nov-00	10:45	DRY151100TMPL-MB1	35.00	12:30	15-Nov-00	35.00	8:15	16-Nov-00	50:1	44	5	5430	0	0	<50	37°52.710'	121°05.226'
404	Tiki Lagun	22-Aug-00	11:20	COL220800TKLG-JL1	35.00	16:00	22-Aug-00	35.50	13:00	23-Aug-00	1:1	49	47	2419.17	6	0	6.3	37°58.700'	121°28.406'
405	Tiki Lagun	14-Sep-00	10:43	COL140900TKLG-SP1	35.00	12:00	14-Sep-00	36.00	10:00	15-Sep-00	1:1	49	43	1413.6	9	1	9.8		
406	Tiki Lagun	02-Oct-00	11:13	COL021000TKLG-MB2	35.00	12:45	02-Oct-00	35.00	9:05	03-Oct-00	10:1	46	17	1842	2	0	20	37°58.877'	121°28.383'
407	Tiki Lagun	02-Oct-00	11:02	COL021000TKLG-MB1	35.00	12:45	02-Oct-00	35.00	9:05	03-Oct-00	10:1	43	10	1178	4	0	41	37°58.702'	121°28.411'
408	Tiki Lagun	22-Mar-01	11:00	COL210301TKLG-LC-1	35.00	13:30	22-Mar-01	35.00		23-Mar-01	20:1	37	5	1466	0	0	<20		
409	Tinsley isle	16-Jul-00	12:40	COL160700TNSL-BJ	35.00	14:30	16-Jul-00	35.00	12:00	17-Jul-00	1:1	49	45	1732.87	28	10	55.2		
410	Tower Park	13-Oct-00	10:40	COL131100TWRP-MB1	35.00	13:55	13-Oct-00	35.00	10:00	14-Oct-00	20:1	40	3	1618	3	0	62	38°06.593'	121°29.998'
411	Tower Park	14-Oct-00	15:55	COL141000TWRP-MB1	35.00	17:20	14-Oct-00	35.00	14:45	15-Oct-00	1:1	49	48	>2419.2	49	18	307.6	38°06.593'	121°30.009'
412	Turner Cut	22-Aug-00	11:30	COL220800TRNR-JL1	35.00	16:00	22-Aug-00	35.50	13:00	23-Aug-00	1:1	49	48	>2419.2	8	1	9.7	37°58.870'	121°28.393'
413	Turner Cut	14-Sep-00	10:54	COL140900TRNR-SP1	35.00	12:00	14-Sep-00	36.00	10:00	15-Sep-00	1:1	49	48	>2419.2	11	1	13.4		
414	Turner Cut	14-Sep-00	11:00	COL140900TRNR-SP2	35.00	12:00	14-Sep-00	36.00	10:00	15-Sep-00	1:1	49	46	1986.28	12	1	14.6		
415	Turner Cut	02-Oct-00	10:48	COL021000TRNR-MB1	35.00	12:45	02-Oct-00	35.00	9:05	03-Oct-00	10:1	44	8	1187	2	0	20	37°58.997'	121°28.350'
416	Turner Cut	21-Mar-01	11:15	COL210301TRNR-LC1	35.00	13:30	21-Mar-01	35.00	10:30	22-Mar-01	20:1	35	3	1248	0	0	<20		
417	Vacant Lot	12-Oct-00	16:05	COL121000VCNT-MB1	35.00	17:30	12-Oct-00	35.00	13:30	13-Oct-00	20:1	49	48	>48384	49	37	18416	37°57.167'	121°18.127'
418	Weber Point	12-Oct-00	16:30	COL121000WBRP-MB1	35.00	17:30	12-Oct-00	35.00	13:30	13-Oct-00	20:1	49	48	>48384	49	16	5510	37°57.221'	121°17.553'
419	Whiskey Slough Harbor	22-Aug-00	10:53	COL220800WHSK-JL1	35.00	16:00	22-Aug-00	35.50	13:00	23-Aug-00	1:1	49	48	>2419.2	15	2	19.9	37°56.134'	121°25.956'
420	Whiskey Slough Harbor	02-Oct-00	10:40	COL021000WHSK-MB1	35.00	12:45	02-Oct-00	35.00	9:05	03-Oct-00	1:1	45	16	1624	7	0	74	37°56.127'	121°25.949'
421	White Slough	12-Oct-00	11:20	COL121000WHTS-MB1	35.00	15:10	12-Oct-00	35.00	11:10	13-Oct-00	20:1	23	4	708	1	0	20	38°04.124'	121°27.602'
422	Windmill Cove	02-May-00	12:00	COL020500WNDM-RK1	35.50	13:30	02-May-00	35.50	9:30	03-May-00	1:1	49	46	1986.27	38	6	79.4		
423	Windmill Cove	01-Jun-00	10:15	COL010600WNDM-RK	35.00	11:30	01-Jun-00	35.50	7:10	02-Jun-00	1:1	49	48	>2419.2	31	5	54.6		
424	Windmill Cove	13-Jun-00	9:47	COL130600WNDM-JF1	35.00	13:00	13-Jun-00	35.00	10:00	14-Jun-00	1:1	49	48	>2419.2	48	18	248.9		
425	Windmill Cove	21-Jun-00	11:10	COL210600WNDM-JF1	35.50	14:00	21-Jun-00	35.00	10:00	22-Jun-00	1:1	49	48	>2419.2	26	3	39.9		
426	Windmill Cove	30-Jun-00	10:15	COL030600WNDM-JF	35.50	12:00	30-Jun-00	35.00	9:45	01-Jul-00	1:1	49	48	>2419.2	48	20	272.3		
427	Windmill Cove	04-Jul-00	15:35	COL040700WNDM-MB	35.00	16:45	04-Jul-00	35.00	14:30	05-Jul-00	1:1	49	48	>2419.2	47	12	172.3		
428	Windmill Cove	06-Jul-00	11:05	COL060700WNDM-JF	35.00	12:00	06-Jul-00	35.00	12:00	07-Jul-00	1:1	49	48	>2419.2	39	7	86		
429	Windmill Cove	16-Jul-00	10:20	COL160700WNDM-BJ	35.00	14:30	16-Jul-00	35.00	12:00	17-Jul-00	1:1	49	48	>2419.2	47	21	240		
430	Windmill Cove	28-Jul-00	10:30	COL280700WNDM-JL1	35.00	12:30	28-Jul-00	35.00	9:30	29-Jul-00	1:1	49	48	>2419.2	48	14	209.8		

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Site	Date	Collect Time	Sample ID#	Start Temp	Start Time	Start Date	End Temp	End Time	End Date	Ratio	Large Wells Total	Small Wells Total	MPN total	Large Wells E. coli	Small Wells E. coli	MPN E. coli	Northings	Westings
431	Windmill Cove	09-Aug-00	14:30	COL090800WNDM-JL2	35.00	16:30	09-Aug-00	35.50	13:40	10-Aug-00	1:1	49	48	>2419.2	10	0	11	37°59.361'	121°24.551'
432	Windmill Cove	09-Aug-00	12:45	COL090800WNDM-JL1	35.00	16:30	09-Aug-00	35.50	13:40	10-Aug-00	1:1	49	48	>2419.2	12	2	14.6	37°59.357'	121°24.550'
433	Windmill Cove	15-Aug-00	13:12	COL150800WNDM-JL1	35.00	14:20	15-Aug-00	35.50	10:30	16-Aug-00	1:1	49	48	>2419.2	22	3	32.3	39°59.358'	121°24.545'
434	Windmill Cove	22-Aug-00	12:00	COL220800WNDM-JL1	35.00	16:00	22-Aug-00	34.60	13:00	23-Aug-00	1:1	49	47	2419.17	8	0	8.6	37°59.334'	121°24.559'
435	Windmill Cove	18-Sep-00	10:00	COL180900WNDM-	35.00	12:30	18-Sep-00	35.00	9:00	19-Sep-00	1:1	49	45	1732.87	5	0	5.2		
436	Windmill Cove	02-Oct-00	11:35	COL021000WNDM-	35.00	12:45	02-Oct-00	35.00	9:05	03-Oct-00	1:1	47	25	2809	1	0	10	37°59.359'	121°24.555'
437	Windmill Cove	02-Nov-00	11:25	COL021100WNDM-SH1	35.00	12:25	02-Nov-00	34.50	9:00	03-Nov-00	10:1	48	19	2602	3	1	41	37°59.407'	121°24.521'
438	Windmill Cove	20-Nov-00	10:00	COL201100WNDM-	35.00	12:15	20-Nov-00	35.00	8:00	21-Nov-00	10:1	49	22	3873	30	9	588	37°59.354'	121°24.553'
439	Windmill Cove	25-Jan-01	10:50	COL250101WNDM-	35.00	13:20	25-Jan-01	35.00	9:00	26-Jan-01	10:1	14	1	173	0	1	10	37°59.417'	121°24.516'
440	Windmill Cove	07-Mar-01	11:00	COL070301WNDM-LC1	35.00	13:15	07-Mar-01	35.00	10:30	08-Mar-01	20:1	49	9	3912	17	1	406		
441	Windmill Cove	21-Mar-01	10:35	COL210301WNDM-LC1	35.00	13:30	21-Mar-01	35.00	10:30	22-Mar-01	20:1	49	33	14540	12	0	270		
442																			