Appendix A

Summary of RCRA Monitoring Data

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This appendix represents a summary of RCRA monitoring data and is not intended as a complete compilation of data available for WMAs T and TX-TY. A complete listing is available through the Hanford Environmental Information Information System (HEIS). Data for particular periods of time, along with pertinent QA and QC data are contained in various RCRA Quarterly and Annual Reports and in PNNL Groundwater Monitoring Reports.

In the following tables:

1) All metal analyses are for filtered samples and are reported as µg/L (ppb);
2) All anion analyses are for unfiltered samples and are reported as µg/L (ppb);
3) All radionuclide analyses are for unfiltered samples and are reported as pCi/L;
4) Total Organic Carbon (TOC) and Total Organic Halogen (TOX) are reported as µg/L (ppb);
5) Alkalinity (ALK) and Total Dissolved Solids (TDS) are reported as µg/L (ppb);
6) Specific Conductance (Spec. Cond.) is reported µS/cm.
7) n.d. = no data.
8) s.d. = suspect data.

Table A.1. Analytical Results for Well 299-W10-15 (page 1 of 2)

Sample Date	Spec Cond	pH	TOC	TOX	Na	K	Ca	Mg	Cr	Ba	Sr
2/25/90	1,010	8.1	<550	790	177000	4950	33800	10500	94	48	210
7/22/91	1,217	8.4	<1000	933	180000	5500	42000	15000	130	71	n.d.
10/4/91	1,210	8.1	<1000	580	180000	5600	43000	16000	140	69	n.d.
1/27/92	1,291	7.9	<1000	s.d.	200000	5600	51000	19000	170	81	n.d.
4/20/92	1,265	8	<1000	s.d.	190000	5200	46000	16000	150	75	n.d.
7/13/92	1,279	7.8	<1000	s.d.	180000	4600	47000	16000	150	69	n.d.
11/10/92	1,244	8.2	<1000	s.d.	180000	5000	44000	16000	140	70	n.d.
3/5/93	1,180	8.3	<1000	s.d.	180000	5600	44000	15000	140	70	n.d.
6/21/93	1,183	8	500	s.d.	180000	5300	41000	16000	130	67	n.d.
9/28/93	1,172	8.3	600	s.d.	180000	5200	41000	16000	130	67	n.d.
12/10/93	1,129	7.7	525	1004	180000		39000	16000	130	67	n.d.
3/17/94	1,126	8.2	400	763	170000	5000	39000	15000	150	65	n.d.
7/1/94	1,616	7.5	500	319	25000	7200	160000	57000	500	120	n.d.
9/21/94	854	8.1	400	690	150000	4300	32000	13000	100	55	n.d.
11/30/94	1,009	8.4	400	279	170000	4800	35000	14000	110	60	n.d.
2/10/95	1,093	8.2	400	682	160000	4900	36000	14000	110	61	n.d.
5/18/95	1,088	8.1	400	490	170000	4300	36000	14000	110	61	n.d.
8/8/95	1,029	8.2	400	330	160000	4800	35000	13000	930	63	n.d.
11/14/95	1,082	8.2	300	680	160000	4800	34000	13000	100	56	220
2/14/96	1,064	8.1	370	237	160000	4400	33000	13000	97	55	220
5/15/96	1,073	8.1	391	346	160000	4600	30000	11000	94	53	200
8/12/96	s.d.	8.1	371	349	180000	5100	35000	13000	110	56	220
11/11/96	1,042	8.4	<530	344	162000	5110	31300	11500	99.1	51	197
2/5/97	1,063	8.5	<530	362	147000	2710	32100	10900	24.4	41	160
5/8/97	1,094	8.5	650	94.7	183000	5040	34400	12800	106	63.3	232

Table A.1. Analytical Results for Well 299-W10-15 (page 2 of 2)

Sample Date	ALK	TDS	Cl	SO4	NO3	F	Tc-99	Tritium	Beta	Alpha	I-129	Co-60	Cs-137	Sr-90
2/25/90	n.d.	n.d.	19400	66300	292000	4600	n.d.	60600	45.2	n.d.	n.d.	<3.21	<2.36	n.d.
7/22/91	n.d.	n.d.	21000	61000	417000	4300	278	44400	40.2	<0.29	<-0.31	n.d.	n.d.	n.d.
10/4/91	n.d.	n.d.	22000	61500	424000	4150	298	42000	48	1.7	0.27	<3	<-1.46	<-1.4
1/27/92	n.d.	n.d.	27000	69000	380000	4100	291	41200	75	<0.89	<-0.18	<2.32	<0.73	<-0.77
4/20/92	n.d.	n.d.	26000	68000	410000	4600	395	38900	61.8	2.25	0.41	<5.12	<5.27	<-0.50
7/13/92	n.d.	n.d.	28000	68000	410000	4800	435	40700	71.4	2.93	<0.03	6.48	<0.27	<0.04
11/10/92	n.d.	n.d.	30000	61000	410000	5000	495	40800	77.4	5.73	0.31	<5.67	<-0.52	<-0.32
3/5/93	n.d.	n.d.	27000	61000	370000	4700	301	39700	82.3	2.57	<-0.16	13.9	<-6.31	<-0.44
6/21/93	n.d.	830000	27000	66000	360000	4800	334	38100	85.3	2.14	<0.18	<-8.34	<0.55	<-0.16
9/28/93	n.d.	790000	28000	66000	350000	4700	562	35300	108	3.42	<0.24	<6.27	<1.56	<-0.07
12/10/93	170000	810000	26000	65000	340000	4800	510	35000	92.2	3.25	0.42	2.31	<-0.63	<0.07
3/17/94	110000	810000	26000	68000	360000	5000	471	34800	74.6	<2.61	<0.04	<1.19	<-1.08	<-0.07
7/1/94	100000	960000	96000	91000	510000	1200	10100	379000	1640	<1.77	49.4	3.39	<0.69	<-0.16
9/21/94	150000	750000	28000	67000	320000	5100	367	34400	82.9	4.51	<0.17	<1.13	<-0.62	<-0.05
11/30/94	150000	730000	26000	65000	260000	4800	467	32800	106	<1.64	<0.36	3.09	<0.41	<-0.09
2/10/95	150000	760000	27000	63000	230000	4700	509	35200	34.3	<2.3	n.d.	n.d.	n.d.	n.d.
5/18/95	160000	760000	27000	69000	260000	5000	503	35300	99.3	<-0.03	n.d.	n.d.	n.d.	n.d.
8/8/95	160000	760000	26000	62000	280000	4800	441	33100	88.7	4.42	<-0.12	n.d.	n.d.	n.d.
11/14/95	160000	720000	27000	65000	300000	4200	422	30657	98.5	<1.39	n.d.	n.d.	n.d.	n.d.
2/14/96	150000	740000	28000	67000	290000	5000	403	34255	74.2	<1.0	n.d.	n.d.	n.d.	n.d.
5/15/96	150000	760000	28000	65000	290000	4800	322	31366	83.2	<2.15	n.d.	<1.39	<0.58	n.d.
8/12/96	160000	770000	29000	65000	280000	4700	433	34000	85	2	n.d.	n.d.	n.d.	n.d.
11/11/96	148000	752000	27200	63000	304000	4460	390	30300	100	<1.45	n.d.	n.d.	n.d.	n.d.
2/5/97	149000	781000	28400	63000	309000	3890	367	32100	97.3	3.01	n.d.	n.d.	n.d.	n.d.
5/8/97	150000	831000	39400	65600	308500	3950	326	31100	181	1.57	n.d.	<1.85	<-2.12	n.d.

Table A.2. Analytical Results for Well 299-W10-16 (page 1 of 2)

	Cond	pH	TOC	TOX	Na	K	Ca	Mg	Cr	Ba	Sr
2/27/90	764	8	<550	786	113000	3990	29400	8880	41	43	169
7/22/91	865	8	<1000	473	119000	4600	36000	11200	20	40	n.d.
9/24/91	877	7.3	<1000	620	120000	4100	37000	11000	27	42	n.d.
11/25/91	834	8	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
1/27/92	827	7.8	<1000	s.d.	120000	4700	38000	12000	38	42	n.d.
4/20/92	802	7.7	<1000	s.d.	110000	3400	36000	11000	30	41	n.d.
7/13/92	796	7.8	<1000	s.d.	110000	3700	35000	10000	36	38	n.d.
11/10/92	772	7.8	<1000	s.d.	110000	3400	34000	10000	50	40	n.d.
3/5/93	790	7.8	<1000	s.d.	110000	4200	34000	10000	50	30	n.d.
4/29/93	758	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
6/21/93	779	7.7	375	s.d.	110000	3800	34000	10000	44	37	n.d.
9/28/93	774	7.6	575	s.d.	110000	4100	33000	10000	n.d.	36	n.d.
12/16/93	772	7	375	779	110000	3700	32000	10000	41	35	n.d.
3/17/94	771	7.9	338	653	110000	3900	32000	9700	43	34	n.d.
7/1/94	798	7.8	390	636	110000	3900	31000	9500	45	35	n.d.
9/21/94	684	7.3	320	721	110000	3500	29000	9000	41	31	n.d.
11/29/94	766	8.1	200	646	120000	4000	32000	9600	51	34	n.d.
2/9/95	740	7.4	400	710	120000	4200	28000	8600	43	33	n.d.
5/17/95	756	7.9	400	60	120000	3200	26000	8100	47	31	n.d.
8/7/95	778	7.9	400	350	120000	3600	25000	7700	45	30	n.d.
11/14/95	766	8.5	340	720	110000	4200	26000	7900	48	27	140
2/14/96	783	8.1	417	163	120000	3700	28000	8500	45	29	150
5/15/96	790	8.5	371	248	110000	3400	22000	7000	41	27	130
8/12/96	803	8.1	471	493	130000	3400	28000	8600	53	34	150
11/11/96	756	8.2	<530	n.d.	119000	5420	25900	8080	47	29	137
2/5/97	786	8.1	<530	548	131000	2330	30400	9550	50	37	147
5/8/97	893	8.1	740	471	142000	3650	32700	10300	37	37	175
8/7/97	937	8.2	590	227	138000	4970	30900	9890	24	38	170

Table A.1. Analytical Results for Well 299-W10-16 (page 2 of 2)

	ALK	TDS	Cl	SO4	NO3	F	Tc-99	Tritium	I-129	Co-60	Cs-137	Sr-90	U	Beta	Alpha	Tc/Beta
227/90	n.d.	n.d.	23700	56500	163000	1800	n.d.	53200	n.d.	<0.0	<3.34	n.d.		17.8		
7/22/91	n.d.	n.d.	32000	60000	195000	2100	99.1	46800	<0.04	n.d.	n.d.	n.d.	1.8	18.5	0.14	5.356757
9/24/91	n.d.	n.d.	34000	62000	196000	2100	96	44000	<0.09	<6.13	<3.94	<-0.31	1.83	18.1	1.6	5.303867
1/27/92	n.d.	n.d.	34000	67000	170000	1900	131	45900	0.4	<6.55	<5.70	<-0.14	2.49	21.3	0.81	6.150235
4/20/92	n.d.	n.d.	33000	67000	170000	2300	118	44500	<0.16	<2.80	<2.56	<-0.66	1.81	21.8	1.04	5.412844
7/13/92	n.d.	n.d.	34000	64000	160000	2000	123	50500	0.29	<2.03	<0.86	<-0.07	2.34	19.9	1.34	6.180905
11/10/92	n.d.	n.d.	30000	65000	160000	2800	127	49100	<0.29	<-8.02	<-2.08	<-0.29	1.35	23.5	0.66	5.404255
3/5/93	n.d.	n.d.	30000	62000	140000	2400	70.2	51700	<0.30	9.72	<-0.73	<-0.67	1.48	29.1	0.58	2.412371
6/21/93	n.d.	520000	30000	61000	150000	2400	107	50000	<0.09	<0.29	<4.96	<-0.06	1.22	31.5	0.65	3.396825
9/28/93	n.d.	520000	30000	64000	150000	2500	115	46100	<0.08	<2.06	<5.73	<0.08	1.49	34.1	1.95	3.372434
12/16/93	150000	520000	31000	64000	150000	2600	125	48000	1.26	1.58	<0.82	<-0.17	1.76	30.6	0.77	4.084967
3/17/94	150000	530000	30000	66000	160000	2500	118	45400	0.41	2.54	<0.23	0.41	1.75	27.8	2.86	4.244604
7/1/94	150000	500000	31000	64000	160000	2700	107	46300	0.45	<1.54	<0.88	<-0.09	1.27	28.2	1.62	3.794326
9/21/94	150000	500000	31000	62000	140000	2900	116	46600	<0.20	<0.91	<0.66	<-0.18	1.91	33.8	2.1	3.431953
11/29/94	150000	500000	30000	59000	130000	2600	113	45000	<-0.08	<1.02	<-0.14	<-0.18	1.39	29.5	8.66	3.830508
2/9/95	150000	510000	29000	57000	120000	2500	128	43800	n.d.	n.d.	n.d.	n.d.	1.58	28.5	3.26	4.491228
5/17/95	150000	520000	28000	59000	120000	2500	139	47600	n.d.	n.d.	n.d.	n.d.	1.05	28.5	1.04	4.877193
8/7/95	150000	510000	28000	56000	130000	2500	104	45600	n.d.	n.d.	n.d.	n.d.		33.8	2.3	3.076923
11/14/95	160000	480000	29000	57000	140000	2000	114.47	41882	n.d.	n.d.	n.d.	n.d.		26.14	0.39	4.379112
2/14/96	150000	540000	31000	59000	140000	2700	131.39	48700	n.d.	n.d.	n.d.	n.d.		27.87	3.24	4.714388
5/15/96	150000	540000	30000	60000	140000	2500	104.08	42366	n.d.	n.d.	n.d.	n.d.		27.36	2.01	3.804094
8/12/96	150000	530000	31000	60000	130000	2500	128.82	45717	n.d.	n.d.	n.d.	n.d.		29.01	1.71	4.440538
11/11/96	144000	540000	30100	58400	142500	1920	125	39600	n.d.	n.d.	n.d.	n.d.		38.7	1.06	3.229974
2/5/97	145000	540000	32600	58700	152700	1840	110	40400	n.d.	n.d.	n.d.	n.d.		34.5	0.89	3.188406
5/8/9	130000	740000	36700	56000	202300	1690	86	36800	n.d.	n.d.	n.d.	n.d.		57.8	0.63	1.487889
8/7/97	128000	655000	43200	56400	233700	1610	75	34500	n.d.	<-0.83	n.d.	n.d.		27.1	<0.27	2.767528
11/11/97	133000	620000	38700	59000	202300	1580	91.4	36700	<0.29	<-0.39	<-0.79	n.d.		30.4	<0.86	

Table A.3. Analytical Results for Well 299-W11-27 (page 1 of 2)

Sample Date	Spec Cond	pH	TOC	TOX	Na	K	Ca	Mg	Cr	Ba	Sr
5/27/92	702	8	<1000	s.d.	29000	5300	76000	25000	<20	90	n.d.
7/13/92	582	7.9	<1000	s.d.	26000	4600	61000	19000	<20	71	n.d.
11/10/92	537	8.1	<1000	s.d.	23000	3800	54000	18000	<20	50	n.d.
3/5/93	387	8.5	<1000	s.d.	22000	3200	40000	13000	<20	40	n.d.
4/29/93	385	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
6/21/93	401	8	400	s.d.	21000	4200	46000	15000	<20	52	n.d.
9/28/93	399	7.9	425	s.d.	19000	4100	44000	15000	<5.42	52	n.d.
12/13/93	375	7.8	450	9.8	21000	4300	44000	15000	<6	52	n.d.
3/17/94	395	8	<200	9.8	19000	4100	42000	14000	<11	47	n.d.
7/6/94	383	8.1	368	9.7	20000	4200	42000	14000	100	49	n.d.
9/21/94	344	8.1	<320	8.3	18000	4100	41000	14000	5.4	42	n.d.
11/30/94	412	8.1	300	16.7	20000	4300	42000	14000	17	48	n.d.
2/9/95	382	7	200	19.9	19000	4900	39000	14000	4.9	45	n.d.
5/17/95	407	8	400	10.0	21000	3600	43000	15000	10	51	n.d.
8/8/95	425	8.1	300	20.0	20000	4500	43000	15000	11	48	n.d.
11/14/95	429	8.3	270	13.0	19000	4800	42000	15000	29	47	240
2/14/96	611	8.3	547	16.0	23000	5200	65000	23000	360	71	380
5/15/96	954	8.1	919	24.6	24000	6000	89000	31000	590	100	560
8/12/96	1307	7.9	901	91.4	30000	7200	160000	52000	190	150	890
11/12/96	1267	8	1090		27600	7600	150000	51000	94	128	830
2/6/97	1232	7.9	1085	216	26200	7370	151000	51300	61.4	119	850
5/28/97	1115	7.8	1500	116	33000	5490	142000	47800	78	112	789
8/21/97	1126	7.7	1150	126	34500	6540	133000	44800	57	111	756

Table A.3. Analytical Results for Well 299-W11-27 (page 2 of 2)

Sample Date	TDS	ALK	Cl	SO4	NO3	F	Tc-99	Tritium	I-129	Co-60	Beta	Alpha
5/27/92	n.d.	n.d.	16000	180000	39000	700	38.5	448	0.12	<-4.18	12	2.58
7/13/92	n.d.	n.d.	7400	140000	24000	700	152	594	0.55	<4.81	35.2	1.68
11/10/92	n.d.	n.d.	5200	130000	11000	900	20.3	380	<0.19	<2.94	9.81	2.65
3/5/93	n.d.	n.d.	2400	58000	6800	800	<1.19	239	<-0.03	<-5.37	<1.25	1.18
6/21/93	280000	n.d.	2400	70000	5000	800	<1.26	369	<-0.46	<2.45	4.31	1.78
9/28/93	270000	n.d.	2100	59000	5600	900	<2.11	171	<-0.35	<3.82	3.87	2.07
12/13/93	270000	150000	2000	52000	5200	1300	<1.98	242	0.47	<0.15	7.41	1.47
3/17/94	280000	150000	1900	50000	5800	1100	<0.49	153	<0.07	<-1.06	6.44	1.62
7/6/94	270000	140000	2000	47000	4600	1200	<4.23	292	<-0.03	<0.45	4.73	1.96
9/21/94	260000	150000	2200	53000	5900	1400	<2.36	1200	<0.06	<0.46	6.65	4.21
11/30/94	260000	140000	2200	60000	6300	1000	11.7	285	<0.23	0.90	92.7	1.4
2/9/95	260000	140000	2000	51000	4300	1000	24.7	202	n.d.	n.d.	11.7	2.28
5/17/95	270000	140000	2500	59000	6600	1100	67.2	1200	n.d.	n.d.	18.4	<0.16
8/8/95	290000	150000	2400	61000	5900	1100	117	213	n.d.	n.d.	32.2	2
11/14/95	280000	140000	3300	67000	7600	830	441	192	n.d.	n.d.	97.79	<1.18
2/14/96	430000	130000	9800	140000	27000	1200	3482	1169	n.d.	n.d.	755.11	2.6
5/15/96	690000	100000	22000	280000	83000	1100	7802	3927	n.d.	n.d.	2101.4	3.72
8/12/96	900000	91000	38000	320000	190000	1300	17914	4087	n.d.	n.d.	4470.1	0.94
11/12/96	938,000	96000	40800	281000	229000	680	19000	12000	n.d.	n.d.	8600	<-0.23
2/6/97		97500	35700	326000	201000	760	21700	8200	<2.92	n.d.	9330	<1.93
5/28/97	975,000	10000	34900	287000	170800	719	18900	10200	<0.126	28.7	13700	<0.38
8/21/97	948,000	109,000	37400	256000	161600	784	16000	9630	<0.464	27.8	7710	<4.23

Table A.4. Analytical Results for Well 299-W11-28 (page 1 of 2)

	Cond	pH	TOC	TOX	Na	K	Ca	Mg	Cr	Ba	Sr
5/27/92	1098	7.8	<1000	s.d.	150000	5200	46000	15000	<20	52	n.d.
4/29/93	385	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
1/31/94	970	8.3	425	618	140000	4600	36000	12000	<5.42	43	n.d.
3/21/94	916	8	500	603	130000	4900	41000	14000	<5.42	41	n.d.
7/6/94	1033	7.7	500	578	140000	4600	35000	12000	<11	38	n.d.
9/21/94	856	7.8	400	n.d.	130000	4700	39000	14000	<4.5	34	n.d.
10/26/94	671	8	500	934	130000	4800	43000	14000	34	43	n.d.
12/13/94	930	8	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
2/23/95	913	8	400	747	140000	4700	36000	12000	45	39	n.d.
5/17/95	878	7.7	400	340	150000	3800	33000	11000	43	39	n.d.
7/26/95	865	7.7	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
8/10/95	897	7.9	400	300	130000	4500	32000	11000	56	36	n.d.
11/17/95	839	7.8	420	420	130000	4400	28000	9700	33	31	170
2/14/96	860	8	386	367	130000	4000	28000	9400	50	36	160
5/15/96	845	8	437	404	120000	3900	22000	7600	39	32	140
8/13/96	847	7.9	421	473	140000	3900	28000	9400	45	38	160
11/12/96	862	8	560	n.d.	140000	3510	27900	9630	21.8	35.9	160
2/5/97	867	7.7	580	628	164000	3200	33850	12200	71	50	187
5/15/97	928	7.7	530	607	142000	5140	30600	9880	18.9	42.3	168
8/11/97	931	8	640	672	149000	3720	31500	10300	10	67	172
11/11/97	925	10.3	540	491	148000	4920	31200	10100	28	40.2	170

Table A.4. Analytical Results for Well 299-W11-28 (page 2 of 2)

	ALK	TDS	Cl	SO_4	NO_3	F	Tc-99	Tritium	I-129	Co-60	Cs-137	Sr-90	U	Beta	Alpha
5/27/92			43000	160000	170000	3400	271	13500	<0.27	<0.27	<3.56	<0.27	1.77	72.3	1.77
1/31/94	150000	640000	29000	110000	190000	3900	407	60500	<0.07	2.06	<-0.93	0.86	1.76	85.7	0
3/21/94	150000	630000	30000	100000	200000	3900	320	59000	<-0.20	6.45	<0.82	<-0.22	1.37	79.6	0.43
7/6/94	140000	680000	33000	110000	220000	3700	373	60900	0.44	2.99	<0.68	<-0.12	1.68	68.2	5.81
9/21/94	150000	650000	32000	110000	200000	3800	251	58600	<0.11	<1.24	<0.34	<0.04	1.99	55	2.96
10/26/94	150000	640000	32000	110000	210000	3500	455	57500	0.37	2.43	<0.0	<-0.14	2.03	86.3	2.98
2/23/95	160000	605000	30000	81500	130000	3600	351	59400	n.d.	n.d.	n.d.	n.d.	1.75	85	1.46
5/17/95	160000	610000	27000	98000	130000	3600	285	60300	n.d.	n.d.	n.d.	n.d.	1.18	62.5	0.71
8/10/95	160000	650000	28000	93000	140000	3400	305	57900	n.d.	n.d.	n.d.	n.d.	n.d.	57.8	2.91
11/17/95	160000	550000	29000	90000	130000	2800	262	62015	n.d.	n.d.	n.d.	n.d.	n.d.	58.16	1.73
2/14/96	160000	590000	31000	88000	140000	3600	292	67966	n.d.	n.d.	n.d.	n.d.	n.d.	66.7	0.82
5/15/96	160000	580000	31000	89000	130000	3300	319	59818	<0.27	n.d.	n.d.	n.d.	n.d.	73.33	0.27
8/13/96	150000	580000	33000	83000	120000	3400	41	67655	n.d.	n.d.	n.d.	n.d.	n.d.	93.84	0.53
11/12/96	140000	589000	34200	92400	142500	2500	531	62900	n.d.	n.d.	n.d.	n.d.	n.d.	62.1	1.26
2/5/97	142000	577000	35000	97700	141600	2460	500	56600	n.d.	n.d.	n.d.	n.d.	n.d.	131	1.25
5/15/97	138000	622000	33900	102000	155800	2440	561	51700	<0.21	n.d.	n.d.	n.d.	n.d.	220	1.03
8/11/97	138000	640000	36200	103000	156700	2340	445	47100	n.d.	2.9	<-0.35	n.d.	n.d.	147	1.72
11/11/97	136000	614000	35500	111000	160700	2120	483	47100	<0.59	<3.64	<-3.37	n.d.	n.d.	146	<0.97

Table A.5. Analytical Results for Well 299-W10-17 (page 1 of 2)

	Cond	pH	TOC	TOX	Na	K	Ca	Mg	Cr	Ba	Sr
5/8/91	795	8.1	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
10/9/91	769	7.9	<1000	990	130000	3000	23000	8100	27	30	n.d.
11/25/91	782	7.9	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
1/22/92	756	8.1	<1000	s.d.	120000	3550	26000	8500	30	30	n.d.
3/12/92	750	7.9	n.d.	s.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
4/21/92	775	8	<1000	s.d.	120000	3200	26000	8200	24	31	n.d.
7/20/92	762	7.9	<1000	s.d.	120000	3900	28000	8400	25	31	n.d.
11/11/92	745	8.1	<1000	s.d.	120000	3500	24000	7500	20	30	n.d.
3/8/93	777	8	<200	s.d.	100000	2500	21000	6300	<20	20	n.d.
4/29/93	752	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
6/23/93	752	8.1	550	s.d.	120000	3700	24000	7900	23	30	n.d.
9/28/93	760	8.2	525	s.d.	120000	3300	24000	7700	<5.42	29	n.d.
12/16/93	750	7.6	550	s.d.	130000	3700	25000	8200	21	31	n.d.
12/28/93	770	8	n.d.	724	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
3/21/94	775	7.1	425	1045	120000	3800	24000	7700	19	27	n.d.
7/11/94	708	8.3	370	791	110000	3700	25000	7900	19	30	n.d.
9/22/94	734	8	400	838	110000	3400	23000	7500	23	25	n.d.
11/30/94	711	7.9	400	950	110000	3700	23000	7500	9.4	27	n.d.
2/10/95	722	8.2	300	914	110000	3700	23000	7500	13	27	n.d.
5/11/95	710	7.9	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
5/17/95	697	8	400	480	120000	3500	23000	7600	16	27	n.d.
8/7/95	726	8.1	300	330	110000	3500	23000	7400	17	27	n.d.
11/15/95	737	8.1	320	510	115000	3400	23000	7400	16	27	120
2/15/96	747	8.1	362	319	110000	3350	23000	7400	9	26	115
5/16/96	733	8.4	362	485	100000	3550	20500	6750	10	27	110
8/15/96	751	8.1	378	403	110000	3100	32000	11000	14	36	160
11/13/96	751	7.9	<530	n.d.	91600	4510	40700	14200	16.5	44	206
2/6/97	758	7.9	550	572	88100	5670	39900	13600	20.1	43	203
5/12/97	772	8.2	570	614	103000	4520	40600	13700	18.4	47.5	207
8/11/97	765	8.1	640	511	97300	4800	38000	12800	17	55	191

Table A.5. Analytical Results for Well 299-W10-17 (page 2 of 2)

	ALK	TDS	Cl	SO4	NO3	F	Tc-99	Tritium	I-129	Co-60	Cs-137	Sr-90	U	Beta	Alpha
5/8/91	n.d.	n.d.	25500	65400	121000	2210	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
10/9/91	n.d.	n.d.	29000	64000	131000	1700	122	43400	0.23	<2.66	<0.83	<-0.09	1.23	34.5	2.19
1/22/92	n.d.	n.d.	30000	66000	126000	1850	115	43400	<0.2	<-0.49	<-0.47	<-0.4	1.7	27	0.5
4/21/92	n.d.	n.d.	31000	69000	140000	1900	127	46300	<-0.2	<-11.2	<2.01	<0.19	1.27	27.7	0.42
7/20/92	n.d.	n.d.	31000	72000	140000	1900	120	43100	<0.16	<1.85	<1.83	<0.30	1.12	29.4	2.35
11/11/92	n.d.	n.d.	30000	76000	140000	2500	140	44100	<-0.28	<3.64	<3.12	<0.36	1.13	33.5	1.58
3/8/93	n.d.	n.d.	32000	64000	120000	2100	142	44600	0.73	<1.29	<3.02	<-0.30	1.17	41.8	2.1
6/23/93	n.d.	520000	35000	72000	130000	2200	127	41600	<0.07	<-1.31	<2.08	<-0.10	1.24	37.5	1.71
9/28/93	n.d.	490000	35000	68000	120000	2200	156	38600	<0.02	<-4.55	<-2.87	<0.08	1.39	35.7	1.73
12/16/93	150000	500000	33000	68000	120000	2200	146	39900	<0.28	<0.73	<0.21	<0.08	1.25	37.5	1.99
3/21/94	148000	480000	33000	68000	110000	2200	138	37800	<0.03	<-0.96	<0.06	<-0.02	1.17	34.2	<0.81
7/11/94	130000	450000	40000	67000	110000	2100	124	39000	<0.32	<-154	<-0.69	<0.09	1.27	26.1	2.16
9/22/94	150000	470000	37000	65000	100000	2400	103		<0.05	<0.22	<-0.34	<-0.19	1.43	36.2	<0.23
11/30/94	140000	460000	36000	62000	96000	2200	119	33800	<0.04	<0.72	<0.40	<-0.04	1.01	34	1.97
2/10/95	140000	480000	37000	59000	99000	1900	109	35600	<0.04	<0.58	<-0.38	n.d.	n.d.	30.7	<0.26
5/17/95	140000	470000	36000	59000	86000	2000	125	34200	<0.69	<0.46	<-0.16	n.d.	n.d.	34.1	<0.93
8/7/95	140000	470000	37000	56000	97000	2000	122	29900	<-0.79	<-2.22	<-0.39	n.d.	n.d.	32.9	<1.18
11/15/95	140000	470000	37000	61000	100000	1400	361	27117	<0.75	<-0.14	<-0.06	n.d.	n.d.	31.9	<0.89
2/15/96	130000	515000	38000	61000	125000	2100	243	30300	<1.5	<-1.25	<-0.1	n.d.	n.d.	51	<0.5
5/16/96	125000	520000	36000	58000	150000	1850	500	33500	<0.39	<1.1	<-0.43	n.d.	n.d.	111	<0.66
8/15/96	120000	510000	37000	58000	130000	1900	136	33868	<0.13	2.34	<0.18	n.d.	n.d.	116	<-0.16
11/13/96	110000	498000	35400	57800	154900	1310	525	36100	<0.19	<-0.74	<-2.35	n.d.	n.d.	123	<0.82
2/6/97	121000	496000	34900	59100	142500	1320	457	36800	<-0.48	<-1.28	<1.63	n.d.	n.d.	117	<0.84
5/12/97	118000	497000	36100	59200	146500	1360	364	35100	<-0.48	<4.44	<-1.78	n.d.	n.d.	201	<0.61
8/11/97	122000	541000	37400	59400	147400	1350	453	33350	<0.2	<2.6	<-1.1	n.d.	n.d.	103	<1.1
11/17/97	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	398	33400	<0.45	<3.79	<-2.12	n.d.	n.d.	124	<1.1

Table A.6. Analytical Results for Well 299-W10-18 (page 1 of 2)

	Cond	pH	TOC	TOX	Na	K	Ca	Mg	Cr	Ba	Sr
5/8/91	632	7.9	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
9/4/91	591	7.6	<1000	810	33000	4200	56000	19000	<20	58	n.d.
3/11/92	589	7.8	<1000		35000	4600	49000	17000	22	54	n.d.
4/20/92	596	7.7	<1000		33500	5050	57000	19500	44	58	n.d.
7/21/92	587	8.2	<1000		31000	4600	48000	17000	<20	52	n.d.
11/13/92	661	7.1	<1000		37000	4700	50000	17000	<20	50	n.d.
3/8/93	549	7.5	<200		35000	4100	46000	15000	<20	50	n.d.
4/29/93	559	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
6/23/93	556	7.8	550		38000	4800	47000	17000	<20	55	n.d.
9/28/93	567	7.6	450		38000	4600	47000	17000	<5.42	57	n.d.
12/16/93	576	7.7	500		37000	4400	50000	18000	<6.0	60	n.d.
12/28/93	573	7.8	n.d.	460	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
3/22/94	518	8	400	498	40000	5100	46000	16000	<11	58	n.d.
7/11/94	557	8	325	376	40000	4900	45000	16000	<11	57	n.d.
9/22/94	553	7.9	400	439	38000	4400	47000	17000	24	58	n.d.
11/30/94	582	7.9	300	291	38000	4800	49000	17000	8.1	59	n.d.
2/10/95	603	7.9	300	371	36000	5000	51000	18000	15	60	n.d.
5/17/95	589	7.8	300	285	40000	4200	53000	19000	8	65	n.d.
8/7/95	620	8	300	100	38000	4800	50000	18000	6.5	62	n.d.
11/16/95	611	8.1	300	250	39000	4900	50000	18000	8.2	64	250
2/15/96	615	8.2	337	174	39500	4550	49500	18000	17	62	240
5/17/96	615	8.1	397	305	38000	5400	41000	16000	5.9	59	220
8/14/96	588	8.2	400	175	45000	5300	49500	20000	9.2	66	265
11/13/96	608	8.3	<530	49.8	45800	5200	50500	21700	10.7	67.8	285
2/6/97	591	8.3	580	48.1	42700	5870	45800	20000	14.6	61.8	269
5/12/97	573	8.4	710	103	42400	5670	44000	20100	16	59	275
8/11/97	607	8.2	580	130	47200	4980	31300	20300	27	71	251

Table A.6. Analytical Results for Well 299-W10-18 (page 2 of 2)

	ALK	TDS	Cl	SO4	NO3	F	Tc-99	Tritium	I-129	Co-60	Cs-137	Sr-90	U	Beta	Alpha
5/8/91	n.d.	n.d.	27100	62200	54100	1310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d
9/24/91	n.d.	n.d.	34000	58000	70000	1100	41.7	38700	<0.31	<-1.48	<0.65	<-0.63	2.03	13.5	1.48
3/11/92	n.d.	n.d.	37000	55000	58000	1400	35.5	34400	<-0.02	<1.03	<1.13	<-0.43	2.78	10	<0.93
4/20/92	n.d.	n.d.	35000	62000	64500	1300	42.3	35600	<0.29	<-1.4	6.7	<-0.37	2.3	10	<1.17
7/21/92	n.d.	n.d.	36000	61000	61000	1100	43.5	36100	<0.0	<-1.85	<0.64	<-0.47	1.7	11.8	<0.88
11/13/92	n.d.	n.d.	39000	59000	61000	1500	40.4	34300	<-0.15	<0.46	<2.19	<-0.57	1.54	12.6	<0.62
3/8/93	n.d.	n.d.	36000	50000	49000	1700	34.4	25100	<0.07	<2.31	<-0.73	<-0.31	1.69	13.8	<0.58
6/23/93	n.d.	390000	41000	56000	54000	1500	58.4	23400	<0.30	<-3.09	<2.52	<-0.05	1.96	22.1	<0.73
9/28/93	n.d.	360000	39000	52000	57000	1400	56.9	22800	<-0.13	<0.29	<1.39	<0.03	1.56	17.1	4.28
12/16/93	130000	370000	43000	52000	59000	1500	77.3	22000	<-0.11	<-0.14	<-0.17	<0.18	1.68	17.6	<0.84
3/22/94	120000	390000	37000	50000	57000	1600	89.3	19000	0.26	1.16	<0.38	<-0.20	1.68	18.2	2.36
7/11/94	110000	350000	43000	50000	62000	1700	112	16300	<-0.07	1.93	<0.84	<0.0	1.68	29.6	<0.34
9/22/94	n.d.	370000	39000	48000	68000	1800	138	14600	<-0.08	<0.61	1.24	<0.0	1.52	35.6	<0.59
11/30/94	120000	360000	38000	45000	78000	1800	196	12500	<0.25	<-0.30	<-0.21	<-0.01	1.53		2.77
2/10/95	110000	390000	38000	42000	83000	1500	229	13500	<0.27	<0.89	<0.14	n.d.	n.d.	64.7	<0.67
5/17/95	120000	380000	37000	43000	94500	1400	293	12200	<0.6	1.7	<0.6	n.d.	n.d.	53	2.4
8/7/95	120000	410000	36000	40000	95000	1500	277	10200	<-0.28	1.49	<-1.07	n.d.	n.d.	66.7	<1.41
11/16/95	120000	370000	37000	44000	94000	1100	258	9095	<1.04	<-0.65	<0.24	n.d.	n.d.	58.3	<1.08
2/15/96	120000	395000	39000	46000	89500	1700	300	11650	<-0.1	<-0.2	<-0.36	n.d.	n.d.	74	<1.1
5/17/96	120000	400000	37000	48000	92000	1800	310	9550	<-1.46	1.6	<-0.38	n.d.	n.d.	70.37	<-0.16
8/14/96	115000	400000	38000	48500	88000	1850	297	9890	<0.26	<1.0	<-0.8	n.d.	n.d.	77	1.2
11/13/96	112000	406000	37500	44100	94700	1440	260	10200	<0.67	<-0.83	<2.11	n.d.	n.d.	58	<1.01
2/6/97	111000	371000	38500	47600	88500	1370	238	10300	<-0.52	<-2.92	<4.32	n.d.	n.d.	61.1	<0.71
5/12/97	106000	348000	37000	52300	74800	1310	232	11600	<-0.25	<-0.60	<4.19	n.d.	n.d.	125	1
8/11/97	84300	370000	34000	48100	76100	1230	169	11200	<-0.42	<4.0	<1.56	n.d.	n.d.	56.6	1.09

Table A.7. Analytical Results for Well 299-W14-12 (page 1 of 2)

	Cond	pH	TOC	TOX	Na	K	Ca	Mg	Cr	Ba	Sr
4/21/92	1584	7.5	<1000	s.d.	24000	6700	160000	56000	410	130	n.d.
7/20/92	1573	7.6	<1000	s.d.	25000	8000	180000	62000	550	140	n.d.
11/11/92	1639	7.7	<1000	s.d.	25000	7100	180000	64000	600	140	n.d.
3/9/93	1505	7.8	<1000	s.d.	24000	7800	160000	58000	480	130	n.d.
4/29/93	1767	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
6/23/93	1571	7.7	625	s.d.	24000	6900	160000	58000	500	120	n.d.
9/28/93	1771	8.1	625	s.d.	24000	6600	170000	63000	510	140	n.d.
12/16/93	1357	7.5	500	s.d.	25000	6500	140000	51000	390	110	n.d.
12/28/93	1492	n.d.	n.d.	s.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
3/17/94	1319	7.8	400	275	25000	6800	130000	48000	330	100	n.d.
7/6/94	1444	7.6	400	305	25000	6900	140000	50000	390	110	n.d.
9/13/94	1560	7.6	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
9/22/94	1368	7.8	500	303	26000	6500	140000	50000	380	110	n.d.
11/30/94	1228	7.4	400	834	27000	6400	120000	44000	190	100	n.d.
2/10/95	1520	7.1	500	245	29000	8000	160000	61000	290	120	n.d.
5/17/95	1392	7.6	400	150	31000	6300	140000	52000	360	110	n.d.
8/8/95	1213	7.7	400	170	30000	6600	120000	43000	250	93	n.d.
12/20/95	984	7.9	284	197	28000	6600	100000	36000	150	88	430
2/20/96	874	8	384	107	26000	6100	85000	30000	63	77	370
5/16/96	813	7.9	472	137	24000	5500	63000	23000	24	70	310
8/14/96	741	8.1	366	67.7	27000	6500	77000	27000	10	77	340
11/13/96	802	8.4	<530	n.d.	28800	6720	76400	26900	5.7	77.4	331
2/10/97	772	8	570	17.4	26700	7780	71100	25600	4.6	75.2	326
5/14/97	785	8.3	900	22.4	29500	6770	74100	26800	6.5	113	345
8/12/97	846	8.3	n.d.	34.6	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
8/26/97	817	8.1	640	n.d.	28700	7100	77200	28200	6	90.4	360
11/17/97	815	8.3	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

Table A.7. Analytical Results for Well 299-W14-12 (page 2 of 2)

	ALK	TDS	Cl	SO4	NO3	F	Tc-99	Tritium	I-129	Co-60	Cs-137	Sr-90	Beta	Alpha	U
4/21/92	n.d.	n.d.	97000	75000	440000	1000	8240	242000	50.3	15.5	<-2.0	<-0.35	1960	1.28	1.98
7/20/92	n.d.	n.d.	98000	84000	480000	500	10500	415000	49.8	16.7	<-4.48	<-0.35	1660	3.31	2
11/11/92	n.d.	n.d.	100000	94000	530000	100	13300	463000	52.9	27.8	7.51	<-0.50	1680	0.06	0.96
3/9/93	n.d.	n.d.	93000	84000	440000	800	10700	456000	55.7	15.3	<-11.5	<-0.21	905	2.63	1.73
623/93	n.d.	1200000	88000	96000	470000	900	7570	427000		22.6	<1.86	<-0.02	1890	1.27	4.15
9/28/93	n.d.	1100000	94000	96000	520000	5300	12200	564000	64.2	24	<5.48	<-0.08	1220	3.91	1.75
12/16/93	100000	760000	86000	75000	390000	900	7040	285000		12.3	<-0.54	<0.02	834	2.22	1.44
3/17/94	100000	850000	80000	76000	390000	1000		278000	34.2	10.9	<-0.70	<-0.02	1610	1.1	4.1
7/6/94	90000	880000	85000	76000	410000	1100	8490	327000	39.4	10.4	<0.19	<-0.20	2640	4.23	1.78
9/22/94	90000	840000	81000	74000	390000	1100	8800	288000	34.8	13.2	<0.99	<-0.08	2930	3.13	4.23
11/30/94	90000	770000	72000	65000	300000	1000	6290	233000	29	7.8	<-1.16	<-0.37	833	3.56	0.84
2/10/95	80000	970000	94000	84000	450000	1000	9950	585000	47.8	17.2	<-0.29	n.d.	2900	0	n.d
5/17/95	90000	890000	80000	73000	360000	3600	9000	319000	39.3	11.5	<0.73	n.d.	2030	1.37	n.d
8/8/95	90000	810000	64000	56000	350000	1000	6060	184000	30.4	6.62	<0.70	n.d.	1190	2.03	n.d
12/20/95	89000	670000	56000	53000	250000	1100	3014	185000	18.45	4.53	<-1.01	n.d.	876	1.52	n.d
2/20/96	87000	600000	47000	42000	250000	850	2270	131000	5.47	4.31	<-0.43	n.d.	478	0.64	n.d
5/16/96	95000	520000	41000	38000	220000	870	1208	71500	6.85	<-0.15	<1.06	n.d.	143	0.85	n.d
8/14/96	96000	490000	39000	36000	180000	1200	227	39100	1.94	2.04	<0.20	n.d.	140	1.69	n.d
11/13/96	92000	496000	41600	41300	207000	640	1090	48400	3.42	<-3.1	<2.31	n.d.	174	1.8	n.d
2/10/97	99500	522000	37000	37500	23900	420	1180	65200	2.16	<-1.36	<-5.26	n.d.	279	1.11	n.d
5/14/97	86000	646000	41700	37500	190300	660	710	62900	3.06	5.01	<1.43	n.d.	457	1.55	n.d
8/12/97	n.d.	n.d.	41800	37300	205400	560	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d
8/26/97	95100	n.d.	n.d.	n.d.	n.d.	n.d.	1080	53800	n.d.	n.d.	n.d.	n.d.	355	n.d.	n.d
11/17/97							1060	121000	5.74	<2.77	<0.34		413	1.43	

Table A.8. Analytical Results for Well 299-W15-22 (page 1 of 2)

	Cond	pH	TOC	TOX	Na	K	Ca	Mg	Cr	Ba	Sr
4/18/91	538	8.2	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
9/24/91	478	7.5	<1000	1250	19000	5100	49000	14000	<20	52	n.d.
1/27/92	452	8.3	<1000	s.d.	21000	4400	53000	16000	<20	50	n.d.
3/12/92	442	7.5	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
4/20/92	443	7.6	<1000	s.d.	18000	4200	46000	14000	<20	43	n.d.
7/20/92	447	n.d.	<1000	s.d.	19000	4900	52000	15000	28	46	n.d.
11/11/92	478	8	<1000	s.d.	19000	4500	50000	15000	<20	50	n.d.
3/5/93	482	7.4	<1000	s.d.	18000	5500	47000	13000	<20	40	n.d.
4/29/93	482	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
6/23/93	498	7.6	425	s.d.	18000	4200	49000	14000	<20	45	n.d.
9/28/93	538	7.9	300	s.d.	20000	4600	56000	17000	<5.42	52	n.d.
12/10/93	545	7.9	400	760	21000	4900	63000	19000	18	60	n.d.
3/17/94	563	8.1	200	960	20000	4600	59000	17000	12	53	n.d.
7/1/94	659	7.6	385	710	21000	4900	65000	19000	<11	60	n.d.
9/22/94	642	7.8	400	583	21000	4600	65000	19000	25	59	n.d.
11/30/94	595	7.9	200	518	22000	4800	63000	19000	7.4	59	n.d.
2/10/95	577	7.9	300	1090	20000	4900	61000	18000	8	56	n.d.
5/17/95	615	7.6	400	710	23000	4700	66000	20000	8.9	64	n.d.
8/24/95	622	8	300	550	23000	5100	64000	19000	6.9	64	280
11/15/95	623	7.9	290	700	21000	5100	64000	19000	9.3	60	270
2/15/96	654	7.8	344	331	22000	5100	67000	20000	5	63	280
5/16/96	686	8	457	789	20000	5100	58000	18000	8.3	64	270
8/13/96	750	7.7	470	491	24000	5900	78000	23000	13	74	330
11/13/96	587	8.1	<530		21800	4710	63200	19400	8	195	264
2/6/97	570	8.1	620	250	19600	5620	55000	16800	12.8	52.7	235
5/12/97	537	8.1	<530	419	21200	4470	55000	19100	306	57	269
8/11/97	653	7.7	530	113	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

Table A.8. Analytical Results for Well 299-W15-22 (page 2 of 2)

	ALK	TDS	Cl	SO4	NO3	F	Tc-99	Tritium	I-129	Co-60	Cs-137	Sr-90	U	Beta	Alpha
4/18/91	n.d.	n.d.	14600	33100	63400	740	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d
9/24/91	n.d.	n.d.	20000	34000	74300	410	137	9290	<0.08	<-0.60	<-7.50	<0.05	2.02	31.9	0.49
1/27/92	n.d.	n.d.	21000	35000	61000	500	38.7	8900	<0.18	11.6	<-3.79	<-0.29	2.14	39.1	0.08
4/20/92	n.d.	n.d.	19000	31000	59000	700	120	4730	<0.18	<-0.26	<-10.2	<-0.51	1.29	33.8	0.7
7/20/92	n.d.	n.d.	20000	33000	63000	400	145	4680	<-0.08	<1.03	<-0.39	<-0.39	0.94	22.9	1.09
11/11/92	n.d.	n.d.	26000	39000	64000	700	290	7370	<0.24	<0.44	<0.0	<-0.40	1.79	48.8	0.74
3/5/93	n.d.	n.d.	18000	29000	68000	600	462	4690	<-0.54	<-1.85	<0.09	<-0.22	1.45	95.7	1.19
6/23/93	n.d.	340000	21000	31000	82000	700	415	3810	0.71	9.06	<2.95	<-0.15	1.4	90.9	0.18
9/28/93	n.d.	330000	25000	37000	95000	500	219	9600	<-0.22	<0.29	<1.21	<0.08	1.17	53.3	0.97
12/10/93	120000	380000	27000	41000	110000	500	449	20000	<0.03	1.71	<-0.29	<-0.01	1.43	88.7	2.69
3/17/94	110000	390000	23000	40000	110000	700		23700	35.9	3.55	<1.99	<-0.10	2.47	78.3	4.04
7/1/94	100000	410000	32000	45000	140000	900	398	18900	<0.11	2.15	<0.84	<-0.18	1.11	133	1.22
9/22/94	100000	410000	35000	47000	120000	1100	482	19400	<0.01	<-0.21	<0.16	<-0.15	1.58	57.4	1.13
11/30/94	100000	360000	33000	47000	110000	500	298	22600	<0.05	<0.23	<-0.17	<-0.17	1.4	72	2.17
2/10/95	100000	380000	33000	43000	96000	500	228	27800	<0.24	<0.44	<0.10	n.d.	n.d.	89.2	3.92
5/17/95	100000	390000	34000	48000	93000	700	365	30600	<-0.97	1.75	<0.28	n.d.	n.d.	73.3	0.82
8/24/95	100000	440000	35000	44000	100000	700	286	43200	<-1.2	<2.46	<0.92	n.d.	n.d.	80	0.86
11/15/95	100000	390000	36000	46000	110000	350	126	32515	<1.13	<0.37	<0.29	n.d.	n.d.	90.93	0.48
2/15/96	98000	430000	38000	46000	130000	830	437	36963	4.2	2.02	<0.13	n.d.	n.d.	108.22	0.38
5/16/96	96000	470000	39000	45000	170000	750	519	35330	<-0.93	1.66	<-0.66	n.d.	n.d.	156.75	1.8
8/13/96	86000	490000	40000	44000	160000	720	472	39694	<0.79	<-0.08	<0.24	n.d.	n.d.	235.65	1.14
11/13/96	102000	379000	34700	43600	92500	420	390	41100	<-0.09	<2.57	<-0.44	n.d.	n.d.	152	1.04
2/6/97	99500	337000	30800	41000	87600	460	451	33200	<0.11	<5.51	<2.29	n.d.	n.d.	106	1.09
5/12/97	102000	312000	25300	37500	84100	410	628	19800		<1.49	<0.89	n.d.	n.d.	595	1.98
8/11/97	n.d.	n.d.	34700	48900	128800	380	1340	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	370	