

TABLE A.1
Southwest Alluvium Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Cl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
EPA 28	N	7/9/1991	6,866.20	6.4	7.07	5350	477	463	208	10.1	551	2940	107	< 0.05	68	< 1	< 0.1	< 0.001
EPA 28	N	10/23/1991	6,865.40	6.4	7.5	5170	488	499	225	11.4	534	2792	114	0.28	52.3	< 1	< 0.1	< 0.001
EPA 28	N	1/23/1992	6,865.10	6.4	7.37	5268	490	448	213	10.2	583	2786	111	0.14	40.6	< 1	< 0.1	< 0.001
EPA 28	N	4/3/1992	6,865.30	6.5	7.46	4613	505	448	263	12.6	612	2934	110	0.22	72.1	< 1	< 0.1	< 0.001
EPA 28	N	7/16/1992	6,864.40	6.6	7.2	5042	517	489	246	13.6	561	2916	110	0.1	35.4	< 1	< 0.1	< 0.001
EPA 28	N	10/15/1992	6,863.20	6.7	7.21	5249	509	486	236	10.9	550	3015	106	< 0.05	55.5	< 1	< 0.1	< 0.001
EPA 28	N	1/12/1993	6,862.60	6.6	7.16	5095	546	482	244	13.9	584	2973	110	< 0.05	77.9	< 1	< 0.1	< 0.001
EPA 28	N	4/15/1993	6,863.00	6.7	7.49	5230	534	483	251	10	744	2981	122	0.08	63	< 1	< 0.1	< 0.001
EPA 28	N	7/21/1993	6,862.20	6.7	7.49	4999	546	474	249	12.5	561	2968	98.9	< 0.05	49.5	< 1	< 0.1	< 0.001
EPA 28	N	10/12/1993	6,859.60	7	7.18	5002	525	450	223	10.6	603	2913	109	< 0.05	48.6	< 1	< 0.1	< 0.001
EPA 28	N	1/11/1994	6,861.10	7	7.73	5378	544	473	236	10.6	562	3132	101	< 0.05	52.8	< 1	< 0.1	< 0.001
EPA 28	N	4/19/1994	6,860.90	6.7	7.71	5077	481	452	232	12.6	527	2901	108	0.06	56.2	< 1	< 0.1	< 0.001
EPA 28	N	7/27/1994	6,860.50	6.7	7.45	5476	611	527	197	12.7	559	3177	102	< 0.05	59.2	< 1	< 0.1	< 0.001
EPA 28	N	10/11/1994	6,860.00	6.7	7.69	5491	545	574	241	13	614	3325	97.5	0.06	38.6	< 1	< 0.1	< 0.001
EPA 28	N	1/11/1995	6,859.70	6.7	7.65	5614	510	576	202	12.9	586	3257	96.7	0.13	48.2	< 1	< 0.1	< 0.001
EPA 28	N	4/11/1995	6,859.70	6.7	7.39	5089	532	496	217	11.8	601	3028	124	0.15	28.6	< 1	< 0.1	< 0.001
EPA 28	N	7/11/1995	6,859.30	6.9	7.85	4851	535	505	219	11.5	554	2850	115	< 0.05	51.7	< 1	< 0.1	< 0.001
EPA 28	N	10/10/1995	6,858.80	6.9	7.94	4825	520	495	229	12	549	2802	101	< 0.05	47.2	< 1	< 0.1	< 0.001
EPA 28	N	1/9/1996	6,858.40	7	7.29	5029	535	520	207	11.6	528	2979	112	< 0.05	55.3	< 1	< 0.1	< 0.001
EPA 28	N	4/10/1996	6,858.00	7.1	7.73	5273	508	500	209	10.8	556	3165	124	0.07	48.5	< 1	< 0.1	0.002
EPA 28	N	7/17/1996	6,857.80	7	7.08	5267	525	550	227	12.1	531	3045	112	< 0.05	125	< 1	< 0.1	< 0.001
EPA 28	N	10/8/1996	6,857.60	7	7.23	5260	538	498	223	11.8	360	2849	108	0.07	47.3	< 1	< 0.1	< 0.001
EPA 28	N	1/28/1997	6,857.40	7	7.73	5270	545	500	194	11.2	642	2935	157	0.06	47.2	< 1	< 0.1	< 0.001
EPA 28	N	4/15/1997	6,857.30	7	7.61	5350	574	555	213	12.1	544	3280	116	< 0.05	52.6	< 1	< 0.1	< 0.001
EPA 28	N	7/15/1997	6,857.00	6.8	7.83	5360	539	506	206	11.7	531	2810	119	0.05	44.6	< 1	< 0.1	< 0.001
EPA 28	N	10/15/1997	6,857.10	6.7	7.83	5290	585	543	217	11.5	667	3010	145	0.05	49.5	< 1	< 0.1	< 0.001
EPA 28	N	1/20/1998	6,857.20	6.7	8.07	5330	531	514	224	12.8	540	3250	121	0.16	51.4	< 1	< 0.1	< 0.001
EPA 28	N	4/14/1998	6,856.90	7	7.41	5430	549	556	221	12.6	539	2990	95.4	< 0.05	44.5	< 1	< 0.1	< 0.001
EPA 28	N	7/14/1998	6,856.70	7	7.88	5630	538	543	228	12.8	544	2900	101	< 0.05	41.7	< 1	< 0.1	< 0.001
EPA 28	N	10/13/1998	6,858.40	6.82	7.94	5230	526	525	227	12.4	535	3050	104	0.11	39.5	< 1	< 0.1	< 0.001

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Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5.2	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
EPA 28	N	7/9/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.2	< 0.1	< 0.05	< 0.001	< 0.1	0.0302	1.4	1.1	2.5	< 0.2	< 1	2
EPA 28	N	10/23/1991	< 0.01	< 0.01	0.01	no data	0.21	< 0.1	< 0.05	< 0.001	< 0.1	0.05	0.7	< 1	0.7	< 0.2	< 1	< 1
EPA 28	N	1/23/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.23	< 0.1	< 0.05	0.001	< 0.1	0.024	0.8	3.5	4.3	< 0.2	2.7	< 1
EPA 28	N	4/3/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.23	< 0.1	< 0.05	0.008	< 0.1	0.019	0.2	1.4	1.6	< 0.2	< 1	< 1
EPA 28	N	7/16/1992	< 0.01	< 0.01	0.02	< 0.05	0.23	< 0.1	< 0.05	0.001	< 0.1	0.023	1.7	< 1	1.7	< 0.2	< 1	1.9
EPA 28	N	10/15/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.21	< 0.1	< 0.05	< 0.001	< 0.1	0.029	0.9	< 1	0.9	< 0.2	2.6	< 1
EPA 28	N	1/12/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.24	< 0.1	< 0.05	0.016	< 0.1	0.026	0.4	3.3	3.7	< 0.2	< 1	< 1
EPA 28	N	4/15/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.24	< 0.1	< 0.05	< 0.001	< 0.1	0.028	0.6	< 1	0.6	< 0.2	< 1	< 1
EPA 28	N	7/21/1993	< 0.01	< 0.01	0.01	< 0.05	0.25	< 0.1	< 0.05	< 0.001	< 0.1	0.029	0.5	< 1	0.5	< 0.2	< 1	< 1
EPA 28	N	10/12/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.24	< 0.1	< 0.05	0.001	< 0.1	0.038	1	< 1	1	< 0.2	2.8	< 1
EPA 28	N	1/11/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.27	< 0.1	< 0.05	< 0.001	< 0.1	0.027	0.3	4.3	4.6	< 0.2	< 1	7.7
EPA 28	N	4/19/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.32	< 0.1	< 0.05	< 0.001	< 0.1	0.026	7	< 1	7	< 0.2	2	7.2
EPA 28	N	7/27/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.25	< 0.1	< 0.05	0.002	< 0.1	0.019	0.05	< 1	0.05	< 0.2	< 1	< 1
EPA 28	N	10/11/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.26	< 0.1	< 0.05	< 0.001	< 0.1	0.024	3.7	< 1	3.7	< 0.2	< 1	3.9
EPA 28	N	1/11/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.3	< 0.1	< 0.05	< 0.001	< 0.1	0.026	1.3	3.6	4.9	< 0.2	2.6	6.9
EPA 28	N	4/11/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.27	< 0.1	< 0.05	< 0.001	< 0.1	0.025	0.4	< 1	0.4	< 0.2	< 1	< 1
EPA 28	N	7/11/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.25	< 0.1	< 0.05	0.002	< 0.1	0.026	1.3	< 1	1.3	< 0.2	1.6	6.9
EPA 28	N	10/10/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.23	< 0.1	< 0.05	0.002	< 0.1	0.027	0.8	1.2	2	0.5	< 1	1.5
EPA 28	N	1/9/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.29	< 0.1	< 0.05	0.005	< 0.1	0.027	0.6	< 1	0.6	< 0.2	< 1	< 1
EPA 28	N	4/10/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.27	< 0.1	< 0.05	< 0.001	< 0.1	0.033	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 28	N	7/17/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.22	< 0.1	< 0.05	< 0.001	< 0.1	0.032	1.8	< 1	1.8	< 0.2	< 1	< 1
EPA 28	N	10/8/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.27	< 0.1	< 0.05	< 0.001	< 0.1	0.038	1	< 1	1	< 0.2	< 1	< 1
EPA 28	N	1/28/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.27	< 0.1	< 0.05	< 0.001	< 0.1	0.023	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 28	N	4/15/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.24	< 0.1	< 0.05	0.005	< 0.1	0.022	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 28	N	7/15/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.19	< 0.1	< 0.05	0.001	< 0.1	0.025	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 28	N	10/15/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.23	< 0.1	< 0.05	0.002	< 0.1	0.035	< 0.2	4.9	4.9	< 0.2	5.5	< 1
EPA 28	N	1/20/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.23	< 0.1	< 0.05	< 0.001	< 0.1	0.028	0.7	< 1	0.7	< 0.2	< 1	< 1
EPA 28	N	4/14/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.31	< 0.1	< 0.05	< 0.001	< 0.1	0.0261	1.6	< 1	1.6	< 0.2	< 1	2.9
EPA 28	N	7/14/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.31	< 0.1	< 0.05	< 0.001	< 0.1	0.0431	0.7	< 1	0.7	< 0.2	< 1	< 1
EPA 28	N	10/13/1998	< 0.01	0.005	< 0.01	< 0.05	0.18	< 0.1	< 0.05	0.001	< 0.1	0.0315	< 0.2	< 1	0	< 0.2	< 1	< 1

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Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO ₃ mg/l	SO ₄ mg/l	Cl mg/l	NH ₄ as N mg/l	NO ₃ as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
EPA 28	N	1/12/1999	6,917.90	6.9	8.02	5380	468	504	204	12.8	538	3100	101	0.08	43.7	< 1	< 0.1	< 0.001
EPA 28	N	4/13/1999	6,857.70	6.8	8.05	5360	544	550	214	11.9	533	2930	106	0.08	45.1	< 1	< 0.1	< 0.001
EPA 28	N	7/20/1999	6,856.36	6.9	7.94	5390	528	556	235	15	557	3010	106	0.05	40	< 1	< 0.1	< 0.001
EPA 28	N	10/12/1999	6,857.30	6.9	7.98	5210	532	518	190	11.3	542	2930	108	< 0.05	40.4	< 1	< 0.1	< 0.001
EPA 28	N	1/11/2000	6,856.80	6.8	8.07	5280	498	514	192	12.8	534	2820	99.6	0.05	39.1	< 1	< 0.1	< 0.001
EPA 28	N	5/9/2000	6,856.60	6.6	7.77	5080	503	477	201	11.3	635	2600	115	< 0.05	49.5	< 1	< 0.1	< 0.001
EPA 28	N	7/17/2000	6,856.40	6.66	7.7	5190	534	499	195	11.4	636	2570	119	< 0.05	46.1	< 1	< 0.1	< 0.001
EPA 28	N	10/9/2000	6,856.15	6.9	7.7	5110	460	446	210	13.4	637	2500	110	0.16	52.3	< 1	< 0.1	< 0.001
EPA 28	N	1/8/2001	6,856.15	6.88	7.66	5110	538	512	179	11.4	633	2850	116	< 0.05	51	< 1	< 0.1	< 0.001
EPA 28	N	2/5/2001	6,856.40	7.01	7.56	5090	615	567	178	12.2	636	3060	107	< 0.05	47.6	< 1	0.6	< 0.001
EPA 28	N	3/5/2001	6,856.35	7.56	7.53	4670	535	515	155	12.3	644	2910	103	< 0.05	49.4	< 1	< 0.1	< 0.001
EPA 28	N	4/10/2001	6,856.70	7.13	7.42	4950	596	546	188	12.1	650	3010	117	< 0.05	50.1	< 1	< 0.1	< 0.001
EPA 28	N	5/8/2001	6,856.70	6.81	7.62	5120	520	489	190	11.5	647	2480	118	0.09	53.6	< 1	< 0.1	< 0.001
EPA 28	N	6/5/2001	6,856.75	6.84	7.35	4510	546	532	191	10.3	635	2870	113	0.07	42.3	< 1	< 0.1	< 0.001
EPA 28	N	7/10/2001	6,856.90	6.94	7.33	5220	554	542	208	11.6	628	2690	97	0.05	48.3	< 1	< 0.1	< 0.001
EPA 28	N	8/7/2001	6,856.90	6.72	7.7	5220	510	500	190	12	625	2600	120	0.05	42	< 1	< 0.1	< 0.001
EPA 28	N	9/11/2001	6,857.05	6.74	7.5	5100	520	500	186	12.1	649	2600	143	0.05	55	< 1	< 0.1	< 0.001
EPA 28	N	10/1/2001	6,857.25	6.86	7.4	5210	510	500	184	12.2	652	2500	148	0.05	48.8	< 1	< 0.1	< 0.001
EPA 28	N	11/6/2001	6,857.25	6.75	7.6	5190	554	525	193	12.8	644	2820	143	0.05	50	< 1	< 0.1	< 0.001
EPA 28	N	12/4/2001	6,857.40	6.91	7.5	5190	517	488	170	11	645	2560	123	0.05	48	< 1	< 0.1	< 0.001
EPA 28	N	1/8/2002	6,857.40	6.96	7.5	5170	603	538	182	12.3	658	3010	150	< 0.05	44.8	< 1	< 0.1	< 0.001
EPA 28	N	2/5/2002	6,857.60	7.01	7.5	5230	586	515	193	12.2	652	2830	136	0.1	43.1	< 1	< 0.1	< 0.001
EPA 28	N	3/5/2002	6,857.50	6.81	7.6	5160	549	508	208	12.4	682	2870	137	0.05	45.9	< 1	< 0.1	< 0.001
EPA 28	N	4/2/2002	6,857.70	6.74	7.65	5140	572	520	206	13.6	675	2960	134	0.06	42.1	< 1	< 0.1	< 0.001
EPA 28	N	5/7/2002	6,857.65	6.8	7.58	5200	546	507	210	13.1	652	2780	119	< 0.05	43.9	< 1	< 0.1	< 0.001
EPA 28	N	6/4/2002	6,857.79	6.74	7.83	5150	531	485	192	11.4	656	2660	116	0.07	44.9	< 1	< 0.1	< 0.001
EPA 28	N	7/9/2002	6,857.60	6.8	7.58	5250	549	524	202	13.1	683	2850	120	< 0.05	43.4	< 1	< 0.1	< 0.001
EPA 28	N	10/8/2002	6,857.33	6.77	7.6	5190	504	480	192	11.2	675	2680	113	0.05	45.3	< 1	< 0.1	< 0.001
EPA 28	N	1/7/2003	6,857.39	7.62	7.46	5130	554	536	218	9.9	694	2900	135	0.12	41.8	< 1	< 0.1	< 0.001
EPA 28	N	4/8/2003	6,857.49	6.68	7.02	5230	529	480	205	15.5	695	2500	131	0.08	46	< 1	< 0.1	< 0.001

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Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5.2	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
EPA 28	N	1/12/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.3	< 0.1	< 0.05	< 0.001	< 0.1	0.0324	0.6	< 1	0.6	< 0.2	< 1	< 1
EPA 28	N	4/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.32	< 0.1	< 0.05	< 0.001	< 0.1	0.0251	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 28	N	7/20/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.26	< 0.1	< 0.05	0.001	< 0.1	0.0282	0.6	< 1	0.6	< 0.2	< 1	1.6
EPA 28	N	10/12/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.17	< 0.1	< 0.05	< 0.001	< 0.1	0.03	0.7	< 1	0.7	< 0.2	< 1	< 1
EPA 28	N	1/11/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.31	< 0.1	< 0.05	0.001	< 0.1	0.0256	1.8	3.4	5.2	< 0.2	< 1	3
EPA 28	N	5/9/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.5	< 0.1	< 0.05	< 0.001	< 0.1	0.0445	0.5	2	2.5	< 0.2	14.2	< 1
EPA 28	N	7/17/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.39	< 0.1	< 0.05	< 0.001	< 0.1	0.0375	< 0.2	1.8	1.8	< 0.2	< 1	< 1
EPA 28	N	10/9/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.37	< 0.1	< 0.05	< 0.001	< 0.1	0.042	< 0.2	1.3	1.3	< 0.2	< 1	< 1
EPA 28	N	1/8/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.42	< 0.1	< 0.05	< 0.001	< 0.1	0.039	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 28	N	2/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.42	< 0.1	< 0.05	< 0.001	< 0.1	0.042	0.5	< 1	0.5	< 0.2	< 1	< 1
EPA 28	N	3/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.45	< 0.1	< 0.05	< 0.001	< 0.1	0.0398	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 28	N	4/10/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.43	< 0.1	< 0.05	< 0.001	< 0.1	0.037	0.5	2	2.5	< 0.2	< 1	< 1
EPA 28	N	5/8/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.47	< 0.1	< 0.05	< 0.001	< 0.1	0.042	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 28	N	6/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.47	< 0.1	< 0.05	0.001	< 0.1	0.038	0.4	< 1	0.4	< 0.2	< 1	< 1
EPA 28	N	7/10/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.48	< 0.1	< 0.05	< 0.001	< 0.1	0.0403	0.7	< 1	0.7	< 0.2	< 1	< 1
EPA 28	N	8/7/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.48	< 0.1	< 0.05	< 0.001	< 0.1	0.043	0.4	2.4	2.8	< 0.2	< 1	< 1
EPA 28	N	9/11/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.42	< 0.1	< 0.05	< 0.001	< 0.1	0.037	0.3	< 1	0.3	< 0.2	< 1	< 1
EPA 28	N	10/1/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.4	< 0.1	< 0.05	< 0.001	< 0.1	0.0374	0.7	< 1	0.7	< 0.2	< 1	< 1
EPA 28	N	11/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.44	< 0.1	< 0.05	< 0.001	< 0.1	0.0354	0.6	< 1	0.6	< 0.2	< 1	< 1
EPA 28	N	12/4/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.42	< 0.1	< 0.05	< 0.001	< 0.1	0.0358	0.2	< 1	0.2	< 0.2	< 1	< 1
EPA 28	N	1/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.43	< 0.1	< 0.05	< 0.001	< 0.1	0.036	0.6	< 1	0.6	< 0.2	< 1	< 1
EPA 28	N	2/5/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.44	< 0.1	< 0.05	< 0.001	< 0.1	0.0291	0.7	< 1	0.7	< 0.2	< 1	< 1
EPA 28	N	3/5/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.59	< 0.1	< 0.05	< 0.001	< 0.1	0.0519	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 28	N	4/2/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.46	< 0.1	< 0.05	< 0.001	< 0.1	0.0397	0.7	2.2	2.9	< 0.2	< 1	< 1
EPA 28	N	5/7/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.47	< 0.1	< 0.05	< 0.001	< 0.1	0.0388	0.9	< 1	0.9	< 0.2	< 1	< 1
EPA 28	N	6/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.5	< 0.1	< 0.05	< 0.001	< 0.1	0.0378	< 0.2	2.5	2.5	< 0.2	< 1	< 1
EPA 28	N	7/9/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.41	< 0.1	< 0.05	< 0.001	< 0.1	0.0464	0.8	< 1	0.8	< 0.2	< 1	< 1
EPA 28	N	10/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.44	< 0.1	< 0.05	< 0.001	< 0.1	0.0329	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 28	N	1/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.5	< 0.1	< 0.05	< 0.001	< 0.1	0.0503	0.8	3.7	4.5	< 0.2	< 1	< 1.0
EPA 28	N	4/8/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.48	< 0.1	< 0.05	< 0.001	< 0.1	0.0464	< 0.2	5.3	5.3	< 0.2	< 1	< 1.0

TABLE A.1
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Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO ₃ mg/l	SO ₄ mg/l	Cl mg/l	NH ₄ as N mg/l	NO ₃ as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
EPA 28	N	7/7/2003	6,857.48	6.54	7.53	5090	493	471	193	13.5	689	2690	121	0.1	42	< 1	< 0.1	< 0.001
EPA 28	N	10/7/2003	6,857.10	6.54	7.87	5270	698	544	222	12.6	677	3730	127	0.27	38.8	< 1	< 0.1	< 0.001
EPA 28	N	1/6/2004	6,857.22	6.78	7.52	5170	537	510	196	11.7	721	2860	129	0.1	42.8 D	< 1.0	0.2	< 0.001
EPA 28	N	4/6/2004	6,857.39	7.4	7.05	5220	539	512	175	11.4	710	2800 D	116	0.21	41.5 D	< 1	< 0.1	< 0.001
EPA 28	N	7/13/2004	6,857.16	6.57	7.01	5300	555	508	218	12.9	708	2810 D	125	0.18	38.4 D	< 1.0	< 0.1	< 0.001
EPA 28	N	10/5/2004	6,856.79	6.63	7.22	5460	528 D	498 D	224	12.2	684	2750 D	125	< 0.05	36.8 D	< 1.0	< 0.1	< 0.001
EPA 28	N	1/4/2005	6,856.96	6.92	7.22	5280	560 D	521 D	213	11.7	702	2750 D	118	0.07	39.1 D	< 1.0	< 0.1	< 0.001
EPA 28	N	4/5/2005	6,856.94	6.84	7.55	5170	554	516	214	11.9	724	2750	127	< 0.05	38.4	< 1.0	< 0.1	< 0.001
EPA 28	N	7/12/2005	6,856.75	6.74	7.51	5110	595 D	534 D	207	11.8	702	2900 D	139	< 0.05	37.1 D	< 1.0	< 0.1	< 0.001
EPA 28	N	10/4/2005	6,856.53	6.75	7.3	5150	544 D	513 D	215	12.2	671	2900 D	136	< 0.05	28 D	< 1.0	< 0.1	< 0.001
EPA 28	N	1/10/2006	6,856.66	6.85	7.61	5070	508	464	209	9.9	762	2560 D	114	0.07	38.3 D	< 1.0	< 0.1	< 0.001
EPA 28	N	4/4/2006	6,856.51	6.67	7.25	5020	571 D	533 D	210	12.4	732	2800 D	134	< 0.05	40 D	< 1.0	< 0.1	< 0.001
EPA 28	N	7/18/2006	6,856.21	6.69	7.2	4940	558 D	522 D	226	12.6	669	3020 D	126	< 0.05	36.1 D	< 1.0	< 0.1	< 0.001
EPA 28	N	10/3/2006	6,856.13	6.69	7.02	4990	535 D	484 D	199	11.8	672	2670 D	102	0.09	35.9 D	< 0.5	< 0.1	< 0.001
EPA 28	N	1/9/2007	6,856.31	6.84	7.08	5190	544 D	497 D	208	12.3	738	2740 D	119	0.07	35.2 D	< 0.5	< 0.1	< 0.001
EPA 28	N	4/10/2007	6,856.44	6.78	7.02	5160	545 D	504 D	197	13.2	744	2800 D	119	0.06	37.2 D	< 0.5	< 0.1	< 0.001
EPA 28	N	7/10/2007	6,856.11	6.69	7.08	4990	577 D	521 D	216	12	767	2930 D	116	< 0.05	39 D	< 0.5	< 0.1	0.008
EPA 28	N	10/2/2007	6,855.91	6.67	6.88	5040	506 D	465 D	211 D	13.3	795	2600 D	141 D	< 0.05	36 D	< 0.5	< 0.1	< 0.001
EPA 28	Dup	10/2/2007	6,855.75	6.7	7.06	5000	493 D	460 D	221 D	12.8	719	2650 D	139 D	< 0.05	29 D	< 0.5	< 0.1	< 0.001
EPA 28	N	1/15/2008	6,856.01	6.74	6.93	5190	534 D	485 D	215 D	13.6	752	2670 D	148 D	< 0.05	34.6 D	< 0.5	< 0.1	< 0.001
EPA 28	Dup	1/15/2008	6,855.76	6.79	6.61	5140	517 D	470 D	219 D	12.9	688	2680 D	145 D	< 0.05	28.1 D	< 0.5	< 0.1	< 0.001
EPA 28	N	4/8/2008	6,856.16	6.65	7.08	4930	578 D	546 D	244 D	13.0 D	722	2920 D	114	< 0.1 D	48.5 D	< 0.5	< 0.1	< 0.001
EPA 28	Dup	4/8/2008	6,855.96	6.65	7	4890	566 D	535 D	248 D	12.2 D	632	3000 D	114	< 0.1 D	43.2 D	< 0.5	< 0.1	< 0.001
EPA 28	N	7/8/2008	6,855.91	6.53	7.3	4870	542	492	203 D	11	715	2830 D	121	< 0.05	32.9 D	< 0.5	< 0.1	< 0.003
EPA 28	Dup	7/8/2008	6,855.66	6.53	6.94	4790	534	478	214 D	11	653	2920 D	122	< 0.05	28.9	< 0.5	< 0.1	< 0.003
EPA 28	N	10/7/2008	6,855.56	6.81	7.05	4990	546	478	204 D	11	785	3060 D	110	0.2	51.8	< 0.5	0.2	< 0.001
EPA 28	Dup	10/7/2008	6,855.31	6.75	7.07	4970	541	478	207 D	11	764	3060 D	110	< 0.1 D	45.2	< 0.5	< 0.1	< 0.001
EPA 28	N	1/13/2009	6,855.46	6.73	6.89	5190	591	528	237	13	796	2770 D	113	< 0.05	47.8 D	< 0.5	< 0.1	< 0.001
EPA 28	Dup	1/13/2009	no data		6.84	5140	563	496	241	12	664	2730 D	113	< 0.05	35.5	< 0.5	< 0.1	< 0.001
EPA 28	N	4/7/2009	6,855.41	6.68	6.84	5130	517 D	465 D	229 D	11	817	2790 D	120	< 0.05	34.7 D	< 0.50	< 0.1	< 0.001

TABLE A.1
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Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5.2	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
EPA 28	N	7/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.49	< 0.1	< 0.05	< 0.001	< 0.1	0.0401	< 0.2	< 1	0	< 0.2	< 1	< 1.0
EPA 28	N	10/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.47	< 0.1	< 0.05	< 0.001	< 0.1	0.0386	0.3	< 1	0.3	< 0.2	< 1	< 1.0
EPA 28	N	1/6/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.55	< 0.1	< 0.05	< 0.001	< 0.1	0.0394 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
EPA 28	N	4/6/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.51	< 0.1	< 0.05	< 0.001	< 0.1	0.0421 D	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 28	N	7/13/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.48	< 0.1	< 0.05	< 0.001	< 0.1	0.0403 D	0.5	< 1.0	0.5	< 0.2	< 1.0	< 1.0
EPA 28	N	10/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.51	< 0.1	< 0.05	< 0.001	< 0.1	0.0368 D	0.3	< 1.0	0.3	< 0.2	< 1.0	1.2
EPA 28	N	1/4/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.5	< 0.1	< 0.05	< 0.001	< 0.1	0.0445	0.6	< 1.0	0.6	< 0.2	< 1.0	2.1
EPA 28	N	4/5/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.5	< 0.1	< 0.05	< 0.001	< 0.1	0.0459	0.7	< 1.0	0.7	< 0.2	< 1.0	< 1.0
EPA 28	N	7/12/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.55	< 0.1	< 0.05	< 0.001	< 0.1	0.0418	0.6	< 1.0	0.6	< 0.2	< 1.0	1.2
EPA 28	N	10/4/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.52	< 0.1	< 0.05	< 0.001	< 0.1	0.0408	0.4	1.4	1.8	< 0.2	< 1.0	1.4
EPA 28	N	1/10/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.57	< 0.1	< 0.05	< 0.001	< 0.1	0.0476	< 0.2	1.5	1.5	< 0.2	< 1.0	< 1.0
EPA 28	N	4/4/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.61	< 0.1	< 0.05	< 0.001	< 0.1	0.0420 D	0.6	2.4	3	< 0.2	< 1.0	< 1.0
EPA 28	N	7/18/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.58	< 0.1	< 0.05	< 0.001	< 0.1	0.0435	0.8	3	3.8	< 0.2	< 1.0	1.3
EPA 28	N	10/3/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.59	< 0.1	< 0.05	< 0.001	< 0.1	0.0437	0.6	< 1	0.6	< 0.2	< 1	< 1
EPA 28	N	1/9/2007	< 0.01	< 0.005	< 0.01	< 0.05	0.59	< 0.1	< 0.05	< 0.001	< 0.1	0.0459	0.6	< 1	0.6	< 0.2	< 1	< 1
EPA 28	N	4/10/2007	< 0.01	< 0.005	< 0.01	< 0.05	0.58	< 0.1	< 0.05	< 0.001	< 0.1	0.043	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 28	N	7/10/2007	< 0.01	< 0.005	< 0.01	< 0.05	0.54	< 0.1	< 0.05	< 0.001	< 0.1	0.0496	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 28	N	10/2/2007	< 0.01	< 0.005	< 0.01	< 0.05	0.7	< 0.1	< 0.05	< 0.001	< 0.1	0.0506	< 0.2	< 1	0	< 0.2	< 1	1.2
EPA 28	Dup	10/2/2007	< 0.01	< 0.005	< 0.01	< 0.05	0.55	< 0.1	< 0.05	< 0.001	< 0.1	0.0399	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 28	N	1/15/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.58	< 0.1	< 0.05	< 0.001	< 0.1	0.0429	0.6	< 1	0.6	< 0.2	< 1	< 1
EPA 28	Dup	1/15/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.5	< 0.1	< 0.05	< 0.001	< 0.1	0.0364	< 0.2	< 1	0	< 0.2	< 1	1.2
EPA 28	N	4/8/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.6	< 0.1	< 0.05	< 0.001	< 0.1	0.0445	0.1 U	0.7 U	0.8	-0.1 U	-4.5 U	1.5
EPA 28	Dup	4/8/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.52	< 0.1	< 0.05	< 0.001	< 0.1	0.0398	0.2	0.5 U	0.7	-0.1 U	0 U	1.3
EPA 28	N	7/8/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.62	< 0.1	< 0.05	< 0.001	< 0.1	0.0402	0.58	1.2 U	1.78	0.4	0.1 U	0.4 U
EPA 28	Dup	7/8/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.52	< 0.1	< 0.05	< 0.001	< 0.1	0.0351	0.68	1.3	1.98	0 U	1.3 U	0.3 U
EPA 28	N	10/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.68	< 0.1	< 0.05	< 0.001	< 0.1	0.0476	0.2	1 U	1.2	-0.5 U	-0.6 U	0.6 U
EPA 28	Dup	10/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.63	< 0.1	< 0.05	< 0.001	< 0.1	0.0433	0.17 U	0.89 U	1.06	0.6	0.7 U	1.5
EPA 28	N	1/13/2009	< 0.01	< 0.005	< 0.01	< 0.05	0.69	< 0.1	< 0.05	< 0.001	< 0.1	0.0459	0.28	0.68 U	0.96	-0.1 U	-2 U	1.4
EPA 28	Dup	1/13/2009	< 0.01	< 0.005	< 0.01	< 0.05	0.59	< 0.1	< 0.05	< 0.001	< 0.1	0.0387	0.25	0.72 U	0.97	0.1 U	-0.6 U	1.6
EPA 28	N	4/7/2009	< 0.01	< 0.005	< 0.01	< 0.05	0.66	< 0.1	< 0.05	0.001	< 0.1	0.0519	0.27	1	1.27	-0.03 U	-2 U	0.9

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Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Cl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
EPA 28	Dup	4/7/2009	no data		6.92	5160	527 D	486 D	236 D	11	737	2760 D	124	<0.05	32.0 D	<0.50	<0.1	<0.001
EPA 28	N	7/7/2009	6,855.31	6.65	6.97	5120	536 D	480	210 D	12	799	3290 D	116	<0.05	29 D	<0.50	<0.1	<0.001
EPA 28	Dup	7/7/2009	no data		7.11	5050	518	453	215	11	670	2840 D	119	<0.05	25 D	<0.50	<0.1	<0.001
EPA 28	N	10/5/2009	6,855.01	6.65	7.4	5160	515 D	476	209 D	11	824	2850 D	120	<0.05	34 D	<0.50	<0.1	<0.001
EPA 28	Dup	10/5/2009	no data		7.8	5060	514	469	218	11	707	2990 D	124	<0.05	30.1 D	<0.50	<0.1	<0.001
EPA 28	N	1/5/2010	6,854.81	6.72	7.12	5220 D	516 D	474	220 D	10	861	2900 DH	145	<0.05	35 D	<0.50	<0.1	<0.001
EPA 28	Dup	1/5/2010	6,854.51	6.7	7.06	5160 D	549 D	464	236	11	742	3070 D	124	<0.05	31 D	<0.50	<0.1	<0.001
EPA 28	N	4/6/2010	6,854.71	6.82	6.92	5180 D	574 D	520	242 D	12	889	2790 D	122	<0.05	31.8 D	<0.50	<0.1	<0.001
EPA 28	Dup	4/6/2010	6,854.26	6.82	7.06	5150 D	540 D	487	233 D	12	770	2980 D	121	<0.05	28.6 D	<0.50	<0.1	<0.001
EPA 28	N	7/13/2010	6,854.71	6.63	7.18	5240 D	553	498	232	12	854	2890 D	121 D	<0.05	31 D	<0.50	<0.1	<0.001
EPA 28	Dup	7/13/2010	6,854.21	6.63	7.28	5100 D	549	488	236	11	732	2910 D	119 D	<0.05	27 D	<0.50	<0.1	<0.001
EPA 28	N	10/5/2010	6,854.46	6.76	7.68	5410 D	522	470	227	12	843	2960 D	125 D	0.07	30 D	<0.50	<0.1	<0.001
EPA 28	Dup	10/5/2010	6,852.96	6.78	7.65	5180 D	530	462	231	11	728	2960 D	116 D	0.05	27 D	<0.50	<0.1	<0.001
EPA 28	N	1/4/2011	6854.261	6.76	7.5	4900 D	534	474	222	11	827	2790 D	127 D	<0.05	29 D	<0.50	<0.1	<0.001
EPA 28	Dup	4/4/2011	6854.161	6.82	7.12	5230 D	536	470	237	12	842	2720 D	123 D	<0.05	33 D	<0.50	<0.1	0.002
EPA 28	N	7/12/2011	6854.171	6.89	7.23	4930 D	541	478	234	12	837	2740 D	124 D	<0.1	32 D	<0.50	<0.1	<0.001
EPA 28	Dup	7/12/2011	6853.711	6.86	7.41	5000 D	535	463	238	11	733	2710 D	118 D	<0.1	29 D	<0.50	<0.1	<0.001
EPA 28	N	10/4/2011	6853.911	6.82	7.59	4910 D	532	466	227	11	771	2890 D	127 D	<0.1	28 D	<0.50	<0.1	<0.001
EPA 28	Dup	10/4/2011	6853.551	6.88	7.4	4860 D	536	458	232	11	646	2960 D	124 D	<0.1	26 D	<0.50	<0.1	<0.001
GW 1	N	7/19/1989	6,869.00	6.9	7.32	5134	910	412	328	2.7	1415	2042	220	0.08	120	< 1	< 0.1	< 0.001
GW 1	N	10/16/1989	6,868.90	7	7.02	5376	856	431	331	3.8	2030	1931	236	0.13	110	< 1	< 0.1	< 0.001
GW 1	N	1/10/1990	6,868.30	6.4	6.54	5658	774	408	349	2.81	1903	2079	239	0.25	111	< 1	< 0.1	0.001
GW 1	N	4/5/1990	6,868.20	6.3	6.98	5732	818	430	350	2.8	2001	2118	243	0.13	119	< 1	< 0.1	< 0.001
GW 1	N	7/3/1990	6,867.20	6.4	6.92	6154	953	501	343	4.5	2098	2252	241	< 0.05	109	< 1	< 0.1	< 0.001
GW 1	N	10/3/1990	6,867.60	6.3	7.26	5879	780	425	350	4	1785	2214	238	< 0.05	68.3	< 1	< 0.1	0.003
GW 1	N	1/16/1991	6,867.60	6.4	7.12	6092	909	483	380	3.3	1573	2373	247	< 0.05	97.5	< 1	0.18	< 0.001
GW 1	N	4/2/1991	6,867.70	6.3	7.1	5780	817	459	344	3.5	1478	2476	237	0.05	108	< 1	0.19	< 0.001
GW 1	N	7/17/1991	6,866.80	6.5	7.21	6236	821	478	326	4.8	1893	2626	236	< 0.05	90.9	< 1	< 0.1	< 0.001
GW 1	N	10/15/1991	6,866.10	6.3	6.9	6275	900	519	349	3.8	2020	2460	247	< 0.05	57.6	< 1	0.36	< 0.001
GW 1	N	1/15/1992	6,865.90	6.3	7.05	5446	695	457	360	3.9	1617	2445	239	< 0.05	78.2	< 1	< 0.1	< 0.001

TABLE A.1
Southwest Alluvium Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5.2	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
EPA 28	Dup	4/7/2009	<0.01	<0.005	<0.01	<0.05	0.58	<0.1	<0.05	<0.001	<0.1	0.0467	0.41	0.45 U	0.86	0.2 U	-0.8 U	0.8
EPA 28	N	7/7/2009	<0.01	<0.005	<0.01	<0.05	0.72	<0.1	<0.05	<0.001	<0.1	0.0415	0.64	1.5	2.14	0.02 U	-0.6 U	1.3
EPA 28	Dup	7/7/2009	<0.01	<0.005	<0.01	<0.05	0.6	<0.1	<0.05	<0.001	<0.1	0.037	0.61	1.4	2.01	0.3 U	0.2 U	1.1
EPA 28	N	10/5/2009	<0.01	<0.005	<0.01	<0.05	0.71	<0.1	<0.05	<0.001	<0.1	0.045	0.73	1.4 U	2.13	-0.03 U	1.1 U	0.5 U
EPA 28	Dup	10/5/2009	<0.01	<0.005	<0.01	<0.05	0.58	<0.1	<0.05	<0.001	<0.1	0.0406	0.68	0.71 U	1.39	0.09 U	1.9 U	0.4 U
EPA 28	N	1/5/2010	<0.01	<0.005	<0.01	<0.05	0.65	<0.1	<0.05	<0.001	<0.1	0.044	0.16 U	1.9	2.06	0.04 U	-1 U	0.8
EPA 28	Dup	1/5/2010	<0.01	<0.005	<0.01	<0.05	0.56	<0.1	<0.05	<0.001	<0.1	0.0392	0.15 U	1.5	1.65	-0.05 U	-0.2 U	0.9
EPA 28	N	4/6/2010	<0.01	<0.005	<0.01	<0.05	0.63	<0.1	<0.05	<0.001	<0.1	0.0444	0.55	1.2	1.75	0.03 U	2.3 U	0.6
EPA 28	Dup	4/6/2010	<0.01	<0.005	<0.01	<0.05	0.57	<0.1	<0.05	<0.001	<0.1	0.0416	0.53	1.6	2.13	-0.02 U	2.1 U	0.3 U
EPA 28	N	7/13/2010	<0.01	<0.005	<0.01	<0.05	0.59	<0.1	<0.05	0.002	<0.1	0.0451	0.26	0.65 U	0.91	0.004 U	0.6 U	0.3 U
EPA 28	Dup	7/13/2010	<0.01	<0.005	<0.01	<0.05	0.53	<0.1	<0.05	0.004	<0.1	0.0407	0.24	0.87 U	1.11	0.02 U	1.1 U	0.7 U
EPA 28	N	10/5/2010	<0.01	<0.005	<0.01	<0.05	0.71	<0.1	<0.05	<0.001	<0.1	0.0503	0.18	1.5	1.68	0.02 U	2.6	0.8
EPA 28	Dup	10/5/2010	<0.01	<0.005	<0.01	<0.05	0.64	<0.1	<0.05	<0.001	<0.1	0.0453	0.23	1.3	1.53	0.03 U	2.2	0.5 U
EPA 28	N	1/4/2011	<0.01	<0.005	<0.01	<0.05	0.8	<0.1	<0.05	<0.001	<0.1	0.051	0.27	1.4	1.67	0.008 U	0.08 U	1.1
EPA 28	Dup	4/4/2011	<0.01	<0.005	<0.01	<0.05	0.72	<0.1	<0.05	<0.001	<0.1	0.0492	0.17	1.2	1.37	0.05 U	0.4 U	1
EPA 28	N	7/12/2011	<0.01	<0.005	<0.01	<0.05	0.76	<0.1	<0.05	<0.001	<0.1	0.0512	0.10 U	0.45 U	0.55	0.05 U	-0.4 U	0.7 U
EPA 28	Dup	7/12/2011	<0.01	<0.005	<0.01	<0.05	0.63	<0.1	<0.05	<0.001	<0.1	0.0445	0.07 U	-0.05 U	0.02	0.01 U	-0.4 U	1.2
EPA 28	N	10/4/2011	<0.01	<0.005	<0.01	<0.05	0.74	<0.1	<0.05	<0.001	<0.1	0.0461	0.4	0.89 U	1.29	0.02 U	0.9 U	0.1 U
EPA 28	Dup	10/4/2011	<0.01	<0.005	<0.01	<0.05	0.63	<0.1	<0.05	<0.001	<0.1	0.0384	0.32	0.97 U	1.29	0.01 U	0.6 U	0.4 U
GW 1	N	7/19/1989	< 0.05	< 0.01	< 0.05	< 0.05	0.05	< 0.1	< 0.05	0.002	< 0.1	0.0954	0.6	< 1	0.6	< 0.2	1.7	5.9
GW 1	N	10/16/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.08	< 0.1	< 0.05	0.001	< 0.1	0.0979	0.4	< 1	0.4	4	1.5	3.7
GW 1	N	1/10/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.09	< 0.1	< 0.05	0.002	< 0.1	0.09	1	1.1	2.1	< 0.2	1.3	1.2
GW 1	N	4/5/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.1	< 0.1	< 0.05	0.002	< 0.1	0.087	0.5	< 1	0.5	< 0.2	1.2	0.8
GW 1	N	7/3/1990	< 0.05	< 0.01	0.01	< 0.05	0.1	< 0.1	< 0.05	0.001	< 0.1	0.116	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	10/3/1990	< 0.05	0.01	0.03	< 0.05	0.12	< 0.1	< 0.05	0.001	< 0.1	0.08	0.7	< 1	0.7	< 0.2	< 1	< 1
GW 1	N	1/16/1991	< 0.01	< 0.01	0.02	< 0.05	0.12	< 0.1	< 0.05	0.001	< 0.1	0.111	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	4/2/1991	< 0.01	0.01	0.02	< 0.05	0.13	< 0.1	< 0.05	0.001	< 0.1	0.13	0.4	< 1	0.4	< 0.2	< 1	< 1
GW 1	N	7/17/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.15	< 0.1	< 0.05	0.002	< 0.1	0.104	0.2	< 1	0.2	< 0.2	2.3	< 1
GW 1	N	10/15/1991	< 0.01	< 0.01	0.01	< 0.05	0.12	< 0.1	< 0.05	< 0.001	< 0.1	0.15	0.3	4.6	4.9	< 0.2	< 1	< 1
GW 1	N	1/15/1992	< 0.01	< 0.01	0.01	< 0.05	0.13	< 0.1	< 0.05	< 0.001	< 0.1	0.105	0.3	< 1	0.3	< 0.2	< 1	< 1

TABLE A.1
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Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Cl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
GW 1	N	4/8/1992	6,865.70	6.2	7.43	4775	769	481	364	4.4	1813	2538	217	0.08	75.8	< 1	< 0.1	< 0.001
GW 1	N	7/8/1992	6,864.80	6	7.37	4964	801	403	454	5.6	1610	2493	231	0.13	115	< 1	< 0.1	< 0.001
GW 1	N	10/6/1992	6,863.70	6.3	6.9	6008	800	504	389	3.2	1809	2370	220	< 0.05	110	< 1	0.1	< 0.001
GW 1	N	1/7/1993	6,863.40	6.4	7.73	5223	676	421	348	5.3	1807	2206	234	0.06	117	< 1	< 0.1	< 0.001
GW 1	N	4/7/1993	6,863.90	6.4	7.22	5681	681	401	372	5.6	1579	2269	199	< 0.05	119	< 1	< 0.1	< 0.001
GW 1	N	7/14/1993	6,862.70	6.4	7.23	5630	807	438	337	4.3	1610	2370	211	0.05	118	< 1	< 0.1	< 0.001
GW 1	N	10/7/1993	6,862.20	6.7	7.29	5196	719	433	310	3	1792	1952	228	< 0.05	124	< 1	< 0.1	< 0.001
GW 1	N	1/6/1994	6,861.80	6.8	7.38	5051	704	394	335	2.9	1635	2075	218	0.11	101	< 1	< 0.1	< 0.001
GW 1	N	4/12/1994	6,861.60	6.7	7.15	5216	685	409	316	3.9	1485	2256	175	0.3	115	< 1	< 0.1	< 0.001
GW 1	N	7/21/1994	6,861.10	6.7	6.97	5415	828	417	283	5.3	1519	2371	185	0.13	118	< 1	< 0.1	< 0.001
GW 1	N	10/5/1994	6,860.70	6.5	7.45	5567	745	446	323	5.1	13.55	2250	177	0.23	111	< 1	< 0.1	< 0.001
GW 1	N	1/4/1995	6,860.50	6.5	7.39	5732	788	441	295	4.7	1364	2483	166	0.72	104	< 1	< 0.1	< 0.001
GW 1	N	4/5/1995	6,860.30	6.6	7.03	5397	698	420	282	3.9	1443	2400	186	0.36	110	< 1	< 0.1	< 0.001
GW 1	N	7/6/1995	6,859.90	6.5	7.65	5180	665	428	285	3.9	1183	2255	170	0.1	99.4	< 1	< 0.1	< 0.001
GW 1	N	10/3/1995	6,859.30	6.6	7.53	5292	640	419	270	3.2	1218	2265	137	0.29	105	< 1	< 0.1	0.003
GW 1	N	1/3/1996	6,858.90	6.6	6.8	5086	605	405	274	3.5	1211	2079	135	0.07	115	< 1	< 0.1	0.002
GW 1	N	4/2/1996	6,858.60	6.6	7.55	5078	594	388	274	3.7	1160	2162	140	0.09	116	< 1	< 0.1	< 0.001
GW 1	N	7/7/1996	6,858.40	6.3	7.08	5119	605	395	290	3.6	1169	2155	160	0.21	109	1.04	< 0.1	0.002
GW 1	N	10/1/1996	6,858.40	6.5	6.99	5080	624	422	264	3.9	1170	2063	158	0.1	116	< 1	< 0.1	0.001
GW 1	N	1/22/1997	6,858.10	6.4	7.36	4790	625	415	266	4.16	1130	2003	148	0.1	107	< 1	< 0.1	< 0.001
GW 1	N	4/8/1997	6,858.30	6.6	7.9	4830	636	403	241	4.2	1080	2047	173	0.24	117	< 1	< 0.1	< 0.001
GW 1	N	7/8/1997	6,857.70	6.9	7.68	4800	634	379	229	4.4	1040	2050	173	0.3	116	< 1	< 0.1	< 0.001
GW 1	N	10/7/1997	6,857.80	6.3	7.35	4750	619	364	245	4.7	1070	1980	145	0.38	114	< 1	< 0.1	< 0.001
GW 1	N	1/15/1998	6,857.50	6.8	7.9	4650	616	349	251	5.6	1020	2100	157	0.71	112	< 1	< 0.1	< 0.001
GW 1	N	4/7/1998	6,857.50	6.6	7.48	4440	597	331	220	4.2	872	2000	121	0.13	97.9	< 1	< 0.1	0.002
GW 1	N	7/7/1998	6,857.50	6.8	7.7	4350	587	317	224	4.8	815	1800	132	0.37	122	< 1	< 0.1	< 0.001
GW 1	N	10/6/1998	6,857.00	6.72	7.88	4370	632	331	228	5.7	801	2020	125	0.06	95.9	< 1	< 0.1	< 0.001
GW 1	N	1/5/1999	6,856.90	6.7	7.75	4450	597	304	197	5.4	853	1830	124	0.29	91.5	< 1	< 0.1	< 0.001
GW 1	N	4/6/1999	6,856.80	6.7	7.65	4300	610	264	209	5.1	738	1820	115	0.43	91.8	< 1	< 0.1	< 0.001
GW 1	N	7/13/1999	6,857.06	6.7	7.8	4190	611	304	183	9.7	770	1900	125	0.47	82.4	< 1	< 0.1	< 0.001

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Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5.2	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
GW 1	N	4/8/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	< 0.001	< 0.1	0.094	< 0.2	1.1	1.1	< 0.2	< 1	< 1
GW 1	N	7/8/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.11	< 0.1	< 0.05	0.001	< 0.1	0.07	0.2	1.8	2	< 0.2	2.2	< 1
GW 1	N	10/6/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.13	< 0.1	< 0.05	0.007	< 0.1	0.049	0.8	< 1	0.8	< 0.2	1.2	< 1
GW 1	N	1/7/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.11	< 0.1	< 0.05	0.007	< 0.1	0.097	0.3	2.6	2.9	< 0.2	< 1	< 1
GW 1	N	4/7/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.14	< 0.1	< 0.05	0.002	< 0.1	0.1	3.5	< 1	3.5	< 0.2	2.2	3.9
GW 1	N	7/14/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.14	< 0.1	< 0.05	0.004	< 0.1	0.099	< 0.2	1.7	1.7	< 0.2	3.3	< 1
GW 1	N	10/7/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.13	< 0.1	< 0.05	0.005	< 0.1	0.075	0.7	3.7	4.4	< 0.2	< 1	< 1
GW 1	N	1/6/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	0.069	3.3	3.5	6.8	< 0.2	< 1	9.5
GW 1	N	4/12/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.1	< 0.1	< 0.05	0.001	< 0.1	0.089	0.4	1.5	1.9	< 0.2	1.9	2.8
GW 1	N	7/21/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	0.001	< 0.1	0.082	1.2	< 1	1.2	< 0.2	1.1	1.4
GW 1	N	10/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.09	< 0.1	< 0.05	0.001	< 0.1	0.082	0.2	< 1	0.2	< 0.2	3.1	< 1
GW 1	N	1/4/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	0.069	1	2.3	3.3	< 0.2	< 1	4.6
GW 1	N	4/5/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.09	< 0.1	< 0.05	< 0.001	< 0.1	0.074	2.2	1.7	3.9	< 0.2	< 1	4.9
GW 1	N	7/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.002	< 0.1	0.0623	0.4	< 1	0.4	< 0.2	< 1	< 1
GW 1	N	10/3/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.019	< 0.1	0.0559	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	1/3/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.07	< 0.1	< 0.05	0.027	< 0.1	0.058	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.05	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	7/7/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.07	< 0.1	< 0.05	0.006	< 0.1	0.06	0.3	< 1	0.3	< 0.2	< 1	< 1
GW 1	N	10/1/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.07	< 0.1	< 0.05	0.002	< 0.1	0.051	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	1/22/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.043	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.06	< 0.1	< 0.05	0.015	< 0.1	0.049	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.048	0.4	< 1	0.4	< 0.2	< 1	< 1
GW 1	N	10/7/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.054	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	1/15/1998	< 0.01	< 0.01	< 0.01	< 0.05	0.07	< 0.1	< 0.05	< 0.001	< 0.1	0.0539	1	< 1	1	< 0.2	< 1	< 1
GW 1	N	4/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.046	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	7/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0464	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	10/6/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.05	< 0.2	< 1	0	< 0.2	1.2	1.2
GW 1	N	1/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0509	1.2	< 1	1.2	< 0.2	< 1	< 1
GW 1	N	4/6/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0461	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	7/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.001	< 0.1	0.046	< 0.2	< 1	0	< 0.2	< 1	< 1

TABLE A.1
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Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Cl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
GW 1	N	10/5/1999	6,857.60	6.75	7.53	4230	562	270	205	5.1	788	1670	120	0.1	91	< 1	< 0.1	< 0.001
GW 1	N	1/4/2000	6,857.00	6.7	7.72	4160	589	278	176	6	742	1790	114	0.28	94.2	< 1	< 0.1	< 0.001
GW 1	N	5/9/2000	6,856.30	6.6	7.69	4410	585	309	226	5.1	919	1870	122	0.84	87	< 1	< 0.1	< 0.001
GW 1	N	7/17/2000	6,856.20	6.63	7.58	4370	609	312	210	4.88	915	1720	125	0.77	77.5	< 1	< 0.1	< 0.001
GW 1	N	10/9/2000	6,855.85	6.88	7.53	4260	517	274	200	5.8	905	1520	95.1	0.88	75.7	< 1	< 0.1	< 0.001
GW 1	N	1/8/2001	6,856.00	6.73	7.75	4290	628	316	196	5.2	944	1830	112	0.76	79.9	< 1	< 0.1	< 0.001
GW 1	N	2/5/2001	6,856.20	6.91	7.44	4270	721	352	184	6.1	960	2110	114	0.77	73.7	< 1	< 0.1	< 0.001
GW 1	N	3/5/2001	6,856.50	7.15	7.4	4080	635	323	166	6.1	975	2070	104	0.79	74.2	< 1	< 0.1	< 0.001
GW 1	N	4/4/2001	6,856.70	7	7.5	4360	713	347	201	4.1	946	2070	116	0.79	84.7	< 1	< 0.1	< 0.001
GW 1	N	5/8/2001	6,856.80	6.72	7.51	4500	628	314	201	4.7	944	1830	124	0.79	78.2	< 1	< 0.1	< 0.001
GW 1	N	6/4/2001	6,857.05	6.67	6.98	4420	635	322	187	4.7	944	1980	119	0.83	76.4	< 1	< 0.1	< 0.001
GW 1	N	7/10/2001	6,857.10	7.12	7.47	4680	694	353	197	4.1	892	2110	134	0.8	86.7	< 1	< 0.1	< 0.001
GW 1	N	8/7/2001	6,857.12	6.61	7.5	4910	650	340	210	4.5	878	2100	140	0.69	84	< 1	< 0.1	< 0.001
GW 1	N	9/11/2001	6,857.25	6.64	7.4	4960	690	350	214	4.6	899	2200	140	0.68	101	< 1	< 0.1	< 0.001
GW 1	N	10/1/2001	6,857.40	6.73	7.8	5190	690	350	206	5.3	913	2200	170	0.63	91.5	< 1	< 0.1	< 0.001
GW 1	N	11/5/2001	6,857.50	6.68	7.2	5260	775	386	219	5.1	950	2540	150	0.59	95	< 1	< 0.1	< 0.001
GW 1	N	12/4/2001	6,857.65	6.83	7.3	5300	722	361	197	4.4	984	2270	145	0.64	96	< 1	< 0.1	< 0.001
GW 1	Dup	12/4/2001	no data	6.87	7.4	5260	716	351	219	3.9	946	2250	137	0.46	96	< 1	< 0.1	< 0.001
GW 1	N	1/8/2002	6,857.70	6.89	7.2	5310	841	408	173	6.9	991	2650	157	0.59	82	< 1	< 0.1	< 0.001
GW 1	Dup	1/8/2002	no data	6.9	7.3	5260	844	401	176	6.8	978	2660	159	0.51	81.5	< 1	< 0.1	< 0.001
GW 1	N	2/4/2002	6,857.75	6.87	7.4	5360	808	398	206	6.2	1010	2530	167	0.59	80.5	< 1	< 0.1	< 0.001
GW 1	N	3/4/2002	6,857.75	6.7	7.3	5360	764	408	260	4.4	1080	2630	151	0.6	92.2	< 1	< 0.1	< 0.001
GW 1	N	4/1/2002	6,857.90	6.65	7.38	5470	791	419	240	6.2	1100	2620	162	0.58	83.2	< 1	< 0.1	< 0.001
GW 1	N	5/6/2002	6,857.95	6.63	7.56	5490	763	418	245	5.8	1110	2450	160	0.56	91	< 1	< 0.1	< 0.001
GW 1	Dup	5/6/2002	no data	6.7	7.67	5470	770	409	248	5.6	1100	2440	158	0.46	93.2	< 1	< 0.1	< 0.001
GW 1	N	6/3/2002	6,857.97	6.58	7.61	5530	755	423	230	4.3	1150	2400	150	0.57	96	< 1	< 0.1	< 0.001
GW 1	N	7/8/2002	6,857.75	6.65	7.8	5630	753	454	190	6.6	1200	2500	140	0.54	99.9	< 1	< 0.1	< 0.001
GW 1	N	10/8/2002	6,857.52	6.75	7.72	5850	708	460	241	4	1300	2320	170	0.42	113	< 1	< 0.1	< 0.001
GW 1	N	1/6/2003	6,857.61	7.38	7.61	5980	768	544	302	6.7	1390	2620	166	0.94	119	< 1	< 0.1	< 0.001
GW 1	N	4/7/2003	6,857.81	6.57	7.27	6050	704	504	288	5.9	1360	2280	209	0.41	124	< 1	< 0.1	< 0.001

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Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5.2	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
GW 1	N	10/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0507	0.4	< 1	0.4	< 0.2	< 1	< 1
GW 1	N	1/4/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	0.001	< 0.1	0.051	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	5/9/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.061	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	7/17/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0572	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	10/9/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.06	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	1/8/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	0.001	< 0.1	0.063	< 0.2	5.1	5.1	< 0.2	< 1	< 1
GW 1	N	2/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.068	0.3	< 1	0.3	< 0.2	< 1	< 1
GW 1	N	3/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0671	< 0.2	3.9	3.9	< 0.2	< 1	< 1
GW 1	N	4/4/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.068	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	5/8/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.075	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	6/4/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	0.009	< 0.1	0.065	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	7/10/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0731	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	8/7/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.081	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	9/11/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0764	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	10/1/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0903	0.2	< 1	0.2	< 0.2	< 1	< 1
GW 1	N	11/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0872	0.4	< 1	0.4	< 0.2	< 1	< 1
GW 1	N	12/4/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0957	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	Dup	12/4/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.095	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	1/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0976	0.3	< 1	0.3	< 0.2	< 1	< 1
GW 1	Dup	1/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.102	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	2/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0926	< 0.2	1.8	1.8	< 0.2	< 1	< 1
GW 1	N	3/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.108	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	4/1/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.102	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	5/6/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	0.05	< 0.001	< 0.1	0.114	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	Dup	5/6/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	0.05	< 0.001	< 0.1	0.102	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	6/3/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.108	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	7/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.128	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	10/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.093	0.6	< 1	0.6	< 0.2	< 1	< 1
GW 1	N	1/6/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.116	< 0.2	< 1	0	< 0.2	< 1	< 1.0
GW 1	N	4/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0963	< 0.2	< 1	0	< 0.2	< 1	< 1.0

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Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Cl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
GW 1	Dup	4/7/2003	no data	no data	7.24	6000	696	495	291	5.7	1380	2250	206	0.4	134	< 1	< 0.1	< 0.001
GW 1	N	7/7/2003	6,857.66	6.37	7.28	5400	678	514	261	7	1380	2550	192	0.39	129	< 1	< 0.1	< 0.001
GW 1	N	10/6/2003	6,857.34	6.39	7.74	6150	743	583	319	4.7	1520	2740	223	0.59	102	< 1	< 0.1	< 0.001
GW 1	N	1/6/2004	6,857.47	6.64	7.65	6120	707	566	293	5.8	1480	2670	252	0.36	106 D	< 1.0	0.2	< 0.001
GW 1	N	4/5/2004	6,857.63	6.94	6.98	6270	700	570	302	5.9	1480	2650 D	221	0.43	117 D	< 1	< 0.1	< 0.001
GW 1	N	7/12/2004	6,857.41	6.39	6.97	6610	715	563	354	6.4	1420	2630 D	228	0.41	124 D	< 1.0	< 0.1	< 0.001
GW 1	N	10/4/2004	6,857.00	6.45	7.13	6800	699 D	572 D	354	5.8	1570	2590 D	249	0.23	93 D	< 1.0	< 0.1	< 0.001
GW 1	N	1/3/2005	6,857.13	6.7	7.09	6400	711 D	575 D	350	5.8	1570	2510 D	224	0.28	89 D	< 1.0	< 0.1	< 0.001
GW 1	N	4/4/2005	6,857.29	6.64	7.25	6250	716	579	350	5.4	1560	2680	222	0.22	88	< 1.0	0.2	< 0.001
GW 1	N	7/11/2005	6,856.92	6.56	7.4	6360	780 D	648 D	344	5.7	1480	2900 D	247	0.43	92 D	< 1.0	< 0.1	< 0.001
GW 1	N	10/4/2005	6,856.60	6.63	7.24	6420	711 D	595 D	352	6.3	1560	2770 D	267	0.23	85 D	< 1.0	< 0.1	< 0.001
GW 1	N	1/9/2006	6,856.61	6.78	7.56	6230	615	564 D	339	5.1	1620	2320 D	213	0.42	77 D	< 1.0	< 0.1	< 0.001
GW 1	N	4/3/2006	6,856.71	6.53	7.3	6490	764 D	646 D	335	6.9	1580	2800 D	262	0.34	106 D	< 1.0	0.1	< 0.001
GW 1	N	7/18/2006	6,856.36	6.57	7.05	6310	736 D	625 D	386	7.6	1580	2990 D	244	0.28	111 D	< 1.0	< 0.1	< 0.001
GW 1	N	10/3/2006	6,856.26	6.6	6.91	6330	665 D	581 D	353 D	7.2	1280	2660 D	192	0.4	96 D	0.61	< 0.1	< 0.001
GW 1	N	1/9/2007	6,856.44	6.91	6.85	6680	698 D	604 D	333	8.1	1550	2830 D	223	0.38	99 D	0.64	< 0.1	< 0.001
GW 1	N	4/9/2007	6,856.61	6.74	6.95	6180	704 D	604 D	339	8.5	1610	2850 D	238	0.38	111 D	< 0.5	< 0.1	< 0.001
GW 1	N	7/9/2007	6,856.26	6.59	6.98	6500	733 D	655 D	383	7.2	1640	3070 D	207	0.38	108 D	0.8	< 0.1	0.01
GW 1	N	10/2/2007	6,855.99	6.67	6.7	6610	645 D	593 D	377 D	7.7	1660	2720 D	255 D	0.36	96 D	0.84	< 0.1	< 0.001
GW 1	N	1/14/2008	6,855.96	6.69	6.68	6800	714 D	645 D	393 D	8.1	1630	2870 D	270 D	0.46	93 D	0.9	0.1	< 0.001
GW 1	N	4/7/2008	6,856.31	6.61	7.01	6440	749 D	692 D	423 D	9.8 D	1620	3180 D	224	0.5 D	160 D	1.48	< 0.1	< 0.001
GW 1	N	7/7/2008	6,856.01	6.42	6.87 H	6480 H	714	636	374 D	7	1680	3160 D	234	0.41	152 D	1.56	< 0.1	< 0.003
GW 1	N	10/6/2008	6,855.56	6.42	6.92	6650	705	633	378 D	7	1710	3310 D	223	0.5	102 D	1.51	< 0.1	< 0.001
GW 1	N	1/12/2009	6,855.51	6.43	6.8	7080	696	658	401	7	1810	2820 D	208	0.26	130 D	1.65	0.2	< 0.001
GW 1	N	4/6/2009	6,855.46	6.53	6.67	6750	682 D	659 D	413 D	6	1850	3170 D	226	0.32	103 D	1.59	< 0.1	< 0.001
GW 1	N	7/6/2009	6,855.41	6.45	6.76	6890 H	734 D	668	387 D	6	1790	3670 D	237	0.48	97 D	1.7	< 0.1	< 0.001
GW 1	N	10/6/2009	6,854.86	6.43	6.98	6640	717 D	645	385 D	7	1870	3340 D	237	0.62	97 D	2.08	< 0.1	< 0.001
GW 1	N	1/4/2010	6,854.81	6.62	6.86	7180 D	722 D	662	391 D	7	1980	3260 D	235	0.48	91 D	1.86	< 0.1	< 0.001
GW 1	N	4/5/2010	6,854.91	6.52	6.75	7260 DH	821 D	763	440 D	8	2090	3810 D	226	0.78	94 D	1.86	0.2	< 0.001
GW 1	N	7/12/2010	6,854.71	6.43	7.13	7250 D	757 D	709	406 D	7	2000	3320 D	234 D	0.89	89 D	1.99	< 0.1	< 0.001

TABLE A.1
Southwest Alluvium Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5.2	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
GW 1	Dup	4/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.11	0.4	< 1	0.4	< 0.2	< 1	< 1
GW 1	N	7/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0885	< 0.2	< 1	0	< 0.2	< 1	< 1.0
GW 1	N	10/6/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.105	< 0.2	< 1	0	< 0.2	< 1	< 1.0
GW 1	N	1/6/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.0891 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
GW 1	N	4/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	0.001	< 0.1	0.0867 D	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	7/12/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0888 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
GW 1	N	10/4/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0870 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
GW 1	N	1/3/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.0914	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
GW 1	N	4/4/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.07	< 0.1	< 0.05	< 0.001	< 0.1	0.0874	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
GW 1	N	7/11/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.0874	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
GW 1	N	10/4/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0934	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
GW 1	N	1/9/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0889	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
GW 1	N	4/3/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0855 D	< 0.2	1.2	1.2	< 0.2	< 1.0	< 1.0
GW 1	N	7/18/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0954	0.2	3	3.2	< 0.2	< 1.0	< 1.0
GW 1	N	10/3/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0914	< 0.2	1.3	1.3	< 0.2	< 1	< 1
GW 1	N	1/9/2007	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0936	0.3	< 1	0.3	< 0.2	< 1	< 1
GW 1	N	4/9/2007	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0964	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	7/9/2007	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.104	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	10/2/2007	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.101	< 0.2	< 1	0	1	< 1	< 1
GW 1	N	1/14/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0929 D	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 1	N	4/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.11	0.1 U	-0.1 U	0	0.2	-4.5 U	1.1
GW 1	N	7/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0967	-0.02 U	1.1 U	1.08	-0.1 U	2.7 U	0.9
GW 1	N	10/6/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.102	0.07 U	0.14 U	0.21	-0.1 U	-1 U	1.5
GW 1	N	1/12/2009	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0564	0.04 U	1.1 U	1.14	-0.3 U	-4 U	1.2
GW 1	N	4/6/2009	< 0.01	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.101	0.14	1	1.14	-0.03 U	-1 U	0.3 U
GW 1	N	7/6/2009	< 0.01	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.113	0.29	1.3	1.59	0.1 U	-2 U	2.8
GW 1	N	10/6/2009	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.104	0.4	0.58 U	0.98	-0.05 U	-1 U	0.2 U
GW 1	N	1/4/2010	< 0.01	< 0.005	< 0.01	< 0.05	0.07	< 0.1	< 0.05	< 0.001	< 0.1	0.103	0.17 U	1.1 U	1.27	0.005 U	-0.4 U	0.5 U
GW 1	N	4/5/2010	< 0.01	< 0.005	< 0.01	< 0.05	0.07	< 0.1	< 0.05	< 0.001	< 0.1	0.118	0.2	0.36 U	0.56	0.05 U	4.1	0.4 U
GW 1	N	7/12/2010	< 0.01	< 0.005	< 0.01	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.137	0.26	0.69 U	0.95	-0.02 U	0.3 U	0.05 U

TABLE A.1
Southwest Alluvium Data Summary, 1989-2011
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Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Cl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
GW 1	N	10/4/2010	6,854.41	6.57	6.85	7200 D	710 D	662	410 D	7	1990	3190 D	228 D	0.91	90 D	2.37	<0.1	<0.001
GW 1	N	1/3/2011	6854.31	6.57	6.97	6620 D	739 D	699	404 D	7	1910	3100 D	242 D	0.83	77 D	1.78	0.1	<0.001
GW 1	N	4/4/2011	6854.19	6.65	6.9	7000 D	713	677	428 D	7	1920	3130 D	233 D	0.78 D	94 D	2.08	<0.1	0.001
GW 1	N	7/11/2011	6854.07	6.65	7.15	6890 D	749	710	438 D	7	1940	3130 D	226 D	0.8 D	95 D	2.16	<0.1	<0.001
GW 1	N	10/3/2011	6853.76	6.59	7.51	6530 D	721	631	419 D	6	1830	2950 D	232 D	0.7 D	89 D	2.38	<0.1	0.003
GW 2	N	7/19/1989	6,870.30	7	7.23	5143	910	412	253	8.3	1293	2267	173	0.06	123	< 1	< 0.1	< 0.001
GW 2	N	10/16/1989	6,870.10	7	7.05	5564	789	479	266	11.7	1818	2314	181	0.1	76	< 1	< 0.1	< 0.001
GW 2	N	1/10/1990	6,869.70	6.7	7.02	5470	752	421	264	8.75	1451	2329	184	0.08	84	< 1	< 0.1	< 0.001
GW 2	N	4/5/1990	6,869.40	6.5	7.06	5277	862	391	256	8.1	1730	2226	183	0.11	113	< 1	< 0.1	< 0.001
GW 2	N	7/3/1990	6,868.90	6.3	6.91	5179	801	667	286	9.9	2001	2161	195	< 0.05	52.2	< 1	< 0.1	< 0.001
GW 2	N	10/3/1990	6,868.70	6.5	7.25	5801	888	522	289	9.4	1602	2395	193	< 0.05	61.9	< 1	< 0.1	0.001
GW 2	N	1/16/1991	6,868.90	6.6	7.11	5775	926	458	297	8.3	1552	2444	202	0.05	88.2	< 1	< 0.1	< 0.001
GW 2	N	4/2/1991	6,868.80	6.5	6.9	5621	812	432	280	8.1	1465	2560	206	< 0.05	102	< 1	< 0.1	< 0.001
GW 2	N	7/17/1991	6,867.50	6.5	7.3	5820	790	430	258	8.5	1769	2638	199	0.05	131	< 1	< 0.1	< 0.001
GW 2	N	10/15/1991	6,866.80	6.2	6.89	6209	737	579	287	9	2011	2868	197	< 0.05	28.8	< 1	0.27	< 0.001
GW 2	N	1/15/1992	6,866.90	6.2	7.11	5127	765	428	259	7.9	1278	2285	187	< 0.05	51.6	< 1	< 0.1	< 0.001
GW 2	N	4/8/1992	6,867.00	6.2	7.53	5275	725	531	286	10.3	1687	2613	177	< 0.05	22.9	< 1	< 0.1	< 0.001
GW 2	N	7/8/1992	6,865.20	6.1	7.24	6313	802	581	402	12.8	1931	3194	171	0.07	54	< 1	< 0.1	< 0.001
GW 2	N	10/6/1992	6,864.10	6.4	7.26	5590	901	422	316	8.8	1563	2256	166	< 0.05	100	< 1	< 0.1	< 0.001
GW 2	N	1/7/1993	6,864.20	6.4	7.62	5795	730	521	296	10.1	1763	2584	177	< 0.05	64	< 1	< 0.1	< 0.001
GW 2	N	4/7/1993	6,864.70	6.5	7.24	5140	670	430	314	6.9	1529	2250	173	< 0.05	79.8	< 1	< 0.1	0.001
GW 2	N	7/14/1993	6,863.00	6.7	7.18	5500	776	437	308	7.7	1612	2501	178	0.05	79.8	< 1	< 0.1	0.001
GW 2	N	10/7/1993	6,862.60	6.8	7.44	4812	693	371	268	6.9	1386	2107	159	0.05	111	< 1	< 0.1	< 0.001
GW 2	N	1/6/1994	6,861.60	6.8	7.14	5185	673	461	277	7.4	1556	2444	170	0.16	68.1	< 1	< 0.1	< 0.001
GW 2	N	4/12/1994	6,862.30	6.7	7.03	5006	748	355	250	7	1536	2238	165	0.24	80.5	< 1	< 0.1	< 0.001
GW 2	N	7/21/1994	6,861.60	6.7	7.35	5402	774	470	247	8.6	1614	2859	170	0.06	52	< 1	< 0.1	0.001
GW 2	N	10/5/1994	6,861.20	6.4	7.51	5969	727	590	288	10	1707	2683	177	< 0.05	29.9	< 1	< 0.1	< 0.001
GW 2	N	1/4/1995	6,861.20	6.4	7.16	6044	748	561	270	10.9	1703	2866	174	0.27	25.3	< 1	< 0.1	< 0.001
GW 2	N	4/5/1995	6,861.70	6.5	6.91	6020	660	635	285	10.4	1745	2955	170	0.19	23.1	< 1	< 0.1	< 0.001
GW 2	N	7/6/1995	6,862.40	6.5	7.49	5305	760	475	265	8.6	1409	2404	194	0.27	48.1	< 1	< 0.1	< 0.001

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Southwest Alluvium Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5.2	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
GW 1	N	10/4/2010	<0.01	<0.005	<0.01	<0.05	0.08	<0.1	<0.05	<0.001	<0.1	0.122	-0.08 U	1.1	1.02	-0.007 U	2	-0.05
GW 1	N	1/3/2011	<0.01	<0.005	<0.01	<0.05	0.08	<0.1	<0.05	<0.001	<0.1	0.119	0.09 U	0.42 U	0.51	-0.008 U	0.9 U	0.3 U
GW 1	N	4/4/2011	<0.01	<0.005	<0.01	<0.05	0.09	<0.1	<0.05	<0.001	<0.1	0.127	-0.05 U	0.13 U	0.08	0.06 U	0.5 U	0.7
GW 1	N	7/11/2011	<0.01	<0.005	<0.01	<0.05	0.1	<0.1	<0.05	<0.001	<0.1	0.127	0.15 U	0.91 U	1.06	-0.006 U	-0.6 U	0.3 U
GW 1	N	10/3/2011	<0.01	<0.005	<0.01	<0.05	0.1	<0.1	<0.05	<0.001	<0.1	0.104	0.05 U	0.93	0.98	-0.009 U	0.4 U	0.8
GW 2	N	7/19/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.22	< 0.1	< 0.05	0.001	< 0.1	0.254	1.5	2.8	4.3	1.1	< 1	6
GW 2	N	10/16/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.31	< 0.1	< 0.05	0.001	< 0.1	0.196	1	2.8	3.8	11	1.5	15
GW 2	N	1/10/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.19	< 0.1	< 0.05	< 0.001	< 0.1	0.183	< 0.2	< 0.1	0	1	< 1	2.3
GW 2	N	4/5/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.41	< 0.1	< 0.05	0.001	< 0.1	0.205	0.5	< 0.1	0.5	< 0.2	1.3	0.8
GW 2	N	7/3/1990	< 0.05	< 0.01	0.01	< 0.05	0.48	< 0.1	< 0.05	< 0.001	< 0.1	0.146	0.4	< 0.1	0.4	< 0.2	< 1	< 1
GW 2	N	10/3/1990	< 0.05	< 0.01	0.02	< 0.05	0.55	< 0.1	< 0.05	< 0.001	< 0.1	0.2215	< 0.2	< 0.1	0	< 0.2	< 1	< 1
GW 2	N	1/16/1991	< 0.01	0.01	< 0.01	< 0.05	0.39	< 0.1	< 0.05	0.002	< 0.1	0.2404	< 0.2	< 0.1	0	< 0.2	< 1	< 1
GW 2	N	4/2/1991	< 0.01	0.02	0.01	< 0.05	0.51	< 0.1	< 0.05	0.001	< 0.1	0.137	< 0.2	1.7	1.7	< 0.2	< 1	< 1
GW 2	N	7/17/1991	< 0.01	0.03	< 0.01	< 0.05	0.5	< 0.1	< 0.05	0.001	< 0.1	0.152	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	10/15/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.55	< 0.1	< 0.05	< 0.001	< 0.1	0.197	< 0.2	3.1	3.1	< 0.2	< 1	< 1
GW 2	N	1/15/1992	< 0.01	< 0.01	0.03	< 0.05	0.48	< 0.1	< 0.05	< 0.001	< 0.1	0.153	< 0.2	1.3	1.3	< 0.2	2.2	< 1
GW 2	N	4/8/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.46	< 0.1	< 0.05	0.006	< 0.1	0.165	< 0.2	< 1	0	< 0.2	2.4	< 1
GW 2	N	7/8/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.4	< 0.1	< 0.05	0.001	< 0.1	0.13	0.2	< 1	0.2	< 0.2	< 1	< 1
GW 2	N	10/6/1992	< 0.01	< 0.01	< 0.01	0.06	0.15	< 0.1	< 0.05	0.002	< 0.1	0.242	0.5	1.6	2.1	< 0.2	< 1	< 1
GW 2	N	1/7/1993	< 0.01	< 0.01	0.02	< 0.05	0.25	< 0.1	< 0.05	0.005	< 0.1	0.181	0.8	7.9	8.7	< 0.2	< 1	< 1
GW 2	N	4/7/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	0.001	< 0.1	0.2	0.4	4.4	4.8	< 0.2	< 1	< 1
GW 2	N	7/14/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.22	< 0.1	< 0.05	0.001	< 0.1	0.084	< 0.2	3.1	3.1	< 0.2	< 1	< 1
GW 2	N	10/7/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.06	< 0.1	< 0.05	0.001	< 0.1	0.118	0.6	2.2	2.8	< 0.2	< 1	< 1
GW 2	N	1/6/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	0.116	0.3	4.8	5.1	< 0.2	1.8	8.5
GW 2	N	4/12/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.29	< 0.1	< 0.05	< 0.001	< 0.1	0.201	1.2	< 1	1.2	< 0.2	3.2	1.4
GW 2	N	7/21/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.13	< 0.1	< 0.05	0.002	< 0.1	0.117	< 0.2	8.1	8.1	< 0.2	< 1	12.5
GW 2	N	10/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.32	< 0.1	< 0.05	< 0.001	< 0.1	0.094	0.4	< 1	0.4	< 0.2	1.4	< 1
GW 2	N	1/4/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.35	< 0.1	< 0.05	< 0.001	< 0.1	0.087	1.8	2.5	4.3	< 0.2	< 1	5.7
GW 2	N	4/5/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.42	< 0.1	< 0.05	< 0.001	< 0.1	0.071	0.4	1.1	1.5	< 0.2	4.4	2.2
GW 2	N	7/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.14	< 0.1	< 0.05	0.002	< 0.1	0.1959	1.7	< 1	1.7	< 0.2	< 1	2.8

TABLE A.1
Southwest Alluvium Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Cl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
GW 2	N	10/3/1995	6,862.60	6.3	7.45	5826	655	600	268	9.5	1791	2841	178	0.2	17.7	< 1	< 0.1	0.002
GW 2	N	1/3/1996	6,859.60	6.4	6.91	5302	595	575	280	9.7	1802	2409	133	< 0.05	16.7	< 1	< 0.1	< 0.001
GW 2	N	4/2/1996	6,859.40	6.5	7.64	6059	622	550	282	10	1732	2936	167	< 0.05	24.1	< 1	< 0.1	< 0.001
GW 2	N	7/7/1996	6,859.10	6.3	7.19	6246	600	595	286	10.4	1643	2870	155	0.1	20.5	< 1	< 0.1	0.003
GW 2	N	10/1/1996	6,859.30	6.4	6.99	6280	628	673	289	10.3	1670	2955	166	< 0.05	12.9	< 1	< 0.1	< 0.001
GW 2	N	1/22/1997	6,858.90	6.3	7.43	6100	600	620	275	10.2	1690	2945	177	< 0.05	10.2	< 1	< 0.1	0.001
GW 2	N	4/8/1997	6,858.70	6.6	7.77	5910	667	572	259	9.7	1630	2851	193	< 0.05	19.8	< 1	< 0.1	< 0.001
GW 2	N	7/8/1997	6,858.60	6.8	7.33	6090	666	631	255	9.9	1640	2720	182	< 0.05	10.7	< 1	< 0.1	< 0.001
GW 2	N	10/7/1997	6,858.90	6.2	7.21	6090	618	610	266	9.7	1630	3050	170	< 0.05	10.7	< 1	< 0.1	< 0.001
GW 2	N	1/16/1998	6,858.50	6.5	7.52	5990	653	582	271	9.9	1640	3000	188	0.13	16	< 1	< 0.1	< 0.001
GW 2	N	4/7/1998	6,858.40	6.4	7.8	5880	638	596	248	9.9	1500	2700	174	< 0.05	8.96	< 1	< 0.1	< 0.001
GW 2	N	7/7/1998	6,858.60	6.1	7.8	5880	638	596	248	9.9	1500	2700	174	< 0.05	8.96	< 1	< 0.1	< 0.001
GW 2	N	10/6/1998	6,860.30	6.48	7.59	5800	651	602	253	10.7	1500	2770	165	0.16	8.73	< 1	< 0.1	< 0.001
GW 2	N	1/5/1999	6,858.20	6.7	7.88	5780	588	552	217	9.8	1460	2900	168	0.07	7.04	< 1	< 0.1	< 0.001
GW 2	N	4/6/1999	6,858.20	6.4	7.57	5710	580	582	221	9.6	1410	2500	162	0.07	6.12	< 1	< 0.1	< 0.001
GW 2	N	7/13/1999	6,857.98	6.6	7.9	5530	594	562	223	14.5	1350	2660	166	0.06	5.95	< 1	< 0.1	< 0.001
GW 2	N	10/5/1999	6,859.30	6.52	7.39	5510	537	512	229	10.1	1420	2380	164	0.24	5.5	< 1	< 0.1	< 0.001
GW 2	N	1/4/2000	6,858.70	6.6	7.76	5440	587	549	185	11	1430	2610	143	< 0.05	4.05	< 1	< 0.1	< 0.001
GW 2	N	5/8/2000	6,858.40	6.4	7.64	5410	540	528	234	9.5	1410	2590	155	< 0.05	2.74	< 1	< 0.1	< 0.001
GW 2	N	7/17/2000	6,858.10	6.37	7.65	5440	571	536	213	9.61	1400	2400	158	< 0.05	2.95	< 1	< 0.1	< 0.001
GW 2	N	10/9/2000	6,857.65	6.35	7.54	5310	476	449	194	10.5	1370	1930	130	0.05	4.09	< 1	< 0.1	0.001
GW 2	N	1/8/2001	6,858.10	6.51	7.23	5270	599	537	211	9.7	1420	2620	159	0.09	4.04	< 1	< 0.1	< 0.001
GW 2	N	2/6/2001	6,858.65	6.79	7.37	5290	679	578	230	10.4	1410	2800	153	0.05	3.84	< 1	< 0.1	< 0.001
GW 2	N	3/6/2001	6,858.80	6.86	7.54	5150	586	528	275	10.6	1400	2680	140	< 0.05	3.36	< 1	< 0.1	< 0.001
GW 2	N	4/9/2001	6,859.30	6.92	7.26	5200	668	568	220	10.1	1420	2730	152	< 0.05	3.68	< 1	< 0.1	< 0.001
GW 2	N	5/7/2001	6,859.20	6.46	7.57	5330	590	514	217	9.7	1420	2390	168	0.11	3.49	< 1	0.15	< 0.001
GW 2	N	6/4/2001	6,859.55	6.47	7.33	4490	583	520	184	9.5	1390	2460	164	0.09	3.8	< 1	< 0.1	< 0.001
GW 2	N	7/9/2001	6,859.61	7.09	7.12	5340	624	561	210	9.3	1450	2450	166	< 0.05	4.4	< 1	< 0.1	< 0.001
GW 2	N	8/7/2001	6,859.45	6.43	7.2	5320	570	520	220	9.8	1460	2300	170	< 0.05	4.4	< 1	< 0.1	< 0.001
GW 2	N	9/10/2001	6,859.70	6.38	7.1	5270	600	530	209	10.1	1500	2400	177	< 0.05	6.3	< 1	< 0.1	< 0.001

TABLE A.1
Southwest Alluvium Data Summary, 1989-2011
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Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5.2	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
GW 2	N	10/3/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.39	< 0.1	< 0.05	< 0.001	< 0.1	0.0751	< 0.2	< 1	0	< 0.2	1.8	< 1
GW 2	N	1/3/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.39	< 0.1	< 0.05	< 0.001	< 0.1	0.071	< 0.2	< 1	0	< 0.2	2.4	< 1
GW 2	N	4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.44	< 0.1	< 0.05	< 0.001	< 0.1	0.118	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	7/7/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.49	< 0.1	< 0.05	0.001	< 0.1	0.099	0.2	< 1	0.2	< 0.2	< 1	< 1
GW 2	N	10/1/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.43	< 0.1	< 0.05	0.002	< 0.1	0.07	< 0.2	< 1	0	1	< 1	< 1
GW 2	N	1/22/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.35	< 0.1	< 0.05	< 0.001	< 0.1	0.054	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.41	< 0.1	< 0.05	< 0.001	< 0.1	0.131	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.29	< 0.1	< 0.05	< 0.001	< 0.1	0.061	0.6	< 1	0.6	< 0.2	< 1	< 1
GW 2	N	10/7/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.38	< 0.1	< 0.05	< 0.001	< 0.1	0.062	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	1/16/1998	< 0.01	< 0.01	< 0.01	< 0.05	0.38	< 0.1	< 0.05	< 0.001	< 0.1	0.0953	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	4/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.3	< 0.1	< 0.05	< 0.001	< 0.1	0.0656	0.7	< 1	0.7	< 0.2	< 1	< 1
GW 2	N	7/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.3	< 0.1	< 0.05	< 0.001	< 0.1	0.0656	0.7	< 1	0.7	< 0.2	< 1	< 1
GW 2	N	10/6/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.33	< 0.1	< 0.05	< 0.001	< 0.1	0.0732	0.6	< 1	0.6	< 0.2	< 1	< 1
GW 2	N	1/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.35	< 0.1	< 0.05	< 0.001	< 0.1	0.0662	2.3	< 1	2.3	< 0.2	< 1	< 1
GW 2	N	4/6/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.34	< 0.1	< 0.05	< 0.001	< 0.1	0.0594	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	7/13/1999	< 0.01	< 0.005	0.01	< 0.05	0.4	< 0.1	< 0.05	< 0.001	< 0.1	0.0057	< 0.2	< 1	0	< 0.2	< 1	2.3
GW 2	N	10/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.49	< 0.1	< 0.05	< 0.001	< 0.1	0.0705	0.3	< 1	0.3	< 0.2	< 1	< 1
GW 2	N	1/4/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.44	< 0.1	< 0.05	0.001	< 0.1	0.0681	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	5/8/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.46	< 0.1	< 0.05	< 0.001	< 0.1	0.0685	< 0.2	< 1	0	< 0.2	5.9	< 1
GW 2	N	7/17/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.44	< 0.1	< 0.05	< 0.001	< 0.1	0.0602	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	10/9/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.34	< 0.1	< 0.05	0.001	< 0.1	0.064	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	1/8/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.49	< 0.1	< 0.05	< 0.001	< 0.1	0.063	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	2/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.5	< 0.1	< 0.05	< 0.001	< 0.1	0.065	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	3/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.5	< 0.1	< 0.05	< 0.001	< 0.1	0.0626	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	4/9/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.54	< 0.1	< 0.05	< 0.001	< 0.1	0.074	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	5/7/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.59	< 0.1	< 0.05	< 0.001	< 0.1	0.067	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	6/4/2001	< 0.01	< 0.005	0.01	< 0.05	0.51	< 0.1	< 0.05	0.004	< 0.1	0.061	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	7/9/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.53	< 0.1	< 0.05	< 0.001	< 0.1	0.0683	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	8/7/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.5	< 0.1	< 0.05	< 0.001	< 0.1	0.075	< 0.2	2.2	2.2	< 0.2	< 1	< 1
GW 2	N	9/10/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.48	< 0.1	< 0.05	< 0.001	< 0.1	0.0627	< 0.2	< 1	0	< 0.2	< 1	< 1

TABLE A.1
Southwest Alluvium Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Cl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
GW 2	N	10/1/2001	6,859.80	6.48	7.6	5330	570	510	222	10.7	1480	2200	202	0.07	6	< 1	< 0.1	< 0.001
GW 2	N	11/5/2001	6,860.10	6.5	7.1	5340	619	532	212	10.8	1460	2550	200	0.05	7.6	< 1	< 0.1	< 0.001
GW 2	N	12/3/2001	6,860.20	6.47	7.1	5320	582	494	195	9.5	1480	2270	182	0.06	8.6	< 1	< 0.1	< 0.001
GW 2	N	1/8/2002	6,860.10	6.54	7	5300	683	543	186	11	1460	2640	199	< 0.05	9	< 1	< 0.1	< 0.001
GW 2	N	2/4/2002	6,860.35	6.57	7.2	5310	662	519	201	10.9	1470	2490	205	0.09	11.4	< 1	< 0.1	< 0.001
GW 2	N	3/4/2002	6,860.10	6.49	7.3	5290	622	512	230	10.7	1470	2540	203	0.06	15.9	< 1	< 0.1	< 0.001
GW 2	N	4/1/2002	6,860.28	6.38	7.15	5350	656	520	229	11.6	1520	2590	196	0.05	17	< 1	< 0.1	< 0.001
GW 2	N	5/6/2002	6,860.32	6.38	7.36	5340	643	509	239	11.6	1530	2410	199	0.06	20.4	< 1	< 0.1	< 0.001
GW 2	N	6/3/2002	6,860.33	6.36	7.38	5390	645	508	216	9.8	1560	2360	178	< 0.05	22	< 1	< 0.1	< 0.001
GW 2	N	7/8/2002	6,859.98	6.25	7.67	5470	648	530	178	11.3	1600	2430	208	0.16	22.5	< 1	< 0.1	< 0.001
GW 2	N	10/8/2002	6,859.90	6.4	7.52	5550	619	494	228	9.7	1690	2260	185	0.1	30.1	< 1	< 0.1	< 0.001
GW 2	N	1/6/2003	6,859.88	6.65	7.52	5640	705	571	276	8.6	1750	2580	196	0.18	27.5	< 1	< 0.1	< 0.001
GW 2	N	4/7/2003	6,859.98	6.35	7.12	5760	678	518	267	14.3	1810	2210	214	0.12	26.7	< 1	< 0.1	< 0.001
GW 2	N	7/7/2003	6,859.91	6.12	7.14	5110	658	505	246	12.4	1970	2360	189	0.11	26.3	< 1	< 0.1	< 0.001
GW 2	N	10/6/2003	6,859.68	6.19	8	5980	760	586	305	24.8	2080	2630	233	0.2	24.8	< 1	< 0.1	< 0.001
GW 2	N	1/5/2004	6,859.72	6.4	7.49	6000	756	579	280	11.6	2100	2610	260	0.09	22.8 D	< 1.0	0.2	< 0.001
GW 2	N	4/5/2004	6,859.94	6.68	6.72	6130	771	588	318	11.6	2080	2590 D	225	0.21	19.4 D	< 1	< 0.1	< 0.001
GW 2	N	7/12/2004	6,859.61	6.12	6.51	6300	781	568	341	13.2	2220	2560 D	235	0.15	15.5 D	< 1.0	< 0.1	< 0.001
GW 2	N	10/4/2004	6,859.21	6.21	6.95	6600	761 D	569 D	346	11.5	2240	2570 D	224	< 0.05	12.8 D	< 1.0	< 0.1	< 0.001
GW 2	N	1/3/2005	6,859.48	6.48	6.85	6480	836 D	618 D	356	12	2290	2720 D	220	0.08	13.3 D	< 1.0	< 0.1	< 0.001
GW 2	N	4/4/2005	6,859.64	6.38	6.99	6370	809	598	360	11	2360	2810	211	< 0.05	8.7	< 1.0	1.3	< 0.001
GW 2	N	7/11/2005	6,859.10	6.3	7.1	6590	780 D	612 D	376	11.8	2350	2900 D	232	0.13	6.2 D	< 1.0	< 0.1	< 0.001
GW 2	N	10/3/2005	6,858.90	6.35	7.02	6730	815 D	638 D	376	12.3	2300	3040 D	242	0.08	7.6 D	< 1.0	< 0.1	< 0.001
GW 2	N	1/9/2006	6,858.86	6.53	7.6	6770	720	654 D	350	10.3	2180	2730 D	199	0.19	8.2 D	< 1.0	< 0.1	< 0.001
GW 2	N	4/3/2006	6,858.93	6.24	7.03	7000	844 D	734 D	341	12.4	2390	3170 D	245	0.22	7.2 D	< 1.0	< 0.1	< 0.001
GW 2	N	7/17/2006	6,858.63	6.28	6.58	7000	792 D	752 D	395	13.7	2360	3480 D	230	0.06	7.0 D	< 1.0	< 0.1	< 0.001
GW 2	N	10/2/2006	6,858.55	6.37	6.69	7380	754 D	756 D	335	12.5	2440	3300 D	166	0.16	6.3 D	< 0.5	0.1	< 0.001
GW 2	N	1/8/2007	6,858.54	6.56	6.64	7500	715 D	785 D	334	13.6	2330	3430 D	204	0.1	7.4 D	< 0.5	< 0.1	< 0.001
GW 2	N	4/9/2007	6,858.90	6.42	6.67	7100	739 D	869 D	336	15.6	2320	3680 D	217	< 0.05	7.9 D	< 0.5	< 0.1	< 0.001
GW 2	N	7/9/2007	6,858.43	6.28	6.65	7580	734 D	922 D	395	13.3	2460	3990 D	180	0.07	8.5	< 0.5	< 0.1	0.009

TABLE A.1
Southwest Alluvium Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5.2	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
GW 2	N	10/1/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.45	< 0.1	< 0.05	< 0.001	< 0.1	0.0659	0.3	< 1	0.3	< 0.2	< 1	< 1
GW 2	N	11/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.5	< 0.1	< 0.05	< 0.001	< 0.1	0.0584	0.4	< 1	0.4	< 0.2	< 1	< 1
GW 2	N	12/3/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.45	< 0.1	< 0.05	< 0.001	< 0.1	0.0622	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	1/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.47	< 0.1	< 0.05	< 0.001	< 0.1	0.0609	0.4	1.2	1.6	< 0.2	< 1	< 1
GW 2	N	2/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.48	< 0.1	< 0.05	< 0.001	< 0.1	0.0551	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	3/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.58	< 0.1	< 0.05	< 0.001	< 0.1	0.0833	0.4	< 1	0.4	< 0.2	< 1	< 1
GW 2	N	4/1/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.52	< 0.1	< 0.05	< 0.001	< 0.1	0.0664	0.4	< 1	0.4	< 0.2	< 1	< 1
GW 2	N	5/6/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.52	< 0.1	< 0.05	< 0.001	< 0.1	0.0738	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	6/3/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.52	< 0.1	< 0.05	< 0.001	< 0.1	0.0646	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	7/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.48	< 0.1	< 0.05	< 0.001	< 0.1	0.0821	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	10/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.51	< 0.1	< 0.05	< 0.001	< 0.1	0.064	2	< 1	2	< 0.2	< 1	< 1
GW 2	N	1/6/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.56	< 0.1	< 0.05	< 0.001	< 0.1	0.0829	< 0.2	4.2	4.2	< 0.2	< 1	< 1.0
GW 2	N	4/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.47	< 0.1	< 0.05	< 0.001	< 0.1	0.0886	0.7	< 1	0.7	< 0.2	< 1	< 1.0
GW 2	N	7/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.55	< 0.1	< 0.05	< 0.001	< 0.1	0.0808	< 0.2	< 1	0	< 0.2	< 1	< 1.0
GW 2	N	10/6/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.63	< 0.1	< 0.05	< 0.001	< 0.1	0.104	< 0.2	< 1	0	< 0.2	< 1	< 1.0
GW 2	N	1/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.73	< 0.1	< 0.05	< 0.001	< 0.1	0.0952 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
GW 2	N	4/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.68	< 0.1	< 0.05	< 0.001	< 0.1	0.108 D	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	7/12/2004	< 0.01	< 0.005	0.02	< 0.05	0.66	< 0.1	< 0.05	< 0.001	< 0.1	0.109 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
GW 2	N	10/4/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.69	< 0.1	< 0.05	< 0.001	< 0.1	0.102 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
GW 2	N	1/3/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.75	< 0.1	< 0.05	< 0.001	< 0.1	0.124	0.4	< 1.0	0.4	< 0.2	< 1.0	< 1.0
GW 2	N	4/4/2005	< 0.01	0.011	0.01	< 0.05	0.82	< 0.1	< 0.05	< 0.001	< 0.1	0.117	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
GW 2	N	7/11/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.75	< 0.1	< 0.05	< 0.001	< 0.1	0.116	0.4	< 1.0	0.4	< 0.2	< 1.0	< 1.0
GW 2	N	10/3/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.81	< 0.1	< 0.05	< 0.001	< 0.1	0.132	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
GW 2	N	1/9/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.85	< 0.1	< 0.05	< 0.001	< 0.1	0.126	< 0.2	1.4	1.4	< 0.2	< 1.0	< 1.0
GW 2	N	4/3/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.91	< 0.1	< 0.05	< 0.001	< 0.1	0.115 D	0.4	2.7	3.1	< 0.2	< 1.0	< 1.0
GW 2	N	7/17/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.94	< 0.1	< 0.05	< 0.001	< 0.1	0.127	0.2	3.8	4	< 0.2	< 1.0	< 1.0
GW 2	N	10/2/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.96	< 0.1	< 0.05	< 0.001	< 0.1	0.113 D	0.4	1.7	2.1	< 0.2	< 1	< 1
GW 2	N	1/8/2007	< 0.01	< 0.005	< 0.01	< 0.05	1.01	< 0.1	< 0.05	< 0.001	< 0.1	0.115	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	4/9/2007	< 0.01	< 0.005	< 0.01	< 0.05	1.06	< 0.1	< 0.05	< 0.001	< 0.1	0.118	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 2	N	7/9/2007	< 0.01	< 0.005	< 0.01	< 0.05	0.98	< 0.1	< 0.05	< 0.001	< 0.1	0.118	< 0.2	< 1	0	< 0.2	< 1	< 1

TABLE A.1
Southwest Alluvium Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Cl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
GW 2	N	10/1/2007	6,858.13	6.42	6.54	7990	654 D	868 D	382 D	14.2	2400	3700 D	238 D	<0.05	4.8	0.64	<0.1	<0.001
GW 2	N	1/14/2008	6,858.13	6.42	6.59	8180	667 D	921 D	386 D	14.3	2330	3720 D	236 D	< 0.05	10	0.74	< 0.1	< 0.001
GW 2	N	4/7/2008	6,858.53	6.28	6.61	7750	705 D	1030 D	419 D	15.8 D	2190	4190 D	209	< 0.05	12.6	1.08	< 0.1	< 0.001
GW 2	N	7/7/2008	6,858.18	6.08	6.57 H	7780 H	659	962	368 D	12	2290	4240 D	216	< 0.05	11.6	1.53	< 0.1	< 0.003
GW 2	N	10/6/2008	6,857.68	6.22	6.64	8230	635	987	362 D	12	2250	4380 D	209	< 0.1	13.6	1.33	< 0.1	< 0.001
GW 2	N	1/12/2009	6,857.73	6.19	6.54	8540	615	1000	395	13	2270	4300 D	188	<0.05	15.3	2.08	<0.1	<0.001
GW 2	N	4/6/2009	6,857.48	6.25	6.39	8430	603 D	1020 D	396 D	12	2300	4360 D	205	<0.05	17.9	2.72	<0.1	<0.001
GW 2	N	7/6/2009	6,857.48	6.13	6.56	8530 H	634 D	1050	382 D	13	2260	5020 D	215	<0.05	13.6	2.56	<0.1	<0.001
GW 2	N	10/6/2009	6,856.98	6.19	6.66	8580	599 D	1060	374 D	13	2320	4720 D	222	<0.05	13.9	3.57	<0.1	<0.001
GW 2	N	1/4/2010	6,856.93	6.35	6.68	8900 D	608 D	1100	383 D	13	2350	4910 D	215	<0.05	14.6	3.37	<0.1	<0.001
GW 2	N	4/5/2010	6,857.13	6.22	6.49	8750 DH	685 D	1200	430 D	15	2410	5080 D	205	<0.05	16.6 D	3.54	<0.1	<0.001
GW 2	N	7/12/2010	6,856.83	6.17	7.05	8770 D	639 D	1130	397 D	13	2370	4530 D	200 D	0.05	14.8 D	4.36	<0.1	<0.001
GW 2	N	10/4/2010	6,856.48	6.27	7.15	8770 D	613 D	1080	402 D	14	2360	4550 D	193 D	0.07	16 D	5.68	<0.1	<0.001
GW 2	N	1/3/2011	6856.48	6.24	6.55	8340 D	635 D	1170	396 D	15	2260	4560 D	211 D	0.11	14 D	4.8	<0.1	<0.001
GW 2	N	4/4/2011	6856.18	6.4	6.57	8520 D	612	1120	418 D	15	2260	4620 D	211 D	0.15	16 D	5.36	<0.1	<0.001
GW 2	N	7/11/2011	6856.19	6.34	7.11	8520 D	613	1140	411 D	15	2250	4520 D	204 D	0.3 D	17 D	5.4	<0.1	<0.001
GW 2	N	10/3/2011	6855.85	6.33	7.27	8490 D	613	1130	397 D	15	2080	4590 D	208 D	0.4 D	16 D	6.08	<0.1	0.007
GW 3	N	7/20/1989	6,870.50	6.8	6.59	4898	891	273	219	5.3	1354	1798	154	0.11	137	< 1	< 0.1	< 0.001
GW 3	N	10/16/1989	6,870.40	6.8	7.51	4658	802	256	210	7	1214	1704	150	0.11	141	< 1	< 0.1	< 0.001
GW 3	N	1/4/1990	6,870.20	6.4	6.74	4784	890	259	217	5.1	1452	1847	177	0.13	146	< 1	< 0.1	< 0.001
GW 3	N	4/3/1990	6,869.60	6.8	7.18	4859	888	280	218	5.1	1362	1775	170	0.11	111	< 1	< 0.1	< 0.001
GW 3	N	7/2/1990	6,869.20	6.4	7	4794	954	276	195	6.9	1418	1841	164	< 0.05	147	< 1	< 0.1	< 0.001
GW 3	N	10/2/1990	6,869.10	6.6	7.18	4699	770	245	211	5.1	1222	1911	169	< 0.05	102	< 1	< 0.1	< 0.001
GW 3	N	1/16/1991	6,869.10	6.5	7.12	4805	928	290	229	8.8	1057	2004	189	< 0.05	148	< 1	< 0.1	< 0.001
GW 3	N	4/2/1991	6,869.00	6.5	7.15	4935	897	272	221	4.7	1043	1990	185	< 0.05	162	< 1	< 0.1	< 0.001
GW 3	N	7/16/1991	6,867.80	6.6	7.09	4829	828	255	212	5.4	1526	2011	103	0.17	37.5	< 1	< 0.1	< 0.001
GW 3	N	10/14/1991	6,866.90	6.4	6.84	5094	739	226	227	4.7	1330	1856	197	< 0.05	87.2	< 1	< 0.1	< 0.001
GW 3	N	1/14/1992	6,867.20	6.4	7.01	4589	794	262	212	5.8	1345	1762	172	< 0.05	90.1	< 1	0.16	< 0.001
GW 3	N	4/9/1992	6,867.20	6.5	7.32	4757	836	267	261	7.4	1114	1874	179	0.14	86.8	< 1	< 0.1	< 0.001
GW 3	N	7/7/1992	6,865.40	6.3	7.42	4877	785	295	274	7.6	964	1907	111	0.08	112	< 1	< 0.1	< 0.001

TABLE A.1
Southwest Alluvium Data Summary, 1989-2011
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Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5.2	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
GW 2	N	10/1/2007	<0.01	<0.005	<0.01	<0.05	1.27	<0.1	<0.05	<0.001	<0.1	0.117	<0.2	<1	0	<0.2	<1	<1
GW 2	N	1/14/2008	<0.01	<0.005	<0.01	<0.05	1.11	<0.1	<0.05	<0.001	<0.1	0.102 D	<0.2	<1	0	<0.2	<1	1.1
GW 2	N	4/7/2008	<0.01	<0.005	<0.01	<0.05	1.22	<0.1	<0.05	<0.001	<0.1	0.111	0.2 U	0.5 U	0.7	-0.2 U	-9 U	1
GW 2	N	7/7/2008	<0.01	<0.005	<0.01	<0.05	1.22	<0.1	<0.05	<0.001	0.1	0.0949	-0.02 U	1.9	1.88	-0.4 U	0.5 U	0.6 U
GW 2	N	10/6/2008	<0.01	<0.005	<0.01	<0.05	1.21	<0.1	<0.05	<0.001	<0.1	0.0964	-0.08 U	0.34 U	0.26	0.1 U	-0.8 U	1.2
GW 2	N	1/12/2009	<0.01	<0.005	<0.01	<0.05	0.74	<0.1	<0.05	<0.001	<0.1	0.0508	0.13 U	1.7	1.83	-0.3 U	-1 U	1.5
GW 2	N	4/6/2009	<0.01	<0.005	<0.01	<0.05	1.24	<0.1	<0.05	0.001	<0.1	0.0980 D	0.21	1.7	1.91	0.02 U	-1 U	0.6 U
GW 2	N	7/6/2009	<0.01	<0.005	0.01	<0.05	1.42	<0.1	<0.05	<0.001	<0.1	0.0975	0.34	1.2	1.54	-0.01 U	-0.8 U	0.6
GW 2	N	10/6/2009	<0.01	<0.005	0.01	<0.05	1.35	<0.1	<0.05	<0.001	<0.1	0.0896 D	0.29	1.3 U	1.59	-0.02 U	-2 U	0.5 U
GW 2	N	1/4/2010	<0.01	<0.005	<0.01	<0.05	1.31	<0.1	<0.05	<0.001	<0.1	0.087	0.17	1.6	1.77	0.02 U	-0.6 U	0.3 U
GW 2	N	4/5/2010	<0.01	<0.005	0.01	<0.05	1.48	<0.1	<0.05	<0.001	<0.1	0.0946	0.19	1.2	1.39	0.07 U	1.7 U	0.5 U
GW 2	N	7/12/2010	<0.01	<0.005	0.01	<0.05	1.56	<0.1	<0.05	<0.001	<0.1	0.0971	0.25	0.47 U	0.72	0.02 U	-0.2 U	0.2 U
GW 2	N	10/4/2010	<0.01	<0.005	0.01	<0.05	1.44	<0.1	<0.05	<0.001	<0.1	0.0882	0.13 U	1.3	1.43	0.4	1.9	0.2 U
GW 2	N	1/3/2011	<0.01	<0.005	0.01	<0.05	1.54	<0.1	<0.05	<0.001	<0.1	0.0957	0.03 U	0.46 U	0.49	-0.03 U	0.7 U	2.1
GW 2	N	4/4/2011	<0.01	<0.005	0.02	<0.05	1.54	<0.1	<0.05	<0.001	<0.1	0.0862 D	0.04 U	0.24 U	0.28	0.07 U	-0.3 U	0.8
GW 2	N	7/11/2011	<0.01	<0.005	0.01	<0.05	1.66	<0.1	<0.05	<0.001	<0.1	0.093	-0.002 U	1.6	1.598	0.004 U	-1 U	0.8 U
GW 2	N	10/3/2011	<0.01	<0.005	<0.01	<0.05	1.56	<0.1	<0.05	<0.001	<0.1	0.0834	0.09 U	0.99	1.08	-0.008 U	-0.2 U	0.3 U
GW 3	N	7/20/1989	<0.05	<0.01	<0.01	<0.05	1.6	<0.1	<0.05	0.002	<0.1	0.127	0.8	<1	0.8	3.3	2.7	4.1
GW 3	N	10/16/1989	<0.05	<0.01	<0.01	<0.05	1.5	<0.1	<0.05	0.005	<0.1	0.132	0.5	<1	0.5	3.3	<1	4.1
GW 3	N	1/4/1990	<0.05	<0.01	<0.01	<0.05	1.5	<0.1	<0.05	0.002	<0.1	0.132	0.9	<1	0.9	<0.2	<1	1.2
GW 3	N	4/3/1990	<0.05	<0.01	<0.01	<0.05	1.2	<0.1	<0.05	0.001	<0.1	0.103	1	<1	1	<0.2	<1	1.5
GW 3	N	7/2/1990	<0.05	<0.01	0.01	<0.05	1.29	<0.1	<0.05	<0.001	<0.1	0.136	0.2	1.2	1.4	<0.2	<1	<1
GW 3	N	10/2/1990	<0.05	0.01	0.01	<0.05	1.5	<0.1	<0.05	<0.001	<0.1	0.094	<0.2	<1	0	<0.2	<1	<1
GW 3	N	1/16/1991	<0.01	<0.01	<0.01	<0.05	1.45	<0.1	<0.05	<0.001	<0.1	0.1387	<0.2	<1	0	<0.2	<1	<1
GW 3	N	4/2/1991	<0.01	<0.01	<0.01	<0.05	1.43	<0.1	<0.05	0.002	<0.1	0.07	0.3	<1	0.3	<0.2	5.6	<1
GW 3	N	7/16/1991	<0.01	<0.01	0.01	<0.05	1.4	<0.1	<0.05	<0.001	<0.1	0.128	0.3	<1	0.3	<0.2	12.8	<1
GW 3	N	10/14/1991	<0.01	<0.01	0.02	<0.05	1.11	<0.1	<0.05	0.001	<0.1	0.14	0.2	<1	0.2	<0.2	<1	<1
GW 3	N	1/14/1992	<0.01	<0.01	0.02	<0.05	1.61	<0.1	0.11	0.001	<0.1	0.08	<0.2	<1	0	<0.2	13.6	<1
GW 3	N	4/9/1992	<0.01	<0.01	<0.01	<0.05	1.21	<0.1	<0.05	0.024	<0.1	0.155	0.8	3.4	4.2	<0.2	<1	<1
GW 3	N	7/7/1992	<0.01	<0.01	<0.01	<0.05	1.25	<0.1	<0.05	0.002	<0.1	0.12	<0.2	2.7	2.7	<0.2	<1	<1

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Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Cl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
GW 3	N	10/7/1992	6,864.20	6.5	7.32	4766	849	273	288	9.3	1537	1932	182	< 0.05	120	< 1	< 0.1	< 0.001
GW 3	N	1/7/1993	6,864.30	6.4	7.48	5105	903	260	244	6	1610	1968	188	< 0.05	134	< 1	< 0.1	< 0.001
GW 3	N	4/7/1993	6,864.90	6.4	7.07	4791	851	248	277	4.7	1419	1879	183	< 0.05	112	< 1	< 0.1	< 0.001
GW 3	N	7/14/1993	6,863.40	6.4	7.09	4780	989	270	293	5.7	1745	1913	201	< 0.05	94.7	< 1	< 0.1	< 0.001
GW 3	N	10/7/1993	6,862.70	6.6	7.22	4614	889	252	238	6.1	1540	1813	71.8	0.05	119	< 1	< 0.1	< 0.001
GW 3	N	1/6/1994	6,862.70	6.5	7.04	4960	889	251	261	5.6	1573	1836	177	0.11	107	< 1	< 0.1	< 0.001
GW 3	N	4/13/1994	6,863.00	6.6	6.86	4709	866	244	234	5.7	1525	1825	167	0.39	113	< 1	< 0.1	< 0.001
GW 3	N	7/21/1994	6,861.80	6.5	7.16	4790	953	256	250	6.2	1512	1943	160	0.13	105	< 1	< 0.1	< 0.001
GW 3	N	10/5/1994	6,861.50	6.3	7.59	4949	942	250	271	6.7	1481	1938	165	0.25	117	< 1	< 0.1	< 0.001
GW 3	N	1/5/1995	6,861.50	6.4	7.34	5101	990	263	256	7.4	1532	1938	152	0.32	95.4	< 1	< 0.1	< 0.001
GW 3	N	4/5/1995	6,862.30	6.5	7.07	4978	920	240	224	5.2	1519	2090	210	0.41	104	< 1	< 0.1	< 0.001
GW 3	N	7/6/1995	6,860.80	6.4	7.5	4792	914	281	252	6.3	1519	1858	171	0.27	96.4	< 1	< 0.1	< 0.001
GW 3	N	10/3/1995	6,860.20	6.5	7.41	5055	905	267	232	5.8	1512	1905	174	0.41	99.1	< 1	< 0.1	0.003
GW 3	N	1/3/1996	6,859.80	6.5	6.96	4495	805	240	235	6.1	1521	1650	138	< 0.05	106	< 1	< 0.1	0.002
GW 3	N	4/2/1996	6,859.80	6.4	7.64	5010	875	275	260	7	1510	1915	155	< 0.05	111	< 1	< 0.1	< 0.001
GW 3	N	7/7/1996	6,859.70	6.3	7.13	4844	865	260	245	7.4	1434	1860	150	0.14	102	< 1	< 0.1	0.01
GW 3	N	10/1/1996	6,859.70	6.4	6.99	4970	909	277	239	6.7	1480	1884	141	0.05	115	< 1	< 0.1	< 0.001
GW 3	N	1/22/1997	6,859.40	6.4	7.51	4770	885	275	228	7.3	1480	1937	166	0.11	114	< 1	< 0.1	< 0.001
GW 3	N	4/8/1997	6,859.30	6.5	7.59	4990	892	277	227	6.6	1430	1994	171	0.06	117	< 1	< 0.1	< 0.001
GW 3	N	7/8/1997	6,859.20	6.8	7.53	5060	933	282	223	7.4	1390	1810	158	0.11	121	< 1	< 0.1	< 0.001
GW 3	N	10/7/1997	6,859.40	6.2	7.44	5010	879	267	231	6.9	1370	1870	155	< 0.05	114	< 1	< 0.1	< 0.001
GW 3	N	1/16/1998	6,859.20	6.7	7.72	4980	858	265	246	8.1	1330	2000	154	0.28	128	< 1	< 0.1	< 0.001
GW 3	N	4/7/1998	6,859.10	6.6	7.51	4980	895	273	234	6.7	1300	1800	128	0.06	130	< 1	< 0.1	< 0.001
GW 3	N	7/7/1998	6,859.00	6.8	7.74	4930	883	276	244	7.8	1200	2100	139	0.1	117	< 1	< 0.1	< 0.001
GW 3	N	10/6/1998	6,858.60	6.66	7.75	4850	871	268	236	7	1220	1980	134	0.11	220	< 1	< 0.1	< 0.001
GW 3	N	1/5/1999	6,858.50	6.8	7.85	3810	671	193	163	8.9	987	1400	95.2	0.21	85.9	< 1	< 0.1	< 0.001
GW 3	N	4/6/1999	6,858.50	6.7	7.64	4600	811	218	202	8.4	1170	1710	131	0.11	103	< 1	< 0.1	< 0.001
GW 3	N	7/13/1999	6,858.34	6.7	7.9	4610	824	259	205	12.3	1170	1830	126	0.09	119	< 1	< 0.1	< 0.001
GW 3	N	10/5/1999	6,859.30	6.68	7.34	4660	702	219	217	7.5	1170	1680	123	14.8	99	< 1	< 0.1	< 0.001
GW 3	N	1/4/2000	6,858.60	6.6	7.83	4680	760	239	169	9.2	1170	1760	106	< 0.05	113	2	< 0.1	< 0.001

TABLE A.1
Southwest Alluvium Data Summary, 1989-2011
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Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5.2	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
GW 3	N	10/7/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.92	< 0.1	< 0.05	0.002	< 0.1	0.331	0.8	< 1	0.8	< 0.2	< 1	3.3
GW 3	N	1/7/1993	< 0.01	< 0.01	< 0.01	< 0.05	1.71	< 0.1	< 0.05	0.005	< 0.1	0.602	0.4	3.3	3.7	< 0.2	< 1	< 1
GW 3	N	4/7/1993	< 0.01	< 0.01	< 0.01	< 0.05	1.64	< 0.1	< 0.05	0.001	< 0.1	0.219	0.6	< 1	0.6	< 0.2	2.2	< 1
GW 3	N	7/14/1993	< 0.01	< 0.01	< 0.01	< 0.05	1.81	< 0.1	< 0.05	0.001	< 0.1	0.135	1.6	3	4.6	< 0.2	< 1	1.8
GW 3	N	10/7/1993	< 0.01	< 0.01	< 0.01	< 0.05	1.79	< 0.1	< 0.05	0.002	< 0.1	0.08	0.6	< 1	0.6	< 0.2	< 1	< 1
GW 3	N	1/6/1994	< 0.01	< 0.01	< 0.01	< 0.05	1.92	< 0.1	< 0.05	< 0.001	< 0.1	0.099	0.8	< 1	0.8	< 0.2	< 1	< 1
GW 3	N	4/13/1994	< 0.01	< 0.01	< 0.01	< 0.05	1.89	< 0.1	< 0.05	< 0.001	< 0.1	0.096	1.7	< 1	1.7	< 0.2	5.9	1.9
GW 3	N	7/21/1994	< 0.01	< 0.01	< 0.01	< 0.05	2.26	< 0.1	< 0.05	< 0.001	< 0.1	0.082	0.4	< 1	0.4	< 0.2	< 1	< 1
GW 3	N	10/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	1.87	< 0.1	< 0.05	< 0.001	< 0.1	0.083	< 0.2	1.1	1.1	< 0.2	1.7	1.5
GW 3	N	1/5/1995	< 0.01	< 0.01	< 0.01	< 0.05	1.97	< 0.1	< 0.05	< 0.001	< 0.1	0.078	0.9	2.5	3.4	< 0.2	< 1	4.8
GW 3	N	4/5/1995	< 0.01	< 0.01	< 0.01	< 0.05	1.91	< 0.1	< 0.05	< 0.001	< 0.1	0.08	0.5	< 1	0.5	< 0.2	< 1	< 1
GW 3	N	7/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	1.92	< 0.1	< 0.05	0.002	< 0.1	0.0882	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	10/3/1995	< 0.01	< 0.01	< 0.01	< 0.05	1.93	< 0.1	< 0.05	0.012	< 0.1	0.0868	0.3	< 1	0.3	< 0.2	< 1	< 1
GW 3	N	1/3/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.74	< 0.1	< 0.05	0.014	< 0.1	0.081	0.4	< 1	0.4	0.4	< 1	< 1
GW 3	N	4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.82	< 0.1	< 0.05	< 0.001	< 0.1	0.087	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	7/7/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.99	< 0.1	< 0.05	< 0.001	< 0.1	0.1	0.3	< 1	0.3	1.2	< 1	< 1
GW 3	N	10/1/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.92	< 0.1	< 0.05	0.001	< 0.1	0.072	< 0.2	< 1	0	0.4	< 1	< 1
GW 3	N	1/22/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.92	< 0.1	< 0.05	< 0.001	< 0.1	0.072	0.6	< 1	0.6	< 0.2	< 1	< 1
GW 3	N	4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.93	< 0.1	< 0.05	0.02	< 0.1	0.086	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.7	< 0.1	< 0.05	< 0.001	< 0.1	0.061	0.4	< 1	0.4	< 0.2	< 1	< 1
GW 3	N	10/7/1997	< 0.01	< 0.01	< 0.01	< 0.05	2.19	< 0.1	< 0.05	< 0.001	< 0.1	0.065	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	1/16/1998	< 0.01	< 0.01	< 0.01	< 0.05	2	< 0.1	< 0.05	< 0.001	< 0.1	0.0721	1.3	< 1	1.3	< 0.2	< 1	3.8
GW 3	N	4/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.79	< 0.1	< 0.05	< 0.001	< 0.1	0.0632	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	7/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.69	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.5	< 1	0.5	< 0.2	< 1	< 1
GW 3	N	10/6/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.76	< 0.1	< 0.05	< 0.001	< 0.1	0.0607	0.7	< 1	0.7	< 0.2	< 1	< 1
GW 3	N	1/5/1999	< 0.01	0.007	< 0.01	< 0.05	1.41	< 0.1	< 0.05	< 0.001	< 0.1	0.0475	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	4/6/1999	< 0.01	< 0.005	< 0.01	< 0.05	1.82	< 0.1	< 0.05	< 0.001	< 0.1	0.0518	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	7/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	1.69	< 0.1	< 0.05	< 0.001	< 0.1	0.0047	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	10/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	2.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0569	0.6	< 1	0.6	< 0.2	< 1	< 1
GW 3	N	1/4/2000	< 0.01	< 0.005	< 0.01	< 0.05	1.78	< 0.1	< 0.05	0.001	< 0.1	0.0513	0.5	< 1	0.5	< 0.2	< 1	< 1

TABLE A.1
Southwest Alluvium Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Cl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
GW 3	N	5/15/2000	6,858.00	6.6	7.71	4780	755	241	211	8	1174	1830	127	0.15	119	< 1	< 0.1	0.001
GW 3	N	7/17/2000	6,857.80	6.48	7.51	4800	809	258	207	9.14	1190	1710	125	< 0.05	117	< 1	< 0.1	< 0.001
GW 3	N	10/10/2000	6,857.60	6.56	7.6	4680	644	210	179	9	1170	1320	96.4	0.1	118	< 1	< 0.1	< 0.001
GW 3	N	1/9/2001	6,858.00	6.82	7.62	4660	830	265	207	8.5	1210	1850	125	< 0.05	115	< 1	< 0.1	< 0.001
GW 3	N	2/6/2001	6,858.30	6.99	7.12	4720	943	290	183	9.7	1220	2120	123	< 0.05	110	< 1	< 0.1	< 0.001
GW 3	N	3/6/2001	6,858.70	7	7.63	4380	817	263	164	9.3	1180	2040	120	0.16	112	< 1	< 0.1	< 0.001
GW 3	N	4/10/2001	6,859.05	7.26	7.2	4680	945	287	207	9.1	1250	2070	128	0.14	108	< 1	< 0.1	< 0.001
GW 3	N	5/8/2001	6,859.10	6.72	7.49	4850	808	256	195	8.9	1250	1730	146	0.15	107	< 1	< 0.1	< 0.001
GW 3	N	6/5/2001	6,859.30	6.76	7.25	4230	847	274	194	8.6	1280	1940	136	0.2	97.5	< 1	0.1	< 0.001
GW 3	N	7/10/2001	6,859.30	6.87	7.1	4980	888	288	244	9	1350	1880	125	0.11	98	< 1	< 0.1	< 0.001
GW 3	N	8/7/2001	6,859.32	6.59	7.2	5010	820	270	210	9.4	1390	1800	160	0.11	90.5	< 1	< 0.1	< 0.001
GW 3	N	9/11/2001	6,859.50	6.65	7.5	4980	840	270	233	8.9	1400	1810	154	0.1	104	< 1	0.13	< 0.001
GW 3	N	10/1/2001	6,859.55	6.83	7.4	5010	810	260	224	8.5	1450	1950	169	0.15	92	< 1	< 0.1	< 0.001
GW 3	N	11/6/2001	6,859.65	6.79	7.6	5020	886	280	229	9.6	1420	2050	173	0.08	88	< 1	0.1	< 0.001
GW 3	N	12/4/2001	6,859.80	6.95	7.4	5020	833	260	201	8.2	1440	1720	148	0.11	91	< 1	< 0.1	< 0.001
GW 3	N	1/8/2002	6,859.80	6.9	7.2	5050	983	293	192	10.2	1440	2200	171	0.09	86.5	< 1	< 0.1	< 0.001
GW 3	N	2/5/2002	6,859.80	6.91	7.2	5110	960	281	219	9.5	1440	2080	165	0.11	82.3	< 1	< 0.1	< 0.001
GW 3	N	3/5/2002	6,859.85	6.77	7.4	5090	914	283	246	8.9	1490	2160	160	0.09	84.3	< 1	< 0.1	< 0.001
GW 3	N	4/2/2002	6,859.90	6.76	7.59	5240	968	291	236	10.5	1480	2110	168	0.1	83.6	< 1	< 0.1	< 0.001
GW 3	N	5/7/2002	6,859.92	6.51	7.44	5320	953	288	250	10.2	1510	2120	159	0.08	82.4	< 1	< 0.1	< 0.001
GW 3	N	6/4/2002	6,859.95	6.68	7.67	5330	958	293	236	8	1520	2110	148	0.1	83.4	< 1	< 0.1	< 0.001
GW 3	N	7/9/2002	6,859.65	6.71	7.38	5430	953	302	157	8.8	1560	2170	127	0.24	93.2	< 1	< 0.1	< 0.001
GW 3	N	10/7/2002	6,859.50	6.64	7.35	4510	884	276	223	8	1620	2030	150	0.22	83.8	< 1	< 0.1	< 0.001
GW 3	N	1/7/2003	6,859.82	6.67	7.39	5530	981	312	274	9.6	1710	2210	154	0.24	86	< 1	< 0.1	< 0.001
GW 3	N	4/8/2003	6,859.84	6.6	7.3	5540	940	282	256	10.9	1680	1900	165	0.23	98	< 1	< 0.1	< 0.001
GW 3	N	7/8/2003	6,859.59	6.45	7.46	5480	866	276	234	9.9	1700	2000	143	0.21	94	< 1	< 0.1	< 0.001
GW 3	N	10/7/2003	6,859.53	6.46	7.3	5490	988	327	280	8.6	1740	2220	171	0.19	89	< 1	< 0.1	< 0.001
GW 3	N	1/6/2004	6,859.61	6.63	7.27	5380	951	317	242	8.5	1700	2170	183	0.38	89.4 D	< 1.0	0.2	< 0.001
GW 3	N	4/6/2004	6,859.76	6.81	6.82	5410	924	309	239	8.6	1680	2070 D	157	0.29	86.7 D	< 1	< 0.1	< 0.001
GW 3	N	7/13/2004	6,859.49	6.44	6.8	5580	968	316	278	9.8	1720	2110 D	172	0.24	82.6 D	< 1.0	< 0.1	< 0.001

TABLE A.1
Southwest Alluvium Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5.2	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
GW 3	N	5/15/2000	< 0.01	< 0.005	< 0.01	< 0.05	1.87	< 0.1	< 0.05	0.001	< 0.1	0.0568	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	7/17/2000	< 0.01	< 0.005	0.01	< 0.05	1.78	< 0.1	< 0.05	< 0.001	< 0.1	0.056	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	10/10/2000	< 0.01	< 0.005	< 0.01	< 0.05	1.57	< 0.1	< 0.05	< 0.001	< 0.1	0.058	< 0.2	1.1	1.1	< 0.2	< 1	< 1
GW 3	N	1/9/2001	< 0.01	< 0.005	0.01	< 0.05	1.9	< 0.1	< 0.05	0.001	< 0.1	0.056	< 0.2	3.6	3.6	< 0.2	< 1	< 1
GW 3	N	2/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.91	< 0.1	< 0.05	0.002	< 0.1	0.059	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	3/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.87	< 0.1	< 0.05	0.001	< 0.1	0.0569	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	4/10/2001	< 0.01	< 0.005	0.01	< 0.05	1.91	< 0.1	< 0.05	0.001	< 0.1	0.057	< 0.2	2.4	2.4	< 0.2	< 1	1.3
GW 3	N	5/8/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.96	< 0.1	< 0.05	0.001	< 0.1	0.06	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	6/5/2001	< 0.01	< 0.005	0.01	< 0.05	2.06	< 0.1	< 0.05	0.005	< 0.1	0.058	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	7/10/2001	< 0.01	< 0.005	0.01	< 0.05	2.22	< 0.1	< 0.05	0.001	< 0.1	0.0676	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	8/7/2001	< 0.01	< 0.005	< 0.01	< 0.05	2	< 0.1	< 0.05	< 0.001	< 0.1	0.071	0.4	< 1	0.4	< 0.2	< 1	< 1
GW 3	N	9/11/2001	< 0.01	< 0.005	0.01	< 0.05	1.99	< 0.1	< 0.05	0.001	< 0.1	0.0655	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	10/1/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.78	< 0.1	< 0.05	0.001	< 0.1	0.0646	0.3	< 1	0.3	< 0.2	< 1	< 1
GW 3	N	11/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.91	< 0.1	< 0.05	< 0.001	< 0.1	0.0632	0.4	< 1	0.4	< 0.2	< 1	< 1
GW 3	N	12/4/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.93	< 0.1	< 0.05	< 0.001	< 0.1	0.0726	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	1/8/2002	< 0.01	< 0.005	0.01	< 0.05	1.79	< 0.1	< 0.05	< 0.001	< 0.1	0.0635	0.3	1.5	1.8	< 0.2	< 1	< 1
GW 3	N	2/5/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.89	< 0.1	< 0.05	< 0.001	< 0.1	0.0586	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	3/5/2002	< 0.01	< 0.005	< 0.01	< 0.05	2.34	< 0.1	< 0.05	< 0.001	< 0.1	0.0805	0.5	< 1	0.5	< 0.2	< 1	< 1
GW 3	N	4/2/2002	< 0.01	< 0.005	< 0.01	< 0.05	2.08	< 0.1	< 0.05	< 0.001	0.1	0.0704	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	5/7/2002	< 0.01	< 0.005	0.01	< 0.05	2.18	< 0.1	< 0.05	< 0.001	< 0.1	0.08	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	6/4/2002	< 0.01	< 0.005	0.01	< 0.05	1.97	< 0.1	< 0.05	< 0.001	< 0.1	0.0789	0.4	< 1	0.4	< 0.2	< 1	< 1
GW 3	N	7/9/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.79	< 0.1	< 0.05	< 0.001	< 0.1	0.0934	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	10/7/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.95	< 0.1	< 0.05	< 0.001	< 0.1	0.0713	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	1/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	2.05	< 0.1	< 0.05	< 0.001	< 0.1	0.111	< 0.2	< 1	0	< 0.2	< 1	< 1.0
GW 3	N	4/8/2003	< 0.01	< 0.005	< 0.01	< 0.05	2.01	< 0.1	< 0.05	< 0.001	< 0.1	0.106	0.4	4	4.4	< 0.2	< 1	< 1.0
GW 3	N	7/8/2003	< 0.01	< 0.005	0.02	< 0.05	1.93	< 0.1	< 0.05	< 0.001	< 0.1	0.0866	< 0.2	< 1	0	< 0.2	< 1	< 1.0
GW 3	N	10/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.87	< 0.1	< 0.05	< 0.001	< 0.1	0.104	< 0.2	< 1	0	< 0.2	< 1	< 1.0
GW 3	N	1/6/2004	< 0.01	< 0.005	< 0.01	< 0.05	2.13	< 0.1	< 0.05	< 0.001	< 0.1	0.0908 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
GW 3	N	4/6/2004	< 0.01	< 0.005	< 0.01	< 0.05	1.91	< 0.1	< 0.05	0.001	< 0.1	0.097 D	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	7/13/2004	< 0.01	< 0.005	0.01	< 0.05	1.74	< 0.1	< 0.05	< 0.001	< 0.1	0.104 D	0.3	< 1.0	0.3	< 0.2	< 1.0	< 1.0

TABLE A.1
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Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Cl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
GW 3	N	10/5/2004	6,859.28	6.5	7.07	5720	935 D	315 D	272	8	1680	2080 D	165	0.06	80.0 D	< 1.0	< 0.1	< 0.001
GW 3	N	1/4/2005	6,859.49	6.68	7.05	5560	960 D	316 D	281	8.9	1730	2050 D	171	0.17	86 D	< 1.0	0.4	< 0.001
GW 3	N	4/5/2005	6,859.37	6.68	7.1	5270	968	328	283	8.2	1550	2130	168	0.09	71	< 1.0	< 0.1	< 0.001
GW 3	N	7/12/2005	6,859.09	6.51	7.1	5190	970 D	319 D	268	7.8	1640	2110 D	170	0.09	77 D	< 1.0	< 0.1	< 0.001
GW 3	N	10/4/2005	6,858.90	6.52	7.26	5270	926 D	314 D	275	8.6	1680	2120 D	178	0.11	78 D	< 1.0	< 0.1	< 0.001
GW 3	N	1/10/2006	6,858.96	6.65	7.62	5100	843	285	272	6.4	1650	1940 D	152	< 0.05	90 D	< 1.0	< 0.1	< 0.001
GW 3	N	4/4/2006	6,859.04	6.55	7.14	5300	977 D	337 D	258	9	1460	2150 D	183	0.24	94 D	< 1.0	< 0.1	< 0.001
GW 3	N	7/18/2006	6,858.64	6.33	6.88	5290	978 D	328 D	293	10.2	1580	2360 D	167	0.07	91 D	< 1.0	< 0.1	< 0.001
GW 3	N	10/3/2006	6,858.59	6.44	6.78	5070	865 D	289 D	253	9	1590	1920 D	149	0.16	100 D	< 0.5	0.1	< 0.001
GW 3	N	1/9/2007	6,858.82	6.58	6.82	5270	867 D	291 D	248	8.7	1550	2170 D	164	0.27	90 D	< 0.5	< 0.1	< 0.001
GW 3	N	4/10/2007	6,858.87	6.68	6.85	5170	882 D	292 D	254	10.2	1540	2050 D	156	0.05	97 D	< 0.5	< 0.1	< 0.001
GW 3	N	7/10/2007	6,858.44	6.48	6.67	5110	927 D	313 D	280	8.9	1630	2280 D	141	0.09	101 D	< 0.5	< 0.1	0.01
GW 3	N	10/2/2007	6,858.27	6.5	6.67	5150	812 D	267 D	280 D	10	1580	1970 D	176 D	< 0.05	94 D	< 0.5	< 0.1	< 0.001
GW 3	N	1/15/2008	6,858.44	6.62	6.73	5250	849 D	275 D	282 D	9.9	1530	1970 D	177 D	< 0.05	88 D	< 0.5	< 0.1	< 0.001
GW 3	N	4/8/2008	6,858.59	6.56	6.75	4970	945 D	311 D	318 D	10.6 D	1450	2250 D	139	< 0.1	143 D	< 0.50	< 0.1	< 0.001
GW 3	N	7/8/2008	6,858.19	6.28	6.69	5130	917	279	282 D	9	1500	2210 D	156	< 0.05	95.3 D	< 0.5	0.2	< 0.003
GW 3	N	10/7/2008	6,857.79	6.59	6.91	5080	918	288	296 D	8	1450	2390 D	149	< 0.1	138 D	< 0.5	0.8	< 0.001
GW 3	N	1/13/2009	6,857.89	6.55	6.62	5430	964	304	324	9	1410	1980 D	159	< 0.05	165 D	< 0.5	0.4	< 0.001
GW 3	N	4/7/2009	6,857.74	6.53	6.56	5250	860 D	282 D	298 D	8	1430	2190 D	180	< 0.05	115 D	< 0.50	1.4	< 0.001
GW 3	N	7/7/2009	6,857.59	6.48	6.86	5370	858	276	282	8	1410	2140 D	193	0.05	114 D	< 0.50	0.5	< 0.001
GW 3	N	10/6/2009	6,857.14	6.38	7.37	5430	889 D	281	283 D	8	1430	2240 D	201	< 0.05	124 D	< 0.50	1.5	< 0.001
GW 3	N	1/5/2010	no data	no data	6.94	5470 D	914 D	276	316	8	1460	2420 D	92	< 0.05	130 D	< 0.50	< 0.1	< 0.001
GW 3	N	4/6/2010	6,857.14	6.64	6.63	5390 D	935 D	283	306 D	9	1530	2330 D	191	< 0.05	111 D	< 0.50	< 0.1	< 0.001
GW 3	N	7/13/2010	6,856.89	6.4	6.88	5380 D	912	280	330	9	1580	2250 D	169 D	< 0.05	100 D	< 0.50	< 0.1	< 0.001
GW 3	N	10/5/2010	6,856.54	6.59	7.18	5420 D	890	272	336	9	1590	2240 D	166 D	0.09	100 D	< 0.50	0.8	< 0.001
GW 3	N	1/4/2011	6856.54	6.55	7.69	5090 D	870	273	324	9	1550	2200 D	174 D	0.05	86 D	< 0.50	0.1	< 0.001
GW 3	N	4/5/2011	6856.49	6.59	6.71	5480 D	873	270	352	9	1600	2220 D	171 D	< 0.05	72 D	< 0.50	1.1	< 0.001
GW 3	N	7/12/2011	6856.29	6.61	6.84	5310 D	906	280	353	9	1620	2210 D	168 D	< 0.1	97 D	< 0.50	0.2	< 0.001
GW 3	N	10/4/2011	6855.94	6.71	7.54	5230 D	896	276	344	9	1550	2240 D	170 D	< 0.1	91 D	< 0.50	0.4	0.013
GW 4	N	7/18/1989	6,915.60	6.9	7.19	4068	714	216	212	14.4	756	1842	47	0.27	148	< 1	< 0.1	< 0.001

TABLE A.1
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Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5.2	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
GW 3	N	10/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	1.76	< 0.1	< 0.05	< 0.001	< 0.1	0.107 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
GW 3	N	1/4/2005	< 0.01	< 0.005	< 0.01	< 0.05	1.88	< 0.1	< 0.05	< 0.001	< 0.1	0.116	0.2	< 1.0	0.2	< 0.2	< 1.0	2.6
GW 3	N	4/5/2005	< 0.01	< 0.005	< 0.01	< 0.05	1.84	< 0.1	< 0.05	< 0.001	< 0.1	0.112	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
GW 3	N	7/12/2005	< 0.01	< 0.005	< 0.01	< 0.05	1.88	< 0.1	< 0.05	< 0.001	< 0.1	0.107	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
GW 3	N	10/4/2005	< 0.01	< 0.005	0.01	< 0.05	1.78	< 0.1	< 0.05	< 0.001	< 0.1	0.118	< 0.2	1.4	1.4	< 0.2	< 1.0	< 1.0
GW 3	N	1/10/2006	< 0.01	< 0.005	< 0.01	< 0.05	1.81	< 0.1	< 0.05	< 0.001	< 0.1	0.115	< 0.2	1.1	1.1	< 0.2	< 1.0	< 1.0
GW 3	N	4/4/2006	< 0.01	< 0.005	0.01	< 0.05	1.79	< 0.1	< 0.05	< 0.001	< 0.1	0.0975 D	< 0.2	2.3	2.3	< 0.2	< 1.0	< 1.0
GW 3	N	7/18/2006	< 0.01	< 0.005	0.01	< 0.05	1.81	< 0.1	< 0.05	< 0.001	< 0.1	0.117	0.4	1.8	2.2	< 0.2	< 1.0	< 1.0
GW 3	N	10/3/2006	< 0.01	< 0.005	< 0.01	< 0.05	1.85	< 0.1	< 0.05	< 0.001	< 0.1	0.112	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	1/9/2007	< 0.01	< 0.005	< 0.01	< 0.05	1.76	< 0.1	< 0.05	< 0.001	< 0.1	0.112	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	4/10/2007	< 0.01	< 0.005	< 0.01	< 0.05	1.62	< 0.1	< 0.05	< 0.001	< 0.1	0.113	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	7/10/2007	< 0.01	< 0.005	< 0.01	< 0.05	1.13	< 0.1	< 0.05	< 0.001	< 0.1	0.13	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	10/2/2007	< 0.01	< 0.005	< 0.01	< 0.05	1.68	< 0.1	< 0.05	< 0.001	< 0.1	0.136	< 0.2	< 1	0	< 0.2	< 1	1.2
GW 3	N	1/15/2008	< 0.01	< 0.005	< 0.01	< 0.05	1.42	< 0.1	< 0.05	< 0.001	< 0.1	0.123	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 3	N	4/8/2008	< 0.01	< 0.005	< 0.01	< 0.05	1.61	< 0.1	< 0.05	< 0.001	< 0.1	0.13	0.1 U	-0.1 U	0	-0.3 U	0 U	2.1
GW 3	N	7/8/2008	< 0.01	< 0.005	< 0.01	< 0.05	1.82	< 0.1	< 0.05	< 0.001	< 0.1	0.133	0.22	0.83 U	1.05	0.1 U	1.3 U	1.1
GW 3	N	10/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	1.66	< 0.1	< 0.05	< 0.001	< 0.1	0.118	0.05 U	1.2 U	1.25	0 U	2.6 U	1.7
GW 3	N	1/13/2009	< 0.01	< 0.005	< 0.01	< 0.05	1.46	< 0.1	< 0.05	< 0.001	< 0.1	0.126	0.02 U	-0.2 U	-0.18	0.7 U	-1 U	1.9
GW 3	N	4/7/2009	< 0.01	< 0.005	< 0.01	< 0.05	1.46	< 0.1	< 0.05	0.001	< 0.1	0.145	0.04 U	0.67 U	0.71	0.2 U	0.7 U	0.7
GW 3	N	7/7/2009	< 0.01	< 0.005	< 0.01	< 0.05	1.47	< 0.1	< 0.05	< 0.001	< 0.1	0.125	0.35	0.45 U	0.8	-0.02 U	0.0 U	2.3
GW 3	N	10/6/2009	< 0.01	< 0.005	< 0.01	< 0.05	1.52	< 0.1	< 0.05	< 0.001	< 0.1	0.151	0.25	0.26 U	0.51	0.04 U	1.6 U	0.7 U
GW 3	N	1/5/2010	< 0.01	< 0.005	< 0.01	< 0.05	1.51	< 0.1	< 0.05	< 0.001	< 0.1	0.142	-0.2 U	0.39 U	0.19	-0.009 U	0.2 U	0.7
GW 3	N	4/6/2010	< 0.01	< 0.005	< 0.01	< 0.05	1.47	< 0.1	< 0.05	< 0.001	< 0.1	0.158	0.25	0.94 U	1.19	0.02 U	3.2	1.1
GW 3	N	7/13/2010	< 0.01	< 0.005	0.01	< 0.05	1.96	< 0.1	< 0.05	< 0.001	< 0.1	0.194	-0.05 U	-0.06 U	-0.11	0.01 U	-0.2 U	0.4 U
GW 3	N	10/5/2010	< 0.01	< 0.005	0.01	< 0.05	1.64	< 0.1	< 0.05	< 0.001	< 0.1	0.215	0.06 U	2.2	2.26	-0.02 U	2.7	0.4 U
GW 3	N	1/4/2011	< 0.01	< 0.005	0.01	< 0.05	1.58	< 0.1	< 0.05	< 0.001	< 0.1	0.199	0.10 U	2.7	2.8	0.06 U	0.3 U	0.02 U
GW 3	N	4/5/2011	< 0.01	< 0.005	0.01	< 0.05	1.7	< 0.1	< 0.05	< 0.001	< 0.1	0.212	-0.05 U	1.1	1.05	0.08 U	0.1 U	0.3 U
GW 3	N	7/12/2011	< 0.01	< 0.005	0.01	< 0.05	1.64	< 0.1	< 0.05	< 0.001	< 0.1	0.236	-0.06 U	0.43 U	0.37	0.009 U	0.1 U	0.8 U
GW 3	N	10/4/2011	< 0.01	< 0.005	< 0.01	< 0.05	1.65	< 0.1	< 0.05	0.003	< 0.1	0.22	0.05 U	0.69 U	0.74	0.02 U	-0.3 U	0.4 U
GW 4	N	7/18/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.14	< 0.1	< 0.05	0.006	< 0.1	0.0901	1.6	< 1	1.6	8.3	< 1	5.5

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Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Cl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
GW 4	N	10/12/1989	6,915.00	7.2	7.48	4078	680	202	202	18	793	1822	50.2	0.21	134	< 1	0.12	< 0.001
GW 4	N	1/4/1990	6,914.60	7.2	7.28	4036	728	222	198	14.1	775	1780	51.7	0.11	134	< 1	< 0.1	< 0.001
GW 4	N	4/3/1990	6,913.60	7.1	7.4	4193	740	212	194	14	789	1707	52.4	0.09	120	< 1	< 0.1	< 0.001
GW 4	N	7/2/1990	6,912.70	6.8	7.3	4326	830	214	167	13.8	866	1651	54.7	< 0.05	176	< 1	< 0.1	< 0.001
GW 4	N	10/3/1990	6,912.40	6.9	7.31	4135	699	198	198	14.4	732	1610	56.2	< 0.05	116	< 1	< 0.1	0.001
GW 4	N	1/15/1991	6,912.40	7	7.29	4064	759	213	189	13.3	731	1678	54.6	< 0.05	176	< 1	0.24	< 0.001
GW 4	N	4/2/1991	6,912.70	7.1	7.59	3990	641	183	180	12.4	550	1660	46.3	< 0.05	162	< 1	< 0.1	< 0.001
GW 4	N	7/17/1991	6,914.40	7.1	7.55	3981	578	190	164	12.9	527	1703	41.2	0.08	132	< 1	< 0.1	0.001
GW 4	N	10/15/1991	6,913.80	7	7.26	3880	698	214	165	13.4	732	1826	43.8	< 0.05	67.6	< 1	< 0.1	0.001
GW 4	N	1/15/1992	6,913.10	7	7.03	3779	619	189	163	11.8	623	1803	38.7	< 0.05	77.4	< 1	< 0.1	< 0.001
GW 4	N	4/7/1992	6,912.20	7	7.19	3334	579	177	185	14.1	602	1621	38.7	0.06	78.2	< 1	< 0.1	0.004
GW 4	N	7/8/1992	6,911.50	7	7.59	3505	661	190	233	14.7	636	1663	40.7	0.2	108	< 1	< 0.1	0.001
GW 4	N	10/6/1992	6,910.90	7.1	7.35	3857	762	204	187	13.2	585	1727	42	< 0.05	162	< 1	0.1	0.002
GW 4	N	1/6/1993	6,910.40	7.1	7.72	3595	667	175	180	12.6	714	1454	49.1	0.13	138	< 1	< 0.1	< 0.001
GW 4	N	4/6/1993	6,910.30	7.2	7.63	3898	665	177	192	10.6	736	1694	51.2	< 0.05	137	< 1	< 0.1	0.001
GW 4	N	7/13/1993	6,910.50	7.1	7.13	4181	727	195	168	12.6	755	1820	47	0.1	125	< 1	< 0.1	< 0.001
GW 4	N	10/6/1993	6,910.60	7.3	7.45	4081	694	177	170	11.3	780	1700	42.1	< 0.05	124	< 1	< 0.1	< 0.001
GW 4	N	1/6/1994	6,911.60	7.2	7.71	3798	656	169	171	10.7	798	1689	40.2	0.17	82.4	< 1	< 0.1	< 0.001
GW 4	N	4/13/1994	6,911.70	7.1	7.2	3682	658	170	157	11.1	752	1688	39.1	0.3	109	< 1	< 0.1	< 0.001
GW 4	N	7/20/1994	6,910.80	7.1	7.09	3676	727	195	157	12	733	1729	40.1	0.18	110	< 1	< 0.1	< 0.001
GW 4	N	10/4/1994	6,910.70	7.1	7.78	3849	721	198	181	12	712	1796	45.6	0.13	119	< 1	< 0.1	< 0.001
GW 4	N	1/5/1995	6,910.30	7.1	7.42	3937	746	192	168	13	738	1697	45.6	0.22	122	< 1	< 0.1	< 0.001
GW 4	N	4/4/1995	6,910.40	7.2	7.47	3989	790	216	182	12.8	805	1844	49	0.44	141	< 1	< 0.1	< 0.001
GW 4	N	7/6/1995	6,909.40	7.2	7.63	3957	740	207	183	15.2	610	1740	58	0.85	141	< 1	< 0.1	< 0.001
GW 4	N	10/3/1995	6,909.20	7.1	7.82	4277	715	213	172	12.6	630	1692	51	3.01	165	< 1	< 0.1	0.004
GW 4	N	1/2/1996	6,909.20	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
GW 4	N	4/2/1996	6,909.20	7.1	7.83	4092	718	193	166	12.4	706	1688	46.6	0.37	146	< 1	< 0.1	< 0.001
GW 4	N	7/9/1996	6,908.60	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
GW 4	N	10/1/1996	6,908.50	6.9	7.66	3900	743	194	165	12.1	806	1671	44	0.28	126	< 1	0.19	0.001
GW 4	N	1/22/1997	6,908.60	6.6	7.7	3490	740	195	146	11.1	773	1739	48	0.1	116	< 1	< 0.1	< 0.001

TABLE A.1
Southwest Alluvium Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5.2	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
GW 4	N	10/12/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	0.008	< 0.1	0.077	1.2	< 1	1.2	< 0.2	1.1	2
GW 4	N	1/4/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.05	< 0.1	< 0.05	0.005	< 0.1	0.077	2.9	< 1	2.9	< 0.2	< 1	3.1
GW 4	N	4/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	0.006	< 0.1	0.077	1	< 1	1	0.4	< 1	1.7
GW 4	N	7/2/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.004	< 0.1	0.0756	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 4	N	10/3/1990	< 0.05	< 0.01	0.02	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	0.059	< 0.2	2.7	2.7	< 0.2	< 1	< 1
GW 4	N	1/15/1991	< 0.01	< 0.01	0.01	< 0.05	0.04	< 0.1	< 0.05	0.004	< 0.1	0.0647	0.8	< 1	0.8	< 0.2	< 1	1.2
GW 4	N	4/2/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.08	< 0.1	< 0.05	0.005	< 0.1	0.048	< 0.2	< 1	0	< 0.2	2.2	< 1
GW 4	N	7/17/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.14	< 0.1	< 0.05	0.008	< 0.1	0.044	0.2	< 1	0.2	< 0.2	< 1	< 1
GW 4	N	10/15/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.14	< 0.1	< 0.05	0.008	< 0.1	0.044	1.2	< 1	1.2	< 0.2	< 1	< 1
GW 4	N	1/15/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.1	< 0.1	< 0.05	0.006	< 0.1	0.124	< 0.2	1.9	1.9	< 0.2	< 1	< 1
GW 4	N	4/7/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.06	< 0.1	< 0.05	0.019	< 0.1	0.07	< 0.2	7.1	7.1	< 0.2	6.3	< 1
GW 4	N	7/8/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.05	< 0.1	< 0.05	0.004	< 0.1	0.047	< 0.2	2.6	2.6	< 0.2	< 1	< 1
GW 4	N	10/6/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.05	0.1	< 0.05	0.016	< 0.1	0.086	0.3	< 1	0.3	< 0.2	< 1	< 1
GW 4	N	1/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.06	< 0.1	< 0.05	0.015	< 0.1	0.111	2.3	< 1	2.3	< 0.2	< 1	5.1
GW 4	N	4/6/1993	< 0.005	< 0.01	0.01	< 0.05	0.05	< 0.1	< 0.05	0.01	< 0.1	0.081	0.3	< 1	0.3	< 0.2	2.8	< 1
GW 4	N	7/13/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	0.016	< 0.1	0.064	0.2	< 1	0.2	< 0.2	3.2	< 1
GW 4	N	10/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.05	< 0.1	< 0.05	0.007	< 0.1	0.073	< 0.2	1.3	1.3	< 0.2	1.2	1.9
GW 4	N	1/6/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.08	< 0.1	< 0.05	0.007	< 0.1	0.052	3.3	3.3	6.6	< 0.2	1.6	10.6
GW 4	N	4/13/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	0.004	< 0.1	0.067	0.9	< 1	0.9	< 0.2	6.8	< 1
GW 4	N	7/20/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.007	< 0.1	0.067	0.5	14.8	15.3	< 0.2	< 1	22.9
GW 4	N	10/4/1994	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.004	< 0.1	0.087	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 4	N	1/5/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.07	< 0.1	< 0.05	0.002	< 0.1	0.062	1.1	< 1	1.1	< 0.2	< 1	1.3
GW 4	N	4/4/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	0.005	< 0.1	0.072	0.6	< 1	0.6	< 0.2	< 1	< 1
GW 4	N	7/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.09	< 0.1	< 0.05	0.012	< 0.1	0.0374	0.9	< 1	0.9	0.4	< 1	< 1
GW 4	N	10/3/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.09	< 0.1	< 0.05	0.019	< 0.1	0.0711	0.3	< 1	0.3	< 0.2	< 1	1.3
GW 4	N	1/2/1996	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
GW 4	N	4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.065	0.3	< 1	0.3	< 0.2	< 1	< 1
GW 4	N	7/9/1996	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
GW 4	N	10/1/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.08	< 0.1	< 0.05	0.007	< 0.1	0.063	0.8	< 1	0.8	0.8	< 1	< 1
GW 4	N	1/22/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.07	< 0.1	< 0.05	0.003	< 0.1	0.06	< 0.2	< 1	0	< 0.2	< 1	< 1

TABLE A.1
Southwest Alluvium Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Chl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
GW 4	N	4/8/1997	6,908.50	7.2	7.75	3840	744	196	149	11.3	680	1734	46	0.07	119	< 1	< 0.1	< 0.001
GW 4	N	7/8/1997	6,908.80	7.3	7.77	3890	730	192	144	11	667	1710	46.2	0.12	111	< 1	< 0.1	< 0.001
GW 4	N	10/7/1997	6,909.60	6.7	7.7	3950	736	183	153	11.3	798	1610	44	0.06	106	< 1	< 0.1	< 0.001
GW 4	N	1/16/1998	6,910.50	7.2	7.94	3880	712	188	162	12.1	817	1800	44.2	0.22	105	< 1	< 0.1	< 0.001
GW 4	N	4/7/1998	6,910.50	7	7.69	3890	715	192	153	11.3	777	1600	35	< 0.05	95.6	< 1	< 0.1	< 0.001
GW 4	N	7/7/1998	6,910.30	7.2	7.8	3870	700	190	163	11.8	797	1600	38.7	0.12	86.9	< 1	< 0.1	< 0.001
GW 4	N	10/6/1998	6,910.20	7.18	7.92	3840	714	198	165	13	670	1780	42.4	0.28	105	< 1	< 0.1	< 0.001
GW 4	N	1/5/1999	6,910.00	7.3	7.78	3810	650	182	151	11.3	622	1620	41.4	0.13	75.7	< 1	< 0.1	< 0.001
GW 4	N	4/6/1999	6,910.40	7.2	7.99	3810	675	179	146	11.5	644	1620	50.1	0.26	100	< 1	< 0.1	< 0.001
GW 4	N	7/13/1999	6,909.25	7.2	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
SBL-01	N	10/18/2004	6,847.15	6.91	7.27	8450	572 D	1070 D	368	15.3	251	5390 D	96	0.43	94 D	< 1.0	0.4	< 0.001
SBL-01	N	1/12/2005	6,847.11	6.86	6.99	8940	564 D	984 D	399	12.4	373	5340 D	97	0.22	39.0 D	< 1.0	0.2	< 0.001
SBL-01	N	4/5/2005	6,846.53	6.95	7.51	8870	553	1010	390	12.3	424	5470	93	0.06	35.8	< 1.0	< 0.1	< 0.001
SBL-01	N	7/12/2005	6,846.35	6.84	7.53	8860	466 D	896 D	384	12.4	432	5120	97	0.29	35.7 D	< 1.0	< 0.1	< 0.001
SBL-01	N	10/4/2005	6,846.49	6.65	7.25	8520	537 D	981 D	357	12.6	387	5360 D	103	0.17	41.4 D	< 1.0	0.1	< 0.001
SBL-01	N	1/10/2006	6,846.50	6.79	7.21	8270	497	871 D	344	10.6	580	4880 D	91	0.36	45.7 D	< 1.0	0.2	< 0.001
SBL-01	N	4/4/2006	6,846.41	6.73	7.41	9200	560 D	1150 D	329	13.6	461	5710 D	101	0.36	41 D	< 1.0	< 0.1	< 0.001
SBL-01	N	7/18/2006	6,846.36	6.61	7.13	8400	552 D	1080 D	345	13	378	5830 D	90	0.09	43 D	< 1.0	0.2	< 0.001
SBL-01	N	10/3/2006	6,846.41	6.62	7.18	8820	520 D	1020 D	314	13	388	5320 D	78	0.27	45 D	< 0.5	0.3	< 0.001
SBL-01	N	1/9/2007	6,846.24	6.79	7	8790	498 D	1010 D	288	12.8	427	5160 D	80	0.19	53 D	< 0.5	0.2	< 0.001
SBL-01	N	4/10/2007	6,846.46	6.94	6.98	8830	508 D	1040 D	293	15.5	439	5380 D	87	0.08	50 D	< 0.5	0.1	< 0.001
SBL-01	N	7/10/2007	6,846.16	6.67	6.93	8960	542 D	1090 D	326	13.3	461	5740 D	81	0.17	50 D	< 0.5	< 0.1	0.008
SBL-01	N	10/2/2007	6,846.21	6.54	6.92	8670 H	470 D	988 D	296 D	14	429	4960 D	102 D	0.32	49 D	< 0.5	0.2	< 0.001
SBL-01	N	1/15/2008	6,846.36	6.89	6.97	9470	524 D	1190 D	321 D	16.6	454	5400 D	112 D	< 0.05	40 D	< 0.5	< 0.1	< 0.001
SBL-01	N	4/8/2008	6,846.21	6.56	7.09	8860	534 D	1200 D	341 D	15.8 D	432	6080 D	82	< 0.1	68.5	< 0.50	0.2	< 0.001
SBL-01	N	7/8/2008	6,846.11	6.42	6.97	9080	502	1080	284 D	12	443	5680 D	82	< 0.05	47 D	< 0.5	0.2	< 0.003
SBL-01	N	10/7/2008	6,846.10	6.67	7.11	8890	504	1120	294 D	13	442	5980 D	67	0.2	53.6	< 0.5	< 0.1	< 0.001
SBL-01	N	1/13/2009	6,846.01	6.77	6.9	9480	523	1210	360	14	460	5780 D	67	< 0.05	61.8 D	< 0.5	< 0.1	< 0.001
SBL-01	N	4/7/2009	6,845.96	6.64	6.82	9410	498 D	1190 D	325 D	13	473	5910 D	81	< 0.05	41.8 D	< 0.50	0.2	< 0.001
SBL-01	N	7/7/2009	6,845.96	6.61	6.91	8490	502 D	1040	288 D	13	444	5700 D	81	< 0.05	48 D	< 0.50	0.6	< 0.001

TABLE A.1
Southwest Alluvium Data Summary, 1989-2011
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Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5.2	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
GW 4	N	4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.1	< 0.1	< 0.05	0.274	< 0.1	0.066	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 4	N	7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	< 0.001	< 0.1	0.063	2.6	< 1	2.6	< 0.2	< 1	2.9
GW 4	N	10/7/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.16	< 0.1	< 0.05	0.004	< 0.1	0.066	0.5	< 1	0.5	< 0.2	< 1	< 1
GW 4	N	1/16/1998	< 0.01	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	0.005	< 0.1	0.0714	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 4	N	4/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.1	< 0.1	< 0.05	0.037	< 0.1	0.0729	0.5	< 1	0.5	< 0.2	< 1	< 1
GW 4	N	7/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.09	< 0.1	< 0.05	0.024	< 0.1	0.0734	0.5	< 1	0.5	< 0.2	< 1	< 1
GW 4	N	10/6/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.21	< 0.1	< 0.05	0.005	< 0.1	0.0782	< 0.2	< 1	0	< 0.2	< 1	< 1
GW 4	N	1/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.11	< 0.1	< 0.05	0.009	< 0.1	0.0744	1.2	< 1	1.2	< 0.2	< 1	< 1
GW 4	N	4/6/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.1	< 0.1	< 0.05	0.007	< 0.1	0.0715	0.8	< 1	0.8	< 0.2	< 1	< 1
GW 4	N	7/13/1999	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	< 1	no data
SBL-01	N	10/18/2004	< 0.01	< 0.005	0.06	< 0.05	3.35	< 0.1	0.17	< 0.001	< 0.1	0.0267 D	0.4	2.8	3.2	< 0.2	< 1.0	< 1.0
SBL-01	N	1/12/2005	< 0.01	< 0.005	0.02	< 0.05	2.38	< 0.1	0.08	< 0.001	< 0.1	0.0289 D	1.1	2.4	3.5	< 0.2	< 1.0	< 1.0
SBL-01	N	4/5/2005	< 0.01	< 0.005	0.01	< 0.05	2.28	< 0.1	0.07	< 0.001	< 0.1	0.0332	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
SBL-01	N	7/12/2005	< 0.01	< 0.005	0.01	< 0.05	2.3	< 0.1	0.06	< 0.001	< 0.1	0.0327	0.7	< 1.0	0.7	< 0.2	< 1.0	< 1.0
SBL-01	N	10/4/2005	< 0.01	< 0.005	0.03	< 0.05	2.25	< 0.1	0.08	< 0.001	< 0.1	0.0241 D	< 0.2	3.5	3.5	< 0.2	< 1.0	< 1.0
SBL-01	N	1/10/2006	< 0.01	< 0.005	0.03	< 0.05	2.16	< 0.1	0.08	0.003	< 0.1	0.0249	0.8	2.6	3.4	< 0.2	< 1.0	1.3
SBL-01	N	4/4/2006	< 0.01	< 0.005	0.01	< 0.05	2.52	< 0.1	0.05	< 0.001	< 0.1	0.0238 D	< 0.2	1.1	1.1	< 0.2	< 1.0	< 1.0
SBL-01	N	7/18/2006	< 0.01	< 0.005	0.02	< 0.05	2.4	< 0.1	0.08	< 0.001	< 0.1	0.0227	0.6	4.7	5.3	< 0.2	< 1.0	< 1.0
SBL-01	N	10/3/2006	< 0.01	< 0.005	0.02	< 0.05	2.47	< 0.1	0.08	< 0.001	< 0.1	0.0216 D	0.4	1.5	1.9	< 0.2	< 1	< 1
SBL-01	N	1/9/2007	< 0.01	< 0.005	0.03	< 0.05	2.42	< 0.1	0.07	< 0.001	< 0.1	0.0176	0.4	< 1	0.4	< 0.2	< 1	< 1
SBL-01	N	4/10/2007	< 0.01	< 0.005	0.02	< 0.05	2.57	< 0.1	0.07	< 0.001	< 0.1	0.0176	< 0.2	2.2	2.2	< 0.2	< 1	< 1
SBL-01	N	7/10/2007	< 0.01	< 0.005	0.03	< 0.05	2.28	< 0.1	0.1	< 0.001	< 0.1	0.0192	< 0.2	< 1	0	< 0.2	< 1	< 1
SBL-01	N	10/2/2007	< 0.01	< 0.005	0.03	< 0.05	2.7	< 0.1	0.08	< 0.001	< 0.1	0.0259	< 0.2	< 1	0	< 0.2	< 1	1.1
SBL-01	N	1/15/2008	< 0.01	< 0.005	0.01	< 0.05	2.69	< 0.1	0.06	< 0.001	< 0.1	0.0166 D	< 0.2	< 1	0	< 0.2	< 1	1.7
SBL-01	N	4/8/2008	< 0.01	< 0.005	0.02	< 0.05	2.93	< 0.1	0.08	< 0.001	< 0.1	0.0174	0.3	0.9 U	1.2	-0.4 U	-4.5 U	1.6
SBL-01	N	7/8/2008	< 0.01	< 0.005	0.03	< 0.05	2.96	< 0.1	0.09	< 0.001	< 0.1	0.0152	0.56	2.1	2.66	0.6	0.7 U	0.9
SBL-01	N	10/7/2008	< 0.01	< 0.005	0.02	< 0.05	2.79	< 0.1	0.06	< 0.001	< 0.1	0.0163	0.29	2.2	2.49	0.6	-0.8 U	1.5
SBL-01	N	1/13/2009	< 0.01	< 0.005	0.02	< 0.05	3.42	< 0.1	0.06	< 0.001	< 0.1	0.0172	0.28	1.3 U	1.58	0.1 U	-1 U	1.6
SBL-01	N	4/7/2009	< 0.01	< 0.005	0.02	< 0.05	3.21	< 0.1	0.06	0.001	< 0.1	0.018	0.38	1.5	1.88	0.4 U	-0.8 U	0.6 U
SBL-01	N	7/7/2009	< 0.01	< 0.005	0.04	< 0.05	3.27	< 0.1	0.11	< 0.001	< 0.1	0.0126	0.72	2	2.72	-0.5 U	-1 U	1.4

TABLE A.1

Southwest Alluvium Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation	Field pH	Lab pH	Lab TDS	Ca	Mg	Na	K	HCO ₃	SO ₄	Cl	NH ₄ as N	NO ₃ as N	TTHMs (Chloroform)	Al	As
			ft amsl	SU	SU	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
SBL-01	N	10/5/2009	6,846.11	6.63	7.45	9000	469 D	1120	285 D	13	446	5960 D	88	<0.05	43 D	<0.50	0.1	<0.001
SBL-01	N	1/5/2010	6,845.86	6.7	7.33	9400 D	482 D	1140	312 D	13	489	6050 DH	78	0.09	46 D	<0.50	0.1	<0.001
SBL-01	N	4/6/2010	6,845.91	6.63	6.98	9330 D	536 D	1250	321 D	14	486	6250 D	80	0.29	42 D	<0.50	0.1	<0.001
SBL-01	N	7/13/2010	6,845.81	6.5	7.06	9250 D	521 D	1170	311 D	13	490	5910 D	79 D	0.26	40 D	<0.50	<0.1	<0.001
SBL-01	N	10/5/2010	6,845.86	6.5	7.53	9080 D	486 D	1110	300 D	14	467	5890 D	85 D	0.15	42 D	<0.50	0.1	<0.001
SBL-01	N	1/4/2011	no data	no data	7.33	9040 D	511 D	1160	303 D	14	446	5960 D	82 D	0.23	40 D	<0.50	0.2	<0.001
SBL-01	Dup	1/4/2011	6845.81	6.27	7.35	7650 D	473 D	971	282 D	13	210	5050 D	86 D	0.24	56 D	<0.50	1.7	<0.001
SBL-01	N	4/4/2011	no data	6.57	6.99	9240 D	501	1180	314 D	15	438	6050 D	77 D	0.18	45 D	<0.50	0.1	<0.001
SBL-01	Dup	4/4/2011	6845.66	6.42	6.76	8310 D	471	1010	293 D	14	249	5440 D	79 D	0.07	63 D	<0.50	1.6	<0.001
SBL-01	N	7/12/2011	6845.61	6.38	7.67	8960 D	515	1170	308 D	14	451	5910 D	79 D	<0.1	47 D	<0.50	0.6	<0.001
SBL-01	N	10/4/2011	6845.74	6.62	7.49	8720 D	510	1140	301 D	14	415	5690 D	77 D	0.2 D	41 D	<0.50	0.1	<0.001

TABLE A.1
Southwest Alluvium Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5.2	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
SBL-01	N	10/5/2009	<0.01	<0.005	0.02	<0.05	3.15	<0.1	0.07	<0.001	<0.1	0.0142	1.1	1.8	2.9	0.003 U	1.0 U	0.4 U
SBL-01	N	1/5/2010	<0.01	<0.005	0.02	<0.05	3.02	<0.1	0.07	<0.001	<0.1	0.0139	0.4	2.1	2.5	0.08 U	-0.5 U	0.8
SBL-01	N	4/6/2010	<0.01	<0.005	0.02	<0.05	3	<0.1	0.07	<0.001	<0.1	0.0136	0.71	1.9	2.61	0.08 U	1.8 U	0.3 U
SBL-01	N	7/13/2010	<0.01	<0.005	0.03	<0.05	3.72	<0.1	0.08	0.001	<0.1	0.0152	0.15 U	1.7	1.85	0.07 U	0.3 U	0.4 U
SBL-01	N	10/5/2010	<0.01	<0.005	0.02	<0.05	3.2	<0.1	0.07	<0.001	<0.1	0.0142	0.3	2.6	2.9	0.03 U	1.8	0.4 U
SBL-01	N	1/4/2011	<0.01	<0.005	0.02	<0.05	3.44	<0.1	0.07	<0.001	<0.1	0.0138	0.42	2.8	3.22	-0.002 U	0.2 U	0.8 U
SBL-01	Dup	1/4/2011	<0.01	<0.005	0.06	<0.05	2.76	<0.1	0.19	<0.001	<0.1	0.0066	0.4	3.3	3.7	0.008 U	1.1 U	2.4
SBL-01	N	4/4/2011	<0.01	<0.005	0.02	<0.05	3.34	<0.1	0.08	<0.001	<0.1	0.0128	0.15 U	2.1	2.25	-0.03 U	-0.09 U	1.2
SBL-01	Dup	4/4/2011	<0.01	<0.005	0.06	<0.05	3.05	<0.1	0.18	<0.001	<0.1	0.0071	0.45	3	3.45	-0.02 U	0.7 U	1
SBL-01	N	7/12/2011	<0.01	<0.005	0.03	<0.05	3.55	<0.1	0.08	0.003	<0.1	0.0138	0.16 U	3.1	3.26	0.009 U	0.2 U	2
SBL-01	N	10/4/2011	<0.01	<0.005	0.02	<0.05	3.57	<0.1	0.09	<0.001	<0.1	0.0119	0.28	2.1	2.38	0.0007 U	0.6 U	0.5

**Laboratory Analytical Data
2011**

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Alluvium Monitor Wells					
Well ID:		509-D	509-D	509-D	509-D
Collection Date:		10/3/2011	7/11/2011	4/4/2011	1/3/2011
Receive Date:		10/7/2011	7/15/2011	4/8/2011	1/7/2011
Report Date:		11/30/2011	9/14/2011	5/25/2011	2/7/2011
Analyte	RUnits	C11100288-001	C11070551-001	C11040312-001	C11010227-001
Bicarbonate as HCO ₃	mg/L	2420	2550	2530	2550
Calcium	mg/L	918	876	905	917
Chloride	mg/L	368	350	366	368
Magnesium	mg/L	434	440	426	460
Nitrogen, Ammonia as N	mg/L	2.3	4.9	2.95	5.5
Nitrogen, Nitrate+Nitrite as N	mg/L	8.9	9.0	9.6	8.1
Potassium	mg/L	13	13	14	14
Sodium	mg/L	430	443	442	429
Sulfate	mg/L	2170	2150	2220	2230
pH	s.u.	7.65	6.97	6.68	6.74
Solids, Total Dissolved TDS @ 180 C	mg/L	5600	5600	5790	5820
Aluminum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Beryllium	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	ND(0.01)	0.01	0.01	0.01
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	3.70	3.98	3.66	3.50
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Uranium	mg/L	0.226	0.262	0.258	0.264
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	0.006	0.005	ND(0.001)	ND(0.001)
Selenium-IV	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	0.2	0.9	0.9	1.5
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.4	0.6	0.3	0.8
Gross Alpha minus Rn & U MDC	pCi/L	0.6	0.9	0.3	0.9
Lead 210	pCi/L	0.2	-0.3	-0.4	0.1
Lead 210 precision (±)	pCi/L	0.8	1.1	0.9	1.0
Lead 210 MDC	pCi/L	1.3	1.9	1.5	1.7
Radium 226	pCi/L	0.30	0.12	-0.03	0.11
Radium 226 precision (±)	pCi/L	0.12	0.12	0.06	0.10
Radium 226 MDC	pCi/L	0.13	0.18	0.13	0.15
Radium 228	pCi/L	1.1	0.73	0.76	0.51
Radium 228 precision (±)	pCi/L	0.52	0.58	0.54	0.53
Radium 228 MDC	pCi/L	0.79	0.92	0.84	0.86
Thorium 230	pCi/L	0.04	0.05	0.05	0.06
Thorium 230 precision (±)	pCi/L	0.07	0.1	0.08	0.09
Thorium 230 MDC	pCi/L	0.2	0.3	0.1	0.2
A/C Balance (± 5)	%	2.51	1.50	0.671	1.97
Anions	meq/L	95.8	97.0	98.6	99.1
Cations	meq/L	101	99.9	100	103
Solids, Total Dissolved Calculated	mg/L	5590	5590	5680	5730
TDS Balance (0.80 - 1.20)		1.00	1.00	1.02	1.02
Trihalomethanes, Total	ug/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)

****Note: The data presented on this form is intended for summary purposes only. Laboratory approved data is contained within the attached database reports.**

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Alluvium Monitor Wells					
Well ID:		EPA-23	EPA-23	EPA-23	EPA-23
Collection Date:		10/3/2011	7/11/2011	4/4/2011	1/3/2011
Receive Date:		10/7/2011	7/15/2011	4/8/2011	1/7/2011
Report Date:		11/30/2011	9/14/2011	5/25/2011	2/7/2011
Analyte	RUnits	C11100288-002	C11070551-002	C11040312-002	C11010227-002
Bicarbonate as HCO ₃	mg/L	1150	1230	1220	1210
Calcium	mg/L	668	664	650	658
Chloride	mg/L	99	95	96	98
Magnesium	mg/L	376	382	372	381
Nitrogen, Ammonia as N	mg/L	0.7	0.76	0.71	1.13
Nitrogen, Nitrate+Nitrite as N	mg/L	0.5	0.7	0.3	0.9
Potassium	mg/L	11	11	11	11
Sodium	mg/L	146	150	146	142
Sulfate	mg/L	2410	2310	2350	2340
pH	s.u.	7.81	7.53	7.01	6.85
Solids, Total Dissolved TDS @ 180 C	mg/L	4460	4450	4520	4330
Aluminum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Beryllium	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	0.01
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	5.68	5.58	5.19	5.57
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Uranium	mg/L	0.0296	0.0299	0.0299	0.0345
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Selenium-IV	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	0.2	0.5	0.6	0.4
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.3	0.6	0.3	0.6
Gross Alpha minus Rn & U MDC	pCi/L	0.4	0.9	0.3	0.9
Lead 210	pCi/L	0.1	-0.6	-0.8	1.3
Lead 210 precision (±)	pCi/L	0.8	1.1	0.9	1.1
Lead 210 MDC	pCi/L	1.3	1.8	1.5	1.8
Radium 226	pCi/L	0.15	0.18	0.22	0.03
Radium 226 precision (±)	pCi/L	0.10	0.13	0.11	0.1
Radium 226 MDC	pCi/L	0.14	0.17	0.13	0.16
Radium 228	pCi/L	0.50	0.73	0.16	0.60
Radium 228 precision (±)	pCi/L	0.52	0.57	0.52	0.58
Radium 228 MDC	pCi/L	0.83	0.89	0.86	0.93
Thorium 230	pCi/L	0.03	-0.01	0.08	0.5
Thorium 230 precision (±)	pCi/L	0.08	0.2	0.08	0.2
Thorium 230 MDC	pCi/L	0.2	0.5	0.1	0.1
A/C Balance (± 5)	%	-0.596	0.374	-1.41	-0.478
Anions	meq/L	71.8	70.9	71.6	71.4
Cations	meq/L	71.0	71.4	69.6	70.7
Solids, Total Dissolved Calculated	mg/L	4290	4230	4240	4250
TDS Balance (0.80 - 1.20)		1.04	1.05	1.07	1.02
Trihalomethanes, Total	ug/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)

****Note: The data presented on this form is intended for summary purposes only. Laboratory approved data is contained within the attached database reports.**

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Alluvium Monitor Wells					
Well ID:		803	803	803	803
Collection Date:		10/3/2011	7/11/2011	4/4/2011	1/3/2011
Receive Date:		10/7/2011	7/15/2011	4/8/2011	1/7/2011
Report Date:		11/30/2011	9/14/2011	5/25/2011	2/7/2011
Analyte	RUnits	C11100288-003	C11070551-003	C11040312-003	C11010227-003
Bicarbonate as HCO ₃	mg/L	1750	1860	1870	1850
Calcium	mg/L	664	670	686	678
Chloride	mg/L	166	168	173	173
Magnesium	mg/L	755	756	744	758
Nitrogen, Ammonia as N	mg/L	2.5	3.0	2.66	2.89
Nitrogen, Nitrate+Nitrite as N	mg/L	44	47	47	40
Potassium	mg/L	14	14	14	14
Sodium	mg/L	301	313	310	291
Sulfate	mg/L	3350	3310	3380	3320
pH	s.u.	6.79	7.53	6.71	6.62
Solids, Total Dissolved TDS @ 180 C	mg/L	6450	6530	6670	6700
Aluminum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Beryllium	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	2.12	2.22	1.98	2.23
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Uranium	mg/L	0.110	0.115	0.115	0.124
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	0.003	ND(0.001)	0.002	ND(0.001)
Selenium-IV	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	0.08	1.8	0.6	0.6
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.3	0.8	0.3	0.6
Gross Alpha minus Rn & U MDC	pCi/L	0.4	0.8	0.3	0.9
Lead 210	pCi/L	0.5	-0.3	-0.4	0.4
Lead 210 precision (±)	pCi/L	0.8	1.1	0.8	1.0
Lead 210 MDC	pCi/L	1.3	1.8	1.3	1.7
Radium 226	pCi/L	0.08	0.05	0.03	0.04
Radium 226 precision (±)	pCi/L	0.09	0.11	0.08	0.09
Radium 226 MDC	pCi/L	0.13	0.17	0.13	0.14
Radium 228	pCi/L	1.1	0.68	0.33	1.1
Radium 228 precision (±)	pCi/L	0.54	0.56	0.53	0.54
Radium 228 MDC	pCi/L	0.82	0.89	0.87	0.83
Thorium 230	pCi/L	0.0006	-0.01	-0.003	0.4
Thorium 230 precision (±)	pCi/L	0.06	0.09	0.06	0.2
Thorium 230 MDC	pCi/L	0.2	0.2	0.1	0.1
A/C Balance (± 5)	%	1.19	1.05	0.0116	1.06
Anions	meq/L	106	108	109	107
Cations	meq/L	109	110	109	109
Solids, Total Dissolved Calculated	mg/L	6330	6380	6470	6350
TDS Balance (0.80 - 1.20)		1.02	1.02	1.03	1.06
Trihalomethanes, Total	ug/L	9.64	8.08	7.24	7.64

****Note:** The data presented on this form is intended for summary purposes only. Laboratory approved data is contained within the attached database reports.

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Alluvium Monitor Wells					
Well ID:		808	808	808	808
Collection Date:		10/3/2011	7/11/2011	4/5/2011	1/3/2011
Receive Date:		10/7/2011	7/15/2011	4/8/2011	1/7/2011
Report Date:		11/30/2011	9/14/2011	5/25/2011	2/7/2011
Analyte	RUnits	C11100288-004	C11070551-004	C11040312-010	C11010227-004
Bicarbonate as HCO ₃	mg/L	1920	2040	2010	1950
Calcium	mg/L	729	714	742	759
Chloride	mg/L	178	179	179	178
Magnesium	mg/L	680	682	674	693
Nitrogen, Ammonia as N	mg/L	0.6	0.4	0.18	ND(0.05)
Nitrogen, Nitrate+Nitrite as N	mg/L	83	95	96	90
Potassium	mg/L	6	5	5	5
Sodium	mg/L	338	341	342	315
Sulfate	mg/L	3000	2960	2920	2870
pH	s.u.	6.77	7.26	6.73	7.30
Solids, Total Dissolved TDS @ 180 C	mg/L	6550	6640	6960	6360
Aluminum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	0.2
Beryllium	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	1.20	1.06	0.93	1.02
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Uranium	mg/L	0.122	0.128	0.115	0.126
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	0.003	ND(0.001)	ND(0.001)	ND(0.001)
Selenium-IV	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	0.04	0.1	0.4	0.6
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.3	0.5	0.3	0.6
Gross Alpha minus Rn & U MDC	pCi/L	0.4	0.9	0.3	0.9
Lead 210	pCi/L	-0.5	0.2	-0.1	0.2
Lead 210 precision (±)	pCi/L	0.8	1.1	0.8	1.0
Lead 210 MDC	pCi/L	1.3	1.8	1.3	1.7
Radium 226	pCi/L	0.15	-0.08	-0.06	0.008
Radium 226 precision (±)	pCi/L	0.1	0.08	0.07	0.09
Radium 226 MDC	pCi/L	0.13	0.18	0.15	0.15
Radium 228	pCi/L	0.71	0.48	0.69	0.80
Radium 228 precision (±)	pCi/L	0.50	0.57	0.62	0.55
Radium 228 MDC	pCi/L	0.79	0.92	0.98	0.86
Thorium 230	pCi/L	0.02	-0.004	0.005	0.08
Thorium 230 precision (±)	pCi/L	0.06	0.06	0.06	0.1
Thorium 230 MDC	pCi/L	0.2	0.1	0.1	0.2
A/C Balance (± 5)	%	1.08	0.135	0.958	2.60
Anions	meq/L	105	106	105	103
Cations	meq/L	107	107	108	109
Solids, Total Dissolved Calculated	mg/L	6270	6300	6300	6210
TDS Balance (0.80 - 1.20)		1.04	1.05	1.10	1.02
Trihalomethanes, Total	ug/L	4.16	4.52	4.44	4.80

****Note:** The data presented on this form is intended for summary purposes only. Laboratory approved data is contained within the attached database reports.

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Alluvium Monitor Wells					
Well ID:		802	802	802	802
Collection Date:		10/3/2011	7/11/2011	4/5/2011	1/3/2011
Receive Date:		10/7/2011	7/15/2011	4/8/2011	1/7/2011
Report Date:		11/30/2011	9/14/2011	5/25/2011	2/7/2011
Analyte	RUnits	C11100288-005	C11070551-005	C11040312-011	C11010227-005
Bicarbonate as HCO ₃	mg/L	1900	2020	2040	2080
Calcium	mg/L	618	632	616	643
Chloride	mg/L	185	184	189	193
Magnesium	mg/L	892	926	911	956
Nitrogen, Ammonia as N	mg/L	ND(0.1)	ND(0.1)	0.39	ND(0.05)
Nitrogen, Nitrate+Nitrite as N	mg/L	107	113	108	92
Potassium	mg/L	6	6	6	6
Sodium	mg/L	362	378	385	360
Sulfate	mg/L	3560	3560	3690	3710
pH	s.u.	7.52	6.97	6.69	7.03
Solids, Total Dissolved TDS @ 180 C	mg/L	7470	7780	7840	7550
Aluminum	mg/L	0.2	ND(0.1)	ND(0.1)	ND(0.1)
Beryllium	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	1.18	1.20	1.18	1.15
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Uranium	mg/L	0.119	0.132	0.122	0.136
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	0.002	ND(0.001)	ND(0.001)	ND(0.001)
Selenium-IV	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	0.4	0.9	0.2	0.6
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.3	0.6	0.2	0.6
Gross Alpha minus Rn & U MDC	pCi/L	0.4	0.9	0.3	0.9
Lead 210	pCi/L	-0.2	-0.04	0.4	0.7
Lead 210 precision (±)	pCi/L	0.8	1.1	0.8	1.0
Lead 210 MDC	pCi/L	1.3	1.8	1.3	1.7
Radium 226	pCi/L	0.14	0.06	0.03	0.07
Radium 226 precision (±)	pCi/L	0.10	0.10	0.09	0.09
Radium 226 MDC	pCi/L	0.14	0.16	0.15	0.15
Radium 228	pCi/L	0.50	1.6	0.79	1.5
Radium 228 precision (±)	pCi/L	0.52	0.58	0.61	0.57
Radium 228 MDC	pCi/L	0.84	0.84	0.96	0.84
Thorium 230	pCi/L	-0.007	0.07	0.07	-0.02
Thorium 230 precision (±)	pCi/L	0.05	0.2	0.1	0.08
Thorium 230 MDC	pCi/L	0.2	0.3	0.2	0.2
A/C Balance (± 5)	%	0.892	1.82	-0.285	1.28
Anions	meq/L	118	120	123	123
Cations	meq/L	120	124	123	127
Solids, Total Dissolved Calculated	mg/L	7050	7170	7310	7330
TDS Balance (0.80 - 1.20)		1.06	1.09	1.07	1.03
Trihalomethanes, Total	ug/L	17.2	15.9	19.0	15.9

****Note: The data presented on this form is intended for summary purposes only. Laboratory approved data is contained within the attached database reports.**

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Alluvium Monitor Wells					
Well ID:		801	801	801	801
Collection Date:		10/3/2011	7/11/2011	4/5/2011	1/3/2011
Receive Date:		10/7/2011	7/15/2011	4/8/2011	1/7/2011
Report Date:		11/30/2011	9/14/2011	5/25/2011	2/7/2011
Analyte	RUnits	C11100288-006	C11070551-006	C11040312-012	C11010227-006
Bicarbonate as HCO ₃	mg/L	1400	1490	1500	1500
Calcium	mg/L	552	576	566	572
Chloride	mg/L	204	198	206	207
Magnesium	mg/L	644	660	645	676
Nitrogen, Ammonia as N	mg/L	2.8	3.4	3.36	1.93
Nitrogen, Nitrate+Nitrite as N	mg/L	11.2	9.7	7.9	5.3
Potassium	mg/L	12	12	13	12
Sodium	mg/L	354	364	371	348
Sulfate	mg/L	3290	3170	3290	3290
pH	s.u.	7.19	7.23	6.69	7.45
Solids, Total Dissolved TDS @ 180 C	mg/L	6000	6040	6370	5940
Aluminum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Beryllium	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	4.13	3.98	4.05	3.98
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Uranium	mg/L	0.0370	0.0400	0.0357	0.0407
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Selenium-IV	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	0.8	1.0	0.4	0.8
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.4	0.7	0.3	0.7
Gross Alpha minus Rn & U MDC	pCi/L	0.4	0.8	0.3	0.9
Lead 210	pCi/L	0.4	-0.8	-0.2	0.6
Lead 210 precision (±)	pCi/L	0.8	1.0	0.8	1.0
Lead 210 MDC	pCi/L	1.3	1.8	1.4	1.7
Radium 226	pCi/L	0.47	0.37	0.29	0.25
Radium 226 precision (±)	pCi/L	0.14	0.16	0.14	0.12
Radium 226 MDC	pCi/L	0.13	0.18	0.16	0.15
Radium 228	pCi/L	0.66	1.2	0.96	0.73
Radium 228 precision (±)	pCi/L	0.52	0.60	0.67	0.54
Radium 228 MDC	pCi/L	0.82	0.91	1.0	0.85
Thorium 230	pCi/L	0.01	0.02	0.02	0.01
Thorium 230 precision (±)	pCi/L	0.08	0.2	0.09	0.07
Thorium 230 MDC	pCi/L	0.2	0.3	0.2	0.2
A/C Balance (± 5)	%	-0.847	1.44	-0.745	0.275
Anions	meq/L	98.1	96.7	99.5	99.2
Cations	meq/L	96.4	99.5	98.0	99.8
Solids, Total Dissolved Calculated	mg/L	5830	5790	5900	5900
TDS Balance (0.80 - 1.20)		1.03	1.04	1.08	1.01
Trihalomethanes, Total	ug/L	2.39	2.22	2.76	2.14

****Note:** The data presented on this form is intended for summary purposes only. Laboratory approved data is contained within the attached database reports.

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Alluvium Monitor Wells					
Well ID:		GW-2	GW-2	GW-2	GW-2
Collection Date:		10/3/2011	7/11/2011	4/4/2011	1/3/2011
Receive Date:		10/7/2011	7/15/2011	4/8/2011	1/7/2011
Report Date:		11/30/2011	9/14/2011	5/25/2011	2/7/2011
Analyte	RUnits	C11100288-007	C11070551-007	C11040312-009	C11010227-007
Bicarbonate as HCO ₃	mg/L	2080	2250	2260	2260
Calcium	mg/L	613	613	612	635
Chloride	mg/L	208	204	211	211
Magnesium	mg/L	1130	1140	1120	1170
Nitrogen, Ammonia as N	mg/L	0.4	0.3	0.15	0.11
Nitrogen, Nitrate+Nitrite as N	mg/L	16	17	16	14
Potassium	mg/L	15	15	15	15
Sodium	mg/L	397	411	418	396
Sulfate	mg/L	4590	4520	4620	4560
pH	s.u.	7.27	7.11	6.57	6.55
Solids, Total Dissolved TDS @ 180 C	mg/L	8490	8520	8520	8340
Aluminum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Beryllium	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	ND(0.01)	0.01	0.02	0.01
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	1.56	1.66	1.54	1.54
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Uranium	mg/L	0.0834	0.0930	0.0862	0.0957
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	0.007	ND(0.001)	ND(0.001)	ND(0.001)
Selenium-IV	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	0.3	0.8	0.8	2.1
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.3	0.6	0.3	0.8
Gross Alpha minus Rn & U MDC	pCi/L	0.4	0.9	0.3	0.9
Lead 210	pCi/L	-0.2	-1	-0.3	0.7
Lead 210 precision (±)	pCi/L	0.8	1.1	0.8	1.0
Lead 210 MDC	pCi/L	1.3	1.9	1.4	1.7
Radium 226	pCi/L	0.09	-0.002	0.04	0.03
Radium 226 precision (±)	pCi/L	0.1	0.09	0.08	0.10
Radium 226 MDC	pCi/L	0.15	0.16	0.14	0.17
Radium 228	pCi/L	0.99	1.6	0.24	0.46
Radium 228 precision (±)	pCi/L	0.58	0.58	0.56	0.59
Radium 228 MDC	pCi/L	0.89	0.86	0.92	0.96
Thorium 230	pCi/L	-0.008	0.004	0.07	-0.03
Thorium 230 precision (±)	pCi/L	0.05	0.06	0.09	0.06
Thorium 230 MDC	pCi/L	0.2	0.1	0.1	0.2
A/C Balance (± 5)	%	1.58	1.67	-0.340	2.39
Anions	meq/L	137	138	142	139
Cations	meq/L	141	142	141	146
Solids, Total Dissolved Calculated	mg/L	8070	8100	8210	8180
TDS Balance (0.80 - 1.20)		1.05	1.05	1.04	1.02
Trihalomethanes, Total	ug/L	6.08	5.40	5.36	4.80

****Note: The data presented on this form is intended for summary purposes only. Laboratory approved data is contained within the attached database reports.**

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Alluvium Monitor Wells					
Well ID:		GW-1	GW-1	GW-1	GW-1
Collection Date:		10/3/2011	7/11/2011	4/4/2011	1/3/2011
Receive Date:		10/7/2011	7/15/2011	4/8/2011	1/7/2011
Report Date:		11/30/2011	9/14/2011	5/25/2011	2/7/2011
Analyte	RUnits	C11100288-008	C11070551-008	C11040312-008	C11010227-008
Bicarbonate as HCO ₃	mg/L	1830	1940	1920	1910
Calcium	mg/L	721	749	713	739
Chloride	mg/L	232	226	233	242
Magnesium	mg/L	631	710	677	699
Nitrogen, Ammonia as N	mg/L	0.7	0.8	0.78	0.83
Nitrogen, Nitrate+Nitrite as N	mg/L	89	95	94	77
Potassium	mg/L	6	7	7	7
Sodium	mg/L	419	438	428	404
Sulfate	mg/L	2950	3130	3130	3100
pH	s.u.	7.51	7.15	6.90	6.97
Solids, Total Dissolved TDS @ 180 C	mg/L	6530	6890	7000	6620
Aluminum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	0.1
Beryllium	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	0.10	0.10	0.09	0.08
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Uranium	mg/L	0.104	0.127	0.127	0.119
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	0.003	ND(0.001)	0.001	ND(0.001)
Selenium-IV	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	0.8	0.3	0.7	0.3
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.4	0.5	0.3	0.6
Gross Alpha minus Rn & U MDC	pCi/L	0.4	0.9	0.3	0.9
Lead 210	pCi/L	0.4	-0.6	0.5	0.9
Lead 210 precision (±)	pCi/L	0.8	1.1	0.8	1.1
Lead 210 MDC	pCi/L	1.3	1.8	1.4	1.8
Radium 226	pCi/L	0.05	0.15	-0.05	0.09
Radium 226 precision (±)	pCi/L	0.08	0.12	0.05	0.1
Radium 226 MDC	pCi/L	0.13	0.15	0.13	0.14
Radium 228	pCi/L	0.93	0.91	0.13	0.42
Radium 228 precision (±)	pCi/L	0.52	0.60	0.51	0.51
Radium 228 MDC	pCi/L	0.79	0.94	0.85	0.82
Thorium 230	pCi/L	-0.009	-0.006	0.06	-0.008
Thorium 230 precision (±)	pCi/L	0.06	0.06	0.09	0.04
Thorium 230 MDC	pCi/L	0.2	0.1	0.2	0.1
A/C Balance (± 5)	%	0.976	2.49	0.320	1.86
Anions	meq/L	104	109	109	108
Cations	meq/L	106	115	110	112
Solids, Total Dissolved Calculated	mg/L	6280	6620	6550	6500
TDS Balance (0.80 - 1.20)		1.04	1.04	1.07	1.02
Trihalomethanes, Total	ug/L	2.38	2.16	2.08	1.78

****Note:** The data presented on this form is intended for summary purposes only. Laboratory approved data is contained within the attached database reports.

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Alluvium Monitor Wells					
Well ID:		632	632	632	632
Collection Date:		10/3/2011	7/11/2011	4/5/2011	1/4/2011
Receive Date:		10/7/2011	7/15/2011	4/8/2011	1/7/2011
Report Date:		11/30/2011	9/14/2011	5/25/2011	2/7/2011
Analyte	RUnits	C11100288-009	C11070551-016	C11040312-013	C11010227-014
Bicarbonate as HCO ₃	mg/L	1790	1900	1910	1930
Calcium	mg/L	604	630	613	602
Chloride	mg/L	235	228	238	238
Magnesium	mg/L	793	837	802	818
Nitrogen, Ammonia as N	mg/L	0.6	0.7	0.59	0.71
Nitrogen, Nitrate+Nitrite as N	mg/L	70	74	68	64
Potassium	mg/L	10	10	10	9
Sodium	mg/L	406	431	432	395
Sulfate	mg/L	3410	3310	3440	3380
pH	s.u.	7.39	7.31	6.63	6.63
Solids, Total Dissolved TDS @ 180 C	mg/L	7050	7000	7230	6780
Aluminum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	0.2
Beryllium	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	2.64	2.79	2.90	2.95
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Uranium	mg/L	0.0742	0.0817	0.0810	0.0947
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Selenium-IV	mg/L	ND(0.001)	0.002	ND(0.001)	0.001
Gross Alpha minus Rn & U	pCi/L	0.8	1.1	0.9	1.9
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.4	0.7	0.3	0.8
Gross Alpha minus Rn & U MDC	pCi/L	0.4	0.8	0.3	0.9
Lead 210	pCi/L	0.8	0.7	0.3	1.6
Lead 210 precision (±)	pCi/L	0.8	1.0	0.8	1.0
Lead 210 MDC	pCi/L	1.3	1.7	1.4	1.7
Radium 226	pCi/L	0.60	0.49	0.65	0.75
Radium 226 precision (±)	pCi/L	0.16	0.15	0.18	0.18
Radium 226 MDC	pCi/L	0.13	0.13	0.15	0.16
Radium 228	pCi/L	2.0	2.2	2.3	2.3
Radium 228 precision (±)	pCi/L	0.57	0.73	0.67	0.64
Radium 228 MDC	pCi/L	0.80	1.1	0.96	0.90
Thorium 230	pCi/L	0.02	0.07	0.07	0.009
Thorium 230 precision (±)	pCi/L	0.07	0.1	0.09	0.08
Thorium 230 MDC	pCi/L	0.2	0.2	0.1	0.2
A/C Balance (± 5)	%	0.635	3.47	0.306	0.647
Anions	meq/L	112	111	115	113
Cations	meq/L	113	119	116	115
Solids, Total Dissolved Calculated	mg/L	6670	6710	6830	6710
TDS Balance (0.80 - 1.20)		1.06	1.04	1.06	1.01
Trihalomethanes, Total	ug/L	3.16	3.28	3.23	2.76

****Note:** The data presented on this form is intended for summary purposes only. Laboratory approved data is contained within the attached database reports.

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Alluvium Monitor Wells					
Well ID:		624	624	624	624
Collection Date:		10/4/2011	7/12/2011	4/4/2011	1/4/2011
Receive Date:		10/7/2011	7/15/2011	4/8/2011	1/7/2011
Report Date:		11/30/2011	9/14/2011	5/25/2011	2/7/2011
Analyte	RUnits	C11100288-010	C11070551-010	C11040312-017	C11010227-009
Bicarbonate as HCO ₃	mg/L	1420	1520	1520	1510
Calcium	mg/L	694	691	697	720
Chloride	mg/L	208	200	202	206
Magnesium	mg/L	408	419	412	427
Nitrogen, Ammonia as N	mg/L	ND(0.1)	ND(0.1)	ND(0.05)	ND(0.05)
Nitrogen, Nitrate+Nitrite as N	mg/L	74	78	69	64
Potassium	mg/L	6	6	6	6
Sodium	mg/L	279	282	292	273
Sulfate	mg/L	2240	2180	2170	2190
pH	s.u.	7.49	7.15	6.81	7.01
Solids, Total Dissolved TDS @ 180 C	mg/L	4990	5100	5170	4970
Aluminum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Beryllium	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	0.19	0.25	0.19	0.16
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Uranium	mg/L	0.0308	0.0351	0.0327	0.0345
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Selenium-IV	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	0.4	1	-0.04	1.1
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.3	0.6	0.2	0.7
Gross Alpha minus Rn & U MDC	pCi/L	0.4	0.8	0.3	0.9
Lead 210	pCi/L	0.04	-0.04	-0.3	0.6
Lead 210 precision (±)	pCi/L	0.8	1.1	0.8	1.0
Lead 210 MDC	pCi/L	1.3	1.8	1.4	1.7
Radium 226	pCi/L	0.12	0.05	0.05	0.06
Radium 226 precision (±)	pCi/L	0.09	0.1	0.10	0.1
Radium 226 MDC	pCi/L	0.13	0.16	0.17	0.16
Radium 228	pCi/L	0.71	0.95	0.95	0.71
Radium 228 precision (±)	pCi/L	0.50	0.66	0.70	0.56
Radium 228 MDC	pCi/L	0.79	1.0	1.1	0.89
Thorium 230	pCi/L	0.008	0.02	0.02	0.02
Thorium 230 precision (±)	pCi/L	0.05	0.1	0.07	0.07
Thorium 230 MDC	pCi/L	0.2	0.3	0.1	0.1
A/C Balance (± 5)	%	-0.328	0.338	0.303	1.48
Anions	meq/L	81.0	80.9	81.0	80.7
Cations	meq/L	80.5	81.4	81.5	83.1
Solids, Total Dissolved Calculated	mg/L	4890	4860	4880	4880
TDS Balance (0.80 - 1.20)		1.02	1.05	1.06	1.02
Trihalomethanes, Total	ug/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)

****Note:** The data presented on this form is intended for summary purposes only. Laboratory approved data is contained within the attached database reports.

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Alluvium Monitor Wells					
Well ID:		SBL-1	SBL-1	SBL-1	SBL-1
Collection Date:		10/4/2011	7/12/2011	4/4/2011	1/4/2011
Receive Date:		10/7/2011	7/15/2011	4/8/2011	1/7/2011
Report Date:		11/30/2011	9/14/2011	5/25/2011	2/7/2011
Analyte	RUnits	C11100288-011	C11070551-009	C11040312-005	C11010227-011
Bicarbonate as HCO ₃	mg/L	415	451	249	210
Calcium	mg/L	510	515	471	473
Chloride	mg/L	77	79	79	86
Magnesium	mg/L	1140	1170	1010	971
Nitrogen, Ammonia as N	mg/L	0.2	ND(0.1)	0.07	0.24
Nitrogen, Nitrate+Nitrite as N	mg/L	41	47	63	56
Potassium	mg/L	14	14	14	13
Sodium	mg/L	301	308	293	282
Sulfate	mg/L	5690	5910	5440	5050
pH	s.u.	7.49	7.67	6.76	7.35
Solids, Total Dissolved TDS @ 180 C	mg/L	8720	8960	8310	7650
Aluminum	mg/L	0.1	0.6	1.6	1.7
Beryllium	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	0.02	0.03	0.06	0.06
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	3.57	3.55	3.05	2.76
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	0.09	0.08	0.18	0.19
Uranium	mg/L	0.0119	0.0138	0.0071	0.0066
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Selenium-IV	mg/L	ND(0.001)	0.003	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	0.5	2.0	1	2.4
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.3	0.8	0.3	0.9
Gross Alpha minus Rn & U MDC	pCi/L	0.4	0.8	0.3	0.9
Lead 210	pCi/L	0.6	0.2	0.7	1.1
Lead 210 precision (±)	pCi/L	0.8	1.1	0.8	1.0
Lead 210 MDC	pCi/L	1.3	1.8	1.3	1.7
Radium 226	pCi/L	0.28	0.16	0.45	0.40
Radium 226 precision (±)	pCi/L	0.14	0.12	0.15	0.17
Radium 226 MDC	pCi/L	0.16	0.17	0.14	0.19
Radium 228	pCi/L	2.1	3.1	3.0	3.3
Radium 228 precision (±)	pCi/L	0.82	0.75	0.66	0.79
Radium 228 MDC	pCi/L	1.2	1.0	0.89	1.1
Thorium 230	pCi/L	0.0007	0.009	-0.02	0.008
Thorium 230 precision (±)	pCi/L	0.06	0.1	0.04	0.04
Thorium 230 MDC	pCi/L	0.2	0.3	0.1	0.1
A/C Balance (± 5)	%	1.03	0.133	-1.55	0.463
Anions	meq/L	130	135	124	115
Cations	meq/L	133	136	120	116
Solids, Total Dissolved Calculated	mg/L	8130	8410	7710	7250
TDS Balance (0.80 - 1.20)		1.07	1.07	1.08	1.06
Trihalomethanes, Total	ug/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)

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UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Alluvium Monitor Wells					
Well ID:		EPA-28	EPA-28	EPA-28	EPA-28
Collection Date:		10/4/2011	7/12/2011	4/4/2011	1/4/2011
Receive Date:		10/7/2011	7/15/2011	4/8/2011	1/7/2011
Report Date:		11/30/2011	9/14/2011	5/25/2011	2/7/2011
Analyte	RUnits	C11100288-012	C11070551-011	C11040312-006	C11010227-012
Bicarbonate as HCO ₃	mg/L	771	837	842	827
Calcium	mg/L	532	541	536	534
Chloride	mg/L	127	124	123	127
Magnesium	mg/L	466	478	470	474
Nitrogen, Ammonia as N	mg/L	ND(0.1)	ND(0.1)	ND(0.05)	ND(0.05)
Nitrogen, Nitrate+Nitrite as N	mg/L	28	32	33	29
Potassium	mg/L	11	12	12	11
Sodium	mg/L	227	234	237	222
Sulfate	mg/L	2890	2740	2720	2790
pH	s.u.	7.59	7.23	7.12	7.50
Solids, Total Dissolved TDS @ 180 C	mg/L	4910	4930	5230	4900
Aluminum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Beryllium	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	0.74	0.76	0.72	0.80
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Uranium	mg/L	0.0461	0.0512	0.0492	0.0510
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	ND(0.001)	ND(0.001)	0.002	ND(0.001)
Selenium-IV	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	0.1	0.7	1.0	1.1
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.3	0.6	0.4	0.7
Gross Alpha minus Rn & U MDC	pCi/L	0.4	0.8	0.3	0.9
Lead 210	pCi/L	0.9	-0.4	0.4	0.08
Lead 210 precision (±)	pCi/L	0.8	1.1	0.8	1.0
Lead 210 MDC	pCi/L	1.3	1.9	1.3	1.7
Radium 226	pCi/L	0.40	0.10	0.17	0.27
Radium 226 precision (±)	pCi/L	0.14	0.10	0.11	0.14
Radium 226 MDC	pCi/L	0.13	0.14	0.14	0.17
Radium 228	pCi/L	0.89	0.45	1.2	1.4
Radium 228 precision (±)	pCi/L	0.64	0.67	0.60	0.66
Radium 228 MDC	pCi/L	1.0	1.1	0.92	1.0
Thorium 230	pCi/L	0.02	0.05	0.05	0.008
Thorium 230 precision (±)	pCi/L	0.06	0.1	0.07	0.05
Thorium 230 MDC	pCi/L	0.2	0.3	0.1	0.1
A/C Balance (± 5)	%	-2.32	0.243	-0.0973	-1.12
Anions	meq/L	78.7	76.5	76.2	77.3
Cations	meq/L	75.1	76.8	76.0	75.6
Solids, Total Dissolved Calculated	mg/L	4790	4700	4670	4710
TDS Balance (0.80 - 1.20)		1.03	1.05	1.12	1.04
Trihalomethanes, Total	ug/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)

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UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Alluvium Monitor Wells					
Well ID:		EPA-28 Duplicate	EPA-28 Duplicate	EPA-28 Duplicate	EPA-28 Duplicate
Collection Date:		10/4/2011	7/12/2011	10/5/2010	7/13/2010
Receive Date:		10/7/2011	7/15/2011	10/8/2010	7/16/2010
Report Date:		11/30/2011	9/14/2011	11/19/2010	8/31/2010
Analyte	RUnits	C11100288-013	C11070551-012	C10100364-013	C10070623-013
Bicarbonate as HCO ₃	mg/L	646	733	728	732
Calcium	mg/L	536	535	530	549
Chloride	mg/L	124	118	116	119
Magnesium	mg/L	458	463	462	488
Nitrogen, Ammonia as N	mg/L	ND(0.1)	ND(0.1)	0.05	ND(0.05)
Nitrogen, Nitrate+Nitrite as N	mg/L	26	29	27	27
Potassium	mg/L	11	11	11	11
Sodium	mg/L	232	238	231	236
Sulfate	mg/L	2960	2710	2960	2910
pH	s.u.	7.40	7.41	7.65	7.28
Solids, Total Dissolved TDS @ 180 C	mg/L	4860	5000	5180	5100
Aluminum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Beryllium	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	0.63	0.63	0.64	0.53
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Uranium	mg/L	0.0384	0.0445	0.0453	0.0407
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Selenium-IV	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	0.004
Gross Alpha minus Rn & U	pCi/L	0.4	1.2	0.5	0.7
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.3	0.7	0.4	0.5
Gross Alpha minus Rn & U MDC	pCi/L	0.4	0.8	0.5	0.7
Lead 210	pCi/L	0.6	-0.4	2.2	1.1
Lead 210 precision (±)	pCi/L	0.8	1.1	1	1.3
Lead 210 MDC	pCi/L	1.3	1.9	1.6	2.2
Radium 226	pCi/L	0.32	0.07	0.23	0.24
Radium 226 precision (±)	pCi/L	0.12	0.1	0.12	0.14
Radium 226 MDC	pCi/L	0.13	0.15	0.15	0.17
Radium 228	pCi/L	0.97	-0.05	1.3	0.87
Radium 228 precision (±)	pCi/L	0.64	0.67	0.60	0.61
Radium 228 MDC	pCi/L	0.99	1.1	0.91	0.95
Thorium 230	pCi/L	0.01	0.01	0.03	0.02
Thorium 230 precision (±)	pCi/L	0.05	0.05	0.06	0.06
Thorium 230 MDC	pCi/L	0.1	0.1	0.1	0.1
A/C Balance (± 5)	%	-1.88	1.11	-2.46	0.199
Anions	meq/L	77.7	73.8	78.7	77.8
Cations	meq/L	74.9	75.4	74.9	78.1
Solids, Total Dissolved Calculated	mg/L	4780	4580	4800	4810
TDS Balance (0.80 - 1.20)		1.02	1.09	1.08	1.06
Trihalomethanes, Total	ug/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)

****Note:** The data presented on this form is intended for summary purposes only. Laboratory approved data is contained within the attached database reports.

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Alluvium Monitor Wells					
Well ID:		GW-3	GW-3	GW-3	GW-3
Collection Date:		10/4/2011	7/12/2011	4/5/2011	1/4/2011
Receive Date:		10/7/2011	7/15/2011	4/8/2011	1/7/2011
Report Date:		11/30/2011	9/14/2011	5/25/2011	2/7/2011
Analyte	RUnits	C11100288-014	C11070551-013	C11040312-014	C11010227-015
Bicarbonate as HCO ₃	mg/L	1550	1620	1600	1550
Calcium	mg/L	896	906	873	870
Chloride	mg/L	170	168	171	174
Magnesium	mg/L	276	280	270	273
Nitrogen, Ammonia as N	mg/L	ND(0.1)	ND(0.1)	ND(0.05)	0.05
Nitrogen, Nitrate+Nitrite as N	mg/L	91	97	72	86
Potassium	mg/L	9	9	9	9
Sodium	mg/L	344	353	352	324
Sulfate	mg/L	2240	2210	2220	2200
pH	s.u.	7.54	6.84	6.71	7.69
Solids, Total Dissolved TDS @ 180 C	mg/L	5230	5310	5480	5090
Aluminum	mg/L	0.4	0.2	1.1	0.1
Beryllium	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	ND(0.01)	0.01	0.01	0.01
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	1.65	1.64	1.70	1.58
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Uranium	mg/L	0.220	0.236	0.212	0.199
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	0.013	ND(0.001)	ND(0.001)	ND(0.001)
Selenium-IV	mg/L	0.003	ND(0.001)	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	0.4	0.8	0.3	0.02
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.3	0.6	0.2	0.5
Gross Alpha minus Rn & U MDC	pCi/L	0.4	0.8	0.3	0.9
Lead 210	pCi/L	-0.3	0.1	0.1	0.3
Lead 210 precision (±)	pCi/L	0.8	1.1	0.8	1.1
Lead 210 MDC	pCi/L	1.3	1.8	1.3	1.8
Radium 226	pCi/L	0.05	-0.06	-0.05	0.10
Radium 226 precision (±)	pCi/L	0.08	0.06	0.07	0.10
Radium 226 MDC	pCi/L	0.13	0.14	0.15	0.15
Radium 228	pCi/L	0.69	0.43	1.1	2.7
Radium 228 precision (±)	pCi/L	0.61	0.64	0.63	0.64
Radium 228 MDC	pCi/L	0.97	1.0	0.96	0.88
Thorium 230	pCi/L	0.02	0.009	0.08	0.06
Thorium 230 precision (±)	pCi/L	0.07	0.06	0.1	0.07
Thorium 230 MDC	pCi/L	0.2	0.1	0.2	0.1
A/C Balance (± 5)	%	-0.169	0.231	-1.49	-1.22
Anions	meq/L	82.8	83.4	83.7	82.2
Cations	meq/L	82.5	83.8	81.3	80.2
Solids, Total Dissolved Calculated	mg/L	5090	5120	5100	5010
TDS Balance (0.80 - 1.20)		1.03	1.04	1.07	1.02
Trihalomethanes, Total	ug/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)

****Note:** The data presented on this form is intended for summary purposes only. Laboratory approved data is contained within the attached database reports.

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Alluvium Monitor Wells					
Well ID:		EPA-25	EPA-25	EPA-25	EPA-25
Collection Date:		10/4/2011	7/12/2011	4/5/2011	1/4/2011
Receive Date:		10/7/2011	7/15/2011	4/8/2011	1/7/2011
Report Date:		11/30/2011	9/14/2011	5/25/2011	2/7/2011
Analyte	RUnits	C11100288-015	C11070551-014	C11040312-015	C11010227-016
Bicarbonate as HCO ₃	mg/L	1110	1150	1190	1180
Calcium	mg/L	770	742	748	759
Chloride	mg/L	106	101	105	105
Magnesium	mg/L	228	231	224	237
Nitrogen, Ammonia as N	mg/L	ND(0.1)	ND(0.1)	ND(0.05)	ND(0.05)
Nitrogen, Nitrate+Nitrite as N	mg/L	80	82	93	66
Potassium	mg/L	8	7	7	7
Sodium	mg/L	190	188	196	179
Sulfate	mg/L	1840	1780	1820	1800
pH	s.u.	7.46	7.37	7.02	7.39
Solids, Total Dissolved TDS @ 180 C	mg/L	4120	4060	4290	4000
Aluminum	mg/L	ND(0.1)	0.2	ND(0.1)	ND(0.1)
Beryllium	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	0.27	0.50	0.26	0.10
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Uranium	mg/L	0.113	0.117	0.115	0.118
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	0.002	ND(0.001)	ND(0.001)	ND(0.001)
Selenium-IV	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	-0.009	0.01	-0.04	0.2
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.3	0.5	0.2	0.5
Gross Alpha minus Rn & U MDC	pCi/L	0.4	0.8	0.3	0.9
Lead 210	pCi/L	0.6	0.1	-0.2	-0.06
Lead 210 precision (±)	pCi/L	0.8	1.0	0.8	1.0
Lead 210 MDC	pCi/L	1.3	1.7	1.4	1.7
Radium 226	pCi/L	-0.09	0.04	-0.08	0.01
Radium 226 precision (±)	pCi/L	0.06	0.09	0.06	0.09
Radium 226 MDC	pCi/L	0.14	0.15	0.14	0.16
Radium 228	pCi/L	-0.3	0.71	1.1	0.53
Radium 228 precision (±)	pCi/L	0.60	0.72	0.60	0.58
Radium 228 MDC	pCi/L	1.0	1.1	0.93	0.94
Thorium 230	pCi/L	-0.007	0.01	0.006	0.06
Thorium 230 precision (±)	pCi/L	0.05	0.06	0.08	0.07
Thorium 230 MDC	pCi/L	0.2	0.1	0.2	0.09
A/C Balance (± 5)	%	0.524	0.423	-1.05	0.684
Anions	meq/L	65.0	63.9	65.8	64.4
Cations	meq/L	65.7	64.4	64.4	65.3
Solids, Total Dissolved Calculated	mg/L	4050	3960	4040	3980
TDS Balance (0.80 - 1.20)		1.02	1.03	1.06	1.01
Trihalomethanes, Total	ug/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)

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UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Alluvium Monitor Wells					
Well ID:		627	627	627	627
Collection Date:		10/4/2011	7/12/2011	4/5/2011	1/4/2011
Receive Date:		10/7/2011	7/15/2011	4/8/2011	1/7/2011
Report Date:		11/30/2011	9/14/2011	5/25/2011	2/7/2011
Analyte	RUnits	C11100288-016	C11070551-015	C11040312-016	C11010227-017
Bicarbonate as HCO ₃	mg/L	559	599	594	601
Calcium	mg/L	509	538	530	526
Chloride	mg/L	39	37	38	40
Magnesium	mg/L	227	239	231	238
Nitrogen, Ammonia as N	mg/L	ND(0.1)	ND(0.1)	ND(0.05)	ND(0.05)
Nitrogen, Nitrate+Nitrite as N	mg/L	96	101	94	85
Potassium	mg/L	6	6	6	6
Sodium	mg/L	460	490	503	456
Sulfate	mg/L	2420	2350	2390	2350
pH	s.u.	7.70	7.67	7.12	7.47
Solids, Total Dissolved TDS @ 180 C	mg/L	4260	4330	4320	4300
Aluminum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Beryllium	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	0.02	0.02	0.03	0.03
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Uranium	mg/L	0.0184	0.0198	0.0189	0.0201
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Selenium-IV	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	-0.009	0.4	0.09	0.08
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.3	0.6	0.2	0.5
Gross Alpha minus Rn & U MDC	pCi/L	0.4	0.8	0.3	0.9
Lead 210	pCi/L	0.9	0.7	0.2	0.4
Lead 210 precision (±)	pCi/L	0.8	1.0	0.8	1.0
Lead 210 MDC	pCi/L	1.3	1.7	1.3	1.7
Radium 226	pCi/L	0.15	0.16	0.009	0.14
Radium 226 precision (±)	pCi/L	0.10	0.11	0.09	0.12
Radium 226 MDC	pCi/L	0.13	0.14	0.16	0.16
Radium 228	pCi/L	0.06	0.28	0.34	0.60
Radium 228 precision (±)	pCi/L	0.59	0.64	0.62	0.59
Radium 228 MDC	pCi/L	0.98	1.1	1.0	0.95
Thorium 230	pCi/L	0.03	0.04	0.005	0.09
Thorium 230 precision (±)	pCi/L	0.07	0.09	0.07	0.1
Thorium 230 MDC	pCi/L	0.2	0.2	0.2	0.2
A/C Balance (± 5)	%	-2.50	1.13	-0.104	-0.184
Anions	meq/L	67.5	66.5	67.6	66.1
Cations	meq/L	64.2	68.0	67.5	65.8
Solids, Total Dissolved Calculated	mg/L	4380	4390	4450	4320
TDS Balance (0.80 - 1.20)		0.970	0.990	0.970	1.00
Trihalomethanes, Total	ug/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)

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