2003 REPORT
SAN FERNANDO VALLEY SUPERFUND SITES
GROUNDWATER MONITORING PROGRAM

SAN FERNANDO VALLEY
LOS ANGELES COUNTY, CALIFORNIA

Appendices A through C

United States Environmental Protection Agency

July 2004

Appendix A
RI Monitoring Well Completion Data

TABLE A-1
Well Completion Data
San Fernando Valley Basin - Groundwater Monitoring Program

Well ID	Ground Surface Elevation (ft msl)	Top of Casing Elevation (ft msl)	Total Depth of Boring (ft bgs)	Bottom of Well (ft bgs)	Screen Interval (ft bgs)
CS-C01-105	543.82	542.39	108	107	75-105
CS-C01-285	543.68	542.48	289	287	265-285
CS-C01-558	544.1	542.55	719	563	538-558
CS-C02-062	477.86	475.75	66	62	32-62
CS-C02-180	477.88	475.59	190	180	140-180
CS-C02-250	477.85	475.6	255	250	230-250
CS-C02-335	477.88	475.86	450	335	315-335
CS-C03-100	489.37	487.35	115	100	60-100
CS-C03-325	489.6	487.54	330	325	295-325
CS-C03-465	489.54	488.13	470	465	425-465
CS-C03-550	489.38	487.27	585	550	530-550
CS-C04-290	480.05	478.22	300	290	260-290
CS-C04-382	479.95	477.76	395	382	362-382
CS-C04-520	480.12	477.88	700	520	500-520
CS-C05-160	460.7	458.87	168	160	120-160
CS-C05-290	460.65	459.31	439	290	260-290
CS-C06-185	456.79	455.69	195	185	155-185
CS-C06-278	456.73	455.37	313	278	258-278
CS-VPB-01	499.76	498.53	109	96	76.13-95.55
CS-VPB-02	508.87	507.5	100	96	76.3-96.6
CS-VPB-03	518.24	517.82	103	96	76-96
CS-VPB-04	479.95	478.47	82	80	50-80
CS-VPB-05	460.74	459.61	63	61	41.41-61.37
CS-VPB-06	456.83	455.44	78	77	56.64-76.64
CS-VPB-07	495.83	494.44	93	92	71.34-91.88
CS-VPB-08	484.48	483.05	84	82	61.65-81.69
CS-VPB-09	487.07	485.73	80	77	56.43-76.43
CS-VPB-10	481.02	479.66	104	101	81.66-92.66
CS-VPB-11	507.22	506.08	121	116	95.78-116.08
NH-C01-325	782.08	781.43	333	330	275-325
NH-C01-450	782.15	781.56	460	453	400-450
NH-C01-660	782.24	781.3	665	662	630-660
NH-C01-780	782.27	781.47	902	785	740-780
NH-C02-220	658.52	657.1	225	225	170-220
NH-C02-325	658.73	656.72	332	325	275-325
NH-C02-520	658.85	657.04	527	520	470-520
NH-C02-681	658.97	656.96	932	686	641-681

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San Fernando Valley Basin - Groundwater Monitoring Program

Well ID	Ground Surface Elevation (ft msl)	Top of Casing Elevation (ft msl)	Total Depth of Boring (ft bgs)	Bottom of Well (ft bgs)	Screen Interval (ft bgs)
NH-C03-380	710.28	708.15	388	380	340-380
NH-C03-580	710.41	708.7	587	580	540-580
NH-C03-680	710.46	708.02	695	680	640-680
NH-C03-800	710.62	708.55	908	800	760-800
NH-C04-240	560	557.88	245	240	210-240
NH-C04-375	559.9	557.75	385	375	325-375
NH-C04-560	559.61	557.34	919	565	510-560
NH-C05-320	774.33	772.39	325	320	270-320
NH-C05-460	774.19	772.15	470	465	390-460
NH-C06-160	590.84	589.5	166	162	110-160
NH-C06-285	590.91	589.24	300	290	235-285
NH-C06-425	590.98	589.44	435	430	365-425
NH-VPB-01	559.54	559.13	169	146	125.44-145.44
NH-VPB-02	710.5	710	264	261	241.6-261.6
NH-VPB-03	676.55	676.16	223	220	200.05-220.35
NH-VPB-04	631.97	631.54	188	181	160.47-180.77
NH-VPB-05	657.26	656.68	207	205	185.16-205.46
NH-VPB-06	746.93	746.39	310	307	287.43-307.73
NH-VPB-07	756.28	755.82	295	290	270.58-290.88
NH-VPB-08	669.25	668.68	231	225	205-225.55
NH-VPB-09	795.86	794.84	293	291	271.06-291.46
NH-VPB-10	764.12	763.28	328	326	305.42-325.72
NH-VPB-11	790.64	789.88	329	321	301.14-321.44
NH-VPB-12	614.02	613.55	171	160	140.02-160.32
NH-VPB-13	855.64	855.06	379	375	356.24-375.54
NH-VPB-14	565.41	564.93	114	110	91.71-112.01
PO-C01-195	444.64	443.72	198	195	175-195
PO-C01-354	444.45	442.3	378	359	324-354
PO-C02-053	427.75	426.62	60	57	22-52
PO-C02-205	428.02	426.79	233	210	175-205
PO-C03-182	386.24	385.15	187	185	162-182
PO-C03-235	386.12	384.99	274	240	205-235
PO-VPB-01	412.64	411.33	65	61	41.25-61.25
PO-VPB-02	444.39	443.41	74	71	50.59-70.66
PO-VPB-03	387.26	386.11	78	71	50.75-70.82
PO-VPB-04	381.15	380.13	119	115	94.44-114.5
PO-VPB-05	367.66	366.57	69	66	45.78-65.78

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Well Completion Data
San Fernando Valley Basin - Groundwater Monitoring Program

Well ID	Ground Surface Elevation (ft msl)	Top of Casing Elevation (ft msl)	Total Depth of Boring (ft bgs)	Bottom of Well (ft bgs)	Screen Interval (ft bgs)
PO-VPB-06	347.72	346.47	55	51	31.22-51.21
PO-VPB-07	395.39	394.24	93	91	70.79-90.88
PO-VPB-08	331.95	331.3	49	46	25.88-46
PO-VPB-09	369.38	368.12	58	56	35.87-55.92
PO-VPB-10	474.7	472.8	93	91	70.7-90.81
PO-VPB-11	415.56	414.66	110	106	85.48-105.51
VD-VPB-01	1397.37	1395.36	214	210	189.8-209.84
VD-VPB-02	1170.81	1169.03	149	136	115.96-135.72
VD-VPB-03	817.26	816.13	50	46	25.48-45.58
VD-VPB-04	988.3	985.99	124	116	96.09-116
VD-VPB-05	1217.48	1216.13	170	156	135.62-156.43
VD-VPB-06	1649.76	1647.83	120	96	75.95-96
VD-VPB-07	1847.19	1844.77	219	216	195.88-215.92

Notes:

ft msl = Feet mean sea level
ft bgs = Feet below ground surface

Appendix B
Rationale for Selection of Representative Monitoring Well Data

Appendix B
Rationale for Selection of Representative Monitoring Well Data

Water quality data received from U.S. Environmental Protection Agency (EPA) Remedial Investigation (RI) monitoring wells, California Regional Water Quality Control Board (RWQCB) facility wells, California Department of Toxic Substances Control (DTSC) facility wells, Lockheed Aeronautical Systems Corporation (LASC)monitoring wells and production wells operated by purveyors in the SFV (Los Angeles Department of Water and Power, the Cities of Glendale and Burbank, and Crescenta Valley County Water District) are incorporated into the SFV Geographic Information System (GIS) database. For EPA RI monitoring wells, facility wells, and production wells incorporated in the SFV GIS, the areas of contamination are based on the available representative data. A set of steps has been developed to incorporate all available data in a logical method understanding the varying sampling schedules and requirements. This rationale incorporates all recent available data while retaining "older" data. The convention established for accomplishing this goal, while adequately and accurately presenting the available data in the SFV GIS database, is based upon the following set of criteria.

- For those wells sampled on a routine quarterly basis (i.e., RI and LASC monitoring wells); the highest concentration value observed during the previous 6 months (i.e., previous 2 sample rounds) should be used on the maps.
- For wells that are sampled on an annual basis, the highest concentration value observed during the previous two sample rounds should be used on the maps.
- For wells not sampled within the last year but within the previous 18 months, the highest concentration value observed during the previous 18 months should be used on the maps.
- For wells where the most recent data is from more than 18 months prior to the current sampling, the most recent concentration value available should be used on the maps.
- For wells where the most recent data is from 5 years (or more) prior to the current sampling, the data is retained at its latest know value until a more recent replacement value is obtained. These older data points are presented on the concentration contour maps with a different well symbol.

For RWQCB facility wells, additional steps are included in the selection criteria. These steps are necessary because there are additional water quality and well construction data

found in “hard copy” reports compared to the reports received in electronic format. For these quarterly data, the following steps are completed prior to the above stated criteria.

- Manual review of “hard copy” reports; entry of those data not included with the current electronic data into a separate file along with a flag.
- Review of this flagged data as subsequent electronic data reports are received. Electronic data corresponding to the flagged data should replace those data in the SFV GIS; additional data observed in subsequent review of “hard copy” reports and not received in electronic form should be entered into the separate flagged file.

Appendix C
RI Monitoring Wells Submersible Pump Installation Data

Appendix C
San Fernando Valley RI Monitoring Wells
Submersible Pump Installation Data

Well Name	Pump Installation Date	Pump Test Date	Total Depth of Well (ft bgs)1	Depth to Water (DTW) (ft bgs)2	Top of Screen (ft bgs)3	Bottom of Screen (ft bgs)3	Pump Setting (ft bgs)	Distance from DTW to Pump(ft)	Distance from Pump to Bottom(ft)	Grundfos Horse-power (HP)	Test Flow Rate (gpm)4
RI Monitoring Well Pumps Installed and Tested by CH2M HILL											
CS-C01-105	12/18/91	1/15/92	107	93.6	75	105	102	8	5	0.33	6.6
CS-C01-285	12/18/91	1/15/92	287	93	265	285	163	70	124	0.50	7.0
CS-C01-558	1/20/92	1/23/92	563	97.9	538	558	168	70	395	1.00	12.0
CS-C02-180	12/17/91	1/15/92	180	39.8	140	180	110	70	70	0.33	6.2
CS-C02-250	12/17/91	1/15/92	250	39.9	230	250	110	70	140	0.33	6.1
CS-C02-335	12/17/91	1/15/92	335	40.4	315	335	110	70	225	0.50	11.6
CS-C02-062	12/17/91	1/15/92	62	39.6	32	62	57	17	5	0.33	13.2
CS-C03-100	12/19/91	1/16/92	100	54.6	60	100	95	40	5	0.33	11.2
CS-C03-325	1/14/92	1/16/92	325	56.2	295	325	126	70	199	0.50	10.6
CS-C03-465	1/14/92	1/16/92	465	56.7	425	465	127	70	338	0.50	10.2
CS-C03-550	1/14/92	1/16/92	550	56.6	530	550	127	70	423	0.75	12.5
CS-C04-290	12/20/91	1/16/92	290	49.4	260	290	119	70	171	0.50	10.1
CS-C04-382	12/20/91	1/16/92	382	50.2	362	382	120	70	262	0.50	9.4
CS-C04-520	1/12/92	1/16/92	520	50.2	500	520	120	70	400	0.75	10.3
CS-C05-160	12/19/91	1/16/92	160	34	120	160	104	70	56	0.33	6.5
CS-C05-290	12/19/91	1/16/92	290	37	260	290	107	70	183	0.33	6.5
CS-C06-185	1/13/92	1/16/92	185	36.8	155	185	107	70	78	0.33	6.1
CS-C06-278	1/13/92	1/16/92	278	38.8	258	278	109	70	169	0.33	6.2
CS-VPB-02	12/18/91	1/15/92	96	67.4	76	96	95	28	1	0.33	6.2
CS-VPB-03	1/8/92	1/16/92	96	60.6	76	96	91	30	5	0.33	10.8
CS-VPB-06	12/19/91	1/16/92	77	37.3	56-	76	71	34	6	0.33	12.7
CS-VPB-09	1/8/92	1/16/92	76	54.8	56	76	71	16	5	0.33	11.1
CS-VPB-10	12/20/91	1/16/92	101	62.8	82	101	96	33	5	0.33	10.2
CS-VPB-11	12/19/91	1/16/92	116	81.9	96	116	109	27	7	0.33	8.2
NH-C01-325	12/13/91	1/14/92	330	298.6	275	325	325	26	5	1.00	6.4
NH-C01-450	1/9/92	1/23/92	453	298.7	400	450	369	70	84	1.50	8.1
NH-C01-660	1/9/92	1/23/92	662	302.7	630	660	373	70	289	1.50	7.5
NH-C01-780	1/9/92	1/23/92	785	304.1	740	780	374	70	411	1.50	7.5
NH-C02-220	12/15/91	1/14/92	219	179.9	170	218	213	33	6	0.75	8.8
NH-C02-325	12/15/91	1/14/92	325	182.1	215	325	252	70	73	0.75	5.4

Appendix C
San Fernando Valley RI Monitoring Wells
Submersible Pump Installation Data

Well Name	Pump Installation Date	Pump Test Date	Total Depth of Well (ft bgs)1	Depth to Water (DTW) (ft bgs)2	Top of Screen (ft bgs)3	Bottom of Screen (ft bgs)3	Pump Setting (ft bgs)	Distance from DTW to Pump(ft)	Distance from Pump to Bottom(ft)	Grundfos Horse-power (HP)	Test Flow Rate (gpm)4
RI Monitoring Well Pumps Installed and Tested by CH2M HILL											
NH-C02-520	1/11/92	1/14/92	520	191.2	470	520	261	70	259	1.00	8.6
NH-C02-681	1/11/92	1/14/92	686	191.6	641	681	262	70	424	1.50	11.6
NH-C03-380	1/10/92	1/17/92	380	246.8	340	380	317	70	63	1.00	5.6
NH-C03-580	12/18/91	1/14/92	580	235	540	580	305	70	275	1.50	10.8
NH-C03-680	1/10/92	1/17/92	680	234.7	640	680	305	70	375	1.50	10.9
NH-C03-800	1/10/92	1/17/92	800	249.9	760	800	320	70	480	1.50	9.8
NH-C04-240	12/17/91	1/15/92	240	94	210	245	164	70	76	0.50	7.2
NH-C04-375	1/13/92	1/15/92	375	114.6	325	375	185	70	190	0.75	9.9
NH-C04-560	1/13/92	1/15/92	565	86.2	510	560	156	70	409	1.00	12.8
NH-C05-320	1/6/92	1/14/92	320	308.6	270	320	315	6	5	1.00	5.6
NH-C05-460	1/6/92	1/14/92	460	307.7	390	460	378	70	82	1.50	7.8
NH-C06-160	12/16/91	1/14/92	162	120.5	110	160	157	37	5	0.50	6.0
NH-C06-285	1/23/92	1/24/92	290	125.8	235	285	196	70	94	0.75	9.0
NH-C06-425	1/12/92	1/14/92	430	131.3	366	425	201	70	229	0.75	9.6
NH-VPB-01	12/16/91	1/15/92	146	103.9	126	146	136	32	10	0.33	5.1
NH-VPB-02	1/8/92	1/17/92	260	231	240	260	255	24	5	0.75	6.3
NH-VPB-03	1/7/92	1/17/92	220	125.4	200	220	210	85	10	0.75	8.8
NH-VPB-04	1/23/92	1/23/92	180	154.7	160	180	175	20	5	0.50	6.5
NH-VPB-05	12/14/91	1/14/92	207	180.5	185	205	202	22	5	0.75	10.1
NH-VPB-09	12/14/91	1/15/92	293	275.1	271	291	288	13	5	1.00	7.0
NH-VPB-10	1/7/92	1/23/92	326	238.3	305	325	308	70	18	1.00	<1
NH-VPB-12	1/8/92	1/23/92	160	134.6	140	160	155	20	5	0.50	4.0
PO-C01-195	1/15/92	1/17/92	195	41.8	175	195	112	70	83	0.33	5.7
PO-C01-354	1/15/92	1/17/92	359	40.9	354	359	111	70	248	0.50	11.8
PO-C02-205	2/15/92	2/16/92	210	43.8	175	210	114	70	96	0.33	5.2
PO-C02-53	2/15/92	2/16/92	57	43.6	22	52	52	8	5	0.33	11.9
PO-C03-182	12/21/91	1/21/92	185	43.8	162	182	114	70	71	0.33	7.9
PO-C03-235	1/21/92	1/21/92	240	44	205	235	114	70	126	0.33	5.0
PO-VPB-01	12/20/91	1/21/92	61	27.2	41	61	56	29	5	0.33	12.1
PO-VPB-05	1/21/92	1/21/92	66	32.3	46	66	61	29	5	0.33	13.1

Appendix C
San Fernando Valley RI Monitoring Wells
Submersible Pump Installation Data

Well Name	Pump Installation Date	Pump Test Date	Total Depth of Well (ft bgs)1	Depth to Water (DTW) (ft bgs)2	Top of Screen (ft bgs)3	Bottom of Screen (ft bgs)3	Pump Setting (ft bgs)	Distance from DTW to Pump(ft)	Distance from Pump to Bottom(ft)	Grundfos Horse-power (HP)	Test Flow Rate (gpm)4
RI Monitoring Well Pumps Installed and Tested by CH2M HILL											
PO-VPB-06	1/14/92	1/21/92	51	23.9	31	51	46	22	5	0.33	13.5
PO-VPB-08	12/21/91	1/21/92	46	19.8	26	46	41	21	5	0.33	14.3
PO-VPB-10	1/15/92	1/17/92	91	62.9	71	91	86	23	5	0.33	4.8
VD-VPB-01	1/21/92	1/23/92	210	202.6	189	209	208	5	2	0.75	
VD-VPB-02	1/23/92	1/24/92	136	124	116	136	131	7	5	0.50	9.5
VD-VPB-03	1/22/92	1/24/92	45	21.1	25	46	40	19	5	0.33	13.5
VD-VPB-04	1/23/92	1/24/92	116	89.1	96	116	111	22	5	0.33	5.5
VD-VPB-05	1/22/92	1/24/92	156	143.8	136	156	151	7	5	0.50	
VD-VPB-06	1/22/92	1/23/92	96	76.4	76	90	91	15	5	0.33	9.0
VD-VPB-07	1/22/92	1/23/92	216	202.5	196	216	211	9	5	0.75	8.0

NOTES:

1) Total depth of well from May 1991 Quarterly Sampling Plan, (J.M. M.).

2) Depth to Water = During second quarter sampling event April-May 1992.

3) bgs = below ground surface.

4) gpm= gallons per minute