

Appendix A

Well Completion Information and Conceptual Site Model

This page intentionally left blank

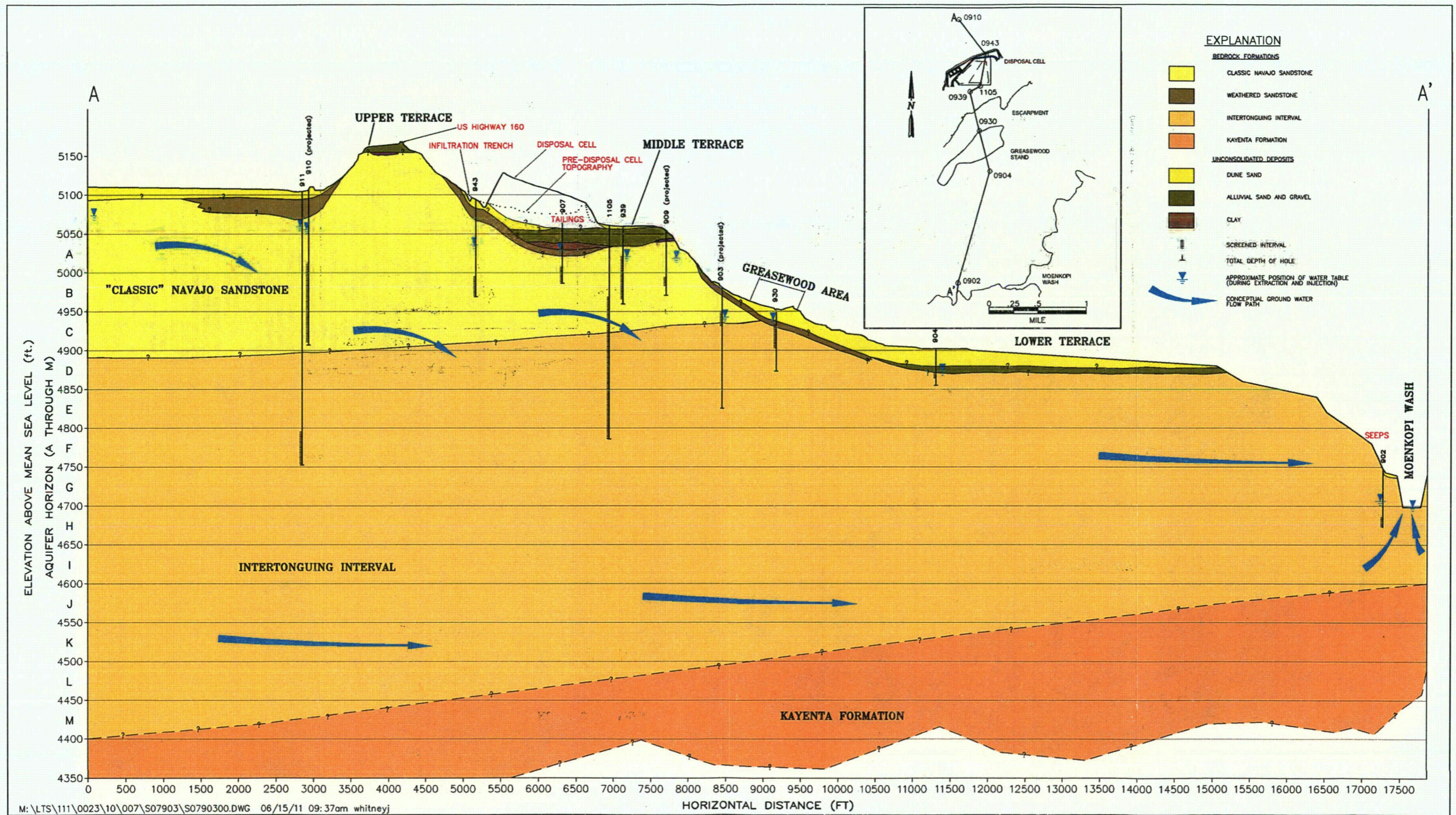
Figures

Figure A-1. Conceptual Model of the Site Hydrogeology.....	A-1
Figure A-2. Well Completions Schematic.....	A-2

Table

Table A-1. Well Completion Information.....	A-3
---	-----

This page intentionally left blank



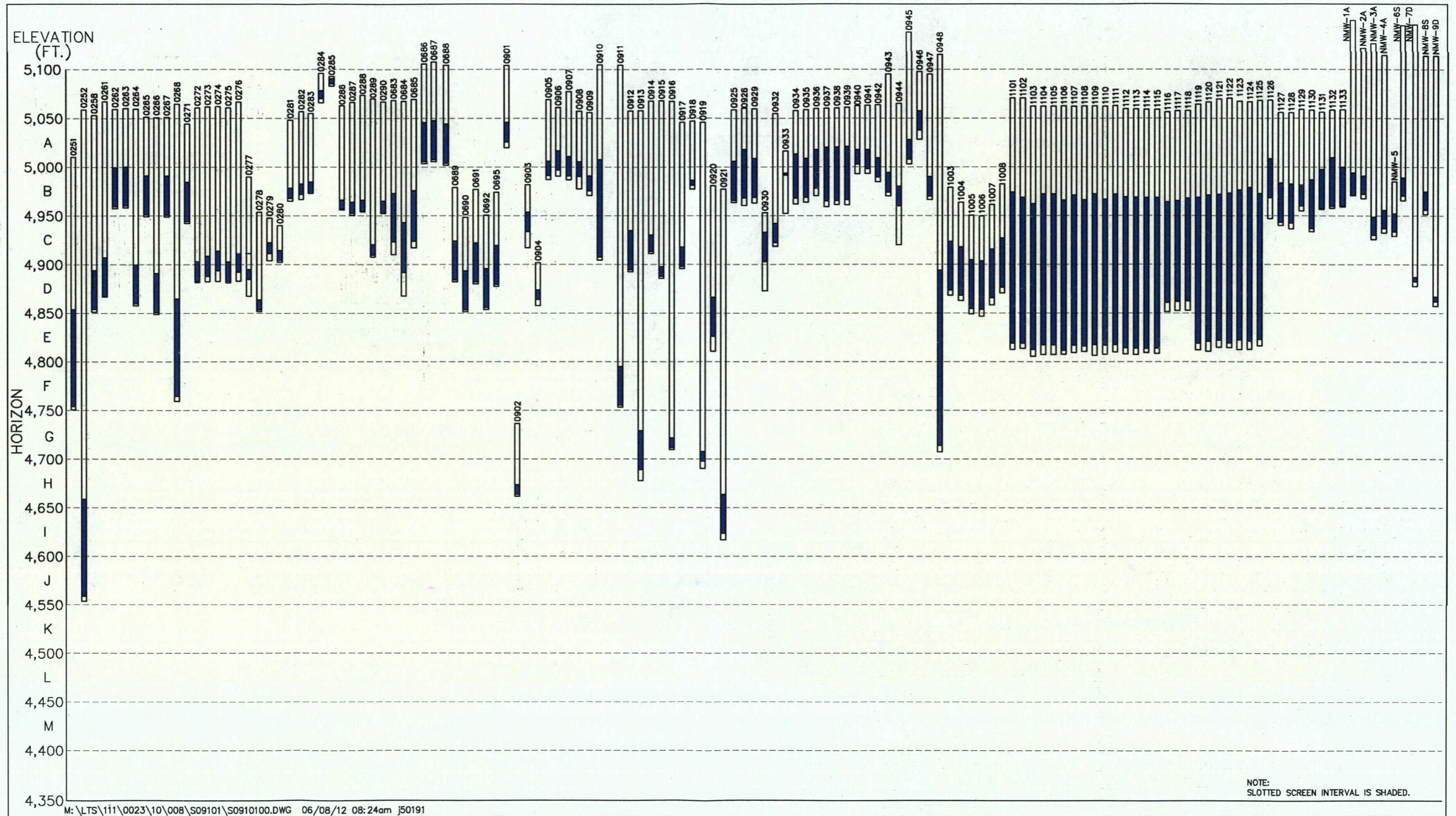


Figure A-2. Well Completions Schematic

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	Top of Casing Elev.	Ground Elev.	Well Diameter	Boring Started	Decommission Date	State Plane East	State Plane North
0284	MW	A	5079.8	5074.8	5069.8	16.5	21.5	26.5	10.0	1.5	28.0	5098.72	5096.3	2	16-Aug-04		730525	1873562
0285	MW	A	5090.8	5088.3	5085.8	3.0	5.5	8.0	5.0	0.1	8.1	5096.47	5093.8	2	16-Aug-04		731629	1874042
0686	MW	A	5045.5	5025.5	5005.5	60.0	80.0	100.0	40.0	0.3	100.3	5107.97	5105.5	2	28-Mar-00		729978	1873416
0687	MW	A	5047.6	5027.6	5007.6	60.0	80.0	100.0	40.0	0.3	100.3	5109.82	5107.6	2	29-Mar-00		731152	1874024
0688	MW	A	5044.1	5024.1	5004.1	60.0	80.0	100.0	40.0	0.3	100.3	5106.98	5104.1	2	29-Mar-00		731961	1874385
0901	MW	A	5045.8	5035.8	5025.8	58.0	68.0	78.0	20.0	2.0	80.0	5105.46	5103.8	2	16-Oct-84		730185	1875918
0906	MW	A	5016.9	5006.9	4996.9	44.0	54.0	64.0	20.0	2.0	66.0	5062.10	5060.9	2	19-Nov-84		730838	1872181
0907	MW	A	5010.7	5000.7	4990.7	66.5	76.5	86.5	20.0			5079.17	5077.2	2	30-Nov-84	19-Apr-88	731252	1872920
0928	MW	A	5022.1	5009.6	4997.1	30.0	42.5	55.0	25.0	3.0	58.0	5053.99	5052.1	4	20-Oct-95	24-May-00	729401	1870814
0929	MW	A	5010.4	4990.4	4970.4	48.2	68.2	88.2	40.0			5060.82	5058.6	4			728780	1871453
0940	MW	A	5017.9	5010.4	5002.9	45.0	52.5	60.0	15.0	3.0	68.0	5064.77	5062.9	4	01-Nov-95		730130	1872391
0941	MW	A	5018.0	5008.0	4998.0	45.0	55.0	65.0	20.0	3.0	68.0	5065.97	5063.0	4	10-Nov-95		730908	1872398
0945	MW	A	5028.1	5018.1	5008.1	110.0	120.0	130.0	20.0	3.0	133.0	5140.49	5138.1	4	11-Oct-95		730019	1873857
0946	MW	A	5057.6	5047.6	5037.6	40.0	50.0	60.0	20.0	3.3	63.3	5100.50	5097.6	4	02-Nov-95		730547	1873582
NMW-1A	MW	B	4980.7	4970	4960.7	167.5	177.5	187.5	20.0	5.0	192.50	5150.95	5148.20	4	25-Sep-10		728130	1872744
NMW-2A	MW	B	4978.7	4968	4958.7	140.5	150.5	160.5	20.0	5.0	165.46	5121.69	5119.15	4	27-Sep-10		728826	1874729
NMW-3A	MW	B	4975.1	4965	4955.1	190.6	200.6	210.6	20.0	5.0	215.62	5168.51	5165.73	4	10-Oct-10		730559	1874974
NMW-4A	MW	B	4964.2	4954	4944.2	170.5	180.5	190.5	20.0	5.0	195.46	5137.44	5134.68	4	7-Oct-10		727368	1874332
NMW-6S	MW	B	4975.1	4965	4955.1	167.6	177.6	187.6	20.0	5.0	192.62	5145.93	5142.74	4	23-Sep-10		729015	1873349
NMW-8S	MW	B	4962.4	4952	4942.4	149.4	159.4	169.4	20.0	5.0	174.43	5114.87	5112.30	4	6-Oct-10		727588	1871585
0262	MW	B	4999.2	4979.2	4959.2	60.0	80.0	100.0	40.0	0.3	100.3	5061.99	5059.2	2	03-Apr-00		731402	1872012
0263	MW	B	5000.2	4980.2	4960.2	60.0	80.0	100.0	40.0	0.3	100.3	5063.10	5060.2	2	04-Apr-00		731565	1871757
0265	MW	B	4991.1	4971.1	4951.1	60.0	80.0	100.0	40.0	0.3	100.3	5053.88	5051.1	2	16-Apr-00		730382	1870964
0267	MW	B	4990.8	4970.8	4950.8	60.0	80.0	100.0	40.0	0.3	100.3	5053.40	5050.8	2	14-Apr-00		729329	1870707
0271	MW	B	4984.0	4964.0	4944.0	60.0	80.0	100.0	40.0	0.3	100.3	5046.72	5044.0	2	29-Apr-00		728160	1869555
0281	MW	B	4977.8	4972.8	4967.8	70.5	75.5	80.5	10.0	1.5	82.0	5051.00	5048.3	2	11-Aug-04		729714	1870315
0282	MW	B	4983.3	4978.3	4973.3	74.1	79.1	84.1	10.0	1.5	85.6	5060.04	5057.4	2	10-Aug-04		730062	1871168
0283	MW	B	4984.8	4979.8	4974.8	70.5	75.5	80.5	10.0	1.5	82.0	5057.97	5055.3	2	03-Aug-04		730901	1871185
0286	MW	B	4968.84	4963.8	4958.84	93.2	98.2	103.2	10.0	0.4	103.6	5063.99	5062.0	2	13-Mar-07		730128	1872377
0287	MW	B	4962.29	4957.3	4952.29	100.7	105.7	110.7	10.0	0.4	111.1	5065.65	5063.0	2	15-Mar-07		730908	1872386
0288	MW	B	4965.86	4960.9	4955.86	104.0	109.0	114.0	10.0	0.5	114.5	5072.54	5069.9	2	18-Mar-07		729995	1872709
0290	MW	B	4964.33	4959.3	4954.33	102.7	107.7	112.7	10.0	0.4	113.1	5068.91	5067.0	2	17-Mar-07		732633	1872979
0905	MW	B	5006.0	4998.5	4991.0	63.0	70.5	78.0	15.0	2.0	80.0	5072.80	5069.0	2	14-Nov-84	24-May-00	732933	1873200
0908	MW	B	5005.3	4997.8	4990.3	52.0	59.5	67.0	15.0	2.0	69.0	5058.14	5057.3	2	17-Nov-84		729366	1871999
0909	MW	B	4990.8	4983.3	4975.8	65.0	72.5	80.0	15.0	2.0	82.0	5057.17	5055.8	2	18-Nov-84		730927	1871393
0910	MW	B	5007.6	4957.6	4907.6	97.0	147.0	197.0	100.0	1.0	198.0	5106.70	5104.6	4	26-Jul-85		730219	1875840
0918	MW	B	4986.2	4983.7	4981.2	61.0	63.5	66.0	5.0	2.0	68.0	5049.63	5047.2	4	15-Aug-85		727294	1868724
0925	EXT	B	5005.8	4985.8	4965.8	53.0	73.0	93.0	40.0	0.5	93.5	5060.87	5058.8	6	21-Oct-95	24-May-00	729452	1872006
0926	EXT	B	5018.3	4993.3	4968.3	42.2	67.2	92.2	50.0	3.0	95.2	5062.85	5060.5	6	25-Oct-95	17-May-00	730790	1872126
0933	MW	B	4993.3	4992.3	4991.3	23.0	24.0	25.0	2.0			5018.03	5016.3	4	18-Oct-95	24-May-00	731727	1871341
0934	MW	B	5013.0	4990.5	4968.0	45.0	67.5	90.0	45.0	3.0	93.0	5059.73	5058.0	4	02-Nov-95		730018	1871649
0935	MW/EXT	B	5008.8	4988.8	4968.8	50.0	70.0	90.0	40.0	3.0	93.0	5061.50	5058.8	4	28-Oct-95	*	729461	1871978
0936	MW/EXT	B	5017.9	4997.9	4977.9	42.0	62.0	82.0	40.0	3.0	85.0	5062.30	5059.9	6	26-Oct-95	*	730055	1872121

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	Top of Casing Elev.	Ground Elev.	Well Diameter	Boring Started	Decommission Date	State Plane East	State Plane North
0937	MW	B	5020.2	4992.7	4965.2	40.0	67.5	95.0	55.0	3.0	98.0	5062.80	5060.2	4	09-Nov-95	24-May-00	730790	1872116
0938	MW/EXT	B	5020.4	4992.9	4965.4	40.0	67.5	95.0	55.0	3.0	98.0	5063.64	5060.4	4	26-Oct-95	*	730769	1872124
0939	EXT	B	5021.1	4993.6	4966.1	40.0	67.5	95.0	55.0	3.0	98.0	5063.23	5061.1	6	23-Oct-95	16-May-00	731403	1872132
0942	MW/EXT	B	5009.5	4999.5	4989.5	54.0	64.0	74.0	20.0	3.0	77.0	5066.45	5063.5	4	03-Nov-95	*	731642	1872409
0943	MW	B	4994.1	4984.1	4974.1	101.0	111.0	121.0	20.0	3.0	124.0	5098.05	5095.1	4	13-Oct-95		731596	1874034
0944	MW	B	4979.9	4969.9	4959.9	85.0	95.0	105.0	20.0	2.0	107.0	5067.00	5064.9	4	04-Nov-95	28-Jul-99	732199	1873007
0947	MW	B	4990.0	4980.0	4970.0	105.0	115.0	125.0	20.0	3.3	128.3	5097.01	5095.0	4	03-Nov-95		732786	1874642
1126	EXT	B	4991.9	4971.9	4951.9	60.0	80.0	100.0	40.0	3.3	103.3	5051.9	** 5051.9	** 4	09-Sep-04		729517	1870728
1127	EXT	B	4984.2	4964.2	4944.2	72.7	92.7	112.7	40.0	3.3	116.0	5056.9	** 5056.9	** 4	11-Sep-04		730044	1871022
1128	EXT	B	4982.3	4962.3	4942.3	72.7	92.7	112.7	40.0	3.3	116.0	5055.0	** 5055.0	** 4	12-Sep-04		730679	1871294
1129	EXT	B	4990.9	4975.9	4960.9	68.2	83.2	98.2	30.0	3.3	101.5	5059.1	** 5059.1	** 4	30-Aug-04		731237	1871690
1130	EXT	B	4987.3	4962.3	4937.3	71.7	96.7	121.7	50.0	3.3	125.0	5059.0	** 5059.0	** 4	29-Jul-04		731699	1871907
1131	EXT	B	4998.1	4978.1	4958.1	59.7	79.7	99.7	40.0	3.3	103.0	5057.8	** 5057.8	** 4	08-Sep-04		732011	1872106
1132	EXT	B	5009.1	4984.1	4959.1	49.7	74.7	99.7	50.0	3.3	103.0	5058.8	** 5058.8	** 4	31-Aug-04		731310	1872015
1133	EXT	B	4999.4	4979.4	4959.4	59.7	79.7	99.7	40.0	3.3	103.0	5059.1	** 5059.1	** 4	02-Sep-04		730850	1871827
NMW-5	MW	C	4948.2	4938	4928.2	35.0	45.0	55.0	20.0	5.0	59.95	4985.85	4983.10	4	8-Oct-10		715095	1867920
0274	MW	C	4913.6	4903.6	4893.6	149.0	159.0	169.0	20.0	1.5	170.5	5064.42	5062.6	2	30-Aug-04		731623	1872403
0276	MW	C	4910.0	4900.0	4890.0	154.5	164.5	174.5	20.0	1.5	176.0	5067.55	5064.5	2	01-Sep-04		732081	1873158
0279	MW	C	4922.1	4917.1	4912.1	26.5	31.5	36.5	10.0	1.5	38.0	4951.04	4948.6	2	15-Aug-04		731494	1870132
0280	MW	C	4922.6	4917.6	4912.6	26.5	31.5	36.5	10.0	1.5	38.0	4951.52	4949.1	2	15-Aug-04		731794	1870289
0289	MW	C	4920.3	4915.3	4910.3	148.3	153.3	158.3	10.0	0.4	163.0	5070.82	5068.6	6	28-Mar-07		729965	1872709
0683	MW	C	4973.2	4948.2	4923.2	95.0	120.0	145.0	50.0	3.0	148.0	5070.64	5068.2	6	31-Aug-99		732661	1872574
0684	MW	C	4943.1	4917.4	4891.8	124.2	149.9	175.5	51.3	2.5	178.0	5070.05	5067.3	6	20-Aug-99		732642	1873521
0685	MW	C	4975.6	4949.7	4923.8	93.7	119.6	145.5	51.8	2.5	148.0	5072.44	5069.3	6	19-Aug-99		732295	1873760
0689	MW	C	4923.9	4903.9	4883.9	55.0	75.0	95.0	40.0	0.3	95.3	4981.63	4978.9	2	31-Mar-00		730439	1869893
0691	MW	C	4921.9	4901.9	4881.9	55.0	75.0	95.0	40.0	0.3	95.3	4979.41	4976.9	2	30-Mar-00		732124	1870872
0903	MW	C	4953.5	4943.5	4933.5	28.0	38.0	48.0	20.0	2.0	50.0	4983.33	4981.5	2	30-Oct-84		731314	1870829
0912	MW	C	4934.7	4914.7	4894.7	123.0	143.0	163.0	40.0	2.0	165.0	5059.97	5057.7	4	12-Aug-85		729324	1871942
0914	MW	C	4930.3	4921.8	4913.3	137.2	145.7	154.2	17.0	2.0	156.2	5070.10	5067.5	4	16-Aug-85		732723	1872119
0917	MW	C	4917.8	4907.8	4897.8	128.0	138.0	148.0	20.0	2.0	150.0	5048.02	5045.8	4	14-Aug-85		727255	1868642
0930	MW	C	4933.0	4918.0	4903.0	20.0	35.0	50.0	30.0	3.0	53.0	4954.96	4953.0	4	23-Oct-95		731257	1870099
0932	MW	C	4942.3	4932.3	4922.3	112.5	122.5	132.5	20.0	2.7	135.2	5057.32	5054.8	4	29-Oct-95		730900	1871401
1008	INJ	C	4926.8	4901.6	4876.4	55.6	80.8	106.0	50.4	2.5	108.5	4980.52	4982.3	6	23-Jul-99		730410	1869916
1116	EXT	C	4964.1	4912.5	4861.0	92.4	143.9	195.5	103.1	2.5	198.0	5053.74	5056.5	6	08-Aug-99		730350	1871702
1117	EXT	C	4965.3	4913.7	4862.1	92.3	143.9	195.5	103.2	2.5	198.0	5054.95	5057.6	6	11-Aug-99		729981	1871688
1118	EXT	C	4967.9	4915.1	4862.3	89.9	142.7	195.5	105.6	2.5	198.0	5055.11	5057.8	6	12-Aug-99		729756	1871695
NMW-7D	MW	D	4865.7	4863	4860.7	278.2	280.7	283.2	5.0	5.0	288.19	5147.13	5143.92	4	21-Sep-10		729017	1873387
0258	MW	D	4894.0	4874.0	4854.0	159.0	179.0	199.0	40.0	0.3	199.3	5055.56	5053.0	2	13-Apr-00		732452	1871996
0261	MW	D	4907.0	4887.0	4867.0	160.0	180.0	200.0	40.0	0.3	200.3	5069.69	5067.0	2	01-Apr-00		732565	1871578
0264	MW	D	4899.6	4879.6	4859.6	160.0	180.0	200.0	40.0	0.3	200.3	5062.19	5059.6	2	03-Apr-00		731569	1871746
0266	MW	D	4890.6	4870.6	4850.6	160.0	180.0	200.0	40.0	0.3	200.3	5053.32	5050.6	2	15-Apr-00		730380	1870941
0272	MW	D	4902.8	4892.8	4882.8	159.1	169.1	179.1	20.0	1.5	180.6	5064.24	5061.9	2	28-Aug-04		730112	1872389
0273	MW	D	4909.4	4899.4	4889.4	153.0	163.0	173.0	20.0	1.5	174.5	5064.74	5062.4	2	29-Aug-04		730922	1872397
0275	MW	D	4903.0	4893.0	4883.0	158.2	168.2	178.2	20.0	1.5	179.7	5062.64	5061.2	2	01-Sep-04		732092	1872586

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	Top of Casing Elev.	Ground Elev.	Well Diameter	Boring Started	Decommission Date	State Plane East	State Plane North
0277	MW	D	4884.0	4879.0	4874.0	95.7	100.7	105.7	10.0	1.5	107.2	4982.35	4979.7	2	12-Aug-04		731290	1870777
0278	MW	D	4862.9	4857.9	4852.9	90.5	95.5	100.5	10.0	1.5	102.0	4956.09	4953.4	2	14-Aug-04		731210	1870104
0690	MW	D	4893.3	4873.3	4853.3	55.0	75.0	95.0	40.0	0.3	95.3	4950.87	4948.3	2	30-Mar-00		731521	1870140
0692	MW	D	4895.6	4875.6	4855.6	55.0	75.0	95.0	40.0	0.3	95.3	4953.31	4950.6	2	05-Apr-00		731821	1870303
0695	MW	D	4919.3	4899.3	4879.3	55.0	75.0	95.0	40.0	0.3	95.3	4976.83	4974.3	2	06-Apr-00		732566	1870896
0904	MW	D	4873.8	4868.8	4863.8	28.0	33.0	38.0	10.0	2.0	40.0	4904.11	4901.8	2	07-Nov-84		731808	1868036
0915	MW	D	4897.8	4892.8	4887.8	170.0	175.0	180.0	10.0	2.0	182.0	5070.84	5067.8	4	24-Aug-85		732740	1872209
1003	INJ	D	4923.4	4898.4	4873.4	55.5	80.5	105.5	50.0	2.5	108.0	4976.58	4978.9	6	26-Jul-99		732101	1870898
1004	INJ	D	4918.1	4893.1	4868.1	45.5	70.5	95.5	50.0	2.5	98.0	4961.55	4963.6	6	27-Jul-99		731892	1870544
1005	INJ	D	4904.7	4879.7	4854.7	45.5	70.5	95.5	50.0	2.5	98.0	4947.83	4950.2	6	25-Jul-99		731496	1870168
1006	INJ	D	4903.7	4878.7	4853.7	45.7	70.7	95.7	50.0	2.5	98.2	4947.08	4949.5	6	24-Jul-99		731233	1869918
1007	INJ	D	4915.6	4890.5	4865.4	45.8	70.9	96.0	50.2	2.5	98.5	4958.56	4961.4	6	23-Jul-99		730770	1869861
1101	EXT	D	4974.2	4896.5	4818.9	96.1	173.8	251.5	155.4	2.5	254.0	5067.29	5070.4	6	24-Aug-99		732223	1872970
1102	EXT	D	4968.8	4893.8	4818.8	101.5	176.5	251.5	150.0	2.5	254.0	5066.76	5070.3	6	24-Aug-99		732225	1872670
1103	EXT	D	4962.3	4887.3	4812.3	100.0	175.0	250.0	150.0	2.5	252.5	5059.56	5062.3	6	30-Jul-99		731896	1872407
1104	EXT	D	4972.3	4894.8	4817.3	90.0	167.5	245.0	155.0	3.0	248.0	5059.57	5062.3	6	01-Aug-99		731527	1872404
1105	EXT	D	4972.1	4894.6	4817.1	90.0	167.5	245.0	155.0	3.0	248.0	5059.33	5062.1	6	02-Aug-99		731304	1872401
1106	EXT	D	4966.0	4888.7	4811.4	96.5	173.8	251.1	154.6	2.9	254.0	5059.73	5062.5	6	03-Aug-99		731081	1872400
1107	EXT	D	4971.2	4894.0	4816.8	91.1	168.3	245.5	154.4	2.5	248.0	5059.51	5062.3	6	03-Aug-99		730858	1872398
1108	EXT	D	4966.1	4891.1	4816.1	96.3	171.3	246.3	150.0	2.5	248.8	5059.62	5062.4	6	03-Aug-99		730634	1872396
1109	EXT	D	4972.1	4894.7	4817.3	90.3	167.7	245.1	154.8	2.9	248.0	5059.64	5062.4	6	04-Aug-99		730410	1872394
1110	EXT	D	4966.8	4891.8	4816.8	95.5	170.5	245.5	150.0	2.5	248.0	5059.47	5062.3	6	07-Aug-99		730187	1872392
1111	EXT	D	4971.9	4894.7	4817.5	90.7	167.9	245.1	154.4	2.5	247.6	5059.87	5062.6	6	06-Aug-99		729993	1872392
1112	EXT	D	4969.1	4891.6	4814.1	90.5	168.0	245.5	155.0	2.5	248.0	5057.08	5059.6	6	17-Aug-99		730494	1872064
1113	EXT	D	4968.7	4891.2	4813.7	90.5	168.0	245.5	155.0	2.5	248.0	5058.54	5059.2	6	17-Aug-99		730196	1872061
1114	EXT	D	4968.5	4891.0	4813.6	90.6	168.0	245.5	154.9	2.5	248.0	5056.25	5059.1	6	11-Aug-99		729896	1872057
1115	EXT	D	4968.6	4891.2	4813.7	90.5	168.0	245.5	155.0	2.5	248.0	5056.36	5059.2	6	07-Aug-99		729596	1872055
1119	EXT	D	4968.7	4893.7	4818.7	95.3	170.3	245.3	150.0	2.5	247.8	5061.19	5064.0	6	31-Jul-99		731894	1872667
1120	EXT	D	4971.0	4896.0	4821.0	95.5	170.5	245.5	150.0	2.5	248.0	5063.60	5066.5	6	28-Jul-99		731891	1872967
1121	EXT	D	4972.0	4897.0	4822.0	97.5	172.5	247.5	150.0	2.5	250.0	5066.61	5069.5	6	28-Jul-99		731889	1873267
1122	EXT	D	4973.4	4896.3	4819.2	96.9	174.0	251.1	154.2	2.9	254.0	5067.31	5070.3	6	26-Aug-99		732221	1873269
1123	EXT	D	4976.2	4899.2	4822.2	91.0	168.0	245.0	154.0	3.0	248.0	5064.54	5067.2	6	02-Sep-99		732508	1873222
1124	EXT	D	4978.7	4899.9	4821.1	87.9	166.7	245.5	157.6	2.5	248.0	5063.86	5066.6	6	23-Aug-99		732512	1872972
1125	EXT	D	4972.8	4897.8	4822.8	95.5	170.5	245.5	150.0	2.5	248.0	5065.47	5068.3	6	25-Aug-99		732515	1872671
NMW-9D	MW	E	4847.6	4845	4842.6	265.5	268	270.5	5.0	5.0	275.52	5115.92	5113.14	4	4-Oct-10		727573	1871587
0251	MW	E	4858.9	4808.9	4758.9	200.0	250.0	300.0	100.0	0.3	300.3	5061.25	5058.9	2	28-Apr-00		730215	1871999
0268	MW	E	4864.5	4814.5	4764.5	200.0	250.0	300.0	100.0	0.3	300.3	5067.24	5064.5	2	15-May-00		732301	1872430
0920	MW	E	4866.0	4846.0	4826.0	114.4	134.4	154.4	40.0	2.0	156.4	4982.97	4980.4	4	30-Jul-85		731262	1870737
0948	EXDS	E	4893.9	4803.9	4713.9	221.5	311.5	401.5	180.0	5.0	406.5	5117.80	5115.4	4	17-Oct-95		733915	1875516
0911	MW	F	4795.2	4775.2	4755.2	309.4	329.4	349.4	40.0	2.0	351.4	5106.96	5104.6	4	18-Jul-85		730265	1875920
0913	MW	G	4729.2	4709.2	4689.2	328.7	348.7	368.7	40.0	2.0	370.7	5060.16	5057.9	4	02-Aug-85		729327	1871871
0916	MW	G	4721.7	4716.7	4711.7	345.7	350.7	355.7	10.0	2.0	357.7	5070.00	5067.4	4	22-Aug-85		732811	1872146
0919	MW	G	4707.9	4702.9	4697.9	337.7	342.7	347.7	10.0	2.0	349.7	5048.56	5045.6	4	26-Aug-85		727353	1868654
0902	MW	H	4673.7	4668.7	4663.7	63.0	68.0	73.0	10.0	2.0	75.0	4737.42	4736.7	2	02-Dec-84		730179	1862292

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	Top of Casing Elev.	Ground Elev.	Well Diameter	Boring Started	Decommission Date	State Plane East	State Plane North
0252	MW	I	4658.9	4608.9	4558.9	400.0	450.0	500.0	100.0	0.4	500.4	5061.30	5058.9	4	26-Apr-00		730232	1871993
0254	MW	I	4662.7	4612.7	4562.7	400.0	450.0	500.0	100.0	0.4	500.4	5065.38	5062.7	4	03-May-00	13-Aug-05	730951	1872411
0256	MW	I	4664.0	4614.0	4564.0	400.0	450.0	500.0	100.0	0.4	500.4	5066.58	5064.0	4	13-May-00	14-Aug-05	732277	1872437
0921	MW	I	4663.7	4643.7	4623.7	313.2	333.2	353.2	40.0	2.0	355.2	4979.08	4976.9	4	22-Jul-85		731379	1870742
0253	MW	M	4458.8	4408.8	4358.8	600.0	650.0	700.0	100.0	0.4	700.4	5061.11	5058.8	4	18-Apr-00	11-Apr-01	730213	1871974
0255	MW	M	4462.3	4412.3	4362.3	600.0	650.0	700.0	100.0	0.4	700.4	5064.89	5062.3	4	01-May-00	12-Aug-05	730947	1872387
0257	MW	M	4463.4	4413.4	4363.4	600.0	650.0	700.0	100.0	0.4	700.4	5066.40	5063.4	4	11-May-00	11-Aug-05	732278	1872414
0968	EXDS	NA	5000.4	4699.9	4399.4	106.0	406.5	707.0	601.0	0.0	707.0	5107.00	5106.4	10	1-Feb-55		730180	1875689
0970	EXDS	NA	5007.7	4705.2	4402.7	100.0	402.5	705.0	605.0	0.0	705.0	5109.53	5107.7	10	1-Sep-55		730653	1876567
0971	EXDS	NA	4985.3	4693.8	4402.3	117.0	408.5	700.0	583.0	0.0	700.0	5104.00	5102.3	10	1-Nov-55		731590	1878306
0972	EXDS	NA	5039.7	4724.7	4409.7	100.0	415.0	730.0	630.0	0.0	730.0	5141.07	5139.7	10	1-Jun-56		728031	1877986

All dimensions in feet except well diameter in inches.

All depths are relative to ground surface.

* = Converted to extraction well in August 2005.

MW = monitoring well.

EXT = Groundwater remediation extraction well.

INJ = Groundwater remediation injection well.

EXDS = Extraction well domestic supply, completed in Navajo Sandstone. Four wells, previously owned by Rare Metals—0968, 0970, 0971, and 0972 (sampled in 1982 and 1985 only)—are located north of the site, near upgradient monitoring wells 0901, 0910, and 0911.

NMW = Wells owned by NNEPA

Well 0948 (single sampling in 1995), located about 1,500 ft east of the site, is used to supply the Tuba City site treatment facility with domestic non-potable water. Water levels are still measured annually at wells 0948, 0968, and 0970.

** = Approximate.

Appendix B

**Groundwater Sample Results for Contaminants of Concern:
August 2011, February 2012, and the Baseline Period**

This page intentionally left blank

Contents

Tables

Table B-1. Baseline, August 2011, and February 2012 Molybdenum Concentrations	B-1
Table B-2. Baseline, August 2011, and February 2012 Nitrate Concentrations (as NO ₃).....	B-4
Table B-3. Baseline, August 2011, and February 2012 Selenium Concentrations.....	B-7
Table B-4. Baseline, August 2011, and February 2012 Sulfate Concentrations	B-10
Table B-5. Baseline, August 2011, and February 2012 Uranium Concentrations.....	B-13

This page intentionally left blank

Table B-1. Baseline, August 2011, and February 2012 Molybdenum Concentrations

Well Number	Horizon	Baseline Molybdenum Concentration (mg/L)	Year Sampled, Baseline	August 2011 Molybdenum Concentration (mg/L)	February 2012 Molybdenum Concentration (mg/L)
0686	A	0.0015U	2002	0.0015	
0687	A	0.0113	2002	0.0026	
0688	A	0.0015U	2002	0.002	
0901	A	0.00078	2001	0.00054	0.000857BN
0906	A	0.0137	2002	0.0018	0.00913N
0929	A	0.0015U	2002	0.00029	0.000551BN
0940	A	0.0015U	2002	0.0015	0.00163BN
0941	A	0.0284	2002	0.026	0.0358N *
0945	A	0.0015U	2002	0.00062	
0946	A			0.00032	
0262	B	0.432	2001	0.75	0.839
0263	B	0.192	2001	0.041	0.0476
0265	B	0.00046	2001	0.00016U	0.000206B
0267	B	0.0015U	2002	0.00032U	0.000267B
0271	B	0.0015U	2002	0.00028	
0281	B			0.00055	0.00152B
0282	B			0.00041	0.000529B
0286	B			0.00058B	0.00124B
0287	B			0.12	0.134
0288	B			0.00011	0.000232B
0290	B			0.00022	0.000549BN
0908	B	0.0015U	2002	0.00039B	0.000522BN
0909	B	0.0015U	2002		
0910	B			0.00045	0.000765BN
0934	B	0.0015U	2002	0.0013	0.00292BN
0935	B	0.0015U	2002	0.00032U	0.000165NU
0936	B	0.0015U	2002		
0938	B	0.001U	1999	0.0034	0.0112N
0942	B	0.021	2002	0.0051	0.00931N
0943	B	0.0015U	2002	0.00051	
0947	B	0.0015U	2002	0.00041	
1129	B			1.1	
1130	B			0.051	
1132	B			2.8	1.96N
1133	B			0.012	
NMW-1A	B				0.000643BU
NMW-2A	B				0.000611BU
NMW-3A	B				0.00047BU
NMW-4A	B				0.00039BU
NMW-6S	B				0.000601BU
NMW-8S	B				0.000431BU
0274	C			0.00039	0.000507BU
0276	C			0.00043	0.000556BU
0279	C			0.00078	
0280	C			0.00046	
0289	C			0.00037	0.000938BNU
0683	C	0.0015U	2002	0.00046	
0684	C	0.0015U	2002	0.00042	
0685	C	0.0015U	2002	0.00035	
0689	C	0.0015U	2002	0.00035	

Table B-1 (continued). Baseline, August 2011, and February 2012 Molybdenum Concentrations

Well Number	Horizon	Baseline Molybdenum Concentration (mg/L)	Year Sampled, Baseline	August 2011 Molybdenum Concentration (mg/L)	February 2012 Molybdenum Concentration (mg/L)
0691	C	0.0015U	2002	0.00016U	0.000285BN
0903	C	0.0015U	2002	0.00023	
0912	C	0.0003U	2001	0.000055B	
0914	C	0.00081	2001	0.00085	
0917	C	0.0013	2001		
0930	C	0.0015U	2002	0.00016	0.000591BU
0932	C	0.0018U	2002	0.00029	0.000592BN
1008	C	0.0015U	2002		
1116	C	0.0015U	2002	0.00021	
1117	C	0.0015U	2002	0.00033	
1118	C	0.00063	2000	0.00016	
NMW-5	C				0.00113B
0258	D	0.0026	2001		
0261	D	0.0031	2001	0.00042	0.000639B
0264	D	0.00058	2001	0.00047	
0266	D			0.00032	0.000526B
0272	D			0.0002	0.00044B
0273	D			0.00022	0.000361BU
0275	D			0.02	0.025
0277	D			0.00032U	0.000398BU
0278	D	0.0015U	2002	0.00017	
0690	D	0.0015U	2002	0.0003	
0692	D	0.0015U	2002	0.00032	
0695	D	0.00077	2001	0.0003	
0904	D	0.00054	2001	0.00056	
0915	D	0.0004U	2000	0.00067	
1003	D	0.0004U	2000	0.00056	
1004	D	0.0004U	2000	0.00014	
1005	D	0.0004U	2000	0.00035	
1006	D	0.0015U	2002		
1007	D	0.0015U	2002	0.00029	
1101	D	0.0015U	2002		
1102	D	0.0916	2002	0.00032U	
1103	D	2.96	2002	0.005	
1104	D	1.26	2002	0.029	
1105	D	0.16	2002	1	
1106	D	0.0015U	2002	0.092	
1107	D	0.0015U	2002	0.097	
1108	D	0.0015U	2002	0.00043B	
1109	D	0.0015U	2002		
1110	D	0.0015U	2002		
1111	D	0.0015U	2002	0.00032U	
1112	D	0.0027	2002	0.00024B	
1113	D	0.0015U	2002	0.00037	
1114	D	0.0053	2002		
1115	D	0.0815	2002		
1119	D	0.105	2002	0.0027	
1120	D	0.0003U	2001	0.037	
1121	D	0.00081	2001		
1122	D	0.0015U	2002	0.00076B	
1124	D	0.0015U	2002	0.00032U	

Table B-1 (continued). Baseline, August 2011, and February 2012 Molybdenum Concentrations

Well Number	Horizon	Baseline Molybdenum Concentration (mg/L)	Year Sampled, Baseline	August 2011 Molybdenum Concentration (mg/L)	February 2012 Molybdenum Concentration (mg/L)
1125	D	0.0015U	2002	0.00032	
NMW-7D	D				0.000707BU
0251	E	0.0015U	2002	0.00019	0.000437B
0268	E	0.0015U	2002	0.00024	0.000484BU *
0920	E	0.0003U	2001	0.00023	
NMW-9D	E				0.00259B
0911	F			0.0002	
0913	G	0.0003U	2001	0.00011	
0916	G	0.00096	2001	0.00096	
0252	I	0.0015U	2002	0.00012	0.00031B
0921	I	0.0003U	2001	0.00017	

B = Result between instrument detection limit and contract required detection limit.

U = Analytical result below detection limit.

Values in red exceed the corresponding groundwater remediation target for molybdenum, 0.1 mg/L (see Table 1 of main report). Well numbers with groundwater concentrations greater than the remediation target during this reporting period are also listed in red.

* Denotes filtered sample. Samples are generally not filtered (as reflected above), except in cases when turbidity is greater than 10 nephelometric turbidity units (NTUs).

Table B-2. Baseline, August 2011, and February 2012 Nitrate Concentrations (as NO₃)

Well Number	Horizon	Baseline Nitrate Concentration (mg/L)	Year Sampled, Baseline	August 2011 Nitrate Concentration (mg/L)	February 2012 Nitrate Concentration (mg/L)
0686	A	32.2	2002	12	
0687	A	60.6	2002	9	
0688	A	35.1	2002	21	
0901	A	13	2001	16	14.2
0906	A	1470	2002	1550	2280
0929	A	69.5	2002	66	57.6
0940	A	1800	2002	1950	1970
0941	A	358	2002	1110	1140 *
0945	A	12.7	2002	20	
0946	A			7.1	
0262	B	380	2001	841	872
0263	B	1140	2001	1020	1150
0265	B	720	2001	664	726
0267	B	1640	2002	1330	1380
0271	B	15.6	2002	19	
0281	B			150	151
0282	B			180	196
0286	B			841	1180
0287	B			1240	1330
0288	B			220	214
0290	B			170	254
0908	B	651	2002	797	859
0909	B	485	2002		
0910	B			14	13.9
0934	B	2320	2002	1590	1580
0935	B	525	2002	1150	1190
0936	B	2950	2002		
0938	B	1450	1999	1460	1480
0942	B	1360	2002	620	651
0943	B	22.1	2002	9	
0947	B	12.5	2002	13	
1129	B			620	
1130	B			1240	
1132	B			1280	797
1133	B			140	
NMW-1A	B				14.3
NMW-2A	B				13.7
NMW-3A	B				13.6
NMW-4A	B				15.4
NMW-6S	B				15.4
NMW-8S	B				15.4
0274	C			16	14.8
0276	C			15	14.3
0279	C			42	
0280	C			11	
0289	C			170	122
0683	C	14.1	2002	14	
0684	C	13.9	2002	14	
0685	C	14.3	2002	15	
0689	C	14.3	2002	12	

Table B-2 (continued). Baseline, August 2011, and February 2012 Nitrate Concentrations (as NO₃)

Well Number	Horizon	Baseline Nitrate Concentration (mg/L)	Year Sampled, Baseline	August 2011 Nitrate Concentration (mg/L)	February 2012 Nitrate Concentration (mg/L)
0691	C	298	2002	270	285
0903	C	54.8	2002	58	
0912	C	403	2001	310	
0914	C	13	2001	12	
0917	C	15.7	2001		
0930	C	50.9	2002	66	79.7H
0932	C	25.3	2002	30	28.6
1008	C	15.7	2000		
1116	C	106	2002	17	
1117	C	225	2002	160	
1118	C	164	2002	160	
NMW-5	C				11.4
0258	D	15	2000	15	14.4
0261	D	14	2001	15	
0264	D	24.3	2001	44	45.6
0266	D	14	2001	15	14.2
0272	D			17	17.6
0273	D			190	197
0275	D			1110	1110
0277	D			14	
0278	D			14	
0690	D	12.5	2002	14	
0692	D	12.5	2002	10	
0695	D	25.4	2002	32	
0904	D	5.13	2001	4	
0915	D	14.1	2001	14	
1003	D	176	2000	270	
1004	D	49.1	2000	29	
1005	D	14.5	2000		
1006	D	14.1	2000	10	
1007	D	15.3	2000	15	
1101	D	438	2002		
1102	D	650	2002	664	
1103	D	1120	2002	797	
1104	D	993	2002	753	
1105	D	648	2002	1060	
1106	D	614	2002	430	
1107	D	1060	2002	708	
1108	D	1410	2002	487	
1109	D	798	2002		
1110	D	227	2002		
1111	D	421	2002	487	
1112	D	617	2002	220	
1113	D	143	2002	100	
1114	D	228	2002		
1115	D	766	2002		
1119	D	468	2002	160	
1120	D	493	2002	140	
1121	D	573	2002		
1122	D	954	2002	190	
1123	D	643	2002	71	

Table B-2 (continued). Baseline, August 2011, and February 2012 Nitrate Concentrations as (NO₃)

Well Number	Horizon	Baseline Nitrate Concentration (mg/L)	Year Sampled, Baseline	August 2011 Nitrate Concentration (mg/L)	February 2012 Nitrate Concentration (mg/L)
1124	D	781	2002	487	
1125	D	104	2002	37	
NMW-7D	D				14
0251	E	426	2002	14	15.1
0268	E	15.4	2002	75	210 *
0920	E	14.8	2001	15	
NMW-9D	E				7.7
0911	F			14	
0913	G	12.4	2001	13	
0916	G	11.6	2001	8.4	
0252	I	15.3	2002	10	10.4
0921	I	11	2001	11	

Values in red exceed the corresponding groundwater remediation target for nitrate (as NO₃), 44 mg/L (see Table 1 of main report). Well numbers with groundwater concentrations greater than the remediation target during this reporting period are also listed in red.

* Denotes filtered sample. Samples are generally not filtered (as reflected above), except in cases when turbidity is greater than 10 NTUs.

Table B-3. Baseline, August 2011, and February 2012 Seleniu Concentrations

Well Number	Horizon	Baseline Selenium Concentration (mg/L)	Year Sampled, Baseline	August 2011 Selenium Concentration (mg/L)	February 2012 Selenium Concentration (mg/L)
0686	A	0.0088	2002	0.0047	
0687	A	0.0145	2002	0.00056	
0688	A	0.0033	2002	0.0047	
0901	A	0.0024	2001	0.0029	0.00304B
0906	A	0.0335	2002	0.017	0.0488
0929	A	0.0028	2002	0.0023	0.00239B
0940	A	0.105	2002	0.064	0.0871
0941	A	0.0348	2002	0.11	0.126 *
0945	A	0.0035	2002	0.0037	
0946	A			0.00041	
0262	B	0.0621	2001	0.072	0.0963
0263	B	0.0632	2001	0.043	0.0489
0265	B	0.0071	2001	0.0068	0.00579
0267	B	0.0532	2002	0.049	0.0554
0271	B	0.0016	2002	0.0014	
0281	B			0.002	0.00167B
0282	B			0.0016	0.0015U
0286	B			0.027	0.0388
0287	B			0.098	0.0955
0288	B			0.0026	0.00183B
0290	B			0.0042	0.00795
0908	B	0.0163	2002	0.024	0.0252
0909	B	0.0224	2002		
0910	B			0.0015	0.00172B
0934	B	0.0116	2002	0.014	0.0075
0935	B	0.0195	2002	0.016	0.0172
0936	B	0.0869	2002		
0938	B	0.0432	1999	0.065	0.0767
0942	B	0.0348	2002	0.055	0.0616
0943	B	0.0021	2002	0.00026	
0947	B	0.0019	2002	0.0016	
1129	B			0.082	
1130	B			0.046	
1132	B			0.22	0.126
1133	B			0.015	
NMW-1A	B				0.0015U
NMW-2A	B				0.0015U
NMW-3A	B				0.0015U
NMW-4A	B				0.0015U
NMW-6S	B				0.0015U
NMW-8S	B				0.00175B
0274	C			0.0015	0.00231B
0276	C			0.0016	0.00236B
0279	C			0.0023	
0280	C			0.002	
0289	C			0.0022	0.00182B
0683	C	0.0022	2002	0.0018	
0684	C	0.0019	2002	0.0015	
0685	C	0.0017	2002	0.0018	
0689	C	0.0014	2002	0.0012	

Table B-3 (continued). Baseline, August 2011, and February 2012 Selenium Concentrations

Well Number	Horizon	Baseline Selenium Concentration (mg/L)	Year Sampled, Baseline	August 2011 Selenium Concentration (mg/L)	February 2012 Selenium Concentration (mg/L)
0691	C	0.0046	2002	0.0037	0.00341B
0903	C	0.0023	2002	0.0019	
0912	C	0.0137	2001	0.0066	
0914	C	0.0016	2001	0.0011	
0917	C	0.0017	2001		
0930	C	0.002	2002	0.0018	0.00249B
0932	C	0.0019	2002	0.0015	0.00179B
1008	C	0.0015	2000		
1116	C	0.0018	2002	0.0012	
1117	C	0.0028	2002	0.0049	
1118	C	0.0028	2002	0.0039	
NMW-5	C				0.00277B
0258	D	0.0018	2000	0.0016	0.0015U
0261	D	0.0021	2001	0.0017	
0264	D	0.0018	2001	0.0018	0.00208B
0266	D	0.0013	2001	0.001	0.0015U
0272	D			0.001	0.0015U
0273	D			0.016	0.0192
0275	D			0.034	0.0375
0277	D			0.0015	
0278	D			0.0011	
0690	D	0.0014	2002	0.0012	
0692	D	0.0022	2002	0.0014	
0695	D	0.0019	2002	0.0017	
0904	D	0.0131	2001	0.013	
0915	D	0.0019	2001	0.0016	
1003	D	0.003	2000	0.0037	
1004	D	0.0021	2000	0.0017	
1005	D	0.0014	2000		
1006	D	0.0013	2000	0.0012	
1007	D	0.0013	2000	0.0013	
1101	D	0.0188	2002		
1102	D	0.0121	2002	0.037	
1103	D	0.0613	2002	0.035	
1104	D	0.0344	2002	0.047	
1105	D	0.0871	2002	0.071	
1106	D	0.0925	2002	0.05	
1107	D	0.0903	2002	0.056	
1108	D	0.0704	2002	0.034	
1109	D	0.0372	2002		
1110	D	0.0081	2002		
1111	D	0.0172	2002	0.012	
1112	D	0.0154	2002	0.0052	
1113	D	0.0025	2002	0.0024	
1114	D	0.0035	2002		
1115	D	0.0362	2002		
1119	D	0.029	2002	0.011	
1120	D	0.0563	2002	0.013	
1121	D	0.0455	2002		
1122	D	0.0558	2002	0.025	
1123	D	0.0449	2002	0.014	
1124	D	0.0186	2002	0.033	

Table B-3 (continued). Baseline, August 2011, and February 2012 Selenium Concentrations

Well Number	Horizon	Baseline Selenium Concentration (mg/L)	Year Sampled, Baseline	August 2011 Selenium Concentration (mg/L)	February 2012 Selenium Concentration (mg/L)
1125	D	0.0025	2002	0.0023	
NMW-7D	D				0.0015U
0251	E	0.0035	2002	0.00086	0.0015U
0268	E	0.0018	2002	0.002	0.00246B *
0920	E	0.0014	2001	0.0013	
NMW-9D	E				0.00174B
0911	F			0.00094	
0913	G	0.00063	2001	0.00091	
0916	G	0.001	2001	0.00085	
0252	I	0.00092	2002	0.00072	0.0015U
0921	I	0.00091	2001	0.00087	

B = Result between instrument detection limit and contract required detection limit.

U = Analytical result below detection limit.

Values in red exceed the corresponding groundwater remediation target for selenium, 0.01 mg/L (see Table 1 of main report). Well numbers with groundwater concentrations greater than the remediation target during this reporting period are also listed in red.

* Denotes filtered sample. Samples are generally not filtered (as reflected above), except in cases when turbidity is greater than 10 NTUs.

Table B-4. Baseline, August 2011, and February 2012 Sulfate Concentrations

Well Number	Horizon	Baseline Sulfate Concentration (mg/L)	Year Sampled, Baseline	August 2011 Sulfate Concentration (mg/L)	February 2012 Sulfate Concentration (mg/L)
0686	A	98.6	2002	78	
0687	A	329	2002	24	
0688	A	40	2002	110	
0901	A	26.2	2001	36	26.1
0906	A	1660	2002	1600	2060
0929	A	28.1	2002	26	19.9
0940	A	7550	2002	8200	6490
0941	A	745	2002	1400	1390 *
0945	A	32.1	2002	31	
0946	A			20	
0262	B	931	2001	2000	1850
0263	B	1990	2001	2700	2840
0265	B	1520	2001	1100	1120
0267	B	3680	2002	3300	2990
0271	B	16.4	2002	14	
0281	B			140	132
0282	B			82	112
0286	B			2400	2850
0287	B			1700	1670
0288	B			230	234
0290	B			200	284
0908	B	2430	2002	2800	2620
0909	B	666	2002		
0910	B			14	14.3
0934	B	7360	2002	2800	2800
0935	B	2690	2002	2400	2350
0936	B	4360	2002		
0938	B	2120	1999	2600	2420
0942	B	3030	2002	3200	2990
0943	B	29	2002	17	
0947	B	18.7	2002	16	
1129	B			1100	
1130	B			2600	
1132	B			2200	1760
1133	B			150	
NMW-1A	B				12.6
NMW-2A	B				13.4
NMW-3A	B				11.4
NMW-4A	B				12.5
NMW-6S	B				14.8
NMW-8S	B				13
0274	C			15	15
0276	C			16	16.8
0279	C			59	
0280	C			20	
0289	C			190	109
0683	C	21.6	2002	17	
0684	C	18	2002	15	
0685	C	26.2	2002	20	
0689	C	13.7	2002	14	

Table B-4 (continued). Baseline, August 2011, and February 2012 Sulfate Concentrations

Well Number	Horizon	Baseline Sulfate Concentration (mg/L)	Year Sampled, Baseline	August 2011 Sulfate Concentration (mg/L)	February 2012 Sulfate Concentration (mg/L)
0691	C	587	2002	520	499
0903	C	76.5	2002	66	
0912	C	846	2001	520	
0914	C	15.6	2001	12	
0917	C	13.9	2001		
0930	C	59.8	2002	78	91.2
0932	C	30.2	2002	30	23.2
1008	C	13	2000		
1116	C	176	2002	14	
1117	C	255	2002	280	
1118	C	163	2002	250	
NMW-5	C				52.6
0258	D	17.4	2000	17	17.1
0261	D	18.2	2001	17	
0264	D	37.7	2001	76	73.5
0266	D	10.9	2001	10	10.4
0272	D			11	12.6
0273	D			170	206
0275	D			2800	2200
0277	D			16	
0278	D			12	
0690	D	13.8	2002	12	
0692	D	20.8	2002	15	
0695	D	50.4	2002	40	
0904	D	96.5	2001	92	
0915	D	17.8	2001	16	
1003	D	302	2000	520	
1004	D	66.2	2000	43	
1005	D	12.7	2000		
1006	D	12.2	2000	11	
1007	D	11.7	2000	12	
1101	D	960	2002		
1102	D	1320	2002	2000	
1103	D	2570	2002	2000	
1104	D	1870	2002	2400	
1105	D	1590	2002	2400	
1106	D	1050	2002	1100	
1107	D	1200	2002	1200	
1108	D	3400	2002	1500	
1109	D	3280	2002		
1110	D	512	2002		
1111	D	988	2002	1200	
1112	D	1140	2002	300	
1113	D	136	2002	100	
1114	D	328	2002		
1115	D	1930	2002		
1119	D	1560	2002	900	
1120	D	2330	2002	2300	
1121	D	2590	2002		
1122	D	2960	2002	1900	
1123	D	1240	2002	2200	

Table B-4 (continued). Baseline, August 2011, and February 2012 Sulfate Concentrations

Well Number	Horizon	Baseline Sulfate Concentration (mg/L)	Year Sampled, Baseline	August 2011 Sulfate Concentration (mg/L)	February 2012 Sulfate Concentration (mg/L)
1124	D	1170	2002	2100	
1125	D	165	2002	61	
NMW-7D	D				9.68
0251	E	617	2002	11	11.8
0268	E	17.4	2002	110	363 *
0920	E	12.7	2001	12	
NMW-9D	E				31.7
0911	F			8.8	
0913	G	8.43	2001	7.4	
0916	G	13.5	2001	8.4	
0252	I	19.2	2002	6.4	6.38
0921	I	8.52	2001	8.2	

Values in red exceed the corresponding groundwater remediation target for sulfate, 250 mg/L (see Table 1 of main report). Well numbers with groundwater concentrations greater than the remediation target during this reporting period are also listed in red.

* Denotes filtered sample. Samples are generally not filtered (as reflected above), except in cases when turbidity is greater than 10 NTUs.

Table B- . Baseline, August 2011, and February 2012 raniu Concentrations

Well Number	Horizon	Baseline Uranium Concentration (mg/L)	Year Sampled, Baseline	August 2011 Uranium Concentration (mg/L)	February 2012 Uranium Concentration (mg/L)
0686	A	0.0021	2002	0.0014	
0687	A	0.0208	2002	0.00016	
0688	A	0.002	2002	0.0021	
0901	A	0.0026	2001	0.0031	0.00353
0906	A	0.951	2002	0.51	0.43
0929	A	0.0012	2002	0.0015	0.00197
0940	A	0.546	2002	0.39	0.422
0941	A	0.0886	2002	0.23	0.234 *
0945	A	0.0031	2002	0.0013	
0946	A			0.000084	
0262	B	0.379	2001	0.81	0.774
0263	B	0.485	2001	0.16	0.141
0265	B	0.0897	2001	0.061	0.0627
0267	B	0.0731	2002	0.077	0.069
0271	B	0.0014	2002	0.0014	
0281	B			0.0074	0.00875
0282	B			0.0048	0.00695
0286	B			0.4	0.33
0287	B			0.24	0.238
0288	B			0.011	0.0128
0290	B			0.0089	0.041
0908	B	0.122	2002	0.083	0.0948
0909	B	0.0389	2002		
0910	B			0.0011	0.00155
0934	B	0.312	2002	0.17	0.176
0935	B	0.0868	2002	0.14	0.161
0936	B	0.267	2002		
0938	B	0.21	1999	0.37	0.396
0942	B	0.246	2002	0.4	0.413
0943	B	0.0049	2002	0.0062	
0947	B	0.0024	2002	0.0012	
1129	B			1	
1130	B			0.5	
1132	B			3.5	1.69
1133	B			0.064	
NMW-1A	B				0.00145
NMW-2A	B				0.00142
NMW-3A	B				0.0013
NMW-4A	B				0.00134
NMW-6S	B				0.0014
NMW-8S	B				0.00156
0274	C			0.0017	0.00202
0276	C			0.0015	0.00191
0279	C			0.0019	
0280	C			0.0014	
0289	C			0.015	0.0155
0683	C	0.0012	2002	0.0012	
0684	C	0.0019	2002	0.0013	
0685	C	0.0012	2002	0.0013	
0689	C	0.0011	2002	0.0012	

Table B- (continued). Baseline, August 2011, and February 2012 Uranium Concentrations

Well Number	Horizon	Baseline Uranium Concentration (mg/L)	Year Sampled, Baseline	August 2011 Uranium Concentration (mg/L)	February 2012 Uranium Concentration (mg/L)
0691	C	0.0657	2002	0.052	0.071
0903	C	0.0022	2002	0.0021	
0912	C	0.0342	2001	0.024	
0914	C	0.0013	2001	0.000041	
0917	C	0.0013	2001		
0930	C	0.0023	2002	0.0033	0.00475
0932	C	0.0016	2002	0.0022	0.00215
1008	C	0.001	2000		
1116	C	0.0081	2002	0.0018	
1117	C	0.0151	2002	0.011	
1118	C	0.0098	2002	0.013	
NMW-5	C				0.00507
0258	D	0.0018	2000	0.0013	0.00153
0261	D	0.0018	2001	0.0013	
0264	D	0.0033	2001	0.0035	0.00423
0266	D	0.0019	2001	0.0015	0.00223
0272	D			0.0014	0.00182
0273	D			0.035	0.0502
0275	D			0.42	0.469
0277	D			0.0024	
0278	D			0.0013	
0690	D	0.0018	2002	0.0016	
0692	D	0.0015	2002	0.0017	
0695	D	0.002	2002	0.002	
0904	D	0.0044	2001	0.0043	
0915	D	0.0017	2001	0.000029U	
1003	D	0.0205	2000	0.039	
1004	D	0.0053	2000	0.0049	
1005	D	0.0013	2000		
1006	D	0.0014	2000	0.0013	
1007	D	0.0012	2000	0.0014	
1101	D	0.245	2002		
1102	D	0.533	2002	0.54	
1103	D	0.355	2002	0.45	
1104	D	0.194	2002	1.4	
1105	D	2.1	2002	2.1	
1106	D	2.1	2002	2	
1107	D	0.118	2002	0.26	
1108	D	0.646	2002	0.76	
1109	D	0.565	2002		
1110	D	0.0528	2002		
1111	D	0.161	2002	0.16	
1112	D	0.13	2002	0.052	
1113	D	0.0149	2002	0.014	
1114	D	0.0277	2002		
1115	D	0.41	2002		
1119	D	0.555	2002	0.14	
1120	D	1.3	2002	0.13	
1121	D	0.857	2002		
1122	D	0.878	2002	0.2	
1123	D	0.261	2002	0.27	

Table B-5 (continued). Baseline, August 2011, and February 2012 Uranium Concentrations

Well Number	Horizon	Baseline Uranium Concentration (mg/L)	Year Sampled, Baseline	August 2011 Uranium Concentration (mg/L)	February 2012 Uranium Concentration (mg/L)
1124	D	0.171	2002	0.33	
1125	D	0.0176	2002	0.0073	
NMW-7D	D				0.0011
0251	E	0.0481	2002	0.0015	0.00194
0268	E	0.0014	2002	0.015	0.0845 *
0920	E	0.0017	2001	0.0014	
NMW-9D	E				0.00147
0911	F			0.0013	
0913	G	0.0016	2001	0.0012	
0916	G	0.0014	2001	0.000013	
0252	I	0.0024	2002	0.0019	0.00224
0921	I	0.0047	2001	0.0047	

B = Result between instrument detection limit and contract required detection limit.

Values in red exceed the corresponding groundwater remediation target for uranium, 0.044 mg/L (see Table 1 of main report). Well numbers with groundwater concentrations greater than the remediation target during this reporting period are also listed in red.

* Denotes filtered sample. Samples are generally not filtered (as reflected above), except in cases when turbidity is greater than 10 NTUs.

This page intentionally left blank

Appendix C

Nitrate, Sulfate, and Uranium Plume Maps

This page intentionally left blank

Figures

Figure C-1. Nitrate (mg/L as NO ₃) Plume Map: August 2011	C-1
Figure C-2. Sulfate (mg/L) Plume Map: August 2011	C-2
Figure C-3. Uranium (µg/L) Plume Map: July 2010	C-3

This page intentionally left blank

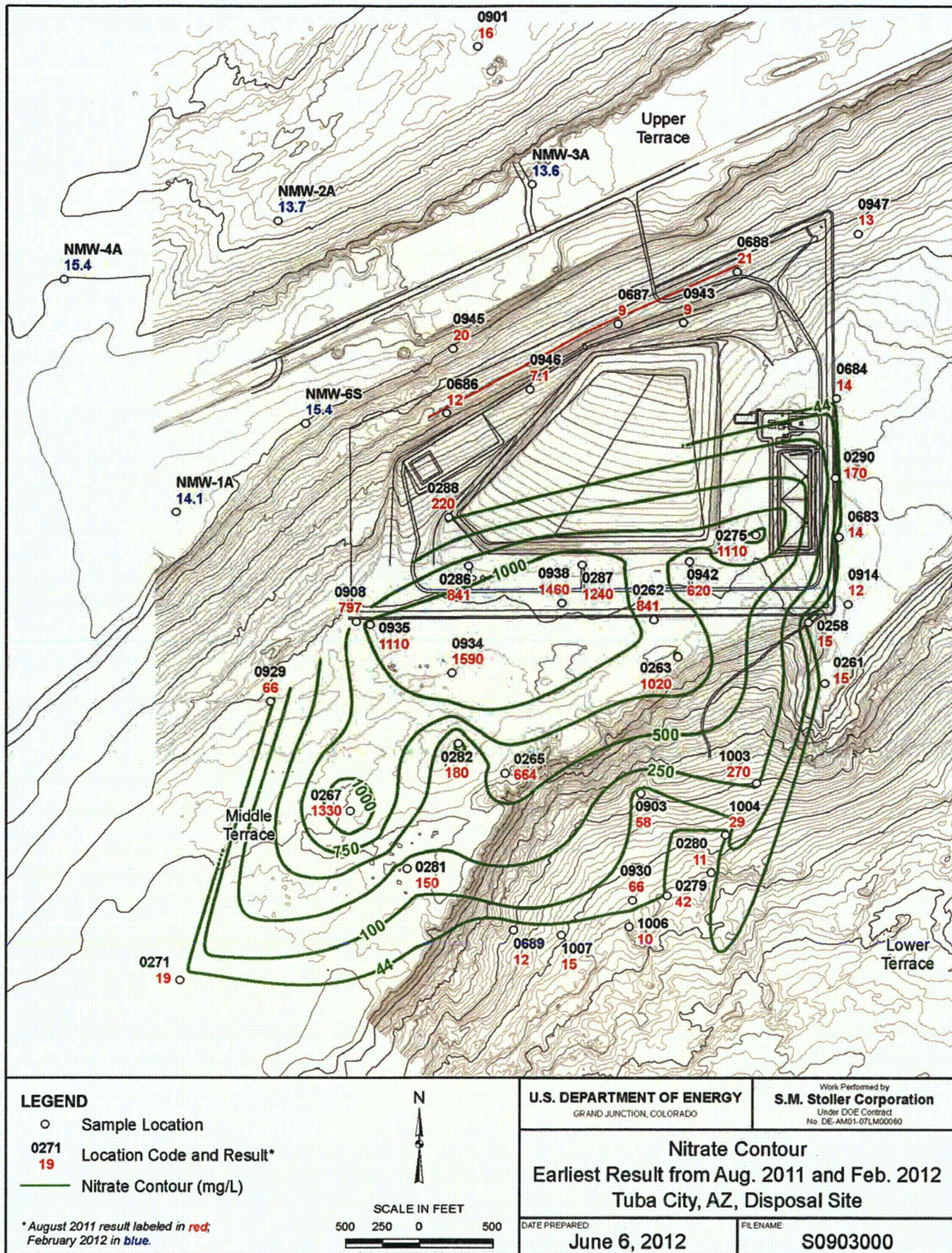
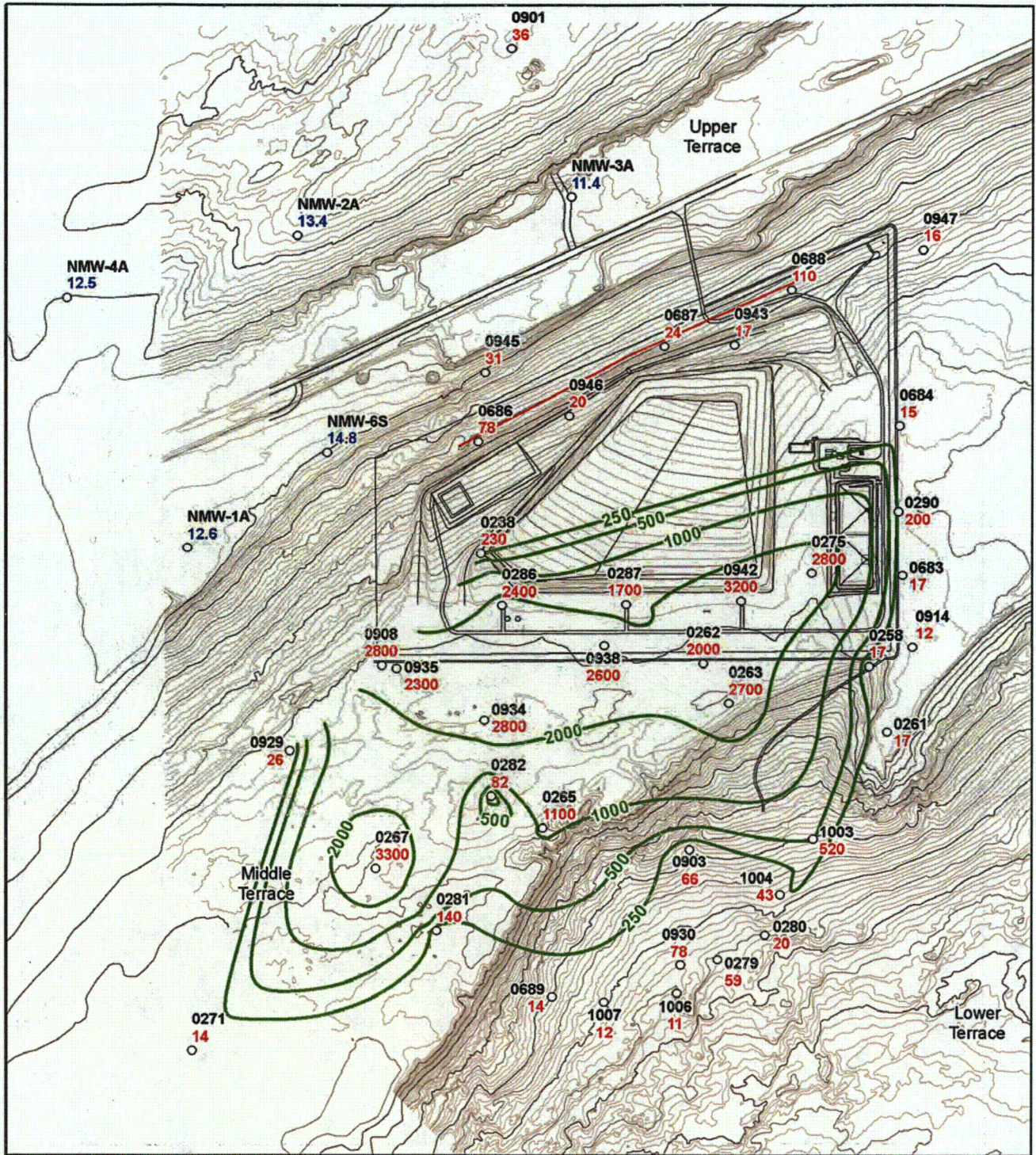


Figure C-1. Nitrate (mg/L as NO₃) Plume Map: August 2011



LEGEND ○ Sample Location 0271 14 Location Code and Result — Sulfate Contour (mg/L)	N SCALE IN FEET 500 250 0 500 1,000	U.S. DEPARTMENT OF ENERGY <small>GRAND JUNCTION, COLORADO</small>	<small>Work Performed by</small> S.M. Stoller Corporation <small>Under DOE Contract No. DE-AM01-07LM00060</small>
		Sulfate Contour Earliest Result from Aug. 2011 and Feb. 2012 Tuba City, AZ, Disposal Site	
<small>* August 2011 result labeled in red; February 2012 in blue.</small>	DATE PREPARED: June 6, 2012	FILENAME: S0903100	

M:\LTS\1111\0023\10\008\S09031\S0903100.mxd coatesc 06/06/2012 11:58:45 AM

Figure C-2. Sulfate (mg/L) Plume Map: August 2011

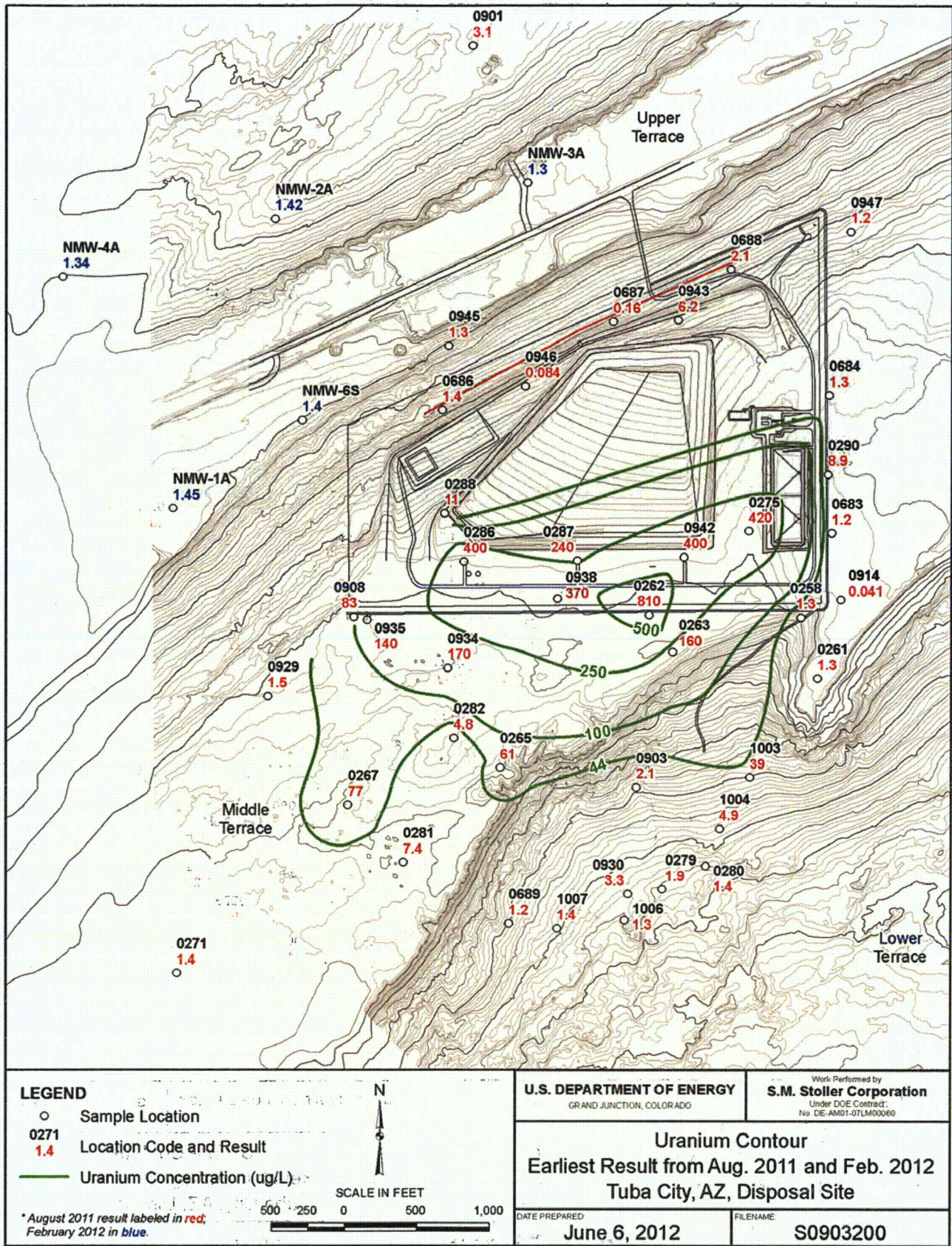


Figure C-3. Uranium ($\mu\text{g/L}$) Plume Map: July 2010

This page intentionally left blank