SECTION 2

2001 Quarterly Sampling Events

2.1 Sampling Activities

Field sampling procedures followed the revised project Sampling and Analysis Plan (SAP) and Quality Assurance Project Plan (QAPP) (EPA, 1999a and 1999b, respectively). During these sampling events, field sampling procedures for the additional parameters described below were included with Addendum No. 2 to the QAPP (CH2M HILL, November 1999) and Addendum No. 3 to the SAP (CH2M HILL, November 1999). Water levels were measured in each well immediately after accessing the well and prior to sampling. The value for the observed depth-to-water (DTW) and groundwater elevation in feet above mean sea level (msl) are presented for each well sampled in Table 2-1.

Well purging consisted of removing between three and five well volumes of water at a flow rate between 5 and 12 gallons per minute (gpm) and using the dedicated electric pumps. During purging, pH, temperature, electrical conductivity, and turbidity of the groundwater were measured over time (Table 2-2) to ensure that these parameters stabilized prior to sampling. Following purging, flow rates were lowered to approximately 1 gpm to minimize aeration prior to sampling. Purge water from monitoring wells known to have VOC concentrations above the MCLs was collected in a stainless steel vacuum truck certified "clean" and site-dedicated by Haz Mat Transportation Corp. Once collected, the purge water was transported for disposal at DK Environmental. Purge water from monitoring wells known to have VOC concentrations below the MCLs was diverted into the nearest storm drain.

During the first, second, and third quarter 2001 sampling events, analytical parameters consisted of VOCs including methyl tertiary butyl ethylene (MTBE), nitrate/nitrite, and hexavalent chromium. Samples were collected in appropriate containers from polyethylene tubing attached to an adjustable sampling valve. Samples for VOCs and nitrate/nitrite were stored in coolers packed with ice and were shipped the day of sampling by overnight carrier to laboratories designated by EPA's Contract Laboratory Program (CLP). Samples collected for hexavalent chromium were delivered daily by courier to Montgomery Watson Laboratory in Pasadena.

During the fourth quarter (annual) 2001 sampling event, analytical parameters consisted of VOCs including MTBE, semivolatile organic compounds (SVOC), perchlorate, nitrate/nitrite, dissolved metals, hexavalent chromium, total alkalinity, total dissolved solids (TDS), total organic carbon (TOC) and additional general water chemistry parameters (chloride, sulfate, hardness). Samples collected during the fourth quarter 2001 were preserved (if required) according to the methodology presented in the QAPP and Addendum No. 2 to the QAPP, stored in coolers packed with ice and were shipped the day of sampling by overnight carrier to laboratories designated by EPA's Contract Laboratory Program (CLP). Samples collected for hexavalent chromium were delivered daily by courier to APPL Laboratory in Fresno.

State of California and federal maximum contaminant levels (MCLs) are listed in Table 2-3; Table 2-4 specifies the methods by which the parameters were analyzed and their respective target detection limits. Chain-of-custody procedures and sample documentation were conducted as outlined in the SAP and QAPP. Copies of chain-of-custody documentation for the first, second, third, and fourth quarter sample events are provided in Appendix D.

2.1.1 First Quarter

The first quarter 2001 sample event was designated as a quarterly event. During this event, 52 monitoring wells (28 VPBs and 24 cluster wells) were sampled. A total of 65 samples were collected and analyzed, including samples representing quality control (QC) samples (field blanks, laboratory blanks, and field duplicates). Samples collected by CH2M HILL were analyzed for VOCs including MTBE, nitrate and nitrite through CLP laboratories and samples collected for hexavalent chromium were analyzed through an independently procured laboratory.

Purge water was collected in a vacuum truck at each monitoring well location where historic VOC concentration exceeded the MCL and transported to a Federally approved disposal facility. Approximately 9,606 gallons of purge water were collected during the first quarter sample event.

2.1.2 Second Quarter

The second quarter 2001 sample event was designated as a quarterly event. During this event, 50 monitoring wells (26 VPBs and 24 cluster wells) were sampled. An additional two monitoring wells (NH-VPB-03 and NH-VPB-09) scheduled for sampling during this event had their pumps removed to accommodate construction activities. A total of 62 samples were collected and analyzed, including samples representing QC samples (field blanks, laboratory blanks, and field duplicates). Samples collected by CH2M HILL were analyzed for VOCs including MTBE, nitrate and nitrite through CLP laboratories and samples collected for hexavalent chromium were analyzed through an independently procured laboratory.

During this event, a comparison between field-preserved and laboratory-preserved hexavalent chromium duplicate samples was reviewed. Duplicate samples were collected at 4 monitoring wells with varying hexavalent chromium concentrations.

Purge water was collected in a vacuum truck at each monitoring well location where historic VOC concentration exceeded the MCL and transported to a Federally approved disposal facility. Approximately 9,549 gallons of purge water were collected during the second quarter sample event.

2.1.3 Third Quarter

The third quarter 2001 sample event was a quarterly event during which, 49 monitoring wells (26 VPBs and 23 cluster wells) were sampled. An additional three monitoring wells (NH-VPB-03 and NH-VPB-09) scheduled for sampling during this event had their pumps removed to accommodate construction activities and NH-C02-220 was inoperable. A total of 60 samples were collected and analyzed, including QC samples (field blanks, laboratory blanks, and field duplicates). Samples collected by CH2M HILL were analyzed for VOCs

including MTBE, nitrate and nitrite through CLP laboratories and samples collected for hexavalent chromium were analyzed through an independently procured laboratory.

During the third quarter sampling event, approximately 9,200 gallons of purge water were collected for transport by vacuum truck to a Federally approved disposal facility.

2.1.4 Fourth Quarter

The fourth quarter 2001 sampling event was an annual event during which 63 RI monitoring wells (28 VPBs and 35 cluster wells) were sampled. An additional 17 monitoring wells normally included in the annual event were unable to be sampled. Seven of these wells (NH-VPB-06, NH-VPB-07, NH-VPB-11, NH-VPB-13, NH-VPB-14, NH-C05-320 and VD-VPB-01) were dry; six of the wells (CS-VPB-01, CS-VPB-08, NH-VPB-03 NH-VPB-10, NH-C02-220 and PO-VPB-10) were inoperable; and the remaining four wells (CS-C06-185, CS-C06-278, NH-C05-460 and NH-C06-460) were unable to be sampled due to parked cars or other surface obstructions. A total of 80 samples were collected and analyzed, including QC samples (field blanks, laboratory blanks, and field duplicates). During the fourth quarter sampling event, approximately 24,960 gallons of purge water were collected and transported by vacuum truck to a Federally approved disposal facility.

2.2 Analytical Results

2.2.1 First Quarter

Reported concentrations of TCE at RI monitoring wells ranged from not detected to a high of 4,400 µg/L during the first quarter. Thirty of the 52 RI monitoring wells exhibited sample concentrations of TCE exceeding the MCL of 5 micrograms per liter (µg/L). Twelve of the wells had TCE concentrations greater than 100 µg/L, including three wells (CS-VPB-04, CS-VPB-07 and CS-C03-100) with a concentration over 1,000 µg/L (2,000 µg/L, 4,400 µg/L and 1,300 µg/L, respectively). Non-detectable (ND) concentrations of TCE were observed in 10 of the monitoring wells, with the remaining 12 monitoring wells exhibiting concentrations between the contract required quantification limit (CRQL) and the MCL.

Concentrations of PCE during the first quarter sampling event ranged from not detected to a high of 390 µg/L (CS-VPB-01). Of the 52 RI monitoring wells sampled, 22 had concentrations exceeding the MCL of 5 µg/L, including 5 wells (CS-C01-105, CS-C01-285, CS-C02-335, CS-VPB-01 and PO-VPB-01) with a concentration over 100 µg/L (130 µg/L, 270 µg/L, 340 µg/L, 390 µg/L and 100 µg/L, respectively). ND concentrations of PCE were observed in 8 of the monitoring wells, with the remaining 22 monitoring wells exhibiting concentrations between the CRQL and the MCL.

During this sampling event, MTBE concentrations between 0.5 and 22 µg/L were detected at seven monitoring wells: CS-C01-105 with 10 µg/L, CS-VPB-11 with 4 µg/L, NH-VPB-01 with 22 µg/L, PO-C03-182 with 0.6 µg/L, PO-C03-235 with 5 µg/L, PO-VPB-08 with 0.7 µg/L, and VD-VPB-05 with 0.7 µg/L.

Nitrate (as NO_3) ranged from 4.76 milligram per liter (mg/L) at CS-C03-465 to 76.5 mg/L at NH-C02-520. Twenty-one of the 52 RI monitoring wells sampled during the first quarter exceeded the nitrate MCL of 45 mg/L (as NO_3). Table 2-5 presents a summary table of TCE,

PCE, and nitrate data from the first quarter sampling event. A complete listing of these data, as well as other VOCs for the first quarter sampling event, is located in Appendix E. Results of analyses of duplicates and field blanks for this sampling event are found in Appendix F.

Hexavalent chromium concentrations exceeding the method detection limit (MDL) of 0.2 µg/L were observed in 43 of the 52 RI monitoring wells during the first quarter of 2001 (Table 2-11). Concentrations above 5 µg/L were observed in 12 RI monitoring wells: CS-VPB-03 with 16.6 µg/L, CS-VPB-04 with 618 µg/L, CS-VPB-05 with 91.0 µg/L, CS-VPB-06 with 8.8 µg/L, CS-VPB-07 with 43 µg/L, CS-VPB-09 with 5.4 µg/L, CS-C01-100 with 49.5 µg/L, CS-C02-250 with 7.8 µg/L, NH-C02-520 with 5.9 µg/L, NH-C04-240 with 5.8 µg/L, NH-VPB-01 with 5.2 µg/L and PO-VPB-02 with 340 µg/L. The maximum concentration observed was at CS-VPB-04 with 618 µg/L.

2.2.2 Second Quarter

Although samples were collected and submitted for analyses from 50 RI monitoring wells during this quarter, VOC results were received for only 40 monitoring wells. One cooler with samples scheduled for a Saturday delivery did not arrive at the laboratory until the following Monday. Upon examination, all of the samples had exceeded their required temperature.

Reported concentrations of TCE at RI monitoring wells ranged from ND to a high of 850 µg/L during the second quarter. Twenty-six of the 40 RI monitoring wells exhibited sample concentrations of TCE exceeding the MCL of 5 µg/L. Nine of the wells had TCE concentrations greater than 100 µg/L, including two wells (CS-VPB-04 and CS-VPB-07) with concentrations over 500 µg/L (710 µg/L and 850 µg/L, respectively). Seven of the monitoring wells were flagged as ND, with the remaining seven monitoring wells exhibiting concentrations between the CRQL and the MCL.

Concentrations of PCE during the second quarter sampling event ranged from ND to a high of 240 µg/L (CS-VPB-01). Of the 40 RI monitoring wells sampled, 19 had concentrations exceeding the MCL of 5 µg/L, including four wells (CS-C01-285, CS-C02-250, CS-C02-335, and CS-VPB-01) with concentrations over 100 (190 µg/L, 120 µg/L, 160 µg/L and 240 µg/L, respectively). Four monitoring wells were flagged as ND and the remaining 17 had concentrations between the CRQL and the MCL.

During this sampling event, MTBE concentrations between 0.9 and 19 µg/L were detected at 4 monitoring wells: CS-C01-105 with 16 µg/L, CS-VPB-05 with 1 µg/L, NH-VPB-01 with 19 µg/L and PO-VPB-08 with 0.9 µg/L.

Nitrate (as NO_3) ranged from 3.56 mg/L at CS-C03-465 to 133.5 mg/L at NH-C01-325. Sixteen of the 50 RI monitoring wells sampled during the second quarter exceeded the nitrate MCL of 45 mg/L (as NO_3). Table 2-6 presents a summary table of TCE, PCE, and nitrate data from the second quarter sampling event. A complete listing of these data, as well as other VOCs for the second quarter sampling event, is located in Appendix E. Results of analyses of duplicates and field blanks for this sampling event are found in Appendix F.

Hexavalent chromium concentrations exceeding the MDL of 0.2 µg/L were observed in 46 of the 50 RI monitoring wells during the second quarter of 2001 (Table 2-11). Concentrations

above 5 µg/L were observed in 16 RI monitoring wells: CS-VPB-03 with 20.2 µg/L, CS-VPB-04 with 520 µg/L, CS-VPB-05 with 90.0 µg/L, CS-VPB-06 with 9.8 µg/L, CS-VPB-07 with 46 µg/L, CS-C03-100 with 55.9 µg/L, CS-C02-250 with 8.4 µg/L, CS-C02-335 with 5.3 µg/L, NH-C02-220 with 5.8 µg/L, NH-C02-520 with 5.5 µg/L, NH-C04-240 with 6.8 µg/L, NH-C06-160 with 7.2 µg/L, NH-VPB-01 with 5.4 µg/L, PO-VPB-03 with 5.1 µg/L, PO-VPB-10 with 5.6 µg/L, and PO-VPB-02 with 430 µg/L. The maximum concentration observed was at CS-VPB-04 with 520 µg/L.

A comparison of field preservation to laboratory preservation of hexavalent chromium samples was conducted at five monitoring wells (CS-VPB-04, CS-VPB-05, CS-VPB-06, CS-VPB-06, CS-VPB-07, and NH-VPB-01) during this sampling event. Differences in the observed ratio between preserved and unpreserved samples ranged from 80 percent at CS-VPB-06 (9.8 and 7.8 µg/L, respectively) with no dilution to 102% at CS-VPB-04 (510 and 520 µg/L, respectively) with a 50:1 dilution.

2.2.3 Third Quarter

In the 49 RI monitoring wells sampled during the third quarter sampling event, TCE concentrations ranged from not detected to 9,200 µg/L at CS-VPB-07. Thirty-one of the wells had reported concentrations of TCE exceeding 5 µg/L including 15 with concentrations over 100 µg/L. Of these monitoring wells, two were 1,000 µg/L or above (CS-VPB-07 with 9,200 µg/L and CS-VPB-04 with 5,900 µg/L).

Reported concentrations of PCE ranged from concentrations between the detection limit and the MCL at 18 monitoring wells to a high of 330 µg/L at CS-VPB-01. Concentrations of PCE above the MCL of 5 µg/L were reported in 22 of the 49 monitoring wells sampled during the third quarter event. Seven of these wells (CS-C01-105, CS-CO1-285, CS-C02-250, CS-C02-335, CS-VPB-01, CS-VPB-04, and PO-VPB-02) had PCE concentrations above 100 µg/L. All of the monitoring wells exceeding the MCL for PCE also exceed the MCL for TCE with the exception of CS-VPB-11.

MTBE concentrations between 1.2 and 21 µg/L were detected at 7 monitoring wells during the third quarter of 2001: CS-C01-105 with 13 µg/L, CS-VPB-05 with 5 µg/L, CS-VPB-06 with 3.1 µg/L, CS-VPB-11 with 5 µg/L, NH-VPB-01 with 21 µg/L, PO-C03-235 with 4 µg/L and PO-VPB-08 with 1.2 µg/L.

During the third quarter, nitrate (as NO_3) concentrations ranged from 8.5 mg/L at CS-C04-385 to 133.3 mg/L at NH-C01-325. Thirteen of the 49 wells sampled during this event exhibited concentrations greater than the MCL of 45 mg/L.

TCE, PCE, and nitrate data from the third quarter sampling event are presented in Table 2-7. Additional VOCs exceeding the MCL at RI monitoring wells are reported in Section 3. Appendix E summarizes the complete analytical results for the wells sampled during the third quarter. Results of duplicate samples and field blanks for the third quarter sampling event are presented in Appendix F.

Hexavalent chromium concentrations exceeding the MDL of 0.2 µg/L were observed in 43 RI monitoring wells during the third quarter of 2001 (Table 2-11). Concentrations above 5 µg/L were observed in 16 RI monitoring wells: CS-VPB-03 with 19.5 µg/L, CS-VPB-04 with

515 µg/L, CS-VPB-05 with 100 µg/L, CS-VPB-06 with 10.2 µg/L, CS-VPB-07 with 45.1 µg/L, CS-C01-285 with 5.2 µg/L, CS-C02-250 with 8.7 µg/L, CS-C02-335 with 5.5 µg/L, CS-C03-100 with 67.0 µg/L, CS-C05-100 with 5.3 µg/L, NH-C02-520 with 6.0 µg/L, NH-C04-240 with 6.3 µg/L, NH-C06-160 with 8.6 µg/L, NH-VPB-01 with 5.3 µg/L, PO-VPB-02 with 292 µg/L and PO-VPB-03 with 5.2 µg/L. The maximum concentration observed was at CS-VPB-04 with 515 µg/L.

2.2.4 Fourth Quarter

In the 63 RI monitoring wells sampled during the fourth quarter sampling event, TCE concentrations ranged from not detected to 1,200 µg/L at CS-VPB-07. Twenty-eight of the wells had reported concentrations of TCE exceeding 5 µg/L including 11 with concentrations over 100 µg/L. Of these monitoring wells, two were 1,000 µg/L or above (CS-VPB-07 with 1,200 µg/L and CS-VPB-04 with 1,000 µg/L).

Reported concentrations of PCE ranged from concentrations between the detection limit and the MCL at 31 monitoring wells to a high of 340 µg/L at CS-C01-285. Concentrations of PCE above the MCL of 5 µg/L were reported in 22 of the 63 monitoring wells sampled during the fourth quarter event. Three of these wells (CS-C01-285, CS-C02-335, and CS-VPB-04) had PCE concentrations above 100 µg/L. All of the monitoring wells exceeding the MCL for PCE also exceed the MCL for TCE with the exceptions of CS-VPB-09, CS-VPB-11 and NH-C01-450.

MTBE concentrations between 0.6 and 13 µg/L were detected at 7 monitoring wells during the fourth quarter of 2001: CS-C01-105 with 8 µg/L, CS-VPB-11 with 4 µg/L, NH-VPB-01 with 12 µg/L, PO-C03-235 with 5 µg/L, PO-VPB-06 with 0.6 µg/L, PO-VPB-08 with 0.9 µg/L and PO-VPB-02 with 13 µg/L.

During the fourth quarter, nitrate (as NO_3) concentrations ranged from 1.3 mg/L at CS-C03-550 and CS-C04-520 to 71.2 mg/L at NH-VPB-05. Eighteen of the 63 wells sampled during this event exhibited concentrations greater than the MCL of 45 mg/L

Hexavalent chromium concentrations exceeding the MDL of 0.2 µg/L were observed in 46 RI monitoring wells during the fourth quarter of 2001 (Table 2-11). Concentrations above 5 µg/L were observed in 13 RI monitoring wells: CS-VPB-03 with 22.2 µg/L, CS-VPB-04 with 523 µg/L, CS-VPB-05 with 143 µg/L, CS-VPB-06 with 8.7 µg/L, CS-VPB-07 with 48.1 µg/L, CS-C02-250 with 8.0 µg/L, CS-C02-335 with 5.4 µg/L, CS-C03-100 with 63.9 µg/L, NH-VPB-12 with 5.6 µg/L, NH-C04-240 with 6.9 µg/L, NH-C06-160 with 7.9 µg/L and PO-VPB-02 with 272.0 µg/L. The maximum concentration observed was at CS-VPB-04 with 523 µg/L, and was consistent with previous quarters.

TCE, PCE, and nitrate data from the fourth quarter sampling event are presented in Table 2-8. Additional VOCs, SVOCs and perchlorate concentrations exceeding the MCL at RI monitoring wells are reported in Section 3. Results of the general water chemistry observed during the annual event of 2001 are presented in Table 2-9; the results of dissolved metals exceeding MCLs are in Table 2-10. Appendix E summarizes the complete analytical results for the wells sampled during the fourth quarter. Results of duplicate samples and field blanks for the fourth quarter sampling event are presented in Appendix F.

TABLE 2-1
Groundwater Elevations
First, Second, Third and Fourth Quarters 2001
San Fernando Valley Groundwater Monitoring Program

Well Name	Date of Measurement	Depth to Water (ft msl)	Ground Water Elevation (ft msl)	Well Name	Date of Measurement	Depth to Water (ft msl)	Ground Water Elevation (ft msl)
CS-C01-105	03/08/01	92.99	449.40	NH-C03-680	NA	NA	NA
	06/18/01	92.76	449.63		NA	NA	NA
	09/20/01	92.97	449.42		NA	NA	NA
	12/21/01	93.48	448.91		12/12/01	231.30	476.72
CS-C01-285	03/08/01	92.15	450.33	NH-C03-800	NA	NA	NA
	06/18/01	93.18	449.30		NA	NA	NA
	09/20/01	93.97	448.51		NA	NA	NA
	12/21/01	92.30	450.18		12/12/01	230.09	478.46
CS-C02-062	03/12/01	37.88	437.87	NH-C04-240	03/05/01	99.30	458.58
	06/18/01	38.28	437.47		06/12/01	94.61	463.27
	09/17/01	38.27	437.48		09/10/01	98.05	459.83
	12/17/01	38.84	436.91		12/11/01	98.00	459.88
CS-C02-180	03/12/01	37.49	438.10	NH-C04-375	NA	NA	NA
	06/18/01	37.95	437.64		NA	NA	NA
	09/17/01	38.08	437.51		NA	NA	NA
	12/17/01	38.47	437.12		12/11/01	94.95	462.80
CS-C02-250	03/12/01	37.17	438.43	NH-C04-560	NA	NA	NA
	06/18/01	37.40	438.20		NA	NA	NA
	09/17/01	37.65	437.95		NA	NA	NA
	12/17/01	38.16	437.44		12/11/01	92.25	465.09
CS-C02-335	03/12/01	37.00	438.86	NH-C05-460	NA	NA	NA
	06/18/01	37.00	438.86		NA	NA	NA
	09/17/01	37.00	438.86		NA	NA	NA
	12/17/01	38.00	437.86		12/10/01	296.78	475.37
CS-C03-100	03/08/01	53.58	433.77	NH-C06-160	03/06/01	126.15	464.69
	06/13/01	53.40	433.95		06/14/01	121.02	469.82
	09/18/01	53.64	433.71		09/21/01	121.48	469.36
	12/17/01	54.50	432.85		12/12/01	121.63	469.21

TABLE 2-1
Groundwater Elevations
First, Second, Third and Fourth Quarters 2001
San Fernando Valley Groundwater Monitoring Program

Well Name	Date of Measurement	Depth to Water (ft msl)	Ground Water Elevation (ft msl)	Well Name	Date of Measurement	Depth to Water (ft msl)	Ground Water Elevation (ft msl)
CS-C03-325	NA	NA	NA	NH-VPB-01	03/07/01	105.88	453.25
	NA	NA	NA		06/19/01	105.65	453.48
	NA	NA	NA		09/20/01	105.96	453.17
	12/17/01	55.31	432.23		12/20/01	106.22	452.91
CS-C03-465	03/08/01	55.69	432.44	NH-VPB-02	NA	NA	NA
	06/13/01	55.70	432.43		NA	NA	NA
	09/17/01	56.08	432.05		NA	NA	NA
	12/17/01	56.45	431.68		12/13/01	NA	NA
CS-C03-550	NA	NA	NA	NH-VPB-03	03/12/01	199.71	476.45
	NA	NA	NA		NA	NA	NA
	NA	NA	NA		NA	NA	NA
	12/17/01	55.85	431.42		NA	NA	NA
CS-C04-290	03/08/01	46.43	431.79	NH-VPB-04	NA	NA	NA
	06/14/01	46.82	431.40		NA	NA	NA
	09/19/01	46.68	431.54		NA	NA	NA
	12/18/01	47.00	431.22		12/13/01	155.05	476.49
CS-C04-382	03/08/01	46.48	431.28	NH-VPB-05	03/06/01	183.08	473.60
	06/14/01	46.74	431.02		06/13/01	184.73	471.95
	09/19/01	46.42	431.34		09/20/01	186.19	470.49
	12/18/01	47.02	430.74		12/12/01	186.56	470.12
CS-C04-520	NA	NA	NA	NH-VPB-08	03/07/01	194.14	474.54
	NA	NA	NA		06/13/01	193.30	475.38
	NA	NA	NA		09/18/01	194.58	474.10
	12/18/01	47.08	430.80		12/20/01	194.25	474.43
CS-C05-160	03/09/01	32.95	425.92	NH-VPB-09	03/06/01	277.60	517.24
	06/14/01	33.25	425.62		NA	NA	NA
	09/19/01	33.02	425.85		NA	NA	NA
	12/18/01	32.80	426.07		NA	NA	NA

TABLE 2-1
Groundwater Elevations
First, Second, Third and Fourth Quarters 2001
San Fernando Valley Groundwater Monitoring Program

Well Name	Date of Measurement	Depth to Water (ft msl)	Ground Water Elevation (ft msl)	Well Name	Date of Measurement	Depth to Water (ft msl)	Ground Water Elevation (ft msl)
CS-C05-290	03/09/01	33.24	426.07	NH-VPB-12	NA	NA	NA
	06/14/01	33.65	425.66		NA	NA	NA
	09/19/01	33.64	425.67		NA	NA	NA
	12/18/01	33.69	425.62		12/13/01	145.63	467.92
CS-C06-185	03/09/01	35.10	420.59	PO-C01-195	NA	NA	NA
	06/15/01	35.39	420.30		NA	NA	NA
	09/19/01	35.68	420.01		NA	NA	NA
	NA	NA	NA		12/14/01	41.45	402.27
CS-VPB-01	03/08/01	58.28	440.25	PO-C01-354	NA	NA	NA
	06/13/01	58.24	440.29		NA	NA	NA
	09/20/01	58.30	440.23		NA	NA	NA
	NA	NA	NA		12/14/01	40.20	402.10
CS-VPB-02	03/12/01	65.34	442.16	PO-C02-053	03/06/01	36.50	390.02
	06/13/01	65.59	441.91		06/12/01	36.86	389.66
	09/21/01	66.18	441.32		09/18/01	37.54	388.98
	12/13/01	66.50	441.00		12/14/01	36.78	389.74
CS-VPB-03	03/06/01	63.47	454.77	PO-C02-205	NA	NA	NA
	06/12/01	62.31	455.93		NA	NA	NA
	09/18/01	62.28	455.96		NA	NA	NA
	12/13/01	62.82	455.42		12/14/01	34.30	392.49
CS-VPB-04	03/08/01	47.09	431.38	PO-C03-182	03/06/01	47.42	337.73
	06/14/01	47.13	431.34		06/15/01	43.75	341.40
	09/19/01	47.00	431.47		09/18/01	49.22	335.93
	12/18/01	47.74	430.73		12/19/01	46.96	338.19
CS-VPB-05	03/09/01	33.16	426.45	PO-C03-235	03/06/01	47.30	337.69
	06/14/01	34.00	425.61		06/15/01	43.79	341.20
	09/19/01	33.80	425.81		09/18/01	49.24	335.75
	12/18/01	33.75	425.86		12/190/1	46.85	338.14

TABLE 2-1
Groundwater Elevations
First, Second, Third and Fourth Quarters 2001
San Fernando Valley Groundwater Monitoring Program

Well Name	Date of Measurement	Depth to Water (ft msl)	Ground Water Elevation (ft msl)	Well Name	Date of Measurement	Depth to Water (ft msl)	Ground Water Elevation (ft msl)
CS-VPB-06	03/09/01	36.37	419.07	PO-VPB-01	03/13/01	24.29	387.04
	06/15/01	33.66	421.78		06/12/01	24.65	386.68
	09/19/01	36.80	418.64		09/18/01	25.28	386.05
	12/18/01	35.35	420.09		12/14/01	24.76	386.57
CS-VPB-07	03/09/01	59.18	435.26	PO-VPB-02	03/12/01	42.70	400.71
	06/14/01	59.29	435.15		06/15/01	42.93	400.48
	09/19/01	59.64	434.80		09/18/01	42.75	400.66
	12/18/01	60.30	434.14		12/21/01	41.35	402.06
CS-VPB-09	03/13/01	49.30	436.43	PO-VPB-03	03/12/01	40.01	346.10
	06/12/01	49.61	436.12		06/15/01	37.57	348.54
	09/18/01	49.65	436.08		09/18/01	41.21	344.90
	12/13/01	50.43	435.30		12/19/01	40.86	345.25
CS-VPB-10	03/09/01	61.22	418.44	PO-VPB-05	03/12/01	33.31	333.26
	06/15/01	61.55	418.11		06/19/01	30.40	336.17
	09/19/01	61.91	417.75		09/18/01	35.10	331.47
	12/21/01	61.94	417.72		12/19/01	33.41	333.16
CS-VPB-11	03/09/01	79.34	426.74	PO-VPB-06	NA	NA	NA
	06/15/01	80.00	426.08		NA	NA	NA
	09/19/01	80.40	425.68		NA	NA	NA
	12/21/01	80.86	425.22		12/19/01	23.21	323.26
NH-C01-325	03/06/01	300.34	481.09	PO-VPB-07	03/12/01	59.75	334.49
	06/14/01	297.95	483.48		06/19/01	55.95	338.29
	09/21/01	300.38	481.05		09/18/01	60.46	333.78
	12/10/01	302.52	478.91		12/19/01	59.31	334.93
NH-C01-450	NA	NA	NA	PO-VPB-08	03/12/01	17.58	313.72
	NA	NA	NA		06/19/01	17.90	313.40
	NA	NA	NA		09/18/01	18.02	313.28
	12/10/01	302.40	479.16		12/19/01	18.05	313.25

TABLE 2-1
Groundwater Elevations
First, Second, Third and Fourth Quarters 2001
San Fernando Valley Groundwater Monitoring Program

Well Name	Date of Measurement	Depth to Water (ft msl)	Ground Water Elevation (ft msl)	Well Name	Date of Measurement	Depth to Water (ft msl)	Ground Water Elevation (ft msl)
NH-C01-660	NA	NA	NA	PO-VPB-10	03/13/01	60.65	412.15
	NA	NA	NA		06/12/01	60.78	412.02
	NA	NA	NA		09/20/01	60.77	412.03
	12/10/01	301.79	479.51		NA	NA	NA
NH-C01-780	NA	NA	NA	VD-VPB-02	03/06/01	102.86	1066.17
	NA	NA	NA		06/13/01	103.44	1065.59
	NA	NA	NA		09/21/01	104.43	1064.60
	12/10/01	301.66	479.81		12/12/01	105.03	1064.00
NH-C02-220	03/07/01	185.84	471.26	VD-VPB-03	03/05/01	19.68	796.45
	06/13/01	185.11	471.99		06/11/01	20.48	795.65
	NA	NA	NA		09/10/01	19.45	796.68
	NA	NA	NA		12/11/01	21.03	795.10
NH-C02-325	03/07/01	184.65	472.07	VD-VPB-04	03/05/01	74.86	911.13
	06/13/01	185.22	471.50		06/11/01	73.60	912.39
	09/20/01	187.55	469.17		09/10/01	77.56	908.43
	12/20/01	186.36	470.36		12/11/01	79.43	906.56
NH-C02-520	03/07/01	183.28	473.76	VD-VPB-05	03/05/01	135.58	1080.55
	06/13/01	184.97	472.07		06/11/01	138.19	1077.94
	09/20/01	189.18	467.86		09/10/01	138.68	1077.45
	12/20/01	184.61	472.43		12/11/01	139.11	1077.02
NH-C03-380	03/07/01	230.60	477.55	VD-VPB-06	03/05/01	64.68	1583.15
	06/13/01	230.02	478.13		06/11/01	64.67	1583.16
	09/21/01	233.66	474.49		09/10/01	65.37	1582.46
	12/20/01	232.72	475.43		12/11/01	66.04	1581.79
NH-C03-580	03/07/01	230.00	478.70	VD-VPB-07	03/05/01	181.57	1663.20
	06/13/01	231.35	477.35		06/11/01	173.33	1671.44
	09/21/01	236.11	472.59		09/10/01	173.63	1671.14
	12/20/01	232.20	476.50		12/11/01	178.95	1665.82

TABLE 2-2
Final Field Measurements
First, Second, Third, and Fourth Quarters 2001
San Fernando Valley Groundwater Monitoring Program

Well	Date of Measurement	Volume Purged (gal) [a]	Temp. (C) [b]	pH	Electrical Conductivity (µS/cm) [c]	Turbidity (NTU) [d]
CS-C01-105	03/08/01	30.000	18.500	7.470	1100	3.760
	06/18/01	24.000	21.200	1.680	1060	6.200
	09/20/01	30.000	19.500	7.260	1110	1.720
	12/21/01	27.000	17.800	7.110	1270	3.920
CS-C01-285	03/08/01	381.000	17.500	7.760	586	0.850
	06/18/01	375.000	21.400	7.820	558	2.020
	09/20/01	378.000	18.700	7.480	456	0.920
	12/21/01	384.000	17.400	7.250	562	0.940
CS-C02-062	03/12/01	48.000	19.500	7.190	290	2.100
	06/18/01	45.000	20.000	7.310	210	2.930
	09/17/01	45.000	19.900	7.030	939	2.040
	12/17/01	48.000	19.000	6.950	1260	1.550
CS-C02-180	03/12/01	279.000	19.300	7.920	1000	10.700
	06/18/01	279.000	20.600	8.030	940	14.170
	09/17/01	279.000	19.900	7.500	960	13.500
	12/17/01	279.000	19.400	7.470	874	11.700
CS-C02-250	03/12/01	417.000	18.900	7.830	598	2.070
	06/18/01	417.000	19.700	7.810	558	1.630
	09/17/01	417.000	19.700	7.360	485	0.920
	12/17/01	417.000	17.800	7.450	577	1.580
CS-C02-335	03/12/01	585.000	19.600	7.590	687	1.920
	06/18/01	585.000	19.500	7.780	642	1.210
	09/17/01	585.000	19.300	7.300	552	0.700
	12/17/01	582.000	17.100	7.530	652	0.860
CS-C03-100	03/08/01	90.000	20.900	7.570	1000	0.610
	06/13/01	90.000	21.700	7.780	950	0.990
	09/18/01	90.000	22.300	7.230	970	1.470
	12/17/01	90.000	21.300	7.130	891	0.370
CS-C03-325	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	12/17/01	531.000	19.300	7.610	413	1.130
CS-C03-465	03/08/01	801.000	20.400	8.020	442	0.420
	06/13/01	801.000	21.000	8.240	429	1.600
	09/17/01	801.000	21.600	7.650	368	0.900
	12/17/01	801.000	20.300	7.550	447	0.270

TABLE 2-2
Final Field Measurements
First, Second, Third, and Fourth Quarters 2001
San Fernando Valley Groundwater Monitoring Program

Well	Date of Measurement	Volume Purged (gal) [a]	Temp. (C) [b]	pH	Electrical Conductivity (µS/cm) [c]	Turbidity (NTU) [d]
CS-C03-550	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	12/17/01	969.000	21.200	7.790	763	1.500
CS-C04-290	03/08/01	480.000	18.800	7.970	466	0.920
	06/14/01	474.000	18.900	7.800	459	2.010
	09/19/01	477.000	19.000	7.480	368	0.900
	12/18/01	480.000	18.000	7.540	455	0.770
CS-C04-382	03/08/01	660.000	19.200	8.000	501	1.560
	06/14/01	657.000	19.600	7.850	496	1.700
	09/19/01	660.000	19.600	7.540	397	1.400
	12/18/01	657.000	18.100	7.500	498	0.990
CS-C04-520	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	12/18/01	930.000	19.200	7.650	0.741	1.190
CS-C05-160	03/09/01	249.000	18.700	7.630	688	1.010
	06/14/01	249.000	20.400	7.700	685	1.200
	09/19/01	249.000	20.100	7.310	552	1.350
	12/18/01	252.000	19.600	7.340	689	0.750
CS-C05-290	03/09/01	504.000	19.100	8.010	595	0.900
	06/14/01	501.000	21.800	7.910	599	2.600
	09/19/01	501.000	20.900	7.500	478	3.500
	12/18/01	504.000	21.100	7.490	568	0.710
CS-C06-185	03/09/01	300.000	19.900	7.690	706	1.550
	06/15/01	291.000	20.900	7.440	621	1.700
	09/19/01	294.000	21.400	7.390	514	1.680
	NA	NA	NA	NA	NA	NA
CS-VPB-01	03/08/01	75.000	19.200	7.390	120	2.320
	06/13/01	75.000	20.800	7.480	070	6.130
	09/20/01	75.000	19.200	6.940	050	9.330
	NA	NA	NA	NA	NA	NA
CS-VPB-02	03/12/01	60.000	19.700	7.340	1130	1.020
	06/13/01	60.000	21.300	7.360	1130	1.870
	09/21/01	57.000	21.000	7.150	1130	1.020
	12/13/01	57.000	19.200	6.990	1080	2.360

TABLE 2-2
Final Field Measurements
First, Second, Third, and Fourth Quarters 2001
San Fernando Valley Groundwater Monitoring Program

Well	Date of Measurement	Volume Purged (gal) [a]	Temp. (C) [b]	pH	Electrical Conductivity (µS/cm) [c]	Turbidity (NTU) [d]
CS-VPB-03	03/06/01	63.000	19.400	8.010	421	2.760
	06/12/01	66.000	19.900	7.940	403	3.380
	09/18/01	66.000	21.000	7.680	367	2.400
	12/13/01	66.000	19.000	7.600	413	2.070
CS-VPB-04	03/08/01	69.000	19.700	7.350	891	1.150
	06/14/01	69.000	20.500	7.140	1170	1.480
	09/19/01	69.000	20.300	6.890	1110	0.950
	12/18/01	69.000	19.600	6.900	1160	1.130
CS-VPB-05	03/09/01	54.000	19.500	7.320	1130	0.510
	06/14/01	54.000	21.500	7.350	1150	2.500
	09/19/01	54.000	21.000	7.040	1090	10.600
	12/18/01	54.000	22.400	7.010	1160	0.920
CS-VPB-06	03/09/01	81.000	20.500	7.150	1190	1.590
	06/15/01	84.000	21.200	6.750	1150	1.840
	09/19/01	78.000	21.100	6.830	1120	1.250
	12/18/01	45.000	21.700	6.810	1190	6.470
CS-VPB-07	03/09/01	63.000	20.100	7.170	1080	55.000
	06/14/01	63.000	20.700	7.270	1070	102.000
	09/19/01	63.000	21.200	7.170	1020	104.000
	12/18/01	63.000	19.600	7.080	1080	71.300
CS-VPB-09	03/13/01	51.000	20.200	7.430	2130	14.500
	06/12/01	51.000	20.500	7.440	1810	17.500
	09/18/01	51.000	21.900	7.160	1880	4.740
	12/13/01	51.000	19.800	7.050	1880	11.000
CS-VPB-10	03/09/01	78.000	19.200	7.290	1020	2.080
	06/15/01	78.000	19.700	7.300	980	6.590
	09/19/01	78.000	21.000	7.020	940	4.010
	12/21/01	78.000	18.400	6.820	1030	11.500
CS-VPB-11	03/09/01	12.000	20.600	7.370	1010	12.500
	06/15/01	72.000	21.000	7.280	990	44.900
	09/19/01	69.000	22.200	6.960	960	20.900
	12/21/01	69.000	19.900	6.810	1030	28.900
NH-C01-325	03/06/01	60.000	19.000	7.380	805	1.210
	06/14/01	54.000	21.900	7.420	785	2.090
	09/21/01	48.000	18.600	7.170	983	1.970
	12/10/01	54.000	18.300	7.120	950	2.430

TABLE 2-2
Final Field Measurements
First, Second, Third, and Fourth Quarters 2001
San Fernando Valley Groundwater Monitoring Program

Well	Date of Measurement	Volume Purged (gal) [a]	Temp. (C) [b]	pH	Electrical Conductivity (µS/cm) [c]	Turbidity (NTU) [d]
NH-C01-450	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	12/10/01	294.000	17.600	7.400	746	12.400
NH-C01-660	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	12/10/01	705.000	17.000	7.630	530	3.110
NH-C01-780	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	12/10/01	945.000	17.400	7.660	505	11.100
NH-C02-220	03/07/01	66.000	19.700	7.780	735	79.000
	06/13/01	69.000	18.900	7.940	727	47.100
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
NH-C02-325	03/07/01	276.000	18.300	7.840	602	3.710
	06/13/01	273.000	18.300	7.750	575	7.000
	09/20/01	270.000	19.900	7.560	473	5.710
	12/20/01	273.000	17.200	7.720	593	5.550
NH-C02-520	03/07/01	660.000	19.100	7.770	778	3.000
	06/13/01	657.000	18.600	7.740	754	1.880
	09/20/01	648.000	20.100	7.480	620	470.000
	12/20/01	660.000	17.700	7.680	774	1.110
NH-C03-380	03/07/01	294.000	15.500	7.810	605	0.650
	06/13/01	294.000	17.400	8.033	571	3.990
	09/21/01	285.000	17.400	7.740	442	0.300
	12/20/01	291.000	16.200	7.660	552	0.640
NH-C03-580	03/07/01	687.000	17.000	7.840	613	0.790
	06/13/01	684.000	18.400	8.100	592	5.190
	09/21/01	675.000	18.900	7.720	496	2.920
	12/20/01	684.000	17.200	7.720	594	4.370
NH-C03-680	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	12/12/01	879.000	19.300	7.710	464	3.840

TABLE 2-2
Final Field Measurements
First, Second, Third, and Fourth Quarters 2001
San Fernando Valley Groundwater Monitoring Program

Well	Date of Measurement	Volume Purged (gal) [a]	Temp. (C) [b]	pH	Electrical Conductivity (µS/cm) [c]	Turbidity (NTU) [d]
NH-C03-800	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	12/12/01	1116.000	19.800	7.720	389	2.820
NH-C04-240	03/05/01	276.000	18.100	7.940	467	0.930
	06/12/01	285.000	19.300	7.740	526	0.850
	09/10/01	279.000	21.000	7.620	457	0.140
	12/11/01	279.000	18.800	7.730	527	0.810
NH-C04-375	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	12/11/01	549.000	19.300	7.910	422	2.920
NH-C04-560	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	12/11/01	924.000	19.900	8.070	563	0.880
NH-C05-460	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	12/10/01	107.000	16.400	7.290	460	0.800
NH-C06-160	03/06/01	72.000	19.700	7.600	827	7.070
	06/14/01	75.000	22.500	7.880	677	9.380
	09/21/01	75.000	21.100	7.640	569	6.770
	12/12/01	81.000	19.900	7.460	699	2.870
NH-VPB-01	03/07/01	81.000	18.700	7.550	904	4.750
	06/19/01	78.000	20.600	7.520	940	14.460
	09/20/01	78.000	19.500	7.350	940	17.500
	12/20/01	78.000	18.200	7.650	1000	21.800
NH-VPB-02	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	12/13/01	48.000	19.400	7.300	1010	1.060
NH-VPB-03	03/12/01	39.000	21.000	7.910	1110	0.730
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA

TABLE 2-2
Final Field Measurements
First, Second, Third, and Fourth Quarters 2001
San Fernando Valley Groundwater Monitoring Program

Well	Date of Measurement	Volume Purged (gal) [a]	Temp. (C) [b]	pH	Electrical Conductivity (µS/cm) [c]	Turbidity (NTU) [d]
NH-VPB-04	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	12/13/01	48.000	19.500	7.420	697	1.460
NH-VPB-05	03/06/01	48.000	17.600	7.630	910	1.210
	06/13/01	45.000	19.400	7.820	910	3.040
	09/20/01	42.000	19.900	7.320	666	1.110
	12/12/01	39.000	18.700	7.240	960	2.230
NH-VPB-08	03/07/01	72.000	17.600	7.180	1160	3.500
	06/13/01	75.000	18.800	7.370	900	14.000
	09/18/01	72.000	20.200	6.900	980	53.000
	12/20/01	72.000	17.600	7.220	1080	7.630
NH-VPB-09	03/06/01	30.000	19.800	7.190	633	12.000
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
NH-VPB-12	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	12/13/01	27.000	19.900	7.340	1170	38.000
PO-C01-195	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	12/14/01	300.000	18.700	7.220	653	1.810
PO-C01-354	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	12/14/01	615.000	19.200	8.360	936	5.270
PO-C02-053	03/06/01	45.000	20.000	7.100	1130	1.160
	06/12/01	33.000	21.700	7.230	1050	2.250
	09/18/2001	63.000	21.800	6.880	990	1.960
	12/14/01	33.000	19.300	6.840	1070	1.230
PO-C02-205	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	12/14/01	333.000	18.300	7.080	678	3.880

TABLE 2-2
Final Field Measurements
First, Second, Third, and Fourth Quarters 2001
San Fernando Valley Groundwater Monitoring Program

Well	Date of Measurement	Volume Purged (gal) [a]	Temp. (C) [b]	pH	Electrical Conductivity (µS/cm) [c]	Turbidity (NTU) [d]
PO-C03-182	03/06/01	270.000	20.100	7.310	801	1.070
	06/15/01	270.000	22.700	7.270	772	3.930
	09/18/01	267.000	21.800	7.060	920	0.520
	12/19/01	273.000	21.200	6.930	785	3.830
PO-C03-235	03/06/01	375.000	20.000	7.460	920	1.650
	06/15/01	375.000	22.300	7.430	970	3.900
	09/18/01	375.000	21.600	7.120	1050	0.590
	12/190/1	381.000	20.900	7.130	889	4.290
PO-VPB-01	03/13/01	72.000	20.500	7.120	973	3.170
	06/12/01	72.000	21.000	7.370	824	6.000
	09/18/01	69.000	21.500	6.870	960	6.930
	12/14/01	72.000	19.600	6.750	940	6.290
PO-VPB-02	03/12/01	54.000	19.700	7.170	940	0.920
	06/15/01	54.000	20.500	7.030	814	2.180
	09/18/01	54.000	20.900	6.930	970	4.020
	12/21/01	60.000	18.600	6.730	940	13.100
PO-VPB-03	03/12/01	63.000	20.600	7.060	913	0.760
	06/15/01	66.000	21.600	7.130	950	3.000
	09/18/01	60.000	21.800	6.860	1020	1.920
	12/19/01	63.000	21.600	6.750	1000	1.100
PO-VPB-05	03/12/01	63.000	19.900	7.010	1070	0.850
	06/19/01	69.000	20.500	6.800	940	32.000
	09/18/01	60.000	20.600	6.770	1080	4.620
	12/19/01	66.000	20.100	6.700	1040	4.520
PO-VPB-06	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	12/19/01	57.000	19.600	6.690	1050	0.560
PO-VPB-07	03/12/01	66.000	20.700	7.060	1750	2.240
	06/19/01	72.000	21.700	6.840	1590	4.300
	09/18/01	63.000	21.300	6.840	1720	3.030
	12/19/01	66.000	20.500	6.750	1700	2.110
PO-VPB-08	03/12/01	57.000	19.700	6.680	1080	0.360
	06/19/01	54.000	20.400	6.830	980	0.890
	09/18/01	54.000	20.600	6.770	1110	0.860
	12/19/01	57.000	20.000	6.730	1050	0.340

TABLE 2-2
Final Field Measurements
First, Second, Third, and Fourth Quarters 2001
San Fernando Valley Groundwater Monitoring Program

Well	Date of Measurement	Volume Purged (gal) [a]	Temp. (C) [b]	pH	Electrical Conductivity (µS/cm) [c]	Turbidity (NTU) [d]
PO-VPB-10	03/13/01	60.000	20.700	7.400	1060	87.800
	06/12/01	60.000	21.800	7.920	803	80.200
	09/20/01	60.000	22.700	7.360	672	107.000
	NA	NA	NA	NA	NA	NA
VD-VPB-02	03/06/01	42.000	19.200	6.750	960	10.600
	06/13/01	63.000	20.000	6.650	856	15.100
	09/21/01	63.000	22.000	6068.000	691	6.810
	12/12/01	60.000	19.600	6.370	970	7.700
VD-VPB-03	03/05/01	51.000	17.800	6.890	766	0.860
	06/11/01	48.000	19.300	6.650	789	1.610
	09/10/01	51.000	19.500	6.590	930	1.570
	12/11/01	48.000	17.800	6.650	950	0.380
VD-VPB-04	03/05/01	81.000	18.200	6.790	794	5.100
	06/11/01	84.000	19.900	6.710	745	10.000
	09/10/01	75.000	20.300	6.590	659	6.990
	12/11/01	72.000	15.000	6.700	788	3.930
VD-VPB-05	03/05/01	42.000	18.800	6.740	787	4.200
	06/11/01	36.000	20.100	6.680	726	3.500
	09/10/01	33.000	20.200	6.590	638	13.400
	12/11/01	33.000	18.300	6.560	767	10.700
VD-VPB-06	03/05/01	60.000	19.100	6.590	760	1.610
	06/11/01	60.000	20.800	6.670	710	4.680
	09/10/01	60.000	21.100	6.490	640	0.860
	12/11/01	60.000	19.000	6.420	737	0.580
VD-VPB-07	03/05/01	54.000	15.500	7.270	579	28.600
	06/11/01	84.000	16.800	7.200	574	19.500
	09/10/01	84.000	16.700	6.990	519	11.700
	12/11/01	72.000	15.000	6.980	590	10.800

>105 NTU = reading outside of instrument calibration range
NA = measurement not taken
c: µS/cm = microseimens per centimeter
a: gal = gallons
d: NTU = Nephelometric Turbidity Units
b: C = degrees Centigrade

TABLE 2-3
Standards for Selected Organic Compounds, Metals, and Inorganic Compounds
San Fernando Valley Groundwater Monitoring Program

Constituent	Federal Primary MCL	California Primary MCL
VOLATILE ORGANICS (µg/L)		
Benzene	5.0	1.0
Carbon tetrachloride	5.0	0.5
Chlorobenzene	100.0	30.0
1,1-Dichloroethane	--	5.0
1,2-Dichloroethane	5.0	0.5
1,1-Dichloroethylene	7.0	6.0
cis-1,2-Dichloroethylene	70.0	6.0
trans-1,2-Dichloroethylene	100.0	10.0
1,2-Dichloropropane	5.0	5.0
cis-1,3-Dichloropropene	--	0.5
trans-1,3-Dichloropropene	--	0.5
Methylene chloride	5.0	--
1,1,2,2-Tetrachloroethane	--	1.0
Tetrachloroethylene (PCE)	5.0	5.0
Total THMs	100.0	--
Toluene	1000.0	--
1,1,1-Trichloroethane	200.0	200.0
1,1,2-Trichloroethane	5.0	32.0
Trichloroethylene (TCE)	5.0	5.0
Vinyl Chloride	2.0	0.5
METALS (µg/L)		
Aluminum (secondary)	200.0	1000.0
Antimony	6.0	--
Arsenic (interim)	50.0	50.0
Beryllium	4.0	--
Cadmium	5.0	10.0
Chromium (total)	100.0	50.0
Copper	1000.0	--
Lead	15.0	50.0
Mercury	2.0	2.0

TABLE 2-3
Standards for Selected Organic Compounds, Metals, and Inorganic Compounds
San Fernando Valley Groundwater Monitoring Program

Constituent	Federal Primary MCL	California Primary MCL
Nickel	100.0	--
Selenium	50.0	10.0
Zinc (secondary)	5000.0	--
INORGANICS (mg/l)		
Chloride (secondary)	250.0	--
Sulfate (secondary)	250.0	--
Total Dissolved Solids	500.0	500.0
Nitrate (as NO3)	--	45.0

Only adopted Federal and State MCL (7/94) values have been included in this table.
µg/L = micrograms per liter
mg/L = milligrams per liter

TABLE 2-4
Analytical Methods and Detection Limits for Groundwater Sample Parameters
San Fernando Valley Groundwater Monitoring Program

Parameter	Method	Target Detection Limit(a)
TCL Volatiles	CLP(a)/SAS(b)	CLP(a)/SAS(b)
TAL Metals	CLP(a)	CLP(b)
Chloride	300.0(c) or 325.3(c)	5 mg/L
Sulfate	300.0(c)	5 mg/L
Bicarbonate	403(d)	2 or 20 mg/L
Carbonate	403(d)	2 or 20 mg/L
Total Alkalinity	403(d)	2 or 20 mg/L
Nitrate/Nitrite	300.0, 353.2, or 353.3(c)	0.1 mg/L as N
Fluoride	4500-F-C(d)	0.1 mg/L
Hardness	130.2(c)	5 mg/L as CaCO3
Total Dissolved Solids	160.1(c)	20 mg/L
Total Organic Carbon	415.1(c)	2 mg/L

TCL = Target Compound List
TAL = Target Analyte List
SAS = Special Analytical Services
(a) CLP procedures and QC control limits are defined in EPA contracts 1FBs WA.85.J664/J680 and WP-85-J838/J839 or in the latest EPA contracts.
(b) Lower detection limits than CLP limits to be requested.
(c) EPA, 1979. Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Revised March 1983.
(d) American Public Health Association. 1989. Standard Methods for the Examination of Water and Wastewater. 17th Edition.

TABLE 2-5
Summary of TCE, PCE, and Nitrate
First Quarter - 2001
San Fernando Valley Groundwater Program

Well Name	Sample Date	TCE Value µg/L		PCE Value µg/L		Nitrate as (NO_3) Value mg/L		Well Name	Sample Date	TCE Value µg/L		PCE Value µg/L		Nitrate as (NO_3) Value mg/L	
CS-C01-105	03/08/2001	150.00	*	130.00	*	52.96	*	NH-C02-520	03/07/2001	130.00	* +1	3.00		76.54	*
CS-C01-285	03/08/2001	310.00	*	270.00	*	33.51		NH-C03-380	03/07/2001	7.00	*	7.00	*	21.09	
CS-C02-062	03/12/2001	56.00	*	63.00	* +1	49.40	*	NH-C03-580	03/07/2001	14.00	*	11.00	*	27.10	
CS-C02-180	03/12/2001	30.00	*	12.00	* -1	13.48		NH-C04-240	03/05/2001	5.00		0.30		12.73	
CS-C02-250	03/12/2001	130.00	*	67.00	* -1	23.41		NH-C06-160	03/06/2001	ND	U	ND	U	ND	U
CS-C02-335	03/12/2001	220.00	*	340.00	* +2	43.30		NH-VPB-01	03/07/2001	74.00	*	41.00	*	56.96	*+1
CS-C03-100	03/08/2001	1300.00	* +1	70.00	* +1	59.19	*	NH-VPB-03	03/13/2001	ND	U	0.30		59.63	*
CS-C03-465	03/08/2001	6.00	*	1.00		4.76		NH-VPB-05	03/06/2001	0.70		ND	U	68.98	*
CS-C04-290	03/08/2001	17.00	*	9.00	* +1	14.86		NH-VPB-08	03/07/2001	5.00		1.00		30.97	
CS-C04-382	03/08/2001	16.00	*	9.00	* +1	10.06		NH-VPB-09	03/06/2001	0.90		4.00		8.37	
CS-C05-160	03/09/2001	71.00	*	2.00		16.24		PO-C02-053	03/06/2001	2.00		0.90		37.60	-1
CS-C05-290	03/09/2001	18.00	*	7.00	* +1	9.61		PO-C03-182	03/06/2001	3.00		1.00		33.55	
CS-C06-185	03/09/2001	8.00	*	1.00		9.61		PO-C03-235	03/06/2001	4.00		1.00		22.29	
CS-VPB-01	03/08/2001	150.00	*	390.00	*	48.06	*	PO-VPB-01	03/13/2001	2.00		0.70		42.32	
CS-VPB-02	03/13/2001	14.00	*	3.00		39.96	-1	PO-VPB-02	03/12/2001	290.00	*	100.00	*	53.40	*
CS-VPB-03	03/06/2001	4.00		ND	U	10.95		PO-VPB-03	03/12/2001	14.00	*	9.00	*	53.85	*
CS-VPB-04	03/08/2001	2000.00	*	91.00	* +1	53.85	*+1	PO-VPB-05	03/12/2001	0.30		ND	U	10.06	
CS-VPB-05	03/09/2001	360.00	*	20.00	*	49.84	*	PO-VPB-07	03/12/2001	28.00	*	4.00		39.83	-1
CS-VPB-06	03/09/2001	270.00	*	ND	U	39.07		PO-VPB-08	03/12/2001	9.00	*	7.00	*	15.26	

TABLE 2-5
Summary of TCE, PCE, and Nitrate
First Quarter - 2001
San Fernando Valley Groundwater Program

Well Name	Sample Date	TCE Value µg/L		PCE Value µg/L		Nitrate as (NO_3) Value mg/L		Well Name	Sample Date	TCE Value µg/L		PCE Value µg/L		Nitrate as (NO_3) Value mg/L	
CS-VPB-07	03/09/2001	4400.00	*	39.00	*	38.89		PO-VPB-10	03/13/2001	ND	U	ND	U	76.99	*+1
CS-VPB-09	03/13/2001	ND	U	5.00		51.62	*	VD-VPB-02	03/06/2001	ND	U	2.00		68.53	*
CS-VPB-10	03/09/2001	7.00	*	38.00	*	50.29	-1	VD-VPB-03	03/05/2001	ND	U	ND	U	16.47	
CS-VPB-11	03/09/2001	2.00		11.00	*	50.73	*	VD-VPB-04	03/05/2001	ND	U	0.40		25.68	
NH-C01-325	03/06/2001	0.40		3.00	-1	70.76	*	VD-VPB-05	03/05/2001	ND	U	0.50		47.17	*
NH-C02-220	03/07/2001	19.00	*	0.50		55.63	*	VD-VPB-06	03/05/2001	ND	U	0.50		57.41	*
NH-C02-325	03/07/2001	10.00	*	5.00	-1	19.85		VD-VPB-07	03/05/2001	ND	U	ND	U	13.57	

* = Greater than MCL
NA = Not Analyzed
J = Approximate Concentration
+1 = Value moved 1 conc. zone up from prev. qtr
ND = Not Detected
L = Results Below CRQL
-1 = Value moved 1 conc. zone down from prev. qtr

TABLE 2-6
Summary of TCE, PCE, and Nitrate
Second Quarter - 2001
San Fernando Valley Groundwater Program

Well Name	Sample Date	TCE Value µg/L		PCE Value µg/L		Nitrate as (NO_3) Value mg/L		Well Name	Sample Date	TCE Value µg/L		PCE Value µg/L		Nitrate as (NO_3) Value mg/L	
CS-C01-105	06/18/2001	160.00	*	97.00	* -1	43.61	-1	NH-C02-325	06/13/2001	11.00	*	4.00		16.91	
CS-C01-285	06/18/2001	350.00	*	190.00	*	25.81		NH-C02-520	06/13/2001	140.00	*	3.00		71.20	*
CS-C02-062	06/18/2001	67.00	*	44.00	* -1	43.61	-1	NH-C03-380	06/13/2001	4.00	-1	5.00	-1	14.69	
CS-C02-180	06/18/2001	26.00	*	8.00	*	11.57		NH-C03-580	06/13/2001	18.00	*	12.00	*	23.14	
CS-C02-250	06/18/2001	240.00	*	120.00	* +1	21.81		NH-C04-240	06/12/2001	0.60		ND	U	16.91	
CS-C02-335	06/18/2001	190.00	*	160.00	*	37.83		NH-C06-160	06/14/2001	6.00	* +1	0.60		66.75	*+1
CS-C03-100	06/13/2001	470.00	* -2	21.00	* -1	44.50	-1	NH-VPB-01	06/18/2001	85.00	*	29.00	*	48.95	*
CS-C03-465	06/13/2001	7.00	*	0.90		3.56		NH-VPB-05	06/13/2001	0.50		ND	U	71.20	*
CS-C04-290	06/14/2001	14.00	*	6.00	*	12.46		NH-VPB-08	06/13/2001	10.00	* +1	2.00		26.70	
CS-C04-382	06/14/2001	17.00	*	7.00	*	8.46		PO-C02-053	06/12/2001	3.00		1.00		35.60	
CS-C05-160	06/14/2001	93.00	*	2.00		16.02		PO-C03-182	06/15/2001	NA		NA		28.93	
CS-C05-290	06/14/2001	20.00	*	6.00	*	8.46		PO-C03-235	06/15/2001	NA		NA		18.69	
CS-C06-185	06/15/2001	NA		NA		8.46		PO-VPB-01	06/12/2001	2.00		0.50		43.61	
CS-VPB-01	06/18/2001	150.00	*	240.00	*	39.16	-1	PO-VPB-02	06/15/2001	NA		NA		53.40	*
CS-VPB-02	06/18/2001	6.00	*	1.00		42.72		PO-VPB-03	06/15/2001	NA		NA		48.95	*
CS-VPB-03	06/12/2001	NA		NA		8.90		PO-VPB-05	06/18/2001	0.60		0.30		15.58	
CS-VPB-04	06/14/2001	710.00	* -1	74.00	*	44.50	-1	PO-VPB-07	06/18/2001	42.00	*	6.00	* +1	38.27	
CS-VPB-05	06/14/2001	280.00	*	27.00	*	57.85	*+1	PO-VPB-08	06/18/2001	11.00	*	6.00	*	14.69	
CS-VPB-06	06/15/2001	NA		NA		37.83		PO-VPB-10	06/12/2001	NA		NA		80.10	*

TABLE 2-6
Summary of TCE, PCE, and Nitrate
Second Quarter - 2001
San Fernando Valley Groundwater Program

Well Name	Sample Date	TCE Value µg/L		PCE Value µg/L		Nitrate as (NO_3) Value mg/L		Well Name	Sample Date	TCE Value µg/L		PCE Value µg/L		Nitrate as (NO_3) Value mg/L	
CS-VPB-07	06/14/2001	850.00	* -1	27.00	*	34.71		VD-VPB-02	06/12/2001	ND	U	3.00		66.75	*
CS-VPB-09	06/12/2001	ND	U	5.00		53.40	*	VD-VPB-03	06/11/2001	ND	U	ND	U	17.36	
CS-VPB-10	06/15/2001	NA		NA		48.95	*	VD-VPB-04	06/11/2001	ND	U	0.50		22.70	
CS-VPB-11	06/15/2001	NA		NA		48.95	*	VD-VPB-05	06/11/2001	ND	U	0.80		38.72	-1
NH-C01-325	06/14/2001	0.60		6.00	* +1	133.50	*	VD-VPB-06	06/11/2001	ND	U	0.40		53.40	*
NH-C02-220	06/13/2001	25.00	*	0.50		53.40	*	VD-VPB-07	06/11/2001	ND	U	ND	U	12.46	

* = Greater than MCL
NA = Not Analyzed
J = Approximate Concentration
+1 = Value moved 1 conc. zone up from prev. qtr
ND = Not Detected
L = Results Below CRQL
-1 = Value moved 1 conc. zone down from prev. qtr

TABLE 2-7
Summary of TCE, PCE, and Nitrate
Third Quarter - 2001
San Fernando Valley Groundwater Program

Well Name	Sample Date	TCE Value µg/L		PCE Value µg/L		Nitrate as (NO_3) Value mg/L		Well Name	Sample Date	TCE Value µg/L		PCE Value µg/L		Nitrate as (NO_3) Value mg/L	
CS-C01-105	09/20/01	150.00	* J	100.00	* J	44.5		NH-C02-520	09/20/01	260.00	*	3.20		71.2	*
CS-C01-285	09/20/01	480.00	* J	310.00	* J	25.81		NH-C03-380	09/21/01	4.00		5.00		11.57	
CS-C02-062	09/17/01	89.00	*	60.00	* +1	44.5		NH-C03-580	09/21/01	22.00	*	13.00	*	21.81	
CS-C02-180	09/17/01	36.00	* J	11.00	* J	12.02		NH-C04-240	09/10/01	0.41	J	0.50		18.25	
CS-C02-250	09/17/01	380.00	* J	210.00	* J	22.7		NH-C06-160	09/21/01	6.90	*	1.10		62.3	*
CS-C02-335	09/17/01	270.00	*	220.00	*	39.16		NH-VPB-01	09/20/01	120.00	* J +1	46.00	* J	48.95	*
CS-C03-100	09/17/01	710.00	* +1	25.00	*	44.5		NH-VPB-05	09/20/01	0.76	J	0.31	J	75.65	*
CS-C03-465	09/17/01	8.50	*	1.20		4.005		NH-VPB-08	09/17/01	16.00	*	3.20		30.26	
CS-C04-290	09/19/01	26.00	* J	12.00	* J	12.46		PO-C02-053	09/18/01	2.30		0.97		20.92	
CS-C04-382	09/19/01	18.00	*	8.90	*	8.455		PO-C03-182	09/18/01	4.10		1.60		30.26	
CS-C05-160	09/19/01	180.00	* J +1	3.60		16.02		PO-C03-235	09/18/01	5.20	* +1	1.40		20.92	
CS-C05-290	09/19/01	27.00	* J	10.00	* J	8.9		PO-VPB-01	09/18/01	3.10		1.10		42.72	
CS-C06-185	09/19/01	11.00	*	2.10		8.9		PO-VPB-02	09/18/01	380.00	*	160.00	* +1	53.4	*
CS-VPB-01	09/20/01	220.00	*	330.00	*	41.83		PO-VPB-03	09/18/01	17.00	*	10.00	*	53.4	*
CS-VPB-02	09/21/01	5.70	*	1.40		44.5		PO-VPB-05	09/18/01	ND	U	ND	U	11.57	
CS-VPB-03	09/18/01	3.80	J	ND	U	9.79		PO-VPB-07	09/18/01	370.00	* J +2	4.80		62.3	* +1
CS-VPB-04	09/19/01	5900.00	* +2	150.00	* +1	44.5		PO-VPB-08	09/18/01	15.00	* J	11.00	*	15.13	
CS-VPB-05	09/19/01	640.00	* +1	30.00	* J	57.85	*	PO-VPB-10	09/20/01	ND	UJ	ND	UJ	80.1	*

TABLE 2-7
Summary of TCE, PCE, and Nitrate
Third Quarter - 2001
San Fernando Valley Groundwater Program

Well Name	Sample Date	TCE Value µg/L		PCE Value µg/L		Nitrate as (NO_3) Value mg/L		Well Name	Sample Date	TCE Value µg/L		PCE Value µg/L		Nitrate as (NO_3) Value mg/L	
CS-VPB-06	09/19/01	540.00	* +1	6.40	*	39.61		VD-VPB-02	09/21/01	ND	U	3.60		66.75	*
CS-VPB-07	09/19/01	9200.00	* J +2	42.00	*	33.38		VD-VPB-03	09/10/01	0.50		0.50		16.02	
CS-VPB-09	09/18/01	ND	UJ	2.90		48.95		VD-VPB-04	09/10/01	0.50		0.54		23.59	
CS-VPB-10	09/19/01	7.90	*	54.00	* +1	48.95		VD-VPB-05	09/10/01	0.50		0.93		40.94	
CS-VPB-11	09/19/01	1.20		11.00	*	53.4	*	VD-VPB-06	09/10/01	0.50		0.47	J	53.4	*
NH-C01-325	09/21/01	0.69	J	10.00	* J	133.5	* JB	VD-VPB-07	09/10/01	0.50		0.50		14.24	
NH-C02-325	09/20/01	12.00	*	3.60		16.47									

* = Greater than MCL
NA = Not Analyzed
J = Approximate Concentration
+1 = Value moved 1 conc. zone up from prev. qtr
ND = Not Detected
L = Results Below CRQL
-1 = Value moved 1 conc. zone down from prev. qtr

TABLE 2-8
Summary of TCE, PCE, and Nitrate
Fourth Quarter - 2001
San Fernando Valley Groundwater Program

Well Name	Sample Date	TCE Value µg/L		PCE Value µg/L		Nitrate as (NO_3) Value mg/L		Well Name	Sample Date	TCE Value µg/L		PCE Value µg/L		Nitrate as (NO_3) Value mg/L	
CS-C01-105	12/21/01	86.00	* -1	58.00	*	44.50	J	CS-VPB-10	12/21/01	8.00	*	50.00	* -1	48.95	* J
CS-C01-285	12/21/01	530.00	* +1	340.00	*	26.70	J	CS-VPB-11	12/21/01	0.70	J	9.00	* J	53.40	* J
CS-C02-062	12/17/01	71.00	*	49.00	* -1	48.95	*	NH-C01-325	12/10/01	0.60		5.00	-1	62.30	*
CS-C02-180	12/17/01	36.00	*	12.00	*	12.91		NH-C01-450	12/10/01	1.00		9.00	*	13.35	
CS-C02-250	12/17/01	210.00	*	95.00	* -1	23.14		NH-C01-660	12/10/01	ND	U	ND	U	8.90	
CS-C02-335	12/17/01	270.00	*	220.00	*	38.72		NH-C01-780	12/10/01	ND	U	0.10	J	7.57	
CS-C03-100	12/17/01	680.00	*	23.00	*	48.95	* +1	NH-C02-325	12/20/01	11.00	*	3.00		17.36	
CS-C03-325	12/17/01	3.00		0.90		7.12		NH-C02-520	12/20/01	210.00	*	2.00		66.75	*
CS-C03-465	12/17/01	7.00	*	1.00		4.45		NH-C03-380	12/20/01	5.00		4.00		13.35	
CS-C03-550	12/17/01	0.10	J	ND	U	1.34		NH-C03-580	12/20/01	18.00	*	9.00	*	26.70	
CS-C04-290	12/18/01	24.00	*	12.00	*	13.35		NH-C03-680	12/12/01	7.00	* +1	2.00		10.68	
CS-C04-382	12/18/01	28.00	*	13.00	*	9.35		NH-C03-800	12/12/01	0.20	J	0.10	J	3.12	
CS-C04-520	12/18/01	ND	U	ND	U	1.34		NH-C04-240	12/11/01	0.30	J	0.10	J	20.47	
CS-C05-160	12/18/01	150.00	*	3.00	J	19.58		NH-C04-375	12/11/01	ND	U	ND	U	2.67	
CS-C05-290	12/18/01	7.00	*	2.00	-1	9.35		NH-C04-560	12/11/01	ND	U	ND	U	0.22	J
CS-VPB-02	12/13/01	9.00	* J	2.00		43.61		NH-C06-160	12/12/01	4.00	-1	0.70		62.30	*
CS-VPB-03	12/13/01	5.00		ND	U	11.13		NH-VPB-01	12/20/01	93.00	* -1	35.00	*	48.95	*
CS-VPB-04	12/18/01	1000.00	* -2	120.00	*	44.50		NH-VPB-02	12/13/01	0.20	J	0.50	J	48.95	*
CS-VPB-05	12/18/01	600.00	*	24.00	* J	57.85	*	NH-VPB-04	12/13/01	ND	U	ND	U	44.50	-1

TABLE 2-8
Summary of TCE, PCE, and Nitrate
Fourth Quarter - 2001
San Fernando Valley Groundwater Program

Well Name	Sample Date	TCE Value µg/L		PCE Value µg/L		Nitrate as (NO_3) Value mg/L		Well Name	Sample Date	TCE Value µg/L		PCE Value µg/L		Nitrate as (NO_3) Value mg/L	
CS-VPB-06	12/18/01	420.00	* -1	7.00	* J	39.61		NH-VPB-05	12/12/01	0.70		0.20	J	71.20	*
CS-VPB-07	12/18/01	1200.00	* -1	26.00	*	36.49		NH-VPB-08	12/20/01	8.00	*	2.00		NS	
CS-VPB-09	12/13/01	ND	U	6.00	* +1	48.95	*	NH-VPB-12	12/13/01	ND	U	ND	U	44.50	
PO-C01-195	12/14/01	2.00		0.70		25.81									
PO-C01-354	12/14/01	ND	U	ND	U	ND	U								
PO-C02-053	12/14/01	3.00		1.00		32.93									
PO-C02-205	12/14/01	0.30	J	0.40	J	25.37									
PO-C03-182	12/19/01	3.00		1.00		31.15									
PO-C03-235	12/19/01	5.00	-1	1.00		21.36									
PO-VPB-01	12/14/01	2.00		0.50		42.72									
PO-VPB-02	12/21/01	210.00	* J	85.00	* J -1	53.40	* J								
PO-VPB-03	12/19/01	17.00	*	10.00	*	53.40	*								
PO-VPB-05	12/19/01	0.20	J	0.10	J	10.24									
PO-VPB-06	12/19/01	0.50	J	0.10	J	12.02									
PO-VPB-07	12/19/01	95.00	* -1	2.00		48.95	*								
PO-VPB-08	12/19/01	11.00	*	7.00	*	15.13									
VD-VPB-02	12/12/01	ND	U	3.00		66.75	*								
VD-VPB-03	12/11/01	ND	U	0.10	J	17.36									
VD-VPB-04	12/11/01	ND	U	0.50	J	25.81									

TABLE 2-8
Summary of TCE, PCE, and Nitrate
Fourth Quarter - 2001
San Fernando Valley Groundwater Program

Well Name	Sample Date	TCE Value µg/L		PCE Value µg/L		Nitrate as (NO_3) Value mg/L		Well Name	Sample Date	TCE Value µg/L		PCE Value µg/L		Nitrate as (NO_3) Value mg/L	
VD-VPB-05	12/11/01	0.10	J	0.80		48.95	* +1								
VD-VPB-06	12/11/01	ND	U	0.40	J	14.69	-1								
VD-VPB-07	12/11/01	ND	U	ND	U	53.40	* +1								

* = Greater than MCL
NA = Not Analyzed
+1 = Value moved 1 conc. zone up from prev. qtr
ND = Not Detected
-1 = Value moved 1 conc. zone down from prev. qtr

TABLE 2-9
General Water Chemistry
Fourth Quarter-2001 Sampling Event
San Fernando Valley Groundwater Monitoring Program

Well	Date of Measurement	Chloride (mg/L)	Sulfate (mg/L)	Hardness (mg/L)	Total Alakalinity as CaCO3 (mg/L)	TDS (mg/L)	TOC (mg/L)	Nitrate (as NO_3) (mg/L)
CS-C01-105	12/21/2001	120.000	200.000	560.000	280.00	840.000	5.000	44.500
CS-C01-285	12/21/2001	23.000	56.000	270.000	230.00	390.000	3.000	26.700
CS-C02-062	12/17/2001	100.000	190.000	530.000	300.00	800.000	7.000	48.950
CS-C02-180	12/17/2001	44.000	260.000	370.000	200.00	660.000	5.000	12.905
CS-C02-250	12/17/2001	23.000	71.000	260.000	210.00	390.000	6.000	23.140
CS-C02-335	12/17/2001	33.000	79.000	310.000	220.00	460.000	4.000	38.715
CS-C03-100	12/17/2001	70.000	110.000	420.000	280.00	610.000	7.000	48.950
CS-C03-325	12/17/2001	16.000	44.000	170.000	170.00	260.000	3.000	7.120
CS-C03-465	12/17/2001	13.000	55.000	190.000	180.00	290.000	4.000	4.450
CS-C03-550	12/17/2001	120.000	110.000	180.000	140.00	500.000	4.000	1.335
CS-C04-290	12/18/2001	17.000	46.000	200.000	180.00	300.000	2.000	13.350
CS-C04-382	12/18/2001	18.000	72.000	220.000	190.00	340.000	3.000	9.345
CS-C04-520	12/18/2001	100.000	120.000	200.000	150.00	490.000	2.000	1.335
CS-C05-160	12/18/2001	47.000	110.000	280.000	210.00	480.000	3.000	19.580
CS-C05-290	12/18/2001	36.000	95.000	230.000	180.00	390.000	2.000	9.345
CS-VPB-02	12/13/2001	75.000	180.000	470.000	250.00	680.000	5.000	43.610
CS-VPB-03	12/13/2001	15.000	38.000	180.000	170.00	280.000	3.000	11.125
CS-VPB-04	12/18/2001	83.000	150.000	530.000	330.00	750.000	5.000	44.500
CS-VPB-05	12/18/2001	78.000	150.000	520.000	330.00	750.000	13.000	57.850
CS-VPB-06	12/18/2001	98.000	170.000	510.000	300.00	770.000	11.000	39.605
CS-VPB-07	12/18/2001	80.000	140.000	480.000	290.00	680.000	6.000	36.490
CS-VPB-09	12/13/2001	190.000	200.000	920.000	540.00	1200.000	14.000	48.950
CS-VPB-10	12/21/2001	88.000	150.000	440.000	220.00	670.000	3.000	48.950
CS-VPB-11	12/21/2001	81.000	150.000	450.000	230.00	680.000	3.000	53.400
NH-C01-325	12/10/2001	41.000	67.000	390.000	300.00	570.000	6.000	62.300
NH-C01-450	12/10/2001	23.000	56.000	340.000	320.00	480.000	8.000	13.350
NH-C01-660	12/10/2001	12.000	72.000	230.000	190.00	340.000	5.000	8.900
NH-C01-780	12/10/2001	12.000	65.000	220.000	180.00	330.000	4.000	7.565

TABLE 2-9
General Water Chemistry
Fourth Quarter-2001 Sampling Event
San Fernando Valley Groundwater Monitoring Program

Well	Date of Measurement	Chloride (mg/L)	Sulfate (mg/L)	Hardness (mg/L)	Total Alakalinity as CaCO3 (mg/L)	TDS (mg/L)	TOC (mg/L)	Nitrate (as NO_3) (mg/L)
NH-C02-325	12/20/2001	20.000	61.000	290.000	250.00	410.000	2.000	17.355
NH-C02-520	12/20/2001	39.000	81.000	390.000	270.00	540.000	3.000	66.750
NH-C03-380	12/20/2001	19.000	64.000	270.000	230.00	380.000	2.000	13.350
NH-C03-580	12/20/2001	40.000	68.000	520.000	240.00	420.000	5.000	26.700
NH-C03-680	12/12/2001	15.000	54.000	220.000	190.00	320.000	3.000	10.680
NH-C03-800	12/12/2001	7.000	44.000	160.000	170.00	270.000	3.000	3.115
NH-C04-240	12/11/2001	35.000	65.000	220.000	180.00	360.000	4.000	20.470
NH-C04-375	12/11/2001	21.000	49.000	170.000	170.00	280.000	2.000	2.670
NH-C04-560	12/11/2001	85.000	65.000	120.000	130.00	370.000	4.000	0.223
NH-C06-160	12/12/2001	45.000	75.000	330.000	210.00	480.000	3.000	62.300
NH-VPB-01	12/20/2001	68.000	140.000	460.000	270.00	630.000	3.000	48.950
NH-VPB-02	12/13/2001	46.000	220.000	400.000	220.00	700.000	7.000	48.950
NH-VPB-04	12/13/2001	54.000	76.000	320.000	220.00	460.000	3.000	44.500
NH-VPB-05	12/12/2001	53.000	96.000	420.000	210.00	590.000	9.000	71.200
NH-VPB-08	12/20/2001	NA	NA	NA	NA	650.000	NA	NA
NH-VPB-12	12/13/2001	110.000	150.000	530.000	280.00	750.000	8.000	44.500
PO-C01-195	12/14/2001	50.000	84.000	280.000	190.00	450.000	6.000	25.810
PO-C01-354	12/14/2001	120.000	92.000	30.000	240.00	610.000	4.000	-88.000
PO-C02-053	12/14/2001	95.000	160.000	320.000	200.00	660.000	3.000	32.930
PO-C02-205	12/14/2001	58.000	88.000	290.000	190.00	470.000	3.000	25.365
PO-C03-182	12/19/2001	67.000	120.000	300.000	200.00	560.000	2.000	31.150
PO-C03-235	12/19/2001	75.000	170.000	350.000	230.00	650.000	2.000	21.360
PO-VPB-01	12/14/2001	82.000	120.000	370.000	190.00	570.000	3.000	42.720
PO-VPB-02	12/21/2001	77.000	140.000	390.000	190.00	610.000	3.000	53.400
PO-VPB-03	12/19/2001	85.000	150.000	410.000	210.00	640.000	3.000	53.400
PO-VPB-05	12/19/2001	94.000	180.000	330.000	210.00	660.000	6.000	10.235
PO-VPB-06	12/19/2001	89.000	180.000	330.000	220.00	720.000	1.000	12.015
PO-VPB-07	12/19/2001	150.000	250.000	720.000	440.00	1100.000	8.000	48.950

TABLE 2-9
General Water Chemistry
Fourth Quarter-2001 Sampling Event
San Fernando Valley Groundwater Monitoring Program

Well	Date of Measurement	Chloride (mg/L)	Sulfate (mg/L)	Hardness (mg/L)	Total Alakalinity as CaCO3 (mg/L)	TDS (mg/L)	TOC (mg/L)	Nitrate (as NO_3) (mg/L)
PO-VPB-08	12/19/2001	85.000	180.000	350.000	240.00	680.000	1.000	15.130
VD-VPB-02	12/12/2001	89.000	140.000	390.000	160.00	620.000	5.000	66.750
VD-VPB-03	12/11/2001	90.000	170.000	360.000	190.00	600.000	4.000	17.355
VD-VPB-04	12/11/2001	76.000	110.000	340.000	210.00	540.000	5.000	25.810
VD-VPB-05	12/11/2001	100.000	110.000	330.000	130.00	520.000	3.000	48.950
VD-VPB-06	12/11/2001	40.000	89.000	330.000	190.00	410.000	3.000	14.685
VD-VPB-07	12/11/2001	76.000	150.000	280.000	130.00	540.000	4.000	53.400

TABLE 2-10
Summary of Metals Exceeding MCLs
Fourth Quarter - 2001
San Fernando Valley Groundwater Monitoring Program

Chromium 100 (µg/L) *		**Iron 300 (µg/L) ***		**Manganese 50 (µg/L)***		**Thallium 2 (µg/L) ***	
Well ID	**Value**			**Well ID**	**Value**	**Well ID**	**Value**
CS-VPB-04	494.0	PO-C02-053	769.0	PO-C02-205	116.0	CS-C01-285	4.3
CS-VPB-05	146.0	PO-C03-182	383.0	PO-VPB-05	78.7	CS-C02-180	7.6
PO-VPB-02	285.0	PO-C03-235	460.0	PO-VPB-08	1660.0	CS-C03-325	5.2
						CS-C03-550	4.7
						CS-C04-290	5.7
						CS-C04-382	5.7
						CS-VPB-06	4.6
						CS-VPB-11	7.1
						NH-C02-325	5.2
						NH-C03-580	6.8
						NH-C04-375	4.9
						NH-VPB-08	4.0
						PO-C03-235	5.1
						PO-VPB-06	6.8
						PO-VPB-07	4.3
						VD-VPB-02	5.6
						VD-VPB-05	4.7
						VD-VPB-06	5.9
						VD-VPB-07	4.5

µg/L = micrograms per liter
* = primary MCL
# = secondary MCL

TABLE 2-11
Summary of Hexavalent Chromium
First, Second, Third, and Fourth Quarters 2001
San Fernando Groundwater Monitoring Program

Well Name	Sampling Date	Hexavalent Chromium Concentration (µg/L)	Well Name	Sampling Date	Hexavalent Chromium Concentration (µg/L)
CS-C01-105	03/08/2001	4.20	NH-C03-680	NS	NS
	06/18/2001	3.90		NS	NS
	09/20/2001	4.00		NS	NS
	12/21/2001	3.12		12/12/2001	1.76
CS-C01-285	03/08/2001	3.40	NH-C03-800	NS	NS
	06/18/2001	4.00		NS	NS
	09/20/2001	5.20		NS	NS
	12/21/2001	4.25		12/12/2001	1.70
CS-C02-062	03/12/2001	0.90	NH-C04-240	03/05/2001	5.80
	06/18/2001	2.80		06/12/2001	6.80
	09/17/2001	2.80		09/10/2001	6.30
	12/17/2001	2.36		12/11/2001	6.45
CS-C02-180	03/12/2001	0.40	NH-C04-375	NS	NS
	06/18/2001	2.10		NS	NS
	09/17/2001	1.10		NS	NS
	12/17/2001	3.76		12/11/2001	4.21
CS-C02-250	03/12/2001	7.80	NH-C04-560	NS	NS
	06/18/2001	8.40		NS	NS
	09/17/2001	8.70		NS	NS
	12/17/2001	8.04		12/11/2001	ND
CS-C02-335	03/12/2001	4.60	NH-C06-160	03/06/2001	ND
	06/18/2001	5.30		06/14/2001	7.20
	09/17/2001	5.50		09/21/2001	8.60
	12/17/2001	5.43		12/12/2001	7.89
CS-C03-100	03/08/2001	49.50	NH-VPB-01	03/07/2001	5.30
	06/13/2001	55.90		06/19/2001	5.40
	09/17/2001	67.00		09/20/2001	6.30
	12/17/2001	63.90		12/20/2001	4.59
CS-C03-325	NS	NS	NH-VPB-02	NS	NS
	NS	NS		NS	NS
	NS	NS		NS	NS
	12/17/2001	4.85		12/13/2001	4.64
CS-C03-465	03/08/2001	2.20	NH-VPB-03	03/13/2001	5.30
	06/13/2001	2.20		NS	NS
	09/17/2001	2.10		NS	NS
	12/17/2001	2.16		NS	NS

TABLE 2-11
Summary of Hexavalent Chromium
First, Second, Third, and Fourth Quarters 2001
San Fernando Groundwater Monitoring Program

Well Name	Sampling Date	Hexavalent Chromium Concentration (µg/L)	Well Name	Sampling Date	Hexavalent Chromium Concentration (µg/L)
CS-C03-550	NS	NS	NH-VPB-04	NS	NS
	NS	NS		NS	NS
	NS	NS		NS	NS
	12/17/2001	ND		12/13/2001	1.54
CS-C04-290	03/08/2001	2.70	NH-VPB-05	03/06/2001	1.40
	06/14/2001	3.10		06/13/2001	1.40
	09/19/2001	3.80		09/20/2001	1.40
	12/18/2001	3.54		12/12/2001	1.32
CS-C04-382	03/08/2001	2.80	NH-VPB-08	03/07/2001	1.50
	06/14/2001	2.70		06/13/2001	1.90
	09/19/2001	3.10		09/17/2001	2.10
	12/18/2001	2.69		12/20/2001	2.00
CS-C04-520	NS	NS	NH-VPB-09	03/06/2001	0.60
	NS	NS		NS	NS
	NS	NS		NS	NS
	12/18/2001	ND		NS	NS
CS-C05-160	03/09/2001	3.90	NH-VPB-12	NS	NS
	06/14/2001	4.80		NS	NS
	09/19/2001	5.30		NS	NS
	12/18/2001	6.05		12/13/2001	5.56
CS-C05-290	03/09/2001	2.50	PO-C01-195	NS	NS
	06/14/2001	2.30		NS	NS
	09/19/2001	2.70		NS	NS
	12/18/2001	2.43		12/14/2001	ND
CS-C06-185	03/09/2001	0.80	PO-C01-354	NS	NS
	06/15/2001	2.50		NS	NS
	09/19/2001	2.50		NS	NS
	NS	NS		12/14/2001	ND
CS-VPB-01	03/08/2001	3.00	PO-C02-053	03/06/2001	1.50
	06/18/2001	2.70		06/12/2001	1.70
	09/20/2001	3.50		09/18/2001	1.30
	NS	NS		12/14/2001	1.98
CS-VPB-02	03/13/2001	2.80	PO-C02-205	NS	NS
	06/18/2001	2.20		NS	NS
	09/21/2001	2.70		NS	NS
	12/13/2001	2.48		12/14/2001	ND

TABLE 2-11
Summary of Hexavalent Chromium
First, Second, Third, and Fourth Quarters 2001
San Fernando Groundwater Monitoring Program

Well Name	Sampling Date	Hexavalent Chromium Concentration (µg/L)	Well Name	Sampling Date	Hexavalent Chromium Concentration (µg/L)
CS-VPB-03	03/06/2001	16.60	PO-C03-182	03/06/2001	ND
	06/12/2001	20.20		06/15/2001	0.70
	09/18/2001	19.50		09/18/2001	0.70
	12/13/2001	22.20		12/19/2001	ND
CS-VPB-04	03/08/2001	628.00	PO-C03-235	03/06/2001	ND
	06/14/2001	520.00		06/15/2001	ND
	09/19/2001	515.00		09/18/2001	ND
	12/18/2001	523.00		12/19/2001	ND
CS-VPB-05	03/09/2001	91.00	PO-VPB-01	03/13/2001	4.00
	06/14/2001	90.00		06/12/2001	4.50
	09/19/2001	100.00		09/18/2001	4.30
	12/18/2001	143.00		12/14/2001	3.83
CS-VPB-06	03/09/2001	8.80	PO-VPB-02	03/12/2001	340.00
	06/15/2001	9.80		06/15/2001	430.00
	09/19/2001	10.20		09/18/2001	292.00
	12/18/2001	8.68		12/21/2001	272.00
CS-VPB-07	03/09/2001	43.00	PO-VPB-03	03/12/2001	3.90
	06/14/2001	46.00		06/15/2001	5.10
	09/19/2001	45.10		09/18/2001	5.20
	12/18/2001	48.10		12/19/2001	4.70
CS-VPB-09	03/13/2001	5.40	PO-VPB-05	03/12/2001	ND
	06/12/2001	4.60		06/19/2001	0.20
	09/18/2001	4.40		09/18/2001	ND
	12/13/2001	3.02		12/19/2001	ND
CS-VPB-10	03/09/2001	2.00	PO-VPB-06	NS	NS
	06/15/2001	2.30		NS	NS
	09/19/2001	2.30		NS	NS
	12/21/2001	2.13		12/19/2001	ND
CS-VPB-11	03/09/2001	2.30	PO-VPB-07	03/12/2001	0.60
	06/15/2001	2.40		06/19/2001	1.10
	09/19/2001	2.50		09/18/2001	0.70
	12/21/2001	2.39		12/19/2001	0.69
NH-C01-325	03/06/2001	0.70	PO-VPB-08	03/12/2001	ND
	06/14/2001	0.90		06/19/2001	ND
	09/21/2001	0.90		09/18/2001	ND
	12/10/2001	0.89		12/19/2001	ND

TABLE 2-11
Summary of Hexavalent Chromium
First, Second, Third, and Fourth Quarters 2001
San Fernando Groundwater Monitoring Program

Well Name	Sampling Date	Hexavalent Chromium Concentration (µg/L)	Well Name	Sampling Date	Hexavalent Chromium Concentration (µg/L)
NH-C01-450	NS	NS	PO-VPB-10	03/13/2001	3.30
	NS	NS		06/12/2001	5.60
	NS	NS		09/20/2001	0.90
	12/10/2001	ND		NS	NS
NH-C01-660	NS	NS	VD-VPB-02	03/06/2001	0.30
	NS	NS		06/12/2001	0.30
	NS	NS		09/21/2001	0.40
	12/10/2001	0.30		12/12/2001	0.32
NH-C01-780	NS	NS	VD-VPB-03	03/05/2001	0.10
	NS	NS		06/11/2001	ND
	NS	NS		09/10/2001	0.10
	12/10/2001	0.30		12/11/2001	ND
NH-C02-220	03/07/2001	4.90	VD-VPB-04	03/05/2001	ND
	06/13/2001	5.80		06/11/2001	ND
	NS	NS		09/10/2001	ND
	NS	NS		12/11/2001	ND
NH-C02-325	03/07/2001	1.20	VD-VPB-05	03/05/2001	0.20
	06/13/2001	1.40		06/11/2001	0.20
	09/20/2001	1.40		09/10/2001	0.30
	12/20/2001	1.05		12/11/2001	0.26
NH-C02-520	03/07/2001	5.90	VD-VPB-06	03/05/2001	0.40
	06/13/2001	5.50		06/11/2001	0.30
	09/20/2001	6.00		09/10/2001	0.60
	12/20/2001	4.92		12/11/2001	0.68
NH-C03-380	03/07/2001	2.90	VD-VPB-07	03/05/2001	ND
	06/13/2001	1.70		06/11/2001	ND
	09/21/2001	1.80		09/10/2001	ND
	12/20/2001	1.84		12/11/2001	0.10
NH-C03-580	03/07/2001	2.10			
	06/13/2001	3.20			
	09/21/2001	3.70			
	12/20/2001	2.50			

Notes:
dry = water level below pump intake at time of sampling
inop = pump inoperable
NS = Not Sampled
ND = Not Detected