Table 1-1. Summary of Production Well Information

Item	Arroyo Well	Well 52	Ventura Well	Windsor Well	LAWC#3	LAWC#5	Rubio Canyon 4	Las Flores 2
State Well Number	NA	NA	NA	NA	01N/12W-05P01 S	01N/12W-05Q02 S	NA	01N/12W-08H02 S
Location	NA	NA	NA	NA	729 W. Harriet St. Altadena, CA	564 W. Harriet St. Altadena, CA	NA	148 Mountain View St. Altadena, CA
Well Status	Closed	Closed	Closed	Closed	Active	Active	Active	Active
Date Drilled	1930 (re-sleeved in 1975)	1977	1924	1969	1924	1971	1924	1926
Well Depth (ft bgs)	668	647	473	600	601	588	626	540
Screened Interval (ft bgs)	127 to 624 and 224 to 324	250 to 367 and 372 to 630	102 to 468	320 to585	261 to 501	390 to 556	160 to 347	240 to 390 and 474 to 510
Well Diameter (in)	26 originally; re-sleeved with 20	20	26	20	16-in (0 to 455 ft bgs) 14-in (455 to 593 ft bgs)	20-in	20	18
Pump Make	NA	U.S. Titan	Aurora	Aurora	US Electric Motors	Worthington	NA	Layne and Bowler
Pump Production (gpm)	2,127[(a)]	1,700[(b)]	1,900[(b)]	1,260[(b)]	1080 gpm[(c)]	1050 gpm[(c)]	586[(d)]	735[(e)]
Depth to Pump Bowl (ft)	NA	411	315	420	385 ft	340 ft	NA	Unknown
Pump Controls	NA	Automatic	Automatic	Automatic	Manual/telemetry controls	Manual/telemetry controls	NA	Manual controls

bgs – below ground surface
ft – feet
gpm – gallons per minute
in – inches
NA – not available

(a) Per information provided by PWP in their response to comments of the August 2004 Draft Policy Memorandum 97-005 Documentation, the production rate is the average rate from June 1996 to January 1997; Pumping rates during this time were 1,700; 2,038; 2,323; 2,343; 2,503; and 1,852 gpm.
(b) Based on the pumping test conducted June 5, 2000 as recorded in the well form for the DWSAP.
(c) Based on information provided by the LAWC.
(d) Average operating pumping rate for the years 2000 to 2002.
(e) Based on results of a pumping test conducted May 30, 2002 as recorded in the well form for the DWSAP.

Table 2-1. Summary of Pumping Rate Information Used to Simulate the Capture Zone Analysis

Well	High Pumping Scenario (1)		Low Pumping Scenario (1)		Time-Weighted Average Scenario (2)	
	Average Extraction Rate (gpm)	Months Pumping at this Rate	Average Extraction Rate (gpm)	Months Pumping at this Rate	Time-Weighted Average (gpm)	Time-Weighted Average (acre ft/mo) (3)
Arroyo	1750	5	1450	7	1575	212
Well 52	1750	5	1450	7	1575	212
Ventura	1750	5	0	7	729	98
Windsor	1750	5	0	7	729	98
Lincoln#3	784	4	55.79	8	298	40
Lincoln#5	896	4	47.24	8	330	44
Valley#1	910	6	1.03	6	456	61
Valley#2	9.42	12	0	0	9	1
Valley#3	0.70	12	0	0	1	0.13
Valley#4	804	6	1.22	6	403	54
LCID#1	37.94	12	0	0	38	5
LCID#6	311	3	9.98	9	85	11
Rubio#4	586	6	0	6	293	39
Rubio#7	1160	6	0	6	580	78
Park 2-3 (Pasadena Cemetery)	41.42	12	0	0	41	6
Las Flores#2	123	12	0	0	123	17
NEW-1	250	12	250	12	250	34
NEW-2	250	12	250	12	250	34
NIW-1	167	12	167	12	167	22
NIW-2	167	12	167	12	167	22
NIW-3	167	12	167	12	167	22

(1) Extraction rates for the production wells have been based on anticipated system operation for the four PWP wells (Arroyo, 52, Ventura and Windsor) and monthly production data in Geosciences database from January 2000 - January 2003. For the PWP wells, there will be one system capable of treating 7,000 gpm. However, that will only be the case for 5 months/yr. For the other 7 months, groundwater pumping will be from Arroyo and Well 52 only at flow rates of 1,800 to 4,000 gpm. For the other production wells, pumping data were reviewed for the stated time period and determinations were made for high and low rates and when these rates were in use throughout the year.

(2) Time-weighted averages were derived by summing the products of the high average multiplied by number of months pumped and the low average multiplied by number of months pumped and then dividing by 12 months.

(3) Gallons per minute (gpm) were converted to acre foot per month (acre ft/mo) by dividing amount in gpm by 7.4346.

TABLE 2-2
Summary of Constituents Detected in the Valley Water Company Wells #1, #2, #3, and #4

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value
CALCIUM	µg/L	38	38	100%	86	140
MAGNESIUM	µg/L	38	38	100%	12	48
POTASSIUM	µg/L	38	38	100%	1.8	4.8
SODIUM	µg/L	38	38	100%	36	88
RADIUM 228	PCI/L	1	1	100%	0.24	0.24
STRONTIUM-90	PCI/L	1	1	100%	0.44	0.44
TRITIUM	PCI/L	1	1	100%	164	164
CARBON DIOXIDE	µg/L	7	7	100%	25	43
TETRACHLOROETHYLENE	µg/L	278	293	95%	0.80	290
URANIUM (PCI/L)	PCI/L	31	33	94%	2.6	11
BARIUM	µg/L	29	32	91%	130	365
TOTAL TRIHALOMETHANES	PCI/L	173	193	90%	0.50	81
CHLOROFORM	µg/L	181	206	88%	0.50	29
VANADIUM	µg/L	7	8	88%	3.8	11
GROSS ALPHA	PCI/L	44	51	86%	0.90	16
BORON	µg/L	6	8	75%	52	150
TRICHLOROETHYLENE	µg/L	162	230	70%	0.50	9.6
GROSS BETA	PCI/L	23	34	68%	2.3	17
CIS-1,2-DICHLOROETHYLENE	µg/L	130	213	61%	0.40	56
CHROMIUM, HEXAVALENT	µg/L	9	16	56%	0.10	2.2
BROMODICHLOROMETHANE	µg/L	100	197	51%	0.50	26
DIBROMOCHLOROMETHANE	µg/L	92	196	47%	0.50	32
CHROMIUM (TOTAL)	µg/L	16	36	44%	4.2	22
PERCHLORATE	µg/L	27	64	42%	4.0	8.0
COPPER	µg/L	13	35	37%	2.2	6.9
RADIUM 226	PCI/L	8	23	35%	0.31	1.4
IRON	µg/L	12	35	34%	110	480
ARSENIC	µg/L	10	32	31%	1.5	28
MANGANESE	µg/L	9	35	26%	5.0	46
BROMOFORM	µg/L	48	196	24%	0.50	5.3
ZINC	µg/L	7	35	20%	7.6	21
ALUMINUM	µg/L	6	32	19%	0.10	110
MERCURY	µg/L	6	32	19%	0.30	2.3
1,1-DICHLOROETHANE	µg/L	34	186	18%	0.50	1.4
XYLENES (TOTAL)	µg/L	14	180	8%	1.0	4.0
NICKEL	µg/L	2	26	8%	11	14
DICHLOROMETHANE	µg/L	8	164	5%	0.50	1.4
TRANS-1,2-DICHLOROETHYLENE	µg/L	9	205	4%	0.50	0.90
BROMOCHLOROMETHANE	µg/L	7	176	4%	0.60	1.2
1,1-DICHLOROETHYLENE	µg/L	7	184	4%	0.50	1.4
CARBON TETRACHLORIDE	µg/L	1	195	1%	0.60	0.60

Note: The data summarized in this table includes samples from June 1985 to May 2002.

TABLE 2-3

Summary of Constituents Detected in Groundwater Collected from Jet Propulsion Laboratory Monitoring Wells During the Long-Term Quarterly Monitoring Program

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value
Gross Alpha	pCi/L	4	4	100%	2.0	12
Gross Beta	pCi/L	4	4	100%	3.0	6.0
Fluoride	mg/L	45	45	100%	0.15	1.22
Sodium	mg/L	1158	1163	100%	2.5	122
Calcium	mg/L	1159	1165	99%	1.8	180
Potassium	mg/L	1145	1163	98%	0.99	9.7
Magnesium	mg/L	1144	1163	98%	0.25	58
Sulfate	mg/L	202	207	98%	2.1	194.00
Chloride	mg/L	201	207	97%	7.6	160
Strontium	mg/L	274	290	94%	0.052	1.2
Nitrate	mg/L	189	207	91%	0.07	17.9
Iron	mg/L	899	1153	78%	0.012	9.1
Barium	mg/L	217	290	75%	0.021	0.28
Zinc	mg/L	149	290	51%	0.020	1.0
Chloroform	µg/L	1006	2,163	47%	0.30	58
Dibromofluoromethane	µg/L	268	676	40%	3.9	2,850
Perchlorate	mg/L	684	1,741	39%	0.0032	58.5
Chromium	mg/L	686	2,062	33%	0.0006	0.42
Trichloroethene	µg/L	721	2,177	33%	0.30	73
Tetrachloroethene	µg/L	633	2,163	29%	0.06	33
Tributyltin	µg/L	2	7	29%	0.0020	0.0020
Aluminum	mg/L	40	162	25%	0.050	1.1
Carbon Tetrachloride	µg/L	454	2,163	21%	0.30	310
Atrazine	µg/L	3	20	15%	0.070	0.080
Copper	mg/L	39	290	13%	0.010	2.1
Di-n-butylphthalate	µg/L	19	158	12%	0.50	20
Simazine	µg/L	2	20	10%	0.10	0.10
Nickel	mg/L	24	290	8%	0.010	0.11
bis(2-Ethylhexyl)phthalate	µg/L	18	227	8%	0.50	98
Lead	mg/L	103	1,318	8%	3.00E-05	0.051
1,1-Dichloroethane	µg/L	167	2,163	8%	0.30	3.9
Arsenic	mg/L	106	1,396	8%	0.0015	0.017
1,1-Dichloroethene	µg/L	130	1,822	7%	0.40	12
Trichlorotrifluoroethane	µg/L	103	1,525	7%	0.50	9.2
Methylene Chloride	µg/L	139	2,241	6%	0.30	15
Cyanide	mg/L	12	195	6%	0.0050	0.021
Antimony	mg/L	17	290	6%	0.0070	0.021
1,4-Dioxane	µg/L	20	466	4%	0.4	10
Methyl-t-Butyl Ether (MTBE)	µg/L	45	1182	4%	0.30	7.1
Chromium, Hexavalent	mg/L	72	1,894	4%	0.0050	0.055
1,2-Dichloroethane	µg/L	78	2,163	4%	0.30	8.9
Bromodichloromethane	µg/L	71	2,163	3%	0.40	1.9
Methyl Isobutyl Ketone	µg/L	61	2,115	3%	--	--
cis-1,2-Dichloroethene	µg/L	48	2163	2.2%	0.3	3.4
Pyrene	µg/L	3	158	2%	33	48
1,1,2-Trichlorotrifluoroethane	µg/L	11	596	2%	0.60	6.0
Acenaphthene	µg/L	2	138	1%	35	36
Nitrosodipropylamine	µg/L	2	138	1%	22	24
2-Chlorophenol	µg/L	2	144	1%	50	59
4-Chloro-3-methylphenol	µg/L	2	144	1%	59	63
4-Nitrophenol	µg/L	2	144	1%	79	79
Phenol	µg/L	2	144	1%	49	53
Trichlorofluoromethane	µg/L	25	1,822	1%	0.30	1.8
N-Nitrosodimethylamine	µg/L	2	152	1%	0.0022	0.0022
2,4-Dinitrotoluene	µg/L	2	158	1%	39	41
2-Butanone	µg/L	21	1,705	1%	0.70	420
Ethylbenzene	µg/L	22	1,854	1%	0.30	14.0
Bromochloromethane	µg/L	23	2085	1.1%	0.3	0.8
Dibromochloromethane	µg/L	23	2,163	1%	0.40	2.2
Mercury	mg/L	3	289	1%	2.00E-04	3.00E-04
Pentachlorophenol	µg/L	2	203	1%	81	84
Styrene	µg/L	19	2,163	1%	0.40	0.90
Acetone	µg/L	7	827	0.8%	1	25
Toluene	µg/L	18	2,163	1%	0.30	1.2
Fluoranthene	µg/L	1	136	1%	39	39
Cadmium	mg/L	2	290	1%	0.0050	0.0070
Molybdenum	mg/L	2	290	1%	0.050	0.075
Chloromethane	µg/L	14	2,085	0.7%	0.80	1.4
benzo (g,h,i) perylene	µg/L	1	156	1%	10	10
benzo(k)fluoranthene	µg/L	1	156	1%	11	11
Chrysene	µg/L	1	156	1%	21	21
Indeno(1,2,3-c,d)pyrene	µg/L	1	156	1%	10	10
Phenanthrene	µg/L	1	156	1%	29	29
benzo(a)pyrene	µg/L	1	195	1%	16	16
benzo(b)fluoranthene	µg/L	1	195	1%	28	28
1,1,1-Trichloroethane	µg/L	9	1,822	0.5%	0.50	1.4
1,2,3-Trichlorobenzene	µg/L	8	1,744	0.5%	0.50	1.2
Chloroethane	µg/L	9	2,230	0.4%	--	--
Selenium	mg/L	1	290	0.3%	0.012	0.012
Thallium	mg/L	1	290	0.3%	0.10	0.10
benzo(a)anthracene	µg/L	1	331	0.3%	12	12
Bromoform	µg/L	5	1,822	0.3%	0.50	1.5
Carbon disulfide	µg/L	2	827	0.2%	0.60	1.10

TABLE 2-3

Summary of Constituents Detected in Groundwater Collected from Jet Propulsion Laboratory Monitoring Wells During the Long-Term Quarterly Monitoring Program

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value
m,p-Xylene	µg/L	4	1,822	0.2%	0.60	1.3
trans-1,2-Dichloroethene	µg/L	4	2163	0.2%	0.4	1.8
Naphthalene	µg/L	3	1,813	0.2%	0.70	1.9
Benzene	µg/L	3	1,822	0.2%	0.50	1.3
1,2,4-Trichlorobenzene	µg/L	2	1,474	0.1%	27	31
Hexane	µg/L	1	749	0.1%	4.6	4.6
1,4-Dichlorobenzene	µg/L	2	1,552	0.1%	28	32
1,3-dichloropropane	µg/L	2	2,152	0.1%	--	--
1,2,3-Trichloropropane	µg/L	1	1,744	0.1%	0.80	0.80
Vinyl Chloride	µg/L	1	1,822	0.1%	0.70	0.70

Note: The data summarized in this table includes samples collected from September 1992 through all of 2003 during JPL' Quarterly Monitoring Program.

Table 2-4
Summary of Analyses Conducted for Specific Wells During the Comprehensive Groundwater Monitoring Event

ANALYSES REQUESTED [7]	TOTAL PETROLEUM HYDROCARBONS-DIESEL	TOTAL PETROLEUM HYDROCARBONS-GASOLINE	VOLATILES	1,4-DIOXANE	SEMIVOLATILES	DIOXIN AND FURAN (TETRA THROUGH OCTA CONGENERS)	FORMALDEHYDE	ETHYLENE GLYCOL	PESTICIDES/ PCBs	ORGANOPHOSPHORUS PESTICIDES	NITROGEN & PHOSPHOROUS PESTICIDES	PARAQUAT & DIQUAT	CARBAMATES (ALDICARBS)	CHLOROPHENOXY HERBICIDES	CHLOROPICRIN GROUP
METHOD	EPA 8015-MODIFIED	EPA 8015-MODIFIED	EPA 524.2	EPA 8270 SIM	EPA 8270	EPA 8290	EPA 8315	EPA 8015	EPA 508.1	EPA 8141A	EPA 507	EPA 549.1	EPA 531.1	EPA 8151	EPA 551
LABORATORY	APCL	APCL	APCL	APCL	West Coast Anal.	Frontier Anal.	West Coast Anal.	APCL	APPL	APPL	APPL	APCL	APCL	APCL	APPL
CONTAINER TYPE	GLASS AMBER	VOA VIAL	VOA VIAL	GLASS AMBER	GLASS AMBER	GLASS AMBER	GLASS AMBER	GLASS AMBER	GLASS AMBER	GLASS AMBER	GLASS AMBER	GLASS AMBER	GLASS AMBER	GLASS AMBER	GLASS AMBER
PRESERVATIVES	CHILL to 4 °C	ADD HCl to pH < 2 CHILL to 4 °C NO HEADSPACE	ADD HCl to pH < 2 CHILL to 4 °C NO HEADSPACE	CHILL to 4 °C	CHILL to 4 °C	CHILL to 4 °C	CHILL to 4 °C	CHILL to 4 °C	CHILL to 4 °C	CHILL to 4 °C	CHILL to 4 °C	CHILL to 4 °C	MONO-Cl-ACETIC CHILL to 4 °C	CHILL to 4 °C	CHILL to 4 °C
ANALYTICAL HOLDING TIMES	< 7 DAYS	< 7 DAYS	< 14 DAYS	< 7/40 DAYS[2]	< 7/40 DAYS[2]	< 30 DAYS	<3/3 DAYS	< 14 DAYS	< 7/40 DAYS[2]	< 7/40 DAYS[2]	< 7/40 DAYS[2]	< 7/40 DAYS[2]	< 7/40 DAYS[2]	< 7/40 DAYS[2]	< 7/40 DAYS[2]
NO. BOTTLES PER ANALYSIS[1]	(2) - 1000 mL	(3) - 40 mL	(3) - 40 mL	(2) - 1000 mL	(2) - 1000 mL	(2) - 1000 mL	(2) - 1000 mL	(2) - 1000 mL	(2) - 1000 mL	(2) - 1000 mL	(2) - 1000 mL	(2) - 1000 mL	(2) - 1000 mL	(2) - 1000 mL	(2) - 1000 mL
SAMPLE LOCATION															
Monitoring Wells															
MW-3-3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MW-3-5	0	0	1	1	1	0	0	0	1	0	0	0	0	0	0
MW-4-1	0	0	1	1	1	0	0	0	1	0	0	0	0	0	0
MW-4-2	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1
MW-4-5	0	0	1	1	1	0	0	0	1	0	0	0	0	0	0
MW-7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MW-8	0	0	1	1	1	0	0	0	1	0	0	0	0	0	0
MW-10	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0
MW-12-3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MW-12-5	0	0	1	1	1	0	0	0	1	0	0	0	0	0	0
MW-16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MW-14-2	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1
MW-14-4	0	0	1	1	1	0	0	0	1	0	0	0	0	0	0
MW-17-3	0	0	1	1	1	0	0	0	1	0	0	0	0	0	0
MW-17-4	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0
MW-18-3	0	0	1	1	1	0	0	0	1	0	0	0	0	0	0
MW-18-4	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0
MW-19-3	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0
MW-19-5	0	0	1	1	1	0	0	0	1	0	0	0	0	0	0
MW-21-3	0	0	1	1	1	0	0	0	1	0	0	0	0	0	0
MW-21-5	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0
MW-24-2	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0
TOTAL	12	12	22	22	22	4	6	6	22	6	6	6	6	6	6
Field Blanks															
Equipment Rinsate Blanks[3]	2	2	4	4	4	1	1	1	4	1	1	1	1	1	1
Trip Blanks[4]	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0
Source Blanks[5]	1	1	4	2	2	1	1	1	2	1	1	1	1	1	1
Duplicates															
Duplicates	1	1	2	2	2	1	1	1	2	1	1	1	1	1	1
Matrix Spike/Matrix Spike Duplicate[6]	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
TOTAL	**18**	**18**	**56**	**32**	**32**	**9**	**11**	**11**	**32**	**11**	**11**	**11**	**11**	**11**	**11**

NOTES:

1 The number of sample bottles may be reduced as analyses may be combined, depending on the type of the equipment used by the laboratory.

2 The first number indicates holding time to extraction; the second number indicates the holding time to analysis.

rate of one per three sampling locations; for the multiport wells, each port is a sampling location.

4 Trip Blanks will be included with every cooler containing samples for VOC analyses.

of water used for equipment blanks; the number of samples are estimated.

per 20 samples; each MS/MSD sample counts for two analyses.

conductivity will be measured in the field for all wells.

8 Samples will be collected from production wells during a future sampling event.

9 Holding time is 14 days under refrigeration and 6 months if frozen.

Table 2-4
Summary of Analyses Cor

ANALYSES REQUESTED [7]	GLYPHOSATE	ENDOTHALL	1,2,3-TCP	EDB & DBCP	EXPLOSIVES	NDMA, N-nitrosodi-n-propylamine N-nitrosodiphenylamine	DISSOLVED METALS	MERCURY	ANTIMONY SELENIUM THALLIUM	CHROMIUM (VI)	PERCHLORATE	CHLORATES	CYANIDE	BROMIDE CHLORIDE FLUORIDE SULFATE	NITRATE (AS N) NITRITE (AS N)	GROSS ALPHA & BETA ACTIVITY
METHOD	EPA 547	EPA 548	EPA 504.1 SIM	EPA 504.1	EPA 8330	EPA 1625 Modified	EPA 200.8	EPA 245.1	EPA 200.8 or 200.9	EPA 218.6	EPA 314	EPA 314 Modified	EPA 335.2	EPA 300.0	EPA 300.0	EPA 900.0
LABORATORY	APCL	APCL	FGL	APCL	APCL	APCL	APPL	APPL	APPL	APCL	APCL	APCL	APCL	APCL	APCL	APCL
CONTAINER TYPE	GLASS AMBER	GLASS AMBER	GLASS AMBER	GLASS AMBER	GLASS AMBER	GLASS AMBER	POLYETHYLENE	POLYETHYLENE	POLYETHYLENE	POLYETHYLENE	POLYETHYLENE	POLYETHYLENE	POLYETHYLENE	POLYETHYLENE	POLYETHYLENE	POLYETHYLENE
PRESERVATIVES	NaS_2O_3 for chlorinated water sources CHILL to 4 °C	NaS_2O_3 for chlorinated water sources CHILL to 4 °C	CHILL to 4 °C NO HEADSPACE	CHILL to 4 °C NO HEADSPACE	CHILL to 4 °C	CHILL to 4 °C	ADD HNO_3 to pH < 2 CHILL to 4 °C	ADD HNO_3 to pH < 2 CHILL to 4 °C	ADD HNO_3 to pH < 2 CHILL to 4 °C	CHILL to 4 °C	CHILL to 4 °C	D EDA (pre-preserved bottl	CHILL to 4 °C	CHILL to 4 °C	CHILL to 4 °C	ADD HNO_3 to pH < 2 CHILL to 4 °C NO HEADSPACE
ANALYTICAL HOLDING TIMES	<14 DAYS/6 MONTHS [9]	<7 DAYS/40 DAYS	< 14 DAYS	< 14 DAYS	< 7/40 DAYS[2]	< 7/40 DAYS[2]	< 6 MONTHS	28 DAYS	< 6 MONTHS	24 HOURS	< 28 DAYS	< 28 DAYS	14 DAYS	< 28 DAYS	< 48 HOURS	< 6 MONTHS
NO. BOTTLES PER ANALYSIS[1]	(1) 125-mlL	(1) - 1000 mL	(3) 40-mL	(2) - 1000 mL	(2) - 1000 mL	(2) - 1000 mL	(1) - 125 mL	(1) - 125 mL	(1) - 125 mL	(1) - 125 mL	(1) - 125 mL	(1) - 125 mL	(1) - 125 mL	(1) - 125 mL	(1) - 125 mL	(1) - 125 mL
SAMPLE LOCATION																
Monitoring Wells																
MW-3-3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MW-3-5	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0
MW-4-1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0
MW-4-2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MW-4-5	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0
MW-7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MW-8	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1
MW-10	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MW-12-3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MW-12-5	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0
MW-16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MW-14-2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MW-14-4	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0
MW-17-3	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0
MW-17-4	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MW-18-3	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0
MW-18-4	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MW-19-3	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MW-19-5	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0
MW-21-3	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0
MW-21-5	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MW-24-2	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
TOTAL	6	6	12	12	22	22	22	22	22	22	22	22	22	22	22	13
Field Blanks																
Equipment Rinsate Blanks[3]	1	1	2	2	4	4	4	4	4	4	4	4	4	4	4	3
Trip Blanks[4]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Source Blanks[5]	1	1	1	1	2	2	2	2	2	2	2	0	2	2	2	1
Duplicates																
Duplicates	1	1	1	1	2	2	2	2	2	2	2	2	1	2	2	2
Matrix Spike/Matrix Spike Duplicate[6]	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
TOTAL	**11**	**11**	**18**	**18**	**32**	**32**	**32**	**32**	**32**	**32**	**32**	**30**	**31**	**32**	**32**	**21**

NOTES:

1 The number of sample bottles may be reduced as analyses may be combined, depending on the type of the equipment used by the laboratory.

2 The first number indicates holding time to extraction; the second number indicates the holding time to analysis.

rate of one per three sampling locations; for the multiport wells, each port is a sampling location.

4 Trip Blanks will be included with every cooler containing samples for VOC analyses.

of water used for equipment blanks; the number of samples are estimated.

per 20 samples; each MS/MSD sample counts for two analyses.

conductivity will be measured in the field for all wells.

8 Samples will be collected from production wells during a future sampling event.

9 Holding time is 14 days under refrige

Table 2-4
Summary of Analyses Cor

ANALYSES REQUESTED [7]	MBAS (DETERGENTS) (SURFACTANTS)	TOTAL DISSOLVED SOLIDS	TOTAL ORGANIC CARBON	HARDNESS (AS $CACO_3$)	LABORATORY pH	BIOLOGICAL OXYGEN DEMAND (BOD)	CHEMICAL OXYGEN DEMAND (COD)	COLOR	ALKALINITY	TOTAL SUSPENDED SOLIDS (TSS)	COLIFORM BACTERIA (FECAL)	TOTAL COLIFORMS	HETEROTROPHIC PLATE COUNT	ODOR
METHOD	EPA 425.1	EPA 160.1	EPA 415.1	EPA 130	EPA 150.1	EPA 405.1	EPA 410.4	EPA 110.2	EPA 310.1	EPA 160.2	SM 9221E	SM 9221B	SM 9215 B	EPA 140.1 or SM 2150B
LABORATORY	APCL	APCL	APCL	APCL	APCL	APCL	APCL	APCL	APCL					
CONTAINER TYPE	POLYETHYLENE	POLYETHYLENE	POLYETHYLENE	POLYETHYLENE	POLYETHYLENE	POLYETHYLENE	POLYETHYLENE	POLYETHYLENE	POLYETHYLENE	POLYETHYLENE	POLYETHYLENE	POLYETHYLENE	POLYETHYLENE	POLYETHYLENE
PRESERVATIVES	CHILL to 4 °C	CHILL to 4 °C	ADD H_2SO_4 to pH < 2 CHILL to 4 °C NO HEADSPACE	CHILL to 4 °C	CHILL to 4 °C	CHILL to 4 °C	CHILL to 4 °C	CHILL to 4 °C	CHILL to 4 °C NO HEADSPACE	CHILL to 4 °C	ADD $Na_2S_2O_3$ CHILL to 4 °C	ADD $Na_2S_2O_3$ CHILL to 4 °C	ADD $Na_2S_2O_3$ CHILL to 4 °C	CHILL to 4 °C
ANALYTICAL HOLDING TIMES	48 HOURS	< 7 DAYS	28 DAYS	< 6 MONTHS	IMMEDIATELY	28 DAYS	28 DAYS	< 48 HOURS	14 DAYS	< 7 DAYS	30 HOURS	30 HOURS	30 HOURS	24 HOURS
NO. BOTTLES PER ANALYSIS[1]	(1) - 125 mL	(1) - 125 mL	(1) - 125 mL	(1) - 125 mL	(1) - 125 mL	(1) - 125 mL	(1) - 125 mL	(1) - 125 mL	(1) - 125 mL	(1) - 125 mL	(1) - 125 mL	(1) - 125 mL	(1) - 125 mL	(1) - 125 mL
SAMPLE LOCATION														
Monitoring Wells														
MW-3-3	1	1	1	1	1	1	1	1	1	(8)	(8)	(8)	(8)	(8)
MW-3-5	1	1	0	0	1	0	0	1	0	(8)	(8)	(8)	(8)	(8)
MW-4-1	1	1	0	0	1	0	0	1	0	(8)	(8)	(8)	(8)	(8)
MW-4-2	1	1	1	1	1	1	1	1	1	(8)	(8)	(8)	(8)	(8)
MW-4-5	1	1	0	0	1	0	0	1	0	(8)	(8)	(8)	(8)	(8)
MW-7	1	1	1	1	1	1	1	1	1	(8)	(8)	(8)	(8)	(8)
MW-8	1	1	1	1	1	1	1	1	1	(8)	(8)	(8)	(8)	(8)
MW-10	1	1	1	1	1	1	1	1	1	(8)	(8)	(8)	(8)	(8)
MW-12-3	1	1	1	1	1	1	1	1	1	(8)	(8)	(8)	(8)	(8)
MW-12-5	1	1	0	0	1	0	0	1	0	(8)	(8)	(8)	(8)	(8)
MW-16	1	1	1	1	1	1	1	1	1	(8)	(8)	(8)	(8)	(8)
MW-14-2	1	1	1	1	1	1	1	1	1	(8)	(8)	(8)	(8)	(8)
MW-14-4	1	1	0	0	1	0	0	1	0	(8)	(8)	(8)	(8)	(8)
MW-17-3	1	1	0	0	1	0	0	1	0	(8)	(8)	(8)	(8)	(8)
MW-17-4	1	1	1	1	1	1	1	1	1	(8)	(8)	(8)	(8)	(8)
MW-18-3	1	1	0	0	1	0	0	1	0	(8)	(8)	(8)	(8)	(8)
MW-18-4	1	1	1	1	1	1	1	1	1	(8)	(8)	(8)	(8)	(8)
MW-19-3	1	1	1	1	1	1	1	1	1	(8)	(8)	(8)	(8)	(8)
MW-19-5	1	1	0	0	1	0	0	1	0	(8)	(8)	(8)	(8)	(8)
MW-21-3	1	1	0	0	1	0	0	1	0	(8)	(8)	(8)	(8)	(8)
MW-21-5	1	1	1	1	1	1	1	1	1	(8)	(8)	(8)	(8)	(8)
MW-24-2	1	1	1	1	1	1	1	1	1	(8)	(8)	(8)	(8)	(8)
TOTAL	22	22	13	13	22	13	13	22	13	0	0	0	0	0
Field Blanks														
Equipment Rinsate Blanks[3]	4	4	3	3	4	3	3	4	3	0	0	0	0	0
Trip Blanks[4]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Source Blanks[5]	2	2	2	1	2	1	1	1	1	0	0	0	0	
Duplicates														
Duplicates	1	2	2	2	2	2	2	2	2	0	0	0	0	0
Matrix Spike/Matrix Spike Duplicate[6]	1	1	1	0	0	0	0	0	1	0	0	0	0	0
TOTAL	**31**	**32**	**22**	**19**	**30**	**19**	**19**	**29**	**21**	**0**	**0**	**0**	**0**	**0**

NOTES:

1 The number of sample bottles may be reduced as analyses may be combined, depending on the type of the equipment used by the laboratory.

2 The first number indicates holding time to extraction; the second number indicates the holding time to analysis.

rate of one per three sampling locations; for the multiport wells, each port is a sampling location.

4 Trip Blanks will be included with every cooler containing samples for VOC analyses.

of water used for equipment blanks; the number of samples are estimated.

per 20 samples; each MS/MSD sample counts for two analyses.

conductivity will be measured in the field for all wells.

8 Samples will be collected from production wells during a future sampling event.

9 Holding time is 14 days under refrige

TABLE 2-5
Summary of Constituents Detected in Groundwater from JPL Monitoring Wells
Obtained During the Comprehensive Groundwater Monitoring Event (Dec 2002-Feb 2003)

Analyte	Unit	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value
PH	UNIT	22	22	100%	6.77	9.39
ALKALINITY	mg/L	13	13	100%	123	273
CHLORIDE	mg/L	22	22	100%	8.4	141
SULFATE (SO4--)	mg/L	22	22	100%	12.6	189
TOTAL DISSOLVED SOLIDS (TDS)	mg/L	22	22	100%	182	967
HARDNESS (TOTAL) AS CACO3	mg/L	13	13	100%	92.95	564
ARSENIC	µg/L	21	22	95%	0.5	2.8
BORON	µg/L	21	22	95%	9.2	242
CALCIUM	µg/L	21	22	95%	14600	141000
CHROMIUM	µg/L	21	22	95%	0.5	9.2
MANGANESE	µg/L	21	22	95%	0.1	86.6
VANADIUM	µg/L	21	22	95%	0.8	14.4
TURBIDITY	NTU	18	19	95%	0.27	38
ALPHA, GROSS	PCI/L	13	14	93%	1.4	13.5
BETA, GROSS	PCI/L	13	14	93%	2.09	9.16
BARIUM	µg/L	20	22	91%	15.7	194
MAGNESIUM	µg/L	20	22	91%	334	46700
POTASSIUM	µg/L	20	22	91%	1900	3720
SODIUM	µg/L	20	22	91%	14500	48300
FLUORIDE	mg/L	19	22	86%	0.740	4.1
NITRATE (NO3-) AS N	mg/L	19	22	86%	0.29	17.4
LEAD	µg/L	19	22	86%	0.048	1.1
COPPER	µg/L	18	22	82%	0.7	4
NICKEL	µg/L	18	22	82%	0.5	5.7
CHLOROFORM	µg/L	18	22	82%	0.4	16.6
COBALT	µg/L	17	22	77%	0.044	0.3
TRICHLOROETHENE (TCE)	µg/L	16	22	73%	0.5	7.8
TOTAL ORGANIC CARBON	mg/L	9	13	69%	1.055	7.3
BIOLOGIC OXYGEN DEMAND	mg O2/L	9	13	69%	0.670	2.6
SELENIUM	µg/L	15	22	68%	0.3	2
ZINC	µg/L	15	22	68%	3.7	80.7
CHLOROFORM	µg/L	4	6	67%	1.2	26
TOTAL TRIHALOMETHANES	µg/L	4	6	67%	1.25	27
N-NITROSODIPHENYLAMINE	µg/L	14	22	64%	0.00148	0.0249
COLOR	COLOR	14	22	64%	5	25
TETRACHLOROETHENE (PCE)	µg/L	12	22	55%	0.3	21.2
CHLORATE	mg/L	11	22	50%	0.073	0.875
ALUMINUM	µg/L	10	22	45%	1.2	173
ANTIMONY	µg/L	10	22	45%	0.091	1.8
MERCURY	µg/L	9	22	41%	0.058	0.087
BERYLLIUM	µg/L	9	22	41%	0.4	1.8
IRON	µg/L	9	22	41%	45.5	1650
1,4-DIOXANE	µg/L	9	22	41%	0.6	3
CHROMIUM (VI)	mg/L	8	22	36%	0.0005	0.0027
PERCHLORATE	µg/L	7	22	32%	3.05	13300
CARBON TETRACHLORIDE	µg/L	7	22	32%	0.62	157
RDX	µg/L	6	22	27%	0.66	27.3
TPH-DIESEL	mg/L	3	12	25%	0.01	0.02
2,4,6-TRINITROTOLUENE (TNT)	µg/L	5	22	23%	2.2	25.7
THALLIUM	µg/L	5	22	23%	0.033	0.2
METHYLENE CHLORIDE (DICHLOROMETHANE)	µg/L	4	20	20%	0.400	79.5
FOAMING AGENTS (MBAS)	mg/L	4	21	19%	0.05	0.07
1,1-DICHLOROETHANE	µg/L	4	22	18%	0.3	0.5
N-NITROSODIMETHYLAMINE (NDMA)	µg/L	4	22	18%	0.00044	0.0056
TPH-MOTOR OILS	mg/L	2	12	17%	0.03	0.09
1,2,3-TRICHLOROPROPANE	µg/L	2	12	17%	0.024	0.071
HMX	µg/L	2	22	9%	0.7	2.5
1,1,2-TRICHLOROTRIFLUOROETHANE	µg/L	2	22	9%	2.1	5.9
1,1-DICHLOROETHENE	µg/L	2	22	9%	0.3	8.2
CIS-1,2-DICHLOROETHENE	µg/L	2	22	9%	0.4	2.7
BROMIDE	mg/L	2	22	9%	0.120	0.44
CADMIUM	µg/L	2	22	9%	0.046	0.049
BROMOCHLOROMETHANE	µg/L	1	22	5%	18	18
ETHYLBENZENE	µg/L	1	22	5%	1.1	1.1
STYRENE	µg/L	1	22	5%	0.5	0.5
TRICHLOROFLUOROMETHANE	µg/L	1	22	5%	0.4	0.4
PROPACHLOR	µg/L	1	22	5%	0.28	0.28
N-NITROSODI-N-PROPYLAMINE	µg/L	1	22	5%	0.125	0.125
SILVER	µg/L	1	22	5%	0.024	0.024

Notes:

µg/L = micrograms per liter
µg/mL = micrograms per milliliter
mg/L = milligrams per liter
NTU = Nephelometric Turbidity Units
mg O2/L = milligrams of oxygen per liter
pCi/L = picocuries per liter
pg/L = picograms per liter

TABLE 2-6

Chemicals Identified as Used at JPL from Review of the Environmental Database Search

Analyte/Group	Database
1,1-dichloroethane	CERCLIS-NPL
1,1-dichloroethene	RCRIS-LQG
1,2-dichlorobenzene	CERCLIS-NPL
1,2-dichloroethane	CERCLIS-NPL
1,4-dichlorobenzene	CERCLIS-NPL
acetone	CERCLIS-NPL
arsenic trioxide	RCRIS-LQG
arsenic	CERCLIS-NPL
barium	CERCLIS-NPL
cadmium	CERCLIS-NPL, RCRIS-SQG
carbon disulfide	CERCLIS-NPL
carbon tetrachloride	CERCLIS-NPL
chlorobenzene	CERCLIS-NPL
chloroform	CERCLIS-NPL
chromic acid	CHMIRS
chromium	CERCLIS-NPL
cis-1,2-dichloroethylene	CERCLIS-NPL
cobalt	CERCLIS-NPL
copper	CERCLIS-NPL
diesel fuel	HIST UST
diesel waste	HIST UST
di-n-butyl phthalate	CERCLIS-NPL
fluorene	CERCLIS-NPL
gasoline	HIST UST, LUST
hydrochloric acid	CHMIRS
lead	CERCLIS-NPL, RCRIS-SQG
mercury	CERCLIS-NPL, RCRIS-SQG
methyl ethyl ketone	CERCLIS-NPL
methylene chloride	CERCLIS-NPL
naphthalene	CERCLIS-NPL
nickel	CERCLIS-NPL
polychlorinated biphenyls (PCBs)	HAZNET
silver	RCRIS-LQG
spent cyanide	RCRIS-LQG
spent halogenated and non-halogenated solvents	RCRIS-LQG
styrene	CERCLIS-NPL
tetrachloroethene (PCE)	CERCLIS-NPL, CAL-SITES
toluene	CERCLIS-NPL
trichloroethene (TCE)	CERCLIS-NPL, CAL-SITES
vanadium	CERCLIS-NPL
waste oil	HIST UST
xylene	CERCLIS-NPL
zinc	CERCLIS-NPL

CERCLIS-NPL = Comprehensive Environmental Response, Compensation and Liability Information System - National Priorities List
CHMIRS = California Hazardous Material Incident Report System
CW WDS = California Waste Discharge System
HAZNET = Hazardous Waste Manifest Database
HIST UST = Historical Underground Storage Tank Registered Database
LUST = Leaking Underground Storage Tank Database
RCRIS-LQG = Resource Conservation and Recovery Information System - Large Quantity Generator
UST = Underground Storage Tank Database

TABLE 2-7
Chemicals Used at JPL Based on Previous Studies and Investigations Review

Analyte/Group	Source
1,1,2-trichloro-1,2,2-trifluroethane (Freon 113)	OU-2 RI
1,1-dichloroethene (1,1-DCE)	ESI, OU-2 RI
1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin (OCDD)	OU-2 RI
1,2-dichloroethane (1,2-DCA)	OU-2 RI
acetic acid	PA
acetone	PA, OU-2 RI
antimony	ESI, OU-2 RI
arochlor-1242	OU-2 RI
arochlor-1254	OU-2 RI
arochlor-1260	OU-2 RI
arsenic	OU-2 RI
asbestos	PA
barium	ESI, OU-2 RI
batteries/battery acid	PA, ESI
benzene	PA
benzo(a)anthracene	OU-2 RI
benzo(a)pyrene	OU-2 RI
benzo(b)fluoranthene	OU-2 RI
benzo(g,h,i)perylene	OU-2 RI
beryllium	PA, OU-2 RI
bis(2-ethylhexyl)phthalate	ESI, OU-2 RI
bromodichloromethane	ESI, OU-2 RI
bromoform	ESI
butylbenzylphthalate	OU-2 RI
cadmium	OU-2 RI
carbon tetrachloride	ESI, OU-2 RI
chemical lab wastes	PA, ESI
chloroform	ESI, OU-2 RI
chromium (total)	ESI, OU-2 RI
chrysene	OU-2 RI
cobalt	ESI, OU-2 RI
cooling tower chemicals	ESI
copper	ESI, OU-2 RI
cyanide	OU-2 RI
dibromochloromethane	ESI
di-n-butylphthalate	OU-2 RI
fluoranthene	OU-2 RI
fluorescent lights	PA
flurotrichloromethane	OU-2 RI
freon	PA, ESI
gross alpha	OU-2 RI
gross beta	OU-2 RI
heavy metals	PA
hexavalent chromium	OU-2 RI
hydrochloric acid	PA
ideno(1,2,3-cd) pyrene	OU-2 RI

TABLE 2-7
Chemicals Used at JPL Based on
Previous Studies and Investigations Review

Analyte/Group	Source
lead	PA, ESI, OU-2 RI
magnesium	PA
mercury	PA, ESI, OU-2 RI
methylene chloride	PA, ESI, OU-2 RI
mixed solvents	PA
molybdenum	ESI, OU-2 RI
nickel	ESI, OU-2 RI
nitrates	OU-2 RI
n-nitroso-dipropylamine	OU-2 RI
paints	PA
phenanthrene	OU-2 RI
polychlorinated biphenyls (PCBs)	PA
pyrene	OU-2 RI
selenium	OU-2 RI
silver	OU-2 RI
sodium hydroxide	PA
solid rocket fuel propellant	ESI
solvents	PA
strontium	ESI, OU-2 RI
sulfuric acid	PA, ESI
tetrachloroethene (PCE)	ESI, OU-2 RI
thallium	OU-2 RI
toluene	PA
total petroleum hydrocarbons (TPH)	ESI, OU-2 RI
tributyltin	OU-2 RI
trichloroethane	PA
trichloroethene (TCE)	ESI, OU-2 RI
trichlorotrifluoroethane	PA
vanadium	OU-2 RI
waste oil	PA
zinc	ESI, OU-2 RI

PA = Preliminary Assessment Report
ESI = Extended Site Inspection Report
OU-2 RI = Remedial Investigation Report for Operable Unit 2:On-Site Soil

TABLE 2-8

Chemicals Used at JPL Based on National Archives and Records Administration Review

Analyte/Group	Source
aniline	R&D
aluminum alloys	R&D
aluminum powder	R&D
ammonia isotopes N^{14} and N^{15}	R&D
ammonium perchlorate	R&D
ballastite	R&D
calcium permanganate	R&D
chlorine trifluoride	R&D
coolants	R&D
copper	R&D
corrosives	R&D
cryolite	R&D
ethylene diamine	R&D
fluoride	R&D
freon	R&D
fuming nitric acid	R&D
gasoline	R&D
graphite	R&D
helium	purchase order
hydrazine	purchase order, R&D
hydrazine diperchlorate	purchase order
hydrochloric acid	R&D
hydrogen peroxide	R&D
iron oxide	R&D
liquid nitrogen	purchase order, R&D
liquid oxygen	R&D
magnesium alloy	R&D
magnesium fluoride	R&D
metal alloys	R&D
molybdenum	R&D
monomethyl hydrazine (MMH)	purchase order, R&D
nitrofluoride	R&D
nitrogen gas	R&D
nitrogen tetroxide	R&D
nitromethane	R&D
photographic developers	R&D
polybutadiene acrylic acid acrylonitrile terpolymer binder	R&D
polyeurethane	R&D
potassium perchlorate	R&D
propane	R&D
steel	R&D
T17E2 propellant	R&D
uns-di-methyl-hydrazine (UDMH)	purchase order

R&D = research and development

TABLE 2-9

Summary of all Chemicals Used at or Generated by JPL

Analyte/Group	Source
1,1,2-trichloro-1,2,2-trifluroethane (Freon 113)	OU-2 RI
1,1-dichloroethane (1,1-DCA)	EDSR
1,1-dichloroethene (1,1-DCE)	EDSR, ESI, OU-2 RI
1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin (OCDD)	OU-2 RI
1,2-dichlorobenzene (1,2-DCB)	EDSR
1,2-dichloroethane (1,2-DCA)	EDSR, OU-2 RI
1,4-dichlorobenzene (1,4-DCB)	EDSR
acetic acid	PA
acetone	EDSR, PA, OU-2 RI
aniline	NARA
aluminum alloys	NARA
aluminum powder	NARA
ammonia isotopes N^{14} and N^{15}	NARA
ammonium perchlorate	NARA
antimony	ESI, OU-2 RI
arochlor-1242	OU-2 RI
arochlor-1254	OU-2 RI
arochlor-1260	OU-2 RI
arsenic	EDSR, OU-2 RI
arsenic trioxide	EDSR
asbestos	PA
ballastite	NARA
barium	EDSR, ESI, OU-2 RI
batteries/battery acid	PA, ESI
benzene	PA
benzo(a)anthracene	OU-2 RI
benzo(a)pyrene	OU-2 RI
benzo(b)fluoranthene	OU-2 RI
benzo(g,h,i)perylene	OU-2 RI
beryllium	PA, OU-2 RI
bis(2-ethylhexyl)phthalate	ESI, OU-2 RI
bromodichloromethane	ESI, OU-2 RI
bromoform	ESI
butylbenzylphthalate	OU-2 RI
cadmium	EDSR, OU-2 RI
calcium permanganate	NARA
carbon disulfide	EDSR
carbon tetrachloride	EDSR, ESI, OU-2 RI
chemical lab wastes	PA, ESI
chlorine trifluoride	NARA
chlorobenzene	EDSR
chloroform	EDSR, ESI, OU-2 RI
chromic acid	EDSR
chromium (total)	EDSR, ESI, OU-2 RI
chrysene	OU-2 RI
cis-1,2-dichloroethylene	EDSR
cobalt	EDSR, ESI, OU-2 RI

TABLE 2-9
Summary of all Chemicals Used at or Generated by JPL

Analyte/Group	Source
coolants	NARA
cooling tower chemicals	ESI
copper	EDSR, ESI, OU-2 RI, NARA
corrosives	NARA
cryolite	NARA
cyanide	EDSR, OU-2 RI
dibromochloromethane	ESI
diesel fuel	EDSR
di-n-butylphthalate	EDSR, OU-2 RI
ethylene diamine	NARA
fluoranthene	OU-2 RI
fluorene	EDSR
fluorescent lights	PA
fluoride	NARA
flurotrichloromethane	OU-2 RI
freon	PA, ESI, NARA
fuming nitric acid	NARA
gasoline	EDSR, NARA
graphite	NARA
gross alpha	OU-2 RI
gross beta	OU-2 RI
heavy metals	PA
helium	NARA
hexavalent chromium	OU-2 RI
hydrazine	NARA
hydrazine diperchlorate	NARA
hydrochloric acid	PA, NARA, EDSR
hydrogen peroxide	NARA
ideno(1,2,3-cd) pyrene	OU-2 RI
iron oxide	NARA
lead	EDSR, PA, ESI, OU-2 RI
liquid nitrogen	NARA
liquid oxygen	NARA
magnesium	PA
magnesium alloy	NARA
magnesium fluoride	NARA
mercury	EDSR, PA, ESI, OU-2 RI
metal alloys	NARA
methyl ethyl ketone	EDSR
methylene chloride	EDSR, PA, ESI, OU-2 RI
mixed solvents	PA
molybdenum	ESI, OU-2 RI, NARA
monomethyl hydrazine (MMH)	NARA
naphthalene	EDSR
nickel	EDSR, ESI, OU-2 RI
nitrates	OU-2 RI
nitrofluoride	NARA

TABLE 2-9
Summary of all Chemicals Used at or Generated by JPL

Analyte/Group	Source
nitrogen gas	NARA
nitrogen tetroxide	NARA
nitromethane	NARA
n-nitroso-dipropylamine	OU-2 RI
paints	PA
phenanthrene	OU-2 RI
photographic developers	NARA
polybutadiene acrylic acid acrylonitrile terpolymer binder	NARA
polychlorinated biphenyls (PCBs)	PA
polyeurethane	NARA
potassium perchlorate	NARA
propane	NARA
pyrene	OU-2 RI
selenium	OU-2 RI
silver	EDSR, OU-2 RI
sodium hydroxide	PA
solid rocket fuel propellant	ESI
solvents	PA
steel	NARA
strontium	ESI, OU-2 RI
styrene	EDSR
sulfuric acid	PA, ESI
T17E2 propellant	NARA
tetrachloroethene (PCE)	EDSR, ESI, OU-2 RI
thallium	OU-2 RI
toluene	PA, EDSR
total petroleum hydrocarbons (TPH)	ESI, OU-2 RI
tributyltin	OU-2 RI
trichloroethane	PA
trichloroethene (TCE)	EDSR, ESI, OU-2 RI
trichlorotrifluoroethane	PA
uns-di-methyl-hydrazine (UDMH)	NARA
vanadium	EDSR, OU-2 RI
waste oil	PA
xylene	EDSR
zinc	EDSR, ESI, OU-2 RI

EDSR = Environmental Database Search Review
ESI = Extended Site Inspection Report
NARA = National Archive and Records Administration Review
OU-2 RI = Remedial Investigation Report for Operable Unit 2:On-Site Soil
PA = Preliminary Assessment Report

TABLE 2-10 Potential Sources Identified in Databases

Map ID Letter	Map ID Number	Facility Name	Address
A	Not Assigned	Arroyo Substation	4800 Oak Grove Drive
	Not Assigned	Southern California Edison	4800 Oak Grove Drive
	Not Assigned	Jet Propulsion Laboratory	4800 Oak Grove Drive
B	10, 11, and 12	Pacific Bell	4815 Oak Grove Avenue
	13	Los Angeles County Fire Camp 2	4815 Oak Grove Avenue
C	15, 16, and 19	Saint Francis High School	200 Foothill Boulevard
D	20 and 21	Flintridge Preparatory School	4543 Crown Avenue
E	24, 25, 26 and 27	Flintridge Riding Club	4625 Oak Grove Drive
F	33	Millard Canyon Landfill	3900 Canyon Crest Road
	34	Los Angeles County Road Department	3900 Canyon Crest Road
G	35 and 36	Five Acres/Boys & Girls AIDS School	760 West Mountain View Street
H	41, 42, and 61	Independent Mercedes	440 Foothill Boulevard
	44	La Cañada Tire	459 Foothill Boulevard
	45	Bow Tie Cleaners	458 Foothill Boulevard
I	46	Crystal Cleaners	446 Foothill Boulevard
	48	Los Gringos Locos, LLC	464 West Foothill Boulevard
	49	Foothill Volkswagen	475 Foothill Boulevard
J	50 and 51	La Cañada Wastewater Plant Reclamation Plant District 28	533 Meadow View Drive
K	52 and 53	Szkiba Auto (Former)	3081 Lincoln Boulevard North
K	54, 55, and 56	ARCO Products #80900	3081 North Lincoln Avenue
K	60	Georges Drive-in Liquor & Deli	3061 North Lincoln Avenue
K	62	UNOCAL Corp Service Station	587 West Altadena Drive
	63	Ralphs Grocery Company	501 Foothill Boulevard
L	64	Truemark Property Management	502 West Foothill Boulevard
	65, 66, and 67	Palace Cleaners	510 ½ Foothill Boulevard
M	68, 70, and 71	Lincoln Avenue Water Company	564 West Harriet Street
M	69	South Coulter Water Treatment	564 West Harriet Street
N	73 and 74	Ralphs Grocery Company #55	521 West Foothill Boulevard

TABLE 2-10 Potential Sources Identified in Databases

Map ID Letter	Map ID Number	Facility Name	Address
O	76, 78, 79, 80, 81, 82, and 84	ARCO Products Company	550 Foothill Boulevard
	77 and 83	Name Not Reported	550 Foothill Boulevard
	14	USDA Forest Service, Oak Grove	Oak Grove Drive North
	17	Saint Bede Church	215 Foothill Boulevard
	18	Oak Grove Work Center	Oak Grove Park
Not Assigned	22	G. T. Equipment	4911 Crown Avenue
	23	Pasadena Children's Training School	2933 North El Nido
	28	Oak Grove Ranger Station	4600 Oak Grove Drive
	29	Los Angeles County Public Works	4001 Canyondell Drive
	30	Pasadena Unified School District	725 West Altadena Drive
	31 and 40	Los Angeles County Fire Station #82	352 Foothill Boulevard
	32	Name Not Reported	4463 Oak Grove Drive
	37	Goodyear Auto Service Center	420 Foothill Boulevard
	38	Arnold B. Cotton	582 Meadow Grove Place
	39	Frank McHugh	665 West Altadena Drive
	43	United States Department of Agriculture – Forest/Oak Grove Station	4550 Oak Grove Drive
	47	1X Donald L. Sheppard	400 Georgian
	57	Loma Alta Company Park	3330 North Lincoln Avenue
	58	RITE Cleaners	3053 North Lincoln
	59	Knight Way School	405 West Knight Way
	72	Clifford Beyers	636 Royce Street
	75	William Barber	511 Houseman Street
	85	La Cañada High School	4463 Oak Grove Drive
	86	Lincoln debris disposal area	600 Loma Alta Drive
	87	Altadena Chevron	907 E. Altadena Drive
	88	Thomas A. Edison Elementary School	3126 N. Glenrose Avenue
	89	L.T.	2963 N. Olive
	90	LA County Fire Station #12	2760 Lincoln Ave
	91	Pasadena USD	527 Ventura Street
	92	Old Chevron Station	2445 N. Lincoln Avenue

TABLE 2-10 Potential Sources Identified in Databases

Map ID Letter	Map ID Number	Facility Name	Address
	92	J. Lee Hartman	2439-2445 Lincoln Avenue
	92	Alliance Automotive	2445 N. Lincoln Avenue
	93	No name (private residence)	292 N. Figueroa Drive
	94	1X Rubio Canyon Land & Water Association	263 W. Figueroa Street
	95	Paramount Cleaners	2345 Lincoln Avenue
	96	Foothills Moving Center	2320 Lincoln Avenue
	96	U Haul Foothill 713-042	2320 Lincoln Avenue
	97	Lita McDonald	365 Crosby Street
	98	Poppy/Pansey Cleaners	2271 N. Lincoln Ave
	99	Chuy's Tire Service	2231 N. Lincoln Ave
	99	Esquire Cleaners	2210 N. Linconln Ave
	100	LA County DPW Road Div 521/Maintenance District #2	815 E Calaveras Street
	101	Jesus Mercado	2209 El Sol
	102	Mallcraft Inc.	2225 N. Windsor
	103	Community Development Commision	383 Acacia Street
	104	No name	7073 Woodbury Road
	104	Paul Roberts	2209 N. El Sol
	105	Exxon USA/ARCO	2171 N. Fair Oaks Avenue
	105	1X Mobil Oil/Mobil Oil Corp	15 W. Woodbury Road
	106	Mobil Oil Corp	2172 N Arroyo Blvd
	107	Jackson Elementary	593 W. Woodbury Road
	108	Green Brothers Inc.	543 W. Woodbury Road
	108	OAO Corp/Tim Conway	500 W. Woodbury Road
	109	ENCO Service Station/Exxon Co.	620 W. Woodbury Road
	110	Pasadena USD	740 W. Woodbury Road
	110	RLT Photography	723 W. Woodbury Road
	110	Autosport Engines	741 W. Woodbury Road
	111	Cosso & Campbell Associates	711 W. Woodbury Road
	112	Pacific Lift Inc./Main Yard	836 W. Woodbury Road
	112	Gordy's Garage	843 W. Woodbury Road
	113	Transamerica Financial Service	620 W. Woodbury Road
	114	NASA/JPL	500 W. Woodbury Road
	115	Jerry D. Smith/California Highway Patrol	2130 Windsor Avenue

Table 2-11. Hazardous Generator Activity and Waste Type

Name	Generator Type	Activity	Type of Wastes
Bow Tie Cleaners	RCRIS – SQG	Dry Cleaners	Not Reported
Crystal Cleaners	RCRIS – SQG	Dry Cleaners	• Halogenated Solvents • Photochemicals/ Photoprocessing
Foothill Volkswagen	RCRIS – SQG	Auto and Truck Sales and Service	Not Reported
G. T. Equipment	RCRIS - SQG	Waste Transporter	Not Reported
Independent Mercedes	RCRIS – SQG	Auto and Truck Sales and Service	Not Reported
Pacific Bell	RCRIS – SQG	Telephone Equipment	Not Reported
RITE Cleaners	RCRIS – SQG	Dry Cleaners	Not Reported
JPL	RCRIS – LQG	Federal Government Research and Development	• Inorganic Solids • Organic Solids • Halogenated Solvents • Metals • Diesel and Gasoline Fuels
Thomas A. Edison Elementary School	RCRIS-SQG	School	• Other organic solids
Autosport Engines	RCRIS-SQG	Automotive	• Waste oil, mixed oil
Esquire Cleaners	RCRIS-SQG	Dry Cleaners	Not Reported
Paramount Cleaners	RCRIS-SQG	Dry Cleaners	Not Reported
1X Mobil Oil/Mobil Oil Corp	RCRIS-SQG	Automotive	• unspecified oil containing wastes
Pasadena USD	RCRIS-SQG	School	• PCB-containing waste;

Table 2-12. SWRCB LUST Site Summary and Status

LUST Site	Address	Substance Released / Media Affected	MTBE[1] Tested (yes/no)	Status
ARCO #1684	550 West Foothill Boulevard	Gasoline released into soil and groundwater in 1991	Detected in groundwater in 1995	Preliminary Assessment (PA) conducted in 1989. Pollution characterization completed in 1992. Case closed in 1996.
Flintridge Riding Club	4625 Oak Grove Drive	Unknown substance released into soil	Not required	Case closed in 1990.
JPL	4800 Oak Grove	Gasoline released into soil in 1990	No	Tank closed in 1995.
Oak Grove Ranger Station	4600 Oak Grove Drive	Gasoline released into soil in 1990	No	Tank closed, but date of closure unknown.
Pacific Bell	4815 Oak Grove Avenue	Diesel fuel released into soil in 1990	Not required	Case closed in 1991.
Szkiba Auto (Former)	3081 Lincoln Boulevard North	Gasoline released into soil in 1990	No	Case closed in 1996.
LA County Fire Station #12	2760 Lincoln Avenue	Gasoline released into soil in 2001	No	Not reported
Transamerica Financial Services	620 W. Woodbury Road	Unknown release to soil in 1996. Based on HAZNET search this facility stored waste oil and mixed oil.	Not required to be tested	Case closed 1996; no reports of soil removal.
USDA Forest Service	North Oak Grove Drive	Gasoline released into soil in 1990	No	Tank closed, but the date of closure and status of the Pollution Characterization unknown.

Note:

[1] MTBE - methyl tertiary-butyl ether

TABLE 2-13

Summary of Chemicals Identified for the Other Potential Sources from Review of the Environmental Database Search

Facility	Address	Activity/Source	Chemicals Identified	Database
ALBERTO RODRIGUEZ	550 W Foothill Blvd	UST/Automotive	Waste oil	HIST UST
ARCO #1684	550 W Foothill Blvd	UST/Automotive	Gasoline, methyl tertiary butyl ether	LUST
ARCO #1684	550 W Foothill Blvd	UST/Automotive	Gasoline, organic liquids with alkaline solution with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc); aqueous solution with less than 10% total organic	LUST, HAZNET
ARCO PRODUCTS #01684	550 W Foothill Blvd	UST/Automotive	Unknown	HMS
ARCO PRODUCTS #01684	550 W Foothill Blvd	UST/Automotive	Unknown	UST
ARCO PRODUCTS COMPANY	550 W Foothill Blvd	UST/Automotive	Aqueous solution with less than 10% total organic residues	HAZNET
LA CANADA ARCO	550 W Foothill Blvd	UST/Automotive	Unknown	HMS
NO NAME REPORTED	550 W Foothill Blvd	UST/Automotive	Gasoline	CHMIRS
ARNOLD B COTTON	582 Meadow Grove Pl	Unknown	Unknown	HMS
BOW TIE CLEANERS	458 Foothill Blvd	Dry Cleaners	PCE, liquids w/ halogenated organic compounds > 1000 mg/L; halogenated solvents (chloroform, methyl chloride, PCE, etc)	CA SLIC, HAZNET
CLIFFORD BEYERS	636 Royce St	Unknown	Laboratory waste chemicals	HAZNET
CRYSTAL CLEANERS	446 Foothill Blvd	Dry Cleaners	Solids or sludges with halogenated organic compounds > 1000 mg/kg; aquesous soulutions with < 10% total organic residues; halogenated solvents (chloroform, methyl chloride, PCE, etc); photochemicals/photprocessing wastes	HAZNET
DONALD L SHEPPARD	400 Georgian	Unknown	Asbestos	HAZNET
FIVE ACRES/BOYS & GIRLS AIDS SOCIETY	760 W Mountain View St	Education	Asbestos	HAZNET

TABLE 2-13

Summary of Chemicals Identified for the Other Potential Sources from Review of the Environmental Database Search

Facility	Address	Activity/Source	Chemicals Identified	Database
FLINTRIDGE PREPARATORY SCHOOL	4543 Crown Ave	Education	Asbestos	HAZNET
FLINTRIDGE RIDING CLUB	4625 Oak Grove Dr	UST	Regular fuel	LUST, UST HIST
FOOTHILL VW	475 Foothill Blvd	UST, Automotive	Waste oil, unspecified aqueous solution and unspecified orgainic liquid mixture	HAZNET, HIST UST
FRANK MCHUGH	665 W Altadena Dr	Unknown	Other organic solids	HAZNET
GEORGES DRIVE-IN LIQ & DE	3061 N Lincoln Ave	Retail	Unknown	HMS
GOODYEAR AUTO SERVICE CENTER	420 Foothill Blvd	Automotive	Unspecified orgainic liquid mixtures, oil/water separation sludge, unspecified oil containing wastes	HAZNET
G T EQUIPMENT	4911 Crown Ave	Waste Transporter	Unknown	RCRIS-SQG
INDEPENDENT MERCEDES	440 Foothill Blvd	Automotive	Other organic solids	RCRIS-SQG
KNIGHT WAY SCHOOL	405 W Knight Way	Education	Unknown	HMS
LA CANADA HIGH SCHOOL	4463 Oak Grove Dr	Laboratory/Education	Formaldehyde; asbestos	CHMIRS, HAZNET
LA CANADA TIRE	459 Foothill Blvd	Automotive	Unspecified aqueous solutions with 10% or more total organic residues	HAZNET
LA CANADA WWRP, NON-NPDES	533 Meadow View Dr	Wastewater Treatment	chloride, inorganic salts, heavy metals	WDS
CSDLAC RECLAMATION PLT DIST 28	533 Meadow View Dr	Wastewater Treatment	Unknown	HMS
LINCOLN AVENUE WATER COMPANY	564 W Harriet St	UST	Regular fuel, diesel fuel; asbestos	HIST UST, HAZNET
SOUTH COULTER WATER TREATMENT	564 W Harriet St	Wastewater Treatment	chloride, inorganic salts, heavy metals	WDS
LOMA ALTA CO PARK	3330 N Lincoln Ave	Unknown	Unknown	HMS
LOS ANGELES COUNTY FIRE STATION #82	352 Foothill Blvd	UST	Unleaded fuel, diesel fuel	HIST UST
LOS ANGELES COUNTY ROAD DEPARTMENT	3900 Canyon Crest Rd	Waste Management	Unknown	WMUDS
MILLARD CANYON DUMP	3900 Canyon Crest Rd	Landfill - Closed	Solid waste	SWF/LF
LOS GRINGOS LOCOS, LLC	464 W Foothill Blvd	Unknown	Unknown	HMS
OAK GROVE RANGER STATION	4600 Oak Grove Dr	UST/Ranger Station	Gasoline	LUST
OAK GROVE WORK CTR	Oak Grove Park	UST	Unleaded fuel, diesel fuel	HIST UST
PACIFIC BELL	4815 Oak Grove Ave	UST/Telephone Service	Diesel	LUST
PALACE CLEANERS	510 1/2 Foothill Blvd	Dry Cleaning	Halogenated solvents (chloroform, methyl chloride, PCE, etc.)	HAZNET
PASADENA CHILDREN'S TRAINING SOCIETY	2933 N El Nido	Education	Asbestos	HAZNET
PASADENA USD	725 W Altadena Dr	Unknown	Asbestos	HAZNET
RALPHS GROCERY CO #55	521 W Foothill Blvd	Grocery Store	Unspecified oil-containing waste	HAZNET

TABLE 2-13

Summary of Chemicals Identified for the Other Potential Sources from Review of the Environmental Database Search

Facility	Address	Activity/Source	Chemicals Identified	Database
RITE CLEANERS	3053 N Lincoln	Dry Cleaners	Halogenated solvents (chloroform, methyl chloride, PCE, etc); liquids and solids/sludges with halogentated organic compounds > 1000 mg/L and mg/kg	HAZNET
SOUTHERN CALIFORNIA EDISON-ARROYO SUBSTATION	4800 N Oak Grove Dr	Substation	Polychlorinated biphenyls (PCBs)	HAZNET
ST BEDE CHURCH	215 Foothill Blvd	Religious	Asbestos	HAZNET
ST FRANCIS HIGH SCHOOL	200 Foothill Blvd	Laboratory/Education	Other organic solids; asbestos	HAZNET
SZKIBA AUTO (FORMER)	3081 N Lincoln Blvd	UST/Automotive	Gasoline	LUST
GEORGE SZKIBA	3081 N Lincoln Blvd	Automotive	Other organic solids	HAZNET
ARCO PRODUCTS #80900	3081 N Lincoln Blvd	Automotive	Unknown	HMS
ALTADENA ARCO SERVICE	3081 N Lincoln Blvd	Automotive	Unknown	HMS
TRUEMARK PROPERTY MANAGEMENT	502 W Foothill Blvd	Unknown	Unknown	HMS
UNOCAL CORP SS	587 W Altadena Dr	Unknown	Unknown	HMS
USDA FOREST SERVICE, OAK GROVE	N Oak Grove Dr	UST/Forest Service	Gasoline	LUST
WILLIAM P BARBER	511 Houseman St	Unknown	Asbestos	HAZNET
LINCOLN DEBRIS DISPOSAL AREA	600 Loma Alta Drive	SWF/LF	Unknown	SWF/LF, WMUDS/SWAT
ALTADENA CHEVRON	907 E. Altadena Drive	gas station	Unknown	Hist UST; UST
THOMAS A EDISON ELEMENTARY SCHOOL	3126 N. Glenrose Avenue	school	other organic solids, asbestos-containing waste,	RCRIS-SQG, FINDS, HAZNET
L.T.	2963 N. Olive	unreported	asbestos waste that was disposed of in land fill	HAZNET
LA COUNTY FIRE STATION #12	2760 Lincoln Ave	fire station	gasoline	Hist UST, LUST
PASADENA USD	527 Ventura Street	school	asbestos waste that was disposed of in land fill	HAZNET
OLD CHEVRON STATION	2445 N. Lincoln Avenue	automotive	Unknown	HMS
J. LEE HARTMAN	2439-2445 Lincoln Avenue	automotive	tank bottom wastes which is disposed of via recycler	HAZNET
ALLIANCE AUTOMOTIVE	2445 N. Lincoln Avenue	automotive	waste oil and mixed oil	HAZNET
NO NAME	292 N. Figueroa Drive	private residence	muriatic acid	CHMIRS
1X RUBIO CANYON LAND & WATER ASSOCIATION	263 W. Figueroa Street	Unknown	aqueous solution with less than 10% organic residues	HAZNET
PARAMOUNT CLEANERS	2345 Lincoln Avenue	dry cleaner	Unknown	RCRIS-SQG, FINDS, CLEANERS
FOOTHILLS MOVING CENTER	2320 Lincoln Avenue	retail	2 tanks regular and unleaded product	Hist UST

TABLE 2-13

Summary of Chemicals Identified for the Other Potential Sources from Review of the Environmental Database Search

Facility	Address	Activity/Source	Chemicals Identified	Database
U HAUL FOOTHILL 713-042	2320 Lincoln Avenue	retail	tank bottom wastes which is disposed of via recycler - aqueous solution with less than 10% total organic residues	HAZNET, HMS
LITA MCDONALD	365 Crosby Street	private residence	unreported	HMS
POPPY/PANSEY CLEANERS	2271 N. Lincoln Ave	Dry Cleaner	halogenated solvents (chloroform, methyl c	HAZNET, CLEANERS
CHUY'S TIRE SERVICE	2231 N. Lincoln Ave	Unknown	Unknown	HMS
ESQUIRE CLEANERS	2210 N. Linconln Ave	Dry Cleaner	Unknown	RCRIS-SQG, FINDS, CLEANERS
LA COUNTY DPW ROAD DIV 521/MAINTENANCE DISTRICT #2	815 E Calaveras Street	City maintenance dept.	gasoline, diesel components	Hist UST, HMS
JESUS MERCADO	2209 El Sol	Unknown	Unknown	HMS
MALLCRAFT INC.	2225 N. Windsor	Unknown	diesel and unknown	Hist UST, RCRIS-SQG, FINDS, HMS
COMMUNITY DEVELOPMENT COMMISION	383 Acacia Street	Unknown	asbestos waste that was disposed of in land fill	HAZNET
NO NAME	7073 Woodbury Road	Unknown	printing press cleaner-solvent	CHMIRS
PAUL ROBERTS	2209 N. El Sol	above ground storage tan	Unknown	CA FID UST
EXXON USA/ARCO	2171 N. Fair Oaks Avenue	Unknown	Unknown	HMS, CA FID UST
1X MOBIL OIL/MOBIL OIL CORP	15 W. Woodbury Road	Unknown	aqueous solution with less than 10% organic residues; unspecified oil containing wastes	HAZNET, UST, RCRIS-SQG, FINDS, HMS
MOBIL OIL CORP	2172 N Arroyo Blvd	Unknown	Unknown	HMS
JACKSON ELEMENTARY	593 W. Woodbury Road	Unknown	asbestos waste that was disposed of in land fill	HAZNET
GREEN BROTHERS INC.	543 W. Woodbury Road	Unknown	diesel, regular gasoline	HMS, UST, Hist UST
OAO CORP/TIM CONWAY	500 W. Woodbury Road	Unknown	Unknown	HMS
ENCO SERVICE STATION/EXXON CO.	620 W. Woodbury Road	Unknown	Unknown	HMS
PASADENA USD	740 W. Woodbury Road	Unknown	asbestos waste that was disposed of in land fill, other inorganic materials, PCB-containing waste	RCRIS-SQG, FINDS, HAZNET
RLT PHOTOGRAPHY	723 W. Woodbury Road	Unknown	Unknown	HMS
AUTOSPORT ENGINES	741 W. Woodbury Road	Unknown	other organic solids, waste oil, mixed oil	RCRIS-SQG, FINDS, HAZNET
COSSO & CAMPBELL ASSOCIATES	711 W. Woodbury Road	Unknown	Unknown	HMS
PACIFIC LIFT INC./MAIN YARD	836 W. Woodbury Road	Unknown	waste oil and mixed oil, diesel, unleaded product	HAZNET, Hist UST

TABLE 2-13

Summary of Chemicals Identified for the Other Potential Sources from Review of the Environmental Database Search

Facility	Address	Activity/Source	Chemicals Identified	Database
GORDY'S GARAGE	843 W. Woodbury Road	Unknown	aqueous solution with less than 10% total organic residues	HAZNET
TRANSAMERICA FINANCIAL SERVICE	620 W. Woodbury Road	Unknown	unknown	HAZNET, LUST, Cortese
NASA/JPL	500 W. Woodbury Road	Unknown	photochemical processing waste, lab waste chemicals	HAZNET
JERRY D. SMITH/CALIFORNIAL HIGHWAY PATROL	2130 Windsor Avenue	Unknown	Unknown	HMS

CA SLIC = Spills, Leaks, Investigations, and Cleanup Sites Region from the California Regional Water Quality Control Board Database
CHMIRS = California Hazardous Material Incident Report System
HAZNET = Hazardous Waste Manifest Database
HIST UST = Historical Underground Storage Tank Registered Database
HMS = Los Angeles County Industrial Waste and Underground Storage Tank Sites Database
LUST = Leaking Underground Storage Tank Database
RCRIS-SQG = Resource Conservation and Recovery Information System - Small Quantity Generator
SWF/LF = Solid Waste Facilities/Landfill Sites Records Database
UST =Underground Storage Tank Database
WDS = Waste Discharge System
WMUDS = Waste Management Unit Database System

TABLE 2-14
Summary of Chemicals from Known and Potential Sources

Analyte/Group	Analytes	Rationale for Selecting Chemical	Facility/Source
1,1,2-trichloro-1,2,2-trifluroethane (Freon 113)	1,1,2-trichloro-1,2,2-trifluroethane (Freon 113)	chemical listed	JPL
1,1-dichloroethane (1,1-DCA)	1,1-dichloroethane (1,1-DCA)	chemical listed	JPL
1,1-dichloroethene (1,1-DCE)	1,1-dichloroethene (1,1-DCE)	chemical listed	JPL
1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin (OCDD)	1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin (OCDD)	chemical listed	JPL
1,2-dichlorobenzene (1,2-DCB)	1,2-dichlorobenzene (1,2-DCB)	chemical listed	JPL
1,2-dichloroethane (1,2-DCA)	1,2-dichloroethane (1,2-DCA)	chemical listed	JPL
1,4-dichlorobenzene (1,4-DCB)	1,4-dichlorobenzene (1,4-DCB)	chemical listed	JPL
acetic acid	acetic acid	chemical listed	JPL
acetone	acetone	chemical listed	JPL
aniline	aniline	chemical listed	JPL
aluminum alloys	aluminum	aluminum is a component of aluminum alloys	JPL
aluminum powder	aluminum	aluminum is a component of aluminum powder	JPL
ammonia isotopes N^{14} and N^{15}	ammonia isotopes N^{14} and N^{15}	chemical listed	JPL
ammonium perchlorate	ammonium and perchlorate	chemical would dissociate to ammonium and perchlorate	JPL
antimony	antimony	chemical listed	JPL
aqueous solution with less than 10% total organic residues	none	specific chemicals in aqueous solution are not specified	ARCO PRODUCTS COMPANY, RUBIO CANYON LAND & WATER ASSOCIATION, MOBIL OIL/MOBIL OIL CORP, GORDY'S GARAGE, U HAUL FOOTHILL, LA CANADA TIRE
arochlor-1242	arochlor-1242	chemical listed	JPL
arochlor-1254	arochlor-1254	chemical listed	JPL
arochlor-1260	arochlor-1260	chemical listed	JPL
arsenic	arsenic	chemical listed	JPL
arsenic trioxide	arsenic trioxide	chemical listed	JPL
asbestos	none	asbestos would be filtered out in aquifer	DONALD L SHEPPARD, FIVE ACRES/BOYS &GIRLS SOCIETY, FLINTRIDGE PREPARATORY SCHOOL, JPL, PASADENA CHILDREN'S TRAINING SOCIETY, PASADENA USD, ST BEDE CHURCH, WILLIAM P BARBER, THOMAS A. EDISON ELEMENTARY, JACKSON ELEMENTARY, COMMUNITY DEVELOPMENT COMMISION, LT
ballastite	ballastite	chemical listed	JPL
barium	barium	chemical listed	JPL
batteries/battery acid	sulfuric acid	synonym for battery acid	JPL
benzene	benzene	chemical listed	JPL
benzo(a)anthracene	benzo(a)anthracene	chemical listed	JPL
benzo(a)pyrene	benzo(a)pyrene	chemical listed	JPL
benzo(b)fluoranthene	benzo(b)fluoranthene	chemical listed	JPL
benzo(g,h,i)perylene	benzo(g,h,i)perylene	chemical listed	JPL
beryllium	beryllium	chemical listed	JPL
bis(2-ethylhexyl)phthalate	bis(2-ethylhexyl)phthalate	chemical listed	JPL
bromodichloromethane	bromodichloromethane	chemical listed	JPL
bromoform	bromoform	chemical listed	JPL
butylbenzylphthalate	butylbenzylphthalate	chemical listed	JPL
cadmium	cadmium	chemical listed	JPL
calcium permanganate	calcium permanganate	chemical listed	JPL
carbon disulfide	carbon disulfide	chemical listed	JPL
carbon tetrachloride	carbon tetrachloride	chemical listed	JPL
chemical lab wastes	none	specific chemicals in chemical lab wastes are not specified	JPL

TABLE 2-14
Summary of Chemicals from Known and Potential Sources

Analyte/Group	Analytes	Rationale for Selecting Chemical	Facility/Source
chloride, inorganic salts, heavy metals	none	chloride is naturally occurring; specific chemicals for inorganic salts and heavy metals are not specified	LA CANADA WWRP, NON-NPDES
chloride, inorganic salts, heavy metals	none	chloride is naturally occurring; specific chemicals for inorganic salts and heavy metals are not specified	SOUTH COULTER WATER TREATMENT
chlorine trifluoride	chlorine trifluoride	chemical listed	JPL
chlorobenzene	chlorobenzene	chemical listed	JPL
chloroform	chloroform	chemical listed	JPL
chromic acid	chromic acid	chemical listed	JPL
chromium (total)	chromium (total)	chemical listed	JPL
chrysene	chrysene	chemical listed	JPL
cis-1,2-dichloroethylene	cis-1,2-dichloroethylene	chemical listed	JPL
cobalt	cobalt	chemical listed	JPL
coolants	none	specific chemicals in coolants are not specified	JPL
cooling tower chemicals	none	specific chemicals in cooling tower chemicals are not specified	JPL
copper	copper	chemical listed	JPL
corrosives	none	specific chemicals in corrosives are not specified	JPL
cryolite	sodium aluminum fluoride	synonym for cryolite	JPL
cyanide	cyanide	chemical listed	JPL
dibromochloromethane	dibromochloromethane	chemical listed	JPL
diesel fuel	hydrocarbons in the range from C_{10} through C_{22}	chemicals in gasoline	PACIFIC BELL, JPL
di-n-butylphthalate	di-n-butylphthalate	chemical listed	JPL
ethylene diamine	ethylene diamine	chemical listed	JPL
fluoranthene	fluoranthene	chemical listed	JPL
fluorene	fluorene	chemical listed	JPL
fluorescent lights	mercury and polychlorinated biphenyls (PCBs)	mercury and polychlorinated biphenyls (PCBs) are components of fluorescent lights	JPL
fluoride	fluoride	chemical listed	JPL
flurotrichloromethane	flurotrichloromethane	chemical listed	JPL
formaldehyde; asbestos	formaldehyde	chemical listed; asbestos would be filtered out in aquifer	LA CANADA HIGH SCHOOL
freon	chlorodifluromethane, dichlorodifluromethane, trichlorofluroethane, 1,1,2-trichloro-1,2,2-trifluroethane	synonym for freon	JPL
fuming nitric acid	fuming nitric acid	chemical listed	JPL
gasoline	hydrocarbons in the range of C_4 through C_{12}, benzene, toluene, ethylbenzene, xylenes	chemicals in gasoline	JPL
gasoline	hydrocarbons in the range of C_4 through C_{12}, benzene, toluene, ethylbenzene, xylenes	chemicals in gasoline	NO NAME REPORTED
gasoline	hydrocarbons in the range of C_4 through C_{12}, benzene, toluene, ethylbenzene, xylenes	chemicals in gasoline	OAK GROVE RANGER STATION
gasoline	hydrocarbons in the range of C_4 through C_{12}, benzene, toluene, ethylbenzene, xylenes	chemicals in gasoline	SZKIBA AUTO (FORMER)

TABLE 2-14
Summary of Chemicals from Known and Potential Sources

Analyte/Group	Analytes	Rationale for Selecting Chemical	Facility/Source
gasoline	hydrocarbons in the range of C_4 through C_{12}, benzene, toluene, ethylbenzene, xylenes	chemicals in gasoline	USDA FOREST SERVICE, OAK GROVE
gasoline, methyl tertiary butyl ether (MTBE)	hydrocarbons in the range of C4 through C12, benzene, toluene, ethylbenzene, xylenes, methyl tertiary butyl ether (MTBE), di-isopropyl ether (DIPE), ethyl-t-butyl ether (ETBE), t-amyl methyl ether (TAME), t-butyl alcohol (TBA)	chemicals in gasoline; MTBE byproducts	ARCO #1684
gasoline, organic liquids with alkaline solution with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc); aqueous solution with less than 10% total organic residues	benzene, toluene, ethylbenzene, xylenes, antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc	chemicals listed; specific chemicals in aqueous solution are not specified	ARCO #1684
gross alpha	alpha emitting particles	chemical listed	JPL
gross beta	beta emitting particles	chemical listed	JPL
halogenated solvents (chloroform, methyl chloride, PCE); liquids and solids/sludges with halogentated organic compounds > 1000 mg/L and mg/kg	chloroform, methyl chloride, tetrachloroethene (PCE)	chemicals listed; or specific chemicals in liquids and solids/sludges with halogenated organic compounds are not specified	RITE CLEANERS, PALACE CLEANERS, POPPY/PANSEY CLEANERS, BOWTIE CLEANERS, CRYSTAL CLEANERS, ESQUIRE CLEANERS
heavy metals	cadmium, lead, mercury	most common heavy metals	JPL
helium	none	helium is not a threat to groundwater	JPL
hexavalent chromium	hexavalent chromium	chemical listed	JPL
hydrazine	hydrazine	chemical listed	JPL
hydrazine diperchlorate	hydrazine diperchlorate	chemical listed	JPL
hydrochloric acid	hydrochloric acid	chemical listed	JPL, PRIVATE RESIDENCE AT 292 N. FIGUEROA STREET
hydrogen peroxide	none	hydrogen peroxide would react to form water	JPL
ideno(1,2,3-cd) pyrene	ideno(1,2,3-cd) pyrene	chemical listed	JPL
iron oxide	iron oxide	chemical listed	JPL
laboratory waste chemicals	none	specific chemicals in laboratory waste chemicals not specified	CLIFFORD BEYERS, JPL
lead	lead	chemical listed	JPL
liquid nitrogen	liquid nitrogen	liquid nitrogen is not a threat to groundwater	JPL
liquid oxygen	liquid oxygen	liquid oxygen is not a threat to groundwater	JPL
magnesium	magnesium	chemical listed	JPL
magnesium alloy	magnesium	magnesium is a component of magnesium alloy	JPL
magnesium fluoride	magnesium, fluoride	chemical would dissociate to magnesium and fluoride	JPL
mercury	mercury	chemical listed	JPL
metal alloys	none	specific chemicals in metal alloys are not specified	JPL
methyl ethyl ketone	methyl ethyl ketone	chemical listed	JPL
methylene chloride	methylene chloride	chemical listed	JPL
mixed solvents	none	specific chemicals in mixed solvents are not specified	JPL
molybdenum	molybdenum	chemical listed	JPL
monomethyl hydrazine (MMH)	monomethyl hydrazine (MMH)	chemical listed	JPL
naphthalene	naphthalene	chemical listed	JPL
nickel	nickel	chemical listed	JPL

TABLE 2-14
Summary of Chemicals from Known and Potential Sources

Analyte/Group	Analytes	Rationale for Selecting Chemical	Facility/Source
nitrates	nitrates	chemicals listed	JPL
nitrofluoride	nitrofluoride	chemical listed	JPL
nitrogen gas	none	nitrogen gas is not a threat to groundwater	JPL
nitrogen tetroxide	nitrogen tetroxide	chemical listed	JPL
nitromethane	nitromethane	chemical listed	JPL
n-nitroso-dipropylamine	n-nitroso-dipropylamine	chemical listed	JPL
other organic solids	none	specific chemicals in other organic solids are not specified	FRANK MCHUGH, GEORGE SZKIBA, INDEPENDENT MERCEDES, THOMAS A. EDISON ELEMENTARY, AUTOSPORT ENGINES
other organic solids; asbestos	none	specific chemicals in other organic solids are not specified; asbestos is not a threat to groundwater	ST FRANCIS HIGH SCHOOL
paints	benzene, toluene, methyl ethyl ketone, acetone, xylene, cresols, mercury, lead, chromium	common paint chemicals[2]	JPL
phenanthrene	phenanthrene	chemical listed	JPL
photographic developers	silver, chromium, zinc, selenium, ammonium, hydroquinone, xylene, 1,1,1-trichloroethane, cyanide	common photoprocessing chemicals[1]	JPL, RLT PHOTOGRAPHY
polybutadiene acrylic acid acrylonitrile terpolymer binder	polybutadiene acrylic acid acrylonitrile terpolymer binder	chemical listed	JPL
Polychlorinated biphenyls (PCBs)	polychlorinated biphenyls (PCBs)	chemicals listed	JPL, SOUTHERN CALIFORNIA EDISON-ARROYO SUBSTATION, PASADENA USD
polyurethane	polyeurethane	chemical listed	JPL
potassium perchlorate	potassium, perchlorate	chemical would dissociate to potassium and perchlorate	JPL
propane	propane	chemical listed	JPL
pyrene	pyrene	chemical listed	JPL
regular gasoline fuel	hydrocarbons in the range of C_4 through C_{12}, benzene, toluene, ethylbenzene, xylenes	chemicals in gasoline	FLINTRIDGE RIDING CLUB, LA COUNTY FIRE STATION #12, LA COUNTY DPW ROAD DIV 512/MAINTENANCE DISTRICT #2, GREEN BROTHERS INC, FOOTHILLS MOVING CENTER, ALTADENA CHEVRON, OLD CHEVRON STATION
regular gasoline fuel, diesel fuel; asbestos	hydrocarbons in the range of C_4 through C_{12} for regular gasoline and hydrocarbons in the range from C_{10} through C_{22} for diesel fuel, benzene, toluene, ethylbenzene, xylenes	chemicals in gasoline; asbestos would be filtered out in aquifer	LINCOLN AVENUE WATER COMPANY, PACIFIC LIFT INC/MAIN YARD, GREEN BROTHERS INC., MALLCRAFT INC, EXXON ARCO, ENCO SERVICE STATION/EXXON CO.
selenium	selenium	chemical listed	JPL
silver	silver	chemical listed	JPL
sodium hydroxide	sodium hydroxide	chemical listed	JPL
solid rocket fuel propellant	ammonium perchlorate, potassium perchlorate, polybutadiene, iron oxide, aluminum	common components of solid rocket fuel propellant	JPL
solid waste	none	no chemicals specified	MILLARD CANYON DUMP, LINCOLN DEBRIS DISPOSAL AREA
solids or sludges with halogenated organic compounds > 1000 mg/kg; aqueous solutions with < 10% total organic residues; halogenated solvents (chloroform, methyl chloride, PCE, etc); photochemicals/photoprocessing wastes	Silver, chromium, zinc, selenium, ammonium, hydroquinone, xylene, 1,1,1-trichloroethane, cyanide	chemicals listed; common photoprocessing chemicals[1]; specific chemicals in aqueous solution not specified	NO NAME AT 7073 WOODBURY ROAD
solvents	none	specific chemicals in solvents are not specified	JPL
steel	steel	chemical listed	JPL

TABLE 2-14
Summary of Chemicals from Known and Potential Sources

Analyte/Group	Analytes	Rationale for Selecting Chemical	Facility/Source
strontium	strontium	chemical listed	JPL
styrene	styrene	chemical listed	JPL
sulfuric acid	sulfuric acid	chemical listed	JPL
T17E2 propellant	none	specific chemicals of T17E2 propellant are not specified	JPL
tetrachloroethene (PCE)	tetrachloroethene (PCE)	chemical listed	JPL
thallium	thallium	chemical listed	JPL
toluene	toluene	chemical listed	JPL
total petroleum hydrocarbons (TPH)	total petroleum hydrocarbons (TPH)	chemical listed	JPL
tributyltin	tributyltin	chemical listed	JPL
trichloroethane	trichloroethane	chemical listed	JPL
trichloroethene (TCE)	trichloroethene (TCE)	chemical listed	JPL
trichlorotrifluoroethane	trichlorotrifluoroethane	chemical listed	JPL
unknown	none	no chemicals specified	ALTADENA ARCO SERVICE
unknown	none	no chemicals specified	ARCO PRODUCTS #01684
unknown	none	no chemicals specified	ARCO PRODUCTS #01684
unknown	none	no chemicals specified	ARCO PRODUCTS #80900
unknown	none	no chemicals specified	ARNOLD B COTTON
unknown	none	no chemicals specified	CSDLAC RECLAMATION PLT DIST 28
unknown	none	no chemicals specified	G T EQUIPMENT
unknown	none	no chemicals specified	GEORGES DRIVE-IN LIQ & DE
unknown	none	no chemicals specified	KNIGHT WAY SCHOOL
unknown	none	no chemicals specified	LA CANADA ARCO
unknown	none	no chemicals specified	LOMA ALTA CO PARK
unknown	none	no chemicals specified	LOS ANGELES COUNTY ROAD DEPARTMENT
unknown	none	no chemicals specified	LOS GRINGOS LOCOS, LLC
unknown	none	no chemicals specified	TRUEMARK PROPERTY MANAGEMENT
unknown	none	no chemicals specified	UNOCAL CORP SS
unknown	none	no chemicals specified	LITA MCDONALD
unknown	none	no chemicals specified	PAUL ROBERTS
unknown	none	no chemicals specified	TRANSAMERICA FINANCIAL SERVICES
unknown	none	no chemicals specified	COSSO & CAMPBELL ASSOCIATES
unknown	none	no chemicals specified	CHUY'S TIRE SERVICE
unknown	none	no chemicals specified	JESUS MERCADO
unknown	none	no chemicals specified	JERRY D SMITH/CALIFORNIA HIGHWAY PATROL
unknown	none	no chemicals specified	OAO CORP/TIM CONWAY
unleaded fuel, diesel fuel	hydrocarbons in the range of C_4 through C_{12} for unleaded fuel and hydrocarbons in the range from C_{10} through C_{22} for diesel fuel, benzene, toluene, ethylbenzene, xylenes	chemicals in gasoline	LOS ANGELES COUNTY FIRE STATION #82
unleaded fuel, diesel fuel	hydrocarbons in the range of C_4 through C_{12} for unleaded fuel and hydrocarbons in the range from C_{10} through C_{22} for diesel fuel, benzene, toluene, ethylbenzene, xylenes	chemicals in gasoline	OAK GROVE WORK CTR
uns-di-methyl-hydrazine (UDMH)	uns-di-methyl-hydrazine (UDMH)	chemical listed	JPL
unspecified oil-containing waste	hydrocarbons with C_{18} or greater	specific chemicals in oil-containing waste are not specified	RALPHS GROCERY CO #55, GOODYEAR AUTO SERVCE CENTER, JPL, ALBERTO RODRIQUEZ, FOOTHILL VOLKSWAGEN, AUTOSPORT ENGINES, ALLIANCE AUTOMOTIVE

TABLE 2-14
Summary of Chemicals from Known and Potential Sources

Analyte/Group	Analytes	Rationale for Selecting Chemical	Facility/Source
xylene	xylene	chemical listed	JPL
zinc	zinc	chemical listed	JPL

[1] EPA FedSite: Medical Clinics - Photographic Chemicals - Impact and Regulations; http://www.epa.gov/fedsite/medical/photo.html

[2] EPA Guides to Pollution Prevention - The Paint Manufacturing Industry, EPA/625/7-90/005, June 199

JPL = Jet Propulsion Laboratory

Table 2-15. Summary of Vulnerability of Groundwater to Facilities Within the Capture Zones of the Production Wells

Map ID	Map ID Number	Facility Name	Activity	GroundwaterPotentially Vunerable?	Explanation for Vulnerability
Potential Sources Located within the Capture Zone					
A	none	Southern California Edison – Arroyo Substation	Substation	No	PCBs not expected to migrate to groundwater
A	none	Jet Propulsion Laboratory	Research	Yes	Chemicals detected on-site which would be expected to migrate to groundwater
B	10, 11, 12	Pacific Bell	Telephone service	Yes	Components of diesel fuel detected in groundwater
B	13	LA County Fire Camp 2	Unknown	Unknown	Activities unknown at this address
K	52, 53	Szikba Auto	Automotive Service/ Repair	Yes	Release of gasoline occurred. However, remediation was performed and contaminated soil removed. Potential for residual leaching to groundwater.
K	54, 55, 56	Arco Products #80900	Automotive Service/ Repair	Yes	Release of gasoline occurred. However, remediation was performed and contaminated soil removed. Potential for residual leaching to groundwater.
K	60	George's Drive in Liquors	Automotive Service/ Repair	Yes	Release of gasoline occurred. However, remediation was performed and contaminated soil removed. Potential for residual leaching to groundwater.
K	62	UNOCAL Service Station	Automotive Service/ Repair	Yes	Release of gasoline occurred. However, remediation was performed and contaminated soil removed. Potential for residual leaching to groundwater.
	23	Pasadena Training School	Education	No	Chemicals associated with this facility would not migrate towards groundwater.
	30	Pasadena School District	Education	No	Chemicals (i.e., asbestos) associated with this facility would not migrate towards groundwater.
	39	Frank McHugh	Unknown	Unknown	Uknown chemicals associated with this facility.
	57	Loma Alta Company Park	Unknown	Unknown	Uknown chemicals associated with this facility.
	72	Clifford Beyers	Unknown	Yes	Laboratory waste chemicals are associated with this facility.
	87	Altadena Chevron	Automotive Service/ Repair	Yes	No known release, but petroleum hydrocarbon constituents are associated with this type of facility.
	88	Thomas A. Edison Elementary School	Education	No	Chemicals associated with this facility would not migrate towards groundwater.
	89	L.T.	Unknown	Unknown	Uknown chemicals associated with this facility.
	90	LA County Fire Station #12	Fire Station	Unknown	Uknown chemicals associated with this facility.
	91	Pasadena Unified School District	Education	No	Chemicals associated with this facility would not migrate towards groundwater.
	92	Old Chevron Station, J. Lee Hartman, Alliance Automotive	Automotive Service/ Repair	Yes	No known release, but petroleum hydrocarbon constituents are associated with this type of facility.
	93	Not Reported	Unknown	Unknown	Uknown chemicals associated with this facility.
	94	Rubio Cañon Land & Water Association	Public Drinking Water Supply	Unknown	Uknown chemicals associated with this facility.
	95	Paramount Cleaners	Dry Cleaner	Yes	Chlorinated compounds are associated with this facility.
	96	Foothills Moving Center/ U-Haul	Moving Company	Unknown	Uknown chemicals associated with this facility.
	97	Lita McDonald	Unknown	Unknown	Uknown chemicals associated with this facility.
	98	Poppy/Pansey Cleaners	Dry Cleaner	Yes	Chlorinated compounds are associated with this facility.
	99	Chuy's Tire Service	Automotive Service/ Repair	Yes	Solvents/petroleum hydrocarbons associated with this facility.
	100	LA County DPW Road Div 521/Maintenance District #2	Maintenance Buildings	Yes	Solvents/petroleum hydrocarbons associated with this facility.
	103	Community Development Commision	Office Building	Unknown	Uknown chemicals associated with this facility.
	105	Exxon USA/ARCO; 1X Mobil Oil/Mobil Oil Corp	Automotive Service/ Repair	Yes	unspecified oil containing wastes
Potential Sources Located Outside the Capture Zone but Upgradient of Groundwater Flow Path					
C	none	Saint Francis High School	School	Unknown	Uknown chemicals associated with this facility.
D	none	Flintridge Preparatory School	School	Unknown	Uknown chemicals associated with this facility.
E	none	Flintridge Riding Club	Club	Yes	Unknown substance released into soil
H	none	Independent Mercedes	Automotive Service/ Repair	Yes	Petroleum hydrocarbons associated with this facility.
I	none	La Canada Tire, Bow Tie Cleaners, Crystal Cleaners, Los Gringos Locos LLC, and Foothill Volkswagen	Automotive Service/ Repair; Dry Cleaner	Yes	Solvents/petroleum hydrocarbons associated with this facility.
J	50, 51	La Canada Wastewater Reclamation Plant	Wastewater treatment	Yes	Outside capture zone, but chemicals would migrate towards capture zone.
L	none	Ralphs Grocery Company, Truemark Property Management, Palace Cleaners	Office Building; Dry cleaner	Yes	Solvents associated with this facility.
N	none	Ralphs Grocery Company #55	Retail	Unknown	Uknown chemicals associated with this facility.
O	none	ARCO Products Company	Automotive Service/ Repair	Yes	Petroleum hydrocarbons associated with this facility.
	17	Saint Bede Church	Church	Unknown	Uknown chemicals associated with this facility.
	19	Saint Francis High School	School	Unknown	Uknown chemicals associated with this facility.
	22	G. T. Equipment	Unknown	Unknown	Uknown chemicals associated with this facility.
	28	Oak Grove Ranger Station	Office	Unknown	Uknown chemicals associated with this facility.
	31	Los Angeles County Fire Station	Fire Station	Unknown	Uknown chemicals associated with this facility.
	32	Name not reported	Unknown	Unknown	Uknown chemicals associated with this facility.
	37	Goodyear Auto Service Center	Automotive Service/ Repair; Dry Cleaner	Yes	Solvents/petroleum hydrocarbons associated with this facility.
	38	Arnold B. Cotton	Unknown	Unknown	Uknown chemicals associated with this facility.
	40	Los Angeles County Fire Station #82	Fire Station	Unknown	Uknown chemicals associated with this facility.
	43	United States Department of Agriculture – Forest/Oak Grove Station	Ranger Station	Yes	Gasoline released into soil in 1990
	47	1X Donald L. Sheppard	Unknown	Unknown	Uknown chemicals associated with this facility.
	59	Knight Way School	School	Unknown	Uknown chemicals associated with this facility.
	61	Independent Mercedes	Automotive Service/ Repair	Yes	Petroleum hydrocarbons associated with this facility.
	75	William Barber	Unknown	Unknown	Uknown chemicals associated with this facility.

TABLE 2-16
Summary of Chemicals Detected in the Source Water

Analyte				
1,1,1-Trichloroethane	benzo (g,h,i) perylene	Di-n-butylphthalate	Phenanthrene	Bromochloromethane
1,1,2-Trichlorotrifluoroethane	benzo(a)anthracene	Ethylbenzene	Phenol	Chlorate
1,1-Dichloroethane	benzo(a)pyrene	Fluoranthene	Potassium	cis-1,2-Dichloroethene
1,1-Dichloroethene	benzo(b)fluoranthene	Fluoride	Pyrene	trans-1,2-Dichloroethene
1,2,3-Trichlorobenzene	benzo(k)fluoranthene	Gross alpha	Radium 226	1,2,3-Tricloropropane
1,2,3-Trichloropropane	bis(2-Ethylhexyl)phthalate	Gross beta	Radium 228	Carbonyl sulfide
1,2,4-Trichlorobenzene	Boron	Indeno(1,2,3-c,d)pyrene	Selenium	N-nitrosodimethylamine
1,2-Dichloroethane	Bromodichloromethane	Iron	Simazine	N-nitrosodiphenylamine
1,4-Dichlorobenzene	Bromoform	Lead	Sodium	N-nitrosodi-n-propylamine
1,4-Dioxane	Cadmium	m,p-Xylene	Strontium	TPH-diesel
2,4-Dinitrotoluene	Calcium	Magnesium	Styrene	TPH-gasoline
2-Butanone	Carbon disulfide	Manganese	Tetrachloroethene	RDX
2-Chlorophenol	Carbon Tetrachloride	Mercury	Thallium	HMX
4-Chloro-3-methylphenol	Chloroform	Methylene Chloride	Toluene	Trinitrotoluene
4-Nitrophenol	Chloromethane	Methyl-t-Butyl Ether (MTBE)	Tributyl tin	Propachlor
Acenaphthene	Chromium	Molybdenum	Trichloroethene	Hexane
Acetone	Chromium, Hexavalent	Naphthalene	Trichlorofluoromethane	Beryllium
Aluminum	Chrysene	Nickel	Trichlorotrifluoroethane	Bromide
Antimony	Combined RA226/RA228	Nitrosodipropylamine	Uranium	Chloride
Arsenic	Copper	N-Nitrosodimethylamine	Vanadium	Nitrates
Atrazine	Cyanide	O-xylene	Vinyl Chloride	Silver
Barium	Dibromochloromethane	Pentachlorophenol	Zinc	Sulfate
Benzene	Dibromofluoromethane	Perchlorate		

TABLE 2-17

Summary of Chemicals not Detected in the Source Water but Associated with Known and Other Potential Sources

Analytes		
1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin (OCDD)	cresols	polyurethane
1,2-dichlorobenzene (1,2-DCB)	di-isopropyl ether (DIPE)	propane
acetic acid	ethylene diamine	sulfuric acid
ammonia isotopes N^{14} and N^{15}	ethyl-t-butyl ether (ETBE)	t-amyl methyl ether (TAME)
ammonium	fluorene	t-butyl alcohol (TBA)
aniline	formaldehyde	uns-di-methyl-hydrazine (UDMH)
arochlor-1242	fuming nitric acid	
arochlor-1254	hydrazine	
arochlor-1260	hydrochloric acid	
arsenic trioxide	hydroquinone	
ballastite	iron oxide	
butylbenzylphthalate	monomethyl hydrazine (MMH)	
calcium permanganate	nitrofluoride	
chlorine trifluoride	nitrogen tetroxide	
chlorobenzene	nitromethane	
chlorodifluromethane	polybutadiene acrylic acid acrylonitrile terpolymer binder	
chromic acid	polychlorinated biphenyls (PCBs)	

TABLE 3-1
Summary of Historical Water Quality Data for the Arroyo Well (June 1985 until April 1999)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
Carbon Tetrachloride	µg/L	45	45	100%	1.3	15	4.7	0.50	--	0.10	--	0.50
Calcium	mg/L	7	7	100%	45	158	65	--	--	--	--	--
Magnesium	mg/L	6	6	100%	11.4	16.6	14.7	--	--	--	--	--
Potassium	mg/L	5	5	100%	2.5	3.6	2.9	--	--	--	--	--
Sodium	mg/L	6	6	100%	20	25	22	--	--	--	--	--
Chloride	mg/L	7	7	100%	8.5	39.9	21.4	--	500	--	--	500
Fluoride	mg/L	7	7	100%	0.40	0.80	0.587	2	--	--	--	2
Sulfate (SO4)	mg/L	7	7	100%	25.1	70	38.7	--	500	--	--	500
Gross Alpha	pCi/L	12	12	100%	1.2	6.6	3.66	15	--	--	--	15
Gross Beta	pCi/L	7	7	100%	1.5	7.2	4.9	50	--	--	--	50
Radium 226	pCi/L	1	1	100%	0.080	0.080	0.080	5 (a)	--	--	--	5 (a)
Radium 228	pCi/L	1	1	100%	0.26	0.26	0.26	5 (a)	--	--	--	5 (a)
Uranium	PCI/L	5	5	100%	2.2	4.0	3.3	20	--	--	--	20
Chloroform	µg/L	44	44	100%	1.2	15	3.95	100	--	--	--	100
Chlorthal	µg/L	1	1	100%	0.1	0.1	0.10	--	--	--	--	--
Alkalinity	mg/L	8	8	100%	146	205	173	--	--	--	--	--
Alkalinity (total)	mg/L	6	6	100%	122	171.8	151.8	--	--	--	--	--
Corrosivity	unk	1	1	100%	11.78	11.78	11.78	--	non corrosive	--	--	non corrosive
Hardness (total as CaCO3)	mg/L	7	7	100%	180.2	199.2	204.8	--	--	--	--	--
pH	pH units	7	7	100%	7.37	8.35	7.71	--	--	--	--	--
Conductance	US	7	7	100%	385.0	838.0	498.4	--	1600	--	--	1600
Total Dissolved Solids	mg/L	8	8	100%	234.0	494	290.90	--	1000	--	--	1000
Perchlorate	mg/L	12	12	100%	0.0420	0.160	0.096	--	--	0.006	0.0060	0.0060
Total Trihalomethanes	µg/L	40	42	95%	1.2	9.8	3.98	--	--	--	--	--
Trichloroethene	µg/L	46	49	94%	1.2	15	3.7	5.0	--	0.80	--	5.0
Nitrate -NO3	mg/L	8	9	89%	1.4	59.2	12.510	45	--	--	--	45
Bicarbonate (as HCO3)	mg/L	6	7	86%	136.0	244.0	173.3	--	--	--	--	--
Turbidity	NTU	6	7	86%	0.05	0.35	0.16	--	5	--	--	5
bis(2-Ethylhexyl)phthalate	µg/L	1	2	50%	5.0	5.0	4.0	4.0	--	12	--	4.0
Foaming Agents (MBAS)	µg/L	3	6	50%	0.02	20.0	3.35	--	500	--	--	500
Atrazine	µg/L	2	5	40%	0.50	0.50	0.50	1.0	--	0.15	--	1.0
Tetrachloroethene	µg/L	13	39	33%	0.20	1.1	0.37	5.0	--	0.060	--	5.0
Carbonate (as CO3)	mg/L	2	6	33%	3.02	6.2	1.70	--	--	--	--	--
Simazine	µg/L	2	7	29%	0.50	0.50	0.50	4.0	--	4.0	--	4.0
1,2-Dichloroethane	µg/L	10	38	26%	0.22	3.3	0.47	0.50	--	0.40	--	0.50
Iron	mg/L	1	4	25%	0.041	0.041	0.048	--	0.30	--	--	0.30
Manganese	mg/L	1	4	25%	0.018	0.018	0.016	--	0.050	--	--	0.050
Copper	mg/L	1	4	25%	0.049	0.049	0.026	1.3	1.0	0.17	--	1.3
Zinc	mg/L	1	4	25%	0.027	0.027	0.020	--	5.0	--	--	5.0
Bromodichloromethane	µg/L	8	33	24%	0.30	2.2	0.36	100	--	--	--	100
Silver	mg/L	1	5	20%	0.01	0.01	0.0055	--	0.10	--	--	0.10
Barium	mg/L	2	12	17%	0.04	0.042	0.0464	1.0	--	--	--	1.0
Mercury	mg/L	1	8	13%	0.0008	0.0008	0.0006	0.0020	--	0.0012	--	0.0020
Selenium	mg/L	1	8	13%	0.00062	0.00062	0.004	0.050	--	--	--	0.050
Dibromochloromethane	µg/L	2	30	7%	0.60	1.3	0.28	100	--	--	--	100
1,1,1-Trichloroethane	µg/L	2	31	6%	0.40	0.40	0.48	200	--	--	--	200
Methylene Chloride	µg/L	2	33	6%	0.60	0.70	0.30	5.0	--	4.0	--	5.0
1,1,2-Trichlorotrifluoroethane	µg/L	1	18	6%	0.80	0.80	4.24	1,200	--	4,000	--	1,200
1,2,4-Trichlorobenzene	µg/L	--	28	0%	--	--	--	5	--	5.0	--	5
1,2,4-Trimethylbenzene	µg/L	--	27	0%	--	--	--	--	--	--	330	330
1,4-Dichlorobenzene	µg/L	--	30	0%	--	--	--	5.0	--	6.0	--	5.0
2,4,6-Trichlorophenol	µg/L	--	1	0%	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	µg/L	--	1	0%	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	µg/L	--	1	0%	--	--	--	--	--	--	100	100
2,4-Dinitrophenol	µg/L	--	1	0%	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
2-Chloronaphthalene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
2-Chlorophenol	µg/L	--	1	0%	--	--	--	--	--	--	--	--
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-o-cresol)	µg/L	--	1	0%	--	--	--	--	--	--	--	--
2-Nitrophenol	µg/L	--	1	0%	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	µg/L	--	1	0%	--	--	--	--	--	--	--	--
4-Bromophenylphenylether	µg/L	--	1	0%	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	µg/L	--	1	0%	--	--	--	--	--	--	--	--
4-Chlorophenylphenylether	µg/L	--	1	0%	--	--	--	--	--	--	--	--
4-Nitrophenol	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Alachlor	µg/L	--	5	0%	--	--	--	2.0	--	4.0	--	2.0
Aldrin	µg/L	--	5	0%	--	--	--	--	--	--	0.0020	0.0020
Alpha-BHC	µg/L	--	2	0%	--	--	--	--	--	--	0.015	0.015
Benzidine	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Beta-BHC	µg/L	--	2	0%	--	--	--	--	--	--	0.025	0.025
bis(2-Chloroethoxy)methane	µg/L	--	1	0%	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	µg/L	--	1	0%	--	--	--	--	--	--	--	--
bis(2-Chloroisopropyl)ether	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Bromacil	µg/L	--	4	0%	--	--	--	--	--	--	--	--
Butylbenzylphthalate	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Delta-BHC	µg/L	--	2	0%	--	--	--	--	--	--	0.025	0.025
Dieldrin	µg/L	--	5	0%	--	--	--	--	--	--	0.0020	0.0020
Diethylphthalate	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Dimethoate	µg/L	--	1	0%	--	--	--	--	--	--	1.0	1.0
Dimethylphthalate	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Di-n-butylphthalate	µg/L	--	1	0%	--	--	--	--	--	--	--	--
4,6-Dinitro-o-cresol	µg/L	--	1	0%	--	--	--	--	--	--	--	--

TABLE 3-1
Summary of Historical Water Quality Data for the Arroyo Well (June 1985 until April 1999)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
Di-n-octylphthalate	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Endrin	µg/L	--	10	0%	--	--	--	2.0	--	1.8	--	2.0
Fluoranthene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Fluorene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
gamma-BHC (Lindane)	µg/L	--	10	0%	--	--	--	0.20	--	0.032	--	0.20
Heptachlor	µg/L	--	7	0%	--	--	--	0.010	--	0.0080	--	0.010
Heptachlor Epoxide	µg/L	--	7	0%	--	--	--	0.010	--	0.0060	--	0.010
Hexachlorobenzene	µg/L	--	4	0%	--	--	--	1.0	--	--	--	1.0
Hexachlorobutadiene	µg/L	--	28	0%	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	µg/L	--	4	0%	--	--	--	50	--	50	--	50
Hexachloroethane	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Isophorone	µg/L	--	1	0%	--	--	--	--	--	--	--	--
m-Dichlorobenzene (1,3-DCB)	µg/L	--	30	0%	--	--	--	--	--	--	600	600
Methoxychlor	µg/L	--	10	0%	--	--	--	30	--	30	--	30
Molinate	µg/L	--	4	0%	--	--	--	20	--	--	--	20
Naphthalene	µg/L	--	19	0%	--	--	--	--	--	--	17	17
Nitrobenzene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Nitrosodipropylamine (N-Nitrosodi-N-propylamine)	µg/L	--	1	0%	--	--	--	--	--	--	--	--
N-Nitrosodimethylamine	µg/L	--	1	0%	--	--	--	--	--	--	0.010	0.010
N-Nitrosodiphenylamine	µg/L	--	1	0%	--	--	--	--	--	--	--	--
o-Dichlorobenzene (1,2-DCB)	µg/L	--	30	0%	--	--	--	--	--	--	600	600
Pentachlorobenzene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Pentachlorophenol	µg/L	--	3	0%	--	--	--	1.0	--	0.40	--	1.0
Phenanthrene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Phenol	µg/L	--	1	0%	--	--	--	--	--	--	4,200	4,200
Prometryn	µg/L	--	5	0%	--	--	--	--	--	--	--	--
Thiobencarb	µg/L	--	4	0%	--	--	--	70	1.0	70	--	70
Trifluralin	µg/L	--	1	0%	--	--	--	--	--	--	--	--
2,4,5-TP	µg/L	--	7	0%	--	--	--	50	--	--	--	50
2,4-D	µg/L	--	7	0%	--	--	--	70	--	70	--	70
2,4,7,8-TCDD (dioxin)	µg/L	--	1	0%	--	--	--		--	--	--	--
Endothall	µg/L	--	3	0%	--	--	--	100	--	580	--	100
Merphos	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Aluminum	µg/L	--	3	0%	--	--	--	1.0	0.20	0.60	--	1.0
Arsenic	µg/L	--	5	0%	--	--	--	50.000	--	--	--	50.000
Cadmium	µg/L	--	5	0%	--	--	--	0.0050	--	7.00E-05	--	0.0050
Chromium	µg/L	--	5	0%	--	--	--	0.050	--	--	--	0.050
Lead	µg/L	--	5	0%	--	--	--	0.015	--	0.0020	--	0.015
Acenaphthene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Acenaphthylene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Anthracene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
benzo (g,h,i) perylene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
benzo(a)anthracene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
benzo(a)pyrene	µg/L	--	2	0%	--	--	--	0.20	--	0.0040	--	0.20
benzo(b)fluoranthene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
benzo(k)fluoranthene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Chrysene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Pyrene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
PCB-1016	µg/L	--	1	0%	--	--	--	--	--	--	--	--
PCB-1221	µg/L	--	1	0%	--	--	--	--	--	--	--	--
PCB-1232	µg/L	--	1	0%	--	--	--	--	--	--	--	--
PCB-1242	µg/L	--	1	0%	--	--	--	--	--	--	--	--
PCB-1248	µg/L	--	1	0%	--	--	--	--	--	--	--	--
PCB-1254	µg/L	--	1	0%	--	--	--	--	--	--	--	--
PCB-1260	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Polychlorinated Biphenyls	µg/L	--	3	0%	--	--	--	--	--	--	--	--
4,4-DDD	µg/L	--	2	0%	--	--	--	--	--	--	--	--
4,4-DDE	µg/L	--	2	0%	--	--	--	--	--	--	--	--
4,4-DDT	µg/L	--	2	0%	--	--	--	--	--	--	--	--
Aldicarb	µg/L	--	7	0%	--	--	--	--	--	--	7.0	7.0
Aldicarb Sulfone	µg/L	--	6	0%	--	--	--	--	--	--	--	--
Aldicarb Sulfoxide	µg/L	--	6	0%	--	--	--	--	--	--	--	--
Benfluralin	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Bentazon	µg/L	--	3	0%	--	--	--	18	--	200	--	18
Captan	µg/L	--	1	0%	--	--	--	--	--	--	1.5	1.5
Carbofuran	µg/L	--	7	0%	--	--	--	18	--	1.7	--	18
Chlordane	µg/L	--	7	0%	--	--	--	--	--	--	--	--
Chlordimeform	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Chloropicrin	µg/L	--	1	0%	--	--	--	--	--	--	56	56
Chlorothalonil	µg/L	--	3	0%	--	--	--	--	--	--	--	--
cis-Permethrin	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Cyanzine	µg/L	--	2	0%	--	--	--	--	--	--	--	--
Dacthal	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Dalapon	µg/L	--	3	0%	--	--	--	200	--	790	--	200
Diazinon	µg/L	--	3	0%	--	--	--	--	--	--	6.0	6.0
Dicofol	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Dinoseb	µg/L	--	2	0%	--	--	--	7.0	--	14	--	7.0
Diphenamide	µg/L	--	1	0%	--	--	--	--	--	--	200	200
Endosulfan I	µg/L	--	2	0%	--	--	--	--	--	--	--	--
Endosulfan II	µg/L	--	2	0%	--	--	--	--	--	--	--	--
Endosulfan Sulfate	µg/L	--	2	0%	--	--	--	--	--	--	--	--
Endrin Aldehyde	µg/L	--	2	0%	--	--	--	--	--	--	--	--

TABLE 3-1
Summary of Historical Water Quality Data for the Arroyo Well (June 1985 until April 1999)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
Fluchloralin	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Glyphosate	µg/L	--	6	0%	--	--	--	700	--	1,000	--	700
Napropamide	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Oryzalin	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Picloram	µg/L	--	1	0%	--	--	--	500	--	500	--	500
Propamide	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Propargite	mg/L	--	1	0%	--	--	--	--	--	--	--	--
s,s,s-Tributylphosphorotrithioate	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Toxaphene	µg/L	--	10	0%	--	--	--	3.0	--	--	--	3.0
trans-Permethrin	µg/L	--	1	0%	--	--	--	--	--	--	--	--
1,1,1,2-Tetrachloroethane	µg/L	--	27	0%	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	µg/L	--	30	0%	--	--	--	1.0	--	--	--	1.0
1,1,2-Trichloroethane	µg/L	--	30	0%	--	--	--	5.0	--	--	--	5.0
1,1-Dichloroethane	µg/L	--	30	0%	--	--	--	5.0	--	--	--	5.0
1,1-Dichloroethene	µg/L	--	30	0%	--	--	--	6.0	--	10	--	6.0
1,1-Dichloropropene	µg/L	--	27	0%	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	µg/L	--	27	0%	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	µg/L	--	27	0%	--	--	--	--	--	--	0.0050	0.0050
1,2-Dibromo-3-Chloropropane (DBCP)	µg/L	--	6	0%	--	--	--	0.010	--	0.0017	--	0.010
1,2-Dibromoethane (EDB)	µg/L	--	6	0%	--	--	--	0.050	--	--	--	0.050
1,2-Dichloroethene	µg/L	--	8	0%	--	--	--	10	--	--	--	10
1,2-Dichloropropane	µg/L	--	30	0%	--	--	--	5.0	--	0.50	--	5.0
1,3,5-Trimethylbenzene	µg/L	--	27	0%	--	--	--	--	--	--	--	--
1,3-dichloropropane	µg/L	--	27	0%	--	--	--	--	--	--	--	--
2,2-Dichloropropane	µg/L	--	27	0%	--	--	--	--	--	--	--	--
2-Butanone	µg/L	--	6	0%	--	--	--	--	--	--	--	--
2-Chloroethylvinylether	µg/L	--	18	0%	--	--	--	--	--	--	--	--
2-Chlorotoluene	µg/L	--	27	0%	--	--	--	--	--	--	140	140
3-Hydroxycarbofuran	µg/L		6	0%	--	--	--	--	--	--	--	--
4-Chlorotoluene	µg/L	--	27	0%	--	--	--	--	--	--	140	140
Benzene	µg/L	--	30	0%	--	--	--	1.0	--	0.15	--	1.0
Bromobenzene	µg/L	--	27	0%	--	--	--	--	--	--	--	--
Bromochloromethane	µg/L	--	27	0%	--	--	--	--	--	--	--	--
Bromoform	µg/L	--	30	0%	--	--	--	100	--	--	--	100
Bromomethane	µg/L	--	30	0%	--	--	--	--	--	--	--	--
Chlorobenzene	µg/L	--	30	0%	--	--	--	70	--	--	--	70
Chloroethane	µg/L	--	30	0%	--	--	--	--	--	--	--	--
Chloromethane	µg/L	--	30	0%	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	µg/L	--	28	0%	--	--	--	6.0	--	--	--	6.0
cis-1,3-Dichloropropene	µg/L	--	27	0%	--	--	--	--	--	--	--	--
Dibromomethane	µg/L	--	27	0%	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	µg/L	--	27	0%	--	--	--	--	--	--	1,000	1,000
Ethylbenzene	µg/L	--	30	0%	--	--	--	300	--	300	--	300
Isopropylbenzene	µg/L	--	27	0%	--	--	--	--	--	--	770	770
Kerosene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
m,p-Xylene	µg/L	--	27	0%	--	--	--	1,750	--	1,800	--	1,750
Methyl Isobutyl Ketone (4-methyl-2-pentanone	µg/L	--	6	0%	--	--	--	--	--	--	120	120
Methyl-t-Butyl Ether (MTBE)	µg/L	--	14	0%	--	--	--	13	5.0	13	--	13
n-Butylbenzene	µg/L	--	27	0%	--	--	--	--	--	--	70	70
n-Propylbenzene	µg/L	--	27	0%	--	--	--	--	--	--	260	260
o-Xylene	µg/L	--	27	0%	--	--	--	--	--	--	--	--
p-isopropyltoluene	µg/L	--	27	0%	--	--	--	--	--	--	--	--
sec-Butylbenzene	µg/L	--	27	0%	--	--	--	--	--	--	260	260
Styrene	µg/L	--	27	0%	--	--	--	100	--	--	--	100
tert-Butylbenzene	µg/L	--	25	0%	--	--	--	--	--	--	260	260
Toluene	µg/L	--	30	0%	--	--	--	150	--	150	--	150
trans-1,3-Dichloropropene	µg/L	--	3	0%	--	--	--	--	--	--	--	--
Trichlorofluoromethane	µg/L	--	30	0%	--	--	--	150	--	700	--	150
Vinyl Chloride	µg/L	--	30	0%	--	--	--	0.50	--	0.50	--	0.50
Xylenes, Total	µg/L	--	30	0%	--	--	--	1,750	--	1,800	--	1,750

Shading indicates exceedence of applicable standard.
* The Applicable Regulatory Limit is the regulatory limit with the lowest concentration; proposed CA Primary MCL and CA PHG are not included.
(a) The MCL is 5 pCi/L for Radium-226 and Radium-228 combined.

CA = California
MCL = maximum contaminant level
PHG = public health goal
DHS = Department of Health Services

Bolding of value and qualifier means that the detection limit exceeds a CA Primary/Secondary MCL, or DHS Action Level.

TABLE 3-2
Summary of Historical Water Quality Data for Well 52 (June 1985 Through May 2002)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
Perchlorate	mg/L	182	182	100%	0.0060	0.039	0.022	--	--	0.006	0.0060	0.0060
Carbon Tetrachloride	µg/L	54	79	68%	0.50	4.8	1.2	0.50	--	0.10	--	0.50
Boron	mg/L	2	2	100%	0.13	0.16	0.14	--	--	--	1.0	1.0
Chloride	mg/L	8	8	100%	23.3	42.0	24.8	--	500	--	--	500
Fluoride	mg/L	8	8	100%	0.42	1.15	0.714	2	--	--	--	2
Sulfate (SO4)	mg/L	8	8	100%	35.2	48	41.6	--	500	--	--	500
Vanadium	mg/L	2	2	100%	0.0094	0.013	0.011	--	--	--	0.050	0.050
Combined RA226/RA228	pCi/L	2	2	100%	0.59	0.85	0.72	5	--	--	--	5
Gross Alpha	pCi/L	10	10	100%	2.4	5.9	4.3	15	--	--	--	15
Gross Beta	pCi/L	4	4	100%	1.7	6.7	3.7	50	--	--	--	50
Radium 226	pCi/L	1	1	100%	0.11	0.11	0.11	5 (a)	--	--	--	5 (a)
Radium 228	pCi/L	1	1	100%	0.055	0.055	0.055	5 (a)	--	--	--	5 (a)
Uranium	PCI/L	7	7	100%	1.5	4.0	2.9	20	--	--	--	20
Chloroform	µg/L	79	79	100%	0.50	3.0	1.1	100	--	--	--	100
Conductance	US	5	5	100%	463.0	519.0	516.0	--	900.0	--	--	900
Total Dissolved Solids	mg/L	5	5	100%	290.0	330	315.80	--	1000	--	--	1000
Trichloroethene	µg/L	84	85	99%	1.3	7.3	3.2	5.0	--	0.80	--	5.0
Nitrate -NO3	mg/L	54	57	95%	6.5	55.0	19.963	45	--	--	--	45
Turbidity	NTU	4	5	80%	0.07	0.50	0.17	--	5.00	--	--	5
bis(2-Ethylhexyl)phthalate	µg/L	1	2	50%	5	5	4	4.0	--	12	--	4.0
Foaming Agents (MBAS)	µg/L	2	6	33%	0.04	0.3	0.06	--	500	--	--	500
Arsenic	mg/L	1	5	20%	0.0020	0.0020	0.0012	0.050	--	--	--	0.050
Barium	mg/L	1	5	20%	0.051	0.051	0.050	1.0	--	--	--	1.0
Lead	mg/L	1	5	20%	0.0040	0.0040	0.0028	0.015	--	0.0020	--	0.015
Zinc	mg/L	1	5	20%	0.035	0.035	0.024	--	5.0	--	--	5.0
Tetrachloroethene	µg/L	11	64	17%	0.10	3.8	0.36	5.0	--	0.060	--	5.0
Chromium	mg/L	2	13	15%	0.0021	0.0023	0.0023	0.050	--	--	--	0.050
Bromoform	µg/L	2	58	3%	0.69	0.69	0.25	100	--	--	--	100
Ethylbenzene	µg/L	1	55	2%	0.71	0.71	0.25	300	--	300	--	300
Benzene	µg/L	1	56	2%	0.5	0.5	0.245	1.0	--	0.15	--	1.0
Methylene Chloride	µg/L	1	58	2%	1.3	1.3	0.28	5.0	--	4.0	--	5.0
1,2-Dichloroethane	µg/L	1	59	2%	1.0	1.0	0.26	0.50	--	0.40	--	0.50
Calcium	mg/L	5	5	100%	35	130	66	--	--	--	--	--
Chromium, Hexavalent	mg/L	1	1	100%	0.0021	0.0021	0.0021	--	--	--	--	--
Magnesium	mg/L	4	4	100%	12	63	26	--	--	--	--	--
Potassium	mg/L	2	2	100%	1.5	2.0	1.7	--	--	--	--	--
Sodium	mg/L	5	5	100%	18	34	27	--	--	--	--	--
Chlorthal	µg/L	1	1	100%	0.1	0.1	0.10					
Alkalinity	mg/L	5	5	100%	146	179	170	--	--	--	--	--
Ammonia	mg/L	1	1	100%	0.12	0.12	0.1	--	--	--	--	--
Corrosivity	unk	1	1	100%	11.79	11.79	11.79	--	Non corrosive	--	--	--
Hardness (total as CaCO3)	mg/L	4	4	100%	136.0	206.9	167.0	--	--	--	--	--
pH	pH units	5	5	100%	7.30	7.54	7.43	--	--	--	--	--
Total Trihalomethanes	µg/L	74	76	97%	0.5	2.7	1.08	--	--	--	--	--
Bicarbonate (as HCO3)	mg/L	3	4	75%	160.0	218.9	139.2	--	--	--	--	--
1,2,4-Trichlorobenzene	µg/L	--	52	0%	--	--	--	5	--	5.0	--	5
1,2,4-Trimethylbenzene	µg/L	--	51	0%	--	--	--	--	--	--	330	330
1,4-Dichlorobenzene	µg/L	--	55	0%	--	--	--	5.0	--	6.0	--	5.0
2,4-Dimethylphenol	µg/L	--	1	0%	--	--	--	--	--	--	100	100
Alachlor	µg/L	--	6	0%	--	--	--	2.0	--	4.0	--	2.0
Alpha-BHC	µg/L	--	2	0%	--	--	--	--	--	--	0.015	0.015
Atrazine	µg/L	--	8	0%	--	--	--	1.0	--	0.15	--	1.0
Endrin	µg/L	--	7	0%	--	--	--	2.0	--	1.8	--	2.0
gamma-BHC (Lindane)	µg/L	--	7	0%	--	--	--	0.20	--	0.032	--	0.20
Heptachlor	µg/L	--	7	0%	--	--	--	0.010	--	0.0080	--	0.010
Heptachlor Epoxide	µg/L	--	7	0%	--	--	--	0.010	--	0.0060	--	0.010
Hexachlorobenzene	µg/L	--	1	0%	--	--	--	1.0	--	--	--	1.0
Hexachlorocyclopentadiene	µg/L	--	4	0%	--	--	--	50	--	50	--	50
m-Dichlorobenzene (1,3-DCB)	µg/L	--	55	0%	--	--	--	--	--	--	600	600
Methoxychlor	µg/L	--	7	0%	--	--	--	30	--	30	--	30
Molinate	µg/L	--	5	0%	--	--	--	20	--	--	--	20
Naphthalene	µg/L	--	37	0%	--	--	--	--	--	--	17	17
o-Dichlorobenzene (1,2-DCB)	µg/L	--	55	0%	--	--	--	--	--	--	600	600
Pentachlorophenol	µg/L	--	1	0%	--	--	--	1.0	--	0.40	--	1.0
Phenol	µg/L	--	1	0%	--	--	--	--	--	--	4,200	4,200
Simazine	µg/L	--	8	0%	--	--	--	4.0	--	4.0	--	4.0
Thiobencarb	µg/L	--	5	0%	--	--	--	70	1.0	70	--	1.0
2,4,5-TP	µg/L	--	5	0%	--	--	--	50	--	--	--	50
2,4-D	µg/L	--	6	0%	--	--	--	70	--	70	--	70
Endothall	µg/L	--	3	0%	--	--	--	100	--	580	--	100
Aluminum	µg/L	--	5	0%	--	--	--	1.0	0.20	0.60	--	0.2
benzo(a)pyrene	µg/L	--	2	0%	--	--	--	0.20	--	0.0040	--	0.20
Aldicarb	µg/L	--	6	0%	--	--	--	--	--	--	7.0	7.0
Bentazon	µg/L	--	4	0%	--	--	--	18	--	200	--	18
Captan	µg/L	--	1	0%	--	--	--	--	--	--	1.5	1.5
Carbofuran	µg/L	--	6	0%	--	--	--	18	--	1.7	--	18
Chloropicrin	µg/L	--	1	0%	--	--	--	--	--	--	56	56
Dalapon	µg/L	--	4	0%	--	--	--	200	--	790	--	200
Dinoseb	µg/L	--	3	0%	--	--	--	7.0	--	14	--	7.0
Diphenamide	µg/L	--	1	0%	--	--	--	--	--	--	200	200
Glyphosate	µg/L	--	6	0%	--	--	--	700	--	1,000	--	700
Picloram	µg/L	--	4	0%	--	--	--	500	--	500	--	500
Toxaphene	µg/L	--	7	0%	--	--	--	3.0	--	--	--	3.0
1,1,1-Trichloroethane	µg/L	--	56	0%	--	--	--	200	--	--	--	200
1,1,2,2-Tetrachloroethane	µg/L	--	55	0%	--	--	--	1.0	--	--	--	1.0
1,1,2-Trichloroethane	µg/L	--	55	0%	--	--	--	5.0	--	--	--	5.0

TABLE 3-2
Summary of Historical Water Quality Data for Well 52 (June 1985 Through May 2002)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
1,1,2-Trichlorotrifluoroethane	µg/L	--	38	0%	--	--	--	1,200	--	4,000	--	1,200
1,1-Dichloroethane	µg/L	--	55	0%	--	--	--	5.0	--	--	--	5.0
1,1-Dichloroethene	µg/L	--	55	0%	--	--	--	6.0	--	10	--	6.0
1,2,3-Trichloropropane	µg/L	--	53	0%	--	--	--	--	--	--	0.0050	0.0050
1,2-Dibromo-3-Chloropropane	µg/L	--	8	0%	--	--	--	0.010	--	0.0017	--	0.010
1,2-Dibromoethane (EDB)	µg/L	--	7	0%	--	--	--	0.050	--	--	--	0.050
1,2-Dichloroethene	µg/L	--	8	0%	--	--	--	10	--	--	--	10
1,2-Dichloropropane	µg/L	--	55	0%	--	--	--	5.0	--	0.50	--	5.0
2-Chlorotoluene	µg/L	--	52	0%	--	--	--	--	--	--	140	140
4-Chlorotoluene	µg/L	--	52	0%	--	--	--	--	--	--	140	140
Bromodichloromethane	µg/L	--	55	0%	--	--	--	100	--	--	--	100
Chlorobenzene	µg/L	--	55	0%	--	--	--	70	--	--	--	70
cis-1,2-Dichloroethene	µg/L	--	51	0%	--	--	--	6.0	--	--	--	6.0
Dibromochloromethane (THM)	µg/L	--	55	0%	--	--	--	100	--	--	--	100
Dichlorodifluoromethane	µg/L	--	54	0%	--	--	--	--	--	--	1,000	1,000
Isopropylbenzene	µg/L	--	52	0%	--	--	--	--	--	--	770	770
m,p-Xylene	µg/L	--	52	0%	--	--	--	1,750	--	1,800	--	1,750
Methyl Isobutyl Ketone (4-methyl-2-pentanone)	µg/L	--	19	0%	--	--	--	--	--	--	120	120
Methyl-t-Butyl Ether (MTBE)	µg/L	--	48	0%	--	--	--	13	5.0	13	--	5
n-Butylbenzene	µg/L	--	51	0%	--	--	--	--	--	--	70	70
n-Propylbenzene	µg/L	--	52	0%	--	--	--	--	--	--	260	260
sec-Butylbenzene	µg/L	--	46	0%	--	--	--	--	--	--	260	260
Styrene	µg/L	--	52	0%	--	--	--	100	--	--	--	100
tert-Butylbenzene	µg/L	--	51	0%	--	--	--	--	--	--	260	260
Toluene	µg/L	--	55	0%	--	--	--	150	--	150	--	150
trans-1,3-Dichloropropene	µg/L	--	3	0%	--	--	--	--	--	--	--	--
Trichlorofluoromethane	µg/L	--	55	0%	--	--	--	150	--	700	--	150
Vinyl Chloride	µg/L	--	55	0%	--	--	--	0.50	--	0.50	--	0.50
Xylenes, Total	µg/L	--	55	0%	--	--	--	1,750	--	1,800	--	1,750
Aldrin	µg/L	--	5	0%	--	--	--	--	--	--	0.0020	0.0020
Beta-BHC	µg/L	--	2	0%	--	--	--	--	--	--	0.025	0.025
Delta-BHC	µg/L	--	2	0%	--	--	--	--	--	--	0.025	0.025
Dieldrin	µg/L	--	5	0%	--	--	--	--	--	--	0.0020	0.0020
Dimethoate	µg/L	--	2	0%	--	--	--	--	--	--	1.0	1.0
N-Nitrosodimethylamine	µg/L	--	1	0%	--	--	--	--	--	--	0.010	0.010
Cadmium	µg/L	--	5	0%	--	--	--	0.0050	--	0.00007	--	0.0050
Copper	µg/L	--	5	0%	--	--	--	1.3	1.0	0.17	--	1.0
Iron	µg/L	--	5	0%	--	--	--	--	0.30	--	--	0.30
Manganese	µg/L	--	5	0%	--	--	--	--	0.050	--	--	0.050
Mercury	µg/L	--	5	0%	--	--	--	0.0020	--	0.0012	--	0.0020
Selenium	µg/L	--	5	0%	--	--	--	0.050	--	--	--	0.050
2,3,7,8-TCDD	µg/L	--	1	0%	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	µg/L	--	1	0%	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	µg/L	--	1	0%	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	µg/L	--	1	0%	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
2-Chloronaphthalene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
2-Chlorophenol	µg/L	--	1	0%	--	--	--	--	--	--	--	--
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-o-cresol)	µg/L	--	1	0%	--	--	--	--	--	--	--	--
2-Nitrophenol	µg/L	--	1	0%	--	--	--	--	--	--	--	--
3-Hydroxycarbofuran	µg/L	--	5	0%	--	--	--					
3,3'-Dichlorobenzidine	µg/L	--	1	0%	--	--	--	--	--	--	--	--
4,6-Dinitro-o-cresol	µg/L	--	1	0%	--	--	--					
4-Bromophenylphenylether	µg/L	--	1	0%	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	µg/L	--	1	0%	--	--	--	--	--	--	--	--
4-Chlorophenylphenylether	µg/L	--	1	0%	--	--	--	--	--	--	--	--
4-Nitrophenol	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Aldicarb sulfone	µg/L	--	5	0%	--	--	--	--	--	--	--	--
Aldicarb sulfoxide	µg/L	--	5	0%	--	--	--	--	--	--	--	--
Benzidine	µg/L	--	1	0%	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	µg/L	--	1	0%	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	µg/L	--	1	0%	--	--	--	--	--	--	--	--
bis(2-Chloroisopropyl)ether	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Bromacil	µg/L	--	6	0%	--	--	--	--	--	--	--	--
Butylbenzylphthalate	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Diethylphthalate	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Dimethylphthalate	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Di-n-butylphthalate	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Di-n-octylphthalate	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Fluoranthene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Fluorene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Hexachlorobutadiene	µg/L	--	53	0%	--	--	--	--	--	--	--	--
Hexachloroethane	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Isophorone	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Nitrobenzene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Nitrosodipropylamine (N-Nitrosodi-N-propylamine)	µg/L	--	1	0%	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Pentachlorobenzene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Phenanthrene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Prometryn	µg/L	--	5	0%	--	--	--	--	--	--	--	--
Trifluralin	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Merphos	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Silver	µg/L	--	5	0%	--	--	--	--	0.10	--	--	0.10
Acenaphthene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Acenaphthylene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Anthracene	µg/L	--	1	0%	--	--	--	--	--	--	--	--

TABLE 3-2
Summary of Historical Water Quality Data for Well 52 (June 1985 Through May 2002)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
benzo (g,h,i) perylene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
benzo(a)anthracene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
benzo(b)fluoranthene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
benzo(k)fluoranthene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Chrysene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Pyrene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
PCB-1016	µg/L	--	1	0%	--	--	--	--	--	--	--	--
PCB-1221	µg/L	--	1	0%	--	--	--	--	--	--	--	--
PCB-1232	µg/L	--	1	0%	--	--	--	--	--	--	--	--
PCB-1242	µg/L	--	1	0%	--	--	--	--	--	--	--	--
PCB-1248	µg/L	--	1	0%	--	--	--	--	--	--	--	--
PCB-1254	µg/L	--	1	0%	--	--	--	--	--	--	--	--
PCB-1260	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Polychlorinated Biphenyls	µg/L	--	4	0%	--	--	--	--	--	--	--	--
4,4-DDD	µg/L	--	2	0%	--	--	--	--	--	--	--	--
4,4-DDE	µg/L	--	2	0%	--	--	--	--	--	--	--	--
4,4-DDT	µg/L	--	2	0%	--	--	--	--	--	--	--	--
Benfluralin	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Chlordane	µg/L	--	8	0%	--	--	--	--	--	--	--	--
Chlordimeform	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Chlorothalonil	µg/L	--	3	0%	--	--	--	--	--	--	--	--
cis-Permethrin	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Cyanzine	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Dacthal	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Diazinon	µg/L	--	4	0%	--	--	--	--	--	--	6.0	6.0
Dicofol	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Endosulfan I	µg/L	--	2	0%	--	--	--	--	--	--	--	--
Endosulfan II	µg/L	--	2	0%	--	--	--	--	--	--	--	--
Endosulfan Sulfate	µg/L	--	2	0%	--	--	--	--	--	--	--	--
Endrin Aldehyde	µg/L	--	2	0%	--	--	--	--	--	--	--	--
Fluchloralin	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Napropamide	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Oryzalin	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Propamide	µg/L	--	1	0%	--	--	--	--	--	--	--	--
Propargite	mg/L	--	1	0%	--	--	--	--	--	--	--	--
s,s,s-Tributylphosphorotrithioate	µg/L	--	1	0%	--	--	--	--	--	--	--	--
trans-Permethrin	µg/L	--	1	0%	--	--	--	--	--	--	--	--
1,1,1,2-Tetrachloroethane	µg/L	--	52	0%	--	--	--	--	--	--	--	--
1,1-Dichloropropene	µg/L	--	52	0%	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	µg/L	--	51	0%	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	µg/L	--	51	0%	--	--	--	--	--	--	--	--
1,3-dichloropropane	µg/L	--	52	0%	--	--	--	--	--	--	--	--
2,2-Dichloropropane	µg/L	--	52	0%	--	--	--	--	--	--	--	--
2-Butanone	µg/L	--	19	0%	--	--	--	--	--	--	--	--
2-Chloroethylvinylether	µg/L	--	33	0%	--	--	--	--	--	--	--	--
Bromobenzene	µg/L	--	52	0%	--	--	--	--	--	--	--	--
Bromochloromethane	µg/L	--	52	0%	--	--	--	--	--	--	--	--
Bromomethane	µg/L	--	55	0%	--	--	--	--	--	--	--	--
Chloroethane	µg/L	--	55	0%	--	--	--	--	--	--	--	--
Chloromethane	µg/L	--	55	0%	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	µg/L	--	3	0%	--	--	--	--	--	--	--	--
Dibromomethane	µg/L	--	52	0%	--	--	--	--	--	--	--	--
Kerosene	µg/L	--	1	0%	--	--	--	--	--	--	--	--
o-Xylene	µg/L	--	52	0%	--	--	--	--	--	--	--	--
p-isopropyltoluene	µg/L	--	51	0%	--	--	--	--	--	--	--	--

Shading indicates exceedence of applicable standard.
Note: The data summarized in this table includes samples from June 1985 to May 2002.
* The Applicable Regulatory Limit is the regulatory limit with the lowest concentration; proposed CA Primary MCL and CA PHG are not included.
(a) The MCL is 5 pCi/L for Radium-226 and Radium-228 combined.

CA = California
MCL = maximum contaminant level
PHG = public health goal
DHS = Department of Health Services

TABLE 3-3
Summary of Constituents Analyzed for in Groundwater Collected from the Ventura Production Well (January 1989 to September 2002)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
ALKALINITY (TOTAL) AS CACO3	MG/L	7	7	100%	161.6	194.82	179.6	--	--	--	--	--
BARIUM	UG/L	5	5	100%	95	128	112	1000	--	2000	--	1000
BICARBONATE ALKALINITY	MG/L	4	4	100%	170	221	198.0	--	--	--	--	--
CALCIUM	MG/L	7	7	100%	61	221	96	--	--	--	--	--
CHLORIDE	MG/L	7	7	100%	37	76	55	--	500	--	--	500
CHROMIUM, HEXAVALENT	UG/L	2	2	100%	1.2	4.6	2.9	--	--	--	--	--
COMBINED RA 226 + RA 228	PCI/L	2	2	100%	0.61	1.21	0.91	5	--	--	--	5
FLUORIDE (TEMPERATURE DEPENDENT)	MG/L	7	7	100%	0.07	1	0.43	2	--	1	--	2
GROSS ALPHA	PCI/L	11	11	100%	2.9	7	4.7	15	--	--	--	15
GROSS BETA	PCI/L	4	4	100%	0.98	9.8	5	50	--	--	--	50
HARDNESS (TOTAL) AS CACO3	MG/L	7	7	100%	214	388	286	--	--	--	--	--
TURBIDITY	NTU	7	7	100%	0.05	0.6	0.52	--	5	--	--	5
PH	UNITS	7	7	100%	7.1	7.54	7.24	--	--	--	--	--
MAGNESIUM	MG/L	6	6	100%	15	101	37	--	--	--	--	--
POTASSIUM	MG/L	3	3	100%	1.9	3	2.5	--	--	--	--	--
RADIUM 226	PCI/L	1	1	100%	0.05	0.05	0.05	5	--	0.069	--	5
RADIUM 228	PCI/L	1	1	100%	1.15	1.15	1.15	5	--	--	--	5
SODIUM	MG/L	7	7	100%	21	36.5	27.6	--	--	--	--	--
SULFATE	MG/L	7	7	100%	40	106	72	--	500	--	--	500
TOTAL DISSOLVED SOLIDS	MG/L	7	7	100%	33.1	512	390	--	1000	--	--	1000
URANIUM	PCI/L	7	7	100%	3.12	9.32	5.1	20	--	0.43	--	20
NITRATE - NO3	MG/L	51	52	98%	19.8	61.7	40.3	45	--	45	--	45
PERCHLORATE	UG/L	111	181	61%	2.9	9.66	3.99	--	--	6	6	6
TRICHLOROETHYLENE	UG/L	63	83	76%	0.3	1.8	0.7	5	--	0.8	--	5
TETRACHLOROETHYLENE	UG/L	48	74	65%	0.4	1.3	0.52	5	--	0.06	--	5
CHLOROFORM (THM)	UG/L	40	71	56%	0.4	2.12	0.51	100	--	--	--	100
TOTAL TRIHALOMETHANES	UG/L	35	67	52%	0.4	2.12	0.47	--	--	--	--	--
BORON	UG/L	1	2	50%	64	64	57	--	--	--	1,000	1,000
VANADIUM	UG/L	1	2	50%	8.8	8.8	6.9	--	--	--	50	50
CHROMIUM (TOTAL)	UG/L	1	5	20%	1.7	1.7	3.84	50	--	--	--	50
ALUMINUM	UG/L	1	6	17%	327	327	71	1000	200	600	--	1000
COPPER	UG/L	1	6	17%	6	6	19.33	--	1000	170	1300	1000
CHROMIUM (TOTAL CR-CRVI SCREEN)	UG/L	1	7	14%	2.4	2.4	0.77	50	--	--	--	50
IRON	UG/L	1	7	14%	468	468	102	--	300	--	--	300
ZINC	UG/L	1	7	14%	25	25	23	5000	--	--	--	5000
ATRAZINE	UG/L	1	8	13%	0.5	0.5	0.5	1	--	0.15	--	1
SIMAZINE	UG/L	1	9	11%	0.5	0.5	0.5	4	--	4	--	4
CIS-1,2-DICHLOROETHYLENE	UG/L	2	53	4%	0.2	0.2	0.2	6	--	100	--	6
O-XYLENE	UG/L	1	53	2%	0.6	0.6	0.25	1,750	--	1,800	--	1,750
XYLENES (TOTAL)	UG/L	1	55	2%	0.6	0.6	0.25	1750	--	1800	--	1750
DICHLOROMETHANE	UG/L	1	57	2%	0.6	0.6	0.27	5	--	4	--	5
COLOR	COLOR	0	3	0%	--	--	--	--	15	--	--	15
1,1,1,2-TETRACHLORETHANE	UG/L	0	53	0%	--	--	--	--	--	--	--	--
1,1,1-TRICHLOROETHANE	UG/L	0	59	0%	--	--	--	200	--	1,000	--	200
1,1,2,2-TETRACHLOROETHANE	UG/L	0	61	0%	--	--	--	1	--	0.1	--	1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG/L	0	41	0%	--	--	--	1200	--	4000	--	1200
1,1,2-TRICHLOROETHANE	UG/L	0	56	0%	--	--	--	5	--	0.2	--	5
1,1-DICHLOROETHANE	UG/L	0	55	0%	--	--	--	5	--	3	--	5
1,1-DICHLOROETHYLENE	UG/L	0	55	0%	--	--	--	6	--	10	--	6
1,1-DICHLOROPROPENE	UG/L	0	53	0%	--	--	--	--	--	--	--	--
1,2,3-TRICHLOROBENZENE	UG/L	0	52	0%	--	--	--	1	--	--	--	1
1,2,3-TRICHLOROPROPANE	UG/L	0	47	0%	--	--	--	--	--	--	0.005	0.005
1,2,4-TRICHLOROBENZENE	UG/L	0	53	0%	--	--	--	5	--	5	--	5
1,2,4-TRIMETHYLBENZENE	UG/L	0	42	0%	--	--	--	--	--	--	330	330
1,2-DICHLOROBENZENE	UG/L	0	56	0%	--	--	--	600	--	600	--	60
1,2-DICHLOROETHANE	UG/L	0	58	0%	--	--	--	0.5	--	0.4	--	0.05
1,2-DICHLOROPROPANE	UG/L	0	56	0%	--	--	--	5	--	0.5	--	5
1,3,5-TRIMETHYLBENZENE	UG/L	0	52	0%	--	--	--	--	--	--	330	330
1,3-DICHLOROBENZENE	UG/L	0	56	0%	--	--	--	--	--	--	600	600
1,3-DICHLOROPROPANE	UG/L	0	52	0%	--	--	--	--	--	--	--	--
1,3-DICHLOROPROPENE (TOTAL)	UG/L	0	52	0%	--	--	--	0.5	--	0.5	--	0.5
1,4-DICHLOROBENZENE	UG/L	0	56	0%	--	--	--	5	--	6	--	5
1-PHENYLPROPANE (N-PROPYLBENZENE)	UG/L	0	53	0%	--	--	--	--	--	--	26	26
2,2-DICHLOROPROPANE	UG/L	0	53	0%	--	--	--	--	--	--	--	--
2,3,7,8-TCDD (DIOXIN)	UG/L	0	1	0%	--	--	--	0.00003	--	--	--	0.00003
2,4,5-T	UG/L	0	2	0%	--	--	--	--	--	--	--	--
2,4,5-TP (SILVEX)	UG/L	0	5	0%	--	--	--	50	--	25	--	50
2,4-D	UG/L	0	6	0%	--	--	--	70	--	70	--	70
2,4-DICHLOROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2,4-DIMETHYLPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	100	100
2,4-DINITROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2,4-DINITROTOLUENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2,6-DINITROTOLUENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2-CHLOROETHYLVINYL ETHER	UG/L	0	23	0%	--	--	--	--	--	--	--	--
2-CHLORONAPHTHALENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2-CHLOROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2-CHLOROTOLUENE	UG/L	0	53	0%	--	--	--	--	--	--	140	140
2-METHYL-4,6-DINITROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2-NITROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
3,3-DICHLOROBENZIDINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
3-HYDROXYCARBOFURAN	UG/L	0	2	0%	--	--	--	--	--	--	--	--

TABLE 3-3
Summary of Constituents Analyzed for in Groundwater Collected from the Ventura Production Well (January 1989 to September 2002)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
4,4-DDD	UG/L	0	2	0%	--	--	--	--	--	--	--	--
4,4-DDE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
4,4-DDT	UG/L	0	2	0%	--	--	--	--	--	--	--	--
4-BROMOPHENYL PHENYL ETHER	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4-CHLORO-3-METHYLPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4-CHLOROPHENYL PHENYL ETHER	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4-CHLOROTOLUENE	UG/L	0	53	0%	--	--	--	--	--	--	140	140
4-NITROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ACENAPHTHENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ACENAPHTHYLENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ALACHLOR	UG/L	0	8	0%	--	--	--	2	--	4	--	2
ALDICARB	UG/L	0	3	0%	--	--	--	--	--	--	7	7
ALDICARB SULFONE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
ALDICARB SULFOXIDE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
ALDRIN	UG/L	0	4	0%	--	--	--	--	--	--	0.002	0.002
ALPHA-BHC	UG/L	0	2	0%	--	--	--	--	--	--	--	--
AMMONIA (NH3-N)	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ANTHRACENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ANTIMONY	UG/L	0	4	0%	--	--	--	6	--	20	--	6
ARSENIC	UG/L	0	5	0%	--	--	--	50	--	0.004	--	50
BENFLURALIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENTAZON	UG/L	0	4	0%	--	--	--	18	--	200	--	18
BENZENE	UG/L	0	60	0%	--	--	--	--	--	0.15	--	--
BENZIDINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (A) ANTHRACENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (A) PYRENE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
BENZO (B) FLUORANTHENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (GHI) PERYLENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (K) FLUORANTHENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZYL BUTYL PHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BERYLLIUM	UG/L	0	4	0%	--	--	--	4	--	1	--	4
BETA-BHC	UG/L	0	2	0%	--	--	--	--	--	--	--	--
BIS (2-CHLOROEHOXY) METHANE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BIS (2-CHLOROETHYL) ETHER	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BROMACIL	UG/L	0	8	0%	--	--	--	--	--	--	--	--
BROMOBENZENE	UG/L	0	53	0%	--	--	--	--	--	--	--	--
BROMOCHLOROMETHANE	UG/L	0	53	0%	--	--	--	--	--	--	--	--
BROMODICHLORMETHANE (THM)	UG/L	0	57	0%	--	--	--	--	--	--	--	--
BROMOFORM (THM)	UG/L	0	57	0%	--	--	--	--	--	--	--	--
BROMOMETHANE	UG/L	0	56	0%	--	--	--	--	--	--	--	--
BUTACHLOR	UG/L	0	4	0%	--	--	--	--	--	--	--	--
CADMIUM	UG/L	0	5	0%	--	--	--	5	--	0.07	--	5
CAPTAN	UG/L	0	1	0%	--	--	--	--	--	--	1.5	1.5
CARBARYL	UG/L	0	3	0%	--	--	--	--	--	--	700	700
CARBOFURAN	UG/L	0	3	0%	--	--	--	18	--	1.7	--	18
CARBON TETRACHLORIDE	UG/L	0	62	0%	--	--	--	0.5	--	0.1	--	0.5
CARBONATE ALKALINITY	MG/L	0	4	0%	--	--	--	--	--	--	--	--
CHLORDANE	UG/L	0	7	0%	--	--	--	0.1	--	0.03	--	0.1
CHLORDIMEFORM	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CHLOROETHANE	UG/L	0	55	0%	--	--	--	--	--	--	--	--
CHLOROMETHANE	UG/L	0	55	0%	--	--	--	--	--	--	--	--
CHLOROPICRIN	UG/L	0	1	0%	--	--	--	--	--	--	56	56
CHLOROTHALONIL	UG/L	0	3	0%	--	--	--	--	--	--	--	--
CHRYSENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CIS-1,3-DICHLOROPROPENE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
CIS-PERMETHRIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CYANAZINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CYANIDE	UG/L	0	2	0%	--	--	--	150	--	150	--	150
DACTHAL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DALAPON	UG/L	0	4	0%	--	--	--	200	--	790	--	200
DELTA-BHC	UG/L	0	2	0%	--	--	--	--	--	--	--	--
DI(2-ETHYLHEXYL)ADIPATE	UG/L	0	1	0%	--	--	--	400	--	200	--	400
DI(2-ETHYLHEXYL)PHTHALATE	UG/L	0	2	0%	--	--	--	4	--	12	--	4
DIAZINON	UG/L	0	5	0%	--	--	--	--	--	--	6	6
DIBENZO (A,H) ANTRACENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DIBROMOCHLOROMETHANE (THM)	UG/L	0	57	0%	--	--	--	--	--	--	--	--
DIBROMOMETHANE	UG/L	0	53	0%	--	--	--	--	--	--	--	--
DICAMBA	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DICHLORODIFLUOROMETHANE	UG/L	0	53	0%	--	--	--	--	--	--	1000	1000
DICOFOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DIELDRIN	UG/L	0	4	0%	--	--	--	--	--	--	0.002	0.002
DIETHYL PHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DIISOPROPYL ETHER	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DIMETHOATE	UG/L	0	2	0%	--	--	--	--	--	--	1	1
DIMETHYL PHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DI-N-BUTYLPHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DI-N-OCTYLPHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DINOSEB	UG/L	0	4	0%	--	--	--	7	--	14	--	7
DIPHENAMIDE	UG/L	0	1	0%	--	--	--	--	--	--	200	200
DIQUAT	UG/L	0	4	0%	--	--	--	20	--	15	--	20
DIURON	UG/L	0	1	0%	--	--	--	--	--	--	--	--

TABLE 3-3
Summary of Constituents Analyzed for in Groundwater Collected from the Ventura Production Well (January 1989 to September 2002)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
ENDOSULFAN I	UG/L	0	3	0%	--	--	--	--	--	--	--	--
ENDOSULFAN II	UG/L	0	3	0%	--	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
ENDOTHAL	UG/L	0	2	0%	--	--	--	100	--	580	--	100
ENDRIN	UG/L	0	7	0%	--	--	--	2	--	1.8	--	2
ENDRIN ALDEHYDE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
ETHYLBENZENE	UG/L	0	55	0%	--	--	--	300	--	300	--	300
ETHYLENE DIBROMIDE (EDB)	UG/L	0	8	0%	--	--	--	0.05	--	0.01	--	0.05
ETHYL-TERT-BUTYL ETHER	UG/L	0	24	0%	--	--	--	--	--	--	--	--
FLUCHLORALIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
FLUORANTHENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
FLUORENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
GLYPHOSATE	UG/L	0	5	0%	--	--	--	700	--	1000	--	700
HEPTACHLOR	UG/L	0	6	0%	--	--	--	0.01	--	0.008	--	0.01
HEPTACHLOR EPOXIDE	UG/L	0	6	0%	--	--	--	0.01	--	0.006	--	0.01
HEXACHLOROBENZENE	UG/L	0	3	0%	--	--	--	1	--	0.03	--	1
HEXACHLOROBUTADIENE	UG/L	0	54	0%	--	--	--	50	--	--	--	50
HEXACHLOROCYCLOPENTADIENE	UG/L	0	3	0%	--	--	--	--	--	50	--	--
HEXACHLOROETHANE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
INDENO (1,2,3-CD) PYRENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ISOPHORONE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ISOPROPYLBENZENE	UG/L	0	53	0%	--	--	--	--	--	--	770	770
LEAD	UG/L	0	6	0%	--	--	--	--	--	2	0.015	0.015
LINDANE	UG/L	0	7	0%	--	--	--	0.2	--	0.032	--	0.2
M,P-XYLENE	UG/L	0	53	0%	--	--	--	1,750	--	1,800	--	1,750
MANGANESE	UG/L	0	7	0%	--	--	--	--	50	--	500	50
MERCURY	UG/L	0	5	0%	--	--	--	2	--	1.2	--	--
MERPHOS	UG/L	0	1	0%	--	--	--	--	--	--	--	2
METHOMYL	UG/L	0	2	0%	--	--	--	--	--	--	--	--
METHOXYCHLOR	UG/L	0	6	0%	--	--	--	30	--	30	--	30
METHYL ETHYL KETONE	UG/L	0	25	0%	--	--	--	--	--	--	--	--
METHYL ISOBUTYL KETONE	UG/L	0	25	0%	--	--	--	--	--	--	120	120
METHYL-TERT-BUTYL-ETHER (MTBE)	UG/L	0	57	0%	--	--	--	--	5	13	--	5
METOLACHLOR	UG/L	0	4	0%	--	--	--	--	--	--	--	--
METRIBUZIN	UG/L	0	3	0%	--	--	--	--	--	--	--	--
MOLINATE	UG/L	0	6	0%	--	--	--	20	--	--	--	20
MONOCHLOROBENZENE	UG/L	0	55	0%	--	--	--	70	--	200	--	70
M-XYLENE	UG/L	0	31	0%	--	--	--	--	--	--	--	--
NAPHTHALENE	UG/L	0	39	0%	--	--	--	--	--	--	17	17
NAPROPAMIDE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
N-BUTYLBENZENE	UG/L	0	52	0%	--	--	--	--	--	--	260	260
NICKEL	UG/L	0	4	0%	--	--	--	100	--	12	--	100
NITRITE (AS N)	UG/L	0	3	0%	--	--	--	1000	--	1	--	1000
NITROBENZENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
N-NITROSODIMETHYLAMINE (NDMA)	UG/L	0	1	0%	--	--	--	--	--	--	0.01	0.01
N-NITROSODI-N-PROPYLAMINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
N-NITROSODIPHENYLAMINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ORYZALIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
OXAMYL	UG/L	0	2	0%	--	--	--	50	--	50	--	50
PARAQUAT	UG/L	0	2	0%	--	--	--	--	--	--	--	--
PCB-1016	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1221	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1232	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1242	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1248	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1254	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1260	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PENTACHLOROBENZENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PENTACHLOROPHENOL	UG/L	0	2	0%	--	--	--	1	--	0.4	--	1
PHENANTHRENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PHENOL	UG/L	0	1	0%	--	--	--	--	--	--	4200	4200
PICLORAM	UG/L	0	4	0%	--	--	--	500	--	500	--	500
P-ISOPROPYLTOLUENE	UG/L	0	52	0%	--	--	--	--	--	--	--	--
POLYCHLORINATED BIPHENYLS (TOTAL PCB'S)	UG/L	0	3	0%	--	--	--	0.5	--	--	--	0.5
PROMETRYN	UG/L	0	7	0%	--	--	--	--	--	--	--	--
PROPACHLOR	UG/L	0	3	0%	--	--	--	--	--	--	--	--
PROPAMIDE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PROPARGITE	MG/L	0	1	0%	--	--	--	--	--	--	--	--
P-XYLENE	UG/L	0	31	0%	--	--	--	--	--	--	--	--
PYRENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
S,S,S-TRIBUTYLPHOSPHOROTRITHIOATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
SEC-BUTYLBENZENE	UG/L	0	47	0%	--	--	--	--	--	--	260	260
SELENIUM	UG/L	0	5	0%	--	--	--	50	--	--	--	50
SILVER	UG/L	0	5	0%	--	--	--	--	100	--	--	100
STYRENE	UG/L	0	53	0%	--	--	--	100	--	--	--	100
TERT-AMYL-METHYL ETHER	UG/L	0	23	0%	--	--	--	--	--	--	--	--
TERT-BUTYL ALCOHOL	UG/L	0	3	0%	--	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	UG/L	0	51	0%	--	--	--	--	--	--	260	260
THALLIUM	UG/L	0	5	0%	--	--	--	2	--	0.1	--	2
THIOBENCARB	UG/L	0	5	0%	--	--	--	70	1	70	--	1
TOLUENE	UG/L	0	55	0%	--	--	--	150	--	150	--	150

TABLE 3-3
Summary of Constituents Analyzed for in Groundwater Collected from the Ventura Production Well (January 1989 to September 2002)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
TOXAPHENE	UG/L	0	7	0%	--	--	--	3	--	0.03	--	3
TRANS-1,2-DICHLOROETHYLENE	UG/L	0	55	0%	--	--	--	10	--	60	--	10
TRANS-1,3-DICHLOROPROPENE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
TRANS-PERMETHRIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
TRICHLOROFLUOROMETHANE	UG/L	0	55	0%	--	--	--	150	--	700	--	150
TRIFLURALIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
VINYL CHLORIDE	UG/L	0	55	0%	--	--	--	0.5	--	0.05	--	0.5

Notes:
Source of Data: GeoSciences Database. Production Well monitoring data from January 1989 to September 2002.

µg/L = micrograms per liter
NTU = Nephelometric Turbidity Units
pCi/L = picocuries per liter
µg/mL = micrograms per milliliter
mg/L = milligrams per liter
pg/L = picograms per liter

1/2 of the detection limit was used for nondetected values
Shading indicates exceedence of applicable standard.
* The Applicable Regulatory Limit is the regulatory limit with the lowest concentration; proposed CA Primary MCL and CA PHG are not included.
(a) The MCL is 5 pCi/L for Radium-226 and Radium-228 combined.

CA = California
MCL = maximum contaminant level
PHG = public health goal
DHS = Department of Health Services

TABLE 3-4
Summary of Constituents Analyzed for in Groundwater Collected from the Windsor Production Well (March 1994 to October 2002)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
ALKALINITY (TOTAL) AS CACO3	MG/L	7	7	100%	178.4	221.3	195.9	--	--	--	--	--
BORON	UG/L	2	2	100%	102	108	105	--	--	--	1000	1000
CALCIUM	MG/L	6	6	100%	51.4	182.62	89.1	--	--	--	--	--
CHLORIDE	MG/L	6	6	100%	31	90	47.4	--	500	--	--	500
COMBINED RA 226 + RA 228	PCI/L	2	2	100%	1	1.9	1.45	5	--	--	--	5
FLUORIDE (TEMPERATURE DEPENDENT)	MG/L	6	6	100%	0.3	1	0.54	2	--	1	--	2
GROSS ALPHA	PCI/L	8	8	100%	0.9	6	4.46	15	--	--	--	15
GROSS BETA	PCI/L	4	4	100%	2.34	5.37	3.82	50	--	--	--	50
HARDNESS (TOTAL) AS CACO3	MG/L	6	6	100%	198	425	268	--	--	--	--	--
MAGNESIUM	MG/L	5	5	100%	12	77	32	--	--	--	--	--
NITRATE - NO3	MG/L	64	64	100%	19	56	25.4	45	--	45	--	45
POTASSIUM	MG/L	2	2	100%	2	2.5	2.25	--	--	--	--	--
RADIUM 226	PCI/L	1	1	100%	0.05	0.05	0.05	5	--	--	--	5
RADIUM 228	PCI/L	1	1	100%	0.12	0.12	0.12	5	--	--	--	5
SODIUM	MG/L	6	6	100%	27	36	31	--	--	--	--	--
SULFATE	MG/L	6	6	100%	35	111	58	--	500	--	--	500
TOTAL DISSOLVED SOLIDS	MG/L	7	7	100%	330	556	393	--	1000	--	--	1000
PH	UNITS	7	7	100%	7.1	7.5	7.43	--	--	--	--	--
TURBIDITY	NTU	4	4	100%	0.05	0.44	0.27	--	5	--	--	5
URANIUM (PCI/L)	PCI/L	6	6	100%	2.65	4	4.2	20	--	0.43	--	20
PERCHLORATE	UG/L	79	180	44%	3.09	8.6	3.28	--	--	6	6	6
BICARBONATE ALKALINITY	MG/L	3	4	75%	217.6	239.1	225.0	--	--	--	--	--
TOTAL TRIHALOMETHANES	UG/L	58	79	73%	0.44	9.8	2	--	--	--	--	--
CHROMIUM, HEXAVALENT	UG/L	2	3	67%	9	12.4	7.5	--	--	--	--	--
TRICHLOROETHYLENE	UG/L	73	115	63%	0.1	3.35	0.82	5	--	0.8	--	5
TETRACHLOROETHYLENE	UG/L	72	118	61%	0.5	2.6	0.74	5	--	0.06	--	5
VANADIUM	UG/L	1	2	50%	10	10	7.5	--	--	--	50	50
NICKEL	UG/L	2	5	40%	13	23	10	100	--	12	--	100
BARIUM	UG/L	2	6	33%	65	147	106	1000	--	2000	--	1000
CARBONATE ALKALINITY	MG/L	1	3	33%	0.88	0.88	0.88	--	--	--	--	--
CHLOROFORM (THM)	UG/L	24	78	31%	0.44	6.4	0.3	100	--	--	--	100
DIBROMOCHLOROMETHANE (THM)	UG/L	12	68	18%	0.7	6.47	0.83	--	--	--	--	--
CHROMIUM (TOTAL)	UG/L	1	6	17%	1.7	1.7	1.7	50	--	--	--	50
COPPER	UG/L	1	6	17%	17	17	17	--	1000	170	1300	1000
IRON	UG/L	1	6	17%	723	723	156	--	300	--	--	300
BROMODICHLORMETHANE (THM)	UG/L	11	68	16%	0.6	6.89	0.60	--	--	--	--	--
BROMOFORM (THM)	UG/L	11	68	16%	0.7	4.64	0.87	--	--	--	--	--
CHROMIUM (TOTAL CR-CRVI SCREEN)	UG/L	1	7	14%	1.8	1.8	1.8	--	--	--	--	--
CARBON TETRACHLORIDE	UG/L	2	95	2%	0.57	2.29	0.27	0.5	--	0.1	--	0.5
BENZENE	UG/L	1	67	1%	0.6	0.6	0.25	1	--	0.15	--	1
CHLOROMETHANE	UG/L	1	67	1%	0.69	0.69	0.26	--	--	--	--	--
TRICHLOROFLUOROMETHANE	UG/L	1	67	1%	0.9	0.9	0.26	150	--	700	--	150
COLOR	COLOR	0	3	0%	--	--	--	--	15	--	--	15
1,1,1,2-TETRACHLORETHANE	UG/L	0	67	0%	--	--	--	--	--	--	--	--
1,1,1-TRICHLOROETHANE	UG/L	0	67	0%	--	--	--	200	--	1,000	--	200
1,1,2,2-TETRACHLOROETHANE	UG/L	0	67	0%	--	--	--	1	--	0.1	--	1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG/L	0	67	0%	--	--	--	1200	--	4000	--	1200
1,1,2-TRICHLOROETHANE	UG/L	0	67	0%	--	--	--	5	--	0.2	--	5
1,1-DICHLOROETHANE	UG/L	0	67	0%	--	--	--	5	--	3	--	5
1,1-DICHLOROETHYLENE	UG/L	0	67	0%	--	--	--	6	--	10	--	6
1,1-DICHLOROPROPENE	UG/L	0	67	0%	--	--	--	--	--	--	--	--
1,2,3-TRICHLOROBENZENE	UG/L	0	67	0%	--	--	--	1	--	--	--	1
1,2,3-TRICHLOROPROPANE	UG/L	0	67	0%	--	--	--	--	--	--	0.005	0.005
1,2,4-TRICHLOROBENZENE	UG/L	0	67	0%	--	--	--	5	--	5	--	5
1,2,4-TRIMETHYLBENZENE	UG/L	0	67	0%	--	--	--	--	--	--	330	330
1,2-DICHLOROBENZENE	UG/L	0	67	0%	--	--	--	600	--	600	--	60
1,2-DICHLOROETHANE	UG/L	0	67	0%	--	--	--	0.5	--	0.4	--	0.05
1,2-DICHLOROPROPANE	UG/L	0	67	0%	--	--	--	5	--	0.5	--	5
1,3,5-TRIMETHYLBENZENE	UG/L	0	67	0%	--	--	--	--	--	--	330	330
1,3-DICHLOROBENZENE	UG/L	0	67	0%	--	--	--	--	--	--	600	600
1,3-DICHLOROPROPANE	UG/L	0	67	0%	--	--	--	--	--	--	--	--
1,3-DICHLOROPROPENE (TOTAL)	UG/L	0	67	0%	--	--	--	0.5	--	0.5	--	0.5
1,4-DICHLOROBENZENE	UG/L	0	67	0%	--	--	--	5	--	6	--	5
1-PHENYLPROPANE (N-PROPYLBENZENE)	UG/L	0	67	0%	--	--	--	--	--	--	26	26
2,2-DICHLOROPROPANE	UG/L	0	67	0%	--	--	--	--	--	--	--	--
2,3,7,8-TCDD (DIOXIN)	UG/L	0	1	0%	--	--	--	0.00003	--	--	--	0.00003
2,4,5-T	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2,4,5-TP (SILVEX)	UG/L	0	4	0%	--	--	--	50	--	25	--	50
2,4-D	UG/L	0	5	0%	--	--	--	70	--	70	--	70
2-CHLOROETHYLVINYL ETHER	UG/L	0	30	0%	--	--	--	--	--	--	--	--
2-CHLOROTOLUENE	UG/L	0	67	0%	--	--	--	--	--	--	140	140
3-HYDROXYCARBOFURAN	UG/L	0	5	0%	--	--	--	--	--	--	--	--
4,4-DDD	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4,4-DDE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4,4-DDT	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4-CHLOROTOLUENE	UG/L	0	67	0%	--	--	--	--	--	--	140	140
ALACHLOR	UG/L	0	3	0%	--	--	--	2	--	4	--	2
ALDICARB	UG/L	0	5	0%	--	--	--	--	--	--	7	7
ALDICARB SULFONE	UG/L	0	5	0%	--	--	--	--	--	--	--	--
ALDICARB SULFOXIDE	UG/L	0	5	0%	--	--	--	--	--	--	--	--
ALDRIN	UG/L	0	5	0%	--	--	--	--	--	--	0.002	0.002
ALPHA-BHC	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ALUMINUM	UG/L	0	5	0%	--	--	--	1000	200	600	--	1000

TABLE 3-4
Summary of Constituents Analyzed for in Groundwater Collected from the Windsor Production Well (March 1994 to October 2002)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
AMMONIA (NH3-N)	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ANTIMONY	UG/L	0	5	0%	--	--	--	6	--	20	--	6
ARSENIC	UG/L	0	6	0%	--	--	--	50	--	0.004	--	50
ATRAZINE	UG/L	0	4	0%	--	--	--	1	--	0.15	--	1
BENTAZON	UG/L	0	3	0%	--	--	--	18	--	200	--	18
BENZO (A) PYRENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BERYLLIUM	UG/L	0	5	0%	--	--	--	4	--	1	--	4
BETA-BHC	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BIS (2-CHLOROETHYL) ETHER	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BROMACIL	UG/L	0	3	0%	--	--	--	--	--	--	--	--
BROMOBENZENE	UG/L	0	67	0%	--	--	--	--	--	--	--	--
BROMOCHLOROMETHANE	UG/L	0	67	0%	--	--	--	--	--	--	--	--
BROMOMETHANE	UG/L	0	67	0%	--	--	--	--	--	--	--	--
BUTACHLOR	UG/L	0	3	0%	--	--	--	--	--	--	--	--
CADMIUM	UG/L	0	6	0%	--	--	--	5	--	0.07	--	5
CARBARYL	UG/L	0	6	0%	--	--	--	--	--	--	700	700
CARBOFURAN	UG/L	0	5	0%	--	--	--	18	--	1.7	--	18
CHLORDANE	UG/L	0	5	0%	--	--	--	0.1	--	0.03	--	0.1
CHLOROETHANE	UG/L	0	67	0%	--	--	--	--	--	--	--	--
CHLOROTHALONIL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHYLENE	UG/L	0	67	0%	--	--	--	6	--	100	--	6
CYANIDE	UG/L	0	2	0%	--	--	--	150	--	150	--	150
DALAPON	UG/L	0	3	0%	--	--	--	200	--	790	--	200
DELTA-BHC	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DI(2-ETHYLHEXYL)ADIPATE	UG/L	0	1	0%	--	--	--	400	--	200	--	400
DI(2-ETHYLHEXYL)PHTHALATE	UG/L	0	1	0%	--	--	--	4	--	12	--	4
DIAZINON	UG/L	0	2	0%	--	--	--	--	--	--	6	6
DIBROMOCHLOROPROPANE (DBCP)	UG/L	0	3	0%	--	--	--	--	--	--	--	--
DIBROMOMETHANE	UG/L	0	67	0%	--	--	--	--	--	--	--	--
DICAMBA	UG/L	0	2	0%	--	--	--	--	--	--	--	--
DICHLORODIFLUOROMETHANE	UG/L	0	67	0%	--	--	--	--	--	--	1000	1000
DICHLOROMETHANE	UG/L	0	67	0%	--	--	--	5	--	4	--	5
DIELDRIN	UG/L	0	4	0%	--	--	--	--	--	--	0.002	0.002
DIISOPROPYL ETHER	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DIMETHOATE	UG/L	0	1	0%	--	--	--	--	--	--	1	1
DINOSEB	UG/L	0	2	0%	--	--	--	7	--	14	--	7
DIQUAT	UG/L	0	6	0%	--	--	--	20	--	15	--	20
DIURON	UG/L	0	3	0%	--	--	--	--	--	--	--	--
ENDOSULFAN I	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ENDOSULFAN II	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ENDOTHALL	UG/L	0	2	0%	--	--	--	100	--	580	--	100
ENDRIN	UG/L	0	5	0%	--	--	--	2	--	1.8	--	2
ENDRIN ALDEHYDE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ETHYLBENZENE	UG/L	0	67	0%	--	--	--	300	--	300	--	300
ETHYLENE DIBROMIDE (EDB)	UG/L	0	2	0%	--	--	--	0.05	--	0.01	--	0.05
ETHYL-TERT-BUTYL ETHER	UG/L	0	24	0%	--	--	--	--	--	--	--	--
GLYPHOSATE	UG/L	0	6	0%	--	--	--	700	--	1000	--	700
HEPTACHLOR	UG/L	0	4	0%	--	--	--	0.01	--	0.008	--	0.01
HEPTACHLOR EPOXIDE	UG/L	0	4	0%	--	--	--	0.01	--	0.006	--	0.01
HEXACHLOROBENZENE	UG/L	0	3	0%	--	--	--	1	--	0.03	--	1
HEXACHLOROBUTADIENE	UG/L	0	67	0%	--	--	--	50	--	--	--	50
HEXACHLOROCYCLOPENTADIENE	UG/L	0	3	0%	--	--	--	--	--	50	--	--
ISOPROPYLBENZENE	UG/L	0	67	0%	--	--	--	--	--	--	770	770
LEAD	UG/L	0	6	0%	--	--	--	--	--	2	0.015	0.015
LINDANE	UG/L	0	5	0%	--	--	--	0.2	--	0.032	--	0.2
M,P-XYLENE	UG/L	0	67	0%	--	--	--	1,750	--	1,800	--	1,750
MANGANESE	UG/L	0	6	0%	--	--	--	--	--	--	--	--
MERCURY	UG/L	0	6	0%	--	--	--	2	--	1.2	--	--
METHOMYL	UG/L	0	5	0%	--	--	--	--	--	--	--	--
METHOXYCHLOR	UG/L	0	5	0%	--	--	--	30	--	30	--	30
METHYL ETHYL KETONE	UG/L	0	23	0%	--	--	--	--	--	--	--	--
METHYL ISOBUTYL KETONE	UG/L	0	23	0%	--	--	--	--	--	--	120	120
METHYL-TERT-BUTYL-ETHER (MTBE)	UG/L	0	67	0%	--	--	--	--	5	13	--	5
METOLACHLOR	UG/L	0	3	0%	--	--	--	--	--	--	--	--
METRIBUZIN	UG/L	0	2	0%	--	--	--	--	--	--	--	--
MOLINATE	UG/L	0	2	0%	--	--	--	20	--	--	--	20
MONOCHLOROBENZENE	UG/L	0	67	0%	--	--	--	70	--	200	--	70
M-XYLENE	UG/L	0	31	0%	--	--	--	1,750	--	1,800	--	1,750
NAPHTHALENE	UG/L	0	67	0%	--	--	--	--	--	--	17	17
N-BUTYLBENZENE	UG/L	0	67	0%	--	--	--	--	--	--	--	--
NITRITE (AS N)	UG/L	0	3	0%	--	--	--	1000	--	1	--	1000
OXAMYL	UG/L	0	5	0%	--	--	--	50	--	50	--	50
O-XYLENE	UG/L	0	67	0%	--	--	--	1,750	--	1,800	--	1,750
PARAQUAT	UG/L	0	3	0%	--	--	--	--	--	--	--	--
PENTACHLOROPHENOL	UG/L	0	2	0%	--	--	--	1	--	0.4	--	1
PICLORAM	UG/L	0	3	0%	--	--	--	--	--	--	--	--
P-ISOPROPYLTOLUENE	UG/L	0	67	0%	--	--	--	500	--	500	--	500
POLYCHLORINATED BIPHENYLS (TOTAL PCB'S)	UG/L	0	3	0%	--	--	--	0.5	--	--	--	0.5
PROMETRYN	UG/L	0	2	0%	--	--	--	--	--	--	--	--
PROPACHLOR	UG/L	0	4	0%	--	--	--	--	--	--	--	--
P-XYLENE	UG/L	0	31	0%	--	--	--	--	--	--	--	--
SEC-BUTYLBENZENE	UG/L	0	67	0%	--	--	--	--	--	--	260	260

TABLE 3-4
Summary of Constituents Analyzed for in Groundwater Collected from the Windsor Production Well (March 1994 to October 2002)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
SELENIUM	UG/L	0	6	0%	--	--	--	50	--	--	--	50
SILVER	UG/L	0	6	0%	--	--	--	--	100	--	--	100
SIMAZINE	UG/L	0	4	0%	--	--	--	4	--	4	--	4
STYRENE	UG/L	0	67	0%	--	--	--	100	--	--	--	100
TERT-AMYL-METHYL ETHER	UG/L	0	23	0%	--	--	--	--	--	--	--	--
TERT-BUTYL ALCOHOL	UG/L	0	3	0%	--	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	UG/L	0	67	0%	--	--	--	--	--	--	260	260
THALLIUM	UG/L	0	5	0%	--	--	--	2	--	0.1	--	2
THIOBENCARB	UG/L	0	2	0%	--	--	--	70	1	70	--	1
TOLUENE	UG/L	0	67	0%	--	--	--	150	--	150	--	150
TOXAPHENE	UG/L	0	5	0%	--	--	--	3	--	0.03	--	3
TRANS-1,2-DICHLOROETHYLENE	UG/L	0	67	0%	--	--	--	10	--	60	--	10
VINYL CHLORIDE	UG/L	0	67	0%	--	--	--	0.5	--	0.05	--	0.5
XYLENES (TOTAL)	UG/L	0	67	0%	--	--	--	1750	--	1800	--	1750
ZINC	UG/L	0	6	0%	--	--	--	5000	--	--	--	5000

Notes:
Source of Data: GeoSciences Database. Production Well monitoring data from March 1994 to October 2002.

µg/L = micrograms per liter
NTU = Nephelometric Turbidity Units
pCi/L = picocuries per liter
µg/mL = micrograms per milliliter
mg/L = milligrams per liter
pg/L = picograms per liter

1/2 of the detection limit was used for nondetected values when calculating the arithmetic mean.

* The Applicable Regulatory Limit is the regulatory limit with the lowest concentration; proposed CA Primary MCL and CA PHG are not included.
(a) The MCL is 5 pCi/L for Radium-226 and Radium-228 combined.
Shading indicates exceedence of applicable standard.
CA = California
MCL = maximum contaminant level
PHG = public health goal
DHS = Department of Health Services

TABLE 3-5
Summary of Constituents Analyzed for in Groundwater Collected from the LAWC #3 (June 1991 to October 2002; May 2003 through November 2003)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
ALKALINITY (TOTAL) AS CACO3	MG/L	5	5	100%	148	160	156.0	--	--	--	--	--
BICARBONATE ALKALINITY	MG/L	5	5	100%	181	200	191.0	--	--	--	--	--
CALCIUM	MG/L	5	5	100%	37	62	49	--	--	--	--	--
CHLORIDE	MG/L	5	5	100%	9	17	12.2	--	500	--	--	500
FLUORIDE (TEMPERATURE DEPENDENT)	MG/L	5	5	100%	0.6	0.8	0.6	2	--	1	--	2
GROSS ALPHA	PCI/L	10	10	100%	2.7	4.7	3.6	15	--	--	--	15
HARDNESS (TOTAL) AS CACO3	MG/L	5	5	100%	176	210	192.6	--	--	--	--	--
MAGNESIUM	MG/L	5	5	100%	9.5	26.2	15.8	--	--	--	--	--
NITRATE (AS NO3)	MG/L	11	11	100%	4	18	7.1	45	--	45	--	45
NITRATE + NITRITE (AS N)	UG/L	4	4	100%	950	1941	1383	10,000	--	10,000	--	10,000
SODIUM	MG/L	5	5	100%	8.8	19	14.2	--	--	--	--	--
SULFATE	MG/L	5	5	100%	29	38.6	33	--	500	--	--	500
TOTAL DISSOLVED SOLIDS	MG/L	5	5	100%	214.8	246.7	226.5	--	1000	--	--	1000
pH	UNITS	4	4	100%	6.7	7.6	7.4	--	--	--	--	--
TURBIDITY	NTU	4	4	100%	0.1	0.3	0.2	--	5	--	--	5
URANIUM (PCI/L)	PCI/L	3	3	100%	3	6	4.5	20	--	0.43	--	20
CHLOROFORM (THM)	UG/L	16	20	80%	0.8	9	2.87	100	--	--	--	100
TOTAL TRIHALOMETHANES	UG/L	14	17	82%	0.8	9.9	3.2	--	--	--	--	--
POTASSIUM	MG/L	4	5	80%	1.4	2.1	1.58	--	--	--	--	--
TRICHLOROETHYLENE	UG/L	77	99	78%	0.7	31	6.11	5	--	0.8	--	5
PERCHLORATE (1)	UG/L	93	137	68%	2.5	31	6.8	--	--	6	6	6
TETRACHLOROETHYLENE	UG/L	38	85	45%	0.5	2.9	0.68	5	--	0.06	--	5
VANADIUM	UG/L	1	2	50%	7.3	7.3	4.4	--	--	--	50	50
CARBON TETRACHLORIDE	UG/L	41	85	48%	0.5	2.6	0.64	0.5	--	0.1	--	0.5
CHROMIUM, HEXAVALENT	UG/L	1	3	33%	2.51	2.51	1.17	--	--	--	--	--
ALUMINUM	UG/L	1	4	25%	213	213	72	1000	200	600	--	1000
BROMODICHLOROMETHANE (THM)	UG/L	4	16	25%	0.6	0.9	0.38	--	--	--	--	--
IRON	UG/L	1	5	20%	765	765	193	--	300	--	--	300
ATRAZINE	UG/L	2	11	18%	0.6	1	0.56	1	--	0.15	--	1
SIMAZINE	UG/L	2	11	18%	0.5	0.5	0.5	4	--	4	--	4
DIBROMOCHLOROMETHANE (THM)	UG/L	1	16	6%	0.7	0.7	0.28	--	--	--	--	--
COLOR	COLOR	0	3	0%	--	--	--	--	15	--	--	15
1,1,1,2-TETRACHLORETHANE	UG/L	0	12	0%	--	--	--	--	--	--	--	--
1,1,1-TRICHLOROETHANE	UG/L	0	15	0%	--	--	--	200	--	1,000	--	200
1,1,2,2-TETRACHLOROETHANE	UG/L	0	15	0%	--	--	--	1	--	0.1	--	1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG/L	0	13	0%	--	--	--	1200	--	4000	--	1200
1,1,2-TRICHLOROETHANE	UG/L	0	15	0%	--	--	--	5	--	0.2	--	5
1,1-DICHLOROETHANE	UG/L	0	23	0%	--	--	--	5	--	3	--	5
1,1-DICHLOROETHYLENE	UG/L	0	15	0%	--	--	--	6	--	10	--	6
1,1-DICHLOROPROPENE	UG/L	0	12	0%	--	--	--	--	--	--	--	--
1,2,3-TRICHLOROBENZENE	UG/L	0	12	0%	--	--	--	1	--	--	--	1
1,2,3-TRICHLOROPROPANE	UG/L	0	12	0%	--	--	--	--	--	--	0.005	0.005
1,2,4-TRICHLOROBENZENE	UG/L	0	14	0%	--	--	--	5	--	5	--	5
1,2,4-TRIMETHYLBENZENE	UG/L	0	12	0%	--	--	--	--	--	--	330	330
1,2-DICHLOROBENZENE	UG/L	0	16	0%	--	--	--	600	--	600	--	60
1,2-DICHLOROETHANE	UG/L	0	15	0%	--	--	--	0.5	--	0.4	--	0.05
1,2-DICHLOROPROPANE	UG/L	0	16	0%	--	--	--	5	--	0.5	--	5
1,3,5-TRIMETHYLBENZENE	UG/L	0	12	0%	--	--	--	--	--	--	330	330
1,3-DICHLOROBENZENE	UG/L	0	15	0%	--	--	--	--	--	--	600	600
1,3-DICHLOROPROPANE	UG/L	0	12	0%	--	--	--	--	--	--	--	--
1,3-DICHLOROPROPENE (TOTAL)	UG/L	0	13	0%	--	--	--	0.5	--	0.5	--	0.5
1,4-DICHLOROBENZENE	UG/L	0	16	0%	--	--	--	5	--	6	--	5
1-PHENYLPROPANE (N-PROPYLBENZENE)	UG/L	0	12	0%	--	--	--	--	--	--	26	26
2,2-DICHLOROPROPANE	UG/L	0	12	0%	--	--	--	--	--	--	--	--
2,4,5-TP (SILVEX)	UG/L	0	6	0%	--	--	--	50	--	25	--	50
2,4,6-TRICHLOROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2,4-D	UG/L	0	8	0%	--	--	--	70	--	70	--	70
2,4-DICHLOROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2,4-DIMETHYLPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	100	100
2,4-DINITROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2,4-DINITROTOLUENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2,6-DINITROTOLUENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2-CHLOROETHYLVINYL ETHER	UG/L	0	15	0%	--	--	--	--	--	--	--	--
2-CHLORONAPHTHALENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2-CHLOROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2-CHLOROTOLUENE	UG/L	0	12	0%	--	--	--	--	--	--	140	140
2-METHYL-4,6-DINITROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2-NITROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
3,3-DICHLOROBENZIDINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4,4-DDD	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4,4-DDE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4,4-DDT	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4-BROMOPHENYL PHENYL ETHER	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4-CHLORO-3-METHYLPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4-CHLOROPHENYL PHENYL ETHER	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4-CHLOROTOLUENE	UG/L	0	12	0%	--	--	--	--	--	--	140	140
4-NITROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ACENAPHTHENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ACENAPHTHYLENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ACEPHATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ALACHLOR	UG/L	0	5	0%	--	--	--	2	--	4	--	2
ALDICARB	UG/L	0	1	0%	--	--	--	--	--	--	7	7
ALDRIN	UG/L	0	1	0%	--	--	--	--	--	--	0.002	0.002
ALPHA-BHC	UG/L	0	1	0%	--	--	--	--	--	--	--	--

TABLE 3-5
Summary of Constituents Analyzed for in Groundwater Collected from the LAWC #3 (June 1991 to October 2002; May 2003 through November 2003)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
ANTHRACENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ANTIMONY	UG/L	0	4	0%	--	--	--	6	--	20	--	6
ARSENIC	UG/L	0	5	0%	--	--	--	50	--	0.004	--	50
BARIUM	UG/L	0	4	0%	--	--	--	1000	--	2000	--	1000
BENFLURALIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENOMYL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENTAZON	UG/L	0	4	0%	--	--	--	18	--	200	--	18
BENZENE	UG/L	0	15	0%	--	--	--	1	--	0.15	--	1
BENZIDINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (A) ANTHRACENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (A) PYRENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (B) FLUORANTHENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (GHI) PERYLENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (K) FLUORANTHENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZYL BUTYL PHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BERYLLIUM	UG/L	0	4	0%	--	--	--	4	--	1	--	4
BETA-BHC	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BIS (2-CHLOROEHOXY) METHANE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BIS (2-CHLOROETHYL) ETHER	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BORON	UG/L	0	2	0%	--	--	--	--	--	--	1000	1000
BROMACIL	UG/L	0	5	0%	--	--	--	--	--	--	--	--
BROMOBENZENE	UG/L	0	12	0%	--	--	--	--	--	--	--	--
BROMOCHLOROMETHANE	UG/L	0	12	0%	--	--	--	--	--	--	--	--
BROMOFORM (THM)	UG/L	0	15	0%	--	--	--	--	--	--	--	--
BROMOMETHANE	UG/L	0	15	0%	--	--	--	5	--	0.07	--	5
BUTACHLOR	UG/L	0	2	0%	--	--	--	--	--	--	1.5	1.5
CADMIUM	UG/L	0	4	0%	--	--	--	--	--	--	700	700
CAPTAN	UG/L	0	1	0%	--	--	--	18	--	1.7	--	18
CARBARYL	UG/L	0	4	0%	--	--	--	--	--	--	--	--
CARBOFURAN	UG/L	0	5	0%	--	--	--	--	--	--	--	--
CARBONATE ALKALINITY	MG/L	0	5	0%	--	--	--	--	--	--	--	--
CHLORDANE	UG/L	0	7	0%	--	--	--	0.1	--	0.03	--	0.1
CHLORDIMEFORM	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CHLOROETHANE	UG/L	0	14	0%	--	--	--	--	--	--	--	--
CHLOROMETHANE	UG/L	0	14	0%	--	--	--	--	--	--	--	--
CHLOROPICRIN	UG/L	0	1	0%	--	--	--	--	--	--	56	56
CHLOROPROPHAM	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CHLOROTHALONIL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CHLORPYRIFOS	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CHROMIUM (TOTAL)	UG/L	0	4	0%	--	--	--	50	--	--	--	50
CHRYSENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHYLENE	UG/L	0	13	0%	--	--	--	6	--	100	--	6
CIS-1,3-DICHLOROPROPENE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
CIS-PERMETHRIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
COPPER	UG/L	0	5	0%	--	--	--	--	1000	170	1300	1000
CYANAZINE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
CYANIDE	UG/L	0	4	0%	--	--	--	150	--	150	--	150
DACTHAL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DALAPON	UG/L	0	4	0%	--	--	--	200	--	790	--	200
DELTA-BHC	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DEMETON	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DI(2-ETHYLHEXYL)ADIPATE	UG/L	0	2	0%	--	--	--	400	--	200	--	400
DI(2-ETHYLHEXYL)PHTHALATE	UG/L	0	3	0%	--	--	--	4	--	12	--	4
DIAZINON	UG/L	0	4	0%	--	--	--	--	--	--	6	6
DIBENZO (A,H) ANTRACENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DIBROMOCHLOROPROPANE (DBCP)	UG/L	0	13	0%	--	--	--	--	--	--	--	--
DIBROMOMETHANE	UG/L	0	12	0%	--	--	--	--	--	--	--	--
DICHLORODIFLUOROMETHANE	UG/L	0	15	0%	--	--	--	--	--	--	1000	1000
DICHLOROMETHANE	UG/L	0	15	0%	--	--	--	5	--	4	--	5
DICOFOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DIELDRIN	UG/L	0	1	0%	--	--	--	--	--	--	0.002	0.002
DIETHYL PHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DIMETHOATE	UG/L	0	3	0%	--	--	--	--	--	--	1	1
DIMETHYL PHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DI-N-BUTYLPHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DI-N-OCTYLPHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DINOSEB	UG/L	0	5	0%	--	--	--	--	--	--	--	--
DIPHENAMIDE	UG/L	0	1	0%	--	--	--	7	--	14	--	7
DIQUAT	UG/L	0	5	0%	--	--	--	--	--	--	200	200
DISULFOTON	UG/L	0	1	0%	--	--	--	20	--	15	--	20
DIURON	UG/L	0	2	0%	--	--	--	--	--	--	--	--
DNOC	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DYLOX	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ENDOSULFAN I	UG/L	0	2	0%	--	--	--	--	--	--	--	--
ENDOSULFAN II	UG/L	0	2	0%	--	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ENDOTHALL	UG/L	0	1	0%	--	--	--	100	--	580	--	100
ENDRIN	UG/L	0	7	0%	--	--	--	2	--	1.8	--	2
ENDRIN ALDEHYDE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
EPTC	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ETHION	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ETHYLBENZENE	UG/L	0	15	0%	--	--	--	300	--	300	--	300
ETHYLENE DIBROMIDE (EDB)	UG/L	0	9	0%	--	--	--	0.05	--	0.01	--	0.05
ETHYL-TERT-BUTYL ETHER	UG/L	0	7	0%	--	--	--	--	--	--	--	--

TABLE 3-5
Summary of Constituents Analyzed for in Groundwater Collected from the LAWC #3 (June 1991 to October 2002; May 2003 through November 2003)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
FENAMIPHOS	UG/L	0	1	0%	--	--	--	--	--	--	--	--
FLUCHLORALIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
FLUORANTHENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
FLUORENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
GLYPHOSATE	UG/L	0	6	0%	--	--	--	700	--	1000	--	700
GUTHION	UG/L	0	1	0%	--	--	--	--	--	--	--	--
HEPTACHLOR	UG/L	0	5	0%	--	--	--	0.01	--	0.008	--	0.01
HEPTACHLOR EPOXIDE	UG/L	0	5	0%	--	--	--	0.01	--	0.006	--	0.01
HEXACHLOROBENZENE	UG/L	0	5	0%	--	--	--	1	--	0.03	--	1
HEXACHLOROBUTADIENE	UG/L	0	13	0%	--	--	--	50	--	--	--	50
HEXACHLOROCYCLOPENTADIENE	UG/L	0	5	0%	--	--	--	--	--	50	--	--
HEXACHLOROETHANE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
INDENO (1,2,3-CD) PYRENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ISOPHORONE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ISOPROPYLBENZENE	UG/L	0	12	0%	--	--	--	--	--	--	770	770
LEAD	UG/L	0	4	0%	--	--	--	--	--	2	0.015	0.015
LINDANE	UG/L	0	6	0%	--	--	--	0.2	--	0.032	--	0.2
M,P-XYLENE	UG/L	0	13	0%	--	--	--	--	--	--	--	--
MALATHION	UG/L	0	1	0%	--	--	--	--	--	--	--	--
MANGANESE	UG/L	0	5	0%	--	--	--	--	--	--	--	--
MERCURY	UG/L	0	4	0%	--	--	--	2	--	1.2	--	--
MERPHOS	UG/L	0	1	0%	--	--	--	--	--	--	--	--
METHAMIDOPHOS	UG/L	0	1	0%	--	--	--	--	--	--	--	--
METHOMYL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
METHOXYCHLOR	UG/L	0	6	0%	--	--	--	30	--	30	--	30
METHYL ETHYL KETONE	UG/L	0	3	0%	--	--	--	--	--	--	--	--
METHYL ISOBUTYL KETONE	UG/L	0	3	0%	--	--	--	--	--	--	120	120
METHYL-TERT-BUTYL-ETHER (MTBE)	UG/L	0	15	0%	--	--	--	--	5	13	--	5
METOLACHLOR	UG/L	0	2	0%	--	--	--	--	--	--	--	--
METRIBUZIN	UG/L	0	2	0%	--	--	--	--	--	--	--	--
MOLINATE	UG/L	0	10	0%	--	--	--	20	--	--	--	20
MONOCHLOROBENZENE	UG/L	0	15	0%	--	--	--	70	--	200	--	70
NAPHTHALENE	UG/L	0	13	0%	--	--	--	--	--	--	17	17
NAPROPAMIDE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
N-BUTYLBENZENE	UG/L	0	12	0%	--	--	--	--	--	--	260	260
NICKEL	UG/L	0	4	0%	--	--	--	100	--	12	--	100
NITRITE (AS N)	UG/L	0	4	0%	--	--	--	1000	--	1	--	1000
NITROBENZENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
N-NITROSODIMETHYLAMINE (NDMA)	UG/L	0	1	0%	--	--	--	--	--	--	0.01	0.01
N-NITROSODI-N-PROPYLAMINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
N-NITROSODIPHENYLAMINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ORYZALIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
OXAMYL	UG/L	0	4	0%	--	--	--	50	--	50	--	50
O-XYLENE	UG/L	0	13	0%	--	--	--	--	--	--	--	--
PARAQUAT	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PARATHION	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1016	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1221	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1232	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1242	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1248	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1254	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1260	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PENTACHLOROBENZENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PENTACHLOROPHENOL	UG/L	0	5	0%	--	--	--	1	--	0.4	--	1
PHENANTHRENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PHENOL	UG/L	0	1	0%	--	--	--	--	--	--	4200	4200
PHORATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PHOSDIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PICLORAM	UG/L	0	4	0%	--	--	--	500	--	500	--	500
P-ISOPROPYLTOLUENE	UG/L	0	12	0%	--	--	--	--	--	--	--	--
POLYCHLORINATED BIPHENYLS (TOTAL PCB'S)	UG/L	0	4	0%	--	--	--	0.5	--	--	--	0.5
PROMETRYN	UG/L	0	4	0%	--	--	--	--	--	--	--	--
PROPAMIDE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PROPARGITE	MG/L	0	1	0%	--	--	--	--	--	--	--	--
PROPHAM	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PYRENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
S,S,S-TRIBUTYLPHOSPHOROTRITHIOATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
SEC-BUTYLBENZENE	UG/L	0	12	0%	--	--	--	--	--	--	260	260
SELENIUM	UG/L	0	4	0%	--	--	--	50	--	--	--	50
SILVER	UG/L	0	4	0%	--	--	--	--	100	--	--	100
STYRENE	UG/L	0	13	0%	--	--	--	100	--	--	--	100
TERT-AMYL-METHYL ETHER	UG/L	0	7	0%	--	--	--	--	--	--	--	--
TERT-BUTYL ALCOHOL	UG/L	0	3	0%	--	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	UG/L	0	12	0%	--	--	--	--	--	--	260	260
THALLIUM	UG/L	0	4	0%	--	--	--	2	--	0.1	--	2
THIOBENCARB	UG/L	0	10	0%	--	--	--	70	1	70	--	1
TOLUENE	UG/L	0	15	0%	--	--	--	150	--	150	--	150
TOXAPHENE	UG/L	0	7	0%	--	--	--	3	--	0.03	--	3
TRANS-1,2-DICHLOROETHYLENE	UG/L	0	15	0%	--	--	--	10	--	60	--	10
TRANS-1,3-DICHLOROPROPENE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
TRANS-PERMETHRIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
TRICHLOROFLUOROMETHANE	UG/L	0	15	0%	--	--	--	150	--	700	--	150
VINYL CHLORIDE	UG/L	0	15	0%	--	--	--	0.5	--	0.05	--	0.5

TABLE 3-5

Summary of Constituents Analyzed for in Groundwater Collected from the LAWC #3 (June 1991 to October 2002; May 2003 through November 2003)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
XYLENES (TOTAL)	UG/L	0	15	0%	--	--	--	1750	--	1800	--	1750
ZINC	UG/L	0	5	0%	--	--	--	5000	--	--	--	5000

Notes:

Source of Data: GeoSciences Database. Production Well monitoring data from June 1991 to October 2002; May 2003 through November 2003 for PCE, TCE, carbon tetrachloride, 1,1-DCA, and chloroform as provided in the JPL Quarterly Monitoring Reports by GEOFON.

(1) For perchlorate, data was obtained from the DHS website at http://www.dhs.ca.gov/ps/ddwem/chemicals/perchl/monitoringupdate.htm and includes data from June 1997 to October 2004.

µg/L = micrograms per liter

NTU = Nephelometric Turbidity Units

pCi/L = picocuries per liter

µg/mL = micrograms per milliliter

mg/L = milligrams per liter

pg/L = picograms per liter

1/2 of the detection limit was used for nondetected values when calculating the arithmetic mean

Shading indicates exceedence of applicable standard.

* The Applicable Regulatory Limit is the regulatory limit with the lowest concentration; proposed CA Primary MCL and CA PHG are not included.

(a) The MCL is 5 pCi/L for Radium-226 and Radium-228 combined.

CA = California

MCL = maximum contaminant level

PHG = public health goal

DHS = Department of Health Services

TABLE 3-6
Summary of Constituents Analyzed for in Groundwater Collected from the LAWC #5 (June 1991 to October 2002; May 2003 through November 2003)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
ALKALINITY (TOTAL) AS CACO3	MG/L	5	5	100%	165.6	171.2	167.8	--	--	--	--	--
BICARBONATE ALKALINITY	MG/L	5	5	100%	202	210	205.2	--	--	--	--	--
CALCIUM	MG/L	5	5	100%	39.1	56.7	49.9	--	--	--	--	--
CHLORIDE	MG/L	5	5	100%	11.9	15.7	13.72	--	500	--	--	500
CHLOROFORM (THM)	UG/L	14	14	100%	1.1	4.6	2.8	100	--	--	--	100
CHROMIUM, HEXAVALENT	UG/L	3	3	100%	1.3	2.5	1.97	--	--	--	--	--
FLUORIDE (TEMPERATURE DEPENDENT)	MG/L	5	5	100%	0.6	0.961	0.78	2	--	1	--	2
GROSS ALPHA	PCI/L	9	9	100%	2.3	8.7	4.6	15	--	--	--	15
HARDNESS (TOTAL) AS CACO3	MG/L	5	5	100%	158	203	185	--	--	--	--	--
pH	UNITS	5	5	100%	6.8	7.9	7.47	--	--	--	--	--
TURBIDITY	NTU	4	4	100%	0.1	0.5	0.33	--	5	--	--	5
MAGNESIUM	MG/L	5	5	100%	13	18	15.3	--	--	--	--	--
NITRATE (AS NO3)	MG/L	11	11	100%	10.5	19.3	14.7	45	--	45	--	45
NITRATE + NITRITE (AS N)	UG/L	4	4	100%	2370	3499	2940	--	--	--	--	--
SODIUM	MG/L	5	5	100%	13.4	34.3	21.7	--	--	--	--	--
SULFATE	MG/L	5	5	100%	26.1	37.3	32.5	--	500	--	--	500
TOTAL DISSOLVED SOLIDS	MG/L	5	5	100%	230	250	244	--	1000	--	--	1000
TOTAL TRIHALOMETHANES	UG/L	11	11	100%	1.1	4.8	3.03	--	--	--	--	--
URANIUM (PCI/L)	PCI/L	3	3	100%	6	7	6.3	20	--	0.43	--	20
VANADIUM	UG/L	2	2	100%	6.1	13	9.6	--	--	--	50	50
TRICHLOROETHYLENE	UG/L	90	93	97%	2.4	57.4	19.63	5	--	0.8	--	5
PERCHLORATE (1)	UG/L	94	112	84%	2	15	5.4	--	--	6	6	6
POTASSIUM	MG/L	4	5	80%	1.7	2.9	1.9	--	--	--	--	--
TETRACHLOROETHYLENE	UG/L	29	66	44%	0.5	2.6	0.82	5	--	0.06	--	5
CARBON TETRACHLORIDE	UG/L	25	65	38%	0.5	1.9	0.43	0.5	--	0.1	--	0.5
ALUMINUM	UG/L	1	4	25%	97	97	43	1000	200	600	--	1000
1,1,1-TRICHLOROETHANE	UG/L	1	11	9%	1.2	1.2	0.34	200	--	1,000	--	200
BROMODICHLOROMETHANE (THM)	UG/L	1	11	9%	0.6	0.6	0.28	--	--	--	--	--
COLOR	COLOR	0	3	0%	--	--	--	--	15	--	--	15
1,1,1,2-TETRACHLORETHANE	UG/L	0	9	0%	--	--	--	--	--	--	--	--
1,1,2,2-TETRACHLOROETHANE	UG/L	0	11	0%	--	--	--	1	--	0.1	--	1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG/L	0	9	0%	--	--	--	1200	--	4000	--	1200
1,1,2-TRICHLOROETHANE	UG/L	0	11	0%	--	--	--	5	--	0.2	--	5
1,1-DICHLOROETHANE	UG/L	0	12	0%	--	--	--	5	--	3	--	5
1,1-DICHLOROETHYLENE	UG/L	0	11	0%	--	--	--	6	--	10	--	6
1,1-DICHLOROPROPENE	UG/L	0	9	0%	--	--	--	--	--	--	--	--
1,2,3-TRICHLOROBENZENE	UG/L	0	9	0%	--	--	--	1	--	--	--	1
1,2,3-TRICHLOROPROPANE	UG/L	0	9	0%	--	--	--	--	--	--	0.005	0.005
1,2,4-TRICHLOROBENZENE	UG/L	0	10	0%	--	--	--	5	--	5	--	5
1,2,4-TRIMETHYLBENZENE	UG/L	0	9	0%	--	--	--	--	--	--	330	330
1,2-DICHLOROBENZENE	UG/L	0	12	0%	--	--	--	600	--	600	--	60
1,2-DICHLOROETHANE	UG/L	0	11	0%	--	--	--	0.5	--	0.4	--	0.05
1,2-DICHLOROPROPANE	UG/L	0	12	0%	--	--	--	5	--	0.5	--	5
1,3,5-TRIMETHYLBENZENE	UG/L	0	9	0%	--	--	--	--	--	--	330	330
1,3-DICHLOROBENZENE	UG/L	0	12	0%	--	--	--	--	--	--	600	600
1,3-DICHLOROPROPANE	UG/L	0	9	0%	--	--	--	--	--	--	--	--
1,3-DICHLOROPROPENE (TOTAL)	UG/L	0	9	0%	--	--	--	0.5	--	0.5	--	0.5
1,4-DICHLOROBENZENE	UG/L	0	12	0%	--	--	--	5	--	6	--	5
1-PHENYLPROPANE (N-PROPYLBENZENE)	UG/L	0	9	0%	--	--	--	--	--	--	26	26
2,2-DICHLOROPROPANE	UG/L	0	9	0%	--	--	--	--	--	--	--	--
2,4,5-TP (SILVEX)	UG/L	0	5	0%	--	--	--	50	--	25	--	50
2,4,6-TRICHLOROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2,4-D	UG/L	0	7	0%	--	--	--	70	--	70	--	70
2,4-DICHLOROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2,4-DIMETHYLPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	100	100
2,4-DINITROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2,4-DINITROTOLUENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2,6-DINITROTOLUENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2-CHLOROETHYLVINYL ETHER	UG/L	0	12	0%	--	--	--	--	--	--	--	--
2-CHLORONAPHTHALENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2-CHLOROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2-CHLOROTOLUENE	UG/L	0	9	0%	--	--	--	--	--	--	140	140
2-METHYL-4,6-DINITROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2-NITROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
3,3-DICHLOROBENZIDINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4,4-DDD	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4,4-DDE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4,4-DDT	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4-BROMOPHENYL PHENYL ETHER	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4-CHLORO-3-METHYLPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4-CHLOROPHENYL PHENYL ETHER	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4-CHLOROTOLUENE	UG/L	0	9	0%	--	--	--	--	--	--	140	140
4-NITROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ACENAPHTHENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ACENAPHTHYLENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ACEPHATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ALACHLOR	UG/L	0	8	0%	--	--	--	2	--	4	--	2
ALDICARB	UG/L	0	1	0%	--	--	--	--	--	--	7	7
ALDRIN	UG/L	0	1	0%	--	--	--	--	--	--	0.002	0.002
ALPHA-BHC	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ANTHRACENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ANTIMONY	UG/L	0	4	0%	--	--	--	6	--	20	--	6
ARSENIC	UG/L	0	4	0%	--	--	--	50	--	0.004	--	50

TABLE 3-6
Summary of Constituents Analyzed for in Groundwater Collected from the LAWC #5 (June 1991 to October 2002; May 2003 through November 2003)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
ATRAZINE	UG/L	0	8	0%	--	--	--	1	--	0.15	--	1
BARIUM	UG/L	0	4	0%	--	--	--	1000	--	2000	--	1000
BENFLURALIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENOMYL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENTAZON	UG/L	0	4	0%	--	--	--	18	--	200	--	18
BENZENE	UG/L	0	11	0%	--	--	--	1	--	0.15	--	1
BENZIDINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (A) ANTHRACENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (A) PYRENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (B) FLUORANTHENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (GHI) PERYLENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (K) FLUORANTHENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZYL BUTYL PHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BERYLLIUM	UG/L	0	4	0%	--	--	--	4	--	1	--	4
BETA-BHC	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BIS (2-CHLOROEHOXY) METHANE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BIS (2-CHLOROETHYL) ETHER	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BORON	UG/L	0	2	0%	--	--	--	--	--	--	1000	1000
BROMACIL	UG/L	0	6	0%	--	--	--	--	--	--	--	--
BROMOBENZENE	UG/L	0	9	0%	--	--	--	--	--	--	--	--
BROMOCHLOROMETHANE	UG/L	0	9	0%	--	--	--	--	--	--	--	--
BROMOFORM (THM)	UG/L	0	11	0%	--	--	--	--	--	--	--	--
BROMOMETHANE	UG/L	0	12	0%	--	--	--	--	--	--	--	--
BUTACHLOR	UG/L	0	3	0%	--	--	--	--	--	--	--	--
CADMIUM	UG/L	0	4	0%	--	--	--	5	--	0.07	--	5
CAPTAN	UG/L	0	1	0%	--	--	--	--	--	--	1.5	1.5
CARBARYL	UG/L	0	4	0%	--	--	--	--	--	--	700	700
CARBOFURAN	UG/L	0	5	0%	--	--	--	18	--	1.7	--	18
CARBONATE ALKALINITY	MG/L	0	5	0%	--	--	--	--	--	--	--	--
CHLORDANE	UG/L	0	7	0%	--	--	--	0.1	--	0.03	--	0.1
CHLORDIMEFORM	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CHLOROETHANE	UG/L	0	11	0%	--	--	--	--	--	--	--	--
CHLOROMETHANE	UG/L	0	11	0%	--	--	--	--	--	--	--	--
CHLOROPICRIN	UG/L	0	1	0%	--	--	--	--	--	--	56	56
CHLOROPROPHAM	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CHLOROTHALONIL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CHLORPYRIFOS	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CHROMIUM (TOTAL)	UG/L	0	4	0%	--	--	--	50	--	--	--	50
CHRYSENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHYLENE	UG/L	0	9	0%	--	--	--	6	--	100	--	6
CIS-1,3-DICHLOROPROPENE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
CIS-PERMETHRIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
COPPER	UG/L	0	5	0%	--	--	--	--	1000	170	1300	1000
CYANAZINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CYANIDE	UG/L	0	4	0%	--	--	--	150	--	150	--	150
DACTHAL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DALAPON	UG/L	0	4	0%	--	--	--	200	--	790	--	200
DELTA-BHC	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DEMETON	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DI(2-ETHYLHEXYL)ADIPATE	UG/L	0	2	0%	--	--	--	400	--	200	--	400
DI(2-ETHYLHEXYL)PHTHALATE	UG/L	0	3	0%	--	--	--	4	--	12	--	4
DIAZINON	UG/L	0	7	0%	--	--	--	--	--	--	6	6
DIBENZO (A,H) ANTRACENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DIBROMOCHLOROMETHANE (THM)	UG/L	0	11	0%	--	--	--	--	--	--	--	--
DIBROMOCHLOROPROPANE (DBCP)	UG/L	0	10	0%	--	--	--	--	--	--	--	--
DIBROMOMETHANE	UG/L	0	9	0%	--	--	--	--	--	--	--	--
DICHLORODIFLUOROMETHANE	UG/L	0	12	0%	--	--	--	--	--	--	1000	1000
DICHLOROMETHANE	UG/L	0	11	0%	--	--	--	5	--	4	--	5
DICOFOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DIELDRIN	UG/L	0	1	0%	--	--	--	--	--	--	0.002	0.002
DIETHYL PHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DIMETHOATE	UG/L	0	3	0%	--	--	--	--	--	--	1	1
DIMETHYL PHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DI-N-BUTYLPHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DI-N-OCTYLPHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DINOSEB	UG/L	0	5	0%	--	--	--	7	--	14	--	7
DIPHENAMIDE	UG/L	0	1	0%	--	--	--	--	--	--	200	200
DIQUAT	UG/L	0	5	0%	--	--	--	20	--	15	--	20
DISULFOTON	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DIURON	UG/L	0	2	0%	--	--	--	--	--	--	--	--
DNOC	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DYLOX	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ENDOSULFAN I	UG/L	0	2	0%	--	--	--	--	--	--	--	--
ENDOSULFAN II	UG/L	0	2	0%	--	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ENDOTHALL	UG/L	0	1	0%	--	--	--	100	--	580	--	100
ENDRIN	UG/L	0	6	0%	--	--	--	2	--	1.8	--	2
ENDRIN ALDEHYDE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
EPTC	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ETHION	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ETHYLBENZENE	UG/L	0	11	0%	--	--	--	300	--	300	--	300
ETHYLENE DIBROMIDE (EDB)	UG/L	0	7	0%	--	--	--	0.05	--	0.01	--	0.05
ETHYL-TERT-BUTYL ETHER	UG/L	0	6	0%	--	--	--	--	--	--	--	--

TABLE 3-6
Summary of Constituents Analyzed for in Groundwater Collected from the LAWC #5 (June 1991 to October 2002; May 2003 through November 2003)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
FENAMIPHOS	UG/L	0	1	0%	--	--	--	--	--	--	--	--
FLUCHLORALIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
FLUORANTHENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
FLUORENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
GLYPHOSATE	UG/L	0	6	0%	--	--	--	700	--	1000	--	700
GUTHION	UG/L	0	1	0%	--	--	--	--	--	--	--	--
HEPTACHLOR	UG/L	0	5	0%	--	--	--	0.01	--	0.008	--	0.01
HEPTACHLOR EPOXIDE	UG/L	0	5	0%	--	--	--	0.01	--	0.006	--	0.01
HEXACHLOROBENZENE	UG/L	0	5	0%	--	--	--	1	--	0.03	--	1
HEXACHLOROBUTADIENE	UG/L	0	10	0%	--	--	--	50	--	--	--	50
HEXACHLOROCYCLOPENTADIENE	UG/L	0	5	0%	--	--	--	--	--	50	--	--
HEXACHLOROETHANE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
INDENO (1,2,3-CD) PYRENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
IRON	UG/L	0	5	0%	--	--	--	--	300	--	--	300
ISOPHORONE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ISOPROPYLBENZENE	UG/L	0	9	0%	--	--	--	--	--	--	770	770
LEAD	UG/L	0	4	0%	--	--	--	--	--	2	0.015	0.015
LINDANE	UG/L	0	5	0%	--	--	--	0.2	--	0.032	--	0.2
M,P-XYLENE	UG/L	0	9	0%	--	--	--	--	--	--	--	--
MALATHION	UG/L	0	1	0%	--	--	--	--	--	--	--	--
MANGANESE	UG/L	0	5	0%	--	--	--	--	--	--	--	--
MERCURY	UG/L	0	4	0%	--	--	--	2	--	1.2	--	--
MERPHOS	UG/L	0	1	0%	--	--	--	--	--	--	--	2
METHAMIDOPHOS	UG/L	0	1	0%	--	--	--	--	--	--	--	--
METHOMYL	UG/L	0	1	0%	--	--	--	30	--	30	--	30
METHOXYCHLOR	UG/L	0	5	0%	--	--	--	--	--	--	--	--
METHYL ETHYL KETONE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
METHYL ISOBUTYL KETONE	UG/L	0	2	0%	--	--	--	--	--	--	120	120
METHYL-TERT-BUTYL-ETHER (MTBE)	UG/L	0	10	0%	--	--	--	--	5	13	--	5
METOLACHLOR	UG/L	0	2	0%	--	--	--	--	--	--	--	--
METRIBUZIN	UG/L	0	2	0%	--	--	--	--	--	--	--	--
MOLINATE	UG/L	0	9	0%	--	--	--	20	--	--	--	20
MONOCHLOROBENZENE	UG/L	0	11	0%	--	--	--	70	--	200	--	70
NAPHTHALENE	UG/L	0	10	0%	--	--	--	--	--	--	17	17
NAPROPAMIDE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
N-BUTYLBENZENE	UG/L	0	9	0%	--	--	--	--	--	--	260	260
NICKEL	UG/L	0	4	0%	--	--	--	100	--	12	--	100
NITRITE (AS N)	UG/L	0	4	0%	--	--	--	1000	--	1	--	1000
NITROBENZENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
N-NITROSODIMETHYLAMINE (NDMA)	UG/L	0	1	0%	--	--	--	--	--	--	0.01	0.01
N-NITROSODI-N-PROPYLAMINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
N-NITROSODIPHENYLAMINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ORYZALIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
OXAMYL	UG/L	0	4	0%	--	--	--	50	--	50	--	50
O-XYLENE	UG/L	0	9	0%	--	--	--	--	--	--	--	--
PARAQUAT	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PARATHION	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1016	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1221	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1232	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1242	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1248	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1254	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1260	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PENTACHLOROBENZENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PENTACHLOROPHENOL	UG/L	0	5	0%	--	--	--	1	--	0.4	--	1
PHENANTHRENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PHENOL	UG/L	0	1	0%	--	--	--	--	--	--	4200	4200
PHORATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PHOSDIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PICLORAM	UG/L	0	4	0%	--	--	--	500	--	500	--	500
P-ISOPROPYLTOLUENE	UG/L	0	9	0%	--	--	--	--	--	--	--	--
POLYCHLORINATED BIPHENYLS (TOTAL PCB'S)	UG/L	0	4	0%	--	--	--	0.5	--	--	--	0.5
PROMETRYN	UG/L	0	3	0%	--	--	--	--	--	--	--	--
PROPAMIDE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PROPARGITE	MG/L	0	1	0%	--	--	--	--	--	--	--	--
PROPHAM	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PYRENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
RADIUM 226	PCI/L	0	1	0%	--	--	--	5	--	--	--	5
RADIUM 228	PCI/L	0	1	0%	--	--	--	5	--	--	--	5
S,S,S-TRIBUTYLPHOSPHOROTRITHIOATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
SEC-BUTYLBENZENE	UG/L	0	9	0%	--	--	--	--	--	--	260	260
SELENIUM	UG/L	0	4	0%	--	--	--	50	--	--	--	50
SILVER	UG/L	0	4	0%	--	--	--	--	100	--	--	100
SIMAZINE	UG/L	0	8	0%	--	--	--	4	--	4	--	4
STYRENE	UG/L	0	9	0%	--	--	--	100	--	--	--	100
TERT-AMYL-METHYL ETHER	UG/L	0	6	0%	--	--	--	--	--	--	--	--
TERT-BUTYL ALCOHOL	UG/L	0	3	0%	--	--	--	--	--	--	--	--
TERT-BUTYLBENZENE	UG/L	0	9	0%	--	--	--	--	--	--	260	260
THALLIUM	UG/L	0	4	0%	--	--	--	2	--	0.1	--	2
THIOBENCARB	UG/L	0	8	0%	--	--	--	70	1	70	--	1
TOLUENE	UG/L	0	11	0%	--	--	--	150	--	150	--	150
TOXAPHENE	UG/L	0	6	0%	--	--	--	3	--	0.03	--	3

TABLE 3-6
Summary of Constituents Analyzed for in Groundwater Collected from the LAWC #5 (June 1991 to October 2002; May 2003 through November 2003)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
TRANS-1,2-DICHLOROETHYLENE	UG/L	0	11	0%	--	--	--	10	--	60	--	10
TRANS-1,3-DICHLOROPROPENE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
TRANS-PERMETHRIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
TRICHLOROFLUOROMETHANE	UG/L	0	11	0%	--	--	--	150	--	700	--	150
VINYL CHLORIDE	UG/L	0	11	0%	--	--	--	0.5	--	0.05	--	0.5
XYLENES (TOTAL)	UG/L	0	11	0%	--	--	--	1750	--	1800	--	1750
ZINC	UG/L	0	5	0%	--	--	--	5000	--	--	--	5000

Notes:

Source of Data: GeoSciences Database. Production Well monitoring data from June 1991 to October 2002; May 2003 through November 2003 for PCE, TCE, carbon tetrachloride, 1,1-DCA, and chloroform as provided in the JPL Quarterly Monitoring Reports by GEOFON.

(1) For perchlorate, data was obtained from the DHS website at http://www.dhs.ca.gov/ps/ddwem/chemicals/perchl/monitoringupdate.htm and includes data from June 1997 to October 2004.

µg/L = micrograms per liter
NTU = Nephelometric Turbidity Units
pCi/L = picocuries per liter
µg/mL = micrograms per milliliter
mg/L = milligrams per liter
pg/L = picograms per liter
1/2 of the detection limit was used for nondetected values when calculating the arithmetic mean.
Shading indicates exceedence of applicable standard.
* The Applicable Regulatory Limit is the regulatory limit with the lowest concentration; proposed CA Primary MCL and CA PHG are not included.
(a) The MCL is 5 pCi/L for Radium-226 and Radium-228 combined.
CA = California
MCL = maximum contaminant level
PHG = public health goal
DHS = Department of Health Services

TABLE 3-7
Summary of Constituents Analyzed in Groundwater Collected from the Rubio Cañon Well #4

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
AGGRESSIVE INDEX (CORROSIVITY)	NA	3	3	100%	11.93	12.15	12.06	--	Non-Corrosive	--	--	Non-Corrosive
ALKALINITY (TOTAL) AS CACO3	MG/L	5	5	100%	180	295	222.0	--	--	--	--	--
BICARBONATE ALKALINITY	MG/L	5	5	100%	219.6	360.3	269.8	--	--	--	--	--
CALCIUM	MG/L	5	5	100%	50.1	87.1	73.16	--	--	--	--	--
CHLORIDE	MG/L	5	5	100%	21.4	36	28.02	--	500	--	--	500
FLUORIDE (TEMPERATURE DEPENDENT)	MG/L	45	45	100%	0.26	0.79	0.54	2	--	1	--	2
GROSS ALPHA	PCI/L	17	17	100%	6.02	19.2	11.01	15	--	--	--	15
HARDNESS (TOTAL) AS CACO3	MG/L	5	5	100%	240	341.2	287.96	--	--	--	--	--
MAGNESIUM	MG/L	5	5	100%	12	30	23.4	--	--	--	--	--
NITRATE (AS NO3)	MG/L	58	58	100%	54.1	11	29.92	45	--	45	--	45
NITRATE + NITRITE (AS N)	UG/L	3	3	100%	5959	3200	4256	10,000	--	10,000	--	10,000
NITRATE + NITRITE (NO3-N)	UG/L	1	1	100%	7.5	7.5	7.5	--	--	--	--	--
ODOR THRESHOLD @ 60 C		29	29	100%	1	1	1	--	3	--	--	3
PH, LABORATORY	NA	5	5	100%	7.39	7.89	7.66	--	--	--	--	--
POTASSIUM	MG/L	5	5	100%	1.3	3	2.34	--	--	--	--	--
SODIUM	MG/L	5	5	100%	17.4	25.4	22.68	--	--	--	--	--
SPECIFIC CONDUCTANCE	US	5	5	100%	560	780	648.8	--	1600	--	--	1,600
SULFATE	MG/L	5	5	100%	8.4	61.4	45.46	--	500	--	--	500
TOTAL DISSOLVED SOLIDS	MG/L	5	5	100%	320	468	370.6	--	1000	--	--	1,000
TURBIDITY	NTU	29	29	100%	0.1	2.2	0.38	--	5	--	--	5
URANIUM (PCI/L)	PCI/L	8	8	100%	7.5	20.6	12.75	20	--	0.43	--	20
PERCHLORATE	UG/L	8	13	62%	4	6	3.7	--	--	6	6	6
CHLOROFORM (THM)	UG/L	5	11	45%	0.7	4	1.04	100	--	--	--	100
TOTAL TRIHALOMETHANES	UG/L	4	9	44%	1.3	4.0	1.21	--	--	--	--	--
BORON	UG/L	1	3	33%	110	110	70	--	--	--	1,000	1,000
VANADIUM	UG/L	1	3	33%	4.3	4.3	2.43	--	--	--	50	50
ALUMINUM	UG/L	1	4	25%	0.09	0.09	18.77	1,000	200	600	--	200
ATRAZINE	UG/L	3	13	23%	0.50	0.61	0.51	1.0	--	0.15	--	1
ARSENIC	UG/L	1	5	20%	1.0	1.0	1.0	50	--	0.004	--	50
BARIUM	UG/L	1	5	20%	47.0	47.0	49.4	1,000	--	2,000	--	1,000
CADMIUM	UG/L	1	5	20%	3.0	3.0	1.0	5	--	0.07	--	5
CARBONATE ALKALINITY	MG/L	1	5	20%	0.94	0.94	0.588	--	--	--	--	--
CHROMIUM (TOTAL)	UG/L	1	5	20%	29	29	9.8	50	--	--	--	50
COPPER	UG/L	1	5	20%	12	12	22.4	--	1,000	170	1,300	1,000
IRON	UG/L	1	5	20%	36	36	47.2	--	300	--	--	300
MANGANESE	UG/L	1	5	20%	12	12	10.4	--	50	--	500	50
MERCURY	UG/L	1	5	20%	0.3	0.3	0.46	2	--	1.2	--	2
SELENIUM	UG/L	1	5	20%	3	3	2.6	50	--	--	--	50
SILVER	UG/L	1	5	20%	5	5	5	--	100	--	--	100
ZINC	UG/L	1	5	20%	7	7	21.4	--	5,000	--	--	5,000
SIMAZINE	UG/L	2	13	15%	0.5	0.5	0.5	4	--	4	--	4
RADIUM 226	PCI/L	1	7	14%	0.32	0.32	0.19	--	--	0.069	--	--
DIBROMOCHLOROMETHANE (THM)	UG/L	1	11	9%	1.3	1.3	0.345	100	--	--	--	100
COLOR	UNITS	1	29	3%	5	5	1.62	--	15	--	--	15
1,1,1,2-TETRACHLORETHANE	UG/L	0	9	0%	--	--	--	--	--	--	--	--
1,1,1-TRICHLOROETHANE	UG/L	0	11	0%	--	--	--	200	--	1,000	--	200
1,1,2,2-TETRACHLOROETHANE	UG/L	0	11	0%	--	--	--	1	--	0.1	--	1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG/L	0	9	0%	--	--	--	1,200	--	4,000	--	1,200
1,1,2-TRICHLOROETHANE	UG/L	0	11	0%	--	--	--	5	--	0.2	--	5
1,1-DICHLOROETHANE	UG/L	0	11	0%	--	--	--	5	--	3	--	5
1,1-DICHLOROETHYLENE	UG/L	0	11	0%	--	--	--	6	--	10	--	6
1,1-DICHLOROPROPENE	UG/L	0	9	0%	--	--	--	--	--	--	--	--
1,2,3-TRICHLOROBENZENE	UG/L	0	9	0%	--	--	--	--	--	--	--	--
1,2,3-TRICHLOROPROPANE	UG/L	0	8	0%	--	--	--	--	--	--	0.005	0.005
1,2,4-TRICHLOROBENZENE	UG/L	0	10	0%	--	--	--	5	--	5	--	5
1,2,4-TRIMETHYLBENZENE	UG/L	0	9	0%	--	--	--	--	--	--	330	330
1,2-DICHLOROBENZENE	UG/L	0	11	0%	--	--	--	600	--	600	--	600
1,2-DICHLOROETHANE	UG/L	0	11	0%	--	--	--	0.5	--	0.4	--	0.5
1,2-DICHLOROPROPANE	UG/L	0	11	0%	--	--	--	5	--	0.5	--	5
1,3,5-TRIMETHYLBENZENE	UG/L	0	8	0%	--	--	--	--	--	--	330	330
1,3-DICHLOROBENZENE	UG/L	0	11	0%	--	--	--	--	--	--	600	600
1,3-DICHLOROPROPANE	UG/L	0	9	0%	--	--	--	--	--	--	--	--
1,3-DICHLOROPROPENE (TOTAL)	UG/L	0	10	0%	--	--	--	0.5	--	0.2	--	0.5
1,4-DICHLOROBENZENE	UG/L	0	11	0%	--	--	--	5	--	6	--	5
1-PHENYLPROPANE (N-PROPYLBENZENE)	UG/L	0	9	0%	--	--	--	--	--	--	260	260
2,2-DICHLOROPROPANE	UG/L	0	9	0%	--	--	--	--	--	--	--	--
2,3,7,8-TCDD (DIOXIN)	UG/L	0	1	0%	--	--	--	0.00003	--	--	--	0.00003
2,4,5-TP (SILVEX)	UG/L	0	7	0%	--	--	--	50	--	25	--	50
2,4,6-TRICHLOROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2,4-D	UG/L	0	7	0%	--	--	--	70	--	70	--	70
2,4-DICHLOROPHENOL	UG/L	0	1	0%	--	--	--	--	--		--	--
2,4-DIMETHYLPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	100	100
2,4-DINITROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2,4-DINITROTOLUENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2,6-DINITROTOLUENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2-CHLOROETHYLVINYL ETHER	UG/L	0	9	0%	--	--	--	--	--	--	--	--
2-CHLORONAPHTHALENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2-CHLOROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2-CHLOROTOLUENE	UG/L	0	9	0%	--	--	--	--	--	--	140	140
2-METHYL-4,6-DINITROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2-NITROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
3,3-DICHLOROBENZIDINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4,4-DDD	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4,4-DDE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4,4-DDT	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4-BROMOPHENYL PHENYL ETHER	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4-CHLORO-3-METHYLPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4-CHLOROPHENYL PHENYL ETHER	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4-CHLOROTOLUENE	UG/L	0	9	0%	--	--	--	--	--	--	140	140
4-NITROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--

TABLE 3-7
Summary of Constituents Analyzed in Groundwater Collected from the Rubio Canon Well #4

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
ACENAPHTHENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ACENAPHTHYLENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ALACHLOR	UG/L	0	6	0%	--	--	--	2	--	4	--	2
ALDICARB	UG/L	0	1	0%	--	--	--	--	--	--	7	7
ALDRIN	UG/L	0	2	0%	--	--	--	--	--	--	0.002	0.002
ALPHA-BHC	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ANTHRACENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ANTIMONY	UG/L	0	3	0%	--	--	--	6	--	20	--	6
BENFLURALIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENTAZON	UG/L	0	4	0%	--	--	--	18	--	200	--	18
BENZENE	UG/L	0	11	0%	--	--	--	1	--	0.15	--	1
BENZIDINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (A) ANTHRACENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (A) PYRENE	UG/L	0	3	0%	--	--	--	0.2	--	0.004	--	0.2
BENZO (B) FLUORANTHENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (GHI) PERYLENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (K) FLUORANTHENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZYL BUTYL PHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BERYLLIUM	UG/L	0	3	0%	--	--	--	4	--	1	--	4
BETA-BHC	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BIS (2-CHLOROEHOXY) METHANE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BIS (2-CHLOROETHYL) ETHER	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BROMACIL	UG/L	0	6	0%	--	--	--	--	--	--	--	--
BROMOBENZENE	UG/L	0	9	0%	--	--	--	--	--	--	--	--
BROMOCHLOROMETHANE	UG/L	0	9	0%	--	--	--	--	--	--	--	--
BROMODICHLORMETHANE (THM)	UG/L	0	11	0%	--	--	--	--	--	--	--	--
BROMOFORM (THM)	UG/L	0	11	0%	--	--	--	--	--	--	--	--
BROMOMETHANE	UG/L	0	11	0%	--	--	--	--	--	--	--	--
BUTACHLOR	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CAPTAN	UG/L	0	1	0%	--	--	--	--	--	--	1.5	2
CARBARYL	UG/L	0	2	0%	--	--	--	--	--	--	700	700
CARBOFURAN	UG/L	0	2	0%	--	--	--	18	--	1.7	--	18
CARBON TETRACHLORIDE	UG/L	0	11	0%	--	--	--	0.5	--	0.1	--	0.5
CHLORDANE	UG/L	0	6	0%	--	--	--	0.1	--	0.03	--	0.1
CHLORDIMEFORM	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CHLOROETHANE	UG/L	0	11	0%	--	--	--	--	--	--	--	--
CHLOROMETHANE	UG/L	0	11	0%	--	--	--	--	--	--	--	--
CHLOROPICRIN	UG/L	0	1	0%	--	--	--	--	--	--	56	56
CHLOROTHALONIL	UG/L	0	5	0%	--	--	--	--	--	--	--	--
CHROMIUM, HEXAVALENT	UG/L	0	2	0%	--	--	--	--	--	--	--	--
CHRYSENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHYLENE	UG/L	0	10	0%	--	--	--	6	--	100	--	6
CIS-1,3-DICHLOROPROPENE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
CIS-PERMETHRIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CYANAZINE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
CYANIDE	UG/L	0	3	0%	--	--	--	150	--	150	--	150
DACTHAL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DALAPON	UG/L	0	5	0%	--	--	--	200	--	790	--	200
DELTA-BHC	UG/L	0	1	0%	--	--	--		--	--	--	
DI(2-ETHYLHEXYL)ADIPATE	UG/L	0	1	0%	--	--	--	400	--	200	--	400
DI(2-ETHYLHEXYL)PHTHALATE	UG/L	0	2	0%	--	--	--	4	--	12	--	4
DIAZINON	UG/L	0	5	0%	--	--	--	--	--	--	6	6
DIBENZO (A,H) ANTRACENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DIBROMOCHLOROPROPANE (DBCP)	UG/L	0	13	0%	--	--	--	0.2	--	0.0017	--	0.2
DIBROMOMETHANE	UG/L	0	9	0%	--	--	--	--	--	--	--	--
DICAMBA	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DICHLORODIFLUOROMETHANE	UG/L	0	11	0%	--	--	--	--	--	--	1,000	1,000
DICHLOROMETHANE (METHYLENE CHLORIDE)	UG/L	0	11	0%	--	--	--	5	--	4	--	5
DICOFOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DIELDRIN	UG/L	0	2	0%	--	--	--	--	--	--	0.002	0.002
DIETHYL PHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DIMETHOATE	UG/L	0	1	0%	--	--	--	--	--	--	1	1
DIMETHYL PHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DI-N-BUTYLPHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DI-N-OCTYLPHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DINOSEB	UG/L	0	6	0%	--	--	--	7	--	14	--	7
DIPHENAMIDE	UG/L	0	1	0%	--	--	--	--	--	--	200	200
DIQUAT	UG/L	0	5	0%	--	--	--	20	--	15	--	20
DIURON	UG/L	0	4	0%	--	--	--	--	--	--	--	--
DNOC	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ENDOSULFAN I	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ENDOSULFAN II	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ENDOTHALL	UG/L	0	2	0%	--	--	--	100	--	580	--	100
ENDRIN	UG/L	0	9	0%	--	--	--	2	--	1.8	--	2
ENDRIN ALDEHYDE	UG/L	0	1	0%	--	--	--		--		--	
ETHYLBENZENE	UG/L	0	11	0%	--	--	--	300	--	300	--	300
ETHYLENE DIBROMIDE (EDB)	UG/L	0	9	0%	--	--	--	0.05	--	0.01	--	0.05
ETHYL-TERT-BUTYL ETHER	UG/L	0	4	0%	--	--	--	--	--	--	--	--
FLUCHLORALIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
FLUORANTHENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
FLUORENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
FOAMING AGENTS (MBAS)	UG/L	0	3	0%	--	--	--	--	500	--	--	500
GLYPHOSATE	UG/L	0	5	0%	--	--	--	700	--	1,000	--	700
HEPTACHLOR	UG/L	0	6	0%	--	--	--	0.01	--	0.008	--	0.01
HEPTACHLOR EPOXIDE	UG/L	0	6	0%	--	--	--	0.01	--	0.006	--	0.01
HEXACHLOROBENZENE	UG/L	0	6	0%	--	--	--	1	--	0.03	--	1
HEXACHLOROBUTADIENE	UG/L	0	10	0%	--	--	--	--	--	--	--	--
HEXACHLOROCYCLOPENTADIENE	UG/L	0	6	0%	--	--	--	50	--	50	--	50
HEXACHLOROETHANE	UG/L	0	1	0%	--	--	--	--	--	--	--	--

TABLE 3-7
Summary of Constituents Analyzed in Groundwater Collected from the Rubio Cañon Well #4

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
HYDROXIDE ALKALINITY	MG/L	0	5	0%	--	--	--	--	--	--	--	--
INDENO (1,2,3-CD) PYRENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ISOPHORONE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ISOPROPYLBENZENE	UG/L	0	9	0%	--	--	--	--	--	--	770	770
KEROSENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
LEAD	UG/L	0	4	0%	--	--	--	--	--	2	15	15
LINDANE	UG/L	0	9	0%	--	--	--	0.2	--	0.032	--	0.2
M,P-XYLENE	UG/L	0	9	0%	--	--	--	1,750	--	1,800	--	1,750
MERPHOS	UG/L	0	1	0%	--	--	--	--	--	--	--	--
METHOMYL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
METHOXYCHLOR	UG/L	0	8	0%	--	--	--	30	--	30	--	30
METHYL ETHYL KETONE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
METHYL ISOBUTYL KETONE	UG/L	0	2	0%	--	--	--	--	--	--	120	120
METHYL-TERT-BUTYL-ETHER (MTBE)	UG/L	0	8	0%	--	--	--	13	5	13	--	--
METOLACHLOR	UG/L	0	1	0%	--	--	--	--	--	--	--	--
METRIBUZIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
MOLINATE	UG/L	0	9	0%	--	--	--	200	--	--	--	200
MONOCHLOROBENZENE	UG/L	0	11	0%	--	--	--	70	--	200	--	70
NAPHTHALENE	UG/L	0	10	0%	--	--	--	--	--	--	170	170
NAPROPAMIDE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
N-BUTYLBENZENE	UG/L	0	9	0%	--	--	--	--	--	--	260	260
NICKEL	UG/L	0	3	0%	--	--	--	100	--	12	--	100
NITRITE (AS N)	UG/L	0	3	0%	--	--	--	1,000	--	1,000	--	1,000
NITROBENZENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
N-NITROSODIMETHYLAMINE (NDMA)	UG/L	0	1	0%	--	--	--	--	--	--	0.01	0.01
N-NITROSODI-N-PROPYLAMINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
N-NITROSODIPHENYLAMINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ORYZALIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
OXAMYL	UG/L	0	2	0%	--	--	--	50	--	50	--	50
O-XYLENE	UG/L	0	9	0%	--	--	--	1,750	--	1,800	--	1,750
PCB-1016	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1221	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1232	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1242	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1248	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1254	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1260	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PENTACHLOROBENZENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PENTACHLOROPHENOL	UG/L	0	6	0%	--	--	--	1	--	0.4	--	1
PHENANTHRENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PHENOL	UG/L	0	1	0%	--	--	--	--	--	--	4,200	4,200
PICLORAM	UG/L	0	5	0%	--	--	--	500	--	500	--	500
P-ISOPROPYLTOLUENE	UG/L	0	9	0%	--	--	--	--	--	--	--	--
POLYCHLORINATED BIPHENYLS (TOTAL PCB'S)	UG/L	0	5	0%	--	--	--	0.5	--	--	--	0.5
PROMETRYN	UG/L	0	3	0%	--	--	--	--	--	--	--	--
PROPACHLOR	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PROPAMIDE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PROPARGITE	MG/L	0	1	0%	--	--	--	--	--	--	--	--
PYRENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
RADIUM 228	PCI/L	0	7	0%	--	--	--	--	--	--	--	--
S,S,S-TRIBUTYLPHOSPHOROTRITHIOATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
SEC-BUTYLBENZENE	UG/L	0	9	0%	--	--	--	--	--	--	260	260
STYRENE	UG/L	0	9	0%	--	--	--	100	--	--	--	100
TERT-AMYL-METHYL ETHER	UG/L	0	4	0%	--	--	--	--	--	--	--	--
TERT-BUTYL ALCOHOL	UG/L	0	3	0%	--	--	--	--	--	--	12	12
TERT-BUTYLBENZENE	UG/L	0	9	0%	--	--	--	--	--	--	260	260
TETRACHLOROETHYLENE	UG/L	0	11	0%	--	--	--	5	--	0.06	--	5
THALLIUM	UG/L	0	3	0%	--	--	--	2	--	0.1	--	2
THIOBENCARB	UG/L	0	10	0%	--	--	--	70	1	70	--	70
TOLUENE	UG/L	0	11	0%	--	--	--	150	--	150	--	150
TOXAPHENE	UG/L	0	9	0%	--	--	--	3	--	0.03	--	3
TRANS-1,2-DICHLOROETHYLENE	UG/L	0	11	0%	--	--	--	10	--	60	--	10
TRANS-1,3-DICHLOROPROPENE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
TRANS-PERMETHRIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
TRICHLOROETHYLENE	UG/L	0	12	0%	--	--	--	5	--	0.8	--	5
TRICHLOROFLUOROMETHANE	UG/L	0	11	0%	--	--	--	150	--	700	--	150
VINYL CHLORIDE	UG/L	0	11	0%	--	--	--	0.5	--	0.05	--	0.5
XYLENES (TOTAL)	UG/L	0	11	0%	--	--	--	1,750	--	1,800	--	1,750

* The Applicable Regulatory Limit is the regulatory limit with the lowest concentration; CA PHG is not included.
Shading indicates exceedence of applicable standard.

CA = California
MCL = maximum contaminant level
PHG = public health goal
DHS = Department of Health Services
BNA = base neutral acid
HERB = herbicide
MET = metal
PAH = polycyclic aromatic hydrocarbon
PCB = polychlorinated biphenyl
PEST = pesticide
RAD = radiation
VOC = volatile organic compound

Bolding of value and qualifier means that the detection limit exceeds a CA Primary/Secondary MCL, or DHS Action Level.

TABLE 3-8
Summary of Constituents Analyzed in Groundwater Collected from the Rubio Cañon Well #7

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
AGGRESSIVE INDEX (CORROSIVITY)	NA	3	3	100%	11.9	12.13	12.05	--	Non-Corrosive	--	--	Non-Corrosive
ALKALINITY (TOTAL) AS CACO3	MG/L	5	5	100%	165	190.8	178.3	--	--	--	--	--
BICARBONATE ALKALINITY	MG/L	5	5	100%	200	232.8	216.9	--	--	--	--	--
CALCIUM	MG/L	5	5	100%	35.7	57	46.84	--	--	--	--	--
CHLORIDE	MG/L	4	4	100%	17.9	32	22	--	250	--	--	250
CHROMIUM, HEXAVALENT	UG/L	2	2	100%	1.4	2.2	1.8	--	--	--	--	--
FLUORIDE (TEMPERATURE DEPENDENT)	MG/L	46	46	100%	0.322	23.3	1.09	2	--	1	--	2
GROSS ALPHA	PCI/L	12	12	100%	3.6	13.1	6.72	15	--	--	--	15
HARDNESS (TOTAL) AS CACO3	MG/L	5	5	100%	140.8	210	177.56	--	--	--	--	--
MAGNESIUM	MG/L	5	5	100%	9.2	24.1	15.34	--	--	--	--	--
NITRATE (AS NO3)	MG/L	56	56	100%	7.4	31.3	20.62	45	--	45	--	45
NITRATE + NITRITE (AS N)	UG/L	4	4	100%	4582	2302	3464	10,000	--	10,000	--	10,000
NITRATE + NITRITE (NO3-N)	UG/L	1	1	100%	4582	4582	4582	--	--	--	--	--
ODOR THRESHOLD @ 60 C		29	29	100%	1	1	1	--	3	--	--	3
PH, LABORATORY	NA	5	5	100%	7.5	7.9	7.69	--	--	--	--	--
SODIUM	MG/L	5	5	100%	17.2	48.3	35.26	--	--	--		--
SPECIFIC CONDUCTANCE	US	5	5	100%	480	540	501.4	--	900	--	--	900
SULFATE	MG/L	5	5	100%	19.7	44.3	33.26	--	250	--	--	250
TOTAL DISSOLVED SOLIDS	MG/L	5	5	100%	259	300	276.18	--	500	--	--	500
TURBIDITY	NTU	29	29	100%	0.1	1.2	0.22	--	5	--	--	5
URANIUM (PCI/L)	PCI/L	4	4	100%	5	8.9	7.33	20	--	0.43	--	20
VANADIUM	UG/L	3	3	100%	3	7.2	4.93	--	--	--	50	50
POTASSIUM	MG/L	4	5	80%	1.3	2.2	1.73	--	--	--	--	--
BORON	UG/L	2	3	67%	160	180	130	--	--	--	1,000	1,000
CHLOROFORM (THM)	UG/L	5	10	50%	0.5	1.3	0.59	100	--	--	--	100
TOTAL TRIHALOMETHANES	UG/L	5	10	50%	0.5	1.3	0.59	--	--	--	--	--
ARSENIC	UG/L	2	5	40%	1.0	2.0	1.2	50	--	0.004	--	50
ALUMINUM	UG/L	1	4	25%	98	98	43.25	1,000	200	600	--	1,000
BARIUM	UG/L	1	5	20%	33.0	33.0	46.6	1,000	--	2,000	--	1,000
CADMIUM	UG/L	1	5	20%	3.0	3.0	1.0	5	--	0.07	--	5
CARBONATE ALKALINITY	MG/L	1	5	20%	0.777	0.777	0.5554	--	--	--	--	--
CHROMIUM (TOTAL)	UG/L	1	5	20%	29	29	9.8	50	--	--	--	50
COPPER	UG/L	1	5	20%	7	7	21.4	--	1,000	170	1,300	1,000
IRON	UG/L	1	5	20%	30	30	46	--	300	--	--	300
LEAD	UG/L	1	5	20%	2	2	2.4	--	--	2	15	15
MANGANESE	UG/L	1	5	20%	12	12	10.4	--	50	--	500	50
MERCURY	UG/L	1	5	20%	0.2	0.2	0.44	2	--	1.2	--	2
SELENIUM	UG/L	1	5	20%	1.0	1.0	2.2	50	--	--	--	50
SILVER	UG/L	1	5	20%	5	5	5	--	100	--	--	100
ZINC	UG/L	1	5	20%	7	7	21.4	--	5,000	--	--	5,000
COMBINE RA 226 + RA 228	PCI/L	1	6	17%	0.16	0.16	0.8668	5	--	--	--	5
TRICHLOROETHYLENE	UG/L	9	61	15%	0.6	3.4	0.41	5	--	0.8	--	5
PERCHLORATE	UG/L	1	13	8%	4	4	2.2	--	--	6	6	6
1,1,1,2-TETRACHLORETHANE	UG/L	0	10	0%	--	--	--	--	--	--	--	--
1,1,1-TRICHLOROETHANE	UG/L	0	10	0%	--	--	--	200	--	1,000	--	200
1,1,2,2-TETRACHLOROETHANE	UG/L	0	10	0%	--	--	--	1	--	0.1	--	1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG/L	0	10	0%	--	--	--	1,200	--	4,000	--	1,200
1,1,2-TRICHLOROETHANE	UG/L	0	10	0%	--	--	--	5	--	0.2	--	5
1,1-DICHLOROETHANE	UG/L	0	10	0%	--	--	--	5	--	3	--	5
1,1-DICHLOROETHYLENE	UG/L	0	10	0%	--	--	--	6	--	10	--	6
1,1-DICHLOROPROPENE	UG/L	0	10	0%	--	--	--	--	--	--	--	--
1,2,3-TRICHLOROBENZENE	UG/L	0	10	0%	--	--	--	--	--	--	--	--
1,2,3-TRICHLOROPROPANE	UG/L	0	9	0%	--	--	--	--	--	--	0.005	0.005
1,2,4-TRICHLOROBENZENE	UG/L	0	10	0%	--	--	--	5	--	5	--	5
1,2,4-TRIMETHYLBENZENE	UG/L	0	10	0%	--	--	--	--	--	--	330	330
1,2-DICHLOROBENZENE	UG/L	0	10	0%	--	--	--	600	--	600	--	600
1,2-DICHLOROETHANE	UG/L	0	10	0%	--	--	--	0.5	--	0.4	--	0.5
1,2-DICHLOROPROPANE	UG/L	0	10	0%	--	--	--	5	--	0.5	--	5
1,3,5-TRIMETHYLBENZENE	UG/L	0	9	0%	--	--	--	--	--	--	330	330
1,3-DICHLOROBENZENE	UG/L	0	10	0%	--	--	--	--	--	--	600	600
1,3-DICHLOROPROPANE	UG/L	0	10	0%	--	--	--	--	--	--	--	--
1,3-DICHLOROPROPENE (TOTAL)	UG/L	0	11	0%	--	--	--	0.5	--	0.2	--	0.5
1,4-DICHLOROBENZENE	UG/L	0	10	0%	--	--	--	5	--	6	--	5
1-PHENYLPROPANE (N-PROPYLBENZENE)	UG/L	0	10	0%	--	--	--	--	--	--	260	260
2,2-DICHLOROPROPANE	UG/L	0	10	0%	--	--	--	--	--	--	--	--
2,4,5-TP (SILVEX)	UG/L	0	5	0%	--	--	--	50	--	25	--	50
2,4-D	UG/L	0	5	0%	--	--	--	70	--	70	--	70
2-CHLOROETHYLVINYL ETHER	UG/L	0	9	0%	--	--	--	--	--	--	--	--
2-CHLOROTOLUENE	UG/L	0	10	0%	--	--	--	--	--	--	140	140
4-CHLOROTOLUENE	UG/L	0	10	0%	--	--	--	--	--	--	140	140
ALACHLOR	UG/L	0	5	0%	--	--	--	2	--	4	--	2
ANTIMONY	UG/L	0	4	0%	--	--	--	6	--	20	--	6
ATRAZINE	UG/L	0	10	0%	--	--	--	1.0	--	0.15	--	1
BENTAZON	UG/L	0	4	0%	--	--	--	18	--	200	--	18
BENZENE	UG/L	0	10	0%	--	--	--	1	--	0.15	--	1
BENZO (A) PYRENE	UG/L	0	1	0%	--	--	--	0.2	--	0.004	--	0.2
BERYLLIUM	UG/L	0	4	0%	--	--	--	4	--	1	--	4
BROMACIL	UG/L	0	4	0%	--	--	--	--	--	--	--	--
BROMOBENZENE	UG/L	0	10	0%	--	--	--	--	--	--	--	--
BROMOCHLOROMETHANE	UG/L	0	10	0%	--	--	--	--	--	--	--	--
BROMODICHLORMETHANE (THM)	UG/L	0	10	0%	--	--	--	--	--	--	--	--
BROMOFORM (THM)	UG/L	0	10	0%	--	--	--	--	--	--	--	--
BROMOMETHANE	UG/L	0	10	0%	--	--	--	--	--	--	--	--
CARBARYL	UG/L	0	1	0%	--	--	--	--	--	--	700	700
CARBOFURAN	UG/L	0	2	0%	--	--	--	18	--	1.7	--	18

TABLE 3-8
Summary of Constituents Analyzed in Groundwater Collected from the Rubio Cañon Well #7

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
CARBON TETRACHLORIDE	UG/L	0	10	0%	--	--	--	0.5	--	0.1	--	0.5
CHLORDANE	UG/L	0	5	0%	--	--	--	0.1	--	0.03	--	0.1
CHLOROETHANE	UG/L	0	10	0%	--	--	--	--	--	--	--	--
CHLOROMETHANE	UG/L	0	10	0%	--	--	--	--	--	--	--	--
CHLOROTHALONIL	UG/L	0	3	0%	--	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHYLENE	UG/L	0	11	0%	--	--	--	6	--	100	--	6
COLOR	UNITS	0	29	0%	--	--	--	--	15	--	--	15
CYANIDE	UG/L	0	4	0%	--	--	--	150	--	150	--	150
DALAPON	UG/L	0	5	0%	--	--	--	200	--	790	--	200
DI(2-ETHYLHEXYL)ADIPATE	UG/L	0	1	0%	--	--	--	400	--	200	--	400
DI(2-ETHYLHEXYL)PHTHALATE	UG/L	0	2	0%	--	--	--	4	--	12	--	4
DIAZINON	UG/L	0	4	0%	--	--	--	--	--	--	6	6
DIBROMOCHLOROMETHANE (THM)	UG/L	0	10	0%	--	--	--	100	--	--	--	100
DIBROMOCHLOROPROPANE (DBCP)	UG/L	0	14	0%	--	--	--	0.2	--	0.0017	--	0.2
DIBROMOMETHANE	UG/L	0	10	0%	--	--	--	--	--	--	--	--
DICHLORODIFLUOROMETHANE	UG/L	0	10	0%	--	--	--	--	--	--	1,000	1,000
DICHLOROMETHANE (METHYLENE CHLORIDE)	UG/L	0	10	0%	--	--	--	5	--	4	--	5
DINOSEB	UG/L	0	5	0%	--	--	--	7	--	14	--	7
DIURON	UG/L	0	3	0%	--	--	--	--	--	--	--	--
ENDRIN	UG/L	0	5	0%	--	--	--	2	--	1.8	--	2
ETHYLBENZENE	UG/L	0	10	0%	--	--	--	300	--	300	--	300
ETHYLENE DIBROMIDE (EDB)	UG/L	0	10	0%	--	--	--	0.05	--	0.01	--	0.05
ETHYL-TERT-BUTYL ETHER	UG/L	0	4	0%	--	--	--	--	--	--	--	--
FOAMING AGENTS (MBAS)	UG/L	0	4	0%	--	--	--	--	500	--	--	500
GLYPHOSATE	UG/L	0	5	0%	--	--	--	700	--	1,000	--	700
HEPTACHLOR	UG/L	0	5	0%	--	--	--	0.01	--	0.008	--	0.01
HEPTACHLOR EPOXIDE	UG/L	0	5	0%	--	--	--	0.01	--	0.006	--	0.01
HEXACHLOROBENZENE	UG/L	0	5	0%	--	--	--	1	--	0.03	--	1
HEXACHLOROBUTADIENE	UG/L	0	10	0%	--	--	--	--	--	--	--	--
HEXACHLOROCYCLOPENTADIENE	UG/L	0	5	0%	--	--	--	50	--	50	--	50
HYDROXIDE ALKALINITY	MG/L	0	5	0%	--	--	--	--	--	--	--	--
ISOPROPYLBENZENE	UG/L	0	10	0%	--	--	--	--	--	--	770	770
LINDANE	UG/L	0	5	0%	--	--	--	0.2	--	0.032	--	0.2
M,P-XYLENE	UG/L	0	10	0%	--	--	--	1,750	--	1,800	--	1,750
METHOXYCHLOR	UG/L	0	5	0%	--	--	--	30	--	30	--	30
METHYL-TERT-BUTYL-ETHER (MTBE)	UG/L	0	8	0%	--	--	--	13	5	13	--	--
MOLINATE	UG/L	0	9	0%	--	--	--	200	--	--	--	200
MONOCHLOROBENZENE	UG/L	0	10	0%	--	--	--	70	--	200	--	70
NAPHTHALENE	UG/L	0	10	0%	--	--	--	--	--	--	17	17
N-BUTYLBENZENE	UG/L	0	10	0%	--	--	--	--	--	--	260	260
NICKEL	UG/L	0	4	0%	--	--	--	100	--	12	--	100
NITRITE (AS N)	UG/L	0	4	0%	--	--	--	1,000	--	1,000	--	1,000
OXAMYL	UG/L	0	2	0%	--	--	--	50	--	50	--	50
O-XYLENE	UG/L	0	10	0%	--	--	--	1,750	--	1,800	--	1,750
PENTACHLOROPHENOL	UG/L	0	5	0%	--	--	--	1	--	0.4	--	1
PICLORAM	UG/L	0	5	0%	--	--	--	500	--	500	--	500
P-ISOPROPYLTOLUENE	UG/L	0	10	0%	--	--	--	--	--	--	--	--
POLYCHLORINATED BIPHENYLS (TOTAL PCB'S)	UG/L	0	5	0%	--	--	--	0.5	--	--	--	0.5
RADIUM 226	PCI/L	0	5	0%	--	--	--	--	--	0.069	--	--
RADIUM 228	PCI/L	0	5	0%	--	--	--	--	--	--	--	--
SEC-BUTYLBENZENE	UG/L	0	10	0%	--	--	--	--	--	--	260	260
SIMAZINE	UG/L	0	10	0%	--	--	--	4	--	4	--	4
STYRENE	UG/L	0	10	0%	--	--	--	100	--	--	--	100
TERT-AMYL-METHYL ETHER	UG/L	0	4	0%	--	--	--	--	--	--	--	--
TERT-BUTYL ALCOHOL	UG/L	0	3	0%	--	--	--	--	--	--	12	12
TERT-BUTYLBENZENE	UG/L	0	10	0%	--	--	--	--	--	--	260	260
TETRACHLOROETHYLENE	UG/L	0	10	0%	--	--	--	5	--	0.06	--	5
THALLIUM	UG/L	0	4	0%	--	--	--	2	--	0.1	--	2
THIOBENCARB	UG/L	0	10	0%	--	--	--	70	1	70	--	70
TOLUENE	UG/L	0	10	0%	--	--	--	150	--	150	--	150
TOXAPHENE	UG/L	0	5	0%	--	--	--	3	--	0.03	--	3
TRANS-1,2-DICHLOROETHYLENE	UG/L	0	10	0%	--	--	--	10	--	60	--	10
TRICHLOROFLUOROMETHANE	UG/L	0	10	0%	--	--	--	150	--	700	--	150
VINYL CHLORIDE	UG/L	0	10	0%	--	--	--	0.5	--	0.05	--	0.5
XYLENES (TOTAL)	UG/L	0	10	0%	--	--	--	1750	--	1800	--	1,750

Shading indicates exceedence of applicable standard.

* The Applicable Regulatory Limit is the regulatory limit with the lowest concentration; CA PHG is not included.

CA = California

MCL = maximum contaminant level

PHG = public health goal

DHS = Department of Health Services

Bolding of value and qualifier means that the detection limit exceeds a CA Primary/Secondary MCL, or DHS Action Level.

TABLE 3-9
Summary of Constituents Analyzed in Groundwater Collected from the Las Flores Well 2 (June 1987 to September 2002; June and November 2003; March 2004)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
AGGRESSIVE INDEX (CORROSIVITY)	NA	4	4	100%	11.66	12.17	--	--	Non-Corrosive	--	--	Non-Corrosive
ALKALINITY (TOTAL) AS CACO3	MG/L	6	6	100%	174	199	--	--	--	--	--	--
BICARBONATE ALKALINITY	MG/L	6	6	100%	212.3	242	227.8	--	--	--	--	--
CALCIUM	MG/L	6	6	100%	66.6	98	81.67	--	--	--	--	--
CHLORIDE	MG/L	6	6	100%	33.6	44	39.05	--	250	--	--	250
CHROMIUM, HEXAVALENT	UG/L	3	3	100%	3.2	4.1	3.63	--	--	--	--	--
GROSS ALPHA	PCI/L	15	15	100%	4.4	16.6	10.93	15	--	--	--	15
GROSS BETA	PCI/L	1	1	100%	4.9	4.9	4.90	50	--	--	--	50
HARDNESS (TOTAL) AS CACO3	MG/L	6	6	100%	262	332	291.7	--	300	--	--	300
MAGNESIUM	MG/L	6	6	100%	18	24.7	22.6	--	--	--	--	--
NITRATE (AS NO3)	MG/L	176	176	100%	33.88	60.3	45.95	45	--	45	--	45
NITRATE + NITRITE (AS N)	UG/L	5	5	100%	8,830	11,000	10,049	10,000	--	10,000	--	10,000
ODOR THRESHOLD @ 60 C		29	29	100%	1	1	1	--	3	--	--	3
PH, LABORATORY	NA	6	6	100%	7	7.6	7.33	--	--	--	--	--
RADIUM 226	PCI/L	2	2	100%	0.089	0.244	0.17	5	--	0.069	--	5
SODIUM	MG/L	6	6	100%	20	28.2	24.35	--	--	--	--	--
SPECIFIC CONDUCTANCE	US	5	5	100%	560	780	648.8	--	900	--	--	900
SULFATE	MG/L	6	6	100%	46	78.1	64.93	--	250	--	--	250
TOTAL DISSOLVED SOLIDS	MG/L	6	6	100%	350	423	390.17	--	500	--	--	500
TURBIDITY	NTU	4	4	100%	0.1	0.1	0.1	--	5	--	--	5
URANIUM (PCI/L)	PCI/L	30	30	100%	7.3	41.8	13.28	20	--	0.43	--	20
VANADIUM	UG/L	3	3	100%	3.5	5.8	4.90	--	--	--	50	50
PERCHLORATE	UG/L	114	114	100%	4	9	6.11	--	--	6	6	6
FLUORIDE (TEMPERATURE DEPENDENT)	MG/L	28	29	97%	0.34	1	0.59	2	--	1	--	2
TETRACHLOROETHYLENE	UG/L	237	250	95%	0.6	17	10.36	5	--	0.06	--	5
POTASSIUM	MG/L	5	6	83%	1.7	3.9	2.28	--	--	--	--	--
COMBINE RA 226 + RA 228	PCI/L	2	4	50%	0.07	0.16	0.42	5	--	--	--	5
ARSENIC	UG/L	2	6	33%	2.4	2.4	1.5	50	--	0.004	--	50
TOTAL TRIHALOMETHANES	UG/L	8	33	24%	1	7.5	1.41	--	--	--	--	--
BROMOFORM (THM)	UG/L	7	32	22%	1.8	4	0.87	--	--	--	--	--
DIBROMOCHLOROMETHANE (THM)	UG/L	7	32	22%	1	2.6	0.60	100	--	--	--	100
ALUMINUM	UG/L	1	5	20%	69	69	42.25	1,000	200	600	--	1000
CARBONATE ALKALINITY	MG/L	1	6	17%	0.46	0.46	0.49	--	--	--	--	--
BROMODICHLORMETHANE (THM)	UG/L	5	31	16%	0.5	0.9	0.32	--	--	--	--	--
CHLOROFORM (THM)	UG/L	6	41	15%	0.5	1	1.52	100	--	--	--	100
DIBROMOCHLOROPROPANE (DBCP)	UG/L	1	15	7%	0.02	0.02	0.006	0.2	--	0.0017	--	0.2
M,P-XYLENE	UG/L	1	18	6%	4.2	4.2	0.47	1,750	--	1,800	--	1,750
O-XYLENE	UG/L	1	18	6%	1.1	1.1	0.30	1,750	--	1,800	--	1,750
ETHYLBENZENE	UG/L	1	20	5%	0.9	0.9	0.28	300	--	300	--	300
XYLENES (TOTAL)	UG/L	1	20	5%	5.3	5.3	0.50	1,750	--	1,800	--	1,750
1,1,1,2-TETRACHLORETHANE	UG/L	0	18	0%	--	--	--	--	--	--	--	--
1,1,1-TRICHLOROETHANE	UG/L	0	26	0%	--	--	--	200	--	1,000	--	200
1,1,2,2-TETRACHLOROETHANE	UG/L	0	20	0%	--	--	--	1	--	0.1	--	1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UG/L	0	18	0%	--	--	--	1,200	--	4,000	--	1,200
1,1,2-TRICHLOROETHANE	UG/L	0	20	0%	--	--	--	5	--	0.2	--	5
1,1-DICHLOROETHANE	UG/L	0	24	0%	--	--	--	5	--	3	--	5
1,1-DICHLOROETHYLENE	UG/L	0	20	0%	--	--	--	6	--	10	--	6
1,1-DICHLOROPROPENE	UG/L	0	18	0%	--	--	--	--	--	--	--	--
1,2,3-TRICHLOROBENZENE	UG/L	0	18	0%	--	--	--	--	--	--	--	--
1,2,3-TRICHLOROPROPANE	UG/L	0	16	0%	--	--	--	--	--	--	0.005	0.005
1,2,4-TRICHLOROBENZENE	UG/L	0	19	0%	--	--	--	5	--	5	--	5
1,2,4-TRIMETHYLBENZENE	UG/L	0	18	0%	--	--	--	--	--	--	330	330
1,2-DICHLOROBENZENE	UG/L	0	21	0%	--	--	--	600	--	600	--	600
1,2-DICHLOROETHANE	UG/L	0	20	0%	--	--	--	0.5	--	0.4	--	0.5
1,2-DICHLOROPROPANE	UG/L	0	21	0%	--	--	--	5	--	0.5	--	5
1,3,5-TRIMETHYLBENZENE	UG/L	0	17	0%	--	--	--	--	--	--	330	330
1,3-DICHLOROBENZENE	UG/L	0	21	0%	--	--	--	--	--	--	600	600
1,3-DICHLOROPROPANE	UG/L	0	18	0%	--	--	--	--	--	--	--	--
1,3-DICHLOROPROPENE (TOTAL)	UG/L	0	18	0%	--	--	--	0.5	--	0.2	--	0.5
1,4-DICHLOROBENZENE	UG/L	0	21	0%	--	--	--	5	--	6	--	5
1-PHENYLPROPANE (N-PROPYLBENZENE)	UG/L	0	18	0%	--	--	--	--	--	--	260	260
2,2-DICHLOROPROPANE	UG/L	0	18	0%	--	--	--	--	--	--	--	--
2,3,7,8-TCDD (DIOXIN)	UG/L	0	2	0%	--	--	--	0.00003	--	--	--	0.00003
2,4,5-TP (SILVEX)	UG/L	0	4	0%	--	--	--	50	--	25	--	50
2,4,6-TRICHLOROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2,4-D	UG/L	0	6	0%	--	--	--	70	--	70	--	70
2,4-DICHLOROPHENOL	UG/L	0	1	0%	--	--	--	--	--		--	--
2,4-DIMETHYLPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	100	100
2,4-DINITROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2,4-DINITROTOLUENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2,6-DINITROTOLUENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2-CHLOROETHYLVINYL ETHER	UG/L	0	16	0%	--	--	--	--	--	--	--	--
2-CHLORONAPHTHALENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2-CHLOROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2-CHLOROTOLUENE	UG/L	0	18	0%	--	--	--	--	--	--	140	140
2-METHYL-4,6-DINITROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
2-NITROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
3,3-DICHLOROBENZIDINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
3-HYDROCARBONFURAN	UG/L	0	2	0%	--	--	--	--	--	--	--	--
4,4-DDD	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4,4-DDE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4,4-DDT	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4-BROMOPHENYL PHENYL ETHER	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4-CHLORO-3-METHYLPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4-CHLOROPHENYL PHENYL ETHER	UG/L	0	1	0%	--	--	--	--	--	--	--	--
4-CHLOROTOLUENE	UG/L	0	18	0%	--	--	--	--	--	--	140	140
4-NITROPHENOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ACENAPHTHENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ACENAPHTHYLENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ALACHLOR	UG/L	0	7	0%	--	--	--	2	--	4	--	2
ALDICARB	UG/L	0	2	0%	--	--	--	--	--	--	7	7
ALDICARB SULFONE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
ALDICARB SULFOXIDE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
ALDRIN	UG/L	0	3	0%	--	--	--	--	--	--	0.002	0.002

TABLE 3-9
Summary of Constituents Analyzed in Groundwater Collected from the Las Flores Well 2 (June 1987 to September 2002; June and November 2003; March 2004)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
ALPHA-BHC	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ANTHRACENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ANTIMONY	UG/L	0	5	0%	--	--	--	6	--	20	--	6
ATRAZINE	UG/L	0	12	0%	--	--	--	1.0	--	0.15	--	1
BARIUM	UG/L	0	6	0%	--	--	--	1,000	--	2,000	--	1,000
BENFLURALIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENTAZON	UG/L	0	4	0%	--	--	--	18	--	200	--	18
BENZENE	UG/L	0	20	0%	--	--	--	1	--	0.15	--	1
BENZIDINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (A) ANTHRACENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (A) PYRENE	UG/L	0	3	0%	--	--	--	0.2	--	0.004	--	0.2
BENZO (B) FLUORANTHENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (GHI) PERYLENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZO (K) FLUORANTHENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BENZYL BUTYL PHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BERYLLIUM	UG/L	0	5	0%	--	--	--	4	--	1	--	4
BETA-BHC	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BIS (2-CHLOROEHOXY) METHANE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BIS (2-CHLOROETHYL) ETHER	UG/L	0	1	0%	--	--	--	--	--	--	--	--
BORON	UG/L	0	2	0%	--	--	--	--	--	--	1,000	1,000
BROMACIL	UG/L	0	7	0%	--	--	--	--	--	--	--	--
BROMOBENZENE	UG/L	0	18	0%	--	--	--	--	--	--	--	--
BROMOCHLOROMETHANE	UG/L	0	18	0%	--	--	--	--	--	--	--	--
BROMOMETHANE	UG/L	0	21	0%	--	--	--	--	--	--	--	--
BUTACHLOR	UG/L	0	2	0%	--	--	--	--	--	--	--	--
CADMIUM	UG/L	0	6	0%	--	--	--	5	--	0.07	--	5
CAPTAN	UG/L	0	1	0%	--	--	--	--	--	--	1.5	2
CARBARYL	UG/L	0	6	0%	--	--	--	--	--	--	700	700
CARBOFURAN	UG/L	0	4	0%	--	--	--	18	--	1.7	--	18
CARBON TETRACHLORIDE	UG/L	0	30	0%	--	--	--	0.5	--	0.1	--	0.5
CHLORDANE	UG/L	0	6	0%	--	--	--	0.1	--	0.03	--	0.1
CHLORDIMEFORM	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CHLOROETHANE	UG/L	0	20	0%	--	--	--	--	--	--	--	--
CHLOROMETHANE	UG/L	0	20	0%	--	--	--	--	--	--	--	--
CHLOROPICRIN	UG/L	0	1	0%	--	--	--	--	--	--	56	56
CHLOROTHALONIL	UG/L	0	3	0%	--	--	--	--	--	--	--	--
CHROMIUM (TOTAL)	UG/L	0	7	0%	--	--	--	50	--	--	--	50
CHRYSENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHYLENE	UG/L	0	18	0%	--	--	--	6	--	100	--	6
CIS-1,3-DICHLOROPROPENE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
CIS-PERMETHRIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
COLOR	UNITS	0	4	0%	--	--	--	--	15	--	--	15
COPPER	UG/L	0	6	0%	--	--	--	--	1,000	170	1,300	1,000
CYANAZINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
CYANIDE	UG/L	0	5	0%	--	--	--	150	--	150	--	150
DACTHAL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DALAPON	UG/L	0	4	0%	--	--	--	200	--	790	--	200
DELTA-BHC	UG/L	0	1	0%	--	--	--		--	--	--	
DI(2-ETHYLHEXYL)ADIPATE	UG/L	0	2	0%	--	--	--	400	--	200	--	400
DI(2-ETHYLHEXYL)PHTHALATE	UG/L	0	3	0%	--	--	--	4	--	12	--	4
DIAZINON	UG/L	0	6	0%	--	--	--	--	--	--	6	6
DIBENZO (A,H) ANTRACENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DIBROMOMETHANE	UG/L	0	18	0%	--	--	--	--	--	--	--	--
DICAMBA	UG/L	0	2	0%	--	--	--	--	--	--	--	--
DICHLORODIFLUOROMETHANE	UG/L	0	21	0%	--	--	--	--	--	--	1,000	1,000
DICHLOROMETHANE (METHYLENE CHLORIDE)	UG/L	0	20	0%	--	--	--	5	--	4	--	5
DICOFOL	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DIELDRIN	UG/L	0	3	0%	--	--	--	--	--	--	0.002	0.002
DIETHYL PHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DIMETHOATE	UG/L	0	2	0%	--	--	--	--	--	--	1	1
DIMETHYL PHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DI-N-BUTYLPHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DI-N-OCTYLPHTHALATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
DINOSEB	UG/L	0	5	0%	--	--	--	7	--	14	--	7
DIPHENAMIDE	UG/L	0	1	0%	--	--	--	--	--	--	200	200
DIQUAT	UG/L	0	6	0%	--	--	--	20	--	15	--	20
DIURON	UG/L	0	3	0%	--	--	--	--	--	--	--	--
DNOC	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ENDOSULFAN I	UG/L	0	2	0%	--	--	--	--	--	--	--	--
ENDOSULFAN II	UG/L	0	2	0%	--	--	--	--	--	--	--	--
ENDOSULFAN SULFATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ENDOTHALL	UG/L	0	3	0%	--	--	--	100	--	580	--	100
ENDRIN	UG/L	0	6	0%	--	--	--	2	--	1.8	--	2
ENDRIN ALDEHYDE	UG/L	0	1	0%	--	--	--		--		--	
ETHYLENE DIBROMIDE (EDB)	UG/L	0	10	0%	--	--	--	0.05	--	0.01	--	0.05
ETHYL-TERT-BUTYL ETHER	UG/L	0	10	0%	--	--	--	--	--	--	--	--
FLUCHLORALIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
FLUORANTHENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
FLUORENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
FOAMING AGENTS (MBAS)	UG/L	0	6	0%	--	--	--	--	500	--	--	500
GLYPHOSATE	UG/L	0	6	0%	--	--	--	700	--	1,000	--	700
HEPTACHLOR	UG/L	0	5	0%	--	--	--	0.01	--	0.008	--	0.01
HEPTACHLOR EPOXIDE	UG/L	0	5	0%	--	--	--	0.01	--	0.006	--	0.01
HEXACHLOROBENZENE	UG/L	0	5	0%	--	--	--	1	--	0.03	--	1
HEXACHLOROBUTADIENE	UG/L	0	19	0%	--	--	--	--	--	--	--	--
HEXACHLOROCYCLOPENTADIENE	UG/L	0	1	0%	--	--	--	50	--	50	--	50
HEXACHLOROETHANE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
HYDROXIDE ALKALINITY	MG/L	0	6	0%	--	--	--	--	--	--	--	--
INDENO (1,2,3-CD) PYRENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
IRON	UG/L	0	7	0%	--	--	--	--	300	--	--	300
ISOPHORONE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ISOPROPYLBENZENE	UG/L	0	18	0%	--	--	--	--	--	--	770	770
KEROSENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
LEAD	UG/L	0	6	0%	--	--	--	--	--	2	15	15

TABLE 3-9
Summary of Constituents Analyzed in Groundwater Collected from the Las Flores Well 2 (June 1987 to September 2002; June and November 2003; March 2004)

Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Regulatory Limit *
LINDANE	UG/L	0	6	0%	--	--	--	0.2	--	0.032	--	0.2
MANGANESE	UG/L	0	6	0%	--	--	--	--	50	--	500	50
MERCURY	UG/L	0	6	0%	--	--	--	2	--	1.2	--	2
MERPHOS	UG/L	0	1	0%	--	--	--	--	--	--	--	--
METHOMYL	UG/L	0	2	0%	--	--	--	--	--	--	--	--
METHOXYCHLOR	UG/L	0	5	0%	--	--	--	30	--	30	--	30
METHYL ETHYL KETONE	UG/L	0	3	0%	--	--	--	--	--	--	--	--
METHYL ISOBUTYL KETONE	UG/L	0	3	0%	--	--	--	--	--	--	120	120
METHYL-TERT-BUTYL-ETHER (MTBE)	UG/L	0	14	0%	--	--	--	13	5	13	--	--
METOLACHLOR	UG/L	0	2	0%	--	--	--	--	--	--	--	--
METRIBUZIN	UG/L	0	2	0%	--	--	--	--	--	--	--	--
MOLINATE	UG/L	0	10	0%	--	--	--	200	--	--	--	200
MONOCHLOROBENZENE	UG/L	0	20	0%	--	--	--	70	--	200	--	70
NAPHTHALENE	UG/L	0	19	0%	--	--	--	--	--	--	17	17
NAPROPAMIDE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
N-BUTYLBENZENE	UG/L	0	18	0%	--	--	--	--	--	--	260	260
NICKEL	UG/L	0	5	0%	--	--	--	100	--	12	--	100
NITRITE (AS N)	UG/L	0	5	0%	--	--	--	1,000	--	1,000	--	1,000
NITROBENZENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
N-NITROSODIMETHYLAMINE (NDMA)	UG/L	0	1	0%	--	--	--	--	--	--	0.01	0.01
N-NITROSODI-N-PROPYLAMINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
N-NITROSODIPHENYLAMINE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
ORYZALIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
OXAMYL	UG/L	0	4	0%	--	--	--	50	--	50	--	50
PCB-1016	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1221	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1232	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1242	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1248	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1254	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PCB-1260	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PENTACHLOROBENZENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PENTACHLOROPHENOL	UG/L	0	5	0%	--	--	--	1	--	0.4	--	1
PHENANTHRENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PHENOL	UG/L	0	1	0%	--	--	--	--	--	--	4,200	4,200
PICLORAM	UG/L	0	4	0%	--	--	--	500	--	500	--	500
P-ISOPROPYLTOLUENE	UG/L	0	18	0%	--	--	--	--	--	--	--	--
POLYCHLORINATED BIPHENYLS (TOTAL PCB'S)	UG/L	0	4	0%	--	--	--	0.5	--	--	--	0.5
PROMETRYN	UG/L	0	3	0%	--	--	--	--	--	--	--	--
PROPACHLOR	UG/L	0	2	0%	--	--	--	--	--	--	--	--
PROPAMIDE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
PROPARGITE	MG/L	0	1	0%	--	--	--	--	--	--	--	--
PYRENE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
RADIUM 228	PCI/L	0	2	0%	--	--	--	--	--	--	--	--
S,S,S-TRIBUTYLPHOSPHOROTRITHIOATE	UG/L	0	1	0%	--	--	--	--	--	--	--	--
SEC-BUTYLBENZENE	UG/L	0	18	0%	--	--	--	--	--	--	260	260
SELENIUM	UG/L	0	6	0%	--	--	--	50	--	--	--	50
SILVER	UG/L	0	6	0%	--	--	--	--	100	--	--	100
SIMAZINE	UG/L	0	12	0%	--	--	--	4	--	4	--	4
STYRENE	UG/L	0	18	0%	--	--	--	100	--	--	--	100
TERT-AMYL-METHYL ETHER	UG/L	0	10	0%	--	--	--	--	--	--	--	--
TERT-BUTYL ALCOHOL	UG/L	0	4	0%	--	--	--	--	--	--	12	12
TERT-BUTYLBENZENE	UG/L	0	18	0%	--	--	--	--	--	--	260	260
THALLIUM	UG/L	0	5	0%	--	--	--	2	--	0.1	--	2
THIOBENCARB	UG/L	0	13	0%	--	--	--	70	1	70	--	70
TOLUENE	UG/L	0	20	0%	--	--	--	150	--	150	--	150
TOXAPHENE	UG/L	0	6	0%	--	--	--	3	--	0.03	--	3
TRANS-1,2-DICHLOROETHYLENE	UG/L	0	20	0%	--	--	--	10	--	60	--	10
TRANS-1,3-DICHLOROPROPENE	UG/L	0	2	0%	--	--	--	--	--	--	--	--
TRANS-PERMETHRIN	UG/L	0	1	0%	--	--	--	--	--	--	--	--
TRICHLOROETHYLENE	UG/L	0	31	0%	--	--	--	5	--	0.8	--	5
TRICHLOROFLUOROMETHANE	UG/L	0	20	0%	--	--	--	150	--	700	--	150
VINYL CHLORIDE	UG/L	0	20	0%	--	--	--	0.5	--	0.05	--	0.5
ZINC	UG/L	0	7	0%	--	--	--	--	5,000	--	--	5,000

Shading indicates exceedence of applicable standard.

* The Applicable Regulatory Limit is the regulatory limit with the lowest concentration; CA PHG is not included.

CA = California

MCL = maximum contaminant level

PHG = public health goal

DHS = Department of Health Services

Bolding of value and qualifier means that the detection limit exceeds a CA Primary/Secondary MCL, or DHS Action Level.

TABLE 3-10
Monitoring Wells Selected for Comprehensive Groundwater Monitoring Event for DHS Policy Memo 97-005 Permit

Sampling Location	Well Type	Aquifer Layer	Capture Zone	Comments
MW-3, Screen 3	Multiport	Layer 2	Arroyo Well	• Exceeds perchlorate and carbon tetrachloride MCLs/ALs. • Provides indication of intermediate (Layer 2) groundwater quality midway between the primary source areas and the production well. Also located near historical seepage pit.
MW-3, Screen 5	Multiport	Layer 4	Arroyo Well	• Perchlorate exceeds AL. • Provides indication of deep (Layer 4) groundwater quality midway between the primary source areas and the production well. Also located near historical seepage pit.
MW-4, Screen 1	Multiport	Layer 1	Arroyo Well	• Perchlorate exceeds AL. • Provides indication of shallow (Layer 1) groundwater quality midway between the primary source areas and the production well. Also located near historical seepage pit.
MW-4, Screen 2	Multiport	Layer 2	Arroyo Well (top of Layer 2) and Well 52 (bottom on Layer 2)	• Perchlorate, TCE, carbon tetrachloride, and 1,2-DCA exceed MCLs/ALs. • Provides indication of intermediate (Layer 2) groundwater quality midway between the primary source areas and the production well. Also located near historical seepage pit.
MW-4, Screen 5	Multiport	Layer 4	Well 52	• Trace contamination detected (MCLs or ALs not exceeded). • Provides indication of deep (Layer 3 and Layer 4) groundwater quality midway between the primary source areas and the production wells. Also located near historical seepage pit.
MW-7	Shallow	Layer 1	Arroyo Well	• Perchlorate and carbon tetrachloride exceed MCL/Als. • Perchlorate concentrations are indicative of potential source areas (hot spots) within the shallow groundwater (Layer 1).
MW-8	Shallow	Layer 1	Arroyo Well	• Perchlorate and carbon tetrachloride exceed MCLs/ALs. • Provides indication of shallow (Layer 1) water quality. • Concentrations increased during 2002, indicating that MW-8 may be near a source area.
MW-10	Shallow	Layer 1	Well 52	• Perchlorate, TCE, and carbon tetrachloride exceed MCLs/ALs. • Provides indication of shallow (Layer 1) groundwater quality.

TABLE 3-10
Monitoring Wells Selected for Comprehensive Groundwater Monitoring Event for DHS Policy Memo 97-005 Permit

Sampling Location	Well Type	Aquifer Layer	Capture Zone	Comments
MW-12, Screen 3	Multiport	Layer 2	Arroyo Well	• Carbon tetrachloride exceeds MCLs. • Provides indication of intermediate(Layer 2) groundwater.
MW-12, Screen 5	Multiport	Layer 4	Arroyo Well	• Carbon tetrachloride exceeds MCLs. • Provides indication of deep (Layer 4) groundwater
MW-14, Screen 2	Multiport	Layer 2	Well 52	• Perchlorate exceeds AL. • Provides indication of intermediate (Layer 2) groundwater quality. • May represent water quality upgradient of JPL facility.
MW-14, Screen 4	Multiport	Layer 3	Well 52	• Perchlorate exceeds AL. Provides indication of deep (Layer 3) groundwater quality. • May represent water quality upgradient of JPL facility.
MW-16	Shallow	Layer 1	Arroyo Well	• Perchlorate, TCE, carbon tetrachloride, and 1,2-DCA exceed MCLs/ALs. • Provides indication of shallow (Layer 1) groundwater quality within primary source area.
MW-17, Screen 3	Multiport	Layer 3	Possibly Well 52	• Perchlorate, TCE, and carbon tetrachloride exceed MCLs/ALs. • May be within zone of capture for Well 52, particularly if Lincoln #3 is not in service. • Provides indication of intermediate (Layer 2) groundwater quality downgradient of Well 52, but still within eastern side of capture zone.
MW-17, Screen 4	Multiport	Layer 4	Well 52	• Perchlorate and TCE exceed MCLs/ALs. • Provides indication of deep (Layer 3 and Layer 4) groundwater quality down-gradient of Well 52, but still within eastern side of capture zone.
MW-18, Screen 3	Multiport	Layer 2	Well 52	• Perchlorate, TCE, and carbon tetrachloride exceed MCLs/ALs • Provides indication of intermediate (Layer 2) groundwater quality downgradient of Arroyo Seco on eastern side of Well 52 capture zone.

TABLE 3-10
Monitoring Wells Selected for Comprehensive Groundwater Monitoring Event for DHS Policy Memo 97-005 Permit

Sampling Location	Well Type	Aquifer Layer	Capture Zone	Comments
MW-18, Screen 4	Multiport	Layer 3	Arroyo Well	• Perchlorate and carbon tetrachloride exceed MCLs/ALs. • Upper portion of Layer 3 may be within zone of capture for Well 52; and lower portion of Layer 3 may be within zone of capture for Arroyo Well. • Provides indication of deep (Layer 3) groundwater quality down-gradient of Arroyo Seco on eastern side of Well 52 capture zone.
MW-19, Screen 3	Multiport	Layer 2	Windsor	• Perchlorate exceeds ALs. • Provides indication of intermediate (Layer 2) groundwater quality down-gradient of Arroyo Seco.
MW-19, Screen 5	Multiport	Layer 3	Windsor	• Perchlorate exceeds ALs. • Provides indication of deep (Layer 3) groundwater quality down-gradient of Arroyo Seco.
MW-21 Screen 3	Multiport	Layer 2	Windsor (top of layer 2) / Ventura (bottom of layer 2)	• Perchlorate, TCE, and carbon tetrachloride exceed MCLs/Als. • Provides indication of intermediate (Layer 2) groundwater quality up-gradient of Arroyo Seco
MW-21, Screen 5	Multiport	Layer 3	Ventura	• Perchlorate, TCE, and carbon tetrachloride exceed MCLs/Als. • Provides indication of deep (Layer 3)) groundwater quality up-gradient of Arroyo Seco
MW-24, Screen 2	Multiport	Layer 2	Arroyo Well	• Perchlorate, TCE, carbon tetrachloride, and 1,2-DCA exceed MCLs/ALs. • Provides indication of intermediate (Layer 2) groundwater quality within primary source area.

Notes:

MCL – Maximum Contaminant Level

AL – California DHS Action Level

TABLE 3-11

Estimated Water Quality of Arroyo Well Based on JPL Monitoring Wells

Comprehensive Groundwater Monitoring Event (Dec 2002-Feb 2003)

Analyte	Unit	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Standard*
HARDNESS (TOTAL) AS CACO3	mg/L	5	5	100%	146	382	215	--	--	--	--	--
TOTAL DISSOLVED SOLIDS (TDS)	mg/L	8	8	100%	232	608	314.625	--	1000	--	--	1000
TURBIDITY	NTU	8	8	100%	1.6	21.3	5.2125	--	5	--	--	5
ARSENIC	µg/L	8	8	100%	0.5	1.4	0.925	50	--	--	--	50
BARIUM	µg/L	8	8	100%	41.4	108	72.7125	1000	--	--	--	1000
BORON	µg/L	8	8	100%	9.2	182	112.05	--	--	--	1000	1000
CALCIUM	µg/L	8	8	100%	14600	96000	49625	--	--	--	--	--
CHROMIUM	µg/L	8	8	100%	0.5	4.1	2.875	50	--	--	--	50
MAGNESIUM	µg/L	8	8	100%	334	36300	17026	--	--	--	--	--
MANGANESE	µg/L	8	8	100%	0.1	49.7	11.85	--	50	--	500	50
POTASSIUM	µg/L	8	8	100%	1900	3720	2819	--	--	--	--	--
SODIUM	µg/L	8	8	100%	500	47800	28450	--	--	--	--	--
VANADIUM	µg/L	8	8	100%	0.8	7.5	3.6125	--	--	--	50	50
CHLORIDE	mg/L	8	8	100%	8.4	92.9	29.625	--	500	--	--	500
FLUORIDE	mg/L	8	8	100%	0.86	4.1	1.482	2	--	1	--	2
SULFATE (SO4--)	mg/L	8	8	100%	12.6	107	41.813	--	500	--	--	500
ALKALINITY	mg/L	5	5	100%	135	230	170.2	--	--	--	--	--
PH	UNIT	8	8	100%	6.93	9.39	7.641	--	--	--	--	--
COLOR	COLOR	7	8	88%	5	10	5.0625	--	15	--	--	15
COPPER	µg/L	7	8	88%	0.8	4	1.83125	--	1000	170	1300	1000
LEAD	µg/L	7	8	88%	0.09	1.1	0.27375	--	--	2	15	15
NICKEL	µg/L	7	8	88%	0.7	2.8	1.925	100	--	12	--	100
ALPHA, GROSS	PCI/L	4	5	80%	2.41	9.76	5.063	15	--	--	--	15
BETA, GROSS	PCI/L	4	5	80%	3.82	9.16	4.418	50	--	--	--	50
SELENIUM	µg/L	6	8	75%	0.3	1.9	0.7	50	--	--	--	50
ZINC	µg/L	6	8	75%	4.6	80.7	19.375	--	5000	--	--	5000
NITRATE - NO3	mg/L	6	8	75%	0.64	8.3	2.771	45	--	45	--	45
CHLOROFORM	µg/L	6	8	75%	0.4	2.9	1.076	100	--	--	--	100
ALUMINUM	µg/L	5	8	63%	1.2	12	11.775	1000	200	600	--	1000
ANTIMONY	µg/L	5	8	63%	0.1	1.8	0.43125	6	--	20	--	6
COBALT	µg/L	5	8	63%	0.044	0.1	0.084	--	--	--	--	--
IRON	µg/L	5	8	63%	45.5	983	197.5	--	300	--	--	300
TRICHLOROETHENE (TCE)	µg/L	5	8	63%	0.5	7.8	1.831	5	--	0.8	--	--
1,4-DIOXANE	µg/L	5	8	63%	0.6	1.9	1	--	--	--	3	3
RDX	µg/L	5	8	63%	0.66	27.3	5.261	--	--	--	--	--
1,2,3-TRICHLOROPROPANE	µg/L	2	4	50%	0.024	0.071	0.025	--	--	--	0.005	0.005
TPH-MOTOR OILS	mg/L	2	4	50%	0.03	0.09	0.27	--	--	--	--	--
2,4,6-TRINITROTOLUENE (TNT)	µg/L	4	8	50%	2.2	25.7	4.736	--	--	--	--	--
N-NITROSODIPHENYLAMINE	µg/L	4	8	50%	0.002	0.025	0.005	--	--	--	--	--
BIOLOGIC OXYGEN DEMAND	mg O2/L	2	5	40%	0.88	2	1.646	--	--	--	--	--
TOTAL ORGANIC CARBON	mg/L	2	5	40%	1.2	5.9	1.95	--	--	--	--	--
THALLIUM	µg/L	3	8	38%	0.037	0.2	0.099	2	--	0.1	--	2
PERCHLORATE	µg/L	3	8	38%	28.2	127	24.238	--	--	--	6	6
CARBON TETRACHLORIDE	µg/L	3	8	38%	9.21	13.2	4.016	0.5	--	0.1	--	0.5
CHLOROFORM	µg/L	1	3	33%	5.8	5.8	2.1	100	--	--	--	100
TOTAL TRIHALOMETHANES	µg/L	1	3	33%	5.8	5.8	2.1	100	--	--	--	100
METHYLENE CHLORIDE (DICHLOROMETHANE)[1]	µg/L	2	7	29%	0.400	5.8	1.286	5	--	4	--	5
CADMIUM	µg/L	2	8	25%	0.046	0.049	0.087	5	--	0.07	--	5
CHLORATE	mg/L	2	8	25%	0.099	0.52	0.115	--	--	--	--	--
TETRACHLOROETHENE (PCE)	µg/L	2	8	25%	0.6	5.5	0.95	5	--	0.06	--	5
TPH-DIESEL	mg/L	1	4	25%	0.01	0.01	0.3625	--	--	--	--	--
HMX	µg/L	2	8	25%	0.7	2.5	1.181	--	--	--	--	--
MERCURY	µg/L	2	8	25%	0.1	0.1	0.092	2	--	1.2	--	2
N-NITROSODIMETHYLAMINE (NDMA)	µg/L	2	8	25%	0.0004	0.006	0.0015	--	--	--	0.01	0.01
BERYLLIUM	µg/L	1	8	13%	1	1	0.2125	4	--	--	--	4
CHROMIUM (VI)	mg/L	1	8	13%	0.0009	0.0009	0.0002	--	--	0.0002	--	--
BROMIDE	mg/L	1	8	13%	0.120	0.120	0.471	--	--	--	--	--
FOAMING AGENTS (MBAS)	mg/L	1	8	13%	0.05	0.05	0.026125	--	0.5	--	--	0.5
PROPACHLOR	µg/L	1	8	13%	0.28	0.28	0.079	--	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	µg/L	1	8	13%	2.1	2.1	0.481	1200	--	4000	--	1200
1,1-DICHLOROETHANE	µg/L	1	8	13%	0.4	0.4	0.181	5	--	--	--	5
ETHYLBENZENE	µg/L	1	8	13%	1.1	1.1	0.356	300	--	300	--	300
STYRENE	µg/L	1	8	13%	0.5	0.5	0.281	100	--	--	--	100
TRICHLOROFLUOROMETHANE	µg/L	1	8	13%	0.4	0.4	0.269	150	--	700	--	150
N-NITROSODI-N-PROPYLAMINE	µg/L	1	8	13%	0.125	0.125	0.018	--	--	--	--	--
SILVER	µg/L	--	8	0%	--	--	0.1	--	100	--	--	100
NITRITE (AS N)	mg/L	--	8	0%	--	--	0.171	1	--	0.001	--	1
CYANIDE	mg/L	--	9	0%	--	--	0.012	0.15	--	0.15	--	0.15
CHEMICAL OXYGEN DEMAND	mg O2/L	--	5	0%	--	--	2.5	--	--	--	--	--
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE, EDB)	µg/L	--	4	0%	--	--	0.01	0.05	--	--	--	0.05
DIBROMOCHLOROPROPANE (DBCP)	µg/L	--	4	0%	--	--	0.01	0.2	--	0.0017	--	0.2
ALACHLOR	µg/L	--	3	0%	--	--	0.25	2	--	4	--	2
ATRAZINE	µg/L	--	3	0%	--	--	0.25	1	--	0.15	--	1
BROMACIL	µg/L	--	3	0%	--	--	0.25	--	--	--	--	--
BUTACHLOR	µg/L	--	3	0%	--	--	0.19	--	--	--	--	--
DEMETON	µg/L	--	3	0%	--	--	0.25	--	--	--	--	--
DIAZINON	µg/L	--	3	0%	--	--	0.125	--	--	--	6	6
DIMETHOATE	µg/L	--	3	0%	--	--	0.25	--	--	--	1	1
DISULFOTON	µg/L	--	3	0%	--	--	0.25	--	--	--	--	--
METOLACHLOR	µg/L	--	3	0%	--	--	0.25	--	--	--	--	--
METRIBUZIN	µg/L	--	3	0%	--	--	0.25	--	--	--	--	--
MEVINPHOS	µg/L	--	3	0%	--	--	0.25	--	--	--	--	--
MOLINATE	µg/L	--	3	0%	--	--	0.25	20	--	--	--	20

TABLE 3-11
Estimated Water Quality of Arroyo Well Based on JPL Monitoring Wells
Comprehensive Groundwater Monitoring Event (Dec 2002-Feb 2003)

Analyte	Unit	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Standard*
PROMETON	µg/L	--	3	0%	--	--	0.25	--	--	--	--	--
PROMETRYN	µg/L	--	3	0%	--	--	0.25	--	--	--	--	--
PRONAMIDE	µg/L	--	3	0%	--	--	0.25	--	--	--	--	--
SIMAZINE	µg/L	--	3	0%	--	--	0.25	4	--	4	--	4
SIMETRYN	µg/L	--	3	0%	--	--	0.25	--	--	--	--	--
TERBUTRYN	µg/L	--	3	0%	--	--	0.25	--	--	--	--	--
THIOBENCARB	µg/L	--	3	0%	--	--	0.25	70	1	70	--	70
2,4'-DDD	µg/L	--	8	0%	--	--	0.025	--	--	--	--	--
2,4'-DDE	µg/L	--	8	0%	--	--	0.025	--	--	--	--	--
2,4'-DDT	µg/L	--	8	0%	--	--	0.01	--	--	--	--	--
4,4-DDD	µg/L	--	8	0%	--	--	0.01	--	--	--	--	--
4,4-DDE	µg/L	--	8	0%	--	--	0.005	--	--	--	--	--
4,4-DDT	µg/L	--	8	0%	--	--	0.01	--	--	--	--	--
ALACHLOR	µg/L	--	8	0%	--	--	0.05	2	--	4	--	2
ALDRIN	µg/L	--	8	0%	--	--	0.025	--	--	--	0.002	0.002
ALPHA-BHC	µg/L	--	8	0%	--	--	0.025	--	--	--	0.015	0.015
BENFLURALIN	µg/L	--	8	0%	--	--	0.05	--	--	--	--	--
BETA-BHC	µg/L	--	8	0%	--	--	0.025	--	--	--	0.025	0.025
CAPTAN	µg/L	--	8	0%	--	--	0.05	--	--	--	1.5	1.5
CARBOPHENOTHION	µg/L	--	8	0%	--	--	0.025	--	--	--	--	--
CHLORDANE	µg/L	--	8	0%	--	--	0.025	0.1	--	0.03	--	0.1
CHLOROTHALONIL	µg/L	--	8	0%	--	--	0.025	--	--	--	--	--
DELTA-BHC	µg/L	--	8	0%	--	--	0.025	--	--	--	0.025	0.025
DICOFOL	µg/L	--	8	0%	--	--	0.05	--	--	--	--	--
DIELDRIN	µg/L	--	8	0%	--	--	0.01	--	--	--	0.002	0.002
DMPA	µg/L	--	8	0%	--	--	0.05	--	--	--	--	--
ENDOSULFAN I	µg/L	--	8	0%	--	--	0.01	--	--	--	--	--
ENDOSULFAN II	µg/L	--	8	0%	--	--	0.005	--	--	--	--	--
ENDOSULFAN SULFATE	µg/L	--	8	0%	--	--	0.025	--	--	--	--	--
ENDRIN	µg/L	--	8	0%	--	--	0.025	2	--	1.8	--	2
ENDRIN ALDEHYDE	µg/L	--	8	0%	--	--	0.025	--	--	--	--	--
ENDRIN KETONE	µg/L	--	8	0%	--	--	0.025	--	--	--	--	--
GAMMA- BHC (LINDANE)	µg/L	--	8	0%	--	--	0.025	0.2	--	0.032	--	0.2
HEPTACHLOR	µg/L	--	8	0%	--	--	0.005	0.01	--	0.008	--	0.01
HEPTACHLOR EPOXIDE	µg/L	--	8	0%	--	--	0.005	0.01	--	0.006	--	0.01
HEXACHLOROBENZENE	µg/L	--	8	0%	--	--	0.025	1	--	--	--	1
METHOXYCHLOR	µg/L	--	8	0%	--	--	0.025	30	--	30	--	30
NITROFEN	µg/L	--	8	0%	--	--	0.025	--	--	--	--	--
PCB-1016	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
PCB-1221	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
PCB-1232	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
PCB-1242	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
PCB-1248	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
PCB-1254	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
PCB-1260	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
PCNB	µg/L	--	8	0%	--	--	0.025	--	--	--	--	--
TOXAPHENE	µg/L	--	8	0%	--	--	0.25	3	--	--	--	3
1,1,1,2-TETRACHLOROETHANE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
1,1,1-TRICHLOROETHANE	µg/L	--	8	0%	--	--	0.25	200	--	--	--	200
1,1,2,2-TETRACHLOROETHANE	µg/L	--	8	0%	--	--	0.25	1	--	--	--	1
1,1,2-TRICHLOROETHANE	µg/L	--	8	0%	--	--	0.25	5	--	--	--	5
1,1-DICHLOROETHENE	µg/L	--	8	0%	--	--	0.25	6	--	10	--	6
1,2,3-TRICHLOROBENZENE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
1,2,4-TRICHLOROBENZENE	µg/L	--	8	0%	--	--	0.25	5	--	5	--	5
1,2,4-TRIMETHYLBENZENE	µg/L	--	8	0%	--	--	0.25	--	--	--	330	330
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE, EDB)	µg/L	--	8	0%	--	--	0.25	0.05	--	--	--	0.05
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	µg/L	--	8	0%	--	--	0.25	600	--	600	--	600
1,2-DICHLOROETHANE	µg/L	--	8	0%	--	--	0.25	0.5	--	0.4	--	0.5
1,2-DICHLOROPROPANE	µg/L	--	8	0%	--	--	0.25	5	--	0.5	--	5
1,3,5-TRIMETHYLBENZENE	µg/L	--	8	0%	--	--	0.25	--	--	--	330	330
1,3-DICHLOROPROPANE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
1,4-DICHLOROBENZENE (PARA-DICHLOROBENZENE)	µg/L	--	8	0%	--	--	0.25	5	--	6	--	5
2,2-DICHLOROPROPANE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
2-BUTANONE (METHYL ETHYL KETONE, MEK)	µg/L	--	8	0%	--	--	2.5	--	--	--	--	--
2-CHLOROETHYLVINYLETHER	µg/L	--	8	0%	--	--	2.5	--	--	--	--	--
2-CHLOROTOLUENE	µg/L	--	8	0%	--	--	0.25	--	--	--	140	140
2-HEXANONE	µg/L	--	8	0%	--	--	1	--	--	--	--	--
4-CHLOROTOLUENE	µg/L	--	8	0%	--	--	0.25	--	--	--	140	140
4-METHYL-2-PENTANONE (MIBK)	µg/L	--	8	0%	--	--	2.5	--	--	--	120	120
ACETONE	µg/L	--	8	0%	--	--	2.925	--	--	--	--	--
ACROLEIN	µg/L	--	8	0%	--	--	25	--	--	--	--	--
ACRYLONITRILE	µg/L	--	8	0%	--	--	5	--	--	--	--	--
BENZENE	µg/L	--	8	0%	--	--	0.25	1	--	0.15	--	1
BROMOBENZENE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
BROMOCHLOROMETHANE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
BROMODICHLOROMETHANE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
BROMOFORM	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
BROMOMETHANE (METHYL BROMIDE)	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
CARBON DISULFIDE	µg/L	--	8	0%	--	--	1	--	--	--	160	160
CHLOROBENZENE	µg/L	--	8	0%	--	--	0.25	70	--	--	--	70
CHLORODIBROMOMETHANE (THM)	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
CHLOROETHANE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
CHLOROMETHANE (METHYL CHLORIDE)	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--

TABLE 3-11
Estimated Water Quality of Arroyo Well Based on JPL Monitoring Wells
Comprehensive Groundwater Monitoring Event (Dec 2002-Feb 2003)

Analyte	Unit	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Standard*
CIS-1,2-DICHLOROETHENE	µg/L	--	8	0%	--	--	0.25	6	--	--	--	6
CIS-1,3-DICHLOROPROPENE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
DI-ISOPROPYL ETHER	µg/L	--	8	0%	--	--	0.2525	--	--	--	--	--
DIBROMOMETHANE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
DICHLORODIFLUOROMETHANE (FREON 112)	µg/L	--	8	0%	--	--	0.25	--	--	--	1000	1000
ETHYL-TERT-BUTYL ETHER (ETBE)	µg/L	--	8	0%	--	--	1.5	--	--	--	--	--
HEXACHLOROBUTADIENE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
ISOPROPYLBENZENE (CUMENE)	µg/L	--	8	0%	--	--	0.25	--	--	--	770	770
M-XYLENE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
METHYL ACETATE	µg/L	--	8	0%	--	--	5	--	--	--	--	--
METHYL-T-BUTYL ETHER (MTBE)	µg/L	--	8	0%	--	--	0.25	13	5	13	--	13
N-BUTYLBENZENE	µg/L	--	8	0%	--	--	0.25	--	--	--	260	260
N-PROPYLBENZENE	µg/L	--	8	0%	--	--	0.25	--	--	--	260	260
NAPHTHALENE	µg/L	--	8	0%	--	--	0.25	--	--	--	17	17
O-XYLENE	µg/L	--	8	0%	--	--	0.1	1750	--	--	--	1750
P-ISOPROPYLTOLUENE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
SEC-BUTYLBENZENE	µg/L	--	8	0%	--	--	0.25	--	--	--	260	260
TERT-AMYL-METHYL ETHER (TAME)	µg/L	--	8	0%	--	--	1.5	--	--	--	--	--
TERT-BUTYLBENZENE	µg/L	--	8	0%	--	--	0.25	--	--	--	260	260
TERTIARY BUTYL ALCOHOL (TBA)	µg/L	--	8	0%	--	--	2.625	--	--	--	12	12
TETRAHYDROFURAN	µg/L	--	8	0%	--	--	1.056	--	--	--	--	--
TOLUENE	µg/L	--	8	0%	--	--	0.25	150	--	150	--	150
TRANS-1,2-DICHLOROETHENE	µg/L	--	8	0%	--	--	0.25	10	--	--	--	10
TRANS-1,3-DICHLOROPROPENE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
VINYL ACETATE	µg/L	--	8	0%	--	--	1	--	--	--	--	--
VINYL CHLORIDE (CHLOROETHANE)	µg/L	--	8	0%	--	--	0.25	0.5	--	0.05	--	0.5
XYLENES (TOTAL)	µg/L	--	6	0%	--	--	0.25	1750	--	1800	--	1750
3-HYDROXYCARBOFURAN	µg/L	--	2	0%	--	--	1.5	--	--	--	--	--
ALDICARB	µg/L	--	2	0%	--	--	1.5	--	--	--	7	7
ALDICARB SULFONE	µg/L	--	2	0%	--	--	2	--	--	--	--	--
ALDICARB SULFOXIDE	µg/L	--	2	0%	--	--	1.5	--	--	--	--	--
CARBARYL	µg/L	--	2	0%	--	--	2.5	--	--	--	700	700
CARBOFURAN	µg/L	--	2	0%	--	--	2.5	18	--	1.7	--	18
METHIOCARB	µg/L	--	2	0%	--	--	2.5	--	--	--	--	--
METHOMYL	µg/L	--	2	0%	--	--	1	--	--	--	--	--
OXAMYL	µg/L	--	2	0%	--	--	2.5	50	--	50	--	50
PROPOXUR	µg/L	--	2	0%	--	--	2.5	--	--	--	--	--
GLYPHOSATE	µg/L	--	3	0%	--	--	5	700	--	1000	--	700
ENDOTHALL	µg/L	--	3	0%	--	--	85	100	--	580	--	100
DIQUAT	µg/L	--	2	0%	--	--	0.2	20	--	15	--	20
PARAQUAT	µg/L	--	2	0%	--	--	0.2	--	--	--	--	--
1,1,1-TRICHLORO-2-PROPANONE	µg/L	--	3	0%	--	--	0.5	--	--	--	--	--
1,1-DICHLOROPROPANONE	µg/L	--	3	0%	--	--	0.5	--	--	--	--	--
BROMOCHLOROACETONITRILE	µg/L	--	3	0%	--	--	2.5	--	--	--	--	--
BROMODICHLOROMETHANE	µg/L	--	3	0%	--	--	0.25	--	--	--	--	--
BROMOFORM	µg/L	--	3	0%	--	--	0.25	--	--	--	--	--
CHLORODIBROMOMETHANE (THM)	µg/L	--	3	0%	--	--	0.25	--	--	--	--	--
CHLOROPICRIN	µg/L	--	3	0%	--	--	0.5	--	--	--	56	56
DIBROMOACETONITRILE	µg/L	--	3	0%	--	--	1	--	--	--	--	--
DICHLOROACETONITRILE	µg/L	--	3	0%	--	--	0.5	--	--	--	--	--
TRICHLOROACETONITRILE	µg/L	--	3	0%	--	--	1	--	--	--	--	--
ETHYLENE GLYCOL	mg/L	--	3	0%	--	--	2.5	--	--	--	--	--
TPH-GASOLINE	mg/L	--	4	0%	--	--	0.05	--	--	--	--	--
BOLSTAR	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--
CHLORPYRIFOS	µg/L	--	3	0%	--	--	0.025	--	--	--	--	--
COUMAPHOS	µg/L	--	3	0%	--	--	0.1	--	--	--	--	--
DEMETON	µg/L	--	3	0%	--	--	0.1	--	--	--	--	--
DIAZINON	µg/L	--	3	0%	--	--	0.025	--	--	--	6	6
DICHLORVOS	µg/L	--	3	0%	--	--	0.1	--	--	--	--	--
DIMETHOATE	µg/L	--	3	0%	--	--	0.05	--	--	--	1	1
DISULFOTON	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--
EPN	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--
EPTC	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--
ETHION	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--
ETHOPROP	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--
FENSULFOTHION	µg/L	--	3	0%	--	--	0.25	--	--	--	--	--
FENTHION	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--
GUTHION	µg/L	--	3	0%	--	--	0.5	--	--	--	--	--
MALATHION	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--
MERPHOS	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--
METHYL PARATHION	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--
MEVINPHOS	µg/L	--	3	0%	--	--	0.35	--	--	--	--	--
NALED	µg/L	--	3	0%	--	--	0.25	--	--	--	--	--
PARATHION	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--
PHORATE	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--
PROWL	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--
RONNEL	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--
S,S,S-TRIBUTYLPHOSPHOROTRITHIOATE	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--
STIROPHOS	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--
SULFOTEPP	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--
TOKUTHION	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--
TRICHLORONATE	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--
TRIFLURALIN	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--

TABLE 3-11
Estimated Water Quality of Arroyo Well Based on JPL Monitoring Wells
Comprehensive Groundwater Monitoring Event (Dec 2002-Feb 2003)

Analyte	Unit	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Standard*
2,4,5-T	µg/L	--	3	0%	--	--	0.112	--	--	--	--	--
2,4,5-TP	µg/L	--	3	0%	--	--	0.05	50	--	--	--	50
2,4-D	µg/L	--	3	0%	--	--	0.243	70	--	70	--	70
3,5-DICHLOROBENZOIC ACID	µg/L	--	1	0%	--	--	0.24	--	--	--	--	--
4-NITROPHENOL	µg/L	--	1	0%	--	--	0.24	--	--	--	--	--
ACIFLUORFEN	µg/L	--	1	0%	--	--	0.48	--	--	--	--	--
BENTAZON	µg/L	--	3	0%	--	--	0.243	18	--	200	--	18
CHLORAMBEN	µg/L	--	1	0%	--	--	0.24	--	--	--	--	--
DACTHAL	µg/L	--	3	0%	--	--	0.082	--	--	--	--	--
DALAPON	µg/L	--	3	0%	--	--	0.487	200	--	790	--	200
DICAMBA	µg/L	--	3	0%	--	--	0.05	--	--	--	--	--
DICHLOROPROP	µg/L	--	3	0%	--	--	0.243	--	--	--	--	--
DINOSEB	µg/L	--	3	0%	--	--	0.147	7	--	14	--	7
MCPA	µg/L	--	3	0%	--	--	48.667	--	--	--	--	--
MCPP	µg/L	--	3	0%	--	--	48.667	--	--	--	--	--
PENTACHLOROPHENOL	µg/L	--	3	0%	--	--	0.05	1	--	0.4	--	1
PICLORAM	µg/L	--	3	0%	--	--	0.102	500	--	500	--	500
1,2,4-TRICHLOROBENZENE	µg/L	--	8	0%	--	--	0.5	5	--	5	--	5
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	µg/L	--	8	0%	--	--	0.5	600	--	600	--	600
1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	µg/L	--	8	0%	--	--	0.5	--	--	--	600	--
1,4-DICHLOROBENZENE (PARA-DICHLOROBENZENE)	µg/L	--	8	0%	--	--	0.5	5	--	6	--	5
2,4,5-TRICHLOROPHENOL	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
2,4,6-TRICHLOROPHENOL	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
2,4-DICHLOROPHENOL	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
2,4-DIMETHYLPHENOL	µg/L	--	8	0%	--	--	0.5	--	--	--	100	100
2,4-DINITROPHENOL	µg/L	--	8	0%	--	--	2	--	--	--	--	--
2,4-DINITROTOLUENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
2,6-DINITROTOLUENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
2-CHLORONAPHTHALENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
2-CHLOROPHENOL	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
2-METHYLNAPHTHALENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
2-METHYLPHENOL	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
2-NITROANILINE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
2-NITROPHENOL	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
3-NITROANILINE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
3/4-METHYLPHENOL	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
4,6-DINITRO-O-CRESOL	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
4-BROMOPHENYLPHENYLETHER	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
4-CHLORO-3-METHYLPHENOL	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
4-CHLOROANILINE	µg/L	--	8	0%	--	--	2	--	--	--	--	--
4-CHLOROPHENYLPHENYLETHER	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
4-NITROANILINE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
4-NITROPHENOL	µg/L	--	8	0%	--	--	1.5	--	--	--	--	--
ACENAPHTHENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
ACENAPHTHYLENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
ACETOPHENONE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
ANILINE	µg/L	--	8	0%	--	--	2	--	--	--	--	--
ANTHRACENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
BENZALDEHYDE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
BENZO (A) ANTHRACENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
BENZO (A) PYRENE	µg/L	--	8	0%	--	--	0.5	0.2	--	0.004	--	0.2
BENZO (GHI) PERYLENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
BENZO(B & K)FLUORANTHENES	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
BENZOIC ACID	µg/L	--	8	0%	--	--	2	--	--	--	--	--
BENZYL ALCOHOL	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
BIS (2-CHLOROETHYL) ETHER	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
BIS (2-CHLOROISOPROPYL) ETHER	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	µg/L	--	8	0%	--	--	0.5	4	--	12	--	4
BUTYLBENZYLPHTHALATE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
CAPROLACTAM	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
CARBAZOLE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
CHRYSENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
DI-(2-ETHYLHEXYL)ADIPATE	µg/L	--	8	0%	--	--	0.5	400	--	--	--	400
DI-N-BUTYLPHTHALATE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
DI-N-OCTYLPHTHALATE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
DIBENZO (A,H) ANTRACENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
DIBENZOFURAN	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
DIETHYLPHTHALATE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
DIMETHYL 2,3,5,6-TETRACHLOROTE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
DIMETHYLPHTHALATE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
FLUORANTHENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
FLUORENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
HEXACHLOROBENZENE	µg/L	--	8	0%	--	--	0.5	1	--	--	--	1
HEXACHLOROBUTADIENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
HEXACHLOROCYCLOPENTADIENE	µg/L	--	8	0%	--	--	4	50	--	50	--	50
HEXACHLOROETHANE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
INDENO(1,2,3-C,D)PYRENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
ISOPHORONE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
N-NITROSODI-N-PROPYLAMINE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
N-NITROSODIMETHYLAMINE (NDMA)	µg/L	--	8	0%	--	--	0.5	--	--	--	0.01	0.01
N-NITROSODIPHENYLAMINE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--

TABLE 3-11
Estimated Water Quality of Arroyo Well Based on JPL Monitoring Wells
Comprehensive Groundwater Monitoring Event (Dec 2002-Feb 2003)

Analyte	Unit	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Standard*
NAPHTHALENE	µg/L	--	8	0%	--	--	0.5	--	--	--	170	170
NITROBENZENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
PENTACHLOROPHENOL	µg/L	--	8	0%	--	--	2	1	--	0.4	--	1
PHENANTHRENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
PHENOL	µg/L	--	8	0%	--	--	0.5	--	--	--	4200	4200
PYRENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
PYRIDINE	µg/L	--	8	0%	--	--	1.5	--	--	--	--	--
1,2,3,4,6,7,8-HpCDD	PG/L	--	2	0%	--	--	1.6475	--	--	--	--	--
1,2,3,4,6,7,8-HpCDF	PG/L	--	2	0%	--	--	0.87	--	--	--	--	--
1,2,3,4,7,8,9-HpCDF	PG/L	--	2	0%	--	--	1.1425	--	--	--	--	--
1,2,3,4,7,8-HxCDD	PG/L	--	2	0%	--	--	2.18	--	--	--	--	--
1,2,3,4,7,8-HxCDF	PG/L	--	2	0%	--	--	0.4465	--	--	--	--	--
1,2,3,6,7,8-HxCDD	PG/L	--	2	0%	--	--	2.3825	--	--	--	--	--
1,2,3,6,7,8-HxCDF	PG/L	--	2	0%	--	--	0.535	--	--	--	--	--
1,2,3,7,8,9-HxCDD	PG/L	--	2	0%	--	--	2.145	--	--	--	--	--
1,2,3,7,8,9-HxCDF	PG/L	--	2	0%	--	--	0.555	--	--	--	--	--
1,2,3,7,8-PeCDD	PG/L	--	2	0%	--	--	1.275	--	--	--	--	--
1,2,3,7,8-PeCDF	PG/L	--	2	0%	--	--	1.4	--	--	--	--	--
2,3,4,6,7,8-HxCDF	PG/L	--	2	0%	--	--	0.6375	--	--	--	--	--
2,3,4,7,8-PeCDF	PG/L	--	2	0%	--	--	1.1275	--	--	--	--	--
2,3,7,8-TCDD (DIOXIN)	PG/L	--	2	0%	--	--	0.8075	30	--	--	--	30
2,3,7,8-TCDF	PG/L	--	2	0%	--	--	0.7175	--	--	--	--	--
OCDD	PG/L	--	2	0%	--	--	2.1075	--	--	--	--	--
OCDF	PG/L	--	2	0%	--	--	1.905	--	--	--	--	--
Total HpCDD	PG/L	--	2	0%	--	--	1.6475	--	--	--	--	--
Total HpCDF	PG/L	--	2	0%	--	--	1.1425	--	--	--	--	--
Total HxCDD	PG/L	--	2	0%	--	--	2.3825	--	--	--	--	--
Total HxCDF	PG/L	--	2	0%	--	--	0.6375	--	--	--	--	--
Total PeCDD	PG/L	--	2	0%	--	--	1.275	--	--	--	--	--
Total PeCDF	PG/L	--	2	0%	--	--	1.4	--	--	--	--	--
Total TCDD	PG/L	--	2	0%	--	--	0.8075	--	--	--	--	--
Total TCDF	PG/L	--	2	0%	--	--	0.7175	--	--	--	--	--
2-BUTANONE (METHYL ETHYL KETONE, MEK)	UG/ML	--	3	0%	--	--	0.015	--	--	--	--	--
ACETALDEHYDE	UG/ML	--	3	0%	--	--	0.0015	--	--	--	--	--
ACETONE	UG/ML	--	3	0%	--	--	0.005	--	--	--	--	--
ACROLEIN	UG/ML	--	3	0%	--	--	0.005	--	--	--	--	--
BENZALDEHYDE	UG/ML	--	3	0%	--	--	0.015	--	--	--	--	--
BUTYRALDEHYDE	UG/ML	--	3	0%	--	--	0.015	--	--	--	--	--
CROTONALDEHYDE	UG/ML	--	3	0%	--	--	0.015	--	--	--	--	--
FORMALDEHYDE	UG/ML	--	3	0%	--	--	0.002	--	--	--	--	--
HEXANALDEHYDE	UG/ML	--	3	0%	--	--	0.015	--	--	--	--	--
M-TOLUALDEHYDE	UG/ML	--	3	0%	--	--	0.015	--	--	--	--	--
METHACROLEIN	UG/ML	--	3	0%	--	--	0.015	--	--	--	--	--
PROPIONALDEHYDE	UG/ML	--	3	0%	--	--	0.015	--	--	--	--	--
VALERALDEHYDE	UG/ML	--	3	0%	--	--	0.015	--	--	--	--	--
1,3,5-TRINITROBENZENE (TNB)	µg/L	--	8	0%	--	--	0.338	--	--	--	--	--
1,3-DINITROBENZENE (DNB)	µg/L	--	8	0%	--	--	0.338	--	--	--	--	--
2,4-DINITROTOLUENE	µg/L	--	8	0%	--	--	0.338	--	--	--	--	--
2,6-DINITROTOLUENE	µg/L	--	8	0%	--	--	0.394	--	--	--	--	--
2-AMINO-4,6-DINITROTOLUENE	µg/L	--	8	0%	--	--	0.217	--	--	--	--	--
2-NITROTOLUENE	µg/L	--	8	0%	--	--	0.976	--	--	--	--	--
3-NITROTOLUENE	µg/L	--	8	0%	--	--	0.506	--	--	--	--	--
4-AMINO-2,6-DINITROTOLUENE	µg/L	--	8	0%	--	--	0.338	--	--	--	--	--
4-NITROTOLUENE	µg/L	--	8	0%	--	--	0.976	--	--	--	--	--
NITROBENZENE	µg/L	--	8	0%	--	--	0.338	--	--	--	--	--
TETRYL	µg/L	--	8	0%	--	--	0.341	--	--	--	--	--

* The Applicable Regulatory Limit is the regulatory limit with the lowest concentration; CA PHG is not included.

Notes:

µg/L = micrograms per liter
µg/mL = micrograms per milliliter
mg/L = milligrams per liter
NTU = Nephelometric Turbidity Units
mg O2/L = milligrams of oxygen per liter
pCi/L = picocuries per liter
pg/L = picograms per liter

(1) presence of methylene chloride has been attributed to laboratory contamination.
1/2 of the detection limit was used for nondetected values when
calculating the arithmetic mean, geometric mean, standard deviation,
and 95% upper confidence limit.

TABLE 3-12

Estimated Water Quality of Well 52 Based on JPL Monitoring Wells

Comprehensive Groundwater Monitoring Event (Dec 2002-Feb 2003)

Analyte	Unit	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Standard*
HARDNESS (TOTAL) AS CACO3	mg/L	4	4	100%	92.95	564	400.238	--	--	--	--	--
TOTAL DISSOLVED SOLIDS (TDS)	mg/L	8	8	100%	182	967	461.625	--	1000	--	--	1000
TURBIDITY	NTU	7	7	100%	2.2	38	12.014	--	5	--	--	5
CHLORIDE	mg/L	8	8	100%	11.75	141	56.270	--	500	--	--	500
SULFATE (SO4-)	mg/L	8	8	100%	14.5	189	76.725	--	500	--	--	500
ALKALINITY	mg/L	4	4	100%	147	240	209.750	--	--	--	--	--
BIOLOGIC OXYGEN DEMAND	mg O2/L	4	4	100%	0.73	2	1.358	--	--	--	--	--
PH	UNIT	8	8	100%	6.77	8.37	7.650	--	--	--	--	--
ALPHA, GROSS	PCI/L	5	5	100%	1.54	9.76	3.824	15	--	--	--	15
BETA, GROSS	PCI/L	5	5	100%	2.09	9.16	4.209	50	--	--	--	50
ARSENIC	µg/L	7	8	88%	0.5	2.8	1.230	50	--	--	--	50
BORON	µg/L	7	8	88%	41.1	242	118.790	--	--	--	1000	1000
CHROMIUM	µg/L	7	8	88%	1.6	7.2	3.510	50	--	--	--	50
MANGANESE	µg/L	7	8	88%	0.3	85.2	13.140	--	50	--	500	50
VANADIUM	µg/L	7	8	88%	1.3	11.5	6.860	--	--	--	50	50
FLUORIDE	mg/L	7	8	88%	0.75	2	1.370	2	--	1	--	2
NITRATE - NO3	mg/L	7	8	88%	0.29	17.4	5.550	45	--	10	--	45
N-NITROSODIPHENYLAMINE	µg/L	7	8	88%	0.001	0.003	0.002	--	--	--	--	--
MERCURY	µg/L	8	8	86%	0.041	0.1	0.077	2	--	1.2	--	2
COLOR	COLOR	6	8	75%	5	25	6.375	--	15	--	--	15
BARIUM	µg/L	6	8	75%	15.7	170	64.975	1000	--	--	--	1000
CALCIUM	µg/L	6	8	75%	17700	141000	58256	--	--	--	--	--
COBALT	µg/L	6	8	75%	0.046	0.2	0.084	--	--	--	--	--
COPPER	µg/L	6	8	75%	0.7	2.6	0.994	--	1000	170	1300	1000
LEAD	µg/L	6	8	75%	0.058	0.3	0.113	--	--	2	15	--
MAGNESIUM	µg/L	6	8	75%	7905	46700	21882	--	--	--	--	--
NICKEL	µg/L	6	8	75%	0.5	5.7	1.720	100	--	12	--	100
POTASSIUM	µg/L	6	8	75%	1995	3240	2249	--	--	--	--	--
SODIUM	µg/L	6	8	75%	23200	42950	29713	--	--	--	--	--
TOTAL ORGANIC CARBON	mg/L	3	4	75%	1.055	6.4	2.914	--	--	--	--	--
CHLOROFORM	µg/L	6	8	75%	0.4	2.9	0.875	100	--	--	--	100
TRICHLOROETHENE (TCE)	µg/L	6	8	75%	0.600	7.6	2.469	5	--	0.8	--	5
CHLORATE	mg/L	5	8	63%	0.073	0.875	0.335	--	--	--	--	--
TETRACHLOROETHENE (PCE)	µg/L	5	8	63%	0.3	1.5	0.569	5	--	0.06	--	5
BERYLLIUM	µg/L	4	8	50%	0.9	1.8	0.656	4	--	--	--	4
ZINC	µg/L	4	8	50%	3.7	20.1	10.960	--	5000	--	--	5000
CHLOROFORM	µg/L	1	2	50%	1.8	1.8	1.025	100	--	--	--	100
TOTAL TRIHALOMETHANES	µg/L	1	2	50%	1.9	1.9	1.075	100	--	--	--	100
N-NITROSODIMETHYLAMINE (NDMA)	µg/L	--	8	50%	--	--	0.001	--	--	--	0.01	0.01
METHYLENE CHLORIDE (DICHLOROMETHANE)[1]	µg/L	3	7	43%	5.8	79.5	24.730	5	--	4	--	5
ALUMINUM	µg/L	3	8	38%	1.2	1.6	11.556	1000	200	600	--	1000
ANTIMONY	µg/L	3	8	38%	0.2	0.5	0.175	6	--	20	--	6
SELENIUM	µg/L	3	8	38%	0.6	1.9	0.556	50	--	--	--	50
CHROMIUM (VI)	mg/L	3	8	38%	0.00066	0.0027	0.0008	--	--	0.0002	--	--
1,1-DICHLOROETHANE	µg/L	3	8	38%	0.4	0.5	0.269	5	--	--	--	5
1,4-DIOXANE	µg/L	3	8	38%	1	1.2	0.718	--	--	--	3	3
IRON	µg/L	2	8	25%	49.9	197	40.24	--	300	--	--	300
PERCHLORATE	µg/L	2	8	25%	3.05	115	16.256	--	--	--	6	6
TPH-DIESEL	mg/L	1	4	25%	0.01	0.01	0.368	--	--	--	--	--
TPH-MOTOR OILS	mg/L	1	4	25%	0.09	0.09	0.388	--	--	--	--	--
FOAMING AGENTS (MBAS)	mg/L	1	7	14%	0.062	0.062	0.030	--	0.5	--	--	0.5
SILVER	µg/L	1	8	13%	0.024	0.024	0.091	--	100	--	--	100
THALLIUM	µg/L	1	8	13%	0.053	0.053	0.094	2	--	0.1	--	2
1,1-DICHLOROETHENE	µg/L	1	8	13%	0.3	0.3	0.256	6	--	10	--	6
BROMOCHLOROMETHANE	µg/L	1	8	13%	18	18	2.69	--	--	--	--	--
CARBON TETRACHLORIDE	µg/L	1	8	13%	12.5	12.5	1.713	0.5	--	0.1	--	0.5
2,4,6-TRINITROTOLUENE (TNT)	µg/L	1	8	13%	4.5	4.5	0.611	--	--	--	--	--
RDX	µg/L	1	8	13%	3.1	3.1	0.475	--	--	--	--	--
CADMIUM	µg/L	--	8	0%	--	--	0.1	5	--	0.07	--	5
BROMIDE	mg/L	--	8	0%	--	--	0.869	--	--	--	--	--
NITRITE (AS N)	mg/L	--	8	0%	--	--	0.353	1	--	0.001	--	1
CYANIDE	mg/L	--	8	0%	--	--	0.012	0.15	--	0.15	--	0.15
CHEMICAL OXYGEN DEMAND	mg O2/L	--	4	0%	--	--	2.5	--	--	--	--	--
1,2,3-TRICHLOROPROPANE	µg/L	--	4	0%	--	--	0.0025	--	--	--	0.005	0.005
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE, EDB)	µg/L	--	4	0%	--	--	0.01	0.05	--	--	--	0.05
DIBROMOCHLOROPROPANE (DBCP)	µg/L	--	4	0%	--	--	0.01	0.2	--	0.0017	--	0.2
ALACHLOR	µg/L	--	1	0%	--	--	0.25	2	--	4	--	2
ATRAZINE	µg/L	--	1	0%	--	--	0.25	1	--	0.15	--	1
BROMACIL	µg/L	--	1	0%	--	--	0.25	--	--	--	--	--
BUTACHLOR	µg/L	--	1	0%	--	--	0.19	--	--	--	--	--
DEMETON	µg/L	--	1	0%	--	--	0.25	--	--	--	--	--
DIAZINON	µg/L	--	1	0%	--	--	0.125	--	--	--	6	6
DIMETHOATE	µg/L	--	1	0%	--	--	0.25	--	--	--	1	1
DISULFOTON	µg/L	--	1	0%	--	--	0.25	--	--	--	--	--
METOLACHLOR	µg/L	--	1	0%	--	--	0.25	--	--	--	--	--
METRIBUZIN	µg/L	--	1	0%	--	--	0.25	--	--	--	--	--
MEVINPHOS	µg/L	--	1	0%	--	--	0.25	--	--	--	--	--
MOLINATE	µg/L	--	1	0%	--	--	0.25	20	--	--	--	20
PROMETON	µg/L	--	1	0%	--	--	0.25	--	--	--	--	--
PROMETRYN	µg/L	--	1	0%	--	--	0.25	--	--	--	--	--
PRONAMIDE	µg/L	--	1	0%	--	--	0.25	--	--	--	--	--
SIMAZINE	µg/L	--	1	0%	--	--	0.25	4	--	4	--	4

TABLE 3-12

Estimated Water Quality of Well 52 Based on JPL Monitoring Wells

Comprehensive Groundwater Monitoring Event (Dec 2002-Feb 2003)

Analyte	Unit	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Standard*
SIMETRYN	µg/L	--	1	0%	--	--	0.25	--	--	--	--	--
TERBUTRYN	µg/L	--	1	0%	--	--	0.25	--	--	--	--	--
THIOBENCARB	µg/L	--	1	0%	--	--	0.25	70	1	70	--	70
2,4'-DDD	µg/L	--	8	0%	--	--	0.025	--	--	--	--	--
2,4'-DDE	µg/L	--	8	0%	--	--	0.025	--	--	--	--	--
2,4'-DDT	µg/L	--	8	0%	--	--	0.01	--	--	--	--	--
4,4-DDD	µg/L	--	8	0%	--	--	0.01	--	--	--	--	--
4,4-DDE	µg/L	--	8	0%	--	--	0.005	--	--	--	--	--
4,4-DDT	µg/L	--	8	0%	--	--	0.01	--	--	--	--	--
ALACHLOR	µg/L	--	8	0%	--	--	0.05	2	--	4	--	2
ALDRIN	µg/L	--	8	0%	--	--	0.025	--	--	--	0.002	0.002
ALPHA-BHC	µg/L	--	8	0%	--	--	0.025	--	--	--	0.015	0.015
BENFLURALIN	µg/L	--	8	0%	--	--	0.05	--	--	--	--	--
BETA-BHC	µg/L	--	8	0%	--	--	0.025	--	--	--	0.025	0.025
CAPTAN	µg/L	--	8	0%	--	--	0.05	--	--	--	1.5	1.5
CARBOPHENOTHION	µg/L	--	8	0%	--	--	0.025	--	--	--	--	--
CHLORDANE	µg/L	--	8	0%	--	--	0.025	0.1	--	0.03	--	0.1
CHLOROTHALONIL	µg/L	--	8	0%	--	--	0.025	--	--	--	--	--
DELTA-BHC	µg/L	--	8	0%	--	--	0.025	--	--	--	0.025	0.025
DICOFOL	µg/L	--	8	0%	--	--	0.05	--	--	--	--	--
DIELDRIN	µg/L	--	8	0%	--	--	0.01	--	--	--	0.002	0.002
DMPA	µg/L	--	8	0%	--	--	0.05	--	--	--	--	--
ENDOSULFAN I	µg/L	--	8	0%	--	--	0.01	--	--	--	--	--
ENDOSULFAN II	µg/L	--	8	0%	--	--	0.005	--	--	--	--	--
ENDOSULFAN SULFATE	µg/L	--	8	0%	--	--	0.025	--	--	--	--	--
ENDRIN	µg/L	--	8	0%	--	--	0.025	2	--	1.8	--	2
ENDRIN ALDEHYDE	µg/L	--	8	0%	--	--	0.025	--	--	--	--	--
ENDRIN KETONE	µg/L	--	8	0%	--	--	0.025	--	--	--	--	--
GAMMA- BHC (LINDANE)	µg/L	--	8	0%	--	--	0.025	0.2	--	0.032	--	0.2
HEPTACHLOR	µg/L	--	8	0%	--	--	0.005	0.01	--	0.008	--	0.01
HEPTACHLOR EPOXIDE	µg/L	--	8	0%	--	--	0.005	0.01	--	0.006	--	0.01
HEXACHLOROBENZENE	µg/L	--	8	0%	--	--	0.025	1	--	--	--	1
METHOXYCHLOR	µg/L	--	8	0%	--	--	0.025	30	--	30	--	30
NITROFEN	µg/L	--	8	0%	--	--	0.025	--	--	--	--	--
PCB-1016	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
PCB-1221	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
PCB-1232	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
PCB-1242	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
PCB-1248	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
PCB-1254	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
PCB-1260	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
PCNB	µg/L	--	8	0%	--	--	0.025	--	--	--	--	--
PROPACHLOR	µg/L	--	8	0%	--	--	0.05	--	--	--	--	--
TOXAPHENE	µg/L	--	8	0%	--	--	0.25	3	--	--	--	3
1,1,1,2-TETRACHLOROETHANE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
1,1,1-TRICHLOROETHANE	µg/L	--	8	0%	--	--	0.25	200	--	--	--	200
1,1,2,2-TETRACHLOROETHANE	µg/L	--	8	0%	--	--	0.25	1	--	--	--	1
1,1,2-TRICHLOROETHANE	µg/L	--	8	0%	--	--	0.25	5	--	--	--	5
1,1,2-TRICHLOROTRIFLUOROETHANE	µg/L	--	8	0%	--	--	0.25	1200	--	4000	--	1200
1,2,3-TRICHLOROBENZENE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
1,2,4-TRICHLOROBENZENE	µg/L	--	8	0%	--	--	0.25	5	--	5	--	5
1,2,4-TRIMETHYLBENZENE	µg/L	--	8	0%	--	--	0.25	--	--	--	330	330
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE, EDB)	µg/L	--	8	0%	--	--	0.25	0.05	--	--	--	0.05
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	µg/L	--	8	0%	--	--	0.25	600	--	600	--	600
1,2-DICHLOROETHANE	µg/L	--	8	0%	--	--	0.25	5	--	0.4	--	5
1,2-DICHLOROPROPANE	µg/L	--	8	0%	--	--	0.25	5	--	0.5	--	5
1,3,5-TRIMETHYLBENZENE	µg/L	--	8	0%	--	--	0.25	--	--	--	330	330
1,3-DICHLOROPROPANE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
1,4-DICHLOROBENZENE (PARA-DICHLOROBENZENE)	µg/L	--	8	0%	--	--	0.25	5	--	6	--	5
2,2-DICHLOROPROPANE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
2-BUTANONE (METHYL ETHYL KETONE, MEK)	µg/L	--	8	0%	--	--	2.5	--	--	--	--	--
2-CHLOROETHYLVINYLETHER	µg/L	--	8	0%	--	--	2.5	--	--	--	--	--
2-CHLOROTOLUENE	µg/L	--	8	0%	--	--	0.25	--	--	--	140	140
2-HEXANONE	µg/L	--	8	0%	--	--	1	--	--	--	--	--
4-CHLOROTOLUENE	µg/L	--	8	0%	--	--	0.25	--	--	--	140	140
4-METHYL-2-PENTANONE (MIBK)	µg/L	--	8	0%	--	--	2.5	--	--	--	120	120
ACETONE	µg/L	--	8	0%	--	--	2.5	--	--	--	--	--
ACROLEIN	µg/L	--	8	0%	--	--	25	--	--	--	--	--
ACRYLONITRILE	µg/L	--	8	0%	--	--	5	--	--	--	--	--
BENZENE	µg/L	--	8	0%	--	--	0.25	1	--	0.15	--	1
BROMOBENZENE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
BROMODICHLOROMETHANE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
BROMOFORM	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
BROMOMETHANE (METHYL BROMIDE)	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
CARBON DISULFIDE	µg/L	--	8	0%	--	--	1	--	--	--	160	160
CHLOROBENZENE	µg/L	--	8	0%	--	--	0.25	70	--	--	--	70
CHLORODIBROMOMETHANE (THM)	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
CHLOROETHANE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
CHLOROMETHANE (METHYL CHLORIDE)	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
CIS-1,2-DICHLOROETHENE	µg/L	--	8	0%	--	--	0.25	6	--	--	--	6
CIS-1,3-DICHLOROPROPENE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
DI-ISOPROPYL ETHER	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
DIBROMOMETHANE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--

TABLE 3-12

Estimated Water Quality of Well 52 Based on JPL Monitoring Wells

Comprehensive Groundwater Monitoring Event (Dec 2002-Feb 2003)

Analyte	Unit	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Standard*
DICHLORODIFLUOROMETHANE (FREON 112)	µg/L	--	8	0%	--	--	0.25	--	--	--	1000	1000
ETHYL-TERT-BUTYL ETHER (ETBE)	µg/L	--	8	0%	--	--	1.5	--	--	--	--	--
ETHYLBENZENE	µg/L	--	8	0%	--	--	0.25	300	--	300	--	300
HEXACHLOROBUTADIENE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
ISOPROPYLBENZENE (CUMENE)	µg/L	--	8	0%	--	--	0.25	--	--	--	770	770
M-XYLENE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
METHYL ACETATE	µg/L	--	8	0%	--	--	5	--	--	--	--	--
METHYL-T-BUTYL ETHER (MTBE)	µg/L	--	8	0%	--	--	0.25	13	5	13	--	5
N-BUTYLBENZENE	µg/L	--	8	0%	--	--	0.25	--	--	--	260	260
N-PROPYLBENZENE	µg/L	--	8	0%	--	--	0.25	--	--	--	260	260
NAPHTHALENE	µg/L	--	8	0%	--	--	0.25	--	--	--	17	17
O-XYLENE	µg/L	--	8	0%	--	--	0.1	1750	--	--	--	1750
P-ISOPROPYLTOLUENE	µg/L	--	8	0%	--	--	0.25	--	--	--	--	--
SEC-BUTYLBENZENE	µg/L	--	8	0%	--	--	0.25	--	--	--	260	260
STYRENE	µg/L	--	8	0%	--	--	0.25	100	--	--	--	100
TERT-AMYL-METHYL ETHER (TAME)	µg/L	--	8	0%	--	--	1.5	--	--	--	--	--
TERT-BUTYLBENZENE	µg/L	--	8	0%	--	--	0.25	--	--	--	260	260
TERTIARY BUTYL ALCOHOL (TBA)	µg/L	--	8	0%	--	--	1.8	--	--	--	12	12
TETRAHYDROFURAN	µg/L	--	8	0%	--	--	1.100	--	--	--	--	--
TOLUENE	µg/L	--	8	0%	--	--	0.250	150	--	150	--	150
TRANS-1,2-DICHLOROETHENE	µg/L	--	8	0%	--	--	0.250	10	--	--	--	10
TRANS-1,3-DICHLOROPROPENE	µg/L	--	8	0%	--	--	0.250	--	--	--	--	--
TRICHLOROFLUOROMETHANE	µg/L	--	8	0%	--	--	0.25	150	--	700	--	150
VINYL ACETATE	µg/L	--	8	0%	--	--	1	--	--	--	--	--
VINYL CHLORIDE (CHLOROETHANE)	µg/L	--	8	0%	--	--	0.25	0.5	--	0.05	--	0.5
XYLENES (TOTAL)	µg/L	--	8	0%	--	--	0.25	1750	--	1800	--	1750
3-HYDROXYCARBOFURAN	µg/L	--	1	0%	--	--	1.5	--	--	--	--	--
ALDICARB	µg/L	--	1	0%	--	--	1.5	--	--	--	7	7
ALDICARB SULFONE	µg/L	--	1	0%	--	--	2	--	--	--	--	--
ALDICARB SULFOXIDE	µg/L	--	1	0%	--	--	1.5	--	--	--	--	--
CARBARYL	µg/L	--	1	0%	--	--	2.5	--	--	--	700	700
CARBOFURAN	µg/L	--	1	0%	--	--	2.5	18	--	1.7	--	18
METHIOCARB	µg/L	--	1	0%	--	--	2.5	--	--	--	--	--
METHOMYL	µg/L	--	1	0%	--	--	1	--	--	--	--	--
OXAMYL	µg/L	--	1	0%	--	--	2.5	50	--	50	--	50
PROPOXUR	µg/L	--	1	0%	--	--	2.5	--	--	--	--	--
GLYPHOSATE	µg/L	--	1	0%	--	--	5	700	--	1000	--	700
ENDOTHALL	µg/L	--	1	0%	--	--	2.5	100	--	580	--	100
DIQUAT	µg/L	--	1	0%	--	--	0.2	20	--	15	--	20
PARAQUAT	µg/L	--	1	0%	--	--	0.2	--	--	--	--	--
1,1,1-TRICHLORO-2-PROPANONE	µg/L	--	2	0%	--	--	0.33	--	--	--	--	--
1,1-DICHLOROPROPANONE	µg/L	--	2	0%	--	--	0.303	--	--	--	--	--
BROMOCHLOROACETONITRILE	µg/L	--	2	0%	--	--	1.7	--	--	--	--	--
BROMODICHLOROMETHANE	µg/L	--	2	0%	--	--	0.193	--	--	--	--	--
BROMOFORM	µg/L	--	2	0%	--	--	0.19	--	--	--	--	--
CHLORODIBROMOMETHANE (THM)	µg/L	--	2	0%	--	--	0.178	--	--	--	--	--
CHLOROPICRIN	µg/L	--	2	0%	--	--	0.335	--	--	--	56	56
DIBROMOACETONITRILE	µg/L	--	2	0%	--	--	0.623	--	--	--	--	--
DICHLOROACETONITRILE	µg/L	--	2	0%	--	--	0.303	--	--	--	--	--
TRICHLOROACETONITRILE	µg/L	--	2	0%	--	--	0.703	--	--	--	--	--
ETHYLENE GLYCOL	mg/L	--	2	0%	--	--	2.5	--	--	--	--	--
TPH-GASOLINE	mg/L	--	4	0%	--	--	0.044	--	--	--	--	--
BOLSTAR	µg/L	--	1	0%	--	--	0.05	--	--	--	--	--
CHLORPYRIFOS	µg/L	--	1	0%	--	--	0.025	--	--	--	--	--
COUMAPHOS	µg/L	--	1	0%	--	--	0.1	--	--	--	--	--
DEMETON	µg/L	--	1	0%	--	--	0.1	--	--	--	--	--
DIAZINON	µg/L	--	1	0%	--	--	0.025	--	--	--	6	6
DICHLORVOS	µg/L	--	1	0%	--	--	0.1	--	--	--	--	--
DIMETHOATE	µg/L	--	1	0%	--	--	0.05	--	--	--	1	1
DISULFOTON	µg/L	--	1	0%	--	--	0.05	--	--	--	--	--
EPN	µg/L	--	1	0%	--	--	0.05	--	--	--	--	--
EPTC	µg/L	--	1	0%	--	--	0.05	--	--	--	--	--
ETHION	µg/L	--	1	0%	--	--	0.05	--	--	--	--	--
ETHOPROP	µg/L	--	1	0%	--	--	0.05	--	--	--	--	--
FENSULFOTHION	µg/L	--	1	0%	--	--	0.25	--	--	--	--	--
FENTHION	µg/L	--	1	0%	--	--	0.05	--	--	--	--	--
GUTHION	µg/L	--	1	0%	--	--	0.5	--	--	--	--	--
MALATHION	µg/L	--	1	0%	--	--	0.05	--	--	--	--	--
MERPHOS	µg/L	--	1	0%	--	--	0.05	--	--	--	--	--
METHYL PARATHION	µg/L	--	1	0%	--	--	0.05	--	--	--	--	--
MEVINPHOS	µg/L	--	1	0%	--	--	0.35	--	--	--	--	--
NALED	µg/L	--	1	0%	--	--	0.25	--	--	--	--	--
PARATHION	µg/L	--	1	0%	--	--	0.05	--	--	--	--	--
PHORATE	µg/L	--	1	0%	--	--	0.05	--	--	--	--	--
PROWL	µg/L	--	1	0%	--	--	0.05	--	--	--	--	--
RONNEL	µg/L	--	1	0%	--	--	0.05	--	--	--	--	--
S,S,S-TRIBUTYLPHOSPHOROTRITHIOATE	µg/L	--	1	0%	--	--	0.05	--	--	--	--	--
STIROPHOS	µg/L	--	1	0%	--	--	0.05	--	--	--	--	--
SULFOTEPP	µg/L	--	1	0%	--	--	0.05	--	--	--	--	--
TOKUTHION	µg/L	--	1	0%	--	--	0.05	--	--	--	--	--
TRICHLORONATE	µg/L	--	1	0%	--	--	0.05	--	--	--	--	--
TRIFLURALIN	µg/L	--	1	0%	--	--	0.05	--	--	--	--	--
2,4,5-T	µg/L	--	2	0%	--	--	0.1125	--	--	--	--	--

TABLE 3-12

Estimated Water Quality of Well 52 Based on JPL Monitoring Wells

Comprehensive Groundwater Monitoring Event (Dec 2002-Feb 2003)

Analyte	Unit	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Standard*
2,4,5-TP	µg/L	--	2	0%	--	--	0.05	50	--	--	--	50
2,4-D	µg/L	--	2	0%	--	--	0.245	70	--	70	--	70
3,5-DICHLOROBENZOIC ACID	µg/L	--	2	0%	--	--	0.245	--	--	--	--	--
4-NITROPHENOL	µg/L	--	2	0%	--	--	0.245	--	--	--	--	--
ACIFLUORFEN	µg/L	--	2	0%	--	--	0.490	--	--	--	--	--
BENTAZON	µg/L	--	2	0%	--	--	0.245	18	--	200	--	18
CHLORAMBEN	µg/L	--	2	0%	--	--	0.245	--	--	--	--	--
DACTHAL	µg/L	--	2	0%	--	--	0.083	--	--	--	--	--
DALAPON	µg/L	--	2	0%	--	--	0.490	200	--	790	--	200
DICAMBA	µg/L	--	2	0%	--	--	0.05	--	--	--	--	--
DICHLOROPROP	µg/L	--	2	0%	--	--	0.245	--	--	--	--	--
DINOSEB	µg/L	--	2	0%	--	--	0.148	7	--	14	--	7
MCPA	µg/L	--	2	0%	--	--	49.000	--	--	--	--	--
MCPP	µg/L	--	2	0%	--	--	49.000	--	--	--	--	--
PENTACHLOROPHENOL	µg/L	--	2	0%	--	--	0.05	1	--	0.4	--	1
PICLORAM	µg/L	--	2	0%	--	--	0.103	500	--	500	--	500
1,2,4-TRICHLOROBENZENE	µg/L	--	8	0%	--	--	0.5	5	--	5	--	5
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	µg/L	--	8	0%	--	--	0.5	600	--	600	--	600
1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	µg/L	--	8	0%	--	--	0.5	--	--	--	600	600
1,4-DICHLOROBENZENE (PARA-DICHLOROBENZENE)	µg/L	--	8	0%	--	--	0.5	5	--	6	--	5
2,4,5-TRICHLOROPHENOL	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
2,4,6-TRICHLOROPHENOL	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
2,4-DICHLOROPHENOL	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
2,4-DIMETHYLPHENOL	µg/L	--	8	0%	--	--	0.5	--	--	--	100	100
2,4-DINITROPHENOL	µg/L	--	8	0%	--	--	2	--	--	--	--	--
2,4-DINITROTOLUENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
2,6-DINITROTOLUENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
2-CHLORONAPHTHALENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
2-CHLOROPHENOL	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
2-METHYLNAPHTHALENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
2-METHYLPHENOL	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
2-NITROANILINE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
2-NITROPHENOL	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
3,3'-DICHLOROBENZIDINE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
3-NITROANILINE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
3/4-METHYLPHENOL	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
4,6-DINITRO-O-CRESOL	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
4-BROMOPHENYLPHENYLETHER	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
4-CHLORO-3-METHYLPHENOL	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
4-CHLOROANILINE	µg/L	--	8	0%	--	--	2	--	--	--	--	--
4-CHLOROPHENYLPHENYLETHER	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
4-NITROANILINE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
4-NITROPHENOL	µg/L	--	8	0%	--	--	1.5	--	--	--	--	--
ACENAPHTHENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
ACENAPHTHYLENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
ACETOPHENONE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
ANILINE	µg/L	--	8	0%	--	--	2	--	--	--	--	--
ANTHRACENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
BENZALDEHYDE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
BENZO (A) ANTHRACENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
BENZO (A) PYRENE	µg/L	--	8	0%	--	--	0.5	0.2	--	0.004	--	0.2
BENZO (GHI) PERYLENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
BENZO(B & K)FLUORANTHENES	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
BENZOIC ACID	µg/L	--	8	0%	--	--	2	--	--	--	--	--
BENZYL ALCOHOL	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
BIS (2-CHLOROETHYL) ETHER	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
BIS (2-CHLOROISOPROPYL) ETHER	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	µg/L	--	8	0%	--	--	0.5	4	--	12	--	4
BUTYLBENZYLPHTHALATE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
CAPROLACTAM	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
CARBAZOLE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
CHRYSENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
DI-(2-ETHYLHEXYL)ADIPATE	µg/L	--	8	0%	--	--	0.5	400	--	--	--	400
DI-N-BUTYLPHTHALATE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
DI-N-OCTYLPHTHALATE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
DIBENZO (A,H) ANTRACENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
DIBENZOFURAN	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
DIETHYLPHTHALATE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
DIMETHYL 2,3,5,6-TETRACHLOROTE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
DIMETHYLPHTHALATE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
FLUORANTHENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
FLUORENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
HEXACHLOROBENZENE	µg/L	--	8	0%	--	--	0.5	1	--	--	--	1
HEXACHLOROBUTADIENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
HEXACHLOROCYCLOPENTADIENE	µg/L	--	8	0%	--	--	4	50	--	50	--	50
HEXACHLOROETHANE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
INDENO(1,2,3-C,D)PYRENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
ISOPHORONE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
N-NITROSODI-N-PROPYLAMINE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
N-NITROSODIMETHYLAMINE (NDMA)	µg/L	--	8	0%	--	--	0.5	--	--	--	0.01	0.01
N-NITROSODIPHENYLAMINE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
NAPHTHALENE	µg/L	--	8	0%	--	--	0.5	--	--	--	170	170

TABLE 3-12

Estimated Water Quality of Well 52 Based on JPL Monitoring Wells

Comprehensive Groundwater Monitoring Event (Dec 2002-Feb 2003)

Analyte	Unit	Number of Detects	Number of Samples	Frequency of Detection	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level	Applicable Standard*
NITROBENZENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
PENTACHLOROPHENOL	µg/L	--	8	0%	--	--	2	1	--	0.4	--	1
PHENANTHRENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
PHENOL	µg/L	--	8	0%	--	--	0.5	--	--	--	4200	4200
PYRENE	µg/L	--	8	0%	--	--	0.5	--	--	--	--	--
PYRIDINE	µg/L	--	8	0%	--	--	1.5	--	--	--	--	--
2-BUTANONE (METHYL ETHYL KETONE, MEK)	UG/ML	--	2	0%	--	--	0.015	--	--	--	--	--
ACETALDEHYDE	UG/ML	--	2	0%	--	--	0.0015	--	--	--	--	--
ACETONE	UG/ML	--	2	0%	--	--	0.005	--	--	--	--	--
ACROLEIN	UG/ML	--	2	0%	--	--	0.005	--	--	--	--	--
BENZALDEHYDE	UG/ML	--	2	0%	--	--	0.015	--	--	--	--	--
BUTYRALDEHYDE	UG/ML	--	2	0%	--	--	0.015	--	--	--	--	--
CROTONALDEHYDE	UG/ML	--	2	0%	--	--	0.015	--	--	--	--	--
FORMALDEHYDE	UG/ML	--	2	0%	--	--	0.002	--	--	--	--	--
HEXANALDEHYDE	UG/ML	--	2	0%	--	--	0.015	--	--	--	--	--
M-TOLUALDEHYDE	UG/ML	--	2	0%	--	--	0.015	--	--	--	--	--
METHACROLEIN	UG/ML	--	2	0%	--	--	0.015	--	--	--	--	--
PROPIONALDEHYDE	UG/ML	--	2	0%	--	--	0.015	--	--	--	--	--
VALERALDEHYDE	UG/ML	--	2	0%	--	--	0.015	--	--	--	--	--
1,3,5-TRINITROBENZENE (TNB)	µg/L	--	8	0%	--	--	0.100	--	--	--	--	--
1,3-DINITROBENZENE (DNB)	µg/L	--	8	0%	--	--	0.100	--	--	--	--	--
2,4-DINITROTOLUENE	µg/L	--	8	0%	--	--	0.100	--	--	--	--	--
2,6-DINITROTOLUENE	µg/L	--	8	0%	--	--	0.165	--	--	--	--	--
2-AMINO-4,6-DINITROTOLUENE	µg/L	--	8	0%	--	--	0.105	--	--	--	--	--
2-NITROTOLUENE	µg/L	--	8	0%	--	--	0.330	--	--	--	--	--
3-NITROTOLUENE	µg/L	--	8	0%	--	--	0.150	--	--	--	--	--
4-AMINO-2,6-DINITROTOLUENE	µg/L	--	8	0%	--	--	0.100	--	--	--	--	--
4-NITROTOLUENE	µg/L	--	8	0%	--	--	0.330	--	--	--	--	--
HMX	µg/L	--	8	0%	--	--	0.250	--	--	--	--	--
NITROBENZENE	µg/L	--	8	0%	--	--	0.100	--	--	--	--	--
TETRYL	µg/L	--	8	0%	--	--	0.075	--	--	--	--	--
N-NITROSODI-N-PROPYLAMINE	µg/L	--	8	0%	--	--	0.003	--	--	--	--	--

* The Applicable Regulatory Limit is the regulatory limit with the lowest concentration; CA PHG is not included.

Notes:

µg/L = micrograms per liter
µg/mL = micrograms per milliliter
mg/L = milligrams per liter
NTU = Nephelometric Turbidity Units
mg O2/L = milligrams of oxygen per liter
pCi/L = picocuries per liter
pg/L = picograms per liter

(1) presence of methylene chloride has been attributed to laboratory contamination.
1/2 of the detection limit was used for nondetected values when calculating the arithmetic mean, geometric mean, standard deviation, and 95% upper confidence limit.

TABLE 3-13

Chemical Concentrations Estimated to be Present in the Influent to Water Treatment Plant for the Arroyo Well and Well

Estimated from the Comprehensive Groundwater Monitoring Event (Dec 2002-Feb 2003)

Analyte	Unit	Estimated Influent Concentration [1]	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level
Analytes Detected that Exceed MCLs or ALs						
PERCHLORATE	µg/L	20.3	--	--	6	6
1,2,3-TRICHLOROPROPANE	µg/L	0.01	--	--	--	0.005
CARBON TETRACHLORIDE	µg/L	2.86	0.5	--	0.1	--
TURBIDITY	NTU	8.61	--	5	--	--
Analytes Detected that do not Exceed MCLs or ALs, or do not have MCLs or ALs						
COLOR	COLOR	5.7190	--	15	--	--
HARDNESS (TOTAL) AS CACO3	mg/L	297	--	--	--	--
TOTAL DISSOLVED SOLIDS (TDS)	mg/L	388	--	1000	--	--
ALUMINUM	µg/L	11.6700	1000	200	600	--
ANTIMONY	µg/L	0.3030	6	--	20	--
ARSENIC	µg/L	1.0780	50	--	0.004	--
BARIUM	µg/L	68.8400	1000	--	2000	--
BERYLLIUM	µg/L	0.4344	4	--	1	--
BORON	µg/L	115	--	--	--	1000
CADMIUM	µg/L	0.0935	5	--	0.07	--
CALCIUM	µg/L	53941	--	--	--	--
CHROMIUM	µg/L	3.1910	50	--	--	--
COBALT	µg/L	0.0838	--	--	--	--
COPPER	µg/L	1.4070	--	1000	170	1300
IRON	µg/L	119	--	300	--	--
LEAD	µg/L	0.1930	--	--	2	15
MAGNESIUM	µg/L	19454	--	--	--	--
MANGANESE	µg/L	12.4900	--	50	--	500
METHYLENE CHLORIDE (DICHLOROMETHANE)[2]	µg/L	0.50	5	--	4	--
NICKEL	µg/L	1.8620	100	--	12	--
POTASSIUM	µg/L	2534	--	--	--	--
SELENIUM	µg/L	0.6281	50	--	--	--
SILVER	µg/L	0.0953	--	100	--	--
SODIUM	µg/L	29081	--	--	--	--
THALLIUM	µg/L	0.0966	2	--	0.1	--
VANADIUM	µg/L	5.2380	--	--	--	50
ZINC	µg/L	15.1660	--	5000	--	--
CHROMIUM (VI)	mg/L	0.0005	--	--	--	--
BROMIDE	mg/L	0.6699	--	--	--	--
CHLORATE	mg/L	0.2252	--	--	--	--
CHLORIDE	mg/L	43.0	--	500	--	--
FLUORIDE	mg/L	1.4260	2	--	1	--
NITRATE - NO3	mg/L	4.1610	45	--	45	--
SULFATE (SO4--)	mg/L	59.3	--	500	--	--
ALKALINITY	mg/L	188	--	--	--	--
BIOLOGIC OXYGEN DEMAND	mg O2/L	1.5178	--	--	--	--
TOTAL ORGANIC CARBON	mg/L	2.3783	--	--	--	--
FOAMING AGENTS (MBAS)	mg/L	0.0282	--	0.5	--	--
PROPACHLOR	µg/L	0.0653	--	--	--	--
1,1,2-TRICHLOROTRIFLUOROETHANE	µg/L	0.3733	1200	--	--	--
1,1-DICHLOROETHANE	µg/L	0.2250	5	--	3	--
1,1-DICHLOROETHENE	µg/L	0.2531	6	--	10	--
BROMOCHLOROMETHANE	µg/L	1.5940	--	--	--	--
CHLOROFORM	µg/L	0.9755	100	--	--	--
ETHYLBENZENE	µg/L	0.3067	300	--	300	--
STYRENE	µg/L	0.2667	100	--	--	--
TETRACHLOROETHENE (PCE)	µg/L	0.7594	5	--	0.06	--
TRICHLOROETHENE (TCE)	µg/L	2.1500	5	--	0.8	--
TRICHLOROFLUOROMETHANE	µg/L	0.2600	150	--	700	--
CHLOROFORM	µg/L	1.6700	100	--	--	--
TOTAL TRIHALOMETHANES	µg/L	1.6900	100	--	--	--
TPH-DIESEL	mg/L	0.3650	--	--	--	--
TPH-GASOLINE	mg/L	0.0447	--	--	--	--
TPH-MOTOR OILS	mg/L	0.3288	--	--	--	--
1,4-DIOXANE	µg/L	0.8588	--	--	--	3
2,4,6-TRINITROTOLUENE (TNT)	µg/L	2.6730	--	--	--	--
HMX	µg/L	0.7467	--	--	--	--
RDX	µg/L	2.8680	--	--	--	--
PH	UNIT	7.6440	--	--	--	--
MERCURY	µg/L	0.0850	2	--	1.2	--
ALPHA, GROSS	pCi/L	4.4434	15	--	--	--
BETA, GROSS	pCi/L	4.3135	50	--	--	--
N-NITROSODI-N-PROPYLAMINE	µg/L	0.0107	--	--	--	--
N-NITROSODIMETHYLAMINE (NDMA)	µg/L	0.0013	--	--	--	0.01
N-NITROSODIPHENYLAMINE	µg/L	0.0036	--	--	--	--
Analytes that have not been Detected, but Detection Limits Were Above MCL/ALs						
ALDRIN	µg/L	0.0250	--	--	--	0.002
ALPHA-BHC	µg/L	0.0250	--	--	--	0.015
DIELDRIN	µg/L	0.0100	--	--	--	0.002
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE, EDB)	µg/L	0.2500	0.05	--	--	--
N-NITROSODIMETHYLAMINE (NDMA) [1]	µg/L	0.5000	--	--	--	0.01

Notes:

1/2 of the detection limit was used for nondetected values when calculating the arithmetic mean

Table 3-14

Chemical Concentrations Estimated to be Present in the Influent to the Water Treatment Plant for the Ventura and Windsor Production Wells

Analyte	Units	Estimated Influent Concentration (1)	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level
Analytes Detected that Exceed MCLs or ALs						
--	--	--	--	--	--	--
Analytes Detected that do not Exceed MCLs or ALs, or do not have MCLs or ALs						
ALKALINITY (TOTAL) AS CACO3	MG/L	188	--	--	--	--
ALUMINUM	UG/L	48	1000	200	600	--
ARSENIC (2)	UG/L	0.85	50	--	0.004	--
ATRAZINE	UG/L	0.50	1.0	--	0.15	--
BARIUM	UG/L	109	1000	--	2000	--
BENZENE	UG/L	0.25	1.0	--	0.15	--
BERYLLIUM (2)	UG/L	0.50	4	--	1	--
BICARBONATE ALKALINITY	MG/L	211.50	--	--	--	--
BORON	UG/L	81.00	--	--	--	1000
BROMODICHLORMETHANE (THM)	UG/L	0.42	100	--	--	--
BROMOFORM (THM)	UG/L	0.56	--	--	--	--
CALCIUM	MG/L	92.60	--	--	--	--
CARBON TETRACHLORIDE	UG/L	0.26	0.50	--	0.1	--
CHLORATE (2)	MG/L	0.50	--	--	--	0.8
CHLORIDE	MG/L	51.20	--	500	--	--
CHLOROFORM (THM)	UG/L	0.41	100	--	--	--
CHLOROMETHANE	UG/L	0.25	--	--	--	--
CHROMIUM (TOTAL CR-CRVI SCREEN)	UG/L	1.29	50	--	--	--
CHROMIUM (TOTAL)	UG/L	2.77	50	--	--	--
CHROMIUM, HEXAVALENT	UG/L	5.20	50	--	--	--
CIS-1,2-DICHLOROETHYLENE	UG/L	0.23	6.0	--	100	--
COBALT (2)	UG/L	0.15	--	--	--	--
COLOR	COLOR	1.07	--	15	--	--
COMBINED RA 226 + RA 228	PCI/L	1.18	5		--	
COPPER	UG/L	18.17	--	1000	170	1300
DIBROMOCHLOROMETHANE (THM)	UG/L	0.54	100	--	--	--
DICHLOROMETHANE	UG/L	0.26	5.0	--	4	--
FLUORIDE (TEMPERATURE DEPENDENT)	MG/L	0.49	2	--	1	--
GROSS ALPHA	PCI/L	4.58	15	--	--	--
GROSS BETA	PCI/L	4.41	50	--	--	--
HARDNESS (TOTAL) AS CACO3	MG/L	277.00	--	--	--	--
IRON	UG/L	412.50	--	300	--	--
LEAD (2)	UG/L	0.30	--	--	2	15
MAGNESIUM	MG/L	34.50	--	--	--	--
MANGANESE (2)	UG/L	4.25	--	50	--	500
MERCURY (2)	UG/L	0.06	2	--	1.2	--
NICKEL	UG/L	7.50	100	--	12	--
NITRATE (AS NO3)	MG/L	32.85	45	--	45	--
N-NITROSODIPHENYLAMINE (2)	UG/L	0.0029	--	--	--	--
O-XYLENE	UG/L	0.25	1,750	--	1800	--
PERCHLORATE	UG/L	3.64	--	--	6	6.0
PH	NA	7.34	--	--	--	--
POTASSIUM	MG/L	2.38	--	--	--	--
RADIUM 226	PCI/L	0.05	--	--	0.069	--
RADIUM 228	PCI/L	0.64	--	--	0.019	--
SELENIUM (2)	UG/L	1.40	50	--	--	--
SIMAZINE	UG/L	0.50	4.0	--	4	--
SODIUM	MG/L	29.30	--	--	--	--
SULFATE	MG/L	65.00	--	500	--	--
TETRACHLOROETHYLENE	UG/L	0.63	5.0	--	0.06	--
THALLIUM (2)	UG/L	0.12	2	--	0.1	--
TOTAL DISSOLVED SOLIDS	MG/L	391.50	--	1000	--	--
TOTAL TRIHALOMETHANES	UG/L	1.24	--	--	--	--
TRICHLOROETHYLENE	UG/L	0.76	5.0	--	0.8	--
TRICHLOROFLUOROMETHANE	UG/L	0.25	150	--	700	--
TURBIDITY	NTU	0.40	--	5	--	--
URANIUM (PCI/L)	PCI/L	4.65	20	--	0.43	--
VANADIUM	UG/L	7.20	--	--	--	50
XYLENES (TOTAL)	UG/L	0.25	1,750	--	1800	--
ZINC	UG/L	22.15	--	5000	--	--
Analytes that have not been Detected, but Detection Limits Were Above MCL/ALs						
ALDRIN	UG/L	0.05	--	--	--	0.002
BETA-BHC	UG/L	0.05	--	--	--	0.025
DELTA-BHC	UG/L	0.05	--	--	--	0.025
DIELDRIN	UG/L	0.05	--	--	--	0.002
BENZO(A)PYRENE	UG/L	1.00	0.2	--	0.004	--
NDMA	UG/L	1.00	--	--	--	0.01

(1) Influent concentration was estimated by summing estimated influent concentrations for the Windsor and Ventura wells and dividing by two (assuming the average flow rates for the Windsor and Ventura wells were the same at 98 acre ft/month).

(2) These chemicals were not detected in the production wells, but were detected in groundwater collected from JPL's MW-19-3 and MW-21-3 during the Comprehensive Groundwater Monitoring Event in December2002/January 2003. Average concenrations for these constituents were assumed to be equal to the average of MW-19-3 and MW-21-3 and used as substitutes for these constituents in Ventura and Windsor wells.

CA = California
MCL = maximum contaminant level
DHS = Department of Health Services
µg/L = micrograms per liter
NTU = Nephelometric Turbidity Units
pCi/L = picocuries per liter
mg/L = milligrams per liter
1/2 of the detection limit was used for nondetected values when

Table 3-15
Chemical Concentrations Estimated to be Present in the Influent to Water Treatment Plant for LAWC #3 and LAWC #5

Analyte	Units	Estimated Influent Concentration (1)	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level
Analytes Detected that Exceed MCLs or ALs						
CARBON TETRACHLORIDE	UG/L	0.53	0.50	--	0.1	--
PERCHLORATE	UG/L	10.52	--	--	6	6.0
TRICHLOROETHYLENE	UG/L	13.19	5.0	--	0.8	--
Analytes Detected that do not Exceed MCLs or ALs, or do not have MCLs or ALs						
1,1,1-TRICHLOROETHANE	UG/L	0.30	200	--	1000	--
ALKALINITY (TOTAL) AS CACO3	MG/L	162.18	--	--	--	--
ALUMINUM	UG/L	56.81	1000	200	600.0	--
ARSENIC (2)	UG/L	2.45	50	--	0.004	--
ATRAZINE	UG/L	0.53	1.0	--	0.15	--
BARIUM (2)	UG/L	40.90	1000	--	2000	--
BERYLLIUM (2)	UG/L	1.35	4	--	1	--
BICARBONATE ALKALINITY	MG/L	198.43	--	--	--	--
BORON (2)	UG/L	50.00	--	--	--	1000
BROMODICHLORMETHANE (THM)	UG/L	0.33	100	--	--	--
CALCIUM	MG/L	49.47	--	--	--	--
CHLORIDE	MG/L	13.00	--	500	--	--
CHLOROFORM (THM)	UG/L	2.83	100	--	--	--
CHROMIUM (2)	UG/L	2.20	50	--	--	--
CHROMIUM, HEXAVALENT	UG/L	1.59	--	--	--	--
COBALT(3)	UG/L	0.06	--	--	--	--
COLOR	UNITS	1.50	--	15	--	--
COPPER (2)	UG/L	0.80	--	1000	170	1300
DIBROMOCHLOROMETHANE (THM)	UG/L	0.26	100	--	--	--
FLUORIDE (TEMPERATURE DEPENDENT)	MG/L	0.69	2	--	1	--
GROSS ALPHA	PCI/L	4.12	15	--	--	--
HARDNESS (TOTAL) AS CACO3	MG/L	188.62	--	--	--	--
IRON	UG/L	118.10	--	300	--	--
LEAD (2)	UG/L	0.10	--	--	2	15
MAGNESIUM	MG/L	15.54	--	--	--	--
MANGANESE (2)	UG/L	7.02	--	50	--	500
MERCURY (2)	UG/L	0.08	2	--	1.2	--
NICKEL (2)	UG/L	0.60	100	--	12	--
NITRATE (AS NO3)	MG/L	11.08	45	--	45	--
NITRATE + NITRITE (AS N)	UG/L	2198.57	10000	--	10000	--
N-NITROSODIPHENYLAMINE (2)	UG/L	1.31	--	--	--	--
PH	NA	7.44	--	--	--	--
POTASSIUM	MG/L	1.75	--	--	--	--
SIMAZINE	UG/L	0.50	4.0	--	--	--
SODIUM	MG/L	18.13	--	--	--	--
SULFATE	MG/L	32.74	--	500	--	--
TETRACHLOROETHYLENE	UG/L	0.75	5.0	--	0.06	--
TOTAL DISSOLVED SOLIDS	MG/L	235.67	--	1000	--	--
TOTAL TRIHALOMETHANES	UG/L	3.11	--	--	--	--
TURBIDITY	NTU	0.27	--	5	--	--
URANIUM	PCI/L	5.44	20	--	0.43	--
VANADIUM	UG/L	7.12	--	--	--	50
ZINC (2)	UG/L	14.50	--	5000	--	--
Analytes that have not been Detected, but Detection Limits Were Above MCL/ALs						
ALDRIN	UG/L	0.01	--	--	--	0.002
BENZO(A)PYRENE	UG/L	5.00	0.2	--	0.004	--
BETA-BHC	UG/L	0.03	--	--	--	0.025
DELTA-BHC	UG/L	0.03	--	--	--	0.025
DIELDRIN	UG/L	0.03	--	--	--	0.002
NDMA	UG/L	2.50	--	--	--	0.01

(1) Influent concentration was estimated by multiplying the average concentration by the average flow rate for each well, summing these products together and dividing by the total flow rate (i.e., sum of flow rate for LAWC #3 and LAWC #5). Average flow rate for LAWC #3 is 40 acre ft/month and average flow rate for LAWC #5 is 44 acre ft/month.

(2) These chemicals were not detected in the production wells, but were detected in groundwater collected from JPL's MW-17-3 and MW-17-4 during the Comprehensive Groundwater Monitoring Event in December 2002/January 2003. Average concentrations for these constituents were assumed to be equal to the average of MW-17-3 and MW-17-4 and used as substitutes for these constituents in LAWC #3 and LAWC #5. Although carbon tetrachloride, PCE, and TCE also were detected in MW-17-3 and MW-17-4, these constituents were already present in the production wells and therefore average concentrations were based on production well data.

(3) Cobalt was not analyzed for in the LAWC wells; therefore, the average cobalt concentration based on MW-17-3 and MW-17-4 was used to determine the influent concentration. This average concentration was assumed to be representative for both wells, multiplied by the respective average flow rate, summed, then divided by the total flow rate.

CA = California
MCL = maximum contaminant level
DHS = Department of Health Services
µg/L = micrograms per liter
NTU = Nephelometric Turbidity Units
pCi/L = picocuries per liter
mg/L = milligrams per liter
1/2 of the detection limit was used for nondetected values when

Table 3-16
Chemical Concentrations Estimated to be Present in the Influent to Water Treatment Plant for Rubio Cañon Wells #4 & #7

Analyte	Units	Estimated Influent Concentration[1]	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level
Analytes Detected that Exceed MCLs or ALs						
--	--	--	--	--	--	--
Analytes Detected that do not Exceed MCLs or ALs, or do not have MCLs or ALs						
AGGRESSIVE INDEX (CORROSIVITY)	NA	12.06	--	Non-Corrosive	--	--
ALKALINITY (TOTAL) AS CACO3	MG/L	192.88	--	--	--	--
ALUMINUM	UG/L	35.09	1,000	200	600	--
ARSENIC	UG/L	1.13	50	--	0.004	--
ATRAZINE	UG/L	0.50	1.0	--	--	--
BARIUM	UG/L	47.53	1,000	--	2000	--
BICARBONATE ALKALINITY	MG/L	234.51	--	--	--	--
BORON	UG/L	110.00	--	--	--	1,000
CADMIUM	UG/L	1.00	5	--	0.07	--
CALCIUM	MG/L	55.61	--	--	--	--
CARBONATE ALKALINITY	MG/L	0.57	--	--	--	--
CHLORIDE	MG/L	24.01	--	500	--	--
CHLOROFORM (THM)	UG/L	0.74	100	--	--	--
CHROMIUM (TOTAL)	UG/L	9.80	50	--	--	--
CHROMIUM, HEXAVALENT	UG/L	1.37	--	--	--	--
COLOR	UNITS	1.54	--	15	--	--
COMBINE RA 226 + RA 228	PCI/L	0.58	5	--	--	--
COPPER	UG/L	21.73	--	1,000	170	1,300
DIBROMOCHLOROMETHANE (THM)	UG/L	0.28	100	--	--	--
FLUORIDE (TEMPERATURE DEPENDENT)	MG/L	0.91	2	--	1	--
GROSS ALPHA	PCI/L	8.15	15	--	--	--
HARDNESS (TOTAL) AS CACO3	MG/L	214.36	--	--	--	--
IRON	UG/L	46.40	--	300	--	--
LEAD	UG/L	2.64	--	--	2	15
MAGNESIUM	MG/L	18.03	--	--	--	--
MANGANESE	UG/L	10.40	--	50	--	500
MERCURY	UG/L	0.45	2	--	1.2	--
NITRATE (AS NO3)	MG/L	23.72	45	--	45	--
NITRATE + NITRITE (AS N)	UG/L	3,728	10,000	--	10000	--
NITRATE + NITRITE (NO3-N)	UG/L	3,057	--	--	--	--
PERCHLORATE	UG/L	2.67	--	--	6	6
PH, LABORATORY	NA	7.68	--	--	--	--
POTASSIUM	MG/L	1.93	--	--	--	--
RADIUM 226	PCI/L	0.40	--	--	0.069	--
SELENIUM	UG/L	2.33	50	--	--	--
SILVER	UG/L	5.00	--	100	--	--
SIMAZINE	UG/L	0.50	4	--	--	--
SODIUM	MG/L	31.07	--	--	--	--
SULFATE	MG/L	37.33	--	500	--	--
TOTAL DISSOLVED SOLIDS	MG/L	307.65	--	1000	--	--
TOTAL TRIHALOMETHANES	UG/L	0.79	--	--	--	--
TRICHLOROETHYLENE	UG/L	0.35	5	--	0.8	--
TURBIDITY	NTU	0.27	--	5	--	--
URANIUM (PCI/L)	PCI/L	9.13	20	--	0.43	--
VANADIUM	UG/L	4.10	--	--	--	50
ZINC	UG/L	21.40	--	5,000	--	--
ODOR THRESHOLD @ 60 C		1.00	--	3	--	--
SPECIFIC CONDUCTANCE	US	550.53	--	1600	--	--
Analytes that have not been Detected, but Detection Limits Were Above MCL/ALs						
N-NITROSODIMETHYLAMINE (NDMA)	UG/L	5	--	--		0.01
1,2,3-TRICHLOROPROPANE	UG/L	0.01	--	--		0.005
ALDRIN	UG/L	0.08	--	--		0.002
DIELDRIN	UG/L	0.02	--	--		0.002

1) Influent concentration was estimated by multiplying the average concentration by the average flow rate for each well, summing these products together and dividing by the total flow rate (i.e., sum of flow rate for Rubio #4 and Rubio #7). Average flow rate for Rubio #4 is 39 acre ft/month and average flow rate for Rubio #7 is 78 acre ft/month.

CA = California
MCL = maximum contaminant level
PHG = Public Health Goal
DHS = Department of Health Services

Table 3-17
Chemical Concentrations Estimated to be Present in the Influent to Water Treatment Plant for Las Flores Well 2

Analyte	Units	Arithmetic Mean	CA Primary MCL	CA Secondary MCL	CA PHG	DHS Action Level
Analytes Detected that Exceed MCLs or ALs						
NITRATE (AS NO3)	MG/L	45.95	45	--	45	--
NITRATE + NITRITE (AS N)	UG/L	10049	10000	--	10000	--
PERCHLORATE	UG/L	6.11	--	--	6	6
TETRACHLOROETHYLENE	UG/L	10.36	5	--	0.06	--
Analytes Detected that do not Exceed MCLs or ALs, or do not have MCLs or ALs						
AGGRESSIVE INDEX (CORROSIVITY)	NA	11.89	--	Non-Corrosive	--	--
ALKALINITY (TOTAL) AS CACO3	MG/L	187.2	--	--	--	--
ALUMINUM	UG/L	42.25	1000	200	600	--
ARSENIC	UG/L	1.5	50	--	0.004	--
BICARBONATE ALKALINITY	MG/L	227.8	--	--	--	--
BROMODICHLORMETHANE (THM)	UG/L	0.32	--	--	--	--
BROMOFORM (THM)	UG/L	0.87	--	--	--	--
CALCIUM	MG/L	81.67	--	--	--	--
CARBONATE ALKALINITY	MG/L	0.49	--	--	--	--
CHLORIDE	MG/L	39.05	--	500	--	--
CHLOROFORM (THM)	UG/L	1.52	100	--	--	--
CHROMIUM, HEXAVALENT	UG/L	3.63	--	--	--	--
COMBINE RA 226 + RA 228	PCI/L	0.42	5	--	--	--
DIBROMOCHLOROMETHANE (THM)	UG/L	0.60	100	--	--	--
DIBROMOCHLOROPROPANE (DBCP)	UG/L	0.006	0.2	--	--	--
ETHYLBENZENE	UG/L	0.28	300	--	300	--
FLUORIDE (TEMPERATURE DEPENDENT)	MG/L	0.59	2	--	1	--
GROSS ALPHA	PCI/L	10.93	15	--	--	--
GROSS BETA	PCI/L	4.90	50	--	--	--
HARDNESS (TOTAL) AS CACO3	MG/L	291.7	--	--	--	--
M,P-XYLENE	UG/L	0.47	1750	--	1800	--
MAGNESIUM	MG/L	22.6	--	--	--	--
O-XYLENE	UG/L	0.30	1750	--	1800	--
PH, LABORATORY	NA	7.33	--	--	--	--
POTASSIUM	MG/L	2.28	--	--	--	--
RADIUM 226	PCI/L	0.17	--	--	0.069	--
SODIUM	MG/L	24.35	--	--	--	--
SULFATE	MG/L	64.93	--	500	--	--
TOTAL DISSOLVED SOLIDS	MG/L	390.17	--	1000	--	--
TOTAL TRIHALOMETHANES	UG/L	1.41	--	--	--	--
TURBIDITY	NTU	0.1	--	5	--	--
URANIUM (PCI/L)	PCI/L	13.28	20	--	0.43	--
VANADIUM	UG/L	4.90	--	--	--	50
XYLENES (TOTAL)	UG/L	0.50	1750	--	1800	--
ODOR THRESHOLD @ 60 C		1	--	3	--	--
SPECIFIC CONDUCTANCE	US	648.8	--	1600	--	--
Analytes that have not been Detected, but Detection Limits Were Above MCL/ALs						
ALDRIN	UG/L	0.075	--	--	--	0.002
DIELDRIN	UG/L	0.02	--	--	--	0.002
DIMETHOATE	UG/L	10	--	--	--	1.0

CA = California
MCL = maximum contaminant level
PHG = Public Health Goal
DHS = Department of Health Services

Table 3-18. Results of Modeling Simulations

Chemical	Target Level (µg/L)	Maximum Concentration Required to Meet Action Level (µg/L)														
		Distance = 500 ft					Distance = 1,000 ft					Distance = 1,500 ft				
		Sorption (mL/g)					Sorption (mL/g)					Sorption (mL/g)				
		0	0.001	0.01	0.1	1	0	0.001	0.01	0.1	1	0	0.001	0.01	0.1	1
Perchlorate	6	66.312	66.312	69.48	102.12	429	130.26	130.8	137.1	201.6	846.84	193.92	195	204.72	42485.96	1264.98
CCl4	0.5	5.526	5.526	5.79	8.51	35.75	10.855	10.9	11.425	16.8	70.57	16.16	16.25	17.06	3540.497	105.415
TCE/PCE	5	55.26	55.26	57.9	85.1	357.5	108.55	109	114.25	168	705.7	161.6	162.5	170.6	35404.97	1054.15
2,4,6-TNT	2.2	24.3144	24.3144	25.476	37.444	157.3	47.762	47.96	50.27	73.92	310.508	71.104	71.5	75.064	15578.19	463.826
HMX	1800	19893.6	19893.6	20844	30636	128700	39078	39240	41130	60480	254052	58176	58500	61416	12745789	379494
RDX	0.61	6.74172	6.74172	7.0638	10.3822	43.615	13.2431	13.298	13.9385	20.496	86.0954	19.7152	19.825	20.8132	4319.406	128.6063
NDMA	0.0013	0.0143676	0.014368	0.015054	0.022126	0.09295	0.028223	0.02834	0.029705	0.04368	0.183482	0.042016	0.04225	0.044356	9.205292	0.274079
n-Nitrosodi-n-propylamine	0.0096	0.1060992	0.106099	0.111168	0.163392	0.6864	0.208416	0.20928	0.21936	0.32256	1.354944	0.310272	0.312	0.327552	67.97754	2.023968
n-Nitrosodiphenylamine	14	154.728	154.728	162.12	238.28	1001	303.94	305.2	319.9	470.4	1975.96	452.48	455	477.68	99133.91	2951.62
Chlorate	800	8841.6	8841.6	9264	13616	57200	17368	17440	18280	26880	112912	25856	26000	27296	5664795	168664
Propachlor	470	5194.44	5194.44	5442.6	7999.4	33605	10203.7	10246	10739.5	15792	66335.8	15190.4	15275	16036.4	3328067	99090.1
TCP	0.005	0.05526	0.05526	0.0579	0.0851	0.3575	0.10855	0.109	0.11425	0.168	0.7057	0.1616	0.1625	0.1706	35.40497	1.05415
1,4-Dioxane	3	33.156	33.156	34.74	51.06	214.5	65.13	65.4	68.55	100.8	423.42	96.96	97.5	102.36	21242.98	632.49
Time (yr)		2.4	2.5	2.5	3.8	15.5	4.7	4.8	5.0	7.3	30.3	7.1	7.1	7.4	10.8	45.0

Chemical	Target Level (µg/L)	Maximum Concentration Required to Meet Action Level (µg/L)														
		Distance = 2,000 ft					Distance = 2,500 ft					Distance = 3,000 ft				
		Sorption (mL/g)					Sorption (mL/g)					Sorption (mL/g)				
		0	0.001	0.01	0.1	1	0	0.001	0.01	0.1	1	0	0.001	0.01	0.1	1
Perchlorate	6	256.08	257.64	270.54	397.92	1671	321.6	322.92	339.24	497.4	2088.6	389.4	391.56	411	603.6	2539.8
CCl4	0.5	21.34	21.47	22.545	33.16	139.25	26.8	26.91	28.27	41.45	174.05	32.45	32.63	34.25	50.3	211.65
TCE/PCE	5	213.4	214.7	225.45	331.6	1392.5	268	269.1	282.7	414.5	1740.5	324.5	326.3	342.5	503	2116.5
2,4,6-TNT	2.2	93.896	94.468	99.198	145.904	612.7	117.92	118.404	124.388	182.38	765.82	142.78	143.572	150.7	221.32	931.26
HMX	1800	76824	77292	81162	119376	501300	96480	96876	101772	149220	626580	116820	117468	123300	181080	761940
RDX	0.61	26.0348	26.1934	27.5049	40.4552	169.885	32.696	32.8302	34.4894	50.569	212.341	39.589	39.8086	41.785	61.366	258.213
NDMA	0.0013	0.055484	0.055822	0.058617	0.086216	0.36205	0.06968	0.069966	0.073502	0.10777	0.45253	0.08437	0.084838	0.08905	0.13078	0.55029
n-Nitrosodi-n-propylamine	0.0096	0.409728	0.412224	0.432864	0.636672	2.6736	0.51456	0.516672	0.542784	0.79584	3.34176	0.62304	0.626496	0.6576	0.96576	4.06368
n-Nitrosodiphenylamine	14	597.52	601.16	631.26	928.48	3899	750.4	753.48	791.56	1160.6	4873.4	908.6	913.64	959	1408.4	5926.2
Chlorate	800	34144	34352	36072	53056	222800	42880	43056	45232	66320	278480	51920	52208	54800	80480	338640
Propachlor	470	20059.6	20181.8	21192.3	31170.4	130895	25192	25295.4	26573.8	38963	163607	30503	30672.2	32195	47282	198951
TCP	0.005	0.2134	0.2147	0.22545	0.3316	1.3925	0.268	0.2691	0.2827	0.4145	1.7405	0.3245	0.3263	0.3425	0.503	2.1165
1,4-Dioxane	3	128.04	128.82	135.27	198.96	835.5	160.8	161.46	169.62	248.7	1044.3	194.7	195.78	205.5	301.8	1269.9
Time (yr)		9.2	9.2	9.7	14.1	58.8	11.4	11.5	12.1	17.8	74.1	13.7	13.9	14.5	21.3	88.6

Note: Target levels for the chemicals are as follows:
Perchlorate = DHS action level
Carbon tetrachloride (CCL4) = DHS MCL
TCE/PCE = DHS MCL
2,4,6-TNT = EPA Region 9 tapwater preliminary remediation goal
HMX = EPA Region 9 tapwater preliminary remediation goal
RDX = EPA Region 9 tapwater preliminary remediation goal
NDMA = EPA Region 9 tapwater preliminary remediation goal (DHS action level is 0.01 ug/L)
N-nitrosodi-n-propylamine = EPA Region 9 tapwater preliminary remediation goal
N-nitrosodiphenylamine = EPA Region 9 tapwater preliminary remediation goal
Chlorate = DHS action level
Propachlor = EPA Region 9 tapwater preliminary remediation goal
TCP = DHS action level
1,4-dioxane = DHS action level

Table 3-19. Comparison of Measured Concentrations in JPL Wells[1] Within Radii of Influence of Arroyo Well to Estimated Concentrations Determined from Groundwater Modeling

Analyte	Unit	MW-3 (~800 ft)	MW-12 (~1,300 ft)	MW-11 (~1,500 ft)	MW-7 (~2,200)	MW-13 (~2,200)	Estimated Concentrations, no Sorption [2]					
							500 ft	1,000 ft	1,500 ft	2,000 ft	2,500 ft	3,000 ft
PERCHLORATE	µg/L	<4 – 91	4 – 9.2	<4 – 29	120 - 13300	57 - 590	66	130	194	256	322	389
CARBON TETRACHLORIDE	µg/L	0.2 – 230	<0.2 – 35	0.5 – 11.7	<0.2 - 310	<0.5 - 70	5.5	11	16	21	27	33
TCE	µg/L	0.4 – 35	0.3 – 3	0.4 – 6.6	<0.5 - 48	<0.5 - 73	55	109	162	213	268	325
PCE	µg/L	0.3 – 1.7	<0.5 – 1.2	0.3 – 7.7	<0.5 - 33	<0.5 - 1.5	55	109	162	213	268	325
TNT	µg/L	<2 – 26	<0.11 – 2.2	<0.11	<0.11	NA	24	48	71	94	118	143
HMX	µg/L	<10 – 2.5	<0.5	<0.5	<0.5	NA	19894	39078	58176	76824	96480	116820
RDX	µg/L	<4 – 27	0.66 – 3	<0.2	<0.2	NA	7	13	20	26	33	40
NDMA	µg/L	0.00044 – 0.006	<0.002	0.002 – 0.003	0.00366	<5	0.01	0.03	0.04	0.06	0.07	0.08
N-NITROSODI-N-PROPYLAMINE	µg/L	<5 – 0.125	<0.005	<0.005 - <5	<0.005	<5	0.11	0.21	0.31	0.41	0.52	0.62
N-NITROSODIPHENYLAMINE	µg/L	<5 – 0.025	<0.005	0.0018 – 0.0019	0.00174	<5	155	304	452	598	750	909
CHLORATE	mg/L	<0.1	<0.1	<0.1 – 0.073	<0.1	NA	8842	17368	25856	34144	42880	51920
PROPACHLOR	µg/L	<0.1	<0.1	<0.05 – 0.28	<0.1	NA	5194	10204	15190	20060	25192	30503
1,2,3-TRICHLOROPROPANE	µg/L	<0.005	0.024	<0.5 – 0.071	<0.005	<0.5	0.06	0.11	0.16	0.21	0.27	0.32
1,4-DIOXANE	µg/L	<1 – 0.6	<1 – 1.7	<0.96 – 1.9	<3 - 5	<3	33	65	97	128	161	195

Shading indicates that the maximum concentration detected in the JPL Well was greater than the concentration estimated to have to be present at a certain distance away from the Arroyo Well to exceed the target level.

NA – Analyte not analyzed for in this well.

(1) Based on JPL monitoring well data from 1996 through February 2003.

(2) Concentration taken from Table 3-18.

Table 3-20
Identification of COPCs and Potential Range of Concentrations

COPC	Units	Historical Average Concentrations (1)	Historical Maximum Concentrations (2)	Estimated Influent Concentration (3)	Applicable Regulatory Limit (4)
Arroyo and Well 52					
1,2,3-TRICHLOROPROPANE	UG/L	ND	ND	0.014	0.005
CARBON TETRACHLORIDE	UG/L	4.7	15	2.86	0.5
PERCHLORATE	UG/L	96.2	160	20.3	6
TRICHLOROETHENE	UG/L	3.7	15	2.15	5
TNT [5]	UG/L	NAF	NAF	2.67	N/A
RDX [5]	UG/L	NAF	NAF	2.87	N/A
Ventura and Windsor Wells					
PERCHLORATE	UG/L	4	9.7	4.2	6
LAWC Wells #3 and #5					
CARBON TETRACHLORIDE	UG/L	0.64	2.6	0.57	0.50
PERCHLORATE	UG/L	6.8	31	10.52	6
TRICHLOROETHYLENE	UG/L	19.63	57	10.70	5.0
Las Flores					
PERCHLORATE	UG/L	6.2	9	6.2	6
NITRATE (AS NO3)	MG/L	46	60.3	46	45
TETRACHLOROETHYLENE	UG/L	10.4	17	10.4	5

(1) Historical average concentrations based on historical production well monitoring data. Concentration shown is the higher of the average concentration determined for each production well.

(2) Historical maximum concentrations based on historical production well monitoring data. Concentration shown is the higher of the maximum concentrations determined for each production well.

(3) Influent estimate obtained from Tables 3-13 through 3-17.

(4) Applicable regulatory limit is the lowest of the primary MCL, secondary MCL, and AL.

(5) COPCs

ND - not detected

NA - not applicable

NAF - not analyzed for in historical samples

Table 5-1. PWP Sampling Location and Monitoring Schedule

Analyte	Method	Ventura Well	Windsor Well	Arroyo Well	Well 52	Air Stripper Effluent	Lead VGAC Effluent	Combined Air Discharge	IX Influent	Each IX Effluent	LGAC Influent	Each LGAC-Port 4	Combined Effluent
VOCs[(a)]	EPA 524.2	M	M	M	M	M	M	M	-	-	W	W	M
1,2,3-Trichrolopropane	EPA 504.1	M	M	M	M	M	M	M	-	-	W	W	M
Perchlorate	EPA 314.0	M	M	M	M	M	M	M	W	W	-	-	M
Total Coliform	EPA 1604	-	-	-	-	-	-	-	-	-	M	M	W
Heterotrophic Plate Count	SM 9215B	-	-	-	-	-	-	-	-	-	M	M	W
Nitrate	EPA 300.0	M	M	M	M	M	M	M	M	M	-	-	M

(a) VOCs include carbon tetrachloride, trichloroethene, tetrachloroethene, and 1,1-dichloroethene
M = Monthly
W = Weekly

Table 5-2. LAWC Sampling Location and Monitoring Schedule

Analyte	Method	LAWC #3	LAWC #5	IX Influent	Lead IX Effluent	Lag IX Effluent	LGAC-4th Port[2]	LGAC-Effluent[3]	Combined Effluent
Trichloroethene (TCE)	EPA 524.2	M	M	-	-	-	W	M	M
Tetrachloroethene (PCE)	EPA 524.2	M	M	-	-	-	W	M	M
Carbon Tetrachloride (CTC)	EPA 524.2	M	M	-	-	-	W	M	M
1,2,3-Trichrolopropane (TCP)	EPA 504.1	M	M	-	-	-	-	-	-
Perchlorate	EPA 314.0	M	M	W	W[1]	W	-	-	M
Nitrate	EPA 300.0	-	-	M	M	M	-	M	-
Total Coliform	EPA 1604	M	M	-	-	-	-	M	W
Heterotrophic Plate Count	SM 9215B	-	-	-	-	-	-	M	W

(1) Sample Lead bed effluent twice weekly after initial detection is confirmed.
(2) Samples will be collected from the 4th port of each LGAC vessel.
(3) Samples will be collected from the effluent of each LGAC vessel.
M = Monthly
W = Weekly

Table 5-3. Las Flores Water Company Sampling Location and Monitoring Schedule

Analyte	Method	Mountain View Well 2	GAC Sample Port at 50%	GAC Sample Port at 75%	GAC Effluent	Blending Facility
PCE	EPA 524.2	W	W[a]	W[a]	W	W[b]
Perchlorate	EPA 314.0	W	W[a]	W[a]	W	W
Nitrate	EPA 300.0	W	-	-	W	W
Heterotrophic Plate Count	SM 9215B	M	-	-	M	-
VOCs	EPA 524.2	A	-	-	-	-

(a) PCE and perchlorate samples collected weekly from the GAC sample port at 50% until detected. Once PCE and perchlorate are detected at the 50% sample port, then samples will be collected weekly from the GAC sample port at 75%.
(b) PCE samples collected weekly from the Blending Facility only if the GAC is bypassed.

M = Monthly
W = Weekly
A = Annually

Table 5-4
Treatability Assessment for Water Treatment Plants

Analytes Detected that Exceed MCLs or ALs	Units	Estimated Influent Concentration (1)	CA Primary MCL	CA Secondary MCL	DHS Action Level	Treatability Assessment	Treatment Method
PWP Treatment System							
PERCHLORATE	µg/L	20.3	--	--	6	Yes	Ion Exchange
1,2,3-TRICHLOROPROPANE	µg/L	0.01	--	--	0.005	Yes	AS/LGAC
CARBON TETRACHLORIDE	µg/L	2.86	0.5	--	--	Yes	AS/LGAC
TRICHLOROETHYLENE	µg/L	2.15	5.0	--	--	Yes	AS/LGAC
2,4,6-TRINITROTOLUENE	µg/L	2.67	--	--	--	Yes	LGAC
RDX	µg/L	2.87	--	--	--	Yes	LGAC
LAWC Treatment System							
PERCHLORATE	µg/L	11.8	--	--	6	Yes	Ion Exchange
CARBON TETRACHLORIDE	µg/L	0.57	0.50	--	--	Yes	LGAC
TRICHLOROETHYLENE	µg/L	10.70	5.0	--	--	Yes	LGAC
Las Flores Treatment System							
NITRATE (AS NO3)	MG/L	45.95	45	--	--	Yes	Blending
PERCHLORATE	UG/L	6.24	--	--	6	Yes	Blending
TETRACHLOROETHYLENE	UG/L	10.36	5	--	--	Yes	LGAC

Notes:
CA = California
MCL = maximum contaminant level
DHS = Department of Health Services
µg/L = micrograms per liter
NTU = Nephelometric Turbidity Units
pCi/L = picocuries per liter
mg/L = milligrams per liter
(1) 1/2 the detection limit was used for nondetect values in calculating the average concentration for each well. Influent concentration was estimated by multiplying the average concentration by the average flow rate for each well, summing these products together and dividing by the total flow rate (i.e., sum of flow rate for Ventura and Windsor). Average flow rate for Ventura is 105 acre ft/month and average flow rate for Windsor is 88 acre ft/month.

TABLE 6-1
Estimates of Risk Based on Treatment System Failure at the Water Treatment Plant for the Arroyo Well and Well 52

Analyte [1]	MCL or AL (ug/L)	CA OEHHA PHG (ug/L)	CA OEHHA PHG Support Document (ug/L)	U.S. EPA Region 9 PRG (ug/L)	Applicable Standard (Cancer) (ug/L)	Applicable Standard (Non-cancer) (ug/L)	Estimated Influent Concentration [1] (ug/L)	Exposure Duration (total number of days treatment system fails over 20 years) [5]	Incremental Cancer Risk [6]	Noncancer Hazard Quotient [7]
1,2,3-TRICHLOROPROPANE	0.005	--	--	0.0056 ca	0.005	NA	0.01	56	4.4E-09	NA
CARBON TETRACHLORIDE	0.5	0.1	5	0.17 ca	0.1	5	2.86	56	6.3E-08	0.6
PERCHLORATE	6	6	--	3.6 ca 3.6 nc	NA	6	20.30	56	NA	3.4
2,4,6-TNT	--	--	--	2.2 ca	2.2	NA	2.67	56	2.7E-09	NA
RDX	--	--	--	0.61 ca	0.61	NA	2.87	56	1.0E-08	NA
							TOTAL		8.0E-08	4.0

(1) Estimates of risk were determined for chemicals of potential concern that were identified in Section 3.5 and listed in Table 3-20.

(2) U.S. EPA Region 9 Preliminary Remediation Goals (PRGs) accessed at http://www.epa.gov/region09/waste/sfund/prg/files/02table.pdf; ca = carcinogen; nc = noncarcinogen.

(3) Applicable standards (cancer and noncancer) were based on the PHG, USEPA Region 9 PRG or the MCL/AL. PHGs were used as the standard if one was available. If no PHG existed, then the lower of the USEPA Region 9 PRG value and MCL/AL was used. The MCL/AL was used when no PHG or PRG existed. In some cases, the PHG was obtained from the documentation supporting the PHG available at http://www.oehha.ca.gov/water/phg/allphgs.html.

(4) Influent concentrations are the arithmetic means of the estimated water quality of the influent to the water treatment plant obtained from Section 3.0.

(5) Assumes complete system failure once every five years for 14-days over a 20-year period.

(6) Calculation of cancer risk: [(Concentration/Applicable or Relevant Standard for Cancer) x (Period of exposure in days)/(365 days x 70 years)]

(7) Calculation of hazard quotient: [(Concentration/Applicable or Relevant Standard for noncancer)]; Noncancer hazard quotient equal to or greater than 1 indicates potential for adverse health effect, depending on toxicity endpoint.

TABLE 6-2
Estimates of Risk Based on Treatment System Failure at the Water Treatment Plant for the Ventura and Windsor Wells

Analyte	Primary MCL or AL (ug/L)	CA OEHHA PHG (ug/L)	CA OEHHA PHG Support Document (ug/L)	U.S. EPA Region 9 PRG (ug/L)	Applicable Standard (Cancer) (ug/L)	Applicable Standard (Non-cancer) (ug/L)	Estimated Influent Concentration (1) (ug/L)	Exposure Duration (total number of days treatment system fails over 20 years)	Incremental Cancer Risk	Noncancer Hazard Quotient
PERCHLORATE	6	6	--	3.6 ca 3.6 nc	NA	6	4.20	56	NA	0.7
							TOTAL		**0.0E+00**	**7.0E-01**

(1) Estimates of risk were determined for chemicals of potential concern that were identified in Section 3.5 and listed on Table 3-20.

(2) U.S. EPA Region 9 Preliminary Remediation Goals (PRGs) accessed at http://www.epa.gov/region09/waste/sfund/prg/files/02table.pdf; ca = carcinogen; nc = noncarcinogen.

(3) Applicable standards (cancer and noncancer) were based on the PHG, USEPA Region 9 PRG or the MCL/AL. PHGs were used as the standard if one was available. If no PHG existed, then the lower of the USEPA Region 9 PRG value and MCL/AL was used. The MCL/AL was used when no PHG or PRG existed. In some cases, the PHG was obtained from the documentation supporting the PHG available at http://www.oehha.ca.gov/water/phg/allphgs.html.

(4) Influent concentrations are the arithmetic means of the estimated water quality of the influent to the water treatment plant obtained from Section 3.0.

(5) Assumes complete system failure once every five years for 14-days over a 20-year period.

(6) Calculation of cancer risk: [(Concentration/Applicable or Relevant Standard for Cancer) x (Period of exposure in days)/(365 days x 70 years)]

(7) Calculation of hazard quotient: [(Concentration/Applicable or Relevant Standard for noncancer)]; Noncancer hazard quotient equal to or greater than 1 indicates potential for adverse health effect, depending on toxicity endpoint.

Table 6-3
Estimates of Risk Based on Treatment System Failure at the Water Treatment Plant for the Lincoln Avenue Wells

Analyte	Primary MCL or AL (ug/L)	CA OEHHA PHG (ug/L)	CA OEHHA PHG Support Document (ug/L)	U.S. EPA Region 9 PRG (ug/L)	Applicable Standard (Cancer) (ug/L)	Applicable Standard (Non-cancer) (ug/L)	Estimated Influent Concentration (1) (ug/L)	Exposure Duration (total number of days treatment system fails over 20 years)	Incremental Cancer Risk	Noncancer Hazard Quotient
CARBON TETRACHLORIDE	0.5	0.1	5	0.17 ca	0.1	5	0.57	56	1.2E-08	0.1
PERCHLORATE	6	6	--	3.6 ca 3.6 nc	NA	6	11.80	56	NA	2.0
TRICHLOROETHYLENE	5	0.8	1000	0.028 nc	0.8	1000	10.70	56	2.9E-08	0.01
							TOTAL		**4.2E-08**	**2.1**

(1) Estimates of risk were determined for chemicals of potential concern that were identified in Section 3.5 and listed on Table 3-20.

(2) U.S. EPA Region 9 Preliminary Remediation Goals (PRGs) accessed at http://www.epa.gov/region09/waste/sfund/prg/files/02table.pdf; ca = carcinogen; nc = noncarcinogen.

(3) Applicable standards (cancer and noncancer) were based on the PHG, USEPA Region 9 PRG or the MCL/AL. PHGs were used as the standard if one was available. If no PHG existed, then the lower of the USEPA Region 9 PRG value and MCL/AL was used. The MCL/AL was used when no PHG or PRG existed. In some cases, the PHG was obtained from the documentation supporting the PHG available at http://www.oehha.ca.gov/water/phg/allphgs.html.

(4) Influent concentrations are the arithmetic means of the estimated water quality of the influent to the water treatment plant obtained from Section 3.0.

(5) Assumes complete system failure once every five years for 14-days over a 20-year period.

(6) Calculation of cancer risk: [(Concentration/Applicable or Relevant Standard for Cancer) x (Period of exposure in days)/(365 days x 70 years)]

(7) Calculation of hazard quotient: [(Concentration/Applicable or Relevant Standard for noncancer)]; Noncancer hazard quotient equal to or greater than 1 indicates potential for adverse health effect, depending on toxicity endpoint.

TABLE 6-4
Estimates of Risk Based on Treatment System Failure at the Water Treatment Plant for the Las Flores Well

Analyte	Primary MCL or AL (ug/L)	CA OEHHA PHG (ug/L)	CA OEHHA PHG Support Document (ug/L)	U.S. EPA Region 9 PRG (ug/L)	Applicable Standard (Cancer) (ug/L)	Applicable Standard (Non-cancer) (ug/L)	Estimated Influent Concentration (1) (ug/L)	Exposure Duration (total number of days treatment system fails over 20 years)	Incremental Cancer Risk	Noncancer Hazard Quotient
NITRATE (AS NO3)	45,000	45,000	--	10,000 nc	NA	45000	45950	56	NA	1.0
PERCHLORATE	6	6	--	3.6 ca 3.6 nc	NA	6	6.24	56	NA	1.0
TETRACHLOROETHYLENE	5	0.06	11	0.66 ca	0.06	11	10.36	56	3.8E-07	0.9
							TOTAL		**3.8E-07**	**2.9**

(1) Estimates of risk were determined for chemicals of potential concern that were identified in Section 3.5 and listed on Table 3-20.

(2) U.S. EPA Region 9 Preliminary Remediation Goals (PRGs) accessed at http://www.epa.gov/region09/waste/sfund/prg/files/02table.pdf; ca = carcinogen; nc = noncarcinogen.

(3) Applicable standards (cancer and noncancer) were based on the PHG, USEPA Region 9 PRG or the MCL/AL. PHGs were used as the standard if one was available. If no PHG existed, then the lower of the USEPA Region 9 PRG value and MCL/AL was used. The MCL/AL was used when no PHG or PRG existed. In some cases, the PHG was obtained from the documentation supporting the PHG available at http://www.oehha.ca.gov/water/phg/allphgs.html.

(4) Influent concentrations are the arithmetic means of the estimated water quality of the influent to the water treatment plant obtained from Section 3.0.

(5) Assumes complete system failure once every five years for 14-days over a 20-year period.

(6) Calculation of cancer risk: [(Concentration/Applicable or Relevant Standard for Cancer) x (Period of exposure in days)/(365 days x 70 years)]

(7) Calculation of hazard quotient: [(Concentration/Applicable or Relevant Standard for noncancer)]; Noncancer hazard quotient equal to or greater than 1 indicates potential for adverse health effect, depending on toxicity endpoint.

Table 7-1. Summary of Water Quality Data for Pasadena Groundwater and MWD Surface Water for the Year 2002 [(a)]

Parameter	MCL (MRDL)	PHG (MCLG)	Pasadena Wells		MWD Weymouth Plant		Most Recent Sampling Date
			Average	Range	Average	Range	
Primary Standards							
Radionuclides							
Alpha Radiation (pCi/L)	15	n/a	7	1 - 16	5	2 – 6	1999
Radium (pCi/L)	5	n/a	1	1 - 2	ND	ND – 1	(1)
Uranium (pCi/L)	20	0.5	6	1 - 18	3	2 – 4	(1)
Inorganic Chemicals							
Aluminum (ppb)	1000/200 (2)	600	ND	ND – 104	54	ND - 164	2002
Arsenic (ppb)	50	n/a	ND	ND	ND	ND – 2	2002
Fluoride (ppm)	2	1	1	0.9 – 1.5	0.2	0.2 – 0.3	2002
Lead (ppb)	AL=15	2	ND	ND – 9	ND	ND	2002
Nitrate (ppm as N)	10	10	4.7	2 – 8.6	ND	ND – 0.5	2002
Volatile Organic Compounds							
Methyl-tert-butyl-ether (ppb)	13/5 (2)	13	ND	ND	ND	ND – 1	2002
Secondary Standards [(2)]							
Chloride (ppm)	500	n/a	24	13 – 33	85	74 – 98	2002
Color (units)	15	n/a	ND	ND	2	1 – 2	2002
Corrosivity (SI)	Noncorrosive	n/a	-0.4	(-0.5) – (-0.1)	0.3	0.2 – 0.4	2002
Iron (ppb)	300	n/a	ND	ND – 178	ND	ND	2002
Odor Threshold (units)	3	n/a	ND	ND	(3)	(3)	2002
Specific Conductance (umho/cm)	1600	n/a	466	392 – 549	839	766 – 910	2002
Sulfate (ppm)	500	n/a	52	25 – 143	171	139 – 196	2002
Total Dissolved Solids (ppm)	1000	n/a	278	220 – 328	500	449 – 533	2002
Zinc (ppm)	5	n/a	0.1	ND – 0.7	ND	ND	2002
Unregulated Chemicals Requiring Monitoring							
Boron (ppb)	AL=1000	n/a	145	ND – 231	130	100 - 140	(4)
Perchlorate (ppb)	AL=4	n/a	ND	ND – 4	ND	ND	2002
Vanadium (ppb)	AL=50	n/a	8	ND - 15	ND	ND	(4)
Other Parameters							
Alkalinity (ppm)	n/a	n/a	141	106 – 188	114	100 – 126	2002
Calcium (ppm)	n/a	n/a	49	34 – 58	54	44 – 62	2002
Hardness (ppm)	n/a	n/a	172	109 – 211	230	196 – 254	2002
Magnesium (ppm)	n/a	n/a	12	6 – 16	23	21 – 26	2002
pH (units)	n/a	n/a	7.8	7.3 – 7.9	8.1	8.1	2002
Sodium (ppm)	n/a	n/a	28	22 - 31	80	74 – 89	2002

n/a – not available; ND – not detected; AL – action level

(a) Source: Pasadena Water and Power 13th Annual Drinking Water Quality Report dated June 2003; obtained from http://www.ci.pasadena.ca.us/waterandpower/water_qualityreports.asp

(1) - results are for 2000 Pasadena and 1998/99 for MWD; **(2)** – chemical is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color); **(3)** – MWD has developed a flavor-profile analysis method that can more accurately detect odor occurrences. For more information contact MWD at (213) 217-6850; **(4)** – results are for 2001 Pasadena and 2002 for MWD. **No MCL violation occurred in 2002**.