TABLE 1
INORGANICS CONCENTRATIONS IN WATER
Panoche Energy Center
Fresno County, California

Well Identification		Lower Confined Aquifer				Upper Confined Aquifer				Semi-Confined Aquifer				City of Mendota			City of Firebaugh			Water Quality Limits For Constituents[a]					
		MW-1				MW-2				MW-3				2006 Consumer Confidence Report			2006 Consumer Confidence Report			CDHS[b]		USEPA[c]			
Sample Identification		MW-1	MW-4 (Blind Duplicate of MW-1)	MW-1		MW-2	MW-5 (Blind Duplicate of MW-2)	MW-2							Range of Detections			Range of Detections							
		Sample Date												Level Detected	Low	High	Level Detected	Low	High						
Constituent or Parameter	Units	10/25/2006	10/25/2006	2/16/2007	4/11/2007	10/25/2006	10/25/2006	2/16/2007	4/11/2007	10/27/2006	2/16/2007	4/11/2007	Treatment							Primary MCL[d]	Secondary MCL[e]	Primary MCL	Secondary MCL	CA PHG[f]	Ag Water Quality Limits[g]
Total Alkalinity as $CaCO_3$	mg/L[h]	180	180	180	170	110	110	100	50	180	170	--[p]								-	-	-	-	-	-
Bicarbonate Alkalinity as HCO_3	mg/L	200	200	200	190	130	140	120	61	230	210	--[p]								-	-	-	-	-	-
Carbonate Alkalinity as CO_3	mg/L	< 20	< 20	<20	<20	< 20	< 20	<20	<20	< 20	<20	--[p]													
Hydroxide Alkalinity as OH	mg/L	< 20	< 20	<20	<20	< 20	< 20	<20	<20	< 20	<20	--[p]													
Ammonia as N	mg/L	< 1.0	< 1.0	<1.0	<1.0	< 1.0	< 1.0	<1.0	<1.0	< 1.0	<1.0	<1.0													
Biochemical Oxygen Demand	mg/L	< 1.0	< 1.0	1.5	1.3	< 1.0	< 1.0	<1.0	1.4	< 1.0	<1.0	<1.0													
Chloride	mg/L	85	85	73	66	40	41	42	41	**160**	**160**	**160**		65 ppm	36 ppm	95 ppm	154 ppm	110 ppm	260 ppm	-	250	-	250	-	106
Chemical Oxygen Demand	mg/L	< 10	< 10	24	40	26	< 10	16	27	< 10	11	22								-	-	-	-	-	-
Cyanide (total)	mg/L	< 0.005	< 0.005	<0.0050	<0.0050	< 0.005	< 0.005	<0.0050	<0.0050	< 0.005	<0.0050	<0.0050													
Specific Conductance (EC)	µS/cm[i]	**1,500**	**1,500**	**1,500**	**1,400**	**1,100**	**1,100**	**1,200**	**1,200**	**3,000**	**3,200**	**3,200**	Before Treatment	571 micromhos	310 micromhos	820 micromhos	956 (units?)	720 (units?)	1,400 (units?)		900			-	700
													After Treatment	772 micromhos	600 micromhos	880 micromhos									
Fluoride	mg/L	0.60	0.68	0.44	0.61	0.56	0.59	0.35	0.73	0.71	0.50	<2.5		0.60 ppm	0.40 ppm	0.80 ppm	0.18 ppm	ND	0.40 ppm	2		4	2	1	1
Hardness	mg equiv. $CaCO_3$/L[j]	40	41	48	34	56	56	42	44	1,100	1,200	1,100		8.03 ppm	1.4 ppm	14 ppm	110.2 ppm	22 ppm	220 ppm	-	-	-	-	-	-
Methylene Blue Active Substances	mg/L	< 0.050	< 0.050	<0.050	<0.050	< 0.050	< 0.050	<0.050	<0.050	< 0.050	<0.050	<0.050													
Nitrate as NO_3	mg/L	< 6.0	< 6.0	<2.0	<10	< 6.0	< 6.0	<2.0	<10	**27**	**31**	<50		ND	ND	ND				45	-	10	-	10	-
Orthophosphate as P	mg/L	< 1.5	< 1.5	<0.50	<2.5	< 1.5	< 1.5	<0.50	<2.5	< 1.5	<0.50	<12													
pH	pH units	**8.9**	**9.0**	**8.7**	**9.0**	**8.6**	**8.6**	**8.5**	8.4	8.1	8.0	8.1											6.5 - 8.5		6.5 - 8.4
Phosphorus	mg/L	0.12	0.16	0.15	<0.10	0.14	< 0.10	0.11	<0.10	< 0.10	<0.10	<0.10								-	-	-	-	-	-
Sulfate as SO_4	mg/L	**440**	**440**	**410**	**430**	**380**	**400**	**370**	**410**	**1,500**	**1,500**	**1,700**					113.8 ppm	76 ppm	160 ppm	-	250	500	250	-	-
Sulfide	mg/L	< 1.0[k]	< 1.0[k]	--[o]	<1.0	< 1.0[k]	< 1.0[k]	--[o]	<1.0	< 1.0	--[o]	<1.0													
Total Dissolved Solids	mg/L	**1,100**	**1,100**	**1,000**	**1,000**	**840**	**840**	**850**	**820**	**2,900**	**2,900**	**2,900**	Before Treatement	398 ppm	220 ppm	1,000 ppm	594 ppm	460 ppm	850 ppm	-	500	-	500	-	450
													After Treatment	480 ppm	380 ppm	540 ppm									
Total Organic Carbon	mg/L	1	< 1.0	1.0	1.3	< 1.0	1	<1.0	1.9	< 1.0	<1.0	<1.0								-	-	-	-	-	-
Total Suspended Solids	mg/L	110	94	76	< 40[n]	25	15	<40	< 40[n]	< 4.0	<10	< 40[n]								-	-	-	-	-	-
Turbidity	NTU[l]	**89**[m]	**87**[m]	**200**	**260**	**52**[m]	**45**[m]	**180**	**72**	**2.3**	**19**	**7.4**		1.05 (units?)	0.2 (units?)	1.7 (units)	0.42	ND	1.2	1 or 5	5	1 or 5	-	-	-

Note: Values shown in bold print exceed one or more water quality limits shown on right.
[a] Water quality limits for detected constituents summarized from A Compilation of Water Quality Goals, August, 2003, Regional Water Quality Control Board, Central Valley Region
[b] California Department of Health Services
[c] U.S. Environmental Protection Agency
[d] Primary Maximum Contaminant Level
[e] Secondary Maximum Contaminant Level
[f] California Office of Environmental Health Hazard Assessment Public Health Goal in Drinking Water
[g] Agricultural Water Quality Limits based on Ayers, R.S. and D.W. Westcot, Water Quality for Agriculture, Food and Agriculture Organization of the United Nations - Irrigation and Drainage Paper No. 29, Rev. 1, Rome, 1965, as summarized in A Compilation of Water Quality Goals, August, 2003

[h] mg/L = milligrams per liter
[i] µS/cm = microsiemens per centimeter
[j] mg equiv. $CaCO_3$/L = milligrams equivlent calcium carbonate
[k] Analyst noted that samples were orange in color and indicated possible matrix interference
[l] NTU = Nephelometric Turbidity Units
[m] Sample analyzed outside of U.S. Environmental Protection Agency recommended holding time
[n] Sample analyzed at a dilution due to limited sample volume
[o] Sample not collected - no sample container provided by laboratory
[p] Sample not analyzed due to inadequate sample volume