Appendix A

Tuba City Project Well Data

Table A-1. Well Completion Information

WELL	TYPE	Horizon	TOP OF SCREEN ELEV	MID SCREEN ELEV	BOTTOM OF SCREEN ELEV	TOP OF SCREEN DEPTH	MID SCREEN DEPTH	BOTTOM OF SCREEN DEPTH	SCREEN LENGTH	SUMP LENGTH	WELL DEPTH
0284	MW	A	5079.8	5074.8	5069.8	16.5	21.5	26.5	10.0	1.5	28.0
0285	MW	A	5090.8	5088.3	5085.8	3.0	5.5	8.0	5.0	0.1	8.1
0686	MW	A	5045.5	5025.5	5005.5	60.0	80.0	100.0	40.0	0.3	100.3
0687	MW	A	5047.6	5027.6	5007.6	60.0	80.0	100.0	40.0	0.3	100.3
0688	MW	A	5044.1	5024.1	5004.1	60.0	80.0	100.0	40.0	0.3	100.3
0901	MW	A	5045.8	5035.8	5025.8	58.0	68.0	78.0	20.0	2.0	80.0
0906	MW	A	5016.9	5006.9	4996.9	44.0	54.0	64.0	20.0	2.0	66.0
0907	MW	A	5010.7	5000.7	4990.7	66.5	76.5	86.5	20.0		
0928	MW	A	5022.1	5009.6	4997.1	30.0	42.5	55.0	25.0	3.0	58.0
0929	MW	A	5010.4	4990.4	4970.4	48.2	68.2	88.2	40.0		
0940	MW	A	5017.9	5010.4	5002.9	45.0	52.5	60.0	15.0	3.0	68.0
0941	MW	A	5018.0	5008.0	4998.0	45.0	55.0	65.0	20.0	3.0	68.0
0945	MW	A	5028.1	5018.1	5008.1	110.0	120.0	130.0	20.0	3.0	133.0
0946	MW	A	5057.6	5047.6	5037.6	40.0	50.0	60.0	20.0	3.3	63.3
0262	MW	B	4999.2	4979.2	4959.2	60.0	80.0	100.0	40.0	0.3	100.3
0263	MW	B	5000.2	4980.2	4960.2	60.0	80.0	100.0	40.0	0.3	100.3
0265	MW	B	4991.1	4971.1	4951.1	60.0	80.0	100.0	40.0	0.3	100.3
0267	MW	B	4990.8	4970.8	4950.8	60.0	80.0	100.0	40.0	0.3	100.3
0271	MW	B	4984.0	4964.0	4944.0	60.0	80.0	100.0	40.0	0.3	100.3
0281	MW	B	4977.8	4972.8	4967.8	70.5	75.5	80.5	10.0	1.5	82.0
0282	MW	B	4983.3	4978.3	4973.3	74.1	79.1	84.1	10.0	1.5	85.6
0283	MW	B	4984.8	4979.8	4974.8	70.5	75.5	80.5	10.0	1.5	82.0
0905	MW	B	5006.0	4998.5	4991.0	63.0	70.5	78.0	15.0	2.0	80.0
0908	MW	B	5005.3	4997.8	4990.3	52.0	59.5	67.0	15.0	2.0	69.0
0909	MW	B	4990.8	4983.3	4975.8	65.0	72.5	80.0	15.0	2.0	82.0
0910	MW	B	5007.6	4957.6	4907.6	97.0	147.0	197.0	100.0	1.0	198.0
0918	MW	B	4986.2	4983.7	4981.2	61.0	63.5	66.0	5.0	2.0	68.0
0925	EXT	B	5005.8	4985.8	4965.8	53.0	73.0	93.0	40.0	0.5	93.5
0926	EXT	B	5018.3	4993.3	4968.3	42.2	67.2	92.2	50.0	3.0	95.2
0933	MW	B	4993.3	4992.3	4991.3	23.0	24.0	25.0	2.0		
0934	MW	B	5013.0	4990.5	4968.0	45.0	67.5	90.0	45.0	3.0	93.0
0935	MW	B	5008.8	4988.8	4968.8	50.0	70.0	90.0	40.0	3.0	93.0
0936	MW	B	5017.9	4997.9	4977.9	42.0	62.0	82.0	40.0	3.0	85.0
0937	MW	B	5020.2	4992.7	4965.2	40.0	67.5	95.0	55.0	3.0	98.0
0938	MW	B	5020.4	4992.9	4965.4	40.0	67.5	95.0	55.0	3.0	98.0
0939	EXT	B	5021.1	4993.6	4966.1	40.0	67.5	95.0	55.0	3.0	98.0
0942	MW	B	5009.5	4999.5	4989.5	54.0	64.0	74.0	20.0	3.0	77.0
0943	MW	B	4994.1	4984.1	4974.1	101.0	111.0	121.0	20.0	3.0	124.0
0944	MW	B	4979.9	4969.9	4959.9	85.0	95.0	105.0	20.0	2.0	107.0
0947	MW	B	4990.0	4980.0	4970.0	105.0	115.0	125.0	20.0	3.3	128.3
1126	EXT	B	4991.9	4971.9	4951.9	60.0	80.0	100.0	40.0	3.3	103.3
1127	EXT	B	4984.2	4964.2	4944.2	72.7	92.7	112.7	40.0	3.3	116.0
1128	EXT	B	4982.3	4962.3	4942.3	72.7	92.7	112.7	40.0	3.3	116.0
1129	EXT	B	4990.9	4975.9	4960.9	68.2	83.2	98.2	30.0	3.3	101.5
1130	EXT	B	4987.3	4962.3	4937.3	71.7	96.7	121.7	50.0	3.3	125.0
1131	EXT	B	4998.1	4978.1	4958.1	59.7	79.7	99.7	40.0	3.3	103.0
1132	EXT	B	5009.1	4984.1	4959.1	49.7	74.7	99.7	50.0	3.3	103.0
1133	EXT	B	4999.4	4979.4	4959.4	59.7	79.7	99.7	40.0	3.3	103.0
0274	MW	C	4913.6	4903.6	4893.6	149.0	159.0	169.0	20.0	1.5	170.5
0276	MW	C	4910.0	4900.0	4890.0	154.5	164.5	174.5	20.0	1.5	176.0
0279	MW	C	4922.1	4917.1	4912.1	26.5	31.5	36.5	10.0	1.5	38.0
0280	MW	C	4922.6	4917.6	4912.6	26.5	31.5	36.5	10.0	1.5	38.0
0683	MW	C	4973.2	4948.2	4923.2	95.0	120.0	145.0	50.0	3.0	148.0
0684	MW	C	4943.1	4917.4	4891.8	124.2	149.9	175.5	51.3	2.5	178.0
0685	MW	C	4975.6	4949.7	4923.8	93.7	119.6	145.5	51.8	2.5	148.0
0689	MW	C	4923.9	4903.9	4883.9	55.0	75.0	95.0	40.0	0.3	95.3
0691	MW	C	4921.9	4901.9	4881.9	55.0	75.0	95.0	40.0	0.3	95.3
0903	MW	C	4953.5	4943.5	4933.5	28.0	38.0	48.0	20.0	2.0	50.0
0912	MW	C	4934.7	4914.7	4894.7	123.0	143.0	163.0	40.0	2.0	165.0
0914	MW	C	4930.3	4921.8	4913.3	137.2	145.7	154.2	17.0	2.0	156.2
0917	MW	C	4917.8	4907.8	4897.8	128.0	138.0	148.0	20.0	2.0	150.0
0930	MW	C	4933.0	4918.0	4903.0	20.0	35.0	50.0	30.0	3.0	53.0
0932	MW	C	4942.3	4932.3	4922.3	112.5	122.5	132.5	20.0	2.7	135.2
1008	INJ	C	4926.8	4901.6	4876.4	55.6	80.8	106.0	50.4	2.5	108.5
1116	EXT	C	4964.1	4912.5	4861.0	92.4	143.9	195.5	103.1	2.5	198.0
1117	EXT	C	4965.3	4913.7	4862.1	92.3	143.9	195.5	103.2	2.5	198.0
1118	EXT	C	4967.9	4915.1	4862.3	89.9	142.7	195.5	105.6	2.5	198.0
0258	MW	D	4894.0	4874.0	4854.0	159.0	179.0	199.0	40.0	0.3	199.3
0261	MW	D	4907.0	4887.0	4867.0	160.0	180.0	200.0	40.0	0.3	200.3
0264	MW	D	4899.6	4879.6	4859.6	160.0	180.0	200.0	40.0	0.3	200.3
0266	MW	D	4890.6	4870.6	4850.6	160.0	180.0	200.0	40.0	0.3	200.3
0272	MW	D	4902.8	4892.8	4882.8	159.1	169.1	179.1	20.0	1.5	180.6
0273	MW	D	4909.4	4899.4	4889.4	153.0	163.0	173.0	20.0	1.5	174.5
0275	MW	D	4903.0	4893.0	4883.0	158.2	168.2	178.2	20.0	1.5	179.7
0277	MW	D	4884.0	4879.0	4874.0	95.7	100.7	105.7	10.0	1.5	107.2
0278	MW	D	4862.9	4857.9	4852.9	90.5	95.5	100.5	10.0	1.5	102.0
0690	MW	D	4893.3	4873.3	4853.3	55.0	75.0	95.0	40.0	0.3	95.3

Table A–1 (continued). Well Completion Information

WELL	TYPE	Horizon	TOP OF CASING ELEV	GROUND ELEV	WELL DIAMETER	BORING STARTED	DECOMMISSION DATE	STATE PLANE EAST	STATE PLANE NORTH
0284	MW	A	5098.72	5096.3	2	16-Aug-04		730525	1873562
0285	MW	A	5096.47	5093.8	2	16-Aug-04		731629	1874042
0686	MW	A	5107.97	5105.5	2	28-Mar-00		729978	1873416
0687	MW	A	5109.82	5107.6	2	29-Mar-00		731152	1874024
0688	MW	A	5106.98	5104.1	2	29-Mar-00		731961	1874385
0901	MW	A	5105.46	5103.6	2	16-Oct-84		730185	1875918
0906	MW	A	5062.10	5060.9	2	19-Nov-84		730838	1872181
0907	MW	A	5079.17	5077.2	2	30-Nov-84	19-Apr-88	731252	1872920
0928	MW	A	5053.99	5052.1	4	20-Oct-95	24-May-00	729401	1870814
0929	MW	A	5060.82	5058.6	4			728780	1871453
0940	MW	A	5064.77	5062.9	4	01-Nov-95		730130	1872391
0941	MW	A	5065.97	5063.0	4	10-Nov-95		730908	1872398
0945	MW	A	5140.49	5138.1	4	11-Oct-95		730019	1873857
0946	MW	A	5100.50	5097.6	4	02-Nov-95		730547	1873582
0262	MW	B	5061.99	5059.2	2	03-Apr-00		731402	1872012
0263	MW	B	5063.10	5060.2	2	04-Apr-00		731565	1871757
0265	MW	B	5053.88	5051.1	2	16-Apr-00		730382	1870964
0267	MW	B	5053.40	5050.8	2	14-Apr-00		729329	1870707
0271	MW	B	5046.72	5044.0	2	29-Apr-00		728160	1869555
0281	MW	B	5051.00	5048.3	2	11-Aug-04		729714	1870315
0282	MW	B	5060.04	5057.4	2	10-Aug-04		730062	1871168
0283	MW	B	5057.97	5055.3	2	03-Aug-04		730901	1871185
0905	MW	B	5072.80	5069.0	2	14-Nov-84	24-May-00	732933	1873200
0908	MW	B	5058.14	5057.3	2	17-Nov-84		729366	1871999
0909	MW	B	5057.17	5055.8	2	18-Nov-84		730927	1871393
0910	MW	B	5106.70	5104.6	4	26-Jul-85		730219	1875840
0918	MW	B	5049.63	5047.2	4	15-Aug-85		727294	1868724
0925	EXT	B	5060.87	5058.8	6	21-Oct-95	24-May-00	729452	1872006
0926	EXT	B	5062.85	5060.5	6	25-Oct-95	17-May-00	730790	1872126
0933	MW	B	5018.03	5016.3	4	18-Oct-95	24-May-00	731727	1871341
0934	MW	B	5059.73	5058.0	4	02-Nov-95		730018	1871649
0935	MW	B	5061.50	5058.8	4	28-Oct-95		729461	1871978
0936	MW	B	5062.30	5059.9	6	26-Oct-95		730055	1872121
0937	MW	B	5062.80	5060.2	4	09-Nov-95	24-May-00	730790	1872116
0938	MW	B	5063.64	5060.4	4	26-Oct-95		730769	1872124
0939	EXT	B	5063.23	5061.1	6	23-Oct-95	16-May-00	731403	1872132
0942	MW	B	5066.45	5063.5	4	03-Nov-95		731642	1872409
0943	MW	B	5098.05	5095.1	4	13-Oct-95		731596	1874034
0944	MW	B	5067.00	5064.9	4	04-Nov-95	28-Jul-99	732199	1873007
0947	MW	B	5097.01	5095.0	4	03-Nov-95		732786	1874642
1126	EXT	B	*5051.9* **	*5051.9* **	4	09-Sep-04		729517	1870728
1127	EXT	B	*5056.9* **	*5056.9* **	4	11-Sep-04		730044	1871022
1128	EXT	B	*5055.0* **	*5055.0* **	4	12-Sep-04		730679	1871294
1129	EXT	B	*5059.1* **	*5059.1* **	4	30-Aug-04		731237	1871690
1130	EXT	B	*5059.0* **	*5059.0* **	4	29-Jul-04		731699	1871907
1131	EXT	B	*5057.8* **	*5057.8* **	4	08-Sep-04		732011	1872106
1132	EXT	B	*5058.8* **	*5058.8* **	4	31-Aug-04		731310	1872015
1133	EXT	B	*5059.1* **	*5059.1* **	4	02-Sep-04		730850	1871827
0274	MW	C	5064.42	5062.6	2	30-Aug-04		731623	1872403
0276	MW	C	5067.55	5064.5	2	01-Sep-04		732081	1873158
0279	MW	C	4951.04	4948.6	2	15-Aug-04		731494	1870132
0280	MW	C	4951.52	4949.1	2	15-Aug-04		731794	1870289
0683	MW	C	5070.64	5068.2	6	31-Aug-99		732661	1872574
0684	MW	C	5070.05	5067.3	6	20-Aug-99		732642	1873521
0685	MW	C	5072.44	5069.3	6	19-Aug-99		732295	1873760
0689	MW	C	4981.63	4978.9	2	31-Mar-00		730439	1869893
0691	MW	C	4979.41	4976.9	2	30-Mar-00		732124	1870872
0903	MW	C	4983.33	4981.5	2	30-Oct-84		731314	1870829
0912	MW	C	5059.97	5057.7	4	12-Aug-85		729324	1871942
0914	MW	C	5070.10	5067.5	4	16-Aug-85		732723	1872119
0917	MW	C	5048.02	5045.8	4	14-Aug-85		727255	1868642
0930	MW	C	4954.96	4953.0	4	23-Oct-95		731257	1870099
0932	MW	C	5057.32	5054.8	4	29-Oct-95		730900	1871401
1008	INJ	C	4980.52	4982.3	6	23-Jul-99		730410	1869916
1116	EXT	C	5053.74	5056.5	6	08-Aug-99		730350	1871702
1117	EXT	C	5054.95	5057.6	6	11-Aug-99		729981	1871688
1118	EXT	C	5055.11	5057.8	6	12-Aug-99		729756	1871695
0258	MW	D	5055.56	5053.0	2	13-Apr-00		732452	1871996
0261	MW	D	5069.69	5067.0	2	01-Apr-00		732565	1871578
0264	MW	D	5062.19	5059.6	2	03-Apr-00		731569	1871746
0266	MW	D	5053.32	5050.6	2	15-Apr-00		730380	1870941
0272	MW	D	5064.24	5061.9	2	28-Aug-04		730112	1872389
0273	MW	D	5064.74	5062.4	2	29-Aug-04		730922	1872397
0275	MW	D	5062.64	5061.2	2	01-Sep-04		732092	1872586
0277	MW	D	4982.35	4979.7	2	12-Aug-04		731290	1870777
0278	MW	D	4956.09	4953.4	2	14-Aug-04		731210	1870104
0690	MW	D	4950.87	4948.3	2	30-Mar-00		731521	1870140

Table A-1 (continued). Well Completion Information

WELL	TYPE	Horizon	TOP OF SCREEN ELEV	MID SCREEN ELEV	BOTTOM OF SCREEN ELEV	TOP OF SCREEN DEPTH	MID SCREEN DEPTH	BOTTOM OF SCREEN DEPTH	SCREEN LENGTH	SUMP LENGTH	WELL DEPTH
0692	MW	D	4895.6	4875.6	4855.6	55.0	75.0	95.0	40.0	0.3	95.3
0695	MW	D	4919.3	4899.3	4879.3	55.0	75.0	95.0	40.0	0.3	95.3
0904	MW	D	4873.8	4868.8	4863.8	28.0	33.0	38.0	10.0	2.0	40.0
0915	MW	D	4897.8	4892.8	4887.8	170.0	175.0	180.0	10.0	2.0	182.0
1003	INJ	D	4923.4	4898.4	4873.4	55.5	80.5	105.5	50.0	2.5	108.0
1004	INJ	D	4918.1	4893.1	4868.1	45.5	70.5	95.5	50.0	2.5	98.0
1005	INJ	D	4904.7	4879.7	4854.7	45.5	70.5	95.5	50.0	2.5	98.0
1006	INJ	D	4903.7	4878.7	4853.7	45.7	70.7	95.7	50.0	2.5	98.2
1007	INJ	D	4915.6	4890.5	4865.4	45.8	70.9	96.0	50.2	2.5	98.5
1101	EXT	D	4974.2	4896.5	4818.9	96.1	173.8	251.5	155.4	2.5	254.0
1102	EXT	D	4968.8	4893.8	4818.8	101.5	176.5	251.5	150.0	2.5	254.0
1103	EXT	D	4962.3	4887.3	4812.3	100.0	175.0	250.0	150.0	2.5	252.5
1104	EXT	D	4972.3	4894.8	4817.3	90.0	167.5	245.0	155.0	3.0	248.0
1105	EXT	D	4972.1	4894.6	4817.1	90.0	167.5	245.0	155.0	3.0	248.0
1106	EXT	D	4966.0	4888.7	4811.4	96.5	173.8	251.1	154.6	2.9	254.0
1107	EXT	D	4971.2	4894.0	4816.8	91.1	168.3	245.5	154.4	2.5	248.0
1108	EXT	D	4966.1	4891.1	4816.1	96.3	171.3	246.3	150.0	2.5	248.8
1109	EXT	D	4972.1	4894.7	4817.3	90.3	167.7	245.1	154.8	2.9	248.0
1110	EXT	D	4966.8	4891.8	4816.8	95.5	170.5	245.5	150.0	2.5	248.0
1111	EXT	D	4971.9	4894.7	4817.5	90.7	167.9	245.1	154.4	2.5	247.6
1112	EXT	D	4969.1	4891.6	4814.1	90.5	168.0	245.5	155.0	2.5	248.0
1113	EXT	D	4968.7	4891.2	4813.7	90.5	168.0	245.5	155.0	2.5	248.0
1114	EXT	D	4968.5	4891.0	4813.6	90.6	168.0	245.5	154.9	2.5	249.0
1115	EXT	D	4968.6	4891.2	4813.7	90.5	168.0	245.5	155.0	2.5	248.0
1119	EXT	D	4968.7	4893.7	4818.7	95.3	170.3	245.3	150.0	2.5	247.8
1120	EXT	D	4971.0	4896.0	4821.0	95.5	170.5	245.5	150.0	2.5	248.0
1121	EXT	D	4972.0	4897.0	4822.0	97.5	172.5	247.5	150.0	2.5	250.0
1122	EXT	D	4973.4	4896.3	4819.2	96.9	174.0	251.1	154.2	2.9	254.0
1123	EXT	D	4976.2	4899.2	4822.2	91.0	168.0	245.0	154.0	3.0	248.0
1124	EXT	D	4978.7	4899.9	4821.1	87.9	166.7	245.5	157.6	2.5	248.0
1125	EXT	D	4972.8	4897.8	4822.8	95.5	170.5	245.5	150.0	2.5	248.0
0251	MW	E	4858.9	4808.9	4758.9	200.0	250.0	300.0	100.0	0.3	300.3
0268	MW	E	4864.5	4814.5	4764.5	200.0	250.0	300.0	100.0	0.3	300.3
0920	MW	E	4866.0	4846.0	4826.0	114.4	134.4	154.4	40.0	2.0	156.4
0948	EXDS	E	4893.9	4803.9	4713.9	221.5	311.5	401.5	180.0	5.0	406.5
0911	MW	F	4795.2	4775.2	4755.2	309.4	329.4	349.4	40.0	2.0	351.4
0913	MW	G	4729.2	4709.2	4689.2	328.7	348.7	368.7	40.0	2.0	370.7
0916	MW	G	4721.7	4716.7	4711.7	345.7	350.7	355.7	10.0	2.0	357.7
0919	MW	G	4707.9	4702.9	4697.9	337.7	342.7	347.7	10.0	2.0	349.7
0902	MW	H	4673.7	4668.7	4663.7	63.0	68.0	73.0	10.0	2.0	75.0
0252	MW	I	4658.9	4608.9	4558.9	400.0	450.0	500.0	100.0	0.4	500.4
0254	MW	I	4662.7	4612.7	4562.7	400.0	450.0	500.0	100.0	0.4	500.4
0256	MW	I	4664.0	4614.0	4564.0	400.0	450.0	500.0	100.0	0.4	500.4
0921	MW	I	4663.7	4643.7	4623.7	313.2	333.2	353.2	40.0	2.0	355.2
0253	MW	M	4458.8	4408.8	4358.8	600.0	650.0	700.0	100.0	0.4	700.4
0255	MW	M	4462.3	4412.3	4362.3	600.0	650.0	700.0	100.0	0.4	700.4
0257	MW	M	4463.4	4413.4	4363.4	600.0	650.0	700.0	100.0	0.4	700.4
0968	EXDS		5000.4	4699.9	4399.4	106.0	406.5	707.0	601.0	0.0	707.0
0970	EXDS		5007.7	4705.2	4402.7	100.0	402.5	705.0	605.0	0.0	705.0
0971	EXDS		4985.3	4693.8	4402.3	117.0	408.5	700.0	583.0	0.0	700.0
0972	EXDS		5039.7	4724.7	4409.7	100.0	415.0	730.0	630.0	0.0	730.0

Table A–1 (continued). Well Completion Information

WELL	TYPE	Horizon	TOP OF CASING ELEV	GROUND ELEV	WELL DIAMETER	BORING STARTED	DECOMMISSION DATE	STATE PLANE EAST	STATE PLANE NORTH
0692	MW	D	4953.31	4950.6	2	05-Apr-00		731821	1870303
0695	MW	D	4976.83	4974.3	2	06-Apr-00		732566	1870896
0904	MW	D	4904.11	4901.8	2	07-Nov-84		731808	1868036
0915	MW	D	5070.84	5067.8	4	24-Aug-85		732740	1872209
1003	INJ	D	4976.58	4978.9	6	26-Jul-99		732101	1870898
1004	INJ	D	4961.55	4963.6	6	27-Jul-99		731892	1870544
1005	INJ	D	4947.83	4950.2	6	25-Jul-99		731496	1870168
1006	INJ	D	4947.08	4949.5	6	24-Jul-99		731233	1869918
1007	INJ	D	4958.56	4961.4	6	23-Jul-99		730770	1869861
1101	EXT	D	5067.29	5070.4	6	24-Aug-99		732223	1872970
1102	EXT	D	5066.76	5070.3	6	24-Aug-99		732225	1872670
1103	EXT	D	5059.56	5062.3	6	30-Jul-99		731896	1872407
1104	EXT	D	5059.57	5062.3	6	01-Aug-99		731527	1872404
1105	EXT	D	5059.33	5062.1	6	02-Aug-99		731304	1872401
1106	EXT	D	5059.73	5062.5	6	03-Aug-99		731081	1872400
1107	EXT	D	5059.51	5062.3	6	03-Aug-99		730858	1872398
1108	EXT	D	5059.62	5062.4	6	03-Aug-99		730634	1872396
1109	EXT	D	5059.64	5062.4	6	04-Aug-99		730410	1872394
1110	EXT	D	5059.47	5062.3	6	07-Aug-99		730187	1872392
1111	EXT	D	5059.87	5062.6	6	06-Aug-99		729993	1872392
1112	EXT	D	5057.08	5059.6	6	17-Aug-99		730494	1872064
1113	EXT	D	5058.54	5059.2	6	17-Aug-99		730196	1872061
1114	EXT	D	5056.25	5059.1	6	11-Aug-99		729896	1872057
1115	EXT	D	5056.36	5059.2	6	07-Aug-99		729596	1872055
1119	EXT	D	5061.19	5064.0	6	31-Jul-99		731894	1872667
1120	EXT	D	5063.60	5066.5	6	28-Jul-99		731891	1872967
1121	EXT	D	5066.61	5069.5	6	28-Jul-99		731889	1873267
1122	EXT	D	5067.31	5070.3	6	26-Aug-99		732221	1873269
1123	EXT	D	5064.54	5067.2	6	02-Sep-99		732508	1873222
1124	EXT	D	5063.86	5066.6	6	23-Aug-99		732512	1872972
1125	EXT	D	5065.47	5068.3	6	25-Aug-99		732515	1872671
0251	MW	E	5061.25	5058.9	2	28-Apr-00		730215	1871999
0268	MW	E	5067.24	5064.5	2	15-May-00		732301	1872430
0920	MW	E	4982.97	4980.4	4	30-Jul-85		731262	1870737
0948	EXDS	E	5117.80	5115.4	4	17-Oct-95		733915	1875516
0911	MW	F	5106.96	5104.6	4	18-Jul-85		730265	1875920
0913	MW	G	5060.16	5057.9	4	02-Aug-85		729327	1871871
0916	MW	G	5070.00	5067.4	4	22-Aug-85		732811	1872146
0919	MW	G	5048.56	5045.6	4	26-Aug-85		727353	1868654
0902	MW	H	4737.42	4736.7	2	02-Dec-84		730179	1862292
0252	MW	I	5061.30	5058.9	4	28-Apr-00		730232	1871993
0254	MW	I	5065.38	5062.7	4	03-May-00		730951	1872411
0256	MW	I	5066.58	5064.0	4	13-May-00		732277	1872437
0921	MW	I	4979.08	4976.9	4	22-Jul-85		731379	1870742
0253	MW	M	5061.11	5058.8	4	18-Apr-00	11-Apr-01	730213	1871974
0255	MW	M	5064.89	5062.3	4	01-May-00		730947	1872387
0257	MW	M	5066.40	5063.4	4	11-May-00		732278	1872414
0968	EXDS		5107.00	5106.4	10			730180	1875689
0970	EXDS		5109.53	5107.7	10			730653	1876567
0971	EXDS		5104.00	5102.3	10			731590	1878306
0972	EXDS		5141.07	5139.7	10			728031	1877986

ALL DIMENSIONS IN FEET EXCEPT WELL DIAMETER IN INCHES
ALL DEPTHS ARE RELATIVE TO GROUND SURFACE

MW	MONITOR WELL
EXT	GROUNDWATER REMEDIATION EXTRACTION WELL
INJ	GROUNDWATER REMEDIATION INJECTION WELL
EXDS	OTHER SUPPLY WELL
**	APPROXIMATE

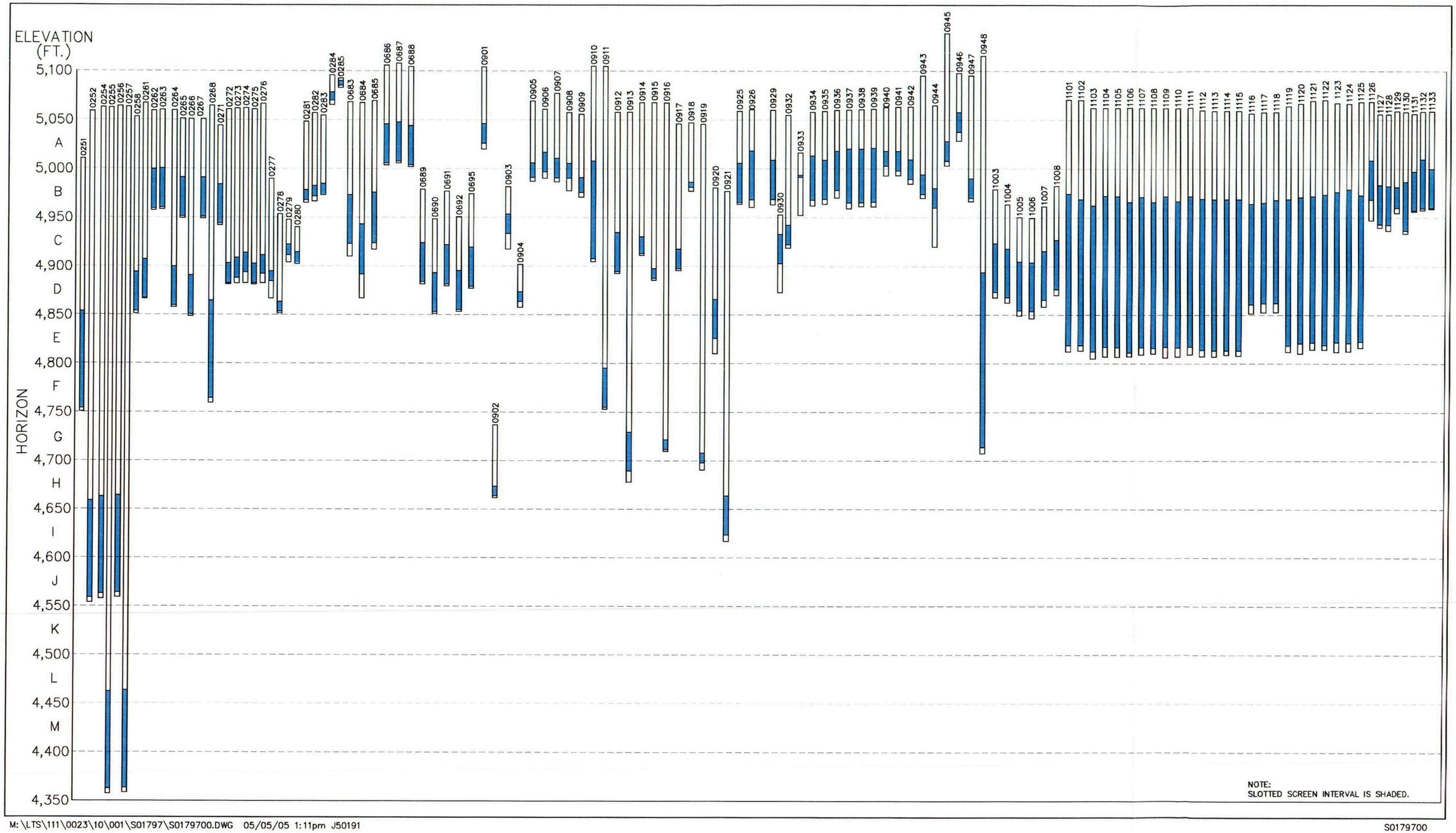

Figure A–1. Well Completions Schematic

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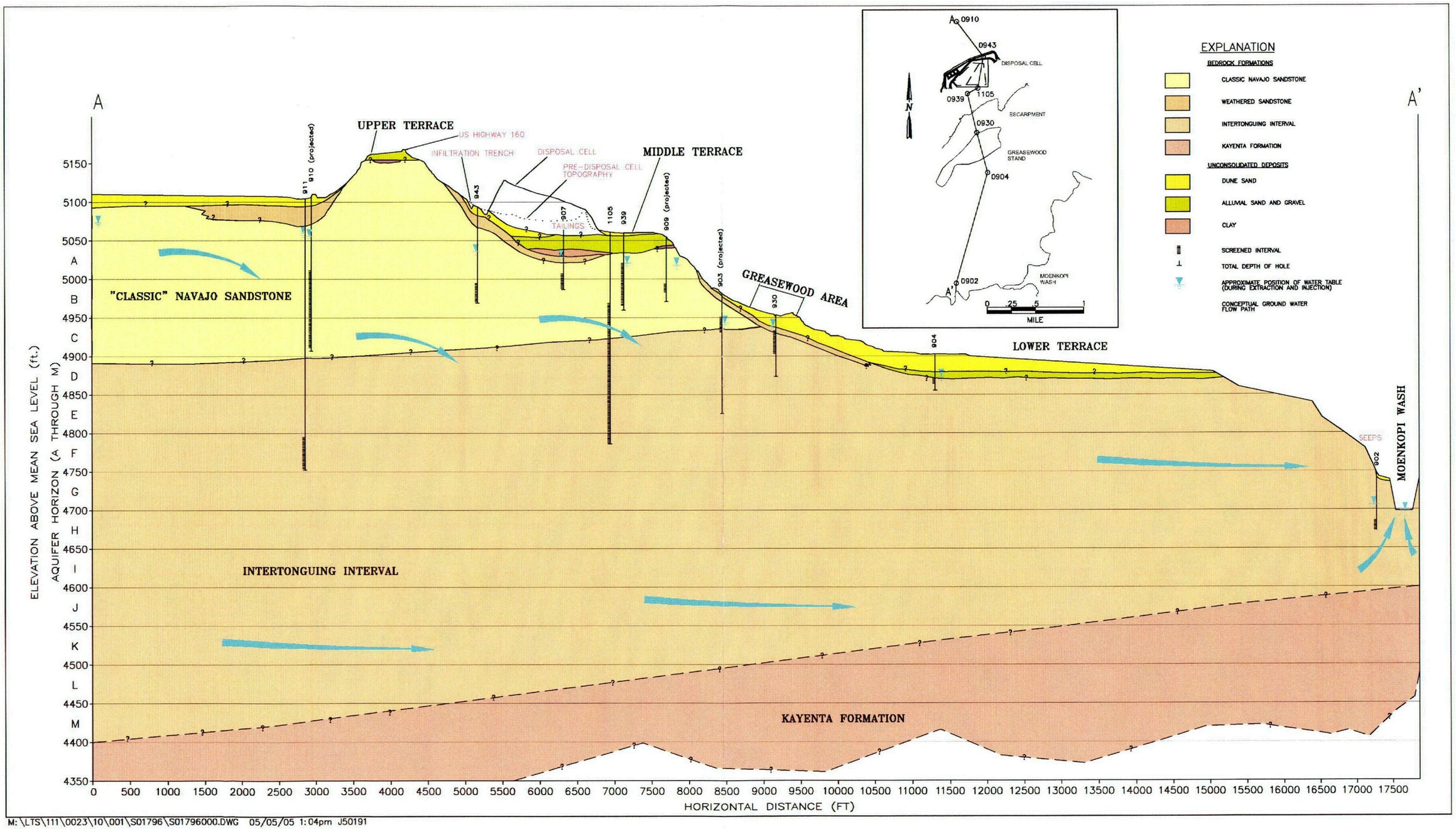

Figure A–2. Conceptual Model of the Site Hydrogeology

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Table A–2. Extraction Well Operation Summary—March 2004 through March 2005

TUBA CITY EXTRACTION WELL OPERATIONAL SUMMARY: MARCH 2004 THROUGH MARCH 2005												
	Mar-04						Apr-04					
	Total Time On	28.82 days		q1	q2	q3	Total Time On	29.97 days		q1	q2	q3
Well	Total Time	Pump OST	Gallons	gpm	gpm	gpm	Total Time	OST	Gallons	gpm	gpm	gpm
1101	26.39	92%	201,345	5.3	4.9	4.5	29.97	100%	246,613	5.7	5.7	5.7
1102	27.19	94%	218,507	5.6	5.3	4.9	29.96	100%	235,135	5.4	5.4	5.4
1103	27.30	95%	252,458	6.4	6.1	5.7	29.95	100%	277,906	6.4	6.4	6.4
1104	27.18	94%	167,683	4.3	4.0	3.8	29.97	100%	172,911	4.0	4.0	4.0
1105	14.46	50%	214,388	10.3	5.2	4.8	14.94	50%	221,997	10.3	5.1	5.1
1106	18.95	66%	112,722	4.1	2.7	2.5	17.44	58%	75,777	3.0	1.8	1.8
1107	25.91	90%	148,146	4.0	3.6	3.3	29.97	100%	158,977	3.7	3.7	3.7
1108	27.30	95%	185,771	4.7	4.5	4.2	29.97	100%	201,853	4.7	4.7	4.7
1109	27.30	95%	95,480	2.4	2.3	2.1	29.97	100%	98,234	2.3	2.3	2.3
1110	24.84	86%	141,352	4.0	3.4	3.2	26.10	87%	139,673	3.7	3.2	3.2
1111	27.30	95%	156,559	4.0	3.8	3.5	29.97	100%	166,638	3.9	3.9	3.9
1112	13.92	48%	83,335	4.2	2.0	1.9	13.48	45%	82,197	4.2	1.9	1.9
1113	18.37	64%	101,407	3.8	2.4	2.3	18.72	62%	99,809	3.7	2.3	2.3
1114	26.73	93%	201,388	5.2	4.9	4.5	29.85	100%	214,936	5.0	5.0	5.0
1115	27.30	95%	245,728	6.2	5.9	5.5	29.97	100%	267,764	6.2	6.2	6.2
1116	0.00	0%	0	0.0	0.0	0.0	0.00	0%	0	0.0	0.0	0.0
1117	0.00	0%	0	0.0	0.0	0.0	0.00	0%	0	0.0	0.0	0.0
1118	26.93	93%	54,936	1.4	1.3	1.2	3.29	11%	8,051	1.7	0.2	0.2
1119	27.30	95%	127,575	3.2	3.1	2.9	29.97	100%	137,831	3.2	3.2	3.2
1120	9.51	33%	31,002	2.3	0.7	0.7	8.28	28%	18,110	1.5	0.4	0.4
1121	26.24	91%	177,929	4.7	4.3	4.0	29.95	100%	197,947	4.6	4.6	4.6
1122	27.30	95%	130,969	3.3	3.2	2.9	29.97	100%	132,933	3.1	3.1	3.1
1123	12.91	45%	16,015	0.9	0.4	0.4	12.78	43%	15,346	0.8	0.4	0.4
1124	27.17	94%	165,957	4.2	4.0	3.7	29.97	100%	172,956	4.0	4.0	4.0
1125	27.17	94%	149,425	3.8	3.6	3.3	29.96	100%	158,429	3.7	3.7	3.7
		total gallons	3,380,078						3,602,022			
		operating q gpm	81.5						81.1			
		days/month	31						30			
		avg monthly q gpm	76						81			
		avg well q gpm		3.9	3.3	3.0				3.8	3.2	3.2
	May-04						Jun-04					
	Total Time On	29.65 days		q1	q2	q3	Total Time On	27.62 days		q1	q2	q3
Well	Total Time	OST	Gallons	gpm	gpm	gpm	Total Time	OST	Gallons	gpm	gpm	gpm
1101	29.65	100%	239,097	5.6	5.6	5.4	25.90	94%	212,103	5.7	5.3	4.9
1102	29.64	100%	221,770	5.2	5.2	5.0	27.58	100%	199,460	5.0	4.6	4.6
1103	29.64	100%	273,580	6.4	6.4	6.1	27.56	100%	251,638	6.3	5.8	5.8
1104	29.64	100%	174,268	4.1	4.1	3.9	27.61	100%	166,606	4.2	3.9	3.9
1105	15.58	53%	235,556	10.5	5.5	5.3	14.89	54%	228,802	10.7	5.3	5.3
1106	0.00	0%	0	0.0	0.0	0.0	4.92	18%	16,615	2.3	0.4	0.4
1107	29.64	100%	160,947	3.8	3.8	3.6	27.61	100%	150,662	3.8	3.5	3.5
1108	29.64	100%	198,165	4.6	4.6	4.4	27.58	100%	184,691	4.7	4.3	4.3
1109	29.64	100%	99,606	2.3	2.3	2.2	27.61	100%	97,037	2.4	2.2	2.2
1110	26.54	90%	142,082	3.7	3.3	3.2	26.93	98%	140,633	3.6	3.3	3.3
1111	29.64	100%	161,708	3.8	3.8	3.6	27.60	100%	149,226	3.8	3.5	3.5
1112	14.14	48%	85,179	4.2	2.0	1.9	13.63	49%	84,030	4.3	1.9	1.9
1113	19.12	64%	101,170	3.7	2.4	2.3	18.13	66%	98,327	3.8	2.3	2.3
1114	29.52	100%	214,036	5.0	5.0	4.8	26.86	97%	201,292	5.2	4.7	4.7
1115	29.64	100%	264,558	6.2	6.2	5.9	27.61	100%	245,317	6.2	5.7	5.7
1116	0.00	0%	0	0.0	0.0	0.0	0.00	0%	0	0.0	0.0	0.0
1117	0.00	0%	0	0.0	0.0	0.0	0.00	0%	0	0.0	0.0	0.0
1118	0.00	0%	0	0.0	0.0	0.0	0.00	0%	0	0.0	0.0	0.0
1119	29.64	100%	135,429	3.2	3.2	3.0	27.59	100%	125,245	3.2	2.9	2.9
1120	9.79	33%	54,994	3.9	1.3	1.2	11.73	42%	116,031	6.9	2.7	2.7
1121	29.64	100%	191,214	4.5	4.5	4.3	27.58	100%	180,293	4.5	4.2	4.2
1122	29.64	100%	129,453	3.0	3.0	2.9	27.60	100%	120,600	3.0	2.8	2.8
1123	12.35	42%	15,026	0.8	0.4	0.3	11.57	42%	14,296	0.9	0.3	0.3
1124	29.64	100%	168,198	3.9	3.9	3.8	27.61	100%	155,784	3.9	3.6	3.6
1125	29.63	100%	155,758	3.7	3.6	3.5	27.45	99%	143,650	3.6	3.3	3.3
		total gallons	3,421,796						3,282,335			
		operating q gpm	80.2						82.5			
		days/month	31						30			
		avg monthly q gpm	77						76			
		avg well q gpm		3.7	3.2	3.1				3.9	3.1	3.0
	Jul-04						Aug-04					
	Total Time On	18.13 days		q1	q2	q3	Total Time On	27.15 days		q1	q2	q3
Well	Total Time	OST	Gallons	gpm	gpm	gpm	Total Time	OST	Gallons	gpm	gpm	gpm
1101	18.11	100%	160,257	6.1	6.1	3.6	27.14	100%	237,360	6.1	6.1	5.3
1102	18.09	100%	133,501	5.1	5.1	3.0	27.12	100%	195,115	5.0	5.0	4.4

Table A-2 (continued). Extraction Well Operation Summary—March 2004 through March 2005

TUBA CITY EXTRACTION WELL OPERATIONAL SUMMARY: MARCH 2004 THROUGH MARCH 2005												
1103	18.07	100%	165,576	6.4	6.3	3.7	27.06	100%	247,916	6.4	6.3	5.6
1104	18.09	100%	121,855	4.7	4.7	2.7	27.07	100%	170,879	4.4	4.4	3.8
1105	16.59	92%	73,282	3.1	2.8	1.6	26.94	99%	116,902	3.0	3.0	2.6
1106	18.09	100%	73,453	2.8	2.8	1.6	27.14	100%	102,032	2.6	2.6	2.3
1107	18.09	100%	103,965	4.0	4.0	2.3	27.06	100%	146,982	3.8	3.8	3.3
1108	18.04	100%	121,815	4.7	4.7	2.7	27.00	99%	180,070	4.6	4.6	4.0
1109	17.93	99%	71,005	2.8	2.7	1.6	27.13	100%	98,705	2.5	2.5	2.2
1110	17.94	99%	104,731	4.1	4.0	2.3	27.09	100%	144,387	3.7	3.7	3.2
1111	17.98	99%	99,368	3.8	3.8	2.2	27.12	100%	144,622	3.7	3.7	3.2
1112	15.28	84%	64,267	2.9	2.5	1.4	23.63	87%	78,597	2.3	2.0	1.8
1113	7.34	41%	34,007	3.2	1.3	0.8	9.64	36%	38,251	2.8	1.0	0.9
1114	15.85	87%	120,264	5.3	4.6	2.7	24.39	90%	159,769	4.5	4.1	3.6
1115	17.93	99%	152,977	5.9	5.9	3.4	27.14	100%	223,578	5.7	5.7	5.0
1116	14.72	81%	88,472	4.2	3.4	2.0	27.14	100%	157,591	4.0	4.0	3.5
1117	14.73	81%	153,195	7.2	5.9	3.4	27.13	100%	281,086	7.2	7.2	6.3
1118	14.73	81%	74,320	3.5	2.8	1.7	19.80	73%	112,150	3.9	2.9	2.5
1119	18.00	99%	90,280	3.5	3.5	2.0	27.11	100%	127,825	3.3	3.3	2.9
1120	13.55	75%	156,382	8.0	6.0	3.5	19.12	70%	203,751	7.4	5.2	4.6
1121	18.00	99%	123,307	4.8	4.7	2.8	26.99	99%	183,732	4.7	4.7	4.1
1122	18.00	99%	87,014	3.4	3.3	1.9	27.14	100%	124,619	3.2	3.2	2.8
1123	4.14	23%	4,286	0.7	0.2	0.1	7.36	27%	6,491	0.6	0.2	0.1
1124	12.97	72%	81,951	4.4	3.1	1.8	0.00	0%	2	0.0	0.0	0.0
1125	17.86	99%	102,833	4.0	3.9	2.3	26.91	99%	156,487	4.0	4.0	3.5
		total gallons	2,562,362						3,638,897			
		operating q gpm	98.2						93.1			
		days/month	31						31			
		avg monthly q gpm	57						82			
		avg well q gpm		4.3	3.9	2.3				4.0	3.7	3.3
	Sep-04						Oct-04					
	Total Time On	13.46 days		q1	q2	q3	Total Time On	15.48 days		q1	q2	q3
Well	Total Time	OST	Gallons	gpm	gpm	gpm	Total Time	OST	Gallons	gpm	gpm	gpm
1101	13.42	100%	117,148	6.1	6.0	2.7	15.41	100%	138,626	6.2	6.2	3.1
1102	13.42	100%	98,372	5.1	5.1	2.3	15.42	100%	120,502	5.4	5.4	2.7
1103	13.39	100%	123,133	6.4	6.4	2.9	15.39	99%	142,499	6.4	6.4	3.2
1104	13.42	100%	90,508	4.7	4.7	2.1	15.40	99%	127,818	5.8	5.7	2.9
1105	13.42	100%	101,351	5.2	5.2	2.3	15.42	100%	116,318	5.2	5.2	2.6
1106	13.42	100%	49,919	2.6	2.6	1.2	15.42	100%	71,032	3.2	3.2	1.6
1107	13.42	100%	76,903	4.0	4.0	1.8	15.38	99%	96,473	4.4	4.3	2.2
1108	13.31	99%	90,199	4.7	4.7	2.1	14.88	96%	109,332	5.1	4.9	2.4
1109	13.42	100%	50,633	2.6	2.6	1.2	15.42	100%	69,710	3.1	3.1	1.6
1110	13.39	99%	79,678	4.1	4.1	1.8	15.41	100%	115,961	5.2	5.2	2.6
1111	13.42	100%	71,809	3.7	3.7	1.7	15.42	100%	89,586	4.0	4.0	2.0
1112	12.00	89%	47,464	2.7	2.4	1.1	15.40	100%	83,261	3.8	3.7	1.9
1113	6.55	49%	25,818	2.7	1.3	0.6	11.73	76%	45,543	2.7	2.0	1.0
1114	13.40	100%	92,869	4.8	4.8	2.1	15.38	99%	119,029	5.4	5.3	2.7
1115	13.42	100%	112,409	5.8	5.8	2.6	15.41	100%	137,116	6.2	6.1	3.1
1116	13.42	100%	76,866	4.0	4.0	1.8	15.41	100%	86,203	3.9	3.9	1.9
1117	13.42	100%	138,971	7.2	7.2	3.2	15.41	100%	159,966	7.2	7.2	3.6
1118	12.84	95%	74,759	4.0	3.9	1.7	15.42	100%	88,584	4.0	4.0	2.0
1119	13.42	100%	65,110	3.4	3.4	1.5	15.42	100%	86,309	3.9	3.9	1.9
1120	9.60	71%	124,124	9.0	6.4	2.9	15.17	98%	238,933	10.9	10.7	5.4
1121	13.42	100%	92,718	4.8	4.8	2.1	15.42	100%	115,219	5.2	5.2	2.6
1122	13.42	100%	65,575	3.4	3.4	1.5	15.42	100%	88,632	4.0	4.0	2.0
1123	5.90	44%	5,173	0.6	0.3	0.1	10.75	69%	9,744	0.6	0.4	0.2
1124	0.00	0%	0	0.0	0.0	0.0	0.00	0%	0	0.0	0.0	0.0
1125	13.41	100%	80,650	4.2	4.2	1.9	15.42	100%	100,136	4.5	4.5	2.2
		total gallons	1,952,157						2,556,530			
		operating q gpm	100.7						114.7			
		days/month	30						31			
		avg monthly q gpm	45						57			
		avg well q gpm		4.2	4.0	1.8				4.7	4.6	2.3
	Nov-04						Dec-04					
	Total Time On	23.31 days		q1	q2	q3	Total Time On	24.23 days		q1	q2	q3
Well	Total Time	OST	Gallons	gpm	gpm	gpm	Total Time	OST	Gallons	gpm	gpm	gpm
1101	23.25	100%	203,946	6.1	6.1	4.7	24.15	100%	204,056	5.9	5.8	4.6
1102	23.25	100%	171,778	5.1	5.1	4.0	24.15	100%	172,369	5.0	4.9	3.9
1103	23.26	100%	215,886	6.4	6.4	5.0	24.15	100%	222,418	6.4	6.4	5.0
1104	23.24	100%	150,253	4.5	4.5	3.5	24.15	100%	145,489	4.2	4.2	3.3
1105	23.25	100%	173,744	5.2	5.2	4.0	24.15	100%	174,313	5.0	5.0	3.9
1106	23.25	100%	81,430	2.4	2.4	1.9	24.15	100%	77,515	2.2	2.2	1.7

Table A-2 (continued). Extraction Well Operation Summary—March 2004 through March 2005

TUBA CITY EXTRACTION WELL OPERATIONAL SUMMARY: MARCH 2004 THROUGH MARCH 2005												
1107	23.25	100%	132,224	3.9	3.9	3.1	24.15	100%	133,364	3.8	3.8	3.0
1108	23.13	99%	166,931	5.0	5.0	3.9	24.15	100%	172,253	5.0	4.9	3.9
1109	23.25	100%	89,642	2.7	2.7	2.1	24.15	100%	83,802	2.4	2.4	1.9
1110	23.17	99%	127,371	3.8	3.8	2.9	23.80	98%	124,826	3.6	3.6	2.8
1111	23.25	100%	126,853	3.8	3.8	2.9	24.15	100%	126,452	3.6	3.6	2.8
1112	22.47	96%	76,490	2.4	2.3	1.8	23.53	97%	71,915	2.1	2.1	1.6
1113	14.51	62%	52,869	2.5	1.6	1.2	18.40	76%	62,667	2.4	1.8	1.4
1114	23.25	100%	155,525	4.6	4.6	3.6	24.15	100%	157,076	4.5	4.5	3.5
1115	23.25	100%	192,316	5.7	5.7	4.5	24.15	100%	197,158	5.7	5.7	4.4
1116	23.25	100%	133,356	4.0	4.0	3.1	24.15	100%	136,383	3.9	3.9	3.1
1117	23.25	100%	240,336	7.2	7.2	5.6	24.15	100%	248,614	7.1	7.1	5.6
1118	23.18	99%	132,592	4.0	4.0	3.1	24.15	100%	138,874	4.0	4.0	3.1
1119	23.25	100%	111,068	3.3	3.3	2.6	24.15	100%	104,490	3.0	3.0	2.3
1120	15.83	68%	195,579	8.6	5.8	4.5	15.17	63%	177,313	8.1	5.1	4.0
1121	23.22	100%	160,271	4.8	4.8	3.7	24.05	99%	162,598	4.7	4.7	3.6
1122	23.26	100%	112,183	3.3	3.3	2.6	24.15	100%	109,936	3.2	3.2	2.5
1123	9.85	42%	8,436	0.6	0.3	0.2	10.86	45%	8,886	0.6	0.3	0.2
1124	0.00	0%	0	0.0	0.0	0.0	0.00	0%	0	0.0	0.0	0.0
1125	23.26	100%	137,836	4.1	4.1	3.2	24.15	100%	141,310	4.1	4.1	3.2
		total gallons	3,348,914						3,354,076			
		operating q gpm	99.8						96.1			
		days/month	30						31			
		avg monthly q gpm	78						75			
		avg well q gpm		4.2	4.0	3.1				4.0	3.8	3.0
	Jan-05						Feb-05					
	Total Time On	27.55	days	q1	q2	q3	Total Time On	24.98	days	q1	q2	q3
Well	Total Time	OST	Gallons	gpm	gpm	gpm	Total Time	OST	Gallons	gpm	gpm	gpm
1101	27.46	100%	230,448	5.8	5.8	5.3	15.69	63%	124,621	5.5	3.5	3.1
1102	27.46	100%	192,551	4.9	4.9	4.5	24.91	100%	170,022	4.7	4.7	4.2
1103	27.46	100%	253,131	6.4	6.4	5.9	24.91	100%	228,914	6.4	6.4	5.7
1104	27.47	100%	162,336	4.1	4.1	3.8	24.91	100%	144,596	4.0	4.0	3.6
1105	27.45	100%	248,236	6.3	6.3	5.7	24.91	100%	231,318	6.4	6.4	5.7
1106	27.47	100%	82,990	2.1	2.1	1.9	24.91	100%	71,908	2.0	2.0	1.8
1107	27.46	100%	150,142	3.8	3.8	3.5	24.92	100%	134,706	3.8	3.7	3.3
1108	27.43	100%	194,600	4.9	4.9	4.5	24.90	100%	176,173	4.9	4.9	4.4
1109	27.46	100%	94,891	2.4	2.4	2.2	24.91	100%	81,176	2.3	2.3	2.0
1110	26.96	98%	137,199	3.5	3.5	3.2	24.42	98%	123,618	3.5	3.4	3.1
1111	27.46	100%	138,956	3.5	3.5	3.2	24.91	100%	123,607	3.4	3.4	3.1
1112	27.38	99%	77,410	2.0	2.0	1.8	24.86	100%	68,846	1.9	1.9	1.7
1113	25.31	92%	80,040	2.2	2.0	1.9	24.25	97%	76,242	2.2	2.1	1.9
1114	27.46	100%	174,551	4.4	4.4	4.0	24.91	100%	162,478	4.5	4.5	4.0
1115	27.47	100%	222,278	5.6	5.6	5.1	24.91	100%	209,648	5.8	5.8	5.2
1116	27.46	100%	154,833	3.9	3.9	3.6	24.91	100%	143,992	4.0	4.0	3.6
1117	27.46	100%	280,851	7.1	7.1	6.5	3.49	14%	19,812	3.9	0.6	0.5
1118	27.46	100%	157,045	4.0	4.0	3.6	24.91	100%	151,328	4.2	4.2	3.8
1119	27.46	100%	116,810	3.0	2.9	2.7	24.91	100%	105,532	2.9	2.9	2.6
1120	16.56	60%	189,720	8.0	4.8	4.4	14.70	59%	166,071	7.8	4.6	4.1
1121	27.42	100%	184,842	4.7	4.7	4.3	24.87	100%	165,560	4.6	4.6	4.1
1122	27.46	100%	121,966	3.1	3.1	2.8	24.91	100%	108,926	3.0	3.0	2.7
1123	14.64	53%	11,697	0.6	0.3	0.3	14.95	60%	10,798	0.5	0.3	0.3
1124	0.00	0%	0	0.0	0.0	0.0	12.03	48%	91,372	5.3	2.5	2.3
1125	26.47	96%	159,392	4.2	4.0	3.7	24.91	100%	136,625	3.8	3.8	3.4
		total gallons	3,816,916						3,227,888			
		operating q gpm	96.2						89.7			
		days/month	30						28			
		avg monthly q gpm	88						80			
		avg well q gpm		4.0	3.8	3.5				4.1	3.6	3.2
	Mar-05											
	Total Time On	30.54	days	q1	q2	q3						
Well	Total Time	OST	Gallons	gpm	gpm	gpm						
1101	27.90	91%	271,428	6.8	6.2	6.1						
1102	30.34	99%	191,512	4.4	4.4	4.3						
1103	30.45	100%	277,772	6.3	6.3	6.2						
1104	30.45	100%	166,811	3.8	3.8	3.7						
1105	30.45	100%	274,606	6.3	6.2	6.2						
1106	30.45	100%	80,668	1.8	1.8	1.8						
1107	30.45	100%	160,017	3.6	3.6	3.6						
1108	30.45	100%	209,306	4.8	4.8	4.7						
1109	30.45	100%	93,320	2.1	2.1	2.1						
1110	29.91	98%	143,714	3.3	3.3	3.2						
1111	30.45	100%	145,536	3.3	3.3	3.3						
1112	30.45	100%	76,716	1.7	1.7	1.7						

Table A-2 (continued). Extraction Well Operation Summary—March 2004 through March 2005

TUBA CITY EXTRACTION WELL OPERATIONAL SUMMARY: MARCH 2004 THROUGH MARCH 2005						
1113	29.85	98%	78,659	1.8	1.8	1.8
1114	30.45	100%	190,799	4.4	4.3	4.3
1115	30.45	100%	249,497	5.7	5.7	5.6
1116	30.45	100%	170,174	3.9	3.9	3.8
1117	29.51	97%	129,734	3.1	2.9	2.9
1118	30.46	100%	177,878	4.1	4.0	4.0
1119	30.45	100%	126,071	2.9	2.9	2.8
1120	16.66	55%	173,492	7.2	3.9	3.9
1121	30.45	100%	194,309	4.4	4.4	4.4
1122	30.45	100%	121,113	2.8	2.8	2.7
1123	14.94	49%	9,845	0.5	0.2	0.2
1124	30.45	100%	220,324	5.0	5.0	4.9
1125	30.37	99%	144,378	3.3	3.3	3.2
		total gallons	4,077,677			
		operating q gpm	92.7			
		days/month	31			
		avg monthly q gpm	91			
			avg well q gpm	3.9	3.7	3.7

total time on = number of days in month that pumps are operating
total time = number of days in month of pump on-cycle; excludes off-cycle time
ost (on stream time) = total time on / total time
q1 = instantaneous pumping rate
q2 = effective pumping rate on-cycle plus off-cycle time
q3 = effective pumping rate during month

Appendix B

Ground Water Sample Results for February 2004 and the Baseline Period for Contaminants Requiring Remediation

Table B-1. Baseline, August 2004 and February 2005 Molybdenum Concentrations

Well Number	Horizon	Baseline Molybdenum Concentration (mg/L)	Year Sampled, Baseline	Aug 2004 Molybdenum Concentration (mg/L)	Feb 2005 Molybdenum Concentration (mg/L)
0284	A			NS	Dry
0285	A			NS	Dry
0686	A	0.0015U	2002	0.0014	0.0011U
0687	A	0.0113	2002	0.0017	0.0015
0688	A	0.0015U	2002	0.0029	0.0016
0901	A	0.00078	2001	0.00065BU	0.00054BU
0906	A	0.0137	2002	0.028	0.017
0929	A	0.0015U	2002	0.00047BU	0.00046BU
0940	A	0.0015U	2002	NS	NS
0941	A	0.0284	2002	0.063	0.021
0945	A	0.0015U	2002	0.0011	NS
0946	A			0.0025	0.0024
0001	B			NS	NS
0262	B	0.432	2001	0.58	0.64
0263	B	0.192	2001	0.059	0.042
0265	B	0.00046	2001	0.00064BU	0.00047BU
0267	B	0.0015U	2002	0.00053BU	0.00041BU
0271	B	0.0015U	2002	0.00041BU	NS
0281	B			NS	0.0031
0282	B			NS	0.0048
0283	B			NS	0.003
0908	B	0.0015U	2002	0.0004BU	0.00044BU
0909	B	0.0015U	2002	0.00049BU	0.00032BU
0910	B			NS	0.00052BU
0918	B			NS	NS
0934	B	0.0015U	2002	0.00038BU	0.00035BU
0935	B	0.0015U	2002	NS	NS
0936	B	0.0015U	2002	0.0013	0.0012U
0938	B	0.001U	1999	NS	NS
0942	B	0.021	2002	0.025	0.018
0943	B	0.0015U	2002	0.0005BU	0.00035BU
0947	B	0.0015U	2002	NS	NS
1126	B			NS	NS
1127	B			NS	NS
1128	B			NS	NS
1129	B			NS	NS
1130	B			NS	NS
1131	B			NS	NS
1132	B			NS	NS
1133	B			NS	NS
0274	C			NS	0.00058BU
0276	C			NS	0.00063BU
0279	C			NS	0.0038
0280	C			NS	0.00063BU
0683	C	0.0015U	2002	0.00066BU	NS
0684	C	0.0015U	2002	0.00077BU	NS

Table B–1 (continued). Baseline, August 2004 and February 2005 Molybdenum Concentrations

Well Number	Horizon	Baseline Molybdenum Concentration (mg/L)	Year Sampled, Baseline	Aug 2004 Molybdenum Concentration (mg/L)	Feb 2005 Molybdenum Concentration (mg/L)
0685	C	0.0015U	2002	0.00054BU	NS
0689	C	0.0015U	2002	0.00049BU	NS
0691	C	0.0015U	2002	0.00035BU	0.0004BU
0903	C	0.0015U	2002	0.00053BU	0.00045BU
0912	C	0.0003U	2001	0.00044BU	NS
0914	C	0.00081	2001	0.00078BU	NS
0917	C	0.0013	2001	NS	0.00057BU
0930	C	0.0015U	2002	0.00037BU	0.00035BU
0932	C	0.0018U	2002	0.0014	0.00063BU
1008	C	0.0004U	2000	NS	0.0005BU
1116	C	0.0015U	2002	0.00033BU	NS
1117	C	0.0015U	2002	0.00034BU	NS
1118	C	0.0015U	2002	NS	NS
0258	D	0.00063	2000	NS	0.00053BU
0261	D	0.0026	2001	0.00069BU	NS
0264	D	0.0031	2001	0.00077BU	0.00052BU
0266	D	0.00058	2001	0.00054BU	0.00049BU
0272	D			NS	0.00038BU
0273	D			NS	0.027
0275	D			NS	0.0006BU
0277	D			NS	0.0016
0278	D			NS	0.00053BU
0690	D	0.0015U	2002	0.00069BU	0.00056BU
0692	D	0.0015U	2002	0.00063B	0.00055BU
0695	D	0.0015U	2002	0.00068BU	NS
0904	D	0.00077	2001	NS	0.0006BU
0915	D	0.00054	2001	NS	NS
1003	D	0.0004U	2000	NS	0.00034BU
1004	D	0.0004U	2000	0.00051BU	0.00046BU
1005	D	0.0004U	2000	NS	NS
1006	D	0.0004U	2000	NS	0.0004BU
1007	D	0.0004U	2000	NS	0.00035BU
1101	D	0.0015U	2002	0.00058BU	NS
1102	D	0.0015U	2002	0.00042BU	NS
1103	D	0.0015U	2002	0.00098BU	NS
1104	D	0.0916	2002	0.043	NS
1105	D	2.96	2002	1.5	NS
1106	D	1.26	2002	0.44	NS
1107	D	0.16	2002	0.014	NS
1108	D	0.0015U	2002	0.00045BU	NS
1109	D	0.0015U	2002	0.00038BU	NS
1110	D	0.0015U	2002	0.00098BU	NS
1111	D	0.0015U	2002	0.00029BU	NS
1112	D	0.0015U	2002	0.00037BU	NS
1113	D	0.0015U	2002	0.00036BU	NS
1114	D	0.0027	2002	0.00099BU	NS

Table B-1 (continued). Baseline, August 2004 and February 2005 Molybdenum Concentrations

Well Number	Horizon	Baseline Molybdenum Concentration (mg/L)	Year Sampled, Baseline	Aug 2004 Molybdenum Concentration (mg/L)	Feb 2005 Molybdenum Concentration (mg/L)
1115	D	0.0015U	2002	0.00038BU	NS
1119	D	0.0053	2002	0.00082BU	NS
1120	D	0.0815	2002	0.025	NS
1121	D	0.105	2002	0.039	NS
1122	D	0.0015U	2002	0.00068BU	NS
1123	D	0.0015U	2002	NS	NS
1124	D	0.0015U	2002	NS	NS
1125	D	0.0015U	2002	0.00048BU	NS
0251	E	0.0015U	2002	0.00054BU	0.00044BU
0268	E	0.0015U	2002	0.00084BU	0.00051BU
0920	E	0.0003U	2001	NS	0.00049BU
0911	F			NS	0.00039BU
0913	G	0.0003U	2001	0.00038BU	NS
0916	G	0.00096	2001	NS	NS
0919	G			NS	0.00074BU
0902	H			NS	NS
0252	I	0.0015U	2002	0.00082BU	0.00036BU
0254	I	0.164	2002	0.059	0.055
0256	I	0.0015U	2002	0.00099BU	0.00055BU
0921	I	0.0003U	2001	NS	0.00037BU
0255	M	0.0043	2000	0.059	0.071
0257	M	0.00041	2000	0.042U	0.044

B=Result is between the IDL and CRDL
NS=Not sampled
U=Analytical result below detection limit

Table B-2. Baseline, August 2004 and February 2005 Nitrate Concentrations

Well Number	Horizon	Baseline Nitrate Concentration (mg/L)	Year Sampled, Baseline	Aug 2004 Nitrate Concentration (mg/L)	Feb 2005 Nitrate Concentration (mg/L)
0284	A			NS	Dry
0285	A			NS	Dry
0686	A	32.2	2002	16	16
0687	A	60.6	2002	7.5	12
0688	A	35.1	2002	39	43
0901	A	13	2001	14	14
0906	A	1470	2002	1510	1590
0929	A	69.5	2002	71	62
0940	A	1800	2002	NS	NS
0941	A	358	2002	576	708
0945	A	12.7	2002	12	NS
0946	A			23	25
0001	B			NS	NS
0262	B	380	2001	487	487
0263	B	1140	2001	841	753
0265	B	720	2001	430	487
0267	B	1640	2002	1550	1510
0271	B	15.6	2002	16	NS
0281	B			NS	89
0282	B			NS	487
0283	B			NS	420
0908	B	651	2002	664	664
0909	B	485	2002	531	576
0910	B			NS	10
0918	B			NS	NS
0934	B	2320	2002	2260	2170
0935	B	525	2002	NS	615
0936	B	2950	2002	2120	2430
0938	B	1450	1999	NS	NS
0942	B	1360	2002	1460	1680
0943	B	22.1	2002	330	210
0947	B	12.5	2002	NS	NS
1126	B			NS	1143
1127	B			NS	400
1128	B			NS	411
1129	B			NS	578
1130	B			NS	1179
1131	B			NS	1535
1132	B			NS	1203
1133	B			NS	692
0274	C			NS	15
0276	C			NS	14
0279	C			NS	28
0280	C			NS	10
0683	C	14.1	2002	14	NS
0684	C	13.9	2002	14	NS

Table B-2 (continued). Baseline, August 2004 and February 2005 Nitrate Concentrations

Well Number	Horizon	Baseline Nitrate Concentration (mg/L)	Year Sampled, Baseline	Aug 2004 Nitrate Concentration (mg/L)	Feb 2005 Nitrate Concentration (mg/L)
0685	C	14.3	2002	10	NS
0689	C	14.3	2002	14	NS
0691	C	298	2002	170	200
0903	C	54.8	2002	49	42
0912	C	403	2001	280	NS
0914	C	13	2001	12	NS
0917	C	15.7	2001	NS	16
0930	C	50.9	2002	62	66
0932	C	25.3	2002	25	26
1008	C	15.7	2000	NS	14
1116	C	106	2002	89	109
1117	C	225	2002	340	NS
1118	C	164	2002	NS	588
0258	D	15	2000	NS	15
0261	D	14	2001	15	NS
0264	D	24.3	2001	40	38
0266	D	14	2001	15	15
0272	D			NS	17
0273	D			NS	190
0275	D			NS	1060
0277	D			NS	14
0278	D			NS	14
0690	D	12.5	2002	13	13
0692	D	12.5	2002	13	13
0695	D	25.4	2002	27	NS
0904	D	5.13	2001	NS	4
0915	D	14.1	2001	NS	NS
1003	D	176	2000	NS	220
1004	D	49.1	2000	21	44
1005	D	14.5	2000	NS	NS
1006	D	14.1	2000	NS	10
1007	D	15.3	2000	NS	15
1101	D	438	2002	443	485
1102	D	650	2002	620	601
1103	D	1120	2002	1020	1062
1104	D	993	2002	531	580
1105	D	648	2002	531	219
1106	D	614	2002	200	185
1107	D	1060	2002	210	178
1108	D	1410	2002	664	641
1109	D	798	2002	410	425
1110	D	227	2002	180	174
1111	D	421	2002	390	391
1112	D	617	2002	150	127
1113	D	143	2002	49	45
1114	D	228	2002	200	214

Table B-2 (continued). Baseline, August 2004 and February 2005 Nitrate Concentrations

Well Number	Horizon	Baseline Nitrate Concentration (mg/L)	Year Sampled, Baseline	Aug 2004 Nitrate Concentration (mg/L)	Feb 2005 Nitrate Concentration (mg/L)
1115	D	766	2002	290	284
1119	D	468	2002	487	534
1120	D	493	2002	270	228
1121	D	573	2002	210	195
1122	D	954	2002	270	226
1123	D	643	2002	NS	104
1124	D	781	2002	NS	NS
1125	D	104	2002	49	45
0251	E	426	2002	16	17
0268	E	15.4	2002	39	62
0920	E	14.8	2001	NS	15
0911	F			NS	10
0913	G	12.4	2001	12	NS
0916	G	11.6	2001	NS	NS
0919	G			NS	6.2
0902	H			NS	NS
0252	I	15.3	2002	10	11
0254	I	354	2002	440	487
0256	I	189	2002	39	49
0921	I	11	2001	NS	11
0255	M	9.6	2000	0.04U	0.04U
0257	M	6.9	2000	0.04U	0.04U

NS=Not sampled
U=Analytical result below detection limit

Table B-3. Baseline, August 2004 and February 2005 Selenium Concentrations

Well Number	Horizon	Baseline Selenium Concentration (mg/L)	Year Sampled, Baseline	Aug 2004 Selenium Concentration (mg/L)	Feb 2005 Selenium Concentration (mg/L)
0284	A			NS	Dry
0285	A			NS	Dry
0686	A	0.0088	2002	0.0051	0.0036
0687	A	0.0145	2002	0.0003	0.00046
0688	A	0.0033	2002	0.0057	0.015
0901	A	0.0024	2001	0.0021	0.0017
0906	A	0.0335	2002	0.02	0.017
0929	A	0.0028	2002	0.0022	0.0022
0940	A	0.105	2002	NS	NS
0941	A	0.0348	2002	0.048	0.055
0945	A	0.0035	2002	0.0031	NS
0946	A			0.0037	0.0047
0001	B			NS	NS
0262	B	0.0621	2001	0.061	0.065
0263	B	0.0632	2001	0.04	0.032
0265	B	0.0071	2001	0.0037	0.0036
0267	B	0.0532	2002	0.048	0.043
0271	B	0.0016	2002	0.0012	NS
0281	B			NS	0.00098
0282	B			NS	0.0035
0283	B			NS	0.0088
0908	B	0.0163	2002	0.022	0.023
0909	B	0.0224	2002	0.03	0.036
0910	B			NS	0.001
0918	B			NS	NS
0934	B	0.0116	2002	0.0089	0.0097
0935	B	0.0195	2002	NS	NS
0936	B	0.0869	2002	0.053	0.054
0938	B	0.0432	1999	NS	NS
0942	B	0.0348	2002	0.037	0.039
0943	B	0.0021	2002	0.01	0.0089
0947	B	0.0019	2002	NS	NS
1126	B			NS	
1127	B			NS	
1128	B			NS	
1129	B			NS	
1130	B			NS	
1131	B			NS	
1132	B			NS	
1133	B			NS	
0274	C			NS	0.0011
0276	C			NS	0.0012
0279	C			NS	0.00066
0280	C			NS	0.0016
0683	C	0.0022	2002	0.0015	NS
0684	C	0.0019	2002	0.0014	NS

Table B–3 (continued). Baseline, August 2004 and February 2005 Selenium Concentrations

Well Number	Horizon	Baseline Selenium Concentration (mg/L)	Year Sampled, Baseline	Aug 2004 Selenium Concentration (mg/L)	Feb 2005 Selenium Concentration (mg/L)
0685	C	0.0017	2002	0.0013	NS
0689	C	0.0014	2002	0.001	NS
0691	C	0.0046	2002	0.0019	0.0023
0903	C	0.0023	2002	0.0014	0.0013
0912	C	0.0137	2001	0.0083	NS
0914	C	0.0016	2001	0.00081	NS
0917	C	0.0017	2001	NS	0.00092
0930	C	0.002	2002	0.0017	0.0015
0932	C	0.0019	2002	0.0009	0.0011
1008	C	0.0015	2000	NS	0.00083
1116	C	0.0018	2002	0.0016	NS
1117	C	0.0028	2002	0.01	NS
1118	C	0.0028	2002	NS	NS
0258	D	0.0018	2000	NS	0.0012
0261	D	0.0021	2001	0.0012	NS
0264	D	0.0018	2001	0.0011	0.0012
0266	D	0.0013	2001	0.00086	0.00078
0272	D			NS	0.00082
0273	D			NS	0.016
0275	D			NS	0.021
0277	D			NS	0.001
0278	D			NS	0.00085
0690	D	0.0014	2002	0.001	0.00094
0692	D	0.0022	2002	0.0015	0.0014
0695	D	0.0019	2002	0.0015	NS
0904	D	0.0131	2001	NS	0.015
0915	D	0.0019	2001	NS	NS
1003	D	0.003	2000	NS	0.0025
1004	D	0.0021	2000	0.0018	0.0014
1005	D	0.0014	2000	NS	NS
1006	D	0.0013	2000	NS	0.00086
1007	D	0.0013	2000	NS	0.00088
1101	D	0.0188	2002	0.027	NS
1102	D	0.0121	2002	0.021	NS
1103	D	0.0613	2002	0.037	NS
1104	D	0.0344	2002	0.019	NS
1105	D	0.0871	2002	0.067	NS
1106	D	0.0925	2002	0.029	NS
1107	D	0.0903	2002	0.011	NS
1108	D	0.0704	2002	0.031	NS
1109	D	0.0372	2002	0.015	NS
1110	D	0.0081	2002	0.0058	NS
1111	D	0.0172	2002	0.016	NS
1112	D	0.0154	2002	0.0038	NS
1113	D	0.0025	2002	0.0011	NS
1114	D	0.0035	2002	0.0047	NS

Table B–3 (continued). Baseline, August 2004 and February 2005 Selenium Concentrations

Well Number	Horizon	Baseline Selenium Concentration (mg/L)	Year Sampled, Baseline	Aug 2004 Selenium Concentration (mg/L)	Feb 2005 Selenium Concentration (mg/L)
1115	D	0.0362	2002	0.0079	NS
1119	D	0.029	2002	0.017	NS
1120	D	0.0563	2002	0.023	NS
1121	D	0.0455	2002	0.017	NS
1122	D	0.0558	2002	0.017	NS
1123	D	0.0449	2002	NS	NS
1124	D	0.0186	2002	NS	NS
1125	D	0.0025	2002	0.0019	NS
0251	E	0.0035	2002	0.00071	0.00067
0268	E	0.0018	2002	0.0012	0.0013
0920	E	0.0014	2001	NS	0.00095
0911	F			NS	0.0007
0913	G	0.00063	2001	0.00047	NS
0916	G	0.001	2001	NS	NS
0919	G			NS	0.00019
0902	H			NS	NS
0252	I	0.00092	2002	0.00056	0.00052
0254	I	0.0531	2002	0.046	0.04
0256	I	0.0031	2002	0.0008	0.00081
0921	I	0.00091	2001	NS	0.00059
0255	M	0.0011	2000	0.00027	0.000079B
0257	M	0.0013	2000	0.00017	0.000092B

B=Result is between the IDL and CRDL
NS=Not sampled

Table B-4. Baseline, August 2004 and February 2005 Sulfate Concentrations

Well Number	Horizon	Baseline Sulfate Concentration (mg/L)	Year Sampled, Baseline	Aug 2004 Sulfate Concentration (mg/L)	Feb 2005 Sulfate Concentration (mg/L)
0284	A			NS	Dry
0285	A			NS	Dry
0686	A	98.6	2002	120	110
0687	A	329	2002	19	35
0688	A	40	2002	110	230
0901	A	26.2	2001	31	30
0906	A	1660	2002	1700	1900
0929	A	28.1	2002	26	26
0940	A	7550	2002	NS	NS
0941	A	745	2002	710	890
0945	A	32.1	2002	34	NS
0946	A			94	100
0001	B			NS	NS
0262	B	931	2001	1000	1000
0263	B	1990	2001	1900	2100
0265	B	1520	2001	800	810
0267	B	3680	2002	3500	3700
0271	B	16.4	2002	16	NS
0281	B			NS	62
0282	B			NS	790
0283	B			NS	530
0908	B	2430	2002	2600	3000
0909	B	666	2002	590	680
0910	B			NS	16
0918	B			NS	NS
0934	B	7360	2002	2300	2300
0935	B	2690	2002	NS	2506
0936	B	4360	2002	2500	2700
0938	B	2120	1999	NS	NS
0942	B	3030	2002	2900	3000
0943	B	29	2002	520	390
0947	B	18.7	2002	NS	NS
1126	B			NS	3583
1127	B			NS	570
1128	B			NS	506
1129	B			NS	1308
1130	B			NS	1993
1131	B			NS	1931
1132	B			NS	1972
1133	B			NS	555
0274	C			NS	15
0276	C			NS	18
0279	C			NS	36
0280	C			NS	21
0683	C	21.6	2002	18	NS
0684	C	18	2002	17	NS

Table B-4 (continued). Baseline, August 2004 and February 2005 Sulfate Concentrations

Well Number	Horizon	Baseline Sulfate Concentration (mg/L)	Year Sampled, Baseline	Aug 2004 Sulfate Concentration (mg/L)	Feb 2005 Sulfate Concentration (mg/L)
0685	C	26.2	2002	16	NS
0689	C	13.7	2002	14	NS
0691	C	587	2002	330	340
0903	C	76.5	2002	61	51
0912	C	846	2001	560	NS
0914	C	15.6	2001	15	NS
0917	C	13.9	2001	NS	15
0930	C	59.8	2002	70	80
0932	C	30.2	2002	26	26
1008	C	13	2000	NS	13
1116	C	176	2002	99	139
1117	C	255	2002	690	NS
1118	C	163	2002	NS	1488
0258	D	17.4	2000	NS	17
0261	D	18.2	2001	20	NS
0264	D	37.7	2001	59	56
0266	D	10.9	2001	11	11
0272	D			NS	12
0273	D			NS	210
0275	D			NS	2100
0277	D			NS	23
0278	D			NS	14
0690	D	13.8	2002	13	13
0692	D	20.8	2002	19	20
0695	D	50.4	2002	54	NS
0904	D	96.5	2001	NS	120
0915	D	17.8	2001	NS	NS
1003	D	302	2000	NS	410
1004	D	66.2	2000	31	68
1005	D	12.7	2000	NS	NS
1006	D	12.2	2000	NS	13
1007	D	11.7	2000	NS	12
1101	D	960	2002	1200	1303
1102	D	1320	2002	1300	1267
1103	D	2570	2002	2000	2007
1104	D	1870	2002	950	978
1105	D	1590	2002	1200	484
1106	D	1050	2002	420	356
1107	D	1200	2002	250	217
1108	D	3400	2002	1700	1521
1109	D	3280	2002	1100	1151
1110	D	512	2002	340	340
1111	D	988	2002	890	1021
1112	D	1140	2002	200	190
1113	D	136	2002	38	37
1114	D	328	2002	280	333

Table B-4 (continued). Baseline, August 2004 and February 2005 Sulfate Concentrations

Well Number	Horizon	Baseline Sulfate Concentration (mg/L)	Year Sampled, Baseline	Aug 2004 Sulfate Concentration (mg/L)	Feb 2005 Sulfate Concentration (mg/L)
1115	D	1930	2002	400	448
1119	D	1560	2002	870	1068
1120	D	2330	2002	1300	1166
1121	D	2590	2002	1400	1560
1122	D	2960	2002	1000	903
1123	D	1240	2002	NS	207
1124	D	1170	2002	NS	NS
1125	D	165	2002	76	69
0251	E	617	2002	13	14
0268	E	17.4	2002	55	99
0920	E	12.7	2001	NS	13
0911	F			NS	8.8
0913	G	8.43	2001	8.2	NS
0916	G	13.5	2001	NS	NS
0919	G			NS	3.6
0902	H			NS	NS
0252	I	19.2	2002	6.6	6.8
0254	I	505	2002	530	560
0256	I	368	2002	68	84
0921	I	8.52	2001	NS	7.6
0255	M	102	2000	4100	4400
0257	M	13.4	2000	340	370

NS=Not sampled

Table B-5. Baseline, August 2004 and February 2005 Uranium Concentrations

Well Number	Horizon	Baseline Uranium Concentration (mg/L)	Year Sampled, Baseline	Aug 2004 Uranium Concentration (mg/L)	Feb 2005 Uranium Concentration (mg/L)
0284	A			NS	Dry
0285	A			NS	Dry
0686	A	0.0021	2002	0.0007E	0.0003
0687	A	0.0208	2002	0.000046B	0.000039BU
0688	A	0.002	2002	0.0016	0.0012
0901	A	0.0026	2001	0.0023	0.0023
0906	A	0.951	2002	0.89	0.83
0929	A	0.0012	2002	0.00098	0.001
0940	A	0.546	2002	NS	NS
0941	A	0.0886	2002	0.076	0.049
0945	A	0.0031	2002	0.0034	NS
0946	A			0.00022	0.00016
0262	B	0.379	2001	0.53	0.56
0263	B	0.485	2001	0.23	0.19
0265	B	0.0897	2001	0.045	0.045
0267	B	0.0731	2002	0.088	0.085
0271	B	0.0014	2002	0.0012	NS
0281	B			NS	0.0061
0282	B			NS	0.054
0283	B			NS	0.027
0908	B	0.122	2002	0.12	0.11
0909	B	0.0389	2002	0.029	0.035
0910	B			NS	0.00076
0918	B			NS	NS
0934	B	0.312	2002	0.32	0.28
0935	B	0.0868	2002	NS	0.111
0936	B	0.267	2002	0.47	0.47
0938	B	0.21	1999	NS	NS
0942	B	0.246	2002	0.27	0.27
0943	B	0.0049	2002	0.2	0.2
0947	B	0.0024	2002	NS	NS
1126	B			NS	0.069
1127	B			NS	0.027
1128	B			NS	0.035
1129	B			NS	0.643
1130	B			NS	0.2606
1131	B			NS	0.472
1132	B			NS	1.477
1133	B			NS	0.0665
0274	C			NS	0.001
0276	C			NS	0.0013
0279	C			NS	0.0025
0280	C			NS	0.0011
0683	C	0.0012	2002	0.00091	NS
0684	C	0.0019	2002	0.001	NS
0685	C	0.0012	2002	0.00097	NS

Table B-5 (continued). Baseline, August 2004 and February 2005 Uranium Concentrations

Well Number	Horizon	Baseline Uranium Concentration (mg/L)	Year Sampled, Baseline	Aug 2004 Uranium Concentration (mg/L)	Feb 2005 Uranium Concentration (mg/L)
0689	C	0.0011	2002	0.00086	NS
0691	C	0.0657	2002	0.03	0.031
0903	C	0.0022	2002	0.0018	0.0014
0912	C	0.0342	2001	0.025	NS
0914	C	0.0013	2001	0.00045	NS
0917	C	0.0013	2001	NS	0.00055
0930	C	0.0023	2002	0.0026	0.0026
0932	C	0.0016	2002	0.0012	0.00099
1008	C	0.001	2000	NS	0.00083
1116	C	0.0081	2002	0.0073	0.0093
1117	C	0.0151	2002	0.03	NS
1118	C	0.0098	2002	NS	0.066
0258	D	0.0018	2000	NS	0.00092
0261	D	0.0018	2001	0.00089	NS
0264	D	0.0033	2001	0.003	0.0027
0266	D	0.0019	2001	0.0012	0.0013
0272	D			NS	0.00095
0273	D			NS	0.056
0275	D			NS	0.44
0277	D			NS	0.0033
0278	D			NS	0.00084
0690	D	0.0018	2002	0.0014	0.0014
0692	D	0.0015	2002	0.0012	0.0011
0695	D	0.002	2002	0.0019	NS
0904	D	0.0044	2001	NS	0.0041
0915	D	0.0017	2001	NS	NS
1003	D	0.0205	2000	NS	0.029
1004	D	0.0053	2000	0.0025	0.0072
1005	D	0.0013	2000	NS	NS
1006	D	0.0014	2000	NS	0.00073
1007	D	0.0012	2000	NS	0.00083
1101	D	0.245	2002	0.32	0.369
1102	D	0.533	2002	0.45	0.398
1103	D	0.355	2002	0.44	0.391
1104	D	0.194	2002	0.12	0.12
1105	D	2.1	2002	1.5	0.578
1106	D	2.1	2002	0.76	0.543
1107	D	0.118	2002	0.041	0.037
1108	D	0.646	2002	0.23	0.218
1109	D	0.565	2002	0.26	0.275
1110	D	0.0528	2002	0.065	0.066
1111	D	0.161	2002	0.16	0.178
1112	D	0.13	2002	0.037	0.036
1113	D	0.0149	2002	0.004	0.0046
1114	D	0.0277	2002	0.028	0.032
1115	D	0.41	2002	0.05	0.053

Table B-5 (continued). Baseline, August 2004 and February 2005 Uranium Concentrations

Well Number	Horizon	Baseline Uranium Concentration (mg/L)	Year Sampled, Baseline	Aug 2004 Uranium Concentration (mg/L)	Feb 2005 Uranium Concentration (mg/L)
1119	D	0.555	2002	0.16	0.206
1120	D	1.3	2002	0.4	0.318
1121	D	0.857	2002	0.37	0.337
1122	D	0.878	2002	0.29	0.263
1123	D	0.261	2002	NS	0.041
1124	D	0.171	2002	NS	NS
1125	D	0.0176	2002	0.011	0.011
0251	E	0.0481	2002	0.0013	0.0012
0268	E	0.0014	2002	0.0077	0.015
0920	E	0.0017	2001	NS	0.00095
0911	F			NS	0.00085
0913	G	0.0016	2001	0.00091	NS
0916	G	0.0014	2001	NS	NS
0919	G			NS	0.000044BU
0902	H			NS	NS
0252	I	0.0024	2002	0.0015	0.0013
0254	I	0.209	2002	0.1	0.089
0256	I	0.0775	2002	0.0097	0.01
0921	I	0.0047	2001	NS	0.0046
0255	M	0.0029	2000	0.0019	0.0017
0257	M	0.0037	2000	0.018	0.018

B=Result is between the IDL and CRDL
E=Estimate value because of interference, see case narrative
NS=Not sampled
U=Analytical result below detection limit

End of current text

Appendix C

Monitor Well Water Level Hydrographs

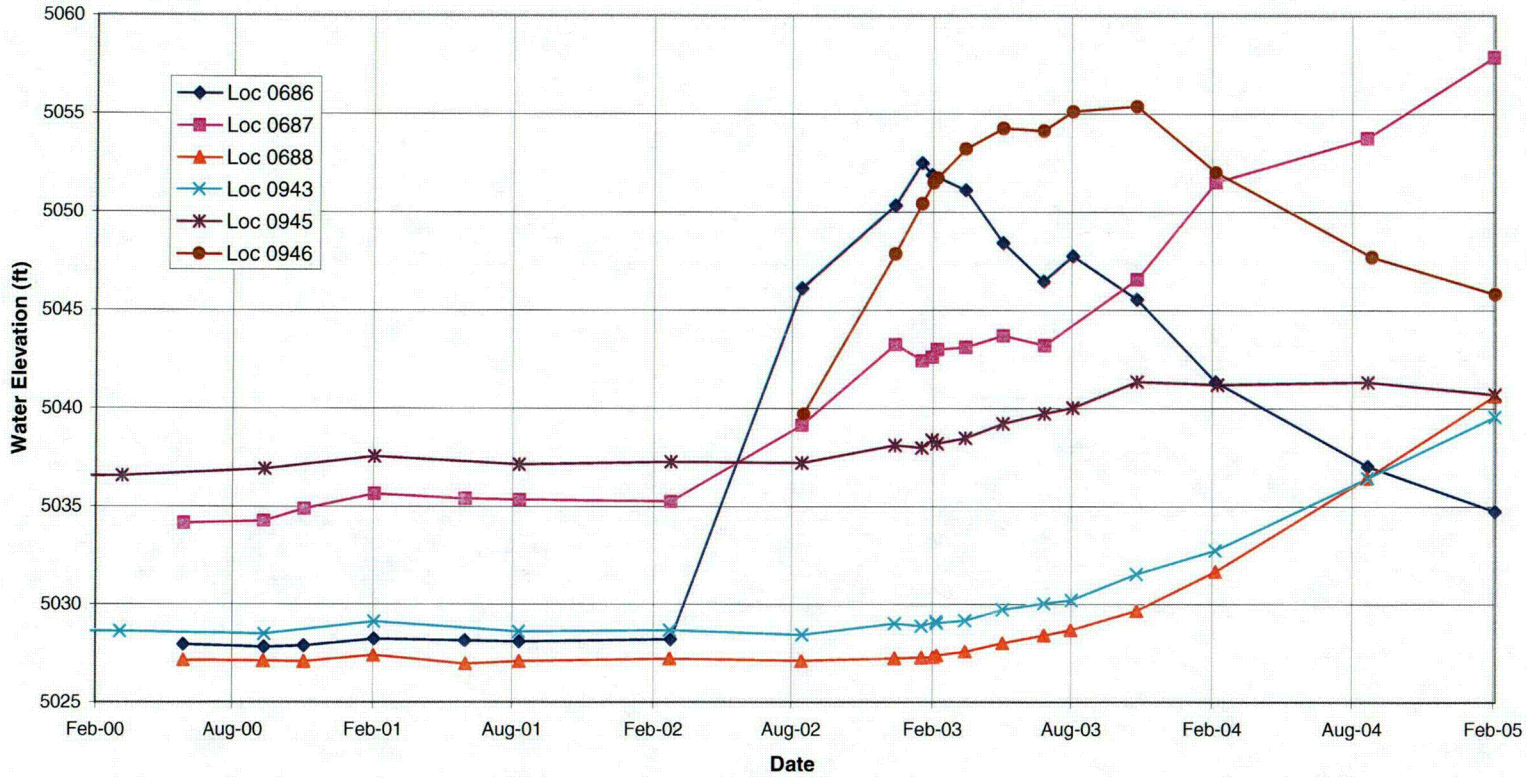


Figure C–1. Water Level Hydrographs: Monitor Wells at Infiltration Trench

C39

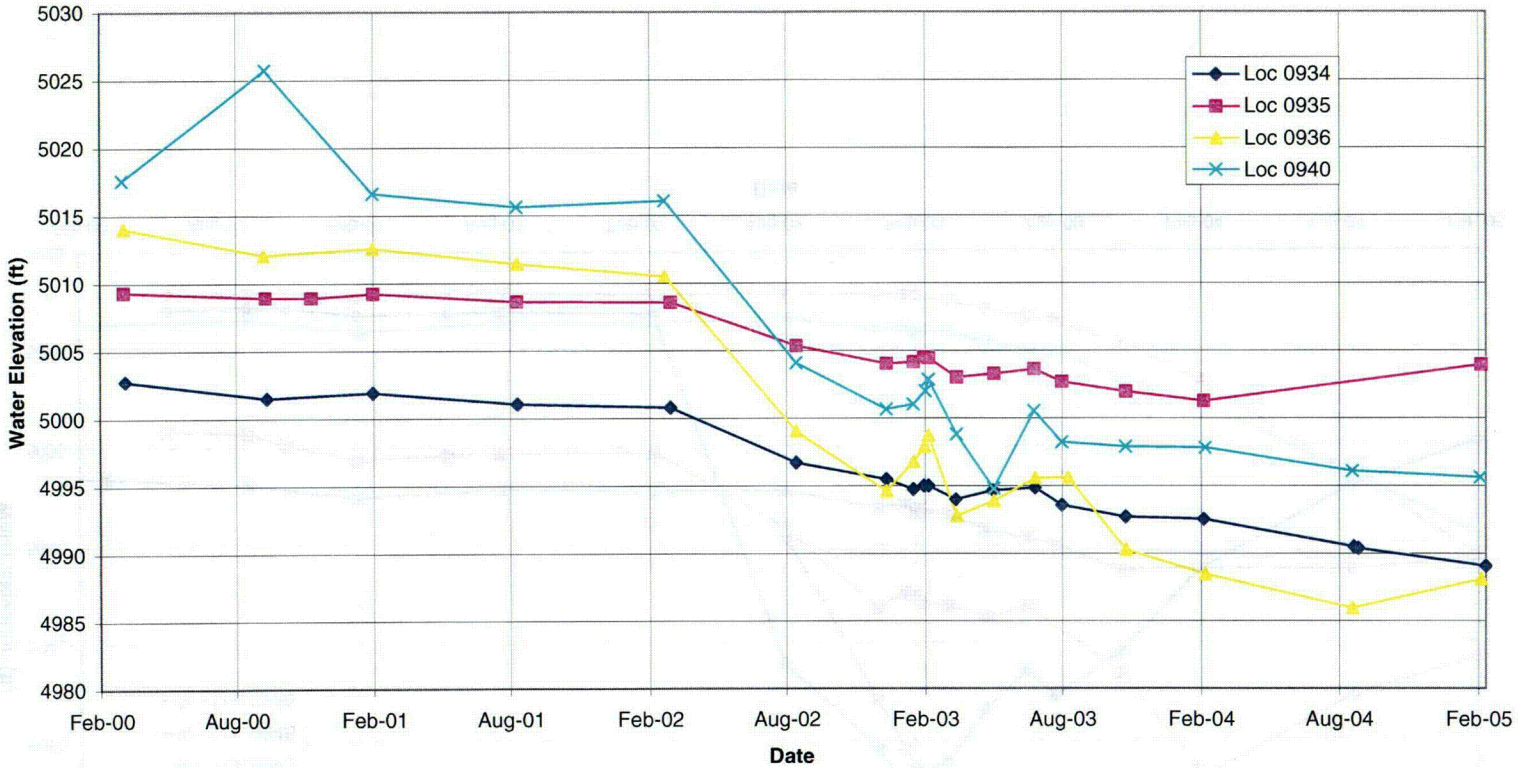


Figure C–2. Water Level Hydrographs: Selected Horizon A and B Monitor Wells

C40

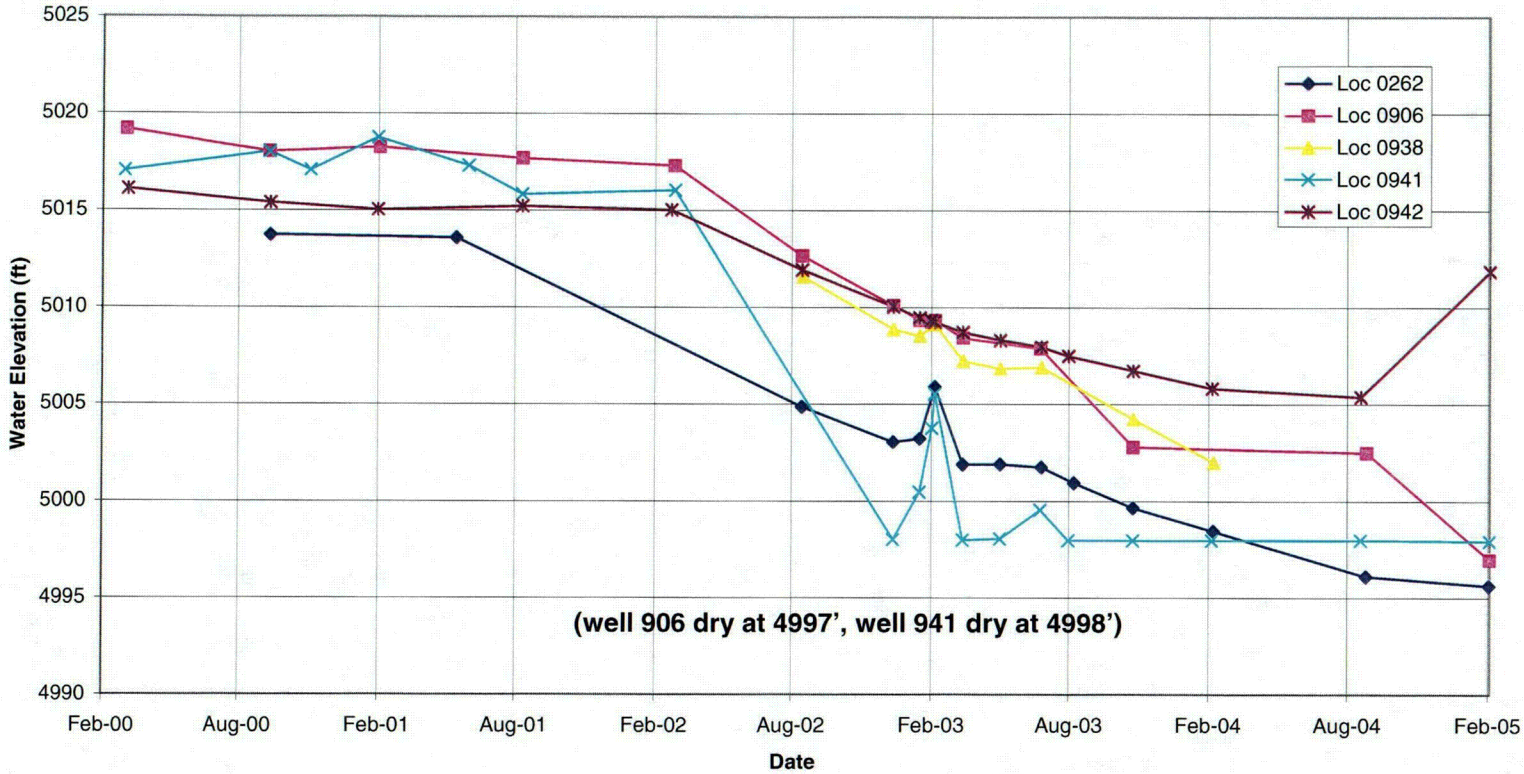


Figure C–3. Water Level Hydrographs: Selected Horizon A and B Monitoring Wells

C41

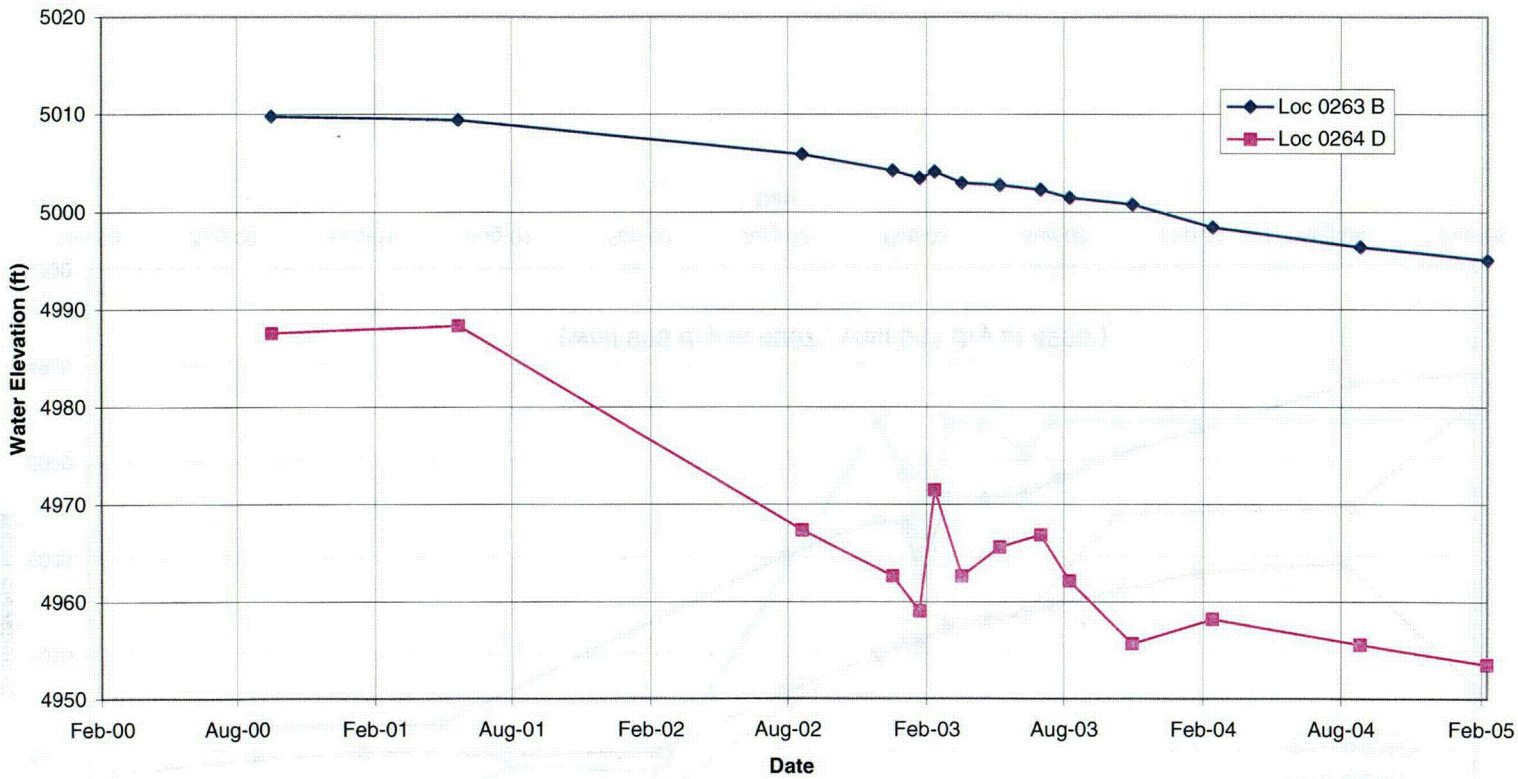


Figure C–4. Water Level Hydrographs: Middle Terrace Well Pair 263/264

C42

Figure C–5. Water Level Hydrographs: Middle Terrace Well Pair 265/266

C43

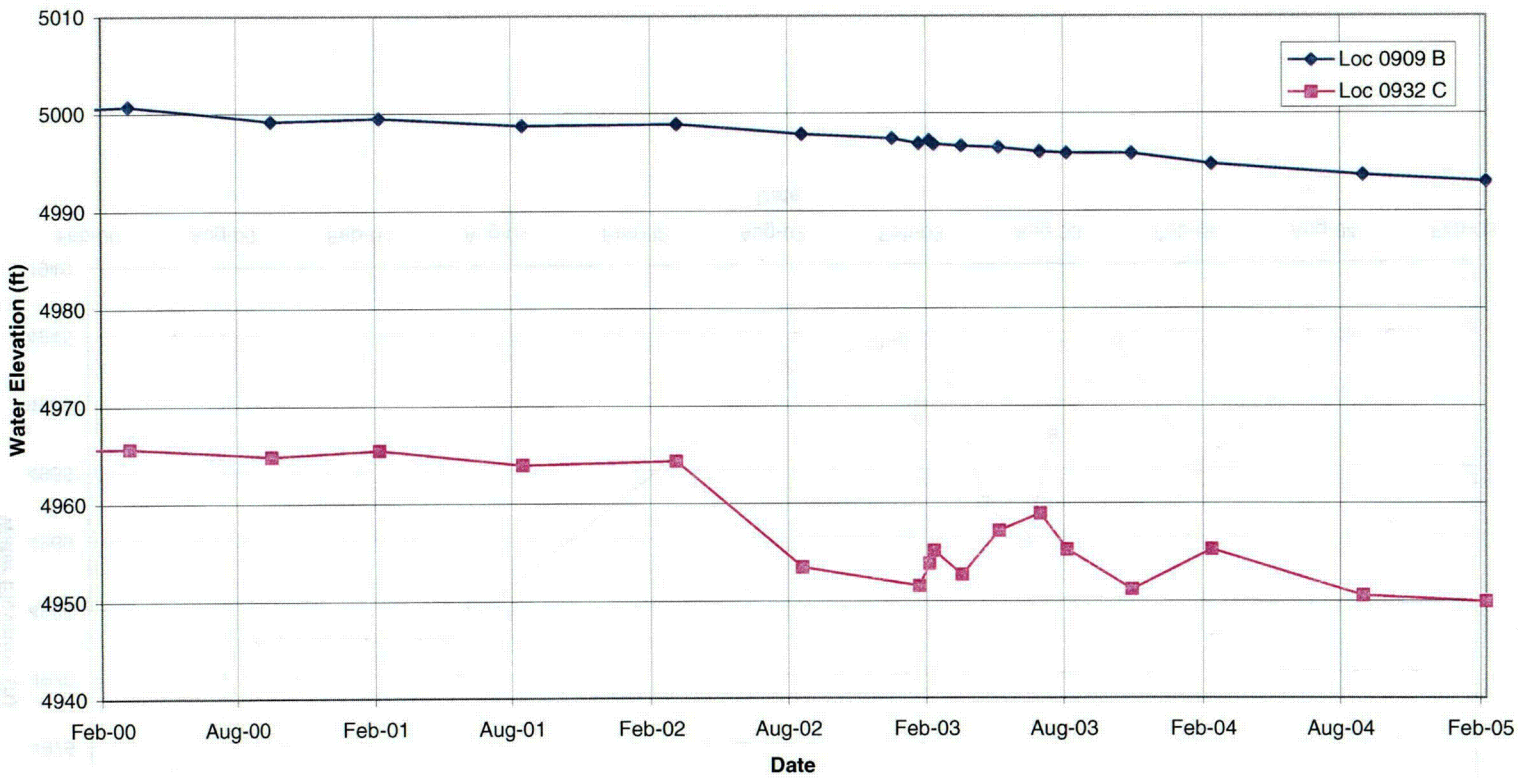


Figure C–6. Water Level Hydrographs: Middle Terrace Well Pair 909/932

C44

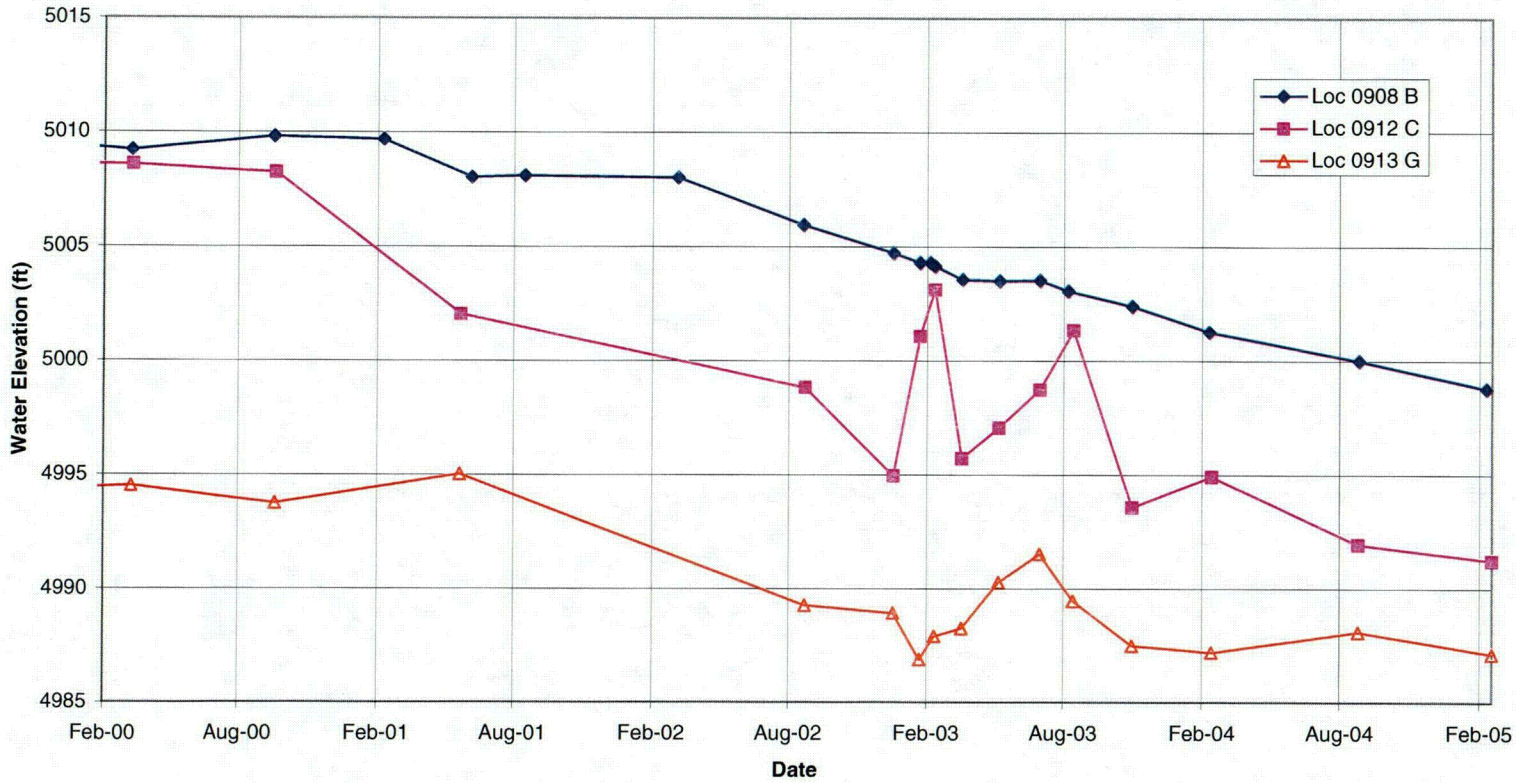


Figure C–7. Water Level Hydrographs: Middle Terrace Well Cluster 908/912/913

C45

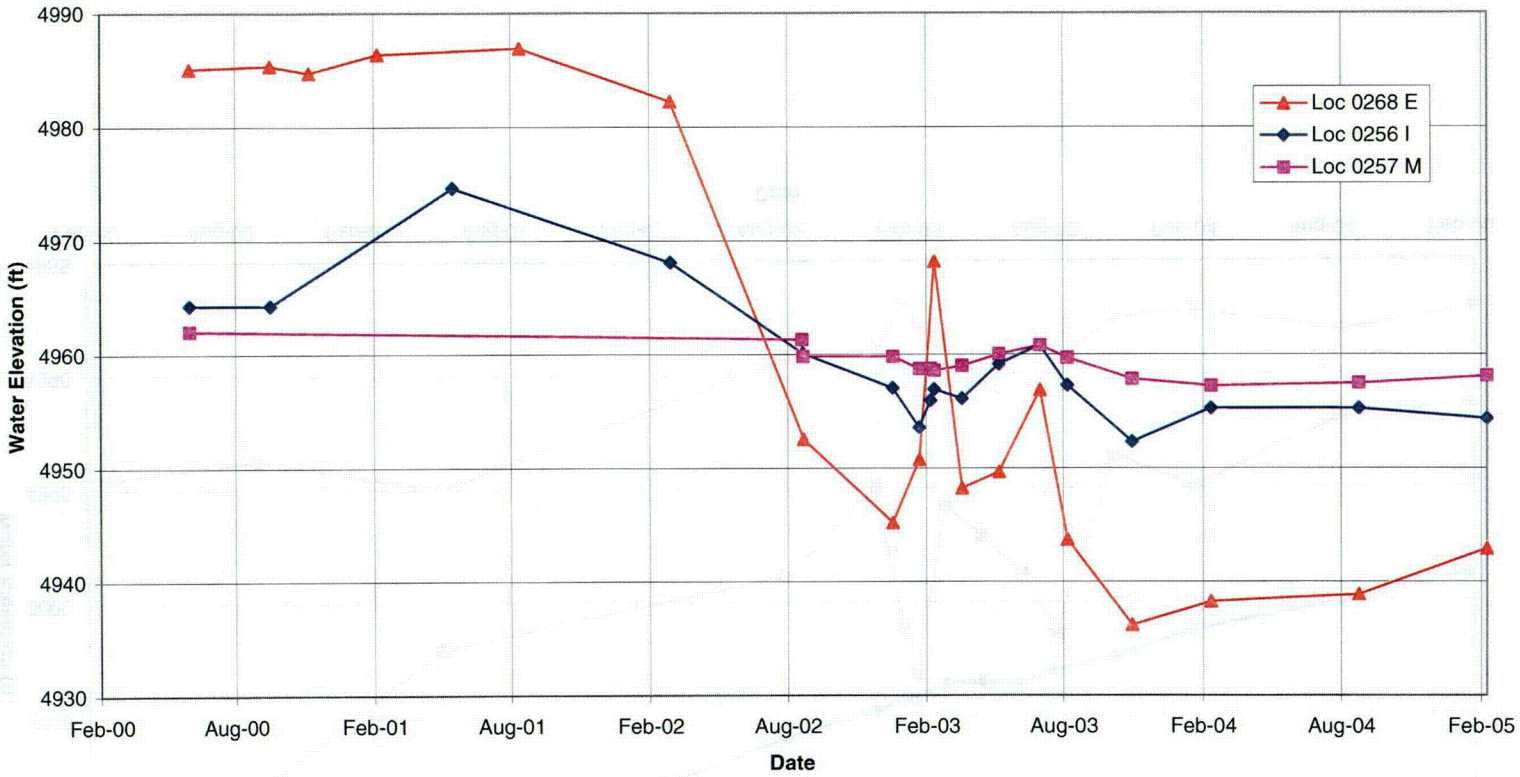


Figure C–8. Water Level Hydrographs: Middle Terrace Well Cluster 268/256/257

C46

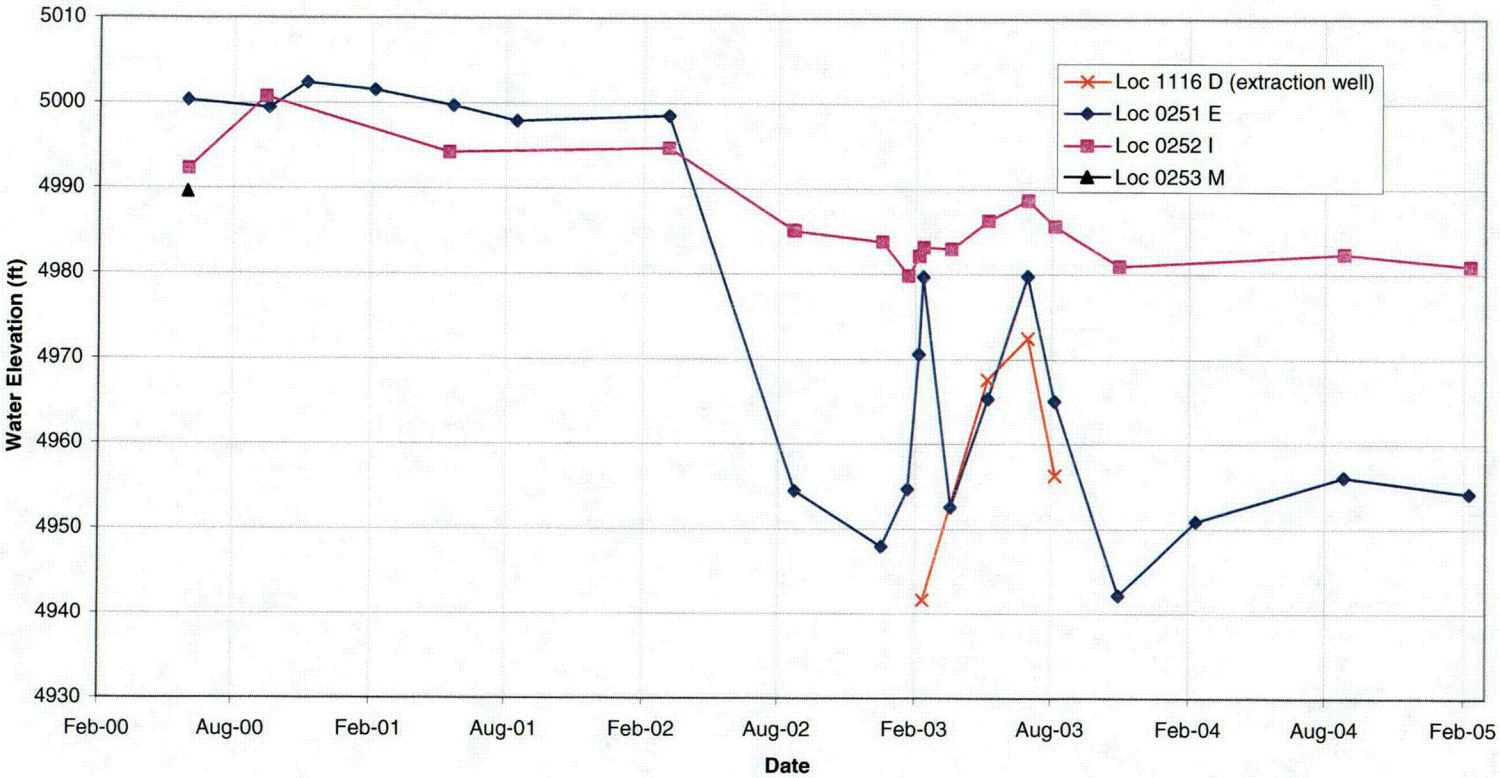


Figure C–9. Water Level Hydrographs: Middle Terrace Well Cluster 1116/251/252/253

C47

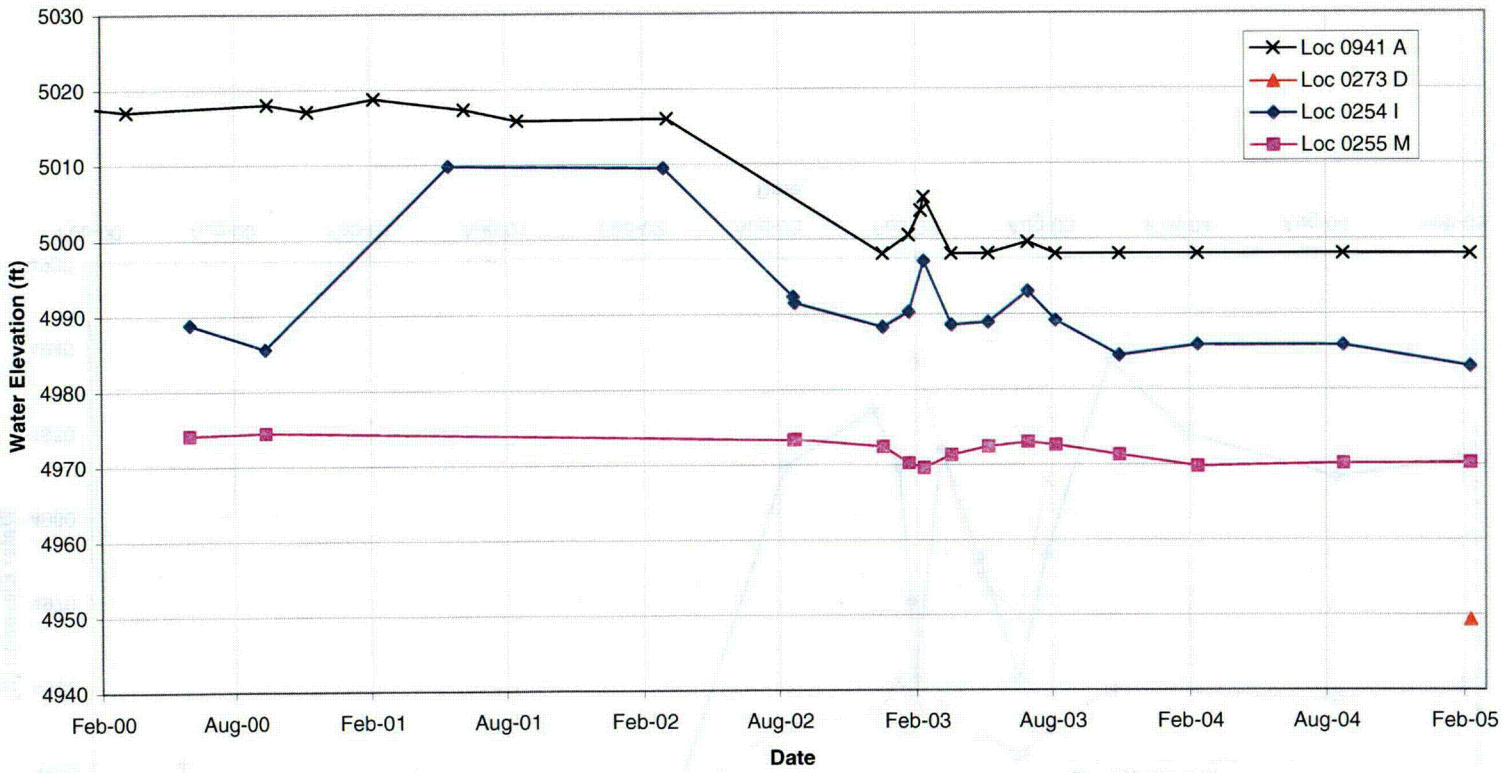


Figure C–10. Water Level Hydrographs: Middle Terrace Well Cluster 941/273/254/255

C48

Figure C–11. Water Level Hydrographs: Middle Terrace Well Cluster 914/915/916

C49

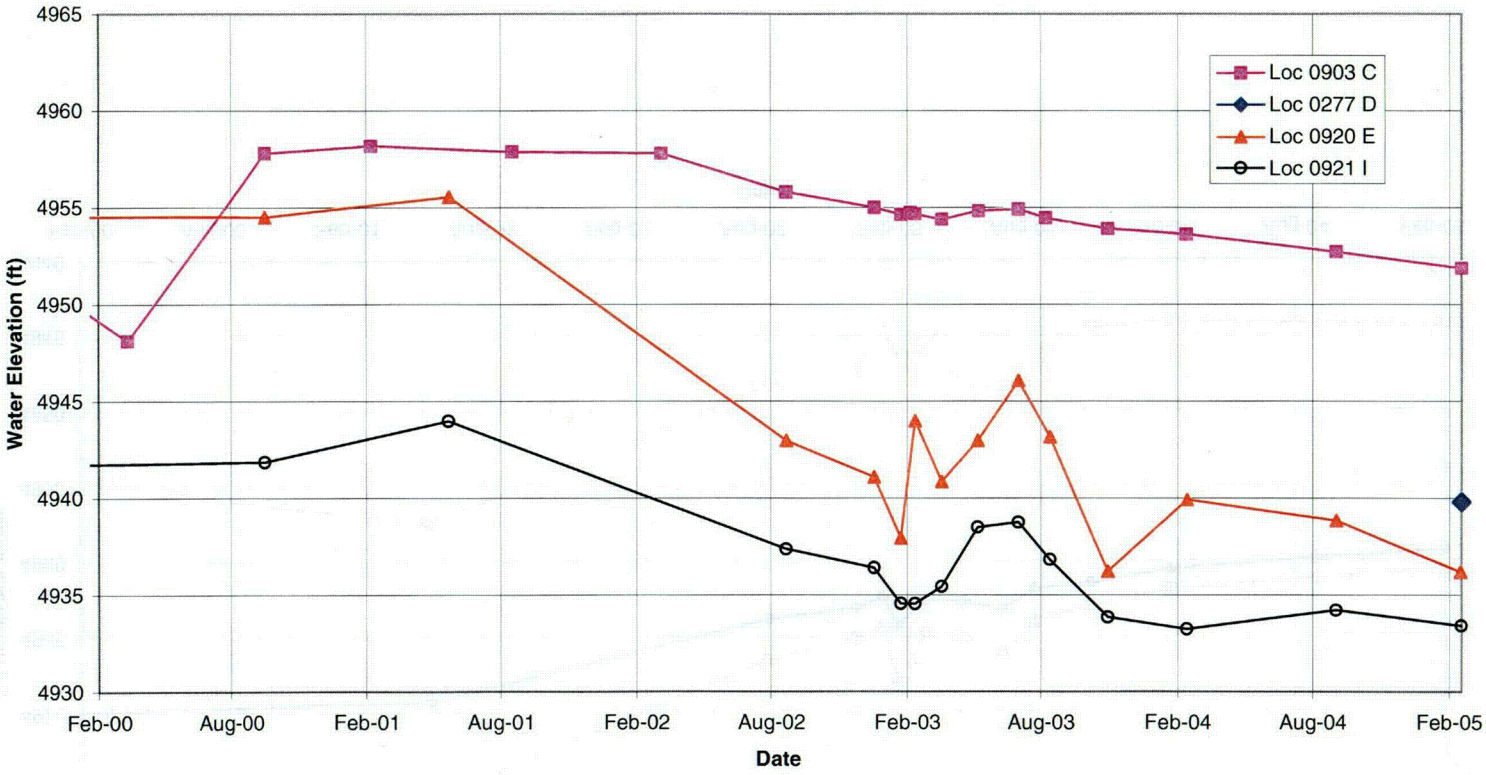
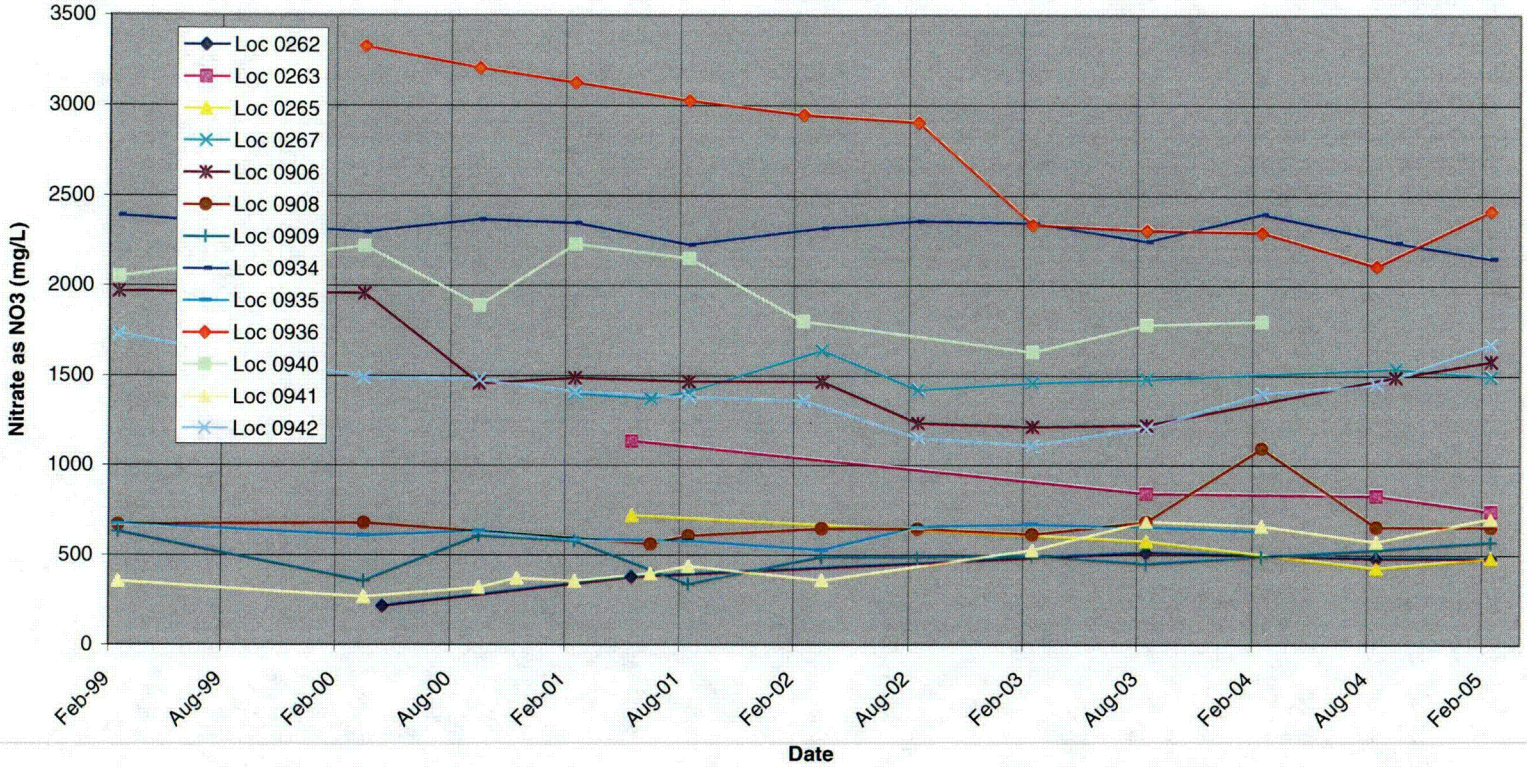


Figure C–12. Water Level Hydrographs: Lower Terrace Well Cluster

c50

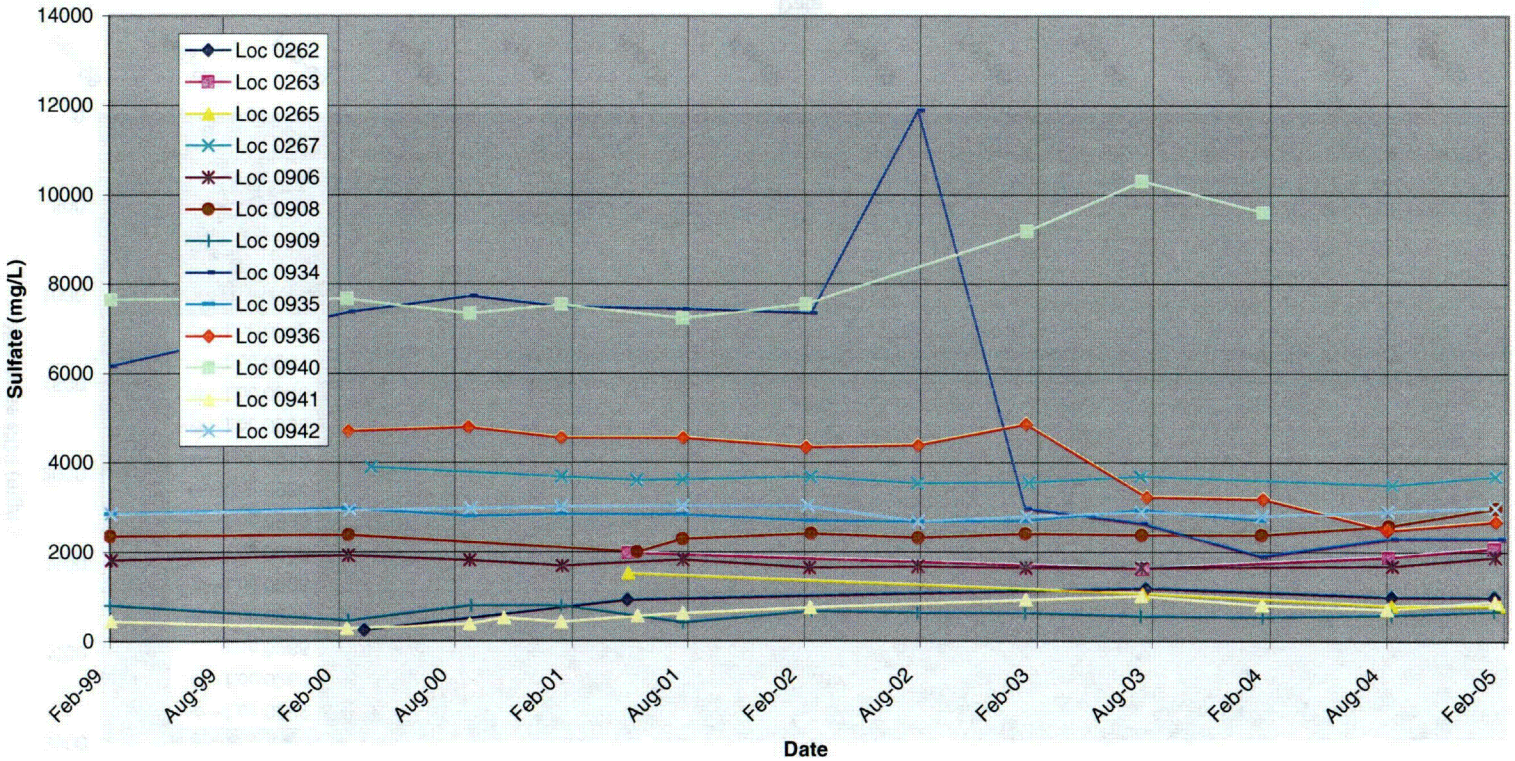
Appendix D

Contaminant Concentration Trends at Monitor Wells



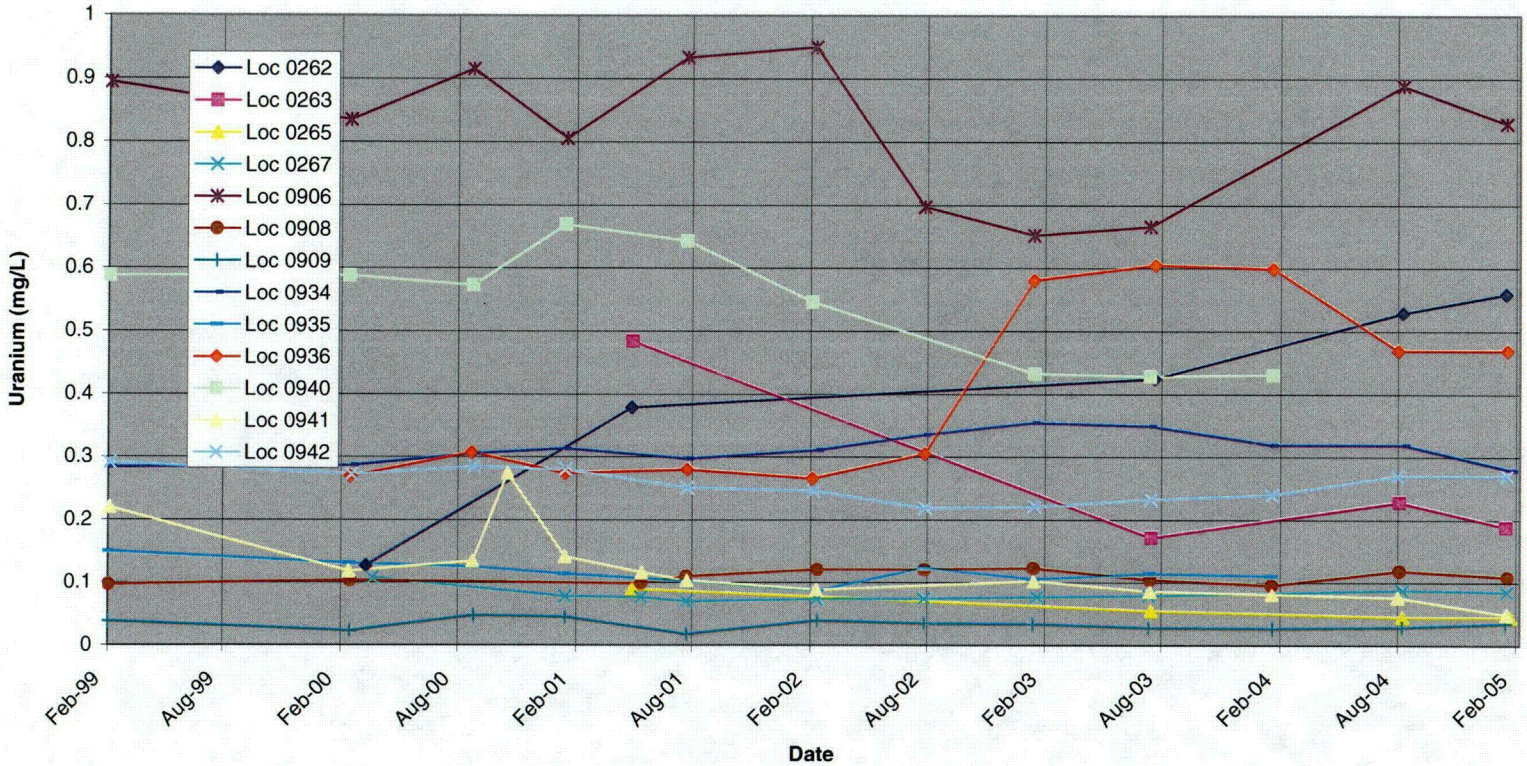
D–1. Horizons A and B Monitor Wells, Nitrate as NO_3 Concentration

C51



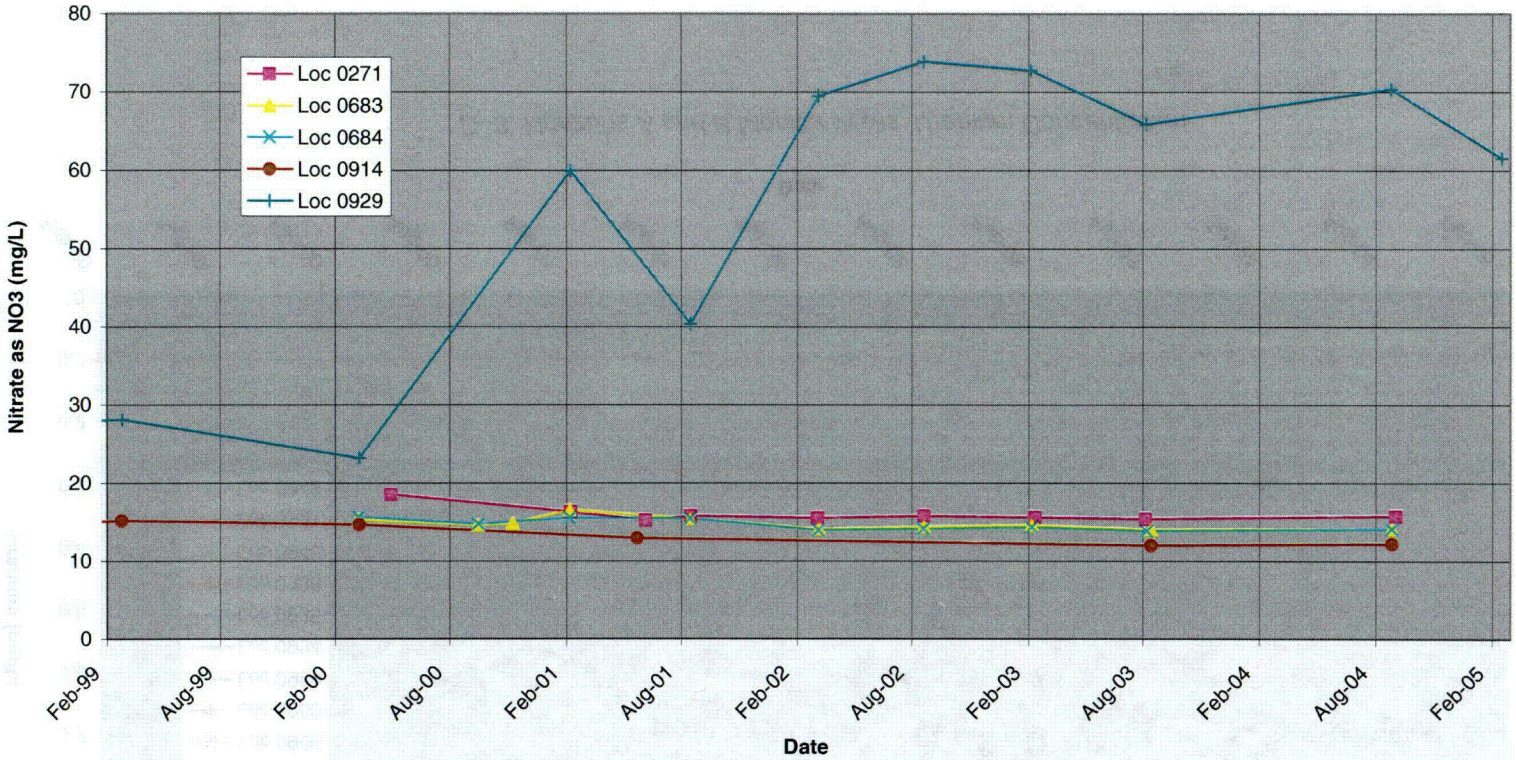
D–2. Horizons A and B Monitor Wells, Sulfate Concentration

C52



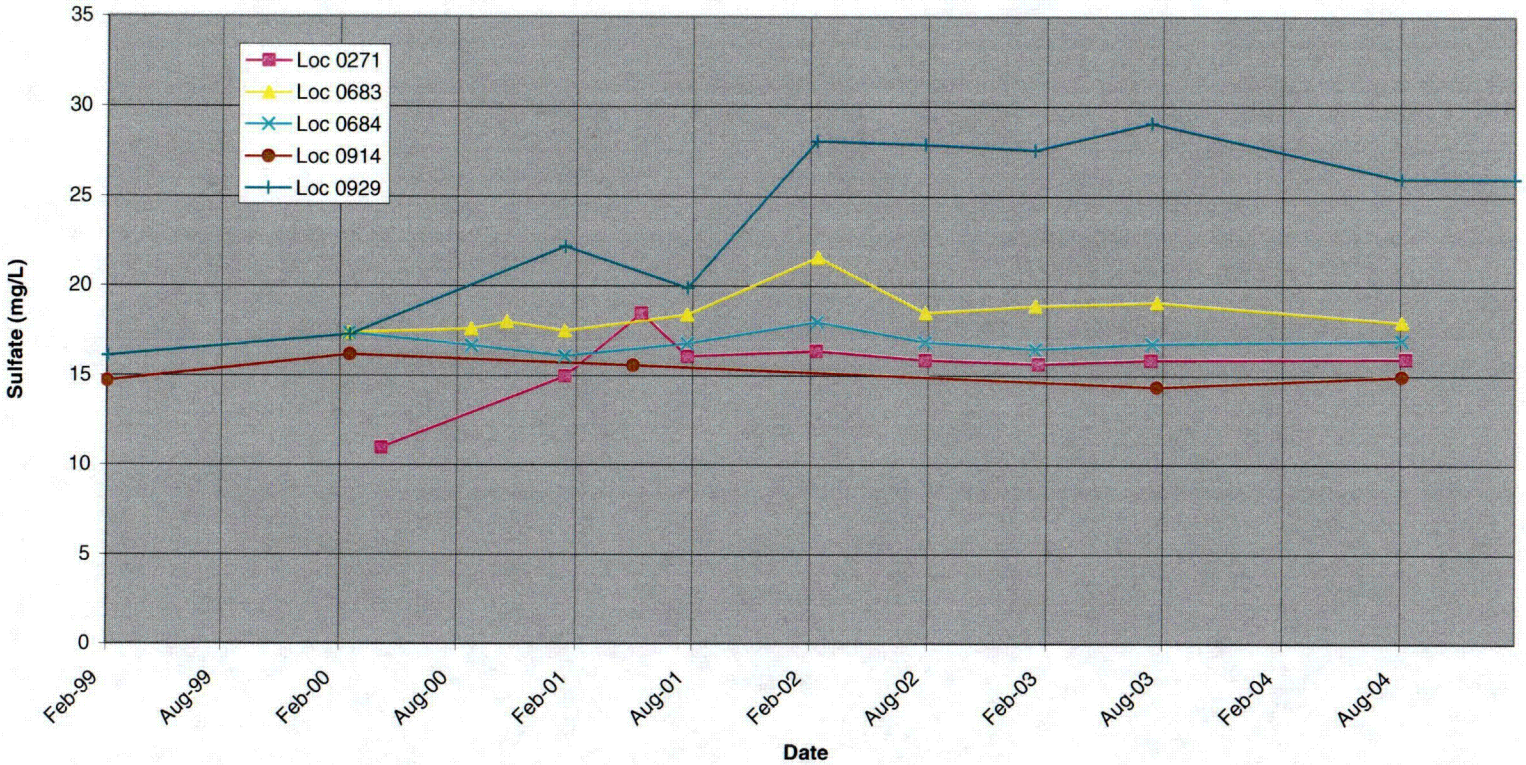
D–3. Horizons A and B Monitor Wells, Uranium Concentration

C53



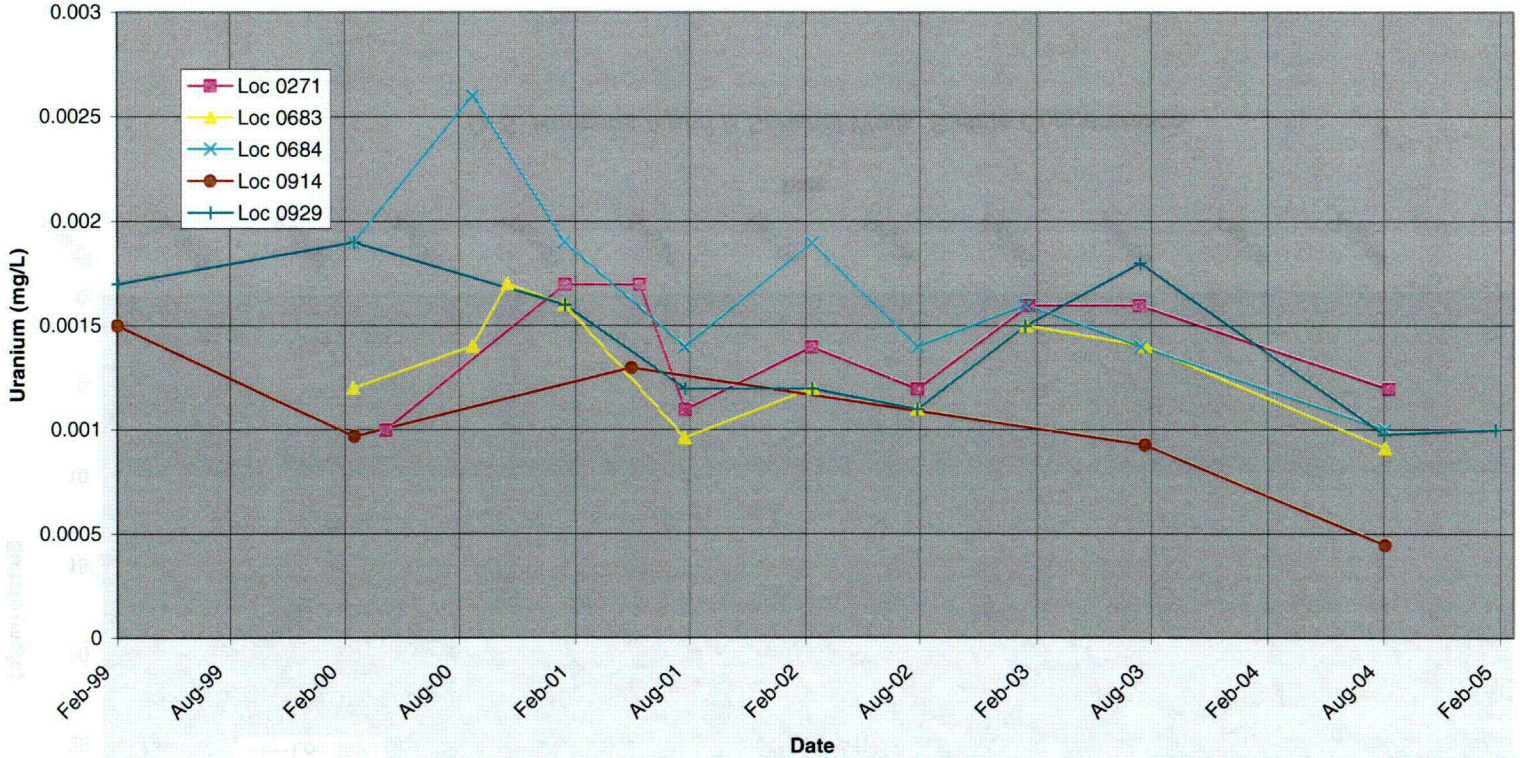
D–4. Horizons A and B Sentinel Wells, Nitrate as NO_3 Concentration

C54



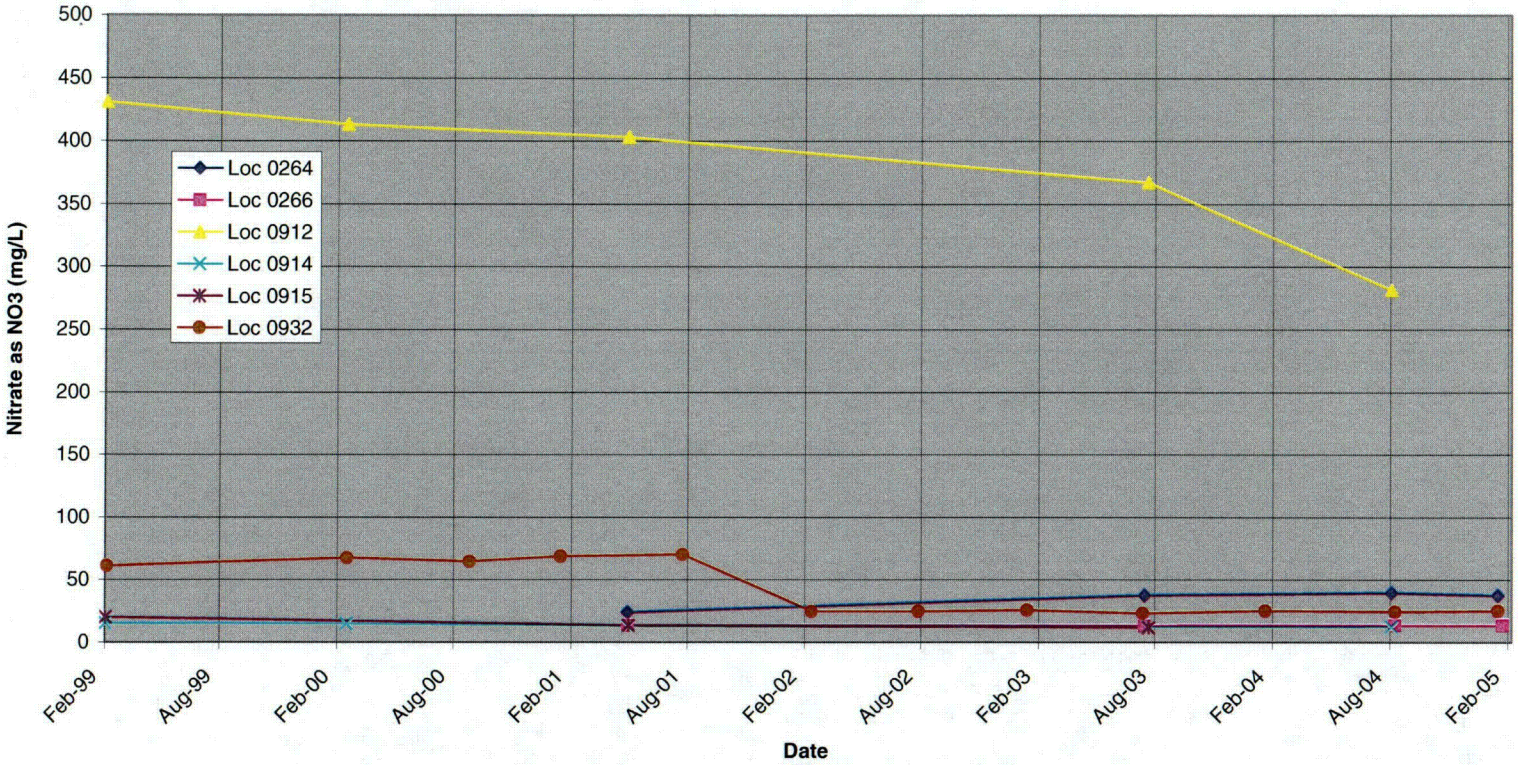
D–5. Horizons A and B Sentinel Wells, Sulfate Concentration

C55



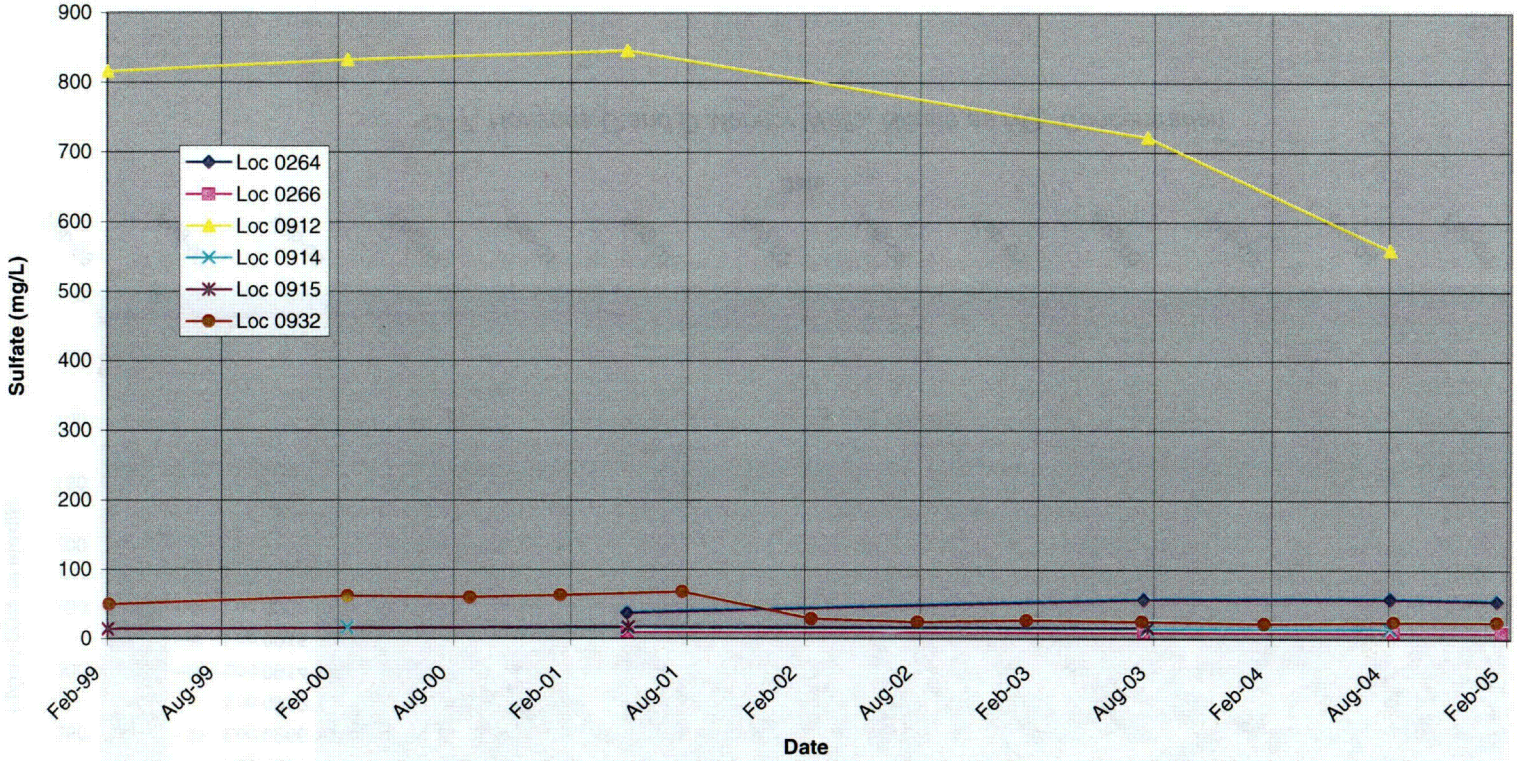
D–6. Horizons A and B Sentinel Wells, Uranium Concentration

C56



D–7. Horizons C and D Monitor Wells, Nitrate as NO_3 Concentration

C57



D–8. Horizons C and D Monitor Wells, Sulfate Concentration

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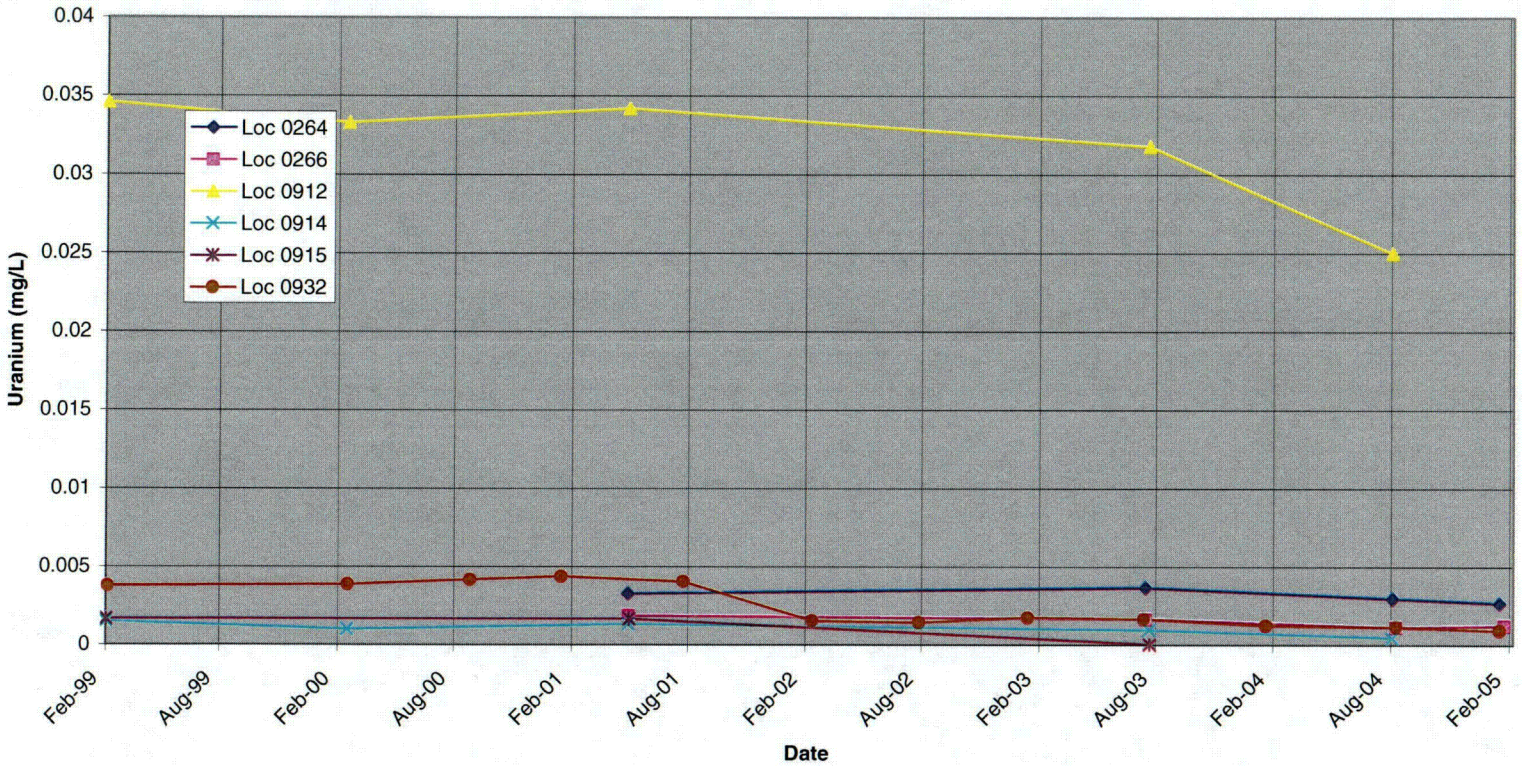
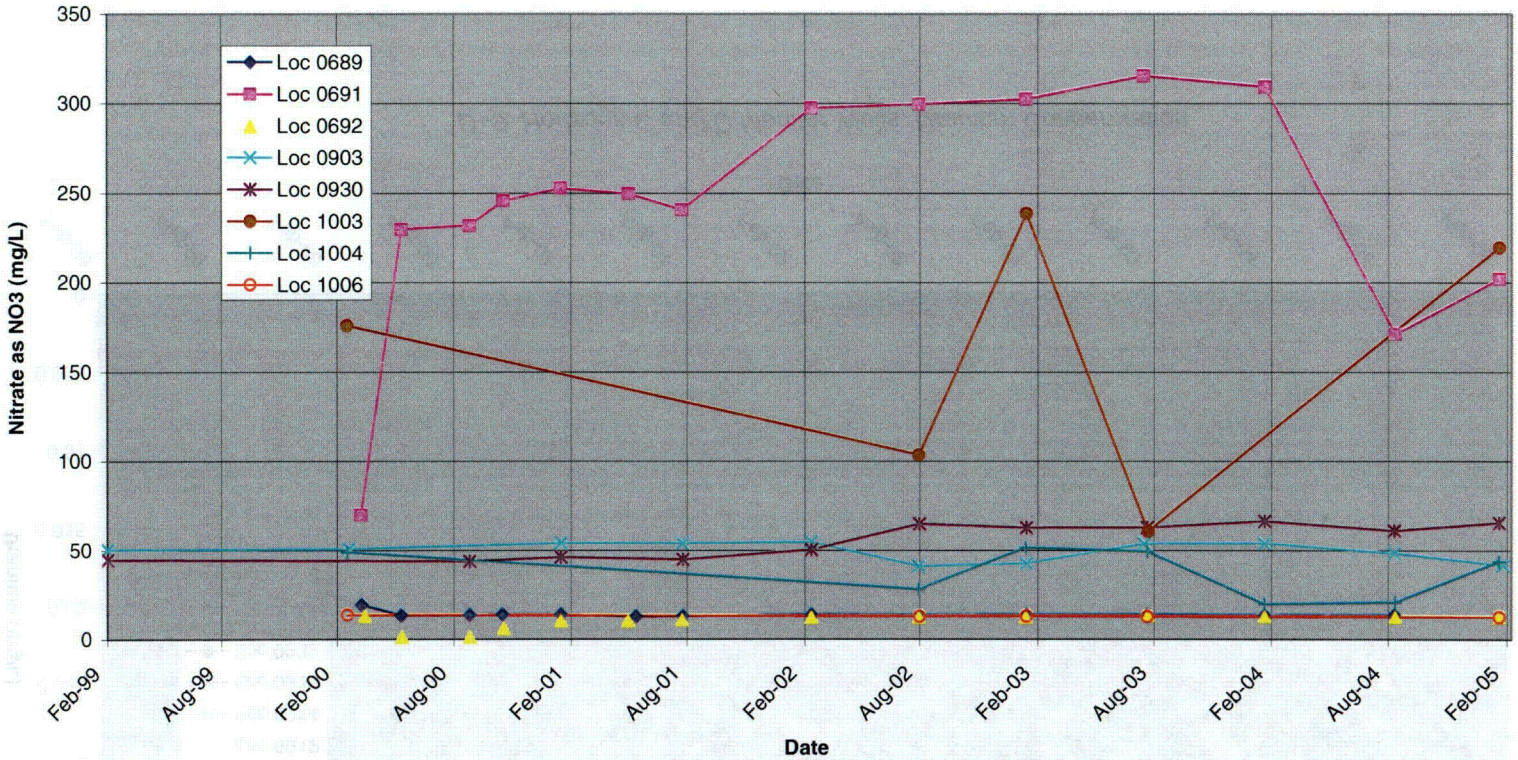


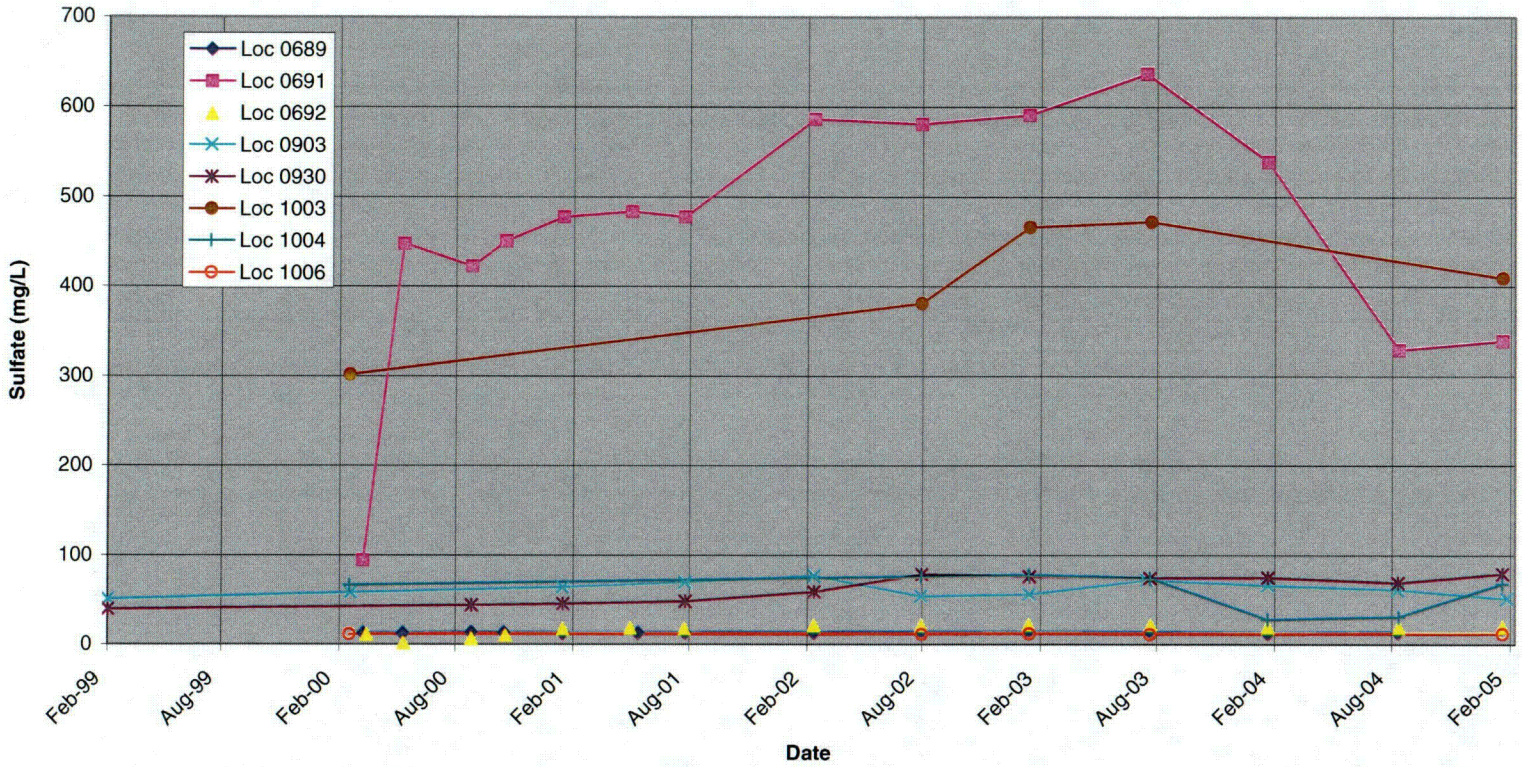
D–9. Horizons C and D Monitor Wells, Uranium Concentration

C59



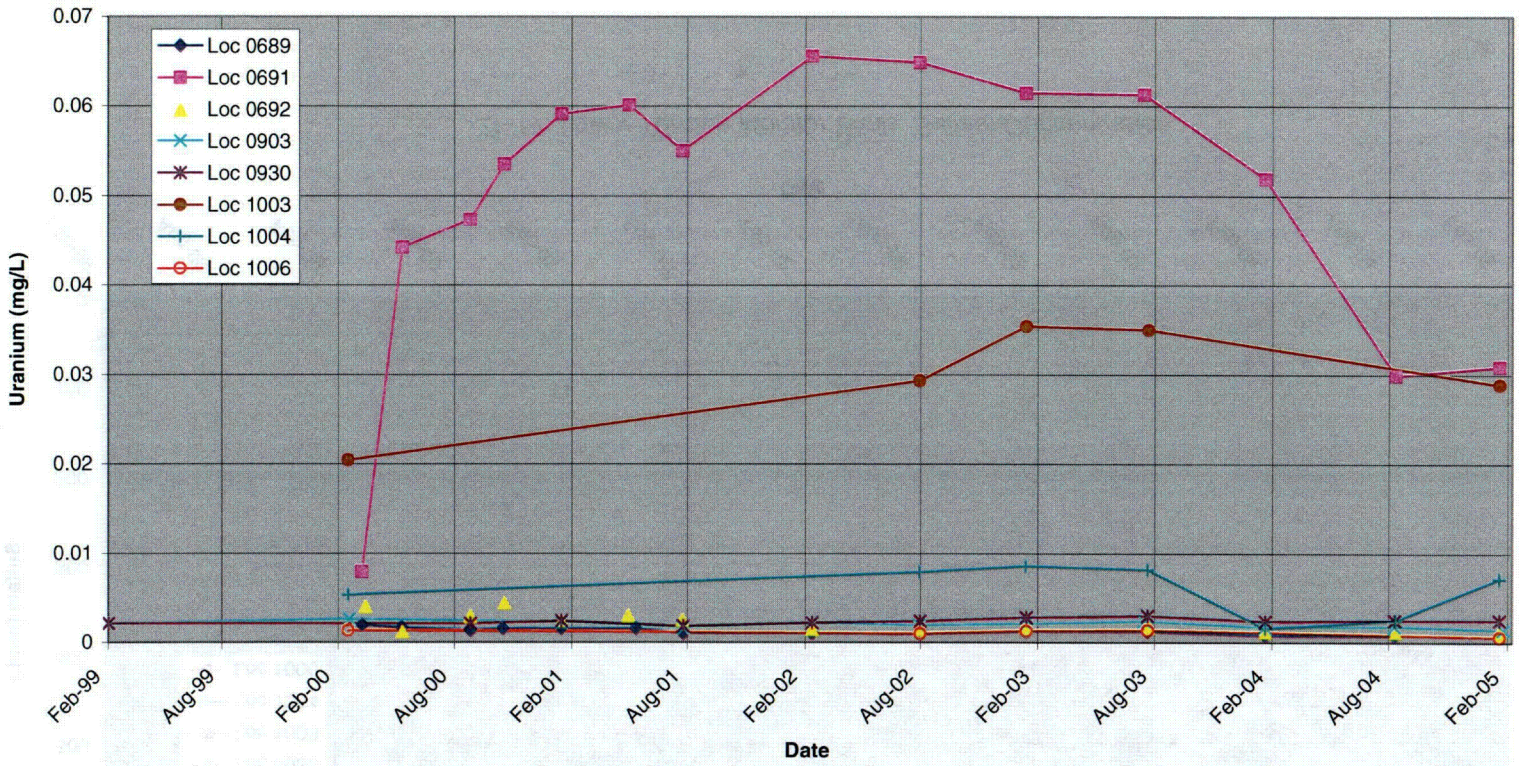
D–10. Lower Terrace Monitor Wells, Nitrate as NO_3 Concentration

C00



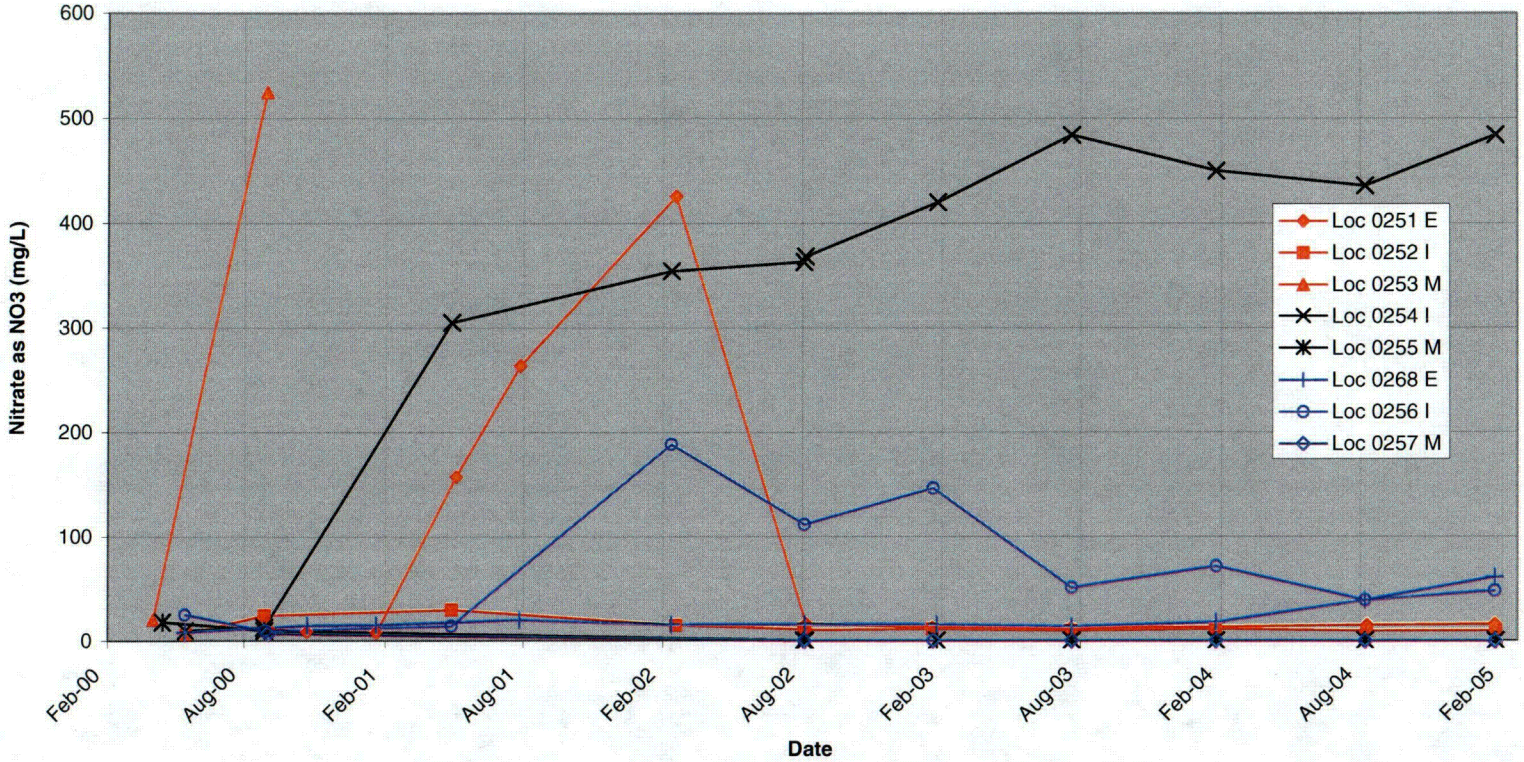
D–11. Lower Terrace Monitor Wells, Sulfate Concentration

C01



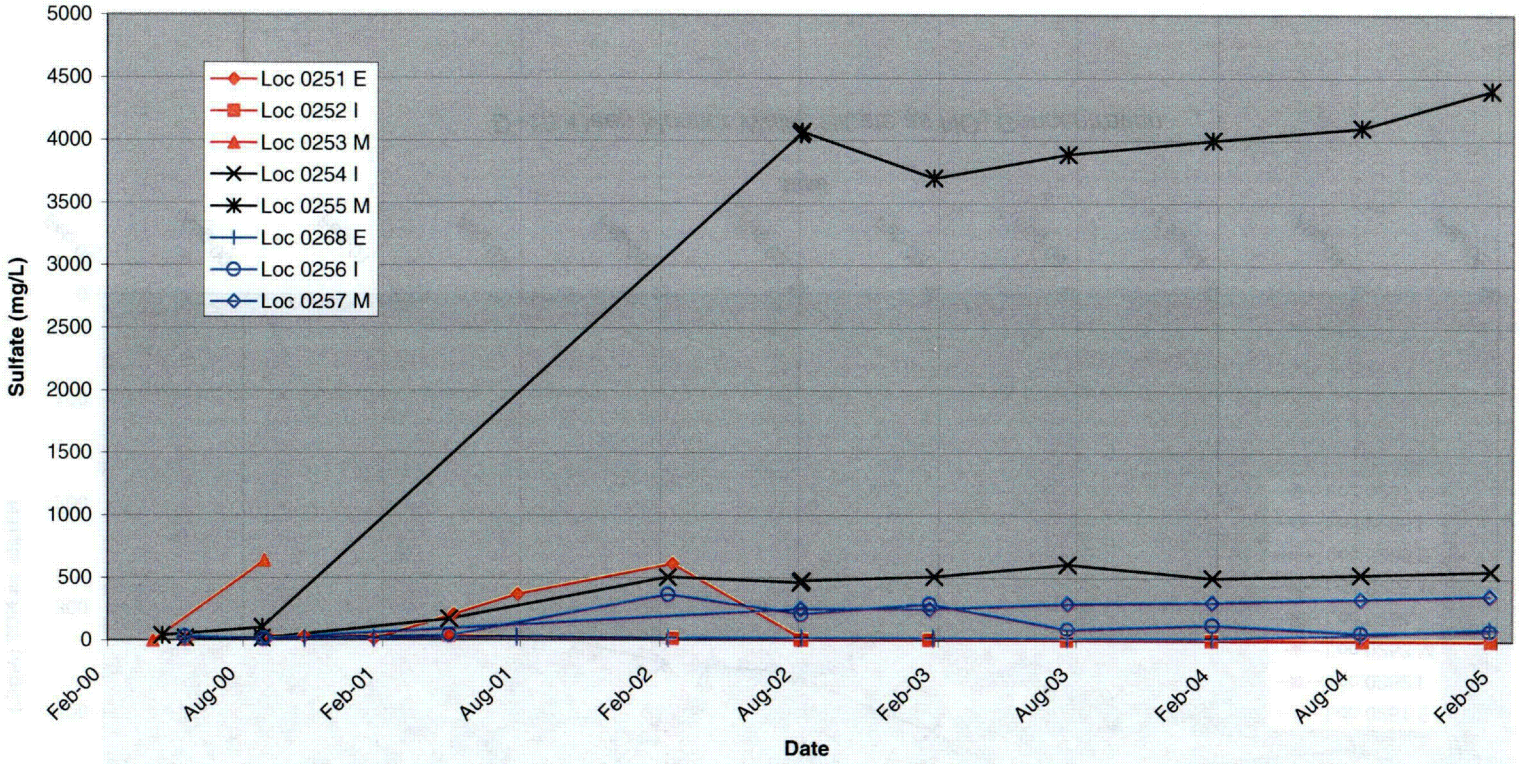
D–12. Lower Terrace Monitor Wells, Uranium Concentration

C62



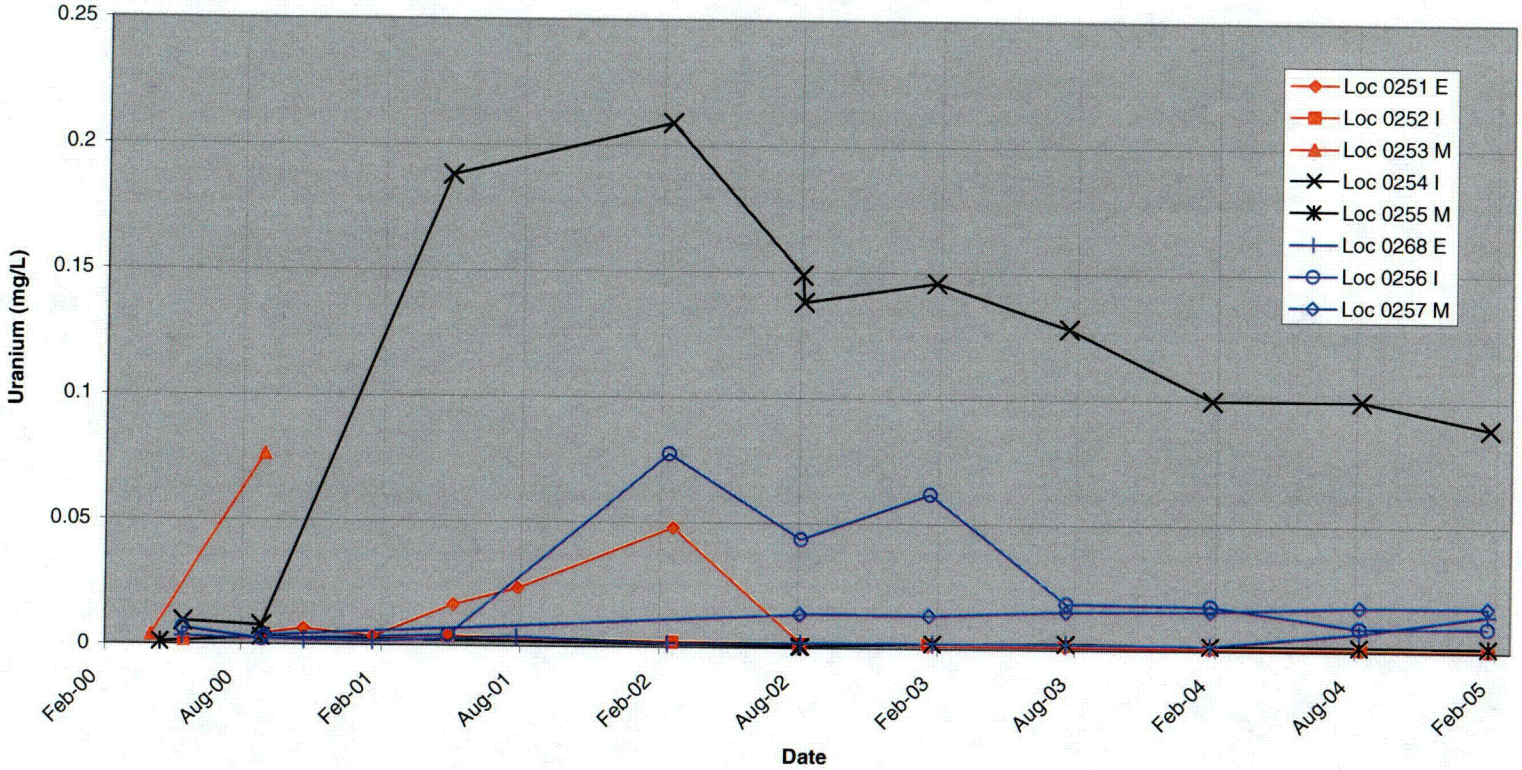
D–13. Deep Monitor Wells, Nitrate as NO_3 Concentration

C63



D–14. Deep Monitor Wells, Sulfate Concentration

C04



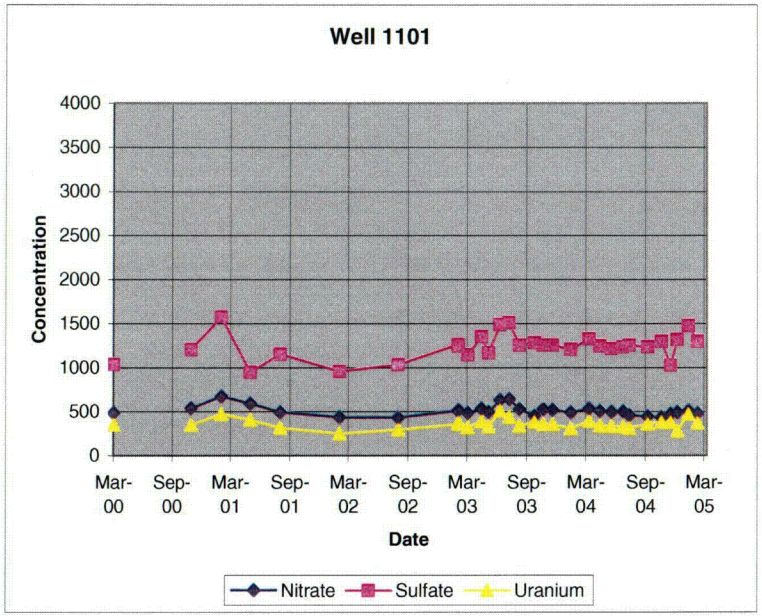
D–15. Deep Monitor Wells, Uranium Concentration

C65

End of current text

Appendix E

Contaminant Concentrations at Extraction Wells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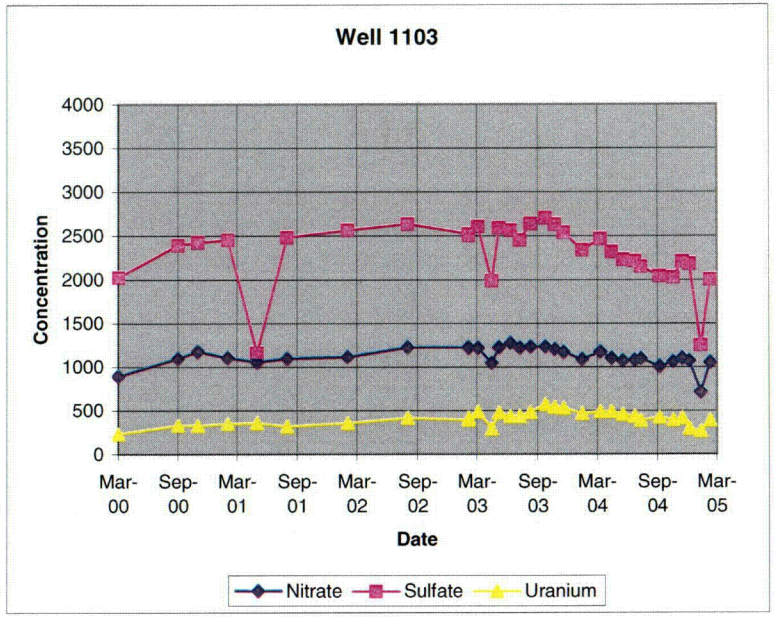
Sep-02
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium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Date
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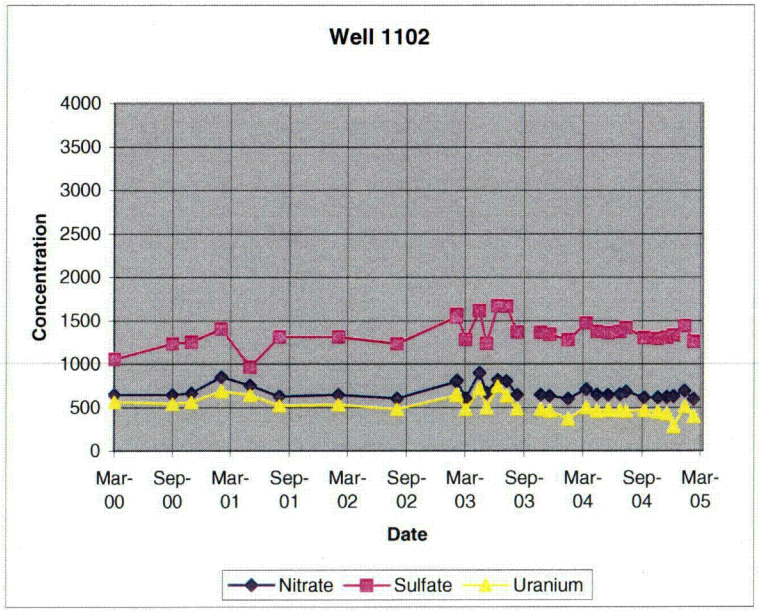
Uranium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Mar-05
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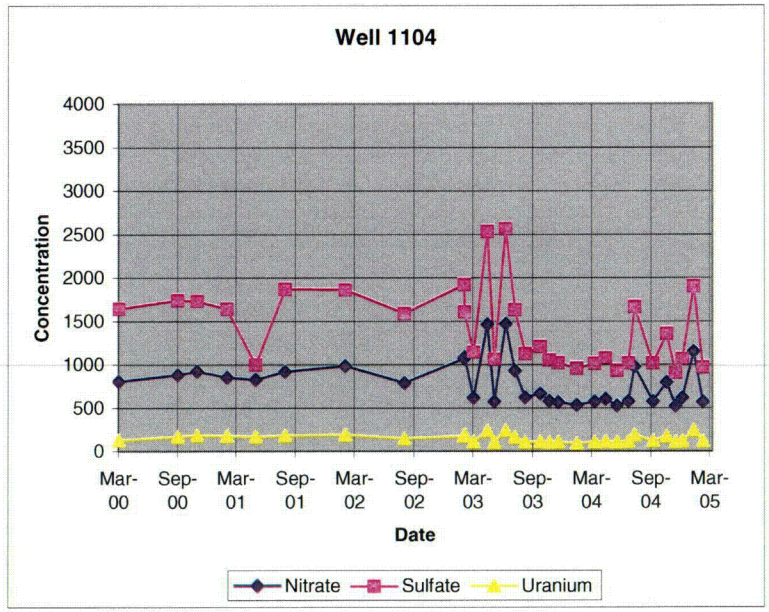
Nitrate
Sulfate
Uranium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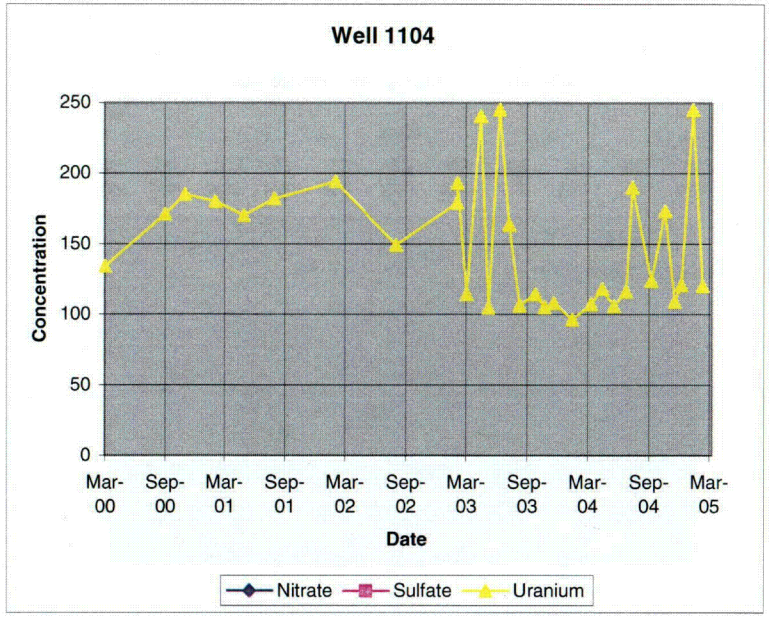
Date
Nitrate
Sulfate
Uranium

C66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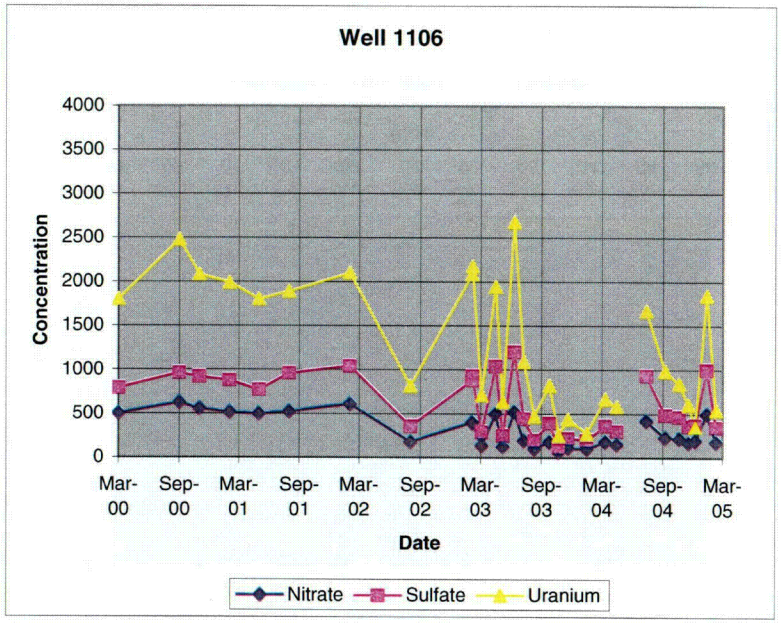
Nitrate
Sulfate
Uranium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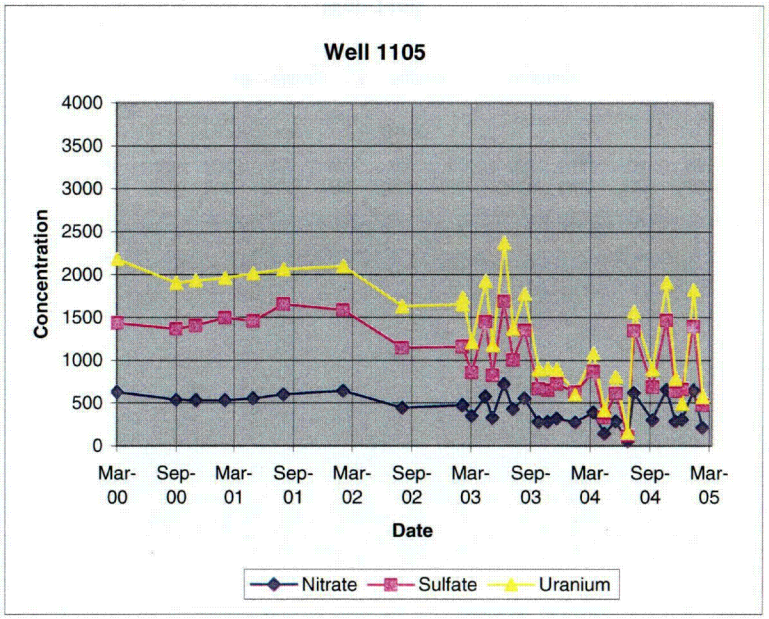
Mar-05
Date
Nitrate
Sulfate
Uranium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Mar-05
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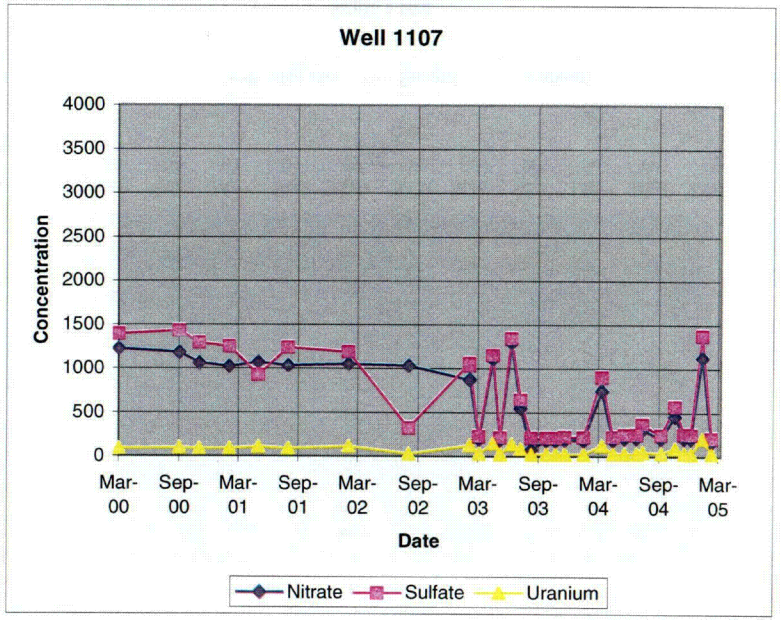
Nitrate
Sulfate
Uranium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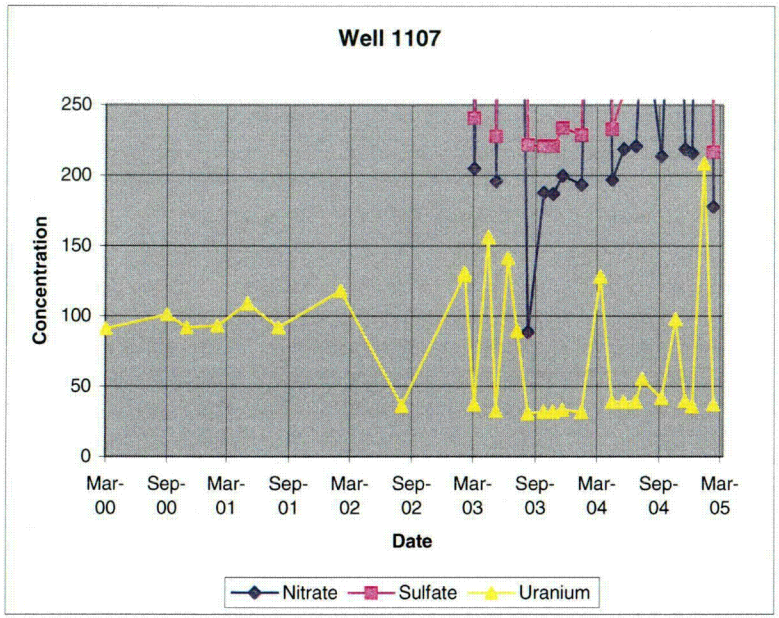
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium

C67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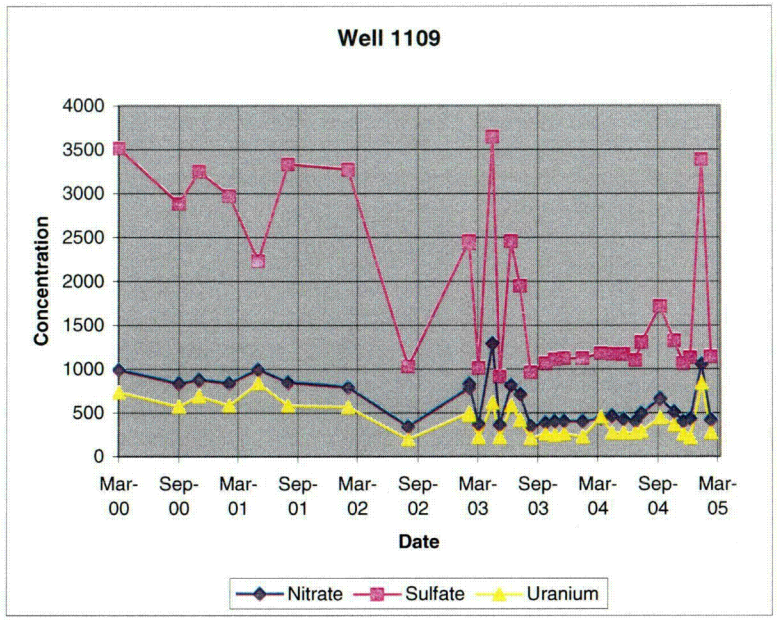
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium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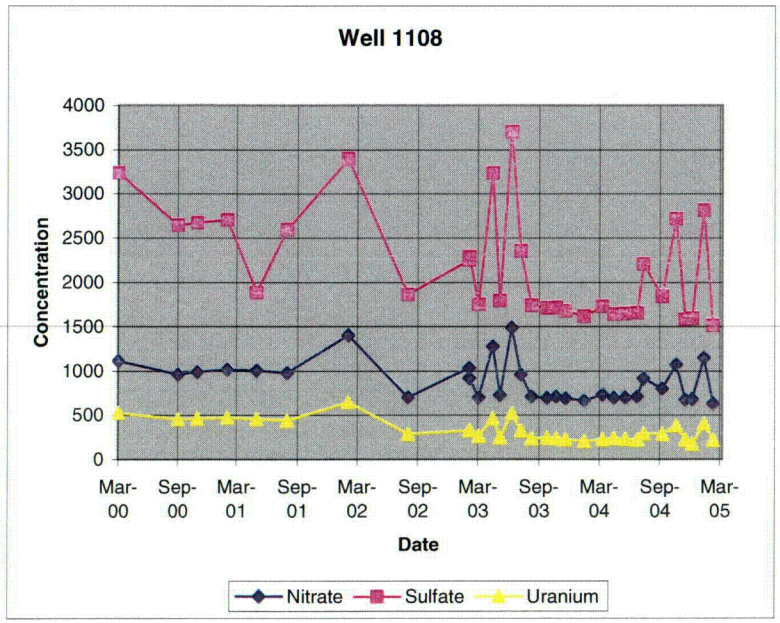
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium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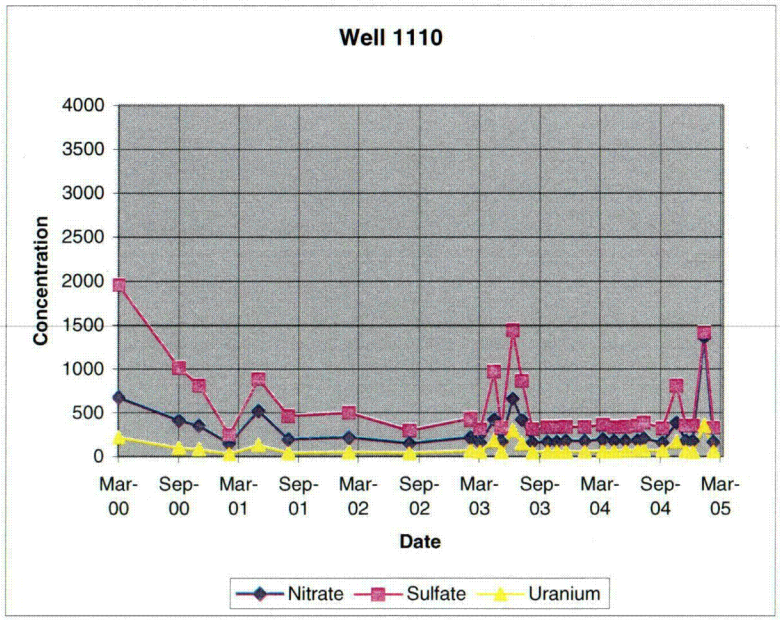
Mar-05
Date
Nitrate
Sulfate
Uranium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Date
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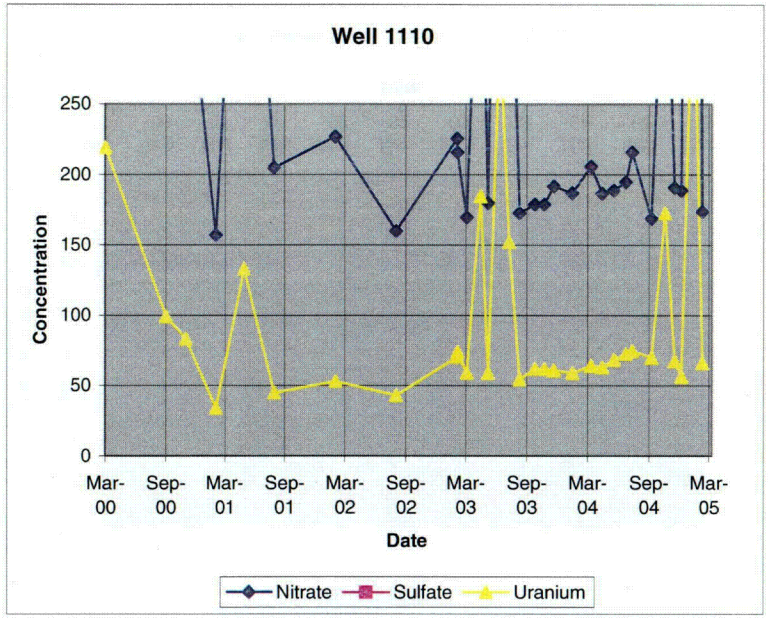
Sulfate
Uranium

C68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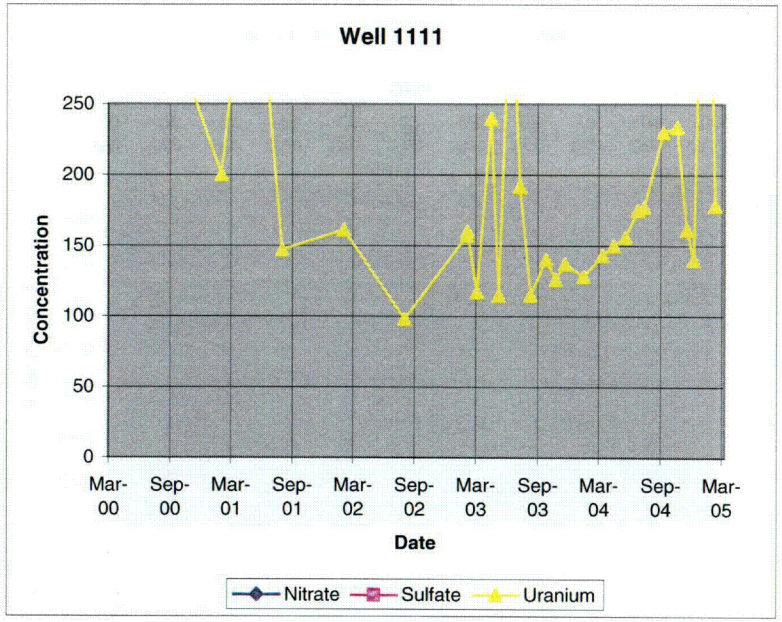
Mar-05
Date
Nitrate
Sulfate
Uranium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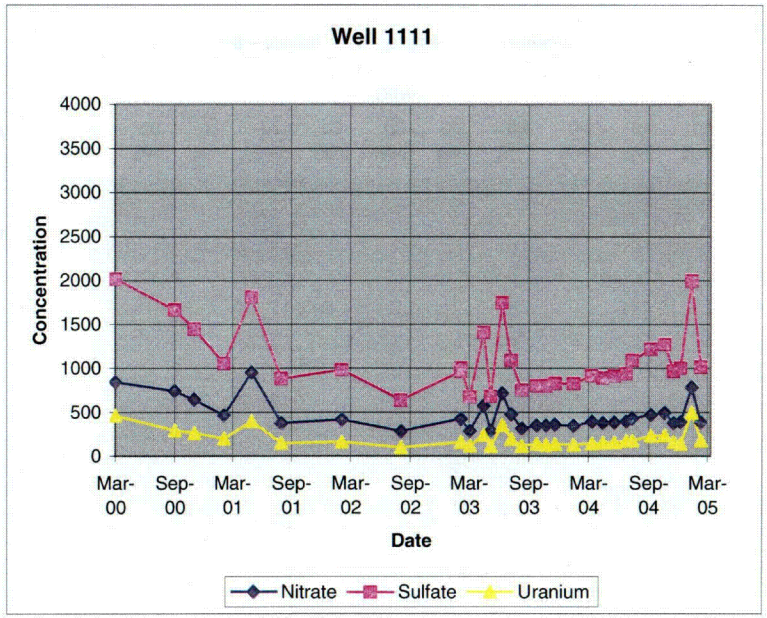
Mar-05
Date
Nitrate
Sulfate
Uranium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Mar-00
Sep-00
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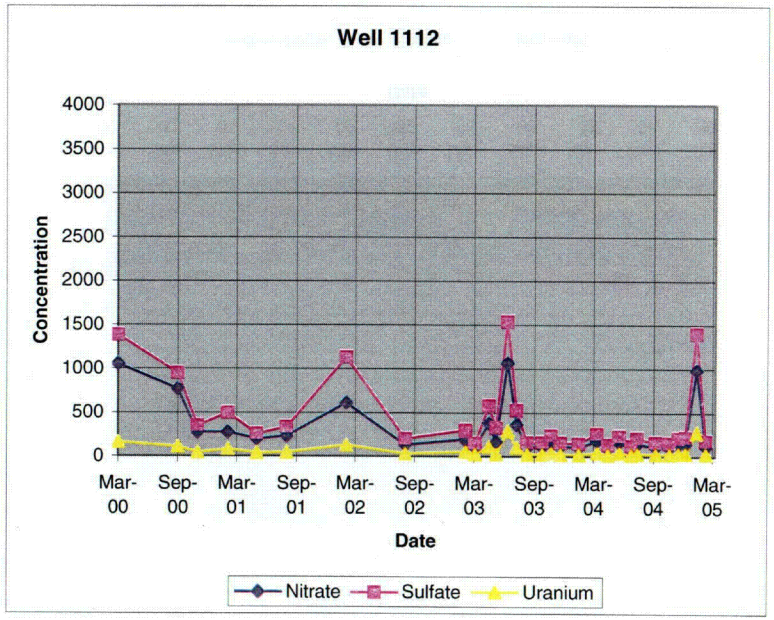
Date
Nitrate
Sulfate
Uranium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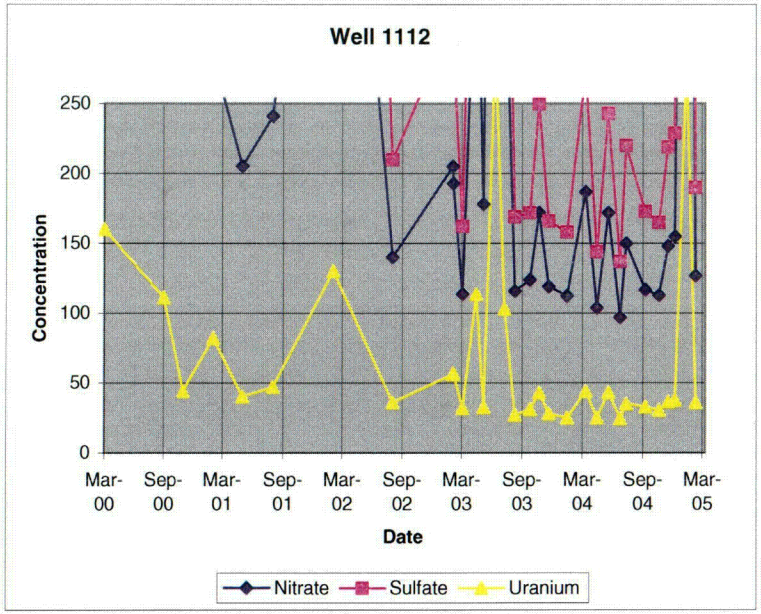
Date
Nitrate
Sulfate
Uranium

C69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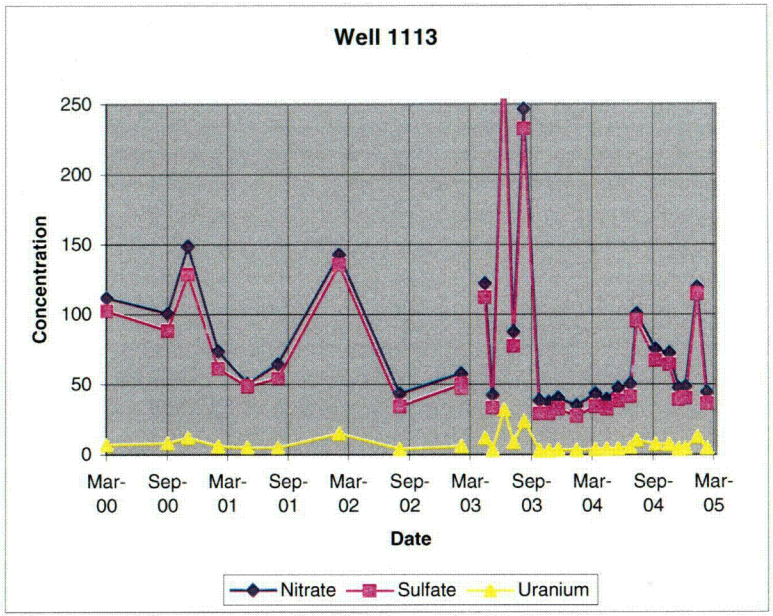
Nitrate
Sulfate
Uranium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Sep-00
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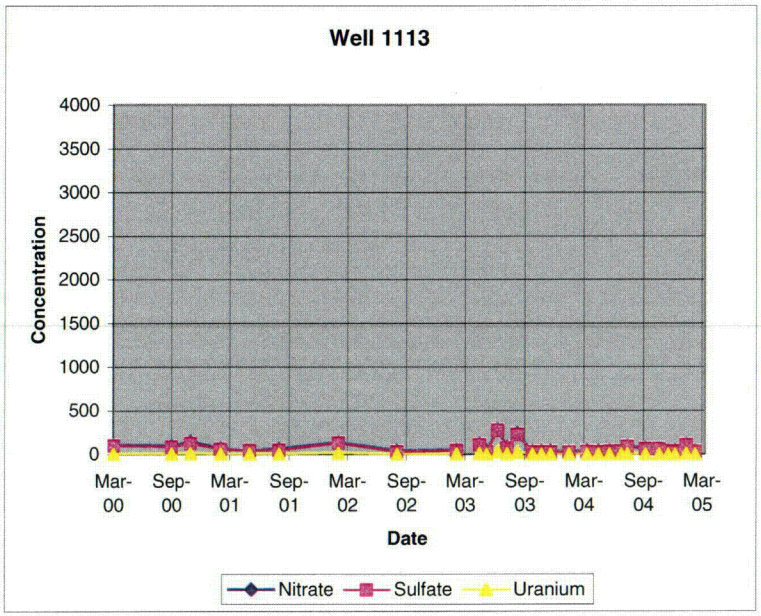
Mar-05
Date
Nitrate
Sulfate
Uranium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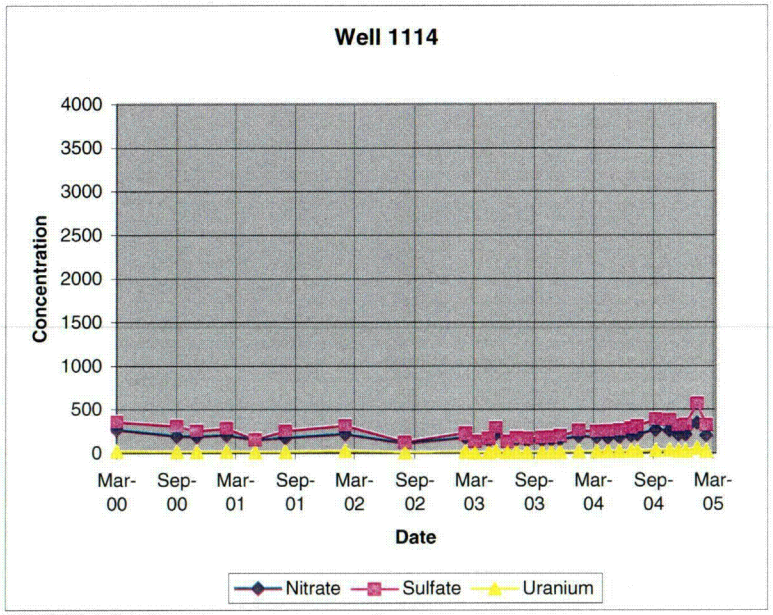
3500
3000
2500
2000
1500
1000
500
0
Mar-00
Sep-00
Mar-01
Sep-01
Mar-02
Sep-02
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium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Mar-00
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Sep-01
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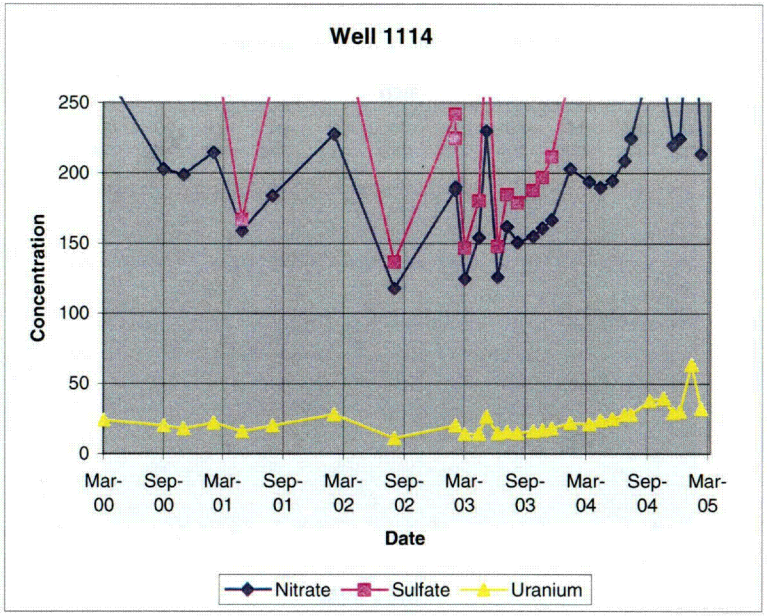
Sep-02
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium

C70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Concentration
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200
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50
0
Mar-00
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Mar-01
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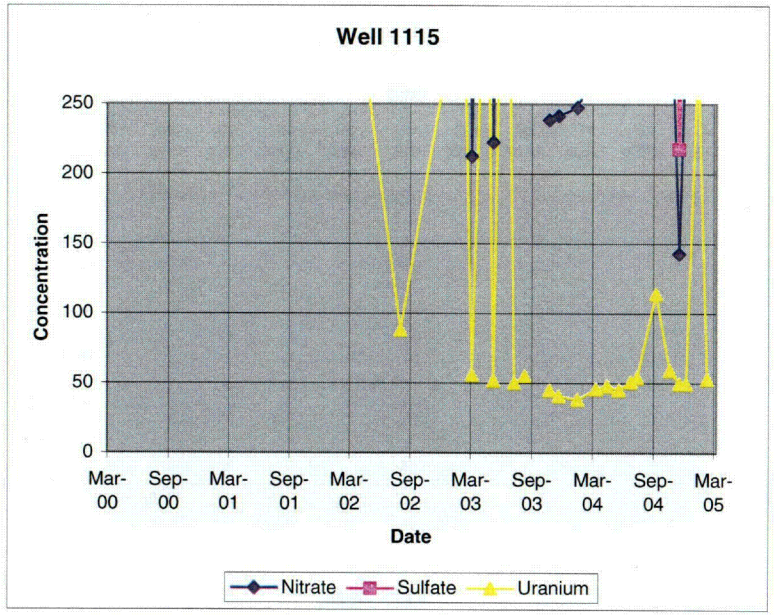
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium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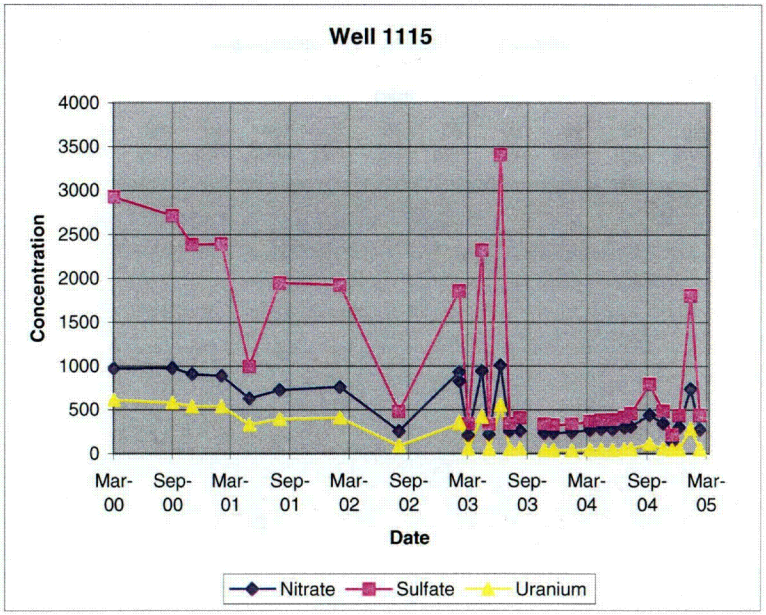
Sep-00
Mar-01
Sep-01
Mar-02
Sep-02
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium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Mar-00
Sep-00
Mar-01
Sep-01
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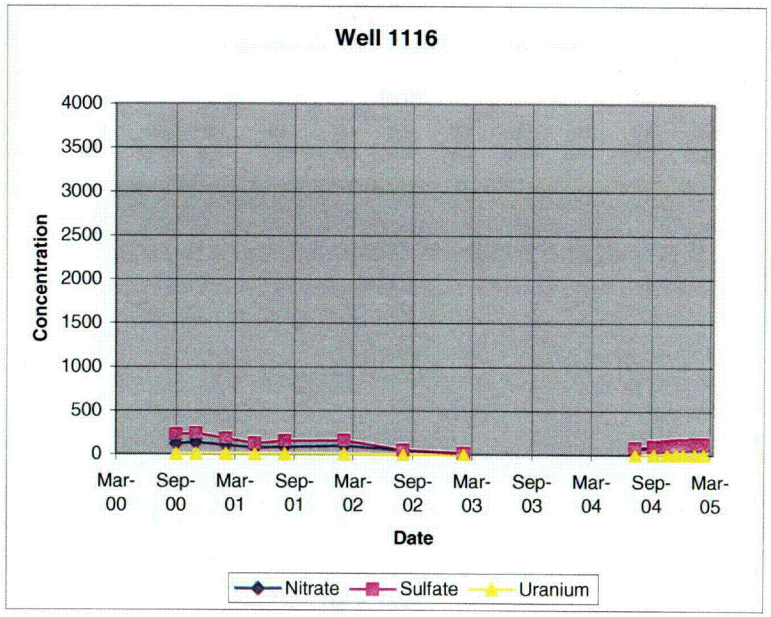
Sep-02
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium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500
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Sep-00
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Sep-02
Mar-03
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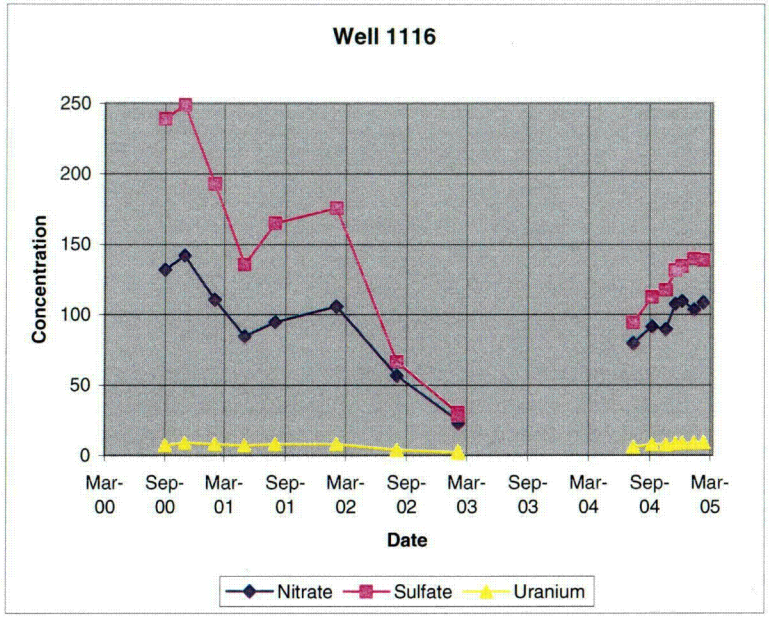
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium

C71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Concentration
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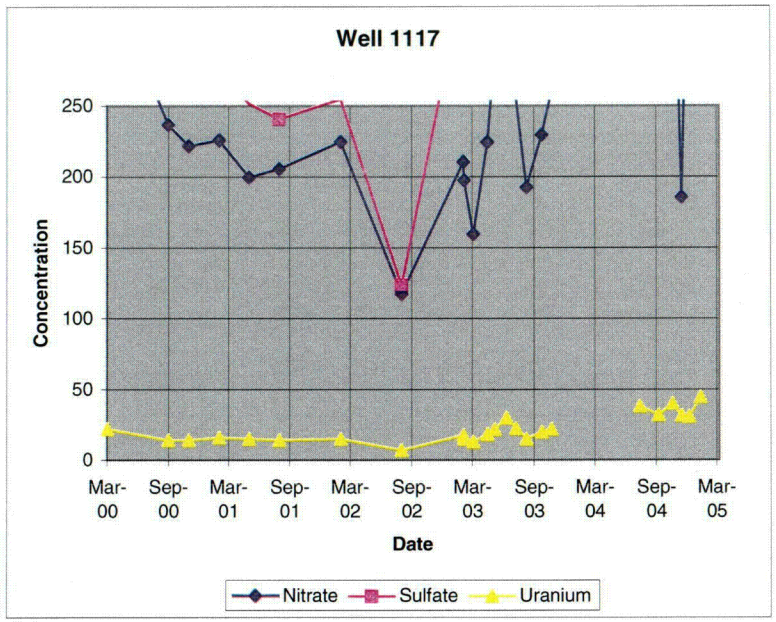
0
Mar-00
Sep-00
Mar-01
Sep-01
Mar-02
Sep-02
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium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Concentration
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50
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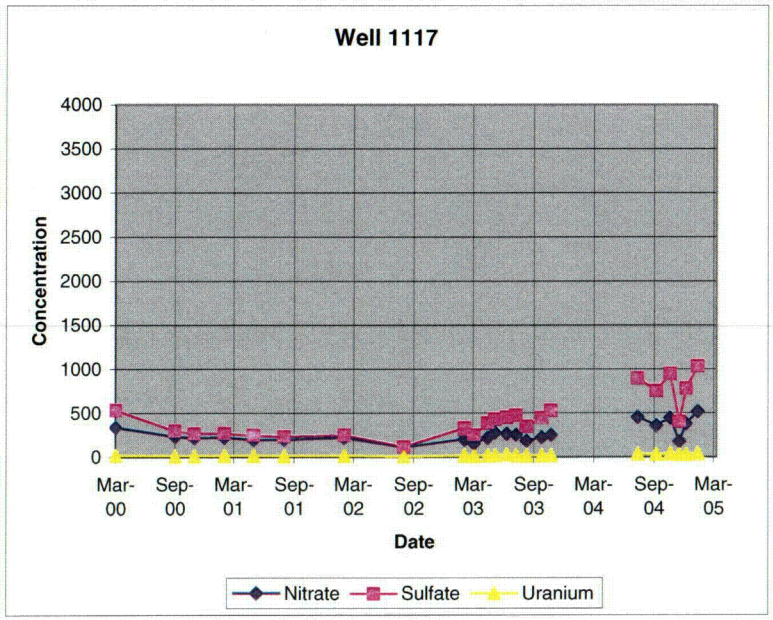
Mar-00
Sep-00
Mar-01
Sep-01
Mar-02
Sep-02
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium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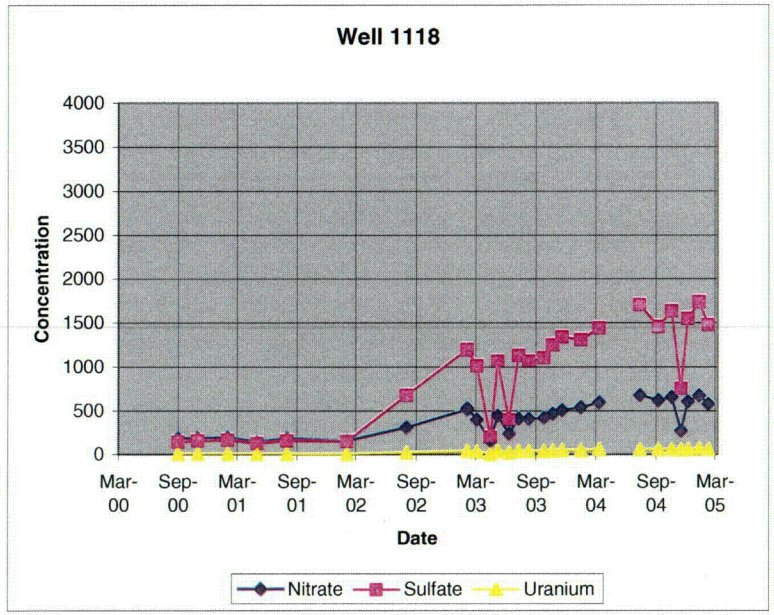
Concentration
4000
3500
3000
2500
2000
1500
1000
500
0
Mar-00
Sep-00
Mar-01
Sep-01
Mar-02
Sep-02
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium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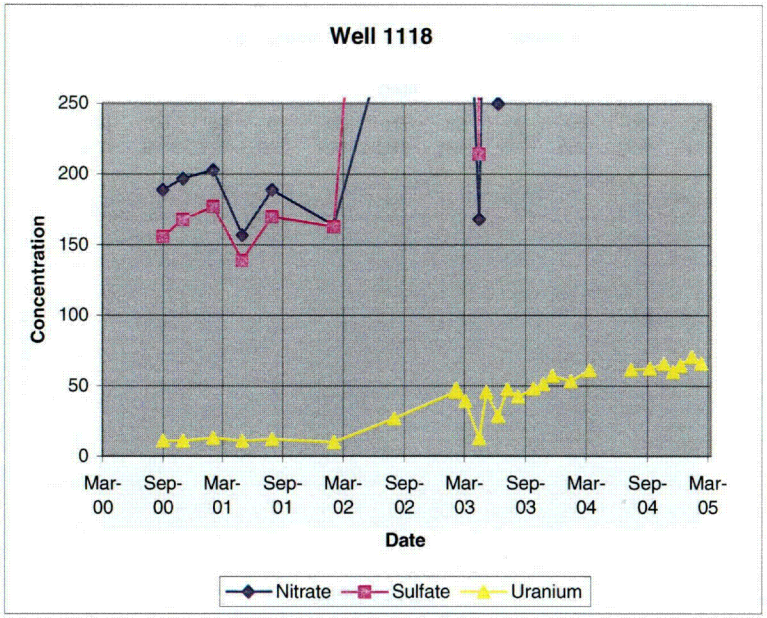
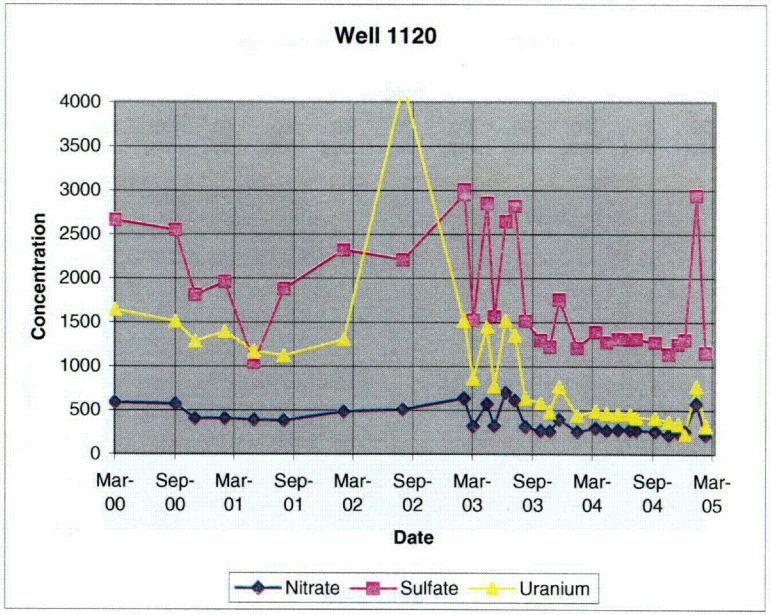
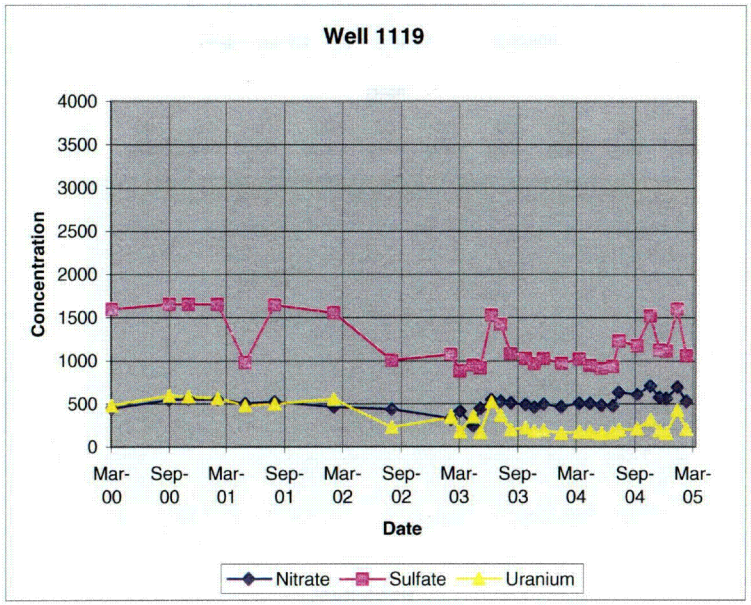
3500
3000
2500
2000
1500
1000
500
0
Mar-00
Sep-00
Mar-01
Sep-01
Mar-02
Sep-02
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium

C72


Well 1118
Concentration
250
200
150
100
50
0
Mar-00
Sep-00
Mar-01
Sep-01
Mar-02
Sep-02
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium


Well 1120
Concentration
4000
3500
3000
2500
2000
1500
1000
500
0
Mar-00
Sep-00
Mar-01
Sep-01
Mar-02
Sep-02
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium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Concentration
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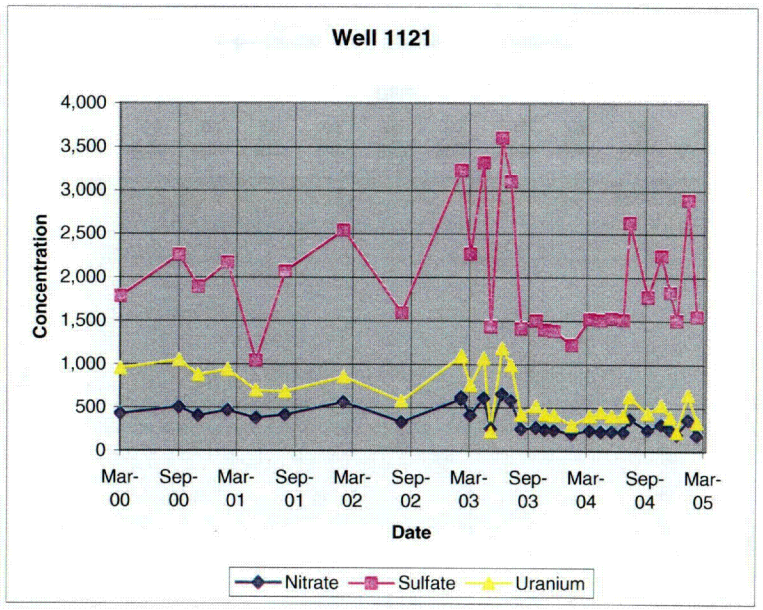
2000
1500
1000
500
0
Mar-00
Sep-00
Mar-01
Sep-01
Mar-02
Sep-02
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium


Well 1121
Concentration
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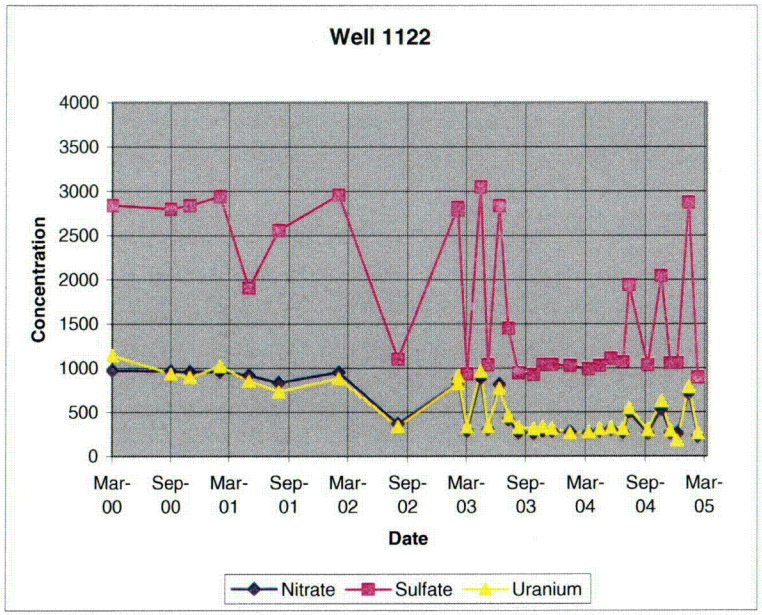
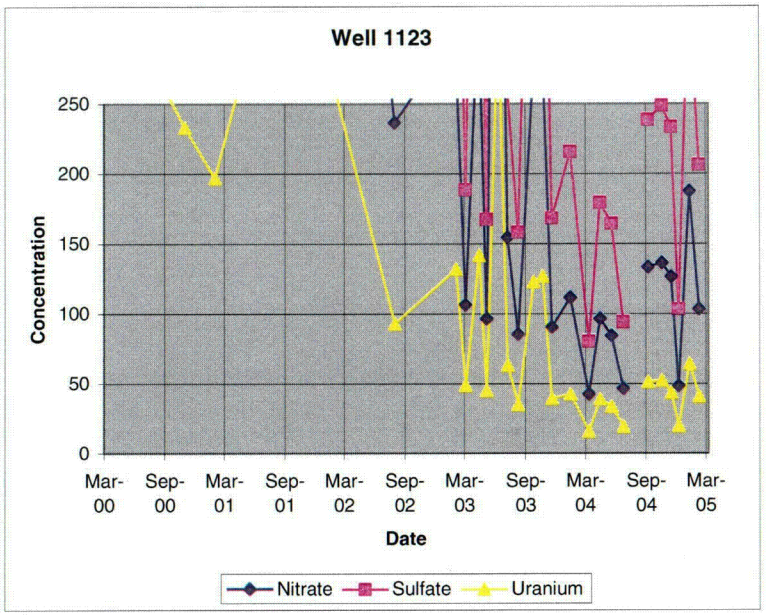
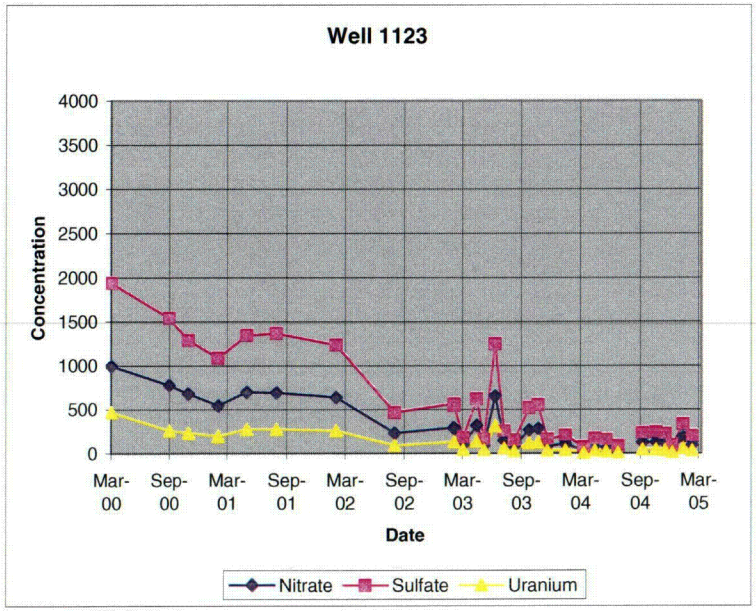
3,000
2,500
2,000
1,500
1,000
500
0
Mar-00
Sep-00
Mar-01
Sep-01
Mar-02
Sep-02
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium

C73


Well 1122
Concentration
4000
3500
3000
2500
2000
1500
1000
500
0
Mar-00
Sep-00
Mar-01
Sep-01
Mar-02
Sep-02
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium


Well 1123
Concentration
250
200
150
100
50
0
Mar-00
Sep-00
Mar-01
Sep-01
Mar-02
Sep-02
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium


Well 1123
Concentration
4000
3500
3000
2500
2000
1500
1000
500
0
Mar-00
Sep-00
Mar-01
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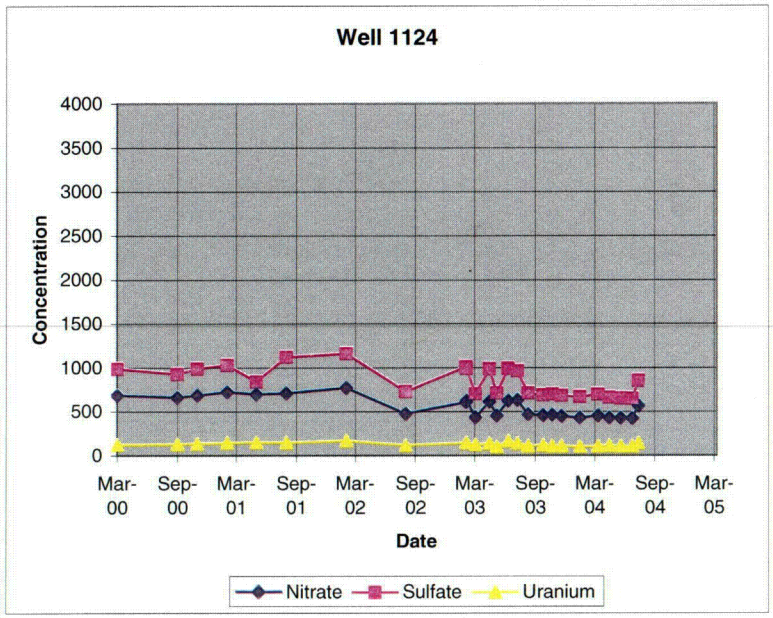
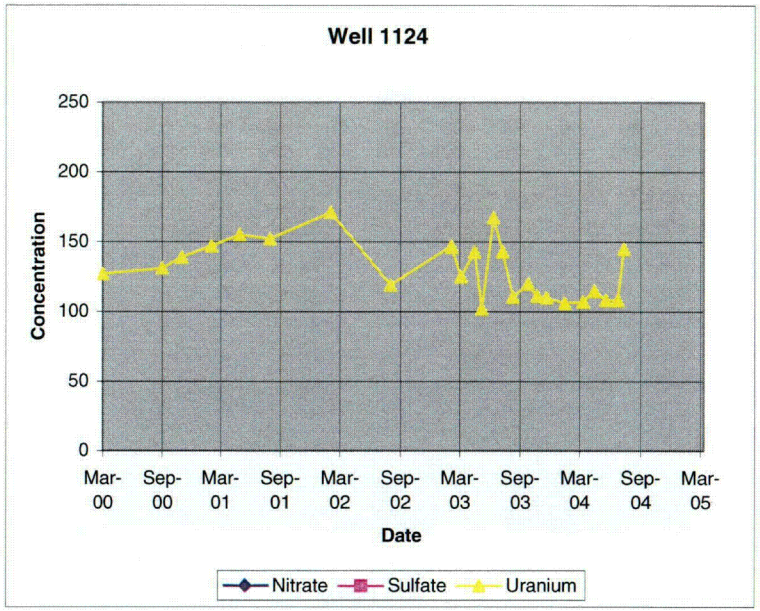
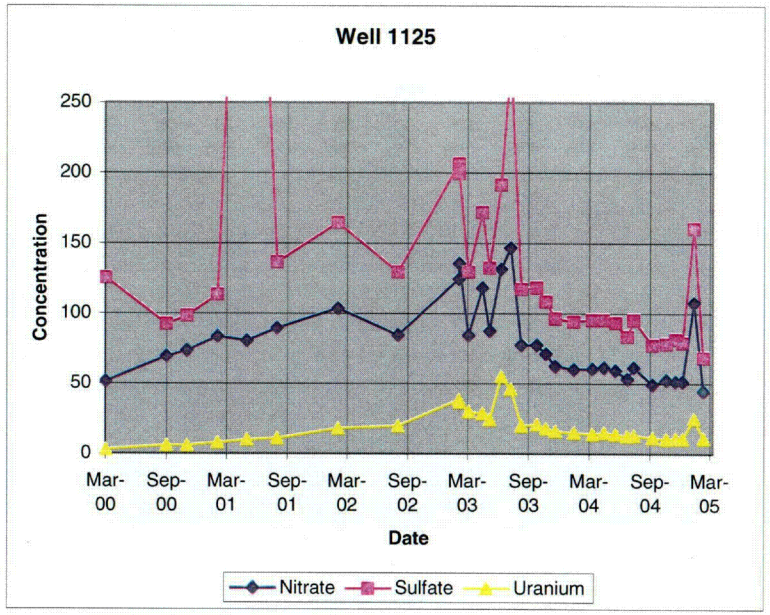
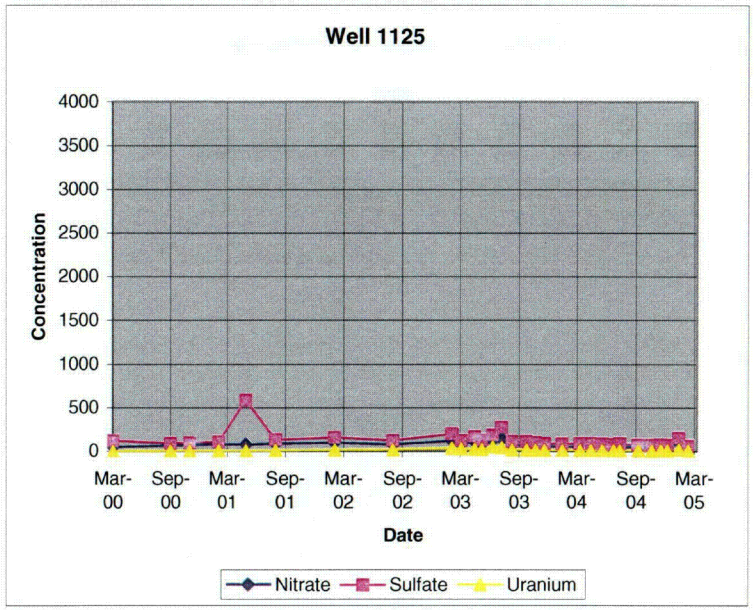
Mar-02
Sep-02
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium


Well 1124
Concentration
4000
3500
3000
2500
2000
1500
1000
500
0
Mar-00
Sep-00
Mar-01
Sep-01
Mar-02
Sep-02
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium

C74


Well 1124
Concentration
250
200
150
100
50
0
Mar-00
Sep-00
Mar-01
Sep-01
Mar-02
Sep-02
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium


Well 1125
Concentration
250
200
150
100
50
0
Mar-00
Sep-00
Mar-01
Sep-01
Mar-02
Sep-02
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium


Well 1125
Concentration
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3500
3000
2500
2000
1500
1000
500
0
Mar-00
Sep-00
Mar-01
Sep-01
Mar-02
Sep-02
Mar-03
Sep-03
Mar-04
Sep-04
Mar-05
Date
Nitrate
Sulfate
Uranium

C75

Appendix F

Estimated Initial Mass of Dissolved Contamination and Initial Volume of Contaminated Ground Water

Calculation Set
Tuba City Site
Year 2005 Annual Performance Evaluation Report
Period of Review: March 2004 through March 2005

Objective: estimate the baseline volume of contaminated groundwater of the Middle Terrace; estimate the baseline mass of dissolved nitrate,sulfate, and uranium in the groundwater

Method:
1) estimate the area of the plume from baseline contaminant maps separately for Horizons A and B combined and Horizons C and D combined
2) estimate the vertical thickness of contamination for Horizons A and B combined and Horizons C and D combined
3) assume 25% porosity and compute the separate plume volumes for Horizons A and B combined and Horizons C and D combined
4) compute separate concentration averages for sulfate and uranium for Horizons A and B combined and Horizons C and D combined from baseline contaminant maps
5) multiply concentration average by plume volume to determine contaminant mass for Horizons A and B combined and Horizons C and D combined
6) sum the volume and mass estimates

Calcualtion:

1) map area of contaminant plume

Horizons A and B	plume length (northeast to southwest	4,000 ft
	plume width	1,800 ft
	area	7,200,000 ft^2
Horizons C and D	plume length (northeast to southwest	2,500 ft
	plume width	1,800 ft
	area	4,500,000 ft^2

2) thickness of contamination

Horizons A and B		Horizons C and D	
thickness Horizon A	50 ft	thickness Horizon C	50 ft
thickness Horizon B	75 ft	thickness Horizon D	25 ft
A&B combined thickness		C&D combined thickness	75 ft
...approximately the upper half of Horizon A not saturated during baseline period		...entire thickness of Horizon C contaminated	
...Horizon B is fully saturated		...Horizon D not contaminated at many locations, assume 50% contaminated thickness	

3) plume volumes

Horizons A and B	volume of contaminated groundwater	135,000,000 ft^3	135,000,000 ft^3
		1,012,500,000 gal	1,013,000,000 gal
		3,832,312,500 L	3,832,000,000 L
Horizons C and D	volume of contaminated groundwater	28,125,000 ft^3	28,000,000 ft^3
		210,937,500 gal	211,000,000 gal
		798,398,438 L	798,000,000 L

4) baseline concentrations

Horizons A and B

well	Horizon	U mg/L	sulfate mg/L	nitrate mg/L as NO3
262	B	0.379	931	380
263	B	0.485	1990	1140
265	B	0.090	1520	720
267	B	0.073	3680	1640
906	A	0.951	1660	1470
908	B	0.122	2430	651
909	B	0.040	666	485
934	B	0.312	7360	2320
936	B	0.267	4360	2950
940	A	0.546	7550	1800
941	A	0.089	745	358
942	B	0.246	3030	1360
944	B	0.950	1590	1010
geometric mean mg/L		0.231	2174	1028

Horizons C and D

well	Horizon	U mg/L	sulfate mg/L	N mg/L as NO3
1101	D	0.245	960	438
1102	D	0.533	1320	650
1103	D	0.355	2570	1120
1104	D	0.194	1870	993
1105	D	2.100	1590	648
1106	D	2.100	1050	614
1107	D	0.118	1200	1060
1108	D	0.646	3400	1410
1109	D	0.565	3280	798
1110	D	0.053	512	227
1111	D	0.161	988	421
1112	D	0.130	1140	617
1113	D	0.053	250	143
1114	D	0.040	328	228
1115	D	0.410	1930	766
1116	D	0.040	250	106
1117	D	0.040	255	225
1118	D	0.040	250	164
1119	D	0.555	1560	468
1120	D	1.3	2330	493
1121	D	0.849	2590	535
1122	D	0.878	2960	954
1123	D	0.261	1240	643
1124	D	0.171	1170	781
1125	D	0.04	250	104
912	C	0.04	846	403
geometric mean mg/L		0.214	1020	464

5) mass calculation

Horizons A and B	mass uranium	884	kg
		1,949	lb
	mass sulfate	8,330,201	kg
		18,359,764	lb
	mass N as NO3	3,940,636	kg
		8,685,162	lb
Horizons C and D	mass uranium	171	kg
		377	lb
	mass sulfate	814,310	kg
		1,794,738	lb
	mass N as NO3	370,337	kg
		816,223	lb

6) total volume and masses

total volume contaminated groundwater	163,000,000	ft^3
	1,222,500,000	gal
	4,627,162,500	L
total mass uranium	1,055	kg
	2,326	lb
total mass sulfate	9,144,511	kg
	20,154,602	lb
total mass nitrate as NO3	4,310,973	kg
	9,501,384	lb

Calculation Set
Tuba City Site
Annual Performance Evaluation Report
Period of Review: March 2004 through March 2005

Objective: estimate aquifer cleanup times

Method: compare mass and volume removed as of April 1, 2005 to estimates of initial contaminant inventory; predict cleanup time calculated removal rates to date

Calculation: estimate #1: initial contaminant volume and mass estimates from DOE Baseline Performance Evaluation, May 2003.
estimate #2: initial contaminant volume and mass estimates recalculated for March 2004 - March 2005 Performance Evaluation Report

Estimate #1

	initial mass lb	cumulative removed lb	% removed			initial vol gal	cumulative removed gal	# pore vols removed	% plume vol removed	
Nitrate	12,400,000	459,000	4			3.40E+09	135,900,000	0.040	4	
Sulfate	17,900,000	1,123,000	6			2.70E+09	135,900,000	0.050	5	
Uranium	2,800	325	12			3.00E+09	135,900,000	0.045	5	

	mass removal rate % per yr	cleanup time, yrs	cleanup date	# yrs until cleanup		pore volume removal rate % / yr	1-pore volume cleanup time, yrs	1-pore volume cleanup date	# yrs until cleanup
Nitrate	1.3	76	2078	73		1.4	70	2072	67
Sulfate	2.2	45	2047	42		1.8	56	2058	53
Uranium	4.1	24	2026	21		1.6	62	2064	59
t1=	15-Jun-02								
t2=	01-Apr-05								
t2 - t1=	2.8	yrs							

Estimate #2

	initial mass lb	cumulative removed lb	% removed			initial vol gal	cumulative removed gal	# pore vols removed	% plume vol removed	
Nitrate	9,500,000	459,000	5			1.20E+09	135,900,000	0.113	11	
Sulfate	20,000,000	1,123,000	6			1.20E+09	135,900,000	0.113	11	
Uranium	2,300	325	14			1.20E+09	135,900,000	0.113	11	

Projection	mass removal rate % per yr	cleanup time, yrs	cleanup date	# yrs until cleanup		pore volume removal rate % / yr	1-pore volume cleanup time, yrs	1-pore volume cleanup date	# yrs until cleanup
Nitrate	1.7	58	2060	55		4.0	25	2027	22
Sulfate	2.0	50	2052	47		4.0	25	2027	22
Uranium	5.1	20	2022	17		4.0	25	2027	22
t1=	15-Jun-02								
t2=	1-Apr-05								
t2 - t1=	2.8	yrs							

Appendix G

Aquifer Restoration Index Calculation

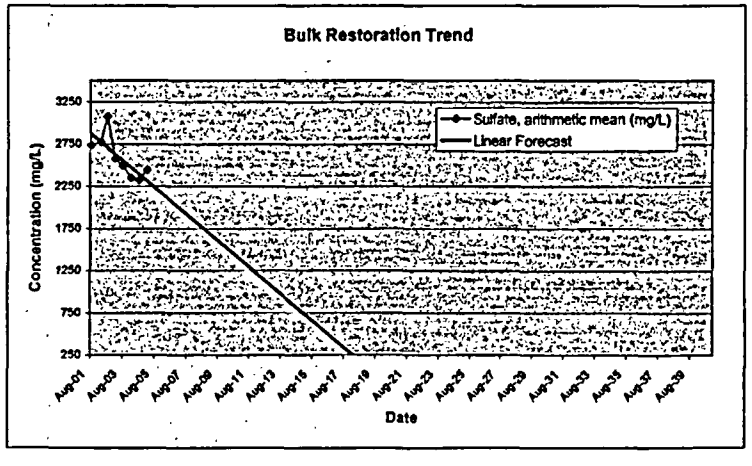
Calculation Set
Tuba City Site
Annual Performance Evaluation Report
Period of Review: March 2004 through March 2005

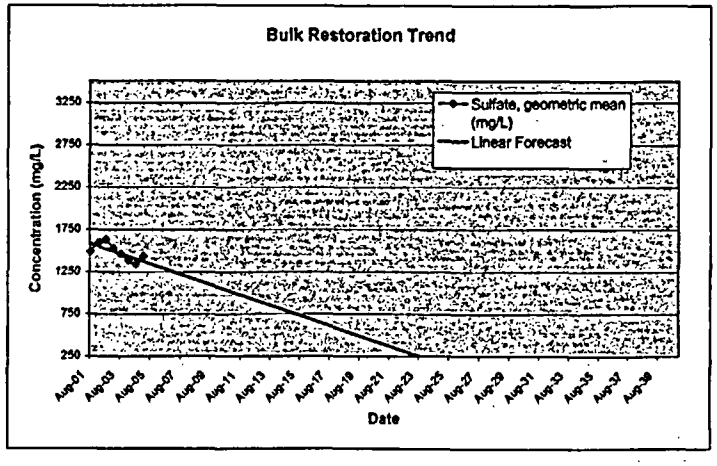
Objective: develop a bulk concentration index for measuring restoration progress for sulfate

Method: 1) compute an average concentration of a contaminant for a given sampling date/event for a selected group of monitor wells within the contaminant plume
2) compare the computed averages over time

Calculation: the selected monitor wells below have the most comprehensive data set and are located throughout the contaminant plume in Horizons A and B;
no historical data exists for Horizons C and D within the contaminant plume
note: where data are absent in the table below, concentrations are carried forward from the previous date as shown in *bold italic*

	Sulfate (mg/L)															
date_sampled	Loc 0262	Loc 0263	Loc 0265	Loc 0267	Loc 0906	Loc 0908	Loc 0909	Loc 0929	Loc 0934	Loc 0936	Loc 0940	Loc 0941	Loc 0942		Sulfate, arithmetic mean (mg/L)	Sulfate, geometric mean (mg/L)
08/16/2001	***931***	***1990***	***1520***	3620	1840	2310	419	19.9	7450	4570	7230	620	3030	baseline	2735	1482
03/06/2002	***931***	***1990***	***1520***	3680	1660	2430	668	28.1	7360	4360	7550	745	3030	baseline	2765	1594
08/20/2002	***931***	***1990***	***1520***	3530	1690	2330	637	27.9	11900	4400	***7550***	***745***	2680		3072	1625
02/06/2003	***931***	***1990***	***1520***	3550	1660	2430	629	27.6	2970	4880	9180	920	2790		2575	1524
08/06/2003	1190	1640	1070	3690	1650	2400	564	29.1	2640	3240	10300	1010	2890		2486	1453
02/12/2004	***1190***	***1640***	***1070***	***3690***	***1650***	2400	540	***29.1***	1900	3200	9600	800	2800		2347	1375
08/31/2004	1000	1900	800	3500	1700	2600	590	26	2300	2500	***9600***	710	2900		2317	1331
02/10/2005	1000	2100	810	3700	1900	3000	580	26	2300	2700	***9600***	890	3000		2439	1426





t1=	15-Jun-02
t2=	1-Apr-05
t2 - t1=	2.8 yr
t3=	Aug-18
projected cleanup time from t1=	18 yr
projected cleanup time from t2=	13 yr

t1=	15-Jun-02
t2=	1-Apr-05
t2 - t1=	2.8 yr
t3=	Aug-23
projected cleanup time from t1=	21 yr
projected cleanup time from t2=	18 yr

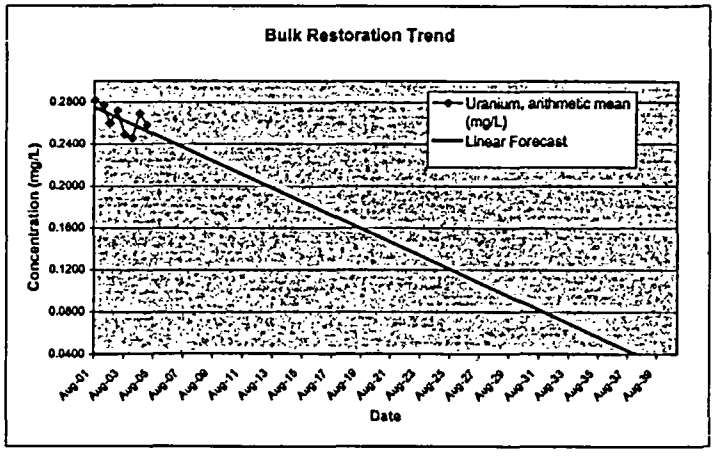
Calculation Set
Tuba City Site
Annual Performance Evaluation Report
Period of Review: March 2004 through March 2005

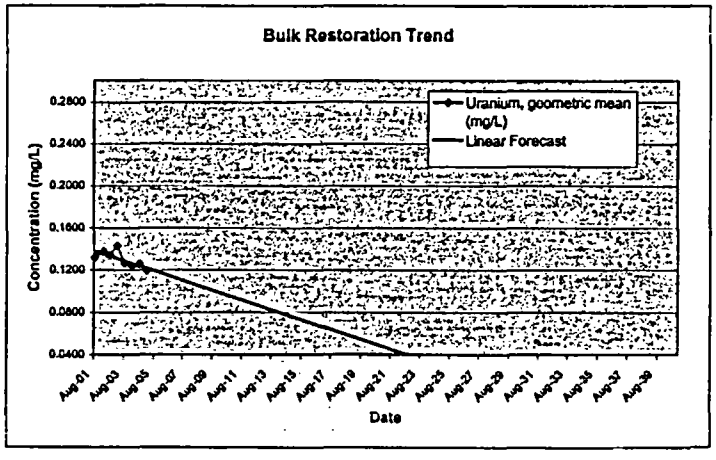
Objective: develop a bulk concentration index for measuring restoration progress for uranium

Method: 1) compute an average concentration of a contaminant for a given sampling date/event for a selected group of monitor wells within the contaminant plume
2) compare the computed averages over time

Calculation: the selected monitor wells below have the most comprehensive data set and are located throughout the contaminant plume in Horizons A and B;
no historical data exists for Horizons C and D within the contaminant plume
note: where data are absent in the table below, concentrations are carried forward from the previous date as shown in *bold italic*

	Uranium mg/L																
date_sampled	Loc 0262	Loc 0263	Loc 0265	Loc 0267	Loc 0906	Loc 0908	Loc 0909	Loc 0929	Loc 0934	Loc 0936	Loc 0940	Loc 0941	Loc 0942		Uranium, arithmetic mean (mg/L)	Uranium, geometric mean (mg/L)
08/16/2001	***0.3790***	***0.4850***	***0.0897***	0.0696	0.9340	0.1110	0.0178	0.0012	0.2980	0.2810	0.6430	0.1030	0.2510	baseline	0.2818	0.1316
03/06/2002	***0.3790***	***0.4850***	***0.0897***	0.0731	0.9510	0.1220	0.0389	0.0012	0.3120	0.2670	0.5460	0.0886	0.2460	baseline	0.2769	0.1378
08/20/2002	***0.3790***	***0.4850***	***0.0897***	0.0742	0.6980	0.1220	0.0349	0.0011	0.3360	0.3060	***0.5460***	***0.0886***	0.2180		0.2599	0.1336
02/06/2003	***0.3790***	***0.4850***	***0.0897***	0.0765	0.6530	0.1240	0.0333	0.0015	0.3550	0.5820	0.4320	0.1020	0.2210		0.2718	0.1428
08/06/2003	0.4250	0.1730	0.0551	0.0784	0.6670	0.1060	0.0279	0.0018	0.3500	0.6060	0.4280	0.0858	0.2320		0.2489	0.1261
02/12/2004	***0.4250***	***0.1730***	***0.0551***	***0.0784***	***0.6670***	0.0970	0.0270	***0.0018***	0.3200	0.6000	0.4300	0.0810	0.2400		0.2458	0.1238
08/31/2004	0.5300	0.2300	0.0450	0.0880	0.8900	0.1200	0.0290	0.0010	0.3200	0.4700	***0.4300***	0.0760	0.2700		0.2692	0.1256
02/10/2005	0.5600	0.1900	0.0450	0.0850	0.8300	0.1100	0.0350	0.0010	0.2800	0.4700	***0.4300***	0.0490	0.2700		0.2581	0.1191





t1=	15-Jun-02
t2=	1-Apr-05
t2 - t1=	2.8 yr
t3=	Aug-37
projected cleanup time from t1=	35 yr
projected cleanup time from t2=	32 yr

t1=	15-Jun-02
t2=	1-Apr-05
t2 - t1=	2.8 yr
t3=	Aug-22
projected cleanup time from t1=	20 yr
projected cleanup time from t2=	17 yr