Appendix A

Southwest Alluvium Monitoring Data

The Southwest Alluvium Remedial Action System was installed in August 1989 and began operating in October 1989. The initial system consisted of three extraction wells (Wells 801, 802, and 803) and four water level observation wells (Wells 804, 805, 806, and 807). An additional extraction well, Well 808, was installed and began operating in June 1991, as required by the Nuclear Regulatory Commission and the U.S. Environmental Protection Agency (EPA). Extraction Wells 801, 802, and 803 are monitored for water quality, and Observation Wells 804, 805, 806, and 807 are monitored for water level elevations on a quarterly basis. Well 801 was decommissioned at the end of July 1999 because it pumped at a rate of less than 0.5 gallon per minute for the previous eight years.

Water level elevations and water quality data have also been collected on a quarterly basis from 18 monitoring wells located up-, down-, and cross-gradient from the tailings area. The 18 monitoring wells include Wells GW 1, GW 2, GW 3, GW 4, EPA 22A, EPA 23, EPA 25, EPA 27, EPA 28, 509 D, 632, 29 A, 624, 627, 639, 642, 644, and 645. All of these wells, except for Wells EPA 27 and 29 A, are completed in the alluvium. Well EPA 27 is completed partially in the alluvium and partially in the Mancos formation and Well 29 A is completed in the underlying Zone 1 formation. Consequently, water quality data collected from these two wells may not be representative of alluvial groundwater conditions.

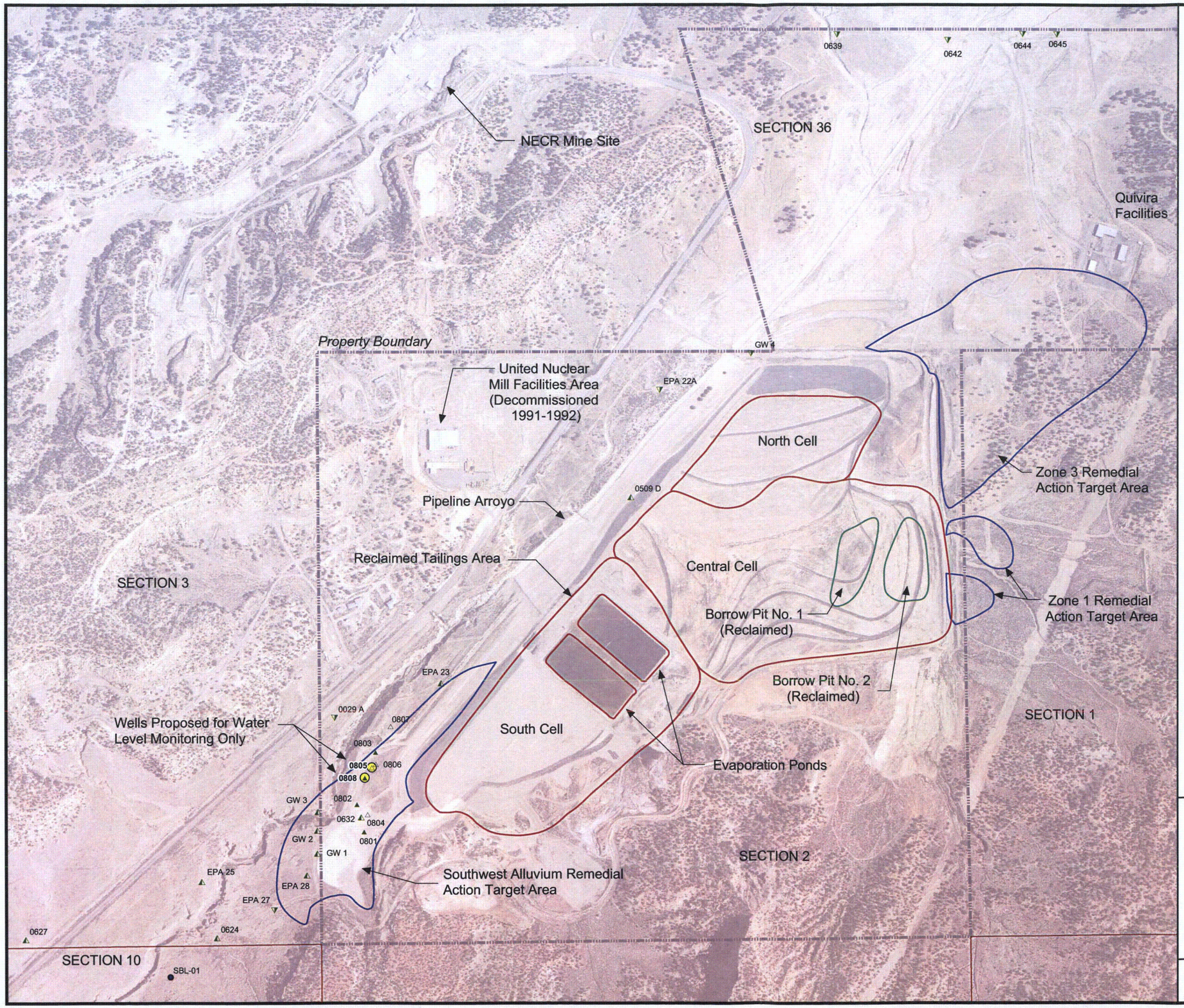
Beginning with the second quarter of 2000, a revised monitoring program was implemented. Changes to the wells included in the monitoring program for the Southwest Alluvium are shown in Table 1 of this 2009 Annual Review Report. See the enclosed Figure A-1 for the current layout of the wells.

Beginning in January 2001, a natural attenuation test was implemented, as requested during the November 14, 2000, meeting in Sante Fe, New Mexico, and as documented in the EPA's e-mail letter from Greg Lyssy, dated November 15, 2000 (Lyssy, 2000). For this test, Extraction Wells 802, 803, and 808 were turned off and added to the revised monitoring program wells. During the 18-month test period, the wells were sampled and water level elevations were measured on a monthly basis. The results of the first 18 months of the natural attenuation test were provided in a report submitted in November 2002 (Earth Tech, 2002c). The natural attenuation test has continued through October 2009 with a quarterly frequency of water quality and water level monitoring.

During July 2004, a new downgradient well was installed within the Southwest Alluvium: SBL 1. The first sampling and water-level measurement of this well occurred in October 2004; quarterly results through October 2009 are included in this appendix. This well is not part of the formal performance monitoring program.

Table A.1 presents the quarterly water level and water quality data for the observation and monitoring wells from the second quarter of 1989 through the fourth quarter of 2009. The laboratory analytical data for 2009 are presented at the end of this appendix.

Figure A-1



Legend

Southwest Alluvium

- Idled Extraction Well
- Groundwater Quality and Water Level Monitoring Well
- Water Level Monitoring Well
- Dry Monitoring Well
- Monitoring Well Installed in 2004
- Well Proposed for Water Level Monitoring Only
- Property Boundary
- Section Boudary
- Tailings Pond
- Remedial Action Targe Area

Aerial photo taken on August 1, 1996.

0 400 800 1,600
Feet

FIGURE A-1

Southwest Alluvium Proposed Revised Monitoring Well Locations

United Nuclear Corporation Church Rock Site, Church Rock, New Mexico

CHESTER ENGINEERS

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Notes For Table A.1

Southwest Alluvium Data Summary, 1989 – 2009

General Notes:

1. NRC standard as listed in License Condition 30, Part B.
2. EPA standard as listed in Table 2, 'Contaminant-Specific Groundwater ARARs' of the ROD (EPA, 1988).
3. Standards for TDS, sulfate, and nitrate changed to reflect revised standards recommended in the NRC's 1996 evaluation of background water quality and documented in the January 6, 1998, letter from NMED to EPA.
4. NA–Not applicable.
5. 'ND' for combined Ra-226 and Ra-228 indicates that both constituents were less than the laboratory reporting limits, which are 0.2 and 1.0 pCi/L, respectively.
6. All values that exceed the NRC and/or EPA standards are shaded.
7. Gross alpha value excludes contribution from radon and uranium.
8. "*" (Asterisk) indicates a Point of Compliance well.
9. Reporting limit for bicarbonate changed from 0.0 mg/L to 0.1 mg/L in fourth quarter 1997.
10. Reporting limit for cadmium changed from 0.01 mg/L to 0.005 mg/L after fourth quarter 1997. The analytical method changed from EPA 200.7 (ICP) to 200.8 (ICP.MS).
11. NO3 (nitrate) is reported by the laboratory as nitrate + nitrite as N.
12. During August 2007, the NRC issued License Amendment 37 (NRC, 2006b) revising the former 1 ug/L chloroform groundwater protection standard to 80 ug/L for total trihalomethanes (TTHMs) in the Southwest Alluvium, Zone 1 and Zone 3; and also revising the current combined radium-226 and -228 groundwater protection standard of 5 pCi/L to 5.2 pCi/L in the Southwest Alluvium and 9.4 pCi/L in Zone 1.
13. Energy Laboratory's reporting of radiological analyses changed during 2008 (N.A. Water Systems, 2008d). This affected the reporting of Church Rock sample analyses beginning in April 2008 (2nd quarter). The changes were made to make the reporting methods consistent with Section 7.5 of The United States Nuclear Regulatory Commission's Regulatory Guide 4.14.

The changes are summarized as follows:

- A minimum detectable concentration (MDC) is determined and reported for each analysis.

- Sample results are reported regardless of whether they are lower than the MDC for the analysis. This may result in the reporting of negative concentrations.
- Sample results lower than the MDC are qualified with a "U".

These noted changes affected the reporting of all radiological parameters analyzed in Church Rock samples, except for thorium-230. Energy Labs did not have an approved methodology for determining MDC values for thorium-230. In the absence of MDC values, the historical reporting limit was used instead. Therefore, U-qualified results for thorium-230 indicate concentrations below a reporting limit rather than an MDC. Otherwise, the reporting of thorium-230 results was treated similarly to other radiological parameters. This means that measured concentrations were reported with a U qualification if the values were below the reporting limit.

The rationale for reporting values below MDC or reporting limit, even if negative, is that errors associated with the reported values are expected, over time, to average to zero. This means that averages or sums (e.g. for total radium) of concentrations will tend to be more accurate if below limit (MDC or reporting) results are retained in the calculations.

Specific Notes:

- Well 801 is monitored for water level only beginning in 2nd quarter 2000.
- Well 803 was not sampled in 3rd quarter 1999.
- Well EPA 22A contained insufficient water for sampling beginning 4th quarter 1997.
- Well EPA 27 contained insufficient water for sampling beginning 4th quarter 1997.
- Well GW 4 contained insufficient water for sampling, 1st and 3rd quarters 1996, and 3rd Quarter 1999.
- Well 29 A contained insufficient water for sampling, 1st quarter 1995.
- Well 639 contained insufficient water for sampling, 1st quarter 1995.
- Well 642 contained insufficient water for sampling, 4th quarter 1995.
- Well 644 contained insufficient water for sampling, 1st quarter 1993.
- Well 645 contained insufficient water for sampling, 1st quarter 1991.
- The following changes to the revised monitoring program were implemented for the Natural Attenuation test beginning January 2001:
- Well 801 is monitored for water level and water quality.
- Pumping wells 802, 803, and 808 were temporarily shut off and are monitored for water level and water quality.

Table A.1

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0029 A		7/20/1989	6,879.40	7.20	7.04	4870	570	250	538	1.2	102	2362	38.3	0.15	183	< 1	< 0.1	< 0.001
0029 A		10/16/1989	6,879.10	7.10	7.60	5144	518	240	662	1.3	546	2176	30.4	0.24	189	< 1	< 0.1	< 0.001
0029 A		1/4/1990	6,878.60	6.90	7.28	5080	554	233	607	0.9	528	2333	42.5	0.09	190	< 1	< 0.1	< 0.001
0029 A		4/3/1990	no data	7.00	7.50	4981	567	240	573	0.9	582	2244	41.9	0.09	147	< 1	< 0.1	< 0.001
0029 A		7/2/1990	no data	7.00	7.48	5000	632	266	463	3.7	596	2268	38	< 0.05	172	< 1	< 0.1	< 0.001
0029 A		10/2/1990	6,877.40	7.10	7.73	4778	520	231	472	0.8	558	2367	39.1	< 0.05	118	< 1	< 0.1	< 0.001
0029 A		1/15/1991	6,877.00	7.10	7.65	4825	580	242	516	3.5	494	2474	42.8	< 0.05	166	< 1	< 0.1	< 0.001
0029 A		4/2/1991	6,876.80	6.90	7.49	4775	592	239	351	0.5	538	2368	39.6	< 0.05	160	< 1	< 0.1	< 0.001
0029 A		7/16/1991	6,876.20	6.90	7.50	4595	579	221	347	1.1	598	2487	37.2	< 0.05	147	< 1	< 0.1	< 0.001
0029 A		10/14/1991	6,875.40	6.80	7.34	4672	490	204	365	1.1	571	2197	45.2	< 0.05	111	< 1	< 0.1	0.001
0029 A		1/14/1992	6,875.00	6.80	7.38	4512	560	239	329	0.7	607	2110	36.4	< 0.05	125	< 1	< 0.1	< 0.001
0029 A		4/9/1992	6,874.80	6.80	7.26	4656	574	235	432	1.6	531	2421	39	6.08	70.2	< 1	< 0.1	< 0.001
0029 A		7/14/1992	6,873.50	6.50	7.58	4599	644	242	419	1.4	518	2358	37.7	5	129	< 1	< 0.1	< 0.001
0029 A		10/13/1992	6,872.30	6.90	7.55	4147	584	267	417	1.7	588	2568	36.5	0.16	105	< 1	0.1	< 0.001
0029 A		1/12/1993	6,872.10	7.00	7.60	4274	591	219	415	3.2	558	2520	36.7	< 0.05	91.8	< 1	< 0.1	< 0.001
0029 A		4/14/1993	6,872.20	7.00	7.62	4349	569	212	373	3.1	568	2349	39.8	0.95	96.6	< 1	< 0.1	< 0.001
0029 A		7/15/1993	6,865.90	7.10	6.93	4135	591	201	342	8.6	589	2195	37.1	< 0.05	81.6	< 1	< 0.1	< 0.001
0029 A		10/7/1993	6,868.30	7.10	7.70	4425	586	212	345	< 0.1	549	2120	35.9	< 0.05	120	< 1	< 0.1	< 0.001
0029 A		1/6/1994	6,870.30	7.10	7.57	4264	567	206	370	0.3	544	2376	35.8	< 0.05	51.8	< 1	< 0.1	< 0.001
0029 A		4/14/1994	6,870.20	7.20	7.26	4070	557	207	344	0.5	576	2339	36	0.21	72.8	< 1	< 0.1	< 0.001
0029 A		7/21/1994	6,869.50	7.00	7.56	4233	678	229	324	< 0.1	630	2625	33	< 0.05	70.5	< 1	< 0.1	< 0.001
0029 A		10/5/1994	6,869.10	6.90	7.81	4347	641	221	344	0.8	593	2365	36.2	0.11	86	< 1	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0029 A		7/20/1989	< 0.05	< 0.01	0.02	< 0.05	0.08	< 0.1	< 0.05	0.002	< 0.1	0.0556	0.4	< 1	0.4	5.9	< 1	0.6
0029 A		10/16/1989	< 0.05	< 0.01	< 0.01	< 0.05	< 0.05	< 0.1	< 0.05	0.003	< 0.1	0.0396	0.3	< 1	0.3	1.1	< 1	1.5
0029 A		1/4/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.039	< 0.2	< 1	0	< 0.2	1.9	< 1
0029 A		4/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.09	< 0.1	< 0.05	0.002	< 0.1	0.036	0.3	< 1	0.3	< 0.2	1.9	0.9
0029 A		7/2/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	0.0302	0.3	1.4	1.7	0.6	< 1	1
0029 A		10/2/1990	< 0.05	< 0.01	0.02	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.031	< 0.2	2.5	2.5	< 0.2	< 1	< 1
0029 A		1/15/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0416	< 0.2	< 1	0	< 0.2	< 1	< 1
0029 A		4/2/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.002	< 0.1	0.0459	< 0.2	1.2	1.2	< 0.2	< 1	< 1
0029 A		7/16/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.01	< 0.1	0.037	< 0.2	< 1	0	< 0.2	< 1	< 1
0029 A		10/14/1991	< 0.01	0.02	0.02	< 0.05	0.02	< 0.1	< 0.05	0.001	< 0.1	0.05	< 0.2	< 1	0	< 0.2	< 1	< 1
0029 A		1/14/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	0.05	0.001	< 0.1	0.032	< 0.2	< 1	0	< 0.2	1.8	< 1
0029 A		4/9/1992	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.021	< 0.1	0.039	2.1	4.7	6.8	< 0.2	1.5	2.4
0029 A		7/14/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.002	< 0.1	0.04	9.4	1.5	10.9	< 0.2	< 1	9.5
0029 A		10/13/1992	< 0.01	0.01	0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.027	3.1	< 1	3.1	< 0.2	< 1	< 1
0029 A		1/12/1993	< 0.01	0.03	0.03	< 0.05	< 0.01	< 0.1	< 0.05	0.011	< 0.1	0.034	< 0.2	< 1	0	< 0.2	< 1	< 1
0029 A		4/14/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.053	0.4	< 1	0.4	< 0.2	< 1	< 1
0029 A		7/15/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.158	0.3	< 1	0.3	< 0.2	< 1	< 1
0029 A		10/7/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.04	0.8	2.9	3.7	< 0.2	< 1	< 1
0029 A		1/6/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.035	0.6	< 1	0.6	< 0.2	1.4	< 1
0029 A		4/14/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.043	1	1.5	2.5	< 0.2	< 1	3.4
0029 A		7/21/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	0.002	< 0.1	0.043	< 0.2	< 1	0	< 0.2	< 1	< 1
0029 A		10/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.04	< 0.2	3.9	3.9	< 0.2	1.9	6.2

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0509 D		7/19/1989	6,916.60	6.40	7.07	4652	819	290	198	10	1525	2017	176	0.06	50	< 1	< 0.1	< 0.001
0509 D		10/12/1989	6,915.80	6.40	6.98	4860	854	332	201	13.5	1703	2053	197	0.13	58	< 1	0.12	0.001
0509 D		1/4/1990	6,915.30	6.10	6.54	4986	833	403	214	10.7	1745	2024	202	0.1	43	< 1	< 0.1	< 0.001
0509 D		4/3/1990	6,914.30	6.20	6.70	5192	794	411	210	11.2	1877	1996	220	0.1	39	< 1	< 0.1	< 0.001
0509 D		7/3/1990	6,913.40	6.30	6.74	5278	909	348	203	12	1898	2026	209	< 0.05	53.4	< 1	< 0.1	< 0.001
0509 D		10/3/1990	6,912.60	6.20	7.24	5373	847	358	252	12.2	1819	2118	221	< 0.05	38	< 1	< 0.1	< 0.001
0509 D		1/15/1991	6,908.00	6.30	7.15	5428	851	379	273	15.1	1463	2355	226	0.05	56.4	< 1	< 0.1	< 0.001
0509 D		4/9/1991	6,907.50	6.60	7.25	4208	923	292	192	9.2	1218	1958	178	0.05	37	< 1	< 0.1	< 0.001
0509 D		7/17/1991	6,906.80	6.30	7.35	5554	905	365	225	11	1826	2303	237	0.07	56.8	< 1	< 0.1	< 0.001
0509 D		10/15/1991	6,906.20	6.20	6.97	5616	917	432	253	12.3	1813	2407	239	< 0.05	22.5	< 1	< 0.1	0.001
0509 D		1/15/1992	6,905.50	6.10	7.16	4832	782	378	228	10.2	1206	2226	215	< 0.05	42.3	< 1	0.26	< 0.001
0509 D		4/8/1992	6,904.80	6.10	7.41	5122	822	437	258	11.6	1763	2392	227	< 0.05	33.3	< 1	< 0.1	< 0.001
0509 D		7/7/1992	6,904.00	6.00	7.80	5151	791	413	319	16.1	1253	2379	182	0.15	55.6	< 1	0.12	< 0.001
0509 D		10/6/1992	6,903.40	6.20	8.15	5913	913	451	293	12.1	1946	2358	230	< 0.05	62.5	< 1	0.1	< 0.001
0509 D		1/6/1993	6,902.90	6.30	7.26	5281	453	995	156	8	2013	2878	262	0.81	84	< 1	< 0.1	< 0.001
0509 D		4/7/1993	6,902.30	6.30	7.00	5254	786	389	319	10.5	1797	2393	251	0.06	51.6	< 1	< 0.1	< 0.001
0509 D		7/14/1993	6,901.30	6.30	7.04	5055	810	402	283	11.4	1961	2101	257	< 0.05	47.4	< 1	< 0.1	< 0.001
0509 D		10/6/1993	6,900.60	6.50	7.00	5090	830	424	271	11.3	1787	2476	231	< 0.05	56.9	< 1	< 0.1	< 0.001
0509 D		1/6/1994	6,900.20	6.50	6.83	5480	814	438	293	10.6	1726	2583	240	0.16	39.6	< 1	< 0.1	< 0.001
0509 D		4/12/1994	6,899.50	6.50	6.75	5766	780	452	277	11.3	1660	2729	256	0.51	59.3	< 1	< 0.1	< 0.001
0509 D		7/21/1994	6,898.90	6.40	7.34	6216	918	487	295	11.7	1817	3043	246	0.39	54.1	< 1	< 0.1	< 0.001
0509 D		10/5/1994	6,898.60	6.20	7.59	6177	901	522	319	12.8	1800	2749	259	0.93	54.8	< 1	< 0.1	< 0.001
0509 D		1/5/1995	6,898.00	6.40	7.12	6296	880	542	298	14	1898	2693	271	1.05	49.7	< 1	< 0.1	< 0.001
0509 D		4/5/1995	6,897.30	6.50	6.92	6165	814	494	276	12	1856	2766	302	1.63	63	< 1	< 0.1	< 0.001
0509 D		7/6/1995	6,896.60	6.40	7.60	6186	835	510	300	13.5	1841	2602	299	1.54	46.5	< 1	< 0.1	< 0.001
0509 D		10/3/1995	6,896.20	6.30	7.41	6534	820	545	296	13.6	1928	2825	292	2.22	50.5	< 1	< 0.1	0.003
0509 D		1/3/1996	6,895.70	6.50	6.96	5314	760	490	287	13.3	1903	2229	227	2.22	50.4	< 1	< 0.1	< 0.001
0509 D		4/2/1996	6,895.10	6.50	7.67	6804	800	610	324	15	1979	3030	342	3.86	53.6	< 1	< 0.1	< 0.001
0509 D		7/7/1996	6,890.10	6.20	7.04	6283	805	495	300	14.7	1769	2580	255	2.45	44.5	< 1	< 0.1	< 0.001
0509 D		10/1/1996	6,889.60	6.40	6.80	6440	818	578	308	15.2	1900	2795	297	3.97	86.1	< 1	< 0.1	< 0.001
0509 D		1/22/1997	6,889.20	6.30	7.21	6140	820	545	277	14.4	1900	2789	337	3.56	43.2	< 1	< 0.1	< 0.001
0509 D		4/8/1997	6,888.50	6.50	7.64	6430	825	581	328	15.7	1910	2869	345	5.09	48.4	< 1	< 0.1	< 0.001
0509 D		7/8/1997	6,888.00	6.80	7.61	6640	827	599	293	16.1	1900	2650	337	6.19	44.8	< 1	< 0.1	< 0.001
0509 D		10/7/1997	6,887.80	6.20	7.42	6530	807	584	302	16.2	1920	2850	350	6.7	44.5	< 1	< 0.1	< 0.001
0509 D		1/16/1998	6,887.20	6.60	7.75	6640	768	602	319	17.3	1930	3000	343	9.43	47.3	< 1	< 0.1	< 0.001

CHESTER ENGINEERS

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0509 D		7/19/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.29	< 0.1	< 0.05	< 0.001	< 0.1	0.111	0.6	1.5	2.1	6.9	2.8	6.8
0509 D		10/12/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.39	< 0.1	< 0.05	0.001	< 0.1	0.105	0.8	< 1	0.8	< 0.2	2.3	1.2
0509 D		1/4/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.38	< 0.1	< 0.05	< 0.001	< 0.1	0.107	0.9	< 1	0.9	< 0.2	3.4	2.5
0509 D		4/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.43	< 0.1	< 0.05	< 0.001	< 0.1	0.106	0.7	< 1	0.7	< 0.2	< 1	1.4
0509 D		7/3/1990	< 0.05	< 0.01	0.02	< 0.05	0.48	< 0.1	< 0.05	< 0.001	< 0.1	0.126	0.4	< 1	0.4	< 0.2	< 1	< 1
0509 D		10/3/1990	< 0.05	< 0.01	0.02	< 0.05	0.55	< 0.1	< 0.05	0.002	< 0.1	0.074	< 0.2	< 1	0	< 0.2	1.9	< 1
0509 D		1/15/1991	< 0.01	0.01	< 0.01	< 0.05	0.44	< 0.1	< 0.05	< 0.001	< 0.1	0.1202	0.8	< 1	0.8	1	< 1	< 1
0509 D		4/9/1991	< 0.01	0.02	< 0.01	< 0.05	0.91	< 0.1	< 0.05	0.001	< 0.1	0.1274	0.5	< 1	0.5	< 0.2	2.9	< 1
0509 D		7/17/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.46	< 0.1	< 0.05	< 0.001	< 0.1	0.136	0.4	< 1	0.4	< 0.2	< 1	< 1
0509 D		10/15/1991	< 0.01	< 0.01	0.01	< 0.05	0.5	< 0.1	< 0.05	0.001	< 0.1	0.132	0.5	7.6	8.1	< 0.2	< 1	< 1
0509 D		1/15/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.7	< 0.1	< 0.05	0.002	< 0.1	0.22	< 0.2	< 1	0	< 0.2	< 1	< 1
0509 D		4/8/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.61	< 0.1	< 0.05	0.004	< 0.1	0.124	< 0.2	1.1	1.1	< 0.2	1.9	< 1
0509 D		7/7/1992	< 0.01	< 0.01	< 0.01	0.07	0.72	< 0.1	< 0.05	0.002	< 0.1	0.12	1	< 1	1	< 0.2	< 1	1.2
0509 D		10/6/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.66	< 0.1	< 0.05	0.005	< 0.1	0.119	0.7	2.2	2.9	< 0.2	2.3	< 1
0509 D		1/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	1.86	< 0.1	< 0.05	0.005	< 0.1	0.003	1.5	4.9	6.4	< 0.2	< 1	1.7
0509 D		4/7/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.68	< 0.1	< 0.05	< 0.001	< 0.1	0.142	0.3	1.9	2.2	< 0.2	2.9	< 1
0509 D		7/14/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.74	< 0.1	< 0.05	< 0.001	< 0.1	0.082	0.5	2	2.5	< 0.2	< 1	< 1
0509 D		10/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.75	< 0.1	< 0.05	< 0.001	< 0.1	0.043	0.9	< 1	0.9	< 0.2	< 1	< 1
0509 D		1/6/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.81	< 0.1	< 0.05	< 0.001	< 0.1	0.081	0.4	< 1	0.4	< 0.2	1.1	< 1
0509 D		4/12/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.81	< 0.1	< 0.05	< 0.001	< 0.1	0.082	< 0.2	< 1	0	< 0.2	< 1	< 1
0509 D		7/21/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.88	< 0.1	< 0.05	0.004	< 0.1	0.075	0.4	4.7	5.1	< 0.2	1.2	5.5
0509 D		10/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.88	< 0.1	< 0.05	< 0.001	< 0.1	0.084	0.5	1.8	2.3	< 0.2	2.7	3.4
0509 D		1/5/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.85	< 0.1	< 0.05	< 0.001	< 0.1	0.084	0.6	1.6	2.2	< 0.2	< 1	3.2
0509 D		4/5/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.44	< 0.1	< 0.05	< 0.001	< 0.1	0.084	0.2	1.6	1.8	< 0.2	< 1	2.8
0509 D		7/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.91	< 0.1	< 0.05	0.001	< 0.1	0.0816	< 0.2	< 1	0	0.4	< 1	< 1
0509 D		10/3/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.82	< 0.1	< 0.05	0.002	< 0.1	0.084	0.8	< 1	0.8	< 0.2	< 1	1.7
0509 D		1/3/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.79	< 0.1	< 0.05	0.002	< 0.1	0.09	0.4	< 1	0.4	< 0.2	1.5	2
0509 D		4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.86	< 0.1	< 0.05	< 0.001	< 0.1	0.101	< 0.2	< 1	0	< 0.2	< 1	< 1
0509 D		7/7/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.97	< 0.1	< 0.05	< 0.001	< 0.1	0.143	0.5	< 1	0.5	< 0.2	< 1	< 1
0509 D		10/1/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.9	< 0.1	< 0.05	0.007	< 0.1	0.088	0.6	< 1	0.6	< 0.2	< 1	< 1
0509 D		1/22/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.85	< 0.1	< 0.05	< 0.001	< 0.1	0.087	< 0.2	< 1	0	< 0.2	< 1	< 1
0509 D		4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.97	< 0.1	< 0.05	0.028	< 0.1	0.099	0.5	< 1	0.5	< 0.2	< 1	< 1
0509 D		7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.84	< 0.1	< 0.05	< 0.001	< 0.1	0.094	1.6	< 1	1.6	< 0.2	< 1	< 1
0509 D		10/7/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.21	< 0.1	< 0.05	< 0.001	< 0.1	0.089	< 0.2	< 1	0	< 0.2	< 1	1
0509 D		1/16/1998	< 0.01	< 0.01	< 0.01	< 0.05	1.2	< 0.1	< 0.05	< 0.001	< 0.1	0.102	0.7	< 1	0.7	< 0.2	< 1	2.5

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0509 D		4/7/1998	6,887.00	6.40	7.24	6390	805	610	310	16.2	1910	2950	274	8.49	46	< 1	< 0.1	< 0.001
0509 D		7/7/1998	6,886.60	6.70	7.64	6320	800	548	305	16.1	1890	2500	322	7.32	42.3	< 1	< 0.1	< 0.001
0509 D		10/6/1998	6,886.20	6.60	7.78	6960	815	689	353	19.9	1910	3050	312	13.8	44.4	< 1	< 0.1	< 0.001
0509 D		1/5/1999	6,885.70	6.60	7.76	6830	761	609	289	17.1	1970	3100	317	12.9	41.1	< 1	< 0.1	< 0.001
0509 D		4/6/1999	6,885.40	6.50	7.60	3780	805	630	289	17.6	1950	2830	345	13.1	9.53	< 1	< 0.1	< 0.001
0509 D		7/13/1999	6,884.84	6.50	7.72	6620	762	644	314	25.1	1540	3000	312	17.6	36.6	< 1	< 0.1	< 0.001
0509 D		10/5/1999	6,884.60	6.56	7.40	6290	847	664	307	18.6	1990	3070	317	0.05	35.4	< 1	< 0.1	< 0.001
0509 D		1/4/2000	6,884.20	6.70	7.59	6090	798	529	232	17.5	1980	2520	278	11.7	36.6	< 1	< 0.1	< 0.001
0509 D		5/3/2000	6,883.70	6.30	7.12	4990	859	337	241	13.2	2010	1570	293	0.6	32.7	1.9	0.2	< 0.001
0509 D		7/12/2000	6,883.30	6.31	7.18	4920	866	306	228	10.3	2110	1380	324	0.24	31.3	< 1	< 0.1	< 0.001
0509 D		10/3/2000	6,883.10	6.21	7.14	5090	893	372	240	13.5	2050	1990	350	1.9	31.2	< 1	< 0.1	< 0.001
0509 D		1/8/2001	6,882.70	6.46	7.47	5010	924	331	220	11.1	2200	1610	317	0.94	30.6	< 1	< 0.1	< 0.001
0509 D		2/5/2001	6,882.35	6.50	7.03	5090	1000	384	265	13.5	2090	1860	365	1.75	29.5	< 1	0.2	0.001
0509 D		3/5/2001	6,882.10	6.65	7.41	5110	901	347	310	13.9	2100	1850	279	0.91	28.4	< 1	< 0.1	< 0.001
0509 D		4/3/2001	6,882.30	6.42	6.76	5120	984	366	211	11.8	2080	1800	311	0.82	31.8	< 1	< 0.1	< 0.001
0509 D		5/7/2001	6,881.90	6.46	7.01	5240	864	338	221	12.5	2060	1700	322	1.56	27.3	< 1	< 0.1	< 0.001
0509 D		6/4/2001	6,882.10	6.46	6.97	4860	848	336	232	12.7	2070	1760	318	1.92	30.2	< 1	< 0.1	< 0.001
0509 D		7/9/2001	6,881.80	6.36	6.84	5210	956	369	293	12.6	2180	1730	326	0.8	29.2	< 1	< 0.1	< 0.001
0509 D		8/6/2001	6,881.60	6.36	7.30	5210	890	340	230	13	2130	1500	370	0.61	26.6	< 1	< 0.1	< 0.001
0509 D		9/10/2001	6,881.40	6.38	7.20	5130	940	340	246	11.4	2210	1600	297	0.42	26	< 1	< 0.1	< 0.001
0509 D		10/1/2001	6,881.35	6.43	7.20	5190	920	320	234	12.1	2250	1570	411	0.37	25	< 1	< 0.1	< 0.001
0509 D		11/5/2001	6,881.30	6.47	7.40	5300	930	348	258	13.6	2300	1770	401	1.37	26.4	< 1	< 0.1	< 0.001
0509 D		12/3/2001	6,881.20	6.44	7.30	5370	875	338	237	12.3	2280	1590	357	2.14	29	< 1	< 0.1	< 0.001
0509 D		1/7/2002	6,881.00	6.41	6.80	5220	1040	354	229	11.8	2290	1840	383	1.1	23	< 1	< 0.1	< 0.001
0509 D		2/4/2002	6,880.80	6.48	7.10	5290	994	358	274	13.1	2170	1760	362	1.11	23.9	< 1	< 0.1	< 0.001
0509 D		3/4/2002	6,880.70	6.45	6.90	5220	934	342	262	12.6	2240	1790	376	0.9	24.4	< 1	< 0.1	< 0.001
0509 D		4/1/2002	6,880.68	6.36	7.69	5260	974	337	262	13.3	2250	1750	380	0.4	23.5	< 1	< 0.1	< 0.001
0509 D		5/6/2002	6,880.55	6.38	7.74	5390	916	361	279	14.5	2120	1850	344	2.76	27.3	< 1	< 0.1	< 0.001
0509 D		6/3/2002	6,880.50	6.36	7.87	5200	949	331	244	11.1	2240	1500	318	0.32	24.5	< 1	< 0.1	< 0.001
0509 D		7/8/2002	6,880.17	6.57	7.83	5470	925	381	306	13.4	2160	1900	308	4.08	25	< 1	< 0.1	< 0.001
0509 D		10/7/2002	6,879.78	6.12	7.82	4290	856	333	254	11.9	2100	1750	300	1.17	26.4	< 1	< 0.1	< 0.001
0509 D		1/6/2003	6,879.36	6.53	6.84	5260	840	309	240	12.4	2150	1640	291	1.1	23.7	< 1	< 0.1	< 0.001
0509 D		4/7/2003	6,879.09	6.33	6.77	5320	887	344	275	18.6	2160	1700	330	2.1	23.3	< 1	< 0.1	< 0.001
0509 D		7/7/2003	6,878.81	6.20	7.28	5350	816	316	280	22.8	2120	1670	344	1.46	23.3	< 1	< 0.1	< 0.001
0509 D		10/6/2003	6,878.52	6.24	7.97	5360	901	362	297	13.6	2160	1840	338	2.21	21.4	< 1	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0509 D		4/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.8	< 0.1	< 0.05	< 0.001	< 0.1	0.101	0.6	< 1	0.6	< 0.2	< 1	< 1
0509 D		7/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.98	< 0.1	< 0.05	< 0.001	< 0.1	0.115	0.6	< 1	0.6	< 0.2	< 1	< 1
0509 D		10/6/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.83	< 0.1	< 0.05	< 0.001	< 0.1	0.105	0.6	< 1	0.6	< 0.2	< 1	< 1
0509 D		1/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.78	< 0.1	< 0.05	< 0.001	< 0.1	0.103	1	< 1	1	< 0.2	< 1	< 1
0509 D		4/6/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.89	< 0.1	< 0.05	< 0.001	< 0.1	0.104	1.1	< 1	1.1	< 0.2	< 1	< 1
0509 D		7/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.56	< 0.1	< 0.05	0.003	< 0.1	0.104	1.9	< 1	1.9	< 0.2	< 1	9.3
0509 D		10/5/1999	< 0.01	0.008	< 0.01	< 0.05	1.05	< 0.1	< 0.05	< 0.001	< 0.1	0.108	0.5	< 1	0.5	< 0.2	< 1	< 1
0509 D		1/4/2000	< 0.01	< 0.005	< 0.01	< 0.05	1.09	< 0.1	0.05	0.001	< 0.1	0.134	0.5	< 1	0.5	< 0.2	< 1	< 1
0509 D		5/3/2000	< 0.01	0.005	< 0.01	< 0.05	1.6	< 0.1	< 0.05	< 0.001	< 0.1	0.176	< 0.2	2.6	2.6	< 0.2	< 1	< 1
0509 D		7/12/2000	< 0.01	< 0.005	< 0.01	< 0.05	1.89	< 0.1	< 0.05	< 0.001	< 0.1	0.226	0.6	2.8	3.4	< 0.2	< 1	< 1
0509 D		10/3/2000	< 0.01	< 0.005	< 0.01	0.07	2.05	< 0.1	< 0.05	< 0.001	< 0.1	0.184	0.7	< 1	0.7	< 0.2	< 1	< 1
0509 D		1/8/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.08	< 0.1	< 0.05	< 0.001	< 0.1	0.211	0.5	< 1	0.5	< 0.2	< 1	< 1
0509 D		2/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.2	< 0.1	< 0.05	< 0.001	< 0.1	0.197	0.6	< 1	0.6	< 0.2	< 1	< 1
0509 D		3/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.51	< 0.1	< 0.05	0.001	< 0.1	0.186	< 0.2	2.3	2.3	< 0.2	< 1	< 1
0509 D		4/3/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.53	< 0.1	< 0.05	< 0.001	< 0.1	0.183	0.5	< 1	0.5	< 0.2	< 1	< 1
0509 D		5/7/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.5	< 0.1	< 0.05	< 0.001	< 0.1	0.188	0.4	< 1	0.4	< 0.2	< 1	< 1
0509 D		6/4/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.42	< 0.1	< 0.05	< 0.001	< 0.1	0.186	0.9	< 1	0.9	< 0.2	< 1	< 1
0509 D		7/9/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.71	< 0.1	< 0.05	< 0.001	< 0.1	0.217	< 0.2	< 1	0	< 0.2	< 1	< 1
0509 D		8/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.8	< 0.1	< 0.05	< 0.001	< 0.1	0.22	0.7	< 1	0.7	< 0.2	< 1	< 1
0509 D		9/10/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.7	< 0.1	< 0.05	< 0.001	< 0.1	0.222	0.5	< 1	0.5	< 0.2	< 1	< 1
0509 D		10/1/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.46	< 0.1	< 0.05	< 0.001	< 0.1	0.225	0.5	< 1	0.5	< 0.2	< 1	< 1
0509 D		11/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.41	< 0.1	< 0.05	< 0.001	< 0.1	0.197	< 0.2	3.9	3.9	< 0.2	< 1	< 1
0509 D		12/3/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.33	< 0.1	< 0.05	0.001	< 0.1	0.252	< 0.2	< 1	0	< 0.2	< 1	< 1
0509 D		1/7/2002	< 0.01	< 0.005	< 0.01	< 0.05	2.49	< 0.1	< 0.05	< 0.001	< 0.1	0.206	1.2	< 1	1.2	< 0.2	< 1	< 1
0509 D		2/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	2.41	< 0.1	< 0.05	< 0.001	< 0.1	0.189	0.4	< 1	0.4	< 0.2	< 1	< 1
0509 D		3/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	2.91	< 0.1	< 0.05	< 0.001	< 0.1	0.228	< 0.2	< 1	0	< 0.2	< 1	< 1
0509 D		4/1/2002	< 0.01	0.007	< 0.01	< 0.05	2.95	< 0.1	0.05	< 0.001	< 0.1	0.213	< 0.2	< 1	0	< 0.2	< 1	< 1
0509 D		5/6/2002	< 0.01	< 0.005	< 0.01	< 0.05	2.48	< 0.1	< 0.05	< 0.001	< 0.1	0.198	< 0.2	< 1	0	< 0.2	< 1	< 1
0509 D		6/3/2002	< 0.01	< 0.005	< 0.01	< 0.05	2.99	< 0.1	0.05	< 0.001	< 0.1	0.192	< 0.2	2.7	2.7	< 0.2	< 1	< 1
0509 D		7/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	2.34	0.3	< 0.05	< 0.001	< 0.1	0.229	0.3	< 1	0.3	< 0.2	< 1	< 1
0509 D		10/7/2002	< 0.01	< 0.005	< 0.01	< 0.05	2.47	< 0.1	< 0.05	< 0.001	< 0.1	0.159	< 0.2	< 1	0	< 0.2	< 1	< 1
0509 D		1/6/2003	< 0.01	< 0.005	< 0.01	< 0.05	2.9	< 0.1	< 0.05	< 0.001	< 0.1	0.19	< 0.2	< 1	0	< 0.2	< 1	1.5
0509 D		4/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	2.45	< 0.1	< 0.05	< 0.001	< 0.1	0.19	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0509 D		7/7/2003	< 0.01	< 0.005	0.02	< 0.05	3.46	< 0.1	< 0.05	< 0.001	< 0.1	0.22	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0509 D		10/6/2003	< 0.01	< 0.005	< 0.01	< 0.05	3.1	< 0.1	< 0.05	< 0.001	< 0.1	0.231	< 0.2	< 1	0	< 0.2	< 1	< 1.0

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0509 D		1/5/2004	6,877.96	6.38	7.86	5610	883	435	267	15.7	2270	2170	404	8.37	22.5 D	< 1.0	0.2	< 0.001
0509 D		4/5/2004	6,877.89	6.62	6.67	5300	912	344	291	12.3	2120	1710 D	350	1	20 D	< 1	< 0.1	< 0.001
0509 D		7/12/2004	6,877.38	6.22	6.67	5540	934	366	327	13.6	2380	1850 D	345	2.48	18.9 D	< 1.0	< 0.1	< 0.001
0509 D		10/4/2004	6,877.03	6.31	6.96	5430	853 D	322 D	308	11.7	2310	1660	349	0.59	17.1 D	< 1.0	< 0.1	< 0.001
0509 D		1/3/2005	6,876.74	6.51	6.89	5380	925 D	335 D	311	12.9	2360	1610 D	367	0.76	17.5 D	< 1.0	< 0.1	< 0.001
0509 D		4/4/2005	6,876.54	6.48	6.87	6050	906	360	329	12.3	2370	1810	344	0.47	14.7	< 1.0	< 0.1	< 0.001
0509 D		7/11/2005	6,876.04	6.38	7.10	5260	881 D	360 D	332	12.6	2330	1840 D	355	0.53	15.1 D	< 1.0	< 0.1	< 0.001
0509 D		10/3/2005	6,875.84	6.38	7.01	5460	875 D	430 D	323	13.7	2250	1890 D	327	3.93	14.9 D	< 1.0	< 0.1	< 0.001
0509 D		1/9/2006	6,875.35	6.51	7.42	5080	868 D	380 D	290	11.6 D	1600	2080 D	345	1.57	14.7 D	< 1.0	< 0.1	< 0.001
0509 D		4/3/2006	6,875.04	6.37	7.06	5260	817	356	296	12.6	1710	1820 D	323	1.28	13.8 D	< 1.0	< 0.1	< 0.001
0509 D		7/17/2006	6,874.74	6.28	6.78	5120	926 D	365 D	330	13.2	2210	1920 D	351	0.28	13.1 D	< 1.0	< 0.1	< 0.001
0509 D		10/2/2006	6,874.54	6.35	6.69	5180	816 D	350 D	312 D	14.1	2330	1760 D	297	2.15	13.7 D	< 0.5	< 0.1	< 0.001
0509 D		1/8/2007	6,874.05	6.44	6.40	5340	914 D	355 D	294	12.4	2260	1580	344	0.23	13.2 D	<0.5	<0.1	<0.001
0509 D		4/9/2007	6,873.82	6.46	6.62	5280	925 D	342 D	326	12.8	2350	1630	361	0.08	12.8 D	<0.5	<0.1	<0.001
0509 D		7/9/2007	6,873.69	6.33	6.69	5110	891 D	364 D	356	12.2	2450	1730	324	<0.05	12.4	<0.5	<0.1	0.008
0509 D		10/1/2007	6,873.39	6.41	6.75	5180	826 D	334 D	334 D	13.1	2340	1720 D	352 D	0.62	12.4	<0.5	<0.1	<0.001
0509 D		1/14/2008	6,872.94	6.48	6.35	5030	886 D	337 D	334 D	13	2280	1660 D	374 D	0.12	13.3 D	< 0.5	< 0.1	< 0.001
0509 D		4/7/2008	6,873.04	6.37	6.70	5210	876 D	409 D	370 D	15.0 D	2150	1970 D	361	1.2 D	21.1	< 0.50	< 0.1	< 0.001
0509 D		7/7/2008	6,872.84	6.19	7 H	5390 H	664	729	270 D	12	2340	2080 D	347	4.7	14.6	< 0.5	< 0.1	< 0.003
0509 D		10/6/2008	6,872.54	6.30	6.6	5650	918	365	346 D	12	2340	1960 D	343	5.4	14.4	< 0.5	< 0.1	< 0.001
0509 D		1/12/2009	6,872.19	6.32	6.69	5750	842	373	368	13	2300	1690 D	332	0.98	18.3	<0.5	<0.1	<0.001
0509 D		4/6/2009	6,871.84	6.35	6.54	5860	820 D	389 D	380 D	13	2430	2090 D	333	2.30	13.5	<0.50	<0.1	<0.001
0509 D		7/6/2009	6,871.84	6.24	6.67	5660	911 D	386	388 D	14	2450	2040 D	357	1.82	11.0	<0.50	0.2	<0.001
0509 D		10/5/2009	6,871.74	6.44	7.16	5600	878 D	418	379 D	13	2500	1910 D	367	4.30	11.0	<0.50	<0.1	<0.001
0624		7/19/1989	6,860.40	7.30	7.64	4637	565	412	226	4.1	378	2479	108	0.06	116	< 1	< 0.1	< 0.001
0624		10/16/1989	6,860.40	7.10	7.50	4760	535	399	211	5	456	2182	110	0.1	108	< 1	< 0.1	< 0.001
0624		1/10/1990	6,860.10	7.20	7.32	4642	562	363	208	3.61	473	2370	110	0.05	118	< 1	< 0.1	< 0.001
0624		4/5/1990	6,860.40	7.10	7.58	4722	559	390	206	3.8	537	2311	115	0.12	130	< 1	< 0.1	< 0.001
0624		7/3/1990	6,859.70	7.10	7.48	4839	553	371	195	3.9	512	2306	113	< 0.05	127	< 1	0.1	< 0.001
0624		10/3/1990	6,859.80	7.00	7.75	4783	565	384	215	4	561	2311	117	< 0.05	82	< 1	< 0.1	0.001
0624		1/15/1991	6,860.00	7.10	7.55	4686	612	405	212	5.6	528	2468	120	< 0.05	117	< 1	< 0.1	< 0.001
0624		4/2/1991	6,860.10	7.20	7.68	4832	555	362	203	3.2	524	2428	130	< 0.05	132	< 1	0.13	< 0.001
0624		7/17/1991	6,859.20	7.10	7.75	4689	540	335	195	2.9	595	2602	132	0.05	159	< 1	0.1	< 0.001
0624		10/15/1991	6,858.80	6.90	7.54	4640	609	373	186	2.5	549	2327	118	< 0.05	93.9	< 1	0.1	0.001
0624		1/15/1992	6,858.50	6.90	7.57	4267	525	348	197	2.8	539	2296	113	< 0.05	82	< 1	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0509 D		1/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	2.1	< 0.1	< 0.05	< 0.001	< 0.1	0.161 D	0.5	< 1.0	0.5	< 0.2	< 1.0	< 1.0
0509 D		4/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	3.26	< 0.1	< 0.05	0.001	< 0.1	0.24 D	< 0.2	< 1	0	< 0.2	< 1	< 1
0509 D		7/12/2004	< 0.01	< 0.005	0.01	< 0.05	2.9	< 0.1	< 0.05	< 0.001	< 0.1	0.219 D	0.5	< 1.0	0.5	< 0.2	< 1.0	< 1.0
0509 D		10/4/2004	< 0.01	< 0.005	< 0.01	< 0.05	3.13	< 0.1	< 0.05	< 0.001	< 0.1	0.211 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0509 D		1/3/2005	< 0.01	< 0.005	< 0.01	< 0.05	3.47	< 0.1	< 0.05	< 0.001	< 0.1	0.231	0.4	< 1.0	0.4	< 0.2	< 1.0	1.7
0509 D		4/4/2005	< 0.01	< 0.005	< 0.01	< 0.05	3.1	< 0.1	< 0.05	< 0.001	< 0.1	0.215	0.9	< 1.0	0.9	< 0.2	< 1.0	< 1.0
0509 D		7/11/2005	< 0.01	< 0.005	< 0.01	< 0.05	3.03	< 0.1	< 0.05	< 0.001	< 0.1	0.209	0.4	< 1.0	0.4	< 0.2	< 1.0	< 1.0
0509 D		10/3/2005	< 0.01	< 0.005	< 0.01	< 0.05	2.36	< 0.1	< 0.05	< 0.001	< 0.1	0.197	< 0.2	1.7	1.7	< 0.2	< 1.0	< 1.0
0509 D		1/9/2006	< 0.01	< 0.005	< 0.01	< 0.05	2.79	< 0.1	< 0.05	< 0.001	< 0.1	0.189	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0509 D		4/3/2006	< 0.01	< 0.005	< 0.01	< 0.05	2.91	< 0.1	< 0.05	< 0.001	< 0.1	0.187 D	0.6	< 1.0	0.6	< 0.2	< 1.0	< 1.0
0509 D		7/17/2006	< 0.01	< 0.005	< 0.01	< 0.05	3.3	< 0.1	< 0.05	< 0.001	< 0.1	0.222	0.6	2.2	2.8	< 0.2	< 1.0	< 1.0
0509 D		10/2/2006	< 0.01	< 0.005	< 0.01	< 0.05	3.03	< 0.1	< 0.05	< 0.001	< 0.1	0.227	< 0.2	< 1	0	< 0.2	< 1	< 1
0509 D		1/8/2007	<0.01	<0.005	<0.01	<0.05	3.97	<0.1	<0.05	<0.001	<0.1	0.229	0.3	<1	0.3	<0.2	<1	<1
0509 D		4/9/2007	<0.01	<0.005	<0.01	<0.05	4.14	<0.1	<0.05	<0.001	<0.1	0.243	<0.2	<1	0	<0.2	<1	1
0509 D		7/9/2007	<0.01	<0.005	<0.01	<0.05	2.25	<0.1	<0.05	<0.001	<0.1	0.24	<0.2	<1	0	<0.2	<1	1
0509 D		10/1/2007	<0.01	<0.005	<0.01	<0.05	3.55	<0.1	<0.05	<0.001	<0.1	0.246	<0.2	<1	0	<0.2	<1	1.5
0509 D		1/14/2008	< 0.01	< 0.005	< 0.01	< 0.05	3.6	< 0.1	< 0.05	< 0.001	< 0.1	0.232	< 0.2	< 1	0	< 0.2	< 1	1.6
0509 D		4/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	2.72	< 0.1	< 0.05	< 0.001	< 0.1	0.218	0.3	0.5 U	0.8	-0.07 U	0 U	1.6
0509 D		7/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	2.7	< 0.1	< 0.05	< 0.001	< 0.1	0.208	-0.08 U	1.6	1.52	0.5	2.7 U	1.3
0509 D		10/6/2008	< 0.01	< 0.005	< 0.01	< 0.05	2.36	< 0.1	< 0.05	< 0.001	< 0.1	0.199	0.14 U	0.31 U	0.45	0.2	-2 U	1.7
0509 D		1/12/2009	<0.01	<0.005	<0.01	<0.05	2.99	<0.1	<0.05	<0.001	<0.1	0.214	0.24	2.4	2.64	0.1 U	1.5 U	1.6
0509 D		4/6/2009	<0.01	<0.005	<0.01	<0.05	2.61	<0.1	<0.05	0.001	<0.1	0.211	0.35	1.4	1.75	0.09 U	-5 U	1
0509 D		7/6/2009	<0.01	<0.005	<0.01	<0.05	3.30	<0.1	<0.05	<0.001	<0.1	0.223	0.75	1.5	2.25	0.03 U	0.4 U	2.7
0509 D		10/5/2009	<0.01	<0.005	<0.01	<0.05	3.35	<0.1	<0.05	<0.001	<0.1	0.239	0.69	0.89 U	1.58	0.05 U	4.0 U	1
0624		7/19/1989	< 0.05	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.003	< 0.1	0.0217	0.6	< 1	0.6	6.9	< 1	6
0624		10/16/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.003	< 0.1	0.021	1.6	< 1	1.6	0.5	< 1	1.8
0624		1/10/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.002	< 0.1	0.022	0.2	1.2	1.4	< 0.2	< 1	0.8
0624		4/5/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	0.003	< 0.1	0.02	0.4	< 1	0.4	< 0.2	1.1	0.9
0624		7/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.001	< 0.1	0.0242	0.7	< 1	0.7	< 0.2	< 1	< 1
0624		10/3/1990	< 0.05	< 0.01	0.02	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.022	< 0.2	1.8	1.8	< 0.2	< 1	< 1
0624		1/15/1991	< 0.01	< 0.01	0.01	< 0.05	0.01	< 0.1	< 0.05	0.001	< 0.1	0.0268	0.4	< 1	0.4	< 0.2	< 1	< 1
0624		4/2/1991	< 0.01	< 0.01	0.02	< 0.05	< 0.01	< 0.1	< 0.05	0.001	< 0.1	0.038	0.4	1.5	1.9	< 0.2	< 1	< 1
0624		7/17/1991	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.002	< 0.1	0.034	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		10/15/1991	< 0.01	< 0.01	0.01	< 0.05	0.01	< 0.1	< 0.05	0.002	< 0.1	0.034	0.4	1.8	2.2	< 0.2	< 1	< 1
0624		1/15/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.002	< 0.1	0.029	< 0.2	< 1	0	< 0.2	< 1	< 1

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0624		4/8/1992	6,858.30	6.90	7.73	4279	581	371	208	3.5	597	2276	118	< 0.05	83.2	< 1	< 0.1	< 0.001
0624		7/8/1992	6,857.90	6.80	7.43	4323	581	360	254	4.3	432	2259	125	0.08	106	< 1	< 0.1	< 0.001
0624		10/6/1992	6,857.50	7.00	7.56	4704	626	364	218	2.1	593	2304	112	< 0.05	120	< 1	< 0.1	< 0.001
0624		1/7/1993	6,857.10	7.00	7.71	4698	587	348	211	3.9	586	2245	122	< 0.05	105	< 1	< 0.1	< 0.001
0624		4/7/1993	6,857.10	7.00	7.50	4111	553	307	230	15.9	581	2172	129	< 0.05	107	< 1	< 0.1	< 0.001
0624		7/14/1993	6,856.60	7.00	7.11	4803	645	361	211	2.4	748	2307	138	< 0.05	106	< 1	< 0.1	< 0.001
0624		10/7/1993	6,856.40	7.10	7.62	4371	602	326	188	1.4	700	2107	128	< 0.05	117	< 1	< 0.1	< 0.001
0624		1/6/1994	6,856.00	7.20	7.41	4425	618	345	200	2.2	694	2241	129	< 0.05	89.4	< 1	< 0.1	< 0.001
0624		4/12/1994	6,855.60	7.10	7.45	4779	623	344	197	1.7	625	2324	118	0.3	124	< 1	< 0.1	< 0.001
0624		7/21/1994	6,855.20	7.10	7.54	4592	674	356	203	2	649	2203	118	< 0.05	115	< 1	< 0.1	0.001
0624		10/5/1994	6,855.00	6.80	7.64	4815	661	391	212	3.8	843	2160	137	< 0.05	97.3	< 1	< 0.1	< 0.001
0624		1/4/1995	6,854.70	6.90	7.63	4803	665	375	202	3.5	814	2303	137	0.27	92.8	< 1	< 0.1	< 0.001
0624		4/5/1995	6,854.40	7.00	7.44	4661	630	342	195	3	475	2383	155	0.27	101	< 1	< 0.1	< 0.001
0624		7/6/1995	6,854.40	7.10	7.63	4358	655	405	207	3.9	766	2201	157	0.1	93.5	< 1	< 0.1	< 0.001
0624		10/3/1995	6,853.80	7.00	7.83	4950	655	415	197	3.8	972	2247	154	0.18	94.3	< 1	< 0.1	0.002
0624		1/3/1996	6,853.60	7.00	7.43	4553	610	392	203	4.8	1182	1879	123	< 0.05	97	< 1	< 0.1	< 0.001
0624		4/2/1996	6,853.20	6.80	7.92	4942	655	430	204	4.7	1048	2310	150	< 0.05	100	< 1	< 0.1	< 0.001
0624		7/7/1996	6,852.90	6.60	7.45	4946	645	405	206	4.6	1158	2190	145	0.07	84.4	< 1	< 0.1	< 0.001
0624		10/1/1996	6,852.90	6.80	7.25	5050	666	430	204	4.6	1180	2179	161	< 0.05	93	< 1	< 0.1	0.001
0624		1/22/1997	6,852.60	6.70	7.69	4920	675	440	202	4.8	1070	2146	161	< 0.05	84.6	< 1	< 0.1	< 0.001
0624		4/8/1997	6,852.40	6.90	7.89	5000	683	427	195	3.8	1030	2227	169	0.06	103	< 1	< 0.1	< 0.001
0624		7/8/1997	6,852.00	7.10	7.54	5040	680	444	186	4.6	1060	2260	181	< 0.05	92.6	< 1	< 0.1	< 0.001
0624		10/7/1997	6,852.50	6.50	7.66	5140	712	459	179	3.51	1310	2160	166	< 0.05	86.3	< 1	< 0.1	< 0.001
0624		1/16/1998	6,852.40	7.00	7.78	5140	679	436	208	5.6	1300	2350	194	0.16	101	< 1	< 0.1	< 0.001
0624		4/7/1998	6,851.90	6.90	7.60	5190	691	442	197	4.4	1180	2400	153	< 0.05	98.7	< 1	< 0.1	< 0.001
0624		7/7/1998	6,851.70	7.20	7.79	5050	679	435	206	4.4	1080	2400	174	< 0.05	92.2	< 1	< 0.1	< 0.001
0624		10/6/1998	6,851.30	7.01	7.88	5210	708	464	216	6.2	1230	2220	175	< 0.05	101	< 1	< 0.1	< 0.001
0624		1/5/1999	6,851.20	6.80	7.85	5140	659	423	188	5.3	1160	2030	172	0.18	94.2	< 1	< 0.1	< 0.001
0624		4/6/1999	6,851.10	6.80	7.89	5150	692	451	188	5.4	1230	2000	180	0.08	94.5	< 1	< 0.1	< 0.001
0624		7/13/1999	6,850.77	6.70	7.85	5020	646	452	191	10.8	1070	2070	181	0.18	88.7	< 1	< 0.1	< 0.001
0624		10/5/1999	6,851.80	6.78	7.59	4900	618	411	199	6.1	1350	1860	179	0.09	88.3	< 1	< 0.1	< 0.001
0624		1/4/2000	6,851.20	6.80	7.76	4840	649	429	170	6.9	1160	2080	155	< 0.05	49.2	< 1	< 0.1	< 0.001
0624		5/9/2000	6,850.60	6.50	7.67	5130	652	438	207	6.3	1470	1970	177	< 0.05	93.6	< 1	< 0.1	< 0.001
0624		7/17/2000	6,850.40	6.55	7.62	5170	697	456	194	6.46	1480	1790	184	< 0.05	85.1	< 1	< 0.1	< 0.001
0624		10/9/2000	6,850.25	6.70	7.59	5090	606	412	185	7.6	1440	1530	147	0.1	98.5	< 1	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0624		4/8/1992	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.002	< 0.1	0.034	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		7/8/1992	< 0.01	< 0.01	< 0.01	0.07	< 0.01	< 0.1	< 0.05	0.002	< 0.1	0.03	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		10/6/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.006	< 0.1	0.048	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		1/7/1993	< 0.01	< 0.01	0.02	< 0.05	0.02	< 0.1	< 0.05	0.008	< 0.1	0.043	< 0.2	4.2	4.2	< 0.2	< 1	< 1
0624		4/7/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.002	< 0.1	0.033	4.6	< 1	4.6	< 0.2	1.4	4.8
0624		7/14/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.003	< 0.1	0.019	< 0.2	< 1	0	< 0.2	2.8	< 1
0624		10/7/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.003	< 0.1	0.023	0.6	< 1	0.6	< 0.2	4.8	< 1
0624		1/6/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.027	1.3	5.1	6.4	< 0.2	< 1	9.9
0624		4/12/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.001	< 0.1	0.043	7.5	2.4	9.9	< 0.2	< 1	11.3
0624		7/21/1994	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.029	< 0.2	1.1	1.1	< 0.2	< 1	1.8
0624		10/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.035	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		1/4/1995	< 0.01	< 0.01	< 0.01	0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.033	0.6	1.3	1.9	< 0.2	< 1	2.7
0624		4/5/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.037	3.9	1.6	5.5	< 0.2	2.1	6.5
0624		7/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.002	< 0.1	0.0405	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		10/3/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.013	< 0.1	0.0331	0.3	< 1	0.3	< 0.2	< 1	< 1
0624		1/3/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.007	< 0.1	0.032	0.6	1.3	1.9	0.6	< 1	< 1
0624		4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.033	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		7/7/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.043	0.3	< 1	0.3	< 0.2	< 1	< 1
0624		10/1/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.003	< 0.1	0.032	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		1/22/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.027	0.6	< 1	0.6	< 0.2	< 1	< 1
0624		4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.014	< 0.1	0.036	0.8	< 1	0.8	< 0.2	< 1	< 1
0624		7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.034	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		10/7/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	< 0.001	< 0.1	0.03	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		1/16/1998	< 0.01	< 0.01	< 0.01	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	0.0379	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		4/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.039	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		7/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0409	0.7	< 1	0.7	< 0.2	< 1	< 1
0624		10/6/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	0.001	< 0.1	0.0409	0.7	< 1	0.7	< 0.2	< 1	< 1
0624		1/5/1999	< 0.01	0.006	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0395	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		4/6/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0366	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		7/13/1999	< 0.01	< 0.005	0.02	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0339	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		10/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0366	0.5	< 1	0.5	< 0.2	< 1	< 1
0624		1/4/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	0.001	< 0.1	0.0443	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		5/9/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0348	< 0.2	2	2	< 0.2	6.4	< 1
0624		7/17/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0325	< 0.2	1.5	1.5	< 0.2	< 1	< 1
0624		10/9/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.031	< 0.2	< 1	0	< 0.2	< 1	< 1

CHESTER ENGINEERS

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0624		1/8/2001	6,850.10	6.65	7.40	5100	707	464	173	6.9	1480	1810	177	< 0.05	104	< 1	< 0.1	< 0.001
0624		2/5/2001	6,850.10	6.72	7.31	5110	801	510	171	7.6	1480	2320	170	0.21	93.9	< 1	< 0.1	< 0.001
0624		3/5/2001	6,850.10	7.03	7.47	4740	690	457	148	8.1	1450	2190	154	< 0.05	101	< 1	< 0.1	< 0.001
0624		4/10/2001	6,850.10	7.24	7.33	4910	791	497	238	7.3	1470	2250	176	< 0.05	103	< 1	< 0.1	< 0.001
0624		5/8/2001	6,849.90	6.62	7.54	5150	677	444	181	6.7	1450	1880	187	0.08	99.3	< 1	< 0.1	< 0.001
0624		6/5/2001	6,849.90	6.62	7.02	5050	683	454	182	6.5	1470	2000	182	0.11	101	< 1	< 0.1	< 0.001
0624		7/10/2001	6,849.90	6.62	7.40	5290	726	488	198	6.1	1480	2050	172	< 0.05	101	< 1	< 0.1	< 0.001
0624		8/7/2001	6,849.87	6.59	7.40	5230	660	450	200	6	1470	1900	180	0.05	88	< 1	0.13	< 0.001
0624		9/11/2001	6,850.30	6.52	7.30	5200	670	450	191	6.8	1490	1930	217	0.05	118	< 1	0.11	< 0.001
0624		10/2/2001	6,850.30	6.65	7.80	5210	660	450	192	7	1500	1850	240	< 0.05	100	< 1	< 0.1	< 0.001
0624		11/6/2001	6,850.15	6.60	7.20	5210	731	475	196	7.4	1490	2100	232	0.05	104	< 1	< 0.1	< 0.001
0624		12/4/2001	6,850.20	6.62	7.30	5250	673	433	172	6.4	1500	1750	197	< 0.05	101	< 1	< 0.1	< 0.001
0624		1/8/2002	6,850.10	6.95	7.30	5190	787	481	201	7	1490	2270	208	< 0.05	91.5	< 1	< 0.1	< 0.001
0624		2/5/2002	6,850.10	6.78	7.30	5190	762	461	193	7.8	1470	2120	219	0.06	90.5	< 1	< 0.1	< 0.001
0624	Dup	2/5/2002	no data	6.78	7.20	5210	762	460	214	6.8	1470	2140	205	0.06	88.3	< 1	< 0.1	< 0.001
0624		3/5/2002	6,850.10	6.61	7.20	5170	726	463	228	6.8	1530	2190	207	0.06	95.1	< 1	< 0.1	< 0.001
0624	Dup	3/5/2002	no data	6.57	7.50	5130	714	456	223	6.6	1530	2170	193	0.06	97.2	< 1	< 0.1	< 0.001
0624		4/2/2002	6,850.16	6.54	7.45	5270	748	464	225	8.3	1500	2180	203	0.06	95.5	< 1	< 0.1	< 0.001
0624	Dup	4/2/2002	no data	6.53	7.48	5210	741	459	220	8	1500	2130	206	0.05	95.7	< 1	< 0.1	< 0.001
0624		5/7/2002	6,850.08	6.59	7.61	5220	719	448	226	7.4	1480	2100	186	0.13	104	< 1	< 0.1	< 0.001
0624		6/4/2002	6,850.10	6.52	7.66	5220	720	450	201	6.4	1480	1830	181	< 0.05	96.3	< 1	< 0.1	< 0.001
0624	Dup	6/4/2002	no data	6.51	7.68	5210	711	444	208	6	1480	1850	174	0.08	92.1	< 1	< 0.1	< 0.001
0624		7/9/2002	6,849.95	6.67	7.42	5300	713	463	223	7.3	1500	2150	200	0.05	92.4	< 1	< 0.1	< 0.001
0624	Dup	7/9/2002	no data	6.59	7.41	5320	709	460	225	7.8	1500	2110	201	0.05	91.4	< 1	< 0.1	< 0.001
0624		10/8/2002	6,849.90	6.67	7.25	5150	659	425	208	6.2	1490	1810	173	0.08	97.1	< 1	< 0.1	< 0.001
0624	Dup	10/8/2002	no data	6.47	7.40	5160	663	427	207	6.1	1480	1800	167	0.06	96.6	< 1	< 0.1	< 0.001
0624		1/7/2003	6,849.61	6.74	7.21	5210	733	480	242	7.4	1490	2250	175	0.19	92	< 1	< 0.1	< 0.001
0624	Dup	1/7/2003	no data	no data	7.24	5190	726	476	120	7.8	1500	2220	118	0.15	90	< 1	< 0.1	< 0.001
0624		4/8/2003	6,849.72	6.49	6.85	5250	685	422	230	8.3	1450	1900	184	0.11	102	< 1	< 0.1	< 0.001
0624		7/8/2003	6,849.70	6.36	7.41	4540	646	413	198	8.5	1480	2040	158	0.07	100	< 1	< 0.1	< 0.001
0624	Dup	7/8/2003	no data	no data	7.38	5290	657	418	208	7.8	1470	2080	160	0.5	93	< 1	< 0.1	< 0.001
0624		10/7/2003	6,849.72	6.40	7.76	5260	725	469	239	6.4	1430	2240	178	0.2	90	< 1	< 0.1	< 0.001
0624	Dup	10/7/2003	no data	no data	7.80	5290	723	467	240	6.6	1460	2210	178	0.17	92	< 1	< 0.1	< 0.001
0624		1/6/2004	6,849.60	6.57	7.71	5180	690	445	212	7	1440	2140	197	0.11	87.9 D	< 1.0	0.2	< 0.001
0624	Dup	1/6/2004	no data	no data	7.69	5170	698	452	214	6.4	1440	2190	172	0.08	100 D	< 1.0	0.2	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0624		1/8/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.032	0.4	< 1	0.4	< 0.2	< 1	< 1
0624		2/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.033	0.3	< 1	0.3	< 0.2	< 1	< 1
0624		3/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0327	< 0.2	4	4	< 0.2	< 1	< 1
0624		4/10/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.031	0.3	< 1	0.3	< 0.2	< 1	< 1
0624		5/8/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.034	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		6/5/2001	< 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
0624		7/10/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0329	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		8/7/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.04	0.4	2.3	2.7	< 0.2	< 1	< 1
0624		9/11/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.03	< 0.2	2.9	2.9	< 0.2	< 1	< 1
0624		10/2/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0319	0.2	< 1	0.2	< 0.2	< 1	< 1
0624		11/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0288	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		12/4/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0295	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		1/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0301	0.4	< 1	0.4	< 0.2	< 1	< 1
0624		2/5/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0212	0.4	2	2.4	< 0.2	< 1	< 1
0624	Dup	2/5/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0218	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		3/5/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0351	< 0.2	< 1	0	< 0.2	< 1	< 1
0624	Dup	3/5/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.037	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		4/2/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0326	< 0.2	< 1	0	< 0.2	< 1	< 1
0624	Dup	4/2/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0338	0.4	< 1	0.4	< 0.2	< 1	1.5
0624		5/7/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0355	0.5	< 1	0.5	< 0.2	< 1	< 1
0624		6/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0333	< 0.2	< 1	0	< 0.2	< 1	< 1
0624	Dup	6/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0314	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		7/9/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.036	0.3	< 1	0.3	< 0.2	< 1	< 1
0624	Dup	7/9/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0363	0.4	< 1	0.4	< 0.2	< 1	< 1
0624		10/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0262	< 0.2	< 1	0	< 0.2	< 1	< 1
0624	Dup	10/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0265	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		1/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0348	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0624	Dup	1/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0409	< 0.2	< 1	0	< 0.2	< 1	< 1.6
0624		4/8/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0336	0.5	< 1	0.5	< 0.2	< 1	< 1.0
0624		7/8/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0289	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0624	Dup	7/8/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0277	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0624		10/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0333	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0624	Dup	10/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0334	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0624		1/6/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.0296 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0624	Dup	1/6/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0284 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0624		4/6/2004	6,849.67	6.76	6.87	5220	695	448	190	6.4	1460	2100 D	147	0.13	92.2 D	< 1	< 0.1	< 0.001
0624	Dup	4/6/2004	no data	no data	6.81	5240	693	448	212	7.1	1460	2120 D	173	0.14	92.8 D	< 1	< 0.1	< 0.001
0624		7/13/2004	6,849.52	6.41	6.87	5320	715	442	249	6.8	1440	2120 D	172	0.13	93.1 D	< 1.0	7.7	< 0.001
0624	Dup	7/13/2004	no data	no data	6.86	5310	714	441	245	7.2	1440	2130 D	175	0.14	92.0 D	< 1.0	1.8	< 0.001
0624		10/5/2004	6,849.34	6.46	7.07	5520	666 D	422 D	237	6.4	1380	2020 D	172	< 0.05	85.9 D	< 1.0	< 0.1	< 0.001
0624	Dup	10/5/2004	no data	no data	7.05	5380	664 D	420 D	227	6.1	1390	2030 D	163	< 0.05	83.2 D	< 1.0	< 0.1	< 0.001
0624		1/4/2005	6,849.37	6.87	6.99	5240	702 D	435 D	240	6.3	1360	2030 D	166	0.05	86 D	< 1.0	< 0.1	< 0.001
0624	Dup	1/4/2005	no data	no data	7.06	5240	692 D	430 D	234	6.3	1420	2000 D	162	0.05	86 D	< 1.0	< 0.1	< 0.001
0624		4/5/2005	6,849.37	6.65	7.30	5000	635	394	238	5.6	1400	1930	159	< 0.05	73	< 1.0	< 0.1	< 0.001
0624	Dup	4/5/2005	no data	no data	7.29	4970	599	382	237	4.5	1400	2060	169	< 0.05	70	< 1.0	< 0.1	< 0.001
0624		7/12/2005	6,849.17	6.55	7.29	5120	673 D	434 D	246	5.9	1340	2100 D	176	0.09	70 D	< 1.0	< 0.1	< 0.001
0624	Dup	7/12/2005	no data	no data	7.32	5010	694 D	424 D	244	5.9	1340	2100 D	177	< 0.05	81 D	< 1.0	< 0.1	< 0.001
0624		10/4/2005	6,849.02	6.56	7.21	5130	693 D	436 D	241	6.2	1370	2170 D	184	< 0.05	75 D	< 1.0	< 0.1	< 0.001
0624	Dup	10/4/2005	no data	no data	7.18	5070	696 D	434 D	242	6.3	1370	2160 D	188	< 0.05	75 D	< 1.0	< 0.1	< 0.001
0624		1/10/2006	6,848.93	6.71	7.64	4890	631	392	236	5.1	1340	1950 D	161	< 0.05	82 D	< 1.0	< 0.1	< 0.001
0624	Dup	1/10/2006	no data	no data	7.33	5020	660	409	247	5.2	1420	2050 D	164	< 0.05	85 D	< 1.0	< 0.1	< 0.001
0624		4/4/2006	6,848.92	6.47	7.21	5070	730 D	463 D	230	6.4	1350	2180 D	184	< 0.05	86 D	< 1.0	0.2	< 0.001
0624	Dup	4/4/2006	no data	no data	7.20	5080	711 D	452 D	233	6.5	1340	2140 D	186	< 0.05	86 D	< 1.0	< 0.1	< 0.001
0624		7/18/2006	6,848.92	6.48	6.89	5030	713 D	443 D	260	6.9	1360	2300 D	178	0.05	82 D	< 1.0	< 0.1	< 0.001
0624	Dup	7/18/2006	no data	no data	6.91	5010	698 D	434 D	258	6.3	1350	2270 D	173	< 0.05	79 D	< 1.0	< 0.1	< 0.001
0624		10/3/2006	6,848.93	6.48	6.72	4920	682 D	419 D	231	6.2	1100	2100 D	144	0.08	76 D	< 0.5	< 0.1	< 0.001
0624	Dup	10/3/2006	no data	no data	6.74	4970	672 D	411 D	224	6.2	1070	2070 D	134	0.08	77 D	< 0.5	< 0.1	< 0.001
0624		1/9/2007	6,848.88	6.62	6.82	5130	704 D	437 D	226	6.9	1360	2250 D	168	<0.05	74 D	<0.5	<0.1	<0.001
0624	Dup	1/9/2007	6,848.97	6.61	6.85	5130	680 D	421 D	228	6.7	1360	2130 D	169	0.05	77 D	<0.5	<0.1	<0.001
0624		4/10/2007	6,849.02	6.65	6.75	5090	693 D	427 D	226	8.1	1380	2150 D	182	<0.05	82 D	<0.5	<0.1	<0.001
0624	Dup	4/10/2007	6,848.99	6.74	6.88	5070	689 D	425 D	222	7.7	1400	2140 D	169	<0.05	83 D	<0.5	<0.1	<0.001
0624		7/10/2007	6,848.67	6.50	6.87	5020	702 D	433 D	245	6.2	1450	2230 D	154	0.08	77 D	<0.5	<0.1	0.009
0624	Dup	7/10/2007	6,848.67	6.47	6.84	4930	688 D	435 D	243	6.1	1450	2250 D	162	0.08	77 D	<0.5	<0.1	0.009
0624		10/2/2007	6,848.67	6.50	6.91	5030	626 D	385 D	246 D	6.9	1430	1990 D	188 D	<0.05	74 D	<0.5	<0.1	<0.001
0624		1/15/2008	6,848.62	6.53	6.69	5110	650 D	396 D	246 D	7.1	1390	2000 D	205 D	< 0.05	68 D	< 0.5	< 0.1	< 0.001
0624		4/8/2008	6,849.12	6.47	6.90	4830	708 D	442 D	280 D	8.2 D	1320	2240 D	174	< 0.05	108 D	< 0.50	< 0.1	< 0.001
0624		7/8/2008	6,848.67	6.33	6.82	4700	657	396	233 D	5	1410	2170 D	184	< 0.05	74.9 D	< 0.5	< 0.1	< 0.003
0624		10/7/2008	6,848.42	6.46	6.88	4920	662	403	248 D	6	1390	2380 D	178	< 0.1	94.9 D	< 0.5	< 0.1	< 0.001
0624		1/13/2009	6,848.27	6.5	6.9	5180	614	383	257	6	1420	1870 D	169	<0.05	111 D	<0.5	<0.1	<0.001
0624		4/7/2009	6,848.22	6.48	6.64	5080	650 D	413 D	271 D	6	1460	2190 D	191	<0.05	77.4 D	<0.50	<0.1	<0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0624		4/6/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.045	< 0.1	< 0.05	< 0.001	< 0.1	0.0288 D	< 0.2	< 1	0	< 0.2	< 1	< 1
0624	Dup	4/6/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0314 D	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		7/13/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0305 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0624	Dup	7/13/2004	< 0.01	< 0.005	0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0303 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0624		10/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.0321 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0624	Dup	10/5/2004	< 0.01	0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.0338 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0624		1/4/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.0343	0.4	< 1.0	0.4	< 0.2	< 1.0	2.2
0624	Dup	1/4/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.0324	0.3	< 1.0	0.3	< 0.2	< 1.0	< 1.0
0624		4/5/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.033	0.7	< 1.0	0.7	< 0.2	< 1.0	< 1.0
0624	Dup	4/5/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.0325	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0624		7/12/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.07	< 0.1	< 0.05	< 0.001	< 0.1	0.0304	0.3	< 1.0	0.3	< 0.2	< 1.0	< 1.0
0624	Dup	7/12/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.07	< 0.1	< 0.05	< 0.001	< 0.1	0.0307	0.3	< 1.0	0.3	< 0.2	< 1.0	< 1.0
0624		10/4/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.0316	< 0.2	2.9	2.9	< 0.2	< 1.0	< 1.0
0624	Dup	10/4/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.0318	< 0.2	1.7	1.7	< 0.2	< 1.0	1.4
0624		1/10/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.07	< 0.1	< 0.05	< 0.001	< 0.1	0.0363	0.4	1.9	2.3	< 0.2	< 1.0	< 1.0
0624	Dup	1/10/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.07	< 0.1	< 0.05	< 0.001	< 0.1	0.0379	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0624		4/4/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.0338 D	< 0.2	1.6	1.6	< 0.2	< 1.0	< 1.0
0624	Dup	4/4/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.0286 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0624		7/18/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.09	< 0.1	< 0.05	< 0.001	< 0.1	0.0326	0.3	2.8	3.1	< 0.2	< 1.0	< 1.0
0624	Dup	7/18/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.09	< 0.1	< 0.05	< 0.001	< 0.1	0.0324	0.6	2.9	3.5	< 0.2	< 1.0	< 1.0
0624		10/3/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.09	< 0.1	< 0.05	< 0.001	< 0.1	0.0328	0.4	< 1	0.4	< 0.2	< 1	< 1
0624	Dup	10/3/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.09	< 0.1	< 0.05	< 0.001	< 0.1	0.032	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		1/9/2007	<0.01	<0.005	<0.01	<0.05	0.09	<0.1	<0.05	<0.001	<0.1	0.0313	<0.2	<1	0	<0.2	<1	<1
0624	Dup	1/9/2007	<0.01	<0.005	<0.01	<0.05	0.09	<0.1	<0.05	<0.001	<0.1	0.0314	0.4	<1	0.4	<0.2	<1	<1
0624		4/10/2007	<0.01	<0.005	<0.01	<0.05	0.09	<0.1	<0.05	<0.001	<0.1	0.0308	<0.2	<1	0	<0.2	<1	<1
0624	Dup	4/10/2007	<0.01	<0.005	<0.01	<0.05	0.09	<0.1	<0.05	<0.001	<0.1	0.0336	<0.2	<1	0	<0.2	<1	<1
0624		7/10/2007	<0.01	<0.005	<0.01	<0.05	0.08	<0.1	<0.05	<0.001	<0.1	0.0339	<0.2	<1	0	<0.2	<1	<1
0624	Dup	7/10/2007	<0.01	<0.005	<0.01	<0.05	0.06	<0.1	<0.05	<0.001	<0.1	0.033	<0.2	<1	0	<0.2	<1	<1
0624		10/2/2007	<0.01	<0.005	<0.01	<0.05	0.1	<0.1	<0.05	<0.001	<0.1	0.0341	<0.2	<1	0	<0.2	<1	<1
0624		1/15/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.09	< 0.1	< 0.05	< 0.001	< 0.1	0.0307	< 0.2	< 1	0	< 0.2	< 1	< 1
0624		4/8/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.10	< 0.1	< 0.05	< 0.001	< 0.1	0.0325	0.2	-0.04 U	0.16	0.5	0 U	0.9 U
0624		7/8/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0286	0.36	0.23 U	0.59	-0.1 U	1.1 U	0.4 U
0624		10/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	0.0306	-0.06 U	-0.2 U	-0.26	0 U	0.3 U	0.9
0624		1/13/2009	<0.01	<0.005	<0.01	<0.05	0.12	<0.1	<0.05	<0.001	<0.1	0.0322	0.05 U	-0.1 U	-0.05	-0.1 U	-1 U	1.7
0624		4/7/2009	<0.01	<0.005	<0.01	<0.05	0.10	<0.1	<0.05	<0.001	<0.1	0.0289	-0.05 U	0.75 U	0.75	0.06 U	-1 U	0.2 U

CHESTER ENGINEERS

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0624		7/7/2009	6,848.07	6.38	6.72	5080	692 D	405	253 D	6	1440	2560 D	187	<0.05	71 D	<0.50	<0.1	<0.001
0624		10/5/2009	6,847.77	6.44	7.17	4950	643 D	396	245 D	6	1490	1960 D	187	<0.05	75 D	<0.50	<0.1	<0.001
0627		7/20/1989	6,846.40	7.10	6.95	4509	554	304	382	3.1	622	2429	36.7	0.06	103	< 1	< 0.1	< 0.001
0627		10/16/1989	6,846.80	6.90	7.36	4512	539	290	359	3.8	659	2151	36.6	0.12	112	< 1	< 0.1	< 0.001
0627		1/4/1990	6,846.70	6.80	7.24	4446	571	275	351	7.8	656	2277	39.7	0.07	113	< 1	< 0.1	< 0.001
0627		4/3/1990	6,846.40	6.80	7.32	4492	590	290	352	3.2	698	2168	40.1	0.09	90	< 1	< 0.1	< 0.001
0627		7/2/1990	6,846.20	6.70	7.34	4750	613	322	325	4.5	693	2265	41.5	< 0.05	109	< 1	< 0.1	< 0.001
0627		10/2/1990	6,846.20	6.80	7.60	4551	509	270	342	2.8	644	2404	41.6	< 0.05	78	< 1	< 0.1	< 0.001
0627		1/15/1991	6,846.20	6.80	7.77	4537	587	309	393	5.9	617	2480	49	< 0.05	118	< 1	0.1	< 0.001
0627		4/2/1991	6,846.20	6.80	7.70	4623	533	263	331	2.7	595	2407	45.9	< 0.05	94.8	< 1	< 0.1	< 0.001
0627		7/16/1991	6,845.90	6.80	7.44	4454	525	249	335	2.8	532	2537	45.4	0.36	97.2	< 1	< 0.1	< 0.001
0627		10/14/1991	6,845.60	6.70	7.37	4539	448	221	342	2.7	622	2161	55.7	< 0.05	104	< 1	< 0.1	0.001
0627		1/14/1992	6,845.40	6.60	7.12	4614	490	246	342	2.8	619	2317	54.7	< 0.05	101	< 1	< 0.1	< 0.001
0627		4/9/1992	6,845.10	6.60	7.91	4671	543	283	424	3.2	605	2346	52.3	< 0.05	68.4	< 1	< 0.1	< 0.001
0627		7/7/1992	6,844.90	6.50	8.00	4811	585	280	468	4.2	588	2403	59.2	0.13	108	< 1	< 0.1	< 0.001
0627		10/7/1992	6,844.60	6.80	7.45	4696	563	257	484	5	593	2402	56.3	< 0.05	125	< 1	< 0.1	< 0.001
0627		1/7/1993	6,844.40	6.80	7.88	4615	556	264	408	2.8	576	2324	57.4	< 0.05	116	< 1	< 0.1	< 0.001
0627		4/7/1993	6,844.30	6.80	7.59	4751	546	228	448	2.3	553	2341	61	< 0.05	100	< 1	< 0.1	< 0.001
0627		7/14/1993	6,843.80	6.90	7.21	5045	645	255	512	2.6	570	2476	72.5	< 0.05	99.3	< 1	< 0.1	< 0.001
0627		10/7/1993	6,843.60	6.90	7.57	5187	568	239	453	2.3	532	2548	62.4	0.05	133	< 1	< 0.1	< 0.001
0627		1/6/1994	6,843.40	6.90	7.51	4941	563	246	474	2.6	512	2693	63.1	< 0.05	61	< 1	< 0.1	< 0.001
0627		4/13/1994	6,843.20	7.00	7.15	4787	564	242	486	2.6	510	2428	58.5	0.12	107	< 1	< 0.1	< 0.001
0627		7/21/1994	6,842.90	6.90	7.53	4899	620	259	455	2.9	529	2908	54.6	< 0.05	108	< 1	< 0.1	0.001
0627		10/5/1994	6,842.90	6.90	7.86	5024	610	282	535	3.6	549	2719	62.6	< 0.05	137	< 1	< 0.1	< 0.001
0627		1/5/1995	6,842.60	6.90	7.49	5292	634	280	530	4.2	540	2650	58.9	0.15	105	< 1	< 0.1	< 0.001
0627		4/5/1995	6,842.50	6.90	7.22	5324	540	275	505	3.9	542	2682	66	0.24	125	< 1	< 0.1	< 0.001
0627		7/6/1995	6,842.00	6.90	7.91	5112	585	315	490	3.6	560	2555	61	< 0.05	90.5	< 1	< 0.1	< 0.001
0627		10/3/1995	6,841.80	6.90	7.65	5241	580	280	535	3.9	544	2760	58	0.48	126	< 1	< 0.1	0.001
0627		1/3/1996	6,841.70	7.10	7.52	5293	640	300	531	3.6	542	2995	60	< 0.05	131	< 1	< 0.1	< 0.001
0627		4/2/1996	6,841.50	7.10	8.06	5230	570	287	530	3.6	558	2740	65.1	< 0.05	129	< 1	< 0.1	< 0.001
0627		7/7/1996	6,841.20	6.80	7.56	5403	585	280	570	4.1	534	2725	64	0.13	113	< 1	< 0.1	< 0.001
0627		10/1/1996	6,841.00	6.80	7.23	4980	592	277	470	3.5	575	2468	54	< 0.05	119	< 1	< 0.1	< 0.001
0627		1/22/1997	6,840.80	6.80	7.85	5020	595	290	503	3.7	577	2673	63.3	< 0.05	121	< 1	< 0.1	< 0.001
0627		4/8/1997	6,840.50	6.90	7.59	5240	590	286	578	4.1	564	2524	56.6	< 0.05	153	< 1	< 0.1	< 0.001
0627		7/8/1997	6,840.20	7.40	7.75	5600	616	303	543	4.3	560	2570	64.1	< 0.05	190	< 1	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0624		7/7/2009	<0.01	<0.005	<0.01	<0.05	0.13	<0.1	<0.05	<0.001	<0.1	0.0310	0.32	0.75 U	1.07	0.1 U	-0.9 U	1.4
0624		10/5/2009	<0.01	<0.005	<0.01	<0.05	0.15	<0.1	<0.05	<0.001	<0.1	0.0315	0.56	0.79 U	1.35	0.08 U	2.4 U	-0.09 U
0627		7/20/1989	< 0.05	< 0.01	0.02	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0143	0.9	< 1	0.9	2.5	2.2	2.7
0627		10/16/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	0.002	< 0.1	0.0181	0.6	< 1	0.6	3.3	1.1	3.8
0627		1/4/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.014	2	< 1	2	< 0.2	2.4	3.4
0627		4/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.06	< 0.1	< 0.05	0.001	< 0.1	0.015	0.4	< 1	0.4	< 0.2	< 1	1.1
0627		7/2/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0175	0.3	< 1	0.3	< 0.2	1.9	< 1
0627		10/2/1990	< 0.05	< 0.01	0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.014	0.2	< 1	0.2	< 0.2	< 1	< 1
0627		1/15/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0176	< 0.2	< 1	0	< 0.2	< 1	< 1
0627		4/2/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.049	1	3.8	4.8	< 0.2	< 1	1
0627		7/16/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.014	< 0.2	2.8	2.8	< 0.2	< 1	< 1
0627		10/14/1991	< 0.01	< 0.01	0.01	< 0.05	0.05	< 0.1	< 0.05	0.002	< 0.1	0.02	< 0.2	1.5	1.5	< 0.2	< 1	< 1
0627		1/14/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.07	< 0.1	< 0.05	0.002	< 0.1	0.017	0.9	1.2	2.1	< 0.2	< 1	< 1
0627		4/9/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	0.003	< 0.1	0.019	< 0.2	2.9	2.9	< 0.2	1.2	< 1
0627		7/7/1992	< 0.1	< 0.01	< 0.01	< 0.05	0.05	< 0.1	< 0.05	0.001	< 0.1	0.02	0.7	< 1	0.7	< 0.2	< 1	< 1
0627		10/7/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.06	< 0.1	< 0.05	0.003	< 0.1	0.025	0.7	2.1	2.8	< 0.2	1.7	< 1
0627		1/7/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.06	< 0.1	< 0.05	0.014	< 0.1	0.018	0.5	1.5	2	< 0.2	< 1	< 1
0627		4/7/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.08	< 0.1	< 0.05	0.004	< 0.1	0.033	< 0.2	< 1	0	< 0.2	1.2	< 1
0627		7/14/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.08	< 0.1	< 0.05	0.018	< 0.1	0.016	0.6	2.3	2.9	< 0.2	< 1	< 1
0627		10/7/1993	< 0.01	< 0.01	0.02	< 0.05	0.08	< 0.1	< 0.05	0.009	< 0.1	0.012	0.6	< 1	0.6	< 0.2	< 1	< 1
0627		1/6/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.08	< 0.1	< 0.05	0.003	< 0.1	0.015	0.9	< 1	0.9	< 0.2	< 1	< 1
0627		4/13/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.09	< 0.1	< 0.05	0.002	< 0.1	0.015	0.8	< 1	0.8	< 0.2	3.2	< 1
0627		7/21/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.09	< 0.1	< 0.05	0.003	< 0.1	0.017	0.8	2.4	3.2	< 0.2	< 1	4.6
0627		10/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.08	< 0.1	< 0.05	0.001	< 0.1	0.016	0.4	< 1	0.4	< 0.2	< 1	< 1
0627		1/5/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.09	< 0.1	< 0.05	< 0.001	< 0.1	0.016	0.3	< 1	0.3	< 0.2	< 1	< 1
0627		4/5/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.07	< 0.1	< 0.05	< 0.001	< 0.1	0.016	1.2	< 1	1.2	< 0.2	1.4	1.4
0627		7/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.07	< 0.1	< 0.05	0.003	< 0.1	0.0205	0.8	< 1	0.8	0.3	< 1	1.4
0627		10/3/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.09	< 0.1	< 0.05	0.019	< 0.1	0.0168	< 0.2	< 1	0	< 0.2	1.7	2
0627		1/3/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.07	< 0.1	< 0.05	0.001	< 0.1	0.018	0.7	< 1	0.7	1.2	2.4	1.2
0627		4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.07	< 0.1	< 0.05	< 0.001	< 0.1	0.019	0.5	< 1	0.5	< 0.2	< 1	< 1
0627		7/7/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.13	< 0.1	< 0.05	< 0.001	< 0.1	0.024	0.3	< 1	0.3	< 0.2	< 1	< 1
0627		10/1/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.09	< 0.1	< 0.05	0.002	< 0.1	0.024	0.5	< 1	0.5	< 0.2	< 1	< 1
0627		1/22/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	0.018	1	< 1	1	< 0.2	< 1	< 1
0627		4/8/1997	< 0.01	< 0.01	0.01	< 0.05	0.1	< 0.1	< 0.05	0.195	< 0.1	0.02	0.9	< 1	0.9	< 0.2	< 1	< 1
0627		7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.02	0.4	< 1	0.4	< 0.2	< 1	< 1

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0627		10/7/1997	6,840.20	6.60	7.69	4960	601	276	439	3.5	599	2440	66	< 0.05	122	< 1	< 0.1	< 0.001
0627		1/16/1998	6,840.00	7.30	7.91	5260	582	289	545	4.6	682	2850	70.6	1.28	107	< 1	< 0.1	< 0.001
0627		4/7/1998	6,840.20	6.90	7.74	5200	621	294	508	3.9	590	2400	54.6	< 0.05	141	< 1	< 0.1	< 0.001
0627		7/7/1998	6,840.00	7.20	7.80	5210	598	288	529	4.3	588	2500	59.6	0.05	133	< 1	< 0.1	< 0.001
0627		10/6/1998	6,839.80	6.97	7.85	5380	589	288	530	4.8	579	2670	61.5	0.06	109	< 1	< 0.1	< 0.001
0627		1/6/1999	6,839.50	7.70	8.02	5340	566	284	509	4.8	586	2740	60	0.17	142	< 1	< 0.1	< 0.001
0627		4/6/1999	6,839.50	7.10	7.84	5650	580	309	504	4.7	580	2660	68	0.27	131	< 1	< 0.1	< 0.001
0627		7/13/1999	6,839.22	7.00	8.21	5320	579	308	498	10.6	594	2620	67.7	0.17	126	< 1	< 0.1	< 0.001
0627		10/5/1999	6,839.20	7.09	7.70	5320	521	274	512	5.1	594	2320	58.5	0.38	127	< 1	< 0.1	< 0.001
0627		1/4/2000	6,839.10	7.00	8.10	5150	530	283	425	7.3	597	2430	57.2	0.14	144	< 1	< 0.1	< 0.001
0627		5/10/2000	6,839.00	7.00	7.65	5200	535	278	501	4.1	588	2370	55.3	< 0.05	144	< 1	< 0.1	< 0.001
0627		7/18/2000	6,838.60	6.96	7.91	5320	567	292	502	4.32	590	2390	53.3	< 0.05	149	< 1	< 0.1	< 0.001
0627		10/10/2000	6,838.65	7.03	7.78	5100	496	261	512	5.4	580	2160	44.8	< 0.05	150	< 1	< 0.1	< 0.001
0627		1/9/2001	6,838.55	7.23	8.03	5170	583	303	454	5	595	2460	57.9	< 0.05	160	< 1	< 0.1	< 0.001
0627		2/6/2001	6,838.50	7.53	7.48	5040	654	321	558	6.1	592	2780	52.5	< 0.05	158	< 1	< 0.1	< 0.001
0627		3/6/2001	6,838.30	7.31	7.69	4770	553	286	552	6.5	586	2680	53	< 0.05	156	< 1	< 0.1	0.001
0627		4/10/2001	6,838.60	7.52	7.47	5020	656	319	446	5.3	590	2840	57.3	< 0.05	149	< 1	< 0.1	< 0.001
0627		5/8/2001	6,838.10	7.08	7.68	5190	557	289	530	4.9	577	2320	60.2	0.09	154	< 1	< 0.1	< 0.001
0627		6/5/2001	6,838.30	7.14	7.67	4950	576	304	521	3.8	580	2660	55.1	0.09	142	< 1	< 0.1	< 0.001
0627		7/10/2001	6,838.05	7.48	7.45	5270	585	313	585	4.4	600	2450	55.9	0.06	149	< 1	< 0.1	< 0.001
0627		8/8/2001	6,838.00	7.09	7.60	5220	540	290	460	4.1	596	2300	64	0.11	140	< 1	< 0.1	< 0.001
0627		9/11/2001	6,838.00	6.99	7.80	4190	550	290	540	4.9	600	2380	64.4	0.08	158	< 1	< 0.1	< 0.001
0627		10/2/2001	6,838.05	7.08	7.70	5230	540	290	540	5.6	609	2300	74	< 0.05	152	< 1	< 0.1	< 0.001
0627		11/6/2001	6,838.00	7.13	7.90	5310	595	305	451	5.8	602	2600	69	0.06	142	< 1	< 0.1	< 0.001
0627		12/4/2001	6,838.25	7.30	7.80	5190	559	277	498	4.7	610	2290	65.2	0.07	148	< 1	< 0.1	< 0.001
0627		1/8/2002	6,837.90	7.27	7.70	5150	641	314	407	6.5	603	2290	73.6	< 0.05	134	< 1	< 0.1	< 0.001
0627		2/5/2002	6,837.80	7.34	7.70	5190	625	298	436	6.1	601	2560	70.8	< 0.05	133	< 1	< 0.1	< 0.001
0627		3/5/2002	6,837.80	7.17	7.80	5160	595	300	495	5.1	611	2670	64.3	0.07	133	< 1	< 0.1	< 0.001
0627		4/9/2002	6,837.50	7.08	7.64	5250	559	286	486	6.5	612	2440	74.1	0.09	142	< 1	< 0.1	< 0.001
0627		5/7/2002	6,837.73	7.09	7.84	5180	594	294	512	5.9	601	2500	59.7	0.08	137	< 1	< 0.1	< 0.001
0627		6/4/2002	6,837.61	7.17	7.71	5190	607	300	479	4.6	602	2550	53.8	0.12	122	< 1	< 0.1	< 0.001
0627		7/9/2002	6,837.42	7.13	7.90	5350	587	306	495	5.5	608	2590	76	< 0.05	133	< 1	< 0.1	< 0.001
0627		10/7/2002	6,837.30	7.10	7.65	4170	543	280	455	4.7	611	2160	50.1	0.06	139	< 1	< 0.1	< 0.001
0627		1/7/2003	6,836.79	7.49	7.78	5190	586	315	556	4.6	614	2710	71.9	0.17	128	< 1	< 0.1	< 0.001
0627		4/8/2003	6,836.52	6.98	7.50	5220	555	277	496	7.9	603	2280	58.1	0.11	147	< 1	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0627		10/7/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	< 0.001	< 0.1	0.023	0.8	< 1	0.8	< 0.2	< 1	< 1
0627		1/16/1998	< 0.01	< 0.01	0.02	< 0.05	1.47	< 0.1	< 0.05	< 0.001	< 0.1	0.0222	0.9	< 1	0.9	< 0.2	< 1	< 1
0627		4/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.12	< 0.1	< 0.05	< 0.001	< 0.1	0.0221	0.7	< 1	0.7	< 0.2	< 1	< 1
0627		7/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.0233	1.6	2.6	4.2	< 0.2	< 1	< 1
0627		10/6/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.14	< 0.1	< 0.05	< 0.001	< 0.1	0.0345	1.2	< 1	1.2	< 0.2	< 1	< 1
0627		1/6/1999	< 0.01	0.006	< 0.01	< 0.05	0.22	< 0.1	< 0.05	< 0.001	< 0.1	0.0239	< 0.2	< 1	0	< 0.2	< 1	< 1
0627		4/6/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.18	< 0.1	< 0.05	0.002	< 0.1	0.0233	1	2.5	3.5	< 0.2	< 1	< 1
0627		7/13/1999	< 0.01	< 0.005	0.02	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.002	0.8	< 1	0.8	< 0.2	3	2.9
0627		10/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.73	< 0.1	< 0.05	0.002	< 0.1	0.0247	1.3	< 1	1.3	< 0.2	< 1	< 1
0627		1/4/2000	< 0.01	< 0.005	0.06	< 0.05	0.86	< 0.1	< 0.05	0.003	< 0.1	0.0233	4.1	2	6.1	< 0.2	< 1	5.5
0627		5/10/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.0259	0.4	6.3	6.7	< 0.2	5.7	< 1
0627		7/18/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.6	2.5	3.1	< 0.2	< 1	< 1
0627		10/10/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.024	0.5	< 1	0.5	< 0.2	< 1	< 1
0627		1/9/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.11	< 0.1	< 0.05	0.001	< 0.1	0.023	0.4	2.5	2.9	< 0.2	< 1	< 1
0627		2/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.11	< 0.1	< 0.05	0.002	< 0.1	0.0239	0.5	1.5	2	< 0.2	< 1	< 1
0627		3/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.12	< 0.1	< 0.05	0.001	< 0.1	0.024	0.4	< 1	0.4	< 0.2	< 1	< 1
0627		4/10/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.14	< 0.1	< 0.05	0.001	< 0.1	0.03	0.4	< 1	0.4	< 0.2	< 1	< 1
0627		5/8/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.13	< 0.1	< 0.05	0.001	< 0.1	0.024	< 0.2	< 1	0	< 0.2	< 1	< 1
0627		6/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.12	< 0.1	< 0.05	0.003	< 0.1	0.024	< 0.2	< 1	0	< 0.2	< 1	< 1
0627		7/10/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.12	< 0.1	< 0.05	0.001	< 0.1	0.024	< 0.2	< 1	0	< 0.2	< 1	< 1
0627		8/8/2001	< 0.01	0.006	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.025	< 0.2	< 1	0	< 0.2	< 1	< 1
0627		9/11/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.12	< 0.1	< 0.05	0.001	< 0.1	0.023	0.6	< 1	0.6	< 0.2	< 1	< 1
0627		10/2/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.1	< 0.1	< 0.05	0.001	< 0.1	0.0235	0.7	< 1	0.7	< 0.2	< 1	< 1
0627		11/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.11	< 0.1	< 0.05	0.002	< 0.1	0.0224	0.6	< 1	0.6	< 0.2	< 1	< 1
0627		12/4/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.0223	0.8	< 1	0.8	< 0.2	< 1	< 1
0627		1/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	0.0228	0.8	< 1	0.8	< 0.2	< 1	< 1
0627		2/5/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	0.014	0.5	< 1	0.5	< 0.2	< 1	< 1
0627		3/5/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.12	< 0.1	< 0.05	< 0.001	< 0.1	0.0251	0.4	< 1	0.4	< 0.2	< 1	< 1
0627		4/9/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	0.0244	< 0.2	< 1	0	< 0.2	< 1	< 1
0627		5/7/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.13	< 0.1	< 0.05	0.001	< 0.1	0.0249	< 0.2	< 1	0	< 0.2	< 1	< 1
0627		6/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.13	< 0.1	< 0.05	< 0.001	< 0.1	0.0246	0.7	< 1	0.7	< 0.2	< 1	< 1
0627		7/9/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	0.0228	0.3	< 1	0.3	< 0.2	< 1	< 1
0627		10/7/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.09	< 0.1	< 0.05	< 0.001	< 0.1	0.0198	< 0.2	< 1	0	< 0.2	< 1	< 1
0627		1/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.0291	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0627		4/8/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.0278	< 0.2	< 1	0	< 0.2	< 1	< 1.0

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0627		7/8/2003	6,836.50	6.82	7.70	5190	534	282	455	6	317	2530	48.7	0.09	142	< 1	< 0.1	< 0.001
0627		10/7/2003	6,836.43	6.90	7.74	5310	613	321	531	5	625	2700	56.7	0.13	134	< 1	< 0.1	< 0.001
0627		1/6/2004	6,836.28	7.04	7.68	5200	533	285	489	5.2	637	2470	57.8	0.06	142 D	< 1.0	0.1	< 0.001
0627		4/6/2004	6,836.24	7.38	7.30	5170	591	304	491	5.3	619	2550 D	58.1	0.17	144 D	< 1	< 0.1	< 0.001
0627		7/13/2004	6,835.89	6.81	7.23	5320	592	298	497	6.1	618	2480 D	57	0.15	135 D	< 1.0	< 0.1	< 0.001
0627		10/5/2004	6,835.97	6.92	7.50	5440	571 D	294 D	530 E	4.5	600	2470 D	54	< 0.05	125 D	< 1.0	< 0.1	< 0.001
0627		1/12/2005	6,836.02	7.08	7.24	5190	598 D	304 D	518 D	5.9	596	2520 D	62	0.08	112 D	< 1.0	< 0.1	< 0.001
0627		4/5/2005	6,835.55	7.19	7.70	5000	602	318	518	5.1	612	2590	56	< 0.05	110	< 1.0	< 0.1	< 0.001
0627		7/12/2005	6,835.37	7.01	7.76	4950	594 D	299 D	494	4.4	581	2570 D	52	< 0.05	108 D	< 1.0	< 0.1	< 0.001
0627		10/4/2005	6,835.48	7.00	7.60	4930	554 D	284 D	495	5.2	595	2530 D	54	< 0.05	108 D	< 1.0	< 0.1	< 0.001
0627		1/10/2006	6,835.12	7.06	7.79	4810	527	270	507	4.3	640	2380 D	48	< 0.05	112 D	< 1.0	< 0.1	< 0.001
0627		4/4/2006	6,835.02	6.98	7.30	4800	587 D	303 D	486	5.9	587	2560 D	55	< 0.05	117 D	< 1.0	< 0.1	< 0.001
0627		7/18/2006	6,834.87	6.92	6.91	4790	554 D	279 D	538	6.4	571	2660 D	45	< 0.05	109 D	< 1.0	< 0.1	< 0.001
0627		10/3/2006	6,834.82	6.92	6.92	4670	528 D	261 D	460	5.7	592	2350 D	39	0.08	108 D	< 0.5	< 0.1	< 0.001
0627		1/9/2007	6,834.77	7.09	6.96	4870	512 D	263 D	443	5.6	580	2460 D	47	<0.05	103 D	<0.5	<0.1	<0.001
0627		4/10/2007	6,835.02	7.18	7.18	4740	548 D	272 D	446	7.4	573	2430 D	45	0.06	115 D	<0.5	<0.1	<0.001
0627		7/10/2007	6,834.67	6.97	6.81	4590	571 D	278 D	489	5.8	612	2590 D	41	0.05	117 D	<0.5	<0.1	0.01
0627		10/2/2007	6,834.55	6.87	7.26	4710	486 D	244 D	469 D	6.2	593	2270 D	63 D	0.18	107 D	<0.5	<0.1	<0.001
0627		1/15/2008	6,834.77	7.05	7.03	4750	532 D	256 D	513 D	6.7	568	2340 D	64 D	< 0.05	109 D	< 0.5	< 0.1	< 0.001
0627		4/8/2008	6,834.72	6.94	7.32	4600	565 D	282 D	528 D	6.4 D	546	2530 D	36	< 0.1	159 D	< 0.50	< 0.1	< 0.001
0627		7/8/2008	6,834.47	6.68	7.23	4610	527	250	458 D	5	578	2460 D	50	< 0.05	178 D	< 0.5	< 0.1	< 0.003
0627		10/7/2008	6,833.99	6.98	7.09	4510	530	253	477 D	5	560	2420 DH	36	< 0.1	167 D	< 0.5	< 0.1	< 0.001
0627		1/13/2009	6,834.22	6.9	7.1	4720	580	274	518	6	565	2210 D	28	<0.05	172 D	<0.5	<0.1	<0.001
0627		4/7/2009	6,834.02	6.82	6.99	4650	509 D	244 D	472 D	6	586	2410 D	39	<0.05	107 D	<0.50	<0.1	<0.001
0627		7/7/2009	6,834.02	6.76	7.23	4610	510	239	473	5	579	2310 D	44	<0.05	105 D	<0.50	<0.1	<0.001
0627		10/6/2009	6,834.02	6.93	7.67	4530	510	240	483	5	583	2440 D	44	<0.05	111 D	<0.50	<0.1	<0.001
0632		7/19/1989	6,874.20	6.50	6.77	6819	788	667	330	9.2	2123	2840	242	0.5	107	< 1	< 0.1	< 0.001
0632		10/16/1989	6,874.00	6.80	7.10	6466	781	671	408	10.7	2257	2578	246	0.47	95	< 1	< 0.1	< 0.001
0632		1/10/1990	6,872.30	6.40	6.54	6860	783	712	407	8.35	2111	2747	251	0.43	83	< 1	< 0.1	< 0.001
0632		4/10/1990	6,870.40	6.30	7.16	6977	778	688	380	7.4	2208	2677	258	0.44	107	< 1	< 0.1	< 0.001
0632		7/10/1990	6,871.10	6.30	6.86	7355	819	674	412	7.9	2296	3007	248	0.37	124	< 1	< 0.1	< 0.001
0632		10/9/1990	6,870.40	6.20	7.27	7558	839	707	433	9	2239	2945	258	0.52	106	< 1	< 0.1	< 0.001
0632		1/10/1991	6,869.90	6.30	7.18	7367	900	760	429	8.9	2184	3027	267	0.4	113	< 1	< 0.1	0.002
0632		4/11/1991	6,869.90	6.20	7.36	7346	857	663	451	9.4	2285	3053	274	0.37	146	< 1	< 0.1	0.002
0632		7/9/1991	6,868.30	6.30	6.68	7472	833	636	390	6.9	2336	2964	273	0.61	117	< 1	0.14	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0627		7/8/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.09	< 0.1	< 0.05	< 0.001	< 0.1	0.0241	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0627		10/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.0279	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0627		1/6/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	0.003	< 0.1	0.0244 D	< 0.2	6.6	6.6	< 0.2	< 1.0	< 1.0
0627		4/6/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	0.02	< 0.1	0.025 D	< 0.2	< 1	0	< 0.2	< 1	< 1
0627		7/13/2004	< 0.01	< 0.005	0.01	< 0.05	0.01	< 0.1	< 0.05	0.001	< 0.1	0.0254 D	0.5	< 1.0	0.5	< 0.2	< 1.0	< 1.0
0627		10/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.009	< 0.1	0.0261 D	0.3	2	2.3	< 0.2	< 1.0	< 1.0
0627		1/12/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.001	< 0.1	0.0269	0.5	< 1.0	0.5	< 0.2	< 1.0	< 1.0
0627		4/5/2005	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.028	1	< 1.0	1	< 0.2	< 1.0	< 1.0
0627		7/12/2005	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0254	0.4	< 1.0	0.4	< 0.2	< 1.0	< 1.0
0627		10/4/2005	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0271	0.3	1.4	1.7	< 0.2	< 1.0	< 1.0
0627		1/10/2006	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.01	< 0.1	0.0268	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0627		4/4/2006	< 0.01	0.006	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.005	< 0.1	0.0251 D	< 0.2	2.7	2.7	< 0.2	< 1.0	< 1.0
0627		7/18/2006	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0245	0.4	2.2	2.6	< 0.2	< 1.0	2
0627		10/3/2006	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0235	0.7	< 1	0.7	< 0.2	< 1	< 1
0627		1/9/2007	<0.01	<0.005	<0.01	<0.05	<0.01	<0.1	<0.05	<0.001	<0.1	0.0228	<0.2	<1	0	<0.2	<1	<1
0627		4/10/2007	<0.01	<0.005	<0.01	<0.05	<0.01	<0.1	<0.05	<0.001	<0.1	0.0252	<0.2	<1	0	<0.2	<1	<1
0627		7/10/2007	<0.01	<0.005	<0.01	<0.05	<0.01	<0.1	<0.05	<0.001	<0.1	0.0246	<0.2	<1	0	<0.2	<1	<1
0627		10/2/2007	<0.01	<0.005	<0.01	<0.05	<0.01	<0.1	<0.05	<0.001	<0.1	0.0243	<0.2	<1	0	<0.2	<1	<1
0627		1/15/2008	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0224	< 0.2	< 1	0	< 0.2	< 1	< 1
0627		4/8/2008	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0227	0.003 U	-0.7 U	-0.697	0.2	0 U	1 U
0627		7/8/2008	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0214	0.35	1.2 U	1.55	0.3	-0.2 U	0.6 U
0627		10/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0201	0.05 U	0.06 U	0.11	-0.1 U	0 U	1
0627		1/13/2009	<0.01	<0.005	<0.01	<0.05	0.09	<0.1	<0.05	<0.001	<0.1	0.0215	0.07 U	0.61 U	0.68	-0.2 U	-1 U	1.4
0627		4/7/2009	<0.01	<0.005	<0.01	<0.05	0.03	<0.1	<0.05	0.001	<0.1	0.0196	0.16 U	0.52 U	0.68	0.02 U	0.6 U	0.4 U
0627		7/7/2009	<0.01	<0.005	<0.01	<0.05	0.02	<0.1	<0.05	<0.001	<0.1	0.0198	0.06 U	0.89 U	0.95	0.01 U	-1 U	0.8
0627		10/6/2009	<0.01	<0.005	<0.01	<0.05	0.02	<0.1	<0.05	<0.001	<0.1	0.0213	0.36	0.81 U	1.17	0.02 U	-1 U	0.6 U
0632		7/19/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.15	< 0.1	< 0.05	0.004	< 0.1	0.111	1.7	1.7	3.4	1.1	< 1	4.1
0632		10/16/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	0.003	< 0.1	0.111	1.5	1.4	2.9	< 0.2	< 1	< 1
0632		1/10/1990	< 0.05	< 0.01	0.04	< 0.05	0.15	< 0.1	0.07	0.003	< 0.1	0.084	1	1.6	2.6	< 0.2	< 1	1.2
0632		4/10/1990	< 0.05	< 0.01	0.03	< 0.05	0.24	< 0.1	< 0.05	0.003	< 0.1	0.084	1	1.6	2.6	< 0.2	< 1	1.2
0632		7/10/1990	< 0.05	< 0.01	0.01	< 0.05	0.27	< 0.1	< 0.05	0.004	< 0.1	0.0785	1	1.8	2.8	< 0.2	< 1	1
0632		10/9/1990	< 0.05	< 0.01	0.02	< 0.05	0.22	< 0.1	< 0.05	0.003	< 0.1	0.1312	0.5	2.3	2.8	< 0.2	< 1	< 1
0632		1/10/1991	< 0.01	< 0.01	0.02	< 0.05	0.25	< 0.1	0.05	0.005	< 0.1	0.0795	2.2	< 1	2.2	< 0.2	< 1	2.7
0632		4/11/1991	< 0.01	< 0.01	0.02	< 0.05	0.29	< 0.1	< 0.05	0.005	< 0.1	0.0931	1.1	< 1	1.1	< 0.2	< 1	1
0632		7/9/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.25	< 0.1	< 0.05	0.003	< 0.1	0.0818	0.7	1.8	2.5	< 0.2	< 1	< 1

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0632		10/17/1991	6,867.50	6.10	7.08	7677	886	630	426	8.4	2510	2959	267	0.72	87.6	< 1	< 0.1	0.001
0632		1/21/1992	6,867.60	6.20	6.95	7030	747	758	424	7.2	2211	3200	261	0.6	76.1	< 1	< 0.1	< 0.001
0632		4/14/1992	6,868.30	6.10	7.56	7706	677	557	460	9.1	2184	3126	263	0.55	75.7	< 1	< 0.1	0.002
0632		7/14/1992	6,864.50	6.00	8.05	6323	815	547	451	11.3	1568	2948	265	0.36	119	< 1	< 0.1	0.001
0632		10/13/1992	6,863.00	6.40	7.02	6472	719	594	417	7.4	2495	2903	269	0.18	89.5	< 1	< 0.1	< 0.001
0632		1/12/1993	6,864.80	6.40	7.02	5933	750	571	438	11.2	1220	3037	265	0.24	92.7	< 1	< 0.1	< 0.001
0632		4/14/1993	6,865.60	6.40	7.11	6925	696	633	433	6.7	2113	2962	269	0.31	95.3	< 1	< 0.1	< 0.001
0632		7/15/1993	6,862.20	6.40	6.72	6303	701	607	426	9.1	2098	3107	264	0.19	62.1	< 1	< 0.1	< 0.001
0632		10/7/1993	6,860.40	6.50	7.10	5715	676	555	384	6.6	2240	2392	255	0.13	56.6	< 1	< 0.1	< 0.001
0632		1/6/1994	6,862.40	6.50	7.51	6091	690	549	409	6.9	1984	2705	252	0.17	36.5	1	< 0.1	< 0.001
0632		4/14/1994	6,862.50	6.40	6.74	5930	683	579	426	7.8	2063	2807	251	0.33	25.9	< 1	< 0.1	< 0.001
0632		7/21/1994	6,862.70	6.40	7.19	6160	745	632	383	7.5	2123	3080	246	0.23	30.3	< 1	< 0.1	0.002
0632		10/5/1994	6,861.10	6.30	7.47	6288	692	619	431	8.1	2200	2689	255	0.23	20.9	< 1	< 0.1	< 0.001
0632		1/10/1995	6,861.70	6.40	7.45	6458	708	655	348	8.2	2184	2857	250	0.41	21.9	< 1	< 0.1	< 0.001
0632		4/5/1995	6,860.90	6.50	6.93	6453	685	650	420	10.8	2119	2905	250	2.51	23.9	< 1	< 0.1	< 0.001
0632		7/6/1995	6,860.30	6.40	7.52	6335	696	646	393	8.5	2281	2647	285	0.43	24.1	< 1	< 0.1	< 0.001
0632		10/3/1995	6,860.30	6.30	7.52	6319	695	585	374	8.2	2247	2745	250	0.44	16.8	< 1	< 0.1	0.003
0632		1/4/1996	6,859.10	6.50	7.59	6294	760	625	378	7.9	2239	2595	250	0.22	16.4	< 1	< 0.1	< 0.001
0632		4/2/1996	6,859.30	6.60	7.82	5940	650	585	384	8.1	1807	2715	278	0.26	17.4	< 1	< 0.1	< 0.001
0632		7/7/1996	6,858.80	6.40	7.40	6258	671	589	397	8.8	2035	2749	233	0.29	10.9	1.68	< 0.1	0.014
0632		10/1/1996	6,859.30	6.50	6.92	6280	676	602	396	8.5	2050	2758	255	0.2	11.5	1	< 0.1	0.001
0632		1/22/1997	6,858.60	6.50	7.49	6120	670	590	379	8.7	2130	2740	285	0.2	10	1.1	< 0.1	< 0.001
0632		4/8/1997	6,858.30	6.50	7.75	6180	679	591	369	8.6	2010	2694	287	0.2	9.8	1.05	< 0.1	< 0.001
0632		7/8/1997	6,858.80	6.80	7.64	6330	707	613	362	8.5	2020	2560	264	0.18	8.15	1.14	< 0.1	< 0.001
0632		10/7/1997	6,858.40	6.40	7.63	6170	679	592	369	8.4	2020	2740	290	0.12	6.37	1.48	< 0.1	< 0.001
0632		1/16/1998	6,858.10	6.60	7.68	6170	660	573	383	9.3	2020	2900	288	0.27	7.24	1.9	< 0.1	< 0.001
0632		4/7/1998	6,857.90	6.50	7.39	5970	681	594	385	8.4	2030	2500	234	0.1	7.95	1.9	< 0.1	< 0.001
0632		7/7/1998	6,858.10	6.70	7.81	6250	658	594	392	8.5	1880	2600	264	0.26	5	2.3	< 0.1	< 0.001
0632		10/6/1998	6,859.00	6.58	7.71	6200	664	598	401	9.1	1820	2730	279	0.22	7.89	2.4	< 0.1	< 0.001
0632		1/5/1999	6,857.40	6.70	7.82	6200	629	559	331	8.6	1930	2440	242	0.21	5.94	1.6	< 0.1	< 0.001
0632		4/6/1999	6,857.30	6.60	7.90	6320	662	594	354	8.1	1890	2720	251	0.21	6.37	1.5	< 0.1	< 0.001
0632		7/13/1999	6,857.09	6.30	7.78	6140	651	602	336	14.3	1910	2830	244	0.21	5.72	1.8	< 0.1	< 0.001
0632		10/5/1999	6,858.10	6.60	7.75	6060	691	667	375	8.3	1850	3140	235	0.16	6.03	2.1	< 0.1	< 0.001
0632		1/4/2000	6,857.60	6.60	7.93	6210	581	555	283	10.8	1790	2610	217	0.24	4.44	2	< 0.1	< 0.001
0632		5/8/2000	6,856.90	6.30	7.60	6020	579	560	366	8.3	1800	2640	238	0.05	2.44	2.8	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0632		10/17/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.43	< 0.1	< 0.05	0.018	< 0.1	0.169	0.8	< 1	0.8	< 0.2	1.6	< 1
0632		1/21/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.25	< 0.1	< 0.05	0.004	< 0.1	0.072	1.2	2.6	3.8	< 0.2	< 1	1
0632		4/14/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.28	< 0.1	< 0.05	0.008	< 0.1	0.08	0.9	3.7	4.6	< 0.2	1.6	< 1
0632		7/14/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.16	< 0.1	< 0.05	0.003	< 0.1	0.095	2.2	1.1	3.3	< 0.2	4.2	2.5
0632		10/13/1992	< 0.01	< 0.01	0.02	< 0.05	0.16	< 0.1	< 0.05	0.003	< 0.1	0.147	1.3	6.4	7.7	< 0.2	< 1	1.5
0632		1/12/1993	< 0.01	< 0.01	< 0.01	< 0.05	1.85	< 0.1	< 0.05	0.004	< 0.1	0.068	1.1	4.5	5.6	< 0.2	< 1	1.5
0632		4/14/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.32	< 0.1	< 0.05	0.002	< 0.1	0.113	6.4	2	8.4	1.3	1.2	8.1
0632		7/15/1993	< 0.01	< 0.01	0.01	< 0.05	0.18	< 0.1	< 0.05	0.005	< 0.1	0.082	1.2	< 1	1.2	< 0.2	< 1	1.5
0632		10/7/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.27	< 0.1	< 0.05	0.003	< 0.1	0.093	1.8	1.1	2.9	< 0.2	1.2	1.8
0632		1/6/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.34	< 0.1	< 0.05	< 0.001	< 0.1	0.082	1.6	3.4	5	< 0.2	< 1	7.7
0632		4/14/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.37	< 0.1	< 0.05	0.001	< 0.1	0.088	1.7	2.4	4.1	< 0.2	2.4	5.5
0632		7/21/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.39	< 0.1	< 0.05	0.002	< 0.1	0.09	0.9	5.1	6	< 0.2	< 1	8.7
0632		10/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.42	< 0.1	< 0.05	< 0.001	< 0.1	0.08	1	< 1	1	< 0.2	3.6	1.2
0632		1/10/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.43	< 0.1	< 0.05	< 0.001	< 0.1	0.086	2	< 1	2	< 0.2	1.7	3.7
0632		4/5/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.52	< 0.1	< 0.05	0.002	< 0.1	0.077	1.2	3.1	4.3	< 0.2	1.1	6
0632		7/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.5	< 0.1	< 0.05	0.002	< 0.1	0.0954	1.6	< 1	1.6	0.4	< 1	4.2
0632		10/3/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	0.0899	1.1	< 1	1.1	< 0.2	3.3	2.6
0632		1/4/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.74	< 0.1	< 0.05	< 0.001	< 0.1	0.092	1	1.1	2.1	0.3	1.2	1.8
0632		4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.55	< 0.1	< 0.05	< 0.001	< 0.1	0.09	1.7	< 1	1.7	< 0.2	< 1	5.8
0632		7/7/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.61	< 0.1	< 0.05	0.012	< 0.1	0.092	0.8	< 1	0.8	< 0.2	< 1	< 1
0632		10/1/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.57	< 0.1	< 0.05	0.002	< 0.1	0.078	0.8	< 1	0.8	< 0.2	< 1	3.4
0632		1/22/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.63	< 0.1	< 0.05	< 0.001	< 0.1	0.077	1.4	< 1	1.4	< 0.2	< 1	< 1
0632		4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.63	< 0.1	< 0.05	< 0.001	< 0.1	0.088	1	3.2	4.2	< 0.2	< 1	< 1
0632		7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.57	< 0.1	< 0.05	< 0.001	< 0.1	0.077	0.8	5	5.8	< 0.2	< 1	< 1
0632		10/7/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.82	< 0.1	< 0.05	< 0.001	< 0.1	0.075	0.7	< 1	0.7	< 0.2	< 1	< 1
0632		1/16/1998	< 0.01	< 0.01	< 0.01	< 0.05	0.75	< 0.1	< 0.05	< 0.001	< 0.1	0.089	0.9	< 1	0.9	< 0.2	< 1	2
0632		4/7/1998	< 0.1	< 0.005	< 0.01	< 0.05	0.71	< 0.1	< 0.05	0.005	< 0.1	0.086	1.6	< 1	1.6	< 0.2	< 1	< 1
0632		7/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.72	< 0.1	< 0.05	< 0.001	< 0.1	0.0859	1.7	3.4	5.1	< 0.2	< 1	< 1
0632		10/6/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.74	< 0.1	< 0.05	< 0.001	< 0.1	0.144	1.3	< 1	1.3	< 0.2	< 1	< 1
0632		1/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.66	< 0.1	< 0.05	< 0.001	< 0.1	0.0817	< 0.2	< 1	0	< 0.2	< 1	< 1
0632		4/6/1999	< 0.01	0.008	< 0.01	< 0.05	0.7	< 0.1	< 0.05	< 0.001	< 0.1	0.124	1.7	< 1	1.7	< 0.2	< 1	< 1
0632		7/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.72	< 0.1	< 0.05	< 0.001	< 0.1	0.0775	0.5	< 1	0.5	< 0.2	2.9	3.5
0632		10/5/1999	< 0.01	0.006	< 0.01	< 0.05	0.85	< 0.1	< 0.05	0.001	< 0.1	0.0795	2.1	< 1	2.1	< 0.2	< 1	1.6
0632		1/4/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.87	< 0.1	0.05	0.001	< 0.1	0.0704	1.3	< 1	1.3	< 0.2	< 1	2.1
0632		5/8/2000	< 0.01	< 0.005	< 0.01	< 0.05	1.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0774	0.5	< 1	0.5	< 0.2	< 1	< 1

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0632		7/12/2000	6,856.90	6.25	6.98	6070	595	580	366	8.09	1810	2510	239	0.08	2.92	2	< 0.1	< 0.001
0632		10/3/2000	6,856.70	6.28	7.18	6020	622	610	240	9.7	1780	2820	230	0.07	3.17	2.5	< 0.1	< 0.001
0632		1/8/2001	6,858.50	6.38	7.38	6180	624	612	347	8.7	1740	3020	223	0.17	2.69	3.5	< 0.1	< 0.001
0632		2/5/2001	6,859.80	6.55	7.04	6410	729	701	428	10.3	1660	3420	233	0.35	5.9	2.8	< 0.1	< 0.001
0632		3/6/2001	6,860.20	6.51	7.31	6100	630	653	450	10.3	1640	3400	199	0.34	12.7	3.2	< 0.1	< 0.001
0632		4/3/2001	6,860.70	6.45	7.17	6800	710	713	359	8.1	1600	3370	228	0.33	21.6	3.49	< 0.1	< 0.001
0632		5/7/2001	6,860.90	6.30	7.41	6860	625	650	410	8.7	1600	3000	244	0.36	26.5	1.9	< 0.1	< 0.001
0632		6/4/2001	6,861.20	6.36	7.22	6620	622	663	316	8.9	1580	3180	246	0.38	32.7	3.1	< 0.1	< 0.001
0632		7/9/2001	6,861.43	6.84	7.08	6990	682	742	348	8.5	1680	3260	253	0.33	35.9	3.1	< 0.1	< 0.001
0632		8/6/2001	6,861.39	6.27	7.20	7000	620	680	340	9	1670	3000	300	0.31	34.2	2.7	< 0.1	< 0.001
0632		9/10/2001	6,861.60	6.25	7.00	7020	630	700	355	9.4	1700	3100	273	0.32	45.3	2.46	< 0.1	< 0.001
0632		10/1/2001	6,861.65	6.35	7.40	7080	610	690	336	10.1	1730	2900	311	0.28	40.2	1.95	< 0.1	< 0.001
0632		11/5/2001	6,861.80	6.34	7.50	7060	669	732	360	10	1680	3390	293	0.3	43.2	2.4	< 0.1	< 0.001
0632		12/3/2001	6,861.90	6.37	6.80	7100	613	671	309	8.7	1740	3000	272	0.33	46	1.8	< 0.1	< 0.001
0632		1/8/2002	6,862.00	6.45	7.00	7020	719	748	289	10.5	1700	3530	294	0.33	40.2	2.4	< 0.1	< 0.001
0632		2/4/2002	6,862.10	6.37	7.00	7070	690	717	332	10.1	1720	3330	292	0.37	41.1	2.36	< 0.1	< 0.001
0632		3/4/2002	6,862.05	6.36	7.10	7080	649	721	376	9.4	1690	3460	278	0.32	44	2.5	< 0.1	< 0.001
0632		4/2/2002	6,862.31	6.32	7.04	7140	674	733	378	11.8	1730	3530	280	0.34	42.5	2.7	< 0.1	< 0.001
0632		5/6/2002	6,862.32	6.22	7.16	7130	649	715	388	10.7	1720	3270	260	0.34	43.7	2.4	< 0.1	< 0.001
0632		6/3/2002	6,862.41	6.24	7.30	7150	645	717	349	8.9	1710	3290	240	0.34	45.1	2.8	< 0.1	< 0.001
0632		7/8/2002	6,862.21	6.47	7.75	7200	645	761	292	11.4	1710	3490	229	0.36	43.3	2.4	< 0.1	< 0.001
0632		10/8/2002	6,862.08	6.61	7.29	7100	578	685	356	8.7	1700	3150	221	0.3	45.7	2.6	< 0.1	< 0.001
0632		1/6/2003	6,861.98	6.61	7.52	7170	637	798	424	9.7	1660	3620	232	0.44	45.2	2.2	< 0.1	< 0.001
0632		4/7/2003	6,862.11	6.29	7.15	7210	607	744	388	12.6	1670	3070	242	0.4	48	2.4	< 0.1	< 0.001
0632		7/7/2003	6,862.04	6.19	6.74	5700	593	726	340	12.2	1700	3330	217	0.42	49.2	0.2	< 0.1	< 0.001
0632		10/7/2003	6,861.84	6.18	7.70	7310	644	812	394	9.4	1690	3610	250	0.44	49.5	2.4	< 0.1	< 0.001
0632		1/5/2004	6,861.76	6.36	7.36	7200	652	824	353	10	1720	3700	263	0.44	54.2 D	2.6	0.2	< 0.001
0632		4/5/2004	6,862.09	6.54	6.63	7320	616	788	364	10.4	1760	3380 D	243	0.67	56.9 D	2.5	< 0.1	< 0.001
0632		7/12/2004	6,861.69	6.16	6.77	7400	635	777	420	11.1	1740	3370 D	249	0.49	54.2 D	2	< 0.1	< 0.001
0632		10/4/2004	6,861.41	6.19	6.89	7470	738 D	945 D	395	9.3	1750	4020 D	252	0.33	59.5 D	2.6	< 0.1	< 0.001
0632		1/3/2005	6,861.60	6.49	6.81	7400	626 D	795 D	387	9.4	1770	3230 D	233	0.45	60.1 D	2.5	< 0.1	< 0.001
0632		4/5/2005	6,861.45	6.46	7.01	6980	634	811	392	9	1820	3330	237	0.5	60.5	2.7	< 0.1	< 0.001
0632		7/11/2005	6,861.37	6.36	7.25	7240	610	811 D	389	9.6	1780	3360 D	284	0.53	63.6 D	3.6	< 0.1	< 0.001
0632		10/4/2005	6,861.11	6.39	7.03	7210	626 D	792 D	399	9.2	1860	3350 D	244	0.49	58 D	2.9	< 0.1	< 0.001
0632		1/9/2006	6,860.99	6.47	7.11	7260	572	772 D	385	8.8	1890	3090 D	232	0.64	66.1 D	2.8	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0632		7/12/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.79	< 0.1	< 0.05	< 0.001	< 0.1	0.0739	0.9	2.1	3	< 0.2	< 1	< 1
0632		10/3/2000	< 0.01	< 0.005	< 0.01	0.06	0.73	< 0.1	< 0.05	0.001	< 0.1	0.018	0.8	< 1	0.8	< 0.2	< 1	< 1
0632		1/8/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.85	< 0.1	< 0.05	0.001	< 0.1	0.064	0.7	1.9	2.6	< 0.2	< 1	< 1
0632		2/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.85	< 0.1	< 0.05	< 0.001	< 0.1	0.066	1.2	2.4	3.6	< 0.2	< 1	< 1
0632		3/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.92	< 0.1	< 0.05	< 0.001	< 0.1	0.0601	1	< 1	1	< 0.2	< 1	< 1
0632		4/3/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.87	< 0.1	< 0.05	< 0.001	< 0.1	0.059	1.1	< 1	1.1	< 0.2	< 1	1.7
0632		5/7/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.95	< 0.1	< 0.05	< 0.001	< 0.1	0.062	< 0.2	< 1	0	< 0.2	< 1	< 1
0632		6/4/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.98	< 0.1	< 0.05	0.004	< 0.1	0.06	1.4	3.1	4.5	< 0.2	< 1	< 1
0632		7/9/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.97	< 0.1	< 0.05	< 0.001	< 0.1	0.0632	1.1	< 1	1.1	< 0.2	< 1	< 1
0632		8/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.1	< 0.1	< 0.05	< 0.001	< 0.1	0.072	0.7	2.2	2.9	< 0.2	< 1	< 1
0632		9/10/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.91	< 0.1	< 0.05	< 0.001	< 0.1	0.0582	1	2.7	3.7	< 0.2	< 1	< 1
0632		10/1/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.85	< 0.1	< 0.05	< 0.001	< 0.1	0.0608	1.1	< 1	1.1	< 0.2	< 1	< 1
0632		11/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.97	< 0.1	< 0.05	< 0.001	< 0.1	0.0542	1	< 1	1	< 0.2	< 1	< 1
0632		12/3/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.87	< 0.1	< 0.05	< 0.001	< 0.1	0.0577	0.9	3.4	4.3	< 0.2	< 1	< 1
0632		1/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.95	< 0.1	< 0.05	< 0.001	< 0.1	0.0575	1.2	1.2	2.4	< 0.2	< 1	3.2
0632		2/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.92	< 0.1	< 0.05	< 0.001	< 0.1	0.051	1.3	1.8	3.1	< 0.2	< 1	< 1
0632		3/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.08	< 0.1	< 0.05	< 0.001	< 0.1	0.066	0.6	< 1	0.6	< 0.2	< 1	1.8
0632		4/2/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.13	< 0.1	< 0.05	< 0.001	< 0.1	0.059	1.3	2.9	4.2	< 0.2	< 1	< 1
0632		5/6/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.12	< 0.1	< 0.05	< 0.001	< 0.1	0.0636	0.8	2.2	3	< 0.2	< 1	2.1
0632		6/3/2002	< 0.01	< 0.005	< 0.01	< 0.05	1	< 0.1	< 0.05	< 0.001	< 0.1	0.058	0.6	< 1	0.6	< 0.2	< 1	< 1
0632		7/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.96	< 0.1	< 0.05	< 0.001	< 0.1	0.0708	1	< 1	1	< 0.2	< 1	< 1
0632		10/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.07	< 0.1	< 0.05	< 0.001	< 0.1	0.0521	2.1	< 1	2.1	< 0.2	< 1	< 1
0632		1/6/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0636	1	< 1	1	< 0.2	< 1	1.8
0632		4/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.22	< 0.1	< 0.05	< 0.001	< 0.1	0.0646	0.8	< 1	0.8	< 0.2	< 1	< 1.0
0632		7/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.27	< 0.1	< 0.05	< 0.001	< 0.1	0.0593	0.8	< 1	0.8	< 0.2	< 1	2
0632		10/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.24	< 0.1	< 0.05	< 0.001	< 0.1	0.07	0.5	< 1	0.5	< 0.2	< 1	1.6
0632		1/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	1.44	< 0.1	< 0.05	< 0.001	< 0.1	0.0625 D	1.1	< 1.0	1.1	< 0.2	< 1.0	1.5
0632		4/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.001	< 0.1	< 0.0008 D	0.5	< 1	0.5	< 0.2	< 1	< 1
0632		7/12/2004	< 0.01	< 0.005	< 0.01	< 0.05	1.35	< 0.1	< 0.05	< 0.001	< 0.1	0.0678 D	1.2	6.4	7.6	< 0.2	< 1.0	1.5
0632		10/4/2004	< 0.01	< 0.005	< 0.01	< 0.05	1.42	< 0.1	< 0.05	< 0.001	< 0.1	0.0652 D	2.3	3.5	5.8	< 0.2	< 1.0	1.1
0632		1/3/2005	< 0.01	< 0.005	< 0.01	< 0.05	1.45	< 0.1	< 0.05	< 0.001	< 0.1	0.0755	1.4	1.5	2.9	< 0.2	< 1.0	3.2
0632		4/5/2005	< 0.01	< 0.005	< 0.01	< 0.05	1.4	< 0.1	< 0.05	< 0.001	< 0.1	0.0768	1.2	< 1.0	1.2	< 0.2	< 1.0	< 1.0
0632		7/11/2005	< 0.01	< 0.005	< 0.01	< 0.05	1.72	< 0.1	< 0.05	< 0.001	< 0.1	0.0734	1.3	< 1.0	1.3	< 0.2	< 1.0	1.3
0632		10/4/2005	< 0.01	< 0.005	< 0.01	< 0.05	1.62	< 0.1	< 0.05	< 0.001	< 0.1	0.0880 D	0.6	3.3	3.9	< 0.2	< 1.0	2.4
0632		1/9/2006	< 0.01	< 0.005	< 0.01	< 0.05	1.98	< 0.1	< 0.05	< 0.001	< 0.1	0.0762	0.9	< 1.0	0.9	< 0.2	< 1.0	1

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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
0632		4/3/2006	6,861.04	6.27	7.04	7140	632 D	808 D	391	9.6	1860	3290 D	234	0.64	68.1 D	2.7	< 0.1	< 0.001
0632		7/17/2006	6,860.79	6.26	6.63	7070	644 D	829 D	418	10.5	1880	3590 D	241	0.58	67.5 D	2.9	< 0.1	< 0.001
0632		10/2/2006	6,860.67	6.37	6.66	7120	616 D	784 D	357	10.3	1920	3230 D	188	0.73	64.9 D	2.89	0.2	< 0.001
0632		1/8/2007	6,860.61	6.38	6.66	7430	629 D	813 D	368	11.2	1890	3420 D	236	0.75	69.5 D	3.02	<0.1	<0.001
0632		4/9/2007	6,860.87	6.47	6.64	7190	608 D	782 D	346	12.2	1930	3290 D	240	0.64	75 D	2.59	<0.1	<0.001
0632		7/9/2007	6,860.59	6.29	6.64	7200	605 D	820 D	410 D	10.9 D	2030	3400 D	140	0.62	78 D	3.56	<0.1	0.01
0632		10/2/2007	6,860.32	6.29	6.62	7350	568 D	774 D	388 D	10.9	1970	3210 D	259 D	0.61	70 D	3.57	<0.1	<0.001
0632		1/15/2008	6,860.29	6.39	6.58	7350 H	551 D	738 D	366 D	10.3	1910	3000 D	248 D	0.7	68 D	3.6	< 0.1	< 0.001
0632		4/7/2008	6,860.49	6.32	6.75	6910	647 D	870 D	436 D	12.6 D	1830	3550 D	231	0.6 D	113 D	3.30	< 0.1	< 0.001
0632		7/7/2008	6,860.29	6.16	6.74 H	7090 H	618	802	377 D	9	1910	3500 D	241	0.56	122 D	4.56	< 0.1	< 0.003
0632		10/6/2008	6,859.79	6.21	6.81	7220	605	826	384 D	9	1870	3760 D	227	0.7	96.3 D	3.03	< 0.1	< 0.001
0632		1/12/2009	6,859.74	6.23	6.62	7460	598	906	429	10	1920	3290 D	226	0.28	114 D	3.52	<0.1	<0.001
0632		4/6/2009	6,859.64	6.29	6.43	7370	580 D	820 D	423 D	9	1960	3460 D	237	0.38	77.3 D	3.96	<0.1	<0.001
0632		7/6/2009	6,859.59	6.25	6.59	7280 H	628 D	817	393 D	10	1920	3910 D	258	0.74	68 D	2.86	<0.1	<0.001
0632		10/6/2009	6,859.09	6.24	7.37	7240	589 D	776	390 D	9	1970	3610 D	258	0.64	80 D	3.06	0.1	<0.001
0639		7/23/1989	6,940.70	6.90	7.16	3752	366	390	168	4.2	390	2319	33.9	0.09	3.6	< 1	< 0.1	< 0.001
0639		10/8/1989	6,940.30	6.60	7.40	4076	410	375	177	6.6	448	2508	34.2	0.06	4	< 1	< 0.1	< 0.001
0639		1/11/1990	6,939.60	6.70	7.13	4734	444	478	186	5.55	497	2830	37.5	0.11	3.4	< 1	< 0.1	< 0.001
0639		4/10/1990	6,939.00	6.70	7.48	5351	467	590	193	5.6	565	3153	40.1	0.11	3.3	< 1	< 0.1	< 0.001
0639		7/10/1990	6,938.60	6.70	7.08	5461	419	583	194	5.1	583	3265	39	< 0.05	3	< 1	< 0.1	< 0.001
0639		10/9/1990	6,938.40	6.70	7.59	4043	305	464	176	6.5	516	2452	27.1	< 0.05	2.05	< 1	< 0.1	< 0.001
0639		1/17/1991	6,938.00	6.20	7.25	4672	382	508	178	6.3	508	2944	32	< 0.05	2	< 1	0.12	< 0.001
0639		4/10/1991	6,937.80	6.50	7.51	4523	347	531	173	7.8	551	2690	29.2	< 0.05	4.8	< 1	< 0.1	< 0.001
0639		7/10/1991	6,937.40	6.50	7.26	4877	309	449	150	5.6	555	3046	27.6	< 0.05	3.3	< 1	< 0.1	< 0.001
0639		10/17/1991	6,937.00	6.40	7.37	4899	412	531	158	7.1	626	2803	40.8	< 0.05	4.4	< 1	< 0.1	< 0.001
0639		1/21/1992	6,936.80	6.40	7.20	4330	409	510	153	5.3	620	2792	29.4	< 0.05	2.93	< 1	< 0.1	< 0.001
0639		4/13/1992	6,936.70	6.30	7.54	5005	363	499	165	6.1	618	2922	33.5	< 0.05	3.31	< 1	< 0.1	< 0.001
0639		7/14/1992	6,936.50	6.30	7.36	4857	393	507	175	6.6	616	2845	28	< 0.05	3.74	< 1	< 0.1	< 0.001
0639		10/13/1992	6,936.40	6.40	7.55	4661	335	437	154	6.6	619	2801	27	0.13	2.1	< 1	< 0.1	< 0.001
0639		1/21/1993	6,936.10	6.50	7.09	3924	340	416	131	5.8	570	2359	23.3	0.15	2	< 1	< 0.1	< 0.001
0639		4/14/1993	6,936.00	6.60	7.85	3417	301	343	123	3.7	561	1988	18.6	0.07	2	< 1	< 0.1	< 0.001
0639		7/15/1993	6,935.70	6.60	6.91	3046	300	300	123	6.9	576	1959	19.2	0.19	1.63	< 1	< 0.1	< 0.001
0639		10/6/1993	6,934.60	6.60	6.76	3060	264	321	115	3.6	539	1862	16.8	< 0.05	2.3	< 1	< 0.1	< 0.001
0639		1/5/1994	6,935.60	6.50	7.38	3018	323	325	104	3.3	559	1781	17	0.22	1.38	< 1	< 0.1	< 0.001
0639		4/13/1994	6,935.30	6.70	7.10	3058	303	304	104	2.8	458	1862	15.8	0.18	1.31	< 1	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0632		4/3/2006	< 0.01	< 0.005	< 0.01	< 0.05	1.84	< 0.1	< 0.05	< 0.001	< 0.1	0.0725 D	1.1	< 1.0	1.1	< 0.2	< 1.0	1
0632		7/17/2006	< 0.01	< 0.005	< 0.01	< 0.05	1.98	< 0.1	< 0.05	< 0.001	< 0.1	0.083	0.9	4.3	5.2	< 0.2	< 1.0	< 1.0
0632		10/2/2006	< 0.01	< 0.005	< 0.01	< 0.05	2	< 0.1	< 0.05	< 0.001	< 0.1	0.0767 D	1	1.6	2.6	< 0.2	< 1	< 1
0632		1/8/2007	<0.01	<0.005	<0.01	<0.05	1.98	<0.1	<0.05	<0.001	<0.1	0.0798	0.8	<1	0.8	<0.2	<1	1
0632		4/9/2007	<0.01	<0.005	<0.01	<0.05	2.13	<0.1	<0.05	<0.001	<0.1	0.0825	0.6	<1	0.6	<0.2	<1	1.4
0632		7/9/2007	<0.01	<0.005	<0.01	<0.05	1.99	<0.1	<0.05	<0.001	<0.1	0.0847	0.6	<1	0.6	<0.2	<1	1.4
0632		10/2/2007	<0.01	<0.005	<0.01	<0.05	2.35	<0.1	<0.05	<0.001	<0.1	0.0819	0.7	<1	0.7	1.6	<1	2.4
0632		1/15/2008	< 0.01	< 0.005	< 0.01	< 0.05	1.94	< 0.1	< 0.05	< 0.001	< 0.1	0.0667 D	0.9	< 1	0.9	< 0.2	< 1	2
0632		4/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	2.29	< 0.1	< 0.05	< 0.001	< 0.1	0.0836	0.8	2.5	3.3	0.6	0 U	1.7
0632		7/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	2.63	< 0.1	< 0.05	< 0.001	< 0.1	0.0797	0.74	2.6	3.34	0.4	0.5 U	1.5
0632		10/6/2008	< 0.01	< 0.005	< 0.01	< 0.05	2.39	< 0.1	< 0.05	< 0.001	< 0.1	0.076	0.57	1.2 U	1.77	-0.9 U	-2 U	0.9
0632		1/12/2009	<0.01	<0.005	<0.01	<0.05	2.52	<0.1	<0.05	0.001	<0.1	0.0411	0.67	3.2	3.87	-0.3 U	-3 U	1.8
0632		4/6/2009	<0.01	<0.005	<0.01	<0.05	2.63	<0.1	<0.05	0.002	<0.1	0.0801	0.73	1.7	2.43	-0.2 U	-0.5 U	1.4
0632		7/6/2009	<0.01	<0.005	<0.01	<0.05	2.48	<0.1	<0.05	<0.001	<0.1	0.0718	0.85	2.5	3.35	0.05 U	0.2 U	1.6
0632		10/6/2009	<0.01	<0.005	<0.01	<0.05	2.32	<0.1	<0.05	<0.001	<0.1	0.0764	0.99	2.6	3.59	-0.02 U	-2 U	0.5 U
0639		7/23/1989	< 0.05	< 0.01	0.01	< 0.05	1.8	< 0.1	< 0.05	0.001	< 0.1	0.174	0.3	< 1	0.3	< 0.2	< 1	2.5
0639		10/8/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.27	< 0.1	< 0.05	0.001	< 0.1	0.291	1.8	< 1	1.8	14.3	< 1	17.8
0639		1/11/1990	< 0.05	< 0.01	0.04	< 0.05	0.41	< 0.1	< 0.05	< 0.001	< 0.1	0.276	< 0.2	< 1	0	3.4	10.3	4
0639		4/10/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.56	< 0.1	< 0.05	0.002	< 0.1	0.096	1.3	1.2	2.5	< 0.2	< 1	1.7
0639		7/10/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.89	< 0.1	< 0.05	0.001	< 0.1	0.2416	< 0.2	< 1	0	< 0.2	< 1	< 1
0639		10/9/1990	< 0.05	< 0.01	0.02	< 0.05	0.99	< 0.1	< 0.05	< 0.001	< 0.1	0.2623	< 0.2	1.3	1.3	< 0.2	1.9	< 1
0639		1/17/1991	< 0.01	< 0.01	< 0.01	< 0.05	1.34	< 0.1	< 0.05	0.002	< 0.1	0.1984	1.4	< 1	1.4	< 0.2	< 1	1.9
0639		4/10/1991	< 0.01	< 0.01	< 0.01	< 0.05	1.14	< 0.1	< 0.05	0.002	< 0.1	0.196	< 0.2	< 1	0	< 0.2	< 1	< 1
0639		7/10/1991	< 0.01	< 0.01	0.01	< 0.05	1.47	< 0.1	< 0.05	0.035	< 0.1	0.2739	1	< 1	1	< 0.2	< 1	1
0639		10/17/1991	< 0.01	< 0.01	< 0.01	< 0.05	1.48	< 0.1	< 0.05	0.002	< 0.1	0.272	0.2	< 1	0.2	< 0.2	< 1	< 1
0639		1/21/1992	< 0.01	< 0.01	< 0.01	< 0.05	1.27	< 0.1	< 0.05	0.002	< 0.1	0.17	0.7	1.8	2.5	< 0.2	2.2	< 1
0639		4/13/1992	< 0.01	< 0.01	< 0.01	< 0.05	1.59	< 0.1	< 0.05	0.006	< 0.1	0.367	2.1	2.8	4.9	< 0.2	3.3	2.2
0639		7/14/1992	< 0.01	< 0.01	< 0.01	< 0.05	1.41	< 0.1	< 0.05	0.002	< 0.1	0.245	0.3	1.6	1.9	< 0.2	1.9	< 1
0639		10/13/1992	< 0.01	< 0.01	< 0.01	< 0.05	1.51	< 0.1	< 0.05	0.003	< 0.1	0.223	0.8	3.5	4.3	< 0.2	< 1	< 1
0639		1/21/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.07	< 0.1	< 0.05	0.002	< 0.1	0.094	< 0.2	4.1	4.1	< 0.2	3.9	< 1
0639		4/14/1993	< 0.01	< 0.01	< 0.01	< 0.05	1.67	< 0.1	< 0.05	0.003	< 0.1	0.08	6	6	12	< 0.2	< 1	6.4
0639		7/15/1993	< 0.01	< 0.01	< 0.01	< 0.05	1.44	< 0.1	< 0.05	0.009	< 0.1	0.109	0.2	< 1	0.2	< 0.2	< 1	< 1
0639		10/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	1.15	< 0.1	< 0.05	0.003	< 0.1	0.071	3	1.9	4.9	< 0.2	2	5.8
0639		1/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	1.71	< 0.1	< 0.05	< 0.001	< 0.1	0.107	3.8	< 1	3.8	< 0.2	3.2	4.8
0639		4/13/1994	< 0.01	< 0.01	< 0.01	< 0.05	1.18	< 0.1	< 0.05	0.002	< 0.1	0.11	0.3	< 1	0.3	< 0.2	7.2	< 1

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TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0639		10/5/1994	6,935.50	6.60	7.99	3396	368	348	119	2.6	373	2142	16.3	0.15	1.61	< 1	< 0.1	< 0.001
0642		7/23/1989	6,928.10	6.90	7.36	4083	675	233	179	2.7	405	2209	37.1	0.13	80	< 1	< 0.1	< 0.001
0642		10/8/1989	6,927.50	6.80	7.40	4140	634	227	177	3.6	414	2182	37.9	0.08	93	< 1	< 0.1	< 0.001
0642		1/11/1990	6,926.50	6.80	7.20	4080	628	229	174	2.61	421	2176	26.5	0.06	85	< 1	< 0.1	< 0.001
0642		4/10/1990	6,925.70	6.80	7.50	4161	634	250	171	2.4	430	2129	35.7	0.12	75	< 1	< 0.1	< 0.001
0642		7/10/1990	6,924.80	6.90	7.30	4232	714	263	171	1.9	426	2209	34	< 0.05	83.4	< 1	< 0.1	< 0.001
0642		10/9/1990	6,924.10	6.70	7.62	4168	582	242	174	3.2	415	2319	34.4	< 0.05	66.9	< 1	< 0.1	< 0.001
0642		1/17/1991	6,923.50	6.70	7.58	4131	676	268	181	2.4	414	2323	35.1	< 0.05	61.5	< 1	< 0.1	< 0.001
0642		4/10/1991	6,922.80	6.80	7.84	4110	623	273	162	4.4	432	2216	34.1	< 0.05	87	< 1	< 0.1	< 0.001
0642		7/10/1991	6,922.20	6.70	7.49	4089	625	257	155	2.8	423	2309	33.1	< 0.05	68.1	< 1	< 0.1	< 0.001
0642		10/17/1991	6,921.60	6.70	7.52	4093	639	233	167	3.6	442	2229	34.5	< 0.05	55.4	< 1	< 0.1	< 0.001
0642		1/21/1992	6,920.60	6.80	7.35	4133	684	223	158	2.4	425	2307	75	< 0.05	38.1	< 1	< 0.1	< 0.001
0642		4/13/1992	6,920.00	6.70	7.43	4096	562	238	185	3.1	399	1851	31.5	< 0.05	29	< 1	< 0.1	< 0.001
0642		7/14/1992	6,919.30	6.40	7.72	4196	668	266	183	3.2	405	2518	28.4	< 0.05	46	< 1	< 0.1	0.001
0642		10/13/1992	6,918.50	6.80	7.59	3909	617	260	169	3	422	2721	29	< 0.05	45.9	< 1	< 0.1	0.001
0642		1/21/1993	6,917.60	6.90	7.52	4295	642	268	157	3.5	422	2575	31.6	< 0.05	32.8	< 1	< 0.1	0.001
0642		4/14/1993	6,917.00	7.00	7.95	4460	640	283	166	2.2	453	2621	30.4	< 0.05	35.1	< 1	< 0.1	< 0.001
0642		7/15/1993	6,916.20	7.00	7.02	4023	598	266	182	5.1	478	2657	33	0.08	2.2	< 1	< 0.1	< 0.001
0642		10/6/1993	6,912.90	7.10	7.10	4659	598	325	192	2.2	432	2849	28.6	< 0.05	29.5	< 1	< 0.1	< 0.001
0642		1/5/1994	6,915.00	7.10	7.68	4362	580	326	150	2.8	450	2709	29.5	< 0.05	22.3	< 1	< 0.1	< 0.001
0642		4/13/1994	6,914.40	7.10	7.33	4446	610	334	149	2.8	442	2782	30	0.18	21.2	< 1	< 0.1	< 0.001
0642		7/21/1994	6,913.70	7.10	7.37	4667	789	374	164	4.1	471	3117	27.3	0.08	21.3	< 1	< 0.1	0.001
0642		10/5/1994	6,913.30	7.00	7.70	4699	649	377	178	4.5	490	2863	29.8	0.11	20.6	< 1	< 0.1	< 0.001
0642		1/5/1995	6,912.60	7.00	7.57	4800	630	379	163	5.2	505	2823	30.7	0.17	18.2	< 1	< 0.1	< 0.001
0642		4/5/1995	6,912.60	7.00	7.44	4804	583	390	156	3.9	519	2869	30	0.2	17	< 1	< 0.1	< 0.001
0642		7/6/1995	6,911.60	7.00	7.99	4613	605	377	167	5.3	527	2781	29	< 0.05	20.7	< 1	< 0.1	< 0.001
0642		10/4/1995	6,911.80	7.00	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
0644		7/23/1989	6,936.30	7.30	7.52	4441	769	206	187	5.2	498	1812	72.9	0.07	178	< 1	< 0.1	< 0.001
0644		10/8/1989	6,935.70	6.80	7.50	4778	860	227	203	5.8	676	1776	89.3	0.1	300	< 1	< 0.1	< 0.001
0644		1/11/1990	6,935.00	6.70	7.16	4994	860	254	220	4.15	653	1789	99	0.07	384	< 1	< 0.1	< 0.001
0644		4/10/1990	6,934.30	6.80	7.52	5426	854	260	222	4.2	623	1669	100	0.11	396	< 1	< 0.1	< 0.001
0644		7/10/1990	6,933.80	6.80	7.24	6272	855	274	236	3.7	633	1706	94.8	< 0.05	615	< 1	< 0.1	< 0.001
0644		10/9/1990	6,933.00	6.70	7.68	5576	809	280	232	5.1	586	1689	97.4	< 0.05	377	< 1	< 0.1	< 0.001
0644		1/17/1991	6,932.50	6.60	7.28	5447	922	294	242	5.6	526	1731	97	< 0.05	512	< 1	0.14	< 0.001
0644		4/10/1991	6,932.10	6.60	7.80	5265	855	293	244	6.2	616	1661	99.5	0.05	435	< 1	< 0.1	< 0.001

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TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0639		10/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.8	< 0.1	< 0.05	< 0.001	< 0.1	0.07	< 0.2	7	7	< 0.2	< 1	10.8
0642		7/23/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.002	< 0.1	0.0356	0.7	< 1	0.7	5.4	< 1	4.3
0642		10/8/1989	< 0.05	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.002	< 0.1	0.083	2.8	1.2	4	3.6	< 1	6.4
0642		1/11/1990	< 0.05	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.001	< 0.1	0.001	< 0.2	< 1	0	0.2	< 1	1
0642		4/10/1990	< 0.05	< 0.01	0.01	< 0.05	0.1	< 0.1	< 0.05	0.002	< 0.1	0.036	4.7	< 1	4.7	4.3	< 1	0.4
0642		7/10/1990	< 0.05	< 0.01	0.02	< 0.05	< 0.01	< 0.1	< 0.05	0.002	< 0.1	0.055	< 0.02	< 1	0	< 0.2	< 1	< 1
0642		10/9/1990	< 0.05	< 0.01	0.02	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0446	< 0.2	< 1	0	< 0.2	< 1	< 1
0642		1/17/1991	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0357	< 0.2	< 1	0	< 0.2	< 1	< 1
0642		4/10/1991	< 0.01	< 0.01	0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.001	< 0.1	0.0363	< 0.2	< 1	0	< 0.2	3	< 1
0642		7/10/1991	< 0.01	< 0.01	0.02	< 0.05	< 0.01	< 0.1	< 0.05	0.004	< 0.1	0.0557	0.8	< 1	0.8	< 0.2	3.2	< 1
0642		10/17/1991	< 0.01	< 0.01	< 0.01	< 0.05	< 0.03	< 0.1	< 0.05	0.002	< 0.1	0.04	0.3	< 1	0.3	< 0.2	< 1	< 1
0642		1/21/1992	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.002	< 0.1	0.029	0.5	< 1	0.5	< 0.2	< 1	< 1
0642		4/13/1992	< 0.01	< 0.01	0.02	< 0.05	0.04	< 0.1	< 0.05	0.002	< 0.1	0.108	0.5	< 1	0.5	< 0.2	< 1	< 1
0642		7/14/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.05	< 0.1	< 0.05	0.003	< 0.1	0.05	0.4	1.1	1.5	< 0.2	< 1	< 1
0642		10/13/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	0.001	< 0.1	0.055	0.3	3	3.3	< 0.2	< 1	< 1
0642		1/21/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.05	< 0.1	< 0.05	0.003	< 0.1	0.046	0.4	< 1	0.4	< 0.2	2.7	1.3
0642		4/14/1993	< 0.001	< 0.01	< 0.01	< 0.05	0.16	< 0.1	< 0.05	0.001	< 0.1	0.06	0.7	< 1	0.7	< 0.2	< 1	< 1
0642		7/15/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.1	< 0.1	< 0.05	0.003	< 0.1	0.051	0.5	< 1	0.5	< 0.2	< 1	< 1
0642		10/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.036	0.5	1.3	1.8	< 0.2	< 1	< 1
0642		1/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.046	0.4	< 1	0.4	< 0.2	3.1	< 1
0642		4/13/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.07	< 0.1	< 0.05	0.003	< 0.1	0.043	0.9	< 1	0.9	< 0.2	2.7	< 1
0642		7/21/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	0.006	< 0.1	0.038	0.8	4.6	5.4	< 0.2	3.5	5.3
0642		10/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.039	0.7	1.7	2.4	< 0.2	3.9	3.4
0642		1/5/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.038	1.3	< 1	1.3	< 0.2	< 1	1.5
0642		4/5/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.09	< 0.1	< 0.05	0.002	< 0.1	0.042	3.4	2.9	6.3	< 0.2	2.8	7.9
0642		7/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.14	< 0.1	< 0.05	0.003	< 0.1	0.0549	0.6	< 1	0.6	< 0.2	1.2	4.8
0642		10/4/1995	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
0644		7/23/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.013	< 0.1	0.0652	0.5	< 1	0.5	< 0.2	1.2	1.7
0644		10/8/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.07	< 0.1	< 0.05	0.018	< 0.1	0.093	0.4	< 1	0.4	0.7	< 1	< 1
0644		1/11/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	0.011	< 0.1	0.071	0.3	< 1	0.3	1.2	< 1	4.2
0644		4/10/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	0.007	< 0.1	0.069	0.7	1.4	2.1	< 0.2	< 1	1.2
0644		7/10/1990	< 0.05	< 0.01	0.01	< 0.05	0.04	< 0.1	< 0.05	0.007	< 0.1	0.11	0.6	< 1	0.6	< 0.2	< 1	< 1
0644		10/9/1990	< 0.05	< 0.01	0.02	< 0.05	0.04	< 0.1	< 0.05	0.004	< 0.1	0.0656	< 0.2	< 1	0	< 0.2	< 1	< 1
0644		1/17/1991	< 0.01	< 0.01	0.01	< 0.05	0.07	< 0.1	< 0.05	0.002	< 0.1	0.0627	< 0.2	6.6	6.6	< 0.2	1.3	< 1
0644		4/10/1991	< 0.01	< 0.01	0.02	< 0.05	0.07	< 0.1	< 0.05	0.005	< 0.1	0.0608	0.4	1.9	2.3	< 0.2	3.8	< 1

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0644		7/10/1991	6,931.70	6.70	7.55	5991	845	272	218	4.2	586	1852	96.2	0.06	534	< 1	< 0.1	< 0.001
0644		10/17/1991	6,931.00	6.60	7.50	5606	929	291	251	7	617	1839	111	< 0.05	401	< 1	0.14	< 0.001
0644		1/21/1992	6,930.50	6.70	7.40	4715	794	280	225	4.1	591	1896	98	< 0.05	234	< 1	< 0.1	< 0.001
0644		4/13/1992	6,930.00	6.60	7.40	5318	786	271	268	5.5	539	1851	103	0.08	244	< 1	< 0.1	< 0.001
0644		7/14/1992	6,929.00	6.30	7.38	5770	824	270	285	6.6	464	1884	92.1	< 0.05	338	< 1	< 0.1	< 0.001
0644		10/13/1992	6,929.00	6.70	7.34	5731	771	263	241	5.4	488	2121	97.5	0.07	250	< 1	< 0.1	< 0.001
0645		10/8/1989	6,941.30	7.10	7.40	7992	957	440	518	6.9	378	1982	159	0.13	798	< 1	< 0.1	< 0.001
0645		1/11/1990	6,940.80	6.70	7.18	8426	929	539	574	4.48	354	2299	168	0.14	926	< 1	< 0.1	< 0.001
0645		4/10/1990	6,940.60	6.90	7.54	9179	917	600	560	4.2	369	2489	169	0.13	840	< 1	< 0.1	< 0.001
0645		7/10/1990	6,940.00	7.00	7.28	10530	829	680	637	4.2	365	2728	157	< 0.05	1225	< 1	< 0.1	< 0.001
0645		10/10/1990	6,940.00	6.90	7.41	9343	742	604	644	4.6	351	2674	150	0.09	800	< 1	< 0.1	< 0.001
0645		1/17/1991	6,939.80	6.90	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
0645		4/10/1991	6,939.60	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
0801		10/17/1989	6,873.40	6.50	6.69	9214	626	1102	472	23	1940	4591	246	33.6	26	1.8	< 0.1	< 0.001
0801		1/11/1990	no data	6.50	6.74	8830	628	997	470	14.9	2111	4416	262	25.1	62	< 1	< 0.1	< 0.001
0801		4/5/1990	no data	6.80	7.16	5543	774	852	500	9.1	2103	2946	228	9.3	115	< 1	< 0.1	< 0.001
0801		7/9/1990	no data	6.50	6.82	9507	626	1095	436	15.5	2020	4826	254	40	39.6	1.92	0.19	< 0.001
0801		10/3/1990	no data	6.30	7.09	9800	565	1187	493	15.3	1875	5090	269	34.6	21.1	1.6	< 0.1	< 0.001
0801		1/3/1991	no data	6.10	6.84	9316	628	1232	482	23.6	1930	4650	239	32.4	31.4	2.72	0.59	< 0.001
0801		4/11/1991	no data	6.10	7.09	9510	601	1092	415	16.6	1991	4788	274	30	27.5	3.4	0.19	< 0.001
0801		7/11/1991	no data	6.30	7.08	9566	620	1142	410	12.8	1872	5121	240	40	26.5	3.5	0.12	< 0.001
0801		10/23/1991	no data	6.30	7.08	9049	566	1127	432	13.1	1870	4508	271	27.7	10.1	3.3	0.63	< 0.001
0801		1/16/1992	no data	6.20	7.28	8346	502	961	441	13	1825	4891	247	41.5	13.6	3.6	< 0.1	< 0.001
0801		4/13/1992	no data	6.20	7.11	9240	518	635	444	15.1	1869	4650	255	31.7	12.8	4.2	0.18	< 0.001
0801		7/8/1992	no data	6.10	7.38	8276	635	634	539	16	1915	4512	246	28.1	38.1	3	0.23	< 0.001
0801		10/8/1992	no data	6.40	7.72	9244	517	1003	478	17.4	1832	5132	229	39.5	14.7	3.8	0.3	< 0.001
0801		1/7/1993	no data	6.30	7.28	8060	555	1030	469	14.1	1575	4709	249	42.8	9.9	4.6	< 0.1	< 0.001
0801		4/7/1993	no data	6.40	7.19	8253	476	955	472	12.1	1603	4867	247	43.9	10.2	4	< 0.1	< 0.001
0801		7/14/1993	no data	6.40	6.93	8158	555	1011	432	13	1709	4887	247	34	14.7	4.5	< 0.1	< 0.001
0801		10/7/1993	no data	6.30	7.08	7688	525	931	393	12.6	1641	4231	229	32	19	3.5	< 0.1	< 0.001
0801		1/6/1994	no data	6.40	6.82	7788	522	909	438	12.6	1540	4519	230	32.3	28.6	4.3	0.7	< 0.001
0801		4/12/1994	no data	6.40	6.80	8786	515	905	415	12.8	1454	5061	233	42.7	9.9	2.7	0.36	< 0.001
0801		7/27/1994	no data	6.40	7.24	8502	599	902	382	13.3	1530	4930	222	35.6	25.2	4.2	< 0.1	< 0.001
0801		10/5/1994	no data	6.20	7.29	8093	564	998	440	13.1	1619	4544	236	29.9	10.7	3.25	0.44	< 0.001
0801		1/4/1995	no data	6.20	6.97	8714	635	945	425	14.7	1599	4925	226	45	9.57	3.58	0.51	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0644		7/10/1991	< 0.01	< 0.01	0.02	< 0.05	0.05	< 0.1	< 0.05	0.007	< 0.1	0.1133	0.6	< 1	0.6	< 0.2	< 1	< 1
0644		10/17/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.07	< 0.1	< 0.05	0.008	< 0.1	0.078	0.6	< 1	0.6	< 0.2	4.9	< 1
0644		1/21/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.08	< 0.1	< 0.05	0.004	< 0.1	0.042	1.8	3	4.8	< 0.2	< 1	2
0644		4/13/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	0.008	< 0.1	0.043	1.6	< 1	1.6	< 0.2	< 1	1.8
0644		7/14/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.15	< 0.1	< 0.05	0.005	< 0.1	0.08	0.8	3.1	3.9	< 0.2	< 1	< 1
0644		10/13/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.15	< 0.1	< 0.05	0.012	< 0.1	0.109	2.2	< 1	2.2	< 0.2	< 1	2.3
0645		10/8/1989	< 0.05	0.052	< 0.01	< 0.05	1.2	< 0.1	< 0.05	0.04	< 0.1	0.068	< 0.2	< 1	0	< 0.2	< 1	< 1
0645		1/11/1990	< 0.05	0.074	< 0.01	< 0.05	1.3	< 0.1	< 0.05	0.022	< 0.1	0.038	0.2	< 1	0.2	< 0.2	< 1	1.1
0645		4/10/1990	< 0.05	< 0.01	0.01	< 0.05	0.9	< 0.1	< 0.05	0.022	< 0.1	0.041	0.4	1.1	1.5	< 0.2	< 1	1
0645		7/10/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.72	< 0.1	< 0.05	0.018	< 0.1	0.052	< 0.2	< 1	0	1.1	< 1	1
0645		10/10/1990	< 0.05	0.068	0.01	< 0.05	0.54	< 0.1	< 0.05	0.016	< 0.1	< 0.034	< 0.2	1.6	1.6	< 0.2	< 1	< 1
0645		1/17/1991	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
0645		4/10/1991	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
0801		10/17/1989	< 0.05	< 0.01	0.48	< 0.05	31	< 0.01	0.31	< 0.001	< 0.1	0.0636	1.1	< 1	1.1	1.6	2.4	3.1
0801		1/11/1990	< 0.05	< 0.01	0.13	< 0.05	19	< 0.1	0.14	< 0.001	< 0.1	0.057	0.7	< 1	0.7	2.3	< 1	4
0801		4/5/1990	< 0.05	< 0.01	0.02	< 0.05	5.8	< 0.1	0.15	0.001	< 0.1	0.099	0.6	< 1	0.6	< 0.2	< 1	1
0801		7/9/1990	< 0.05	< 0.01	0.08	< 0.05	31.6	< 0.1	0.17	0.001	< 0.1	0.071	< 0.2	< 1	0	< 0.2	< 1	< 1
0801		10/3/1990	< 0.05	< 0.01	0.18	< 0.05	39.6	< 0.1	0.13	< 0.001	< 0.1	0.037	1	< 1	1	< 0.2	< 1	< 1
0801		1/3/1991	< 0.01	0.01	0.2	< 0.05	32.4	< 0.1	0.17	< 0.001	< 0.1	0.0654	1.8	< 1	1.8	< 0.2	< 1	2
0801		4/11/1991	< 0.01	< 0.01	0.13	< 0.05	30.1	< 0.1	0.13	< 0.001	< 0.1	0.047	1.1	< 1	1.1	< 0.2	< 1	1
0801		7/11/1991	< 0.01	< 0.01	0.08	< 0.05	32	< 0.1	< 0.05	0.001	< 0.1	0.1228	1.6	2.3	3.9	< 0.2	2.4	2
0801		10/23/1991	< 0.01	< 0.01	0.09	no data	34	< 0.1	0.1	< 0.001	< 0.1	0.186	0.5	4.8	5.3	< 0.2	< 1	< 1
0801		1/16/1992	< 0.01	< 0.01	0.11	< 0.05	32.5	< 0.1	0.12	0.005	< 0.1	0.031	0.3	3.7	4	< 0.2	1.5	< 1
0801		4/13/1992	< 0.01	< 0.01	0.09	< 0.05	31.3	< 0.1	0.1	0.005	< 0.1	0.034	0.5	1	1.5	< 0.2	< 1	< 1
0801		7/8/1992	< 0.01	< 0.01	0.03	< 0.05	24.3	< 0.1	< 0.05	0.001	< 0.1	0.04	0.9	< 1	0.9	< 0.2	< 1	< 1
0801		10/8/1992	< 0.01	< 0.01	0.06	< 0.05	37	< 0.1	0.07	< 0.001	< 0.1	0.022	1.7	< 1	1.7	< 0.2	< 1	1.9
0801		1/7/1993	< 0.01	< 0.01	0.12	< 0.05	45.3	< 0.1	< 0.05	0.006	< 0.1	0.03	0.7	< 1	0.7	< 0.2	< 1	< 1
0801		4/7/1993	< 0.001	< 0.01	0.11	< 0.05	45.1	< 0.1	0.16	< 0.001	< 0.1	0.069	0.4	< 1	0.4	< 0.2	1.8	< 1
0801		7/14/1993	< 0.01	< 0.01	0.08	< 0.05	30	< 0.1	0.1	< 0.001	< 0.1	0.028	0.7	3.8	4.5	< 0.2	< 1	< 1
0801		10/7/1993	< 0.01	< 0.01	0.09	< 0.05	31.9	< 0.1	< 0.05	< 0.001	< 0.1	0.035	1.5	3.3	4.8	< 0.2	< 1	2
0801		1/6/1994	< 0.01	< 0.01	0.09	< 0.05	33.4	< 0.1	0.09	< 0.001	< 0.1	0.047	1.3	1	2.3	< 0.2	< 1	3.9
0801		4/12/1994	< 0.01	< 0.01	0.12	< 0.05	34.3	< 0.1	0.15	< 0.001	< 0.1	0.039	0.9	< 1	0.9	< 0.2	3.2	< 1
0801		7/27/1994	< 0.01	< 0.01	0.1	< 0.05	20.5	< 0.1	0.09	0.001	< 0.1	0.036	1.1	5.2	6.3	< 0.2	1.9	5.5
0801		10/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	20.4	< 0.1	0.07	< 0.001	< 0.1	0.036	0.8	1.7	2.5	< 0.2	1	3.5
0801		1/4/1995	< 0.01	< 0.01	0.06	< 0.05	31.5	< 0.1	0.09	< 0.001	< 0.1	0.034	1.2	< 1	1.2	< 0.2	< 1	2.9

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0801		4/6/1995	no data	6.20	6.70	8297	560	910	402	13.1	1652	4455	258	31.8	10.2	2.28	< 0.1	< 0.001
0801		7/6/1995	no data	6.30	7.64	8028	535	883	405	13.7	1627	4335	230	30.4	8.82	4.11	< 0.1	< 0.001
0801		10/4/1995	no data	6.30	7.29	8115	535	890	406	12.1	1619	4668	212	24.4	11	2.91	< 0.1	< 0.001
0801		1/3/1996	no data	6.50	7.18	7962	629	952	414	12.3	1620	4640	242	16.8	9.91	2.81	< 0.1	< 0.001
0801		4/2/1996	no data	6.50	7.31	8061	550	1000	408	13	1623	4370	224	21.5	9.08	3.36	< 0.1	< 0.001
0801		7/17/1996	no data	6.30	6.79	8133	527	864	411	15.1	1532	4100	241	20.6	8.22	4.32	< 0.1	< 0.001
0801		10/8/1996	no data	6.30	6.97	8130	554	915	404	13.9	1520	4325	233	19.9	4.46	3.6	< 0.1	< 0.001
0801		1/28/1997	no data	6.50	7.73	8340	555	906	361	13.8	1678	4460	324	22.2	3.75	3.49	< 0.1	< 0.001
0801		4/8/1997	no data	6.40	7.57	8190	562	944	399	14.5	1520	4500	232	21.2	6.33	3.5	< 0.1	< 0.001
0801		7/8/1997	no data	6.60	7.43	8240	575	956	420	15	1520	4480	243	21.2	6.43	3.42	< 0.1	< 0.001
0801		10/8/1997	no data	6.20	7.51	8100	568	924	379	13.8	1520	4350	273	21.1	5.06	4.06	< 0.1	< 0.001
0801		1/20/1998	no data	6.20	7.72	8090	553	898	397	14.9	1500	4400	269	21	7.07	4.1	< 0.1	< 0.001
0801		4/7/1998	no data	6.50	7.42	8140	553	915	375	13.3	1480	4260	214	20.4	7.42	3.9	< 0.1	< 0.001
0801		7/7/1998	no data	6.60	7.42	8250	563	969	407	14.1	1450	4200	233	22.5	4.86	3.9	< 0.1	< 0.001
0801		10/6/1998	no data	6.40	7.58	8040	546	924	401	14.7	1440	4300	250	23.2	6.56	1.3	< 0.1	< 0.001
0801		1/12/1999	no data	6.50	7.49	8010	470	858	347	14.3	1390	4450	222	20.3	6.05	3.3	< 0.1	< 0.001
0801		4/13/1999	no data	6.40	7.65	7940	534	902	357	13	1410	4060	221	19.8	6.37	3.9	< 0.1	< 0.001
0801		7/20/1999	no data	6.50	7.63	7950	545	932	414	15.5	1420	4240	220	19.7	5.51	3.5	< 0.1	< 0.001
0801		10/5/1999	no data	6.37	7.53	7500	594	936	352	14.7	1450	4300	227	16.2	25.1	2.3	< 0.1	< 0.001
0801		1/4/2000	no data	6.50	7.94	8450	539	1010	307	16.1	1400	4670	205	20.2	11.9	2.6	< 0.1	< 0.001
0801		1/8/2001	6,852.90	6.67	7.70	7330	578	820	359	16.6	1570	3700	240	9.07	48.9	2.2	< 0.1	0.002
0801		2/6/2001	6,853.85	6.90	7.42	7200	642	882	397	15.8	1570	3970	226	9.46	29.9	1.6	< 0.1	< 0.001
0801		3/5/2001	6,854.30	6.92	7.19	6610	550	785	273	15.1	1580	3660	203	8.34	21.9	2.3	< 0.1	< 0.001
0801		4/3/2001	6,854.80	6.59	7.37	6930	615	825	320	12.8	1570	3580	214	7.88	17.5	3.11	< 0.1	< 0.001
0801		5/7/2001	6,855.20	6.47	7.53	7090	541	723	282	12.6	1560	3120	229	7.71	13.3	1.9	< 0.1	< 0.001
0801		6/4/2001	6,855.20	6.47	7.33	6680	549	745	294	12.7	1560	3380	225	8.12	8.45	3.3	< 0.1	< 0.001
0801		7/9/2001	6,855.38	7.02	7.11	6900	585	800	312	12.7	1610	3320	237	7.07	6.25	3.4	< 0.1	< 0.001
0801		8/6/2001	6,855.43	6.76	7.40	6890	550	760	310	13	1580	3300	240	7.5	4.4	3	< 0.1	< 0.001
0801		9/10/2001	6,855.80	6.38	7.00	6860	560	770	319	13.6	1600	3300	248	6.75	< 0.1	2.85	< 0.1	< 0.001
0801		10/1/2001	6,855.75	6.45	7.50	7060	530	750	330	14.1	1600	3200	253	7.2	2.9	2.4	< 0.1	< 0.001
0801		11/5/2001	6,855.90	6.46	7.00	7070	583	805	318	14.3	1590	3670	272	7	3.3	2.82	< 0.1	< 0.001
0801		12/4/2001	6,856.10	6.56	7.00	7090	531	734	293	12.3	1590	3240	229	7.4	3	2.03	< 0.1	< 0.001
0801		1/8/2002	6,856.10	6.58	7.20	7100	620	817	261	13.9	1570	3840	274	6.8	2.34	2.9	< 0.1	< 0.001
0801		2/4/2002	6,856.20	6.45	7.10	7120	603	790	290	13.6	1600	3640	264	6.8	2.08	3.1	< 0.1	< 0.001
0801		3/4/2002	6,856.15	6.41	7.20	7070	563	780	354	13.8	1590	3720	259	3.6	2.41	2.7	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0801		4/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	23.4	< 0.1	< 0.05	< 0.001	< 0.1	0.039	1.6	2.4	4	< 0.2	1.9	5.4
0801		7/6/1995	< 0.01	< 0.01	0.03	< 0.05	23	< 0.1	< 0.05	0.001	< 0.1	0.0435	1.5	1.5	3	0.3	< 1	4.8
0801		10/4/1995	< 0.01	< 0.01	< 0.01	< 0.05	18.1	< 0.1	< 0.05	< 0.001	< 0.1	0.038	1.3	< 1	1.3	0.6	< 1	1.1
0801		1/3/1996	< 0.01	< 0.01	< 0.01	< 0.05	18.6	< 0.1	< 0.05	< 0.001	< 0.1	0.042	1.3	< 1	1.3	< 0.2	3.1	2
0801		4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	17	< 0.1	< 0.05	< 0.001	< 0.1	0.063	0.3	< 1	0.3	< 0.2	2.9	3
0801		7/17/1996	< 0.01	< 0.01	0.01	< 0.05	19.5	< 0.1	< 0.05	< 0.001	< 0.1	0.051	0.9	< 1	0.9	1.1	< 1	1.2
0801		10/8/1996	< 0.01	< 0.01	< 0.01	< 0.05	17.1	< 0.1	< 0.05	< 0.001	< 0.1	0.046	1.3	< 1	1.3	< 0.2	< 1	< 1
0801		1/28/1997	< 0.01	< 0.01	0.02	< 0.05	19.4	< 0.1	0.06	< 0.001	< 0.1	0.028	2.4	< 1	2.4	< 0.2	6.3	1.2
0801		4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	20.2	< 0.1	< 0.05	< 0.001	< 0.1	0.04	0.9	< 1	0.9	< 0.2	< 1	< 1
0801		7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	17	< 0.1	< 0.05	< 0.001	< 0.1	0.039	1.2	3.3	4.5	< 0.2	< 1	< 1
0801		10/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	21.8	< 0.1	< 0.05	< 0.001	< 0.1	0.039	1	< 1	1	< 0.2	< 1	< 1
0801		1/20/1998	< 0.01	< 0.005	< 0.01	< 0.05	19.7	< 0.1	< 0.05	< 0.001	< 0.1	0.043	1.3	< 1	1.3	< 0.2	< 1	< 1
0801		4/7/1998	0.01	< 0.005	< 0.01	< 0.05	16.5	< 0.1	0.75	< 0.001	< 0.1	0.0439	1.2	< 1	1.2	< 0.2	< 1	< 1
0801		7/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	20.8	< 0.1	< 0.05	< 0.001	< 0.1	0.0411	1.6	1.7	3.3	< 0.2	< 1	< 1
0801		10/6/1998	< 0.01	0.005	< 0.01	< 0.05	17.3	< 0.1	< 0.05	< 0.001	< 0.1	0.0262	1.2	< 1	1.2	< 0.2	< 1	1.3
0801		1/12/1999	< 0.01	< 0.005	< 0.01	< 0.05	16.2	< 0.1	< 0.05	< 0.001	< 0.1	0.0433	0.8	< 1	0.8	< 0.2	< 1	< 1
0801		4/13/1999	< 0.01	0.006	< 0.01	< 0.05	17	< 0.1	< 0.05	< 0.001	< 0.1	0.0389	< 0.2	2.5	2.5	< 0.2	< 1	< 1
0801		7/20/1999	< 0.01	< 0.006	0.02	< 0.05	12.6	< 0.1	< 0.05	< 0.001	< 0.1	0.0405	0.9	3.7	4.6	< 0.2	< 1	1
0801		10/5/1999	< 0.01	0.006	< 0.01	< 0.05	16.1	< 0.1	< 0.05	< 0.001	< 0.1	0.0527	1.1	< 1	1.1	< 0.2	< 1	1.4
0801		1/4/2000	< 0.01	< 0.005	0.01	< 0.05	23.6	< 0.1	< 0.05	0.001	< 0.1	0.0408	0.7	< 1	0.7	< 0.2	< 1	1.3
0801		1/8/2001	< 0.01	< 0.005	< 0.01	< 0.05	6.52	< 0.1	< 0.05	0.001	< 0.1	0.087	< 0.2	< 1	0	< 0.2	< 1	< 1
0801		2/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	7.28	< 0.1	< 0.05	< 0.001	< 0.1	0.071	0.5	< 1	0.5	< 0.2	< 1	< 1
0801		3/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	7.98	< 0.1	< 0.05	< 0.001	< 0.1	0.0582	< 0.2	< 1	0	< 0.2	< 1	< 1
0801		4/3/2001	< 0.01	< 0.005	< 0.01	< 0.05	7.02	< 0.1	< 0.05	< 0.001	< 0.1	0.053	0.4	< 1	0.4	< 0.2	< 1	< 1
0801		5/7/2001	< 0.01	< 0.005	< 0.01	< 0.05	8.7	< 0.1	< 0.05	< 0.001	< 0.1	0.049	0.4	< 1	0.4	< 0.2	< 1	< 1
0801		6/4/2001	< 0.01	< 0.005	< 0.01	< 0.05	8.24	< 0.1	< 0.05	< 0.001	< 0.1	0.046	< 0.2	< 1	0	< 0.2	< 1	< 1
0801		7/9/2001	< 0.01	< 0.005	< 0.01	< 0.05	8.34	< 0.1	< 0.05	< 0.001	< 0.1	0.0486	0.8	< 1	0.8	< 0.2	< 1	< 1
0801		8/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	7.7	< 0.1	< 0.05	< 0.001	< 0.1	0.048	0.4	< 1	0.4	< 0.2	< 1	< 1
0801		9/10/2001	< 0.01	< 0.005	< 0.01	< 0.05	6.24	< 0.1	< 0.05	< 0.001	< 0.1	0.044	0.3	< 1	0.3	< 0.2	< 1	< 1
0801		10/1/2001	< 0.01	< 0.005	< 0.01	< 0.05	6.87	< 0.1	< 0.05	< 0.001	< 0.1	0.0373	0.7	< 1	0.7	< 0.2	< 1	< 1
0801		11/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	7.36	< 0.1	< 0.05	< 0.001	< 0.1	0.0374	0.4	< 1	0.4	< 0.2	< 1	< 1
0801		12/4/2001	< 0.01	< 0.005	< 0.01	< 0.05	6.57	< 0.1	< 0.05	< 0.001	< 0.1	0.0407	< 0.2	< 1	0	< 0.2	< 1	< 1
0801		1/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	6.61	< 0.1	< 0.05	< 0.001	< 0.1	0.0422	0.3	< 1	0.3	< 0.2	< 1	< 1
0801		2/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	6.69	< 0.1	< 0.05	< 0.001	< 0.1	0.0336	0.7	< 1	0.7	< 0.2	< 1	< 1
0801		3/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	7.89	< 0.1	< 0.05	< 0.001	< 0.1	0.0525	< 0.2	< 1	0	< 0.2	< 1	< 1

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0801		4/1/2002	6,856.32	6.36	7.33	7120	583	782	351	15.2	1600	3730	249	7.07	2.35	3.6	< 0.1	< 0.001
0801		5/6/2002	6,856.41	6.35	7.38	7030	564	762	341	14.4	1570	3520	242	6.4	2.34	3	< 0.1	< 0.001
0801		6/3/2002	6,856.43	6.33	7.43	7070	561	754	328	12.2	1570	3460	208	6.5	2.13	3.7	< 0.1	< 0.001
0801		7/8/2002	6,855.81	6.62	7.69	7050	552	778	257	13.8	1570	3570	194	6.3	2.04	3	< 0.1	< 0.001
0801		10/8/2002	6,856.12	6.51	7.58	6960	515	699	328	12.7	1560	3260	206	6.4	1.99	3.2	< 0.1	< 0.001
0801		1/6/2003	6,856.07	6.89	7.41	6860	561	785	380	14.1	1520	3600	193	6	1.5	3.1	< 0.1	< 0.001
0801		4/7/2003	6,856.27	6.37	7.31	6910	542	731	358	17.4	1520	3170	226	5.6	2.8	3.1	< 0.1	< 0.001
0801		7/7/2003	6,856.35	6.20	7.18	6880	517	694	316	15.4	1550	3350	200	5.3	1.2	3.7	< 0.1	< 0.001
0801		10/6/2003	6,855.82	6.21	7.54	6730	585	764	364	12.7	1520	3640	219	5.2	1.2	2.9	< 0.1	< 0.001
0801		1/5/2004	6,856.04	6.45	7.48	6640	554	721	320	12.3	1500	3460	224	5.2 D	1.09	3	0.2	< 0.001
0801		4/5/2004	6,856.07	6.80	6.75	6680	554	719	356	13	2220	3360 D	206	4.5 D	0.75	3.1	< 0.1	< 0.001
0801		7/12/2004	6,855.86	6.17	6.87	6690	574	714	374	13.8	1450	3360 D	212	3.3 D	0.69	2.3	< 0.1	< 0.001
0801		10/4/2004	6,855.47	6.27	6.97	6670	565 D	727 D	379	12.6	1470	3390 D	221	4.0 D	0.7	3.1	< 0.1	< 0.001
0801		1/3/2005	6,855.82	6.54	6.93	6700	574 D	729 D	353	12.3	1450	3300 D	198	3.9 D	0.6	2.6	< 0.1	< 0.001
0801		4/4/2005	6,855.77	6.45	7.07	6300	564	697	344	11.4	1480	3310	194	3.5	0.3	2.9	< 0.1	< 0.001
0801		7/11/2005	6,855.42	6.37	7.28	6520	567 D	723 D	359	12.3	1350	3360 D	201	3.7 D	0.2	3.5	< 0.1	< 0.001
0801		10/3/2005	6,855.15	6.49	7.05	6380	547 D	676 D	355	12.2	1450	3280 D	208	2.9 D	0.2	2.9	< 0.1	< 0.001
0801		1/9/2006	6,855.08	6.58	7.57	6340	514	618 D	331	11.1	1490	2940 D	196	3.6 D	0.2	2.6	< 0.1	< 0.001
0801		4/3/2006	6,855.22	6.36	7.05	6170	579 D	693 D	333	12.5	1430	3200 D	210	4.85	0.1	2.2	< 0.1	< 0.001
0801		7/17/2006	6,854.87	6.31	6.68	6270	577 D	687 D	352	12.5	1420	3360 D	204	2.86	0.3	2.8	< 0.1	< 0.001
0801		10/2/2006	6,855.19	6.43	6.96	6180	583 D	692 D	343	12.4	1810	3270 D	192	3.15	1	2.17	< 0.1	< 0.001
0801		1/8/2007	6,854.77	6.49	6.81	6420	557 D	681 D	307	12.8	1430	3220 D	191	2.7 D	1.4	2.33	<0.1	<0.001
0801		4/9/2007	6,854.82	6.52	6.70	5950	539 D	663 D	304	14	1430	3170 D	199	3.1	1	2.06	<0.1	<0.001
0801		7/9/2007	6,854.52	6.33	6.75	6200	573 D	726 D	352	13.3	1510	3500 D	179	2.77	0.8	2.84	<0.1	0.01
0801		10/1/2007	6,854.29	6.46	6.65	6470	514 D	661 D	338 D	13.5	1490	3200 D	223 D	3.37	0.8	2.96	<0.1	<0.001
0801		1/14/2008	6,854.17	6.49	6.65	6580	528 D	669 D	334 D	13	1440	3100 D	209 D	3.55	0.9	2.68	< 0.1	< 0.001
0801		4/7/2008	6,854.47	6.4	6.75	6190	578 D	763 D	375 D	14.4 D	1380	3610 D	197	3.3 D	0.9	2.78	< 0.1	< 0.001
0801		7/7/2008	6,854.22	6.18	6.67 H	6300 H	530	693	314 D	11	1460	3610 D	206	3	1.1	3.49	< 0.1	< 0.003
0801		10/6/2008	6,853.82	6.30	6.75	6490	549	729	336 D	12	1430	3790 D	191	3.7	1.1	2.84	< 0.1	< 0.001
0801		1/12/2009	6,853.77	6.39	6.7	6760	537	730	351	11	1450	2970 D	183	1.19	1.5	2.82	<0.1	<0.001
0801		4/6/2009	6,853.57	6.36	6.51	6700	524 D	714 D	359 D	12	1490	3530 D	198	2.25	1.8	3.45	<0.1	<0.001
0801		7/6/2009	6,853.47	6.27	6.63	6550 H	567 D	738	343 D	13	1460	3420 D	208	3.91	1.8	2.49	<0.1	<0.001
0801		10/5/2009	6,852.97	6.47	7.10	6530	540 D	701	329 D	12	1510	3420 D	215	4.0 D	2.2	2.21	<0.1	<0.001
0802		10/17/1989	6,874.80	6.50	6.89	6744	944	519	374	6.7	2288	2371	221	0.22	113	< 1	< 0.1	< 0.001
0802		1/11/1990	no data	6.50	6.98	6978	849	530	350	5.08	2547	2663	229	0.17	124	1.9	< 0.1	< 0.001

CHESTER ENGINEERS

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0801		4/1/2002	< 0.01	< 0.005	< 0.01	< 0.05	7.42	< 0.1	< 0.05	< 0.001	< 0.1	0.0423	< 0.2	< 1	0	< 0.2	< 1	< 1
0801		5/6/2002	< 0.01	< 0.005	< 0.01	< 0.05	6.84	< 0.1	< 0.05	< 0.001	< 0.1	0.0472	< 0.2	< 1	0	< 0.2	< 1	< 1
0801		6/3/2002	< 0.01	< 0.005	< 0.01	< 0.05	6.36	< 0.1	< 0.05	< 0.001	< 0.1	0.042	< 0.2	< 1	0	< 0.2	< 1	< 1
0801		7/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	5.85	< 0.1	< 0.05	< 0.001	< 0.1	0.0488	0.3	< 1	0.3	< 0.2	< 1	< 1
0801		10/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	5.66	< 0.1	< 0.05	< 0.001	< 0.1	0.0343	< 0.2	< 1	0	< 0.2	< 1	< 1
0801		1/6/2003	< 0.01	< 0.005	< 0.01	< 0.05	5.61	< 0.1	< 0.05	< 0.001	< 0.1	0.0404	< 0.2	< 1	0	< 0.2	< 1	1.4
0801		4/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	5.08	< 0.1	< 0.05	< 0.001	< 0.1	0.0416	0.6	< 1	0.6	< 0.2	< 1	< 1.0
0801		7/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	5.25	< 0.1	< 0.05	< 0.001	< 0.1	0.0385	0.4	< 1	0.4	< 0.2	< 1	< 1.0
0801		10/6/2003	< 0.01	< 0.005	< 0.01	< 0.05	4.65	< 0.1	< 0.05	< 0.001	< 0.1	0.0453	0.6	< 1	0.6	< 0.2	< 1	< 1.0
0801		1/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	5.16	< 0.1	< 0.05	< 0.001	< 0.1	0.0381 D	0.4	< 1.0	0.4	< 0.2	< 1.0	< 1.0
0801		4/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	4.26	< 0.1	< 0.05	< 0.001	< 0.1	0.0422 D	1.3	< 1	1.3	< 0.2	< 1	< 1
0801		7/12/2004	< 0.01	< 0.005	< 0.01	< 0.05	3.94	< 0.1	< 0.05	< 0.001	< 0.1	0.0400 D	0.4	< 1.0	0.4	< 0.2	< 1.0	< 1.0
0801		10/4/2004	< 0.01	< 0.005	< 0.01	< 0.05	4.15	< 0.1	< 0.05	< 0.001	< 0.1	0.0370 D	1.1	< 1.0	1.1	< 0.2	< 1.0	< 1.0
0801		1/3/2005	< 0.01	< 0.005	< 0.01	< 0.05	3.82	< 0.1	< 0.05	< 0.001	< 0.1	0.0442	0.8	< 1.0	0.8	< 0.2	< 1.0	1.8
0801		4/4/2005	< 0.01	< 0.005	< 0.01	< 0.05	3.93	< 0.1	< 0.05	< 0.001	< 0.1	0.041	0.7	< 1.0	0.7	< 0.2	< 1.0	< 1.0
0801		7/11/2005	< 0.01	< 0.005	< 0.01	< 0.05	3.92	< 0.1	< 0.05	< 0.001	< 0.1	0.0416	0.4	< 1.0	0.4	< 0.2	< 1.0	< 1.0
0801		10/3/2005	< 0.01	< 0.005	< 0.01	< 0.05	3.62	< 0.1	< 0.05	< 0.001	< 0.1	0.0419	< 0.2	2.4	2.4	< 0.2	< 1.0	1
0801		1/9/2006	< 0.01	< 0.005	< 0.01	< 0.05	3.97	< 0.1	< 0.05	< 0.001	< 0.1	0.0382	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0801		4/3/2006	< 0.01	< 0.005	< 0.01	< 0.05	3.68	< 0.1	< 0.05	< 0.001	< 0.1	0.0374 D	0.4	1.5	1.9	< 0.2	< 1.0	< 1.0
0801		7/17/2006	< 0.01	< 0.005	< 0.01	< 0.05	3.64	< 0.1	< 0.05	< 0.001	< 0.1	0.042	0.6	< 1.0	0.6	< 0.2	< 1.0	1.1
0801		10/2/2006	< 0.01	< 0.005	< 0.01	< 0.05	3.65	< 0.1	< 0.05	< 0.001	< 0.1	0.0407	0.5	2.5	3	< 0.2	< 1	< 1
0801		1/8/2007	<0.01	<0.005	<0.01	<0.05	3.69	<0.1	<0.05	<0.001	<0.1	0.0395	0.5	1.6	2.1	<0.2	<1	<1
0801		4/9/2007	<0.01	<0.005	<0.01	<0.05	3.63	<0.1	<0.05	<0.001	<0.1	0.0404	<0.2	<1	0	<0.2	<1	1.2
0801		7/9/2007	<0.01	<0.005	<0.01	<0.05	3.43	<0.1	<0.05	<0.001	<0.1	0.0423	<0.2	<1	0	<0.2	<1	<1
0801		10/1/2007	<0.01	<0.005	<0.01	<0.05	4.25	<0.1	<0.05	<0.001	<0.1	0.0431	0.5	<1	0.5	1.5	<1	1.3
0801		1/14/2008	< 0.01	< 0.005	< 0.01	< 0.05	3.81	< 0.1	< 0.05	< 0.001	< 0.1	0.0366	< 0.2	< 1	0	< 0.2	< 1	< 1
0801		4/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	4.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0395	0.5	1.2	1.7	0.2	-4.5 U	1.5
0801		7/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	4.81	< 0.1	< 0.05	< 0.001	< 0.1	0.0387	0.34	2.5	2.84	0.3	-0.3 U	1.2
0801		10/6/2008	< 0.01	< 0.005	< 0.01	< 0.05	3.86	< 0.1	< 0.05	< 0.001	< 0.1	0.0382	0.52	0.14 U	0.66	0.4	-2 U	1.6
0801		1/12/2009	<0.01	<0.005	<0.01	<0.05	2.64	<0.1	<0.05	<0.001	<0.1	0.0198	0.07 U	0.68 U	0.75	0.4 U	-2 U	1.4
0801		4/6/2009	<0.01	<0.005	<0.01	<0.05	4.32	<0.1	<0.05	<0.001	<0.1	0.0347	0.43	0.60 U	1.03	0.07 U	-0.1 U	0.8
0801		7/6/2009	<0.01	<0.005	<0.01	<0.05	5.12	<0.1	<0.05	<0.001	<0.1	0.0367	0.99	1.9	2.89	0.2 U	-0.5 U	1.5
0801		10/5/2009	<0.01	<0.005	<0.01	<0.05	4.67	<0.1	<0.05	<0.001	<0.1	0.0393	0.91	1.2 U	2.11	0.002 U	1.4 U	0.6 U
0802		10/17/1989	< 0.05	< 0.01	0.01	< 0.05	0.2	< 0.01	< 0.05	< 0.001	< 0.1	0.154	0.6	< 1	0.6	< 0.2	< 1	1.5
0802		1/11/1990	< 0.05	< 0.01	0.04	< 0.05	0.21	< 0.1	< 0.05	< 0.001	< 0.1	0.164	0.3	< 1	0.3	1.3	< 1	1.8

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0802		4/5/1990	no data	6.50	6.80	6854	877	570	380	5.2	2416	2528	230	0.12	128	< 1	< 0.1	< 0.001
0802		7/9/1990	no data	6.60	7.02	6937	866	605	378	5.6	2347	2625	213	< 0.05	133	< 1	< 0.1	< 0.001
0802		10/3/1990	no data	6.60	7.18	6698	944	586	383	5.6	1940	2606	224	< 0.05	89.7	< 1	< 0.1	0.001
0802		1/3/1991	no data	6.50	7.22	6727	898	649	397	8.6	2318	2691	230	0.08	152	< 1	< 0.1	< 0.001
0802		4/11/1991	no data	6.30	7.65	6711	893	615	382	6.1	2171	2561	240	< 0.05	165	< 1	< 0.1	< 0.001
0802		7/11/1991	no data	6.40	7.21	7065	829	624	335	4.6	1940	2857	218	< 0.08	127	< 1	< 0.1	< 0.001
0802		10/23/1991	no data	6.40	7.41	6795	800	543	362	4.6	2250	2775	237	0.36	99	< 1	< 0.1	< 0.001
0802		1/16/1992	no data	6.30	7.10	6541	765	657	363	4.4	1662	2916	235	0.57	117	< 1	< 0.1	< 0.001
0802		4/13/1992	no data	6.20	6.84	7383	852	592	393	5.5	2404	2730	234	0.09	81.3	< 1	< 0.1	< 0.001
0802		7/8/1992	no data	6.20	7.32	5929	841	608	445	6.2	1777	2615	235	0.16	100	< 1	< 0.1	< 0.001
0802		10/8/1992	no data	6.80	7.21	7274	809	648	456	8.2	2245	3057	228	< 0.05	136	< 1	< 0.1	< 0.001
0802		1/7/1993	no data	6.80	7.46	6306	782	660	397	6	2150	2980	236	0.14	105	< 1	< 0.1	< 0.001
0802		4/7/1993	no data	6.50	7.15	6486	732	644	421	4.1	2223	3023	237	0.5	93.9	< 1	< 0.1	< 0.001
0802		7/14/1993	no data	6.40	7.00	7413	861	720	393	4.6	2208	3183	241	0.32	78.3	< 1	< 0.1	< 0.001
0802		10/7/1993	no data	6.40	6.98	6416	659	700	354	4.2	1972	2935	218	0.39	110	< 1	< 0.1	< 0.001
0802		1/6/1994	no data	6.40	6.75	6614	749	641	389	4	2125	3228	224	1	80.3	< 1	< 0.1	< 0.001
0802		4/12/1994	no data	6.30	6.99	7568	731	706	367	4.7	2047	3596	184	1.24	96.2	< 1	< 0.1	< 0.001
0802		7/27/1994	no data	6.40	7.35	7680	866	715	355	5.3	2237	3484	217	1.03	106	< 1	< 0.1	< 0.001
0802		10/5/1994	no data	6.30	7.45	7578	790	826	389	5.8	2288	3277	225	1.47	97.3	< 1	< 0.1	< 0.001
0802		1/4/1995	no data	6.60	7.29	7845	853	756	376	6.5	2323	3436	240	1.66	86.1	< 1	< 0.1	< 0.001
0802		4/6/1995	no data	6.50	6.75	7761	786	714	380	5.2	2269	3551	268	1.82	93	< 1	< 0.1	< 0.001
0802		7/6/1995	no data	6.40	7.43	7216	750	735	375	5.8	2257	3310	236	1.83	84.6	< 1	< 0.1	< 0.001
0802		10/4/1995	no data	6.50	7.56	7003	738	754	369	5.3	2208	3301	190	2.23	88.4	< 1	< 0.1	< 0.001
0802		1/3/1996	no data	6.40	7.92	7477	817	805	361	5.5	2166	3530	222	1.84	85.8	< 1	< 0.1	< 0.001
0802		4/2/1996	no data	6.40	7.37	7595	796	845	380	11.4	2250	3560	227	1.88	88.4	< 1	< 0.1	< 0.001
0802		7/17/1996	no data	6.30	6.96	7488	701	723	366	6	2196	3164	236	1.6	91.2	1.21	< 0.1	< 0.001
0802		10/8/1996	no data	6.70	7.25	7600	756	778	357	6.4	2200	3291	220	1.7	76.5	< 1	< 0.1	< 0.001
0802		1/28/1997	no data	6.50	7.84	7350	745	720	301	6	2142	3215	317	1.23	79.1	< 1	< 0.1	< 0.001
0802		4/8/1997	no data	6.40	7.44	7270	756	740	336	6.6	2090	3190	240	1.53	80.1	< 1	< 0.1	< 0.001
0802		7/8/1997	no data	6.70	7.38	7430	786	759	335	6.7	2140	2930	236	1.37	82	< 1	< 0.1	< 0.001
0802		10/8/1997	no data	6.50	7.45	7330	789	750	336	6.35	2160	3050	252	1.38	82.8	< 1	< 0.1	< 0.001
0802		1/20/1998	no data	6.20	7.72	7320	766	721	356	7.6	2120	3350	242	1.49	83.3	< 1	< 0.1	< 0.001
0802		4/7/1998	no data	6.60	7.30	7310	776	723	340	6.7	2120	3010	212	1.2	90.8	1.2	< 0.1	< 0.001
0802		7/7/1998	no data	6.80	7.42	7350	758	726	348	6.6	2180	2900	224	1.26	86.6	1	< 0.1	< 0.001
0802		10/6/1998	no data	6.43	7.64	7340	796	757	361	7.2	2110	3230	210	1.13	85.4	1.5	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0802		4/5/1990	< 0.05	< 0.01	0.02	< 0.05	0.21	< 0.1	< 0.05	< 0.001	< 0.1	0.128	0.7	< 1	0.7	< 0.2	1.2	1.1
0802		7/9/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.23	< 0.1	< 0.05	0.001	< 0.1	0.123	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		10/3/1990	< 0.05	< 0.01	0.02	< 0.05	0.2	< 0.1	< 0.05	< 0.001	< 0.1	0.1812	0.4	1	1.4	< 0.2	1.4	< 1
0802		1/3/1991	< 0.01	0.01	0.01	< 0.05	0.23	< 0.1	0.05	0.001	< 0.1	0.0218	0.7	1.3	2	< 0.2	< 1	< 1
0802		4/11/1991	< 0.01	0.03	0.01	< 0.05	0.18	< 0.1	< 0.05	< 0.001	< 0.1	0.1568	< 0.2	< 1	0	< 0.2	2.1	< 1
0802		7/11/1991	< 0.01	< 0.01	0.01	< 0.05	0.24	< 0.1	< 0.05	0.001	< 0.1	0.1983	< 0.2	< 1	0	< 0.2	2.1	< 1
0802		10/23/1991	< 0.01	< 0.01	0.02	no data	0.28	< 0.1	< 0.05	< 0.001	< 0.1	0.22	< 0.2	2.1	2.1	< 0.2	< 1	< 1
0802		1/16/1992	< 0.01	< 0.01	0.02	< 0.05	0.35	< 0.1	< 0.05	< 0.001	< 0.1	0.144	0.5	< 1	0.5	< 0.2	< 1	< 1
0802		4/13/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.44	< 0.1	< 0.05	0.004	< 0.1	0.045	0.2	< 1	0.2	< 0.2	2.7	< 1
0802		7/8/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.4	< 0.1	< 0.05	0.001	< 0.1	0.14	1.2	4.4	5.6	< 0.2	< 1	1.5
0802		10/8/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.4	< 0.1	< 0.05	0.002	< 0.1	0.124	0.8	< 1	0.8	< 0.2	< 1	< 1
0802		1/7/1993	< 0.01	< 0.01	0.01	< 0.05	0.44	< 0.1	< 0.05	0.006	< 0.1	0.127	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		4/7/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.57	< 0.1	< 0.05	0.001	< 0.1	0.249	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		7/14/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.53	< 0.1	< 0.05	0.003	< 0.1	0.154	0.5	< 1	0.5	< 0.2	< 1	< 1
0802		10/7/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.52	< 0.1	< 0.05	0.004	< 0.1	0.143	0.7	4.1	4.8	< 0.2	1.6	< 1
0802		1/6/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.55	< 0.1	< 0.05	< 0.001	< 0.1	0.148	0.5	1.6	2.1	< 0.2	< 1	3.9
0802		4/12/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.72	< 0.1	< 0.05	0.001	< 0.1	0.176	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		7/27/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.57	< 0.1	< 0.05	0.003	< 0.1	0.165	0.8	< 1	0.8	< 0.2	< 1	< 1
0802		10/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.57	< 0.1	< 0.05	< 0.001	< 0.1	0.153	0.8	< 1	0.8	< 0.2	< 1	< 1
0802		1/4/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.78	< 0.1	< 0.05	< 0.001	< 0.1	0.142	0.4	2.2	2.6	< 0.2	< 1	3.9
0802		4/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.76	< 0.1	< 0.05	< 0.001	< 0.1	0.159	< 0.2	< 1	0	< 0.2	2.6	< 1
0802		7/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.69	< 0.1	< 0.05	0.002	< 0.1	0.1883	0.3	< 1	0.3	< 0.2	< 1	1.5
0802		10/4/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.73	< 0.1	< 0.05	0.024	< 0.1	0.157	0.3	< 1	0.3	< 0.2	< 1	1.4
0802		1/3/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.09	< 0.1	< 0.05	0.022	< 0.1	0.168	0.4	< 1	0.4	< 0.2	3.6	< 1
0802		4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.8	< 0.1	< 0.05	< 0.001	< 0.1	0.167	< 0.2	< 1	0	< 0.2	< 1	1.2
0802		7/17/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.81	< 0.1	< 0.05	< 0.001	< 0.1	0.086	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		10/8/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.06	< 0.1	< 0.05	< 0.001	< 0.1	0.171	0.5	< 1	0.5	< 0.2	< 1	< 1
0802		1/28/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.93	< 0.1	< 0.05	< 0.001	< 0.1	0.171	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.98	< 0.1	< 0.05	0.021	< 0.1	0.181	1.4	< 1	1.4	< 0.2	< 1	1.9
0802		7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.97	< 0.1	< 0.05	< 0.001	< 0.1	0.018	0.6	< 1	0.6	< 0.2	< 1	< 1
0802		10/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.26	< 0.1	< 0.05	< 0.001	< 0.1	0.176	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		1/20/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.25	< 0.1	< 0.05	< 0.001	< 0.1	0.198	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		4/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.18	< 0.1	< 0.05	< 0.001	< 0.1	0.186	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		7/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.19	< 0.1	< 0.05	< 0.001	< 0.1	0.208	0.6	< 1	0.6	< 0.2	< 1	< 1
0802		10/6/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.2	< 0.1	< 0.05	0.001	< 0.1	0.207	< 0.2	< 1	0	< 0.2	< 1	< 1

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0802		1/12/1999	no data	6.60	7.55	7190	734	686	298	7.4	2110	3260	207	1.28	88.1	< 1	< 0.1	< 0.001
0802		4/13/1999	no data	6.40	7.65	7320	783	732	323	6.8	2090	3060	205	1.23	86.2	1.5	< 0.1	< 0.001
0802		7/20/1999	no data	6.50	7.58	7350	760	743	370	9.8	2120	3160	207	1.18	76.2	1.4	< 0.1	< 0.001
0802		10/12/1999	no data	6.62	7.66	7360	703	695	311	6.4	2120	2920	194	1.09	76.9	1.4	< 0.1	< 0.001
0802		1/11/2000	no data	6.50	7.73	7350	732	734	298	9.5	2100	3120	195	1.06	119	1.6	0.12	< 0.001
0802		5/2/2000	no data	6.70	7.55	7170	651	643	290	9.1	2047	2920	174	1.24	81.2	1.5	0.1	< 0.001
0802		7/12/2000	6,841.60	6.55	7.33	7030	699	700	297	12.1	2020	2870	174	0.91	42	< 1	< 0.1	< 0.001
0802		10/4/2000	6,842.00	6.37	7.01	7250	732	758	327	9	2050	3170	201	1.06	79.7	2	< 0.1	0.001
0802		1/8/2001	6,857.50	6.43	7.69	7360	751	758	300	8.2	2180	3190	203	1.2	89.3	2.2	< 0.1	< 0.001
0802		2/5/2001	6,860.50	6.49	7.10	6910	739	834	348	8.2	2050	3160	200	1.02	93.8	2.6	< 0.1	< 0.001
0802		3/5/2001	6,861.00	6.64	7.17	6120	737	661	370	8	2000	2850	158	0.12	103	1.5	< 0.1	< 0.001
0802		4/9/2001	6,861.60	6.86	7.24	6400	847	671	263	6.6	2050	2840	180	0.06	111	< 1	< 0.1	< 0.001
0802		5/7/2001	6,861.65	6.42	7.23	6660	737	608	257	6	2020	2420	193	0.08	102	< 1	< 0.1	< 0.001
0802		6/4/2001	6,861.95	6.46	7.16	6200	729	591	231	6.3	1960	2520	190	0.1	101	1.3	< 0.1	0.001
0802		7/9/2001	6,862.10	7.07	7.06	6580	794	651	274	5.4	2060	2520	216	0.07	114	1	< 0.1	< 0.001
0802		8/6/2001	6,862.08	6.43	7.20	6630	740	620	260	8	2050	2500	240	< 0.05	97.5	< 1	< 0.1	< 0.001
0802		9/10/2001	6,862.30	6.37	6.90	6400	770	600	284	5.6	2100	2400	216	< 0.05	100	< 1	< 0.1	< 0.001
0802		10/1/2001	6,862.35	6.44	7.40	6620	730	590	290	6.4	2080	2400	225	0.06	97.5	< 1	< 0.1	< 0.001
0802		11/5/2001	6,862.55	6.44	7.50	6660	786	618	304	6.3	2050	2640	227	< 0.05	114	< 1	< 0.1	< 0.001
0802		12/3/2001	6,862.65	6.56	7.50	6710	750	587	256	5.9	2060	2450	214	0.09	121	< 1	< 0.1	< 0.001
0802		1/7/2002	6,862.70	6.56	7.10	6750	874	646	226	8.2	2030	2850	232	0.05	98	1.2	< 0.1	< 0.001
0802		2/4/2002	6,862.80	6.50	7.20	6820	849	626	284	7	2070	2750	239	0.13	100	1.1	< 0.1	< 0.001
0802		3/4/2002	6,862.75	6.48	7.10	6800	806	633	323	6	2030	2880	217	0.08	108	1.3	< 0.1	< 0.001
0802		4/1/2002	6,862.98	6.38	7.08	6900	840	648	326	7.7	2080	2980	212	0.06	98.1	1.6	< 0.1	< 0.001
0802		5/6/2002	6,862.02	6.36	7.24	7050	815	643	302	7.8	2090	2790	215	0.05	107	1.9	< 0.1	< 0.001
0802		6/3/2002	6,863.05	6.34	7.94	7430	859	705	299	6.6	2160	3090	196	0.08	103	3	< 0.1	< 0.001
0802		7/8/2002	6,862.81	6.41	7.84	7470	830	720	265	7.7	2190	3150	227	0.2	99.1	2.6	< 0.1	< 0.001
0802		10/7/2002	6,862.55	6.33	7.99	5680	774	710	317	6.2	2140	3060	187	0.08	95.2	3.5	< 0.1	< 0.001
0802		1/6/2003	6,861.34	6.64	7.52	7840	843	873	393	12.5	2310	3620	228	0.16	88	4.1	< 0.1	< 0.001
0802		4/7/2003	6,861.54	6.43	7.34	7890	759	810	335	9.2	2300	3050	210	0.14	103	5	< 0.1	< 0.001
0802		7/7/2003	6,861.49	6.27	7.90	8150	712	792	327	9.4	2300	3260	195	0.11	97	6.6	< 0.1	< 0.001
0802		10/6/2003	6,861.20	6.30	7.45	8140	765	927	376	7.1	2440	3710	211	0.24	88	6.2	< 0.1	< 0.001
0802		1/5/2004	6,861.21	6.45	7.92	8160	726	925	326	8.7	2440	3670	257	0.12	95.1 D	7.2	0.2	< 0.001
0802		4/5/2004	6,861.39	6.65	6.78	8310	693	931	368	7.8	2400	3580 D	209	0.09	96.2 D	7.4	< 0.1	< 0.001
0802		7/12/2004	6,861.15	6.28	6.90	8390	695	910	403	8.2	2370	3510 D	214	0.13	93.2 D	6.6	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0802		1/12/1999	< 0.01	< 0.005	< 0.01	< 0.05	1.29	< 0.1	< 0.05	< 0.001	< 0.1	0.211	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		4/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	1.48	< 0.1	< 0.05	< 0.001	< 0.1	0.19	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		7/20/1999	< 0.01	< 0.005	< 0.01	< 0.05	1.13	< 0.1	< 0.05	< 0.001	< 0.1	0.196	0.5	< 1	0.5	< 0.2	< 1	1
0802		10/12/1999	< 0.01	< 0.005	< 0.01	< 0.05	1.37	< 0.1	< 0.05	< 0.001	< 0.1	0.203	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		1/11/2000	< 0.01	< 0.005	< 0.01	< 0.05	1.83	< 0.1	0.05	0.001	< 0.1	0.18	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		5/2/2000	< 0.01	< 0.005	< 0.01	< 0.05	2.27	< 0.1	< 0.05	0.001	< 0.1	0.193	< 0.2	2.1	2.1	< 0.2	< 1	< 1
0802		7/12/2000	< 0.01	< 0.005	< 0.01	< 0.05	1.52	< 0.1	< 0.05	< 0.001	< 0.1	0.098	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		10/4/2000	< 0.01	< 0.005	< 0.01	< 0.05	1.97	< 0.1	< 0.05	< 0.001	< 0.1	0.168	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		1/8/2001	< 0.01	< 0.005	0.01	< 0.05	2.73	< 0.1	< 0.05	0.004	< 0.1	0.193	< 0.2	3.6	3.6	< 0.2	< 1	< 1
0802		2/5/2001	< 0.01	< 0.005	0.01	< 0.05	3.34	< 0.1	< 0.05	0.001	< 0.1	0.159	0.4	< 1	0.4	< 0.2	< 1	< 1
0802		3/5/2001	< 0.01	< 0.005	0.01	< 0.05	0.96	< 0.1	< 0.05	0.001	< 0.1	0.165	< 0.2	2.9	2.9	< 0.2	< 1	< 1
0802		4/9/2001	< 0.01	< 0.005	0.01	< 0.05	0.64	< 0.1	< 0.05	< 0.001	< 0.1	0.17	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		5/7/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.6	< 0.1	< 0.05	0.001	< 0.1	0.181	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		6/4/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.62	< 0.1	< 0.05	0.011	< 0.1	0.214	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		7/9/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.6	< 0.1	< 0.05	0.001	< 0.1	0.221	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		8/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.65	< 0.1	< 0.05	< 0.001	< 0.1	0.23	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		9/10/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.68	< 0.1	< 0.05	< 0.001	< 0.1	0.25	0.3	2.7	3	< 0.2	< 1	< 1
0802		10/1/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.57	< 0.1	< 0.05	< 0.001	< 0.1	0.244	0.6	1.2	1.8	< 0.2	< 1	< 1
0802		11/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.62	< 0.1	< 0.05	< 0.001	< 0.1	0.219	0.3	< 1	0.3	< 0.2	< 1	< 1
0802		12/3/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.55	< 0.1	< 0.05	< 0.001	< 0.1	0.222	< 0.2	1.6	1.6	< 0.2	< 1	< 1
0802		1/7/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.58	< 0.1	< 0.05	< 0.001	< 0.1	0.225	0.4	< 1	0.4	< 0.2	< 1	< 1
0802		2/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.63	< 0.1	< 0.05	< 0.001	< 0.1	0.222	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		3/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.71	< 0.1	< 0.05	< 0.001	< 0.1	0.249	< 0.2	1.7	1.7	< 0.2	< 1	< 1
0802		4/1/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.7	< 0.1	< 0.05	< 0.001	< 0.1	0.223	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		5/6/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.7	< 0.1	< 0.05	< 0.001	< 0.1	0.227	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		6/3/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.53	< 0.1	< 0.05	< 0.001	< 0.1	0.199	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		7/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.55	< 0.1	< 0.05	< 0.001	< 0.1	0.248	0.5	< 1	0.5	< 0.2	< 1	< 1
0802		10/7/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.65	< 0.1	< 0.05	< 0.001	< 0.1	0.205	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		1/6/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.64	< 0.1	< 0.05	< 0.001	< 0.1	0.218	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0802		4/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.63	< 0.1	< 0.05	< 0.001	< 0.1	0.24	0.4	< 1	0.4	< 0.2	< 1	< 1.0
0802		7/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.7	< 0.1	< 0.05	< 0.001	< 0.1	0.223	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0802		10/6/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.77	< 0.1	< 0.05	< 0.001	< 0.1	0.254	0.4	< 1	0.4	< 0.2	< 1	< 1.0
0802		1/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.79	< 0.1	< 0.05	< 0.001	< 0.1	0.209 D	< 0.2	2.4	2.4	< 0.2	< 1.0	< 1.0
0802		4/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.65	< 0.1	< 0.05	0.002	< 0.1	0.207 D	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		7/12/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.83	< 0.1	< 0.05	< 0.001	< 0.1	0.221 D	< 0.2	2.2	2.2	< 0.2	< 1.0	< 1.0

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0802		10/4/2004	6,860.76	6.33	7.04	8200	666 D	955 D	397	6.8	2350	3580 D	215	< 0.05	83 D	8.4	< 0.1	< 0.001
0802		1/3/2005	6,860.89	6.57	6.93	8490	687 D	998 D	374	7.4	2370	3620 D	202	0.12	100 D	7.9	< 0.1	< 0.001
0802		4/4/2005	6,861.00	6.52	7.11	8100	669	957	365	6.1	2370	3710	190	< 0.05	83	9.6	< 0.1	< 0.001
0802		7/11/2005	6,860.64	6.43	7.25	8210	676 D	1010 D	363	6.6	2370	3780 D	225	0.09	93 D	12.3	< 0.1	< 0.001
0802		10/3/2005	6,860.41	6.44	7.17	8290	672 D	1050 D	366	6.8	2280	3620 D	199	0.09	90 D	10.6	< 0.1	< 0.001
0802		1/9/2006	6,860.26	6.56	7.29	8250	620 D	954 D	310	7.1	2270	3560 D	179	< 0.05	102 D	10.9	< 0.1	< 0.001
0802		4/3/2006	6,860.24	6.40	7.06	8210	681 D	1030 D	320	6.8	2290	3700 D	192	0.16	99 D	9.8	< 0.1	< 0.001
0802		7/17/2006	6,860.04	6.35	6.95	8210	648 D	1080 D	388	7.8	2250	4330 D	215	0.06	100 D	11.6	< 0.1	< 0.001
0802		10/2/2006	6,859.94	6.44	6.72	8050	657 D	988 D	354	7.4	2320	3750 D	160	0.13	108 D	9.6	0.2	< 0.001
0802		1/8/2007	6,859.87	6.55	6.72	8250	621 D	936 D	327	8.1	2150	3610 D	189	1.68	102 D	11.2	<0.1	<0.001
0802		4/9/2007	6,860.04	6.58	6.75	7690	624 D	946 D	326	9.2	2180	3610 D	197	<0.05	103 D	15.5	<0.1	<0.001
0802		7/9/2007	6,859.74	6.39	6.79	8050	651 D	1010 D	375	7	2280	3900 D	169	0.06	106 D	11.9	<0.1	0.008
0802		10/1/2007	6,859.48	6.49	6.57	8080	593 D	923 D	348 D	7	2260	3490 D	209 D	<0.05	101 D	13.5	<0.1	<0.001
0802		1/14/2008	6,859.39	6.47	6.6	8170	622 D	961 D	344 D	7.6	2160	3530 D	219 D	< 0.05	97 D	14	< 0.1	< 0.001
0802		4/7/2008	6,859.69	6.41	6.77	7710	638 D	1010 D	386 D	8.1 D	2040	3980 D	192	< 0.1	158 D	13.7	< 0.1	< 0.001
0802		7/7/2008	6,859.34	6.25	6.72 H	8000 H	640	986	336 D	6	2150	3800 D	195	< 0.05	105 D	15.2	< 0.1	< 0.003
0802		10/6/2008	6,858.94	6.32	6.76	8140	619	950	342 D	6	2100	3980 D	181	0.2	148 D	13.8	< 0.1	< 0.001
0802		1/12/2009	6,858.89	6.29	6.66	8300	619	974	365	6	2120	3290 D	183	<0.05	151 D	16.7	<0.1	<0.001
0802		4/6/2009	6,858.79	6.40	6.53	7830	581 D	951 D	371 D	6	2170	3900 D	191	<0.05	104 D	16.5	<0.1	<0.001
0802		7/6/2009	6,858.69	6.3	6.60	8100 H	654 D	975	359 D	6	2110	3840 D	208	<0.05	98 D	15.5	<0.1	<0.001
0802		10/5/2009	6,858.24	6.51	7.13	7180	593 D	941	345 D	6	2160	3700 D	208	0.07	105 D	17.2	<0.1	<0.001
0803		10/17/1989	6,880.40	6.70	6.91	4852	722	337	208	12.2	1379	2258	108	1.75	34	< 1	< 0.1	< 0.001
0803		1/11/1990	no data	6.60	7.16	5212	769	371	241	9.75	1647	2387	133	1.29	36	< 1	< 0.1	< 0.001
0803		4/5/1990	no data	6.70	7.02	5394	822	410	245	9.4	1696	2321	138	1.35	42	< 1	< 0.1	< 0.001
0803		7/9/1990	no data	6.60	7.18	5416	891	417	233	9.8	1625	2382	127	0.92	42.2	< 1	< 0.1	< 0.001
0803		10/3/1990	no data	6.50	7.29	5618	861	336	245	12	1659	2299	151	0.36	40	< 1	< 0.1	< 0.001
0803		1/3/1991	no data	6.60	7.25	5305	779	384	256	31.8	1598	2439	144	1.41	57.5	< 1	< 0.1	< 0.001
0803		4/11/1991	no data	6.50	7.65	5244	820	416	263	11.3	1702	2376	158	0.85	63	< 1	< 0.1	< 0.001
0803		7/11/1991	no data	6.50	7.27	5616	745	349	219	9.1	1690	2547	195	0.89	71.3	< 1	< 0.1	< 0.001
0803		10/23/1991	no data	6.60	7.39	5402	786	448	263	9.5	1273	2446	174	1.25	35.3	< 1	< 0.1	< 0.001
0803		1/16/1992	no data	6.50	7.19	5155	706	398	255	9.8	1375	2451	160	1.66	51.8	< 1	< 0.1	< 0.001
0803		4/13/1992	no data	6.30	7.01	5265	685	360	242	10.3	1571	2346	180	1.87	19.1	< 1	< 0.1	< 0.001
0803		7/8/1992	no data	6.20	7.46	4617	804	384	272	11.5	1611	2192	137	1.9	25.4	< 1	< 0.1	< 0.001
0803		10/8/1992	no data	6.50	7.79	5982	827	464	347	14	1952	2661	185	0.75	15.7	< 1	< 0.1	< 0.001
0803		1/7/1993	no data	6.30	7.32	5851	851	430	305	12.1	1879	2522	185	1.08	38.8	< 1	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0802		10/4/2004	< 0.01	0.006	< 0.01	< 0.05	0.8	< 0.1	< 0.05	0.001	< 0.1	0.194 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0802		1/3/2005	< 0.01	0.012	< 0.01	< 0.05	0.74	< 0.1	< 0.05	< 0.001	< 0.1	0.194 D	0.8	< 1.0	0.8	< 0.2	< 1.0	2.6
0802		4/4/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.72	< 0.1	< 0.05	< 0.001	< 0.1	0.18	0.7	< 1.0	0.7	< 0.2	< 1.0	< 1.0
0802		7/11/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.79	< 0.1	< 0.05	< 0.001	< 0.1	0.187 D	0.4	< 1.0	0.4	< 0.2	< 1.0	< 1.0
0802		10/3/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.82	< 0.1	< 0.05	< 0.001	< 0.1	0.181 D	< 0.2	< 1.0	0	< 0.2	< 1.0	1.2
0802		1/9/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.84	< 0.1	< 0.05	< 0.001	< 0.1	0.165	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0802		4/3/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.8	< 0.1	< 0.05	0.002	< 0.1	0.152 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0802		7/17/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.84	< 0.1	< 0.05	< 0.001	< 0.1	0.167	0.3	< 1.0	0.3	< 0.2	< 1.0	< 1.0
0802		10/2/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.82	< 0.1	< 0.05	< 0.001	< 0.1	0.146 D	0.4	< 1	0.4	< 0.2	< 1	< 1
0802		1/8/2007	<0.01	<0.005	<0.01	<0.05	0.81	<0.1	<0.05	<0.001	<0.1	0.146	0.3	<1	0.3	<0.2	<1	<1
0802		4/9/2007	<0.01	<0.005	<0.01	<0.05	0.87	<0.1	<0.05	<0.001	<0.1	0.148 D	<0.2	<1	0	<0.2	<1	<1
0802		7/9/2007	<0.01	<0.005	<0.01	<0.05	0.79	<0.1	<0.05	<0.001	<0.1	0.153	<0.2	<1	0	<0.2	<1	<1
0802		10/1/2007	<0.01	<0.005	<0.01	<0.05	0.91	<0.1	<0.05	<0.001	<0.1	0.152	<0.2	<1	0	<0.2	<1	1.1
0802		1/14/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.8	< 0.1	< 0.05	< 0.001	< 0.1	0.128 D	< 0.2	< 1	0	< 0.2	< 1	< 1
0802		4/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.90	< 0.1	< 0.05	< 0.001	< 0.1	0.143	0.1 U	0.3 U	0.4	-1.8 U	0 U	1 U
0802		7/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.9	< 0.1	< 0.05	< 0.001	< 0.1	0.132	-0.02 U	1.2	1.18	1	6.6 U	1.7
0802		10/6/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.71	< 0.1	< 0.05	< 0.001	< 0.1	0.132	0.16 U	0.44 U	0.6	0 U	-0.5 U	1.9
0802		1/12/2009	<0.01	<0.005	<0.01	<0.05	1.05	<0.1	<0.05	<0.001	<0.1	0.129	0.14 U	1.2 U	1.34	-0.1 U	-2 U	1.3
0802		4/6/2009	<0.01	<0.005	<0.01	<0.05	1.04	<0.1	<0.05	0.001	<0.1	0.127	0.34	0.71 U	1.05	0.5 U	-1 U	0.2 U
0802		7/6/2009	<0.01	<0.005	<0.01	<0.05	1.19	<0.1	<0.05	<0.001	<0.1	0.136	0.31	0.74 U	1.05	0.07 U	-2 U	1.1
0802		10/5/2009	<0.01	<0.005	<0.01	<0.05	1.01	<0.1	<0.05	<0.001	<0.1	0.143	0.67	0.78 U	1.45	0.0004 U	0.2 U	0.6 U
0803		10/17/1989	< 0.05	< 0.01	< 0.01	< 0.05	1.8	< 0.01	< 0.05	< 0.001	< 0.1	0.206	< 0.2	< 1	0	< 0.2	< 1	1
0803		1/11/1990	< 0.05	< 0.01	< 0.01	< 0.05	1.5	< 0.1	< 0.05	< 0.001	< 0.1	0.116	< 0.2	1.9	1.9	1.3	< 1	1.6
0803		4/5/1990	< 0.05	< 0.01	< 0.01	< 0.05	1	< 0.1	< 0.05	< 0.001	< 0.1	0.09	0.5	< 1	0.5	< 0.2	< 1	0.9
0803		7/9/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.98	< 0.1	< 0.05	< 0.001	< 0.1	0.135	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		10/3/1990	< 0.05	< 0.01	0.01	< 0.05	0.9	< 0.1	< 0.05	< 0.001	< 0.1	0.1711	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		1/3/1991	< 0.01	0.01	0.01	< 0.05	1	< 0.1	< 0.05	< 0.001	< 0.1	0.1292	0.9	< 1	0.9	< 0.2	< 1	< 1
0803		4/11/1991	< 0.01	< 0.01	0.02	< 0.05	0.82	< 0.1	< 0.05	< 0.001	< 0.1	0.0853	0.6	< 1	0.6	< 0.2	< 1	< 1
0803		7/11/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.58	< 0.1	< 0.05	0.007	< 0.1	0.1322	0.3	< 1	0.3	< 0.2	< 1	< 1
0803		10/23/1991	< 0.01	< 0.01	0.02	no data	0.57	< 0.1	< 0.05	< 0.001	< 0.1	0.135	< 0.2	2.4	2.4	< 0.2	< 1	< 1
0803		1/16/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.47	< 0.1	< 0.05	0.003	< 0.1	0.056	0.3	< 1	0.3	< 0.2	< 1	< 1
0803		4/13/1992	< 0.01	< 0.01	< 0.01	< 0.05	1.43	< 0.1	< 0.05	0.002	< 0.1	0.138	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		7/8/1992	< 0.01	< 0.01	< 0.01	< 0.05	1.3	< 0.1	< 0.05	< 0.001	< 0.1	0.04	0.3	< 1	0.3	< 0.2	< 1	< 1
0803		10/8/1992	< 0.01	< 0.01	0.01	< 0.05	0.61	< 0.1	< 0.05	< 0.001	< 0.1	0.068	0.8	< 1	0.8	< 0.2	< 1	< 1
0803		1/7/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.64	< 0.1	< 0.05	0.003	< 0.1	0.085	< 0.2	< 1	0	< 0.2	1.2	< 1

CHESTER ENGINEERS

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0803		4/7/1993	no data	6.40	7.14	5631	773	481	324	8.7	1806	2666	176	0.9	45.3	< 1	< 0.1	< 0.001
0803		7/14/1993	no data	6.60	7.24	5726	895	452	303	9.8	1878	2833	178	1.09	21.7	< 1	< 0.1	< 0.001
0803		10/7/1993	no data	6.50	7.20	5445	821	451	262	10.2	2000	2482	174	1.12	33.4	< 1	< 0.1	< 0.001
0803		1/6/1994	no data	6.70	7.12	5648	776	460	307	9.2	1656	2754	170	0.92	31.6	< 1	< 0.1	< 0.001
0803		4/12/1994	no data	6.50	7.10	6510	770	519	292	9.9	1743	3205	175	1.03	28	< 1	< 0.1	< 0.001
0803		7/27/1994	no data	6.50	7.41	6003	909	456	303	11.3	1890	2956	172	0.74	24	< 1	< 0.1	< 0.001
0803		10/5/1994	no data	6.30	7.49	5943	846	503	302	10.6	1845	2713	163	1.28	31.3	< 1	< 0.1	< 0.001
0803		1/4/1995	no data	6.40	7.16	6350	928	539	300	12.1	1948	2885	184	1.12	34.3	< 1	< 0.1	< 0.001
0803		4/6/1995	no data	6.40	6.73	6220	810	498	281	10.1	1935	3018	196	1.03	22.7	< 1	< 0.1	< 0.001
0803		7/6/1995	no data	6.50	7.41	6150	840	535	305	11.2	1848	2870	198	0.88	30.7	< 1	< 0.1	< 0.001
0803		10/4/1995	no data	6.80	7.36	6000	786	556	284	9.9	2017	2840	180	1.09	33.6	< 1	< 0.1	< 0.001
0803		1/3/1996	no data	6.50	7.16	6427	893	609	307	10.3	1929	3160	174	0.62	30.6	< 1	< 0.1	< 0.001
0803		4/2/1996	no data	6.60	7.43	6557	831	639	310	10.8	2014	3160	198	0.66	32.5	< 1	< 0.1	< 0.001
0803		7/17/1996	no data	6.30	6.70	6277	735	490	287	11.2	1967	2869	184	0.98	29	< 1	< 0.1	< 0.001
0803		10/8/1996	no data	6.40	7.03	6930	809	675	310	11.5	2022	3202	173	0.52	33.2	< 1	< 0.1	< 0.001
0803		1/28/1997	no data	6.50	7.87	6250	795	550	251	10.9	1847	3178	229	0.99	25.6	< 1	< 0.1	< 0.001
0803		4/8/1997	no data	6.40	7.52	6130	804	559	258	11.2	1800	2914	181	1.21	25.4	< 1	< 0.1	< 0.001
0803		7/8/1997	no data	6.60	7.39	6240	830	575	335	6.7	1790	2930	236	1.15	24.9	< 1	< 0.1	< 0.001
0803		10/8/1997	no data	6.30	7.60	6760	821	649	298	11.7	1990	2970	168	0.58	33.9	< 1	< 0.1	< 0.001
0803		1/20/1998	no data	6.30	7.75	6840	798	648	309	13	2000	3400	218	0.76	38.7	< 1	< 0.1	< 0.001
0803		4/7/1998	no data	6.50	7.40	6870	802	657	296	11.5	1990	3010	181	0.56	35.8	< 1	< 0.1	< 0.001
0803		7/7/1998	no data	6.40	7.40	6940	785	667	310	11.9	2020	3000	198	0.64	51.8	< 1	< 0.1	< 0.001
0803		10/6/1998	no data	6.44	7.56	6880	818	695	302	12.5	1980	3200	193	0.6	39.4	< 1	< 0.1	< 0.001
0803		1/12/1999	no data	6.60	7.63	6980	745	642	272	11.9	1990	3300	184	0.71	39.1	< 1	< 0.1	< 0.001
0803		4/13/1999	no data	6.50	7.65	6910	801	692	280	11.5	1960	3100	178	0.77	40.9	< 1	< 0.1	< 0.001
0803		10/12/1999	no data	6.58	7.78	6990	731	671	260	11.5	2000	3040	175	0.78	37.5	< 1	< 0.1	< 0.001
0803		1/11/2000	no data	6.60	7.66	7020	750	693	262	14.4	2000	3180	176	0.8	35.7	< 1	0.12	< 0.001
0803		5/2/2000	no data	6.70	7.58	7050	670	637	256	13.5	2000	3030	161	0.86	42.8	< 1	0.1	< 0.001
0803		7/12/2000	6,835.50	6.71	7.40	7250	712	737	328	6.76	2050	2890	184	1.24	77.5	1.7	< 0.1	< 0.001
0803		10/4/2000	6,834.50	6.65	7.31	7060	742	750	296	14.1	2010	3260	175	0.85	45.6	< 1	< 0.1	< 0.001
0803		1/8/2001	6,839.90	6.50	7.78	7010	739	730	277	12.5	1970	3240	178	1.06	46.3	< 1	< 0.1	< 0.001
0803		2/5/2001	6,863.35	6.38	7.11	6820	826	784	268	13	1830	3380	163	0.67	40.7	< 1	< 0.1	< 0.001
0803		3/5/2001	6,863.60	6.67	7.14	6810	726	716	320	12.4	1770	3320	129	0.73	39.1	< 1	< 0.1	< 0.001
0803		4/9/2001	6,864.10	6.40	7.01	6630	798	768	222	12.1	1790	3460	149	0.81	43.9	< 1	< 0.1	< 0.001
0803		5/7/2001	6,863.95	6.43	7.30	7040	696	713	217	11.5	1760	2980	159	0.74	46.9	< 1	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0803		4/7/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.98	< 0.1	< 0.05	< 0.001	< 0.1	0.17	0.3	< 1	0.3	< 0.2	< 1	< 1
0803		7/14/1993	< 0.01	< 0.01	< 0.01	< 0.05	1.03	< 0.1	< 0.05	< 0.001	< 0.1	0.062	< 0.2	1.4	1.4	< 0.2	< 1	< 1
0803		10/7/1993	< 0.01	< 0.01	< 0.01	< 0.05	1.12	< 0.1	< 0.05	< 0.001	< 0.1	0.069	0.3	7.9	8.2	< 0.2	< 1	< 1
0803		1/6/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.92	< 0.1	< 0.05	< 0.001	< 0.1	0.07	0.5	< 1	0.5	< 0.2	< 1	< 1
0803		4/12/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.72	< 0.1	< 0.05	< 0.001	< 0.1	0.1	0.6	< 1	0.6	< 0.2	3.2	< 1
0803		7/27/1994	< 0.01	< 0.01	< 0.01	< 0.05	1.17	< 0.1	< 0.05	0.004	< 0.1	0.108	0.9	5.4	6.3	< 0.2	< 1	1.4
0803		10/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	1.34	< 0.1	< 0.05	< 0.001	< 0.1	0.068	< 0.2	< 1	0	< 0.2	2.2	< 1
0803		1/4/1995	< 0.01	< 0.01	< 0.01	< 0.05	1.08	< 0.1	< 0.05	< 0.001	< 0.1	0.071	0.8	< 1	0.8	< 0.2	< 1	< 1
0803		4/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	1.1	< 0.1	< 0.05	< 0.001	< 0.1	0.074	< 0.2	< 1	0	< 0.2	1.1	< 1
0803		7/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	1.16	< 0.1	< 0.05	0.001	< 0.1	0.086	< 0.2	< 1	0	< 0.2	< 1	1.3
0803		10/4/1995	< 0.01	< 0.01	< 0.01	< 0.05	1.07	< 0.1	< 0.05	0.002	< 0.1	0.079	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		1/3/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.17	< 0.1	< 0.05	0.002	< 0.1	0.083	0.2	1	1.2	0.3	1.5	1
0803		4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.14	< 0.1	< 0.05	< 0.001	< 0.1	0.082	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		7/17/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.52	< 0.1	< 0.05	< 0.001	< 0.1	0.068	0.4	< 1	0.4	< 0.2	< 1	< 1
0803		10/8/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.14	< 0.1	< 0.05	< 0.001	< 0.1	0.079	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		1/28/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.53	< 0.1	< 0.05	< 0.001	< 0.1	0.056	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.7	< 0.1	< 0.05	0.002	< 0.1	0.069	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.97	< 0.1	< 0.05	< 0.001	< 0.1	0.067	0.9	< 1	0.9	< 0.2	< 1	< 1
0803		10/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.38	< 0.1	< 0.05	< 0.001	< 0.1	0.081	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		1/20/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.59	< 0.1	< 0.05	< 0.001	< 0.1	0.094	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		4/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.43	< 0.1	< 0.05	0.001	< 0.1	0.0901	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		7/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.52	< 0.1	< 0.05	< 0.001	< 0.1	0.0974	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		10/6/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.42	< 0.1	< 0.05	< 0.001	< 0.1	0.0976	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		1/12/1999	< 0.01	< 0.005	< 0.01	< 0.05	1.47	< 0.1	< 0.05	< 0.001	< 0.1	0.0984	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		4/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	1.55	< 0.1	< 0.05	< 0.001	< 0.1	0.0889	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		10/12/1999	< 0.01	< 0.005	< 0.01	< 0.05	1.62	< 0.1	< 0.05	< 0.001	< 0.1	0.0919	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		1/11/2000	< 0.01	< 0.005	< 0.01	< 0.05	1.69	< 0.1	0.05	0.001	< 0.1	0.0891	0.6	< 1	0.6	< 0.2	< 1	< 1
0803		5/2/2000	< 0.01	< 0.005	< 0.01	< 0.05	2.27	< 0.1	< 0.05	< 0.001	< 0.1	0.193	0.6	2.5	3.1	< 0.2	< 1	< 1
0803		7/12/2000	< 0.01	< 0.005	< 0.01	< 0.05	1.95	< 0.1	< 0.05	< 0.001	< 0.1	0.197	0.4	< 1	0.4	< 0.2	< 1	< 1
0803		10/4/2000	< 0.01	< 0.005	0.02	< 0.05	1.76	< 0.1	< 0.05	< 0.001	< 0.1	0.0841	0.5	1.3	1.8	< 0.2	< 1	< 1
0803		1/8/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.91	< 0.1	< 0.05	0.001	< 0.1	0.09	< 0.2	2.8	2.8	< 0.2	< 1	< 1
0803		2/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.37	< 0.1	< 0.05	0.001	< 0.1	0.1	0.6	< 1	0.6	< 0.2	no data	< 1
0803		3/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.75	< 0.1	0.05	0.001	< 0.1	0.0874	< 0.2	2.2	2.2	< 0.2	< 1	< 1
0803		4/9/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.29	< 0.1	< 0.05	< 0.001	< 0.1	0.1	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		5/7/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.13	< 0.1	< 0.05	< 0.001	< 0.1	0.093	< 0.2	< 1	0	< 0.2	< 1	< 1

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0803		6/4/2001	6,864.40	6.45	7.17	6750	700	723	202	11.6	1790	3280	164	0.84	47.8	< 1	< 0.1	< 0.001
0803		7/9/2001	6,864.30	6.95	6.96	6980	751	793	217	11.5	1820	3160	190	0.49	66	< 1	< 0.1	< 0.001
0803		8/6/2001	6,864.25	6.38	7.20	6950	690	730	220	12	1820	3000	200	0.4	57.6	< 1	< 0.1	< 0.001
0803		9/10/2001	6,864.40	6.49	7.30	6910	700	750	241	11.6	1900	3100	186	0.39	57.4	< 1	< 0.1	< 0.001
0803		10/1/2001	6,864.45	6.40	7.20	6940	670	710	231	12	1880	2800	215	0.45	56.4	< 1	< 0.1	< 0.001
0803		11/5/2001	6,864.75	6.40	7.40	7030	730	765	236	12.7	1830	3310	218	0.54	64	< 1	< 0.1	< 0.001
0803		12/3/2001	6,864.75	6.41	7.40	7120	688	726	221	11.9	1870	3020	191	0.65	62	< 1	< 0.1	< 0.001
0803		1/7/2002	6,864.75	6.46	7.00	6920	799	744	170	11.8	1830	3350	181	0.56	53.5	< 1	< 0.1	< 0.001
0803		2/4/2002	6,864.80	6.46	7.30	7000	775	738	246	11.9	1900	3250	191	0.7	51.1	< 1	< 0.1	< 0.001
0803		3/4/2002	6,864.70	6.42	7.20	7030	734	745	271	11.9	1880	3390	190	0.64	55.3	< 1	< 0.1	< 0.001
0803		4/1/2002	6,864.92	6.34	7.85	7070	770	761	274	13.7	1880	3480	197	0.73	51.2	1	< 0.1	< 0.001
0803		5/6/2002	6,864.95	6.37	7.13	7010	734	718	259	12.5	1890	3140	182	0.72	55.4	< 1	< 0.1	< 0.001
0803		6/3/2002	6,865.10	6.32	7.44	7130	749	743	240	11	1910	3250	165	0.86	52.7	1.2	< 0.1	< 0.001
0803		7/8/2002	6,864.68	6.38	7.60	7110	711	725	214	10.9	1890	3150	148	0.78	51.3	< 1	< 0.1	< 0.001
0803		10/8/2002	6,864.60	6.33	7.44	5300	678	690	244	11.3	1880	3060	163	1.04	55.2	1.1	< 0.1	< 0.001
0803		1/6/2003	6,864.48	6.47	7.27	6900	630	668	261	13.3	1870	2920	143	0.87	54	< 1	< 0.1	< 0.001
0803		4/7/2003	6,864.63	6.37	7.13	7000	693	732	269	15.3	1860	2940	174	0.74	51	1.2	< 0.1	< 0.001
0803		7/7/2003	6,864.01	6.22	7.37	6940	653	670	246	12.2	1850	2980	148	0.93	52	1.4	< 0.1	< 0.001
0803		10/6/2003	6,864.22	6.27	7.96	6860	724	776	287	11.5	1870	3370	165	1.05	49	1.2	< 0.1	< 0.001
0803		1/5/2004	6,864.16	6.46	7.25	6840	716	757	250	11.6	1900	3260	196	0.92	52.6 D	1.8	0.2	< 0.001
0803		4/5/2004	6,864.43	6.58	6.80	6870	677	734	270	12.2	1890	3140 D	170	1.06	52.3 D	2	< 0.1	< 0.001
0803		7/12/2004	6,864.08	6.20	6.77	6980	694	717	295	12.4	1780	3090 D	170	1.03	51.2 D	1.5	< 0.1	< 0.001
0803		10/4/2004	6,863.76	6.30	7.01	7200	695 D	741 D	307	11.1	1830	3140 D	171	0.95	44 D	2	< 0.1	< 0.001
0803		1/3/2005	6,863.88	6.51	6.93	6890	691 D	735 D	272	11.3	1830	2970 D	159	1.01	49 D	1.9	< 0.1	< 0.001
0803		4/4/2005	6,863.99	6.48	7.21	6640	677	726	276	11.3	1860	3120	159	1.24	31	2.8	< 0.1	< 0.001
0803		7/11/2005	6,863.59	6.42	7.27	6690	725 D	774 D	274	11.9	1700	3310 D	182	1.19	53.9 D	2.9	< 0.1	< 0.001
0803		10/3/2005	6,863.27	6.45	7.08	6730	672 D	768 D	271	11.6	2070	2950 D	172	1.19	49.2 D	2.6	< 0.1	< 0.001
0803		1/9/2006	6,863.10	6.56	7.61	6640	658 D	742 D	260	11.4	1910	3280 D	152	1.02	49.0 D	2.6	< 0.1	< 0.001
0803		4/3/2006	6,863.08	6.39	7.02	6610	702 D	757 D	243	11.6	1800	3040 D	171	1.64	52 D	2.4	< 0.1	< 0.001
0803		7/17/2006	6,862.83	6.32	6.83	6490	655 D	776 D	298	12.6	1810	3520 D	174	1.33	50.3 D	2.8	< 0.1	< 0.001
0803		10/2/2006	6,862.68	6.37	6.66	6770	662 D	710 D	261	11.6	1860	3070 D	134	1.41	51.8 D	2.51	< 0.1	< 0.001
0803		1/8/2007	6,862.58	6.43	6.96	6800	646 D	689 D	248	11.8	1780	3000 D	156	1.66	52 D	3.09	<0.1	<0.001
0803		4/9/2007	6,862.78	6.53	6.67	6460	652 D	720 D	257	13.3	1830	3110 D	167	1.47	52 D	3.15	<0.1	<0.001
0803		7/9/2007	6,862.48	6.33	6.82	6630	691 D	773 D	303	13.1	1900	3360 D	147	1.35	51 D	3.02	<0.1	0.01
0803		10/1/2007	6,862.11	6.44	6.62	6670	635 D	700 D	276 D	12.9	1880	3080 D	169 D	1.64	47.7 D	3.9	<0.1	<0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0803		6/4/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.34	< 0.1	< 0.05	0.004	< 0.1	0.086	0.4	< 1	0.4	< 0.2	< 1	< 1
0803		7/9/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.69	< 0.1	< 0.05	< 0.001	< 0.1	0.136	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		8/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.1	< 0.1	< 0.05	< 0.001	< 0.1	0.16	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		9/10/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.8	< 0.1	< 0.05	< 0.001	< 0.1	0.125	0.3	< 1	0.3	< 0.2	< 1	< 1
0803		10/1/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.6	< 0.1	< 0.05	< 0.001	< 0.1	0.148	0.8	< 1	0.8	< 0.2	< 1	< 1
0803		11/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.61	< 0.1	< 0.05	< 0.001	< 0.1	0.134	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		12/3/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.4	< 0.1	< 0.05	< 0.001	< 0.1	0.128	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		1/7/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.57	< 0.1	< 0.05	< 0.001	< 0.1	0.167	1	< 1	1	< 0.2	< 1	< 1
0803		2/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.63	< 0.1	< 0.05	< 0.001	< 0.1	0.149	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		3/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.97	< 0.1	< 0.05	< 0.001	< 0.1	0.166	< 0.2	2.5	2.5	< 0.2	< 1	< 1
0803		4/1/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.77	< 0.1	< 0.05	< 0.001	< 0.1	0.152	< 0.2	2.2	2.2	< 0.2	< 1	< 1
0803		5/6/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.87	< 0.1	< 0.05	< 0.001	< 0.1	0.174	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		6/3/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.8	< 0.1	< 0.05	< 0.001	< 0.1	0.153	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		7/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.77	< 0.1	< 0.05	< 0.001	< 0.1	0.201	0.4	< 1	0.4	< 0.2	< 1	< 1
0803		10/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.6	< 0.1	< 0.05	< 0.001	< 0.1	0.132	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		1/6/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.94	< 0.1	< 0.05	< 0.001	< 0.1	0.161	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0803		4/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.98	< 0.1	< 0.05	< 0.001	< 0.1	0.126	0.5	< 1	0.5	< 0.2	< 1	< 1.0
0803		7/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.91	< 0.1	< 0.05	< 0.001	< 0.1	0.138	0.3	< 1	0.3	< 0.2	< 1	< 1.0
0803		10/6/2003	< 0.01	< 0.005	< 0.01	< 0.05	2.34	< 0.1	< 0.05	< 0.001	< 0.1	0.164	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0803		1/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	2.58	< 0.1	< 0.05	< 0.001	< 0.1	0.153 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0803		4/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	1.89	< 0.1	< 0.05	< 0.001	< 0.1	0.133 D	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		7/12/2004	< 0.01	< 0.005	0.02	< 0.05	1.83	< 0.1	< 0.05	< 0.001	< 0.1	0.141 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0803		10/4/2004	< 0.01	< 0.005	< 0.01	< 0.05	1.99	< 0.1	< 0.05	< 0.001	< 0.1	0.133 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0803		1/3/2005	< 0.01	< 0.005	< 0.01	< 0.05	1.84	< 0.1	< 0.05	< 0.001	< 0.1	0.144	0.4	1.8	2.2	< 0.2	< 1.0	1.9
0803		4/4/2005	< 0.01	< 0.005	< 0.01	< 0.05	1.76	< 0.1	< 0.05	< 0.001	< 0.1	0.118	1	< 1.0	1	< 0.2	< 1.0	< 1.0
0803		7/11/2005	< 0.01	< 0.005	< 0.01	< 0.05	2.08	< 0.1	< 0.05	< 0.001	< 0.1	0.136	0.3	< 1.0	0.3	< 0.2	< 1.0	< 1.0
0803		10/3/2005	< 0.01	< 0.005	< 0.01	< 0.05	1.96	< 0.1	< 0.05	< 0.001	< 0.1	0.14	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0803		1/9/2006	< 0.01	< 0.005	< 0.01	< 0.05	2.36	< 0.1	< 0.05	< 0.001	< 0.1	0.125	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0803		4/3/2006	< 0.01	< 0.005	< 0.01	< 0.05	2.12	< 0.1	< 0.05	< 0.001	< 0.1	0.129 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0803		7/17/2006	< 0.01	< 0.005	< 0.01	< 0.05	2.05	< 0.1	< 0.05	< 0.001	< 0.1	0.139	0.5	2	2.5	< 0.2	< 1.0	1
0803		10/2/2006	< 0.01	< 0.005	< 0.01	< 0.05	2.08	< 0.1	< 0.05	< 0.001	< 0.1	0.125	< 0.2	< 1	0	< 0.2	< 1	< 1
0803		1/8/2007	<0.01	<0.005	<0.01	<0.05	1.94	<0.1	<0.05	<0.001	<0.1	0.126	<0.2	<1	0	<0.2	<1	<1
0803		4/9/2007	<0.01	<0.005	<0.01	<0.05	2.16	<0.1	<0.05	<0.001	<0.1	0.124	<0.2	<1	0	<0.2	<1	1.1
0803		7/9/2007	<0.01	<0.005	<0.01	<0.05	1.9	<0.1	<0.05	<0.001	<0.1	0.123	<0.2	<1	0	<0.2	<1	<1
0803		10/1/2007	<0.01	<0.005	<0.01	<0.05	2.13	<0.1	<0.05	<0.001	<0.1	0.129	<0.2	<1	0	<0.2	<1	1.3

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TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0803		1/14/2008	6,861.93	6.47	6.61	6780	609 D	664 D	260 D	12.6	1810	2810 D	178 D	1.61	47 D	4.24	< 0.1	< 0.001
0803		4/7/2008	6,862.33	6.38	6.73	6460	678 D	777 D	310 D	15.2 D	1720	3310 D	135	2.0 D	68.1	3.89	< 0.1	< 0.001
0803		7/7/2008	6,861.98	6.22	6.74 H	6480 H	650	711	254 D	12	1840	3280 D	165	1.76	49.4 D	4.52	< 0.1	< 0.003
0803		10/6/2008	6,861.58	6.33	6.81	6740	671	721	276 D	12	1790	3410 D	163	1.9	48.6	5.88	< 0.1	< 0.001
0803		1/12/2009	6,861.43	6.37	6.66	6940	627	698	265	11	1810	3040 D	148	1	70.6 D	5.56	<0.1	<0.001
0803		4/6/2009	6,861.23	6.39	6.52	6470	641 D	714 D	297 D	12	1830	3190 D	155	1.33	52.2 D	5.64	<0.1	<0.001
0803		7/6/2009	6,861.23	6.28	6.69	6820 H	671 D	731	296 D	14	1820	3360 D	173	2.13	47.8 D	4.52	<0.1	<0.001
0803		10/5/2009	6,860.88	6.43	7.09	6950	622 D	751	275 D	13	1820	3450 D	159	3.09	43 D	11.3	<0.1	<0.001
0808		1/8/2001	6,853.00	6.34	7.14	7470	720	721	382	14.5	2080	3400	233	16	26	1.4	6.02	0.001
0808		2/5/2001	6,863.60	6.46	7.04	5820	879	489	295	13.2	2040	2740	185	4.99	< 0.1	< 1	0.11	< 0.001
0808		3/5/2001	6,863.85	6.65	7.43	5480	879	482	377	12.1	2100	2580	213	5.01	< 0.1	< 1	< 0.1	< 0.001
0808		4/9/2001	6,864.40	6.65	7.04	6030	841	468	312	11.6	2130	2480	247	6.39	< 0.1	< 1	0.11	< 0.001
0808		5/7/2001	6,864.20	6.44	7.40	6600	797	577	359	8.6	2210	2540	216	1.66	60.2	< 1	< 0.1	< 0.001
0808		6/5/2001	no data	6.54	6.95	6680	843	582	361	9.2	2280	2790	238	2.11	32.4	1.8	0.2	< 0.001
0808	Filt	6/5/2001	6,864.50	6.46	6.90	6900	841	580	361	9.4	2270	2780	244	2.13	34.6	< 1	< 0.1	< 0.001
0808		7/9/2001	6,864.70	7.05	7.17	6870	830	710	320	6.3	1940	2800	246	0.16	119	3.3	< 0.1	< 0.001
0808		8/6/2001	6,864.55	6.40	7.20	6860	700	620	290	7.5	1950	2500	210	0.09	116	2.9	< 0.1	< 0.001
0808		9/10/2001	6,864.75	6.40	7.20	6750	720	610	300	6.1	1960	2500	150	0.41	140	2.9	0.1	< 0.001
0808		10/1/2001	6,864.80	6.47	7.40	6780	720	630	214	6.5	1970	2400	165	0.08	122	2.4	< 0.1	< 0.001
0808		11/5/2001	6,865.00	6.48	7.50	6800	782	656	280	7.6	1900	2750	237	0.06	142	3.1	< 0.1	< 0.001
0808		12/3/2001	6,865.10	6.53	7.50	6780	726	605	244	6.7	1940	2460	212	0.11	147	2.4	< 0.1	< 0.001
0808		1/7/2002	6,865.05	6.53	7.20	6810	854	670	232	8.7	1910	2870	230	0.05	117	3.4	< 0.1	< 0.001
0808		2/4/2002	6,865.10	6.52	7.30	6830	829	649	265	7.7	1960	2750	226	0.08	118	3.3	< 0.1	< 0.001
0808		3/4/2002	6,865.05	6.49	7.30	6710	788	652	308	6.4	1920	2890	207	0.08	122	3.6	< 0.1	< 0.001
0808		4/1/2002	6,865.31	6.36	7.84	6820	810	663	310	7.4	1930	2930	207	0.07	117	4.1	< 0.1	< 0.001
0808		5/6/2002	6,865.34	6.39	7.15	6900	773	644	287	7.6	1950	2690	208	0.16	125	4	< 0.1	< 0.001
0808		6/3/2002	6,865.45	6.35	7.36	6810	781	655	270	5.9	1960	2750	173	0.09	120	4.8	< 0.1	< 0.001
0808		7/8/2002	6,865.08	6.46	7.63	6950	782	682	230	7.3	1960	2850	173	0.15	115	4.2	< 0.1	< 0.001
0808		10/7/2002	6,864.81	6.38	7.19	5260	705	620	290	5.2	1970	2630	168	< 0.05	113	5	< 0.1	< 0.001
0808		1/6/2003	6,864.89	6.64	7.32	6900	655	609	283	9.7	1910	2510	144	0.12	131	5	< 0.1	< 0.001
0808		4/7/2003	6,865.02	6.43	6.71	6870	753	657	308	7.9	1910	2600	194	0.13	125	5.1	< 0.1	< 0.001
0808		7/7/2003	6,864.94	6.24	7.61	7130	720	640	267	7.9	1900	2740	170	0.3	122	6.8	< 0.1	< 0.001
0808		10/6/2003	6,864.67	6.25	7.52	7000	784	719	326	5.2	1880	3030	180	0.16	127	6.3	< 0.1	< 0.001
0808		1/5/2004	6,864.60	6.51	7.40	6810	768	705	269	6.2	1900	2950	200	0.1	123 D	6.5	0.2	< 0.001
0808		4/5/2004	6,864.98	6.69	6.83	6850	730	669	304	5.8	1880	2760 D	182	0.2	135 D	6.7	< 0.1	< 0.001

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TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0803		1/14/2008	< 0.01	< 0.005	< 0.01	< 0.05	1.95	< 0.1	< 0.05	< 0.001	< 0.1	0.115	< 0.2	< 1	0	< 0.2	< 1	1
0803		4/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	2.01	< 0.1	< 0.05	< 0.001	< 0.1	0.118	-0.001 U	0.5 U	0.499	-0.05 U	0 U	1.1
0803		7/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	2.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0994	-0.04 U	2.3	2.26	0 U	1.2 U	0.9
0803		10/6/2008	< 0.01	< 0.005	< 0.01	< 0.05	1.66	< 0.1	< 0.05	< 0.001	< 0.1	0.11	-0.04 U	-0.04 U	-0.08	0.3	-6 U	1
0803		1/12/2009	<0.01	<0.005	<0.01	<0.05	1.76	<0.1	<0.05	<0.001	<0.1	0.115	0.17 U	1.6	1.77	0.1 U	0 U	1.7
0803		4/6/2009	<0.01	<0.005	<0.01	<0.05	1.78	<0.1	<0.05	<0.001	<0.1	0.125	0.22	0.55 U	0.77	0.01 U	-0.7 U	0.7
0803		7/6/2009	<0.01	<0.005	<0.01	<0.05	1.48	<0.1	<0.05	<0.001	<0.1	0.0966	0.51	1.2 U	1.71	0.1 U	-0.4 U	1.1
0803		10/5/2009	<0.01	<0.005	<0.01	<0.05	2.15	<0.1	<0.05	<0.001	<0.1	0.0780	0.47	1.3 U	1.77	0.04 U	-0.8 U	0.9
0808		1/8/2001	< 0.01	< 0.005	0.13	< 0.05	18.1	< 0.1	0.09	0.001	< 0.1	0.082	< 0.2	< 1	0	< 0.2	< 1	< 1
0808		2/5/2001	< 0.01	< 0.005	0.02	< 0.05	2.61	< 0.1	< 0.05	< 0.001	< 0.1	0.0338	0.4	2.1	2.5	< 0.2	< 1	< 1
0808		3/5/2001	< 0.01	< 0.005	0.02	< 0.05	3.18	< 0.1	< 0.05	< 0.001	< 0.1	0.0338	< 0.2	< 1	0	< 0.2	< 1	< 1
0808		4/9/2001	< 0.01	< 0.005	0.03	< 0.05	4	< 0.1	< 0.05	< 0.001	< 0.1	0.034	0.4	< 1	0.4	< 0.2	< 1	< 1
0808		5/7/2001	< 0.01	< 0.005	0.01	< 0.05	1.91	< 0.1	< 0.05	< 0.001	< 0.1	0.074	< 0.2	< 1	0	< 0.2	< 1	< 1
0808		6/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.47	< 0.1	< 0.05	< 0.001	< 0.1	0.059	< 0.2	< 1	0	< 0.2	< 1	< 1
0808	Filt	6/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.49	< 0.1	< 0.05	< 0.001	< 0.1	0.06	0.4	< 1	0.4	< 0.2	< 1	< 1
0808		7/9/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.69	< 0.1	< 0.05	0.001	< 0.1	0.165	< 0.2	< 1	0	< 0.2	< 1	< 1
0808		8/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.71	< 0.1	< 0.05	< 0.001	< 0.1	0.194	< 0.2	< 1	0	< 0.2	< 1	< 1
0808		9/10/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.97	< 0.1	< 0.05	< 0.001	< 0.1	0.253	0.9	2.8	3.7	< 0.2	< 1	< 1
0808		10/1/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.55	< 0.1	< 0.05	< 0.001	< 0.1	0.157	0.3	< 1	0.3	< 0.2	< 1	< 1
0808		11/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.61	< 0.1	< 0.05	< 0.001	< 0.1	0.14	< 0.2	< 1	0	< 0.2	< 1	< 1
0808		12/3/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.56	< 0.1	< 0.05	< 0.001	< 0.1	0.147	< 0.2	< 1	0	< 0.2	< 1	< 1
0808		1/7/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.59	< 0.1	< 0.05	< 0.001	< 0.1	0.138	< 0.2	< 1	0	< 0.2	< 1	< 1
0808		2/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.64	< 0.1	< 0.05	< 0.001	< 0.1	0.145	< 0.2	< 1	0	< 0.2	< 1	< 1
0808		3/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.69	< 0.1	< 0.05	< 0.001	< 0.1	0.162	< 0.2	< 1	0	< 0.2	< 1	< 1
0808		4/1/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.7	< 0.1	< 0.05	< 0.001	< 0.1	0.15	< 0.2	< 1	0	< 0.2	< 1	< 1
0808		5/6/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.71	< 0.1	< 0.05	< 0.001	< 0.1	0.148	< 0.2	< 1	0	< 0.2	< 1	< 1
0808		6/3/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.65	< 0.1	< 0.05	< 0.001	< 0.1	0.142	< 0.2	< 1	0	< 0.2	< 1	< 1
0808		7/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.64	< 0.1	< 0.05	< 0.001	< 0.1	0.169	0.3	< 1	0.3	< 0.2	< 1	< 1
0808		10/7/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.65	< 0.1	< 0.05	< 0.001	< 0.1	0.115	< 0.2	< 1	0	< 0.2	< 1	< 1
0808		1/6/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.65	< 0.1	< 0.05	< 0.001	< 0.1	0.138	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0808		4/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.68	< 0.1	< 0.05	< 0.001	< 0.1	0.126	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0808		7/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.6	< 0.1	< 0.05	< 0.001	< 0.1	0.115	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0808		10/6/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.74	< 0.1	< 0.05	< 0.001	< 0.1	0.15	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0808		1/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.7	< 0.1	< 0.05	< 0.001	< 0.1	0.122 D	< 0.2	2.5	2.5	< 0.2	< 1.0	< 1.0
0808		4/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.62	< 0.1	< 0.05	0.002	< 0.1	0.135 D	< 0.2	< 1	0	< 0.2	< 1	< 1

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0808		7/12/2004	6,864.56	6.23	6.85	7030	751	663	323	6.4	1850	2760 D	186	0.12	128 D	5.3	< 0.1	< 0.001
0808		10/4/2004	6,864.17	6.30	7.05	7070	742 D	681 D	334	4.6	1840	2840 D	185	0.13	118 D	7.2	< 0.1	< 0.001
0808		1/3/2005	6,864.32	6.58	6.92	6880	739 D	663 D	301	5.6	1800	2620 D	174	0.08	110 D	6.6	< 0.1	< 0.001
0808		4/4/2005	6,864.50	6.53	7.23	6460	728	641	304	4.5	1850	2700	168	< 0.05	94	6.8	< 0.1	< 0.001
0808		7/11/2005	6,864.03	6.44	7.19	6680	750 D	676 D	286	5.2	1670	2820 D	198	0.09	125 D	8.7	< 0.1	< 0.001
0808		10/3/2005	6,863.82	6.45	7.09	6700	730 D	695 D	306	4.8	1840	2610 D	169	0.13	120 D	7.3	< 0.1	< 0.001
0808		1/9/2006	6,863.57	6.63	7.55	6510	705 D	649 D	276	5.3	1850	2840 D	159	0.84	128 D	6.7	< 0.1	< 0.001
0808		4/3/2006	6,863.57	6.39	7.03	6580	767 D	676 D	264	4.9	1780	2650 D	171	0.14	128 D	5.8	< 0.1	< 0.001
0808		7/17/2006	6,863.32	6.33	6.97	6460	732 D	693 D	324	5.9	1800	3080 D	180	< 0.05	126 D	6.8	0.3	< 0.001
0808		10/2/2006	6,863.22	6.40	6.55	6450	733 D	639 D	271	5.4	1780	2710 D	131	0.11	129 D	6.08	< 0.1	< 0.001
0808		1/8/2007	6,863.07	6.57	6.77	6060	614 D	539 D	258	5.2	1760	2310 D	141	0.12	124 D	6.24	<0.1	<0.001
0808		4/9/2007	6,863.37	6.59	6.72	6220	725 D	645 D	274	6.6	1780	2740 D	182	0.05	138 D	7.08	<0.1	<0.001
0808		7/9/2007	6,863.07	6.41	6.70	6560	744 D	674 D	313	5	1890	2920 D	152	<0.05	123 D	6.8	<0.1	0.01
0808		10/1/2007	6,862.70	6.49	6.69	6620	681 D	609 D	300 D	5.3	1840	2610 D	187 D	<0.05	122 D	6.88	<0.1	<0.001
0808		1/14/2008	6,862.53	6.53	6.56	6650	698 D	620 D	292 D	5.6	1800	2590 D	191 D	< 0.05	116 D	7	< 0.1	< 0.001
0808		4/7/2008	6,862.97	6.43	6.79	6210	739 D	679 D	330 D	7.0 D	1690	2840 D	162	< 0.05	134 D	6.60	< 0.1	< 0.001
0808		7/7/2008	6,862.72	6.26	6.77 H	6240 H	712	633	279 D	4	1800	2900 D	167	< 0.05	124 D	7.6	< 0.1	< 0.003
0808		10/6/2008	6,862.47	6.33	6.7	6500	729	644	296 D	4	1760	3010 D	166	< 0.1	159 D	9.44	< 0.1	< 0.001
0808		1/12/2009	6,862.07	6.36	6.72	6800	709	652	303	4	1800	2600 D	155	<0.05	123 D	7.68	0.2	<0.001
0808		4/6/2009	6,861.87	6.42	6.49	6360	708 D	659 D	326 D	4	1850	2910 D	162	0.06	117 D	6.40	<0.1	<0.001
0808		7/6/2009	6,861.87	6.31	6.63	6800 H	769 D	673	313 D	5	1840	3020 D	180	<0.05	114 D	6.16	<0.1	<0.001
0808		10/6/2009	6,861.37	6.34	7.09	6740	739 D	639	322	4	1880	3180 D	169	0.16	126 D	7.00	<0.1	<0.001
EPA 22A		7/25/1989	6,914.50	7.10	6.95	1384	311	59	84	3.1	542	646	10.7	0.06	0.2	< 1	< 0.1	< 0.001
EPA 22A		10/8/1989	6,913.70	6.90	7.56	1310	269	55.4	88.2	4.3	521	605	11.4	0.06	0.26	< 1	< 0.1	< 0.001
EPA 22A		1/17/1990	6,912.90	6.80	6.96	1478	311	57.4	86.7	3.4	556	677	11.7	0.07	0.25	< 1	< 0.1	< 0.001
EPA 22A		4/19/1990	6,911.90	6.90	7.31	1448	310	63.1	82.9	3.2	576	845	11.5	0.06	0.21	< 1	< 0.1	< 0.001
EPA 22A		7/17/1990	6,910.80	6.90	7.28	1505	317	59.5	80.4	3.6	583	681	11.6	< 0.05	0.12	< 1	< 0.1	< 0.001
EPA 22A		10/16/1990	6,910.00	6.80	7.79	1536	301	59.9	81.2	3.4	547	704	10.9	< 0.05	0.2	< 1	< 0.1	< 0.001
EPA 22A		1/10/1991	6,909.50	6.90	7.98	1551	324	69.2	84.7	7.1	533	754	16.7	< 0.05	0.21	< 1	< 0.1	< 0.001
EPA 22A		4/16/1991	6,908.80	6.80	7.66	1494	299	60.9	80	3.7	521	720	10.2	< 0.05	0.21	< 1	< 0.1	< 0.001
EPA 22A		7/9/1991	6,908.30	6.80	7.42	1532	291	54.1	75	3.1	540	663	11.5	0.17	0.09	< 1	< 0.1	< 0.001
EPA 22A		10/22/1991	6,907.70	6.80	7.24	1430	282	55.3	84.1	3	549	685	16.2	0.16	< 0.01	< 1	< 0.1	< 0.001
EPA 22A		1/23/1992	6,906.90	6.80	7.76	1416	308	52.3	82.2	3.3	540	676	11.4	< 0.05	< 0.01	< 1	< 0.1	< 0.001
EPA 22A		4/2/1992	6,906.30	6.80	7.70	1453	294	61.2	95.8	3.4	556	727	11	< 0.05	< 0.1	< 1	< 0.1	< 0.001
EPA 22A		7/16/1992	6,905.20	6.90	7.43	1456	268	58.6	74.3	3.6	538	714	12.2	< 0.05	0.7	< 1	< 0.1	0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
0808		7/12/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.58	< 0.1	< 0.05	0.001	< 0.1	0.131 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0808		10/4/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.62	< 0.1	< 0.05	0.001	< 0.1	0.116 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0808		1/3/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.58	< 0.1	< 0.05	< 0.001	< 0.1	0.135	0.3	< 1.0	0.3	< 0.2	< 1.0	< 1.0
0808		4/4/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.62	< 0.1	< 0.05	< 0.001	< 0.1	0.125	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0808		7/11/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.62	< 0.1	< 0.05	< 0.001	< 0.1	0.124	0.3	< 1.0	0.3	< 0.2	< 1.0	< 1.0
0808		10/3/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.61	< 0.1	< 0.05	< 0.001	< 0.1	0.134	< 0.2	1.7	1.7	< 0.2	< 1.0	< 1.0
0808		1/9/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.67	< 0.1	< 0.05	0.002	< 0.1	0.121	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0808		4/3/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.63	< 0.1	< 0.05	0.002	< 0.1	0.131 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0808		7/17/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.66	< 0.1	< 0.05	< 0.001	< 0.1	0.13	0.3	2.1	2.4	< 0.2	< 1.0	< 1.0
0808		10/2/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.63	< 0.1	< 0.05	< 0.001	< 0.1	0.12	< 0.2	< 1	0	< 0.2	< 1	< 1
0808		1/8/2007	<0.01	<0.005	<0.01	<0.05	0.54	<0.1	<0.05	<0.001	<0.1	0.0992	<0.2	<1	0	<0.2	<1	<1
0808		4/9/2007	<0.01	<0.005	<0.01	<0.05	0.65	<0.1	<0.05	<0.001	<0.1	0.126	<0.2	<1	0	<0.2	<1	<1
0808		7/9/2007	<0.01	<0.005	<0.01	<0.05	0.55	<0.1	<0.05	<0.001	<0.1	0.126	<0.2	<1	0	<0.2	<1	<1
0808		10/1/2007	<0.01	<0.005	<0.01	<0.05	0.69	<0.1	<0.05	<0.001	<0.1	0.128	<0.2	<1	0	<0.2	<1	<1
0808		1/14/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.66	< 0.1	< 0.05	< 0.001	< 0.1	0.119	< 0.2	< 1	0	< 0.2	< 1	< 1
0808		4/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.66	< 0.1	< 0.05	< 0.001	< 0.1	0.124	-0.2 U	0.4 U	0.2	0.5	0 U	1.2
0808		7/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.72	< 0.1	< 0.05	< 0.001	< 0.1	0.119	-0.08 U	1.9	1.82	0.4	2 U	1
0808		10/6/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.53	< 0.1	< 0.05	< 0.001	< 0.1	0.115	-0.2 U	0.34 U	0.14	0.1 U	-2 U	1
0808		1/12/2009	<0.01	<0.005	<0.01	<0.05	0.67	<0.1	<0.05	<0.001	<0.1	0.136	0.17 U	0.89 U	1.06	0.1 U	-2 U	1.1
0808		4/6/2009	<0.01	<0.005	<0.01	<0.05	0.74	<0.1	<0.05	<0.001	<0.1	0.119	0.15	0.42 U	0.57	-0.008 U	-0.9 U	0.5 U
0808		7/6/2009	<0.01	<0.005	<0.01	<0.05	0.78	<0.1	<0.05	<0.001	<0.1	0.126	0.60	2.2	2.8	-0.2 U	0.2 U	3.0
0808		10/6/2009	<0.01	<0.005	<0.01	<0.05	0.77	<0.1	<0.05	<0.001	<0.1	0.123	0.61	-0.3 U	0.31	-0.008 U	-0.6 U	0.1 U
EPA 22A		7/25/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.0276	0.5	< 1	0.5	1.3	< 1	< 1
EPA 22A		10/8/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.029	0.9	< 1	0.9	5.9	4.1	7.8
EPA 22A		1/17/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.09	< 0.1	< 0.05	0.001	< 0.1	0.028	0.2	1.9	2.1	3.1	< 1	3.5
EPA 22A		4/19/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.09	< 0.1	< 0.05	0.001	< 0.1	0.027	0.5	< 1	0.5	< 0.2	< 1	< 1
EPA 22A		7/17/1990	< 0.05	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0359	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 22A		10/16/1990	< 0.05	< 0.01	0.03	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	0.0254	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 22A		1/10/1991	< 0.01	< 0.01	0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.0241	0.7	< 1	0.7	< 0.2	1.7	1.1
EPA 22A		4/16/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	< 0.001	< 0.1	0.021	< 0.2	1.7	1.7	< 0.2	< 1	< 1
EPA 22A		7/9/1991	< 0.01	< 0.01	0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.0338	0.6	< 1	0.6	< 0.2	< 1	< 1
EPA 22A		10/22/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.013	0.3	< 1	0.3	< 0.2	< 1	< 1
EPA 22A		1/23/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.11	< 0.1	< 0.05	0.001	< 0.1	0.036	2	2.3	4.3	< 0.2	3.4	2
EPA 22A		4/2/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	0.01	0.3	1.5	1.8	< 0.2	< 1	< 1
EPA 22A		7/16/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.11	< 0.1	< 0.05	0.001	< 0.1	0.028	0.5	1.4	1.9	< 0.2	< 1	< 1

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 22A		10/15/1992	6,904.50	6.90	7.51	1603	306	59.6	83.9	2.9	548	744	11.4	< 0.05	< 0.1	< 1	< 0.1	< 0.001
EPA 22A		1/13/1993	6,903.90	7.00	7.47	1497	314	60	81	3.3	545	746	15.9	< 0.05	< 0.1	< 1	< 0.1	< 0.001
EPA 22A		4/15/1993	6,903.20	7.00	7.52	1631	341	54.4	88.4	1.9	548	777	12.5	< 0.05	0.6	< 1	< 0.1	< 0.001
EPA 22A		7/21/1993	6,902.30	7.00	7.83	1635	333	62	98	4.3	558	859	11.8	< 0.05	0.33	< 1	< 0.1	< 0.001
EPA 22A		10/12/1993	6,899.70	7.00	7.40	1699	352	63.3	92.5	2.1	551	847	11.2	< 0.05	0.33	< 1	< 0.1	< 0.001
EPA 22A		1/11/1994	6,900.90	7.00	7.92	1748	343	68.9	72.9	1.7	492	938	11.4	0.12	0.91	< 1	< 0.1	< 0.001
EPA 22A		4/19/1994	6,900.40	6.70	7.77	1595	315	61.7	82.8	2.8	483	815	11.8	< 0.05	0.68	< 1	< 0.1	< 0.001
EPA 22A		7/27/1994	6,899.80	6.80	7.68	1548	392	58.8	85.1	2	510	877	9.8	< 0.05	0.46	< 1	< 0.1	< 0.001
EPA 22A		10/11/1994	6,899.10	6.90	7.71	1611	341	58.9	95.3	2.5	538	829	11	< 0.05	0.99	< 1	< 0.1	< 0.001
EPA 22A		1/11/1995	6,898.50	6.90	8.00	1726	352	63	87	3	534	828	12.3	0.12	0.92	< 1	< 0.1	< 0.001
EPA 22A		4/11/1995	6,898.10	6.90	7.62	1585	325	66	88	2.5	547	751	10.5	0.06	1.09	< 1	< 0.1	< 0.001
EPA 22A		7/11/1995	6,897.50	7.00	7.84	1820	394	85	87	2.6	503	974	14.3	1.97	1.92	< 1	< 0.1	< 0.001
EPA 22A		10/10/1995	6,896.90	7.20	8.22	1553	313	63	95	2.6	549	724	12	< 0.05	1.12	< 1	< 0.1	0.003
EPA 22A		1/9/1996	6,896.30	7.30	7.49	1724	329	68	94	2.7	549	824	11.5	< 0.05	1.73	< 1	< 0.1	< 0.001
EPA 22A		4/10/1996	6,895.70	7.20	7.93	1782	350	74.5	83.5	2.5	550	881	12.4	0.06	1.85	< 1	< 0.1	< 0.001
EPA 22A		7/17/1996	6,895.30	7.00	7.52	1815	326	72.4	93.6	2.7	548	816	12.1	0.05	1.29	< 1	< 0.1	< 0.001
EPA 22A		10/8/1996	6,894.50	6.90	7.48	2040	401	92	93	3	543	1041	16.7	0.07	1.44	< 1	< 0.1	0.002
EPA 22A		1/28/1997	6,893.70	7.00	7.97	2070	488	104	83	2.83	538	1178	20.4	0.06	4.07	< 1	< 0.1	< 0.001
EPA 22A		4/14/1997	6,893.10	6.80	7.95	2050	409	94	91.6	2.9	537	1074	16.2	0.06	4.27	< 1	< 0.1	< 0.001
EPA 22A		7/15/1997	6,892.60	6.90	8.15	1940	351	80.8	91.1	2.7	521	955	17.2	0.05	3.79	< 1	< 0.1	0.001
EPA 23		7/28/1989	6,897.30	6.60	6.37	4967	742	422	185	10.7	1037	2390	96.4	0.68	97	< 1	< 0.1	< 0.001
EPA 23		10/8/1989	6,896.70	6.30	7.10	4930	682	397	173	14.1	1086	2339	91	0.53	91	< 1	< 0.1	< 0.001
EPA 23		1/17/1990	6,896.30	6.40	6.66	4882	669	391	174	10.9	1074	2278	90.9	0.53	89	< 1	< 0.1	< 0.001
EPA 23		4/18/1990	6,895.60	6.50	6.88	4988	610	363	165	9.9	1104	2241	89.9	0.64	80	< 1	< 0.1	0.002
EPA 23		7/13/1990	6,894.70	6.60	6.86	4780	678	413	173	11.2	1106	2243	89.7	0.31	82.9	< 1	< 0.1	< 0.001
EPA 23		10/11/1990	6,894.50	6.50	7.03	4580	657	403	173	10.8	1076	2374	99	0.5	80.1	< 1	< 0.1	< 0.001
EPA 23		1/9/1991	6,893.90	6.50	7.10	4876	688	418	177	27	1070	2406	97.5	0.51	95	< 1	< 0.1	< 0.001
EPA 23		4/16/1991	6,893.60	6.40	7.90	4876	604	387	165	11.1	1059	2408	90	0.43	115	< 1	< 0.1	< 0.001
EPA 23		7/9/1991	6,892.90	6.30	6.81	5029	616	393	163	9	1122	2347	93.7	0.56	81.8	< 1	0.17	< 0.001
EPA 23		10/23/1991	6,892.40	6.30	7.17	4870	626	393	173	10.2	1059	2257	101	0.8	67.5	< 1	0.14	< 0.001
EPA 23		1/16/1992	6,891.70	6.40	7.42	4916	619	382	168	9.8	979	2376	100	1	94.3	< 1	< 0.1	< 0.001
EPA 23		4/2/1992	6,891.50	6.30	7.27	4901	669	360	211	12	1096	2408	89.3	0.73	94.3	< 1	< 0.1	< 0.001
EPA 23		7/16/1992	6,890.20	6.50	7.08	5173	682	349	201	11.4	1093	2390	93.4	0.4	74.4	< 1	< 0.1	< 0.001
EPA 23		10/15/1992	6,889.30	6.60	7.11	4866	655	339	170	11.5	1091	2373	88.2	0.7	48.4	< 1	< 0.1	< 0.001
EPA 23		1/14/1993	6,889.20	6.60	7.30	4647	622	358	155	11.1	1054	2404	78.6	1.2	39.5	< 1	< 0.1	< 0.001

CHESTER ENGINEERS

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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 22A		10/15/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	0.009	0.9	2.8	3.7	< 0.2	2.2	< 1
EPA 22A		1/13/1993	< 0.1	< 0.01	< 0.01	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	0.041	< 0.2	2.6	2.6	< 0.2	< 1	< 1
EPA 22A		4/15/1993	< 0.01	< 0.01	0.02	< 0.05	0.12	< 0.1	< 0.05	< 0.001	< 0.1	0.039	1	< 1	1	< 0.2	< 1	1.5
EPA 22A		7/21/1993	< 0.01	< 0.01	0.01	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	0.039	0.6	< 1	0.6	< 0.2	1.6	< 1
EPA 22A		10/12/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	< 0.001	< 0.1	0.045	0.6	< 1	0.6	< 0.2	2	< 1
EPA 22A		1/11/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.13	< 0.1	< 0.05	< 0.001	< 0.1	0.045	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 22A		4/19/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	< 0.001	< 0.1	0.034	0.5	1.4	1.9	< 0.2	1.1	2.8
EPA 22A		7/27/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.035	4.4	6.1	10.5	< 0.2	< 1	13.7
EPA 22A		10/11/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	0.036	0.8	< 1	0.8	< 0.2	5.4	< 1
EPA 22A		1/11/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.13	< 0.1	< 0.05	< 0.001	< 0.1	0.051	0.8	2.3	3.1	< 0.2	< 1	4.4
EPA 22A		4/11/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.031	0.3	1.6	1.9	< 0.2	< 1	2.7
EPA 22A		7/11/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.15	< 0.1	< 0.05	< 0.001	< 0.1	0.042	0.4	< 1	0.4	< 0.2	< 1	1.5
EPA 22A		10/10/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.11	< 0.1	< 0.05	< 0.001	< 0.1	0.036	1.3	3.8	5.1	< 0.2	< 1	2.3
EPA 22A		1/9/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.038	0.4	< 1	0.4	0.8	< 1	< 1
EPA 22A		4/10/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.09	< 0.1	< 0.05	< 0.001	< 0.1	0.048	0.5	2	2.5	< 0.2	< 1	1.4
EPA 22A		7/17/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.15	< 0.1	< 0.05	< 0.001	< 0.1	0.048	0.7	< 1	0.7	< 0.2	< 1	< 1
EPA 22A		10/8/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.17	< 0.1	< 0.05	< 0.001	< 0.1	0.051	2.1	< 1	2.1	< 0.2	< 1	2.2
EPA 22A		1/28/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.15	< 0.1	< 0.05	< 0.001	< 0.1	0.032	1.1	< 1	1.1	< 0.2	< 1	1.2
EPA 22A		4/14/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.18	< 0.1	< 0.05	< 0.001	< 0.1	0.043	1.5	< 1	1.5	< 0.2	< 1	3.7
EPA 22A		7/15/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.27	< 0.1	< 0.05	0.003	< 0.1	0.032	0.8	< 1	0.8	< 0.2	< 1	< 1
EPA 23		7/28/1989	< 0.05	< 0.01	0.01	< 0.05	1.8	< 0.1	< 0.05	0.001	< 0.1	0.0443	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		10/8/1989	< 0.05	< 0.01	< 0.01	< 0.05	1.9	< 0.1	< 0.05	0.001	< 0.1	0.04	0.2	< 1	0.2	9.8	< 1	10.2
EPA 23		1/17/1990	< 0.05	< 0.01	< 0.01	< 0.05	1.9	< 0.1	< 0.05	< 0.001	< 0.1	0.035	0.7	1.5	2.2	1.3	1.5	1.5
EPA 23		4/18/1990	< 0.05	< 0.01	< 0.01	< 0.05	1.6	< 0.1	< 0.05	< 0.016	< 0.1	0.031	0.4	< 1	0.4	< 0.2	< 1	< 1
EPA 23		7/13/1990	< 0.05	< 0.01	0.01	< 0.05	2.11	< 0.1	< 0.05	< 0.001	< 0.1	0.0388	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		10/11/1990	< 0.05	< 0.01	< 0.01	< 0.05	2.07	< 0.1	< 0.05	< 0.001	< 0.1	0.0378	0.9	< 1	0.9	< 0.2	< 1	< 1
EPA 23		1/9/1991	< 0.01	< 0.01	< 0.01	< 0.05	2.01	< 0.1	< 0.05	0.001	< 0.1	0.0491	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		4/16/1991	< 0.01	< 0.01	< 0.01	< 0.05	2.08	< 0.1	< 0.05	< 0.001	< 0.1	0.023	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		7/9/1991	< 0.01	< 0.01	< 0.01	< 0.05	1.95	< 0.1	< 0.05	< 0.001	< 0.1	0.0436	0.4	< 1	0.4	< 0.2	< 1	< 1
EPA 23		10/23/1991	< 0.01	< 0.01	< 0.01	no data	2.18	< 0.1	< 0.05	< 0.001	< 0.1	0.051	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		1/16/1992	< 0.01	< 0.01	< 0.01	< 0.05	2.28	< 0.1	< 0.05	< 0.001	< 0.1	0.032	0.3	< 1	0.3	< 0.2	< 1	< 1
EPA 23		4/2/1992	< 0.01	< 0.01	< 0.01	< 0.05	2.27	< 0.1	< 0.05	0.013	< 0.1	0.031	< 0.2	3.6	3.6	< 0.2	< 1	< 1
EPA 23		7/16/1992	< 0.01	< 0.01	< 0.01	< 0.05	2.23	< 0.1	< 0.05	0.001	< 0.1	0.032	1.2	3.1	4.3	< 0.2	< 1	1.3
EPA 23		10/15/1992	< 0.01	< 0.01	< 0.01	< 0.05	2.69	< 0.1	< 0.05	< 0.001	< 0.1	0.038	1.6	1.4	3	< 0.2	1.1	1.8
EPA 23		1/14/1993	< 0.01	< 0.01	< 0.01	< 0.05	2.68	< 0.1	< 0.05	< 0.001	< 0.1	0.035	< 0.2	1.8	1.8	< 0.2	< 1	< 1

CHESTER ENGINEERS

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 23		4/15/1993	6,888.90	6.70	7.08	4777	669	349	176	8.8	1094	2361	93.1	0.75	56.6	< 1	< 0.1	< 0.001
EPA 23		7/21/1993	6,887.50	6.70	7.48	4450	671	347	180	11	1137	2207	87.8	0.93	53	< 1	< 0.1	< 0.001
EPA 23		10/11/1993	6,885.70	6.70	7.06	4749	753	372	155	9	1059	2225	79.6	0.91	52.4	< 1	< 0.1	< 0.001
EPA 23		1/10/1994	6,886.70	6.60	7.42	4712	681	346	179	8.4	1007	2547	85.2	0.9	41.5	< 1	< 0.1	< 0.001
EPA 23		4/19/1994	6,886.60	6.40	7.63	4823	632	342	160	10.1	997	2460	84.9	1.07	49.5	< 1	< 0.1	< 0.001
EPA 23		7/27/1994	6,886.00	6.50	7.40	4720	748	344	144	9.7	1061	2369	88.4	0.8	52.1	< 1	< 0.1	< 0.001
EPA 23		10/10/1994	6,885.40	6.70	7.45	4891	701	404	174	10	1175	2599	92.2	1.2	54.4	< 1	< 0.1	< 0.001
EPA 23		1/11/1995	6,885.30	6.60	7.21	4852	690	352	156	10.4	1142	2333	96.7	1.41	56.3	< 1	< 0.1	< 0.001
EPA 23		4/11/1995	6,885.00	6.50	7.21	4914	710	388	162	9.7	1152	2414	108	1.64	53.4	< 1	< 0.1	< 0.001
EPA 23		7/10/1995	6,884.10	6.60	7.50	4865	695	401	176	10.3	1227	2303	113	2.28	61.4	< 1	< 0.1	< 0.001
EPA 23		10/9/1995	6,883.80	6.50	7.66	4379	675	380	155	9.4	1122	2194	83.3	1.31	32.7	< 1	< 0.1	< 0.001
EPA 23		1/8/1996	6,883.30	6.40	7.35	4421	690	390	162	10.1	1114	2267	86	1.39	42.5	< 1	< 0.1	< 0.001
EPA 23		4/9/1996	6,883.10	6.70	7.67	4880	725	411	150	9.7	1172	2440	95.3	1.51	45	< 1	< 0.1	0.002
EPA 23		7/17/1996	6,882.50	6.50	7.07	4518	620	350	135	10	1048	2368	68	1.09	8.94	< 1	< 0.1	< 0.001
EPA 23		10/8/1996	6,882.30	6.50	7.18	4670	658	378	150	10.1	1094	2269	81.1	1.04	25.8	< 1	< 0.1	< 0.001
EPA 23		1/27/1997	6,881.80	6.60	7.83	4720	650	370	152	10.3	1138	2403	99	1.19	32.9	< 1	< 0.1	0.003
EPA 23		4/14/1997	6,883.20	6.50	7.71	4980	733	431	164	10.4	1210	2351	116	1.88	34.5	< 1	< 0.1	< 0.001
EPA 23		7/14/1997	6,881.10	6.50	7.56	4810	699	400	145	10	1130	2190	99	1.39	33.4	< 1	< 0.1	< 0.001
EPA 23		10/14/1997	6,880.40	6.50	7.71	4840	728	427	175	10.4	1180	2450	113	1.7	40	< 1	< 0.1	< 0.001
EPA 23		1/19/1998	6,881.10	6.60	7.64	4490	647	369	134	10.5	1050	2730	71.4	1.41	1.93	< 1	< 0.1	< 0.001
EPA 23		4/13/1998	6,880.40	6.70	7.37	4840	711	416	167	10.7	1180	2250	90.8	2.05	49.3	< 1	< 0.1	< 0.001
EPA 23		7/13/1998	6,880.10	6.70	7.73	5060	710	424	170	10.7	1190	2200	98.9	2.32	46	< 1	< 0.1	< 0.001
EPA 23		10/13/1998	6,880.40	6.63	7.95	4620	668	390	151	10.5	1110	2300	78.2	3.05	59.2	< 1	< 0.1	< 0.001
EPA 23		1/12/1999	6,880.10	6.70	7.72	4740	653	374	142	9.7	1180	2100	95.6	2.45	61.6	< 1	< 0.1	< 0.001
EPA 23		4/13/1999	6,880.00	6.60	7.68	4670	684	375	145	9.6	1140	2290	92.2	2.09	29.2	< 1	< 0.1	< 0.001
EPA 23		7/20/1999	6,879.91	6.70	7.67	4640	690	402	134	12	1120	2300	86	2.65	56.5	< 1	< 0.1	< 0.001
EPA 23		10/12/1999	6,880.10	6.62	7.69	4910	687	424	152	10.2	1240	2270	111	3.61	63.4	< 1	< 0.1	< 0.001
EPA 23		1/11/2000	6,879.60	6.60	7.73	4730	624	379	144	11.2	1190	1840	92.6	3.11	60.5	< 1	< 0.1	< 0.001
EPA 23		5/9/2000	6,879.20	6.60	7.81	4380	598	364	125	9.8	1040	2130	68.7	0.96	1.41	< 1	< 0.1	< 0.001
EPA 23	Dup	5/9/2000	no data	6.50	7.81	4430	600	365	125	9.6	1050	2150	70	0.99	1.38	< 1	< 0.1	< 0.001
EPA 23		7/17/2000	6,878.80	6.55	7.66	4450	630	376	117	9.68	1060	1980	71.1	1.02	1.51	< 1	< 0.1	< 0.001
EPA 23	Dup	7/17/2000	no data	6.56	7.55	4450	630	377	120	9.64	1050	2030	68.9	1.03	1.54	< 1	< 0.1	< 0.001
EPA 23		10/9/2000	6,878.60	6.54	7.45	4390	531	325	112	10.6	1060	1770	57.4	0.96	1.03	< 1	< 0.1	< 0.001
EPA 23	Dup	10/9/2000	no data	6.55	7.55	4380	528	325	111	10.4	1050	1740	56.1	0.92	1.01	< 1	< 0.1	< 0.001
EPA 23		1/9/2001	6,878.70	6.75	7.68	4340	648	391	114	9.2	1050	2150	67.7	0.97	1.14	< 1	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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 23		4/15/1993	< 0.01	< 0.01	< 0.01	< 0.05	2.61	< 0.1	< 0.05	< 0.001	< 0.1	0.028	0.3	< 1	0.3	< 0.2	< 1	< 1
EPA 23		7/21/1993	< 0.01	0.02	0.02	< 0.05	2.89	< 0.1	< 0.05	< 0.001	< 0.1	0.036	0.2	< 1	0.2	< 0.2	< 1	< 1
EPA 23		10/11/1993	< 0.01	< 0.01	< 0.01	< 0.05	2.74	< 0.1	< 0.05	0.001	< 0.1	0.028	< 0.2	1.4	1.4	< 0.2	< 1	< 1
EPA 23		1/10/1994	< 0.01	< 0.01	< 0.01	< 0.05	2.95	< 0.1	< 0.05	< 0.001	< 0.1	0.035	< 0.2	3.7	3.7	< 0.2	< 1	6.7
EPA 23		4/19/1994	< 0.01	< 0.01	< 0.01	< 0.05	2.63	< 0.1	< 0.05	< 0.001	< 0.1	0.039	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		7/27/1994	< 0.01	< 0.01	< 0.01	< 0.05	2.75	< 0.1	< 0.05	0.001	< 0.1	0.032	1.5	2.5	4	< 0.2	< 1	5.4
EPA 23		10/10/1994	< 0.01	< 0.01	< 0.01	< 0.05	2.82	< 0.1	< 0.05	< 0.001	< 0.1	0.036	0.3	< 1	0.3	< 0.2	1.9	< 1
EPA 23		1/11/1995	< 0.01	< 0.01	< 0.01	< 0.05	2.75	< 0.1	< 0.05	< 0.001	< 0.1	0.046	0.3	2.8	3.1	< 0.2	1.9	4.5
EPA 23		4/11/1995	< 0.01	< 0.01	< 0.01	< 0.05	3	< 0.1	< 0.05	< 0.001	< 0.1	0.034	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		7/10/1995	< 0.01	< 0.01	< 0.01	< 0.05	3.03	< 0.1	< 0.05	0.002	< 0.1	0.038	0.3	< 1	0.3	< 0.2	< 1	3.3
EPA 23		10/9/1995	< 0.01	< 0.01	< 0.01	< 0.05	3.52	< 0.1	< 0.05	0.004	< 0.1	0.033	0.6	3	3.6	< 0.2	< 1	< 1
EPA 23		1/8/1996	< 0.01	< 0.01	< 0.01	< 0.05	3.4	< 0.1	< 0.05	0.003	< 0.1	0.037	0.2	< 1	0.2	< 0.2	1.9	< 1
EPA 23		4/9/1996	< 0.01	< 0.01	< 0.01	< 0.05	3.29	< 0.1	< 0.05	< 0.001	< 0.1	0.04	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		7/17/1996	< 0.01	< 0.01	< 0.01	< 0.05	4.2	< 0.1	< 0.05	< 0.001	< 0.1	0.025	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		10/8/1996	< 0.01	< 0.01	< 0.01	< 0.05	3.65	< 0.1	< 0.05	< 0.001	< 0.1	0.031	0.3	< 1	0.3	< 0.2	< 1	< 1
EPA 23		1/27/1997	< 0.01	< 0.01	< 0.01	< 0.05	3.41	< 0.1	< 0.05	0.005	< 0.1	0.026	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		4/14/1997	< 0.01	< 0.01	< 0.01	< 0.05	3.39	< 0.1	< 0.05	0.005	< 0.1	0.035	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		7/14/1997	< 0.01	< 0.01	< 0.01	< 0.05	3.45	< 0.1	< 0.05	0.001	< 0.1	0.033	0.5	< 1	0.5	< 0.2	< 1	< 1
EPA 23		10/14/1997	< 0.01	< 0.01	< 0.01	< 0.05	3.69	< 0.1	< 0.05	0.003	< 0.1	0.039	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		1/19/1998	< 0.01	< 0.005	< 0.01	< 0.05	4.63	< 0.1	< 0.05	< 0.001	< 0.1	0.024	0.8	< 1	0.8	< 0.2	< 1	< 1
EPA 23		4/13/1998	< 0.01	< 0.005	< 0.01	< 0.05	3.53	< 0.1	< 0.05	< 0.001	< 0.1	0.0405	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		7/13/1998	< 0.01	< 0.005	< 0.01	< 0.05	3.69	< 0.1	< 0.05	< 0.001	< 0.1	0.0448	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		10/13/1998	< 0.01	< 0.005	< 0.01	< 0.05	2.83	< 0.1	< 0.05	< 0.001	< 0.1	0.0288	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		1/12/1999	< 0.01	0.005	< 0.01	< 0.05	2.75	< 0.1	< 0.05	< 0.001	< 0.1	0.0443	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		4/13/1999	< 0.01	0.005	< 0.01	< 0.05	2.96	< 0.1	< 0.05	< 0.001	< 0.1	0.0313	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		7/20/1999	< 0.01	< 0.005	< 0.01	< 0.05	2.33	< 0.1	< 0.05	< 0.001	< 0.1	0.0286	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		10/12/1999	< 0.01	< 0.005	< 0.01	< 0.05	3.23	< 0.1	< 0.05	< 0.001	< 0.1	0.0452	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		1/11/2000	< 0.01	< 0.005	< 0.01	< 0.05	3.17	< 0.1	< 0.05	0.001	< 0.1	0.0388	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		5/9/2000	< 0.01	< 0.005	0.01	< 0.05	7.09	< 0.1	< 0.05	< 0.001	< 0.1	0.0254	< 0.2	2.1	2.1	< 0.2	5.4	< 1
EPA 23	Dup	5/9/2000	< 0.01	< 0.005	0.01	< 0.05	6.96	< 0.1	< 0.05	< 0.001	< 0.1	0.0255	< 0.2	1.6	1.6	< 0.2	5	< 1
EPA 23		7/17/2000	< 0.01	< 0.005	< 0.01	< 0.05	4.76	< 0.1	< 0.05	< 0.001	< 0.1	0.0231	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23	Dup	7/17/2000	< 0.01	< 0.005	< 0.01	8.91	< 0.05	4.61	< 0.1	< 0.05	< 0.001	< 0.1	0.0246	< 0.2	0.0246	< 1	< 0.2	< 1
EPA 23		10/9/2000	< 0.01	< 0.005	< 0.01	< 0.05	4.03	< 0.1	< 0.05	< 0.001	< 0.1	0.025	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23	Dup	10/9/2000	< 0.01	< 0.005	< 0.01	0.05	4	< 0.1	< 0.05	< 0.001	< 0.1	0.025	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		1/9/2001	< 0.01	< 0.005	0.01	< 0.05	4.77	< 0.1	< 0.05	0.001	< 0.1	0.024	< 0.2	2.3	2.3	< 0.2	< 1	< 1

CHESTER ENGINEERS

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 23	Dup	1/9/2001	no data	6.76	7.63	4370	650	392	119	9.3	1060	2380	69.7	1.05	1.14	< 1	< 0.1	< 0.001
EPA 23		2/6/2001	6,878.60	6.80	7.56	4380	737	429	118	10.6	1060	2510	68.5	1.08	1.25	< 1	< 0.1	< 0.001
EPA 23	Dup	2/6/2001	no data	6.68	7.56	4380	729	424	111	10.5	1060	2500	67.1	1.08	1.3	< 1	< 0.1	< 0.001
EPA 23		3/6/2001	6,878.50	6.93	7.61	4070	636	389	150	10.2	1030	2410	65.6	1.09	1.25	< 1	< 0.1	< 0.001
EPA 23	Dup	3/6/2001	no data	7.08	7.78	4110	637	389	150	10.1	1030	2420	64.7	1.12	1.2	< 1	< 0.1	< 0.001
EPA 23		4/4/2001	6,878.50	6.87	7.49	4400	702	410	118	9.3	1040	2310	71	1.16	1.41	< 1	< 0.1	0.001
EPA 23	Dup	4/4/2001	no data	6.87	7.51	4410	711	414	114	9.2	1040	2350	73.9	1.2	1.42	< 1	< 0.1	< 0.001
EPA 23		5/7/2001	6,878.40	6.97	7.14	4460	622	371	113	10	1040	2070	78.6	1.28	1.25	< 1	< 0.1	< 0.001
EPA 23	Dup	5/7/2001	no data	6.88	7.21	4450	620	371	109	10	1030	2060	79.4	1.21	1.27	< 1	< 0.1	< 0.001
EPA 23		6/4/2001	6,878.80	6.67	7.22	4360	618	371	107	9.5	1040	2210	75.4	1.29	1.67	< 1	< 0.1	< 0.001
EPA 23	Dup	6/4/2001	no data	6.67	7.24	4020	617	372	102	9.8	1020	2240	76.2	1.33	1.6	< 1	< 0.1	< 0.001
EPA 23		7/9/2001	6,878.40	6.60	7.12	4470	684	418	116	9.7	1060	2250	86	1.07	1.36	< 1	< 0.1	< 0.001
EPA 23	Dup	7/9/2001	no data	6.59	7.05	4480	682	418	113	9.6	1070	2240	90	1.12	1.51	< 1	< 0.1	< 0.001
EPA 23		8/6/2001	6,878.25	6.58	7.20	4500	640	390	110	10	1060	2300	86	1.1	1.28	< 1	< 0.1	< 0.001
EPA 23	Dup	8/6/2001	no data	6.59	7.20	4480	630	390	110	10	1060	2100	91	1.1	1.29	< 1	< 0.1	< 0.001
EPA 23		9/10/2001	6,878.49	6.56	7.50	4490	650	390	122	9.9	1100	2200	75.6	1.02	1.2	< 1	< 0.1	< 0.001
EPA 23	Dup	9/10/2001	no data	6.56	7.50	4460	650	390	118	10	1100	2200	76.2	1.03	1.2	< 1	< 0.1	< 0.001
EPA 23		10/1/2001	6,878.40	6.68	7.30	4500	600	370	115	10.4	1080	2100	87.9	1.15	1	< 1	< 0.1	< 0.001
EPA 23	Dup	10/1/2001	no data	6.67	7.40	4510	610	370	113	10.6	1090	2200	97.7	1.06	1	< 1	< 0.1	< 0.001
EPA 23		11/5/2001	6,878.50	6.74	7.60	4540	670	401	123	10.8	1050	2360	87	0.95	1.2	< 1	< 0.1	< 0.001
EPA 23	Dup	11/5/2001	no data	6.71	7.60	4540	664	397	117	10.8	1050	2320	95	0.94	1.1	< 1	< 0.1	< 0.001
EPA 23		12/3/2001	6,878.50	6.68	7.60	4480	615	365	107	9.7	1070	2020	83.6	1.06	3.6	< 1	< 0.1	< 0.001
EPA 23		1/7/2002	6,878.20	6.70	7.10	4500	715	403	101	10.7	1070	2430	94.4	1.01	1.02	< 1	< 0.1	< 0.001
EPA 23		2/4/2002	6,878.15	6.80	7.30	4470	711	396	124	10.6	1060	2350	88.2	1.18	0.95	< 1	< 0.1	< 0.001
EPA 23		3/4/2002	6,878.05	6.73	7.20	4430	650	383	132	10.3	1080	2340	82.7	1.07	1.16	< 1	< 0.1	< 0.001
EPA 23		4/1/2002	6,878.20	6.57	7.83	4490	681	389	127	11.2	1070	2400	83	1.09	1.14	< 1	< 0.1	< 0.001
EPA 23		5/6/2002	6,878.16	6.62	7.17	4500	661	380	127	11	1080	2240	77.7	1.11	1.09	< 1	< 0.1	< 0.001
EPA 23		6/3/2002	6,878.22	6.61	7.37	4480	664	382	117	9.4	1060	2270	73.5	1.12	1.05	< 1	< 0.1	< 0.001
EPA 23		7/8/2002	6,877.87	6.62	7.55	4520	656	395	119	10.2	1070	2320	78.2	1.34	0.91	< 1	< 0.1	< 0.001
EPA 23		10/8/2002	6,877.85	5.92	7.59	4280	628	372	118	9.5	1080	2010	75.6	1.47	0.98	< 1	< 0.1	< 0.001
EPA 23		1/6/2003	6,877.27	6.80	7.23	4510	602	369	116	10.3	1060	2180	83.4	1.5	0.9	< 1	< 0.1	< 0.001
EPA 23		4/7/2003	6,877.26	6.65	7.31	4490	635	365	122	13.4	1080	2100	86.2	1.2	1.3	< 1	< 0.1	< 0.001
EPA 23		7/7/2003	6,877.11	6.42	7.61	4660	623	360	119	11	1070	2160	71.9	1.37	0.9	< 1	< 0.1	< 0.001
EPA 23		10/6/2003	6,876.91	6.46	7.41	4550	693	416	137	10.3	1090	2500	73.6	1.57	0.6	< 1	< 0.1	< 0.001
EPA 23		1/5/2004	6,876.67	6.67	7.38	4500	688	412	120	10.2	1090	2420	93.9	1.25	0.62	< 1.0	0.3	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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 23	Dup	1/9/2001	< 0.01	< 0.005	0.01	< 0.05	4.65	< 0.1	< 0.05	< 0.001	< 0.1	0.024	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		2/6/2001	< 0.01	< 0.005	0.01	< 0.05	4.77	< 0.1	< 0.05	< 0.001	< 0.1	0.025	0.3	2.2	2.5	< 0.2	< 1	< 1
EPA 23	Dup	2/6/2001	< 0.01	< 0.005	0.01	< 0.05	4.85	< 0.1	< 0.05	< 0.001	< 0.1	0.025	0.3	2.3	2.6	< 0.2	< 1	< 1
EPA 23		3/6/2001	< 0.01	< 0.005	0.01	< 0.05	5	< 0.1	< 0.05	< 0.001	< 0.1	0.0245	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23	Dup	3/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	5.03	< 0.1	0.07	< 0.001	< 0.1	0.0252	0.4	< 1	0.4	< 0.2	< 1	< 1
EPA 23		4/4/2001	< 0.01	< 0.005	< 0.01	< 0.05	4.29	< 0.1	< 0.05	< 0.001	< 0.1	0.024	0.3	< 1	0.3	< 0.2	< 1	< 1
EPA 23	Dup	4/4/2001	< 0.01	< 0.005	< 0.01	< 0.05	4.19	< 0.1	< 0.05	< 0.001	< 0.1	0.023	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		5/7/2001	< 0.01	< 0.005	< 0.01	< 0.05	5.74	< 0.1	< 0.05	< 0.001	< 0.1	0.026	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23	Dup	5/7/2001	< 0.01	< 0.005	0.01	< 0.05	5.75	< 0.1	< 0.05	< 0.001	< 0.1	0.025	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		6/4/2001	< 0.01	< 0.005	0.01	< 0.05	5.11	< 0.1	< 0.05	< 0.001	< 0.1	0.025	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23	Dup	6/4/2001	< 0.01	< 0.005	0.01	< 0.05	5.15	< 0.1	< 0.05	< 0.001	< 0.1	0.024	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		7/9/2001	< 0.01	< 0.005	< 0.01	< 0.05	5.1	< 0.1	< 0.05	< 0.001	< 0.1	0.0276	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23	Dup	7/9/2001	< 0.01	< 0.005	< 0.01	< 0.05	5.19	< 0.1	< 0.05	< 0.001	< 0.1	0.0263	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		8/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	5.4	< 0.1	< 0.05	< 0.001	< 0.1	0.025	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23	Dup	8/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	5.5	< 0.1	< 0.05	< 0.001	< 0.1	0.027	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		9/10/2001	< 0.01	< 0.005	< 0.01	< 0.05	4.68	< 0.1	< 0.05	< 0.001	< 0.1	0.0229	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23	Dup	9/10/2001	< 0.01	< 0.005	< 0.01	< 0.05	4.96	< 0.1	< 0.05	< 0.001	< 0.1	0.0245	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		10/1/2001	< 0.01	< 0.005	< 0.01	< 0.05	4.38	< 0.1	< 0.05	< 0.001	< 0.1	0.0239	0.5	< 1	0.5	< 0.2	< 1	< 1
EPA 23	Dup	10/1/2001	< 0.01	< 0.005	< 0.01	< 0.05	4.39	< 0.1	< 0.05	< 0.001	< 0.1	0.0235	0.2	< 1	0.2	< 0.2	< 1	< 1
EPA 23		11/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	4.79	< 0.1	< 0.05	< 0.001	< 0.1	0.0212	0.6	3.8	4.4	< 0.2	< 1	< 1
EPA 23	Dup	11/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	4.74	< 0.1	< 0.05	< 0.001	< 0.1	0.0223	0.5	1.7	2.2	< 0.2	< 1	< 1
EPA 23		12/3/2001	< 0.01	< 0.005	< 0.01	< 0.05	4.48	< 0.1	< 0.05	0.003	< 0.1	0.0243	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		1/7/2002	< 0.01	< 0.005	< 0.01	< 0.05	4.59	< 0.1	< 0.05	< 0.001	< 0.1	0.0211	0.5	< 1	0.5	< 0.2	< 1	< 1
EPA 23		2/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	4.69	< 0.1	< 0.05	< 0.001	< 0.1	0.0164	0.4	< 1	0.4	< 0.2	< 1	< 1
EPA 23		3/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	5.48	< 0.1	< 0.05	< 0.001	< 0.1	0.0259	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		4/1/2002	< 0.01	< 0.005	< 0.01	< 0.05	5.12	< 0.1	< 0.05	< 0.001	< 0.1	0.029	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		5/6/2002	< 0.01	< 0.005	0.01	< 0.05	5.41	< 0.1	< 0.05	< 0.001	< 0.1	0.0252	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		6/3/2002	< 0.01	< 0.005	< 0.01	< 0.05	5.43	< 0.1	< 0.05	< 0.001	< 0.1	0.0262	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		7/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	4.62	0.1	< 0.05	< 0.001	< 0.1	0.0291	0.6	< 1	0.6	< 0.2	< 1	< 1
EPA 23		10/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	4.67	< 0.1	< 0.05	< 0.001	< 0.1	0.0197	0.8	< 1	0.8	< 0.2	< 1	< 1
EPA 23		1/6/2003	< 0.01	< 0.005	< 0.01	< 0.05	5.04	< 0.1	< 0.05	< 0.001	< 0.1	0.024	< 0.2	< 1	0	< 0.2	< 1	< 1.0
EPA 23		4/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	4.8	< 0.1	< 0.05	< 0.001	< 0.1	0.0232	< 0.2	< 1	0	< 0.2	< 1	< 1.0
EPA 23		7/7/2003	< 0.01	< 0.005	0.02	< 0.05	5.28	< 0.1	< 0.05	< 0.001	< 0.1	0.0248	< 0.2	< 1	0	< 0.2	< 1	< 1.0
EPA 23		10/6/2003	< 0.01	< 0.005	< 0.01	< 0.05	5.58	< 0.1	< 0.05	< 0.001	< 0.1	0.0302	< 0.2	< 1	0	< 0.2	< 1	< 1.0
EPA 23		1/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	5.88	< 0.1	< 0.05	< 0.001	< 0.1	0.0247 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 23		4/5/2004	6,876.75	7.00	6.87	4540	641	387	131	10.6	1110	2280 D	81.3	1.52	0.69	< 1	< 0.1	< 0.001
EPA 23		7/12/2004	6,876.27	6.41	6.97	4610	665	388	142	10.7	1110	2290 D	82	1.29	0.55	< 1.0	< 0.1	< 0.001
EPA 23		10/4/2004	6,876.01	6.12	7.16	4570	670 D	398 D	140	9.9	1080	2380 D	79	1.06	0.4	< 1.0	< 0.1	< 0.001
EPA 23		1/3/2005	6,875.97	6.72	7.12	4590	652 D	381 D	134	10.4	1070	2160 D	79	1.34	1.2	< 1.0	< 0.1	< 0.001
EPA 23		4/4/2005	6,875.94	6.69	7.36	4400	649	380	134	9.8	1120	2250	80	1.09	0.6	< 1.0	< 0.1	< 0.001
EPA 23		7/11/2005	6,875.53	6.60	7.35	4460	707 D	413 D	135	10.2	1050	2440 D	87	1.14	0.2	< 1.0	< 0.1	< 0.001
EPA 23		10/3/2005	6,875.41	6.58	7.21	4480	650 D	408 D	130	10.2	1120	2170 D	85	1.11	0.4	< 1.0	< 0.1	< 0.001
EPA 23		1/9/2006	6,874.95	6.77	7.66	4410	686 D	420 D	131	10.4	1130	2630 D	82	1.33	1.8	< 1.0	< 0.1	< 0.001
EPA 23		4/3/2006	6,874.81	6.61	7.10	4460	639 D	415 D	119	9.9	1110	2250 D	96 D	1.33	0.5	< 1.0	< 0.1	< 0.001
EPA 23		7/17/2006	6,874.56	6.50	6.77	4370	639 D	411 D	146	11	1130	2560 D	88	1.21	1.4	< 1.0	< 0.1	< 0.001
EPA 23		10/2/2006	6,874.41	6.53	6.89	4740	638 D	397 D	141	11	1180	2260 D	79	3.54	10.8 D	< 0.5	< 0.1	< 0.001
EPA 23		1/8/2007	6,874.03	6.67	6.91	4090	576 D	355 D	121	9.6	1140	2050 D	80	2.38	6	<0.5	<0.1	<0.001
EPA 23		4/9/2007	6,874.31	6.68	6.88	4320	636 D	380 D	125	10.6	1120	2220 D	86	1.2	1.5	<0.5	<0.1	<0.001
EPA 23		7/9/2007	6,873.91	6.54	6.94	4630	661 D	417 D	146	10.7	1200	2430 D	84	1.99	7.7	<0.5	<0.1	0.01
EPA 23		10/1/2007	6,873.59	6.56	6.76	4850	608 D	424 D	162 D	12.5	1300	2350 D	108 D	5.8 D	22.7	<0.5	<0.1	<0.001
EPA 23		1/14/2008	6,873.21	6.77	6.62	4910	622 D	404 D	154 D	12.3	1230	2200 D	123 D	5.67	21.2 D	< 0.5	< 0.1	0.001
EPA 23		4/7/2008	6,873.51	6.56	6.84	4300	683 D	429 D	162 D	11.2 D	1100	2430 D	89	0.29	4.1	< 0.50	< 0.1	< 0.001
EPA 23		7/7/2008	6,873.21	6.38	6.79 H	4440 H	619	390	137 D	10	1230	2410 D	94	1.88	13.1	< 0.5	< 0.1	< 0.003
EPA 23		10/6/2008	6,872.96	6.49	6.97	4530	656	391	147 D	10	1170	2450 D	85	2.8	22.3	< 0.5	< 0.1	< 0.001
EPA 23		1/20/2009	6,872.46	6.52	7.03	5160	649	449	198	12	1290	2140 D	120	3.09	76.2 D	<0.5	<0.1	<0.001
EPA 23		4/6/2009	6,872.21	6.58	6.64	4730	621 D	424 D	170 D	11	1270	2440 D	95	2.17	14.8	<0.50	<0.1	<0.001
EPA 23		7/6/2009	6,872.21	6.39	6.76	4870	680 D	430	167 D	12	1240	2560 D	95	4.65	27.8 D	<0.50	<0.1	<0.001
EPA 23		10/5/2009	6,872.21	6.58	7.22	4610	616	384	138	10	1220	2220 D	98	2.04	7.4	<0.50	<0.1	<0.001
EPA 25		7/28/1989	6,861.30	7.00	6.66	3200	659	148	109	7.3	549	1711	29	0.05	37	< 1	< 0.1	< 0.001
EPA 25		10/8/1989	6,861.10	6.70	7.54	3200	650	150	107	10	619	1745	31.7	0.05	36	< 1	< 0.1	< 0.001
EPA 25		1/17/1990	6,861.50	6.60	6.70	3252	625	147	106	7.8	615	1656	31.7	0.05	30	< 1	< 0.1	< 0.001
EPA 25		4/18/1990	6,861.20	6.70	6.88	3299	640	148	103	7.3	647	1619	34.1	0.05	35	< 1	< 0.1	< 0.001
EPA 25		7/13/1990	6,860.60	6.70	7.18	3343	642	164	101	8.6	677	1628	34.1	< 0.05	34.4	< 1	< 0.1	< 0.001
EPA 25		10/10/1990	6,860.70	6.80	7.32	3422	711	155	105	8.1	653	1724	38	< 0.05	35.9	< 1	< 0.1	< 0.001
EPA 25		1/9/1991	6,861.00	6.80	7.20	3248	655	152	111	12	667	1624	39.4	< 0.05	43.5	< 1	< 0.1	< 0.001
EPA 25		4/16/1991	6,860.80	6.60	7.90	3300	633	150	107	7.6	650	1640	40.2	< 0.05	54.5	< 1	< 0.1	< 0.001
EPA 25		7/9/1991	6,860.90	6.40	7.14	3461	607	153	95	6.7	677	1718	39.2	0.15	55	< 1	< 0.1	< 0.001
EPA 25		10/24/1991	6,859.60	6.50	7.47	3399	639	432	105	7.3	722	1672	62.5	0.31	38	< 1	< 0.1	< 0.001
EPA 25		1/24/1992	6,859.30	6.50	7.51	3123	619	153	102	7	691	1669	45.7	0.14	23.5	< 1	< 0.1	< 0.001
EPA 25		4/3/1992	6,859.20	6.40	7.51	3414	564	138	129	8.9	752	1781	45.4	0.22	43.9	< 1	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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 23		4/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	5.09	< 0.1	< 0.05	< 0.001	< 0.1	0.0252 D	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		7/12/2004	< 0.01	< 0.005	< 0.01	< 0.05	4.84	< 0.1	< 0.05	< 0.001	< 0.1	0.0244 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
EPA 23		10/4/2004	< 0.01	< 0.005	< 0.01	< 0.05	5.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0226 D	0.4	1.3	1.7	< 0.2	< 1.0	< 1.0
EPA 23		1/3/2005	< 0.01	< 0.005	< 0.01	< 0.05	4.9	< 0.1	< 0.05	< 0.001	< 0.1	0.0265	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
EPA 23		4/4/2005	< 0.01	< 0.005	< 0.01	< 0.05	5.2	< 0.1	< 0.05	< 0.001	< 0.1	0.0246	< 0.2	3.5	3.5	< 0.2	< 1.0	< 1.0
EPA 23		7/11/2005	< 0.01	< 0.005	< 0.01	< 0.05	5.12	< 0.1	< 0.05	< 0.001	< 0.1	0.0252	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
EPA 23		10/3/2005	< 0.01	< 0.005	< 0.01	< 0.05	5.15	< 0.1	< 0.05	< 0.001	< 0.1	0.0261	< 0.2	1.2	1.2	< 0.2	< 1.0	< 1.0
EPA 23		1/9/2006	< 0.01	< 0.005	< 0.01	< 0.05	5.64	< 0.1	< 0.05	< 0.001	< 0.1	0.0246	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
EPA 23		4/3/2006	< 0.01	< 0.005	< 0.01	< 0.05	5.46	< 0.1	< 0.05	< 0.001	< 0.1	0.0241 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
EPA 23		7/17/2006	< 0.01	< 0.005	< 0.01	< 0.05	5.4	< 0.1	< 0.05	< 0.001	< 0.1	0.0262	0.4	< 1.0	0.4	< 0.2	< 1.0	< 1.0
EPA 23		10/2/2006	< 0.01	< 0.005	< 0.01	< 0.05	5.14	< 0.1	< 0.05	< 0.001	< 0.1	0.0265	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		1/8/2007	<0.01	<0.005	<0.01	<0.05	4.8	<0.1	<0.05	<0.001	<0.1	0.0229	<0.2	<1	0	<0.2	<1	<1
EPA 23		4/9/2007	<0.01	<0.005	<0.01	<0.05	5.25	<0.1	<0.05	<0.001	<0.1	0.0339	<0.2	<1	0	<0.2	<1	<1
EPA 23		7/9/2007	<0.01	<0.005	<0.01	<0.05	4.59	<0.1	<0.05	<0.001	<0.1	0.027	<0.2	<1	0	<0.2	<1	<1
EPA 23		10/1/2007	<0.01	<0.005	<0.01	<0.05	4.67	<0.1	<0.05	<0.001	<0.1	0.0342	<0.2	<1	0	<0.2	<1	<1
EPA 23		1/14/2008	< 0.01	< 0.005	< 0.01	< 0.05	4.29	< 0.1	< 0.05	0.001	< 0.1	0.0316	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 23		4/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	5.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0303	0.1 U	0.3 U	0.4	0.4	0 U	1
EPA 23		7/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	5.2	< 0.1	< 0.05	< 0.001	< 0.1	0.0287	0.09 U	0.94 U	1.03	0 U	2.4 U	0.9
EPA 23		10/6/2008	< 0.01	< 0.005	< 0.01	< 0.05	4.54	< 0.1	< 0.05	< 0.001	< 0.1	0.0336	0.02 U	-0.004 U	0.016	0.4	-0.1 U	1.3
EPA 23		1/20/2009	<0.01	<0.005	<0.01	<0.05	3.15	<0.1	<0.05	0.001	<0.1	0.0435	0.17 U	1.6	1.77	-0.5 U	-0.4 U	1.2
EPA 23		4/6/2009	<0.01	<0.005	<0.01	<0.05	4.58	<0.1	<0.05	0.002	<0.1	0.0375	0.36	-0.3 U	0.06	-0.02 U	-1 U	0.3 U
EPA 23		7/6/2009	<0.01	<0.005	<0.01	<0.05	4.31	<0.1	<0.05	<0.001	<0.1	0.0306	0.47	0.76 U	1.23	0.2 U	-0.2 U	0.6
EPA 23		10/5/2009	<0.01	<0.005	<0.01	<0.05	5.05	<0.1	<0.05	<0.001	<0.1	0.0309	0.42	1.2 U	1.62	0.04 U	0.7 U	0.5 U
EPA 25		7/28/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.22	< 0.1	< 0.05	0.001	< 0.1	0.0184	0.6	< 1	0.6	< 0.2	1	1.8
EPA 25		10/8/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.22	< 0.1	< 0.05	0.001	< 0.1	0.022	1	< 1	1	< 0.2	1.2	1.1
EPA 25		1/17/1990	< 0.05	< 0.01	0.02	< 0.05	0.21	< 0.1	< 0.05	< 0.001	< 0.1	0.019	0.2	2	2.2	0.7	< 1	1
EPA 25		4/18/1990	< 0.05	< 0.01	0.02	< 0.05	0.3	< 0.1	< 0.05	0.001	< 0.1	0.019	0.5	< 1	0.5	< 0.2	< 1	1.4
EPA 25		7/13/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.18	< 0.1	< 0.05	< 0.001	< 0.1	0.0194	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		10/10/1990	< 0.05	< 0.01	0.01	< 0.05	0.2	< 0.1	< 0.05	< 0.001	< 0.1	0.0206	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		1/9/1991	< 0.01	< 0.01	0.01	< 0.05	0.23	< 0.1	< 0.05	< 0.001	< 0.1	0.0277	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		4/16/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.25	< 0.1	< 0.05	< 0.001	< 0.1	0.017	< 0.2	< 1	0	< 0.2	1.5	< 1
EPA 25		7/9/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.22	< 0.1	< 0.05	< 0.001	< 0.1	0.0231	< 0.2	1	1	< 0.2	1.7	< 1
EPA 25		10/24/1991	< 0.01	< 0.01	0.01	no data	0.24	< 0.1	< 0.05	< 0.001	< 0.1	0.049	< 0.2	3.5	3.5	< 0.2	< 1	< 1
EPA 25		1/24/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.24	< 0.1	< 0.05	0.001	< 0.1	0.027	0.7	< 1	0.7	< 0.2	< 1	< 1
EPA 25		4/3/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.22	< 0.1	< 0.05	< 0.001	< 0.1	0.039	< 0.2	5.4	5.4	< 0.2	< 1	< 1

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 25		7/16/1992	6,858.50	6.50	7.48	3076	623	161	156	10.1	740	1804	49.3	0.18	44.9	< 1	< 0.1	0.007
EPA 25		10/15/1992	6,858.10	6.70	7.03	3529	673	147	120	8.8	769	1725	51.6	< 0.05	38.9	< 1	< 0.1	< 0.001
EPA 25		1/12/1993	6,857.80	6.70	7.36	3591	725	162	112	9.5	766	1631	52.6	< 0.05	50.7	< 1	< 0.1	< 0.001
EPA 25		4/15/1993	6,857.70	6.70	7.65	3674	793	151	123	6.4	1049	1818	59.4	0.06	41.1	< 1	< 0.1	< 0.001
EPA 25		7/20/1993	6,857.00	6.70	7.52	3503	696	151	127	7.1	817	1709	62.7	0.07	38.7	< 1	< 0.1	< 0.001
EPA 25		10/11/1993	6,855.10	6.80	7.26	3584	707	152	95	6.5	805	1699	59.3	0.05	40.8	< 1	< 0.1	< 0.001
EPA 25		1/10/1994	6,856.60	6.80	7.59	3639	662	163	99	6.3	790	1771	67.8	0.12	38.6	< 1	< 0.1	< 0.001
EPA 25		4/20/1994	6,856.30	6.80	7.07	3486	647	151	112	6.5	791	1672	67	0.18	47.1	< 1	< 0.1	0.002
EPA 25		7/26/1994	6,855.80	6.70	7.60	3663	783	181	115	7.4	822	1681	70.4	< 0.05	54.7	< 1	< 0.1	< 0.001
EPA 25		10/10/1994	6,855.70	6.70	7.60	3704	764	187	129	7.8	907	1909	73.9	0.13	47.1	< 1	< 0.1	< 0.001
EPA 25		1/10/1995	6,855.40	6.80	7.50	3734	840	137	120	8.4	889	1779	78.7	0.13	47.1	< 1	< 0.1	< 0.001
EPA 25		4/11/1995	6,855.20	6.10	7.35	3686	806	200	136	13.7	915	1849	91	0.34	50.1	< 1	< 0.1	< 0.001
EPA 25		7/10/1995	6,855.20	6.90	7.53	3576	715	198	133	7.6	697	1716	88	0.26	58.9	< 1	< 0.1	< 0.001
EPA 25		10/9/1995	6,854.70	6.90	7.80	3789	745	202	148	7.2	791	1696	80	0.14	62.9	< 1	< 0.1	< 0.001
EPA 25		1/8/1996	6,854.30	6.80	7.36	3963	745	212	139	6.9	841	1826	71	< 0.05	86.4	< 1	< 0.1	< 0.001
EPA 25		4/9/1996	6,854.00	6.90	7.76	3942	790	206	135	7.2	937	1766	87.4	0.11	62.6	< 1	< 0.1	< 0.001
EPA 25		7/17/1996	6,853.70	6.70	7.10	3928	710	182	145	7.9	964	1816	95	0.07	67.2	< 1	< 0.1	< 0.001
EPA 25		10/8/1996	6,853.60	6.70	7.09	4000	767	199	144	7.9	981	1742	89	0.08	59.6	< 1	< 0.1	< 0.001
EPA 25		1/27/1997	6,853.30	6.70	7.99	3960	760	200	135	8.1	952	1939	117	0.06	60.8	< 1	< 0.1	< 0.001
EPA 25		4/14/1997	6,854.20	6.50	7.96	4020	851	215	142	8.3	981	1777	100	< 0.05	78.9	< 1	< 0.1	< 0.001
EPA 25		7/14/1997	6,852.90	6.70	7.70	4070	803	205	135	7.7	986	1670	101	0.06	71.5	< 1	< 0.1	< 0.001
EPA 25		10/14/1997	6,853.00	6.60	7.71	4010	835	213	140	7.9	933	1800	115	0.08	77.7	< 1	< 0.1	< 0.001
EPA 25		1/20/1998	6,852.80	6.50	7.83	4080	739	206	155	7.9	952	1930	96.4	0.19	75.3	< 1	< 0.1	< 0.001
EPA 25		4/13/1998	6,852.70	6.90	7.33	4060	799	210	156	8.3	1020	1700	87.3	< 0.05	76.9	< 1	< 0.1	< 0.001
EPA 25		7/13/1998	6,852.60	6.90	7.64	4210	804	213	155	8.5	1040	1680	92.6	< 0.05	78.4	< 1	< 0.1	< 0.001
EPA 25		10/13/1998	6,853.20	6.77	8.14	3950	771	214	158	8.6	886	1730	89.3	0.13	69.7	< 1	< 0.1	< 0.001
EPA 25		1/12/1999	6,853.00	6.80	7.86	4060	733	197	137	8	930	1600	89.5	0.08	78.5	< 1	< 0.1	< 0.001
EPA 25		4/13/1999	6,852.70	6.80	7.97	4040	813	196	146	7.8	969	1620	93.6	0.05	75	< 1	< 0.1	< 0.001
EPA 25		7/20/1999	6,852.68	6.80	7.85	4040	762	226	140	9	941	1740	84	0.07	72.4	< 1	< 0.1	< 0.001
EPA 25		10/12/1999	6,852.40	6.83	7.75	4090	736	201	139	8	959	1520	87.7	0.06	85.7	< 1	< 0.1	< 0.001
EPA 25		1/11/2000	6,852.30	6.80	7.97	4060	752	206	139	9.2	934	1500	79.6	< 0.05	90.8	< 1	< 0.1	< 0.001
EPA 25		5/9/2000	6,852.70	6.80	7.77	4030	691	214	160	8.2	813	1670	75.3	< 0.05	105	< 1	< 0.1	< 0.001
EPA 25		7/18/2000	6,852.40	6.88	7.70	4120	682	219	157	7.54	778	1600	67.7	< 0.05	112	< 1	< 0.1	< 0.001
EPA 25		10/10/2000	6,852.25	6.89	7.75	3990	557	184	132	7.6	761	1240	53	0.05	121	< 1	< 0.1	0.001
EPA 25		1/9/2001	6,852.10	7.12	7.89	3910	699	234	155	7	761	1760	63.4	< 0.05	106	< 1	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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 25		7/16/1992	< 0.01	< 0.01	0.02	< 0.05	0.35	< 0.1	< 0.05	0.003	< 0.1	0.041	< 0.2	< 1	0	< 0.2	7	< 1
EPA 25		10/15/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.23	< 0.1	< 0.05	< 0.001	< 0.1	0.022	1.7	1.1	2.8	< 0.2	5.7	1.9
EPA 25		1/12/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.22	< 0.1	< 0.05	0.01	< 0.1	0.018	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		4/15/1993	< 0.01	< 0.01	0.02	< 0.05	0.23	< 0.1	< 0.05	< 0.001	< 0.1	0.025	0.2	< 1	0.2	< 0.2	1.9	< 1
EPA 25		7/20/1993	< 0.01	< 0.01	0.03	< 0.05	0.24	< 0.1	< 0.05	< 0.001	< 0.1	0.025	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		10/11/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.21	< 0.1	< 0.05	< 0.001	< 0.1	0.023	< 0.2	< 1	0	< 0.2	3.5	< 1
EPA 25		1/10/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.29	< 0.1	< 0.05	< 0.001	< 0.1	0.062	< 0.2	2.8	2.8	< 0.2	5.2	5.2
EPA 25		4/20/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.21	< 0.1	< 0.05	< 0.001	< 0.1	0.04	1.7	< 1	1.7	< 0.2	< 1	1.9
EPA 25		7/26/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.26	< 0.1	< 0.05	< 0.001	< 0.1	0.052	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		10/10/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.25	< 0.1	< 0.05	< 0.001	< 0.1	0.046	0.3	< 1	0.3	< 0.2	< 1	< 1
EPA 25		1/10/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.29	< 0.1	< 0.05	< 0.001	< 0.1	0.051	< 0.2	< 1	0	< 0.2	4.3	< 1
EPA 25		4/11/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.46	< 0.1	< 0.05	< 0.001	< 0.1	0.052	2.1	< 1	2.1	< 0.2	< 1	2
EPA 25		7/10/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.37	< 0.1	< 0.05	0.001	< 0.1	0.059	1.5	< 1	1.5	< 0.2	< 1	6.6
EPA 25		10/9/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.51	< 0.1	< 0.05	0.001	< 0.1	0.069	3.5	< 1	3.5	1.4	< 1	3.2
EPA 25		1/8/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.25	< 0.1	< 0.05	< 0.001	< 0.1	0.009	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		4/9/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.46	< 0.1	< 0.05	< 0.001	< 0.1	0.066	0.4	< 1	0.4	< 0.2	< 1	< 1
EPA 25		7/17/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.39	< 0.1	< 0.05	< 0.001	< 0.1	0.189	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		10/8/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.41	< 0.1	< 0.05	< 0.001	< 0.1	0.078	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		1/27/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.51	< 0.1	< 0.05	< 0.001	< 0.1	0.063	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		4/14/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.29	< 0.1	< 0.05	0.006	< 0.1	0.095	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		7/14/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.32	< 0.1	< 0.05	0.001	< 0.1	0.082	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		10/14/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.44	< 0.1	< 0.05	0.001	< 0.1	0.093	1.1	< 1	1.1	< 0.2	< 1	< 1
EPA 25		1/20/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.36	< 0.1	< 0.05	< 0.001	< 0.1	0.094	0.7	< 1	0.7	< 0.2	< 1	< 1
EPA 25		4/13/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.35	< 0.1	< 0.05	< 0.001	< 0.1	0.0999	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		7/13/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.31	< 0.1	< 0.05	< 0.001	< 0.1	0.104	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		10/13/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.61	< 0.1	< 0.05	< 0.001	< 0.1	0.0987	0.4	< 1	0.4	< 0.2	< 1	< 1
EPA 25		1/12/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.76	< 0.1	< 0.05	< 0.001	< 0.1	0.151	0.8	< 1	0.8	< 0.2	< 1	< 1
EPA 25		4/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.55	< 0.1	< 0.05	< 0.001	< 0.1	0.0096	< 0.2	1.6	1.6	< 0.2	< 1	< 1
EPA 25		7/20/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.3	< 0.1	< 0.05	< 0.001	< 0.1	0.103	1.5	1.4	2.9	< 0.2	< 1	2.2
EPA 25		10/12/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.33	< 0.1	< 0.05	< 0.001	< 0.1	0.104	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		1/11/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.3	< 0.1	< 0.05	0.001	< 0.1	0.0928	0.5	< 1	0.5	0.7	< 1	< 1
EPA 25		5/9/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.96	< 0.1	< 0.05	< 0.001	< 0.1	0.0935	< 0.2	2.9	2.9	< 0.2	< 1	< 1
EPA 25		7/18/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.96	< 0.1	< 0.05	< 0.001	< 0.1	0.0865	< 0.2	2	2	< 0.2	< 1	< 1
EPA 25		10/10/2000	< 0.01	< 0.005	< 0.01	< 0.05	1.11	< 0.1	< 0.05	< 0.001	< 0.1	0.095	< 0.2	1.3	1.3	< 0.2	< 1	< 1
EPA 25		1/9/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.25	< 0.1	< 0.05	0.002	< 0.1	0.086	< 0.2	2.7	2.7	< 0.2	< 1	< 1

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 25		2/6/2001	6,852.10	7.33	7.34	3970	792	251	135	8.3	783	1930	64.3	0.06	106	< 1	< 0.1	< 0.001
EPA 25		3/6/2001	6,852.15	7.27	7.87	3710	676	224	186	8.2	757	1840	58.7	< 0.05	105	< 1	< 0.1	< 0.001
EPA 25		4/10/2001	6,852.25	7.41	7.34	3940	778	241	143	7.9	782	1910	71.7	0.08	101	< 1	< 0.1	< 0.001
EPA 25		5/8/2001	6,852.00	7.02	7.67	3990	668	222	148	7.6	715	1570	74.2	0.13	108	< 1	< 0.1	< 0.001
EPA 25		6/5/2001	6,852.10	7.03	7.57	3920	705	236	132	7.3	785	1780	71.2	0.12	94.7	< 1	< 0.1	< 0.001
EPA 25		7/10/2001	6,852.10	7.29	7.39	4060	730	244	159	7.3	817	1720	75.8	0.1	103	< 1	< 0.1	< 0.001
EPA 25		8/7/2001	6,852.02	7.26	7.50	4060	650	220	150	7.6	819	1600	82	0.13	94	< 1	< 0.1	< 0.001
EPA 25		9/11/2001	6,852.30	6.81	7.80	4130	680	220	154	7.8	841	1630	85.9	0.08	111	< 1	< 0.1	< 0.001
EPA 25		10/2/2001	6,852.40	6.96	7.60	4090	670	220	142	7.9	883	1700	100	0.11	97	< 1	< 0.1	< 0.001
EPA 25		11/6/2001	6,852.40	6.95	7.70	4040	719	232	149	8.5	841	1800	96	0.06	92	< 1	< 0.1	< 0.001
EPA 25		12/4/2001	6,852.55	7.09	7.70	4020	675	215	138	7.4	852	1580	86.6	0.07	93	< 1	< 0.1	< 0.001
EPA 25		1/8/2002	6,852.40	7.09	7.70	4030	774	239	136	9	783	1870	97.5	0.06	91.5	< 1	< 0.1	< 0.001
EPA 25		2/5/2002	6,852.30	7.08	7.60	4010	761	228	149	8.7	778	1760	92.4	0.07	92.4	< 1	< 0.1	< 0.001
EPA 25		3/5/2002	6,852.30	6.98	7.70	3980	731	230	158	8.2	827	1800	89.3	0.07	91.6	< 1	< 0.1	< 0.001
EPA 25		4/2/2002	6,852.20	6.89	7.84	4070	760	226	161	9	854	1800	87.3	0.08	91.8	< 1	< 0.1	< 0.001
EPA 25		5/7/2002	6,852.40	6.95	7.68	4030	733	222	158	9.1	828	1720	88.3	0.07	91.5	< 1	< 0.1	< 0.001
EPA 25		6/4/2002	6,852.35	6.90	7.70	4050	745	230	149	7.6	831	1780	79.9	0.07	85.6	< 1	< 0.1	< 0.001
EPA 25		7/9/2002	6,852.25	6.90	7.84	4130	719	230	165	6.6	850	1760	106	0.2	92.5	< 1	< 0.1	< 0.001
EPA 25		10/7/2002	6,852.00	7.08	7.67	3510	647	212	160	6.9	802	1560	70	0.16	82.1	< 1	< 0.1	< 0.001
EPA 25		1/7/2003	6,852.06	7.20	7.67	4030	699	230	168	7.5	819	1770	87.6	0.27	88	< 1	< 0.1	< 0.001
EPA 25		4/8/2003	6,851.96	6.89	7.52	4060	679	207	169	10.2	802	1570	86.9	0.25	105	< 1	< 0.1	< 0.001
EPA 25		7/8/2003	6,851.96	6.71	7.72	4270	650	209	157	8.8	825	1710	74.3	0.23	99	< 1	< 0.1	< 0.001
EPA 25		10/7/2003	6,852.00	6.77	7.66	4190	748	245	177	8.4	836	1880	89.5	0.27	93	< 1	< 0.1	< 0.001
EPA 25		1/6/2004	6,851.91	6.92	7.70	4150	704	232	171	7.9	875	1830	85.2	0.27	99.4 D	< 1.0	0.2	< 0.001
EPA 25		4/6/2004	6,852.00	7.20	7.14	4180	714	230	169	8.1	868	1750 D	93.1	0.33	99.6 D	< 1	< 0.1	< 0.001
EPA 25		7/13/2004	6,851.77	6.73	7.07	4300	736	234	174	8.9	848	1750 D	90	0.25	96.5 D	< 1.0	< 0.1	< 0.001
EPA 25		10/5/2004	6,851.62	6.87	7.39	4250	712 D	230 D	186	7.6	838	1740 D	87	0.06	89.3 D	< 1.0	< 0.1	< 0.001
EPA 25		1/4/2005	6,851.81	7.07	7.34	4210	730 D	227 D	166	8.2	892	1640 D	90	0.18	97 D	< 1.0	< 0.1	< 0.001
EPA 25		4/5/2005	6,851.54	6.96	7.40	4020	744	244	176	7.6	821	1770	91	0.1	87	< 1.0	< 0.1	< 0.001
EPA 25		7/12/2005	6,851.38	6.86	7.33	4060	744 D	236 D	169	6.9	833	1740 D	91	0.13	91 D	< 1.0	< 0.1	< 0.001
EPA 25		10/4/2005	6,851.35	6.86	7.46	4100	727 D	231 D	170	7.9	891	1770 D	99	0.09	84 D	< 1.0	< 0.1	< 0.001
EPA 25		1/10/2006	6,851.18	7.00	7.56	4020	684	221	171	6.3	900	1650 D	87	0.08	96 D	< 1.0	< 0.1	< 0.001
EPA 25		4/4/2006	6,851.18	6.85	7.32	4130	783 D	256 D	168	8.3	838	1810 D	100	0.16	103 D	< 1.0	< 0.1	< 0.001
EPA 25		7/18/2006	6,851.03	6.84	6.96	4150	748 D	241 D	179	8.3	903	1920 D	95	0.14	89 D	< 1.0	< 0.1	< 0.001
EPA 25		10/3/2006	6,851.03	6.80	7.31	3880	702 D	224 D	184 D	7.8	921	1720 D	99	0.18	82 D	< 0.5	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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 25		2/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.33	< 0.1	< 0.05	0.002	< 0.1	0.094	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		3/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.35	< 0.1	< 0.05	0.001	< 0.1	0.0911	< 0.2	2.4	2.4	< 0.2	< 1	< 1
EPA 25		4/10/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.45	< 0.1	< 0.05	0.001	< 0.1	0.091	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		5/8/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.42	< 0.1	< 0.05	0.001	< 0.1	0.091	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		6/5/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.53	< 0.1	< 0.05	0.001	< 0.1	0.09	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		7/10/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.58	< 0.1	< 0.05	0.001	< 0.1	0.0981	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		8/7/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.4	< 0.1	< 0.05	< 0.001	< 0.1	0.1	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		9/11/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.5	< 0.1	< 0.05	< 0.001	< 0.1	0.0904	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		10/2/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.42	< 0.1	< 0.05	< 0.001	< 0.1	0.0949	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		11/6/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.46	< 0.1	< 0.05	< 0.001	< 0.1	0.0852	0.3	< 1	0.3	< 0.2	< 1	< 1
EPA 25		12/4/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.21	< 0.1	< 0.05	< 0.001	< 0.1	0.0877	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		1/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.45	< 0.1	< 0.05	< 0.001	< 0.1	0.0872	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		2/5/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.61	< 0.1	< 0.05	< 0.001	< 0.1	0.0814	0.4	2.4	2.8	< 0.2	< 1	< 1
EPA 25		3/5/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.69	< 0.1	< 0.05	< 0.001	< 0.1	0.0975	< 0.2	1.9	1.9	< 0.2	< 1	< 1
EPA 25		4/2/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.6	< 0.1	< 0.05	< 0.001	< 0.1	0.0939	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		5/7/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.77	< 0.1	< 0.05	< 0.001	< 0.1	0.0994	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		6/4/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.49	< 0.1	< 0.05	< 0.001	< 0.1	0.0864	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		7/9/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.45	< 0.1	< 0.05	< 0.001	< 0.1	0.087	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		10/7/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.62	< 0.1	< 0.05	< 0.001	< 0.1	0.0778	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		1/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.74	< 0.1	< 0.05	< 0.001	< 0.1	0.108	< 0.2	< 1	0	< 0.2	< 1	< 1.0
EPA 25		4/8/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.72	< 0.1	< 0.05	< 0.001	< 0.1	0.108	< 0.2	< 1	0	< 0.2	< 1	< 1.0
EPA 25		7/8/2003	< 0.01	< 0.005	< 0.01	< 0.05	2	< 0.1	< 0.05	< 0.001	< 0.1	0.0807	< 0.2	< 1	0	< 0.2	< 1	< 1.0
EPA 25		10/7/2003	< 0.01	< 0.005	< 0.01	< 0.05	2.06	< 0.1	< 0.05	< 0.001	< 0.1	0.1	< 0.2	< 1	0	< 0.2	< 1	< 1.0
EPA 25		1/6/2004	< 0.01	< 0.005	< 0.01	< 0.05	2.32	< 0.1	< 0.05	< 0.001	< 0.1	0.0875 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
EPA 25		4/6/2004	< 0.01	< 0.005	< 0.01	< 0.05	2.29	< 0.1	< 0.05	0.002	< 0.1	0.0943 D	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 25		7/13/2004	< 0.01	< 0.005	< 0.01	< 0.05	2.06	< 0.1	< 0.05	< 0.001	< 0.1	0.0934 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
EPA 25		10/5/2004	< 0.01	< 0.005	< 0.01	< 0.05	2.32	< 0.1	< 0.05	0.001	< 0.1	0.0969 D	< 0.2	1.3	1.3	< 0.2	< 1.0	< 1.0
EPA 25		1/4/2005	< 0.01	< 0.005	< 0.01	< 0.05	2.29	< 0.1	< 0.05	< 0.001	< 0.1	0.101	< 0.2	1.6	1.6	< 0.2	< 1.0	< 1.0
EPA 25		4/5/2005	< 0.01	< 0.005	< 0.01	< 0.05	2	< 0.1	< 0.05	< 0.001	< 0.1	0.0997	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
EPA 25		7/12/2005	< 0.01	< 0.005	< 0.01	< 0.05	2.39	< 0.1	< 0.05	< 0.001	< 0.1	0.0946	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
EPA 25		10/4/2005	< 0.01	< 0.005	< 0.01	< 0.05	2.23	< 0.1	< 0.05	< 0.001	< 0.1	0.102	< 0.2	2	2	< 0.2	< 1.0	1.4
EPA 25		1/10/2006	< 0.01	< 0.005	< 0.01	< 0.05	2.24	< 0.1	< 0.05	< 0.001	< 0.1	0.105	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
EPA 25		4/4/2006	< 0.01	< 0.005	< 0.01	< 0.05	2.46	< 0.1	< 0.05	< 0.001	< 0.1	0.103 D	< 0.2	2.4	2.4	< 0.2	< 1.0	< 1.0
EPA 25		7/18/2006	< 0.01	< 0.005	< 0.01	< 0.05	2.05	< 0.1	< 0.05	< 0.001	< 0.1	0.103	< 0.2	2.3	2.3	< 0.2	< 1.0	< 1.0
EPA 25		10/3/2006	< 0.01	< 0.005	< 0.01	< 0.05	1.85	< 0.1	< 0.05	< 0.001	< 0.1	0.104	< 0.2	< 1	0	< 0.2	< 1	< 1

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 25		1/9/2007	6,851.14	7.00	6.95	4040	622 D	203 D	142	6.7	927	1510	86	0.07	87 D	<0.5	<0.1	<0.001
EPA 25		4/10/2007	6,851.25	6.92	7.16	4110	733 D	234 D	154	8.6	935	1760 D	99	<0.05	99 D	<0.5	<0.1	<0.001
EPA 25		7/10/2007	6,850.88	6.89	6.80	4040	732 D	245 D	166	7.5	1020	1640	91	0.06	84 D	<0.5	<0.1	0.01
EPA 25		10/2/2007	6,850.86	6.82	7.19	4100	679 D	215 D	168 D	8.8	1010	1650 D	120 D	0.08	90 D	<0.5	<0.1	<0.001
EPA 25		1/15/2008	6,850.98	6.91	7.08	4150	736 D	227 D	172 D	9	952	1670 D	125 D	< 0.05	87 D	< 0.5	< 0.1	< 0.001
EPA 25		4/8/2008	6,851.28	6.78	7.16	3890	803 D	256 D	195 D	8.2 D	994	1860 D	92	< 0.1	134 D	< 0.50	< 0.1	< 0.001
EPA 25		7/8/2008	6,850.78	6.54	7.39	4160	723	214	157 D	7	1040	1770 D	71	< 0.05	88.7 D	< 0.5	< 0.1	< 0.003
EPA 25		10/7/2008	6,850.40	6.82	7.11	4000	686	231	168 D	7	921	2010 D	85	0.2	106 D	< 0.5	< 0.1	< 0.001
EPA 25		1/13/2009	6,850.48	6.76	6.9	4160	654	220	167	6	995	1590 D	64	<0.05	102 D	<0.5	<0.1	<0.001
EPA 25		4/7/2009	6,850.23	6.72	6.92	4090	688 D	231 D	178 D	6	1030	1800 D	88	<0.05	72.0 D	<0.50	<0.1	<0.001
EPA 25		7/7/2009	6,850.18	6.64	7.08	4150	700	224	166	7	1110	1750 D	95	<0.05	72 D	<0.50	<0.1	<0.001
EPA 25		10/6/2009	6,849.88	6.70	7.53	4150	717	230	173	7	1130	1820 D	88	<0.05	77 D	<0.50	<0.1	<0.001
EPA 27		7/29/1989	6,864.90	8.00	7.26	4537	554	221	371	23.5	171	2253	76.8	0.12	216	< 1	< 0.1	< 0.001
EPA 27		10/4/1989	6,864.80	8.10	7.80	4734	550	242	329	22.4	196	2266	74.5	0.09	150	< 1	< 0.1	< 0.001
EPA 27		1/23/1990	6,865.00	8.00	7.40	4680	538	268	340	17	223	2217	78.8	0.11	180	< 1	< 0.1	< 0.001
EPA 27		4/18/1990	6,864.70	7.90	7.55	4775	530	260	340	13.4	283	2160	79.6	0.08	182	< 1	< 0.1	< 0.001
EPA 27		7/13/1990	6,864.10	8.90	7.74	4731	562	239	348	20.4	167	2073	79.7	< 0.05	202	< 1	< 0.1	< 0.001
EPA 27		10/16/1990	6,864.20	8.20	7.78	4786	558	238	372	16.8	183	2324	89.4	0.05	196	< 1	< 0.1	< 0.001
EPA 27		1/10/1991	6,864.30	7.70	7.60	4274	574	288	381	17.1	143	2074	83.8	0.13	171	< 1	< 0.1	< 0.001
EPA 27		4/16/1991	6,864.30	7.60	8.12	4727	547	228	350	16.3	179	2296	85.3	< 0.05	256	< 1	< 0.1	< 0.001
EPA 27		7/9/1991	6,863.80	7.50	7.68	4925	528	253	326	14.9	121	2420	81.3	< 0.05	200	< 1	< 0.1	< 0.001
EPA 27		10/23/1991	6,863.30	7.70	7.70	4461	452	146	359	19.4	122	2229	98	0.31	141	< 1	< 0.1	< 0.001
EPA 27		1/23/1992	6,863.00	7.80	7.47	4570	519	196	335	13	129	2103	92.1	< 0.05	125	< 1	< 0.1	< 0.001
EPA 27		4/3/1992	6,862.90	7.30	7.87	4087	581	248	416	18.7	208	2443	82.5	< 0.05	194	< 1	< 0.1	< 0.001
EPA 27		7/16/1992	6,862.10	8.20	7.76	4239	454	225	441	17	73.4	2224	99	< 0.05	150	< 1	< 0.1	< 0.001
EPA 27		10/15/1992	6,861.60	7.90	7.76	4534	566	213	374	17.3	75.4	2302	99.1	< 0.05	147	< 1	< 0.1	< 0.001
EPA 27		1/12/1993	6,861.00	7.90	7.85	4496	571	217	395	16.1	116	2386	98.9	< 0.05	195	< 1	< 0.1	< 0.001
EPA 27		4/15/1993	6,861.00	7.90	7.86	4612	472	237	389	10.2	96.3	2260	111	0.07	150	< 1	< 0.1	0.001
EPA 27		7/21/1993	6,860.40	8.50	7.87	4408	519	198	387	15.5	81.6	2195	104	< 0.05	141	< 1	< 0.1	0.001
EPA 27		10/12/1993	6,858.70	8.10	6.79	3844	551	183	314	14.1	74.7	2175	101	0.05	92.5	< 1	< 0.1	< 0.001
EPA 27		1/11/1994	6,859.70	8.10	7.75	4266	501	183	320	13	103	2181	97.8	< 0.05	122	< 1	< 0.1	< 0.001
EPA 27		4/19/1994	6,859.30	6.50	8.12	4020	509	172	373	15.3	80.6	2073	107	0.2	143	< 1	< 0.1	< 0.001
EPA 27		7/27/1994	6,859.00	8.00	7.77	3954	568	143	307	16.7	58.6	2060	108	< 0.05	148	< 1	< 0.1	< 0.001
EPA 27		10/11/1994	6,858.60	8.00	7.83	4264	565	223	377	12.1	67.8	2245	108	0.09	141	< 1	< 0.1	< 0.001
EPA 27		1/11/1995	6,858.20	8.30	7.54	4030	552	151	337	16.3	74.8	2066	113	0.16	190	< 1	< 0.1	0.002

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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 25		1/9/2007	<0.01	<0.005	<0.01	<0.05	2.04	<0.1	<0.05	<0.001	<0.1	0.0884	<0.2	<1	0	<0.2	<1	<1
EPA 25		4/10/2007	<0.01	<0.005	<0.01	<0.05	2.18	<0.1	<0.05	<0.001	<0.1	0.109	<0.2	<1	0	<0.2	<1	<1
EPA 25		7/10/2007	<0.01	<0.005	<0.01	<0.05	1.03	<0.1	<0.05	<0.001	<0.1	0.111	<0.2	<1	0	<0.2	<1	<1
EPA 25		10/2/2007	<0.01	<0.005	<0.01	<0.05	2.48	<0.1	<0.05	<0.001	<0.1	0.114	<0.2	<1	0	<0.2	<1	<1
EPA 25		1/15/2008	< 0.01	< 0.005	< 0.01	< 0.05	2.06	< 0.1	< 0.05	< 0.001	< 0.1	0.103	< 0.2	< 1	0	< 0.2	< 1	1.2
EPA 25		4/8/2008	< 0.01	< 0.005	< 0.01	< 0.05	2.32	< 0.1	< 0.05	< 0.001	< 0.1	0.113	0.1 U	-0.5 U	-0.4	0.4	-13.5 U	0.9 U
EPA 25		7/8/2008	< 0.01	< 0.005	< 0.01	< 0.05	2.45	< 0.1	< 0.05	< 0.001	< 0.1	0.104	0.21	1.5	1.71	0 U	2.5 U	0.3 U
EPA 25		10/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	1.4	< 0.1	< 0.05	< 0.001	< 0.1	0.0996	-0.09 U	0.25 U	0.16	-0.1 U	-2 U	1.4
EPA 25		1/13/2009	<0.01	<0.005	<0.01	<0.05	0.44	<0.1	<0.05	<0.001	<0.1	0.116	0.08 U	-0.05 U	0.08	-0.2 U	-2 U	1.1
EPA 25		4/7/2009	<0.01	<0.005	<0.01	<0.05	0.50	<0.1	<0.05	<0.001	<0.1	0.127	-0.01 U	0.76 U	0.76	0.1 U	-3 U	0.2 U
EPA 25		7/7/2009	<0.01	<0.005	<0.01	<0.05	0.66	<0.1	<0.05	<0.001	<0.1	0.115	-0.1 U	-0.08 U	-0.1	0.1 U	-1 U	0.5
EPA 25		10/6/2009	<0.01	<0.005	<0.01	<0.05	0.46	<0.1	<0.05	<0.001	<0.1	0.128	0.13	0.21 U	0.34	0.04 U	-1 U	0.1 U
EPA 27		7/29/1989	< 0.05	< 0.01	< 0.01	< 0.05	< 0.01	0.03	< 0.05	0.004	< 0.1	0.0138	0.4	1.9	2.3	3.2	< 1	< 1
EPA 27		10/4/1989	< 0.05	< 0.01	< 0.01	< 0.05	< 0.01	0.03	< 0.05	0.006	< 0.1	0.032	0.6	1.8	2.4	< 0.2	< 1	1.1
EPA 27		1/23/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.005	< 0.1	0.046	< 0.2	1.5	1.5	1.4	< 1	1.7
EPA 27		4/18/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.005	< 0.1	0.027	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 27		7/13/1990	< 0.05	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.002	< 0.1	0.0213	< 0.2	< 1	0	0.8	1	< 1
EPA 27		10/16/1990	< 0.05	< 0.01	0.04	< 0.05	< 0.01	< 0.1	< 0.05	0.003	< 0.1	0.0282	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 27		1/10/1991	< 0.01	< 0.01	0.02	< 0.05	0.01	< 0.1	< 0.05	0.006	< 0.1	0.0286	0.8	< 1	0.8	< 0.2	< 1	1.2
EPA 27		4/16/1991	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.004	< 0.1	0.024	< 0.2	< 1	0	< 0.2	1.3	< 1
EPA 27		7/9/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.005	< 0.1	0.0347	0.4	< 1	0.4	< 0.2	< 1	< 1
EPA 27		10/23/1991	< 0.01	< 0.01	0.01	no data	0.01	< 0.1	< 0.05	0.006	< 0.1	0.032	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 27		1/23/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.001	< 0.1	0.039	0.5	1	1.5	< 0.2	1.6	< 1
EPA 27		4/3/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.096	< 0.1	0.014	< 0.2	< 1	0	< 0.2	2.4	< 1
EPA 27		7/16/1992	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.006	< 0.1	0.024	0.6	2.5	3.1	< 0.2	< 1	< 1
EPA 27		10/15/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.007	< 0.1	0.029	0.9	5.1	6	< 0.2	2.2	< 1
EPA 27		1/12/1993	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.031	< 0.1	0.011	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 27		4/15/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.011	< 0.1	0.023	< 0.2	< 1	0	< 0.2	1.9	< 1
EPA 27		7/21/1993	< 0.01	< 0.01	0.01	< 0.05	0.02	< 0.1	< 0.05	0.015	< 0.1	0.018	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 27		10/12/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.011	< 0.1	0.019	0.5	< 1	0.5	< 0.2	1.9	< 1
EPA 27		1/11/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.01	< 0.1	0.023	< 0.2	1.7	1.7	< 0.2	< 1	3.5
EPA 27		4/19/1994	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.009	< 0.1	0.019	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 27		7/27/1994	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.007	< 0.1	0.014	0.9	3.8	4.7	< 0.2	1.9	6.8
EPA 27		10/11/1994	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.008	< 0.1	0.021	0.3	< 1	0.3	< 0.2	1	< 1
EPA 27		1/11/1995	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.011	< 0.1	0.017	< 0.2	2.6	2.6	< 0.2	3	4.3

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 27		4/11/1995	6,858.10	7.50	8.02	4125	541	169	354	15.6	63.1	2054	118	0.21	149	< 1	< 0.1	< 0.001
EPA 27		7/11/1995	6,857.80	7.90	7.90	3897	550	134	332	15.6	64.6	1872	118	0.05	129	< 1	< 0.1	< 0.001
EPA 27		10/10/1995	6,857.40	7.90	8.18	3760	535	128	360	18.2	54.2	1796	108	0.05	121	< 1	< 0.1	< 0.001
EPA 27		1/9/1996	6,857.10	7.90	7.90	3743	530	126	328	16.1	62.2	1929	116	< 0.05	132	< 1	< 0.1	< 0.001
EPA 27		4/10/1996	6,856.80	8.40	7.97	3875	552	133	324	14.1	57.6	2080	126	0.07	123	< 1	< 0.1	0.002
EPA 27		7/17/1996	6,856.50	7.80	7.82	3730	560	118	348	16.4	45.5	2009	124	< 0.05	143	< 1	< 0.1	< 0.001
EPA 27		10/8/1996	6,856.20	7.70	8.04	3720	524	127	343	16.5	40.4	1865	112	0.13	121	< 1	< 0.1	< 0.001
EPA 27		1/28/1997	6,855.90	7.70	7.64	3720	530	135	336	15.4	39.8	1910	156	0.18	113	< 1	< 0.1	< 0.001
EPA 27		4/15/1997	6,855.90	7.10	7.65	3660	564	111	332	16.8	31.1	1876	120	0.06	139	< 1	< 0.1	< 0.001
EPA 27		7/15/1997	6,855.60	7.50	7.58	3710	547	127	317	16.3	31	1790	123	0.08	116	< 1	< 0.1	< 0.001
EPA 28		7/29/1989	6,867.90	6.90	6.60	4825	548	458	222	10.5	671	2622	110	0.05	74	< 1	< 0.1	< 0.001
EPA 28		10/4/1989	6,867.70	6.50	7.20	4989	565	475	216	14.1	738	2720	107	< 0.05	113	< 1	< 0.1	< 0.001
EPA 28		1/23/1990	6,867.70	6.60	6.80	4904	525	468	227	10.4	756	2434	116	0.09	75	< 1	< 0.1	< 0.001
EPA 28		4/18/1990	6,867.30	6.80	7.12	4977	542	428	207	9.9	815	2330	117	0.12	69	< 1	< 0.1	< 0.001
EPA 28		7/13/1990	6,866.20	6.70	7.21	5037	541	440	212	10	821	2210	126	< 0.05	74.2	< 1	< 0.1	< 0.001
EPA 28		10/16/1990	6,866.70	6.50	7.21	5306	548	231	387	17.7	522	3005	111	< 0.05	62.5	< 1	< 0.1	< 0.001
EPA 28		1/10/1991	6,866.70	6.60	7.17	5138	542	487	232	13.8	627	2732	115	< 0.05	68	< 1	< 0.1	< 0.001
EPA 28		4/16/1991	6,866.70	6.50	7.76	5194	497	470	222	11.8	632	2824	123	< 0.05	88	< 1	< 0.1	< 0.001
EPA 28		7/9/1991	6,866.20	6.40	7.07	5350	477	463	208	10.1	551	2940	107	< 0.05	68	< 1	< 0.1	< 0.001
EPA 28		10/23/1991	6,865.40	6.40	7.50	5170	488	499	225	11.4	534	2792	114	0.28	52.3	< 1	< 0.1	< 0.001
EPA 28		1/23/1992	6,865.10	6.40	7.37	5268	490	448	213	10.2	583	2786	111	0.14	40.6	< 1	< 0.1	< 0.001
EPA 28		4/3/1992	6,865.30	6.50	7.46	4613	505	448	263	12.6	612	2934	110	0.22	72.1	< 1	< 0.1	< 0.001
EPA 28		7/16/1992	6,864.40	6.60	7.20	5042	517	489	246	13.6	561	2916	110	0.1	35.4	< 1	< 0.1	< 0.001
EPA 28		10/15/1992	6,863.20	6.70	7.21	5249	509	486	236	10.9	550	3015	106	< 0.05	55.5	< 1	< 0.1	< 0.001
EPA 28		1/12/1993	6,862.60	6.60	7.16	5095	546	482	244	13.9	584	2973	110	< 0.05	77.9	< 1	< 0.1	< 0.001
EPA 28		4/15/1993	6,863.00	6.70	7.49	5230	534	483	251	10	744	2981	122	0.08	63	< 1	< 0.1	< 0.001
EPA 28		7/21/1993	6,862.20	6.70	7.49	4999	546	474	249	12.5	561	2968	98.9	< 0.05	49.5	< 1	< 0.1	< 0.001
EPA 28		10/12/1993	6,859.60	7.00	7.18	5002	525	450	223	10.6	603	2913	109	< 0.05	48.6	< 1	< 0.1	< 0.001
EPA 28		1/11/1994	6,861.10	7.00	7.73	5378	544	473	236	10.6	562	3132	101	< 0.05	52.8	< 1	< 0.1	< 0.001
EPA 28		4/19/1994	6,860.90	6.70	7.71	5077	481	452	232	12.6	527	2901	108	0.06	56.2	< 1	< 0.1	< 0.001
EPA 28		7/27/1994	6,860.50	6.70	7.45	5476	611	527	197	12.7	559	3177	102	< 0.05	59.2	< 1	< 0.1	< 0.001
EPA 28		10/11/1994	6,860.00	6.70	7.69	5491	545	574	241	13	614	3325	97.5	0.06	38.6	< 1	< 0.1	< 0.001
EPA 28		1/11/1995	6,859.70	6.70	7.65	5614	510	576	202	12.9	586	3257	96.7	0.13	48.2	< 1	< 0.1	< 0.001
EPA 28		4/11/1995	6,859.70	6.70	7.39	5089	532	496	217	11.8	601	3028	124	0.15	28.6	< 1	< 0.1	< 0.001
EPA 28		7/11/1995	6,859.30	6.90	7.85	4851	535	505	219	11.5	554	2850	115	< 0.05	51.7	< 1	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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 27		4/11/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.011	< 0.1	0.014	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 27		7/11/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.012	< 0.1	0.011	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 27		10/10/1995	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.035	< 0.1	0.0094	0.2	1.5	1.7	< 0.2	< 1	< 1
EPA 27		1/9/1996	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.038	< 0.1	0.011	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 27		4/10/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.009	< 0.1	0.013	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 27		7/17/1996	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.01	2.1	< 1	2.1	< 0.2	< 1	< 1
EPA 27		10/8/1996	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.009	< 0.1	0.012	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 27		1/28/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.08	< 0.1	< 0.05	0.015	< 0.1	0.006	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 27		4/15/1997	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.042	< 0.1	0.003	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 27		7/15/1997	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.019	< 0.1	0.006	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 28		7/29/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.2	< 0.1	< 0.05	0.002	< 0.1	0.0313	0.9	1.8	2.7	6.9	2.6	< 1
EPA 28		10/4/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.19	< 0.1	< 0.05	0.002	< 0.1	0.041	2.7	< 1	2.7	4.6	< 1	8.4
EPA 28		1/23/1990	< 0.05	< 0.01	0.01	< 0.05	0.18	< 0.1	< 0.05	0.002	< 0.1	0.045	0.4	3	3.4	1.8	1.3	3.2
EPA 28		4/18/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.17	< 0.1	< 0.05	0.001	< 0.1	0.26	0.8	< 1	0.8	< 0.2	< 1	1.3
EPA 28		7/13/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.17	< 0.1	< 0.05	< 0.001	< 0.1	0.0378	< 0.2	1.2	1.2	< 0.2	< 1	< 1
EPA 28		10/16/1990	< 0.05	< 0.01	0.01	< 0.05	0.23	< 0.1	< 0.05	< 0.001	< 0.1	0.0206	0.8	< 1	0.8	< 0.2	< 1	< 1
EPA 28		1/10/1991	< 0.01	0.01	0.02	< 0.05	0.21	< 0.1	< 0.05	0.002	< 0.1	0.0268	2.4	< 1	2.4	< 0.2	6.3	3.1
EPA 28		4/16/1991	< 0.01	0.01	< 0.01	< 0.05	0.18	< 0.1	< 0.05	< 0.001	< 0.1	0.027	0.9	3.1	4	< 0.2	< 1	< 1
EPA 28		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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

CHESTER ENGINEERS

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 28		10/10/1995	6,858.80	6.90	7.94	4825	520	495	229	12	549	2802	101	< 0.05	47.2	< 1	< 0.1	< 0.001
EPA 28		1/9/1996	6,858.40	7.00	7.29	5029	535	520	207	11.6	528	2979	112	< 0.05	55.3	< 1	< 0.1	< 0.001
EPA 28		4/10/1996	6,858.00	7.10	7.73	5273	508	500	209	10.8	556	3165	124	0.07	48.5	< 1	< 0.1	0.002
EPA 28		7/17/1996	6,857.80	7.00	7.08	5267	525	550	227	12.1	531	3045	112	< 0.05	125	< 1	< 0.1	< 0.001
EPA 28		10/8/1996	6,857.60	7.00	7.23	5260	538	498	223	11.8	360	2849	108	0.07	47.3	< 1	< 0.1	< 0.001
EPA 28		1/28/1997	6,857.40	7.00	7.73	5270	545	500	194	11.2	642	2935	157	0.06	47.2	< 1	< 0.1	< 0.001
EPA 28		4/15/1997	6,857.30	7.00	7.61	5350	574	555	213	12.1	544	3280	116	< 0.05	52.6	< 1	< 0.1	< 0.001
EPA 28		7/15/1997	6,857.00	6.80	7.83	5360	539	506	206	11.7	531	2810	119	0.05	44.6	< 1	< 0.1	< 0.001
EPA 28		10/15/1997	6,857.10	6.70	7.83	5290	585	543	217	11.5	667	3010	145	0.05	49.5	< 1	< 0.1	< 0.001
EPA 28		1/20/1998	6,857.20	6.70	8.07	5330	531	514	224	12.8	540	3250	121	0.16	51.4	< 1	< 0.1	< 0.001
EPA 28		4/14/1998	6,856.90	7.00	7.41	5430	549	556	221	12.6	539	2990	95.4	< 0.05	44.5	< 1	< 0.1	< 0.001
EPA 28		7/14/1998	6,856.70	7.00	7.88	5630	538	543	228	12.8	544	2900	101	< 0.05	41.7	< 1	< 0.1	< 0.001
EPA 28		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
EPA 28		1/12/1999	6,917.90	6.90	8.02	5380	468	504	204	12.8	538	3100	101	0.08	43.7	< 1	< 0.1	< 0.001
EPA 28		4/13/1999	6,857.70	6.80	8.05	5360	544	550	214	11.9	533	2930	106	0.08	45.1	< 1	< 0.1	< 0.001
EPA 28		7/20/1999	6,856.36	6.90	7.94	5390	528	556	235	15	557	3010	106	0.05	40	< 1	< 0.1	< 0.001
EPA 28		10/12/1999	6,857.30	6.90	7.98	5210	532	518	190	11.3	542	2930	108	< 0.05	40.4	< 1	< 0.1	< 0.001
EPA 28		1/11/2000	6,856.80	6.80	8.07	5280	498	514	192	12.8	534	2820	99.6	0.05	39.1	< 1	< 0.1	< 0.001
EPA 28		5/9/2000	6,856.60	6.60	7.77	5080	503	477	201	11.3	635	2600	115	< 0.05	49.5	< 1	< 0.1	< 0.001
EPA 28		7/17/2000	6,856.40	6.66	7.70	5190	534	499	195	11.4	636	2570	119	< 0.05	46.1	< 1	< 0.1	< 0.001
EPA 28		10/9/2000	6,856.15	6.90	7.70	5110	460	446	210	13.4	637	2500	110	0.16	52.3	< 1	< 0.1	< 0.001
EPA 28		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		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		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		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		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		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		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		8/7/2001	6,856.90	6.72	7.70	5220	510	500	190	12	625	2600	120	0.05	42	< 1	< 0.1	< 0.001
EPA 28		9/11/2001	6,857.05	6.74	7.50	5100	520	500	186	12.1	649	2600	143	0.05	55	< 1	< 0.1	< 0.001
EPA 28		10/1/2001	6,857.25	6.86	7.40	5210	510	500	184	12.2	652	2500	148	0.05	48.8	< 1	< 0.1	< 0.001
EPA 28		11/6/2001	6,857.25	6.75	7.60	5190	554	525	193	12.8	644	2820	143	0.05	50	< 1	< 0.1	< 0.001
EPA 28		12/4/2001	6,857.40	6.91	7.50	5190	517	488	170	11	645	2560	123	0.05	48	< 1	< 0.1	< 0.001
EPA 28		1/8/2002	6,857.40	6.96	7.50	5170	603	538	182	12.3	658	3010	150	< 0.05	44.8	< 1	< 0.1	< 0.001
EPA 28		2/5/2002	6,857.60	7.01	7.50	5230	586	515	193	12.2	652	2830	136	0.1	43.1	< 1	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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		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		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		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		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		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		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		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		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		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		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		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		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		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
EPA 28		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 28		3/5/2002	6,857.50	6.81	7.60	5160	549	508	208	12.4	682	2870	137	0.05	45.9	< 1	< 0.1	< 0.001
EPA 28		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		5/7/2002	6,857.65	6.80	7.58	5200	546	507	210	13.1	652	2780	119	< 0.05	43.9	< 1	< 0.1	< 0.001
EPA 28		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		7/9/2002	6,857.60	6.80	7.58	5250	549	524	202	13.1	683	2850	120	< 0.05	43.4	< 1	< 0.1	< 0.001
EPA 28		10/8/2002	6,857.33	6.77	7.60	5190	504	480	192	11.2	675	2680	113	0.05	45.3	< 1	< 0.1	< 0.001
EPA 28		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		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
EPA 28		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		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		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		4/6/2004	6,857.39	7.40	7.05	5220	539	512	175	11.4	710	2800 D	116	0.21	41.5 D	< 1	< 0.1	< 0.001
EPA 28		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		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		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		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		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		10/4/2005	6,856.53	6.75	7.30	5150	544 D	513 D	215	12.2	671	2900 D	136	< 0.05	28 D	< 1.0	< 0.1	< 0.001
EPA 28		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		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		7/18/2006	6,856.21	6.69	7.20	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		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		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		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		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		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	6.70	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		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		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	7.00	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		7/8/2008	6,855.91	6.53	7.30	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		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

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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		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		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		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		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		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		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		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		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
EPA 28		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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

CHESTER ENGINEERS

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 28		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		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
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		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		10/5/2009	6,855.01	6.65	7.40	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		7.80	5060	514	469	218	11	707	2990 D	124	<0.05	30.1 D	<0.50	<0.1	<0.001
GW 1		7/19/1989	6,869.00	6.90	7.32	5134	910	412	328	2.7	1415	2042	220	0.08	120	< 1	< 0.1	< 0.001
GW 1		10/16/1989	6,868.90	7.00	7.02	5376	856	431	331	3.8	2030	1931	236	0.13	110	< 1	< 0.1	< 0.001
GW 1		1/10/1990	6,868.30	6.40	6.54	5658	774	408	349	2.81	1903	2079	239	0.25	111	< 1	< 0.1	0.001
GW 1		4/5/1990	6,868.20	6.30	6.98	5732	818	430	350	2.8	2001	2118	243	0.13	119	< 1	< 0.1	< 0.001
GW 1		7/3/1990	6,867.20	6.40	6.92	6154	953	501	343	4.5	2098	2252	241	< 0.05	109	< 1	< 0.1	< 0.001
GW 1		10/3/1990	6,867.60	6.30	7.26	5879	780	425	350	4	1785	2214	238	< 0.05	68.3	< 1	< 0.1	0.003
GW 1		1/16/1991	6,867.60	6.40	7.12	6092	909	483	380	3.3	1573	2373	247	< 0.05	97.5	< 1	0.18	< 0.001
GW 1		4/2/1991	6,867.70	6.30	7.10	5780	817	459	344	3.5	1478	2476	237	0.05	108	< 1	0.19	< 0.001
GW 1		7/17/1991	6,866.80	6.50	7.21	6236	821	478	326	4.8	1893	2626	236	< 0.05	90.9	< 1	< 0.1	< 0.001
GW 1		10/15/1991	6,866.10	6.30	6.90	6275	900	519	349	3.8	2020	2460	247	< 0.05	57.6	< 1	0.36	< 0.001
GW 1		1/15/1992	6,865.90	6.30	7.05	5446	695	457	360	3.9	1617	2445	239	< 0.05	78.2	< 1	< 0.1	< 0.001
GW 1		4/8/1992	6,865.70	6.20	7.43	4775	769	481	364	4.4	1813	2538	217	0.08	75.8	< 1	< 0.1	< 0.001
GW 1		7/8/1992	6,864.80	6.00	7.37	4964	801	403	454	5.6	1610	2493	231	0.13	115	< 1	< 0.1	< 0.001
GW 1		10/6/1992	6,863.70	6.30	6.90	6008	800	504	389	3.2	1809	2370	220	< 0.05	110	< 1	0.1	< 0.001
GW 1		1/7/1993	6,863.40	6.40	7.73	5223	676	421	348	5.3	1807	2206	234	0.06	117	< 1	< 0.1	< 0.001
GW 1		4/7/1993	6,863.90	6.40	7.22	5681	681	401	372	5.6	1579	2269	199	< 0.05	119	< 1	< 0.1	< 0.001
GW 1		7/14/1993	6,862.70	6.40	7.23	5630	807	438	337	4.3	1610	2370	211	0.05	118	< 1	< 0.1	< 0.001
GW 1		10/7/1993	6,862.20	6.70	7.29	5196	719	433	310	3	1792	1952	228	< 0.05	124	< 1	< 0.1	< 0.001
GW 1		1/6/1994	6,861.80	6.80	7.38	5051	704	394	335	2.9	1635	2075	218	0.11	101	< 1	< 0.1	< 0.001
GW 1		4/12/1994	6,861.60	6.70	7.15	5216	685	409	316	3.9	1485	2256	175	0.3	115	< 1	< 0.1	< 0.001
GW 1		7/21/1994	6,861.10	6.70	6.97	5415	828	417	283	5.3	1519	2371	185	0.13	118	< 1	< 0.1	< 0.001
GW 1		10/5/1994	6,860.70	6.50	7.45	5567	745	446	323	5.1	13.55	2250	177	0.23	111	< 1	< 0.1	< 0.001
GW 1		1/4/1995	6,860.50	6.50	7.39	5732	788	441	295	4.7	1364	2483	166	0.72	104	< 1	< 0.1	< 0.001
GW 1		4/5/1995	6,860.30	6.60	7.03	5397	698	420	282	3.9	1443	2400	186	0.36	110	< 1	< 0.1	< 0.001
GW 1		7/6/1995	6,859.90	6.50	7.65	5180	665	428	285	3.9	1183	2255	170	0.1	99.4	< 1	< 0.1	< 0.001
GW 1		10/3/1995	6,859.30	6.60	7.53	5292	640	419	270	3.2	1218	2265	137	0.29	105	< 1	< 0.1	0.003
GW 1		1/3/1996	6,858.90	6.60	6.80	5086	605	405	274	3.5	1211	2079	135	0.07	115	< 1	< 0.1	0.002

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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		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		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	1.0	1.27	-0.03 U	-2 U	0.9
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		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	0.60	<0.1	<0.05	<0.001	<0.1	0.0370	0.61	1.4	2.01	0.3 U	0.2 U	1.1
EPA 28		10/5/2009	<0.01	<0.005	<0.01	<0.05	0.71	<0.1	<0.05	<0.001	<0.1	0.0450	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
GW 1		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		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		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		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		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		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		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		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		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		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		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
GW 1		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
GW 1		4/2/1996	6,858.60	6.60	7.55	5078	594	388	274	3.7	1160	2162	140	0.09	116	< 1	< 0.1	< 0.001
GW 1		7/7/1996	6,858.40	6.30	7.08	5119	605	395	290	3.6	1169	2155	160	0.21	109	1.04	< 0.1	0.002
GW 1		10/1/1996	6,858.40	6.50	6.99	5080	624	422	264	3.9	1170	2063	158	0.1	116	< 1	< 0.1	0.001
GW 1		1/22/1997	6,858.10	6.40	7.36	4790	625	415	266	4.16	1130	2003	148	0.1	107	< 1	< 0.1	< 0.001
GW 1		4/8/1997	6,858.30	6.60	7.90	4830	636	403	241	4.2	1080	2047	173	0.24	117	< 1	< 0.1	< 0.001
GW 1		7/8/1997	6,857.70	6.90	7.68	4800	634	379	229	4.4	1040	2050	173	0.3	116	< 1	< 0.1	< 0.001
GW 1		10/7/1997	6,857.80	6.30	7.35	4750	619	364	245	4.7	1070	1980	145	0.38	114	< 1	< 0.1	< 0.001
GW 1		1/15/1998	6,857.50	6.80	7.90	4650	616	349	251	5.6	1020	2100	157	0.71	112	< 1	< 0.1	< 0.001
GW 1		4/7/1998	6,857.50	6.60	7.48	4440	597	331	220	4.2	872	2000	121	0.13	97.9	< 1	< 0.1	0.002
GW 1		7/7/1998	6,857.50	6.80	7.70	4350	587	317	224	4.8	815	1800	132	0.37	122	< 1	< 0.1	< 0.001
GW 1		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		1/5/1999	6,856.90	6.70	7.75	4450	597	304	197	5.4	853	1830	124	0.29	91.5	< 1	< 0.1	< 0.001
GW 1		4/6/1999	6,856.80	6.70	7.65	4300	610	264	209	5.1	738	1820	115	0.43	91.8	< 1	< 0.1	< 0.001
GW 1		7/13/1999	6,857.06	6.70	7.80	4190	611	304	183	9.7	770	1900	125	0.47	82.4	< 1	< 0.1	< 0.001
GW 1		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		1/4/2000	6,857.00	6.70	7.72	4160	589	278	176	6	742	1790	114	0.28	94.2	< 1	< 0.1	< 0.001
GW 1		5/9/2000	6,856.30	6.60	7.69	4410	585	309	226	5.1	919	1870	122	0.84	87	< 1	< 0.1	< 0.001
GW 1		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		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		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		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		3/5/2001	6,856.50	7.15	7.40	4080	635	323	166	6.1	975	2070	104	0.79	74.2	< 1	< 0.1	< 0.001
GW 1		4/4/2001	6,856.70	7.00	7.50	4360	713	347	201	4.1	946	2070	116	0.79	84.7	< 1	< 0.1	< 0.001
GW 1		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		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		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		8/7/2001	6,857.12	6.61	7.50	4910	650	340	210	4.5	878	2100	140	0.69	84	< 1	< 0.1	< 0.001
GW 1		9/11/2001	6,857.25	6.64	7.40	4960	690	350	214	4.6	899	2200	140	0.68	101	< 1	< 0.1	< 0.001
GW 1		10/1/2001	6,857.40	6.73	7.80	5190	690	350	206	5.3	913	2200	170	0.63	91.5	< 1	< 0.1	< 0.001
GW 1		11/5/2001	6,857.50	6.68	7.20	5260	775	386	219	5.1	950	2540	150	0.59	95	< 1	< 0.1	< 0.001
GW 1		12/4/2001	6,857.65	6.83	7.30	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	7.40	5260	716	351	219	3.9	946	2250	137	0.46	96	< 1	< 0.1	< 0.001
GW 1		1/8/2002	6,857.70	6.89	7.20	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	6.90	7.30	5260	844	401	176	6.8	978	2660	159	0.51	81.5	< 1	< 0.1	< 0.001
GW 1		2/4/2002	6,857.75	6.87	7.40	5360	808	398	206	6.2	1010	2530	167	0.59	80.5	< 1	< 0.1	< 0.001

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TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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 1		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		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		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		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		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		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		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		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		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		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		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		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		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		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
GW 1		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
GW 1		3/4/2002	6,857.75	6.70	7.30	5360	764	408	260	4.4	1080	2630	151	0.6	92.2	< 1	< 0.1	< 0.001
GW 1		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		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	6.70	7.67	5470	770	409	248	5.6	1100	2440	158	0.46	93.2	< 1	< 0.1	< 0.001
GW 1		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		7/8/2002	6,857.75	6.65	7.80	5630	753	454	190	6.6	1200	2500	140	0.54	99.9	< 1	< 0.1	< 0.001
GW 1		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		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		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
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		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		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		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		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		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		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		1/3/2005	6,857.13	6.70	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		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		7/11/2005	6,856.92	6.56	7.40	6360	780 D	648 D	344	5.7	1480	2900 D	247	0.43	92 D	< 1.0	< 0.1	< 0.001
GW 1		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		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		4/3/2006	6,856.71	6.53	7.30	6490	764 D	646 D	335	6.9	1580	2800 D	262	0.34	106 D	< 1.0	0.1	< 0.001
GW 1		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		10/3/2006	6,856.26	6.60	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		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		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		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		10/2/2007	6,855.99	6.67	6.70	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		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		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		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		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		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		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		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	1.70	<0.1	<0.001

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TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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 1		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		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		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		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		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		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		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		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
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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		4/7/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.110	0.1 U	-0.1 U	0	0.2	-4.5 U	1.1
GW 1		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		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		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		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	1.0	1.14	-0.03 U	-1 U	0.3 U
GW 1		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

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
GW 1		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 2		7/19/1989	6,870.30	7.00	7.23	5143	910	412	253	8.3	1293	2267	173	0.06	123	< 1	< 0.1	< 0.001
GW 2		10/16/1989	6,870.10	7.00	7.05	5564	789	479	266	11.7	1818	2314	181	0.1	76	< 1	< 0.1	< 0.001
GW 2		1/10/1990	6,869.70	6.70	7.02	5470	752	421	264	8.75	1451	2329	184	0.08	84	< 1	< 0.1	< 0.001
GW 2		4/5/1990	6,869.40	6.50	7.06	5277	862	391	256	8.1	1730	2226	183	0.11	113	< 1	< 0.1	< 0.001
GW 2		7/3/1990	6,868.90	6.30	6.91	5179	801	667	286	9.9	2001	2161	195	< 0.05	52.2	< 1	< 0.1	< 0.001
GW 2		10/3/1990	6,868.70	6.50	7.25	5801	888	522	289	9.4	1602	2395	193	< 0.05	61.9	< 1	< 0.1	0.001
GW 2		1/16/1991	6,868.90	6.60	7.11	5775	926	458	297	8.3	1552	2444	202	0.05	88.2	< 1	< 0.1	< 0.001
GW 2		4/2/1991	6,868.80	6.50	6.90	5621	812	432	280	8.1	1465	2560	206	< 0.05	102	< 1	< 0.1	< 0.001
GW 2		7/17/1991	6,867.50	6.50	7.30	5820	790	430	258	8.5	1769	2638	199	0.05	131	< 1	< 0.1	< 0.001
GW 2		10/15/1991	6,866.80	6.20	6.89	6209	737	579	287	9	2011	2868	197	< 0.05	28.8	< 1	0.27	< 0.001
GW 2		1/15/1992	6,866.90	6.20	7.11	5127	765	428	259	7.9	1278	2285	187	< 0.05	51.6	< 1	< 0.1	< 0.001
GW 2		4/8/1992	6,867.00	6.20	7.53	5275	725	531	286	10.3	1687	2613	177	< 0.05	22.9	< 1	< 0.1	< 0.001
GW 2		7/8/1992	6,865.20	6.10	7.24	6313	802	581	402	12.8	1931	3194	171	0.07	54	< 1	< 0.1	< 0.001
GW 2		10/6/1992	6,864.10	6.40	7.26	5590	901	422	316	8.8	1563	2256	166	< 0.05	100	< 1	< 0.1	< 0.001
GW 2		1/7/1993	6,864.20	6.40	7.62	5795	730	521	296	10.1	1763	2584	177	< 0.05	64	< 1	< 0.1	< 0.001
GW 2		4/7/1993	6,864.70	6.50	7.24	5140	670	430	314	6.9	1529	2250	173	< 0.05	79.8	< 1	< 0.1	0.001
GW 2		7/14/1993	6,863.00	6.70	7.18	5500	776	437	308	7.7	1612	2501	178	0.05	79.8	< 1	< 0.1	0.001
GW 2		10/7/1993	6,862.60	6.80	7.44	4812	693	371	268	6.9	1386	2107	159	0.05	111	< 1	< 0.1	< 0.001
GW 2		1/6/1994	6,861.60	6.80	7.14	5185	673	461	277	7.4	1556	2444	170	0.16	68.1	< 1	< 0.1	< 0.001
GW 2		4/12/1994	6,862.30	6.70	7.03	5006	748	355	250	7	1536	2238	165	0.24	80.5	< 1	< 0.1	< 0.001
GW 2		7/21/1994	6,861.60	6.70	7.35	5402	774	470	247	8.6	1614	2859	170	0.06	52	< 1	< 0.1	0.001
GW 2		10/5/1994	6,861.20	6.40	7.51	5969	727	590	288	10	1707	2683	177	< 0.05	29.9	< 1	< 0.1	< 0.001
GW 2		1/4/1995	6,861.20	6.40	7.16	6044	748	561	270	10.9	1703	2866	174	0.27	25.3	< 1	< 0.1	< 0.001
GW 2		4/5/1995	6,861.70	6.50	6.91	6020	660	635	285	10.4	1745	2955	170	0.19	23.1	< 1	< 0.1	< 0.001
GW 2		7/6/1995	6,862.40	6.50	7.49	5305	760	475	265	8.6	1409	2404	194	0.27	48.1	< 1	< 0.1	< 0.001
GW 2		10/3/1995	6,862.60	6.30	7.45	5826	655	600	268	9.5	1791	2841	178	0.2	17.7	< 1	< 0.1	0.002
GW 2		1/3/1996	6,859.60	6.40	6.91	5302	595	575	280	9.7	1802	2409	133	< 0.05	16.7	< 1	< 0.1	< 0.001
GW 2		4/2/1996	6,859.40	6.50	7.64	6059	622	550	282	10	1732	2936	167	< 0.05	24.1	< 1	< 0.1	< 0.001
GW 2		7/7/1996	6,859.10	6.30	7.19	6246	600	595	286	10.4	1643	2870	155	0.1	20.5	< 1	< 0.1	0.003
GW 2		10/1/1996	6,859.30	6.40	6.99	6280	628	673	289	10.3	1670	2955	166	< 0.05	12.9	< 1	< 0.1	< 0.001
GW 2		1/22/1997	6,858.90	6.30	7.43	6100	600	620	275	10.2	1690	2945	177	< 0.05	10.2	< 1	< 0.1	0.001
GW 2		4/8/1997	6,858.70	6.60	7.77	5910	667	572	259	9.7	1630	2851	193	< 0.05	19.8	< 1	< 0.1	< 0.001
GW 2		7/8/1997	6,858.60	6.80	7.33	6090	666	631	255	9.9	1640	2720	182	< 0.05	10.7	< 1	< 0.1	< 0.001
GW 2		10/7/1997	6,858.90	6.20	7.21	6090	618	610	266	9.7	1630	3050	170	< 0.05	10.7	< 1	< 0.1	< 0.001

CHESTER ENGINEERS

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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 1		10/6/2009	<0.01	<0.005	<0.01	<0.05	0.05	<0.1	<0.05	<0.001	<0.1	0.104	0.40	0.58 U	0.98	-0.05 U	-1 U	0.2 U
GW 2		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		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	1.1	1.5	15
GW 2		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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
GW 2		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		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		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		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		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		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		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		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		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

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
GW 2		1/16/1998	6,858.50	6.50	7.52	5990	653	582	271	9.9	1640	3000	188	0.13	16	< 1	< 0.1	< 0.001
GW 2		4/7/1998	6,858.40	6.40	7.80	5880	638	596	248	9.9	1500	2700	174	< 0.05	8.96	< 1	< 0.1	< 0.001
GW 2		7/7/1998	6,858.60	6.10	7.80	5880	638	596	248	9.9	1500	2700	174	< 0.05	8.96	< 1	< 0.1	< 0.001
GW 2		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		1/5/1999	6,858.20	6.70	7.88	5780	588	552	217	9.8	1460	2900	168	0.07	7.04	< 1	< 0.1	< 0.001
GW 2		4/6/1999	6,858.20	6.40	7.57	5710	580	582	221	9.6	1410	2500	162	0.07	6.12	< 1	< 0.1	< 0.001
GW 2		7/13/1999	6,857.98	6.60	7.90	5530	594	562	223	14.5	1350	2660	166	0.06	5.95	< 1	< 0.1	< 0.001
GW 2		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		1/4/2000	6,858.70	6.60	7.76	5440	587	549	185	11	1430	2610	143	< 0.05	4.05	< 1	< 0.1	< 0.001
GW 2		5/8/2000	6,858.40	6.40	7.64	5410	540	528	234	9.5	1410	2590	155	< 0.05	2.74	< 1	< 0.1	< 0.001
GW 2		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		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		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		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		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		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		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		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		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		8/7/2001	6,859.45	6.43	7.20	5320	570	520	220	9.8	1460	2300	170	< 0.05	4.4	< 1	< 0.1	< 0.001
GW 2		9/10/2001	6,859.70	6.38	7.10	5270	600	530	209	10.1	1500	2400	177	< 0.05	6.3	< 1	< 0.1	< 0.001
GW 2		10/1/2001	6,859.80	6.48	7.60	5330	570	510	222	10.7	1480	2200	202	0.07	6	< 1	< 0.1	< 0.001
GW 2		11/5/2001	6,860.10	6.50	7.10	5340	619	532	212	10.8	1460	2550	200	0.05	7.6	< 1	< 0.1	< 0.001
GW 2		12/3/2001	6,860.20	6.47	7.10	5320	582	494	195	9.5	1480	2270	182	0.06	8.6	< 1	< 0.1	< 0.001
GW 2		1/8/2002	6,860.10	6.54	7.00	5300	683	543	186	11	1460	2640	199	< 0.05	9	< 1	< 0.1	< 0.001
GW 2		2/4/2002	6,860.35	6.57	7.20	5310	662	519	201	10.9	1470	2490	205	0.09	11.4	< 1	< 0.1	< 0.001
GW 2		3/4/2002	6,860.10	6.49	7.30	5290	622	512	230	10.7	1470	2540	203	0.06	15.9	< 1	< 0.1	< 0.001
GW 2		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		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		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		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		10/8/2002	6,859.90	6.40	7.52	5550	619	494	228	9.7	1690	2260	185	0.1	30.1	< 1	< 0.1	< 0.001
GW 2		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		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		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

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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 2		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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
GW 2		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		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		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		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		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		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		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		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		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		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		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		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		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		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

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
GW 2		10/6/2003	6,859.68	6.19	8.00	5980	760	586	305	24.8	2080	2630	233	0.2	24.8	< 1	< 0.1	< 0.001
GW 2		1/5/2004	6,859.72	6.40	7.49	6000	756	579	280	11.6	2100	2610	260	0.09	22.8 D	< 1.0	0.2	< 0.001
GW 2		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		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		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		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		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		7/11/2005	6,859.10	6.30	7.10	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		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		1/9/2006	6,858.86	6.53	7.60	6770	720	654 D	350	10.3	2180	2730 D	199	0.19	8.2 D	< 1.0	< 0.1	< 0.001
GW 2		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		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		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		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		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		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
GW 2		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		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		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		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		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		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		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		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		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 3		7/20/1989	6,870.50	6.80	6.59	4898	891	273	219	5.3	1354	1798	154	0.11	137	< 1	< 0.1	< 0.001
GW 3		10/16/1989	6,870.40	6.80	7.51	4658	802	256	210	7	1214	1704	150	0.11	141	< 1	< 0.1	< 0.001
GW 3		1/4/1990	6,870.20	6.40	6.74	4784	890	259	217	5.1	1452	1847	177	0.13	146	< 1	< 0.1	< 0.001
GW 3		4/3/1990	6,869.60	6.80	7.18	4859	888	280	218	5.1	1362	1775	170	0.11	111	< 1	< 0.1	< 0.001
GW 3		7/2/1990	6,869.20	6.40	7.00	4794	954	276	195	6.9	1418	1841	164	< 0.05	147	< 1	< 0.1	< 0.001
GW 3		10/2/1990	6,869.10	6.60	7.18	4699	770	245	211	5.1	1222	1911	169	< 0.05	102	< 1	< 0.1	< 0.001
GW 3		1/16/1991	6,869.10	6.50	7.12	4805	928	290	229	8.8	1057	2004	189	< 0.05	148	< 1	< 0.1	< 0.001
GW 3		4/2/1991	6,869.00	6.50	7.15	4935	897	272	221	4.7	1043	1990	185	< 0.05	162	< 1	< 0.1	< 0.001
GW 3		7/16/1991	6,867.80	6.60	7.09	4829	828	255	212	5.4	1526	2011	103	0.17	37.5	< 1	< 0.1	< 0.001
GW 3		10/14/1991	6,866.90	6.40	6.84	5094	739	226	227	4.7	1330	1856	197	< 0.05	87.2	< 1	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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 2		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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
GW 2		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		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		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		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		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		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		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		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		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 3		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		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		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		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		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		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		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		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		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		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

CHESTER ENGINEERS

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
GW 3		1/14/1992	6,867.20	6.40	7.01	4589	794	262	212	5.8	1345	1762	172	< 0.05	90.1	< 1	0.16	< 0.001
GW 3		4/9/1992	6,867.20	6.50	7.32	4757	836	267	261	7.4	1114	1874	179	0.14	86.8	< 1	< 0.1	< 0.001
GW 3		7/7/1992	6,865.40	6.30	7.42	4877	785	295	274	7.6	964	1907	111	0.08	112	< 1	< 0.1	< 0.001
GW 3		10/7/1992	6,864.20	6.50	7.32	4766	849	273	288	9.3	1537	1932	182	< 0.05	120	< 1	< 0.1	< 0.001
GW 3		1/7/1993	6,864.30	6.40	7.48	5105	903	260	244	6	1610	1968	188	< 0.05	134	< 1	< 0.1	< 0.001
GW 3		4/7/1993	6,864.90	6.40	7.07	4791	851	248	277	4.7	1419	1879	183	< 0.05	112	< 1	< 0.1	< 0.001
GW 3		7/14/1993	6,863.40	6.40	7.09	4780	989	270	293	5.7	1745	1913	201	< 0.05	94.7	< 1	< 0.1	< 0.001
GW 3		10/7/1993	6,862.70	6.60	7.22	4614	889	252	238	6.1	1540	1813	71.8	0.05	119	< 1	< 0.1	< 0.001
GW 3		1/6/1994	6,862.70	6.50	7.04	4960	889	251	261	5.6	1573	1836	177	0.11	107	< 1	< 0.1	< 0.001
GW 3		4/13/1994	6,863.00	6.60	6.86	4709	866	244	234	5.7	1525	1825	167	0.39	113	< 1	< 0.1	< 0.001
GW 3		7/21/1994	6,861.80	6.50	7.16	4790	953	256	250	6.2	1512	1943	160	0.13	105	< 1	< 0.1	< 0.001
GW 3		10/5/1994	6,861.50	6.30	7.59	4949	942	250	271	6.7	1481	1938	165	0.25	117	< 1	< 0.1	< 0.001
GW 3		1/5/1995	6,861.50	6.40	7.34	5101	990	263	256	7.4	1532	1938	152	0.32	95.4	< 1	< 0.1	< 0.001
GW 3		4/5/1995	6,862.30	6.50	7.07	4978	920	240	224	5.2	1519	2090	210	0.41	104	< 1	< 0.1	< 0.001
GW 3		7/6/1995	6,860.80	6.40	7.50	4792	914	281	252	6.3	1519	1858	171	0.27	96.4	< 1	< 0.1	< 0.001
GW 3		10/3/1995	6,860.20	6.50	7.41	5055	905	267	232	5.8	1512	1905	174	0.41	99.1	< 1	< 0.1	0.003
GW 3		1/3/1996	6,859.80	6.50	6.96	4495	805	240	235	6.1	1521	1650	138	< 0.05	106	< 1	< 0.1	0.002
GW 3		4/2/1996	6,859.80	6.40	7.64	5010	875	275	260	7	1510	1915	155	< 0.05	111	< 1	< 0.1	< 0.001
GW 3		7/7/1996	6,859.70	6.30	7.13	4844	865	260	245	7.4	1434	1860	150	0.14	102	< 1	< 0.1	0.01
GW 3		10/1/1996	6,859.70	6.40	6.99	4970	909	277	239	6.7	1480	1884	141	0.05	115	< 1	< 0.1	< 0.001
GW 3		1/22/1997	6,859.40	6.40	7.51	4770	885	275	228	7.3	1480	1937	166	0.11	114	< 1	< 0.1	< 0.001
GW 3		4/8/1997	6,859.30	6.50	7.59	4990	892	277	227	6.6	1430	1994	171	0.06	117	< 1	< 0.1	< 0.001
GW 3		7/8/1997	6,859.20	6.80	7.53	5060	933	282	223	7.4	1390	1810	158	0.11	121	< 1	< 0.1	< 0.001
GW 3		10/7/1997	6,859.40	6.20	7.44	5010	879	267	231	6.9	1370	1870	155	< 0.05	114	< 1	< 0.1	< 0.001
GW 3		1/16/1998	6,859.20	6.70	7.72	4980	858	265	246	8.1	1330	2000	154	0.28	128	< 1	< 0.1	< 0.001
GW 3		4/7/1998	6,859.10	6.60	7.51	4980	895	273	234	6.7	1300	1800	128	0.06	130	< 1	< 0.1	< 0.001
GW 3		7/7/1998	6,859.00	6.80	7.74	4930	883	276	244	7.8	1200	2100	139	0.1	117	< 1	< 0.1	< 0.001
GW 3		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		1/5/1999	6,858.50	6.80	7.85	3810	671	193	163	8.9	987	1400	95.2	0.21	85.9	< 1	< 0.1	< 0.001
GW 3		4/6/1999	6,858.50	6.70	7.64	4600	811	218	202	8.4	1170	1710	131	0.11	103	< 1	< 0.1	< 0.001
GW 3		7/13/1999	6,858.34	6.70	7.90	4610	824	259	205	12.3	1170	1830	126	0.09	119	< 1	< 0.1	< 0.001
GW 3		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		1/4/2000	6,858.60	6.60	7.83	4680	760	239	169	9.2	1170	1760	106	< 0.05	113	2	< 0.1	< 0.001
GW 3		5/15/2000	6,858.00	6.60	7.71	4780	755	241	211	8	1174	1830	127	0.15	119	< 1	< 0.1	0.001
GW 3		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

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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 3		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		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		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
GW 3		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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
GW 3		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		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

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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
GW 3		10/10/2000	6,857.60	6.56	7.60	4680	644	210	179	9	1170	1320	96.4	0.1	118	< 1	< 0.1	< 0.001
GW 3		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		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		3/6/2001	6,858.70	7.00	7.63	4380	817	263	164	9.3	1180	2040	120	0.16	112	< 1	< 0.1	< 0.001
GW 3		4/10/2001	6,859.05	7.26	7.20	4680	945	287	207	9.1	1250	2070	128	0.14	108	< 1	< 0.1	< 0.001
GW 3		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		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		7/10/2001	6,859.30	6.87	7.10	4980	888	288	244	9	1350	1880	125	0.11	98	< 1	< 0.1	< 0.001
GW 3		8/7/2001	6,859.32	6.59	7.20	5010	820	270	210	9.4	1390	1800	160	0.11	90.5	< 1	< 0.1	< 0.001
GW 3		9/11/2001	6,859.50	6.65	7.50	4980	840	270	233	8.9	1400	1810	154	0.1	104	< 1	0.13	< 0.001
GW 3		10/1/2001	6,859.55	6.83	7.40	5010	810	260	224	8.5	1450	1950	169	0.15	92	< 1	< 0.1	< 0.001
GW 3		11/6/2001	6,859.65	6.79	7.60	5020	886	280	229	9.6	1420	2050	173	0.08	88	< 1	0.1	< 0.001
GW 3		12/4/2001	6,859.80	6.95	7.40	5020	833	260	201	8.2	1440	1720	148	0.11	91	< 1	< 0.1	< 0.001
GW 3		1/8/2002	6,859.80	6.90	7.20	5050	983	293	192	10.2	1440	2200	171	0.09	86.5	< 1	< 0.1	< 0.001
GW 3		2/5/2002	6,859.80	6.91	7.20	5110	960	281	219	9.5	1440	2080	165	0.11	82.3	< 1	< 0.1	< 0.001
GW 3		3/5/2002	6,859.85	6.77	7.40	5090	914	283	246	8.9	1490	2160	160	0.09	84.3	< 1	< 0.1	< 0.001
GW 3		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		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		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		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		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		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		4/8/2003	6,859.84	6.60	7.30	5540	940	282	256	10.9	1680	1900	165	0.23	98	< 1	< 0.1	< 0.001
GW 3		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		10/7/2003	6,859.53	6.46	7.30	5490	988	327	280	8.6	1740	2220	171	0.19	89	< 1	< 0.1	< 0.001
GW 3		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		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		7/13/2004	6,859.49	6.44	6.80	5580	968	316	278	9.8	1720	2110 D	172	0.24	82.6 D	< 1.0	< 0.1	< 0.001
GW 3		10/5/2004	6,859.28	6.50	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		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		4/5/2005	6,859.37	6.68	7.10	5270	968	328	283	8.2	1550	2130	168	0.09	71	< 1.0	< 0.1	< 0.001
GW 3		7/12/2005	6,859.09	6.51	7.10	5190	970 D	319 D	268	7.8	1640	2110 D	170	0.09	77 D	< 1.0	< 0.1	< 0.001
GW 3		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		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		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

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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 3		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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
GW 3		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		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		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		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		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		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		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

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
GW 3		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		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		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		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		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		10/2/2007	6,858.27	6.50	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		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		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		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		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		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		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		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		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 4		7/18/1989	6,915.60	6.90	7.19	4068	714	216	212	14.4	756	1842	47	0.27	148	< 1	< 0.1	< 0.001
GW 4		10/12/1989	6,915.00	7.20	7.48	4078	680	202	202	18	793	1822	50.2	0.21	134	< 1	0.12	< 0.001
GW 4		1/4/1990	6,914.60	7.20	7.28	4036	728	222	198	14.1	775	1780	51.7	0.11	134	< 1	< 0.1	< 0.001
GW 4		4/3/1990	6,913.60	7.10	7.40	4193	740	212	194	14	789	1707	52.4	0.09	120	< 1	< 0.1	< 0.001
GW 4		7/2/1990	6,912.70	6.80	7.30	4326	830	214	167	13.8	866	1651	54.7	< 0.05	176	< 1	< 0.1	< 0.001
GW 4		10/3/1990	6,912.40	6.90	7.31	4135	699	198	198	14.4	732	1610	56.2	< 0.05	116	< 1	< 0.1	0.001
GW 4		1/15/1991	6,912.40	7.00	7.29	4064	759	213	189	13.3	731	1678	54.6	< 0.05	176	< 1	0.24	< 0.001
GW 4		4/2/1991	6,912.70	7.10	7.59	3990	641	183	180	12.4	550	1660	46.3	< 0.05	162	< 1	< 0.1	< 0.001
GW 4		7/17/1991	6,914.40	7.10	7.55	3981	578	190	164	12.9	527	1703	41.2	0.08	132	< 1	< 0.1	0.001
GW 4		10/15/1991	6,913.80	7.00	7.26	3880	698	214	165	13.4	732	1826	43.8	< 0.05	67.6	< 1	< 0.1	0.001
GW 4		1/15/1992	6,913.10	7.00	7.03	3779	619	189	163	11.8	623	1803	38.7	< 0.05	77.4	< 1	< 0.1	< 0.001
GW 4		4/7/1992	6,912.20	7.00	7.19	3334	579	177	185	14.1	602	1621	38.7	0.06	78.2	< 1	< 0.1	0.004
GW 4		7/8/1992	6,911.50	7.00	7.59	3505	661	190	233	14.7	636	1663	40.7	0.2	108	< 1	< 0.1	0.001
GW 4		10/6/1992	6,910.90	7.10	7.35	3857	762	204	187	13.2	585	1727	42	< 0.05	162	< 1	0.1	0.002
GW 4		1/6/1993	6,910.40	7.10	7.72	3595	667	175	180	12.6	714	1454	49.1	0.13	138	< 1	< 0.1	< 0.001
GW 4		4/6/1993	6,910.30	7.20	7.63	3898	665	177	192	10.6	736	1694	51.2	< 0.05	137	< 1	< 0.1	0.001
GW 4		7/13/1993	6,910.50	7.10	7.13	4181	727	195	168	12.6	755	1820	47	0.1	125	< 1	< 0.1	< 0.001
GW 4		10/6/1993	6,910.60	7.30	7.45	4081	694	177	170	11.3	780	1700	42.1	< 0.05	124	< 1	< 0.1	< 0.001
GW 4		1/6/1994	6,911.60	7.20	7.71	3798	656	169	171	10.7	798	1689	40.2	0.17	82.4	< 1	< 0.1	< 0.001
GW 4		4/13/1994	6,911.70	7.10	7.20	3682	658	170	157	11.1	752	1688	39.1	0.3	109	< 1	< 0.1	< 0.001
GW 4		7/20/1994	6,910.80	7.10	7.09	3676	727	195	157	12	733	1729	40.1	0.18	110	< 1	< 0.1	< 0.001

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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 3		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		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		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		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		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		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		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		4/8/2008	< 0.01	< 0.005	< 0.01	< 0.05	1.61	< 0.1	< 0.05	< 0.001	< 0.1	0.130	0.1 U	-0.1 U	0	-0.3 U	0 U	2.1
GW 3		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		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		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		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		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		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 4		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
GW 4		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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

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TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
GW 4		10/4/1994	6,910.70	7.10	7.78	3849	721	198	181	12	712	1796	45.6	0.13	119	< 1	< 0.1	< 0.001
GW 4		1/5/1995	6,910.30	7.10	7.42	3937	746	192	168	13	738	1697	45.6	0.22	122	< 1	< 0.1	< 0.001
GW 4		4/4/1995	6,910.40	7.20	7.47	3989	790	216	182	12.8	805	1844	49	0.44	141	< 1	< 0.1	< 0.001
GW 4		7/6/1995	6,909.40	7.20	7.63	3957	740	207	183	15.2	610	1740	58	0.85	141	< 1	< 0.1	< 0.001
GW 4		10/3/1995	6,909.20	7.10	7.82	4277	715	213	172	12.6	630	1692	51	3.01	165	< 1	< 0.1	0.004
GW 4		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		4/2/1996	6,909.20	7.10	7.83	4092	718	193	166	12.4	706	1688	46.6	0.37	146	< 1	< 0.1	< 0.001
GW 4		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		10/1/1996	6,908.50	6.90	7.66	3900	743	194	165	12.1	806	1671	44	0.28	126	< 1	0.19	0.001
GW 4		1/22/1997	6,908.60	6.60	7.70	3490	740	195	146	11.1	773	1739	48	0.1	116	< 1	< 0.1	< 0.001
GW 4		4/8/1997	6,908.50	7.20	7.75	3840	744	196	149	11.3	680	1734	46	0.07	119	< 1	< 0.1	< 0.001
GW 4		7/8/1997	6,908.80	7.30	7.77	3890	730	192	144	11	667	1710	46.2	0.12	111	< 1	< 0.1	< 0.001
GW 4		10/7/1997	6,909.60	6.70	7.70	3950	736	183	153	11.3	798	1610	44	0.06	106	< 1	< 0.1	< 0.001
GW 4		1/16/1998	6,910.50	7.20	7.94	3880	712	188	162	12.1	817	1800	44.2	0.22	105	< 1	< 0.1	< 0.001
GW 4		4/7/1998	6,910.50	7.00	7.69	3890	715	192	153	11.3	777	1600	35	< 0.05	95.6	< 1	< 0.1	< 0.001
GW 4		7/7/1998	6,910.30	7.20	7.80	3870	700	190	163	11.8	797	1600	38.7	0.12	86.9	< 1	< 0.1	< 0.001
GW 4		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		1/5/1999	6,910.00	7.30	7.78	3810	650	182	151	11.3	622	1620	41.4	0.13	75.7	< 1	< 0.1	< 0.001
GW 4		4/6/1999	6,910.40	7.20	7.99	3810	675	179	146	11.5	644	1620	50.1	0.26	100	< 1	< 0.1	< 0.001
GW 4		7/13/1999	6,909.25	7.20	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
SBL-01		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		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		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		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		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		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		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		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		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		1/9/2007	6,846.24	6.79	7.00	8790	498 D	1010 D	288	12.8	427	5160 D	80	0.19	53 D	<0.5	0.2	<0.001
SBL-01		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		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		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		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		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

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TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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		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		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		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		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		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		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		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		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		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		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
GW 4		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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		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	2	<1	1.1
SBL-01		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		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

CHESTER ENGINEERS

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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		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		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		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		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		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
SBL-01		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

TABLE A.1

Southwest Alluvium Data Summary, 1989-2009

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**
SBL-01		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		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		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		4/7/2009	<0.01	<0.005	0.02	<0.05	3.21	<0.1	0.06	0.001	<0.1	0.0180	0.38	1.5	1.88	0.4 U	-0.8 U	0.6 U
SBL-01		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	2.0	2.72	-0.5 U	-1 U	1.4
SBL-01		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

Laboratory Analytical Data
2009

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Alluvium Monitor Wells

Well ID:		509-D	509-D	509-D	509-D
Collection Date:		10/5/2009	7/6/2009	4/6/2009	1/12/2009
Receive Date:		10/9/2009	7/10/2009	4/10/2009	1/16/2009
Report Date:		11/19/2009	8/25/2009	6/3/2009	3/17/2009
Analyte	Units	C09100421-001	C09070417-001	C09040397-001	C09010567-001
Bicarbonate as HCO3	mg/L	2500	2450	2430	2300
Calcium	mg/L	878	911	820	842
Chloride	mg/L	367	357	333	332
Magnesium	mg/L	418	386	389	373
Nitrogen, Ammonia as N	mg/L	4.30	1.82	2.30	0.98
Nitrogen, Nitrate+Nitrite as N	mg/L	11.0	11.0	13.5	18.3
Potassium	mg/L	13	14	13	13
Sodium	mg/L	379	388	380	368
Sulfate	mg/L	1910	2040	2090	1690
pH	s.u.	7.16	6.67	6.54	6.69
Solids, Total Dissolved TDS @ 180 C	mg/L	5600	5660	5860	5750
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	3.35	3.30	2.61	2.99
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	0.239	0.223	0.211	0.214
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)	0.001	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	1	2.7	1	1.6
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.6	0.5	0.5	0.4
Gross Alpha minus Rn & U MDC	pCi/L	0.7	0.3	0.6	0.3
Lead 210	pCi/L	4.0	0.4	-5	1.5
Lead 210 precision (±)	pCi/L	3.6	1.6	6.5	2.6
Lead 210 MDC	pCi/L	6.0	2.6	11.0	4.3
Radium 226	pCi/L	0.69	0.75	0.35	0.24
Radium 226 precision (±)	pCi/L	0.18	0.16	0.12	0.13
Radium 226 MDC	pCi/L	0.12	0.12	0.09	0.17
Radium 228	pCi/L	0.89	1.5	1.4	2.4
Radium 228 precision (±)	pCi/L	0.78	0.82	0.62	0.83
Radium 228 MDC	pCi/L	1.2	1.3	0.94	1.2
Thorium 230	pCi/L	0.05	0.03	0.09	0.1
Thorium 230 precision (±)	pCi/L	0.1	0.2	0.2	0.5
Thorium 230 MDC	pCi/L	0.2	0.4	0.4	
A/C Balance (± 5)	%	1.94	0.575	-2.00	3.22
Anions	meq/L	91.7	93.5	93.6	83.5
Cations	meq/L	95.4	94.6	90.0	89.1
Solids, Total Dissolved Calculated	mg/L	5260	5350	5300	4850
TDS Balance (0.80 - 1.20)		1.06	1.06	1.11	1.19
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.**

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Alluvium Monitor Wells

Well ID:		EPA-23	EPA-23	EPA-23	EPA-23
Collection Date:		10/5/2009	7/6/2009	4/6/2009	1/20/2009
Receive Date:		10/9/2009	7/10/2009	4/10/2009	1/23/2009
Report Date:		11/19/2009	8/25/2009	6/3/2009	3/18/2009
Analyte	**Units**	**C09100421-002**	**C09070417-002**	**C09040397-002**	**C09010816-001**
Bicarbonate as HCO3	mg/L	1220	1240	1270	1290
Calcium	mg/L	616	680	621	649
Chloride	mg/L	98	95	95	120
Magnesium	mg/L	384	430	424	449
Nitrogen, Ammonia as N	mg/L	2.04	4.65	2.17	3.09
Nitrogen, Nitrate+Nitrite as N	mg/L	7.4	27.8	14.8	76.2
Potassium	mg/L	10	12	11	12
Sodium	mg/L	138	167	170	198
Sulfate	mg/L	2220	2560	2440	2140
pH	s.u.	7.22	6.76	6.64	7.03
Solids, Total Dissolved TDS @ 180 C	mg/L	4610	4870	4730	5160
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	5.05	4.31	4.58	3.15
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	0.0309	0.0306	0.0375	0.0435
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)	0.002	0.001
Gross Alpha minus Rn & U	pCi/L	0.5	0.6	0.3	1.2
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.5	0.3	0.4	0.7
Gross Alpha minus Rn & U MDC	pCi/L	0.7	0.3	0.6	0.9
Lead 210	pCi/L	0.7	-0.2	-1	-0.4
Lead 210 precision (±)	pCi/L	3.6	1.6	1.6	3.4
Lead 210 MDC	pCi/L	6.0	2.6	2.8	5.6
Radium 226	pCi/L	0.42	0.47	0.36	0.17
Radium 226 precision (±)	pCi/L	0.15	0.13	0.12	0.16
Radium 226 MDC	pCi/L	0.14	0.11	0.09	0.23
Radium 228	pCi/L	1.2	0.76	-0.3	1.6
Radium 228 precision (±)	pCi/L	0.86	0.75	0.58	0.79
Radium 228 MDC	pCi/L	1.4	1.2	0.99	1.2
Thorium 230	pCi/L	0.04	0.2	-0.02	-0.5
Thorium 230 precision (±)	pCi/L	0.1	0.3	0.4	0.6
Thorium 230 MDC	pCi/L	0.3	0.4	0.9	
A/C Balance (± 5)	%	-0.575	-0.734	-1.17	2.62
Anions	meq/L	69.5	78.3	75.4	74.5
Cations	meq/L	68.8	77.2	73.7	78.5
Solids, Total Dissolved Calculated	mg/L	4120	4680	4450	4560
TDS Balance (0.80 - 1.20)		1.12	1.04	1.06	1.13
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.**

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Alluvium Monitor Wells

Well ID:		801	801	801	801
Collection Date:		10/5/2009	7/6/2009	4/6/2009	1/12/2009
Receive Date:		10/9/2009	7/10/2009	4/10/2009	1/16/2009
Report Date:		11/19/2009	8/25/2009	6/3/2009	3/17/2009
Analyte	**Units**	**C09100421-003**	**C09070417-006**	**C09040397-006**	**C09010567-008**
Bicarbonate as HCO3	mg/L	1510	1460	1490	1450
Calcium	mg/L	540	567	524	537
Chloride	mg/L	215	208	198	183
Magnesium	mg/L	701	738	714	730
Nitrogen, Ammonia as N	mg/L	4.0	3.91	2.25	1.19
Nitrogen, Nitrate+Nitrite as N	mg/L	2.2	1.8	1.8	1.5
Potassium	mg/L	12	13	12	11
Sodium	mg/L	329	343	359	351
Sulfate	mg/L	3420	3420	3530	2970
pH	s.u.	7.10	6.63	6.51	6.70
Solids, Total Dissolved TDS @ 180 C	mg/L	6530	6550	6700	6760
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	4.67	5.12	4.32	2.64
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	0.0393	0.0367	0.0347	0.0198
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	0.6	1.5	0.8	1.4
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.5	0.4	0.5	0.4
Gross Alpha minus Rn & U MDC	pCi/L	0.7	0.3	0.6	0.3
Lead 210	pCi/L	0.2	-0.5	-0.1	-2
Lead 210 precision (±)	pCi/L	3.6	1.6	1.6	2.5
Lead 210 MDC	pCi/L	6.0	2.6	2.8	4.3
Radium 226	pCi/L	0.91	0.99	0.43	0.07
Radium 226 precision (±)	pCi/L	0.20	0.18	0.13	0.10
Radium 226 MDC	pCi/L	0.13	0.11	0.08	0.16
Radium 228	pCi/L	1.2	1.9	0.60	0.68
Radium 228 precision (±)	pCi/L	0.81	0.83	0.58	0.79
Radium 228 MDC	pCi/L	1.3	1.3	0.93	1.3
Thorium 230	pCi/L	0.002	0.2	0.07	0.4
Thorium 230 precision (±)	pCi/L	0.08	0.2	0.2	0.8
Thorium 230 MDC	pCi/L	0.2	0.3	0.4	
A/C Balance (± 5)	%	-1.30	1.64	-1.31	5.98
Anions	meq/L	102	101	104	91.0
Cations	meq/L	99.5	105	101	103
Solids, Total Dissolved Calculated	mg/L	6000	6050	6110	5550
TDS Balance (0.80 - 1.20)		1.09	1.08	1.10	1.22
Trihalomethanes, Total	ug/L	2.21	2.49	3.45	2.82

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Alluvium Monitor Wells

Well ID:		802	802	802	802
Collection Date:		10/5/2009	7/6/2009	4/6/2009	1/12/2009
Receive Date:		10/9/2009	7/10/2009	4/10/2009	1/16/2009
Report Date:		11/19/2009	8/25/2009	6/3/2009	3/17/2009
Analyte	**Units**	**C09100421-004**	**C09070417-005**	**C09040397-005**	**C09010567-004**
Bicarbonate as HCO3	mg/L	2160	2110	2170	2120
Calcium	mg/L	593	654	581	619
Chloride	mg/L	208	208	191	183
Magnesium	mg/L	941	975	951	974
Nitrogen, Ammonia as N	mg/L	0.07	ND(0.05)	ND(0.05)	ND(0.05)
Nitrogen, Nitrate+Nitrite as N	mg/L	105	98	104	151
Potassium	mg/L	6	6	6	6
Sodium	mg/L	345	359	371	365
Sulfate	mg/L	3700	3840	3900	3290
pH	s.u.	7.13	6.60	6.53	6.66
Solids, Total Dissolved TDS @ 180 C	mg/L	7180	8100	7830	8300
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	1.01	1.19	1.04	1.05
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	0.143	0.136	0.127	0.129
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)	0.001	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	0.6	1.1	0.2	1.3
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.5	0.4	0.4	0.4
Gross Alpha minus Rn & U MDC	pCi/L	0.7	0.3	0.6	0.3
Lead 210	pCi/L	0.2	-2	-1	-2
Lead 210 precision (±)	pCi/L	3.6	1.6	1.6	2.5
Lead 210 MDC	pCi/L	6.0	2.6	2.8	4.3
Radium 226	pCi/L	0.67	0.31	0.34	0.14
Radium 226 precision (±)	pCi/L	0.17	0.11	0.11	0.12
Radium 226 MDC	pCi/L	0.12	0.11	0.08	0.17
Radium 228	pCi/L	0.78	0.74	0.71	1.2
Radium 228 precision (±)	pCi/L	0.75	0.75	0.58	0.77
Radium 228 MDC	pCi/L	1.2	1.2	0.92	1.2
Thorium 230	pCi/L	0.0004	0.07	0.5	-0.1
Thorium 230 precision (±)	pCi/L	0.08	0.3	1.0	0.6
Thorium 230 MDC	pCi/L	0.2	0.5	1.9	
A/C Balance (± 5)	%	-1.45	0.461	-2.33	3.25
Anions	meq/L	126	127	129	119
Cations	meq/L	122	129	123	127
Solids, Total Dissolved Calculated	mg/L	7340	7540	7540	7170
TDS Balance (0.80 - 1.20)		0.980	1.07	1.04	1.16
Trihalomethanes, Total	ug/L	17.2	15.5	16.5	16.7

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Alluvium Monitor Wells

Well ID:		803	803	803	803
Collection Date:		10/5/2009	7/6/2009	4/6/2009	1/12/2009
Receive Date:		10/9/2009	7/1/2009	4/10/2009	1/16/2009
Report Date:		11/19/2009	8/25/2009	6/3/2009	3/17/2009
Analyte	**Units**	**C09100421-005**	**C09070417-003**	**C09040397-003**	**C09010567-002**
Bicarbonate as HCO3	mg/L	1820	1820	1830	1810
Calcium	mg/L	622	671	641	627
Chloride	mg/L	159	173	155	148
Magnesium	mg/L	751	731	714	698
Nitrogen, Ammonia as N	mg/L	3.09	2.13	1.33	1.00
Nitrogen, Nitrate+Nitrite as N	mg/L	43	47.8	52.2	70.6
Potassium	mg/L	13	14	12	11
Sodium	mg/L	275	296	297	265
Sulfate	mg/L	3450	3360	3190	3040
pH	s.u.	7.09	6.69	6.52	6.66
Solids, Total Dissolved TDS @ 180 C	mg/L	6950	6820	6470	6940
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	2.15	1.48	1.78	1.76
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	0.0780	0.0966	0.125	0.115
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	0.9	1.1	0.7	1.7
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.6	0.4	0.5	0.4
Gross Alpha minus Rn & U MDC	pCi/L	0.7	0.3	0.6	0.3
Lead 210	pCi/L	-0.8	-0.4	-0.7	0.0
Lead 210 precision (±)	pCi/L	3.6	1.6	1.6	2.6
Lead 210 MDC	pCi/L	6.0	2.6	2.8	4.3
Radium 226	pCi/L	0.47	0.51	0.22	0.17
Radium 226 precision (±)	pCi/L	0.16	0.14	0.1	0.12
Radium 226 MDC	pCi/L	0.13	0.12	0.08	0.17
Radium 228	pCi/L	1.3	1.2	0.55	1.6
Radium 228 precision (±)	pCi/L	0.83	0.82	0.57	0.79
Radium 228 MDC	pCi/L	1.3	1.3	0.92	1.2
Thorium 230	pCi/L	0.04	0.1	0.01	0.1
Thorium 230 precision (±)	pCi/L	0.1	0.3	0.2	0.8
Thorium 230 MDC	pCi/L	0.2	0.6	0.4	
A/C Balance (± 5)	%	-1.75	-0.471	-0.253	-0.794
Anions	meq/L	109	108	105	102
Cations	meq/L	105	107	104	101
Solids, Total Dissolved Calculated	mg/L	6370	6350	6160	6020
TDS Balance (0.80 - 1.20)		1.09	1.07	1.05	1.15
Trihalomethanes, Total	ug/L	11.3	4.52	5.64	5.56

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Alluvium Monitor Wells

Well ID:		624	624	624	624
Collection Date:		10/5/2009	7/7/2009	4/7/2009	1/13/2009
Receive Date:		10/9/2009	7/10/2009	4/10/2009	1/16/2009
Report Date:		11/19/2009	8/25/2009	6/3/2009	3/17/2009
Analyte	**Units**	**C09100421-006**	**C09070417-010**	**C09040397-010**	**C09010567-009**
Bicarbonate as HCO3	mg/L	1490	1440	1460	1420
Calcium	mg/L	643	692	650	614
Chloride	mg/L	187	187	191	169
Magnesium	mg/L	396	405	413	383
Nitrogen, Ammonia as N	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Nitrogen, Nitrate+Nitrite as N	mg/L	75	71	77.4	111
Potassium	mg/L	6	6	6	6
Sodium	mg/L	245	253	271	257
Sulfate	mg/L	1960	2560	2190	1870
pH	s.u.	7.17	6.72	6.64	6.90
Solids, Total Dissolved TDS @ 180 C	mg/L	4950	5080	5080	5180
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	0.15	0.13	0.10	0.12
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	0.0315	0.0310	0.0289	0.0322
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	-0.09	1.4	0.2	1.7
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.4	0.4	0.4	0.4
Gross Alpha minus Rn & U MDC	pCi/L	0.7	0.3	0.6	0.3
Lead 210	pCi/L	2.4	-0.9	-1	-1
Lead 210 precision (±)	pCi/L	3.6	1.6	1.6	2.6
Lead 210 MDC	pCi/L	6.0	2.6	2.8	4.3
Radium 226	pCi/L	0.56	0.32	-0.05	0.05
Radium 226 precision (±)	pCi/L	0.18	0.11	0.09	0.1
Radium 226 MDC	pCi/L	0.15	0.1	0.17	0.16
Radium 228	pCi/L	0.79	0.75	0.75	-0.1
Radium 228 precision (±)	pCi/L	0.93	0.71	0.58	0.75
Radium 228 MDC	pCi/L	1.5	1.1	0.92	1.3
Thorium 230	pCi/L	0.08	0.1	0.06	-0.1
Thorium 230 precision (±)	pCi/L	0.1	0.2	0.2	0.7
Thorium 230 MDC	pCi/L	0.2	0.4	0.4	
A/C Balance (± 5)	%	-0.264	-4.98	-1.39	-0.937
Anions	meq/L	75.9	87.3	80.5	74.8
Cations	meq/L	75.5	79.0	78.3	73.4
Solids, Total Dissolved Calculated	mg/L	4530	5150	4810	4510
TDS Balance (0.80 - 1.20)		1.09	0.990	1.06	1.15
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:		SBL-1	SBL-1	SBL-1	SBL-1
Collection Date:		10/5/2009	7/7/2009	4/7/2009	1/13/2009
Receive Date:		10/9/2009	7/10/2009	4/10/2009	1/16/2009
Report Date:		11/19/2009	8/25/2009	6/3/2009	3/17/2009
Analyte	**Units**	**C09100421-007**	**C09070417-011**	**C09040397-011**	**C09010567-010**
Bicarbonate as HCO3	mg/L	446	444	473	460
Calcium	mg/L	469	502	498	523
Chloride	mg/L	88	81	81	67
Magnesium	mg/L	1120	1040	1190	1210
Nitrogen, Ammonia as N	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Nitrogen, Nitrate+Nitrite as N	mg/L	43	48	41.8	61.8
Potassium	mg/L	13	13	13	14
Sodium	mg/L	285	288	325	360
Sulfate	mg/L	5960	5700	5910	5780
pH	s.u.	7.45	6.91	6.82	6.90
Solids, Total Dissolved TDS @ 180 C	mg/L	9000	8490	9410	9480
Aluminum	mg/L	0.1	0.6	0.2	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	0.02	0.04	0.02	0.02
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	3.15	3.27	3.21	3.42
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	0.07	0.11	0.06	0.06
Uranium	mg/L	0.0142	0.0126	0.0180	0.0172
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)	0.001	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	0.4	1.4	0.6	1.6
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.5	0.4	0.4	0.4
Gross Alpha minus Rn & U MDC	pCi/L	0.7	0.3	0.6	0.3
Lead 210	pCi/L	1	-1	-0.8	-1
Lead 210 precision (±)	pCi/L	3.6	1.6	1.6	2.5
Lead 210 MDC	pCi/L	6.0	2.6	2.8	4.3
Radium 226	pCi/L	1.1	0.72	0.38	0.28
Radium 226 precision (±)	pCi/L	0.22	0.16	0.16	0.14
Radium 226 MDC	pCi/L	0.12	0.1	0.19	0.17
Radium 228	pCi/L	1.8	2.0	1.5	1.3
Radium 228 precision (±)	pCi/L	0.81	0.77	0.66	0.81
Radium 228 MDC	pCi/L	1.2	1.1	1.0	1.3
Thorium 230	pCi/L	0.003	-0.5	0.4	0.1
Thorium 230 precision (±)	pCi/L	0.07	0.7	0.8	1.3
Thorium 230 MDC	pCi/L	0.2	2.0	1.4	
A/C Balance (± 5)	%	-3.11	-3.00	0.495	2.71
Anions	meq/L	137	132	136	134
Cations	meq/L	129	124	137	142
Solids, Total Dissolved Calculated	mg/L	8360	8070	8440	8470
TDS Balance (0.80 - 1.20)		1.08	1.05	1.11	1.12
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:		10/5/2009	7/7/2009	4/7/2009	1/13/2009
Receive Date:		10/9/2009	7/10/2009	4/10/2009	1/16/2009
Report Date:		11/19/2009	8/25/2009	6/3/2009	3/17/2009
Analyte	**Units**	**C09100421-008**	**C09070417-012**	**C09040397-012**	**C09010567-011**
Bicarbonate as HCO3	mg/L	824	799	817	796
Calcium	mg/L	515	536	517	591
Chloride	mg/L	120	116	120	113
Magnesium	mg/L	476	480	465	528
Nitrogen, Ammonia as N	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Nitrogen, Nitrate+Nitrite as N	mg/L	34	29	34.7	47.8
Potassium	mg/L	11	12	11	13
Sodium	mg/L	209	210	229	237
Sulfate	mg/L	2850	3290	2790	2770
pH	s.u.	7.40	6.97	6.84	6.89
Solids, Total Dissolved TDS @ 180 C	mg/L	5160	5120	5130	5190
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	0.71	0.72	0.66	0.69
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	0.0450	0.0415	0.0519	0.0459
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)	0.001	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	0.5	1.3	0.9	1.4
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.5	0.4	0.5	0.4
Gross Alpha minus Rn & U MDC	pCi/L	0.7	0.3	0.6	0.3
Lead 210	pCi/L	1.1	-0.6	-2	-2
Lead 210 precision (±)	pCi/L	3.6	1.6	1.6	5.1
Lead 210 MDC	pCi/L	6.0	2.6	2.8	8.6
Radium 226	pCi/L	0.73	0.64	0.27	0.28
Radium 226 precision (±)	pCi/L	0.20	0.15	0.13	0.12
Radium 226 MDC	pCi/L	0.14	0.1	0.17	0.15
Radium 228	pCi/L	1.4	1.5	1.0	0.68
Radium 228 precision (±)	pCi/L	0.92	0.74	0.57	0.79
Radium 228 MDC	pCi/L	1.4	1.1	0.88	1.3
Thorium 230	pCi/L	-0.03	0.02	-0.03	-0.1
Thorium 230 precision (±)	pCi/L	0.1	0.1	0.5	0.6
Thorium 230 MDC	pCi/L	0.2	0.3	1.2	
A/C Balance (± 5)	%	-2.87	-6.89	-1.97	3.96
Anions	meq/L	78.6	86.9	77.3	77.2
Cations	meq/L	74.2	75.7	74.3	83.6
Solids, Total Dissolved Calculated	mg/L	4750	5180	4680	4870
TDS Balance (0.80 - 1.20)		1.09	0.990	1.10	1.07
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:		10/5/2009	7/7/2009	4/7/2009	1/13/2009
Receive Date:		10/9/2009	7/10/2009	4/10/2009	1/16/2009
Report Date:		11/19/2009	8/25/2009	6/3/2009	3/17/2009
Analyte	**Units**	**C09100421-009**	**C09070417-013**	**C09040397-013**	**C09010567-012**
Bicarbonate as HCO3	mg/L	707	670	737	664
Calcium	mg/L	514	518	527	563
Chloride	mg/L	124	119	124	113
Magnesium	mg/L	469	453	486	496
Nitrogen, Ammonia as N	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Nitrogen, Nitrate+Nitrite as N	mg/L	30.1	25	32.0	35.5
Potassium	mg/L	11	11	11	12
Sodium	mg/L	218	215	236	241
Sulfate	mg/L	2990	2840	2760	2730
pH	s.u.	7.80	7.11	6.92	6.84
Solids, Total Dissolved TDS @ 180 C	mg/L	5060	5050	5160	5140
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	0.58	0.60	0.58	0.59
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	0.0406	0.0370	0.0467	0.0387
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	1.1	0.8	1.6
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.5	0.4	0.5	0.4
Gross Alpha minus Rn & U MDC	pCi/L	0.7	0.3	0.6	0.3
Lead 210	pCi/L	1.9	0.2	-0.8	-0.6
Lead 210 precision (±)	pCi/L	3.6	1.6	1.6	2.6
Lead 210 MDC	pCi/L	6.0	2.6	2.8	4.3
Radium 226	pCi/L	0.68	0.61	0.41	0.25
Radium 226 precision (±)	pCi/L	0.22	0.15	0.16	0.13
Radium 226 MDC	pCi/L	0.17	0.10	0.17	0.16
Radium 228	pCi/L	0.71	1.4	0.45	0.72
Radium 228 precision (±)	pCi/L	1.1	0.78	0.58	0.79
Radium 228 MDC	pCi/L	1.7	1.2	0.94	1.3
Thorium 230	pCi/L	0.09	0.3	0.2	0.1
Thorium 230 precision (±)	pCi/L	0.1	0.3	0.3	0.6
Thorium 230 MDC	pCi/L	0.2	0.3	0.6	
A/C Balance (± 5)	%	-3.62	-1.70	1.07	4.15
Anions	meq/L	79.5	75.2	75.2	73.4
Cations	meq/L	74.0	72.7	76.9	79.7
Solids, Total Dissolved Calculated	mg/L	4820	4610	4650	4650
TDS Balance (0.80 - 1.20)		1.05	1.10	1.11	1.11
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:		808	808	808	808
Collection Date:		10/6/2009	7/6/2009	4/6/2009	1/12/2009
Receive Date:		10/9/2009	7/10/2009	4/10/2009	1/16/2009
Report Date:		11/19/2009	8/25/2009	6/3/2009	3/17/2009
Analyte	**Units**	**C09100421-010**	**C09070417-004**	**C09040397-004**	**C09010567-003**
Bicarbonate as HCO3	mg/L	1880	1840	1850	1800
Calcium	mg/L	739	769	708	709
Chloride	mg/L	169	180	162	155
Magnesium	mg/L	639	673	659	652
Nitrogen, Ammonia as N	mg/L	0.16	ND(0.05)	0.06	ND(0.05)
Nitrogen, Nitrate+Nitrite as N	mg/L	126	114	117	123
Potassium	mg/L	4	5	4	4
Sodium	mg/L	322	313	326	303
Sulfate	mg/L	3180	3020	2910	2600
pH	s.u.	7.09	6.63	6.49	6.72
Solids, Total Dissolved TDS @ 180 C	mg/L	6740	6800	6360	6800
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	0.77	0.78	0.74	0.67
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	0.123	0.126	0.119	0.136
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	0.1	3.0	0.5	1.1
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.4	0.6	0.4	0.4
Gross Alpha minus Rn & U MDC	pCi/L	0.7	0.3	0.6	0.3
Lead 210	pCi/L	-0.6	0.2	-0.9	-2
Lead 210 precision (±)	pCi/L	3.6	1.6	1.6	2.5
Lead 210 MDC	pCi/L	6.0	2.6	2.8	4.3
Radium 226	pCi/L	0.61	0.60	0.15	0.17
Radium 226 precision (±)	pCi/L	0.19	0.15	0.08	0.12
Radium 226 MDC	pCi/L	0.14	0.12	0.08	0.17
Radium 228	pCi/L	-0.3	2.2	0.42	0.89
Radium 228 precision (±)	pCi/L	0.85	0.88	0.57	0.76
Radium 228 MDC	pCi/L	1.5	1.3	0.92	1.2
Thorium 230	pCi/L	-0.008	-0.2	-0.008	0.1
Thorium 230 precision (±)	pCi/L	0.05	0.2	0.2	0.4
Thorium 230 MDC	pCi/L	0.1	0.6	0.5	
A/C Balance (± 5)	%	-3.36	0.616	0.0639	2.72
Anions	meq/L	111	106	104	96.9
Cations	meq/L	104	107	104	102
Solids, Total Dissolved Calculated	mg/L	6560	6390	6220	5880
TDS Balance (0.80 - 1.20)		1.03	1.06	1.02	1.16
Trihalomethanes, Total	ug/L	7.00	6.16	6.40	7.68

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Alluvium Monitor Wells

Well ID:		GW-2	GW-2	GW-2	GW-2
Collection Date:		10/6/2009	7/6/2009	4/6/2009	1/12/2009
Receive Date:		10/9/2009	7/10/2009	4/10/2009	1/16/2009
Report Date:		11/19/2009	8/25/2009	6/3/2009	3/17/2009
Analyte	**Units**	**C09100421-011**	**C09070417-007**	**C09040397-007**	**C09010567-006**
Bicarbonate as HCO3	mg/L	2320	2260	2300	2270
Calcium	mg/L	599	634	603	615
Chloride	mg/L	222	215	205	188
Magnesium	mg/L	1060	1050	1020	1000
Nitrogen, Ammonia as N	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Nitrogen, Nitrate+Nitrite as N	mg/L	13.9	13.6	17.9	15.3
Potassium	mg/L	13	13	12	13
Sodium	mg/L	374	382	396	395
Sulfate	mg/L	4720	5020	4360	4300
pH	s.u.	6.66	6.56	6.39	6.54
Solids, Total Dissolved TDS @ 180 C	mg/L	8580	8530	8430	8540
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	0.01	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	1.35	1.42	1.24	0.74
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	0.0896	0.0975	0.0980	0.0508
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)	0.001	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	0.5	0.6	0.6	1.5
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.5	0.3	0.4	0.4
Gross Alpha minus Rn & U MDC	pCi/L	0.7	0.3	0.6	0.3
Lead 210	pCi/L	-2	-0.8	-1	-1
Lead 210 precision (±)	pCi/L	3.6	1.6	1.6	2.6
Lead 210 MDC	pCi/L	6.0	2.6	2.8	4.3
Radium 226	pCi/L	0.29	0.34	0.21	0.13
Radium 226 precision (±)	pCi/L	0.11	0.11	0.13	0.11
Radium 226 MDC	pCi/L	0.10	0.1	0.14	0.16
Radium 228	pCi/L	1.3	1.2	1.7	1.7
Radium 228 precision (±)	pCi/L	0.87	0.73	1.0	0.80
Radium 228 MDC	pCi/L	1.4	1.1	1.6	1.2
Thorium 230	pCi/L	-0.02	-0.01	0.02	-0.3
Thorium 230 precision (±)	pCi/L	0.1	0.3	0.2	0.7
Thorium 230 MDC	pCi/L	0.2	0.7	0.5	
A/C Balance (± 5)	%	-3.55	-4.77	-1.58	-1.01
Anions	meq/L	143	149	136	133
Cations	meq/L	134	135	131	130
Solids, Total Dissolved Calculated	mg/L	8210	8510	7830	7720
TDS Balance (0.80 - 1.20)		1.05	1.00	1.08	1.10
Trihalomethanes, Total	ug/L	3.57	2.56	2.72	2.08

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Alluvium Monitor Wells

Well ID:		GW-1	GW-1	GW-1	GW-1
Collection Date:		10/6/2009	7/6/2009	4/6/2009	1/12/2009
Receive Date:		10/9/2009	7/10/2009	4/10/2009	1/16/2009
Report Date:		11/19/2009	8/25/2009	6/3/2009	3/17/2009
Analyte	**Units**	**C09100421-012**	**C09070417-008**	**C09040397-008**	**C09010567-007**
Bicarbonate as HCO3	mg/L	1870	1790	1850	1810
Calcium	mg/L	717	734	682	696
Chloride	mg/L	237	237	226	208
Magnesium	mg/L	645	668	659	658
Nitrogen, Ammonia as N	mg/L	0.62	0.48	0.32	0.26
Nitrogen, Nitrate+Nitrite as N	mg/L	97	97	103	130
Potassium	mg/L	7	6	6	7
Sodium	mg/L	385	387	413	401
Sulfate	mg/L	3340	3670	3170	2820
pH	s.u.	6.98	6.76	6.67	6.80
Solids, Total Dissolved TDS @ 180 C	mg/L	6640	6890	6750	7080
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	0.05	0.06	0.06	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	0.104	0.113	0.101	0.0564
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	2.8	0.3	1.2
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.5	0.5	0.4	0.4
Gross Alpha minus Rn & U MDC	pCi/L	0.7	0.3	0.6	0.3
Lead 210	pCi/L	-1	-2	-1	-4
Lead 210 precision (±)	pCi/L	3.6	1.6	1.6	5.1
Lead 210 MDC	pCi/L	6.0	2.6	2.8	8.6
Radium 226	pCi/L	0.40	0.29	0.14	0.04
Radium 226 precision (±)	pCi/L	0.12	0.11	0.08	0.1
Radium 226 MDC	pCi/L	0.09	0.1	0.08	0.16
Radium 228	pCi/L	0.58	1.3	1.0	1.1
Radium 228 precision (±)	pCi/L	0.73	0.75	0.61	0.77
Radium 228 MDC	pCi/L	1.2	1.2	0.94	1.2
Thorium 230	pCi/L	-0.05	0.1	-0.03	-0.3
Thorium 230 precision (±)	pCi/L	0.1	0.2	0.3	0.6
Thorium 230 MDC	pCi/L	0.3	0.3	0.7	
A/C Balance (± 5)	%	-3.65	-4.70	-1.72	1.39
Anions	meq/L	114	119	110	104
Cations	meq/L	106	109	106	107
Solids, Total Dissolved Calculated	mg/L	6710	7040	6550	6290
TDS Balance (0.80 - 1.20)		0.990	0.980	1.03	1.13
Trihalomethanes, Total	ug/L	2.08	1.70	1.59	1.65

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Alluvium Monitor Wells

Well ID:		632	632	632	632
Collection Date:		10/6/2009	7/6/2009	4/6/2009	1/12/2009
Receive Date:		10/9/2009	7/10/2009	4/10/2009	1/16/2009
Report Date:		11/19/2009	8/25/2009	6/3/2009	3/17/2009
Analyte	**Units**	**C09100421-013**	**C09070417-009**	**C09040397-009**	**C09010567-005**
Bicarbonate as HCO3	mg/L	1970	1920	1960	1920
Calcium	mg/L	589	628	580	598
Chloride	mg/L	258	258	237	226
Magnesium	mg/L	776	817	820	906
Nitrogen, Ammonia as N	mg/L	0.64	0.74	0.38	0.28
Nitrogen, Nitrate+Nitrite as N	mg/L	80	68	77.3	114
Potassium	mg/L	9	10	9	10
Sodium	mg/L	390	393	423	429
Sulfate	mg/L	3610	3910	3460	3290
pH	s.u.	7.37	6.59	6.43	6.62
Solids, Total Dissolved TDS @ 180 C	mg/L	7240	7280	7370	7460
Aluminum	mg/L	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	2.32	2.48	2.63	2.52
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	0.0764	0.0718	0.0801	0.0411
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)	0.002	0.001
Gross Alpha minus Rn & U	pCi/L	0.5	1.6	1.4	1.8
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.5	0.4	0.5	0.4
Gross Alpha minus Rn & U MDC	pCi/L	0.7	0.3	0.6	0.3
Lead 210	pCi/L	-2	0.2	-0.5	-3
Lead 210 precision (±)	pCi/L	3.6	1.6	1.6	2.5
Lead 210 MDC	pCi/L	6.0	2.6	2.8	4.3
Radium 226	pCi/L	0.99	0.85	0.73	0.67
Radium 226 precision (±)	pCi/L	0.18	0.16	0.16	0.17
Radium 226 MDC	pCi/L	0.09	0.09	0.08	0.16
Radium 228	pCi/L	2.6	2.5	1.7	3.2
Radium 228 precision (±)	pCi/L	0.87	0.73	0.61	0.86
Radium 228 MDC	pCi/L	1.3	1.0	0.90	1.2
Thorium 230	pCi/L	-0.02	0.05	-0.2	-0.3
Thorium 230 precision (±)	pCi/L	0.1	0.3	0.6	0.7
Thorium 230 MDC	pCi/L	0.3	0.5	1.5	
A/C Balance (± 5)	%	-4.25	-3.78	-0.549	3.69
Anions	meq/L	120	125	116	115
Cations	meq/L	111	116	115	123
Solids, Total Dissolved Calculated	mg/L	6970	7270	6840	6940
TDS Balance (0.80 - 1.20)		1.04	1.00	1.08	1.07
Trihalomethanes, Total	ug/L	3.06	2.86	3.96	3.52

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Alluvium Monitor Wells

Well ID:		GW-3	GW-3	GW-3	GW-3
Collection Date:		10/6/2009	7/7/2009	4/7/2009	1/13/2009
Receive Date:		10/9/2009	7/10/2009	4/10/2009	1/16/2009
Report Date:		11/19/2009	8/25/2009	6/3/2009	3/17/2009
Analyte	**Units**	**C09100421-014**	**C09070417-014**	**C09040397-014**	**C09010567-013**
Bicarbonate as HCO3	mg/L	1430	1410	1430	1410
Calcium	mg/L	889	858	860	964
Chloride	mg/L	201	193	180	159
Magnesium	mg/L	281	276	282	304
Nitrogen, Ammonia as N	mg/L	ND(0.05)	0.05	ND(0.05)	ND(0.05)
Nitrogen, Nitrate+Nitrite as N	mg/L	124	114	115	165
Potassium	mg/L	8	8	8	9
Sodium	mg/L	283	282	298	324
Sulfate	mg/L	2240	2140	2190	1980
pH	s.u.	7.37	6.86	6.56	6.62
Solids, Total Dissolved TDS @ 180 C	mg/L	5430	5370	5250	5430
Aluminum	mg/L	1.5	0.5	1.4	0.4
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	1.52	1.47	1.46	1.46
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	0.151	0.125	0.145	0.126
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)	0.001	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	0.7	2.3	0.7	1.9
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.5	0.5	0.5	0.5
Gross Alpha minus Rn & U MDC	pCi/L	0.7	0.3	0.6	0.3
Lead 210	pCi/L	1.6	0.0	0.7	-1
Lead 210 precision (±)	pCi/L	3.6	1.6	1.6	2.6
Lead 210 MDC	pCi/L	6.0	2.6	2.8	4.3
Radium 226	pCi/L	0.25	0.35	0.04	0.02
Radium 226 precision (±)	pCi/L	0.1	0.11	0.10	0.1
Radium 226 MDC	pCi/L	0.09	0.1	0.17	0.16
Radium 228	pCi/L	0.26	0.45	0.67	-0.2
Radium 228 precision (±)	pCi/L	0.75	0.68	0.57	0.75
Radium 228 MDC	pCi/L	1.2	1.1	0.91	1.3
Thorium 230	pCi/L	0.04	-0.02	0.2	0.7
Thorium 230 precision (±)	pCi/L	0.1	0.2	0.2	0.7
Thorium 230 MDC	pCi/L	0.2	0.5	0.3	
A/C Balance (± 5)	%	-2.84	-2.04	-1.99	4.11
Anions	meq/L	84.6	81.3	82.5	80.6
Cations	meq/L	80.0	78.1	79.2	87.5
Solids, Total Dissolved Calculated	mg/L	5180	4990	5040	5180
TDS Balance (0.80 - 1.20)		1.05	1.08	1.04	1.05
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-25	EPA-25	EPA-25	EPA-25
Collection Date:		10/6/2009	7/7/2009	4/7/2009	1/13/2009
Receive Date:		10/9/2009	7/10/2009	4/10/2009	1/16/2009
Report Date:		11/19/2009	8/25/2009	6/3/2009	3/17/2009
Analyte	**Units**	**C09100421-015**	**C09070417-015**	**C09040397-015**	**C09010567-014**
Bicarbonate as HCO3	mg/L	1130	1110	1030	995
Calcium	mg/L	717	700	688	654
Chloride	mg/L	88	95	88	64
Magnesium	mg/L	230	224	231	220
Nitrogen, Ammonia as N	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Nitrogen, Nitrate+Nitrite as N	mg/L	77	72	72.0	102
Potassium	mg/L	7	7	6	6
Sodium	mg/L	173	166	178	167
Sulfate	mg/L	1820	1750	1800	1590
pH	s.u.	7.53	7.08	6.92	6.90
Solids, Total Dissolved TDS @ 180 C	mg/L	4150	4150	4090	4160
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	0.46	0.66	0.50	0.44
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	0.128	0.115	0.127	0.116
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	0.1	0.5	0.2	1.1
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.4	0.3	0.4	0.4
Gross Alpha minus Rn & U MDC	pCi/L	0.7	0.3	0.6	0.3
Lead 210	pCi/L	-1	-1	-3	-2
Lead 210 precision (±)	pCi/L	3.6	1.6	1.6	2.5
Lead 210 MDC	pCi/L	6.0	2.6	2.8	4.3
Radium 226	pCi/L	0.13	-0.1	-0.01	0.08
Radium 226 precision (±)	pCi/L	0.08	0.07	0.09	0.10
Radium 226 MDC	pCi/L	0.09	0.17	0.17	0.16
Radium 228	pCi/L	0.21	-0.08	0.76	-0.05
Radium 228 precision (±)	pCi/L	0.77	0.72	0.58	0.75
Radium 228 MDC	pCi/L	1.3	1.2	0.91	1.3
Thorium 230	pCi/L	0.04	0.1	0.1	-0.2
Thorium 230 precision (±)	pCi/L	0.1	0.2	0.2	0.5
Thorium 230 MDC	pCi/L	0.3	0.4	0.4	
A/C Balance (± 5)	%	-1.60	-1.17	-0.720	-0.363
Anions	meq/L	64.5	62.2	62.1	58.6
Cations	meq/L	62.4	60.8	61.3	58.1
Solids, Total Dissolved Calculated	mg/L	3950	3820	3820	3660
TDS Balance (0.80 - 1.20)		1.05	1.09	1.07	1.14
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:		10/6/2009	7/7/2009	4/7/2009	1/13/2009
Receive Date:		10/9/2009	7/10/2009	4/10/2009	1/16/2009
Report Date:		11/19/2009	8/25/2009	6/3/2009	3/17/2009
Analyte	**Units**	**C09100421-016**	**C09070417-016**	**C09040397-016**	**C09010567-015**
Bicarbonate as HCO3	mg/L	583	579	586	565
Calcium	mg/L	510	510	509	580
Chloride	mg/L	44	44	39	28
Magnesium	mg/L	240	239	244	274
Nitrogen, Ammonia as N	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Nitrogen, Nitrate+Nitrite as N	mg/L	111	105	107	172
Potassium	mg/L	5	5	6	6
Sodium	mg/L	483	473	472	518
Sulfate	mg/L	2440	2310	2410	2210
pH	s.u.	7.67	7.23	6.99	7.10
Solids, Total Dissolved TDS @ 180 C	mg/L	4530	4610	4650	4720
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	0.09
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	0.0213	0.0198	0.0196	0.0215
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)	0.001	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	0.6	0.8	0.4	1.4
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.5	0.3	0.4	0.4
Gross Alpha minus Rn & U MDC	pCi/L	0.7	0.3	0.6	0.3
Lead 210	pCi/L	-1	-1	0.6	-1
Lead 210 precision (±)	pCi/L	3.6	1.6	1.6	2.6
Lead 210 MDC	pCi/L	6.0	2.6	2.8	4.3
Radium 226	pCi/L	0.36	0.06	0.16	0.07
Radium 226 precision (±)	pCi/L	0.12	0.11	0.12	0.10
Radium 226 MDC	pCi/L	0.1	0.17	0.17	0.16
Radium 228	pCi/L	0.81	0.89	0.52	0.61
Radium 228 precision (±)	pCi/L	0.81	0.78	0.56	0.78
Radium 228 MDC	pCi/L	1.3	1.2	0.90	1.3
Thorium 230	pCi/L	0.02	0.01	0.02	-0.2
Thorium 230 precision (±)	pCi/L	0.1	0.2	0.2	0.6
Thorium 230 MDC	pCi/L	0.2	0.5	0.4	
A/C Balance (± 5)	%	-2.32	-0.395	-1.74	4.05
Anions	meq/L	69.5	66.4	68.4	68.4
Cations	meq/L	66.3	65.9	66.1	74.1
Solids, Total Dissolved Calculated	mg/L	4520	4350	4460	4680
TDS Balance (0.80 - 1.20)		1.00	1.06	1.04	1.01
Trihalomethanes, Total	ug/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)

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Appendix B

Zone 3 Monitoring Data

Earlier remedial action in Zone 3 has consisted of the operation of the Northeast Pump-Back Wells (Wells 600, 608, 610, 613, and 672), and installation and operation of twelve Stage I Extraction Wells (Wells 701-703 and 705-713) in mid-1989 and seven Stage II Extraction Wells (Wells 714-720) in mid-1991. Remedial action has been monitored since the third quarter of 1989 by measurement of groundwater levels and groundwater sampling and analyses at nineteen Zone 3 monitoring wells (Wells 106 D, 9D, 517, 518, 504 B, 502 B, 501 B, 420, 411, EPA 18, EPA 17, EPA 15, EPA 14, EPA 13, EPA 12, EPA 11, EPA 9, EPA 3, and EPA 1). Well 126 was added to the monitoring program in the third quarter of 1990 to measure water levels in accordance with the requirements of the Nuclear Regulatory Commission (NRC) and the U.S. Environmental Protection Agency (EPA).

At the end of the 1993 operating year, the extraction and performance monitoring systems for Zone 3 were modified with the approval of the NRC and EPA. Modifications included discontinuing pumping at ten low-producing extraction wells (Wells 600, 608, 610, 672, 702, 703, 705, 710, 712, and 713) and at two extraction wells that were intercepting background water (Wells 714 and 715). Water levels were measured at seven of these former extraction wells (Wells 608, 702, 703, 710, 712, 714, and 715) during 2000 to augment the existing monitoring system.

In July 1999, ten additional low-producing extraction wells (Wells 613, 701, 706, 707, 708, 709, 711, 713, 719, and 720) were decommissioned with approval of the NRC and EPA. Several of these wells were converted to use as water level and water quality monitoring wells (Wells 613 and 711) or as water level monitoring wells (713, 701, 706, 707 and 719).

Beginning with the second quarter of 2000, the revised monitoring program was implemented. This included using a revised set of monitoring wells and low-flow sampling procedures. Some changes to the well set used in the revised program were implemented in the second quarter of 2001, including installation a new well designated NBL 1. The wells included in the monitoring program for Zone 3 are listed in Table 9 of this 2009 Annual Review Report. See enclosed Figure B-1 for the current layout of the wells. During June 2002, the following wells were installed to track the northward migration of the Zone 3 seepage-impact front: PB 1, PB 2, PB 3, and PB 4. These wells are not part of the formal performance monitoring program. During July 2004, two new piezometers were installed in the updip, southeastern part of the Zone 3 hydrostratigraphic unit: Z3 M-1 and Z3 M-2. These piezometers were dry during the first two quarterly measurement events. They are not part of the formal performance monitoring program.

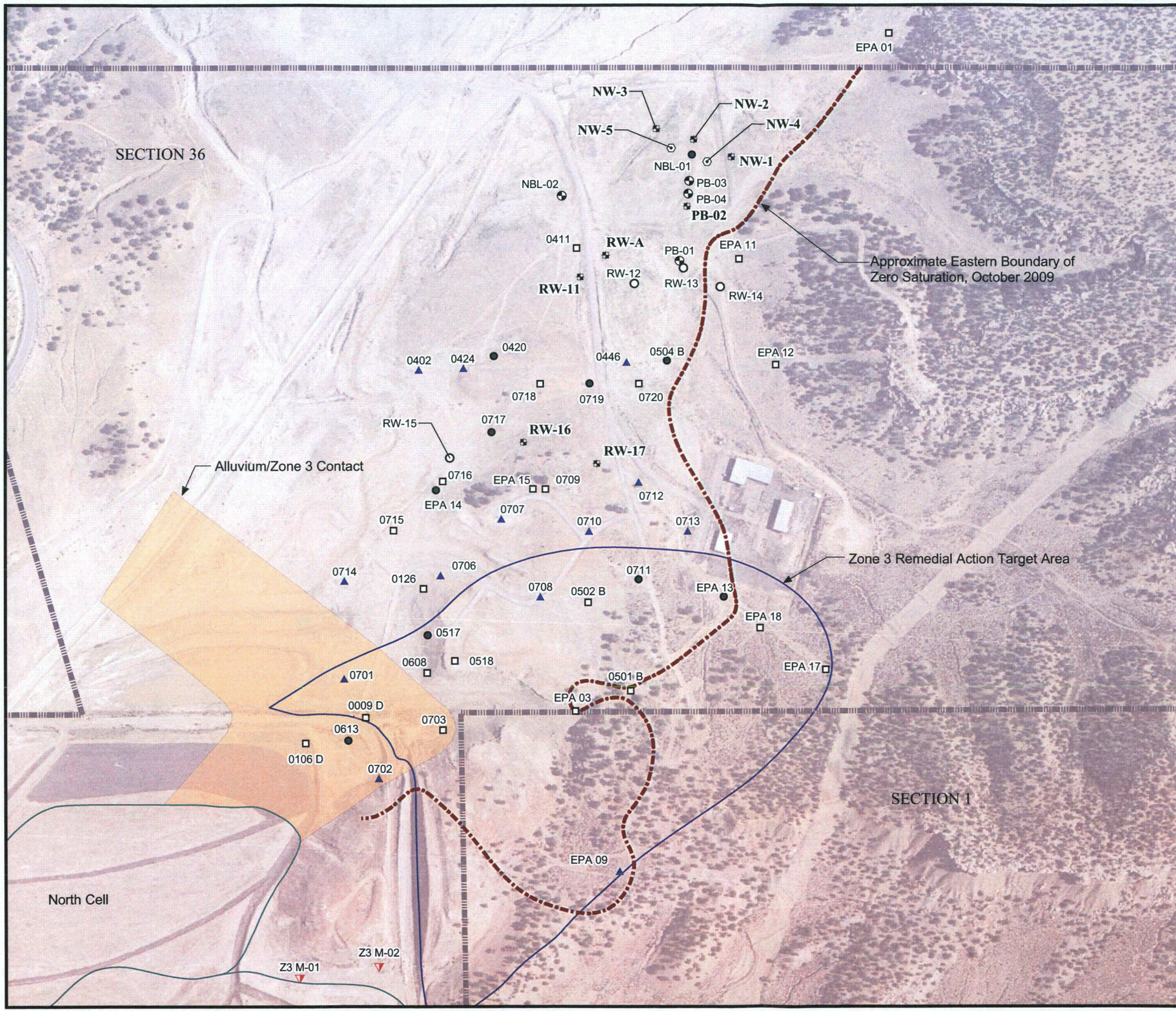
During 2004, new extraction wells were installed and hydrofractured in order to enhance the permeability of the Zone 3 sandstones. Since then, some of these extraction wells have been shut off due to very low yields, fouling, or becoming dry. Starting in April 2005 and continuing to present in 2009, the extraction wells pumped groundwater from Zone 3 that is piped to the evaporation pond. These extraction wells are shown in Figure B-1 of this appendix (RW-series wells); older well PB 2 was also utilized for extraction pumping. Figure B-1 also shows the

locations of two new wells installed during 2007: extraction well RW A (September 2007) and tracking monitoring well NBL 2 (August 2007; not part of the formal monitoring program).

During September 2008 five new extraction wells were installed within Section 36 to the north of Well NBL 1. These wells (designated NW-1 through NW-5) underwent test pumping during February 2009, and from February to November 2009 NW-1, NW-2, and NW-3 were pumped. In November 2009 this pumping regime was re-optimized to comprise pumping at NW-1, NW-2, and NW-4.

Table B.1 presents the quarterly water level and water quality data for the monitoring wells from start-up of the Stage I wells in the third quarter of 1989 through the fourth quarter of 2009. Water levels for wells that are monitored only for water level were presented for the period from 1994 through 2002 in Earth Tech (2002d, Table B.2). Groundwater level updates for four of these wells (402, 424, 446, and NBL 1) were provided in Table B.1 of the 2004 Annual Review Report (N.A. Water Systems, 2004b), and the water levels for October 2009 are provided in Figure 37 of this 2009 Annual Review Report. The Zone 3 groundwater extraction system, and the likelihood that recharge from the alluvium has ceased, have resulted in dewatering a large portion of the Zone 3 Remedial Action Target Area and, consequently, many of the monitoring wells have gone dry since 1989. For these wells, water level and water quality data are presented for the period of time prior to dewatering. The laboratory analytical data for 2009 are presented at the end of this appendix.

Figure B-1



Legend

- Groundwater Quality and Water Level Monitoring Well
- Water Level Monitoring Well
- Zone 3 Monitoring Well Removed From Monitoring Program
- Boundary Well
- Piezometer Installed in 2004
- Extraction Well
- Extraction Well (Off)
- Former Extraction Well
- Property Boundary
- Zone 3 Target Remedial Action Area
- Section Boundary
- Cell Boundary
- Approximate Eastern Boundary of Zero Saturation

Notes:

1. Aerial photo taken on August 1, 1996.
2. Extraction wells NW-1 through NW-5 installed September 2008; not yet pumping.

0 200 400 800
Feet

FIGURE B-1

Zone 3 2009 Monitoring Well Locations

United Nuclear Corporation Church Rock Site, Church Rock, New Mexico

CHESTER ENGINEERS

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Notes for Table B.1

Zone 3 Data Summary, 1989 - 2009

General Notes:

1. NRC standard as listed in License Condition 30, Part B.
2. EPA standard as listed in Table 2, "Contaminant-Specific Groundwater ARARs" of the ROD (EPA, 1988).
3. Standards for TDS, sulfate and nitrate changed to reflect revised standards recommended in the NRC's 1996 evaluation of background water quality and documented in the January 6, 1998, letter from NMED to EPA.
4. NA - Not applicable.
5. 'ND' for combined Ra-226 and Ra-228 indicates that both constituents were less than the laboratory reporting limits, which are 0.2 and 1.0 pCi/L, respectively.
6. All values that exceed the NRC and/or EPA standards are shaded.
7. Gross alpha value excludes contribution from radon and uranium.
8. "*" (Asterisk) indicates a Point of Compliance well.
9. Reporting limit for bicarbonate changed from 0.0 mg/L to 0.1 mg/L in fourth quarter 1997.
10. Reporting limit for cadmium changed from 0.01 mg/L to 0.005 mg/L after fourth quarter 1997. The analytical method changed from EPA 200.7 (ICP) to 200.8 (ICP.MS).
11. Well NBL-01 was installed in June 2001 in accordance with the agencies during the November 14-15, 2000 meeting. The well is monitored for water level and water quality beginning August 2001.
12. NO3 (nitrate) is reported by the laboratory as nitrate + nitrite as N.
13. During August 2006, the NRC issued License Amendment 37 (NRC, 2006b) revising the former 1 ug/L chloroform groundwater protection standard to 80 ug/L for total trihalomethanes (TTHMs) in the Southwest Alluvium, Zone 1 and Zone 3; and also revising the current combined radium-226 and -228 groundwater protection standard of 5 pCi/L to 5.2 pCi/L in the Southwest Alluvium and 9.4 pCi/L in Zone 1.
14. Energy Laboratory's reporting of radiological analyses changed during 2008 (N.A. Water Systems, 2008d). This affected the reporting of Church Rock sample analyses beginning in April 2008 (2nd quarter). The changes were made to make the reporting methods

consistent with Section 7.5 of The United States Nuclear Regulatory Commission's Regulatory Guide 4.14.

The changes are summarized as follows:

- A minimum detectable concentration (MDC) is determined and reported for each analysis.
- Sample results are reported regardless of whether they are lower than the MDC. for the analysis. This may result in the reporting of negative concentrations.
- Sample results lower than the MDC are qualified with a 'U'.

These noted changes affected the reporting of all radiological parameters analyzed in Church Rock samples, except for thorium-230. Energy Labs did not have an approved methodology for determining MDC values for thorium-230. In the absence of MDC values, the historical reporting limit was used instead. Therefore, U-qualified results for thorium-230 indicate concentrations below a reporting limit rather than an MDC. Otherwise, the reporting of thorium-230 results was treated similarly to other radiological parameters. This means that measured concentrations were reported with a U qualification if the values were below the reporting limit.

The rationale for reporting values below MDC or reporting limit, even if negative, is that errors associated with the reported values are expected, over time, to average to zero. This means that averages or sums (e.g. for total radium) of concentrations will tend to be more accurate if below limit (MDC or reporting) results are retained in the calculations.

Specific Notes:

- Well 502 B was eliminated from the monitoring program as of 2nd quarter 2000 in accordance with the Revised Monitoring Program.
- Well 711 was added to the monitoring program to replace Well 502 B.
- Well 708 is monitored for water level and water quality beginning 2nd quarter 2001.
- Well 518 was eliminated from the monitoring program as of 2nd quarter 2000 in accordance with the Revised Monitoring Program.
- Well EPA 9 is monitored for water level only beginning in 2nd quarter 2000.
- Well EPA 13 was monitored for water level only from 2nd quarter 2000 through 1st quarter 2001.
- Well EPA 13 is monitored for water level and water quality beginning in 2nd quarter 2001.

- Wells 402, 424, 446, 613, 701, 706, 707, 717, and 719 were added as water level monitoring wells as of 2nd quarter 2000.
- Wells 717 and 719 are monitored for water quality and water level beginning 2nd quarter 2001.
- Well 9 D contained insufficient water for sampling, 4th quarter 1992.
- Well 106 D contained insufficient water for sampling, 3rd quarter 1991.
- Well 501 B* contained insufficient water for sampling, 4th quarter 1993.
- Well EPA 3* contained insufficient water for sampling, 1st quarter 1992.
- The water level in EPA-11 fell below the pump inlet after 2nd quarter 1990. The pump is cemented in place and cannot be lowered.
- Well EPA 12 contained insufficient water for sampling, 4th quarter 1992.
- Well EPA 15 contained insufficient water for sampling, 1st quarter 1996.
- Well EPA 17 contained insufficient water for sampling, 3rd quarter 1992.
- Well EPA 18 contained insufficient water for sampling, 1st quarter 1995.
- Well EPA 1 contained insufficient water for sampling, 1st quarter 1997.
- Well 411 contained insufficient water for sampling, 2nd quarter 1998.

Table B.1

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0009 D		7/18/1989	6,910.50	4.60	4.56	7365	465	963	158	10.7	1	5061	100	0.79	2.5	< 1	43	< 0.001
0009 D		10/12/1989	6,908.00	4.40	4.10	8276	439	1013	159	13.4	0	5508	108	0.87	2.4	< 1	90	< 0.001
0009 D		1/4/1990	6,902.30	4.40	4.04	8330	431	940	160	10	< 1	5597	94.4	0.6	0.55	< 1	96	< 0.001
0009 D		4/10/1990	6,910.00	4.40	4.41	7222	447	856	160	9.1	< 1	4688	99.1	1.08	6.3	< 1	46	< 0.001
0009 D		7/10/1990	6,904.10	4.40	4.14	8932	473	1012	153	9.5	< 1	6126	101	0.37	0.26	< 1	155	< 0.001
0009 D		10/9/1990	6,903.70	4.30	4.21	9372	435	1094	172	9.7	< 1	6551	124	0.24	0.1	< 1	153	< 0.001
0009 D		1/15/1991	6,902.30	4.50	4.37	7769	469	887	159	11.6	< 1	5383	113	0.65	0.12	< 1	50.4	< 0.001
0009 D		4/9/1991	6,903.70	4.20	4.18	9518	485	1106	163	10.7	< 1	6305	80.2	1.04	0.39	< 1	115	< 0.001
0009 D		7/9/1991	6,899.40	4.30	4.40	8444	412	883	141	8.9	< 1	5661	44.1	1.18	0.05	< 1	76.6	< 0.001
0009 D		10/14/1991	6,899.30	4.10	4.35	8946	363	717	160	8.3	< 1	5904	191	2.3	< 0.01	< 1	128	< 0.001
0009 D		1/21/1992	6,898.60	4.30	4.31	8112	444	1028	153	10.2	< 1	5648	108	1.11	1.24	< 1	55.1	0.001
0009 D		4/7/1992	6,897.80	4.30	4.09	8533	426	767	185	11.5	< 1	5628	124	1.31	< 0.1	< 1	150	< 0.001
0106 D		7/18/1989	6,909.10	4.20	4.66	4068	476	425	113	17.3	2	2928	45.7	1.12	67	< 1	8	< 0.001
0106 D		10/11/1989	6,906.80	4.70	4.76	4182	465	332	113	21.2	6.8	2582	46.3	0.97	52	3.3	6.5	< 0.001
0106 D		1/4/1990	6,905.90	4.30	4.37	4150	466	339	110	16.4	< 1	2502	47.5	0.86	56	2.3	7.4	< 0.001
0106 D		4/10/1990	6,904.20	4.30	4.93	4180	483	350	110	17	6.8	2452	48.2	1.54	58	1.9	7.8	< 0.001
0106 D		7/10/1990	6,903.20	4.60	4.76	4259	455	332	99.4	15.1	8.5	2439	44.2	0.14	64.3	2.8	6.5	< 0.001
0106 D		10/9/1990	6,902.30	4.50	4.99	4256	437	342	113	14.6	9.8	2536	50	0.13	52	9.6	4.3	< 0.001
0106 D		1/15/1991	6,902.40	4.80	6.35	4121	545	383	112	13.3	65	2563	56	0.12	57.5	10	0.77	< 0.001
0106 D		4/9/1991	6,903.00	5.20	6.69	4014	591	380	117	11.6	125	2481	55.3	0.1	67	17.7	0.29	< 0.001
0106 D		7/9/1991	6,901.90	4.90	5.89	4247	575	360	99	13.7	20	2770	156	0.49	44.3	6.22	0.9	< 0.001
0411		7/23/1989	6,866.20	6.20	6.45	2458	454	125	107	6.4	246	1563	17.9	0.41	0.04	< 1	< 0.1	0.02
0411		10/11/1989	6,864.90	6.30	6.90	2628	470	128	110	9.5	243	1688	20	0.55	0.09	< 1	< 0.1	0.031
0411		1/3/1990	6,863.70	6.00	6.50	2534	440	116	112	6.8	256	1509	19.8	0.39	0.08	< 1	< 0.1	0.018
0411		4/3/1990	6,862.30	6.00	6.60	2545	431	117	109	6.6	270	1444	19.7	0.33	0.08	< 1	< 0.1	0.018
0411		7/2/1990	6,861.20	5.80	6.60	2602	475	114	102	6	267	1483	19	0.2	0.08	< 1	< 0.1	0.009
0411		10/2/1990	6,860.30	6.20	6.85	2527	406	110	109	6.5	266	1607	20.1	0.11	0.05	< 1	< 0.1	0.018
0411		1/3/1991	6,859.50	6.20	6.49	2746	468	126	117	15.7	262	1492	19.4	0.45	0.23	< 1	< 0.1	0.029
0411		4/10/1991	6,859.20	6.00	7.23	2600	467	118	111	7.8	277	1453	22.3	0.19	0.05	< 1	< 0.1	0.029
0411		7/16/1991	6,858.20	6.10	6.63	2705	419	110	113	6.3	278	1742	22.3	0.38	0.02	< 1	< 0.1	0.035
0411		10/14/1991	6,855.30	6.00	7.28	2851	414	98.6	123	5.8	271	1640	28.6	0.3	0.02	< 1	0.23	0.062
0411		1/14/1992	6,854.70	5.80	7.78	2939	467	128	119	6.5	255	1765	23.1	0.8	< 0.01	< 1	< 0.1	0.088
0411		4/7/1992	6,854.90	5.90	7.82	3064	475	144	140	8.4	401	1847	26.1	0.37	< 0.1	< 1	< 0.1	0.087
0411		7/7/1992	6,853.30	5.60	8.09	3340	473	170	144	9.6	244	2034	28.7	0.49	0.1	< 1	< 0.1	0.044
0411		10/6/1992	6,850.90	6.00	8.15	3860	634	239	139	9.2	259	2352	27.4	0.44	6.05	< 1	0.2	0.022

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
0009 D		7/18/1989	< 0.05	< 0.01	0.65	0.08	14	< 0.1	0.86	< 0.001	< 0.1	0.0077	4.4	2.9	7.3	1.1	4.5	17.6
0009 D		10/12/1989	< 0.05	< 0.01	0.94	0.37	17	< 0.01	1.2	< 0.001	< 0.1	0.018	2.4	1.8	4.2	< 0.02	1.5	3.5
0009 D		1/4/1990	< 0.05	0.01	1	0.14	18	< 0.1	1.4	< 0.001	< 0.1	0.012	4.7	< 1	4.7	< 0.2	6.7	1.9
0009 D		4/10/1990	< 0.05	0.01	0.75	0.12	15	< 0.1	0.97	< 0.001	< 0.1	0.0395	2.7	2.2	4.9	< 0.2	1.5	3
0009 D		7/10/1990	< 0.05	< 0.01	0.83	0.13	19.3	< 0.1	1.56	< 0.001	< 0.1	0.017	5.1	5.2	10.3	< 0.2	< 1	5
0009 D		10/9/1990	< 0.05	0.02	1.52	0.13	23	< 0.1	2.13	< 0.001	< 0.1	0.0157	8	3.8	11.8	< 0.2	1.6	4
0009 D		1/15/1991	0.02	0.01	0.71	0.09	12.8	< 0.1	0.88	< 0.001	< 0.1	0.0065	4.9	2.5	7.4	< 0.2	2.7	6.2
0009 D		4/9/1991	< 0.05	0.02	0.83	0.13	13.1	< 0.1	1.16	< 0.001	< 0.1	0.0098	7	6.1	13.1	1.2	< 1	6
0009 D		7/9/1991	0.02	0.01	0.79	< 0.05	17	< 0.1	1.09	< 0.001	< 0.1	0.0062	2.9	2.5	5.4	< 0.2	< 1	3
0009 D		10/14/1991	< 0.01	0.01	1.3	< 0.05	22.1	< 0.1	1.83	< 0.001	< 0.1	0.047	6.6	< 1	6.6	< 0.2	< 1	7
0009 D		1/21/1992	0.01	0.02	0.74	0.26	17.1	< 0.1	1.07	0.02	< 0.1	0.009	8.5	< 2	8.5	< 0.2	< 1	9.3
0009 D		4/7/1992	0.04	< 0.01	1.35	0.27	22	< 0.1	1.78	< 0.001	< 0.1	0.022	15.5	8.6	24.1	< 0.2	< 1	15.8
0106 D		7/18/1989	< 0.05	< 0.01	0.15	< 0.05	12	< 0.1	0.26	< 0.001	< 0.1	0.0029	7.3	6.6	13.9	4.5	2.2	22.5
0106 D		10/11/1989	< 0.05	0.005	0.16	0.06	12	0.06	0.25	0.031	< 0.1	0.045	3.2	7.4	10.6	< 0.2	4.7	3.5
0106 D		1/4/1990	< 0.05	< 0.01	0.14	< 0.05	12	< 0.1	0.27	< 0.001	< 0.1	0.002	5.9	11.8	17.7	< 0.2	2.8	6.7
0106 D		4/10/1990	< 0.05	< 0.01	0.12	< 0.05	12	< 0.1	0.29	0.001	< 0.1	0.032	5.3	6	11.3	< 0.2	< 1	6
0106 D		7/10/1990	< 0.05	< 0.01	0.12	< 0.05	12.4	< 0.1	0.25	< 0.001	< 0.1	0.0107	2.8	4.5	7.3	< 0.2	1.9	3
0106 D		10/9/1990	< 0.05	< 0.01	0.11	< 0.05	11.6	< 0.1	0.24	< 0.001	< 0.1	0.0041	2.3	4.6	6.9	< 0.2	< 1	2
0106 D		1/15/1991	< 0.01	< 0.01	0.07	< 0.05	7.7	0.18	0.1	< 0.001	< 0.1	0.0074	0.8	< 1	0.8	< 0.2	< 1	1.1
0106 D		4/9/1991	< 0.05	< 0.01	0.04	< 0.05	4.2	0.21	< 0.05	< 0.001	< 0.1	0.0069	4	5.4	9.4	< 0.2	< 1	5
0106 D		7/9/1991	< 0.01	< 0.01	0.07	< 0.05	7.9	0.2	0.1	0.04	< 0.1	0.0085	3.2	3.5	6.7	< 0.2	< 1	3
0411		7/23/1989	< 0.05	< 0.01	0.05	< 0.05	2.7	2	0.08	0.001	< 0.1	0.0543	6.7	6.3	13	10.2	< 1	14.6
0411		10/11/1989	< 0.05	< 0.01	0.06	< 0.05	3	2.5	0.09	< 0.001	< 0.1	0.081	5.4	< 1	5.4	< 0.2	< 1	6
0411		1/3/1990	< 0.05	< 0.01	0.03	< 0.05	2.3	1.8	0.07	< 0.001	< 0.1	0.055	6	3.1	9.1	< 0.2	< 1	8.2
0411		4/3/1990	< 0.05	< 0.01	0.05	< 0.05	2.5	2.4	0.08	< 0.001	< 0.1	0.05	4.7	2.4	7.1	< 0.2	< 1	5.3
0411		7/2/1990	< 0.05	< 0.01	0.04	< 0.05	2.44	1.77	0.07	< 0.001	< 0.1	0.0592	5.1	5.2	10.3	0.4	< 1	5
0411		10/2/1990	< 0.05	< 0.01	0.06	< 0.05	2.42	1.93	0.06	< 0.001	< 0.1	0.049	6.3	< 1	6.3	< 0.2	1.8	7.5
0411		1/3/1991	< 0.01	< 0.01	0.06	< 0.05	2.72	1.95	0.11	< 0.001	< 0.1	0.1131	6.9	3.7	10.6	< 0.2	< 1	7
0411		4/10/1991	< 0.01	< 0.01	0.05	< 0.05	2.01	1.34	0.06	< 0.001	< 0.1	0.0549	5.8	7.2	13	< 0.2	2.6	6
0411		7/16/1991	< 0.01	< 0.01	0.04	< 0.05	2.37	1.89	< 0.05	< 0.001	< 0.1	0.04	4.6	3.6	8.2	< 0.2	2	5
0411		10/14/1991	< 0.01	< 0.01	0.06	< 0.05	2.92	2.96	0.09	< 0.001	< 0.1	0.059	5.5	< 1	5.5	< 0.2	< 1	6
0411		1/14/1992	< 0.01	< 0.01	0.06	< 0.05	2.96	2.73	0.09	0.002	< 0.1	0.039	5.4	4.7	10.1	< 0.2	3.5	5
0411		4/7/1992	< 0.01	< 0.01	0.06	< 0.05	3.95	3.5	0.05	< 0.001	< 0.1	0.065	4.9	4.3	9.2	< 0.2	2.8	4.9
0411		7/7/1992	< 0.01	< 0.01	0.08	< 0.05	3.62	4.11	0.08	0.003	< 0.1	0.02	5.9	3.6	9.5	< 0.2	< 1	6.5
0411		10/6/1992	< 0.01	< 0.01	0.09	< 0.05	4.41	6.6	0.11	0.003	< 0.1	0.154	5.2	8.4	13.6	< 0.2	< 1	5.3

TABLE B.1
Zone 3 Data Summary, 1989-2009
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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0411		1/6/1993	6,851.20	6.00	6.79	3091	530	208	127	10.6	246	2137	30.4	1.13	4.1	< 1	< 0.1	0.022
0411		4/6/1993	6,851.30	6.70	6.65	3306	510	200	140	8	245	2257	35.1	0.84	1.8	< 1	< 0.1	0.011
0411		7/16/1993	6,846.90	6.60	6.25	3412	586	242	166	12.2	321	2420	39.6	0.68	4.4	< 1	0.14	0.017
0411		10/6/1993	6,848.00	7.10	6.81	4026	614	285	149	9.3	340	2591	41.3	0.33	14.3	< 1	< 0.1	0.013
0411		1/5/1994	6,841.60	6.80	6.69	4298	557	276	149	9.3	303	2540	45.8	0.55	12.5	< 1	< 0.1	0.011
0411		4/14/1994	6,847.40	7.10	6.51	4006	620	274	146	9.8	294	2634	42.1	1.06	8.8	< 1	< 0.1	0.01
0411		7/21/1994	6,846.40	6.80	6.79	4253	645	287	141	9.6	293	2883	38.1	0.43	10.8	< 1	< 0.1	0.008
0411		7/29/1994	no data	6.50	7.30	4280	688	307	147	9.6	300	2906	43.5	0.54	17.3	< 1	0.12	0.009
0411		10/5/1994	6,846.20	6.80	7.36	4053	636	286	141	9.9	274	2509	36.9	0.99	5.17	< 1	< 0.1	0.009
0411		10/6/1994	no data	6.30	7.56	4404	653	300	167	9.8	331	2760	47.2	0.73	24.7	< 1	< 0.1	0.008
0411		1/10/1995	6,845.40	6.60	7.65	4276	675	213	139	11	295	2754	40.5	0.71	5.55	< 1	< 0.1	0.009
0411		4/11/1995	6,842.90	6.60	6.35	4320	645	283	152	9.5	182	2862	50	0.64	5.86	< 1	< 0.1	0.004
0411		7/11/1995	6,844.40	6.90	7.67	4038	605	315	147	9.4	379	2471	49.4	1.4	26.4	< 1	< 0.1	0.012
0411		10/3/1995	6,842.90	6.80	8.06	4526	645	322	162	9.1	383	2684	47	0.46	27.3	< 1	< 0.1	0.014
0411		1/4/1996	6,845.40	7.10	6.69	4445	630	310	173	9.5	382	2655	45.3	0.06	29.2	< 1	< 0.1	0.006
0411		4/2/1996	6,844.50	7.00	7.67	4338	604	300	146	9.8	366	2666	40	0.2	8.92	< 1	< 0.1	0.014
0411		7/17/1996	6,844.10	7.00	6.80	4459	580	290	168	10.1	410	2730	52.1	0.25	28.1	< 1	< 0.1	0.007
0411		10/8/1996	6,844.20	6.90	7.61	4370	611	318	151	10.1	429	2542	45.6	0.3	45.4	< 1	< 0.1	0.012
0411		1/28/1997	6,844.30	6.80	7.83	4350	610	315	144	10.1	468	2726	56	0.63	13.2	< 1	< 0.1	0.013
0411		4/15/1997	6,844.20	7.10	7.77	4470	671	358	159	10.7	451	2610	51	0.22	29.1	< 1	< 0.1	0.013
0411		7/15/1997	6,844.10	6.90	7.83	4510	659	342	159	9.6	437	2750	54.8	0.2	33.9	< 1	< 0.1	0.014
0411		10/15/1997	6,844.00	6.80	7.93	4490	685	350	154	10.2	433	2620	62.3	0.32	30.3	< 1	< 0.1	0.01
0411		1/20/1998	6,844.00	6.70	7.95	4390	634	323	178	10.4	439	2700	57.5	0.46	31.2	< 1	< 0.1	0.007
0420		7/23/1989	6,882.00	6.30	6.52	2239	438	110	99	5.8	285	1293	16.5	0.56	60	< 1	< 0.1	0.012
0420		10/11/1989	6,879.70	6.40	6.84	2328	402	112	96.8	8.5	244	1594	18.7	0.77	4.8	< 1	0.16	0.029
0420		1/3/1990	6,878.30	5.90	6.20	2680	431	141	99.5	7.1	196	1602	19.1	1.43	2.1	< 1	< 0.1	0.055
0420		4/3/1990	6,876.80	5.90	6.40	2725	439	149	97	7.1	209	1532	18.4	1.29	0.15	< 1	< 0.1	0.058
0420		7/2/1990	6,875.70	6.00	6.56	2708	464	140	91.7	6.2	226	1577	18.7	0.77	0.87	< 1	< 0.1	0.024
0420		10/2/1990	6,874.60	6.10	6.57	2777	412	151	91.5	7.1	198	1771	18.8	0.66	< 0.01	< 1	< 0.1	0.034
0420		1/3/1991	6,874.00	6.20	7.30	2729	478	135	105	27	248	1574	18	0.82	6.8	< 1	< 0.1	0.024
0420		4/10/1991	6,874.00	6.00	6.99	2635	483	143	102	7.9	269	1480	19.1	0.54	5.7	< 1	< 0.1	0.027
0420		7/16/1991	6,872.40	5.90	6.43	2840	492	114	87.3	6.9	205	1888	17.5	1.1	0.11	< 1	< 0.1	0.04
0420		10/14/1991	6,866.70	5.90	7.01	2982	593	133	94.1	6.1	217	1819	21.6	1.2	0.07	< 1	< 0.1	0.066
0420		1/14/1992	6,868.50	5.90	8.17	2806	426	148	93.1	6.4	243	1831	17.8	1.3	2	< 1	< 0.1	0.053
0420		4/7/1992	6,868.70	5.80	7.89	2962	453	164	99.2	8.3	265	1890	16.2	1.4	< 0.1	< 1	< 0.1	0.032

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
0411		1/6/1993	< 0.01	< 0.01	0.09	< 0.05	4.65	5.38	0.14	0.004	< 0.1	0.129	6.8	5.8	12.6	< 0.2	2.3	6.9
0411		4/6/1993	< 0.01	< 0.01	0.1	< 0.05	5.5	6.41	0.13	< 0.001	< 0.1	0.205	6.7	9.6	16.3	< 0.2	< 1	6.9
0411		7/16/1993	< 0.01	< 0.01	0.12	< 0.05	4.48	8.5	0.14	< 0.001	< 0.1	0.127	4.8	3.5	8.3	< 0.2	1.2	5.2
0411		10/6/1993	< 0.01	< 0.01	0.1	< 0.05	4	8.38	0.13	< 0.001	< 0.1	0.145	3.8	6.3	10.1	< 0.2	2.2	4
0411		1/5/1994	< 0.01	< 0.01	0.08	< 0.05	4.07	6.9	0.08	< 0.001	< 0.1	0.182	6.6	2.8	9.4	< 0.2	2.7	11.8
0411		4/14/1994	< 0.01	< 0.01	0.1	< 0.05	4.07	7.96	0.1	< 0.001	< 0.1	0.187	7.4	7.8	15.2	< 0.2	3.7	19.3
0411		7/21/1994	< 0.01	< 0.01	0.13	< 0.05	4.68	9.23	0.17	< 0.001	< 0.1	0.186	6.7	10.9	17.6	< 0.2	4.4	23.2
0411		7/29/1994	< 0.01	< 0.01	0.08	< 0.05	3.87	8.49	0.13	0.001	< 0.1	0.234	9.4	4.7	14.1	< 0.2	1.2	16.6
0411		10/5/1994	< 0.01	< 0.01	0.08	< 0.05	4.42	6.59	0.13	0.004	< 0.1	0.156	6.7	13.1	19.8	< 0.2	< 1	26.5
0411		10/6/1994	< 0.01	< 0.01	0.09	< 0.05	3.64	8.87	0.11	0.006	< 0.1	0.258	4.8	22.3	27.1	< 0.2	< 1	38.4
0411		1/10/1995	< 0.01	< 0.01	0.13	< 0.05	3.68	11.5	0.12	< 0.001	< 0.1	0.246	9.7	5.6	15.3	< 0.2	2.8	18.3
0411		4/11/1995	< 0.01	< 0.01	0.08	< 0.05	4.38	8.74	0.08	< 0.001	< 0.1	0.238	6.4	6.6	13	< 0.2	< 1	16.3
0411		7/11/1995	< 0.01	< 0.01	0.086	< 0.05	3.48	9.6	0.08	< 0.001	< 0.1	0.215	5.1	2.5	7.6	< 0.2	< 1	10.7
0411		10/3/1995	< 0.01	< 0.01	0.09	< 0.05	< 0.01	9.91	< 0.05	0.002	< 0.1	0.2669	8.4	< 1	8.4	< 0.2	1.5	14.7
0411		1/4/1996	< 0.01	< 0.01	0.09	< 0.05	3.18	10.6	0.07	< 0.001	< 0.1	0.287	5	4.6	9.6	< 0.2	2.6	5.7
0411		4/2/1996	< 0.01	< 0.01	0.08	< 0.05	3.8	8.8	0.07	< 0.001	< 0.1	0.306	4.5	3.1	7.6	< 0.2	< 1	4.8
0411		7/17/1996	< 0.01	< 0.01	0.09	< 0.05	3.39	10	0.06	< 0.001	< 0.1	0.281	5	4.7	9.7	< 0.2	< 1	8.2
0411		10/8/1996	< 0.01	< 0.01	0.07	< 0.05	3.38	9.97	0.06	< 0.001	< 0.1	0.164	3.5	7.8	11.3	< 0.2	< 1	2.4
0411		1/28/1997	< 0.01	< 0.01	0.06	< 0.05	3.11	10.7	< 0.05	0.002	< 0.1	0.145	3.6	< 1	3.6	0.5	< 1	4.5
0411		4/15/1997	< 0.01	< 0.01	0.06	< 0.05	3.04	10.5	< 0.05	< 0.001	< 0.1	0.235	4.7	2.5	7.2	< 0.2	< 1	5.8
0411		7/15/1997	< 0.01	< 0.01	0.08	< 0.05	2.7	9.8	0.05	0.002	< 0.1	0.212	4.5	2.2	6.7	< 0.2	< 1	3.9
0411		10/15/1997	< 0.01	< 0.01	0.1	0.05	2.96	9.85	0.06	0.002	< 0.1	0.25	2.9	6.4	9.3	< 0.2	< 1	4.2
0411		1/20/1998	< 0.01	< 0.005	0.1	< 0.05	3.33	11.1	0.05	< 0.001	< 0.1	0.244	4.4	3.5	7.9	< 0.2	< 1	3.1
0420		7/23/1989	< 0.05	< 0.01	< 0.01	< 0.05	1.4	9.1	< 0.05	0.001	< 0.1	0.0293	4.1	5	9.1	< 0.2	1.6	6.8
0420		10/11/1989	< 0.05	< 0.01	< 0.01	< 0.05	1.6	8.1	< 0.05	0.002	< 0.1	0.022	2.9	4.9	7.8	< 0.2	1.9	3.5
0420		1/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	2.2	6	< 0.05	< 0.001	< 0.1	0.007	6.6	4	10.6	< 0.2	3.3	6.8
0420		4/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	3	4.8	< 0.05	< 0.001	< 0.1	0.004	3.1	3.7	6.8	< 0.2	1.9	3.6
0420		7/2/1990	< 0.05	< 0.01	0.02	< 0.05	2.57	6	< 0.05	< 0.001	< 0.1	0.0087	2.8	2.5	5.3	< 0.2	1.5	3
0420		10/2/1990	< 0.05	< 0.01	< 0.01	< 0.05	3.39	4.2	< 0.05	< 0.001	< 0.1	0.003	5.3	< 1	5.3	< 0.2	< 1	5
0420		1/3/1991	< 0.01	0.01	< 0.01	< 0.05	2.16	4.9	< 0.05	< 0.001	< 0.1	0.0162	2.7	2.3	5	< 0.2	< 1	3
0420		4/10/1991	< 0.01	< 0.01	0.01	< 0.05	2.51	5.34	< 0.05	< 0.001	< 0.1	0.0127	3.4	4.7	8.1	< 0.2	1.1	3
0420		7/16/1991	< 0.01	< 0.01	< 0.01	< 0.05	3.25	3.54	< 0.05	< 0.001	< 0.1	0.003	4.8	3.6	8.4	< 0.2	2.2	5
0420		10/14/1991	< 0.01	< 0.01	< 0.01	< 0.05	4.05	2.42	< 0.05	< 0.001	< 0.1	0.072	6	< 1	6	< 0.2	< 1	6
0420		1/14/1992	< 0.01	< 0.01	< 0.01	< 0.05	3.42	2.45	< 0.05	< 0.001	< 0.1	0.007	2.2	2.8	5	0.8	1.3	2
0420		4/7/1992	< 0.01	< 0.01	< 0.01	< 0.05	4.98	1.76	< 0.05	< 0.001	< 0.1	0.026	2.7	9.7	12.4	< 0.2	< 1	2.7

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0420		7/7/1992	6,862.80	5.70	7.71	3097	494	202	98.9	8.6	244	1750	18.3	1.78	0.2	< 1	0.13	0.036
0420		10/6/1992	6,861.90	6.00	6.83	3098	537	180	100	7.8	114	1991	23.2	1.2	< 0.1	< 1	0.3	0.111
0420		1/6/1993	6,864.30	5.90	6.58	2512	455	152	86	6.7	119	1675	19.3	1.29	< 0.1	< 1	< 0.1	0.104
0420		4/6/1993	6,864.60	6.10	6.83	2505	413	118	111	5.4	222	1658	24.4	0.42	1.9	< 1	< 0.1	0.044
0420		7/13/1993	6,859.60	6.00	6.26	2704	435	169	100	7.2	143	1818	21.1	0.83	0.7	< 1	< 0.1	0.1
0420		10/6/1993	6,858.40	6.00	5.81	2947	497	165	95.4	6.6	84.5	2062	20.6	0.87	0.8	< 1	0.1	0.064
0420		1/5/1994	6,859.80	6.20	6.45	2915	475	145	97.7	6.3	181	1855	21.1	0.66	2.58	< 1	0.11	0.061
0420		4/13/1994	6,859.70	6.20	6.22	2930	504	167	92.6	6.5	91.2	2024	22.6	1.66	0.76	< 1	< 0.1	0.02
0420		7/20/1994	6,857.10	6.10	6.28	3540	602	192	102	7.2	89.3	2338	22.6	1.28	< 0.1	< 1	0.1	0.012
0420		10/4/1994	6,857.40	6.00	7.18	3297	593	186	111	7.6	133	2245	25.3	1.19	2.26	< 1	< 0.1	0.006
0420		1/4/1995	6,856.90	6.00	6.70	3434	593	188	105	7.6	116	2204	25.3	1.48	1.13	< 1	< 0.1	< 0.001
0420		4/4/1995	6,856.50	6.10	6.36	3395	579	179	107	7.1	145	2237	31	1.09	2.09	< 1	< 0.1	0.007
0420		7/7/1995	6,855.10	6.20	7.57	3074	530	135	108	6.5	207	1882	25.7	0.46	6.35	< 1	< 0.1	0.002
0420		10/3/1995	6,854.30	6.40	7.61	3117	544	142	118	6.5	305	1821	28	0.24	7.17	< 1	< 0.1	0.005
0420		1/3/1996	6,853.70	6.70	7.14	3084	545	162	115	6.1	322	1856	26.4	< 0.05	8.66	< 1	< 0.1	0.001
0420		4/2/1996	6,852.90	6.90	7.85	3165	588	140	122	6.2	344	1890	30.2	0.1	18.4	< 1	< 0.1	0.003
0420		7/7/1996	6,852.20	6.70	7.40	3225	586	134	127	6.6	332	1816	30.2	0.24	16.7	< 1	< 0.1	< 0.001
0420		10/1/1996	6,851.60	6.50	6.97	3250	614	146	131	6.6	339	1821	30.4	< 0.05	22.8	< 1	< 0.1	< 0.001
0420		1/21/1997	6,851.80	5.90	7.83	3120	620	150	123	6.3	377	1926	36.2	0.07	24.3	< 1	< 0.1	< 0.001
0420		4/8/1997	6,851.50	6.80	7.96	3250	659	159	126	6.3	359	1944	34.6	0.06	23.8	< 1	< 0.1	< 0.001
0420		7/8/1997	6,850.60	7.30	7.92	3360	614	165	136	6.5	364	1940	36	0.06	25.6	< 1	< 0.1	< 0.001
0420		10/7/1997	6,850.00	6.60	7.78	3450	683	149	131	6.2	388	1900	38.8	0.06	31.5	< 1	< 0.1	< 0.001
0420		1/16/1998	6,850.00	7.00	7.83	3500	664	141	142	6.6	388	2000	39.2	0.32	43.5	< 1	< 0.1	< 0.001
0420		4/7/1998	6,849.60	6.50	7.45	3510	659	149	135	6	340	1800	34.9	0.08	36.5	< 1	< 0.1	< 0.001
0420		7/7/1998	6,850.20	6.90	7.58	3420	660	149	144	6.1	415	1900	35.5	0.16	34.7	< 1	< 0.1	< 0.001
0420		10/6/1998	6,849.10	6.78	7.88	3530	657	123	148	6.9	415	2000	36.3	1.77	37.3	< 1	< 0.1	< 0.001
0420		1/5/1999	6,848.40	6.80	7.82	3600	672	123	136	5.5	422	1830	34.1	< 0.05	32.2	< 1	< 0.1	< 0.001
0420		4/6/1999	6,848.10	6.50	7.96	3640	672	144	137	6.4	388	1870	39.5	0.11	28.5	< 1	< 0.1	< 0.001
0420		7/13/1999	6,847.68	6.40	8.07	3560	708	111	123	7	411	1840	34.6	0.09	39.8	< 1	< 0.1	< 0.001
0420		10/5/1999	6,847.20	6.72	7.63	3630	731	130	146	6.1	392	2100	38.9	0.07	47.7	< 1	< 0.1	< 0.001
0420		1/4/2000	6,846.20	6.60	7.97	3550	676	157	126	7	414	1870	34.6	< 0.05	50.7	< 1	< 0.1	< 0.001
0420		5/1/2000	6,847.30	6.70	7.69	3500	616	139	127	6.5	452	1840	33.5	0.19	31.3	< 1	0.2	0.008
0420		7/10/2000	6,847.30	7.35	7.47	3500	664	151	141	5.86	456	1740	35	< 0.05	33.2	< 1	< 0.1	< 0.001
0420		10/2/2000	6,848.20	7.03	7.24	3350	661	147	138	6.97	467	1750	38.6	0.07	18.7	< 1	< 0.1	0.007
0420		1/15/2001	6,848.75	6.61	7.23	3200	617	123	119	6.9	474	1920	42	< 0.05	12.7	< 1	< 0.1	0.023

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
0420		7/7/1992	< 0.01	< 0.01	< 0.01	< 0.05	4.25	2.35	< 0.05	0.001	< 0.1	0.02	3.7	4.8	8.5	< 0.2	< 1	3.9
0420		10/6/1992	< 0.01	< 0.01	< 0.01	< 0.05	4.25	1.6	< 0.05	0.002	< 0.1	< 0.0003	4.1	11.4	15.5	< 0.2	< 1	4.7
0420		1/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	4.17	1.38	< 0.05	0.004	< 0.1	0.027	10.7	< 1	10.7	< 0.2	< 1	10.9
0420		4/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	2.52	2.3	< 0.05	0.001	< 0.1	0.024	2.6	2.2	4.8	< 0.2	< 1	2.9
0420		7/13/1993	< 0.01	< 0.01	0.02	< 0.05	4.03	1.81	< 0.05	< 0.001	< 0.1	0.003	3.8	8.4	12.2	< 0.2	3	5.7
0420		10/6/1993	< 0.01	< 0.01	0.02	< 0.05	3.94	1.88	0.07	< 0.001	< 0.1	0.005	5.9	3.8	9.7	< 0.2	1.2	6
0420		1/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	3.06	1.44	< 0.05	< 0.001	< 0.1	0.008	4.1	1.9	6	< 0.2	1.4	7.9
0420		4/13/1994	< 0.01	< 0.01	< 0.01	< 0.05	4.07	1.17	< 0.05	< 0.001	< 0.1	0.002	5	6.8	11.8	< 0.2	< 1	15.4
0420		7/20/1994	< 0.01	< 0.01	0.01	< 0.05	5	1.03	< 0.05	< 0.001	< 0.1	0.006	10.7	8.7	19.4	< 0.2	< 1	23.9
0420		10/4/1994	< 0.01	< 0.01	< 0.01	< 0.05	5.56	1.2	< 0.05	< 0.001	< 0.1	0.011	6	1.4	7.4	< 0.2	< 1	8.3
0420		1/4/1995	< 0.01	< 0.01	< 0.01	< 0.05	3.42	1.43	< 0.05	< 0.001	< 0.1	0.004	5.4	2.7	8.1	< 0.2	< 1	9.6
0420		4/4/1995	< 0.01	< 0.01	0.02	< 0.05	3.45	1.21	< 0.05	< 0.001	< 0.1	0.008	4.7	4.8	9.5	< 0.2	< 1	12.1
0420		7/7/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.14	< 0.1	< 0.05	< 0.001	< 0.1	0.0205	3.4	5.5	8.9	< 0.2	< 1	7.5
0420		10/3/1995	< 0.01	< 0.01	< 0.01	< 0.05	2.08	0.76	< 0.05	< 0.001	< 0.1	0.0363	3.8	4.1	7.9	0.6	< 1	5.7
0420		1/3/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.88	0.64	< 0.05	< 0.001	< 0.1	0.0392	2.7	< 1	2.7	0.8	1.6	3.7
0420		4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.9	0.54	< 0.05	< 0.001	< 0.1	0.1	2.2	2.5	4.7	< 0.2	< 1	3.2
0420		7/7/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.98	0.59	< 0.05	< 0.001	< 0.1	0.051	2.9	7.3	10.2	< 0.2	3.1	2.1
0420		10/1/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.9	0.61	< 0.05	0.003	< 0.1	0.044	2.1	< 1	2.1	< 0.2	< 1	2.1
0420		1/21/1997	< 0.01	< 0.01	< 0.01	< 0.05	2.1	0.59	< 0.05	< 0.001	< 0.1	0.043	2.2	< 1	2.2	< 0.2	< 1	1.6
0420		4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	2.03	0.52	< 0.05	0.007	< 0.1	0.05	3.9	3	6.9	< 0.2	< 1	6
0420		7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.97	0.73	< 0.05	< 0.001	< 0.1	0.053	2.8	< 1	2.8	< 0.2	< 1	2.5
0420		10/7/1997	< 0.01	< 0.01	< 0.01	< 0.05	2.3	0.54	< 0.05	< 0.001	< 0.1	0.049	3.3	1.9	5.2	< 0.2	< 1	1.9
0420		1/16/1998	< 0.01	< 0.01	< 0.01	< 0.05	2.6	0.56	< 0.05	< 0.001	< 0.1	0.0515	2.4	< 1	2.4	< 0.2	< 1	3.6
0420		4/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.94	0.4	< 0.05	< 0.001	< 0.1	0.0495	3.5	< 1	3.5	< 0.2	< 1	4
0420		7/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.98	0.4	< 0.05	0.001	< 0.1	0.0567	2.2	< 1	2.2	< 0.2	< 1	3.7
0420		10/6/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.89	0.42	< 0.05	< 0.001	< 0.1	0.0674	4.8	< 1	4.8	< 0.2	< 1	3.2
0420		1/5/1999	< 0.01	0.007	< 0.01	< 0.05	1.97	0.37	< 0.05	< 0.001	< 0.1	0.054	3.5	1.5	5	< 0.2	4.7	4.7
0420		4/6/1999	< 0.01	< 0.005	< 0.01	< 0.05	2.01	0.56	< 0.05	< 0.001	< 0.1	0.0556	3.2	2.1	5.3	0.8	< 1	4.7
0420		7/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	1.98	0.37	< 0.05	< 0.001	< 0.1	0.0578	2.2	2	4.2	< 0.2	< 1	2.7
0420		10/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	2.23	0.34	< 0.05	< 0.001	< 0.1	0.054	2.4	4.4	6.8	< 0.2	< 1	1.9
0420		1/4/2000	< 0.01	< 0.005	< 0.01	< 0.05	2.01	0.36	< 0.05	0.001	< 0.1	0.0511	2.4	< 1	2.4	< 0.2	< 1	3.1
0420		5/1/2000	< 0.01	0.051	< 0.01	< 0.05	2.14	0.2	0.08	< 0.001	< 0.1	0.05	3.2	4.8	8	1	6.8	3.3
0420		7/10/2000	< 0.01	< 0.005	< 0.01	< 0.05	2.03	0.21	< 0.05	< 0.001	< 0.1	0.0436	2.8	4.2	7	< 0.2	< 1	2.8
0420		10/2/2000	< 0.01	< 0.005	< 0.01	< 0.05	2.25	0.15	< 0.05	< 0.001	< 0.1	0.0392	2.9	2.2	5.1	< 0.2	< 1	3.6
0420		1/15/2001	0.15	< 0.005	< 0.01	< 0.05	2.08	0.24	< 0.05	0.001	< 0.1	0.043	2.7	4	6.7	< 0.2	< 1	3.2

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0420		4/2/2001	6,848.70	6.59	7.39	3290	695	139	126	5.7	467	1800	39.7	0.1	12.5	< 1	< 0.1	0.006
0420		7/16/2001	6,848.50	6.20	7.55	3330	592	126	162	11.4	474	1580	54.1	0.18	13.6	< 1	< 0.1	0.06
0420		10/8/2001	6,848.50	6.45	7.20	3360	600	130	115	6.3	516	1680	53.1	0.09	14	< 1	< 0.1	0.008
0420		1/17/2002	6,849.45	6.20	7.20	3360	661	140	113	8	508	1700	62	0.07	13.3	< 1	0.13	0.003
0420		4/8/2002	6,848.22	6.53	7.20	3410	644	140	130	6.9	565	1750	56.8	0.12	13.3	< 1	< 0.1	0.003
0420		7/15/2002	6,848.10	6.36	7.51	3480	642	161	118	6.1	515	2015	39.1	0.19	14.6	< 1	< 0.1	0.001
0420		10/14/2002	6,847.60	5.88	7.65	3080	680	151	123	6	569	1870	52.4	0.26	11.4	< 1	< 0.1	0.002
0420		1/13/2003	6,847.13	7.22	7.22	3410	671	146	124	6.3	562	1700	44.8	0.27	14.4	< 1	< 0.1	0.003
0420		4/15/2003	6,847.25	6.44	7.41	3440	657	152	144	8.6	566	1790	63.6	0.28	13.7	< 1	< 0.1	0.002
0420		7/14/2003	6,846.66	6.35	7.64	3490	653	140	133	7.1	556	1630	57.7	0.3	13.4	< 1	< 0.1	0.002
0420		10/13/2003	6,846.74	6.38	7.39	3440	712	158	138	6.8	576	1880	62.9	0.23	13	< 1	0.4	0.002
0420		1/12/2004	6,845.82	6.64	7.42	3460	740	164	141	7.4	614	1880	64.4	0.27	13.9 D	< 1.0	< 0.1	0.005
0420		4/12/2004	6,845.52	6.33	6.92	3480	662	147	129	8	537	1840	73.7	0.26	11.4 D	< 1	< 0.1	0.002
0420		7/19/2004	6,845.11	6.51	6.74	3420	746 D	156 D	154	6.8	684	1820 D	67	0.24	12.6 D	< 1.0	< 0.1	0.002
0420		10/11/2004	6,844.85	6.62	7.09	3520	646 D	144 D	146	7.2	579	1650 D	69	0.17	13.6 D	< 1.0	< 0.1	0.003
0420		1/10/2005	6,844.33	6.48	7.02	3550	732 D	156 D	143	7	610	1800 D	84	0.12	14.8 D	< 1.0	< 0.1	0.003
0420		4/11/2005	6,843.48	6.65	7.06	3410	724	157	160	7	551	1860	72	0.09	15.4	< 1.0	< 0.1	0.002
0420		7/18/2005	6,842.76	6.18	7.15	3600	707 D	137	153 D	4.2 D	564	1730	71	0.19	16.4 D	< 1.0	< 0.1	0.002
0420		10/10/2005	6,842.13	6.65	7.22	3510	713 D	147	154	6.9	586	1780 D	73	0.2	15.1 D	< 1.0	< 0.1	0.006
0420		1/16/2006	6,841.56	6.63	7.36	3480	689 D	127	142	7	537	1770 D	68	0.12	13.2 D	< 1.0	< 0.1	0.003
0420		4/10/2006	6,841.11	6.54	7.25	3330	773 D	164 D	141	7.1	781	1890 D	84	0.12	13.8 D	< 1.0	< 0.1	0.003
0420		7/24/2006	6,840.48	6.42	6.87	3340	673	150 D	157	7.1	476	1800 D	67	0.14	14.5 D	< 1.0	< 0.1	0.005
0420		10/9/2006	6,840.03	6.60	6.90	3350	676	155 D	150	6.9	550	1800 D	63	0.15	14.8 D	< 0.5	< 0.1	< 0.001
0420		1/16/2007	6,840.28	6.94	6.69	3400	687 D	153 D	145	6.8	518	1780 D	70	0.06	15.6 D	<0.5	<0.1	0.006
0420		4/17/2007	6,838.60	6.98	7.06	3540	601 D	161 D	140	6.8	237	1900 D	75	<0.05	14.6 D	<0.5	<0.1	0.003
0420		7/17/2007	6,837.18	6.53	7.59	3160	596 D	156 D	150	6.7	749	1870 D	66	0.13	20 D	<0.5	<0.1	0.03
0420		10/9/2007	6,837.33	7.11	7.13	3340	649 D	137 D	125	6.1	476	1860 D	43	<0.05	2.8	<0.5	<0.1	0.005
0420		1/22/2008	6,836.90	6.69	7.12	3320	654 D	131	137	7.3	455	1890 D	50	0.08	0.5	< 0.5	< 0.1	0.037
0420		4/15/2008	6,836.58	6.69	7.10	3240	694	138	139 D	6.5	436	2110 D	39	0.05	< 0.1	< 0.50	0.1	0.006
0420		7/15/2008	6,836.03	6.64	6.91	3350	619	128	129 D	6	451	1980 D	39	< 0.05	< 0.1	< 0.5	< 0.1	0.004
0420		10/14/2008	6,835.49	6.49	6.78	3390	630	130	132 D	6	468	2120 D	37	< 0.4	< 0.1	< 0.5	1.3	0.008
0420		1/20/2009	6,835.03	6.59	7.1	3450	664	143	145	7	458	1860 D	39	<0.05	<0.1	<0.5	0.8	0.005
0420		4/14/2009	6,834.98	6.46	6.68	3330	603	131	138	6	464	2020 D	41	0.05	<0.1	<0.50	0.3 D	0.007
0420		7/14/2009	6,834.38	6.45	7.25	3390	640	133	136	7	451	2060 D	43	<0.05	<0.1	<0.50	0.2	<0.001
0420		10/13/2009	6,834.08	6.48	7.69	3390 H	654	137	136	7	467	2030 D	46	0.10	<0.1	<0.50	<0.1	<0.001

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
0420		4/2/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.28	0.2	< 0.05	0.001	< 0.1	0.05	2.5	< 1	2.5	< 0.2	< 1	3
0420		7/16/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.07	0.4	< 0.05	0.002	< 0.1	0.054	3.6	3.7	7.3	< 0.2	< 1	4.6
0420		10/8/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.69	0.11	< 0.05	< 0.001	< 0.1	0.0546	2.5	2.1	4.6	< 0.2	< 1	3.4
0420		1/17/2002	< 0.01	< 0.005	0.01	< 0.05	2.04	0.16	0.06	< 0.001	< 0.1	0.0534	2.9	2.8	5.7	< 0.2	< 1	2.1
0420		4/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	2.22	0.2	< 0.05	< 0.001	< 0.1	0.0671	3.5	3.3	6.8	< 0.2	< 1	4.5
0420		7/15/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.87	0.2	< 0.05	< 0.001	< 0.1	0.0728	3.1	3	6.1	< 0.2	< 1	2.7
0420		10/14/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.85	0.1	< 0.05	< 0.001	< 0.1	0.0779	2.4	< 1	2.4	< 0.2	< 1	2.4
0420		1/13/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.97	0.2	< 0.05	< 0.001	< 0.1	0.0903	3.1	7.8	10.9	< 0.2	< 1	3.5
0420		4/15/2003	< 0.01	< 0.005	< 0.01	< 0.05	2.26	0.2	< 0.05	< 0.001	< 0.1	0.0882	3.4	5.3	8.7	< 0.2	< 1	4
0420		7/14/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.9	0.2	< 0.05	< 0.001	< 0.1	0.0839	2.9	< 1	2.9	< 0.2	< 1	2.9
0420		10/13/2003	< 0.01	< 0.005	< 0.01	< 0.05	2	0.2	< 0.05	< 0.001	< 0.1	0.105	2.5	< 1	2.5	< 0.2	< 1	4.5
0420		1/12/2004	< 0.01	< 0.005	< 0.01	< 0.05	2.08	0.2	< 0.05	< 0.001	< 0.1	0.122 D	2.9	< 1.0	2.9	< 0.2	< 1.0	3.6
0420		4/12/2004	< 0.01	< 0.005	< 0.01	< 0.05	2.03	0.2	< 0.05	< 0.001	< 0.1	0.105 D	2.3	< 1	2.3	< 0.2	< 1	3.1
0420		7/19/2004	< 0.01	< 0.005	< 0.01	< 0.05	1.96	0.2	< 0.05	< 0.001	< 0.1	0.109 D	2.8	1.9	4.7	< 0.2	< 1.0	4.6
0420		10/11/2004	< 0.01	< 0.005	< 0.01	< 0.05	1.95	0.1	< 0.05	< 0.001	< 0.1	0.101	2.4	2.5	4.9	< 0.2	< 1.0	3
0420		1/10/2005	< 0.01	< 0.005	< 0.01	< 0.05	1.96	< 0.1	< 0.05	< 0.001	< 0.1	0.127	2.2	3.6	5.8	< 0.2	< 1.0	3.9
0420		4/11/2005	< 0.01	< 0.005	< 0.01	< 0.05	2.15	0.1	< 0.05	< 0.001	< 0.1	0.122	3.2	1.9	5.1	< 0.2	< 1.0	2.1
0420		7/18/2005	< 0.01	< 0.005	< 0.01	< 0.05	2.16	0.1	< 0.05	< 0.001	< 0.1	0.126	2.3	3	5.3	< 0.2	< 1.0	3
0420		10/10/2005	< 0.01	< 0.005	< 0.01	< 0.05	2.37	0.1	< 0.05	< 0.001	< 0.1	0.113	3.8	2.4	6.2	< 0.2	< 1.0	5.2
0420		1/16/2006	< 0.01	< 0.005	< 0.01	< 0.05	2.19	0.1	< 0.05	< 0.001	< 0.1	0.121	2.6	3.2	5.8	< 0.2	< 1.0	4.2
0420		4/10/2006	< 0.01	< 0.005	< 0.01	< 0.05	2.11	0.1	< 0.05	< 0.001	< 0.1	0.136	1.8	3.4	5.2	< 0.2	< 1.0	2.6
0420		7/24/2006	< 0.01	< 0.005	< 0.01	< 0.05	2.09	0.2	< 0.05	< 0.001	< 0.1	0.125	2.4	2.1	4.5	< 0.2	< 1.0	3.8
0420		10/9/2006	< 0.01	< 0.005	< 0.01	< 0.05	1.92	0.1	< 0.05	< 0.001	< 0.1	0.131	2.6	1.8	4.4	< 0.2	< 1	1.7
0420		1/16/2007	<0.01	<0.005	<0.01	<0.05	1.93	0.2	<0.05	<0.001	<0.1	0.15	2.9	<1	2.9	<0.2	<1	3.2
0420		4/17/2007	<0.01	<0.005	<0.01	<0.05	0.27	0.1	<0.05	<0.001	<0.1	0.138	2.2	2.4	4.6	<0.2	<1	2.3
0420		7/17/2007	<0.01	<0.005	<0.01	<0.05	1.01	0.2	<0.05	<0.001	<0.1	0.133	2.3	4.5	6.8	<0.2	<1	2.3
0420		10/9/2007	<0.01	<0.005	<0.01	<0.05	2.05	0.1	<0.05	<0.001	<0.1	0.269	1.7	3.5	5.2	<0.2	<1	3.1
0420		1/22/2008	< 0.01	< 0.005	0.01	< 0.05	1.83	0.3	< 0.05	< 0.001	< 0.1	0.303	4.2	2.8	7	< 0.2	3.7	4.4
0420		4/15/2008	< 0.01	< 0.005	0.01	< 0.05	1.84	0.4	< 0.05	< 0.001	< 0.1	0.282	2	4.4	6.4	0.1 U	-4.9 U	4
0420		7/15/2008	< 0.01	< 0.005	0.01	< 0.05	1.84	0.3	< 0.05	< 0.001	< 0.1	0.27	4.5	4.6	9.1	-0.2 U	4.8 U	3.8
0420		10/14/2008	< 0.01	< 0.005	0.02	< 0.05	2.16	0.9	< 0.05	0.001	< 0.1	0.294	4	3.4	7.4	0.1 U	1.3 U	5.6
0420		1/20/2009	<0.01	<0.005	0.02	<0.05	2.08	0.5	<0.05	0.002	<0.1	0.276	3.1	4.9	8	0.1 U	0.3 U	3.9
0420		4/14/2009	<0.01	<0.005	0.02	<0.05	2.00 D	0.5	<0.05	<0.001	<0.1	0.296	2.1	3.8	5.9	0.001 U	0.0 U	5.7
0420		7/14/2009	<0.01	<0.005	0.02	<0.05	2.16	0.4	<0.05	<0.001	<0.1	0.284	2.4	3.7	6.1	0.05 U	-0.2 U	4.4
0420		10/13/2009	<0.01	<0.005	0.02	<0.05	2.00	0.3	<0.05	<0.001	<0.1	0.298	3.3	5.0	8.3	0.05 U	1.3 U	4.1

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0501 B		7/20/1989	6,889.00	3.10	3.13	5722	443	492	106	17.5	0	4074	24.2	1.36	0.21	< 1	100	0.244
0501 B		10/8/1989	6,887.90	3.20	3.29	5594	454	540	110	20.2	0	3758	36.2	1.06	0.2	< 1	70	0.046
0501 B		1/10/1990	6,885.30	3.70	2.98	5622	449	529	115	14.9	< 1	3570	26.6	1.01	0.42	< 1	29	0.03
0501 B		4/10/1990	6,884.60	4.40	2.86	5716	447	576	110	14.3	< 1	3592	30	1.02	0.23	< 1	22	0.026
0501 B		7/10/1990	6,883.30	4.50	3.01	5738	511	578	111	15.5	< 1	3756	25.6	0.48	0.26	< 1	22.9	0.014
0501 B		10/9/1990	6,882.30	4.20	4.25	5845	403	511	120	16.7	< 1	3678	57.3	0.39	0.05	< 1	25.8	0.029
0501 B		1/11/1991	6,881.40	3.80	3.45	5791	484	592	105	16	< 1	3862	28.2	0.84	< 0.01	< 1	24.7	0.02
0501 B		4/10/1991	6,880.70	3.60	3.62	5924	483	591	89.1	18.2	< 1	3834	27.1	0.99	< 0.01	< 1	25.62	0.03
0501 B		7/9/1991	6,879.90	3.70	3.43	6105	412	512	94.7	15.4	< 1	3937	28.7	1.27	< 0.01	< 1	40.84	0.016
0501 B		10/17/1991	6,879.40	3.60	3.81	6099	476	483	117	17.9	< 1	3822	37.9	1.3	< 0.01	< 1	52	0.022
0501 B		1/21/1992	6,878.80	3.40	4.02	6099	420	555	101	15.7	< 1	4151	24.5	< 0.05	< 0.01	< 1	53.2	0.073
0501 B		4/14/1992	6,878.40	3.30	3.62	6113	417	472	100	17.8	< 1	3824	28	1.17	< 0.1	< 1	37.1	0.021
0501 B		7/14/1992	6,877.90	3.20	2.99	6203	362	539	129	21.4	< 1	4209	28.6	0.52	< 0.1	< 1	35.6	0.013
0501 B		10/13/1992	6,877.50	3.60	3.33	5832	455	563	113	19.4	< 1	3601	27.9	0.97	< 0.1	< 1	36.1	0.025
0501 B		1/21/1993	6,877.10	3.50	3.11	6118	408	544	101	16.5	< 1	4100	21.4	0.98	< 0.1	< 1	39.2	0.021
0501 B		4/14/1993	6,876.90	3.40	3.01	5140	439	532	108	13.7	< 1	3936	29.7	0.99	< 0.1	< 1	42	0.04
0501 B		7/15/1993	6,876.20	3.50	3.02	4976	492	544	105	15.8	< 1	3778	28	0.85	< 0.1	< 1	40.4	0.018
0502 B		7/23/1989	6,892.40	5.30	5.64	5131	559	501	186	13.7	63	3298	51	2.94	30	< 1	2.2	0.001
0502 B		10/11/1989	6,888.10	5.10	5.66	5192	513	483	184	18.7	50.8	3563	55.3	1.26	38	< 1	2.2	0.009
0502 B		1/3/1990	6,885.70	4.90	5.38	5364	501	495	184	16.1	33.9	3347	52	2.8	39	< 1	16	0.009
0502 B		4/3/1990	6,883.90	4.70	5.28	5400	491	500	180	15.5	28.7	3296	55.8	2.17	39	< 1	8.5	0.012
0502 B		7/2/1990	6,882.70	4.40	4.53	5536	575	542	162	15.9	1.4	3487	54.5	2.38	31.6	< 1	22.7	0.027
0502 B		10/2/1990	6,881.40	4.70	5.22	5143	435	453	159	15.4	12.2	3377	51.4	0.8	10.5	< 1	2.4	0.014
0502 B		1/4/1991	6,880.60	4.80	4.50	5193	457	469	165	23.7	< 1	3214	53	3.54	12.4	< 1	22.4	0.024
0502 B		4/9/1991	6,880.00	4.40	4.57	5227	527	508	158	20	5	3410	36.3	4	14	< 1	15.7	0.003
0502 B		7/16/1991	6,879.20	4.30	4.72	5129	520	526	138	25.8	5	3760	54.4	5.63	12.6	< 1	1	0.009
0502 B		10/14/1991	6,878.10	4.10	3.88	5164	384	349	139	20.7	< 1	3233	61.3	6.8	10.2	< 1	54.2	0.004
0502 B		1/14/1992	6,876.70	3.70	4.03	4850	420	382	110	15.3	< 1	3470	114	6.3	2.4	< 1	74.7	0.023
0502 B		4/7/1992	6,875.70	3.70	3.44	5134	439	388	111	16.6	< 1	3407	41.7	12.2	< 0.1	< 1	89.5	0.04
0502 B		7/7/1992	6,874.50	3.60	3.67	5229	513	461	97.3	16.4	< 1	3424	20.4	9.1	< 0.1	< 1	92.2	0.068
0502 B		10/6/1992	6,873.10	3.80	3.18	5350	488	440	101	16.8	< 1	3695	24.4	6.3	0.24	< 1	68.7	0.036
0502 B		1/6/1993	6,870.10	3.70	3.41	4292	421	394	92	20.3	< 1	3594	16.8	6.7	< 0.1	< 1	96.9	0.036
0502 B		4/6/1993	6,870.20	3.70	3.24	4837	409	367	111	19	< 1	3579	43	7.2	< 0.1	< 1	101	0.696
0502 B		7/13/1993	6,869.30	4.10	4.11	4892	464	456	119	19.9	< 1	3741	51.1	6.97	< 0.1	< 1	87	0.018
0502 B		10/6/1993	6,865.40	4.20	3.94	4832	450	432	121	16.1	< 1	3706	35.9	6.69	0.1	< 1	57.8	0.004

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
0501 B		7/20/1989	0.13	< 0.01	1.1	0.08	12	0.11	1.8	< 0.001	< 0.1	0.61	22.1	11	33.1	5.4	< 1	96.3
0501 B		10/8/1989	0.09	< 0.01	0.83	0.07	11	0.03	1.2	< 0.001	< 0.1	0.469	16.5	5.9	22.4	15	< 1	34.7
0501 B		1/10/1990	< 0.05	< 0.01	0.59	< 0.05	9.8	< 0.1	0.8	< 0.001	< 0.1	0.212	9.2	7.2	16.4	< 0.2	< 1	11.2
0501 B		4/10/1990	< 0.05	< 0.01	0.64	< 0.05	12	< 0.1	0.73	< 0.001	< 0.1	0.125	10.4	6.8	17.2	< 0.2	< 1	10.4
0501 B		7/10/1990	< 0.05	< 0.01	0.41	< 0.05	12.21	< 0.1	0.74	< 0.001	< 0.1	0.161	9.7	6.9	16.6	< 0.2	< 1	10
0501 B		10/9/1990	0.05	< 0.01	0.68	< 0.05	13.5	< 0.1	0.88	< 0.001	< 0.1	0.2099	12.2	10.6	22.8	< 0.2	1.4	14
0501 B		1/11/1991	0.05	< 0.01	0.68	< 0.05	12.4	< 0.1	0.83	< 0.001	< 0.1	0.2768	12.5	13.4	25.9	< 0.2	1.5	13.4
0501 B		4/10/1991	< 0.01	< 0.01	0.6	< 0.05	8.12	< 0.1	0.69	< 0.001	< 0.1	0.3332	14.4	8.1	22.5	2.6	5.9	17.7
0501 B		7/9/1991	0.06	< 0.01	0.7	< 0.05	12.21	< 0.1	0.86	< 0.001	< 0.1	0.4356	8.3	9.9	18.2	< 0.2	< 1	9
0501 B		10/17/1991	0.09	< 0.01	0.8	< 0.05	15.24	< 0.1	1.14	< 0.001	< 0.1	0.5918	10.1	5.4	15.5	< 0.2	2.4	10
0501 B		1/21/1992	< 0.01	0.02	0.86	0.05	13.9	< 0.1	1.15	0.002	< 0.1	0.434	18.4	12.6	31	< 0.2	1.3	19
0501 B		4/14/1992	0.08	< 0.01	0.82	< 0.05	13.9	< 0.1	0.95	< 0.001	< 0.1	0.379	9	13.1	22.1	< 0.2	1.6	9.2
0501 B		7/14/1992	0.063	< 0.01	0.98	< 0.05	13.1	< 0.1	1.07	< 0.001	< 0.1	0.539	10.1	5.5	15.6	< 0.2	< 1	10.2
0501 B		10/13/1992	< 0.01	0.02	0.77	< 0.05	13.6	< 0.1	0.85	< 0.001	< 0.1	0.529	15.8	12.1	27.9	< 0.2	3.3	15.9
0501 B		1/21/1993	< 0.01	< 0.01	0.63	< 0.05	12.5	< 0.1	1.01	< 0.001	< 0.1	0.225	9	4.9	13.9	< 0.2	2.6	9
0501 B		4/14/1993	0.08	< 0.01	0.99	< 0.05	13.6	< 0.1	1.14	< 0.001	< 0.1	0.421	6.5	11.8	18.3	< 0.2	1.7	7.8
0501 B		7/15/1993	0.051	< 0.01	0.71	< 0.05	11.6	< 0.1	0.75	< 0.001	< 0.1	0.18	6.9	5.1	12	< 0.2	< 1	7.5
0502 B		7/23/1989	< 0.05	< 0.01	0.26	< 0.05	6.9	9.3	0.24	0.003	< 0.1	0.0543	9.3	7.9	17.2	< 0.2	2.3	30.5
0502 B		10/11/1989	< 0.05	< 0.01	0.19	< 0.05	5.7	23	0.21	0.01	< 0.1	0.064	3.9	5.9	9.8	18.1	4.1	23
0502 B		1/3/1990	< 0.05	< 0.01	0.21	< 0.05	5.8	22	0.27	0.003	< 0.1	0.113	8.7	4.9	13.6	< 0.2	6.7	9.3
0502 B		4/3/1990	< 0.05	< 0.01	0.27	< 0.05	7	19	0.32	0.004	< 0.1	0.064	8.8	7	15.8	< 0.2	2.8	9.4
0502 B		7/2/1990	< 0.05	< 0.01	0.28	< 0.05	8.9	9.1	0.33	0.003	< 0.1	0.204	14.6	12.8	27.4	< 0.2	7.9	15
0502 B		10/2/1990	< 0.05	< 0.01	0.39	< 0.05	9	5.2	0.38	0.002	< 0.1	0.054	15	1	16	< 0.2	< 1	15
0502 B		1/4/1991	0.03	< 0.01	0.52	< 0.05	11.1	2.1	0.55	0.002	< 0.1	0.208	17.2	12.8	30	< 0.2	< 1	18
0502 B		4/9/1991	< 0.05	< 0.01	0.4	< 0.05	8.51	0.68	0.44	0.001	< 0.1	0.2058	14.8	11.4	26.2	< 0.2	< 1	12
0502 B		7/16/1991	< 0.01	< 0.01	0.59	< 0.05	12.56	0.85	0.66	< 0.001	< 0.1	0.323	12.7	10.8	23.5	< 0.2	2.9	13
0502 B		10/14/1991	0.012	< 0.01	0.68	< 0.05	13.6	1.01	0.78	0.001	< 0.1	0.28	17.5	12.3	29.8	< 0.2	< 1	18
0502 B		1/14/1992	0.13	< 0.01	0.67	< 0.05	14.6	2.41	0.84	0.004	< 0.1	0.344	3	1.5	4.5	< 0.2	< 1	3
0502 B		4/7/1992	0.14	< 0.01	0.71	< 0.05	17.7	2.3	0.74	< 0.001	< 0.1	0.567	12.9	17.8	30.7	< 0.2	2	12.7
0502 B		7/7/1992	0.12	< 0.01	0.75	< 0.05	15.1	1.17	0.72	0.001	< 0.1	0.43	7.8	16.4	24.2	< 0.2	< 1	8.4
0502 B		10/6/1992	0.13	< 0.01	0.79	< 0.05	14.3	1	0.89	0.004	< 0.1	0.552	10	16.5	26.5	< 0.2	< 1	10.4
0502 B		1/6/1993	0.13	0.02	0.77	< 0.05	16	0.6	1.02	< 0.001	< 0.1	0.715	19.7	19	38.7	< 0.2	< 1	19.9
0502 B		4/6/1993	0.14	< 0.01	0.75	< 0.05	15.23	1.15	0.05	0.003	< 0.1	0.812	10.2	24.6	34.8	< 0.2	3.3	11.5
0502 B		7/13/1993	< 0.005	< 0.01	0.97	< 0.05	14.2	0.74	1.09	< 0.001	< 0.1	0.478	7.3	9.7	17	< 0.2	< 1	8.5
0502 B		10/6/1993	0.09	< 0.01	0.74	< 0.05	12.4	0.51	0.93	< 0.001	< 0.1	0.177	8.8	13	21.8	< 0.2	2	9

CHESTER ENGINEERS

TABLE B.1
Zone 3 Data Summary, 1989-2009
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	HCO3	SO4	Chl	NH4 as N	NO3 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
0502 B		1/5/1994	6,867.20	4.10	2.89	5012	475	435	128	14.6	< 1	3674	45	6.63	18.2	< 1	57.1	0.007
0502 B		4/13/1994	6,867.20	4.20	3.45	5054	486	432	127	14.3	< 1	3656	37.4	10.2	< 0.1	< 1	54.5	0.005
0502 B		7/21/1994	6,867.20	4.30	3.59	5603	552	501	116	14.2	< 1	4100	29	6.23	< 0.1	< 1	44.2	0.003
0502 B		10/5/1994	6,867.20	4.30	4.23	5017	470	489	129	14	< 1	3739	29.4	5.86	< 0.1	< 1	26.7	0.004
0502 B		1/5/1995	6,866.50	4.10	4.27	5078	457	488	125	14.4	< 1	3652	33.3	7.9	< 0.1	< 1	32.3	< 0.001
0502 B		4/5/1995	6,866.40	4.20	3.89	5106	484	494	122	13.6	< 1	3860	24.2	6.4	< 0.1	< 1	27.2	0.003
0502 B		7/6/1995	6,866.10	4.40	4.18	5090	455	478	118	13.1	< 1	3615	31	6.46	< 0.1	< 1	16.9	0.005
0502 B		10/4/1995	6,866.10	4.50	4.42	4852	445	470	123	12.8	< 1	3555	29	5.39	0.3	< 1	13.3	0.001
0502 B		1/4/1996	6,866.10	4.20	3.82	5022	470	485	122	13.3	< 1	3710	29.3	3.16	< 0.1	< 1	16.1	0.002
0502 B		4/2/1996	6,865.70	4.80	4.47	5428	478	525	119	13.5	< 1	3810	31.2	3.62	< 0.1	< 1	12.1	0.001
0502 B		7/7/1996	6,865.40	4.50	3.40	5317	460	475	120	14.2	< 1	3550	34	3.83	0.11	< 1	16.9	0.002
0502 B		10/1/1996	6,865.50	4.70	3.72	5570	480	517	123	13.9	< 1	3648	29.3	3.58	< 0.1	< 1	13.6	0.001
0502 B		1/21/1997	6,865.70	4.80	4.01	5570	485	525	116	14	< 1	3755	32.1	4.54	< 0.1	< 1	18.3	0.002
0502 B		4/8/1997	6,864.80	4.70	4.39	5610	506	550	145	13.4	< 1	3960	31.2	3.03	< 0.1	1	9.48	< 0.001
0502 B		7/8/1997	6,864.40	5.70	4.20	5710	516	557	125	14.8	< 1	4000	32.9	3.94	< 0.1	< 1	15.1	< 0.001
0502 B		10/8/1997	6,865.00	4.30	3.75	5700	492	523	110	13.1	< 0.1	3590	34	4.01	< 0.1	< 1	7.71	0.008
0502 B		1/16/1998	6,864.20	4.80	4.62	5720	479	522	118	14.3	2.1	3700	33.5	5.14	< 0.1	< 1	11.8	0.003
0502 B		4/7/1998	6,864.30	4.30	3.99	5730	485	536	113	13	0.1	3570	28.6	3.27	< 0.1	< 1	8.5	< 0.001
0502 B		7/7/1998	6,864.90	4.60	4.11	5570	480	536	115	13.6	< 0.1	3500	29.7	3.85	< 0.1	< 1	8.32	< 0.001
0502 B		10/6/1998	6,865.10	4.46	4.54	5840	500	559	120	14.7	< 0.1	3720	28.3	0.9	< 0.1	< 1	6.74	0.005
0502 B		1/6/1999	6,863.90	4.20	4.53	5870	483	568	124	12.7	< 0.1	4000	29.6	3.72	< 0.1	< 1	8.16	< 0.001
0502 B		4/6/1999	6,864.00	4.50	4.79	5880	472	545	108	13.2	4	3730	34.7	3.54	< 0.1	< 1	6.86	< 0.001
0502 B		7/13/1999	6,863.30	4.70	3.90	5820	487	580	100	14.2	< 0.1	3800	24.9	3.25	< 0.1	< 1	6.14	< 0.001
0502 B		10/5/1999	6,863.70	4.25	3.78	5830	503	612	114	13.6	< 0.1	4050	31.2	3.87	< 0.1	< 1	8.31	< 0.001
0502 B		1/4/2000	6,863.90	4.30	4.29	5750	469	572	105	14	< 0.1	3720	28.9	3.29	< 0.1	< 1	7.15	< 0.001
0504 B		7/23/1989	6,868.10	6.20	6.50	4631	515	440	172	10.5	293	3027	37.9	0.49	0.05	< 1	0.25	0.113
0504 B		10/11/1989	6,867.30	5.90	6.68	4674	491	384	150	13.8	271	2947	39	0.58	0.23	< 1	0.2	0.054
0504 B		1/3/1990	6,865.90	5.70	6.36	4458	497	373	146	11	217	2793	35.9	0.7	0.05	< 1	0.22	0.025
0504 B		4/3/1990	6,864.60	6.00	6.30	4622	503	407	144	10.8	203	2751	36.9	0.79	0.08	< 1	< 0.1	0.017
0504 B		7/2/1990	6,863.50	5.60	6.32	4598	554	424	143	10.6	229	2931	33.2	0.36	0.06	< 1	< 0.1	0.023
0504 B		10/2/1990	6,862.70	5.80	6.71	4631	469	456	146	10.5	198	3067	33.7	0.39	0.02	< 1	< 0.1	0.021
0504 B		1/3/1991	6,862.70	5.70	6.25	4687	534	446	140	31.6	166	3022	32.5	0.86	0.08	< 1	< 0.1	0.002
0504 B		4/9/1991	6,861.70	5.60	6.51	4678	531	437	134	13.5	159	2979	30.9	0.74	0.07	< 1	< 0.1	0.001
0504 B		7/16/1991	6,860.70	5.60	6.30	4769	535	392	132	10.8	161	3427	33.1	0.91	0.1	< 1	< 0.1	< 0.001
0504 B		10/14/1991	6,857.30	5.80	6.62	4495	456	269	131	8.3	245	2640	39.2	0.44	0.03	< 1	< 0.1	0.573

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
0502 B		1/5/1994	0.08	< 0.01	0.85	< 0.05	12.6	0.41	0.78	< 0.001	< 0.1	0.347	9.7	6.5	16.2	< 0.2	1.1	20.4
0502 B		4/13/1994	0.05	< 0.01	0.7	< 0.05	10.5	0.41	0.79	< 0.001	< 0.1	0.332	6.9	7.5	14.4	< 0.2	3.8	18.3
0502 B		7/21/1994	0.04	< 0.01	0.82	< 0.05	12	0.35	0.97	< 0.001	< 0.1	0.205	9.3	9.9	19.2	< 0.2	4.4	24.3
0502 B		10/5/1994	0.03	< 0.01	0.64	< 0.05	9.18	0.28	0.7	< 0.001	< 0.1	0.188	7	6.3	13.3	< 0.2	1.2	16.6
0502 B		1/5/1995	0.04	< 0.01	0.72	< 0.05	10.5	0.2	0.85	< 0.001	< 0.1	0.211	12.6	4.3	16.9	< 0.2	< 1	19.2
0502 B		4/5/1995	0.03	< 0.01	0.81	< 0.05	11.1	0.19	0.74	< 0.001	< 0.1	0.191	8.8	8.2	17	< 0.2	2	21.3
0502 B		7/6/1995	0.02	< 0.01	0.69	< 0.05	9.65	0.19	0.77	< 0.001	< 0.1	0.1321	8.4	6.1	14.5	< 0.2	2	24
0502 B		10/4/1995	0.02	< 0.01	0.66	< 0.05	9.2	0.15	0.73	< 0.001	< 0.1	0.129	9.1	14.5	23.6	< 0.2	< 1	16.6
0502 B		1/4/1996	0.02	< 0.01	0.66	< 0.05	10.3	0.12	0.72	< 0.001	< 0.1	0.134	7.6	14.1	21.7	< 0.2	2.7	11.6
0502 B		4/2/1996	0.02	< 0.01	0.63	< 0.05	9.08	0.11	0.66	< 0.001	< 0.1	0.154	6	13.6	19.6	2.1	< 1	11.2
0502 B		7/7/1996	< 0.01	< 0.01	0.68	< 0.05	10.3	0.13	0.74	< 0.001	< 0.1	0.148	5.9	24.7	30.6	0.6	5.3	16.2
0502 B		10/1/1996	0.02	< 0.01	0.62	< 0.05	9.6	< 0.1	0.68	0.002	< 0.1	0.105	5.8	23.1	28.9	1.1	< 1	16.3
0502 B		1/21/1997	0.02	< 0.01	0.63	< 0.05	10.7	< 0.1	0.67	< 0.001	< 0.1	0.138	6.9	22.5	29.4	< 0.2	< 1	8.2
0502 B		4/8/1997	0.01	< 0.01	0.54	< 0.05	5.3	0.67	0.48	< 0.001	< 0.1	0.12	10.5	25.3	35.8	< 0.2	< 1	26.1
0502 B		7/8/1997	< 0.01	< 0.01	0.59	< 0.05	10.1	< 0.1	0.56	< 0.001	< 0.1	0.132	7	19.1	26.1	< 0.2	4.6	12.7
0502 B		10/8/1997	0.01	< 0.01	0.66	< 0.05	11.4	0.11	0.63	< 0.001	< 0.1	0.089	7.7	18.3	26	< 0.2	< 1	10.7
0502 B		1/16/1998	0.01	< 0.01	0.58	< 0.05	10.7	0.11	0.64	< 0.001	0.1	0.13	7	21.7	28.7	< 0.2	< 1	21.2
0502 B		4/7/1998	0.01	0.005	0.5	< 0.05	9.35	< 0.1	0.52	< 0.001	< 0.1	0.126	10.3	25.9	36.2	< 0.2	< 1	11.9
0502 B		7/7/1998	0.01	0.006	0.5	< 0.05	10.2	0.14	0.53	< 0.001	< 0.1	0.131	8.9	28	36.9	< 0.2	< 1	18
0502 B		10/6/1998	< 0.01	0.006	0.5	< 0.05	9.7	0.11	0.54	< 0.001	< 0.1	0.121	8.3	22.3	30.6	< 0.2	15.4	15.4
0502 B		1/6/1999	0.01	0.006	0.47	< 0.05	9.65	< 0.1	0.52	< 0.001	< 0.1	0.135	7.8	19	26.8	< 0.2	18.1	18.1
0502 B		4/6/1999	< 0.01	0.009	0.55	< 0.05	10.5	< 0.1	0.54	< 0.001	< 0.1	0.125	8.7	20.9	29.6	1.4	27.1	27.1
0502 B		7/13/1999	< 0.01	0.006	0.42	< 0.05	10.6	< 0.1	0.42	< 0.001	< 0.1	0.12	7.4	18.3	25.7	< 0.2	< 1	14.4
0502 B		10/5/1999	< 0.01	0.008	0.57	< 0.05	12	0.14	0.49	< 0.001	< 0.1	0.132	9.9	26.1	36	< 0.2	< 1	13.1
0502 B		1/4/2000	0.02	< 0.005	0.5	< 0.05	11.4	< 0.1	0.53	< 0.001	< 0.1	0.131	11.1	12.9	24	< 0.2	< 1	9.8
0504 B		7/23/1989	< 0.05	< 0.01	0.14	< 0.05	2.5	24	0.24	0.001	< 0.1	0.1	19.6	12.8	32.4	< 0.2	< 1	66.1
0504 B		10/11/1989	< 0.05	0.09	0.26	< 0.05	3.1	9.9	0.37	< 0.001	< 0.1	0.122	14	9.3	23.3	11.1	2.7	27.5
0504 B		1/3/1990	< 0.05	< 0.01	0.16	< 0.05	2.3	4.2	0.25	0.001	< 0.1	0.286	15.8	12.4	28.2	1.6	5.7	18.1
0504 B		4/3/1990	< 0.05	< 0.01	0.3	< 0.05	4.1	7.8	0.52	0.001	< 0.1	0.101	10.6	18.6	29.2	< 0.2	1.6	12.5
0504 B		7/2/1990	< 0.05	< 0.01	0.28	< 0.05	3.8	8.32	0.45	0.001	< 0.1	0.1468	17.7	18.5	36.2	< 0.2	3.3	20
0504 B		10/2/1990	< 0.05	< 0.01	0.34	< 0.05	3.6	13.3	0.46	< 0.001	< 0.1	0.13	19.2	12	31.2	< 0.2	< 1	20
0504 B		1/3/1991	< 0.01	< 0.01	0.49	< 0.05	4.85	3.6	0.6	0.001	< 0.1	0.3797	23.7	15.2	38.9	< 0.2	< 1	25
0504 B		4/9/1991	< 0.05	< 0.01	0.35	< 0.05	4.39	2.83	0.49	< 0.001	< 0.1	0.147	21.9	19	40.9	< 0.2	< 1	25
0504 B		7/16/1991	< 0.01	< 0.01	0.43	< 0.05	4.47	2.7	0.54	< 0.001	< 0.1	0.279	16	12	28	< 0.2	3.2	16
0504 B		10/14/1991	< 0.01	< 0.01	0.22	< 0.05	2.96	75	0.3	< 0.001	< 0.1	0.14	6.6	2.4	9	< 0.2	< 1	7

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0504 B		1/14/1992	6,855.40	5.40	6.06	5014	502	378	161	10.8	121	3119	40.3	3.1	< 0.01	< 1	< 0.1	0.34
0504 B		4/7/1992	6,855.90	5.40	6.21	5112	500	473	162	13.1	207	3372	31.4	0.92	< 0.1	< 1	< 0.1	0.035
0504 B		7/7/1992	6,855.80	5.10	7.63	5218	578	463	194	14.1	50.9	3249	41	0.63	< 0.1	< 1	< 0.1	0.388
0504 B		10/6/1992	6,851.70	5.40	5.85	5061	593	430	185	13.9	63.4	3278	37.3	0.84	< 0.1	< 1	1.1	0.257
0504 B		1/21/1993	6,849.90	5.40	5.90	4440	525	378	159	14.3	38.1	3194	43.2	0.93	< 0.1	< 1	1.3	0.181
0504 B		4/14/1993	6,849.90	5.60	6.50	4825	519	494	171	10.4	82.8	3373	37.6	0.76	< 0.1	< 1	0.1	0.042
0504 B		7/15/1993	6,848.40	5.60	4.91	4659	540	464	160	14.8	13.2	3430	41.2	0.93	< 0.1	< 1	1.17	0.139
0504 B		10/6/1993	6,844.70	5.70	5.67	4372	543	385	155	11	27.6	3129	33.5	0.6	0.2	< 1	0.17	0.014
0504 B		1/5/1994	6,847.00	5.70	6.01	5244	578	450	145	10.6	58.5	3491	38.7	0.8	< 0.1	< 1	< 0.1	0.041
0504 B		4/13/1994	6,846.50	5.80	6.01	5083	580	433	138	10.6	47.9	3448	37.9	1.82	< 0.1	< 1	< 0.1	0.019
0504 B		7/21/1994	6,846.30	5.90	6.25	4998	600	452	135	11.1	62.8	3467	32.3	0.91	< 0.1	< 1	0.15	0.012
0504 B		10/5/1994	6,846.30	5.80	6.56	5208	604	489	176	12.5	68.3	3421	35.5	1.4	< 0.1	< 1	< 0.1	0.01
0504 B		1/5/1995	6,844.80	5.80	6.41	4827	570	406	152	12.2	117	3232	35.8	1.38	< 0.1	< 1	< 0.1	0.009
0504 B		4/5/1995	6,845.00	5.80	7.46	5199	527	487	145	11.3	35.4	3710	37.1	1.49	< 0.1	< 1	< 0.1	0.011
0504 B		7/6/1995	6,845.10	6.30	6.51	4787	515	470	145	11.7	58.7	3298	33.5	1.64	< 0.1	< 1	< 0.1	0.01
0504 B		10/4/1995	6,844.10	6.00	6.70	4530	490	450	151	11.6	71.1	3315	33	1.36	0.23	< 1	< 0.1	0.008
0504 B		1/4/1996	6,843.30	6.20	6.44	4519	530	455	156	11.3	92	3116	32	0.66	1.68	< 1	< 0.1	0.005
0504 B		4/2/1996	6,843.10	7.00	6.82	5270	530	515	59.4	13.1	61.5	3630	37.5	0.74	< 0.1	< 1	< 0.1	0.01
0504 B		7/7/1996	6,842.70	6.00	6.22	5316	515	475	153	13.4	44	3440	39.2	0.67	< 0.1	< 1	< 0.1	0.01
0504 B		10/1/1996	6,842.20	6.30	6.00	5260	539	509	154	12.7	53.7	3427	34.6	0.62	< 0.1	< 1	< 0.1	0.005
0504 B		1/21/1997	6,843.90	6.10	5.61	5220	515	525	149	14.1	8.5	3530	34.2	0.72	< 0.1	< 1	0.16	0.017
0504 B		4/8/1997	6,842.10	6.10	6.92	5180	537	534	145	12.5	76.3	3640	37.5	0.61	< 0.1	1	< 0.1	< 0.001
0504 B		7/8/1997	6,841.30	7.10	6.53	5390	564	565	153	13.8	42.6	3850	37.7	0.67	< 0.1	< 1	0.17	0.017
0504 B		10/8/1997	6,841.70	5.70	6.40	5350	531	519	141	12.3	26	3430	37.5	0.78	0.15	< 1	0.16	0.02
0504 B		1/16/1998	6,841.20	5.80	6.60	5360	517	520	152	13.4	32.7	3500	36.4	1.12	0.1	< 1	1.15	0.025
0504 B		4/7/1998	6,841.00	5.70	5.91	5420	518	529	146	12.3	19.2	3350	32.4	0.76	< 0.1	< 1	0.22	0.024
0504 B		7/7/1998	6,841.00	6.00	4.34	5140	503	519	153	12.7	< 0.1	3550	33	0.96	< 0.1	< 1	0.23	0.013
0504 B		10/6/1998	6,841.20	5.70	6.33	5340	543	555	158	13.8	29.7	3500	32.7	3.99	0.29	< 1	0.24	0.019
0504 B		1/6/1999	6,841.00	5.60	6.36	5340	463	524	141	12.3	38	3700	33	0.7	0.19	< 1	0.33	0.025
0504 B		4/6/1999	6,841.20	5.50	6.53	5370	508	542	140	12.4	31	3440	38.6	0.8	< 0.1	< 1	0.37	0.015
0504 B		7/13/1999	6,840.81	6.50	6.51	5350	522	558	132	13.3	28	3500	32	0.75	0.38	< 1	0.17	0.02
0504 B		10/5/1999	6,841.40	5.73	5.53	5260	540	583	152	12.5	9	3740	34	0.96	0.26	< 1	< 0.1	0.022
0504 B		1/4/2000	6,841.50	6.00	7.11	5220	497	543	135	12.7	31	3380	30.2	0.64	0.5	< 1	< 0.1	0.021
0504 B		5/1/2000	6,841.40	5.60	6.69	5500	474	526	134	12.3	51	3480	34	0.75	< 0.1	< 1	0.3	0.033
0504 B		7/10/2000	6,841.30	5.45	6.20	5510	506	570	150	12.3	48	3440	28.4	0.68	< 0.1	< 1	0.21	0.025

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
0504 B		1/14/1992	< 0.01	< 0.01	0.5	< 0.05	5.08	43.4	0.67	< 0.001	< 0.1	0.029	17	5.2	22.2	< 0.2	< 1	16
0504 B		4/7/1992	< 0.01	< 0.01	0.53	< 0.05	7.1	9.6	0.63	0.002	< 0.1	0.124	7.9	12.2	20.1	< 0.2	< 1	7.6
0504 B		7/7/1992	< 0.01	< 0.01	0.7	< 0.05	6.66	56.4	0.88	0.001	< 0.1	0.02	8.2	4.8	13	< 0.2	< 1	8.5
0504 B		10/6/1992	< 0.01	< 0.01	0.66	< 0.05	6.88	49.8	0.91	0.002	< 0.1	0.042	12.6	7.8	20.4	< 0.2	< 1	12.5
0504 B		1/21/1993	< 0.01	< 0.01	0.57	< 0.05	7.05	45.4	0.9	< 0.001	< 0.1	0.033	9.5	3.8	13.3	< 0.2	4.7	10
0504 B		4/14/1993	< 0.01	< 0.01	< 0.01	< 0.05	5.94	12.7	0.67	< 0.001	< 0.1	0.176	9.1	11.7	20.8	< 0.2	< 1	10.5
0504 B		7/15/1993	< 0.01	< 0.01	1	< 0.05	6.68	12.4	1.27	0.002	< 0.1	0.064	9	8	17	< 0.2	< 1	9.9
0504 B		10/6/1993	< 0.01	< 0.01	0.52	< 0.05	4.94	7	0.7	< 0.001	< 0.1	0.051	13.6	7.9	21.5	< 0.2	< 1	15
0504 B		1/5/1994	< 0.01	< 0.01	0.46	< 0.05	6	3.4	0.54	< 0.001	< 0.1	0.085	21.1	16	37.1	< 0.2	< 1	46.1
0504 B		4/13/1994	< 0.01	< 0.01	0.52	< 0.05	6.09	4.97	0.73	< 0.001	< 0.1	0.059	15.5	15.6	31.1	< 0.2	2.6	29
0504 B		7/21/1994	< 0.01	< 0.01	0.45	< 0.05	5.8	1.03	0.6	< 0.001	< 0.1	0.084	18.2	23.4	41.6	< 0.2	2.5	53.4
0504 B		10/5/1994	< 0.01	< 0.01	0.36	< 0.05	5.14	5.36	0.54	< 0.001	< 0.1	0.081	14.4	13.9	28.3	< 0.2	2	35.4
0504 B		1/5/1995	< 0.01	< 0.01	0.37	< 0.05	4.62	0.85	0.51	< 0.001	< 0.1	0.123	21.3	18.4	39.7	< 0.2	< 1	49
0504 B		4/5/1995	< 0.01	< 0.01	0.54	< 0.05	6.2	2.67	0.56	< 0.001	< 0.1	0.073	16.8	14.8	31.6	< 0.2	< 1	39.2
0504 B		7/6/1995	< 0.01	< 0.01	0.47	< 0.05	5.63	2.11	0.58	< 0.001	< 0.1	0.0792	13.7	13.3	27	< 0.2	1.3	51.9
0504 B		10/4/1995	< 0.01	< 0.01	0.47	< 0.05	5.5	0.77	0.61	< 0.001	< 0.1	0.078	15.6	19.2	34.8	< 0.2	< 1	25.5
0504 B		1/4/1996	< 0.01	< 0.01	0.43	< 0.05	4.79	0.52	0.5	< 0.001	< 0.1	0.119	14	23.1	37.1	< 0.2	3.4	27.4
0504 B		4/2/1996	< 0.01	< 0.01	0.5	< 0.05	5.73	0.41	0.61	< 0.001	< 0.1	0.088	15.3	20.9	36.2	< 0.2	< 1	23.3
0504 B		7/7/1996	< 0.01	< 0.01	0.49	< 0.05	6.04	0.47	0.63	< 0.001	< 0.1	0.081	16.9	30.6	47.5	0.7	2.3	20.4
0504 B		10/1/1996	< 0.01	< 0.01	0.48	< 0.05	5.68	0.36	0.6	0.002	< 0.1	0.072	14.9	25.2	40.1	0.8	< 1	25.2
0504 B		1/21/1997	< 0.01	< 0.01	0.41	< 0.05	6	0.64	0.57	< 0.001	< 0.1	0.057	16.7	32.2	48.9	< 0.2	< 1	14.1
0504 B		4/8/1997	< 0.01	< 0.01	0.37	< 0.05	5.3	0.67	0.48	< 0.001	< 0.1	0.106	19.9	24	43.9	< 0.2	< 1	43.7
0504 B		7/8/1997	< 0.01	< 0.01	0.38	< 0.05	5.81	1.38	0.49	< 0.001	< 0.1	0.068	17.2	26	43.2	< 0.2	< 1	17
0504 B		10/8/1997	< 0.01	< 0.01	0.45	< 0.05	6.71	4.69	0.56	< 0.001	< 0.1	0.087	16.3	18.4	34.7	< 0.2	< 1	16.3
0504 B		1/16/1998	< 0.01	< 0.01	0.41	< 0.05	6.37	6.75	0.57	< 0.001	< 0.1	0.1607	15.6	23.6	39.2	< 0.2	< 1	42
0504 B		4/7/1998	< 0.01	< 0.005	0.32	< 0.05	5.4	7.43	0.43	< 0.001	< 0.1	0.0594	18.5	18.4	36.9	< 0.2	< 1	18.7
0504 B		7/7/1998	< 0.01	< 0.005	0.31	< 0.05	5.78	8.79	0.44	< 0.001	< 0.1	0.0359	13.7	20.9	34.6	< 0.2	< 1	20
0504 B		10/6/1998	< 0.01	< 0.005	0.31	< 0.05	5.48	9.2	0.446	< 0.001	< 0.1	0.0378	15.9	13.2	29.1	< 0.2	< 1	15.8
0504 B		1/6/1999	< 0.01	0.007	0.3	< 0.05	5.6	12.4	0.42	< 0.001	< 0.1	0.0435	15.9	18.5	34.4	< 0.2	< 1	32
0504 B		4/6/1999	< 0.01	< 0.005	0.33	< 0.05	5.8	9.48	0.43	< 0.001	< 0.1	0.0531	18.8	17.5	36.3	< 0.2	< 1	50
0504 B		7/13/1999	< 0.01	< 0.005	0.24	< 0.05	5.7	14.6	0.35	< 0.001	< 0.1	0.0288	11.1	14.6	25.7	< 0.2	< 1	17.3
0504 B		10/5/1999	< 0.01	0.007	0.33	< 0.05	6.27	16.3	0.4	0.001	< 0.1	0.0392	13.5	16.4	29.9	< 0.2	< 1	12.6
0504 B		1/4/2000	< 0.01	< 0.005	0.32	< 0.05	6.02	14.5	0.48	< 0.001	< 0.1	0.0454	12.8	15.7	28.5	< 0.2	< 1	12.3
0504 B		5/1/2000	< 0.01	0.025	0.34	< 0.05	6.67	15.7	0.51	< 0.001	< 0.1	0.0388	21.3	16.3	37.6	< 0.2	< 1	22.6
0504 B		7/10/2000	< 0.01	< 0.005	0.3	< 0.05	6.18	13.4	0.41	< 0.001	< 0.1	0.0498	13.4	20.8	34.2	< 0.2	< 1	21

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0504 B		10/2/2000	6,841.40	6.52	6.28	5650	510	620	147	13.8	44	3740	33	0.53	< 0.1	< 1	0.2	0.033
0504 B		1/15/2001	6,841.80	5.02	5.92	5590	480	564	135	12.5	43	4100	34.6	0.71	< 0.1	< 1	0.2	0.028
0504 B		4/2/2001	6,841.80	7.50	6.02	5590	479	595	153	12.1	13	3480	29.3	0.88	< 0.1	< 1	0.3	0.026
0504 B		7/16/2001	6,841.70	3.50	3.70	5810	458	590	134	24.3	< 0.1	3570	44	0.84	< 0.1	< 1	0.3	0.036
0504 B		10/8/2001	6,841.85	3.55	5.80	5920	450	590	132	12.3	26.8	3300	35.9	0.77	< 0.1	< 1	0.16	0.026
0504 B		1/7/2002	6,841.60	5.46	3.50	5840	499	628	128	13	< 0.1	3940	42	0.63	< 0.1	< 1	0.2	0.023
0504 B		4/8/2002	6,841.90	3.30	3.36	5980	477	616	142	12.6	< 0.1	3810	33.5	0.7	< 0.1	< 1	0.2	0.018
0504 B		7/15/2002	6,841.80	4.55	3.42	6060	561	713	143	12.3	< 0.1	4430	25.6	1.23	< 0.1	< 1	< 0.1	0.02
0504 B		10/14/2002	6,841.70	3.43	3.80	4980	460	605	144	11.5	< 0.1	3710	26.8	1.16	< 0.1	< 1	0.2	0.019
0504 B		1/13/2003	6,841.31	5.54	4.47	5980	531	710	137	11.8	< 0.1	4140	15.6	1.27	< 0.1	< 1	0.2	0.025
0504 B		4/14/2003	6,841.59	5.14	3.27	6140	626	873	158	15.2	< 0.1	5300	30.2	1.3	< 0.1	< 1	< 0.1	0.012
0504 B		7/14/2003	6,841.31	5.35	3.34	6230	474	633	158	12.4	< 0.1	3750	28.3	1.1	< 0.1	< 1	0.2	0.017
0504 B		10/13/2003	6,841.16	5.48	3.36	6100	512	699	152	12.6	< 0.1	4260	30.4	1.05	< 0.1	< 1	0.3	0.023
0504 B		1/12/2004	6,840.94	5.39	3.25	6120	514	699	134	13.4	< 1.0	4110	31.2	1.37	< 0.10	< 1.0	0.2	0.017
0504 B		4/12/2004	6,840.84	5.36	3.50	6120	485	652	148	13.4	< 1	4140	31.8	1.26	< 0.1	< 1	0.1	0.022
0504 B		7/19/2004	6,840.83	5.48	5.21	6140	523 D	672 D	164	12.5	15	4070 D	28	1.04	< 0.10	< 1.0	0.4	0.017
0504 B		10/11/2004	6,840.74	5.56	3.31	6210	485 D	685 D	163	12.5	< 1	4120 D	29	0.91	< 0.10	< 1.0	0.2	0.015
0504 B		1/10/2005	6,840.60	5.31	3.37	6240	488 D	660 D	150	12.1	< 1	3970 D	29	0.91	< 0.1	< 1.0	0.2	0.02
0504 B		4/11/2005	6,840.33	5.55	4.27	5990	512	693	166	12.4	< 1	4340	30	1.07	< 0.1	< 1.0	0.3	0.02
0504 B		7/18/2005	6,840.19	5.10	3.30	6300	512 D	684 D	162	12.2	< 1	4150 D	29	0.96	< 0.1	< 1.0	0.3	0.02
0504 B		10/10/2005	6,839.55	5.45	5.07	4250	525 D	415 D	126	10	< 1	3040 D	29	0.93	< 0.1	< 1.0	13.7	< 0.001
0504 B		1/16/2006	6,838.98	5.22	3.96	6310	448 D	654 D	148	11.8	< 1	3990 D	28	1.29	< 0.1	< 1.0	10.2	0.02
0504 B		4/10/2006	6,838.71	5.21	3.63	5980	517 D	707 D	144	12.3	< 1	4330 D	34	0.97	0.3	< 1.0	2.4	0.02
0504 B		7/24/2006	6,838.23	5.06	3.99	5870	487 D	668 D	160	12.3	< 1	4140 D	29	1.16	< 0.1	< 1.0	0.4	0.008
0504 B		10/9/2006	6,837.89	5.11	5.14	5790	483 D	662 D	148	12.2	< 1	3970 D	25	1.13	< 0.1	< 0.5	0.1	0.02
0504 B		1/15/2007	6,837.51	5.23	5.38 H	6140 H	474 D	649 D	149	12.5	<1	4070 D	29	0.54	<0.1	<0.5	0.8	0.02
0504 B		4/17/2007	6,836.83	5.25	4.47	6020	499 D	700 D	149	12.6	<1	4480 D	32	0.56	<0.1	<0.5	2.1	0.01
0504 B		7/17/2007	6,836.81	5.10	3.35	5690	484 D	674 D	154	12.1	<1	4180 D	28	0.83	<0.1	<0.5	0.9	0.05
0504 B		10/9/2007	6,836.13	3.29	4.81	6000	480 D	657 D	151	12.4	6	4050 D	29	0.73	<0.1	<0.5	0.1	0.02
0504 B		1/22/2008	6,835.95	5.35	3.66	5590	458 D	607 D	142	12.7	4	3800 D	35 D	0.53	< 0.1	< 0.5	2.4	0.035
0504 B		4/15/2008	6,835.96	5.24	3.51	5630	486	652	151 D	12.1	< 1	4300 D	26	0.43	< 0.1	< 0.50	4.8	0.01
0504 B		7/15/2008	6,835.41	5.26	3.9	5950	437	607	140 D	12	< 1	3940 D	26	0.36	< 0.1	< 0.5	2.9	0.003
0504 B		10/13/2008	6,835.11	3.47	3.66	5750	439	601	142 D	12	< 1	4060 D	23	0.9 D	< 0.1	< 0.5	0.6	0.005
0504 B		1/20/2009	6,834.86	5.5	3.44	5750	466	618	167	13	<1	4140 D	21	0.49	<0.1	<0.5	5.2	0.028
0504 B		4/14/2009	6,834.86	5.59	3.60	5580	449 D	581 D	152 D	11	<1	3930 D	26	0.42	<0.1	<0.50	4.8 D	0.020

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
0504 B		10/2/2000	< 0.01	< 0.005	0.35	< 0.05	6.23	14.3	0.36	< 0.001	< 0.1	0.0226	15	15.8	30.8	< 0.2	< 1	25
0504 B		1/15/2001	< 0.01	0.008	0.29	< 0.05	5.99	12.3	0.44	< 0.001	< 0.1	0.031	15.7	17.9	33.6	< 0.2	< 1	18.7
0504 B		4/2/2001	< 0.01	< 0.005	0.31	< 0.05	6.2	12.9	0.48	< 0.001	< 0.1	0.027	15.5	20.8	36.3	< 0.2	< 1	15.5
0504 B		7/16/2001	< 0.01	< 0.005	0.28	< 0.05	6.2	10.5	0.43	< 0.001	< 0.1	0.028	18.6	25.2	43.8	< 0.2	< 1	16.9
0504 B		10/8/2001	< 0.01	< 0.005	0.22	< 0.05	5.3	7.49	0.29	< 0.001	< 0.1	0.0257	16	20	36	< 0.2	< 1	23
0504 B		1/7/2002	< 0.01	< 0.005	0.26	< 0.05	6.37	7.3	0.41	< 0.001	< 0.1	0.0242	18.2	23.2	41.4	< 0.2	< 1	16.7
0504 B		4/8/2002	< 0.01	< 0.005	0.31	< 0.05	7.84	9.9	0.43	< 0.001	< 0.1	0.0278	13.5	19.5	33	< 0.2	< 1	20.4
0504 B		7/15/2002	< 0.01	< 0.005	0.26	< 0.05	6.37	7.1	0.28	< 0.001	< 0.1	0.0296	16.3	24.7	41	< 0.2	< 1	17.3
0504 B		10/14/2002	< 0.01	< 0.005	0.27	< 0.05	6.96	6.8	0.36	< 0.001	< 0.1	0.0331	12.4	13.1	25.5	< 0.2	< 1	18.7
0504 B		1/13/2003	< 0.01	< 0.005	0.27	< 0.05	6.57	7.4	0.32	< 0.001	< 0.1	0.0288	17.3	4	21.3	< 0.2	< 1	21.6
0504 B		4/14/2003	< 0.01	< 0.005	0.29	< 0.05	7.52	6.1	0.35	< 0.001	< 0.1	0.0243	16.9	17.4	34.3	< 0.2	< 1	31.2
0504 B		7/14/2003	< 0.01	< 0.005	0.27	< 0.05	7.03	5.8	0.34	< 0.001	< 0.1	0.0254	14.9	13	27.9	< 0.2	< 1	11.4
0504 B		10/13/2003	< 0.01	< 0.005	0.25	< 0.05	6.27	4.5	0.32	< 0.001	< 0.1	0.0251	11.8	13.9	25.7	< 0.2	< 1	27.8
0504 B		1/12/2004	< 0.01	< 0.005	0.26	< 0.05	7.08	4.7	< 0.05	< 0.001	< 0.1	0.0241 D	12.4	14.1	26.5	< 0.2	< 1.0	29.7
0504 B		4/12/2004	< 0.01	< 0.005	0.25	< 0.05	7.14	4	0.3	< 0.001	< 0.1	0.02 D	10.1	14.1	24.2	< 0.2	< 1	16.2
0504 B		7/19/2004	< 0.01	< 0.005	0.25	< 0.05	6.82	2.8	0.27	< 0.001	< 0.1	0.0208 D	11.7	13	24.7	< 0.2	< 1.0	28.1
0504 B		10/11/2004	< 0.01	< 0.005	0.19	< 0.05	6.88	3	0.28	< 0.001	< 0.1	0.0236	11.4	8.5	19.9	< 0.2	< 1.0	20
0504 B		1/10/2005	< 0.01	< 0.005	0.26	< 0.05	6.41	2.3	0.29	< 0.001	< 0.1	0.0254	7.8	10	17.8	< 0.2	< 1.0	20.8
0504 B		4/11/2005	< 0.01	< 0.005	0.24	< 0.05	7.1	2.5	0.28	< 0.001	< 0.1	0.0254	14.4	14.6	29	< 0.2	< 1.0	15.6
0504 B		7/18/2005	< 0.01	< 0.005	0.24	< 0.05	6.85	0.7	0.3	< 0.001	< 0.1	0.0206	10.7	13.4	24.1	2.4	< 1.0	19.1
0504 B		10/10/2005	< 0.01	< 0.005	0.27	< 0.05	5.02	< 0.1	0.28	< 0.001	< 0.1	0.019	14.8	14.5	29.3	< 0.2	< 1.0	16.8
0504 B		1/16/2006	< 0.01	< 0.005	0.27	< 0.05	7.52	1.6	0.33	< 0.001	< 0.1	0.0439	11.3	16.7	28	< 0.2	< 1.0	14.8
0504 B		4/10/2006	< 0.01	< 0.005	0.27	< 0.05	7.45	1.7	0.27	< 0.001	< 0.1	0.0254	12.5	17	29.5	< 0.2	< 1.0	11.2
0504 B		7/24/2006	< 0.01	< 0.005	0.24	< 0.05	7.14	0.5	0.25	< 0.001	< 0.1	0.0211	11.3	16.2	27.5	< 0.2	< 1.0	11.7
0504 B		10/9/2006	< 0.01	< 0.005	0.25	< 0.05	7.28	1.5	0.28	< 0.001	< 0.1	0.0234	11.4	17.1	28.5	< 0.2	< 1	9.9
0504 B		1/15/2007	<0.01	<0.005	0.22	<0.05	6.67	2	0.25	<0.001	<0.1	0.0254	12.2	16.4	28.6	<0.2	<1	16.4
0504 B		4/17/2007	<0.01	<0.005	0.26	<0.05	7.42	0.2	0.29	<0.001	<0.1	0.0254 D	10.6	19.6	30.2	<0.2	<1	10.9
0504 B		7/17/2007	<0.01	<0.005	0.25	<0.05	6.41	2.3	0.28	<0.001	<0.1	0.0248	11.5	17.1	28.6	<0.2	<1	13.5
0504 B		10/9/2007	<0.01	<0.005	0.24	<0.05	7.52	1	0.26	<0.001	<0.1	0.0195	8.2	16.9	25.1	<0.2	<1	10.7
0504 B		1/22/2008	< 0.01	< 0.005	0.25	< 0.05	6.88	2.8	0.29	< 0.001	< 0.1	0.0307	16.4	19.6	36	< 0.2	< 1	16
0504 B		4/15/2008	< 0.01	< 0.005	0.25	< 0.05	6.67	3.1	0.27	< 0.001	< 0.1	0.0373	9	23.1	32.1	-0.1 U	0 U	14.6
0504 B		7/15/2008	< 0.01	< 0.005	0.22	< 0.05	6.62	3.5	0.26	< 0.001	< 0.1	0.0318	12	20	32	0 U	4.5 U	13.2
0504 B		10/13/2008	< 0.01	< 0.005	0.23	< 0.05	6.44	2.6	0.26	< 0.001	< 0.1	0.0274	11	13	24	0.4	1.4 U	19.5
0504 B		1/20/2009	<0.01	<0.005	0.24	<0.05	6.83	9	0.27	<0.001	<0.1	0.0572	14	21	35	-0.1 U	0.6 U	18.6
0504 B		4/14/2009	<0.01	<0.005	0.22	<0.05	6.46 D	7.3 D	0.26	<0.001	<0.1	0.0498	8.9	15	23.9	0.2 U	-0.6 U	17.1

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0504 B		7/14/2009	6,834.51	3.56	3.69	5980	474	597	147	12	<1	4020 D	27	0.55	<0.1	<0.50	4.6	<0.001
0504 B		10/13/2009	6,834.36	5.50	3.68	5690 H	494 D	589	142 D	12	<1	4100 D	31	0.61	<0.1	<0.50	2.7	<0.001
0517		7/23/1989	6,899.70	6.00	6.51	3617	543	291	111	4.5	303	2079	20.9	0.53	39	1.1	< 0.1	< 0.001
0517		10/11/1989	6,893.20	6.10	6.50	3738	507	290	117	6.8	298	2199	21.8	0.31	43	< 1	< 0.1	< 0.001
0517		1/3/1990	6,894.80	5.40	5.90	4096	523	318	138	8.1	168	2434	27.9	0.74	45	< 1	0.11	< 0.001
0517		4/3/1990	6,892.60	5.60	6.24	4306	515	360	140	8.1	220	2556	28.3	0.9	44	< 1	0.11	< 0.001
0517		7/2/1990	6,892.90	5.60	6.20	4318	526	387	127	7	231	2456	26.1	0.26	47.8	< 1	0.1	< 0.001
0517		10/16/1990	6,892.60	5.50	6.30	4083	440	532	131	7.2	170	2574	22.8	0.36	27.1	< 1	< 0.1	< 0.001
0517		1/16/1991	6,893.60	5.70	6.42	4235	554	385	157	8.1	227	2706	27.5	0.25	49.3	< 1	< 0.1	< 0.001
0517		4/10/1991	6,894.50	5.70	6.80	4204	541	376	136	6.2	284	2370	31.4	0.27	61	< 1	< 0.1	< 0.001
0517		7/16/1991	6,891.60	5.60	6.42	4550	546	353	136	6.8	215	3014	50.3	0.25	67	2.6	< 0.1	< 0.001
0517		10/14/1991	6,887.60	5.50	6.39	5348	452	393	175	6.2	142	3173	77.6	0.39	30.3	3.2	0.12	0.001
0517		1/14/1992	6,888.80	5.30	6.04	5847	490	544	185	7.2	117	3571	76.9	1.76	36.1	3.2	0.13	< 0.001
0517		4/7/1992	6,888.80	5.30	7.19	5539	518	495	199	8.1	103	3457	61.7	2.32	26.7	3.4	< 0.1	0.002
0517		7/7/1992	6,884.70	5.20	6.91	5413	528	480	195	9.68	85.4	3334	66.3	3.78	40.5	4	0.15	< 0.001
0517		10/6/1992	6,882.60	5.20	6.73	5109	530	451	186	7	73.2	3169	62.9	3.29	41.8	4.1	0.1	< 0.001
0517		1/6/1993	6,883.20	5.30	6.88	4169	459	374	148	6.9	75.6	2856	75.8	1.13	48.1	6.7	0.1	< 0.001
0517		4/6/1993	6,884.20	5.30	6.08	4493	458	438	183	6.1	71	3066	74.1	3.76	34.5	7	< 0.1	< 0.001
0517		7/13/1993	6,882.10	5.40	5.64	5166	557	498	195	9.4	46.1	3734	77.5	11.9	38.5	8.8	0.86	< 0.001
0517		10/6/1993	6,880.10	4.80	4.49	5918	589	508	185	10.3	1.8	3901	79.6	26.9	39.3	< 1	11.2	< 0.001
0517		1/5/1994	6,880.00	4.90	4.60	5674	518	461	195	11	5.7	3740	88.4	6.52	33.8	9.5	11.1	< 0.001
0517		4/13/1994	6,879.70	4.30	4.29	5770	515	479	204	12	< 1	3883	108	7.25	27.8	8.5	96	< 0.001
0517		7/20/1994	6,878.60	5.10	4.36	6115	604	516	177	11.7	< 1	4308	85.9	34.2	32.9	< 1	22.9	< 0.001
0517		10/4/1994	6,878.00	4.80	4.33	6218	554	551	204	12.5	< 1	4563	82.5	22.4	42.5	4.5	67.1	< 0.001
0517		1/4/1995	6,877.20	4.70	4.46	5507	517	465	178	11	< 1	3665	66.2	40.4	40.3	3.2	42.4	< 0.001
0517		4/4/1995	6,876.80	5.20	4.72	4608	514	338	143	6.5	6.5	2999	54	17.8	44.9	1.4	10.5	< 0.001
0517		7/6/1995	6,875.90	4.70	4.57	4312	500	365	142	6.7	1.8	3040	48	36.1	16.4	1.76	14.4	< 0.001
0517		10/3/1995	6,875.10	4.60	4.39	5058	465	469	185	11	< 1	3745	12.7	41.4	7.29	4.25	47	0.004
0517		1/3/1996	6,874.40	4.50	4.10	5807	510	530	174	10.1	< 1	4100	61.2	28.6	1.51	5.05	40	0.001
0517		4/2/1996	6,874.00	4.60	4.44	5804	481	550	170	10.5	< 1	3995	61.9	27.8	1.38	5.21	27.3	< 0.001
0517		7/7/1996	6,873.80	4.50	4.33	5635	460	485	175	10.6	< 1	3590	67	24.9	1.44	5.26	21.2	< 0.001
0517		10/1/1996	6,873.60	4.80	4.30	5520	477	518	182	10.5	< 1	3578	66	22.5	1.35	4.39	16.6	< 0.001
0517		1/21/1997	no data	4.50	4.73	5210	485	515	175	10.2	6.3	3585	68	21.1	1.47	4.87	15.8	0.001
0517		1/22/1997	6,873.50	4.50	4.73	5210	485	515	175	10.2	6.3	3585	68	21.1	1.47	4.87	15.8	0.001
0517		4/8/1997	6,873.30	5.10	4.69	5260	485	526	169	9.9	4	3710	69.5	18.8	1.11	4.22	11.2	< 0.001

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
0504 B		7/14/2009	<0.01	<0.005	0.22	<0.05	6.44	6.0	0.25	0.001	<0.1	0.0505	11	17	28	0.06 U	1.9 U	19.2
0504 B		10/13/2009	<0.01	<0.005	0.21	<0.05	6.06	3.3	0.25	<0.001	<0.1	0.0498	14	18	32	0.1	4.2	15.4
0517		7/23/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.58	0.14	< 0.05	0.001	< 0.1	0.252	11.9	9.5	21.4	< 0.2	2.1	44.1
0517		10/11/1989	< 0.05	< 0.01	0.01	0.06	0.64	0.18	< 0.05	0.013	< 0.1	0.196	4.3	4.2	8.5	< 0.2	2.8	4.7
0517		1/3/1990	< 0.05	< 0.01	0.01	< 0.05	1.3	0.32	< 0.05	0.001	< 0.1	0.088	8.9	4.5	13.4	< 0.2	4.5	10.5
0517		4/3/1990	< 0.05	< 0.01	0.03	< 0.05	2	0.16	< 0.05	< 0.001	< 0.1	0.09	9.3	10.2	19.5	< 0.2	1	10.8
0517		7/2/1990	< 0.05	< 0.01	0.01	< 0.05	1.81	0.2	< 0.05	0.001	< 0.1	0.136	8.3	2.2	10.5	< 0.2	1.2	10
0517		10/16/1990	< 0.05	< 0.01	0.04	< 0.05	2.89	0.1	0.09	< 0.001	< 0.1	0.046	11.1	1.4	12.5	< 0.2	< 1	10
0517		1/16/1991	< 0.01	< 0.01	0.04	< 0.05	2.37	< 0.1	0.05	0.001	< 0.1	0.0814	10	1	11	< 0.2	< 1	11.3
0517		4/10/1991	< 0.01	< 0.01	0.06	< 0.05	2.93	0.17	0.11	0.001	< 0.1	0.1666	8.1	8.3	16.4	< 0.2	< 1	8
0517		7/16/1991	< 0.01	< 0.01	0.04	< 0.05	2.63	0.06	0.01	< 0.001	< 0.1	0.149	8	7.6	15.6	< 0.2	< 1	9
0517		10/14/1991	< 0.01	< 0.01	0.12	< 0.05	4.46	0.1	0.06	< 0.001	< 0.1	0.03	5.1	6.1	11.2	< 0.2	< 1	5
0517		1/14/1992	< 0.01	< 0.01	0.13	< 0.05	5.29	0.11	0.09	0.026	< 0.1	0.012	13.6	6.3	19.9	< 0.2	1.3	14
0517		4/7/1992	< 0.01	< 0.01	0.12	< 0.05	5.69	< 0.1	0.1	0.02	< 0.1	0.03	6.3	13.5	19.8	< 0.2	1.3	6.6
0517		7/7/1992	0.094	< 0.01	0.12	< 0.05	4.27	< 0.1	0.07	0.001	< 0.1	0.006	6.7	13.9	20.6	< 0.2	< 1	6.9
0517		10/6/1992	< 0.005	< 0.01	0.13	< 0.05	3.92	< 0.1	0.12	0.005	< 0.1	0.007	8.8	27.9	36.7	< 0.2	< 1	8.9
0517		1/6/1993	< 0.01	< 0.01	0.1	< 0.05	3.38	< 0.1	0.11	0.003	< 0.1	0.011	10.1	35.8	45.9	< 0.2	< 1	10.6
0517		4/6/1993	< 0.005	< 0.01	0.11	< 0.05	4.66	< 0.1	0.11	0.002	< 0.1	0.007	6.7	21.3	28	< 0.2	< 1	6.9
0517		7/13/1993	< 0.005	< 0.01	0.2	< 0.05	7.27	< 0.1	0.17	0.001	< 0.1	0.003	8.5	20.3	28.8	< 0.2	3.6	10.9
0517		10/6/1993	< 0.005	< 0.01	0.32	< 0.05	12.2	< 0.1	0.38	< 0.001	< 0.1	0.003	19.4	30.7	50.1	< 0.2	< 1	20.5
0517		1/5/1994	< 0.01	< 0.01	0.31	< 0.05	11.6	< 0.1	0.27	< 0.001	< 0.1	0.017	24.5	29.6	54.1	< 0.2	1.1	69.8
0517		4/13/1994	< 0.01	< 0.01	0.67	< 0.05	18.5	< 0.1	0.72	< 0.001	< 0.1	0.068	20.9	40.6	61.5	< 0.2	4.5	81.9
0517		7/20/1994	< 0.01	< 0.01	0.41	< 0.05	12.3	< 0.1	0.32	< 0.001	< 0.1	0.03	24	30.5	54.5	< 0.2	< 1	69.9
0517		10/4/1994	< 0.01	< 0.01	0.67	< 0.05	18.1	0.11	0.51	< 0.001	< 0.1	0.061	20	18.6	38.6	< 0.2	< 1	48
0517		1/4/1995	< 0.01	< 0.01	0.28	< 0.05	10.5	< 0.1	0.27	< 0.001	< 0.1	0.05	33	24.1	57.1	< 0.2	< 1	69.3
0517		4/4/1995	< 0.01	< 0.01	0.14	< 0.05	5.65	< 0.01	0.11	< 0.001	< 0.1	0.043	16.8	17.9	34.7	< 0.2	< 1	43.8
0517		7/6/1995	< 0.01	< 0.01	0.21	< 0.05	6.21	< 0.01	0.17	< 0.001	< 0.1	0.0684	18.4	17.8	36.2	1	3.8	69.1
0517		10/3/1995	< 0.01	< 0.01	0.16	< 0.05	3	< 0.1	< 0.05	0.007	< 0.1	0.1421	31.1	22.8	53.9	1.9	< 1	94.8
0517		1/3/1996	0.02	< 0.01	0.83	< 0.05	13.7	< 0.1	0.79	0.002	< 0.1	0.125	21.1	7.9	29	1.9	1.8	44.6
0517		4/2/1996	0.01	< 0.01	0.82	< 0.05	12.2	< 0.1	0.72	< 0.001	< 0.1	0.149	14.4	17.4	31.8	1.4	21.4	34.6
0517		7/7/1996	0.01	< 0.01	0.78	< 0.05	12.1	< 0.1	0.71	< 0.001	< 0.1	0.113	10	23.1	33.1	1.3	5.4	25.5
0517		10/1/1996	< 0.01	< 0.01	0.71	< 0.05	10.9	< 0.1	0.66	0.002	< 0.1	0.087	9.7	20.9	30.6	1.5	< 1	29.5
0517		1/21/1997	< 0.01	< 0.01	0.67	< 0.05	10.5	< 0.1	0.6	< 0.001	< 0.1	0.076	10.3	17.3	27.6	< 0.2	< 1	12
0517		1/22/1997	< 0.01	< 0.01	0.67	< 0.05	10.5	< 0.1	0.6	< 0.001	< 0.1	0.076	10.3	17.3	27.6	< 0.2	< 1	12
0517		4/8/1997	< 0.01	< 0.01	0.62	< 0.05	9.18	< 0.1	0.56	< 0.001	< 0.1	0.077	17.5	17.5	35	< 0.2	< 1	58.5

TABLE B.1
Zone 3 Data Summary, 1989-2009
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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0517		7/8/1997	6,872.70	5.10	4.59	5350	487	517	179	10.4	2.4	3470	71.6	20.1	2.58	4.46	14.4	< 0.001
0517		10/7/1997	6,872.60	4.50	4.35	5310	504	503	165	9.9	< 0.1	3390	74	21.4	4.08	6.08	18.2	< 0.001
0517		1/15/1998	6,872.40	4.50	4.63	5240	507	506	172	10.1	3.3	3600	64.7	20	4.63	5.1	14.4	< 0.001
0517		4/7/1998	6,872.50	4.50	4.57	5250	478	486	164	9.2	2	3240	58.8	17.7	4.23	5.7	12.7	< 0.001
0517		7/7/1998	6,872.40	4.80	4.45	5170	480	486	173	9.7	< 0.1	3500	61.8	18.7	4.83	5.9	13.5	< 0.001
0517		10/6/1998	6,872.20	4.56	4.56	5170	506	505	171	10.2	1.4	3420	59.9	40.9	5.59	no data	12.2	< 0.001
0517		1/5/1999	6,871.80	4.60	4.60	5220	433	477	158	9	2	3500	57.8	17	4.12	4.5	12.3	< 0.001
0517		4/6/1999	6,870.90	4.50	4.72	5110	472	478	156	9.4	4	3260	62.5	15.3	4.45	3.6	12.3	< 0.001
0517		7/13/1999	6,871.32	4.60	4.09	5010	392	493	149	10	< 0.1	3300	52.6	14.4	4.19	4.4	9.96	< 0.001
0517		10/5/1999	6,869.10	4.50	4.40	4970	515	520	164	8.9	< 0.1	3510	54.7	13.7	4.42	5	11.2	< 0.001
0517		1/4/2000	6,870.80	4.50	4.67	4830	476	476	146	9.7	3	3150	50.2	12.5	5.16	4.5	8.59	< 0.001
0517		5/1/2000	6,871.60	4.50	4.67	4750	436	415	146	9.5	5	3000	54.6	13	3.77	5.4	11.6	< 0.001
0517		7/18/2000	6,871.30	4.55	4.70	4800	461	435	149	8.56	7	2850	50.6	12.5	3.95	5.1	10.2	< 0.001
0517		10/2/2000	6,871.55	4.54	4.78	4720	467	451	154	9.69	6	2990	48.6	11.5	3.05	3.7	9.8	0.001
0517		1/15/2001	6,871.75	4.80	4.60	4640	447	396	145	9	3	3220	53.2	12	3.62	3.6	9	< 0.001
0517		4/9/2001	6,871.75	4.90	4.75	5180	527	481	143	8.6	7	3870	60.5	40.4	4.15	3.7	60.2	< 0.001
0517		7/10/2001	6,871.45	4.36	4.65	4670	462	430	145	8.5	3	2900	45	9.95	2.61	7	8.9	< 0.001
0517		10/8/2001	6,871.45	4.50	4.60	4690	430	390	132	8.3	3.1	2600	55.1	10	2.9	3.7	7.9	< 0.001
0517		1/9/2002	6,871.35	5.65	4.60	4620	478	416	120	10	1.2	3000	69	9.8	2.6	2.8	10.1	< 0.001
0517		4/3/2002	6,871.40	4.46	4.48	4660	517	436	146	10	1	3230	56.4	10.1	2.89	6.8	11	< 0.001
0517		7/15/2002	6,871.45	4.93	4.42	4710	544	466	136	8.4	< 0.1	3390	42.6	10.5	2.49	5.9	10.4	< 0.001
0517		10/14/2002	6,871.20	4.19	4.12	4260	512	447	142	8.8	< 0.1	3250	46.6	10.8	1.09	5.3	8.9	< 0.001
0517		1/7/2003	6,870.77	4.04	4.04	4690	504	457	107	6	< 0.1	3140	34.4	10.3	2.5	5.6	10.7	< 0.001
0517		4/8/2003	6,870.68	4.12	3.70	4720	468	395	149	11.2	< 0.1	2926	49.4	10.1	2.7	5	10.2	< 0.001
0517		7/8/2003	6,870.55	4.06	3.87	4730	476	411	147	9.8	< 0.1	2990	46.2	10.4	1.9	5.9	8.3	< 0.001
0517		10/13/2003	6,870.44	4.22	3.89	4780	505	454	141	9.2	< 0.1	3290	48.8	10.3	1.5	4.6	8.8	< 0.001
0517		1/6/2004	6,870.25	4.21	3.80	4820	521	456	166	20.3	< 1.0	3300	48.9	11.0 D	1.65	5.6	7.9	< 0.001
0517		4/6/2004	6,870.23	4.26	4.15	4850	492	435	149	9.1	< 1	3090 D	47.2	10.8 D	0.72	5.1	7.3	< 0.001
0517		7/13/2004	6,869.94	4.17	3.87	4720	483	423	158	9.4	< 1	3130 D	48	9.9 D	0.46	4.4	6.3	< 0.001
0517		10/11/2004	6,870.03	4.47	4.09	4890	512 D	469 D	151	10	< 1	3330 D	48	10.6 D	0.41	3.5	5.8	< 0.001
0517		1/10/2005	6,869.86	4.01	3.92	4940	485 D	426 D	146	9.4	< 1	3040 D	45	10.3 D	0.4	1.7	5.3	< 0.001
0517		4/12/2005	6,869.62	4.39	4.07	4590	514	444	156	9.8	< 1	3370	47	9.6	0.3	4.6	5.6	< 0.001
0517		7/12/2005	6,869.32	4.46	3.93	4910	505 D	443 D	142	9.2	< 1	3270 D	42	9.7 D	0.1	6.4	4.1	< 0.001
0517		10/10/2005	6,869.52	4.45	3.86	4880	502 D	467 D	146	10	< 1	3260 D	46	8.6 D	0.4	3.4	4.8	< 0.001
0517		1/16/2006	6,869.38	4.42	4.12	4790	454 D	431 D	142	9.9	< 1	3100 D	45	11.3 D	0.3	5.3	4.4	< 0.001

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
0517		7/8/1997	< 0.01	< 0.01	0.64	< 0.05	10.5	< 0.1	0.51	< 0.001	< 0.1	0.082	8.5	17.4	25.9	< 0.2	< 1	13.3
0517		10/7/1997	< 0.01	< 0.01	0.77	< 0.05	11.3	< 0.1	0.66	< 0.001	< 0.1	0.111	9	15.7	24.7	0.9	< 1	10.5
0517		1/15/1998	< 0.01	< 0.01	0.59	< 0.05	9	< 0.1	0.54	< 0.001	< 0.1	0.0932	9.6	14.3	23.9	< 0.2	< 1	44.3
0517		4/7/1998	< 0.01	0.007	0.55	< 0.05	8.15	< 0.1	0.49	< 0.001	< 0.1	0.0901	16.3	13.1	29.4	< 0.2	6.1	19.7
0517		7/7/1998	< 0.01	0.008	0.55	< 0.05	8.64	< 0.1	0.5	< 0.001	< 0.1	0.0885	11	15.4	26.4	< 0.2	< 1	23.4
0517		10/6/1998	< 0.01	0.009	0.54	< 0.05	7.78	< 0.1	0.44	< 0.001	< 0.1	0.0936	11	13.4	24.4	< 0.2	9.9	4.4
0517		1/5/1999	< 0.01	0.008	0.55	< 0.05	8.11	< 0.1	0.45	< 0.001	< 0.1	0.0924	10.1	10.9	21	< 0.2	28.7	28.7
0517		4/6/1999	< 0.01	0.01	0.59	< 0.05	8.2	< 0.1	0.46	< 0.001	< 0.1	0.0851	20.6	20.3	40.9	< 0.2	< 1	61.8
0517		7/13/1999	< 0.01	0.01	0.62	< 0.05	8	< 0.1	0.5	< 0.001	< 0.1	0.0758	9.9	10.2	20.1	< 0.2	< 1	18.8
0517		10/5/1999	< 0.01	0.011	0.61	< 0.05	8.82	< 0.1	0.44	0.002	< 0.1	0.0731	9.8	13.2	23	< 0.2	< 1	10
0517		1/4/2000	< 0.01	< 0.005	0.63	< 0.05	8.36	< 0.1	0.54	< 0.001	< 0.1	0.0657	8.6	12.1	20.7	< 0.2	< 1	7.2
0517		5/1/2000	< 0.01	0.056	0.57	< 0.05	7.71	< 0.1	0.51	< 0.001	< 0.1	0.0695	19	11	30	3.2	4.2	20.8
0517		7/18/2000	< 0.01	0.008	0.55	< 0.05	7.14	< 0.1	0.37	< 0.001	< 0.1	0.0661	9.6	13.1	22.7	1.7	< 1	26.7
0517		10/2/2000	< 0.01	0.006	0.51	< 0.05	6.73	< 0.1	0.4	< 0.001	< 0.1	0.0606	9.8	9.4	19.2	< 0.2	< 1	26.4
0517		1/15/2001	< 0.01	0.005	0.54	< 0.05	6.43	< 0.1	0.47	< 0.001	< 0.1	0.0605	12.2	8.9	21.1	< 0.2	< 1	14.5
0517		4/9/2001	0.02	0.008	0.75	< 0.05	10.7	< 0.1	0.65	< 0.001	0.4	0.218	7.8	10.6	18.4	46.5	< 1	24.2
0517		7/10/2001	< 0.01	0.005	0.52	< 0.05	5.84	< 0.1	0.46	< 0.001	< 0.1	0.064	15.7	11.4	27.1	< 0.2	< 1	9.1
0517		10/8/2001	< 0.01	0.007	0.47	< 0.05	5.26	< 0.1	0.37	< 0.001	< 0.1	0.0614	8.4	14	22.4	< 0.2	< 1	12.1
0517		1/9/2002	< 0.01	0.008	0.55	< 0.05	6.08	< 0.1	0.49	< 0.001	< 0.1	0.0568	11.2	15.5	26.7	< 0.2	< 1	15.1
0517		4/3/2002	< 0.01	0.007	0.57	< 0.05	6.5	< 0.1	0.5	< 0.001	< 0.1	0.0652	13.1	12.2	25.3	< 0.2	< 1	29.6
0517		7/15/2002	< 0.01	0.007	0.55	< 0.05	5.88	< 0.1	0.48	< 0.001	< 0.1	0.0647	11.2	21.8	33	< 0.2	< 1	12.5
0517		10/14/2002	< 0.01	0.006	0.56	< 0.05	6.1	< 0.1	0.5	< 0.001	< 0.1	0.066	7.6	9.5	17.1	0.5	< 1	17.6
0517		1/7/2003	< 0.01	0.006	0.61	< 0.05	6.58	< 0.1	0.5	< 0.001	< 0.1	0.0752	8.6	6.6	15.2	1.2	< 1	20.5
0517		4/8/2003	< 0.01	0.007	0.54	< 0.05	6.33	< 0.1	0.53	< 0.001	< 0.1	0.079	10.1	12.1	22.2	0.6	< 1	34.1
0517		7/8/2003	< 0.01	0.008	0.6	< 0.05	6.65	< 0.1	0.52	< 0.001	< 0.1	0.0544	7.3	10.6	17.9	1.1	< 1	9.2
0517		10/13/2003	< 0.01	0.008	0.64	< 0.05	6.55	< 0.1	0.56	< 0.001	< 0.1	0.0677	6	5.3	11.3	0.4	< 1	24
0517		1/6/2004	< 0.01	0.007	0.68	< 0.05	6.95	< 0.1	0.52	< 0.001	< 0.1	0.0622 D	8.2	9.6	17.8	0.5	< 1.0	12.4
0517		4/6/2004	< 0.01	0.006	0.71	< 0.05	7.18	< 0.1	0.61	< 0.001	< 0.1	0.0576 D	6.5	11.1	17.6	0.2	< 1	19.7
0517		7/13/2004	< 0.01	0.005	0.64	< 0.05	6.62	< 0.1	0.62	< 0.001	< 0.1	0.0526 D	10.2	10.1	20.3	0.3	< 1.0	9.3
0517		10/11/2004	< 0.01	< 0.005	0.57	< 0.05	6.98	< 0.1	0.58	< 0.001	< 0.1	0.0504	6.5	11.1	17.6	0.3	< 1.0	15.4
0517		1/10/2005	< 0.01	< 0.005	0.74	< 0.05	6.7	< 0.1	0.66	< 0.001	< 0.1	0.0554	4	9.2	13.2	0.3	< 1.0	22.2
0517		4/12/2005	< 0.01	0.005	0.67	< 0.05	7.38	< 0.1	0.63	< 0.001	< 0.1	0.051	13.7	11.4	25.1	< 0.2	< 1.0	9.8
0517		7/12/2005	< 0.01	0.007	0.74	< 0.05	7.39	< 0.1	0.69	< 0.001	< 0.1	0.0407	11.6	9.3	20.9	0.2	< 1.0	42.6
0517		10/10/2005	< 0.01	0.007	0.78	< 0.05	7.49	< 0.1	0.68	< 0.001	< 0.1	0.0447	10.3	12.2	22.5	< 0.2	< 1.0	16.7
0517		1/16/2006	< 0.01	0.007	0.7	< 0.05	7.26	< 0.1	0.69	< 0.001	< 0.1	0.0528	7.8	10.5	18.3	< 0.2	< 1.0	10.4

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0517		4/10/2006	6,869.43	4.03	4.08	4910	482 D	446 D	152	10	< 1	3240 D	43	10.4 D	0.2	4.8	4.8	< 0.001
0517		7/24/2006	6,869.04	4.08	3.58	4740	492 D	446 D	141	< 0.5	< 1	3250 D	43	10.2 D	0.1	5.8	4.1	< 0.001
0517		4/18/2007	6,869.18	3.95	3.71	5100	478 D	472 D	136	10.7	<1	3520 D	44	9.7 D	<0.1	6.56	5.6	<0.001
0517		7/10/2007	6,869.02	3.88	3.18	4910	508 D	477 D	154	11.3	<1	3590 D	44	10.4 D	<0.1	5.64	4.7	0.02
0517		10/8/2007	6,868.92	4.05	3.93	5130	478 D	463 D	147	11.8	<1	3390 D	47	10.9 D	0.2	6.76	4.7	<0.001
0517		1/21/2008	6,869.25	3.8	3.9 H	5080	454 D	431 D	155	12.9	< 1	3190 D	45 D	11.8 D	0.2	6.24	5.1	0.003
0517		4/15/2008	6,868.97	3.69	3.31	4880	488	473	145 D	11.1	< 1	3810 D	40	10.0 D	< 0.1	3.98	5.1	< 0.001
0517		7/15/2008	6,868.62	4.00	3.77	5110	440	425	136 D	11	< 1	3410 D	36	10 D	< 0.1	5.92	5.8	< 0.003
0517		10/13/2008	6,869.02	3.70	3.31	5040 H	483	460	148 D	11	< 1	3650 D	41	10	< 0.1	4.28	6.5	< 0.001
0517		1/19/2009	6,868.49	3.68	3.23	5350 H	441	447	156	12	<1	3100 D	38	4.92	<0.1	6.2	5.7	<0.001
0517		4/13/2009	6,868.84	3.7	3.13	5190	435 D	434 D	144 D	10	<1	3450 D	34	8.2 D	0.1	5.44	6.1	<0.001
0517		7/13/2009	6,868.49	3.65	3.23 H	5320 H	465	450	145	12	<1	3690 D	45	5.6 D	<0.1	5.08	5.0	<0.001
0517		10/12/2009	6,868.69	3.7	3.59	5320	442	437	142	12	<1	3360 D	35	10.7 D	0.1	4.72	6.1	<0.001
0518		7/23/1989	6,897.20	3.30	3.44	9675	443	764	236	35.8	0	6727	64.6	123	22	43	420	0.001
0518		10/11/1989	6,892.90	3.20	3.32	10260	417	770	223	46.8	0	6908	133	77.2	29	42	500	< 0.001
0518		1/3/1990	6,890.20	3.00	3.00	10370	440	748	228	30	< 1	6962	108	40.4	18.7	23.7	410	0.001
0518		4/3/1990	6,888.20	2.90	3.26	10524	431	850	223	29.2	< 1	6989	84	52	28	15.6	430	0.001
0518		7/10/1990	6,886.80	3.30	2.95	9505	415	768	198	22.3	< 1	6226	67	34.4	16	26.1	299	< 0.001
0518		10/9/1990	6,885.60	3.10	3.30	11417	439	900	248	27.5	< 1	7573	87.9	45.2	20.6	17.2	406	0.002
0518		1/4/1991	6,885.10	3.40	3.62	7402	476	168	158	33.5	< 1	4846	85.7	12.6	0.58	18.9	128	< 0.001
0518		4/10/1991	6,887.30	3.80	4.11	7370	471	686	119	14.2	< 1	4597	38.3	8.8	< 0.01	16.3	62.1	< 0.001
0518		7/16/1991	6,885.60	3.70	3.64	7248	467	685	136	12.8	< 1	5539	23.8	7.6	< 0.01	19.9	64.9	< 0.001
0518		10/14/1991	6,883.90	3.60	3.30	7257	363	493	145	11.1	< 1	4652	41.8	7.2	< 0.01	17.5	73.2	< 0.001
0518		1/14/1992	6,884.10	3.60	3.79	7008	385	645	128	12.9	< 1	4442	66.8	9.3	< 0.01	17.5	63.1	< 0.001
0518		4/7/1992	6,885.10	3.70	3.44	7028	419	581	150	15.5	< 1	4452	32.7	6.87	< 0.1	18.5	41.2	0.003
0518		7/7/1992	6,881.60	3.40	3.07	8076	428	574	244	25.5	< 1	5279	47.8	17	< 0.1	16	161	< 0.001
0518		10/13/1992	6,879.70	3.50	2.99	8062	447	613	168	17.8	< 1	5260	48.2	17.3	< 0.1	16	123	< 0.001
0518		1/21/1993	6,882.50	3.70	2.97	5822	447	613	168	14.7	< 1	4456	51.6	4.6	< 0.1	16	32.5	0.001
0518		4/14/1993	6,883.50	4.20	3.00	5276	448	530	100	14	< 1	3993	53.7	15	< 0.1	14.5	39.1	0.001
0518		7/15/1993	6,879.80	3.60	3.06	5485	433	569	146	14	< 1	3940	34.1	6.4	< 0.1	17.4	51	< 0.001
0518		10/6/1993	6,876.00	3.70	3.03	5631	438	651	131	12.5	< 1	4358	38.2	8.3	< 0.1	14.2	68	0.003
0518		1/5/1994	6,880.40	3.60	2.79	6074	499	619	138	11.3	< 1	4350	36.3	7.93	0.13	< 1	65.6	< 0.001
0518		4/13/1994	6,881.30	3.80	3.08	5991	510	618	122	13.1	< 1	4246	32	10.8	< 0.1	16.1	56.7	0.001
0518		7/21/1994	6,881.30	4.00	3.17	5944	481	609	126	13.7	< 1	4218	24.6	7.69	< 0.1	14	53.4	< 0.001
0518		10/5/1994	6,881.40	4.00	3.84	5869	463	652	138	14.5	< 1	4296	31.3	10.7	< 0.1	10	37.9	0.001

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
0517		4/10/2006	< 0.01	0.007	0.74	< 0.05	7.75	< 0.1	0.7	< 0.001	< 0.1	0.0466	5.9	11.8	17.7	< 0.2	< 1.0	8.5
0517		7/24/2006	< 0.01	0.006	0.77	< 0.05	8.14	< 0.1	0.66	< 0.001	< 0.1	0.0441	6.7	13.1	19.8	< 0.2	< 1.0	9.2
0517		4/18/2007	<0.01	0.009	0.77	<0.05	8.03	<0.1	0.84	<0.001	<0.1	0.0514	7.3	18	25.3	<0.2	<1	11.1
0517		7/10/2007	<0.01	0.008	0.83	<0.05	8.08	<0.1	0.87	<0.001	<0.1	0.048 D	7.4	14.2	21.6	<0.2	<1	11.6
0517		10/8/2007	<0.01	0.007	0.8	<0.05	8.98	<0.1	0.76	<0.001	<0.1	0.0518	5.6	14.1	19.7	<0.2	1.8	11.2
0517		1/21/2008	< 0.01	0.009	0.79	< 0.05	8.8	< 0.1	0.84	0.001	< 0.1	0.0561	11.8	17.4	29.2	< 0.2	< 0.9	13
0517		4/15/2008	< 0.01	0.008	0.85	< 0.05	9.04	< 0.1	0.84	< 0.001	0.2	0.0525	6.6	20.3	26.9	1.3	0 U	11.3
0517		7/15/2008	< 0.01	0.01	0.75	< 0.05	8.79	< 0.1	0.8	< 0.001	< 0.1	0.0477	7	16	23	0.4	5.7 U	10.2
0517		10/13/2008	< 0.01	0.009	0.87	< 0.05	9.63	< 0.1	0.91	< 0.001	< 0.1	0.0564	5.4	14	19.4	1.1	1.8 U	12.3
0517		1/19/2009	<0.01	0.009	0.81	<0.05	9.06	<0.1	0.84	0.002	<0.1	0.0485	8	14	22	0.6	1.4 U	15.1
0517		4/13/2009	<0.01	0.009	0.80	<0.05	9.09	<0.1	0.83	<0.001	<0.1	0.0558	5.1	14	19.1	0.8	0.4 U	18.0
0517		7/13/2009	<0.01	0.009	0.81	<0.05	9.27	<0.1	0.87	<0.001	<0.1	0.0538	7.2	13	20.2	0.4 U	1.2 U	16.4
0517		10/12/2009	<0.01	0.009	0.86	<0.05	9.91	<0.1	0.88	<0.001	<0.1	0.0585	6.8	13	19.8	1.1	3.2 U	18.6
0518		7/23/1989	0.16	< 0.01	1.7	0.11	41	< 0.1	1.9	0.001	< 0.1	0.842	24.3	16.7	41	17.9	4.1	120
0518		10/11/1989	0.19	0.03	1.8	0.19	44	< 0.01	2.1	0.006	1	1.08	11.5	11.2	22.7	55.8	5	70.1
0518		1/3/1990	0.16	0.01	1.9	< 0.05	41	< 0.01	2.1	< 0.001	0.22	0.988	10.3	4.3	14.6	42	5.1	54
0518		4/3/1990	0.18	< 0.01	2.1	< 0.05	50	< 0.01	2.5	< 0.001	0.16	0.801	12	< 1	12	10.2	2.2	15
0518		7/10/1990	0.13	0.01	1.17	< 0.05	36.5	< 0.1	1.91	0.001	0.26	1.077	7.1	1.3	8.4	6.8	< 1	15
0518		10/9/1990	0.21	0.01	2.75	< 0.05	51	< 0.1	3.21	< 0.001	0.9	1.786	17.8	5.1	22.9	4	< 1	22
0518		1/4/1991	0.06	< 0.01	1	< 0.05	19.8	< 0.1	1.31	0.001	0.26	0.7028	6.8	5.9	12.7	6.2	< 1	15.5
0518		4/10/1991	< 0.01	< 0.01	0.7	< 0.05	11.13	< 0.1	0.8	< 0.001	0.11	0.392	10.2	7.9	18.1	1.6	1.5	12.1
0518		7/16/1991	0.05	0.02	0.96	< 0.05	16.4	< 0.1	0.94	< 0.001	< 0.1	0.304	3.9	5.9	9.8	< 0.2	4.6	4
0518		10/14/1991	0.05	0.02	0.97	< 0.05	16.8	< 0.1	0.91	< 0.001	0.12	0.43	4.5	< 1	4.5	< 0.2	< 1	5
0518		1/14/1992	0.03	0.02	1.43	< 0.05	14	< 0.1	0.92	< 0.001	0.14	0.258	12.1	5.9	18	< 0.2	1.9	12
0518		4/7/1992	0.03	0.03	0.86	< 0.05	18.1	< 0.1	0.66	< 0.001	< 0.1	0.268	5.8	16.7	22.5	< 0.2	< 1	5.9
0518		7/7/1992	< 0.01	< 0.01	1.13	< 0.05	20.8	< 0.1	1.09	0.001	0.22	0.86	5.1	2.1	7.2	< 0.2	< 1	5.6
0518		10/13/1992	< 0.01	0.02	1.17	< 0.05	20.3	< 0.1	1.06	< 0.001	0.4	1.22	6.4	6.7	13.1	16.1	< 1	6.9
0518		1/21/1993	< 0.01	< 0.01	0.42	< 0.05	11.8	< 0.1	0.93	< 0.001	< 0.1	0.189	6.3	4.9	11.2	2.2	3.7	8.5
0518		4/14/1993	< 0.01	< 0.01	0.93	< 0.05	13.7	< 0.1	1.05	< 0.001	< 0.1	0.252	8.9	20.5	29.4	< 2	1.9	9.7
0518		7/15/1993	< 0.01	< 0.01	0.9	< 0.05	14.4	< 0.1	0.8	< 0.001	0.15	0.17	4.5	2	6.5	< 2	< 1	4.7
0518		10/6/1993	0.053	< 0.01	0.75	< 0.05	14.9	< 0.1	0.92	< 0.001	< 0.1	0.289	5.4	2.6	8	21.2	1.2	30.5
0518		1/5/1994	0.05	< 0.01	0.93	< 0.05	16.8	< 0.1	0.8	< 0.001	0.1	0.331	5.5	< 1	5.5	12.1	3.1	18.6
0518		4/13/1994	0.03	< 0.01	0.77	< 0.05	12.6	< 0.1	0.8	< 0.001	0.16	0.306	5.3	9.5	14.8	< 0.2	2	19.7
0518		7/21/1994	0.02	< 0.01	0.86	< 0.05	14.5	< 0.1	0.73	< 0.001	< 0.1	0.237	9.1	16.9	26	< 0.2	7.6	34.6
0518		10/5/1994	< 0.01	< 0.01	1.04	< 0.05	9.65	< 0.1	0.54	0.004	< 0.1	0.302	8.7	17.6	26.3	< 0.2	< 1	35.2

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0518		1/5/1995	6,880.90	3.90	3.84	5872	476	623	128	15	< 1	4462	33.6	14.4	< 0.1	14.1	62.2	< 0.001
0518		4/5/1995	6,880.90	3.90	3.30	7021	628	718	140	14.2	< 1	5113	29.6	12.8	< 0.1	11.5	64	0.001
0518		7/6/1995	6,880.30	4.40	3.10	6818	622	595	133	12.6	< 1	4765	34.2	16.5	< 0.1	13.7	85	0.002
0518		10/4/1995	6,880.20	3.60	3.08	4162	618	314	173	6.2	< 1	3064	28.7	5.22	< 0.1	16.9	< 0.1	0.002
0518		1/4/1996	6,880.10	3.20	3.11	7039	670	660	145	10.5	< 1	5245	33.4	9	< 0.1	15.3	98.5	0.001
0518		4/2/1996	6,880.20	3.40	3.50	7408	661	700	141	11.6	< 1	5180	37.3	9.2	0.13	14.7	97	< 0.001
0518		7/7/1996	6,879.50	3.50	3.24	5648	453	691	155	12.5	< 1	5139	42.8	13	1.2	15.6	122	< 0.001
0518		10/1/1996	6,879.20	3.80	3.31	7580	448	688	144	12.9	< 1	4928	35.8	8.95	0.25	13.2	100	< 0.001
0518		1/21/1997	6,879.70	4.00	3.26	7340	440	680	147	13.8	< 1	4920	34.3	9.21	2.28	13.9	100	0.002
0518		4/8/1997	6,878.80	3.30	3.55	7480	469	720	138	13.3	< 1	5250	38.7	8.4	1.75	12.2	104	< 0.001
0518		7/8/1997	6,878.40	3.70	3.56	7630	488	742	148	14.6	< 1	5370	41	8.29	2.46	10.6	106	< 0.001
0518		10/8/1997	6,878.40	3.00	3.43	7460	460	698	141	13.9	< 0.1	4990	39.4	9.32	2.87	6.8	110	< 0.001
0518		1/16/1998	6,878.30	3.70	3.73	7650	453	683	145	15.1	< 0.1	5000	39.4	9.54	1.89	11.8	87.3	< 0.001
0518		4/7/1998	6,878.30	3.70	3.48	7600	454	702	184	13.8	< 0.1	4920	35.9	8.37	2.84	11.1	70.4	< 0.001
0518		7/7/1998	6,877.90	3.70	3.64	7020	446	692	137	14.4	< 0.1	4600	33.7	8.31	1.44	9.8	75.8	< 0.001
0518		10/6/1998	6,877.80	3.35	3.66	7050	466	723	144	15.9	< 0.1	4800	35.8	4.48	1.89	10	90.4	0.001
0518		1/6/1999	6,877.76	3.30	3.54	7640	482	724	150	14.2	< 0.1	5000	38.7	8.24	2.26	8.3	80.4	< 0.001
0518		4/6/1999	6,877.86	3.30	3.75	7380	436	699	125	14.4	< 0.1	4800	43.5	7.28	1.37	8.3	76.6	< 0.001
0518		7/13/1999	6,877.28	3.50	3.62	7690	464	737	129	16.1	< 0.1	5000	31.7	7.17	0.62	8.3	69.5	< 0.001
0518		10/5/1999	6,877.26	3.48	3.61	7660	478	772	139	14.7	< 0.1	5300	35.4	8.36	0.98	8.3	86.5	< 0.001
0518		1/4/2000	6,877.36	3.30	3.58	7540	445	729	128	15.5	< 0.1	4960	37.1	7.7	1.5	7.9	55.1	< 0.001
0613		5/2/2000	6,884.60	3.02	3.11	13900	415	646	323	2	< 0.1	9150	177	474	22.8	91.2	666	< 0.001
0613		7/11/2000	6,883.70	2.96	3.16	13700	426	656	328	< 0.1	< 0.1	8770	166	445	16.8	68.6	662	< 0.001
0613		10/2/2000	6,885.00	3.03	3.08	13800	451	709	350	1.5	< 0.1	8870	175	400	18	49	694	0.001
0613		1/15/2001	6,883.50	3.10	3.08	13800	425	622	334	1	< 0.1	10400	183	423	17.2	46.4	810	< 0.001
0613		4/9/2001	6,883.65	2.96	3.16	13100	411	623	313	0.6	< 0.1	8510	174	425	18	41	738	< 0.001
0613		7/10/2001	6,883.50	2.98	3.12	13900	459	726	322	< 0.1	< 0.1	9400	147	370	16.5	96	753	< 0.001
0613		10/2/2001	6,883.50	3.24	3.00	13600	430	640	300	< 1	< 0.1	8400	160	392	17.3	87.5	673	< 0.001
0613		1/14/2002	6,883.45	3.12	3.00	13800	470	701	342	< 1	< 0.1	9090	172	394	16	109	670	< 0.001
0613		4/2/2002	6,883.40	2.92	3.02	13800	461	678	311	1.6	< 0.1	9810	189	389	15.4	39.7	718	< 0.001
0613		7/9/2002	6,883.23	2.95	3.07	13300	437	672	316	< 1	< 0.1	8810	167	359	15.5	39.7	725	< 0.001
0613		10/8/2002	6,883.30	2.85	3.04	11800	398	625	284	< 1	< 0.1	8490	165	357	14.2	166	592	< 0.001
0613		1/7/2003	6,882.69	2.96	3.02	13100	377	611	264	< 1	< 0.1	7870	158	341	12.6	137	475	< 0.001
0613		4/8/2003	6,882.54	2.87	3.05	13200	398	649	290	< 1	< 0.1	8020	148	341	13.8	142	473	< 0.001
0613		7/8/2003	6,882.75	2.78	2.98	12100	438	684	292	< 1	< 0.1	8910	172	327	13	134	726	< 0.001

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
0518		1/5/1995	< 0.01	< 0.01	0.96	< 0.05	15	< 0.1	0.9	< 0.001	0.15	0.321	10.9	7.9	18.8	25.2	< 1	47.9
0518		4/5/1995	0.04	0.02	0.97	< 0.05	15.4	< 0.1	0.88	< 0.001	0.23	0.332	8.8	14.4	23.2	8.6	2.4	38.9
0518		7/6/1995	0.05	< 0.01	0.99	< 0.05	15.9	< 0.1	0.91	< 0.001	0.28	0.5747	9.8	6.7	16.5	17.7	1.9	38.6
0518		10/4/1995	< 0.01	< 0.01	0.14	< 0.05	0.26	< 0.1	< 0.05	0.003	< 0.1	0.053	1.5	< 1	1.5	< 0.2	< 1	4.3
0518		1/4/1996	0.05	< 0.01	1.01	< 0.05	15.5	< 0.1	0.91	< 0.001	0.16	0.472	8.6	5.1	13.7	25	4.2	17.9
0518		4/2/1996	0.05	< 0.01	1.02	< 0.05	15.4	< 0.1	0.87	< 0.001	0.13	0.587	9.4	6.4	15.8	16.2	< 1	28.3
0518		7/7/1996	< 0.01	< 0.01	1.14	< 0.05	17.3	< 0.1	1.08	< 0.001	0.14	0.548	7.2	7	14.2	23.2	6.2	49.2
0518		10/1/1996	0.06	< 0.01	1.06	< 0.05	15.9	< 0.1	0.99	< 0.001	< 0.1	0.42	6	< 1	6	18.6	< 1	31.3
0518		1/21/1997	0.06	< 0.01	1.09	< 0.05	16.2	< 0.1	1.01	< 0.001	0.19	0.356	6.8	< 1	6.8	18.6	< 1	11.7
0518		4/8/1997	0.06	< 0.01	1.06	< 0.05	17.5	< 0.1	1.02	< 0.001	0.16	0.445	6	< 1	6	< 0.2	5.6	23.9
0518		7/8/1997	0.06	< 0.01	1.14	< 0.05	18.5	< 0.1	0.98	< 0.001	< 0.1	0.368	8.7	< 1	8.7	16.7	< 1	18.5
0518		10/8/1997	0.07	< 0.01	1.28	< 0.05	18.7	< 0.1	1.17	< 0.001	< 0.1	0.367	6.6	< 1	6.6	13.1	< 1	11.9
0518		1/16/1998	0.06	< 0.01	1.19	< 0.05	17.3	< 0.1	1.16	< 0.001	< 0.1	0.3836	6.8	< 1	6.8	9	< 1	9.6
0518		4/7/1998	0.06	0.007	1.05	< 0.05	15	< 0.1	1.04	< 0.001	< 0.1	0.372	5	< 1	5	12.3	< 1	12
0518		7/7/1998	0.06	0.009	1.05	< 0.05	16.2	< 0.1	1	< 0.001	< 0.1	0.347	5.6	< 1	5.6	9.2	7	17
0518		10/6/1998	0.06	0.007	1.16	< 0.05	17.5	< 0.1	1.06	< 0.001	< 0.1	0.363	7.9	< 1	7.9	8	< 1	16.6
0518		1/6/1999	0.06	0.011	1.26	< 0.05	17.2	< 0.1	1.37	< 0.001	< 0.1	0.345	7.5	< 1	7.5	9.4	9.5	9.5
0518		4/6/1999	0.06	0.01	1.15	< 0.05	16.6	< 0.1	1.15	< 0.001	< 0.1	0.328	6.4	1.7	8.1	4.1	< 1	15.3
0518		7/13/1999	0.05	< 0.005	1.11	< 0.05	16.2	< 0.1	1.1	< 0.001	< 0.1	0.0198	3.5	< 1	3.5	7.8	< 1	14
0518		10/5/1999	0.06	0.01	1.17	< 0.05	18.4	< 0.1	1.18	< 0.001	< 0.1	0.327	6.1	4.6	10.7	7.1	< 1	13.6
0518		1/4/2000	0.05	< 0.005	1.04	< 0.05	17.1	< 0.1	1.06	0.001	< 0.1	0.306	9.1	< 1	9.1	8.5	< 1	12.3
0613		5/2/2000	0.21	0.714	1.8	< 0.05	62.6	< 0.1	1.69	< 0.001	6	1.93	10	3	13	339	< 1	19.7
0613		7/11/2000	0.22	0.028	1.64	0.23	63.6	< 0.1	1.88	< 0.001	5.8	1.98	11.9	< 1	11.9	317	< 1	46.6
0613		10/2/2000	0.21	0.03	1.56	0.28	60.1	< 0.1	1.52	< 0.001	5.08	1.82	13.5	< 1	13.5	249	< 1	67.9
0613		1/15/2001	0.23	0.028	1.77	< 0.05	61	< 0.1	1.6	< 0.001	5.4	2.08	14.6	< 1	14.6	794	< 1	44.1
0613		4/9/2001	0.2	0.027	1.9	< 0.05	54.8	< 0.1	1.7	< 0.001	5	1.85	11.5	1.5	13	592	< 1	40
0613		7/10/2001	0.23	0.028	1.63	< 0.05	54.3	< 0.1	1.49	< 0.001	4.8	1.99	10.5	< 1	10.5	556	< 1	30.3
0613		10/2/2001	0.18	0.038	1.74	< 0.05	59.2	< 0.1	1.54	< 0.001	3.62	1.89	13	< 1	13	672	< 1	38
0613		1/14/2002	0.22	0.039	1.81	< 0.05	55.3	< 0.1	1.62	< 0.001	3	1.99	13.2	3.2	16.4	810	< 1	20.2
0613		4/2/2002	0.21	0.038	1.95	< 0.05	63.9	< 0.1	1.79	< 0.001	3.1	1.84	15.1	< 1	15.1	575	< 1	38.5
0613		7/9/2002	0.07	0.026	0.62	< 0.05	69.4	< 0.1	1.15	< 0.001	1.1	2.48	19.9	< 1	19.9	509	< 1	40.3
0613		10/8/2002	0.13	0.031	1.81	< 0.05	56.5	< 0.1	1.63	< 0.001	2.3	1.79	16.6	< 1	16.6	543	< 1	52.1
0613		1/7/2003	0.13	0.031	1.66	< 0.05	49.6	< 0.1	1.63	< 0.001	2.4	1.96	17.6	< 1	17.6	568	< 1	69.9
0613		4/8/2003	0.16	0.038	1.37	< 0.05	41.9	< 0.1	1.62	< 0.001	2	1.91	12	< 1	12	588	< 1	52.4
0613		7/8/2003	0.17	0.03	1.71	< 0.05	53	< 0.1	1.76	< 0.001	2.2	1.51	15.4	< 1	15.4	389	< 1	29.5

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0613		10/8/2003	6,882.97	3.11	3.04	13200	429	705	297	< 1	< 0.1	9510	175	321	12.5	138	810	< 0.001
0613		1/6/2004	6,882.61	2.77	3.01	13100	529	817	329	4.3	< 1.0	10900	195	323 D	12.3 D	133 D	842	< 0.001
0613		4/6/2004	6,882.66	2.94	2.99	13200	446	716	300	< 1	< 1	8950 D	166	297 D	12 D	126 D	738 D	< 0.001
0613		7/13/2004	6,882.67	2.79	2.84	12900	438	700	304	< 0.5	< 1	9030 D	161	279 D	11.7 D	130 D	708 D	< 0.001
0613		10/5/2004	6,882.21	2.78	2.98	12600	435 D	703 D	295	< 0.5	< 1	9210 D	159	284 D	11.6 D	148 D	687 D	< 0.001
0613		1/4/2005	6,882.66	2.86	2.93	13400	462 D	749 D	294	< 0.5	< 1	9310 D	162	265 D	9.7 D	102 D	650 D	< 0.001
0613		4/5/2005	6,881.78	2.97	2.97	13000	452	748	293	< 0.5	< 1	9100	164	289	8.2	141	630	< 0.001
0613		7/12/2005	6,882.27	3.02	3.00	13100	509 D	795 D	202	4.3	< 1	9910 D	247	265 D	11.3 D	168 D	683 D	< 0.001
0613		10/5/2005	6,882.39	3.02	3.15	13400	431 D	744 D	284	< 0.5	< 1	9040 D	156	253 D	10.7 D	136 D	712 D	< 0.001
0613		1/10/2006	6,882.16	3.01	3.25	13300	397 D	687 D	270 D	< 0.5	< 1	8690 D	149	286 D	10.6 D	99.2 D	690	< 0.001
0613		4/3/2006	6,882.14	2.80	3.44	13000	426 D	728 D	262	0.6	< 1	8520 D	150	273 D	10.3 D	111 D	679	< 0.001
0613		7/19/2006	6,882.19	2.94	3.06	12600	388 D	717 D	290 D	1.9 D	< 1	9170 D	173	242 D	10.4 D	108 D	710	< 0.001
0613		10/3/2006	6,882.14	2.87	3.06	12900	435 D	726 D	269	0.6	< 1	8790 D	138	268 D	9.5 D	118 D	511	< 0.001
0613		1/9/2007	6,882.04	3.00	3.02	13100	410 D	698 D	267 D	0.5	<1	8550 D	136	239 D	9 D	123	679	<0.001
0613		4/10/2007	6,882.04	3.02	3.12	12900	444	756	278	2	<1	9040 D	147	250 D	9.5 D	114	611	<0.001
0613		7/10/2007	6,882.04	2.90	3.06	13100	455 D	745 D	294	<0.5	<1	9260 D	146	253 D	9.2	121 D	688	0.02
0613		10/8/2007	6,881.72	2.93	2.95	12700	376 D	651 D	266 D	0.8	<1	8300 D	146 D	247 D	10.6	127	641	0.001
0613		1/15/2008	6,882.40	3.03	3.4	12200	387 D	658 D	274 D	1.3	< 1	8380 D	196 D	269 D	9.1 D	144	733 D	< 0.001
0613		4/8/2008	6,881.94	2.84	2.99	12500	458 D	791 D	305 D	2 D	< 1	9430 D	183	251 D	9.6	97.6	500	0.002
0613		7/8/2008	6,881.79	2.80	3.05	12000	414	700	261 D	< 1	< 1	9300 D	188	264 D	7.1	98	711 D	< 0.003
0613		10/7/2008	6,881.74	2.78	3.07	12500	411	680	250 D	< 1	< 1	9300 DH	119	242 D	7.6	87.6	787	0.001
0613		1/12/2009	6,881.79	2.86	3.09	13000	402	680	270	<1	<1	8180 D	102	353 D	8.1	94.8	682 D	<0.001
0613		4/7/2009	6,881.84	2.85	3.07	12600	407 D	674 D	271 D	<1	<1	9360 D	81	228 D	4.0	89.6	660 D	<0.001
0613		7/7/2009	6,881.99	2.76	2.87	12500	425 D	696	259 D	<1	<1	9360 D	193	243 D	7.4	71.6	745 D	<0.001
0613		10/7/2009	6,881.74	3.00	3.06	12400	433 D	691	262 D	<1	<1	8690 D	212	241 D	7.5	99.2	635 D	<0.001
0708		4/29/1991	no data	4.00	4.16	6374	438	349	126	13.3	< 1	4055	54.6	17.5	26	< 1	98.7	0.034
0708		4/2/2001	6,864.20	2.82	3.20	5520	515	578	101	10.7	< 0.1	3750	31.3	1.81	< 0.1	< 1	0.61	0.004
0708		7/16/2001	6,863.90	2.73	3.36	5740	433	519	122	14.8	< 0.1	3630	38.4	1.58	< 0.1	< 1	0.8	0.002
0708		10/8/2001	6,864.25	2.67	3.70	5700	420	500	91.1	10.8	< 0.1	3200	33.2	1.4	< 0.1	< 1	0.82	0.006
0708		1/14/2002	6,864.40	2.83	3.80	5670	520	582	119	12.6	< 0.1	3650	28.6	1.11	< 0.1	< 1	1	0.002
0708		4/8/2002	6,864.30	2.82	3.29	5670	453	528	108	11.8	< 0.1	3600	33.4	1.22	< 0.1	< 1	1	0.001
0708		7/16/2002	6,864.10	2.68	3.14	5760	540	610	99.5	10.2	< 0.1	4200	16.1	2.04	< 0.1	< 1	0.8	0.001
0708		10/14/2002	6,863.93	2.68	3.23	4840	485	571	116	12.1	< 0.1	3880	25.1	2.14	< 0.1	< 1	0.9	0.002
0708		1/13/2003	6,863.61	2.77	2.98	5740	529	632	98	9.6	< 0.1	4020	14.9	2.03	< 0.1	< 1	1	0.003
0708		4/15/2003	6,863.88	3.31	2.92	5860	460	574	113	13.5	< 0.1	3800	30	2.17	< 0.1	< 1	1	< 0.001

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
0613		10/8/2003	0.18	0.032	1.86	< 0.05	44.3	< 0.1	1.74	< 0.001	2.5	1.73	6.9	< 1	6.9	400	< 1	34.3
0613		1/6/2004	0.16	0.029	1.77	< 0.05	49.4	< 0.1	1.58	< 0.001	2.3	1.58 D	9.4	< 1.0	9.4	440	< 1.0	28.2
0613		4/6/2004	0.16	0.031	1.9	< 0.05	56.8	< 0.1	1.77	0.005	2.4	1.5 D	10.9	< 1	10.9	425	< 1	36.8
0613		7/13/2004	0.19	0.029	1.83	< 0.05	54.1	< 0.1	1.64	< 0.001	2.5	1.43 D	12.7	< 1.0	12.7	408	< 1.0	22.6
0613		10/5/2004	0.18	0.058 D	1.87	< 0.05	61.4	< 0.1	1.8	< 0.001	2.5	1.41 D	9.7	< 1.0	9.7	371	< 1.0	47.4
0613		1/4/2005	0.19	0.034	2	< 0.05	65.2	< 0.1	1.70 D	0.001	2.7	1.52 D	12.9	< 1.0	12.9	312	< 1.0	75.7
0613		4/5/2005	0.19	0.029	1.54	< 0.05	64.8	< 0.1	1.98	< 0.001	2.2	1.51	14.1	1.4	15.5	280	< 1.0	42.3
0613		7/12/2005	0.24	0.039	2.53	< 0.05	73.8	< 0.1	2.34	< 0.001	3.5	1.82 D	10.9	< 1.0	10.9	292	< 1.0	68.5
0613		10/5/2005	0.21	0.036	2.38	< 0.05	62.9	< 0.1	2.21	< 0.001	3.3	1.68 D	8.2	< 1.0	8.2	254	< 1.0	48.5
0613		1/10/2006	0.21	0.034	1.73	< 0.05	59.8	< 0.1	1.67	0.005	2.6	1.6	12.4	< 1.0	12.4	370	< 1.0	39.5
0613		4/3/2006	0.17	0.033	1.89	< 0.05	54.5	< 0.1	1.87	0.006	2.6	1.38 D	10.7	< 1.0	10.7	405	< 1.0	28.8
0613		7/19/2006	0.16	0.032	1.82	0.07	54.8	< 0.1	1.87	< 0.001	2.5	0.992 D	14	< 1.0	14	327	< 1.0	52.2
0613		10/3/2006	0.18	0.032	2	< 0.05	58.1	< 0.1	1.81	< 0.001	2.6	1.35 D	8.3	< 1	8.3	398	< 1	36.6
0613		1/9/2007	0.19	0.032	2.02	<0.05	61.7	<0.1	1.84	<0.001	2.7	1.22 D	7.4	<1	7.4	467	<1	19.1
0613		4/10/2007	0.19	0.032	1.21	<0.05	54.9	<0.1	1.75	<0.001	1.6	1.27 D	7.5	<1	7.5	681	<1	46
0613		7/10/2007	0.16	0.032	1.88	<0.05	53.6	<0.1	1.9	<0.001	2.3	1.31	14.6	<1	14.6	448	<1	18.3
0613		10/8/2007	0.16	0.029	1.79	<0.05	50.6	<0.1	1.82	<0.001	2.3	1.36	17.2	<1	17.2	706	1.6	40
0613		1/15/2008	0.17	0.037	1.82	< 0.05	51.7	< 0.1	1.88	< 0.001	2.3	1.21 D	15.3	1.8	17.1	750	6	52.5
0613		4/8/2008	0.20	0.036	2.11	< 0.05	62.6	< 0.1	2.05	< 0.001	2.4	1.44	7.9	0.5 U	8.4	798	0 U	53.6
0613		7/8/2008	0.17	0.04	1.89	< 0.05	61	< 0.1	1.83	< 0.001	2.3	1.2	13	0.98 U	13.98	674	6 U	78.7
0613		10/7/2008	0.18	0.034	2.27	< 0.05	57.9	< 0.1	2.05	< 0.001	2.8	1.28 D	8.2	0.54 U	8.74	467	0.5 U	53.1
0613		1/12/2009	0.14	0.031	1.55	<0.05	46.2	<0.1	1.54	<0.001	1.9	1.09 D	8.3	0.73 U	9.03	677	0.4 U	30.1
0613		4/7/2009	0.17	0.038	1.98	<0.05	55.9 D	<0.1	1.76	<0.001	2.3	1.21 D	4.4	0.78 U	5.18	452	-1 U	52.9
0613		7/7/2009	0.18	0.036	1.58	<0.05	64.6 D	<0.1	1.68	<0.001	1.9	1.19	7.3	0.16 U	7.46	432	4.2	43.7
0613		10/7/2009	0.19 D	0.030	1.71	<0.05	55.3 D	<0.1	1.67	0.001	2.1	1.15	14	1.2 U	15.2	324	-0.2 U	35.6
0708		4/29/1991	0.105	< 0.01	0.83	< 0.05	16.6	0.2	0.89	< 0.001	< 0.1	197.1	17.5	15	32.5	< 0.2	2.9	16
0708		4/2/2001	< 0.01	< 0.005	0.33	< 0.05	6.87	< 0.1	0.26	< 0.001	< 0.1	0.007	7.4	11.7	19.1	< 0.2	< 1	9
0708		7/16/2001	< 0.01	< 0.005	0.29	< 0.05	7.23	< 0.1	0.24	< 0.001	< 0.1	0.009	8.1	13.6	21.7	< 0.2	< 1	12.5
0708		10/8/2001	< 0.01	< 0.005	0.23	< 0.05	5.67	< 0.1	0.18	< 0.001	< 0.1	0.0105	7.4	12	19.4	< 0.2	< 1	11.3
0708		1/14/2002	< 0.01	< 0.005	0.32	< 0.05	7.78	< 0.1	0.25	< 0.001	< 0.1	0.0111	8.5	14.5	23	< 0.2	< 1	7.4
0708		4/8/2002	< 0.01	< 0.005	0.34	< 0.05	8.16	< 0.1	0.27	< 0.001	< 0.1	0.0104	9.1	13	22.1	< 0.2	< 1	8.8
0708		7/16/2002	< 0.01	< 0.005	0.32	< 0.05	8.33	< 0.1	0.24	< 0.001	< 0.1	0.0117	6.5	15.2	21.7	< 0.2	< 1	8.3
0708		10/14/2002	< 0.01	< 0.005	0.29	< 0.05	7.57	< 0.1	0.24	< 0.001	< 0.1	0.0118	8.8	5.7	14.5	< 0.2	< 1	9.8
0708		1/13/2003	< 0.01	< 0.005	0.31	< 0.05	8.21	< 0.1	0.24	< 0.001	< 0.1	0.012	7.1	4.3	11.4	< 0.2	< 1	10.1
0708		4/15/2003	< 0.01	< 0.005	0.29	< 0.05	8.34	< 0.1	0.22	< 0.001	< 0.1	0.0158	9	10.3	19.3	< 0.2	< 1	13.4

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0708		7/14/2003	6,863.48	3.78	2.99	5910	448	529	111	12.3	< 0.1	3500	22	1.65	< 0.1	< 1	1.1	0.002
0708		10/15/2003	6,851.39	5.27	3.60	5570	486	597	116	12.2	< 0.1	4030	28.8	2.18	< 0.1	< 1	1.3	0.002
0708		10/20/2003	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	no data
0708		1/13/2004	6,863.13	3.85	3.01	5880	504	618	109	13.2	< 1.0	3990	27.1	2.16	< 0.10	< 1.0	1.4	0.001
0708		4/12/2004	6,863.37	3.75	2.90	5820	452	552	113	12.4	< 1	3980	33	2.14	< 0.1	< 1	1.5	< 0.001
0708		7/19/2004	6,863.06	3.99	2.87	5780	494 D	576 D	120	12.2	< 1	3800 D	29	1.81	< 0.10	< 1.0	1.7	< 0.001
0708		10/12/2004	6,863.04	4.11	3.70	5660	442 D	562 D	115	12.5	< 1	3620 D	30	1.7	< 0.10	< 1.0	1.8	< 0.001
0708		1/10/2005	6,863.00	3.61	3.71	5750	463 D	563 D	112	11.9	< 1	3670 D	27	1.64	< 0.1	< 1.0	1.8	0.002
0708		4/12/2005	6,862.73	3.98	3.73	5630	484	588	124	12.5	< 1	4050	29	1.96	< 0.1	< 1.0	2.7	< 0.001
0708		7/19/2005	6,862.34	3.63	3.55	5950	464 D	563 D	119	12	< 1	3810 D	27	1.86	< 0.1	< 1.0	2.6	0.001
0708		10/11/2005	6,862.36	3.94	3.62	5900	458 D	591 D	116	12.6	< 1	3960 D	31	1.84	< 0.1	< 1.0	2.6	0.001
0708		1/17/2006	6,861.91	3.96	4.06	5850	439 D	573 D	110	12.4	< 1	3770 D	26	2.01	0.5	< 1.0	2.7	< 0.001
0708		4/11/2006	6,861.90	3.74	3.76	5830	472 D	608 D	115	12.2	< 1	3950 D	29	1.69	< 0.1	< 1.0	3.4	0.002
0708		7/25/2006	6,861.66	3.83	3.69	5670	439 D	553 D	110	11.6	< 1	3680 D	26	1.82	< 0.1	< 1.0	2.9	< 0.001
0708		10/10/2006	6,861.45	3.83	3.63	5920	448 D	576 D	108	11.4	< 1	3740 D	24	1.97	< 0.1	< 0.5	2.9	0.002
0708		1/17/2007	6,861.30	3.82	3.76	5960	420 D	543 D	101	11.1	<1	3570 D	24	1 D	<0.1	<1 D	2.6	0.001
0708		4/16/2007	6,861.13	3.89	3.80	5900	442 D	589 D	103	9.8	<1	3910 D	27	1.1	<0.1	<0.5	2.8	<0.001
0708		7/17/2007	6,860.73	3.77	3.04	5770	454 D	605 D	111	11.8	<1	4040 D	26	1.74	<0.1	<0.5	3.3	0.02
0708		10/8/2007	6,860.48	3.78	3.49	5910	461 D	604 D	115	12.7	<1	4040 D	28	1.41	<0.1	<0.5	4.1	0.002
0708		1/21/2008	6,860.60	3.81	3.05 H	5680	422 D	553 D	111	13.3	< 1	3630 D	37 D	1.19	0.1	< 0.5	4.2	0.003
0708		4/15/2008	6,860.28	3.72	2.95	5610	461	594	108 D	12.4	< 1	4370 D	25	0.89	< 0.1	< 0.50	6.4	< 0.001
0708		7/14/2008	6,861.55	4.58	3.62	5990	413	519	100 D	10	< 1	3920 D	24	0.78	< 0.1	< 0.5	7.5	< 0.003
0708		10/13/2008	6,861.50	4.28	3.58	6020	460	574	109 D	8	< 1	4090 D	24	1.4 D	< 0.1	< 0.5	6.4	< 0.001
0708		1/19/2009	6,859.18	3.57	3	6130 H	450	594	119	13	<1	4190 D	21	0.46	<0.1	<0.5	11.3	<0.001
0708		4/13/2009	6,859.33	3.55	2.99	6010	425 D	547 D	115 D	12	<1	4100 D	25	0.97	<0.1	<0.50	12.6	<0.001
0708		7/13/2009	6,858.98	2.53	3.03	6170 H	436	562	110	13	<1	4210 D	30	0.86	<0.1	<0.50	12.3 D	<0.001
0708		10/12/2009	6,859.08	3.58	3.74	4880	420 D	563	112 D	13	<1	3770 D	25	1.60	0.2	<0.50	11.6	<0.001
0711		4/29/1991	no data	4.20	4.30	5747	393	377	114	9.3	< 1	3647	49.3	8	< 0.01	no data	75.6	0.196
0711		5/1/2000	6,863.55	4.80	5.61	5410	489	522	100	11.1	10	3380	14.2	0.57	< 0.1	< 1	1.4	0.039
0711	Dup	5/1/2000	no data	4.84	5.66	5480	458	494	96.7	10.7	9	3220	15.4	0.56	< 0.1	< 1	1.5	0.039
0711		7/10/2000	6,863.50	3.06	3.98	5400	518	542	101	10.9	< 0.1	3490	20	0.58	< 0.1	< 1	1.51	0.032
0711	Dup	7/10/2000	no data	4.88	5.31	5440	513	537	101	10.9	9	3510	19.8	0.59	< 0.1	< 1	1.47	0.032
0711		10/2/2000	6,863.65	2.88	4.13	5310	503	556	100	12.6	< 0.1	3990	17.9	0.45	< 0.1	< 1	1.33	0.041
0711	Dup	10/2/2000	no data	4.81	5.36	5310	503	555	104	12.9	11	3970	15.7	0.39	< 0.1	< 1	1.33	0.042
0711		1/15/2001	6,863.85	2.86	3.57	5260	496	495	93.7	11.1	< 0.1	3900	23.7	0.59	< 0.1	< 1	1.4	0.036

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
0708		7/14/2003	< 0.01	< 0.005	0.32	< 0.05	8.58	< 0.1	0.26	< 0.001	< 0.1	0.0108	7.6	4.4	12	< 0.2	< 1	5.9
0708		10/15/2003	< 0.01	< 0.005	0.31	< 0.05	8.47	< 0.1	0.25	< 0.001	< 0.1	0.0145	6.1	6.9	13	< 0.2	< 1	12.7
0708		10/20/2003	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
0708		1/13/2004	< 0.01	< 0.005	0.32	< 0.05	9.26	< 0.1	0.25	< 0.001	< 0.1	0.0151 D	4.5	5.7	10.2	< 0.2	< 1.0	14.7
0708		4/12/2004	< 0.01	< 0.005	0.32	< 0.05	9.22	< 0.1	0.26	< 0.001	< 0.1	0.0162 D	6.2	6.5	12.7	< 0.2	< 1	9.3
0708		7/19/2004	< 0.01	< 0.005	0.33	< 0.05	9.07	< 0.1	0.23	< 0.001	< 0.1	0.0164 D	6.8	4.4	11.2	< 0.2	< 1.0	11.6
0708		10/12/2004	< 0.01	< 0.005	0.27	< 0.05	9.12	< 0.1	0.26	< 0.001	< 0.1	0.016	7.1	7.2	14.3	< 0.2	< 1.0	9.5
0708		1/10/2005	< 0.01	< 0.005	0.37	< 0.05	8.87	< 0.1	0.31	< 0.001	< 0.1	0.0178	4.8	5.8	10.6	< 0.2	< 1.0	13.4
0708		4/12/2005	< 0.01	< 0.005	0.34	< 0.05	10.1	< 0.1	0.29	< 0.001	< 0.1	0.0217	8.7	6.3	15	< 0.2	< 1.0	10.1
0708		7/19/2005	< 0.01	< 0.005	0.34	< 0.05	9.63	< 0.1	0.31	< 0.001	< 0.1	0.024	6.2	5.2	11.4	< 0.2	< 1.0	8.8
0708		10/11/2005	< 0.01	< 0.005	0.35	< 0.05	10.3	< 0.1	0.33	< 0.001	< 0.1	0.0214	8.6	8.7	17.3	< 0.2	< 1.0	9.4
0708		1/17/2006	< 0.01	< 0.005	0.33	< 0.05	10.8	< 0.1	0.33	< 0.001	< 0.1	0.0267	7.9	6.7	14.6	< 0.2	< 1.0	11.6
0708		4/11/2006	< 0.01	< 0.005	0.35	< 0.05	10.7	< 0.1	0.31	< 0.001	< 0.1	0.0281	5.9	10.8	16.7	< 0.2	< 1.0	7.6
0708		7/25/2006	< 0.01	< 0.005	0.35	< 0.05	11.1	< 0.1	0.29	< 0.001	< 0.1	0.0221	7.1	6.4	13.5	< 0.2	< 1.0	7.7
0708		10/10/2006	< 0.01	< 0.005	0.35	< 0.05	11.2	< 0.1	0.33	< 0.001	< 0.1	0.0201	7.9	5.1	13	< 0.2	< 1	7.9
0708		1/17/2007	<0.01	<0.005	0.29	<0.05	10.8	<0.1	0.29	<0.001	<0.1	0.0194	7.7	5.1	12.8	<0.2	<1	12
0708		4/16/2007	<0.01	<0.005	0.36	<0.05	11.1	<0.1	0.32	<0.001	<0.1	0.0196	6.6	5.9	12.5	<0.2	<1	8.8
0708		7/17/2007	<0.01	<0.005	0.37	<0.05	10.1	<0.1	0.35	<0.001	<0.1	0.0217	8	7	15	<0.2	<1	8.6
0708		10/8/2007	<0.01	<0.005	0.37	<0.05	11.4	<0.1	0.34	<0.001	<0.1	0.0226	5.6	6.9	12.5	<0.2	<1	10.4
0708		1/21/2008	< 0.01	< 0.005	0.37	< 0.05	11.4	< 0.1	0.37	0.002	< 0.1	0.0246	7.9	4.5	12.4	< 0.2	5	11.6
0708		4/15/2008	0.01	< 0.005	0.34 D	< 0.05	11.1	< 0.1	0.33	< 0.001	0.2	0.0321	6.5	9.2	15.7	0 U	-18 U	10.8
0708		7/14/2008	0.01	< 0.005	0.36	< 0.05	11.8	< 0.1	0.36	< 0.001	< 0.1	0.0311	6.4	5.2	11.6	0.1 U	8 U	9.4
0708		10/13/2008	0.01	< 0.005	0.37	< 0.05	11.7	< 0.1	0.36	< 0.001	< 0.1	0.032	7.9	4.4	12.3	-0.1 U	0.5 U	14.8
0708		1/19/2009	0.01	<0.005	0.37	<0.05	11.6	<0.1	0.37	<0.001	<0.1	0.0392	9.5	6.1	15.6	0.2	0.6 U	14.5
0708		4/13/2009	0.02	<0.005	0.36	<0.05	11.4	<0.1	0.39	<0.001	<0.1	0.0465	6.4	5.9	12.3	0.05 U	0.0 U	16.0
0708		7/13/2009	0.02	<0.005	0.42	<0.05	12.1 D	<0.1	0.42	0.001	<0.1	0.0426	10	1.4	11.4	-0.08 U	0.7 U	16.5
0708		10/12/2009	0.02	<0.005	0.44	<0.05	12.5	<0.1	0.45	<0.001	<0.1	0.0423	9.1	7.4	16.5	0.04 U	1.9 U	18.3
0711		4/29/1991	0.098	< 0.01	0.82	< 0.05	11.7	10.49	1.03	< 0.001	< 0.1	0.3815	21	20.8	41.8	< 0.2	< 1	20
0711		5/1/2000	< 0.01	0.02	0.41	< 0.05	8.42	0.15	0.38	< 0.001	< 0.1	0.0645	13.7	12.9	26.6	< 0.2	< 1	15.9
0711	Dup	5/1/2000	< 0.01	0.016	0.42	< 0.05	8.43	0.16	0.4	< 0.001	< 0.1	0.0655	12.6	14.8	27.4	< 0.2	< 1	14.4
0711		7/10/2000	< 0.01	< 0.005	0.42	< 0.05	8.39	0.11	0.35	< 0.001	< 0.1	0.0613	9.6	18.6	28.2	< 0.2	< 1	14.2
0711	Dup	7/10/2000	< 0.01	< 0.005	0.43	< 0.05	8.29	0.11	0.35	< 0.001	< 0.1	0.0595	9.8	16.3	26.1	< 0.2	< 1	14.5
0711		10/2/2000	< 0.01	< 0.005	0.34	< 0.05	7.44	< 0.1	0.32	< 0.001	< 0.1	0.053	9.6	20.9	30.5	< 0.2	< 1	19.3
0711	Dup	10/2/2000	< 0.01	< 0.005	0.36	< 0.05	7.93	< 0.1	0.34	< 0.001	< 0.1	0.05	9	19.7	28.7	< 0.2	< 1	22.9
0711		1/15/2001	< 0.01	< 0.005	0.39	< 0.05	8	< 0.1	0.34	< 0.001	< 0.1	0.0568	10.3	19.4	29.7	< 0.2	< 1	13.2

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0711	Dup	1/15/2001	no data	4.82	5.31	5270	501	501	93	11.2	10	3860	23.3	0.6	< 0.1	< 1	1.4	0.038
0711		4/2/2001	6,863.85	2.92	3.10	5310	560	572	94.9	10.4	< 0.1	3560	19.1	0.99	< 0.1	< 1	1.4	0.035
0711	Dup	4/2/2001	no data	4.46	3.77	5370	557	569	92.7	10.3	< 0.1	3640	20.1	0.83	0.11	< 1	1.4	0.034
0711		7/11/2001	6,863.50	2.86	3.65	5410	541	576	106	11.1	< 0.1	3580	30.4	0.8	< 0.1	< 1	1.5	0.03
0711	Dup	7/11/2001	no data	4.53	5.33	5450	539	573	104	11	8	3520	30.2	0.83	< 0.1	< 1	1.3	0.032
0711		10/8/2001	6,863.65	2.88	3.40	5440	450	480	80.8	10.2	1	3100	27	0.7	< 0.1	< 1	1.08	0.033
0711	Dup	10/8/2001	no data	4.48	5.00	5410	450	480	84.4	10.5	7.9	3100	26.7	0.71	< 0.1	< 1	1.09	0.031
0711		1/15/2002	6,863.75	2.89	3.70	5380	547	551	95.2	12.1	< 0.1	3460	21	0.54	< 0.1	< 1	1.4	0.037
0711	Dup	1/15/2002	no data	4.36	5.20	5360	552	555	92.9	12	8.54	3460	20.2	0.55	< 0.1	< 1	1.3	0.041
0711		4/8/2002	6,863.55	2.85	3.23	5340	482	500	97.2	11.2	< 0.1	3360	21.9	0.61	1	< 1	1.3	0.028
0711	Dup	4/8/2002	no data	4.73	5.22	5360	482	499	95.4	11.2	4.9	3340	21	0.65	1.46	< 1	1.3	0.03
0711		7/16/2002	6,863.46	2.87	3.10	5400	569	580	89.6	10.3	< 0.1	3990	11.3	1.26	< 0.1	< 1	1.4	0.023
0711	Dup	7/16/2002	no data	4.35	4.78	5450	570	580	89.4	9.7	7.3	3990	10.1	1.37	< 0.1	< 1	1.2	0.029
0711		10/14/2002	6,863.49	2.86	3.01	4720	516	543	104	11	< 0.1	3730	16.4	1.24	< 0.1	< 1	1	0.027
0711	Dup	10/14/2002	no data	4.47	5.32	5130	579	606	114	12.3	7.9	4170	23.8	1.39	< 0.1	< 1	1.1	0.031
0711		1/13/2003	6,863.10	2.96	3.00	5300	509	558	72.7	8.4	< 0.1	3300	7.9	1.4	< 0.1	< 1	1.1	0.027
0711	Dup	1/13/2003	no data	no data	4.98	5390	495	541	90.6	9.8	4.9	3410	10.6	1.32	< 0.1	< 1	1	0.029
0711		4/15/2003	6,863.46	4.43	2.85	5430	482	532	110	13.8	< 0.1	3540	17.5	1.4	0.2	< 1	1	0.025
0711	Dup	4/15/2003	no data	no data	4.86	5460	494	544	105	13.1	3	3620	20.4	1.44	< 0.1	< 1	1.1	0.026
0711		7/14/2003	6,863.13	4.44	3.00	5450	496	515	99.2	12	< 0.1	3380	20.6	1.08	0.2	< 1	0.9	0.019
0711	Dup	7/14/2003	no data	no data	4.30	5490	493	509	98.6	11.8	3	3370	18	1.1	< 0.1	< 1	0.9	0.023
0711		10/14/2003	6,863.08	4.73	3.07	5370	519	556	100	11	< 0.1	3750	23.1	1.43	< 0.1	< 1	1	0.019
0711	Dup	10/14/2003	no data	no data	4.38	5430	524	561	99	11	4	3810	19.7	1.46	< 0.1	< 1	1	0.032
0711		1/13/2004	6,862.83	4.55	2.91	5390	521	557	92.6	12.9	< 1.0	3630	18.9	1.4	< 0.10	< 1.0	0.9	0.023
0711	Dup	1/13/2004	no data	no data	4.85	5380	525	561	94.3	12.6	3.4	3630	20.4	1.42	< 0.10	< 1.0	0.9	0.022
0711		4/13/2004	6,862.97	4.46	2.94	5440	481	511	97	11.5	< 1	3620	21.2	1.29	< 0.1	< 1	0.9	0.021
0711	Dup	4/13/2004	no data	no data	4.69	5470	480	509	90.5	11.4	3	3700	21	1.35	< 0.1	< 1	0.8	0.033
0711		7/20/2004	6,862.93	4.66	2.78	5290	525 D	529 D	105	10.8	< 1	3530 D	18	1.1	< 0.10	< 1.0	1	0.021
0711	Dup	7/20/2004	no data	no data	4.48	5480	530 D	532 D	105	10.8	< 1	3580 D	18	1.18	< 0.10	< 1.0	0.9	0.032
0711		10/12/2004	6,862.94	4.71	3.64	5370	491 D	533 D	93.7	10.9	< 1	3450 D	19	0.93	< 0.10	< 1.0	0.9	0.021
0711	Dup	10/12/2004	no data	no data	4.88	5430	491 D	530 D	101	11.8	6	3460 D	20	0.98	< 0.10	< 1.0	0.9	0.023
0711		1/11/2005	6,863.14	4.36	3.57	5380	499 D	513 D	98.1	10.7	< 1	3380 D	19	0.84	< 0.1	< 1.0	0.9	0.04
0711	Dup	1/11/2005	no data	no data	4.99	5410	505 D	518 D	98.3	10.7	5	3430 D	19	0.98	< 0.1	< 1.0	0.9	0.03
0711		4/12/2005	6,862.81	4.70	3.73	5190	517	532	108	11.1	< 1	3710	19	1.08	< 0.1	< 1.0	0.9	0.02
0711	Dup	4/12/2005	no data	no data	4.87	5160	528	532	107	11.1	6	3690	19	1.11	< 0.1	< 1.0	0.9	0.02

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
0711	Dup	1/15/2001	0.01	< 0.005	0.4	< 0.05	7.65	0.1	0.38	< 0.001	< 0.1	0.049	10.4	19.9	30.3	< 0.2	< 1	11.8
0711		4/2/2001	< 0.01	< 0.005	0.4	< 0.05	6.98	< 0.1	0.39	< 0.001	< 0.1	0.056	8.7	16.9	25.6	< 0.2	< 1	12.4
0711	Dup	4/2/2001	< 0.01	< 0.005	0.41	< 0.05	7.12	0.1	0.43	< 0.001	< 0.1	0.054	8.1	12.6	20.7	< 0.2	< 1	10.9
0711		7/11/2001	0.01	< 0.005	0.39	< 0.05	7.57	< 0.1	0.37	< 0.001	< 0.1	0.057	12.2	19.1	31.3	< 0.2	< 1	12.7
0711	Dup	7/11/2001	< 0.01	< 0.005	0.36	< 0.05	6.75	< 0.1	0.34	< 0.001	< 0.1	0.051	13.6	19.1	32.7	< 0.2	< 1	11.9
0711		10/8/2001	< 0.01	< 0.005	0.33	< 0.05	5.91	< 0.1	0.29	< 0.001	< 0.1	0.0534	8.7	17	25.7	< 0.2	< 1	12.1
0711	Dup	10/8/2001	< 0.01	< 0.005	0.34	< 0.05	6.15	< 0.1	0.32	< 0.001	< 0.1	0.0483	8.7	17	25.7	< 0.2	< 1	11.1
0711		1/15/2002	< 0.01	< 0.005	0.44	< 0.05	8.13	0.14	0.42	< 0.001	< 0.1	0.051	10	26.1	36.1	< 0.2	< 1	10.6
0711	Dup	1/15/2002	< 0.01	< 0.005	0.44	< 0.05	8.03	0.2	0.41	< 0.001	< 0.1	0.0469	9.1	23.8	32.9	< 0.2	< 1	12.1
0711		4/8/2002	< 0.01	< 0.005	0.47	< 0.05	8.23	0.1	0.43	< 0.001	< 0.1	0.0463	11.4	23.6	35	< 0.2	< 1	14.1
0711	Dup	4/8/2002	< 0.01	< 0.005	0.46	< 0.05	8.31	0.1	0.43	< 0.001	< 0.1	0.0442	12.1	23.3	35.4	< 0.2	< 1	13.9
0711		7/16/2002	< 0.01	< 0.005	0.38	< 0.05	6.94	< 0.1	0.35	< 0.001	< 0.1	0.0462	9.9	32.5	42.4	< 0.2	< 1	12.6
0711	Dup	7/16/2002	< 0.01	< 0.005	0.36	< 0.05	6.64	0.1	0.32	< 0.001	< 0.1	0.0421	10	26.2	36.2	< 0.2	< 1	10.8
0711		10/14/2002	< 0.01	< 0.005	0.41	< 0.05	7.73	< 0.1	0.39	< 0.001	< 0.1	0.0454	8.9	14.2	23.1	< 0.2	< 1	14.4
0711	Dup	10/14/2002	< 0.01	< 0.005	0.43	< 0.05	8.46	0.1	0.41	< 0.001	< 0.1	0.0494	7.8	13.1	20.9	< 0.2	< 1	10.6
0711		1/13/2003	< 0.01	< 0.005	0.44	< 0.05	7.5	0.1	0.36	< 0.001	< 0.1	0.045	8.8	7.4	16.2	< 0.2	< 1	10.4
0711	Dup	1/13/2003	< 0.01	< 0.005	0.44	< 0.05	7.58	0.1	0.35	< 0.001	< 0.1	0.0434	10.1	5.6	15.7	< 0.2	< 1	13
0711		4/15/2003	< 0.01	< 0.005	0.48	< 0.05	8.56	0.1	0.42	< 0.001	< 0.1	0.042	11.2	12.9	24.1	< 0.2	< 1	18
0711	Dup	4/15/2003	< 0.01	< 0.005	0.42	< 0.05	7.98	0.1	0.37	< 0.001	< 0.1	0.0433	9.7	15.8	25.5	< 0.2	< 1	20.9
0711		7/14/2003	< 0.01	< 0.005	0.43	< 0.05	7.85	< 0.1	0.35	< 0.001	< 0.1	0.0349	9.2	5.4	14.6	< 0.2	< 1	6.5
0711	Dup	7/14/2003	< 0.01	< 0.005	0.43	< 0.05	7.72	< 0.1	0.36	< 0.001	< 0.1	0.0335	8.8	11.6	20.4	< 0.2	< 1	7.4
0711		10/14/2003	< 0.01	< 0.005	0.44	< 0.05	7.58	< 0.1	0.38	< 0.001	< 0.1	0.0433	6.8	3.6	10.4	< 0.2	< 1	17.4
0711	Dup	10/14/2003	< 0.01	< 0.005	0.44	< 0.05	7.72	< 0.1	0.4	< 0.001	< 0.1	0.0411	6.1	3.7	9.8	< 0.2	< 1	14.6
0711		1/13/2004	< 0.01	< 0.005	0.43	< 0.05	7.87	0.1	0.35	< 0.001	< 0.1	0.0394 D	8.2	14.5	22.7	< 0.2	< 1.0	16.7
0711	Dup	1/13/2004	< 0.01	< 0.005	0.43	< 0.05	7.85	0.1	0.38	< 0.001	< 0.1	0.0361 D	9	14.4	23.4	< 0.2	< 1.0	16.6
0711		4/13/2004	0.01	< 0.005	0.43	< 0.05	7.62	0.1	0.38	< 0.001	< 0.1	0.0377 D	6.9	11.3	18.2	< 0.2	< 1	9.8
0711	Dup	4/13/2004	0.03	< 0.005	0.43	< 0.05	7.74	0.1	0.38	< 0.001	< 0.1	0.0344 D	6.7	18	24.7	< 0.2	< 1	9.3
0711		7/20/2004	< 0.01	< 0.005	0.44	< 0.05	7.48	< 0.1	0.35	< 0.001	< 0.1	0.0368 D	6.5	14.4	20.9	< 0.2	< 1.0	14.7
0711	Dup	7/20/2004	< 0.01	< 0.005	0.43	< 0.05	7.45	< 0.1	0.34	< 0.001	< 0.1	0.0356 D	6.6	12.3	18.9	< 0.2	< 1.0	16.6
0711		10/12/2004	< 0.01	< 0.005	0.37	< 0.05	6.79	< 0.1	0.34	< 0.001	< 0.1	0.0339	7.3	12.2	19.5	< 0.2	< 1.0	12.7
0711	Dup	10/12/2004	< 0.01	< 0.005	0.37	< 0.05	7.35	< 0.1	0.35	< 0.001	< 0.1	0.0332	7.9	12.6	20.5	< 0.2	< 1.0	13.9
0711		1/11/2005	< 0.01	< 0.005	0.48	< 0.05	6.95	< 0.1	0.42	< 0.001	< 0.1	0.0379	5.1	10	15.1	< 0.2	< 1.0	12.3
0711	Dup	1/11/2005	< 0.01	< 0.005	0.42	< 0.05	6.94	< 0.1	0.39	< 0.001	< 0.1	0.0338	3.9	12.7	16.6	< 0.2	< 1.0	14.6
0711		4/12/2005	< 0.01	< 0.005	0.4	< 0.05	7.59	< 0.1	0.37	< 0.001	< 0.1	0.0336	10.7	11.2	21.9	< 0.2	< 1.0	10.8
0711	Dup	4/12/2005	< 0.01	< 0.005	0.41	< 0.05	7.51	< 0.1	0.38	< 0.001	< 0.1	0.032	10.6	12.1	22.7	< 0.2	< 1.0	8.9

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0711		7/19/2005	6,862.60	4.32	3.57	5380	490 D	498 D	100	10.9	< 1	3410 D	20	0.95	< 0.1	< 1.0	0.7	0.03
0711	Dup	7/19/2005	no data	no data	4.82	5360	500 D	505 D	104	10.5	4	3450 D	18	1	< 0.1	< 1.0	0.7	0.04
0711		10/11/2005	6,862.66	4.51	3.62	5240	492 D	526 D	99.8	10.8	< 1	3560 D	21	0.82	< 0.1	< 1.0	0.8	0.04
0711	Dup	10/11/2005	no data	no data	5.10	5270	496 D	530 D	100	10.9	3	3610 D	21	0.93	< 0.1	< 1.0	0.8	0.03
0711		1/17/2006	6,862.43	4.72	4.68	5140	480 D	515 D	92.5	10.6	< 1	3410 D	17	0.97	0.2	< 1.0	0.7	0.02
0711	Dup	1/17/2006	no data	no data	5.45	5180	478 D	513 D	97.3	10.9	6	3420 D	18	0.98	0.2	< 1.0	0.6	0.02
0711		4/11/2006	6,862.40	4.41	4.04	5130	497 D	528 D	99.6	10.6	< 1	3480 D	20	0.83	< 0.1	< 1.0	0.7	0.03
0711	Dup	4/11/2006	no data	no data	5.24	5150	512 D	540 D	98.9	10.6	8	3530 D	17	0.85	< 0.1	< 1.0	0.6	0.02
0711		7/25/2006	6,862.34	4.36	3.08	4790	478 D	491 D	100	10.6	< 1	3350 D	18	1.1	< 0.1	< 1.0	0.6	0.02
0711	Dup	7/25/2006	no data	no data	4.65	4970	484 D	495 D	99.6	10.7	5	3380 D	18	1.11	< 0.1	< 1.0	0.5	0.02
0711		10/11/2006	6,862.28	4.55	4.41	4930	501 D	524 D	99.6	10.5	< 1	3400 D	16	1.09	< 0.1	< 0.5	0.6	0.1
0711	Dup	10/11/2006	no data	no data	4.97	4960	504 D	529 D	101	10.8	< 1	3410 D	15	1.05	< 0.1	< 0.5	0.6	0.1
0711		1/17/2007	6,862.15	4.06	3.81	5130	383 D	402 D	74.9	8.1	<1	2680 D	13	0.39	<0.1	<0.5	0.4	0.02
0711	Dup	1/17/2007	6,861.54	4.80	5.39	5160 H	413 D	431 D	81.3	8.9	3	2880 D	14	0.53	<0.1	<0.5	0.4	0.04
0711		4/16/2007	6,862.14	4.60	3.91	5070	484 D	519 D	89.6	10.3	<1	3500 D	18	0.41	<0.1	<0.5	0.5	0.03
0711	Dup	4/16/2007	6,861.60	4.88	5.10	5110	480 D	512 D	88.6	10.2	4	3490 D	17	0.43	<0.1	<0.5	0.5	0.03
0711		7/16/2007	6,861.85	4.26	3.10	4810	490 D	515 D	94.2	10.1	<1	3480 D	16	0.75	<0.1	<0.5	0.5	0.05
0711	Dup	7/16/2007	6,861.35	4.60	4.33	4980	485 D	516 D	96.1	10.2	<1	3510 D	16	0.71	<0.1	<0.5	0.5	0.04
0711		10/8/2007	6,861.68	4.46	3.80	5090	489 D	512 D	100	11.2	<1	3470 D	18	0.48	<0.1	<0.5	0.4	0.03
0711	Dup	10/8/2007	6,861.05	4.68	4.91	5140	486 D	505 D	98.3	11.1	6	3430 D	18	0.52	<0.1	<0.5	0.4	0.03
0711		1/21/2008	6,862.05	4.46	3.54 H	4850	460 D	475 D	98.6	12.1	< 1	3190 D	23 D	0.51	< 0.1	< 0.5	0.4	0.045
0711	Dup	1/21/2008	6,861.45	4.74	4.73 H	5030	464 D	474 D	91.1	11.9	4	3220 D	22	0.52	0.1	< 0.5	0.4	0.038
0711		4/14/2008	6,861.50	4.46	3.91	4770	479	492	98 D	10.7	< 1	3470 D	15	0.36	< 0.1	< 0.50	0.5	0.01
0711	Dup	4/14/2008	6,860.70	4.69	4.68	4740	482	496	98 D	10.7	5	3510 D	15	0.36	< 0.1	< 0.50	0.5	0.01
0711		7/14/2008	6,861.55	4.58	4.15	4870	464	463	91 D	10	< 1	3230 D	13	0.32	< 0.1	< 0.5	0.4	0.005
0711	Dup	7/14/2008	6,860.70	4.77	5.07	4960	456	457	92 D	10	2	3390 D	13	0.32	< 0.1	< 0.5	0.4	0.006
0711		10/13/2008	6,861.50	4.28	3.78	5040	430	442	86 D	9	< 1	3270 DH	15	0.7 D	< 0.1	< 0.5	0.3	0.006
0711	Dup	10/13/2008	6,860.65	4.65	4.54 H	5050	478	476	91 D	10	< 1	3690 D	16	0.7 D	< 0.1	< 0.5	0.3	0.008
0711		1/19/2009	6,861.15	4.45	3.34	5050 H	493	499	101	11	<1	3350 D	14	0.31	<0.1	<0.5	0.3	0.008
0711	Dup	1/19/2009	no data	4.73	5.15	5070 H	506	517	102	11	6	3320 D	12	0.21	<0.1	<0.5	0.3	0.008
0711		4/13/2009	6,861.30	4.53	3.20	5020	445 D	455 D	96 D	9	<1	3410 D	16	0.27	<0.1	<0.50	0.3	0.008
0711	Dup	4/13/2009	no data	4.76	4.82	4960	484	481	104	11	11	3440 D	13	0.30	<0.1	<0.50	0.3	0.013
0711		7/13/2009	6,861.20	4.34	3.21	4940 H	478	458	92	10	<1	3560 D	31	0.32	<0.1	<0.50	0.3	<0.001
0711	Dup	7/13/2009	no data	4.58	4.82	4990 H	482 D	453	93 D	11	1	3440 D	17	0.32	<0.1	<0.50	0.2	<0.001
0711		10/12/2009	6,861.30	4.47	4.07	4960	480 D	472	100 D	11	<1	3620 D	19	0.47	<0.1	<0.50	0.3	<0.001

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
0711		7/19/2005	< 0.01	< 0.005	0.45	< 0.05	7.36	< 0.1	0.42 D	< 0.001	< 0.1	0.0346	6.2	12	18.2	< 0.2	< 1.0	10.8
0711	Dup	7/19/2005	< 0.01	< 0.005	0.42	< 0.05	7.03	< 0.1	0.4	< 0.001	< 0.1	0.0319	6.7	12.2	18.9	< 0.2	< 1.0	11.3
0711		10/11/2005	< 0.01	< 0.005	0.44	< 0.05	7.3	< 0.1	0.36	< 0.001	< 0.1	0.0302	7.3	15.3	22.6	< 0.2	< 1.0	12.4
0711	Dup	10/11/2005	< 0.01	< 0.005	0.44	< 0.05	7.25	< 0.1	0.39	< 0.001	< 0.1	0.0291	9.6	17	26.6	< 0.2	< 1.0	9.3
0711		1/17/2006	< 0.01	< 0.005	0.41	< 0.05	6.78	< 0.1	0.34	< 0.001	< 0.1	0.0278	7.6	15.5	23.1	< 0.2	< 1.0	10.2
0711	Dup	1/17/2006	< 0.01	< 0.005	0.4	< 0.05	6.93	< 0.1	0.39	< 0.001	< 0.1	0.0323	7.2	14.4	21.6	< 0.2	< 1.0	8.4
0711		4/11/2006	< 0.01	< 0.005	0.43	< 0.05	7.16	0.1	0.36	< 0.001	< 0.1	0.031	5.9	9.9	15.8	< 0.2	< 1.0	5.5
0711	Dup	4/11/2006	< 0.01	< 0.005	0.42	< 0.05	6.98	0.1	0.37	< 0.001	< 0.1	0.0281	5.4	15.2	20.6	< 0.2	< 1.0	7.4
0711		7/25/2006	< 0.01	< 0.005	0.43	< 0.05	7.48	< 0.1	0.35	< 0.001	< 0.1	0.0306	5.4	13.9	19.3	< 0.2	< 1.0	7.3
0711	Dup	7/25/2006	< 0.01	< 0.005	0.41	< 0.05	7.24	0.1	0.35	< 0.001	< 0.1	0.0272	5.2	12	17.2	< 0.2	< 1.0	10.2
0711		10/11/2006	< 0.01	< 0.005	0.4	< 0.05	7.12	0.4	0.37	< 0.001	< 0.1	0.0295	6.3	13.2	19.5	< 0.2	< 1	6
0711	Dup	10/11/2006	< 0.01	< 0.005	0.41	< 0.05	7.18	0.4	0.39	< 0.001	< 0.1	0.0279	5.9	12.3	18.2	< 0.2	< 1	6.8
0711		1/17/2007	<0.01	<0.005	0.29	<0.05	5.3	<0.1	0.27	<0.001	<0.1	0.0237	6.8	9.9	16.7	<0.2	<1	8.5
0711	Dup	1/17/2007	<0.01	<0.005	0.31	<0.05	5.61	0.2	0.3	<0.001	<0.1	0.0215	6.8	9.2	16	<0.2	<1	9.3
0711		4/16/2007	<0.01	<0.005	0.4	<0.05	6.96	0.1	0.36	<0.001	<0.1	0.0327	5.6	13.5	19.1	<0.2	<1	7.3
0711	Dup	4/16/2007	<0.01	<0.005	0.39	<0.05	6.8	0.1	0.35	<0.001	<0.1	0.0248	4.8	15.5	20.3	<0.2	<1	6.8
0711		7/16/2007	<0.01	<0.005	0.39	<0.05	6	0.1	0.37	<0.001	<0.1	0.0268	5.1	16.4	21.5	<0.2	<1	6.8
0711	Dup	7/16/2007	<0.01	<0.005	0.38	<0.05	6.07	0.1	0.35	<0.001	<0.1	0.0248	5.3	13.2	18.5	<0.2	<1	6.1
0711		10/8/2007	<0.01	<0.005	0.4	<0.05	7.09	0.1	0.34	<0.001	<0.1	0.024	3.9	15.6	19.5	<0.2	<1	7.7
0711	Dup	10/8/2007	<0.01	<0.005	0.4	<0.05	7.06	0.1	0.34	<0.001	<0.1	0.023	3.5	15.1	18.6	<0.2	<1	7.6
0711		1/21/2008	< 0.01	< 0.005	0.38	< 0.05	6.34	0.2	0.35	< 0.001	< 0.1	0.0241	7	15.3	22.3	< 0.2	< 1	9.1
0711	Dup	1/21/2008	< 0.01	< 0.005	0.37	< 0.05	6.24	0.1	0.34	< 0.001	< 0.1	0.0224	7.4	14.6	22	< 0.2	< 1	8.2
0711		4/14/2008	< 0.01	< 0.005	0.38 D	< 0.05	6.59	0.2	0.35	< 0.001	< 0.1	0.0248	4	18.4	22.4	0.4	0 U	8.4
0711	Dup	4/14/2008	< 0.01	< 0.005	0.37	< 0.05	6.76	0.2	0.35	< 0.001	< 0.1	0.0227	4	17.4	21.4	0.4	0 U	8.1
0711		7/14/2008	< 0.01	< 0.005	0.34	< 0.05	6.12	0.2	0.33	< 0.001	< 0.1	0.0206	3.7	9.8	13.5	0.2	2.3 U	6.4
0711	Dup	7/14/2008	< 0.01	< 0.005	0.34	< 0.05	6.27	0.2	0.4	< 0.001	< 0.1	0.0196	3.8	11	14.8	-0.5 U	6 U	6.4
0711		10/13/2008	< 0.01	< 0.005	0.36	< 0.05	6.18	0.1	0.32	< 0.001	< 0.1	0.0214	4.4	7.5	11.9	0.1 U	2.1 U	10.3
0711	Dup	10/13/2008	< 0.01	< 0.005	0.36	< 0.05	6.15	0.2	0.32	< 0.001	< 0.1	0.0195	4.6	9.2	13.8	-0.1 U	0.2 U	10.4
0711		1/19/2009	<0.01	<0.005	0.32	<0.05	5.81	0.1	0.32	<0.001	<0.1	0.0175	4	13	17	-0.1 U	0.8 U	7
0711	Dup	1/19/2009	<0.01	<0.005	0.33	<0.05	5.89	0.2	0.32	<0.001	<0.1	0.017	4.7	13	17.7	0 U	1.1 U	8.7
0711		4/13/2009	<0.01	<0.005	0.33	<0.05	5.78	0.1	0.30	<0.001	<0.1	0.0161	3.6	10	13.6	0.9	-1 U	8.7
0711	Dup	4/13/2009	<0.01	<0.005	0.33	<0.05	5.82	0.2	0.31	<0.001	<0.1	0.0159	3.7	12	15.7	0.6	-1 U	10.3
0711		7/13/2009	<0.01	<0.005	0.32	<0.05	5.92 D	0.1	0.29	0.004	<0.1	0.0169	4.3	12	16.3	0.08 U	1.4 U	9.3
0711	Dup	7/13/2009	<0.01	<0.005	0.32	<0.05	5.56	0.1	0.28	<0.001	<0.1	0.0150	3.9	12	15.9	-0.08 U	-0.2 U	7.2
0711		10/12/2009	<0.01	<0.005	0.32	<0.05	5.77	0.2	0.30	<0.001	<0.1	0.0167	4.0	12	16	0.04 U	1.5 U	7.0

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0711	Dup	10/12/2009	no data	4.25	5.26	4890 H	489 D	475	94 D	11	3	3550 D	16 H	0.41	<0.1	<0.50	0.4	0.002
0717		4/9/2001	6,855.40	5.65	7.30	3300	631	137	118	6.4	498	1650	54.2	0.11	12.3	< 1	< 0.1	0.002
0717		7/16/2001	6,855.30	6.32	7.35	3350	591	127	124	6.7	539	1630	61.7	0.13	12.4	< 1	< 0.1	0.001
0717		10/8/2001	6,855.30	7.01	7.20	3300	600	130	105	6.1	588	1600	66.7	0.05	10.6	< 1	< 0.1	< 0.001
0717		1/9/2002	6,855.20	7.76	7.10	3230	669	128	107	8	656	1530	75	0.07	10.2	< 1	< 0.1	< 0.001
0717		4/9/2002	6,854.75	7.34	7.39	3320	660	124	129	6.6	654	1700	64.4	0.1	12.2	< 1	< 0.1	< 0.001
0717		7/15/2002	6,854.73	6.67	7.52	3420	791	147	125	5.9	740	1886	48.4	0.22	16.2	< 1	< 0.1	< 0.001
0717		10/14/2002	6,854.47	6.65	7.61	3130	720	144	125	6.3	704	1780	68.3	0.21	15.6	< 1	< 0.1	< 0.001
0717		1/13/2003	6,854.02	7.46	7.05	3530	621	130	104	6.2	731	1440	47.2	0.24	21.5	< 1	< 0.1	0.002
0717		4/8/2003	6,853.75	6.44	7.19	3620	697	147	143	9.9	705	1615	71.2	0.27	22.9	< 1	< 0.1	< 0.001
0717		7/8/2003	6,853.63	6.28	7.47	3790	735	175	128	7.7	737	1880	60.9	0.29	23	< 1	< 0.1	< 0.001
0717		10/13/2003	6,853.24	6.37	7.43	3840	765	206	135	7.2	705	2080	75.3	0.37	25.1	< 1	0.3	< 0.001
0717		1/12/2004	6,852.78	6.52	7.43	3960	725	211	136	7.7	689	2100	72.3	0.47	27.7 D	< 1.0	< 0.1	< 0.001
0717		4/12/2004	6,852.40	6.31	6.75	4000	695	218	135	9.3	650	2100	77.1	0.83	23.8 D	< 1	< 0.1	< 0.001
0717		7/19/2004	6,852.07	6.43	6.54	4130	747 D	242 D	151	8.9	635	2150 D	66	1.31	26.2 D	< 1.0	< 0.1	< 0.001
0717		10/11/2004	6,851.80	6.57	6.99	4180	729 D	270 D	148	9.6	559	2330 D	69	1.81	26.8 D	< 1.0	< 0.1	< 0.001
0717		1/10/2005	6,851.37	6.51	6.94	4280	719 D	272 D	147	9.9	541	2280 D	69	2.88	25.8 D	< 1.0	< 0.1	< 0.001
0717		4/18/2005	6,850.62	6.38	7.09	4210	649	253	151	11.5	512	2410	128	4.69	27.1	< 1.0	< 0.1	< 0.001
0717		7/18/2005	6,849.32	6.00	6.97	4450	685 D	288 D	158	11	480	2420 D	61	6.1 D	27.2 D	< 1.0	< 0.1	< 0.001
0717		10/10/2005	6,848.82	6.49	7.00	4500	712 D	319 D	152	11.9	518	2520 D	72	6.6 D	26.4 D	< 1.0	< 0.1	< 0.001
0717		1/16/2006	6,848.64	6.31	7.07	5430	726 D	412 D	159	18.8	415	3290 D	76	41.3 D	27.4 D	< 1.0	0.5	< 0.001
0717		4/10/2006	6,848.37	6.17	6.69	5520	809 D	472 D	162	20.8	291	3770 D	103	53.0 D	25.2 D	< 1.0	1.6	< 0.001
0717		7/24/2006	6,847.93	5.83	6.44	5260	704 D	450 D	181	21.9	212	3540 D	80	56.4 D	25.4 D	< 1.0	1.3	< 0.001
0717		10/9/2006	6,847.59	6.05	6.27	5230	622	325	172	20.2	189	3040	74	60.7 D	26.2 D	< 0.5	0.2	0.001
0717		1/16/2007	6,846.80	6.07	6.65	5410	646 D	402 D	163	19.1	146	3270 D	79	47.2 D	29.1 D	<0.5	0.9	<0.001
0717		4/10/2007	6,846.65	6.04	6.16	5110	665 D	427 D	169	20.4	176	3410 D	80	56 D	29.1 D	<0.5	1.3	<0.001
0717		7/16/2007	6,846.22	5.82	6.11	4980	663 D	449 D	170	19.6	144	3550 D	74	58.4 D	35 D	<0.5	1.9	0.005
0717		10/9/2007	6,845.78	5.73	6.10	5420	633 D	448 D	162	19.6	92	3440 D	79	63.6 D	31.1 D	<0.5	3.2	0.001
0717		1/22/2008	6,845.20	5.64	5.9	5050	596 D	436 D	161	22.9	74	3390 D	94	68.5 D	37.2 D	< 0.5	3.9	0.002
0717		4/15/2008	6,845.22	5.59	5.80	5560	597	473	186 D	21.5	58	3950 D	72	71.0 D	44.8	< 0.50	7.6	< 0.001
0717		7/15/2008	6,860.70	4.77	5.58	5460	521	438	162 D	19	31	3450 D	56	70.5 D	37.7 D	0.51	13.6	< 0.003
0717		10/14/2008	6,860.65	4.65	5.03	5660	505	462	169 D	19	6	3670 D	65	71 D	37.6 D	< 0.5	16.5	< 0.001
0717		1/19/2009	6,843.92	4.41	4.44	5960 H	539	553	201	21	<1	3970 D	56	57.4 D	53.1 D	<0.5	46	<0.001
0717		4/14/2009	6,843.82	4.28	4.29	6060	453 D	502 D	181 D	16	<1	4060 D	70	56 D	35.1 D	1.17	86.2	<0.001
0717		7/14/2009	6,843.47	3.65	4.23	6480	454	532	179	14	<1	4440 D	68	76.7 D	27.6	1.24	149 D	<0.001

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
0711	Dup	10/12/2009	<0.01	<0.005	0.32	<0.05	5.70	0.2	0.29	<0.001	<0.1	0.0161	4.8	11	15.8	0.05 U	1.9 U	8.2
0717		4/9/2001	< 0.01	< 0.005	0.01	< 0.05	1.4	0.12	< 0.05	< 0.001	< 0.1	0.057	4.2	4.5	8.7	< 0.2	< 1	4
0717		7/16/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.36	0.1	< 0.05	< 0.001	< 0.1	0.065	3.7	3.7	7.4	< 0.2	< 1	2.5
0717		10/8/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.08	0.08	< 0.05	< 0.001	< 0.1	0.0643	3.5	4.5	8	< 0.2	< 1	4.8
0717		1/9/2002	< 0.01	< 0.005	0.01	< 0.05	1.4	0.2	0.06	< 0.001	< 0.1	0.0841	4.9	7.6	12.5	< 0.2	< 1	3.5
0717		4/9/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.61	0.2	< 0.05	< 0.001	< 0.1	0.112	3.1	3.8	6.9	< 0.2	< 1	3.4
0717		7/15/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.6	0.2	< 0.05	< 0.001	< 0.1	0.118	3.1	7.3	10.4	< 0.2	< 1	3.2
0717		10/14/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.77	0.2	< 0.05	< 0.001	< 0.1	0.115	2.2	3.2	5.4	< 0.2	< 1	4.8
0717		1/13/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.96	0.2	< 0.05	< 0.001	< 0.1	0.12	5.4	8.6	14	< 0.2	< 1	4.9
0717		4/8/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.85	0.2	< 0.05	< 0.001	< 0.1	0.133	2.8	11	13.8	< 0.2	< 1	8.1
0717		7/8/2003	< 0.01	< 0.005	0.02	< 0.05	2.5	0.2	< 0.05	< 0.001	< 0.1	0.0994	3.3	3.4	6.7	< 0.2	< 1	3
0717		10/13/2003	< 0.01	< 0.005	< 0.01	< 0.05	2.54	0.2	< 0.05	< 0.001	< 0.1	0.107	2.3	4.1	6.4	< 0.2	< 1	5.4
0717		1/12/2004	< 0.01	< 0.005	0.01	< 0.05	3.05	0.2	< 0.05	< 0.001	< 0.1	0.106 D	4.4	5	9.4	< 0.2	< 1.0	5.4
0717		4/12/2004	< 0.01	< 0.005	0.01	< 0.05	2.97	0.2	< 0.05	< 0.001	< 0.1	0.0855 D	3.1	< 1	3.1	< 0.2	< 1	5.9
0717		7/19/2004	< 0.01	< 0.005	< 0.01	< 0.05	3.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0802 D	4.3	5.1	9.4	< 0.2	< 1.0	6.4
0717		10/11/2004	< 0.01	< 0.005	0.01	< 0.05	3.14	< 0.1	< 0.05	< 0.001	< 0.1	0.0692	4	6.2	10.2	< 0.2	< 1.0	7.9
0717		1/10/2005	< 0.01	< 0.005	0.01	< 0.05	3.34	< 0.1	< 0.05	< 0.001	< 0.1	0.0708	4.5	4.2	8.7	< 0.2	< 1.0	5.5
0717		4/18/2005	< 0.01	< 0.005	0.02	< 0.05	3.91	0.1	< 0.05	< 0.001	< 0.1	0.0576	6.1	7.6	13.7	< 0.2	< 1.0	5.9
0717		7/18/2005	< 0.01	< 0.005	0.02	< 0.05	4.28	< 0.1	< 0.05	< 0.001	< 0.1	0.0554	5.5	5.4	10.9	< 0.2	< 1.0	7.8
0717		10/10/2005	< 0.01	< 0.005	0.03	< 0.05	4.5	< 0.1	< 0.05	< 0.001	< 0.1	0.0536	7.2	8.5	15.7	< 0.2	< 1.0	9.2
0717		1/16/2006	< 0.01	< 0.005	0.07	< 0.05	13.2	< 0.1	0.06	< 0.001	< 0.1	0.0325	15.1	17.8	32.9	< 0.2	< 1.0	16.1
0717		4/10/2006	< 0.01	< 0.005	0.19	< 0.05	15.8	< 0.1	0.11	0.002	< 0.1	0.019	16.7	21.4	38.1	< 0.2	< 1.0	14.6
0717		7/24/2006	< 0.01	< 0.005	0.42	< 0.05	19.8	< 0.1	0.26	< 0.001	< 0.1	0.012	17.7	22.4	40.1	< 0.2	< 1.0	20.7
0717		10/9/2006	< 0.01	< 0.005	0.42	< 0.05	18.3	< 0.1	0.29	< 0.001	< 0.1	0.0102	20.5	26.1	46.6	< 0.2	< 1	19
0717		1/16/2007	<0.01	<0.005	0.3	<0.05	19.1	<0.1	0.27	<0.001	<0.1	0.0105	18.3	21.7	40	<0.2	<1	23.3
0717		4/10/2007	<0.01	<0.005	0.36	<0.05	16.8	<0.1	0.26	<0.001	<0.1	0.0063	19.6	25.9	45.5	<0.2	<1	30.6
0717		7/16/2007	<0.01	<0.005	0.4	<0.05	16.3	<0.1	0.27	<0.001	<0.1	0.0033	20.4	28.7	49.1	<0.2	<1	19.3
0717		10/9/2007	<0.01	<0.005	0.5	<0.05	17.2	<0.1	0.34	<0.001	<0.1	0.0036	14.3	25.2	39.5	<0.2	<1	20.9
0717		1/22/2008	< 0.01	0.005	0.55	< 0.05	20.7	< 0.1	0.43	< 0.001	< 0.1	0.0017	25.3	29.7	55	< 0.2	5.3	26.4
0717		4/15/2008	< 0.01	0.006	0.65 D	< 0.05	23.7	< 0.1	0.55	< 0.001	< 0.1	0.0011	18.6	22.8	41.4	0.6	-3.3 U	22.1
0717		7/15/2008	< 0.01	0.008	0.59	< 0.05	21.8	< 0.1	0.53	< 0.001	< 0.1	0.0012	20	26	46	0.1 U	7 U	24.3
0717		10/14/2008	0.02	0.01	0.77	< 0.05	22.9	< 0.1	0.67	< 0.001	< 0.1	0.0028	21	21	42	0.3	3 U	34.9
0717		1/19/2009	0.05	0.015	0.9	<0.05	23.1	<0.1	0.81	<0.001	<0.1	0.0187	23	24	47	0.3	3 U	32.3
0717		4/14/2009	0.07	0.015	0.93	<0.05	23.9	<0.1	0.84	<0.001	<0.1	0.0331	21	24	45	-0.2 U	2.0 U	34.5
0717		7/14/2009	0.10	0.014	0.95	<0.05	21.8	<0.1	0.82	<0.001	<0.1	0.0377	17	25	42	0.1 U	4.5	34.7

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0717		10/13/2009	6,843.17	4.14	4.30	6570 H	475 D	548	181 D	14	<1	4520 D	74	77 D	26.2	0.55	145	<0.001
0719		4/9/2001	6,845.30	2.94	3.01	5850	482	461	134	4.3	< 0.1	3750	32.2	5.14	0.11	< 1	78.8	0.016
0719		7/11/2001	6,845.30	2.70	2.94	6180	527	518	144	3.5	< 0.1	4000	43.8	3.86	< 0.1	< 1	73.2	0.015
0719		10/8/2001	6,846.70	2.75	2.90	5960	450	440	108	3.8	< 0.1	3300	51.6	2.8	< 0.1	< 1	49.9	0.013
0719		1/7/2002	6,846.50	3.00	2.80	5680	496	463	115	6	< 0.1	3760	57	2.9	< 0.1	< 1	47.4	0.01
0719		4/8/2002	6,845.79	2.90	2.99	5520	470	440	129	5.7	< 0.1	3470	39.9	3.42	< 0.1	< 1	51	0.005
0719		7/15/2002	6,845.38	2.78	3.00	5420	563	517	123	7.6	< 0.1	4020	33.9	3.59	< 0.1	< 1	35.4	0.005
0719		10/14/2002	6,845.95	2.85	3.06	4630	514	491	134	10.5	< 0.1	3720	33.4	3.76	< 0.1	< 1	25	0.005
0719		1/13/2003	6,845.26	2.96	3.05	5340	531	509	120	11	< 0.1	3610	25.2	3.4	< 0.1	< 1	26.9	0.004
0719		4/15/2003	6,845.54	3.26	2.88	5350	477	477	149	15.7	< 0.1	3460	38.8	3.6	< 0.1	< 1	25.8	0.002
0719		7/14/2003	6,844.64	3.09	2.97	5330	490	456	141	13.5	< 0.1	3240	36.3	3.1	< 0.1	< 1	21.4	< 0.001
0719		10/13/2003	6,844.38	3.09	3.03	5340	526	506	143	12.7	< 0.1	3720	35.2	3.56	< 0.1	< 1	20.7	< 0.001
0719		1/12/2004	6,844.00	3.17	2.87	5240	537	505	129	12.8	< 1.0	3580	38.8	3.65	< 0.10	< 1.0	2.3	< 0.001
0719		4/12/2004	6,843.88	3.05	3.08	5060	482	438	126	11.4	< 1	3440	40.8	3.31	< 0.1	< 1	23.6	< 0.001
0719		7/19/2004	6,843.59	3.37	3.02	5070	537 D	432 D	144	10.5	< 1	3180 D	36	2.8 D	< 0.10	< 1.0	17.7	< 0.001
0719		10/11/2004	6,843.62	3.42	3.09	4920	496 D	440 D	136	9.8	< 1	3200 D	34	2.54	< 0.10	< 1.0	16.5	< 0.001
0719		1/10/2005	no data	3.32	3.38	4850	513 D	428 D	135	9.9	< 1	3090 D	36	1.9	< 0.1	< 1.0	15.3	< 0.001
0719		4/11/2005	6,842.19	3.51	3.37	4580	531	423	136	9.8	< 1	3280	33	1.5	< 0.1	< 1.0	19.3	< 0.001
0719		7/18/2005	6,841.57	3.31	3.46	4640	534 D	397 D	130	9.8	< 1	3000 D	31	1.2	< 0.1	< 1.0	17.3	< 0.001
0719		10/10/2005	6,840.91	3.73	3.82	4540	494 D	709 D	157	12.5	< 1	4160 D	30	1.25	< 0.1	< 1.0	0.2	0.02
0719		1/16/2006	6,840.44	3.99	4.17	4330	510 D	393 D	116	9.8	< 1	2940 D	29	1.84	< 0.1	< 1.0	6.5	< 0.001
0719		4/10/2006	6,839.92	4.05	3.93	4310	573 D	412 D	116	10.3	< 1	3090 D	35	1.13	0.2	< 1.0	5.5	< 0.001
0719		7/24/2006	6,839.44	4.04	4.13	4050	527 D	381 D	128	10.2	< 1	2930 D	28	1.08	< 0.1	< 1.0	2.6	< 0.001
0719		10/9/2006	6,839.21	4.08	4.22	4090	519 D	379 D	119	9.9	< 1	2790 D	26	1.05	< 0.1	< 0.5	2.3	< 0.001
0719		1/15/2007	6,838.61	4.95	5.25 H	4080 H	507 D	369 D	113	9.4	<1	2850 D	28	0.73	<0.1	<0.5	1.2	<0.001
0719		4/17/2007	6,838.11	6.53	5.08	4220	504 D	381 D	110	9.4	7	2900 D	28	0.81	<0.1	<0.5	<0.1	<0.001
0719		7/17/2007	6,837.96	4.47	5.03	4130	519 D	394 D	123	9.7	7	2960 D	27	1.17	<0.1	<0.5	0.8	0.003
0719		10/9/2007	6,837.50	4.17	4.40	4250	496 D	371 D	117	9.8	<1	2730 D	29	0.62	0.1	<0.5	0.9	0.001
0719		1/22/2008	6,837.80	3.89	3.83	4390	476 D	407 D	135	13	< 1	2890 D	34	0.89	< 0.1	< 0.5	1.6	0.003
0719		4/15/2008	6,837.56	3.84	3.59	4420	510	426	138 D	12.0	< 1	3490 D	27	0.50	< 0.1	< 0.50	1.7	< 0.001
0719		7/15/2008	6,837.36	3.94	3.86	4650	559	468	146 D	12	< 1	3060 D	29	0.34	< 0.1	< 0.5	2.2	< 0.003
0719		10/13/2008	6,837.08	3.87	3.8	4880	513	428	134 D	12	< 1	3430 D	26	1.1 D	< 0.1	< 0.5	1.4	< 0.001
0719		1/19/2009	6,836.28	3.67	3.46	4850 H	493	419	142	13	<1	3230 D	31	0.14	0.2	<0.5	22	<0.001
0719		4/14/2009	6,836.18	3.77	3.62	4860	459 D	432 D	145 D	23	<1	3270 D	30	0.43	0.1	<0.50	12.4	<0.001
0719		7/14/2009	6,835.58	3.64	3.57	5090	483	454	134	12	<1	3620 D	33	0.44	<0.1	<0.50	14.2	<0.001

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
0717		10/13/2009	0.11	0.015	0.99	<0.05	23.5	<0.1	0.88	<0.001	<0.1	0.0483	20	29	49	0.01 U	-0.1 U	35.6
0719		4/9/2001	0.07	< 0.005	0.8	< 0.05	8.7	0.34	1.1	< 0.001	< 0.1	0.397	22.1	5.9	28	30.5	< 1	55.3
0719		7/11/2001	0.08	< 0.005	0.71	< 0.05	8.43	0.46	1.01	< 0.001	< 0.1	0.454	24	2.4	26.4	40.9	< 1	46.6
0719		10/8/2001	0.04	< 0.005	0.6	< 0.05	6.85	0.25	0.85	< 0.001	< 0.1	0.387	14	1.1	15.1	40.6	< 1	42.9
0719		1/7/2002	0.05	0.009	0.68	< 0.05	8.21	0.2	0.98	< 0.001	< 0.1	0.27	15.5	1.9	17.4	28	< 1	29
0719		4/8/2002	0.05	0.005	0.76	< 0.05	8.64	0.2	1.08	< 0.001	< 0.1	0.258	12.2	< 1	12.2	17.1	< 1	19.6
0719		7/15/2002	0.04	< 0.005	0.59	< 0.05	6.7	< 0.1	0.73	< 0.001	< 0.1	0.191	6.8	4.6	11.4	9	< 1	14.9
0719		10/14/2002	0.05	< 0.005	0.65	< 0.05	7.89	< 0.1	0.9	< 0.001	< 0.1	0.086	5.4	2	7.4	< 0.2	< 1	11.5
0719		1/13/2003	0.04	< 0.005	0.66	< 0.05	7.67	< 0.1	0.84	< 0.001	< 0.1	0.0691	7.6	< 1	7.6	1.2	< 1	10
0719		4/15/2003	0.04	< 0.005	0.72	< 0.05	8.54	< 0.1	0.96	< 0.001	< 0.1	0.0604	8.3	9.7	18	0.7	< 1	23.3
0719		7/14/2003	0.04	< 0.005	0.61	< 0.05	7.48	< 0.1	0.83	< 0.001	< 0.1	0.0552	6.5	< 1	6.5	0.4	< 1	6.4
0719		10/13/2003	0.04	< 0.005	0.55	< 0.05	7.13	< 0.1	0.72	< 0.001	< 0.1	0.0665	5.1	7.7	12.8	0.8	< 1	16.4
0719		1/12/2004	0.04	< 0.005	0.48	< 0.05	7.4	< 0.1	0.06	< 0.001	< 0.1	0.0784 D	6.2	6.1	12.3	< 0.2	< 1.0	16.8
0719		4/12/2004	0.04	< 0.005	0.37	< 0.05	6.49	< 0.1	0.5	< 0.001	< 0.1	0.0878 D	4.2	7.9	12.1	< 0.2	< 1	8.1
0719		7/19/2004	0.03	< 0.005	0.33	< 0.05	6.11	< 0.1	0.42	< 0.001	< 0.1	0.0642 D	4.7	6.9	11.6	< 0.2	< 1.0	15.5
0719		10/11/2004	0.03	< 0.005	0.34	< 0.05	5.95	< 0.1	0.42	< 0.001	< 0.1	0.0578	4.7	9.1	13.8	0.7	< 1.0	9.9
0719		1/10/2005	0.02	< 0.005	0.35	< 0.05	6.28	< 0.1	0.46	< 0.001	< 0.1	0.0755	3.2	5.1	8.3	< 0.2	< 1.0	9
0719		4/11/2005	0.02	< 0.005	0.3	< 0.05	5.79	< 0.1	0.37	< 0.001	< 0.1	0.112	6.9	7.7	14.6	< 0.2	< 1.0	6.1
0719		7/18/2005	0.02	< 0.005	0.23	< 0.05	4.96	< 0.1	0.33	< 0.001	< 0.1	0.136	3.4	4.4	7.8	< 0.2	< 1.0	5.8
0719		10/10/2005	0.01	< 0.005	0.26	< 0.05	7.12	1.3	0.3	< 0.001	< 0.1	0.0994	4.3	5.4	9.7	< 0.2	< 1.0	6.4
0719		1/16/2006	< 0.01	< 0.005	0.17	< 0.05	4.06	< 0.1	0.22	< 0.001	< 0.1	0.0597	2.6	6.2	8.8	< 0.2	< 1.0	3
0719		4/10/2006	< 0.01	< 0.005	0.18	< 0.05	4.23	< 0.1	0.2	< 0.001	< 0.1	0.0392	2.6	5.9	8.5	< 0.2	< 1.0	2.4
0719		7/24/2006	< 0.01	< 0.005	0.16	< 0.05	4.06	< 0.1	0.18	< 0.001	< 0.1	0.022	2.5	5.1	7.6	< 0.2	< 1.0	2.4
0719		10/9/2006	< 0.01	< 0.005	0.16	< 0.05	4.08	< 0.1	0.18	< 0.001	< 0.1	0.0162	3.1	4.2	7.3	< 0.2	< 1	2.5
0719		1/15/2007	<0.01	<0.005	0.12	<0.05	3.7	<0.1	0.16	<0.001	<0.1	0.0074	2	4.8	6.8	<0.2	<1	3.5
0719		4/17/2007	<0.01	<0.005	0.11	<0.05	3.42	<0.1	0.14	<0.001	<0.1	0.0013	2.8	9.7	12.5	<0.2	<1	3.2
0719		7/17/2007	<0.01	<0.005	0.13	<0.05	3.33	<0.1	0.16	<0.001	<0.1	0.0092	2.7	9.3	12	<0.2	<1	4.3
0719		10/9/2007	<0.01	<0.005	0.19	<0.05	4.49	<0.1	0.22	<0.001	<0.1	0.0103	2	8.7	10.7	<0.2	<1	4.2
0719		1/22/2008	< 0.01	< 0.005	0.53	< 0.05	5.32	< 0.1	0.56	< 0.001	< 0.1	0.0221	4.8	12.6	17.4	< 0.2	8.1	5.3
0719		4/15/2008	< 0.01	< 0.005	0.56 D	< 0.05	5.74	< 0.1	0.60	< 0.001	< 0.1	0.0184	2.5	11.7	14.2	0.4	-0.7 U	5.1
0719		7/15/2008	< 0.01	< 0.005	0.55	< 0.05	5.67	< 0.1	0.6	< 0.001	< 0.1	0.0176	4.1	12	16.1	0.2 U	2.4 U	5.4
0719		10/13/2008	< 0.01	< 0.005	0.68	< 0.05	6.19	< 0.1	0.69	< 0.001	< 0.1	0.0153	3.7	8.4	12.1	0.2	1.4 U	7.7
0719		1/19/2009	<0.01	<0.005	0.72	<0.05	6.68	<0.1	0.86	<0.001	<0.1	0.127	4.2	14	18.2	0.1 U	-0.7 U	7.7
0719		4/14/2009	<0.01	<0.005	0.70	<0.05	6.43	<0.1	0.75	<0.001	<0.1	0.0770	2.7	11	13.7	0.1 U	-2 U	7.6
0719		7/14/2009	<0.01	<0.005	0.77	<0.05	7.08	<0.1	0.80	<0.001	<0.1	0.0966	3.3	12	15.3	-0.04 U	1.0 U	6.9

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Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0719		10/13/2009	6,835.23	3.94	3.66	5560 H	531 D	548	142 D	13	<1	3960 D	31	0.97	<0.1	<0.50	2.4	<0.001
EPA 01		7/25/1989	6,804.30	6.50	6.40	4590	648	380	161	10.2	427	2852	29.3	0.83	0.01	< 1	0.39	0.149
EPA 01		10/4/1989	6,804.50	6.60	6.73	4522	620	352	158	13.4	466	2844	25.9	0.32	0.01	< 1	0.45	0.156
EPA 01		1/16/1990	6,804.20	6.40	6.56	4632	576	352	161	10.6	458	2842	29.5	0.46	0.02	< 1	0.2	0.142
EPA 01		4/17/1990	6,803.80	6.30	6.76	4714	593	244	156	10.2	468	2662	30.4	0.63	0.07	< 1	0.41	0.183
EPA 01		7/12/1990	6,803.10	6.40	6.78	4725	583	360	151	10.8	482	2652	29.7	0.26	0.1	< 1	< 0.1	0.195
EPA 01		10/16/1990	6,802.90	6.30	7.19	4706	633	388	172	12.8	448	2800	32	0.36	0.11	< 1	< 0.1	0.318
EPA 01		1/8/1991	6,802.30	6.40	6.70	4730	628	384	159	29	436	2719	66	0.51	0.05	< 1	< 0.1	0.181
EPA 01		4/16/1991	6,802.20	6.30	7.74	4746	608	368	161	11.2	480	2596	34.1	0.46	0.29	< 1	< 0.1	0.193
EPA 01		7/3/1991	6,801.80	6.40	6.99	4494	560	333	141	9	488	2905	31.8	0.21	< 0.01	< 1	< 0.1	0.19
EPA 01		10/22/1991	6,801.40	6.40	7.14	4713	584	344	156	10.2	483	2853	38.1	0.32	< 0.01	< 1	< 0.1	0.242
EPA 01		1/22/1992	6,801.00	6.30	7.31	4824	584	344	148	9.7	452	2905	36.2	< 0.05	< 0.01	< 1	< 0.1	0.21
EPA 01		4/2/1992	6,800.50	6.10	7.35	4238	566	365	188	12.3	462	2813	34.5	0.46	< 0.01	< 1	< 0.1	0.175
EPA 01		7/15/1992	6,799.10	6.20	7.01	4765	582	375	173	11.5	459	2868	36.1	0.42	< 0.1	< 1	< 0.1	0.176
EPA 01		10/14/1992	6,798.60	6.30	6.93	4708	567	342	155	11.5	425	3104	35.5	0.53	< 0.1	< 1	0.12	0.303
EPA 01		1/13/1993	6,798.10	6.30	6.96	4557	574	320	171	12.5	423	2834	36	0.48	< 0.1	< 1	< 0.1	0.059
EPA 01		4/15/1993	6,797.90	6.30	8.00	4149	532	376	165	9.2	373	2836	31.2	0.17	0.6	< 1	< 0.1	0.06
EPA 01		7/20/1993	6,797.50	6.40	7.10	4178	601	326	145	10.7	421	2769	33	0.24	< 0.1	< 1	< 0.1	0.047
EPA 01		10/12/1993	6,796.30	6.80	6.92	4118	578	326	155	9.2	404	2815	30.2	0.08	< 0.1	< 1	< 0.1	0.107
EPA 01		1/11/1994	6,796.90	6.70	7.66	4656	566	339	132	9.1	333	3005	28.4	< 0.05	0.6	< 1	< 0.1	0.05
EPA 01		4/20/1994	6,796.50	6.60	6.67	4260	560	342	132	8.7	345	2874	27.6	0.62	0.16	< 1	< 0.1	0.071
EPA 01		7/26/1994	6,797.40	6.70	7.51	4000	570	348	129	8.8	328	2726	27.6	0.12	0.14	< 1	< 0.1	0.055
EPA 01		10/11/1994	6,795.90	6.70	7.84	4596	622	383	157	10.3	349	3145	26.6	0.36	0.58	< 1	< 0.1	0.05
EPA 01		1/10/1995	6,795.60	6.60	7.60	4626	705	261	144	12	309	2941	28.9	0.46	0.44	< 1	< 0.1	0.069
EPA 01		4/11/1995	6,795.90	6.80	6.98	4431	616	318	131	9.6	360	2885	31.9	0.57	0.12	< 1	< 0.1	0.036
EPA 01		7/11/1995	6,795.30	7.00	7.93	4039	595	356	132	9.6	367	2673	28.7	0.36	0.52	< 1	< 0.1	0.043
EPA 01		10/10/1995	6,795.20	6.90	7.81	4065	600	355	144	10.1	334	2730	24.5	0.31	0.24	< 1	< 0.1	0.037
EPA 01		1/10/1996	6,794.90	7.10	7.34	4572	595	360	129	9.1	276	2935	33	0.06	0.31	< 1	< 0.1	0.016
EPA 01		4/10/1996	6,794.80	7.50	7.88	4540	615	370	128	10.2	248	3000	26.1	0.07	0.22	< 1	< 0.1	0.017
EPA 01		7/17/1996	6,794.70	7.00	7.29	4458	560	330	135	10.4	242	2925	25.2	0.05	< 0.1	< 1	< 0.1	0.015
EPA 01		10/8/1996	6,794.50	7.00	7.43	4440	635	377	134	10.2	248	2926	24.1	0.11	< 0.1	< 1	< 0.1	0.019
EPA 01		7/15/1997	6,801.00	6.10	7.67	4630	628	375	134	10.4	200	3000	25.2	0.08	0.14	< 1	< 0.1	0.009
EPA 01		10/15/1997	6,794.80	no data	7.87	4600	638	394	137	10.2	196	3050	31.4	0.54	0.24	< 1	< 0.1	0.01
EPA 03		7/26/1989	6,895.60	6.80	5.83	4839	587	465	118	10.5	168	3358	25.1	0.31	0.02	< 1	< 0.1	0.003
EPA 03		10/5/1989	6,894.90	6.30	6.52	4742	507	438	115	13.9	159	3131	24.6	0.27	0.09	< 1	< 0.1	0.017

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
0719		10/13/2009	<0.01	<0.005	0.61	<0.05	6.26	<0.1	0.67	<0.001	<0.1	0.0227	3.2	9.2	12.4	0.04 U	-1 U	4.0
EPA 01		7/25/1989	< 0.05	0.01	< 0.01	< 0.05	4.7	62	< 0.05	< 0.001	< 0.1	0.0034	0.3	1.1	1.4	1.8	< 1	3
EPA 01		10/4/1989	< 0.05	0.01	< 0.01	< 0.05	4.9	50	< 0.05	< 0.001	< 0.1	0.005	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 01		1/16/1990	< 0.05	< 0.01	< 0.01	< 0.05	5	49	< 0.05	< 0.001	< 0.1	0.004	< 0.2	< 1	0	< 0.2	1.6	1.8
EPA 01		4/17/1990	< 0.05	< 0.01	< 0.01	< 0.05	5	46	< 0.05	< 0.001	< 0.1	0.003	1.2	< 1	1.2	< 0.2	< 1	1.3
EPA 01		7/12/1990	< 0.05	< 0.01	0.05	< 0.05	5.45	40.3	< 0.05	< 0.001	< 0.1	0.0068	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 01		10/16/1990	< 0.05	< 0.01	0.02	< 0.05	4.86	41.2	< 0.05	< 0.001	< 0.1	0.0062	< 0.2	< 1	0	< 0.2	2	< 1
EPA 01		1/8/1991	< 0.01	0.01	0.03	< 0.05	5.18	43.1	< 0.05	< 0.001	< 0.1	0.0054	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 01		4/16/1991	< 0.01	< 0.01	0.02	< 0.05	4.88	38.4	< 0.05	< 0.001	< 0.1	0.005	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 01		7/3/1991	< 0.01	< 0.01	0.03	< 0.05	4.37	35.9	< 0.05	< 0.001	< 0.1	0.0118	0.4	< 1	0.4	< 0.2	< 1	< 1
EPA 01		10/22/1991	< 0.01	< 0.01	0.01	< 0.05	4	35.3	< 0.05	< 0.001	< 0.1	0.0041	< 0.2	< 1	0	< 0.2	3.2	< 1
EPA 01		1/22/1992	< 0.01	< 0.01	0.03	< 0.05	4.43	42.1	< 0.05	< 0.001	< 0.1	0.007	1	< 1	1	< 0.2	< 1	1
EPA 01		4/2/1992	< 0.01	0.01	0.03	< 0.05	4.76	41.3	< 0.05	< 0.001	< 0.1	0.092	< 0.2	< 1	0	< 0.2	1.3	< 1
EPA 01		7/15/1992	< 0.01	0.01	0.03	< 0.05	4.68	36.9	< 0.05	< 0.001	< 0.1	0.007	0.6	< 1	0.6	< 0.2	< 1	< 1
EPA 01		10/14/1992	< 0.01	< 0.01	0.02	< 0.05	4.45	35	< 0.05	< 0.001	< 0.1	0.011	0.5	< 1	0.5	< 0.2	< 1	< 1
EPA 01		1/13/1993	< 0.01	0.01	< 0.01	< 0.05	4.07	31.2	< 0.05	< 0.001	< 0.1	0.004	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 01		4/15/1993	< 0.01	< 0.01	< 0.01	< 0.05	4.31	35.3	0.06	< 0.001	< 0.1	0.016	< 0.2	3.1	3.1	< 0.2	< 1	< 1
EPA 01		7/20/1993	< 0.01	< 0.01	< 0.01	< 0.05	4.31	31.9	< 0.05	< 0.001	< 0.1	0.021	< 0.2	2	2	< 0.2	4.7	< 1
EPA 01		10/12/1993	< 0.01	0.01	0.02	< 0.05	3.47	35.5	< 0.05	< 0.001	< 0.1	0.009	0.8	< 1	0.8	< 0.2	< 1	< 1
EPA 01		1/11/1994	< 0.01	< 0.01	0.02	< 0.05	3.84	39.7	0.19	< 0.001	< 0.1	0.017	< 0.2	5.4	5.4	< 0.2	1.8	9.1
EPA 01		4/20/1994	< 0.01	< 0.01	< 0.01	< 0.05	3.02	28.1	< 0.05	< 0.001	< 0.1	0.008	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 01		7/26/1994	< 0.01	< 0.01	0.05	< 0.05	4.13	30	0.14	< 0.001	< 0.1	0.008	0.8	2.6	3.4	< 0.2	1.4	4.9
EPA 01		10/11/1994	< 0.01	< 0.01	0.05	< 0.05	3.47	31.5	0.12	< 0.001	< 0.1	0.01	< 0.2	< 1	0	< 0.2	3.5	< 1
EPA 01		1/10/1995	< 0.01	< 0.01	0.05	< 0.05	3.6	34.1	0.2	< 0.001	< 0.1	0.009	0.3	1.3	1.6	< 0.2	1.1	2.4
EPA 01		4/11/1995	< 0.01	< 0.01	0.03	< 0.05	3.58	26.4	0.05	< 0.001	< 0.1	0.005	0.2	< 1	0.2	< 0.2	< 1	< 1
EPA 01		7/11/1995	< 0.01	< 0.01	< 0.01	< 0.05	3.59	28.1	< 0.05	< 0.001	< 0.1	0.006	< 0.2	< 1	0	< 0.2	11	1.1
EPA 01		10/10/1995	< 0.01	< 0.01	0.04	< 0.05	3.6	28.1	0.07	< 0.001	< 0.1	0.012	< 0.2	< 1	0	< 0.2	2.7	1.3
EPA 01		1/10/1996	< 0.01	< 0.01	0.04	< 0.05	3.48	26.9	0.08	< 0.001	< 0.1	0.0098	0.6	< 1	0.6	< 0.2	< 1	< 1
EPA 01		4/10/1996	< 0.01	< 0.01	0.05	< 0.05	3.21	28.5	0.09	< 0.001	< 0.1	0.012	0.3	1.7	2	< 0.2	< 1	< 1
EPA 01		7/17/1996	< 0.01	< 0.01	0.1	< 0.05	3.54	24.6	0.18	< 0.001	< 0.1	0.0087	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 01		10/8/1996	< 0.01	< 0.01	0.11	< 0.05	3.34	23.8	0.2	< 0.001	< 0.1	0.0078	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 01		7/15/1997	< 0.01	< 0.01	0.18	< 0.05	4.04	11.5	0.18	< 0.001	< 0.1	0.008	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 01		10/15/1997	< 0.01	< 0.01	0.28	< 0.05	4.73	10.4	0.21	< 0.001	< 0.1	0.01	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 03		7/26/1989	< 0.05	< 0.01	0.03	0.07	5.6	< 0.1	< 0.05	< 0.001	< 0.1	0.0103	1.5	< 1	1.5	2.3	< 1	4.3
EPA 03		10/5/1989	< 0.05	< 0.01	0.02	< 0.05	4.8	0.05	< 0.05	< 0.001	< 0.1	0.016	1.5	< 1	1.5	< 0.2	< 1	< 1

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 03		1/23/1990	6,892.80	6.80	6.29	5594	616	494	148	12.9	159	3620	26.3	0.51	0.1	< 1	< 0.1	0.003
EPA 03		4/18/1990	6,891.70	6.40	7.00	5639	560	523	130	11.1	45.5	3653	28.9	0.57	0.04	< 1	< 0.1	0.024
EPA 03		7/17/1990	6,890.50	6.70	6.10	5385	600	536	120	11.9	139	3368	23.6	0.28	0.04	< 1	< 0.1	0.016
EPA 03		10/16/1990	6,889.50	6.50	6.60	4846	517	468	127	13	142	3253	29.7	0.26	0.02	< 1	< 0.1	0.001
EPA 03		1/8/1991	6,888.80	6.60	6.25	4646	532	481	119	22	145	3002	27.3	0.23	0.07	< 1	0.2	0.006
EPA 03		4/17/1991	6,888.30	6.60	6.99	4392	513	349	120	14.1	142	2888	25.6	0.21	0.02	< 1	0.25	0.008
EPA 03		7/3/1991	6,887.70	6.60	6.42	3939	467	353	112	11	137	2885	31.2	0.35	0.03	< 1	0.2	0.008
EPA 03		10/22/1991	6,887.00	6.60	6.51	3752	493	264	116	13.4	139	2485	24.2	0.18	0.02	< 1	0.22	0.001
EPA 09		7/26/1989	6,911.00	6.10	5.54	5122	543	558	122	11.9	122	3598	28.1	0.43	0.07	< 1	0.22	< 0.001
EPA 09		10/5/1989	6,911.20	4.80	6.06	5382	507	580	118	15	92.5	3566	28.3	0.62	0.07	< 1	1	< 0.001
EPA 09		1/16/1990	6,911.20	5.70	6.15	4982	458	498	125	12	214	3210	23.8	0.38	0.15	< 1	< 0.1	< 0.001
EPA 09		4/17/1990	6,911.10	5.50	6.00	5133	479	492	130	11.5	274	3261	28	0.46	0.18	< 1	0.25	0.001
EPA 09		7/17/1990	6,910.80	4.90	4.30	5971	494	619	115	11.7	< 1	4248	26.8	0.45	0.03	< 1	8	< 0.009
EPA 09		10/16/1990	6,910.90	4.70	4.29	5548	494	554	117	12.5	50	3753	33.7	0.41	0.02	< 1	1.1	0.001
EPA 09		1/8/1991	6,910.70	5.30	6.19	5309	548	569	131	16	105	3561	31.1	0.49	< 0.01	< 1	0.61	< 0.001
EPA 09		4/17/1991	6,910.90	5.30	6.25	5360	458	543	124	13.2	68	3576	27.3	0.43	0.03	< 1	4.9	< 0.001
EPA 09		7/3/1991	6,910.70	4.80	6.27	4927	453	516	107	10.2	121	3446	37.7	0.5	0.2	< 1	1.52	0.002
EPA 09		10/22/1991	6,910.80	5.00	5.97	5269	475	501	119	11.1	122	3555	33.2	0.42	< 0.01	< 1	1.58	0.001
EPA 09		1/22/1992	6,911.60	5.20	5.29	6127	484	567	110	11.1	14.7	4132	27.7	0.93	0.49	< 1	1.01	0.013
EPA 09		4/2/1992	6,910.60	5.40	6.61	5681	576	609	133	15.1	60.9	4137	34.4	0.73	< 0.1	< 1	2.5	0.014
EPA 09		7/15/1992	6,909.70	5.80	3.88	6008	496	573	122	12.4	< 1	3956	66.8	0.28	0.1	< 1	1.25	0.01
EPA 09		10/14/1992	6,909.70	5.30	3.90	6070	479	537	109	12	< 1	3996	51	0.45	< 0.1	< 1	2.36	0.018
EPA 09		1/13/1993	6,909.50	5.60	7.06	5015	493	475	116	12.1	105	3403	24.4	0.67	< 0.1	< 1	< 0.1	0.003
EPA 09		4/15/1993	6,909.60	5.30	6.44	4596	425	494	126	9.9	62.3	3487	27.9	0.45	0.2	< 1	0.18	< 0.001
EPA 09		7/20/1993	6,909.80	5.60	5.94	4554	493	464	117	10.9	54.8	3250	30	0.25	< 0.1	< 1	< 0.1	< 0.001
EPA 09		10/12/1993	6,907.00	5.90	5.89	4633	497	490	115	10.8	86.4	3399	27.3	0.42	< 0.1	< 1	1.22	< 0.001
EPA 09		1/12/1994	6,908.00	4.40	2.87	5738	535	556	101	11.8	< 1	4110	55.2	0.58	0.13	< 1	31.1	0.029
EPA 09		4/20/1994	6,908.70	5.40	3.62	5771	550	556	108	10	< 1	4149	30	1.82	< 0.1	< 1	3.3	0.021
EPA 09		7/26/1994	6,909.50	5.20	6.16	4732	540	479	115	10.3	31.3	3472	28	0.46	< 0.1	< 1	0.81	< 0.001
EPA 09		10/11/1994	6,908.40	5.00	3.63	5664	508	603	119	11.3	< 1	4045	28.7	1.08	< 0.1	< 1	1.1	< 0.001
EPA 09		1/10/1995	6,908.20	5.30	4.92	6144	560	650	117	13.3	10.3	4239	28.9	1.78	< 0.1	< 1	5.54	0.012
EPA 09		4/11/1995	6,908.60	6.20	6.04	5264	550	526	120	11.5	119	3500	15.7	1.15	< 0.1	< 1	0.18	0.002
EPA 09		7/11/1995	6,907.90	5.90	6.06	5046	498	540	120	11.5	34.1	3485	29.8	1.04	< 0.1	< 1	< 0.1	0.003
EPA 09		10/10/1995	6,908.00	5.70	6.95	5003	510	530	120	11.6	70.8	3475	27	0.88	< 0.1	< 1	0.15	0.001
EPA 09		1/9/1996	6,907.60	5.60	5.94	5085	485	550	109	11.3	52.8	3790	28.4	0.24	< 0.1	< 1	1.87	< 0.001

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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 03		1/23/1990	< 0.05	< 0.01	0.11	< 0.05	6.1	0.29	0.05	< 0.001	< 0.1	0.049	1.5	< 1	1.5	4.7	< 1	6.1
EPA 03		4/18/1990	< 0.05	< 0.01	0.07	< 0.05	7.2	< 0.1	< 0.05	< 0.001	< 0.1	0.026	1	< 1	1	< 0.2	1.9	1.6
EPA 03		7/17/1990	< 0.05	< 0.01	0.04	< 0.05	6.78	< 0.1	< 0.05	< 0.001	< 0.1	0.033	< 0.2	< 1	0	3.2	< 1	3
EPA 03		10/16/1990	< 0.05	< 0.01	0.03	< 0.05	5.9	0.1	< 0.05	< 0.001	< 0.1	0.0192	0.8	< 1	0.8	< 0.2	< 1	< 1
EPA 03		1/8/1991	< 0.01	< 0.01	0.05	< 0.05	6.07	0.16	0.05	< 0.001	< 0.1	0.024	1.1	< 1	1.1	< 0.2	< 1	1
EPA 03		4/17/1991	< 0.01	< 0.01	0.03	< 0.05	4.24	0.17	< 0.05	< 0.001	< 0.1	0.025	0.6	< 1	0.6	< 0.2	< 1	3
EPA 03		7/3/1991	< 0.01	< 0.01	0.03	< 0.05	3.96	0.25	< 0.05	< 0.001	< 0.1	0.0226	0.8	< 1	0.8	< 0.2	< 1	< 1
EPA 03		10/22/1991	< 0.01	< 0.01	0.02	< 0.05	2.87	0.24	< 0.05	< 0.001	< 0.1	0.0145	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 09		7/26/1989	< 0.05	< 0.01	0.12	< 0.05	4.5	< 0.1	0.09	< 0.001	< 0.1	0.002	5	1.7	6.7	6.5	2.1	4.1
EPA 09		10/5/1989	< 0.05	< 0.01	0.11	< 0.05	4	< 0.01	0.08	< 0.001	< 0.1	0.003	6	< 1	6	2.2	< 1	9.1
EPA 09		1/16/1990	< 0.05	< 0.01	0.08	< 0.05	2.8	< 0.01	< 0.05	< 0.001	< 0.1	0.003	2.1	1	3.1	< 0.2	< 1	2.5
EPA 09		4/17/1990	< 0.05	0.01	0.09	< 0.05	3.7	< 0.1	0.05	< 0.001	< 0.1	0.002	4.2	< 1	4.2	< 0.2	< 1	4.6
EPA 09		7/17/1990	< 0.05	< 0.01	0.21	< 0.05	6.79	< 0.1	0.19	< 0.001	< 0.1	0.0078	12.3	8.1	20.4	< 0.2	< 1	10
EPA 09		10/16/1990	< 0.05	< 0.01	0.14	< 0.05	4.74	< 0.1	0.16	< 0.001	< 0.1	0.0021	8.9	4.7	13.6	< 0.2	< 1	9
EPA 09		1/8/1991	< 0.01	< 0.01	0.29	< 0.05	6.35	< 0.1	0.29	< 0.001	< 0.1	0.0562	3.7	1.5	5.2	< 0.2	< 1	4
EPA 09		4/17/1991	< 0.01	< 0.01	0.24	< 0.05	5.77	< 0.1	0.25	< 0.001	< 0.1	0.022	13.5	5.8	19.3	< 0.2	< 1	14
EPA 09		7/3/1991	< 0.01	< 0.01	0.19	< 0.05	5.09	< 0.1	0.17	< 0.001	< 0.1	0.0137	6.6	5	11.6	< 0.2	< 1	7
EPA 09		10/22/1991	< 0.01	< 0.01	0.12	< 0.05	4.48	< 0.1	0.1	< 0.001	< 0.1	0.0062	4.1	< 1	4.1	< 0.2	2.7	4
EPA 09		1/22/1992	< 0.01	< 0.01	0.21	< 0.05	6.16	< 0.1	0.22	< 0.001	< 0.1	0.007	5.2	4	9.2	< 0.2	< 1	5
EPA 09		4/2/1992	0.02	0.02	0.02	< 0.05	7.86	0.1	0.29	< 0.001	< 0.1	0.002	8.1	4.1	12.2	< 0.2	< 1	0.4
EPA 09		7/15/1992	< 0.01	< 0.01	0.23	< 0.05	6.61	< 0.1	0.22	< 0.001	< 0.1	0.006	5.4	9	14.4	< 0.2	1.3	5.9
EPA 09		10/14/1992	< 0.01	< 0.01	0.28	< 0.05	7.63	< 0.1	0.27	< 0.001	< 0.1	0.002	9.6	8.9	18.5	< 0.2	< 1	9.9
EPA 09		1/13/1993	< 0.01	< 0.01	0.04	< 0.05	2.66	0.14	0.1	< 0.001	< 0.1	0.005	3.8	6.9	10.7	< 0.2	< 1	4.1
EPA 09		4/15/1993	< 0.01	< 0.01	0.08	< 0.05	3.16	< 0.1	0.08	< 0.001	< 0.1	0.002	3.1	2.3	5.4	< 0.2	< 1	3.4
EPA 09		7/20/1993	< 0.01	< 0.01	0.07	< 0.05	3.08	0.11	< 0.05	< 0.001	< 0.1	0.006	3.3	5	8.3	< 0.2	< 1	3.5
EPA 09		10/12/1993	< 0.01	< 0.01	0.14	< 0.05	4.41	< 0.1	0.14	< 0.001	< 0.1	0.005	8.8	7.8	16.6	< 0.2	1.2	10
EPA 09		1/12/1994	0.09	< 0.01	0.6	< 0.05	9.64	0.42	0.85	< 0.001	< 0.1	0.122	15.7	11	26.7	< 0.2	< 1	33.2
EPA 09		4/20/1994	< 0.01	< 0.01	0.21	< 0.05	6.9	0.19	0.24	< 0.001	< 0.1	0.003	13.6	8.4	22	< 0.2	< 1	26.4
EPA 09		7/26/1994	< 0.01	< 0.01	0.1	< 0.05	4.29	0.11	< 0.05	< 0.001	< 0.1	0.001	5.4	5	10.4	< 0.2	< 1	13.1
EPA 09		10/11/1994	< 0.01	< 0.01	0.15	< 0.05	4.49	< 0.1	0.15	< 0.001	< 0.1	0.002	8.4	1.4	9.8	< 0.2	5	10.7
EPA 09		1/10/1995	< 0.01	< 0.01	0.27	< 0.05	7.76	< 0.1	0.28	< 0.001	< 0.1	0.003	18.9	6.1	25	< 0.2	1.2	28.2
EPA 09		4/11/1995	< 0.01	< 0.01	0.07	< 0.05	3.59	< 0.1	< 0.05	< 0.001	< 0.1	0.001	3.7	3.2	6.9	< 0.2	< 1	8.5
EPA 09		7/11/1995	< 0.01	< 0.01	0.022	< 0.05	0.85	< 0.1	< 0.05	< 0.001	< 0.1	0.0006	5.1	3	8.1	0.4	< 1	16.7
EPA 09		10/10/1995	< 0.01	< 0.01	0.08	< 0.05	3.88	< 0.1	0.07	< 0.001	< 0.1	0.0015	5	< 1	5	< 0.2	< 1	11.4
EPA 09		1/9/1996	< 0.01	< 0.01	0.17	< 0.05	5.15	< 0.1	0.14	< 0.001	< 0.1	0.0024	9	4.9	13.9	< 0.2	< 1	8.7

TABLE B.1
Zone 3 Data Summary, 1989-2009
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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 09		4/10/1996	6,907.60	5.90	6.20	5494	525	575	107	11.7	27.5	3905	28.2	0.35	< 0.1	< 1	0.34	0.001
EPA 09		7/17/1996	6,907.40	5.90	5.58	5615	505	555	117	12.1	23.4	3816	32	0.31	< 0.1	< 1	0.56	< 0.001
EPA 09		10/8/1996	6,907.40	5.70	4.44	5590	542	609	116	12.1	< 1	3943	29	0.33	< 0.1	< 1	0.5	0.001
EPA 09		1/28/1997	6,912.30	5.80	6.07	5510	500	545	109	11.7	29.3	3695	30.8	0.35	< 0.1	< 1	0.5	< 0.001
EPA 09		4/15/1997	6,907.20	5.40	5.72	5740	532	616	112	12.1	21.2	4040	31.3	0.38	< 0.1	1	0.81	< 0.001
EPA 09		7/15/1997	6,906.80	5.20	5.27	5780	515	606	109	12	7.4	3560	32.5	0.39	< 0.1	< 1	1.47	0.003
EPA 09		10/15/1997	6,906.70	5.60	4.49	5860	507	632	110	11.7	< 0.1	3990	37.7	0.54	< 0.1	< 1	2.44	0.002
EPA 09		1/20/1998	6,907.10	4.80	5.64	5570	504	595	119	13.1	9.27	4200	34.4	0.82	< 0.1	< 1	1.61	< 0.001
EPA 09		4/14/1998	6,906.80	4.90	4.22	5840	510	610	107	11.3	< 0.1	3720	30.7	0.5	< 0.1	< 1	1.8	0.003
EPA 09		7/14/1998	6,906.60	4.60	4.45	5820	488	611	115	12.3	< 0.1	3700	30.1	0.52	< 0.1	< 1	2.66	0.004
EPA 09		10/13/1998	6,907.90	3.83	4.56	5820	484	622	116	12.6	1.2	4000	29.1	1.08	0.23	< 1	2.84	0.002
EPA 09		1/12/1999	6,917.50	4.30	4.58	5870	423	601	107	11.8	< 0.1	4000	28.9	0.55	< 0.1	< 1	2.9	0.005
EPA 09		4/13/1999	6,907.80	4.10	4.45	5860	472	624	105	11.8	< 0.1	3750	38.9	0.66	< 0.1	< 1	3.42	< 0.001
EPA 09		7/20/1999	6,907.51	3.80	4.18	5930	492	634	104	13.1	< 0.1	3860	32.9	0.48	< 0.1	< 1	2.8	0.002
EPA 09		10/12/1999	6,907.40	4.90	4.47	5860	459	591	108	11.6	< 0.1	3680	32.6	0.57	< 0.1	< 1	3.44	0.014
EPA 09		1/11/2000	6,907.80	4.20	4.25	5790	460	610	103	12.2	< 0.1	3690	31.7	0.62	< 0.1	< 1	4.12	< 0.001
EPA 12		7/25/1989	6,865.90	6.10	5.96	4722	582	430	151	9.7	139	3151	30.2	0.38	0.02	< 1	< 0.1	0.001
EPA 12		10/4/1989	6,865.80	5.90	6.40	4742	534	414	132	10.9	167	3039	26.4	0.37	0.03	< 1	0.11	0.001
EPA 12		1/16/1990	6,864.80	5.90	6.01	4712	505	392	148	9.82	146	3074	27.1	0.4	0.7	< 1	< 0.1	0.002
EPA 12		4/17/1990	6,863.90	5.90	6.47	4757	521	402	143	9.2	170	2989	27	0.41	0.15	< 1	< 0.1	0.002
EPA 12		7/12/1990	6,862.80	6.00	6.26	4839	532	437	143	10	139	2754	27.9	0.27	0.12	< 1	< 0.1	0.084
EPA 12		10/16/1990	6,862.20	6.00	6.65	4816	491	409	146	10.7	142	3102	29	0.32	0.07	< 1	< 0.1	0.095
EPA 12		1/8/1991	6,861.40	6.00	6.29	4828	536	429	144	24	140	3100	27.3	0.48	0.07	< 1	0.1	0.004
EPA 12		4/16/1991	6,861.00	5.90	6.86	4863	527	429	137	8.5	109	3204	27.6	0.31	0.1	< 1	0.14	0.066
EPA 12		7/3/1991	6,860.40	5.80	6.32	4623	486	409	133	8	119	3257	25.1	0.41	0.03	< 1	0.34	0.055
EPA 12		10/22/1991	6,859.70	5.80	6.28	4884	507	423	140	8.5	139	3226	29.5	0.16	< 0.01	< 1	0.2	0.054
EPA 12		1/22/1992	6,858.40	5.90	6.24	5060	531	423	130	8.2	75.4	3162	24.8	1.72	< 0.01	< 1	< 0.1	0.036
EPA 12		4/2/1992	6,857.50	5.60	7.04	4820	523	457	167	11.1	122	3297	23.4	1.5	< 0.1	< 1	< 0.1	0.026
EPA 12		7/15/1992	6,856.00	5.80	7.22	5073	495	438	149	9.3	50	3264	23.8	0.23	< 0.1	< 1	< 0.1	0.013
EPA 13		7/25/1989	6,881.30	5.50	5.56	5054	576	479	136	11.8	31.7	3454	29.7	0.84	14.1	< 1	0.21	0.007
EPA 13		10/4/1989	6,880.40	5.50	6.40	4736	550	407	129	15.1	86.1	3180	27.6	0.51	26	< 1	0.42	0.012
EPA 13		1/16/1990	6,878.50	5.10	5.30	5042	482	477	128	12.3	14.4	3420	26.4	0.96	4.6	< 1	0.19	0.021
EPA 13		4/17/1990	6,877.70	5.00	5.60	5256	496	485	122	11.8	66.6	3377	27.4	1.03	4.1	< 1	< 0.1	0.024
EPA 13		7/17/1990	6,876.80	5.30	5.60	5140	590	527	117	11.3	40	3253	25	0.51	10.8	< 1	0.24	0.033
EPA 13		10/16/1990	6,876.10	5.70	5.98	5067	513	422	129	12.6	39	3355	31.1	0.57	6.8	< 1	0.1	0.016

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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 09		4/10/1996	< 0.01	< 0.01	0.11	< 0.05	4.2	< 0.1	0.09	< 0.001	< 0.1	0.0008	6.6	2.3	8.9	< 0.2	< 1	10.2
EPA 09		7/17/1996	< 0.01	< 0.01	0.15	< 0.05	4.94	< 0.1	0.12	< 0.001	< 0.1	0.0007	8	3.8	11.8	< 0.2	< 1	7.3
EPA 09		10/8/1996	< 0.01	< 0.01	0.13	< 0.05	4.61	< 0.1	0.11	< 0.001	< 0.1	< 0.0003	6.6	9	15.6	< 0.2	< 1	9.2
EPA 09		1/28/1997	< 0.01	< 0.01	0.12	< 0.05	4.25	< 0.1	0.09	0.002	< 0.1	< 0.0003	8.8	8.1	16.9	2.7	< 1	10.7
EPA 09		4/15/1997	< 0.01	< 0.01	0.15	< 0.05	5.03	< 0.1	0.12	< 0.001	< 0.1	< 0.0003	10.6	6.6	17.2	< 0.2	< 1	14.3
EPA 09		7/15/1997	< 0.01	< 0.01	0.17	< 0.05	5.22	< 0.1	0.14	< 0.001	< 0.1	< 0.0003	12	6.3	18.3	< 0.2	< 1	13
EPA 09		10/15/1997	< 0.01	< 0.01	0.21	< 0.05	6.12	< 0.1	0.16	0.001	< 0.1	0.001	10.8	14.6	25.4	< 0.2	5.5	14.1
EPA 09		1/20/1998	< 0.01	< 0.005	0.22	< 0.05	6.33	< 0.1	0.15	< 0.001	< 0.1	0.0008	12.6	9.5	22.1	< 0.2	< 1	12.3
EPA 09		4/14/1998	< 0.01	< 0.005	0.18	< 0.05	5.5	< 0.1	0.16	< 0.001	< 0.1	0.0008	12.5	7.2	19.7	< 0.2	< 1	15.9
EPA 09		7/14/1998	< 0.01	< 0.005	0.19	< 0.05	6.28	< 0.1	0.15	< 0.001	< 0.1	0.0012	12.5	6.3	18.8	< 0.2	< 1	15.1
EPA 09		10/13/1998	< 0.01	< 0.005	0.19	< 0.05	5.67	< 0.1	0.15	< 0.001	< 0.1	0.0008	11.8	8	19.8	< 0.2	< 1	18.9
EPA 09		1/12/1999	< 0.01	< 0.005	0.19	< 0.05	5.82	< 0.1	0.14	< 0.001	< 0.1	0.0017	10.9	6.6	17.5	< 0.2	10.6	10.6
EPA 09		4/13/1999	< 0.01	< 0.005	0.22	< 0.05	6.28	< 0.1	0.16	< 0.001	< 0.1	0.0015	11.9	12.2	24.1	< 0.2	< 1	17.4
EPA 09		7/20/1999	< 0.01	< 0.005	0.17	< 0.05	4.9	< 0.1	0.13	< 0.001	< 0.1	0.0013	12.7	8.4	21.1	< 0.2	< 1	13.5
EPA 09		10/12/1999	< 0.01	< 0.005	0.17	< 0.05	5.84	< 0.1	0.12	< 0.001	< 0.1	< 0.0003	12.7	10.4	23.1	< 0.2	< 1	17.4
EPA 09		1/11/2000	0.01	< 0.005	0.21	< 0.05	6.52	< 0.1	0.2	< 0.001	< 0.1	0.0013	12.6	8.5	21.1	< 0.2	< 1	16.2
EPA 12		7/25/1989	< 0.05	< 0.01	0.11	< 0.05	4.1	7.6	0.3	< 0.001	< 0.1	0.0017	5.7	2.6	8.3	3.4	< 1	7.1
EPA 12		10/4/1989	< 0.05	< 0.01	0.11	< 0.05	3.5	6.3	0.27	< 0.001	< 0.1	0.004	5.9	3.1	9	2.2	2	13
EPA 12		1/16/1990	< 0.05	< 0.01	0.13	< 0.05	3.5	6.7	0.24	< 0.001	< 0.1	0.004	5	3.6	8.6	< 0.2	< 1	5.5
EPA 12		4/17/1990	< 0.05	< 0.01	0.08	< 0.05	3.5	5.3	0.2	< 0.001	< 0.1	0.003	6.3	5.8	12.1	< 0.2	< 1	6.5
EPA 12		7/12/1990	< 0.05	< 0.01	0.1	< 0.05	3.5	7.01	0.19	< 0.001	< 0.1	0.0029	6.8	6.5	13.3	< 0.2	2.4	< 1
EPA 12		10/16/1990	< 0.05	< 0.01	0.13	< 0.05	3.35	6.54	0.19	< 0.001	< 0.1	0.0007	5.2	9.2	14.4	< 0.2	< 1	5
EPA 12		1/8/1991	< 0.01	< 0.01	0.12	< 0.05	3.06	3.87	0.21	0.001	< 0.1	0.0036	4.2	1	5.2	< 0.2	< 1	4
EPA 12		4/16/1991	< 0.01	< 0.01	0.14	< 0.05	3.68	6.26	0.21	< 0.001	< 0.1	0.001	8.3	8.4	16.7	< 0.2	2	8
EPA 12		7/3/1991	< 0.01	< 0.01	0.1	< 0.05	2.97	3.82	0.17	< 0.001	< 0.1	0.001	4.9	3.8	8.7	< 0.2	< 1	5
EPA 12		10/22/1991	< 0.01	< 0.01	0.11	< 0.05	3.32	3.32	0.17	< 0.001	< 0.1	< 0.0003	4.8	< 1	4.8	< 0.2	< 1	5
EPA 12		1/22/1992	< 0.01	< 0.01	0.12	< 0.05	3.02	3.7	0.17	< 0.001	< 0.1	0.007	7.7	6.8	14.5	< 0.2	< 1	8
EPA 12		4/2/1992	< 0.01	< 0.01	0.14	< 0.05	3.31	2.4	0.16	< 0.001	< 0.1	< 0.0003	6.3	8	14.3	< 0.2	1.1	6.5
EPA 12		7/15/1992	< 0.01	< 0.01	0.13	< 0.05	3.1	1.9	0.14	< 0.001	< 0.1	0.007	6.3	13	19.3	< 0.2	< 1	6.5
EPA 13		7/25/1989	< 0.05	< 0.01	0.47	< 0.05	6.2	1.5	0.59	< 0.001	< 0.1	0.006	5.9	3	8.9	6.4	2.7	5.3
EPA 13		10/4/1989	< 0.05	< 0.01	0.23	< 0.05	3.4	1.5	0.37	< 0.001	< 0.1	< 0.028	4.7	3.6	8.3	0.8	< 1	5.9
EPA 13		1/16/1990	< 0.05	< 0.01	0.42	0.06	6.4	0.51	0.6	0.001	< 0.1	0.009	4.6	7.3	11.9	< 0.2	< 1	5.1
EPA 13		4/17/1990	< 0.05	< 0.01	0.36	< 0.05	5.8	0.57	0.46	< 0.001	< 0.1	0.007	6.2	2.4	8.6	< 0.02	< 1	6.9
EPA 13		7/17/1990	< 0.05	< 0.01	0.25	< 0.05	5.5	0.69	0.33	< 0.001	< 0.1	0.0078	2.2	4.8	7	< 0.2	< 1	5
EPA 13		10/16/1990	< 0.05	< 0.01	0.22	< 0.05	5.21	0.8	0.34	< 0.001	< 0.1	0.0117	5.1	4.2	9.3	< 0.2	1.4	5

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 13		1/8/1991	6,875.20	5.40	5.73	5153	531	515	121	23	35	3432	29.4	0.95	9.6	< 1	0.74	0.066
EPA 13		4/16/1991	6,874.80	5.30	5.53	5255	485	457	124	12.8	13	3460	49.5	1.05	5.6	< 1	< 0.1	0.031
EPA 13		7/3/1991	6,876.30	5.20	5.66	5240	472	473	109	10.4	25	3357	23.6	1.2	0.45	< 1	1.14	0.044
EPA 13		10/22/1991	6,876.10	5.20	5.75	5409	488	466	114	11.3	39	3611	28.5	0.78	< 0.01	< 1	0.22	0.1
EPA 13		1/22/1992	6,875.52	5.40	5.48	5640	502	496	115	10.6	15.1	3733	24.1	0.46	< 0.01	< 1	< 0.1	0.077
EPA 13		4/7/1992	6,875.22	5.40	6.79	5228	629	539	149	14.1	59.9	3924	26.7	0.92	< 0.1	< 1	0.2	0.134
EPA 13		7/15/1992	6,874.00	5.60	4.25	5888	541	556	131	11.5	< 1	3862	21.6	0.49	< 0.1	< 1	< 0.1	0.084
EPA 13		10/14/1992	6,873.50	5.80	5.25	6201	534	572	131	11.7	29.3	4186	32.7	0.58	< 0.1	< 1	0.58	0.175
EPA 13		1/14/1993	6,873.00	5.70	5.02	6412	636	738	128	12.4	92.3	4391	30.1	0.11	< 0.1	< 1	0.42	0.23
EPA 13		4/15/1993	6,872.00	5.80	5.81	5848	469	731	155	10	38	4315	27.6	0.64	< 0.1	< 1	< 0.1	0.186
EPA 13		7/20/1993	6,872.10	5.90	5.89	6564	535	817	137	10.9	28.5	4790	28.9	0.61	< 0.1	< 1	< 0.1	0.265
EPA 13		10/12/1993	6,869.80	6.20	5.38	6064	518	715	135	10.3	21	4387	30.4	0.56	< 0.1	< 1	< 0.1	0.154
EPA 13		1/11/1994	6,871.60	6.10	6.15	6208	510	696	145	9.8	57.2	4444	30	0.57	< 0.1	< 1	< 0.1	0.225
EPA 13		4/20/1994	6,871.60	6.00	6.00	6116	514	686	132	9.1	79.2	4436	30.7	1.33	< 0.1	< 1	< 0.1	0.262
EPA 13		7/26/1994	6,871.60	5.90	6.51	6088	528	782	154	10.9	67.6	4343	33.3	0.17	< 0.1	< 1	0.66	0.199
EPA 13		10/11/1994	6,870.40	5.90	6.46	6762	506	806	162	11	80.5	4784	34.7	0.97	< 0.1	< 1	< 0.1	0.192
EPA 13		1/10/1995	6,869.90	6.00	6.57	6748	545	815	142	12	98.6	4810	34	1.28	< 0.1	< 1	< 0.1	0.253
EPA 13		4/11/1995	6,870.20	6.20	6.13	6718	522	714	154	11	94.5	4729	40	1.36	< 0.1	< 1	< 0.1	0.23
EPA 13		7/11/1995	6,869.40	6.90	6.61	6107	500	814	141	10.5	67.1	4435	37.7	1.14	< 0.1	< 1	< 0.1	0.255
EPA 13		10/10/1995	6,869.30	6.20	6.85	6119	485	730	154	11.2	78.1	4340	33.6	1.12	< 0.1	< 1	< 0.1	0.225
EPA 13		1/9/1996	6,868.90	6.30	6.47	6144	465	730	141	10.4	95	4440	33.6	0.45	< 0.1	< 1	< 0.1	0.227
EPA 13		4/10/1996	6,867.30	6.80	7.09	6642	544	877	148	11.1	85.8	5040	35.9	0.53	< 0.1	< 1	< 0.1	0.295
EPA 13		7/17/1996	6,868.70	6.20	6.23	6694	468	761	149	11.7	74.5	4320	39	0.45	< 0.1	< 1	< 0.1	0.269
EPA 13		10/8/1996	6,868.50	6.30	6.32	6670	519	830	151	11.5	79.1	4689	36	0.5	< 0.1	< 1	< 0.1	0.301
EPA 13		1/28/1997	6,868.20	6.50	6.95	6570	512	800	132	10.9	101	4570	50.1	0.48	< 0.1	< 1	< 0.1	0.43
EPA 13		4/15/1997	6,868.00	6.30	6.79	6750	510	828	145	11.6	100	4740	39.2	0.51	< 0.1	1	< 0.1	0.331
EPA 13		7/15/1997	6,868.00	6.20	7.02	6740	499	795	145	11.6	83.7	4620	38.7	0.48	< 0.1	< 1	< 0.1	0.464
EPA 13		10/15/1997	6,867.50	6.40	7.21	6670	497	830	144	11.1	89.5	4620	49.6	0.6	< 0.1	< 1	< 0.1	0.595
EPA 13		1/20/1998	6,867.80	6.00	7.07	6610	486	780	152	12.3	84.7	4700	43.4	0.84	< 0.1	< 1	< 0.1	0.444
EPA 13		4/14/1998	6,867.60	6.30	7.12	6630	494	795	138	10.6	83	4560	38	0.55	< 0.1	< 1	< 0.1	0.563
EPA 13		7/14/1998	6,867.40	6.00	6.89	6700	473	777	149	11.8	76.8	4100	35.6	0.59	0.11	< 1	< 0.1	0.45
EPA 13		10/13/1998	6,868.50	5.93	7.72	6440	472	795	151	12	90.2	4520	36.1	0.65	< 0.1	< 1	< 0.1	0.613
EPA 13		1/12/1999	6,868.20	6.20	6.99	6510	410	769	137	11.7	92	4450	36.8	0.6	< 0.1	< 1	< 0.1	0.514
EPA 13		4/13/1999	6,868.10	6.10	6.93	6520	456	776	136	11.1	86	4200	46	0.69	< 0.1	< 1	< 0.1	0.717
EPA 13		7/20/1999	6,868.02	6.20	6.94	6510	476	791	134	12.8	77	4260	42	0.53	< 0.1	< 1	< 0.1	< 0.001

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TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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 13		1/8/1991	< 0.01	< 0.01	0.21	< 0.05	6.62	0.81	0.39	< 0.001	< 0.1	0.0054	4.4	8	12.4	< 0.2	< 1	4
EPA 13		4/16/1991	< 0.01	< 0.01	0.33	< 0.05	7.16	0.89	0.36	< 0.001	< 0.1	0.004	3.3	8	11.3	< 0.2	< 1	3
EPA 13		7/3/1991	< 0.01	< 0.01	0.32	< 0.05	7.2	0.59	0.37	< 0.001	< 0.1	0.0029	3	1.2	4.2	< 0.2	< 1	3
EPA 13		10/22/1991	< 0.01	< 0.01	0.27	< 0.05	7.04	0.58	0.38	0.001	< 0.1	0.0156	4.2	< 1	4.2	< 0.2	2.3	4
EPA 13		1/22/1992	< 0.01	< 0.01	0.23	< 0.05	6.59	0.64	0.26	< 0.001	< 0.1	0.004	6.9	3.5	10.4	< 0.2	< 1	7
EPA 13		4/7/1992	< 0.01	0.02	0.21	< 0.05	6.56	0.8	0.3	< 0.001	< 0.1	0.004	4.2	7.5	11.7	< 0.2	1.3	4.3
EPA 13		7/15/1992	< 0.01	< 0.01	0.23	< 0.05	6.33	0.83	0.22	0.001	< 0.1	0.009	5.9	9.3	15.2	< 0.2	< 1	6.1
EPA 13		10/14/1992	< 0.01	< 0.01	0.21	< 0.05	6.43	0.9	0.2	< 0.001	< 0.1	0.002	4.7	8.7	13.4	< 0.2	1.2	4.9
EPA 13		1/14/1993	< 0.01	< 0.01	0.15	< 0.05	6.24	0.78	0.24	< 0.001	< 0.1	0.013	5.8	8.6	14.4	< 0.2	< 1	6.5
EPA 13		4/15/1993	< 0.01	< 0.01	0.14	< 0.05	5.81	0.59	0.2	< 0.001	< 0.1	0.017	3	7.7	10.7	< 0.2	< 1	3.5
EPA 13		7/20/1993	< 0.01	< 0.01	0.14	< 0.05	5.65	0.73	0.18	< 0.001	< 0.1	0.017	4.5	5.4	9.9	< 0.2	< 1	5.1
EPA 13		10/12/1993	< 0.01	< 0.01	0.11	< 0.05	5.51	0.6	0.14	< 0.001	< 0.1	0.024	5.4	5.5	10.9	< 0.2	< 1	6
EPA 13		1/11/1994	< 0.01	< 0.01	0.07	< 0.05	5.51	0.67	0.19	< 0.001	< 0.1	0.027	4.5	6.2	10.7	< 0.2	< 1	14.8
EPA 13		4/20/1994	< 0.01	< 0.01	0.09	< 0.05	4.69	0.48	0.14	< 0.001	< 0.1	0.023	5.1	9.9	15	< 0.2	< 1	20.1
EPA 13		7/26/1994	< 0.01	< 0.01	0.1	< 0.05	5.9	0.66	0.13	< 0.001	< 0.1	0.019	5.3	13.8	19.1	< 0.2	1.7	26.2
EPA 13		10/11/1994	< 0.01	< 0.01	0.11	< 0.05	5.26	0.57	0.13	< 0.001	< 0.1	0.022	5.6	6.5	12.1	< 0.2	< 1	19.5
EPA 13		1/10/1995	< 0.01	< 0.01	0.14	< 0.05	5.88	0.82	0.17	< 0.001	< 0.1	0.024	7.7	8.3	16	< 0.2	< 1	20.3
EPA 13		4/11/1995	< 0.01	< 0.01	0.06	< 0.05	5.82	0.47	0.1	< 0.001	< 0.1	0.022	4.8	9.5	14.3	< 0.2	< 1	19.1
EPA 13		7/11/1995	< 0.01	< 0.01	0.016	< 0.05	1.26	< 0.1	< 0.05	< 0.001	< 0.1	0.024	4.7	12.3	17	0.4	2.8	15.9
EPA 13		10/10/1995	< 0.01	< 0.01	0.05	< 0.05	5.91	0.38	0.12	< 0.001	< 0.1	0.026	4.9	1.7	6.6	< 0.2	1.1	11.8
EPA 13		1/9/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.19	< 0.1	< 0.05	< 0.001	< 0.1	0.028	5.3	8.2	13.5	< 0.2	< 1	5.4
EPA 13		4/10/1996	< 0.01	< 0.01	0.06	< 0.05	5.65	0.35	0.11	< 0.001	< 0.1	0.029	4.3	10.6	14.9	< 0.2	< 1	7.6
EPA 13		7/17/1996	< 0.01	< 0.01	0.06	< 0.05	5.94	0.41	0.12	< 0.001	< 0.1	0.022	3.3	15.4	18.7	0.7	< 1	6
EPA 13		10/8/1996	< 0.01	< 0.01	0.06	< 0.05	5.71	0.34	0.12	< 0.001	< 0.1	0.027	3.6	7.9	11.5	< 0.2	< 1	4.4
EPA 13		1/28/1997	< 0.01	< 0.01	0.06	< 0.05	5.96	0.4	0.12	0.003	< 0.1	0.019	4.4	10	14.4	1.5	< 1	4.7
EPA 13		4/15/1997	< 0.01	< 0.01	0.05	< 0.05	5.87	0.34	0.12	< 0.001	< 0.1	0.013	4.5	11	15.5	< 0.2	< 1	7.8
EPA 13		7/15/1997	< 0.01	< 0.01	0.05	< 0.05	5.46	0.35	0.1	< 0.001	< 0.1	0.019	4.1	12	16.1	< 0.2	< 1	4.5
EPA 13		10/15/1997	< 0.01	< 0.01	0.07	< 0.05	6.21	0.45	0.12	< 0.001	< 0.1	0.03	3.5	11.6	15.1	< 0.2	< 1	5.4
EPA 13		1/20/1998	< 0.01	< 0.005	0.08	< 0.05	6.84	0.39	0.13	< 0.001	< 0.1	0.027	5	8.2	13.2	< 0.2	< 1	6.1
EPA 13		4/14/1998	< 0.01	< 0.005	0.05	< 0.05	5.6	0.34	0.11	< 0.001	< 0.1	0.0285	4.4	4.8	9.2	< 0.2	< 1	6.3
EPA 13		7/14/1998	< 0.01	< 0.005	0.05	< 0.05	6.04	0.29	0.1	< 0.001	< 0.1	0.0311	4.4	5.3	9.7	< 0.2	< 1	3.9
EPA 13		10/13/1998	< 0.01	< 0.005	0.05	< 0.05	5.64	0.32	0.12	< 0.001	< 0.1	0.0244	4.2	4.7	8.9	< 0.2	< 1	6.6
EPA 13		1/12/1999	< 0.01	0.006	0.05	< 0.05	5.6	0.26	0.08	< 0.001	< 0.1	0.0267	5.3	6.4	11.7	< 0.2	< 1	4.3
EPA 13		4/13/1999	< 0.01	< 0.005	0.06	< 0.05	5.96	0.33	0.1	< 0.001	< 0.1	0.0284	5.3	6.8	12.1	< 0.2	< 1	8.4
EPA 13		7/20/1999	< 0.01	< 0.005	0.06	< 0.05	4.6	0.26	0.1	< 0.001	< 0.1	0.0242	4.3	6.8	11.1	< 0.2	< 1	8.6

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 13		10/12/1999	6,867.90	6.10	7.16	6520	430	726	133	11.4	100	3890	40.7	0.53	< 0.1	< 1	< 0.1	0.443
EPA 13		1/11/2000	6,868.40	6.10	7.17	6340	455	787	138	12	92	4160	37.5	0.6	< 0.1	< 1	< 0.1	0.347
EPA 13		4/9/2001	6,867.90	7.19	6.43	6110	522	835	138	11.6	79	4660	36.5	0.62	< 0.1	< 1	0.1	0.601
EPA 13		7/16/2001	6,867.60	5.73	6.77	6450	421	733	139	13.3	81	3950	49.9	0.67	< 0.1	< 1	< 0.1	0.386
EPA 13		10/8/2001	6,867.80	5.96	6.60	6390	410	710	116	11	86	3600	48.5	0.53	< 0.1	< 1	< 0.1	0.32
EPA 13		1/15/2002	6,867.90	5.42	6.50	6250	502	804	129	12.7	91.5	4060	43.7	0.49	< 0.1	< 1	< 0.1	0.383
EPA 13		4/8/2002	6,867.67	5.75	6.47	6300	442	728	132	11.5	88.4	3980	43.9	0.54	< 0.1	< 1	< 0.1	0.322
EPA 13		7/15/2002	6,867.63	5.23	6.59	6450	519	840	126	10.9	85.4	4660	30.3	0.86	< 0.1	< 1	< 0.1	0.313
EPA 13		10/14/2002	6,867.52	5.52	6.70	5770	502	832	142	12.3	86.6	4650	42.3	0.8	< 0.1	< 1	< 0.1	0.29
EPA 13		1/13/2003	6,867.41	6.72	6.66	6190	626	973	121	10.5	78.7	5220	26.7	0.86	< 0.1	< 1	< 0.1	0.345
EPA 13		4/15/2003	6,867.62	5.87	6.62	6360	449	784	142	14.2	84.2	4210	39.9	1.03	< 0.1	< 1	< 0.1	0.31
EPA 13		7/14/2003	6,867.52	5.79	6.70	6430	443	725	136	12.4	78.1	3850	38.8	0.85	< 0.1	< 1	< 0.1	0.454
EPA 13		10/14/2003	6,867.48	5.90	6.87	6270	480	808	140	11.6	83	4440	40.2	0.78	< 0.1	< 1	< 0.1	0.3
EPA 13		1/14/2004	6,867.57	5.95	6.68	6280	493	819	132	12.6	88.1	4360	38.8	0.92	< 0.10	< 1.0	< 0.1	0.347 D
EPA 13		4/13/2004	6,867.54	5.85	6.04	6260	452	746	137	12.6	89	4240	44.2	0.94	< 0.1	< 1	< 0.1	0.289 D
EPA 13		7/19/2004	6,867.45	5.98	6.10	5330 H	487 D	763 D	143	11.7	77	4130 D	40	0.79	< 0.10	< 1.0	< 0.1	0.220 D
EPA 13		10/12/2004	6,867.36	6.04	6.43	6410	452 D	768 D	139	11.9	83	4070 D	42	0.66	< 0.10	< 1.0	< 0.1	0.274 D
EPA 13		1/11/2005	6,867.57	5.97	6.37	6350	464 D	744 D	132	11.3	84	3970 D	39	0.69	< 0.1	< 1.0	< 0.1	0.68 D
EPA 13		4/12/2005	6,867.29	6.07	6.37	6050	492	786	149	11.8	76	4450	42	0.7	< 0.1	< 1.0	< 0.1	0.24
EPA 13		7/19/2005	6,867.32	5.77	6.29	6500	463 D	733 D	146	11.4	77	4050 D	40	0.78	< 0.1	< 1.0	< 0.1	0.21 D
EPA 13		10/11/2005	6,867.25	6.06	6.56	6270	475 D	788 D	140	11.9	82	4360 D	42	0.79	< 0.1	< 1.0	< 0.1	0.03
EPA 13		1/16/2006	6,867.28	6.43	7.08	6190	446 D	747 D	130	11.6	82	4000 D	39	0.75	< 0.1	< 1.0	< 0.1	0.22 D
EPA 13		4/11/2006	6,867.08	6.01	6.61	6270	470 D	773 D	141	11.7	85	4220 D	40	0.61	< 0.1	< 1.0	< 0.1	0.27 D
EPA 13		7/25/2006	6,867.12	5.90	6.31	6320	481 D	772 D	138	11.6	80	4240 D	38	0.74	< 0.1	< 1.0	< 0.1	0.30 D
EPA 13		10/10/2006	6,866.95	6.01	6.42	5910	483 D	784 D	132	11.8	64	4210 D	36	0.7	< 0.1	< 0.5	< 0.1	0.42 D
EPA 13		1/16/2007	6,866.72	6.18	6.86	6280	395 D	651 D	118	10.2	76	3510 D	34	0.34	<0.1	<0.5	<0.1	0.53 D
EPA 13		4/17/2007	6,866.70	6.00	6.37	6370	469 D	798 D	126	11.7	81	4430 D	41	0.41	<0.1	<0.5	<0.1	0.84 D
EPA 13		7/17/2007	6,866.62	5.87	6.18	6280	481 D	802 D	138	11.6	85	4400 D	49	0.52	<0.1	<0.5	<0.1	0.64 D
EPA 13		10/9/2007	6,866.42	6.12	6.58	6440	476 D	781 D	136	12.3	79	4280 D	41	0.43	<0.1	<0.5	<0.1	0.27 D
EPA 13		1/22/2008	6,866.50	6.11	6.09	6220	458 D	774 D	139	13.8	84	4140 D	49	0.38	< 0.1	< 0.5	< 0.1	0.24 D
EPA 13		4/14/2008	6,866.37	5.77	6.30	6090	506	843	138 D	11.9	74	4740 D	37	0.28	< 0.1	< 0.50	< 0.1	0.03
EPA 13		7/14/2008	6,866.37	5.98	6.46	6250	458	748	134 D	12	77	4340 D	40	0.24	< 0.1	< 0.5	< 0.1	0.05
EPA 13		10/13/2008	6,866.23	5.92	6.2 H	6540	484	794	134 D	12	60	4690 D	48	< 0.4	< 0.1	< 0.5	< 0.1	0.058
EPA 13		1/20/2009	6,864.81	5.92	6.62	6560	472	800	157	13	73	4580 D	35	0.16	<0.1	<0.5	<0.1	0.049
EPA 13		4/14/2009	6,865.01	5.94	6.13	6490	455 D	778 D	145 D	11	65	4620 D	39	0.31	<0.1	<0.50	<0.1	0.045

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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 13		10/12/1999	< 0.01	< 0.005	0.04	< 0.05	5.63	0.3	< 0.05	< 0.001	< 0.1	0.0237	4.5	6.9	11.4	< 0.2	< 1	5.1
EPA 13		1/11/2000	< 0.01	< 0.005	0.06	< 0.05	5.89	0.32	0.16	< 0.001	< 0.1	0.0207	4.7	8.5	13.2	1.7	< 1	6.3
EPA 13		4/9/2001	< 0.01	< 0.005	0.06	< 0.05	6.33	0.3	0.15	< 0.001	< 0.1	0.023	4.6	5.1	9.7	< 0.2	< 1	6.9
EPA 13		7/16/2001	< 0.01	< 0.005	0.08	< 0.05	8.41	0.4	0.21	< 0.001	< 0.1	0.025	4.5	5.6	10.1	< 0.2	< 1	5.9
EPA 13		10/8/2001	< 0.01	< 0.005	0.04	< 0.05	4.72	0.19	0.08	< 0.001	< 0.1	0.0159	4.3	4.7	9	< 0.2	< 1	5.8
EPA 13		1/15/2002	< 0.01	< 0.005	0.06	< 0.05	6.42	0.3	0.16	< 0.001	< 0.1	0.0163	4.1	10.1	14.2	< 0.2	< 1	5.5
EPA 13		4/8/2002	< 0.01	< 0.005	0.07	< 0.05	7.14	0.4	0.17	< 0.001	< 0.1	0.018	3.9	8.7	12.6	< 0.2	< 1	6
EPA 13		7/15/2002	< 0.01	< 0.005	0.06	< 0.05	5.72	0.3	0.12	< 0.001	< 0.1	0.0179	4.7	6.6	11.3	< 0.2	< 1	4.9
EPA 13		10/14/2002	< 0.01	< 0.005	0.06	< 0.05	6.56	0.3	0.15	< 0.001	< 0.1	0.0173	4.2	4.8	9	< 0.2	< 1	5.7
EPA 13		1/13/2003	< 0.01	< 0.005	0.06	< 0.05	6.07	0.3	0.14	< 0.001	< 0.1	0.0167	5.8	3.9	9.7	2.2	< 1	5.8
EPA 13		4/15/2003	< 0.01	< 0.005	0.05	< 0.05	6.6	0.3	0.13	< 0.001	< 0.1	0.0161	5.7	13.6	19.3	0.5	< 1	8.2
EPA 13		7/14/2003	< 0.01	< 0.005	0.06	< 0.05	6.26	0.3	0.12	< 0.001	< 0.1	0.0127	5	< 1	5	< 0.2	< 1	4.3
EPA 13		10/14/2003	< 0.01	< 0.005	0.06	< 0.05	6.06	0.3	0.14	< 0.001	< 0.1	0.0157	4.5	2.3	6.8	< 0.2	< 1	7.8
EPA 13		1/14/2004	< 0.01	< 0.005	0.06	< 0.05	6.42	0.2	0.12	< 0.001	< 0.1	0.0157 D	4.5	5.1	9.6	< 0.2	< 1.0	8
EPA 13		4/13/2004	< 0.01	< 0.005	0.05	< 0.05	6.38	0.2	0.14	< 0.001	< 0.1	0.0143 D	4.2	3.3	7.5	< 0.2	< 1	6.2
EPA 13		7/19/2004	< 0.01	< 0.005	0.05	< 0.05	6.12	0.1	0.13	< 0.001	< 0.1	0.0134 D	5	3.9	8.9	< 0.2	< 1.0	7
EPA 13		10/12/2004	< 0.01	< 0.005	0.05	< 0.05	6.13	0.2	0.13	< 0.001	< 0.1	0.0119	4.6	5.4	10	< 0.2	< 1.0	7.1
EPA 13		1/11/2005	< 0.01	< 0.005	0.05	< 0.05	5.78	0.1	0.14	< 0.001	< 0.1	0.0135	4	7	11	< 0.2	< 1.0	7.3
EPA 13		4/12/2005	< 0.01	< 0.005	0.05	< 0.05	6.5	0.2	0.14	< 0.001	< 0.1	0.0135	5.7	2.9	8.6	< 0.2	< 1.0	5.3
EPA 13		7/19/2005	< 0.01	< 0.005	0.05	< 0.05	6.09	0.1	0.15	< 0.001	< 0.1	0.0135	4.5	3.6	8.1	< 0.2	< 1.0	6.6
EPA 13		10/11/2005	< 0.01	< 0.005	0.06	< 0.05	6.44	0.1	0.14	< 0.001	< 0.1	0.0129	6	3.8	9.8	< 0.2	< 1.0	7.7
EPA 13		1/16/2006	< 0.01	< 0.005	0.06	< 0.05	6.33	0.2	0.14	< 0.001	< 0.1	0.013	5.6	7.4	13	< 0.2	< 1.0	3.6
EPA 13		4/11/2006	< 0.01	< 0.005	0.06	< 0.05	6.3	0.2	0.14	< 0.001	< 0.1	0.0142	4.6	8.4	13	< 0.2	< 1.0	5.3
EPA 13		7/25/2006	< 0.01	< 0.005	0.06	< 0.05	7.03	0.2	0.14	< 0.001	< 0.1	0.0137	4.5	5.6	10.1	< 0.2	< 1.0	5.3
EPA 13		10/10/2006	< 0.01	< 0.005	0.06	< 0.05	6.59	0.2	0.15	< 0.001	< 0.1	0.0132	4.9	3.8	8.7	< 0.2	< 1	5.7
EPA 13		1/16/2007	<0.01	<0.005	0.05	<0.05	5.32	0.2	0.11	<0.001	<0.1	0.0141	5.3	5.8	11.1	<0.2	<1	7.2
EPA 13		4/17/2007	<0.01	<0.005	0.06	<0.05	6.6	0.2	0.14	<0.001	<0.1	0.0154	4.2	7.1	11.3	<0.2	<1	5.9
EPA 13		7/17/2007	<0.01	<0.005	0.06	<0.05	5.95	0.2	0.15	<0.001	<0.1	0.0141	4.5	8.1	12.6	<0.2	<1	5.5
EPA 13		10/9/2007	<0.01	<0.005	0.07	<0.05	8.13	0.2	0.16	<0.001	<0.1	0.0139	3.4	8.2	11.6	<0.2	<1	5.3
EPA 13		1/22/2008	< 0.01	< 0.005	0.06	< 0.05	6.14	0.2	0.15	< 0.001	< 0.1	0.014	6.9	9.7	16.6	< 0.2	4.3	6.8
EPA 13		4/14/2008	< 0.01	< 0.005	0.06	< 0.05	6.68	0.2	0.14	< 0.001	0.2	0.0133	4.2	10.4	14.6	0.2	-18 U	5.7
EPA 13		7/14/2008	< 0.01	< 0.005	0.06	< 0.05	6.73	0.2	0.15	< 0.001	< 0.1	0.014	4.1	6.4	10.5	0.4	5 U	5.3
EPA 13		10/13/2008	< 0.01	< 0.005	0.06	< 0.05	6.65	0.2	0.15	< 0.001	< 0.1	0.0137	4	5.2	9.2	0.3	1.5 U	9
EPA 13		1/20/2009	<0.01	<0.005	0.05	<0.05	6.2	0.2	0.15	<0.001	<0.1	0.0114	4.3	8.1	12.4	0.3	-1 U	5.1
EPA 13		4/14/2009	<0.01	<0.005	0.06	<0.05	6.52	0.2	0.16	<0.001	<0.1	0.0116	3.9	6.7	10.6	-0.07 U	-1 U	8.0

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 13		7/14/2009	6,864.76	5.85	6.50	7010	478	784	135	13	52	4760 D	41	0.25	<0.1	<0.50	0.2	0.020
EPA 13		10/13/2009	6,864.96	5.83	6.75	6550 H	495 D	788	141 D	13	62	4620 D	49	0.34	<0.1	<0.50	<0.1	0.003
EPA 14		7/28/1989	6,895.90	6.00	5.82	3189	471	245	149	4.5	146	2111	26.8	0.08	16.9	< 1	0.79	< 0.001
EPA 14		10/8/1989	6,891.10	5.40	6.00	3672	407	281	163	6.1	99.3	2370	31.9	0.09	18.8	< 1	1.1	< 0.001
EPA 14		1/17/1990	6,889.50	5.60	6.11	3446	424	275	155	4.6	159	2099	29.4	0.08	16.8	< 1	0.67	< 0.001
EPA 14		4/18/1990	6,888.20	5.70	6.15	3529	430	240	140	3.4	176	2088	28.7	0.15	19	< 1	0.52	< 0.001
EPA 14		7/12/1990	6,886.60	5.80	6.12	3559	486	281	146	5.2	173	2067	30.1	< 0.05	21.2	< 1	0.68	< 0.001
EPA 14		10/10/1990	6,886.80	5.70	6.43	3541	380	251	153	5.9	189	2079	33.3	0.07	20.8	< 1	0.5	< 0.001
EPA 14		1/8/1991	6,886.50	5.70	6.35	3499	462	266	152	22	185	2222	31.8	< 0.05	24.6	< 1	0.54	< 0.001
EPA 14		4/16/1991	6,886.90	5.60	6.80	3738	436	321	177	4.3	143	2380	34.8	0.07	27.5	< 1	0.86	< 0.001
EPA 14		7/3/1991	6,883.90	5.30	6.25	3774	421	313	158	4	102	2558	35.7	0.08	28.9	< 1	1.06	< 0.001
EPA 14		10/22/1991	6,875.10	5.70	6.35	3296	424	229	148	4.1	234	2117	37.6	0.09	9.2	< 1	0.31	< 0.001
EPA 14		1/23/1992	6,880.20	5.50	6.16	4045	414	296	163	4.5	115	2463	39.1	< 0.05	14	< 1	1	< 0.001
EPA 14		4/2/1992	6,880.20	5.40	7.09	4058	464	338	213	6	126	2607	33.6	0.18	27.4	< 1	1	< 0.001
EPA 14		7/16/1992	6,870.30	6.20	6.28	3186	393	333	183	6.3	316	2306	30.5	0.07	23.3	< 1	0.45	< 0.001
EPA 14		10/15/1992	6,870.60	6.10	6.38	3753	491	276	179	6	159	2332	32.8	< 0.05	24.2	< 1	0.73	< 0.001
EPA 14		1/14/1993	6,875.30	5.90	6.47	3728	485	256	156	4.4	142	2456	35.5	0.12	26.5	< 1	0.59	0.002
EPA 14		4/15/1993	6,872.20	5.90	6.54	3401	420	217	164	3.4	180	2096	32.2	0.17	27.1	< 1	0.4	< 0.001
EPA 14		7/20/1993	6,866.90	6.50	7.46	3350	444	285	122	3.4	370	2197	28.9	0.14	14.9	< 1	< 0.1	< 0.001
EPA 14		10/11/1993	6,865.60	6.50	6.49	3272	503	185	137	3.5	220	1936	29.6	0.05	25.7	< 1	0.4	< 0.001
EPA 14		1/11/1994	6,871.00	5.70	6.49	3409	446	270	158	3.5	96.8	2285	37.9	< 0.05	31.9	< 1	0.88	< 0.001
EPA 14		4/19/1994	6,868.40	6.20	6.54	2743	450	141	144	5	250	1654	27.3	0.18	16.9	< 1	0.36	< 0.001
EPA 14		7/26/1994	6,866.10	6.30	7.04	2710	505	151	115	3.6	284	1732	25.6	0.2	9.94	< 1	0.31	< 0.001
EPA 14		10/11/1994	6,866.10	6.30	7.05	3074	500	148	146	4.6	299	1776	26.9	0.25	23.5	< 1	0.53	< 0.001
EPA 14		1/10/1995	6,867.80	6.00	6.60	3516	545	211	154	6.6	121	2309	35.8	0.48	33	< 1	1.25	< 0.001
EPA 14		4/10/1995	6,867.60	6.10	6.01	4051	511	284	160	5.63	104	2570	43.7	0.57	40	< 1	1.68	< 0.001
EPA 14		7/10/1995	6,863.40	6.20	7.62	2659	500	108	124	4.6	465	1456	26.2	0.21	18.6	< 1	< 0.1	< 0.001
EPA 14		10/9/1995	6,863.60	6.60	7.44	2864	510	135	118	4.9	439	1530	25.7	0.16	22.4	< 1	0.18	0.001
EPA 14		1/8/1996	6,861.80	6.50	7.27	2773	525	103	120	4.7	490	1440	26	< 0.05	24.6	< 1	< 0.1	< 0.001
EPA 14		4/9/1996	6,861.20	6.80	7.75	2825	551	109	121	5.1	516	1468	30	0.12	23.9	< 1	< 0.1	< 0.001
EPA 14		7/17/1996	6,861.00	6.50	6.91	2907	532	116	132	5.6	498	1616	35	0.13	23.8	< 1	< 0.1	< 0.001
EPA 14		10/8/1996	6,861.10	6.50	7.24	2900	610	143	137	5.9	511	1589	33	0.11	23.9	< 1	< 0.1	< 0.001
EPA 14		1/28/1997	6,861.60	6.50	7.71	3200	580	170	120	5.51	459	1927	48	0.05	26.7	< 1	< 0.1	< 0.001
EPA 14		4/14/1997	6,861.90	6.50	7.45	3000	641	134	124	5.6	584	1612	42.3	0.06	22.9	1	< 0.1	< 0.001
EPA 14		7/14/1997	6,858.50	6.50	7.35	3160	632	148	116	5.7	627	1640	48.9	0.08	25.7	< 1	< 0.1	0.001

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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 13		7/14/2009	<0.01	<0.005	0.06	<0.05	6.88	0.3	0.16	<0.001	<0.1	0.0183	4.1	7.3	11.4	-0.06 U	3.3	8.0
EPA 13		10/13/2009	<0.01	<0.005	0.07	<0.05	6.98	0.2	0.17	<0.001	<0.1	0.0145	4.9	8.2	13.1	-0.006 U	0.3 U	7.4
EPA 14		7/28/1989	< 0.05	< 0.01	0.04	< 0.05	0.63	< 0.1	0.05	< 0.001	< 0.1	0.0166	3	3.4	6.4	< 0.2	< 1	3.2
EPA 14		10/8/1989	< 0.05	< 0.01	0.04	< 0.05	0.7	0.02	0.07	< 0.001	< 0.1	0.014	2.5	3.2	5.7	< 0.2	7.1	2.8
EPA 14		1/17/1990	< 0.05	< 0.01	0.01	< 0.05	0.89	< 0.1	< 0.05	< 0.001	< 0.1	0.019	2.7	< 1	2.7	2.9	2.2	5.1
EPA 14		4/18/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.56	< 0.1	0.07	< 0.001	< 0.1	0.022	1.9	3	4.9	< 0.2	< 1	2.4
EPA 14		7/12/1990	< 0.05	< 0.01	0.02	< 0.05	0.61	0.13	< 0.05	< 0.001	< 0.1	0.0223	1.4	1.9	3.3	< 0.2	4.6	2
EPA 14		10/10/1990	< 0.05	< 0.01	0.05	< 0.05	0.71	< 0.1	0.08	< 0.001	< 0.1	0.0323	2.8	3.7	6.5	< 0.2	< 1	4
EPA 14		1/8/1991	< 0.01	< 0.01	0.03	< 0.05	0.71	< 0.1	0.08	0.001	< 0.1	0.0312	2.4	< 1	2.4	< 0.2	< 1	2
EPA 14		4/16/1991	< 0.01	< 0.01	0.04	< 0.05	0.7	< 0.1	0.06	< 0.001	< 0.1	0.018	1.3	< 1	1.3	< 0.2	< 1	1
EPA 14		7/3/1991	< 0.01	< 0.01	0.05	< 0.05	0.75	< 0.1	0.07	< 0.001	< 0.1	0.0108	2.3	3.5	5.8	< 0.2	< 1	2
EPA 14		10/22/1991	< 0.01	< 0.01	0.03	< 0.05	0.73	< 0.1	< 0.05	< 0.001	< 0.1	0.0332	1.6	< 1	1.6	< 0.2	1.3	2
EPA 14		1/23/1992	< 0.01	< 0.01	0.03	< 0.05	0.81	< 0.1	< 0.05	0.001	< 0.1	0.01	2.5	1.2	3.7	< 0.2	3.3	3
EPA 14		4/2/1992	< 0.01	< 0.01	0.04	< 0.05	0.91	< 0.1	0.06	0.015	< 0.1	0.007	1.6	< 1	1.6	< 0.2	< 1	1.9
EPA 14		7/16/1992	< 0.01	< 0.01	0.02	< 0.05	0.71	< 0.1	< 0.05	0.001	< 0.1	0.028	3.6	2.9	6.5	< 0.2	< 1	3.8
EPA 14		10/15/1992	< 0.01	< 0.01	0.03	< 0.05	0.87	< 0.1	0.07	< 0.001	< 0.1	0.009	2.8	3.5	6.3	< 0.2	1.7	2.6
EPA 14		1/14/1993	< 0.01	< 0.01	0.04	< 0.05	0.42	< 0.1	0.11	< 0.001	< 0.1	0.009	3.3	3	6.3	< 0.2	< 1	3.6
EPA 14		4/15/1993	< 0.001	< 0.01	0.03	< 0.05	0.82	< 0.1	< 0.05	< 0.001	< 0.1	0.017	1.6	4.6	6.2	< 0.2	< 1	2.1
EPA 14		7/20/1993	< 0.01	< 0.01	0.01	< 0.05	0.55	0.22	< 0.05	< 0.001	< 0.1	0.054	2.6	3.5	6.1	< 0.2	< 1	2.9
EPA 14		10/11/1993	< 0.01	< 0.01	0.02	< 0.05	0.74	< 0.1	< 0.05	0.001	< 0.1	0.023	2.9	2.2	5.1	< 0.2	< 1	6.2
EPA 14		1/11/1994	< 0.01	< 0.01	0.03	< 0.05	1.18	< 0.1	< 0.05	< 0.001	< 0.1	0.014	2.7	5.8	8.5	< 0.2	< 1	12.4
EPA 14		4/19/1994	< 0.01	< 0.01	0.06	< 0.05	0.92	0.16	< 0.05	< 0.001	< 0.1	0.037	2.9	3	5.9	< 0.2	< 1	7.6
EPA 14		7/26/1994	< 0.01	< 0.01	0.02	< 0.05	1.1	0.21	< 0.05	0.011	< 0.1	0.036	3.1	< 1	3.1	< 0.2	< 1	7.3
EPA 14		10/11/1994	< 0.01	< 0.01	0.05	< 0.05	1.26	0.11	< 0.05	< 0.001	< 0.1	0.033	2.3	1	3.3	< 0.2	1.7	3.9
EPA 14		1/10/1995	< 0.01	< 0.01	0.06	< 0.05	2.34	< 0.1	< 0.05	< 0.001	< 0.1	0.008	4.1	4	8.1	< 0.2	1.1	10.3
EPA 14		4/10/1995	< 0.01	< 0.01	0.07	< 0.05	2.59	< 0.1	< 0.05	< 0.001	< 0.1	0.005	2.6	5.2	7.8	< 0.2	< 1	10.4
EPA 14		7/10/1995	< 0.01	< 0.01	0.01	< 0.05	1.05	0.19	< 0.05	< 0.001	< 0.1	0.064	2.3	2.6	4.9	< 0.2	< 1	7.9
EPA 14		10/9/1995	< 0.01	< 0.01	< 0.01	< 0.05	1.33	0.16	< 0.05	0.003	< 0.1	0.064	3.7	< 1	3.7	< 0.2	< 1	8.4
EPA 14		1/8/1996	< 0.01	< 0.01	0.01	< 0.05	1.15	< 0.1	< 0.05	< 0.001	< 0.1	0.081	3.2	2.3	5.5	< 0.2	1.8	2.6
EPA 14		4/9/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.26	0.18	< 0.05	< 0.001	< 0.1	0.083	3.4	2.5	5.9	< 0.2	< 1	3.9
EPA 14		7/17/1996	< 0.01	< 0.01	0.02	< 0.05	1.44	0.18	< 0.05	< 0.001	< 0.1	0.09	3.4	< 1	3.4	< 0.2	< 1	3.5
EPA 14		10/8/1996	< 0.01	< 0.01	0.02	< 0.05	1.52	0.18	< 0.05	< 0.001	< 0.1	0.075	2.5	8	10.5	< 0.2	< 1	1.9
EPA 14		1/28/1997	< 0.01	< 0.01	0.03	< 0.05	1.87	0.13	< 0.05	0.003	< 0.1	0.054	2.8	3.4	6.2	< 0.2	< 1	4.2
EPA 14		4/14/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.49	0.18	< 0.05	< 0.001	< 0.1	0.09	6.7	5.4	12.1	< 0.2	< 1	3.6
EPA 14		7/14/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.54	0.15	< 0.05	< 0.001	< 0.1	0.088	3.1	5	8.1	< 0.2	< 1	3

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 14		10/14/1997	6,859.10	6.60	7.75	3280	677	165	127	6.1	616	1750	60.5	0.13	26.2	< 1	< 0.1	< 0.001
EPA 14		1/19/1998	6,863.50	6.30	7.66	3720	600	234	147	7.7	442	2150	52.8	0.4	33.2	< 1	< 0.1	< 0.001
EPA 14		4/13/1998	6,858.00	6.70	7.36	3310	682	157	121	6	688	1630	53.3	0.11	26.4	< 1	< 0.1	< 0.001
EPA 14		7/13/1998	6,857.40	6.70	7.62	3560	664	164	132	7	715	1600	56.9	0.11	25.2	< 1	< 0.1	< 0.001
EPA 14		10/13/1998	6,861.20	6.66	8.17	3810	626	247	149	7.9	527	2120	54.8	0.34	29.8	< 1	< 0.1	< 0.001
EPA 14		1/12/1999	6,858.10	6.70	7.72	3690	622	212	124	6.7	570	1900	56.2	0.44	28.1	< 1	< 0.1	< 0.001
EPA 14		4/13/1999	6,857.80	6.60	7.93	3690	656	191	130	7.7	647	1820	70.2	1.08	33.9	< 1	< 0.1	0.002
EPA 14		7/20/1999	6,857.41	6.20	7.94	3730	683	217	124	9.6	667	1900	70	2.07	31.3	< 1	< 0.1	0.004
EPA 14		10/12/1999	6,857.40	6.54	7.68	3700	669	191	122	7.9	746	1630	71.2	2.01	32.3	< 1	< 0.1	< 0.001
EPA 14		1/11/2000	6,857.10	6.50	7.73	3790	599	211	121	8.6	650	1820	60.9	1.85	32.4	< 1	0.17	< 0.001
EPA 14		5/2/2000	6,857.40	6.40	7.56	3800	590	200	126	8.6	627	1880	60.5	1.83	34.4	< 1	8.3	< 0.001
EPA 14		7/12/2000	6,859.30	6.94	7.11	4410	563	368	161	8.65	239	2560	53.1	0.56	23	< 1	11.6	0.002
EPA 14		10/9/2000	6,861.00	7.09	7.26	4440	543	423	163	9.5	153	3210	44.2	0.35	19.3	< 1	8.13	< 0.001
EPA 14		1/15/2001	6,860.50	6.08	6.55	4550	507	379	155	9.3	113	3110	55.2	0.23	19.9	< 1	23.7	< 0.001
EPA 14		4/2/2001	6,860.70	5.90	6.89	4570	570	439	153	8.3	104	2990	52.6	0.43	18.1	< 1	13	< 0.001
EPA 14		7/10/2001	6,860.40	5.79	4.10	6810	491	476	201	7.1	< 0.1	4080	78.7	91.3	15.7	< 1	188	< 0.001
EPA 14		10/8/2001	6,860.35	6.60	6.60	4780	480	390	145	9.1	83.6	2500	62	0.4	14	< 1	16.6	< 0.001
EPA 14		1/9/2002	6,860.20	7.36	6.70	4680	532	414	139	11	83	2970	74	0.6	13.6	< 1	36.2	< 0.001
EPA 14		4/3/2002	6,860.40	5.97	7.46	4800	566	434	171	10.5	79.9	3190	61.6	0.7	13.3	< 1	18.6	< 0.001
EPA 14		7/16/2002	6,859.80	5.92	7.04	4830	606	466	160	9.4	95.8	3390	50.6	1.96	14	< 1	19.2	< 0.001
EPA 14		10/14/2002	6,859.40	6.82	7.30	4160	560	425	165	9.6	130	3080	52.2	2.85	13.9	< 1	21.6	< 0.001
EPA 14		1/7/2003	6,858.66	6.91	6.88	4730	452	347	147	8.8	140	2410	41.9	3.25	14.9	< 1	26	< 0.001
EPA 14		4/8/2003	6,858.37	5.90	6.79	4800	516	397	184	12.4	132	3020	55.1	2.65	14.1	< 1	19.4	< 0.001
EPA 14		7/8/2003	6,858.13	5.90	6.82	4840	575	401	172	10.8	113	3000	54.5	4.5	14.1	< 1	< 0.1	< 0.001
EPA 14		10/13/2003	6,857.56	5.94	7.07	4740	556	434	174	10.1	104	3150	52.9	3.17	15.7	< 1	54.4	< 0.001
EPA 14		1/12/2004	6,857.21	6.24	6.98	4760	756	437	175	10.2	95.3	1490	62.3	3.58	16.4 D	< 1.0	143	0.006
EPA 14		4/6/2004	6,856.84	6.12	6.09	12200	675	402	159	10.6	148	2340 D	61.1	5.2 D	17.6 D	< 1	287	< 0.001
EPA 14	F	4/13/2004	no data	no data	6.66	4780	556	395	128	8.1	165	2910 D	45	3.15	16.9 D	no data	0.2	< 0.001
EPA 14	R	4/13/2004	no data	no data	6.14	4500	660	399	172	10.9	135	2090 D	61.3	3	18.1 D	no data	245	0.046
EPA 14		7/13/2004	6,856.29	6.00	5.70	4500	637	369	177	10.7	162	2850 D	64	6.67	21.3 D	< 1.0	595 D	< 0.001
EPA 14		10/5/2004	6,856.01	5.92	6.16	5170	743 D	437 D	181	15.9	188	2800 D	71	40 D	19.0 D	< 1.0	552	< 0.001
EPA 14		1/10/2005	6,856.11	6.19	6.41	4750	599 D	390 D	172	10.4	149	3010 D	59	10.7	18.0 D	< 1.0	442	0.01
EPA 14		4/11/2005	6,854.48	no data	6.21	4570	617	398	176	10.5	168	3050	62	7.9	19.4	< 1.0	105	0.003
EPA 14		7/18/2005	6,853.66	5.94	6.33	4390	604 D	377 D	173	10.2	145	2860 D	57	6.2 D	23.5 D	< 1.0	75.8	0.005
EPA 14		10/10/2005	6,853.01	6.33	6.40	4820	594 D	427 D	171	11.1	134	3020 D	60	10.5 D	21.1 D	< 1.0	57.9	0.004

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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 14		10/14/1997	< 0.01	< 0.01	0.02	< 0.05	2.05	0.2	< 0.05	< 0.001	< 0.1	0.101	2.4	5.8	8.2	< 0.2	< 1	3.5
EPA 14		1/19/1998	< 0.01	< 0.005	0.07	< 0.05	3.21	0.13	0.06	< 0.001	< 0.1	0.075	5.1	5	10.1	< 0.2	< 1	3.9
EPA 14		4/13/1998	< 0.01	< 0.005	0.01	< 0.05	1.92	0.18	< 0.05	< 0.001	< 0.1	0.121	3.8	3.4	7.2	< 0.2	< 1	6
EPA 14		7/13/1998	< 0.01	< 0.005	< 0.01	< 0.05	2.2	0.16	< 0.05	< 0.001	< 0.1	0.12	3.9	5.4	9.3	< 0.2	< 1	2.9
EPA 14		10/13/1998	< 0.01	< 0.005	0.06	< 0.05	2.86	0.12	0.08	< 0.001	< 0.1	0.0906	3.8	4.7	8.5	< 0.2	< 1	4.4
EPA 14		1/12/1999	< 0.01	< 0.005	0.02	< 0.05	2.58	0.11	< 0.05	< 0.001	< 0.1	0.111	5.2	5.6	10.8	< 0.2	3.6	3.6
EPA 14		4/13/1999	< 0.01	0.005	0.03	< 0.05	2.83	0.15	< 0.05	< 0.001	< 0.1	0.11	7.8	9.4	17.2	< 0.2	< 1	10.8
EPA 14		7/20/1999	< 0.01	< 0.005	0.03	< 0.05	2.24	0.14	< 0.05	< 0.001	< 0.1	0.114	5.1	6.8	11.9	< 0.2	< 1	6.7
EPA 14		10/12/1999	< 0.01	< 0.005	0.02	< 0.05	2.86	0.15	< 0.05	< 0.001	< 0.1	0.127	3.5	7.1	10.6	< 0.2	< 1	5.2
EPA 14		1/11/2000	< 0.01	< 0.005	0.04	< 0.05	2.96	0.18	0.08	0.001	< 0.1	0.104	5.1	7.8	12.9	< 0.2	< 1	7.6
EPA 14		5/2/2000	< 0.01	0.014	0.05	< 0.05	3.24	0.2	< 0.05	< 0.001	< 0.1	0.12	8	11.1	19.1	2	< 1	6.5
EPA 14		7/12/2000	< 0.01	< 0.005	0.18	< 0.05	4.36	< 0.1	0.15	< 0.001	< 0.1	0.053	3.8	5.9	9.7	< 0.2	< 1	5.4
EPA 14		10/9/2000	< 0.01	0.008	0.18	< 0.05	3.96	< 0.1	0.15	< 0.001	< 0.1	0.0435	3.9	6.9	10.8	< 0.2	< 1	10.3
EPA 14		1/15/2001	0.01	0.008	0.23	< 0.05	4.65	< 0.1	0.24	< 0.001	< 0.1	0.049	5.2	< 1	5.2	< 0.2	< 1	4.5
EPA 14		4/2/2001	0.01	0.008	0.26	< 0.05	4.68	< 0.1	0.27	< 0.001	< 0.1	0.037	4.2	6.4	10.6	< 0.2	< 1	5.1
EPA 14		7/10/2001	0.08	0.014	0.56	< 0.05	16.5	< 0.1	0.54	0.001	1	0.491	5	5.3	10.3	150	< 1	13.3
EPA 14		10/8/2001	< 0.01	0.009	0.2	< 0.05	3.99	< 0.1	0.2	< 0.001	< 0.1	0.0432	3.9	7	10.9	< 0.2	< 1	6.6
EPA 14		1/9/2002	0.02	0.011	0.23	< 0.05	4.84	< 0.1	0.27	< 0.001	< 0.1	0.0598	5	8.4	13.4	< 0.2	< 1	5.6
EPA 14		4/3/2002	0.01	0.01	0.25	< 0.05	5.4	< 0.1	0.25	< 0.001	< 0.1	0.0334	4.6	7.3	11.9	< 0.2	< 1	8.1
EPA 14		7/16/2002	0.01	0.008	0.2	< 0.05	4.54	< 0.1	0.22	< 0.001	< 0.1	0.0387	4.3	11.7	16	< 0.2	< 1	7.1
EPA 14		10/14/2002	0.02	0.006	0.17	< 0.05	4.78	< 0.1	0.19	< 0.001	< 0.1	0.0558	4.8	5	9.8	< 0.2	< 1	7.2
EPA 14		1/7/2003	0.02	0.001	0.19	< 0.05	5.4	< 0.1	0.21	< 0.001	< 0.1	0.0599	4.6	5.5	10.1	< 0.2	< 1	9.2
EPA 14		4/8/2003	0.01	0.008	0.19	< 0.05	5.26	< 0.1	0.21	< 0.001	< 0.1	0.049	4.6	7.5	12.1	< 0.2	< 1	10.1
EPA 14		7/8/2003	< 0.01	0.007	0.2	< 0.05	5.43	< 0.1	0.25	< 0.001	< 0.1	2.31	55.5	7.7	63.2	< 0.2	< 1	90.2
EPA 14		10/13/2003	0.07	0.015	0.22	< 0.05	5.72	< 0.1	0.24	< 0.001	< 0.1	0.275	144	8.2	152.2	< 0.2	< 1	99.5
EPA 14		1/12/2004	0.28	0.018	0.23	0.1	6.53	< 0.1	0.29	0.003	< 0.1	1.10 D	118	49.5	167.5	< 0.2	32	254
EPA 14		4/6/2004	0.37	0.018	0.23	0.18	6.92	< 0.1	0.29	0.001	< 0.1	1.27 D	141	64.4	205.4	< 0.2	90	78.4
EPA 14	F	4/13/2004	< 0.01	0.005	0.14	< 0.05	5.8	< 0.1	0.17	< 0.001	< 0.1	0.0289 D	17.1	9.7	26.8	< 0.2	< 1	34.5
EPA 14	R	4/13/2004	0.42	0.01	0.19	0.23	6.03	< 0.1	0.31	0.02	< 0.1	0.893 D	82.6	13.4	96	< 0.2	40	160
EPA 14		7/13/2004	0.44	< 0.005	0.1	0.11	5.74	< 0.1	0.13	0.001	< 0.1	0.517 D	39.9	23.8	63.7	< 0.2	< 1.0	46.9
EPA 14		10/5/2004	0.68	0.044 D	0.24	0.29	12.4	< 0.1	0.34	< 0.001	< 0.1	1.05 D	51.1	30.4	81.5	< 0.2	86	120
EPA 14		1/10/2005	0.24	0.005	0.14	0.08	5.97	< 0.1	0.19	0.002	< 0.1	0.514 D	21.4	13.5	34.9	< 0.2	22	72.7
EPA 14		4/11/2005	0.05	< 0.005	0.1	< 0.05	6.42	< 0.1	0.13	< 0.001	< 0.1	0.111	16.6	10.5	27.1	< 0.2	< 1.0	19.7
EPA 14		7/18/2005	0.04	< 0.005	0.08	< 0.05	6.41	< 0.1	0.12	< 0.001	< 0.1	0.0841 D	14.3	12.1	26.4	< 0.2	< 1.0	26.6
EPA 14		10/10/2005	0.03	< 0.005	0.1	< 0.05	7.25	< 0.1	0.12	< 0.001	< 0.1	0.0538	16.2	13.2	29.4	< 0.2	< 1.0	25.1

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 14		1/16/2006	6,852.62	5.95	6.19	4900	568 D	453 D	189	12.3	92	3320 D	64	35 D	17.2 D	< 1.0	304	0.02
EPA 14		4/10/2006	6,853.48	4.90	4.99	5390	573 D	455 D	171	13.2	21	3710 D	82	50.6 D	16.8 D	< 1.0	44.3	< 0.001
EPA 14		7/18/2006	6,851.96	4.50	4.71	5320	506 D	478 D	182 D	13.8 D	12	3820 D	74	64.4 D	20.5 D	< 1.0	69.1	< 0.001
EPA 14		10/10/2006	6,851.39	4.48	4.56	5670	496	500 D	177	15.2	< 1	3800 D	70	73 D	25.6 D	0.93	102	0.002
EPA 14		1/23/2007	6,850.61	4.61	4.48	5790	501 D	501 D	180	14.5	<1	3740 D	72	62.5 D	21.2 D	5.52	64.2	<0.001
EPA 14		4/10/2007	6,850.35	4.53	4.38	5960	500 D	516 D	176	14.3	2	3950 D	76	67 D	27 D	4.44	66.3	<0.001
EPA 14		7/16/2007	6,849.86	4.31	4.34	5860	523 D	562 D	173	12.3	<1	4280 D	70	70.2 D	32 D	3.3	102	0.002
EPA 14		10/9/2007	6,849.38	4.31	4.36	6420	483 D	558 D	174	11.3	<1	4220 D	79	74.9 D	24 D	2.29	121	<0.001
EPA 14		1/22/2008	6,848.85	4.3	4.4	6680	440 D	563 D	179	12.8	< 1	4400 D	98	94.6 D	24.6	2.87	163	< 0.001
EPA 14		4/15/2008	6,848.61	4.2	4.07	6650	482	615	187 D	12.6	< 1	5260 D	77	91.2 D	27.9	3.00	137	< 0.001
EPA 14		7/15/2008	6,848.11	4.27	4.25	6740	457	566	174 D	13	< 1	4520 D	58	78.9 D	19.3	3.07	177	< 0.003
EPA 14		10/14/2008	6,847.51	4.20	4.27	6690	478	553	182 D	14	< 1	4740 D	76	75.9 D	17.8	3	119	< 0.001
EPA 14		1/13/2009	6,847.61	4.28	4.28	6620	441	522	188	10	<1	3600 D	56	78 D	20.6	<0.5	124	<0.001
EPA 14		4/7/2009	6,847.36	4.38	4.34	5480	474 D	478 D	180 D	11	<1	3950 D	46	44.4 D	7.9	1.19	52.2	<0.001
EPA 14		7/7/2009	6,847.16	4.07	4.22	6190	482	503	172	11	<1	4130 D	67	50 D	15.5 D	0.50	94.2	<0.001
EPA 14		10/6/2009	6,846.61	4.42	4.36	5610	533 D	469	170 D	12	<1	4110 D	71	41.4 D	6.2	1.24	50.5 D	<0.001
EPA 15		7/29/1989	6,890.20	6.50	6.35	2567	432	145	119	4.8	288	1487	18.4	0.09	13.2	< 1	< 0.1	< 0.001
EPA 15		10/8/1989	6,883.50	6.00	6.58	2244	380	120	110	7	302	1319	15	0.1	7.4	< 1	< 0.1	< 0.001
EPA 15		1/16/1990	6,881.50	5.90	6.48	2524	369	139	116	5.75	302	1499	18.3	0.19	5.9	< 1	< 0.1	< 0.001
EPA 15		4/18/1990	6,880.30	6.10	6.56	2532	381	140	117	5.6	322	1419	17.6	0.21	7.8	< 1	< 0.1	0.001
EPA 15		7/10/1990	6,879.10	6.20	6.60	2586	392	146	113	5.1	311	1475	18.6	0.07	8.92	< 1	< 0.1	< 0.001
EPA 15		10/10/1990	6,879.80	6.40	6.75	2548	374	143	118	6	303	1412	18.5	0.11	9.55	< 1	< 0.1	< 0.001
EPA 15		1/10/1991	6,878.80	6.30	7.05	2359	397	142	113	7.1	316	1347	19.1	0.07	10.4	< 1	< 0.1	< 0.001
EPA 15		4/16/1991	6,879.20	6.20	7.08	2429	382	135	130	6.1	336	1360	18.8	0.1	16.1	< 1	< 0.1	< 0.001
EPA 15		7/3/1991	6,876.00	6.40	6.86	2548	384	149	114	5.2	325	1565	21.9	0.11	15.6	< 1	< 0.1	< 0.001
EPA 15		10/23/1991	6,871.10	6.20	7.03	2873	401	176	134	6	278	1789	31.6	0.44	24.8	< 1	< 0.1	< 0.001
EPA 15		1/23/1992	6,873.50	6.10	6.93	2603	368	175	122	6.3	292	1588	21.2	0.19	11.1	< 1	< 0.1	< 0.001
EPA 15		4/2/1992	6,873.80	6.10	7.60	2809	413	209	166	8.4	312	1753	23.7	0.31	15	< 1	< 0.1	< 0.001
EPA 15		7/16/1992	6,866.90	6.10	6.84	3214	462	262	156	7.8	246	2206	32.5	0.37	12.7	< 1	< 0.1	0.002
EPA 15		10/15/1992	6,866.20	6.00	6.61	4002	525	263	167	10	237	2451	32.6	0.27	17.3	< 1	< 0.1	0.003
EPA 15		1/13/1993	6,869.00	6.20	6.75	2950	459	181	124	8.2	287	1748	26.8	0.19	11	< 1	< 0.1	< 0.001
EPA 15		4/15/1993	6,869.40	6.30	6.94	2816	471	150	132	5	322	1666	23.6	0.15	13.3	< 1	< 0.1	0.001
EPA 15		7/20/1993	6,864.60	6.30	6.93	3326	542	240	142	8.2	287	2133	30.8	0.06	27.5	< 1	< 0.1	0.001
EPA 15		10/12/1993	6,860.70	6.40	6.34	4110	578	306	158	9	212	2766	41.3	1.27	17	< 1	< 0.1	< 0.001
EPA 15		1/11/1994	6,864.20	6.50	7.00	3001	499	187	128	5.7	288	1774	28.5	< 0.05	12.8	< 1	< 0.1	< 0.001

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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 14		1/16/2006	0.15	0.01	0.21	< 0.05	9.02	0.1	0.28	0.003	< 0.1	0.174 D	36	15.2	51.2	< 0.2	19	66.1
EPA 14		4/10/2006	0.04	0.009	0.41	< 0.05	12.5	< 0.1	0.41	< 0.001	< 0.1	0.0272	20.9	20.9	41.8	< 0.2	< 1.0	24.2
EPA 14		7/18/2006	0.05	0.011	0.61	< 0.05	16.6	< 0.1	0.55	< 0.001	< 0.1	0.0298	27.6	21.5	49.1	< 0.2	< 1.0	33.6
EPA 14		10/10/2006	0.06	0.012	0.66	< 0.05	18.2	< 0.1	0.58	< 0.001	< 0.1	0.0251	20	29.1	49.1	< 0.2	< 1	25.5
EPA 14		1/23/2007	0.05	0.012	0.63	<0.05	17.7	<0.1	0.56	<0.001	<0.1	0.0161	16.5	23.2	39.7	<0.2	<1	18.2
EPA 14		4/10/2007	0.05	0.012	0.76	<0.05	16.9	<0.1	0.67	<0.001	<0.1	0.0113	16.7	32.7	49.4	<0.2	<1	35.2
EPA 14		7/16/2007	0.06	0.012	0.72	<0.05	15.8	<0.1	0.76	<0.001	<0.1	0.0103	16.8	36.8	53.6	<0.2	<1	22.4
EPA 14		10/9/2007	0.07	0.01	0.78	<0.05	17.3	<0.1	0.76	<0.001	<0.1	0.0108	13.8	35.4	49.2	<0.2	<1	26.9
EPA 14		1/22/2008	0.09	0.015	0.9	< 0.05	20.4	< 0.1	0.87	< 0.001	< 0.1	0.014	20.9	52.3	73.2	< 0.2	4.8	27.7
EPA 14		4/15/2008	0.09	0.011	0.95 D	< 0.05	22.0	< 0.1	0.89	< 0.001	0.2	0.0141	17.2	56.1	73.3	0.3	-2.2 U	25.9
EPA 14		7/15/2008	0.08	0.016	1.01	< 0.05	23.1	< 0.1	0.99	< 0.001	< 0.1	0.0133	14	32	46	0.3	5.5 U	23
EPA 14		10/14/2008	0.08	0.014	0.96	< 0.05	21.2	< 0.1	0.87	< 0.001	< 0.1	0.0138	13	22	35	0.3	4.5 U	32.2
EPA 14		1/13/2009	0.08	0.01	0.98	<0.05	20.1	<0.1	0.83	<0.001	<0.1	0.0137	12	24	36	0.6 U	0 U	23.6
EPA 14		4/7/2009	0.04	0.008	0.63	<0.05	16.9	<0.1	0.56	<0.001	<0.1	0.0089 D	6.7	13	19.7	0.5 U	-1 U	14.2
EPA 14		7/7/2009	0.07	0.010	0.66	<0.05	15.6	<0.1	0.65	<0.001	<0.1	0.0116	9.2	23	32.2	0.4 U	4.2	19.9
EPA 14		10/6/2009	<0.08	0.007	0.53	<0.05	15.7 D	<0.1	0.50	<0.001	<0.1	0.0068	6.5	13	19.5	-0.1 U	-0.3 U	17.3
EPA 15		7/29/1989	< 0.05	< 0.01	< 0.01	< 0.05	1.3	0.5	< 0.05	0.001	< 0.1	0.0408	2.8	4.6	7.4	< 0.2	1.3	2.2
EPA 15		10/8/1989	< 0.05	< 0.01	< 0.01	< 0.05	1	< 0.43	< 0.05	< 0.001	< 0.1	0.066	6.6	< 1	6.6	57	1.1	69
EPA 15		1/16/1990	< 0.05	< 0.01	0.01	< 0.05	1.6	0.37	< 0.05	< 0.001	< 0.1	0.037	1.7	3.2	4.9	0.2	< 1	1.7
EPA 15		4/18/1990	< 0.05	< 0.01	< 0.01	0.08	1.5	0.42	< 0.05	< 0.001	< 0.1	0.039	2.1	4.3	6.4	< 0.2	< 1	2.9
EPA 15		7/10/1990	< 0.05	< 0.01	0.04	< 0.05	1.39	0.34	< 0.05	< 0.001	< 0.1	0.074	2.3	2.1	4.4	< 0.2	< 1	2.8
EPA 15		10/10/1990	< 0.05	< 0.01	0.03	< 0.05	1.45	0.3	< 0.05	< 0.001	< 0.1	0.0618	2.1	1.1	3.2	< 0.2	< 1	2
EPA 15		1/10/1991	< 0.01	< 0.01	0.02	< 0.05	1.19	0.33	< 0.05	0.001	< 0.1	0.0554	1.8	1.7	3.5	< 0.2	< 1	2.1
EPA 15		4/16/1991	< 0.01	< 0.01	0.02	< 0.05	1.15	0.43	< 0.05	< 0.001	< 0.1	0.078	2.9	< 1	2.9	< 0.2	< 1	3
EPA 15		7/3/1991	< 0.01	< 0.01	0.03	< 0.05	1.55	0.42	< 0.05	0.001	< 0.1	0.128	2.1	3.9	6	< 0.2	< 1	2
EPA 15		10/23/1991	< 0.01	< 0.01	0.02	< 0.05	2.06	0.34	0.07	< 0.001	< 0.1	0.1015	2.1	6.3	8.4	< 0.2	< 1	< 1
EPA 15		1/23/1992	< 0.01	< 0.01	0.01	< 0.05	2.39	< 0.56	< 0.05	0.001	< 0.1	0.065	1.6	1.8	3.4	< 0.2	1.4	2
EPA 15		4/2/1992	< 0.01	< 0.01	0.01	< 0.05	2.24	0.58	< 0.05	0.001	< 0.1	0.066	2	4.1	6.1	< 0.2	< 1	2.1
EPA 15		7/16/1992	< 0.01	< 0.01	0.02	< 0.05	2.98	0.35	< 0.05	< 0.001	< 0.1	0.034	4.6	8.8	13.4	< 0.2	< 1	4.9
EPA 15		10/15/1992	< 0.01	< 0.01	0.02	< 0.05	3.68	0.59	0.06	< 0.001	< 0.1	0.014	4.9	3.9	8.8	< 0.2	< 1	5.2
EPA 15		1/13/1993	< 0.01	< 0.01	0.02	< 0.05	2.56	0.72	< 0.05	< 0.001	< 0.1	0.064	2	4.5	6.5	< 0.2	< 1	2.7
EPA 15		4/15/1993	< 0.01	< 0.01	0.03	< 0.05	1.97	0.62	< 0.05	< 0.001	< 0.1	0.099	1.8	4.3	6.1	< 0.2	< 1	2
EPA 15		7/20/1993	< 0.01	< 0.01	0.02	< 0.05	2.62	1.13	< 0.05	0.002	< 0.1	0.061	3	4.9	7.9	< 0.2	< 1	3.6
EPA 15		10/12/1993	< 0.01	< 0.01	0.02	< 0.05	4.18	< 0.1	< 0.05	0.001	< 0.1	0.03	6.4	5.5	11.9	< 0.2	1.4	8
EPA 15		1/11/1994	< 0.01	< 0.01	< 0.01	< 0.05	2.21	1.21	< 0.05	< 0.001	< 0.1	0.074	3.3	5.2	8.5	< 0.2	< 1	12.1

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 15		4/19/1994	6,863.90	6.40	6.63	2537	411	137	125	5.8	296	1537	22.6	0.19	9.5	< 1	< 0.1	0.002
EPA 15		7/26/1994	6,862.20	6.20	7.43	4123	627	284	139	7.1	265	2390	31	0.46	33.2	< 1	< 0.1	< 0.001
EPA 15		10/11/1994	6,861.60	6.10	6.94	4502	640	342	163	9.6	214	3049	39	3.12	31.5	< 1	0.3	< 0.001
EPA 15		1/10/1995	6,861.70	6.10	7.09	4144	665	204	133	8.5	244	2567	36.5	1	37.2	< 1	< 0.1	< 0.001
EPA 15		4/11/1995	6,861.90	6.40	6.51	4187	674	302	136	7.6	262	2542	19.9	1.09	44.4	< 1	< 0.1	< 0.001
EPA 15		7/11/1995	6,860.30	5.60	5.87	4169	585	359	144	9.9	24.5	2833	44.5	0.78	29.5	< 1	5.65	< 0.001
EPA 15		10/10/1995	6,859.70	5.50	5.82	4153	585	370	162	10.6	23.2	2961	40	5.86	24.3	1.56	5.67	0.001
EPA 15		1/8/1996	6,858.50	5.30	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
EPA 17		7/20/1989	6,886.60	6.40	6.11	6709	501	785	167	13.3	159	4674	35.6	1.22	0.13	< 1	0.18	0.224
EPA 17		10/8/1989	6,887.00	6.40	6.50	6714	491	829	160	12	154	4526	35.3	0.59	0.06	< 1	< 0.1	0.253
EPA 17		1/10/1990	6,886.30	6.30	6.48	6822	491	844	158	13.1	162	4440	34.3	0.57	0.14	< 1	0.16	0.133
EPA 17		4/10/1990	6,886.20	6.30	6.30	6855	495	830	153	12.4	151	4333	33.9	0.67	0.21	< 1	< 0.1	0.14
EPA 17		7/10/1990	6,886.00	6.10	6.50	6930	493	807	154	13.8	159	4467	33.6	0.29	0.53	< 1	0.14	0.019
EPA 17		10/9/1990	6,885.90	6.30	6.77	6854	465	812	162	13.4	135	4232	32.2	0.22	0.07	< 1	< 0.1	0.054
EPA 17		1/11/1991	6,885.60	6.20	6.30	6678	511	795	160	14.6	122	4489	36.9	0.57	0.14	< 1	< 0.1	0.022
EPA 17		4/10/1991	6,885.40	6.30	6.90	6751	545	758	156	12.3	143	4007	34.8	0.45	0.11	< 1	0.36	0.007
EPA 17		7/9/1991	6,885.10	6.30	6.46	6742	563	712	139	10.9	112	4385	33.5	0.68	< 0.01	< 1	0.26	0.002
EPA 17		10/17/1991	6,885.00	6.20	6.86	6749	514	676	155	14.1	159	4151	33.5	0.33	0.08	< 1	0.13	0.003
EPA 17		1/21/1992	6,884.70	6.30	6.66	6718	473	769	145	11.5	159	4556	37.5	0.33	< 0.1	< 1	< 0.1	0.005
EPA 17		4/14/1992	6,884.50	6.40	7.72	5908	441	528	157	12.5	255	3632	34.3	0.5	< 0.1	< 1	< 0.1	0.022
EPA 18		7/25/1989	6,884.40	5.70	5.46	5818	543	608	132	11.6	44	3974	27.1	0.46	0.08	< 1	< 0.1	0.008
EPA 18		10/4/1989	6,884.10	5.30	5.97	5742	513	604	113	12.6	49	3746	27.5	0.43	0.01	< 1	< 0.1	0.006
EPA 18		1/16/1990	6,883.30	5.20	5.46	5514	468	549	123	11.1	19.5	3654	25.4	0.5	0.06	< 1	< 0.1	0.004
EPA 18		4/17/1990	6,882.70	5.20	5.26	5585	464	520	122	10.5	10.2	3582	27	0.49	0.16	< 1	< 0.1	0.002
EPA 18		7/17/1990	6,881.90	5.40	5.68	5902	543	608	124	31.8	31.5	3513	26.4	0.27	0.07	< 1	0.2	0.012
EPA 18		10/16/1990	6,881.30	5.40	5.93	5925	508	588	139	11	26	3880	32.2	0.39	0.04	< 1	0.1	0.015
EPA 18		1/8/1991	6,880.60	5.10	5.25	5905	518	647	129	18	12	3917	28.3	0.53	< 0.01	< 1	0.61	0.001
EPA 18		4/16/1991	6,880.30	5.00	5.50	5946	551	712	144	10.6	10	3916	34.1	0.48	< 0.01	< 1	< 0.1	0.001
EPA 18		7/3/1991	6,879.90	5.30	5.97	6159	577	698	129	9.4	36	4215	15.8	0.64	0.01	< 1	0.66	0.024
EPA 18		10/22/1991	6,879.60	5.40	5.81	6202	484	722	139	10.6	69	4235	38.3	0.61	0.02	< 1	0.34	0.019
EPA 18		1/22/1992	6,879.00	5.60	6.00	6396	484	657	135	10.4	36.8	4267	29.4	0.61	< 0.01	< 1	0.27	0.014
EPA 18		4/2/1992	6,878.80	5.50	7.16	5799	508	660	167	13.1	75.1	4351	38.3	0.67	< 0.01	< 1	< 0.1	0.014
EPA 18		7/15/1992	6,877.70	5.50	6.09	6375	492	686	131	11.5	8	4196	29.7	0.25	0.1	< 1	< 0.1	0.003
EPA 18		10/14/1992	6,877.20	5.30	5.38	6100	480	624	132	11.3	12.2	4126	30.5	0.32	< 0.1	< 1	0.18	0.002
EPA 18		1/14/1993	6,877.90	5.20	5.74	5947	455	609	137	9.9	16.8	4187	30.9	0.69	< 0.1	< 1	< 0.1	< 0.001

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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 15		4/19/1994	< 0.01	< 0.01	0.05	< 0.05	1.16	1.2	< 0.05	0.001	< 0.1	0.121	3.1	5	8.1	< 0.2	< 1	10.8
EPA 15		7/26/1994	< 0.01	< 0.01	< 0.01	< 0.05	2.82	0.93	< 0.05	0.009	< 0.1	0.05	4.6	8.2	12.8	< 0.2	1.8	17.1
EPA 15		10/11/1994	< 0.01	< 0.01	0.07	< 0.05	4.42	0.75	< 0.05	< 0.001	< 0.1	0.029	7.7	4.5	12.2	< 0.2	3.8	14.7
EPA 15		1/10/1995	< 0.01	< 0.01	0.02	< 0.05	3.08	0.81	< 0.05	< 0.001	< 0.1	0.045	6	3.8	9.8	< 0.2	< 1	11.9
EPA 15		4/11/1995	< 0.01	< 0.01	< 0.01	< 0.05	3.08	0.67	< 0.05	< 0.001	< 0.1	0.038	4.3	5.6	9.9	< 0.2	< 1	12.7
EPA 15		7/11/1995	< 0.01	< 0.01	0.2	< 0.05	7.18	0.65	0.19	< 0.001	< 0.1	0.012	11.6	22.2	33.8	< 0.2	< 1	29.5
EPA 15		10/10/1995	< 0.01	< 0.01	0.17	< 0.05	7.13	1.05	0.16	0.01	< 0.1	0.0087	12.6	8.1	20.7	< 0.2	< 1	19.8
EPA 15		1/8/1996	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
EPA 17		7/20/1989	< 0.05	< 0.01	0.08	< 0.05	6.9	1.2	0.24	< 0.001	< 0.1	0.053	3.4	3.4	6.8	18.4	1.2	14.4
EPA 17		10/8/1989	< 0.05	< 0.01	0.07	< 0.05	6.7	0.83	0.21	< 0.001	< 0.1	0.076	1.1	2.7	3.8	< 0.2	< 1	3
EPA 17		1/10/1990	< 0.05	< 0.01	0.12	< 0.05	5.9	0.46	0.24	< 0.001	< 0.1	0.046	1.9	3.1	5	< 0.2	< 1	2.3
EPA 17		4/10/1990	< 0.05	0.02	0.13	no data	6.7	0.32	0.17	< 0.001	< 0.1	0.048	2.4	3.5	5.9	< 0.2	< 1	3.4
EPA 17		7/10/1990	< 0.05	< 0.01	0.07	< 0.05	6.77	0.22	0.25	< 0.001	< 0.1	0.045	2.5	3.7	6.2	< 0.2	< 1	2.9
EPA 17		10/9/1990	< 0.05	< 0.01	0.09	< 0.05	6.63	0.2	0.23	< 0.001	< 0.1	0.0332	2.2	7.6	9.8	< 0.2	< 1	2
EPA 17		1/11/1991	< 0.01	< 0.01	0.12	< 0.05	7.5	< 0.1	0.29	< 0.001	< 0.1	0.0134	3.4	3.9	7.3	< 0.2	< 1	3.8
EPA 17		4/10/1991	< 0.01	< 0.01	0.12	< 0.05	6.6	0.12	0.29	< 0.001	< 0.1	0.0147	3.2	< 1	3.2	< 0.2	< 1	3
EPA 17		7/9/1991	< 0.01	< 0.01	0.08	< 0.05	6.15	< 0.1	0.17	< 0.001	< 0.1	0.0151	1.8	< 5.3	1.8	< 0.2	< 1	2
EPA 17		10/17/1991	< 0.01	< 0.01	0.09	< 0.05	5.98	< 0.1	0.22	< 0.001	< 0.1	0.0132	2	< 1	2	< 0.2	< 1	2
EPA 17		1/21/1992	< 0.01	< 0.01	0.08	< 0.05	5.42	0.1	0.17	0.001	< 0.1	0.023	1.3	< 1	1.3	< 0.2	1.2	1
EPA 17		4/14/1992	< 0.01	< 0.01	0.05	< 0.05	5.08	0.37	0.15	0.002	< 0.1	0.041	1.2	8.3	9.5	< 0.2	< 1	1.2
EPA 18		7/25/1989	< 0.05	< 0.01	0.19	< 0.05	6.7	0.05	0.23	< 0.001	< 0.1	0.031	7.3	5.3	12.6	6.1	< 1	8
EPA 18		10/4/1989	< 0.05	< 0.01	0.21	< 0.05	7	< 0.01	0.27	< 0.001	< 0.1	0.037	5.6	6.9	12.5	0.3	2.1	6.2
EPA 18		1/16/1990	< 0.05	< 0.01	0.2	< 0.05	7.5	< 0.1	0.3	< 0.001	< 0.1	0.019	4.5	7.7	12.2	0.7	< 1	5.3
EPA 18		4/17/1990	< 0.05	< 0.01	0.2	< 0.05	6.3	< 0.1	0.27	< 0.001	< 0.1	0.019	7.1	5.4	12.5	< 0.2	1.2	7.6
EPA 18		7/17/1990	< 0.05	< 0.01	0.17	< 0.05	6.09	0.12	0.28	< 0.001	< 0.1	0.0824	4.2	3.4	7.6	< 0.2	< 1	4
EPA 18		10/16/1990	< 0.05	< 0.01	0.19	< 0.05	6.49	< 0.1	0.27	< 0.001	< 0.1	0.0577	6.3	12.1	18.4	< 0.2	1.4	6
EPA 18		1/8/1991	< 0.01	< 0.01	0.21	< 0.05	6.89	< 0.1	0.27	< 0.001	< 0.1	0.0357	6.4	7.6	14	< 0.2	< 1	6
EPA 18		4/16/1991	< 0.01	< 0.01	0.17	< 0.05	6.13	< 0.1	0.22	< 0.001	< 0.1	0.031	5.5	9.6	15.1	< 0.2	2.5	6
EPA 18		7/3/1991	< 0.01	< 0.01	0.14	< 0.05	6.62	0.1	0.2	< 0.001	< 0.1	0.07	4.2	8.2	12.4	< 0.2	< 1	4
EPA 18		10/22/1991	< 0.01	< 0.01	0.13	< 0.05	7.44	< 0.1	0.21	< 0.001	< 0.1	0.0005	4.6	< 1	4.6	< 0.2	< 1	5
EPA 18		1/22/1992	< 0.01	< 0.01	0.1	< 0.05	6.15	< 0.1	0.17	< 0.001	< 0.1	0.086	7.9	6.8	14.7	< 0.2	< 1	8
EPA 18		4/2/1992	< 0.01	< 0.01	0.13	< 0.05	7.16	0.1	0.26	< 0.001	< 0.1	0.078	4.9	10.3	15.2	< 0.2	< 1	4.7
EPA 18		7/15/1992	< 0.01	< 0.01	0.12	< 0.05	6.45	< 0.1	0.19	< 0.001	< 0.1	0.064	4.3	9.8	14.1	< 0.2	1	5
EPA 18		10/14/1992	< 0.01	< 0.01	0.15	< 0.05	5.97	< 0.1	0.24	< 0.001	< 0.1	0.081	5.5	10.2	15.7	< 0.2	1.8	5.8
EPA 18		1/14/1993	< 0.01	< 0.01	0.16	< 0.05	7.66	< 0.1	0.32	< 0.001	< 0.1	0.038	6.6	11.5	18.1	< 0.2	< 1	6.8

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 18		4/15/1993	6,877.80	5.30	5.79	6132	414	694	152	9.8	18.1	3999	31.2	0.51	0.2	< 1	< 0.1	0.001
EPA 18		7/20/1993	6,876.50	5.30	5.75	5982	489	705	147	10.4	12.3	4215	31.9	0.32	< 0.1	< 1	< 0.1	< 0.001
EPA 18		10/12/1993	6,873.80	5.80	5.44	5825	473	690	135	10.5	18	4264	28.9	0.39	< 0.1	< 1	< 0.1	< 0.001
EPA 18		1/11/1994	6,875.60	5.70	6.22	6038	453	707	134	10.2	20.3	4228	29.5	0.46	< 0.1	< 1	< 0.1	< 0.001
EPA 18		4/20/1994	6,874.90	5.50	6.00	5622	458	683	125	9.8	15.3	4196	33	1.09	< 0.1	< 1	< 0.1	< 0.001
EPA 18		7/26/1994	6,875.90	5.70	6.69	5618	525	682	149	11.3	17.7	4106	30.7	0.46	< 0.1	< 1	< 0.1	< 0.001
EPA 18		10/11/1994	6,874.50	5.80	6.55	6374	456	764	157	11.4	22.4	4604	33.7	0.75	< 0.1	< 1	< 0.1	< 0.001
NBL-01		8/15/2001	6,820.10	6.61	6.90	3220	550	162	116	6.83	343	1730	36.8	0.41	< 0.1	< 1	< 0.1	0.57
NBL-01		10/3/2001	6,819.89	6.70	7.50	3160	550	150	100	7	346	1680	40	0.29	< 0.1	< 1	< 0.1	0.714
NBL-01		1/7/2002	6,819.70	7.25	7.00	3110	564	158	115	7	342	1840	36	0.26	< 0.1	< 1	< 0.1	0.613
NBL-01		4/17/2002	6,819.90	6.25	7.66	3220	542	167	113	6.8	336	1780	37.9	0.29	< 0.1	< 1	< 0.1	0.768
NBL-01		7/15/2002	6,819.65	6.65	7.68	3310	516	185	123	7.1	339	1810	26	0.43	< 0.1	< 1	< 0.1	0.728
NBL-01		10/15/2002	6,819.54	7.18	7.48	3120	631	176	121	6.3	330	2070	31.4	0.45	< 0.1	< 1	< 0.1	0.776
NBL-01		1/15/2003	6,819.49	6.43	7.29	3290	620	178	101	5.1	335	1930	20.1	0.47	< 0.1	< 1	< 0.1	0.955
NBL-01		4/14/2003	6,819.35	6.87	7.14	3360	566	168	125	7.6	338	1960	35	0.48	< 0.1	< 1	< 0.1	0.688
NBL-01		7/14/2003	6,819.01	6.29	7.40	3460	598	170	119	7.5	334	1880	32.2	0.45	< 0.1	< 1	< 0.1	0.538
NBL-01		10/13/2003	6,818.89	6.37	7.21	3480	567	170	128	6.7	332	1940	27.7	0.42	< 0.1	< 1	0.3	1.01
NBL-01		1/13/2004	6,818.51	6.50	7.30	3610	665	201	118	8.6	333	2200	38.8	0.47	< 0.10	< 1.0	< 0.1	0.523 D
NBL-01		4/12/2004	6,818.46	6.34	6.70	3690	658	203	122	8	308	2340	36.5	0.51	< 0.1	< 1	< 0.1	0.807 D
NBL-01		7/19/2004	6,818.09	6.45	6.37	3900	702 D	224 D	141	7	267	2380 D	35	0.47	< 0.10	< 1.0	< 0.1	0.940 D
NBL-01		10/11/2004	6,817.97	6.47	6.85	4000	616 D	234 D	141	7.1	242	2340 D	36	0.38	< 0.10	< 1.0	< 0.1	0.889 D
NBL-01		1/10/2005	6,817.55	6.27	6.75	4110	650 D	262 D	128	7.2	218	2500 D	36	0.37	< 0.1	< 1.0	< 0.1	2.3 D
NBL-01		4/12/2005	6,816.96	6.31	6.55	3980	652	294	141	7.4	169	2740	36	0.82	< 0.1	< 1.0	< 0.1	0.63
NBL-01		7/18/2005	6,816.06	5.88	6.70	4170	628 D	301 D	138	7.1	129	2630 D	35	0.54	< 0.1	< 1.0	< 0.1	0.82 D
NBL-01		10/10/2005	6,814.93	6.26	6.69	4090	613 D	319 D	133	7.3	122	2640 D	34	0.52	< 0.1	< 1.0	< 0.1	0.06
NBL-01		1/16/2006	6,813.81	6.47	7.52	3970	533 D	271 D	121	7.6	122	2350 D	34	0.76	< 0.1	< 1.0	< 0.1	0.37 D
NBL-01		4/10/2006	6,813.01	6.10	6.38	4050	639 D	316 D	122	8.8	119	2780 D	43	0.78	3.9	< 1.0	< 0.1	0.47 D
NBL-01		7/24/2006	6,812.34	6.06	6.40	3980	622 D	309 D	139	9.5	117	2760 D	44	1.35	< 0.1	< 1.0	< 0.1	0.18 D
NBL-01		10/9/2006	6,811.92	6.21	6.56	4050	629 D	316 D	138	11.4	181	2680 D	43	3.04	0.1	< 0.5	< 0.1	0.72 D
NBL-01		1/16/2007	6,811.24	6.36	6.90	4390	615 D	304 D	139	13.3	217	2690 D	53	5.3 D	0.2	<0.5	0.1	0.51 D
NBL-01		4/17/2007	6,810.72	6.18	6.60	4250	619 D	313 D	133	14.1	222	2800 D	56	9.3 D	0.3	<0.5	<0.1	0.4 D
NBL-01		7/17/2007	6,810.19	6.40	6.93	4140	632 D	289 D	148	15.4	207	2780 D	54	8.8 D	0.6	<0.5	0.3	2.5 D
NBL-01		10/9/2007	6,809.65	6.20	6.53	4290	623 D	280 D	142	13.6	220	2660 D	50	7.1 D	<0.1	<0.5	0.6	0.61 D
NBL-01		1/22/2008	6,809.00	5.88	5.92	4070	568 D	252 D	121	15.7	113	2630 D	57 D	8.43	0.4	< 0.5	2.8	0.969 D
NBL-01		4/15/2008	6,808.74	5.83	4.85	4030	617	270	141 D	13.6	8	2760 D	48	3.88	< 0.1	< 0.50	2.5	0.18

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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 18		4/15/1993	< 0.01	< 0.01	0.16	< 0.05	6.91	< 0.1	0.26	< 0.001	< 0.1	0.058	4.1	9	13.1	< 0.2	< 1	4.5
EPA 18		7/20/1993	< 0.01	< 0.01	0.18	< 0.05	6.51	< 0.1	0.31	< 0.001	< 0.1	0.045	6.4	12.6	19	< 0.2	< 1	7.9
EPA 18		10/12/1993	< 0.01	< 0.01	0.14	< 0.05	6.57	< 0.1	0.24	< 0.001	< 0.1	0.058	7	7.8	14.8	< 0.2	1.8	7
EPA 18		1/11/1994	< 0.01	< 0.01	0.12	< 0.05	6.7	< 0.1	0.28	< 0.001	< 0.1	0.041	6.2	12.3	18.5	< 0.2	< 1	25.6
EPA 18		4/20/1994	< 0.01	< 0.01	0.12	< 0.05	5.69	< 0.1	0.27	< 0.001	< 0.1	0.023	5.1	6.8	11.9	< 0.2	< 1	15.5
EPA 18		7/26/1994	< 0.01	< 0.01	0.15	< 0.05	6.64	< 0.1	0.23	< 0.001	< 0.1	0.012	6	13.5	19.5	< 0.2	< 1	26.4
EPA 18		10/11/1994	< 0.01	< 0.01	0.08	< 0.05	5.3	< 0.1	0.16	< 0.001	< 0.1	0.008	5.9	4.4	10.3	< 0.2	3.4	12.7
NBL-01		8/15/2001	< 0.01	< 0.005	0.05	< 0.05	1.47	2.62	0.19	< 0.001	< 0.1	0.294	7.3	7	14.3	< 0.2	< 1	8.1
NBL-01		10/3/2001	< 0.01	< 0.005	0.05	< 0.05	1.59	2.86	0.08	< 0.001	< 0.1	0.276	7	5.2	12.2	< 0.2	< 1	6.3
NBL-01		1/7/2002	< 0.01	< 0.005	0.05	< 0.05	1.59	3.2	0.11	< 0.001	< 0.1	0.245	6	4.5	10.5	< 0.2	< 1	5.8
NBL-01		4/17/2002	< 0.01	< 0.005	0.05	< 0.05	1.68	3.2	0.09	< 0.001	< 0.1	0.287	5.8	5.3	11.1	0.5	< 1	7.8
NBL-01		7/15/2002	< 0.01	< 0.005	0.05	< 0.05	1.78	2.8	0.09	< 0.001	< 0.1	0.261	4.5	4.5	9	< 0.2	< 1	5.4
NBL-01		10/15/2002	< 0.01	< 0.005	0.06	< 0.05	2.01	2.2	0.1	< 0.001	< 0.1	0.251	6.4	3.1	9.5	< 0.2	< 1	5.6
NBL-01		1/15/2003	< 0.01	< 0.005	0.07	< 0.05	2.04	2.5	0.1	< 0.001	< 0.1	0.256	6.9	5.4	12.3	< 0.2	< 1	7.9
NBL-01		4/14/2003	< 0.01	< 0.005	0.07	< 0.05	2.21	2.4	0.1	< 0.001	< 0.1	0.21	6.7	< 1	6.7	< 0.2	< 1	9.4
NBL-01		7/14/2003	< 0.01	< 0.005	0.06	< 0.05	2.11	2.1	0.09	< 0.001	< 0.1	0.186	7	4	11	< 0.2	< 1	5
NBL-01		10/13/2003	< 0.01	< 0.005	0.06	< 0.05	2.13	2.1	0.09	< 0.001	< 0.1	0.209	6.9	3.1	10	< 0.2	< 1	6.5
NBL-01		1/13/2004	< 0.01	< 0.005	0.06	< 0.05	2.32	2	< 0.05	< 0.001	< 0.1	0.178 D	6.8	< 1.0	6.8	< 0.2	< 1.0	7.5
NBL-01		4/12/2004	< 0.01	< 0.005	0.06	< 0.05	2.39	2	0.1	< 0.001	< 0.1	0.157 D	6.4	4.5	10.9	< 0.2	< 1	7.8
NBL-01		7/19/2004	< 0.01	< 0.005	0.08	< 0.05	2.92	1.6	0.1	< 0.001	< 0.1	0.122	7.2	5.9	13.1	< 0.2	< 1.0	7.6
NBL-01		10/11/2004	< 0.01	< 0.005	0.09	< 0.05	3.41	1.4	0.15	< 0.001	< 0.1	0.0906	8	4.8	12.8	< 0.2	< 1.0	9.4
NBL-01		1/10/2005	< 0.01	< 0.005	0.12	< 0.05	3.73	1.2	0.17	< 0.001	< 0.1	0.0696	6.3	3.3	9.6	< 0.2	< 1.0	5.7
NBL-01		4/12/2005	< 0.01	< 0.005	0.16	< 0.05	4.82	1.2	0.21	< 0.001	< 0.1	0.0423	8.3	3.5	11.8	< 0.2	< 1.0	8.1
NBL-01		7/18/2005	< 0.01	< 0.005	0.22	< 0.05	5.06	0.9	0.28	< 0.001	< 0.1	0.0275	8.6	4.6	13.2	< 0.2	< 1.0	9.2
NBL-01		10/10/2005	< 0.01	< 0.005	0.28	< 0.05	5.37	1	0.34	< 0.001	< 0.1	0.0202	9.2	4.7	13.9	< 0.2	< 1.0	10.5
NBL-01		1/16/2006	< 0.01	< 0.005	0.26	< 0.05	4.91	0.8	0.36	< 0.001	< 0.1	0.0187	8	8.1	16.1	< 0.2	< 1.0	9.3
NBL-01		4/10/2006	< 0.01	< 0.005	0.3	< 0.05	5.5	0.6	0.39	< 0.001	< 0.1	0.0101	9.3	8.6	17.9	< 0.2	< 1.0	13
NBL-01		7/24/2006	< 0.01	< 0.005	0.24	< 0.05	5.98	1	0.35	< 0.001	< 0.1	0.0214	8.6	7.3	15.9	< 0.2	< 1.0	9.6
NBL-01		10/9/2006	< 0.01	< 0.005	0.21	< 0.05	6.64	2.3	0.3	< 0.001	< 0.1	0.0427	9.7	8.1	17.8	< 0.2	< 1	7.5
NBL-01		1/16/2007	<0.01	<0.005	0.29	<0.05	7.63	5	0.3	<0.001	<0.1	0.0784	10.8	4.8	15.6	<0.2	<1	12.2
NBL-01		4/17/2007	<0.01	<0.005	0.26	<0.05	8.09	3.1	0.29	<0.001	<0.1	0.0836	10.3	10.4	20.7	<0.2	<1	10.1
NBL-01		7/17/2007	<0.01	<0.005	0.32	<0.05	7.49	2.6	0.32	<0.001	<0.1	0.111	11.3	10.4	21.7	<0.2	<1	14.2
NBL-01		10/9/2007	<0.01	<0.005	0.25	<0.05	6.97	1.4	0.26	<0.001	<0.1	0.0886	10.4	10.4	20.8	<0.2	<1	12.4
NBL-01		1/22/2008	< 0.01	< 0.005	0.25	< 0.05	7.14	1.9	0.32	0.01	< 0.1	0.138	16.1	10.8	26.9	< 0.2	< 1	16.5
NBL-01		4/15/2008	< 0.01	< 0.005	0.15	< 0.05	6.45	1.0	0.21	< 0.001	0.1	0.134	7.9	12.9	20.8	0.1 U	-5 U	10

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TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
NBL-01		7/15/2008	6,808.14	6.33	6.66	4040	543	245	135 D	12	246	2490 D	50	4.25	< 0.1	< 0.5	0.1	0.052
NBL-01		10/14/2008	6,806.89	6.31	6.49	4010	569	255	138 D	13	253	2640 D	51	4.5 D	< 0.1	< 0.5	0.7	0.056
NBL-01		1/20/2009	6,809.46	6.24	7.38	4060	591	263	150	12	266	2290 D	35	1.99	<0.1	<0.5	0.2	0.081
NBL-01		4/14/2009	6,809.46	6.8	6.95	3910	553 D	246 D	138 D	11	260	2420 D	78	5.93	<0.1	<0.50	<0.8	0.037
NBL-01		7/14/2009	6,808.18	7.16	7.49	4220	613	253	140	13	172	2510 D	54	4.43	<0.1	<0.50	1.5 D	<0.001
NBL-01		10/13/2009	6,807.65	5.65	6.26	4330 H	618	274	142	13	65	2950 D	49	6.7 D	<0.1	<0.50	0.5	<0.001
NBL-02		1/22/2008	6,820.46	6.69	6.84	3410	649 D	156	133	8.1	321	2100 D	42	0.07	14.5	<0.5	<0.1	<0.001
NBL-02		4/15/2008	6,820.31	6.51	6.72	3380	no data	no data	no data	no data	306	no data	35	no data	no data	no data	no data	no data
NBL-02		7/15/2008	6,819.56	6.33	6.62	3470	no data	no data	no data	no data	323	no data	35	no data	no data	no data	no data	no data
NBL-02		10/14/2008	6,819.03	6.54	6.74	3500	647	180	154 D	7	320	2320 D	39	<0.1	19.9	<0.5	<0.1	<0.001
NBL-02		1/20/2009	6,818.51	6.55	6.97	3660	no data	no data	no data	no data	331	no data	21	no data	no data	no data	no data	no data
NBL-02		4/14/2009	6,818.31	6.43	6.51	3630	no data	no data	no data	no data	336	no data	35	no data	no data	no data	no data	no data
NBL-02		7/14/2009	6,817.66	7.91	8.07	3480 H	no data	no data	no data	no data	325	no data	38	no data	no data	no data	no data	no data
NBL-02		10/13/2009	6,817.26	6.41	7.19	3550 H	620	183	144	7	345	2100 D	49	<0.05	19.4	<0.50	<0.1	<0.001
NW-1		7/14/2009	6,800.55	6.25	6.79	4840 H	no data	no data	no data	no data	115	no data	23	no data	no data	no data	no data	no data
NW-1		10/13/2009	6,798.30	7.01	6.76 H	4780 H	no data	no data	no data	no data	136	no data	25	no data	no data	no data	no data	no data
NW-2		7/14/2009	6,805.39	6.15	6.80	4760 H	no data	no data	no data	no data	329	no data	39	no data	no data	no data	no data	no data
NW-2		10/13/2009	6,804.01	6.73	7.09 H	3890 H	no data	no data	no data	no data	355	no data	41	no data	no data	no data	no data	no data
NW-3		7/14/2009	6,807.82	6.4	6.86	3590 H	no data	no data	no data	no data	486	no data	39	no data	no data	no data	no data	no data
NW-3		10/13/2009	6,807.24	6.91	7.28 H	3470 H	no data	no data	no data	no data	501	no data	44	no data	no data	no data	no data	no data
NW-4		7/14/2009	6,805.53	6.64	6.87	3910 H	no data	no data	no data	no data	202	no data	30	no data	no data	no data	no data	no data
NW-4		10/13/2009	6,804.55	6.59	6.89 H	4680 H	no data	no data	no data	no data	226	no data	32	no data	no data	no data	no data	no data
NW-5		7/14/2009	6,808.35	6.3	6.76	3590 H	no data	no data	no data	no data	590	no data	53	no data	no data	no data	no data	no data
NW-5		10/13/2009	6,807.70	7.15	7.45 H	3630 H	no data	no data	no data	no data	612	no data	58	no data	no data	no data	no data	no data
PB-02		1/22/2008	6,811.31	6.05	6.57	4130	518 D	318 D	122	11.3	140	2570 D	40 D	4.8 D	< 0.1	< 0.5	0.9	0.05
PB-02		4/15/2008	6,809.26	5.86	6.22	4090	no data	no data	no data	no data	121	no data	29	no data	no data	no data	no data	no data
PB-02		7/15/2008	6,809.46	5.94	4.41	4450	no data	no data	no data	no data	< 1	no data	26	no data	no data	no data	no data	no data
PB-02		10/14/2008	6,808.53	5.74	6.18	4290	549	358	133 D	10	95	3140 D	26	2.4	< 0.1	< 0.5	0.4	0.003
PB-02		1/20/2009	6,810.60	5.41	5.65	3950	no data	no data	no data	no data	47	no data	32	no data	no data	no data	no data	no data
PB-02		4/14/2009	6,809.65	5.31	5.47	4470	no data	no data	no data	no data	43	no data	29	no data	no data	no data	no data	no data
PB-02		7/14/2009	6,809.60	5.68	5.74	4580 H	no data	no data	no data	no data	39	no data	26	no data	no data	no data	no data	no data
PB-02		10/13/2009	6,808.70	5.55	6.33	4760 H	575 D	408	131 D	11	72	3330 D	28 H	1.00	<0.1	<0.50	1.9	<0.001
PB-03		1/22/2008	6,812.51	6.37	7.1	3860	613 D	250 D	106	13.4	347	2370 D	64 D	9.8 D	0.7	< 0.5	0.2	0.155
PB-03		4/15/2008	6,812.36	6.58	7.3	3860	no data	no data	no data	no data	341	no data	56	no data	no data	no data	no data	no data
PB-03		7/15/2008	6,811.71	7.28	7.41	3960	no data	no data	no data	no data	286	no data	46	no data	no data	no data	no data	no data

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TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
NBL-01		7/15/2008	< 0.01	< 0.005	0.08	< 0.05	6.37	1	0.12	< 0.001	< 0.1	0.126	8.8	11	19.8	0.1 U	1.8 U	10.4
NBL-01		10/14/2008	< 0.01	< 0.005	0.01	< 0.05	2	0.8	< 0.05	< 0.001	< 0.1	0.27	8.3	7.3	15.6	0.2	0.6 U	12.1
NBL-01		1/20/2009	<0.01	<0.005	0.11	<0.05	5.25	0.7	0.15	<0.001	<0.1	0.144	9.5	14	23.5	0.5	0.4 U	8.8
NBL-01		4/14/2009	<0.01	<0.005	0.11	<0.05	5.83	0.6	0.15	<0.001	<0.1	0.120	8.9	11	19.9	0.03 U	0.1 U	13.4
NBL-01		7/14/2009	<0.01	<0.005	0.34	<0.05	7.58	0.5	0.34	<0.001	<0.1	0.0944	10	12	22	0.9	1.8 U	14.5
NBL-01		10/13/2009	<0.01	<0.005	0.41	<0.05	7.92	1.0	0.41	<0.001	<0.1	0.0708	15	16	31	0.2 U	0.8 U	25.1
NBL-02		1/22/2008	<0.01	<0.005	0.02	<0.05	1.02	0.4	<0.05	<0.001	<0.1	0.361	7.6	26.1	33.7	<0.2	<1	11.7
NBL-02		4/15/2008	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
NBL-02		7/15/2008	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
NBL-02		10/14/2008	<0.01	<0.005	0.04	<0.05	1.29	0.3	0.06	<0.001	<0.1	0.296	7.4	9.1	16.5	-0.4 U	-2 U	9.6
NBL-02		1/20/2009	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
NBL-02		4/14/2009	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
NBL-02		7/14/2009	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
NBL-02		10/13/2009	<0.01	<0.005	0.04	<0.05	1.38	0.3	0.05	<0.001	<0.1	0.206	6.4	11	17.4	-0.02 U	0.5 U	7.2
NW-1		7/14/2009	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
NW-1		10/13/2009	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
NW-2		7/14/2009	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
NW-2		10/13/2009	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
NW-3		7/14/2009	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
NW-3		10/13/2009	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
NW-4		7/14/2009	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
NW-4		10/13/2009	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
NW-5		7/14/2009	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
NW-5		10/13/2009	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
PB-02		1/22/2008	< 0.01	< 0.005	0.26	< 0.05	5.59	0.5	0.32	< 0.001	< 0.1	0.102	15.6	12.1	27.7	< 0.2	< 1	17.5
PB-02		4/15/2008	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
PB-02		7/15/2008	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
PB-02		10/14/2008	< 0.01	< 0.005	0.3	< 0.05	5.17	0.2	0.36	< 0.001	< 0.1	0.048	12	11	23	0.3	0.3 U	16.5
PB-02		1/20/2009	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
PB-02		4/14/2009	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
PB-02		7/14/2009	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
PB-02		10/13/2009	<0.01	<0.005	0.38	<0.05	5.49	0.5	0.49	<0.001	<0.1	0.0680	14	15	29	1.5	1.6 U	19.4
PB-03		1/22/2008	< 0.01	< 0.005	0.14	< 0.05	7.67	0.5	0.17	0.001	< 0.1	0.138	13.7	15.3	29	< 0.2	< 1	13.1
PB-03		4/15/2008	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
PB-03		7/15/2008	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

CHESTER ENGINEERS

TABLE B.1

Zone 3 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
PB-03		10/30/2008	6,810.91	5.98	6.95	4000	654	238 D	145 D	13	203	2820 D	53	8.1	< 0.1	< 0.5	2.3	0.02
PB-03		1/20/2009	6,810.53	5.41	3.6	4250	no data	no data	no data	no data	<1	no data	46	no data	no data	no data	no data	no data
PB-03		4/14/2009	6,809.88	6.21	6.79	3940	no data	no data	no data	no data	132	no data	51	no data	no data	no data	no data	no data
PB-03		7/14/2009	6,809.03	6.45	7.50	3850 H	no data	no data	no data	no data	242	no data	46	no data	no data	no data	no data	no data
PB-03		10/13/2009	6,808.36	6.26	6.65	3910 H	588	236	133	10	32	2460 D	39 H	5.79	<0.1	<0.50	1.9	<0.001
PB-04		1/22/2008	6,812.50	6.41	6.63	3710	no data	no data	no data	no data	296	no data	58	no data	no data	no data	no data	no data
PB-04		4/15/2008	6,812.39	6.18	6.54	3550	no data	no data	no data	no data	133	no data	54	no data	no data	no data	no data	no data
PB-04		7/15/2008	6,811.89	6.39	7.08	3900	no data	no data	no data	no data	270	no data	43	no data	no data	no data	no data	no data
PB-04		1/20/2009	6,810.73	4.02	3.84	3570	no data	no data	no data	no data	<1	no data	49	no data	no data	no data	no data	no data
PB-04		4/14/2009	6,810.28	2.88	2.89	4680	no data	no data	no data	no data	<1	no data	30	no data	no data	no data	no data	no data
PB-04		7/14/2009	6,809.98	2.5	2.78	4640 H	no data	no data	no data	no data	<5	no data	38	no data	no data	no data	no data	no data
RW-11		1/23/2008	6,811.70	6.23	6.57	3640	545 D	219	107	10.5	268	2220 D	45 D	5.8 D	0.1	<0.5	<0.1	<0.001
RW-11		10/14/2008	6,823.59	5.74	6.43	3780	541	241	132 D	10	247	2520 D	41	5.1 D	<0.1	<0.5	0.1	0.004
RW-11		10/13/2009	6,818.18	5.90	7.45	3800 H	547	259	130	10	238	2530 D	32	2.99	<0.1	<0.50	<0.1	<0.001
RW-A		1/23/2008	6,802.73	6.27	6.81	3590	599 D	192	117	9.6	378	2080 D	47 D	3.88	0.2	<0.5	<0.1	0.001
RW-A		7/15/2008	6,814.28	6.38	6.6	3660	no data	no data	no data	no data	360	no data	39	no data	no data	no data	no data	no data
RW-A		10/14/2008	6,814.63	6.37	6.61	3740	608	223	136 D	9	327	2560 D	41	3	<0.1	<0.5	<0.1	<0.001
RW-A		1/20/2009	6,818.13	6.25	7.12	3530	no data	no data	no data	no data	329	no data	23	no data	no data	no data	no data	no data
RW-A		4/14/2009	6,817.83	6.36	6.62	3820	no data	no data	no data	no data	339	no data	38	no data	no data	no data	no data	no data
RW-A		7/14/2009	6,816.68	6.3	6.74	3880 H	no data	no data	no data	no data	303	no data	37	no data	no data	no data	no data	no data
RW-A		10/13/2009	6,804.13	5.80	6.99	3950 H	607	254	135	10	281	2640 D	46	3.06	0.2	<0.50	<0.1	<0.001

TABLE B.1

Zone 3 Data Summary, 1989-2009

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**	**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**
PB-03		10/30/2008	< 0.01	< 0.005	0.54	< 0.05	7.42	0.4	0.42	< 0.001	< 0.1	0.193	16	12	28	0.4	-3 U	20.5
PB-03		1/20/2009	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
PB-03		4/14/2009	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
PB-03		7/14/2009	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
PB-03		10/13/2009	<0.01	<0.005	0.24	<0.05	5.75	0.2	0.26	<0.001	<0.1	0.113	14	13	27	2.4	0.2 U	14.0
PB-04		1/22/2008	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
PB-04		4/15/2008	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
PB-04		7/15/2008	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
PB-04		1/20/2009	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
PB-04		4/14/2009	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
PB-04		7/14/2009	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
RW-11		1/23/2008	<0.01	<0.005	0.15	<0.05	4.83	0.2	0.18	<0.001	<0.1	0.131	12.4	16.6	29	<0.2	<1	14.2
RW-11		10/14/2008	<0.01	<0.005	0.15	<0.05	4.93	0.3	0.17	<0.001	<0.1	0.13	18	20	38	0.1 U	-0.2 U	12.8
RW-11		10/13/2009	<0.01	<0.005	0.16	<0.05	4.27	0.2	0.18	<0.001	<0.1	0.134	9.3	13	22.3	-0.004 U	0.4 U	10
RW-A		1/23/2008	<0.01	<0.005	0.09	<0.05	3.95	0.2	0.12	<0.001	<0.1	0.162	14.7	21.8	36.5	<0.2	<1	15
RW-A		7/15/2008	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
RW-A		10/14/2008	<0.01	<0.005	0.12	<0.05	4.24	0.2	0.16	<0.001	<0.1	0.133	11	14	25	0 U	1.1 U	17.7
RW-A		1/20/2009	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
RW-A		4/14/2009	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
RW-A		7/14/2009	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
RW-A		10/13/2009	<0.01	<0.005	0.16	<0.05	4.70	0.2	0.18	<0.001	<0.1	0.111	14	18	32	0.1 U	-1 U	13.1

CHESTER ENGINEERS

Laboratory Analytical Data
2009

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Zone 3 Monitor Wells

Well ID:		EPA-14	EPA-14	EPA-14	EPA-14
Collection Date:		10/6/2009	7/7/2009	4/7/2009	1/13/2009
Receive Date:		10/9/2009	7/10/2009	4/10/2009	1/16/2009
Report Date:		11/18/2009	8/10/2009	6/5/2009	3/16/2009
Analyte	**Units**	**C09100423-001**	**C09070425-002**	**C09040401-002**	**C09010566-002**
Bicarbonate as HCO3	mg/L	ND(1)	ND(1)	ND(1)	ND(1)
Calcium	mg/L	533	482	474	441
Chloride	mg/L	71	67	46	56
Magnesium	mg/L	469	503	478	522
Nitrogen, Ammonia as N	mg/L	41.4	50	44.4	78
Nitrogen, Nitrate+Nitrite as N	mg/L	6.2	15.5	7.9	20.6
Potassium	mg/L	12	11	11	10
Sodium	mg/L	170	172	180	188
Sulfate	mg/L	4110	4130	3950	3600
pH	s.u.	4.36	4.22	4.34	4.28
Solids, Total Dissolved TDS @ 180 C	mg/L	5610	6190	5480	6620
Aluminum	mg/L	50.5	94.2	52.2	124
Beryllium	mg/L	ND(0.08)	0.07	0.04	0.08
Cadmium	mg/L	0.007	0.010	0.008	0.010
Cobalt	mg/L	0.53	0.66	0.63	0.98
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	15.7	15.6	16.9	20.1
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	0.50	0.65	0.56	0.83
Uranium	mg/L	0.0068	0.0116	0.0089	0.0137
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	17.3	19.9	14.2	23.6
Gross Alpha minus Rn & U Precision (±)	pCi/L	1.3	1.4	1.4	1.5
Gross Alpha minus Rn & U MDC	pCi/L	0.4	0.4	0.6	0.3
Lead 210	pCi/L	-0.3	4.2	-1	0.0
Lead 210 precision (±)	pCi/L	1.5	1.6	1.9	2.6
Lead 210 MDC	pCi/L	2.6	2.6	3.3	4.3
Radium 226	pCi/L	6.5	9.2	6.7	12
Radium 226 precision (±)	pCi/L	0.48	0.61	0.42	0.62
Radium 226 MDC	pCi/L	0.17	0.18	0.12	0.16
Radium 228	pCi/L	13	23	13	24
Radium 228 precision (±)	pCi/L	1.1	1.5	1.0	1.5
Radium 228 MDC	pCi/L	1.1	1.3	0.97	1.2
Thorium 230	pCi/L	-0.1	0.4	0.5	0.6
Thorium 230 precision (±)	pCi/L	0.1	0.7	0.5	1.7
Thorium 230 MDC	pCi/L	0.4	1.3	0.8	
A/C Balance (± 5)	%	-4.15	-2.53	1.82	8.72
Anions	meq/L	88.1	89.0	84.2	78.0
Cations	meq/L	81.1	84.7	87.3	92.9
Solids, Total Dissolved Calculated	mg/L	5420	5470	5200	4950
TDS Balance (0.80 - 1.20)		1.04	1.13	1.05	1.34
Trihalomethanes, Total	ug/L	1.24	0.50	1.19	ND(0.50)

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Zone 3 Monitor Wells

Well ID:		613	613	613	613
Collection Date:		10/7/2009	7/7/2009	4/7/2009	1/12/2009
Receive Date:		10/9/2009	7/10/2009	4/10/2009	1/16/2009
Report Date:		11/18/2009	8/10/2009	6/5/2009	3/16/2009
Analyte	**Units**	**C09100423-002**	**C09070425-001**	**C09040401-001**	**C09010566-001**
Bicarbonate as HCO3	mg/L	ND(1)	ND(1)	ND(1)	ND(1)
Calcium	mg/L	433	425	407	402
Chloride	mg/L	212	193	81	102
Magnesium	mg/L	691	696	674	680
Nitrogen, Ammonia as N	mg/L	241	243	228	353
Nitrogen, Nitrate+Nitrite as N	mg/L	7.5	7.4	4.0	8.1
Potassium	mg/L	ND(1)	ND(1)	ND(1)	ND(1)
Sodium	mg/L	262	259	271	270
Sulfate	mg/L	8690	9360	9360	8180
pH	s.u.	3.06	2.87	3.07	3.09
Solids, Total Dissolved TDS @ 180 C	mg/L	12400	12500	12600	13000
Aluminum	mg/L	635	745	660	682
Beryllium	mg/L	0.19	0.18	0.17	0.14
Cadmium	mg/L	0.030	0.036	0.038	0.031
Cobalt	mg/L	1.71	1.58	1.98	1.55
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	55.3	64.6	55.9	46.2
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	1.67	1.68	1.76	1.54
Uranium	mg/L	1.15	1.19	1.21	1.09
Vanadium	mg/L	2.1	1.9	2.3	1.9
Arsenic-III	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Selenium-IV	mg/L	0.001	ND(0.001)	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	35.6	43.7	52.9	30.1
Gross Alpha minus Rn & U Precision (±)	pCi/L	1.8	2.1	2.7	1.7
Gross Alpha minus Rn & U MDC	pCi/L	0.4	0.4	0.6	0.3
Lead 210	pCi/L	-0.2	4.2	-1	0.4
Lead 210 precision (±)	pCi/L	1.5	1.6	1.9	2.6
Lead 210 MDC	pCi/L	2.6	2.6	3.3	4.3
Radium 226	pCi/L	14	7.3	4.4	8.3
Radium 226 precision (±)	pCi/L	0.71	0.69	0.37	0.52
Radium 226 MDC	pCi/L	0.11	0.27	0.14	0.16
Radium 228	pCi/L	1.2	0.16	0.78	0.73
Radium 228 precision (±)	pCi/L	0.96	1.2	0.71	0.75
Radium 228 MDC	pCi/L	1.5	2.0	1.1	1.2
Thorium 230	pCi/L	324	432	452	677
Thorium 230 precision (±)	pCi/L	88.9	56.3	67.2	73.6
Thorium 230 MDC	pCi/L	3.0	1.4	1.4	
A/C Balance (± 5)	%	3.61	-1.47	7.41	6.83
Anions	meq/L	187	201	197	174
Cations	meq/L	201	195	229	199
Solids, Total Dissolved Calculated	mg/L	10300	11000	10800	9850
TDS Balance (0.80 - 1.20)		1.20	1.14	1.18	1.30
Trihalomethanes, Total	ug/L	99.2	71.6	89.6	94.8

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Zone 3 Monitor Wells

Well ID:		517	517	517	517
Collection Date:		10/12/2009	7/13/2009	4/13/2009	1/19/2009
Receive Date:		10/15/2009	7/17/2009	4/17/2009	1/23/2009
Report Date:		11/30/2009	8/25/2009	6/4/2009	3/18/2009
Analyte	**Units**	**C09100637-001**	**C09070725-007**	**C09040593-001**	**C09010817-001**
Bicarbonate as HCO3	mg/L	ND(1)	ND(1)	ND(1)	ND(1)
Calcium	mg/L	442	465	435	441
Chloride	mg/L	35	45	34	38
Magnesium	mg/L	437	450	434	447
Nitrogen, Ammonia as N	mg/L	10.7	5.6	8.2	4.92
Nitrogen, Nitrate+Nitrite as N	mg/L	0.1	ND(0.1)	0.1	ND(0.1)
Potassium	mg/L	12	12	10	12
Sodium	mg/L	142	145	144	156
Sulfate	mg/L	3360	3690	3450	3100
pH	s.u.	3.59	3.23	3.13	3.23
Solids, Total Dissolved TDS @ 180 C	mg/L	5320	5320	5190	5350
Aluminum	mg/L	6.1	5.0	6.1	5.7
Beryllium	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Cadmium	mg/L	0.009	0.009	0.009	0.009
Cobalt	mg/L	0.86	0.81	0.80	0.81
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	9.91	9.27	9.09	9.06
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	0.88	0.87	0.83	0.84
Uranium	mg/L	0.0585	0.0538	0.0558	0.0485
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)	0.002
Gross Alpha minus Rn & U	pCi/L	18.6	16.4	18.0	15.1
Gross Alpha minus Rn & U Precision (±)	pCi/L	2.0	1.4	1.4	1.7
Gross Alpha minus Rn & U MDC	pCi/L	0.9	0.5	0.4	0.9
Lead 210	pCi/L	3.2	1.2	0.4	1.4
Lead 210 precision (±)	pCi/L	2.2	1.4	2.1	3.4
Lead 210 MDC	pCi/L	3.7	2.4	3.6	5.6
Radium 226	pCi/L	6.8	7.2	5.1	8.0
Radium 226 precision (±)	pCi/L	0.52	0.43	0.39	0.58
Radium 226 MDC	pCi/L	0.18	0.09	0.15	0.24
Radium 228	pCi/L	13	13	14	14
Radium 228 precision (±)	pCi/L	1.1	1.2	1.0	1.3
Radium 228 MDC	pCi/L	1.1	1.2	0.94	1.3
Thorium 230	pCi/L	1.1	0.4	0.8	0.6
Thorium 230 precision (±)	pCi/L	0.3	0.3	0.3	0.4
Thorium 230 MDC	pCi/L	0.1	0.5	0.3	
A/C Balance (± 5)	%	1.66	-2.93	-1.33	4.91
Anions	meq/L	70.9	78.2	72.8	65.6
Cations	meq/L	73.3	73.7	70.9	72.3
Solids, Total Dissolved Calculated	mg/L	4460	4850	4540	4220
TDS Balance (0.80 - 1.20)		1.19	1.10	1.14	1.27
Trihalomethanes, Total	ug/L	4.72	5.08	5.44	6.20

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Zone 3 Monitor Wells

Well ID:		708	708	708	708
Collection Date:		10/12/2009	7/13/2009	4/13/2009	1/19/2009
Receive Date:		10/15/2009	7/17/2009	4/17/2009	1/23/2009
Report Date:		11/30/2009	9/9/2009	6/4/2009	3/18/2009
Analyte	**Units**	**C09100637-002**	**C09070701-001**	**C09040593-002**	**C09010817-002**
Bicarbonate as HCO3	mg/L	ND(1)	ND(1)	ND(1)	ND(1)
Calcium	mg/L	420	436	425	450
Chloride	mg/L	25	30	25	21
Magnesium	mg/L	563	562	547	594
Nitrogen, Ammonia as N	mg/L	1.60	0.86	0.97	0.46
Nitrogen, Nitrate+Nitrite as N	mg/L	0.2	ND(0.1)	ND(0.1)	ND(0.1)
Potassium	mg/L	13	13	12	13
Sodium	mg/L	112	110	115	119
Sulfate	mg/L	3770	4210	4100	4190
pH	s.u.	3.74	3.03	2.99	3.00
Solids, Total Dissolved TDS @ 180 C	mg/L	4880	6170	6010	6130
Aluminum	mg/L	11.6	12.3	12.6	11.3
Beryllium	mg/L	0.02	0.02	0.02	0.01
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	0.44	0.42	0.36	0.37
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	12.5	12.1	11.4	11.6
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	0.45	0.42	0.39	0.37
Uranium	mg/L	0.0423	0.0426	0.0465	0.0392
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)	0.001	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	18.3	16.5	16.0	14.5
Gross Alpha minus Rn & U Precision (±)	pCi/L	1.9	1.4	1.4	1.7
Gross Alpha minus Rn & U MDC	pCi/L	0.9	0.4	0.4	0.9
Lead 210	pCi/L	1.9	0.7	0.0	0.6
Lead 210 precision (±)	pCi/L	2.3	1.9	2.1	3.4
Lead 210 MDC	pCi/L	3.8	3.2	3.6	5.6
Radium 226	pCi/L	9.1	10	6.4	9.5
Radium 226 precision (±)	pCi/L	0.63	0.61	0.43	0.63
Radium 226 MDC	pCi/L	0.20	0.17	0.14	0.24
Radium 228	pCi/L	7.4	1.4	5.9	6.1
Radium 228 precision (±)	pCi/L	1.0	0.62	0.78	1.0
Radium 228 MDC	pCi/L	1.2	0.93	0.92	1.3
Thorium 230	pCi/L	0.04	-0.08	0.05	0.2
Thorium 230 precision (±)	pCi/L	0.1	0.4	0.2	0.7
Thorium 230 MDC	pCi/L	0.2	1.0	0.4	
A/C Balance (± 5)	%	2.82	-1.74	-1.45	-0.631
Anions	meq/L	79.2	88.4	86.1	87.9
Cations	meq/L	83.8	85.4	83.6	86.8
Solids, Total Dissolved Calculated	mg/L	4900	5390	5260	5390
TDS Balance (0.80 - 1.20)		1.00	1.14	1.14	1.14
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: Zone 3 Monitor Wells					
Well ID:		711	711	711	711
Collection Date:		10/12/2009	7/13/2009	1/19/2009	10/13/2008
Receive Date:		10/15/2009	7/17/2009	1/23/2009	10/17/2008
Report Date:		11/30/2009	9/9/2009	3/18/2009	11/20/2008
Analyte	Units	C09100637-003	C09070701-002	C09040593-003	C09010817-003
Bicarbonate as HCO3	mg/L	ND(1)	ND(1)	ND(1)	ND(1)
Calcium	mg/L	480	478	445	493
Chloride	mg/L	19	31	16	14
Magnesium	mg/L	472	458	455	499
Nitrogen, Ammonia as N	mg/L	0.47	0.32	0.27	0.31
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Potassium	mg/L	11	10	9	11
Sodium	mg/L	100	92	96	101
Sulfate	mg/L	3620	3560	3410	3350
pH	s.u.	4.07	3.21	3.20	3.34
Solids, Total Dissolved TDS @ 180 C	mg/L	4960	4940	5020	5050
Aluminum	mg/L	0.3	0.3	0.3	0.3
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	0.32	0.32	0.33	0.32
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	5.77	5.92	5.78	5.81
Molybdenum	mg/L	0.2	0.1	0.1	0.1
Nickel	mg/L	0.30	0.29	0.30	0.32
Uranium	mg/L	0.0167	0.0169	0.0161	0.0175
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)	0.008	0.008
Selenium-IV	mg/L	ND(0.001)	0.004	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	7.0	9.3	8.7	7.0
Gross Alpha minus Rn & U Precision (±)	pCi/L	1.3	1.1	1.0	1.3
Gross Alpha minus Rn & U MDC	pCi/L	0.9	0.4	0.4	0.9
Lead 210	pCi/L	1.5	1.4	-1	0.8
Lead 210 precision (±)	pCi/L	2.2	1.9	2.1	6.7
Lead 210 MDC	pCi/L	3.7	3.2	3.6	11.3
Radium 226	pCi/L	4.0	4.3	3.6	4.0
Radium 226 precision (±)	pCi/L	0.42	0.41	0.34	0.40
Radium 226 MDC	pCi/L	0.20	0.19	0.15	0.21
Radium 228	pCi/L	12	12	10	13
Radium 228 precision (±)	pCi/L	1.2	1.1	0.94	1.1
Radium 228 MDC	pCi/L	1.2	1.1	0.95	1.2
Thorium 230	pCi/L	0.04	0.08	0.9	-0.1
Thorium 230 precision (±)	pCi/L	0.08	0.2	0.4	0.3
Thorium 230 MDC	pCi/L	0.1	0.4	0.3	
A/C Balance (± 5)	%	-3.01	-4.54	-2.30	2.86
Anions	meq/L	75.9	74.9	71.5	70.2
Cations	meq/L	71.5	68.4	68.3	74.3
Solids, Total Dissolved Calculated	mg/L	4710	4640	4440	4470
TDS Balance (0.80 - 1.20)		1.05	1.06	1.13	1.13
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: Zone 3 Monitor Wells					
Well ID:		711 Duplicate	711 Duplicate	711 Duplicate	711 Duplicate
Collection Date:		10/12/2009	7/13/2009	4/13/2009	1/19/2009
Receive Date:		10/15/2009	7/17/2009	4/17/2009	1/23/2009
Report Date:		11/30/2009	9/9/2009	6/4/2009	3/18/2009
Analyte	Units	C09100637-004	C09070701-003	C09040593-004	C09010817-004
Bicarbonate as HCO3	mg/L	3	1	11	6
Calcium	mg/L	489	482	484	506
Chloride	mg/L	16	17	13	12
Magnesium	mg/L	475	453	481	517
Nitrogen, Ammonia as N	mg/L	0.41	0.32	0.30	0.21
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Potassium	mg/L	11	11	11	11
Sodium	mg/L	94	93	104	102
Sulfate	mg/L	3550	3440	3440	3320
pH	s.u.	5.26	4.82	4.82	5.15
Solids, Total Dissolved TDS @ 180 C	mg/L	4890	4990	4960	5070
Aluminum	mg/L	0.4	0.2	0.3	0.3
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	0.32	0.32	0.33	0.33
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	5.70	5.56	5.82	5.89
Molybdenum	mg/L	0.2	0.1	0.2	0.2
Nickel	mg/L	0.29	0.28	0.31	0.32
Uranium	mg/L	0.0161	0.0150	0.0159	0.0170
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	0.002	ND(0.001)	0.013	0.008
Selenium-IV	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	8.2	7.2	10.3	8.7
Gross Alpha minus Rn & U Precision (±)	pCi/L	1.4	1	1.1	1.4
Gross Alpha minus Rn & U MDC	pCi/L	0.9	0.4	0.4	0.9
Lead 210	pCi/L	1.9	-0.2	-1	1.1
Lead 210 precision (±)	pCi/L	2.2	1.9	2.1	3.4
Lead 210 MDC	pCi/L	3.7	3.2	3.6	5.6
Radium 226	pCi/L	4.8	3.9	3.7	4.7
Radium 226 precision (±)	pCi/L	0.45	0.40	0.35	0.42
Radium 226 MDC	pCi/L	0.20	0.19	0.15	0.20
Radium 228	pCi/L	11	12	12	13
Radium 228 precision (±)	pCi/L	1.1	1.1	1.0	1.1
Radium 228 MDC	pCi/L	1.2	1.1	0.98	1.2
Thorium 230	pCi/L	0.05	-0.08	0.6	0.0
Thorium 230 precision (±)	pCi/L	0.1	0.2	0.3	0.3
Thorium 230 MDC	pCi/L	0.2	0.5	0.3	
A/C Balance (± 5)	%	-4.56	-4.63	-2.61	2.13
Anions	meq/L	74.4	72.1	72.2	69.5
Cations	meq/L	67.9	65.7	68.6	72.5
Solids, Total Dissolved Calculated	mg/L	4650	4500	4550	4470
TDS Balance (0.80 - 1.20)		1.05	1.11	1.09	1.13
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: Zone 3 Monitor Wells

Well ID:		EPA-13	EPA-13	EPA-13	EPA-13
Collection Date:		10/13/2009	7/14/2009	4/14/2009	1/20/2009
Receive Date:		10/15/2009	7/17/2009	4/17/2009	1/23/2009
Report Date:		11/30/2009	9/9/2009	6/4/2009	3/18/2009
Analyte	**Units**	**C09100637-005**	**C09070701-004**	**C09040593-005**	**C09010817-007**
Bicarbonate as HCO3	mg/L	62	52	65	73
Calcium	mg/L	495	478	455	472
Chloride	mg/L	49	41	39	35
Magnesium	mg/L	788	784	778	800
Nitrogen, Ammonia as N	mg/L	0.34	0.25	0.31	0.16
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Potassium	mg/L	13	13	11	13
Sodium	mg/L	141	135	145	157
Sulfate	mg/L	4620	4760	4620	4580
pH	s.u.	6.75	6.50	6.13	6.62
Solids, Total Dissolved TDS @ 180 C	mg/L	6550	7010	6490	6560
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	0.07	0.06	0.06	0.05
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	6.98	6.88	6.52	6.20
Molybdenum	mg/L	0.2	0.3	0.2	0.2
Nickel	mg/L	0.17	0.16	0.16	0.15
Uranium	mg/L	0.0145	0.0183	0.0116	0.0114
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	0.003	0.020	0.045	0.049
Selenium-IV	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	7.4	8.0	8.0	5.1
Gross Alpha minus Rn & U Precision (±)	pCi/L	1.3	1.0	1	1.1
Gross Alpha minus Rn & U MDC	pCi/L	0.9	0.4	0.4	0.9
Lead 210	pCi/L	0.3	3.3	-1	-1
Lead 210 precision (±)	pCi/L	2.3	1.9	2.1	3.3
Lead 210 MDC	pCi/L	3.8	3.2	3.6	5.6
Radium 226	pCi/L	4.9	4.1	3.9	4.3
Radium 226 precision (±)	pCi/L	0.48	0.37	0.36	0.38
Radium 226 MDC	pCi/L	0.21	0.16	0.16	0.18
Radium 228	pCi/L	8.2	7.3	6.7	8.1
Radium 228 precision (±)	pCi/L	1.1	0.89	0.88	1.0
Radium 228 MDC	pCi/L	1.3	1.0	1.0	1.2
Thorium 230	pCi/L	-0.006	-0.06	-0.07	0.3
Thorium 230 precision (±)	pCi/L	0.06	0.3	0.2	0.9
Thorium 230 MDC	pCi/L	0.1	0.6	0.5	
A/C Balance (± 5)	%	-1.27	-3.39	-2.57	-0.521
Anions	meq/L	98.5	101	98.3	97.6
Cations	meq/L	96.0	94.5	93.4	96.6
Solids, Total Dissolved Calculated	mg/L	6130	6270	6100	6130
TDS Balance (0.80 - 1.20)		1.07	1.12	1.06	1.07
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: Zone 3 Monitor Wells

Well ID:		504-B	504-B	504-B	504-B
Collection Date:		10/13/2009	7/14/2009	4/14/2009	1/20/2009
Receive Date:		10/15/2009	7/17/2009	4/17/2009	1/23/2009
Report Date:		11/30/2009	9/9/2009	6/4/2009	3/18/2009
Analyte	**Units**	**C09100637-006**	**C09070701-005**	**C09040593-006**	**C09010817-008**
Bicarbonate as HCO3	mg/L	ND(1)	ND(1)	ND(1)	ND(1)
Calcium	mg/L	494	474	449	466
Chloride	mg/L	31	27	26	21
Magnesium	mg/L	589	597	581	618
Nitrogen, Ammonia as N	mg/L	0.61	0.55	0.42	0.49
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Potassium	mg/L	12	12	11	13
Sodium	mg/L	142	147	152	167
Sulfate	mg/L	4100	4020	3930	4140
pH	s.u.	3.68	3.69	3.60	3.44
Solids, Total Dissolved TDS @ 180 C	mg/L	5690	5980	5580	5750
Aluminum	mg/L	2.7	4.6	4.8	5.2
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	0.21	0.22	0.22	0.24
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	6.06	6.44	6.46	6.83
Molybdenum	mg/L	3.3	6.0	7.3	9.0
Nickel	mg/L	0.25	0.25	0.26	0.27
Uranium	mg/L	0.0498	0.0505	0.0498	0.0572
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)	0.020	0.028
Selenium-IV	mg/L	ND(0.001)	0.001	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	15.4	19.2	17.1	18.6
Gross Alpha minus Rn & U Precision (±)	pCi/L	1.7	1.5	1.4	1.9
Gross Alpha minus Rn & U MDC	pCi/L	1	0.4	0.4	0.9
Lead 210	pCi/L	4.2	1.9	-0.6	0.6
Lead 210 precision (±)	pCi/L	2.3	1.9	2.1	3.4
Lead 210 MDC	pCi/L	3.8	3.2	3.6	5.6
Radium 226	pCi/L	14	11	8.9	14
Radium 226 precision (±)	pCi/L	0.77	0.56	0.52	0.70
Radium 226 MDC	pCi/L	0.21	0.15	0.15	0.20
Radium 228	pCi/L	18	17	15	21
Radium 228 precision (±)	pCi/L	1.4	1.1	1.1	1.4
Radium 228 MDC	pCi/L	1.3	1.0	0.97	1.2
Thorium 230	pCi/L	0.1	0.06	0.2	-0.1
Thorium 230 precision (±)	pCi/L	0.09	0.2	0.2	0.6
Thorium 230 MDC	pCi/L	0.08	0.5	0.2	
A/C Balance (± 5)	%	-0.531	-2.03	-2.18	-0.879
Anions	meq/L	86.2	84.4	82.6	86.7
Cations	meq/L	85.3	81.1	79.1	85.2
Solids, Total Dissolved Calculated	mg/L	5370	5310	5170	5450
TDS Balance (0.80 - 1.20)		1.06	1.13	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: Zone 3 Monitor Wells					
Well ID:		719	719	719	719
Collection Date:		10/13/2009	7/14/2009	4/14/2009	1/19/2009
Receive Date:		10/15/2009	7/17/2009	4/17/2009	1/23/2009
Report Date:		11/30/2009	9/9/2009	6/4/2009	3/18/2009
Analyte	Units	C09100637-007	C09070701-006	C09040593-007	C09010817-005
Bicarbonate as HCO3	mg/L	ND(1)	ND(1)	ND(1)	ND(1)
Calcium	mg/L	531	483	459	493
Chloride	mg/L	31	33	30	31
Magnesium	mg/L	548	454	432	419
Nitrogen, Ammonia as N	mg/L	0.97	0.44	0.43	0.14
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.1)	ND(0.1)	0.1	0.2
Potassium	mg/L	13	12	23	13
Sodium	mg/L	142	134	145	142
Sulfate	mg/L	3960	3620	3270	3230
pH	s.u.	3.66	3.57	3.62	3.46
Solids, Total Dissolved TDS @ 180 C	mg/L	5560	5090	4860	4850
Aluminum	mg/L	2.4	14.2	12.4	22.0
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	0.61	0.77	0.70	0.72
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	6.26	7.08	6.43	6.68
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	0.67	0.80	0.75	0.86
Uranium	mg/L	0.0227	0.0966	0.0770	0.127
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	4.0	6.9	7.6	7.7
Gross Alpha minus Rn & U Precision (±)	pCi/L	1.0	0.9	0.9	1.3
Gross Alpha minus Rn & U MDC	pCi/L	1	0.4	0.4	0.9
Lead 210	pCi/L	-1	1.0	-2	-0.7
Lead 210 precision (±)	pCi/L	2.2	1.9	2.1	3.3
Lead 210 MDC	pCi/L	3.7	3.2	3.6	5.6
Radium 226	pCi/L	3.2	3.3	2.7	4.2
Radium 226 precision (±)	pCi/L	0.40	0.33	0.30	0.39
Radium 226 MDC	pCi/L	0.23	0.16	0.16	0.20
Radium 228	pCi/L	9.2	12	11	14
Radium 228 precision (±)	pCi/L	1.2	1.0	1.0	1.2
Radium 228 MDC	pCi/L	1.4	0.97	1.0	1.2
Thorium 230	pCi/L	0.04	-0.04	0.1	0.1
Thorium 230 precision (±)	pCi/L	0.09	0.5	0.3	0.6
Thorium 230 MDC	pCi/L	0.2	1.2	0.5	
A/C Balance (± 5)	%	-1.95	-4.03	-1.87	-1.31
Anions	meq/L	83.3	76.3	68.9	68.1
Cations	meq/L	80.2	70.4	66.4	66.4
Solids, Total Dissolved Calculated	mg/L	5230	4750	4370	4330
TDS Balance (0.80 - 1.20)		1.06	1.07	1.11	1.12
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: Zone 3 Monitor Wells

Well ID:		420	420	420	420
Collection Date:		10/13/2009	7/14/2009	4/14/2009	1/20/2009
Receive Date:		10/15/2009	7/17/2009	4/17/2009	1/23/2009
Report Date:		11/30/2009	9/9/2009	6/4/2009	3/18/2009
Analyte	**Units**	**C09100637-008**	**C09070701-007**	**C09040593-008**	**C09010817-009**
Bicarbonate as HCO3	mg/L	467	451	464	458
Calcium	mg/L	654	640	603	664
Chloride	mg/L	46	43	41	39
Magnesium	mg/L	137	133	131	143
Nitrogen, Ammonia as N	mg/L	0.10	ND(0.05)	0.05	ND(0.05)
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Potassium	mg/L	7	7	6	7
Sodium	mg/L	136	136	138	145
Sulfate	mg/L	2030	2060	2020	1860
pH	s.u.	7.69	7.25	6.68	7.10
Solids, Total Dissolved TDS @ 180 C	mg/L	3390	3390	3330	3450
Aluminum	mg/L	ND(0.1)	0.2	0.3	0.8
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	0.02	0.02	0.02
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	2.00	2.16	2.00	2.08
Molybdenum	mg/L	0.3	0.4	0.5	0.5
Nickel	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Uranium	mg/L	0.298	0.284	0.296	0.276
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)	0.007	0.005
Selenium-IV	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	0.002
Gross Alpha minus Rn & U	pCi/L	4.1	4.4	5.7	3.9
Gross Alpha minus Rn & U Precision (±)	pCi/L	1.0	0.8	0.8	1
Gross Alpha minus Rn & U MDC	pCi/L	1	0.4	0.4	0.9
Lead 210	pCi/L	1.3	-0.2	0.0	0.3
Lead 210 precision (±)	pCi/L	2.2	1.9	2.1	3.4
Lead 210 MDC	pCi/L	3.7	3.2	3.6	5.6
Radium 226	pCi/L	3.3	2.4	2.1	3.1
Radium 226 precision (±)	pCi/L	0.40	0.29	0.27	0.37
Radium 226 MDC	pCi/L	0.22	0.17	0.16	0.22
Radium 228	pCi/L	5.0	3.7	3.8	4.9
Radium 228 precision (±)	pCi/L	1.1	0.77	0.77	0.89
Radium 228 MDC	pCi/L	1.4	1.0	1.0	1.2
Thorium 230	pCi/L	0.2	0.05	0.001	0.1
Thorium 230 precision (±)	pCi/L	0.2	0.1	0.1	1.1
Thorium 230 MDC	pCi/L	0.3	0.2	0.3	
A/C Balance (± 5)	%	-1.17	-2.43	-3.82	4.15
Anions	meq/L	51.2	51.4	50.8	47.3
Cations	meq/L	50.0	49.0	47.1	51.4
Solids, Total Dissolved Calculated	mg/L	3250	3250	3180	3080
TDS Balance (0.80 - 1.20)		1.04	1.04	1.05	1.12
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: Zone 3 Monitor Wells

Well ID:		717	717	717	717
Collection Date:		10/13/2009	7/14/2009	4/14/2009	1/19/2009
Receive Date:		10/15/2009	7/17/2009	4/17/2009	1/23/2009
Report Date:		11/30/2009	9/9/2009	6/4/2009	3/18/2009
Analyte	**Units**	**C09100637-009**	**C09070701-008**	**C09040593-009**	**C09010817-006**
Bicarbonate as HCO3	mg/L	ND(1)	ND(1)	ND(1)	ND(1)
Calcium	mg/L	475	454	453	539
Chloride	mg/L	74	68	70	56
Magnesium	mg/L	548	532	502	553
Nitrogen, Ammonia as N	mg/L	77	76.7	56	57.4
Nitrogen, Nitrate+Nitrite as N	mg/L	26.2	27.6	35.1	53.1
Potassium	mg/L	14	14	16	21
Sodium	mg/L	181	179	181	201
Sulfate	mg/L	4520	4440	4060	3970
pH	s.u.	4.30	4.23	4.29	4.44
Solids, Total Dissolved TDS @ 180 C	mg/L	6570	6480	6060	5960
Aluminum	mg/L	145	149	86.2	46.0
Beryllium	mg/L	0.11	0.10	0.07	0.05
Cadmium	mg/L	0.015	0.014	0.015	0.015
Cobalt	mg/L	0.99	0.95	0.93	0.90
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	23.5	21.8	23.9	23.1
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	0.88	0.82	0.84	0.81
Uranium	mg/L	0.0483	0.0377	0.0331	0.0187
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	35.6	34.7	34.5	32.3
Gross Alpha minus Rn & U Precision (±)	pCi/L	2.6	2.1	2.0	2.5
Gross Alpha minus Rn & U MDC	pCi/L	1	0.4	0.4	0.9
Lead 210	pCi/L	-0.1	4.5	2.0	3.0
Lead 210 precision (±)	pCi/L	2.2	2.0	2.2	3.4
Lead 210 MDC	pCi/L	3.7	3.2	3.6	5.6
Radium 226	pCi/L	20	17	21	23
Radium 226 precision (±)	pCi/L	1.1	0.74	0.83	0.92
Radium 226 MDC	pCi/L	0.28	0.17	0.17	0.21
Radium 228	pCi/L	29	25	24	24
Radium 228 precision (±)	pCi/L	2.0	1.3	1.3	1.4
Radium 228 MDC	pCi/L	1.8	1.0	0.99	1.2
Thorium 230	pCi/L	0.003	0.1	-0.2	0.3
Thorium 230 precision (±)	pCi/L	0.2	0.4	0.5	0.7
Thorium 230 MDC	pCi/L	0.4	0.8	1.3	
A/C Balance (± 5)	%	-0.756	-1.84	-2.07	1.10
Anions	meq/L	98.0	96.3	89.0	84.3
Cations	meq/L	96.5	92.8	85.4	86.2
Solids, Total Dissolved Calculated	mg/L	5960	5850	5470	5340
TDS Balance (0.80 - 1.20)		1.10	1.11	1.11	1.12
Trihalomethanes, Total	ug/L	0.55	1.24	1.17	ND(0.50)

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UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Zone 3 Monitor Wells					
Well ID:		NBL-2	NBL-2	NBL-2	NBL-2
Collection Date:		10/13/2009	7/14/2009	4/14/2009	1/20/2009
Receive Date:		10/15/2009	7/17/2009	4/17/2009	1/23/2009
Report Date:		11/30/2009	8/7/2009	4/30/2009	3/18/2009
Analyte	Units	C09100637-010	C090707 11-001	C09040616-001	C09010817-012
Bicarbonate as HCO3	mg/L	345	325	336	331
Calcium	mg/L	620			
Chloride	mg/L	49	38	35	21
Magnesium	mg/L	183			
Nitrogen, Ammonia as N	mg/L	ND(0.05)			
Nitrogen, Nitrate+Nitrite as N	mg/L	19.4			
Potassium	mg/L	7			
Sodium	mg/L	144			
Sulfate	mg/L	2100			
pH	s.u.	7.19	8.07	6.51	6.97
Solids, Total Dissolved TDS @ 180 C	mg/L	3550	3480	3630	3660
Aluminum	mg/L	ND(0.1)			
Beryllium	mg/L	ND(0.01)			
Cadmium	mg/L	ND(0.005)			
Cobalt	mg/L	0.04			
Lead	mg/L	ND(0.05)			
Manganese	mg/L	1.38			
Molybdenum	mg/L	0.3			
Nickel	mg/L	0.05			
Uranium	mg/L	0.206			
Vanadium	mg/L	ND(0.1)			
Arsenic-III	mg/L	ND(0.001)			
Selenium-IV	mg/L	ND(0.001)			
Gross Alpha minus Rn & U	pCi/L	7.2			
Gross Alpha minus Rn & U Precision (±)	pCi/L	1.2			
Gross Alpha minus Rn & U MDC	pCi/L	0.9			
Lead 210	pCi/L	0.5			
Lead 210 precision (±)	pCi/L	2.3			
Lead 210 MDC	pCi/L	3.8			
Radium 226	pCi/L	6.4			
Radium 226 precision (±)	pCi/L	0.50			
Radium 226 MDC	pCi/L	0.19			
Radium 228	pCi/L	11			
Radium 228 precision (±)	pCi/L	1.1			
Radium 228 MDC	pCi/L	1.2			
Thorium 230	pCi/L	-0.02			
Thorium 230 precision (±)	pCi/L	0.09			
Thorium 230 MDC	pCi/L	0.2			
A/C Balance (± 5)	%	0.372			
Anions	meq/L	52.1			
Cations	meq/L	52.4			
Solids, Total Dissolved Calculated	mg/L	3370			
TDS Balance (0.80 - 1.20)		1.05			
Trihalomethanes, Total	ug/L	ND(0.50)			

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Zone 3 Monitor Wells

Well ID:		RW-A	RW-A	RW-A	RW-A
Collection Date:		10/13/2009	7/14/2009	4/14/2009	1/20/2009
Receive Date:		10/15/2009	7/17/2009	4/17/2009	1/23/2009
Report Date:		11/30/2009	8/7/2009	4/30/2009	3/18/2009
Analyte	**Units**	**C09100637-011**	**C09070711-008**	**C09040616-003**	**C09010817-016**
Bicarbonate as HCO3	mg/L	281	303	339	329
Calcium	mg/L	607			
Chloride	mg/L	46	37	38	23
Magnesium	mg/L	254			
Nitrogen, Ammonia as N	mg/L	3.06			
Nitrogen, Nitrate+Nitrite as N	mg/L	0.2			
Potassium	mg/L	10			
Sodium	mg/L	135			
Sulfate	mg/L	2640			
pH	s.u.	6.99	6.74	6.62	7.12
Solids, Total Dissolved TDS @ 180 C	mg/L	3950	3880	3820	3530
Aluminum	mg/L	ND(0.1)			
Beryllium	mg/L	ND(0.01)			
Cadmium	mg/L	ND(0.005)			
Cobalt	mg/L	0.16			
Lead	mg/L	ND(0.05)			
Manganese	mg/L	4.70			
Molybdenum	mg/L	0.2			
Nickel	mg/L	0.18			
Uranium	mg/L	0.111			
Vanadium	mg/L	ND(0.1)			
Arsenic-III	mg/L	ND(0.001)			
Selenium-IV	mg/L	ND(0.001)			
Gross Alpha minus Rn & U	pCi/L	13.1			
Gross Alpha minus Rn & U Precision (±)	pCi/L	1.6			
Gross Alpha minus Rn & U MDC	pCi/L	0.9			
Lead 210	pCi/L	-1			
Lead 210 precision (±)	pCi/L	2.2			
Lead 210 MDC	pCi/L	3.8			
Radium 226	pCi/L	14			
Radium 226 precision (±)	pCi/L	0.70			
Radium 226 MDC	pCi/L	0.18			
Radium 228	pCi/L	18			
Radium 228 precision (±)	pCi/L	1.3			
Radium 228 MDC	pCi/L	1.2			
Thorium 230	pCi/L	0.1			
Thorium 230 precision (±)	pCi/L	0.1			
Thorium 230 MDC	pCi/L	0.2			
A/C Balance (± 5)	%	-3.11			
Anions	meq/L	61.0			
Cations	meq/L	57.3			
Solids, Total Dissolved Calculated	mg/L	3850			
TDS Balance (0.80 - 1.20)		1.03			
Trihalomethanes, Total	ug/L	ND(0.50)			

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Zone 3 Monitor Wells

Well ID:		RW-11	RW-11	RW-11	
Collection Date:		10/13/2009	10/14/2008	1/23/2008	
Receive Date:		10/15/2009	10/17/2008	1/25/2008	
Report Date:		11/30/2009	11/20/2008	4/2/2008	
Analyte	**Units**	**C09100637-012**	**C08100852-006**	**C08011074-017**	
Bicarbonate as HCO3	mg/L	238	247	268	
Calcium	mg/L	547	541	545	
Chloride	mg/L	32	41	45	
Magnesium	mg/L	259	241	219	
Nitrogen, Ammonia as N	mg/L	2.99	5.1	5.8	
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.1)	ND(0.1)	0.1	
Potassium	mg/L	10	10	10.5	
Sodium	mg/L	130	132	107	
Sulfate	mg/L	2530	2520	2220	
pH	s.u.	7.45	6.43	6.57	
Solids, Total Dissolved TDS @ 180 C	mg/L	3800	3780	3640	
Aluminum	mg/L	ND(0.1)	0.1	ND(0.1)	
Beryllium	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	
Cobalt	mg/L	0.16	0.15	0.15	
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	
Manganese	mg/L	4.27	4.93	4.83	
Molybdenum	mg/L	0.2	0.3	0.2	
Nickel	mg/L	0.18	0.17	0.18	
Uranium	mg/L	0.134	0.130	0.131	
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	
Arsenic-III	mg/L	ND(0.001)	0.004	ND(0.001)	
Selenium-IV	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	
Gross Alpha minus Rn & U	pCi/L	10	12.8	14.2	
Gross Alpha minus Rn & U Precision (±)	pCi/L	1.4	1.2	1.2	
Gross Alpha minus Rn & U MDC	pCi/L	0.9	0.4		
Lead 210	pCi/L	0.4	-0.2	ND(1.0)	
Lead 210 precision (±)	pCi/L	2.2	3.0		
Lead 210 MDC	pCi/L	3.7	5.1		
Radium 226	pCi/L	9.3	18	12.4	
Radium 226 precision (±)	pCi/L	0.53	0.89	1.3	
Radium 226 MDC	pCi/L	0.10	0.23		
Radium 228	pCi/L	13	20	16.6	
Radium 228 precision (±)	pCi/L	1.1	1.4	1.5	
Radium 228 MDC	pCi/L	1.0	1.2		
Thorium 230	pCi/L	-0.004	0.1	ND(0.2)	
Thorium 230 precision (±)	pCi/L	0.09	0.9		
Thorium 230 MDC	pCi/L	0.2			
A/C Balance (± 5)	%	-2.61	-4.07	-0.927	
Anions	meq/L	57.4	57.7	51.9	
Cations	meq/L	54.5	53.2	50.9	
Solids, Total Dissolved Calculated	mg/L	3640	3610	3280	
TDS Balance (0.80 - 1.20)		1.04	1.05	1.11	
Trihalomethanes, Total	ug/L	ND(0.50)	ND(0.50)	ND(0.50)	

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Zone 3 Monitor Wells

Well ID:		NBL-1	NBL-1	NBL-1	NBL-1
Collection Date:		10/13/2009	7/14/2009	4/14/2009	1/20/2009
Receive Date:		10/15/2009	7/17/2009	4/17/2009	1/23/2009
Report Date:		11/30/2009	9/9/2009	6/4/2009	3/18/2009
Analyte	**Units**	**C09100637-013**	**C09070701-009**	**C09040593-010**	**C09010817-010**
Bicarbonate as HCO3	mg/L	65	172	260	266
Calcium	mg/L	618	613	553	591
Chloride	mg/L	49	54	78	35
Magnesium	mg/L	274	253	246	263
Nitrogen, Ammonia as N	mg/L	6.7	4.43	5.93	1.99
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Potassium	mg/L	13	13	11	12
Sodium	mg/L	142	140	138	150
Sulfate	mg/L	2950	2510	2420	2290
pH	s.u.	6.26	7.49	6.95	7.38
Solids, Total Dissolved TDS @ 180 C	mg/L	4330	4220	3910	4060
Aluminum	mg/L	0.5	1.5	ND(0.8)	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	0.41	0.34	0.11	0.11
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	7.92	7.58	5.83	5.25
Molybdenum	mg/L	1.0	0.5	0.6	0.7
Nickel	mg/L	0.41	0.34	0.15	0.15
Uranium	mg/L	0.0708	0.0944	0.120	0.144
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)	0.037	0.081
Selenium-IV	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	25.1	14.5	13.4	8.8
Gross Alpha minus Rn & U Precision (±)	pCi/L	2.2	1.4	1.3	1.4
Gross Alpha minus Rn & U MDC	pCi/L	0.9	0.4	0.4	0.9
Lead 210	pCi/L	0.8	1.8	0.1	0.4
Lead 210 precision (±)	pCi/L	2.2	1.9	2.1	3.4
Lead 210 MDC	pCi/L	3.7	3.1	3.6	5.6
Radium 226	pCi/L	15	10	8.9	9.5
Radium 226 precision (±)	pCi/L	0.76	0.58	0.58	0.63
Radium 226 MDC	pCi/L	0.19	0.17	0.19	0.23
Radium 228	pCi/L	16	12	11	14
Radium 228 precision (±)	pCi/L	1.3	1.1	1.0	1.2
Radium 228 MDC	pCi/L	1.2	1.1	1.1	1.2
Thorium 230	pCi/L	0.2	0.9	0.03	0.5
Thorium 230 precision (±)	pCi/L	0.1	0.4	0.3	1.0
Thorium 230 MDC	pCi/L	0.2	0.3	0.6	
A/C Balance (± 5)	%	-3.23	1.41	-2.17	4.49
Anions	meq/L	63.9	56.6	56.9	53.0
Cations	meq/L	59.9	58.2	54.5	58.0
Solids, Total Dissolved Calculated	mg/L	4100	3690	3590	3470
TDS Balance (0.80 - 1.20)		1.06	1.14	1.09	1.17
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.**

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Zone 3 Monitor Wells

Well ID:		PB-3	PB-3	PB-3	PB-3
Collection Date:		10/13/2009	7/14/2009	4/14/2009	1/20/2009
Receive Date:		10/15/2009	7/17/2009	4/17/2009	1/23/2009
Report Date:		11/30/2009	8/7/2009	4/30/2009	3/18/2009
Analyte	**Units**	**C09100637-014**	**C09070711-009**	**C09040616-004**	**C09010817-013**
Bicarbonate as HCO3	mg/L	32	242	132	ND(1)
Calcium	mg/L	588			
Chloride	mg/L	39	46	51	46
Magnesium	mg/L	236			
Nitrogen, Ammonia as N	mg/L	5.79			
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.1)			
Potassium	mg/L	10			
Sodium	mg/L	133			
Sulfate	mg/L	2460			
pH	s.u.	6.65	7.50	6.79	3.60
Solids, Total Dissolved TDS @ 180 C	mg/L	3910	3850	3940	4250
Aluminum	mg/L	1.9			
Beryllium	mg/L	ND(0.01)			
Cadmium	mg/L	ND(0.005)			
Cobalt	mg/L	0.24			
Lead	mg/L	ND(0.05)			
Manganese	mg/L	5.75			
Molybdenum	mg/L	0.2			
Nickel	mg/L	0.26			
Uranium	mg/L	0.113			
Vanadium	mg/L	ND(0.1)			
Arsenic-III	mg/L	ND(0.001)			
Selenium-IV	mg/L	ND(0.001)			
Gross Alpha minus Rn & U	pCi/L	14.0			
Gross Alpha minus Rn & U Precision (±)	pCi/L	1.7			
Gross Alpha minus Rn & U MDC	pCi/L	0.9			
Lead 210	pCi/L	0.2			
Lead 210 precision (±)	pCi/L	2.2			
Lead 210 MDC	pCi/L	3.8			
Radium 226	pCi/L	14			
Radium 226 precision (±)	pCi/L	0.75			
Radium 226 MDC	pCi/L	0.20			
Radium 228	pCi/L	13			
Radium 228 precision (±)	pCi/L	1.1			
Radium 228 MDC	pCi/L	1.1			
Thorium 230	pCi/L	2.4			
Thorium 230 precision (±)	pCi/L	0.7			
Thorium 230 MDC	pCi/L	0.3			
A/C Balance (± 5)	%	2.22			
Anions	meq/L	52.8			
Cations	meq/L	55.2			
Solids, Total Dissolved Calculated	mg/L	3510			
TDS Balance (0.80 - 1.20)		1.11			
Trihalomethanes, Total	ug/L	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.**

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Zone 3 Monitor Wells

Well ID:		PB-2	PB-2	PB-2	PB-2
Collection Date:		10/13/2009	7/14/2009	4/14/2009	1/20/2009
Receive Date:		10/15/2009	7/17/2009	4/17/2009	1/23/2009
Report Date:		11/30/2009	8/7/2009	4/30/2009	3/18/2009
Analyte	**Units**	**C09100637-015**	**C09070711-007**	**C09040616-002**	**C09010817-015**
Bicarbonate as HCO3	mg/L	72	39	43	47
Calcium	mg/L	575			
Chloride	mg/L	28	26	29	32
Magnesium	mg/L	408			
Nitrogen, Ammonia as N	mg/L	1.00			
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.1)			
Potassium	mg/L	11			
Sodium	mg/L	131			
Sulfate	mg/L	3330			
pH	s.u.	6.33	5.74	5.47	5.65
Solids, Total Dissolved TDS @ 180 C	mg/L	4760	4580	4470	3950
Aluminum	mg/L	1.9			
Beryllium	mg/L	ND(0.01)			
Cadmium	mg/L	ND(0.005)			
Cobalt	mg/L	0.38			
Lead	mg/L	ND(0.05)			
Manganese	mg/L	5.49			
Molybdenum	mg/L	0.5			
Nickel	mg/L	0.49			
Uranium	mg/L	0.0680			
Vanadium	mg/L	ND(0.1)			
Arsenic-III	mg/L	ND(0.001)			
Selenium-IV	mg/L	ND(0.001)			
Gross Alpha minus Rn & U	pCi/L	19.4			
Gross Alpha minus Rn & U Precision (±)	pCi/L	1.9			
Gross Alpha minus Rn & U MDC	pCi/L	0.9			
Lead 210	pCi/L	1.6			
Lead 210 precision (±)	pCi/L	2.3			
Lead 210 MDC	pCi/L	3.9			
Radium 226	pCi/L	14			
Radium 226 precision (±)	pCi/L	0.73			
Radium 226 MDC	pCi/L	0.19			
Radium 228	pCi/L	15			
Radium 228 precision (±)	pCi/L	1.1			
Radium 228 MDC	pCi/L	1.0			
Thorium 230	pCi/L	1.5			
Thorium 230 precision (±)	pCi/L	0.8			
Thorium 230 MDC	pCi/L	0.6			
A/C Balance (± 5)	%	-2.08			
Anions	meq/L	71.2			
Cations	meq/L	68.3			
Solids, Total Dissolved Calculated	mg/L	4540			
TDS Balance (0.80 - 1.20)		1.05			
Trihalomethanes, Total	ug/L	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.**

Appendix C

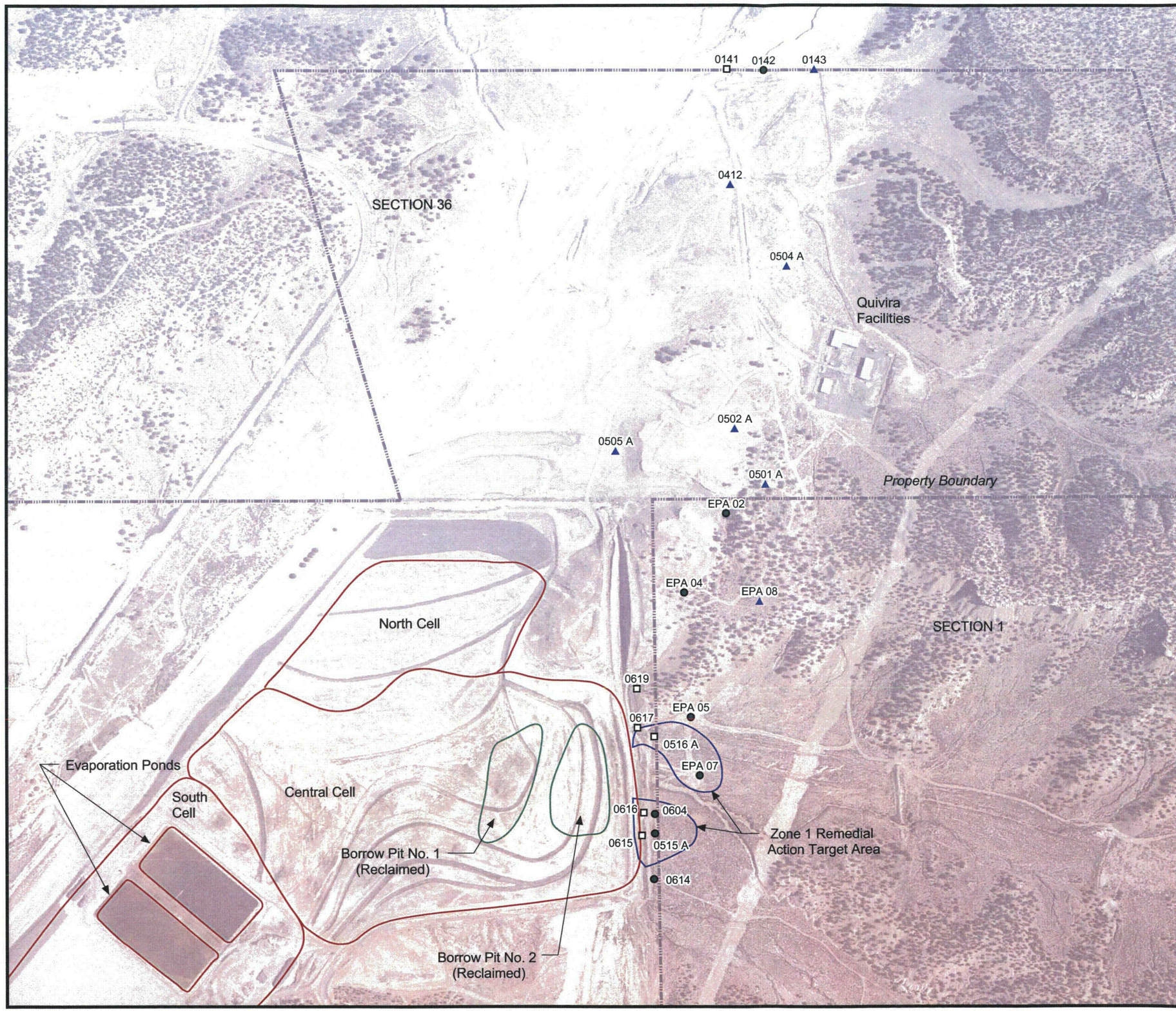
Zone 1 Monitoring Data

Remedial action in Zone 1 consisted of dewatering Borrow Pit No. 2, which was the source of tailings seepage into Zone 1, plus continued operation of the East and North Cross-Dike Pump-Back Wells. Dewatering of Borrow Pit No. 2 was completed in April 1989. The pump-back wells were operated until September 1990, when they were replaced by the Revised East System, consisting of Wells 615, 616, 617, and EPA 7. The Revised East System operated from 1990 through July 1999, when it was decommissioned with approval from NRC and EPA.

Remedial action has been monitored by measurement of groundwater levels and groundwater sampling and analyses at thirteen Zone 1 monitoring wells (Wells 515A, 516A, 604, 614, 619, EPA 2, EPA 4, EPA 5, EPA 7, EPA 8, 141, 142, and 143). This program was modified beginning in the second quarter of 2000 when the revised monitoring program was implemented. The wells included in the monitoring program for Zone 1 are listed in Table 15 of this 2009 Annual Review Report. See enclosed Figure C-1 for the current layout of the wells.

Table C.1 presents the quarterly water level and water quality data for the monitoring wells from the second quarter 1989, when the borrow pit was dewatered, through the fourth quarter 2009. Monitoring Well EPA 7 was used as an extraction well from September 1990 until October 1994; consequently, water level data for this well are available only for the time prior to its conversion to an extraction well, during times when the pump was shut off for maintenance, and after October 1994. The 2009 laboratory analytical data for the Zone 1 Monitoring Wells are presented at the end of this appendix.

Figure C-1



N

Legend

- Groundwater Quality and Water Level Monitoring Well
- Water Level Monitoring Well
- Zone 1 Monitoring Well Removed From Monitoring Program
- Section Boudary
- Tailings Pond
- Property Boundary
- Remedial Action Targe Area

Aerial photo taken on August 1, 1996.

0 300 600 1,200
Feet

FIGURE C-1

Zone 1 2009 Monitoring Locations

United Nuclear Corporation Church Rock Site, Church Rock, New Mexico

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Notes for Table C.1

Zone 1 Data Summary, 1989 - 2009

General Notes:

1. NRC standard as listed in License Condition 30, Part B.
2. EPA standard as listed in Table 2, "Contaminant-Specific Groundwater ARARs" of the ROD (EPA, 1988).
3. Standards for TDS, sulfate, and nitrate changed to reflect revised standards recommended in the NRC's 1996 evaluation of background water quality and documented in the January 6, 1998, letter from NMED to EPA.
4. NA - Not applicable.
5. 'ND' for combined Ra-226 and Ra-228 indicates that both constitutes were less than the laboratory reporting limits, which are 0.2 and 1.0 pCi/L, respectively.
6. All values that exceed the NRC and/or EPA standards are shaded.
7. Gross alpha value excludes contribution from radon and uranium.
8. "*" (Asterisk) indicates a Point of Compliance well.
9. Reporting limit for bicarbonate changed from 0.0 mg/L to 0.1 mg/L in fourth quarter 1997.
10. Reporting limit for cadmium changed from 0.01 mg/L to 0.005 mg/L after fourth quarter 1997. The analytical method changed from EPA 200.7 (ICP) to 200.8 (ICP.MS).
11. NO3 (nitrate) is reported by the laboratory as nitrate + nitrite as N.
12. During August 2006, the NRC issued License Amendment 37 (NRC, 2006b) revising the former 1 ug/L chloroform groundwater protection standard to 80 ug/L for total trihalomethanes (TTHMs) in the Southwest Alluvium, Zone 1 and Zone 3; and also revising the current combined radium-226 and -228 groundwater protection standard of 5 pCi/L to 5.2 pCi/L in the Southwest Alluvium and 9.4 pCi/L in Zone 1.
13. Energy Laboratory's reporting of radiological analyses changed during 2008 (N.A. Water Systems, 2008d). This affected the reporting of Church Rock sample analyses beginning in April 2008 (2nd quarter). The changes were made to make the reporting methods consistent with Section 7.5 of The United States Nuclear Regulatory Commission's Regulatory Guide 4.14.

The changes are summarized as follows:

- A minimum detectable concentration (MDC) is determined and reported for each analysis.

- Sample results are reported regardless of whether they are lower than the MDC. for the analysis. This may result in the reporting of negative concentrations.
- Sample results lower than the MDC are qualified with a"U".

These noted changes affected the reporting of all radiological parameters analyzed in Church Rock samples, except for thorium-230. Energy Labs did not have an approved methodology for determining MDC values for thorium-230. In the absence of MDC values, the historical reporting limit was used instead. Therefore, U-qualified results for thorium-230 indicate concentrations below a reporting limit rather than an MDC. Otherwise, the reporting of thorium-230 results was treated similarly to other radiological parameters. This means that measured concentrations were reported with a U qualification if the values were below the reporting limit.

The rationale for reporting values below MDC or reporting limit, even if negative, is that errors associated with the reported values are expected, over time, to average to zero. This means that averages or sums (e.g. for total radium) of concentrations will tend to be more accurate if below limit (MDC or reporting) results are retained in the calculations.

Specific Notes:

- Well TWQ-143 is monitored for water level only beginning in 2nd quarter 2000 in accordance with the Revised Monitoring Program.
- Well EPA 8 is monitored for water level only beginning in 2nd quarter 2000 in accordance with the Revised Monitoring Program.
- Well 516 A* was eliminated from the monitoring program as of 2nd quarter 2000 in accordance with the Revised Monitoring Program.
- Well 619 was eliminated from the monitoring program as of 2nd quarter 2000 in accordance with the Revised Monitoring Program.
- Well TWQ-141 was not sampled in 4th quarter 1999.
- Well TWQ-141 was eliminated from the monitoring program as of 2nd quarter 2000 in accordance with the Revised Monitoring Program.
- Wells 412, 501 A, 502 A, 504 A, and 505 A added to the monitoring program in 2nd quarter 2000 as water level monitoring wells.

Table C.1

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0141		7/22/1989	6,765.10	7.90	7.90	938	21	8	316	3.74	244	540	17.1	0.42	0.06	< 1	< 0.1	0.003
0141		10/12/1989	6,765.50	7.70	8.00	938	19.1	8.4	306	4.6	257	482	21	0.37	0.1	< 1	< 0.1	0.003
0141		1/3/1990	6,765.20	7.90	7.60	994	23.9	11	306	3.4	262	497	24.8	0.72	0.42	< 1	< 0.1	0.002
0141		4/3/1990	6,765.20	7.90	7.80	1024	24	9.8	304	3.6	262	458	32.9	0.76	0.44	< 1	< 0.1	0.003
0141		7/2/1990	6,764.90	7.60	7.72	1036	25.2	11	321	3.9	257	487	37.2	0.1	0.26	< 1	< 0.1	0.007
0141		10/2/1990	6,764.90	7.60	7.65	1023	21.5	10.1	305	3.7	243	509	42	0.21	0.29	< 1	< 0.1	0.006
0141		1/16/1991	6,764.90	7.50	7.89	1051	25.6	11.9	337	5.8	248	534	65.7	0.3	0.35	< 1	< 0.1	0.002
0141		4/3/1991	6,764.90	7.70	8.10	1070	23.3	10.6	311	3.1	254	530	41	0.32	0.18	< 1	< 0.1	0.003
0141		7/16/1991	6,764.60	7.60	7.54	1059	23.1	10.1	305	3.4	248	550	43.5	0.4	0.17	< 1	< 0.1	0.003
0141		10/14/1991	6,766.70	7.50	7.99	1133	22.7	11.3	325	3.2	195	539	105	0.61	0.26	< 1	< 0.1	< 0.001
0141		1/14/1992	6,770.80	7.40	7.62	1042	25.7	13.1	321	3.5	249	525	88.2	1.87	< 0.01	< 1	< 0.1	< 0.001
0141		4/7/1992	6,772.10	7.40	7.46	1123	25.8	13.9	379	3.8	326	511	116	0.46	< 0.1	< 1	< 0.1	0.002
0141		7/7/1992	6,772.80	7.50	7.80	1175	26.3	13.6	414	4.69	239	506	118	0.68	< 0.1	< 1	< 0.1	0.002
0141		10/6/1992	6,774.20	7.60	7.61	1141	31.7	13.6	360	3.4	246	525	108	0.23	< 0.1	< 1	< 0.1	0.002
0141		1/5/1993	6,775.10	7.70	7.93	1370	34.1	14.3	420	4.6	248	638	68.9	0.13	< 0.1	< 1	< 0.1	0.001
0141		4/6/1993	6,775.90	7.80	8.18	1100	23.4	10	371	2.5	244	495	91.3	0.4	< 0.1	< 1	< 0.1	0.002
0141		7/13/1993	6,776.50	7.70	7.12	1071	23.8	11.1	343	2.9	257	575	79.1	< 0.05	< 0.1	< 1	< 0.1	< 0.001
0141		10/6/1993	6,776.80	7.80	7.31	1105	27.2	12	304	2.7	257	541	64	0.47	0.16	< 1	< 0.1	< 0.001
0141		1/5/1994	6,775.70	7.70	7.78	1101	28.7	12.8	313	2.9	237	550	71	0.39	0.73	< 1	< 0.1	< 0.001
0141		4/13/1994	6,778.30	7.70	7.76	1017	35.1	11.7	301	2.4	234	499	49.4	0.18	< 0.1	< 1	< 0.1	< 0.001
0141		7/20/1994	6,778.70	7.70	7.34	1010	33.3	10.7	312	2.9	240	548	42.8	0.34	0.13	< 1	< 0.1	< 0.001
0141		10/4/1994	6,779.20	7.60	8.02	1076	25.9	11.5	342	3.4	260	537	43.2	0.15	< 0.1	< 1	< 0.1	< 0.001
0141		1/4/1995	6,779.60	7.50	7.93	995	26	11	321	3.3	257	493	39.8	0.42	< 0.1	< 1	< 0.1	< 0.001
0141		4/6/1995	no data	7.60	8.15	1038	25	12.6	291	3.1	254	507	28.2	0.62	5.19	< 1	< 0.1	< 0.001
0141		7/6/1995	6,780.30	7.60	8.21	1073	28.5	13.8	306	3.2	256	528	30.4	0.24	< 0.1	< 1	< 0.1	< 0.001
0141		10/3/1995	6,780.50	7.20	8.30	1038	22.8	10	297	3	261	485	25.9	0.46	< 0.1	< 1	< 0.1	0.004
0141		1/3/1996	6,781.00	7.20	8.24	1097	26.6	12.1	319	3.2	255	554	15.4	0.08	0.32	< 1	< 0.1	0.002
0141		4/2/1996	6,781.30	7.20	8.36	1008	25.5	11.4	283	3.3	259	526	29.1	0.39	0.16	< 1	< 0.1	< 0.001
0141		7/7/1996	6,781.50	8.40	7.75	1034	26.2	11.1	288	3	254	481	23.2	0.36	< 0.1	< 1	< 0.1	< 0.001
0141		10/1/1996	6,781.60	7.30	8.07	1010	25.1	11.7	300	3.1	254	498	25.4	0.31	< 0.1	< 1	< 0.1	< 0.001
0141		1/21/1997	6,782.30	6.70	7.93	903	23.9	10.6	303	3.17	256	500	22.5	0.3	< 0.1	< 1	< 0.1	0.002
0141		4/8/1997	6,782.30	7.00	8.25	962	21.5	9.6	293	3.1	256	479	22.4	0.26	0.14	< 1	< 0.1	< 0.001
0141		7/8/1997	6,782.20	7.90	8.33	977	25.2	11.3	304	3.2	251	516	24.4	1.33	0.13	< 1	< 0.1	< 0.001
0141		10/7/1997	6,782.50	7.10	8.13	997	26.2	12	277	2.94	256	504	22.8	0.2	0.19	< 1	< 0.1	< 0.001
0141		1/15/1998	6,782.90	7.80	8.29	1000	27	12.1	292	3.3	259	541	26.3	0.17	0.25	< 1	< 0.1	< 0.001

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TABLE C.1
Zone 1 Data Summary, 1989-2009
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**	**9.4**	**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**
0141		7/22/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.14	< 0.1	< 0.05	< 0.001	< 0.1	0.0069	< 0.2	2.9	2.9	0.6	< 1	2
0141		10/12/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.05	0.02	< 0.05	0.001	< 0.1	0.019	6.5	< 1	6.5	< 0.2	1.2	7.1
0141		1/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.07	0.02	< 0.05	< 0.001	< 0.1	0.014	0.6	< 1	0.6	< 0.2	2	1.7
0141		4/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.16	< 0.1	< 0.05	0.001	< 0.1	0.008	0.6	< 1	0.6	1.6	< 1	2.5
0141		7/2/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.18	< 0.1	< 0.05	0.001	< 0.1	0.0078	0.5	< 1	0.5	< 0.2	< 1	< 1
0141		10/2/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.15	< 0.1	< 0.05	0.001	< 0.1	0.007	0.5	< 1	0.5	< 0.2	< 1	< 1
0141		1/16/1991	< 0.01	< 0.01	0.01	< 0.05	0.14	< 0.1	< 0.05	< 0.001	< 0.1	0.0065	0.2	< 1	0.2	< 0.2	< 1	< 1
0141		4/3/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	< 0.001	< 0.1	0.005	0.4	< 1	0.4	< 0.2	< 1	< 1
0141		7/16/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.19	< 0.1	< 0.05	< 0.001	< 0.1	0.002	< 0.2	< 1	0	< 0.2	2	< 1
0141		10/14/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.16	< 0.1	< 0.05	0.001	< 0.1	0.022	0.8	< 1	0.8	< 0.2	< 1	< 1
0141		1/14/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.13	< 0.1	< 0.05	0.002	< 0.1	0.005	8.4	3.7	12.1	< 0.2	< 1	9
0141		4/7/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.15	< 0.1	< 0.05	< 0.001	< 0.1	0.002	< 0.2	< 1	0	< 0.2	< 1	< 1
0141		7/7/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	0.001	< 0.1	0.005	2.3	1.5	3.8	< 0.2	< 1	2.5
0141		10/6/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.2	< 0.1	< 0.05	0.001	< 0.1	0.01	< 0.2	< 1	0	< 0.2	< 1	< 1
0141		1/5/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.41	< 0.1	< 0.05	0.007	< 0.1	0.011	0.4	< 1	0.4	< 0.2	< 1	< 1
0141		4/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.19	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.3	< 1	0.3	< 0.2	< 1	< 1
0141		7/13/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.16	< 0.1	< 0.05	< 0.001	< 0.1	0.005	< 0.2	2.5	2.5	< 0.2	1	< 1
0141		10/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.22	< 0.1	< 0.05	< 0.001	< 0.1	0.006	0.6	< 1	0.6	< 0.2	< 1	< 1
0141		1/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.19	< 0.1	< 0.05	< 0.001	< 0.1	0.005	0.4	< 1	0.4	< 0.2	6.2	< 1
0141		4/13/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.15	< 0.1	< 0.05	< 0.001	< 0.1	0.008	0.5	< 1	0.5	< 0.2	1.7	< 1
0141		7/20/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.2	< 0.1	< 0.05	0.001	< 0.1	0.004	1.5	< 1	1.5	< 0.2	< 1	1.7
0141		10/4/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.26	< 0.1	< 0.05	< 0.001	< 0.1	0.003	0.5	< 1	0.5	< 0.2	< 1	< 1
0141		1/4/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.29	< 0.1	< 0.05	< 0.001	< 0.1	0.016	0.7	< 1	0.7	< 0.2	< 1	< 1
0141		4/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.15	< 0.1	< 0.05	< 0.001	< 0.1	0.004	0.4	< 1	0.4	< 0.2	< 1	< 1
0141		7/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.3	< 0.1	< 0.05	0.001	< 0.1	0.0033	1	< 1	1	< 0.2	< 1	< 1
0141		10/3/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.14	< 0.1	< 0.05	< 0.001	< 0.1	0.0034	< 0.2	< 1	0	< 0.2	< 1	< 1
0141		1/3/1996	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0006	0.3	1.4	1.7	0.6	< 1	1.1
0141		4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.0016	< 0.2	< 1	0	< 0.2	< 1	< 1
0141		7/7/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.13	< 0.1	< 0.05	< 0.001	< 0.1	0.0039	< 0.2	< 1	0	< 0.2	< 1	< 1
0141		10/1/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	0.007	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0141		1/21/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.002	< 0.2	< 1	0	< 0.2	< 1	< 1
0141		4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.0006	< 0.2	< 1	0	< 0.2	< 1	< 1
0141		7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	< 0.001	< 0.1	0.002	< 0.2	< 1	0	< 0.2	28	< 1
0141		10/7/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.13	< 0.1	< 0.05	< 0.001	< 0.1	0.005	< 0.2	< 1	0	< 0.2	< 1	< 1
0141		1/15/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.07	< 0.1	< 0.05	< 0.001	< 0.1	0.0031	< 0.2	< 1	0	< 0.2	< 1	2.8

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0141		4/7/1998	6,783.20	7.50	8.22	999	21.8	9.9	285	2.9	259	490	20.3	0.19	< 0.1	< 1	< 0.1	< 0.001
0141		7/7/1998	6,783.20	8.00	8.28	976	23	10.6	302	3.2	259	469	20.9	0.39	< 0.1	< 1	< 0.1	< 0.001
0141		10/6/1998	6,783.20	7.40	8.17	1030	28	12.4	296	3.7	261	545	22.9	3.48	0.34	< 1	< 0.1	0.009
0141		1/5/1999	6,783.60	7.80	8.06	1070	30.5	13.1	273	3.7	253	514	25.2	0.07	< 0.1	< 1	< 0.1	0.007
0141		4/6/1999	6,782.90	7.60	8.13	1070	31.9	16.3	299	3.4	249	516	25.2	0.23	0.21	< 1	< 0.1	0.002
0141		7/13/1999	6,783.54	6.80	8.28	968	29.7	14.2	285	7.5	258	507	30.2	0.37	< 0.1	< 1	< 0.1	0.004
0141		1/4/2000	6,780.50	7.00	8.38	2280	19.7	6.4	665	7	228	1150	176	< 0.05	0.28	< 1	< 0.1	< 0.001

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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**
0141		4/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.0029	< 0.2	< 1	0	< 0.2	< 1	< 1
0141		7/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.09	< 0.1	0.05	< 0.001	< 0.1	0.0027	< 0.2	< 1	0	< 0.2	< 1	< 1
0141		10/6/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.37	< 0.1	< 0.05	< 0.001	< 0.1	0.334	1.5	< 1	1.5	< 0.2	< 1	< 1
0141		1/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.43	0.14	< 0.05	< 0.001	< 0.1	0.014	1.5	< 1	1.5	< 0.2	< 1	< 1
0141		4/6/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.24	< 0.1	< 0.05	0.001	< 0.1	0.0059	1	< 1	1	< 0.2	< 1	< 1
0141		7/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.27	< 0.1	< 0.05	0.001	< 0.1	0.0541	1.1	< 1	1.1	< 0.2	< 1	< 1
0141		1/4/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.11	< 0.1	< 0.05	0.001	< 0.1	0.0183	< 0.2	< 1	0	< 0.2	< 1	< 1

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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
0142		7/22/1989	6,759.60	7.80	7.80	1129	37	17	332	4.36	244	599	17.7	0.45	0.19	< 1	< 0.1	0.001
0142		10/12/1989	6,759.80	7.70	7.87	1096	27.9	13.4	333	5.1	247	580	19.2	0.2	0.38	< 1	< 0.1	0.001
0142		1/3/1990	6,759.80	7.60	7.72	1130	30.6	13.9	332	3.9	245	579	20.6	0.34	0.4	< 1	0.1	0.002
0142		4/3/1990	6,759.60	7.80	7.92	1265	47.4	23.1	318	4.4	281	648	18.5	0.71	0.34	< 1	< 0.1	0.001
0142		7/2/1990	6,759.40	7.60	8.00	1106	32.2	13.6	317	4	253	564	18.1	0.17	0.31	< 1	0.1	0.001
0142		10/2/1990	6,759.60	7.70	7.85	1116	22.8	11	310	3.4	234	590	18.8	0.09	0.33	< 1	0.1	0.001
0142		1/3/1991	6,759.50	7.70	7.10	1113	29	14.3	318	11.9	244	607	18	0.36	0.33	< 1	< 0.1	0.001
0142		4/9/1991	6,759.80	7.70	8.22	1015	31.1	13.7	308	3.9	250	588	17.4	0.21	0.25	< 1	< 0.1	< 0.001
0142		7/16/1991	6,759.60	7.70	7.88	1085	35.2	16.8	286	3.7	271	643	17.2	0.34	0.21	< 1	< 0.1	< 0.001
0142		10/14/1991	6,761.00	7.60	8.07	1110	31.6	14.8	297	3.4	271	590	15.3	0.3	0.14	< 1	< 0.1	< 0.001
0142		1/14/1992	6,764.10	7.40	7.85	1071	27.6	13.8	296	3.3	259	595	16.4	0.95	0.37	< 1	< 0.1	< 0.001
0142		4/7/1992	6,765.70	7.50	8.19	1023	28.8	15.6	335	4.5	256	579	17	0.25	< 0.1	< 1	< 0.1	0.001
0142		7/7/1992	no data	7.60	8.17	1101	35.5	19	355	4.84	263	588	16	0.99	< 0.1	< 1	< 0.1	0.001
0142		10/6/1992	6,767.90	7.80	8.06	1100	37	17.8	332	3.2	260	588	16.8	0.08	< 0.1	< 1	< 0.1	0.001
0142		1/5/1993	6,769.00	7.80	8.14	1019	27.1	11.9	279	3.9	256	542	17.4	0.31	< 0.1	< 1	< 0.1	0.002
0142		4/6/1993	6,770.00	7.80	8.08	1084	31.8	14.8	326	2.6	254	560	16.1	0.31	< 0.1	< 1	< 0.1	< 0.001
0142		7/13/1993	6,770.50	7.80	7.09	1066	33.5	15.4	293	2.9	264	597	17.2	< 0.05	< 0.1	< 1	< 0.1	< 0.001
0142		10/6/1993	6,771.00	7.80	7.60	1074	32.3	13.9	295	2.6	255	566	15.9	0.13	0.17	< 1	< 0.1	< 0.001
0142		1/5/1994	6,770.70	7.80	8.03	1056	33.7	15.4	307	2.8	246	563	16.4	0.31	0.1	< 1	< 0.1	< 0.001
0142		4/13/1994	6,772.60	7.90	7.84	989	31	13.5	287	2.5	234	531	16.5	0.06	0.1	< 1	< 0.1	< 0.001
0142		7/20/1994	6,773.00	7.70	8.05	1088	34.2	14.1	286	2.8	242	538	15.8	0.08	0.45	7.09	< 0.1	< 0.001
0142		10/4/1994	6,773.80	7.70	8.15	1032	31.2	14	322	3.4	256	589	16.9	0.07	0.32	< 1	< 0.1	< 0.001
0142		1/4/1995	6,774.30	7.70	8.01	1036	29	12.2	325	3.3	251	550	17.4	0.14	0.2	< 1	< 0.1	< 0.001
0142		4/6/1995	6,774.70	7.80	8.11	1327	59	31	319	4.2	277	714	13.4	0.34	0.38	< 1	< 0.1	< 0.001
0142		7/6/1995	6,774.80	7.70	8.32	1230	43	20.2	318	3.6	260	625	16.5	0.08	0.1	< 1	< 0.1	< 0.001
0142		10/3/1995	6,775.30	7.30	8.30	1222	45.5	21.9	309	3.7	275	617	15.3	0.12	0.2	< 1	< 0.1	0.003
0142		1/3/1996	6,775.50	7.80	8.05	1018	23.2	11.9	302	3	253	492	25.3	0.2	0.19	< 1	< 0.1	0.001
0142		4/2/1996	6,776.10	7.10	8.42	1074	28.3	12.7	298	3.2	250	593	17.7	0.19	0.25	< 1	< 0.1	< 0.001
0142		7/7/1996	6,776.10	7.90	7.72	1075	26.1	11.4	300	3.1	243	481	23.2	0.26	0.44	< 1	< 0.1	< 0.001
0142		10/1/1996	6,776.20	7.50	8.12	1060	25.2	11.3	318	3.2	245	540	21.3	0.19	0.2	< 1	< 0.1	< 0.001
0142		1/21/1997	6,777.10	6.50	7.86	1020	32.8	15.3	322	3.5	240	567	15.9	0.17	0.15	< 1	< 0.1	0.002
0142		4/8/1997	6,777.20	6.60	8.28	1040	26.8	12	312	3.3	249	551	16.6	0.15	0.29	< 1	< 0.1	< 0.001
0142		7/8/1997	6,777.20	8.10	8.32	1030	27	12	322	3.4	240	575	18.6	0.25	0.12	< 1	< 0.1	< 0.001
0142		10/7/1997	6,773.00	7.40	8.19	1070	27.6	12.1	299	3.06	248	572	16.1	0.21	< 0.1	< 1	< 0.1	< 0.001
0142		1/15/1998	6,774.00	7.80	8.32	1170	39.6	17.9	330	3.8	261	673	20.9	0.35	0.2	< 1	< 0.1	< 0.001

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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**
0142		7/22/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.001	< 0.1	0.0046	1	< 1	1	< 0.2	< 1	1.1
0142		10/12/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.02	0.03	< 0.05	< 0.001	< 0.1	0.005	0.3	< 1	0.3	< 0.2	3.1	1.1
0142		1/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.03	0.02	< 0.05	0.001	< 0.1	0.006	1.3	1.1	2.4	< 0.2	2.9	1.9
0142		4/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	0.003	< 0.1	0.008	1.3	< 1	1.3	< 0.2	< 1	2.1
0142		7/2/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0019	0.5	< 1	0.5	< 0.2	< 1	< 1
0142		10/2/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.003	< 0.2	< 1	0	< 0.2	< 1	< 1
0142		1/3/1991	< 0.01	0.02	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0032	< 0.2	< 1	0	< 0.2	< 1	< 1
0142		4/9/1991	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.001	< 0.1	0.0029	< 0.2	< 1	0	< 0.2	< 1	< 1
0142		7/16/1991	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.003	1.3	< 1	1.3	< 0.2	1.6	< 1
0142		10/14/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.015	1.5	< 1	1.5	< 0.2	< 1	< 1
0142		1/14/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.001	< 0.1	0.002	0.2	< 1	0.2	< 0.2	< 1	< 1
0142		4/7/1992	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.001	< 0.2	< 1	0	< 0.2	< 1	< 1
0142		7/7/1992	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.002	< 0.1	0.003	0.6	3.1	3.7	< 0.2	< 1	< 1
0142		10/6/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.001	< 0.1	< 0.0003	0.4	1.1	1.5	< 0.2	1.4	< 1
0142		1/5/1993	< 0.01	< 0.01	0.01	< 0.05	0.01	< 0.1	< 0.05	0.007	< 0.1	0.01	1.5	< 1	1.5	< 0.2	< 1	1.6
0142		4/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.002	0.8	< 1	0.8	< 0.2	2.6	< 1
0142		7/13/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.3	< 1	0.3	< 0.2	< 1	< 1
0142		10/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.1	< 1	1.1	< 0.2	2.9	< 1
0142		1/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.006	0.7	< 1	0.7	< 0.2	< 1	1.4
0142		4/13/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.5	1.9	2.4	< 0.2	1.6	3.5
0142		7/20/1994	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.8	< 1	0.8	< 0.2	1.2	< 1
0142		10/4/1994	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.3	< 1	0.3	< 0.2	< 1	< 1
0142		1/4/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.4	1.8	2.2	< 0.2	< 1	3.3
0142		4/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.6	2.5	3.1	< 0.2	< 1	4.5
0142		7/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.001	< 0.1	< 0.0003	1.2	< 1	1.2	0.4	< 1	< 1
0142		10/3/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.9	3.4	4.3	< 0.2	< 1	< 1
0142		1/3/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.14	< 0.1	< 0.05	< 0.001	< 0.1	0.0034	0.4	< 1	0.4	0.6	< 1	< 1
0142		4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	< 0.2	< 1	0	< 0.2	< 1	< 1
0142		7/7/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0007	0.5	< 1	0.5	< 0.2	< 1	< 1
0142		10/1/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.003	< 0.1	< 0.0003	0.3	< 1	0.3	< 0.2	< 1	< 1
0142		1/21/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0142		4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0142		7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.5	< 1	0.5	< 0.2	< 1	< 1
0142		10/7/1997	< 0.01	< 0.01	< 0.01	0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.001	< 0.2	< 1	0	< 0.2	< 1	< 1
0142		1/15/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0006	1.8	< 1	1.8	< 0.2	< 1	< 1

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0142		4/7/1998	6,773.40	7.80	8.26	1100	26	11.6	314	3.2	245	546	18	0.13	0.14	< 1	< 0.1	< 0.001
0142		7/7/1998	6,773.70	8.10	8.27	1070	25.8	11.7	325	3.4	245	533	17	0.18	0.22	< 1	< 0.1	0.001
0142		10/6/1998	6,774.20	7.27	8.29	1170	36	17.9	325	4	267	640	18.1	2.04	0.31	< 1	< 0.1	0.002
0142		1/5/1999	6,774.00	8.00	8.21	1210	37.7	17.9	309	3.6	273	628	18.2	0.12	0.24	< 1	< 0.1	0.002
0142		4/6/1999	6,774.20	8.00	8.15	1120	33	15.8	313	3.5	250	562	22.7	0.21	0.25	< 1	< 0.1	< 0.001
0142		7/13/1999	6,774.40	6.80	8.27	1030	32.4	15.8	299	6.7	262	498	24.5	0.26	0.16	< 1	< 0.1	0.001
0142		10/5/1999	6,775.00	7.60	8.11	1130	29.6	14.6	308	3.7	251	557	21.4	0.26	0.13	< 1	< 0.1	< 0.001
0142		1/4/2000	6,774.40	7.20	8.36	1500	82.2	41.7	319	7.8	309	797	26.6	1.51	0.11	< 1	< 0.1	< 0.001
0142		5/10/2000	6,780.70	8.40	8.27	1080	27.2	12.6	306	3.25	242	613	19.1	0.24	< 0.1	< 1	1.18	< 0.001
0142	Dup	5/10/2000	no data	8.32	8.26	1110	26.5	12.2	307	3.1	239	611	18.5	0.25	< 0.1	< 1	0.7	< 0.001
0142		7/10/2000	6,780.50	8.13	7.99	1060	25.8	11.8	318	3.1	242	543	19.9	0.28	< 0.1	< 1	0.75	< 0.001
0142	Dup	7/10/2000	no data	8.13	8.06	1060	24.3	11.2	314	3.01	240	537	19.3	0.29	< 0.1	< 1	0.39	< 0.001
0142		10/2/2000	6,780.60	8.08	7.84	1310	52.7	46.8	314	4.9	220	676	17.7	0.3	< 0.1	< 1	0.18	0.003
0142		1/16/2001	6,781.20	8.23	7.97	1060	20.7	9	309	3.6	242	594	21.6	0.27	< 0.1	< 1	0.2	0.001
0142		4/2/2001	6,781.30	8.10	8.01	1050	19.4	8.8	314	2.6	234	544	18.8	0.37	< 0.1	< 1	0.1	0.002
0142		7/16/2001	6,781.05	7.96	8.01	1080	19.9	9	297	3.7	233	550	24.7	0.27	< 0.1	< 1	0.1	0.001
0142		10/3/2001	6,781.20	7.80	8.10	1060	18.2	8.5	272	3.5	240	555	24.7	0.19	< 0.1	< 1	< 0.1	< 0.001
0142		1/7/2002	6,781.15	8.23	7.90	1060	19.8	8.7	294	3.4	236	560	21.3	0.2	< 0.1	< 1	< 0.1	< 0.001
0142		4/8/2002	6,781.69	7.59	7.59	1070	19.4	8.5	307	2.9	239	556	21.5	0.26	< 0.1	< 1	< 0.1	< 0.001
0142		7/15/2002	6,781.60	7.11	8.06	1060	18.6	8.5	313	4.5	239	607	18.6	0.15	< 0.1	< 1	< 0.1	< 0.001
0142		10/14/2002	6,781.53	7.09	8.00	998	20.4	8.7	308	3.1	237	536	17.7	0.11	< 0.1	< 1	< 0.1	0.004
0142		1/13/2003	6,781.66	7.48	7.93	1060	24.1	8.6	313	3.3	255	526	21.3	< 0.05	< 0.1	< 1	1.1	0.003
0142		4/14/2003	6,781.98	7.89	7.76	1080	22.5	8.7	315	5.6	245	555	18.4	< 0.05	0.2	< 1	< 0.1	< 0.001
0142		7/15/2003	6,781.85	7.63	7.99	1100	23.1	8.7	315	4.3	245	517	20.8	0.17	0.2	< 1	0.4	< 0.001
0142		10/13/2003	6,782.14	7.85	8.04	1070	24.5	10	319	3.1	235	553	21.6	< 0.05	< 0.1	< 1	0.4	< 0.001
0142		1/13/2004	6,782.00	7.80	7.97	1070	24.8	10.8	329	5.1	245	579	18	< 0.05	< 0.10	< 1.0	< 0.1	0.002
0142		4/12/2004	6,782.40	7.76	7.28	1030	23.5	9.5	308	4.2	255	532	20.6	< 0.05	< 0.1	< 1	< 0.1	< 0.001
0142		7/19/2004	6,782.17	8.32	7.75	1070	22.4	9.4	330	2.9	237	549	19	0.19	< 0.10	< 1.0	< 0.1	< 0.001
0142		10/11/2004	6,782.35	8.02	7.99	1090	21	9.5	308	3.8	233	527	19	0.09	< 0.10	< 1.0	< 0.1	< 0.001
0142		1/10/2005	6,782.41	7.72	7.89	1070	22.4	9.7	326	3	241	540	19	< 0.05	< 0.1	< 1.0	< 0.1	< 0.001
0142		4/12/2005	6,782.45	7.55	7.82	1070	23.6	10.1	335	3.2	235	568	16	< 0.05	< 0.1	< 1.0	< 0.1	< 0.001
0142		7/18/2005	6,782.40	7.29	7.93	1060	22.5	9.9	326	2.8	239	535	15	< 0.05	< 0.1	< 1.0	< 0.1	< 0.001
0142		10/10/2005	6,782.69	7.53	7.94	1050	22.8	10.3	322	3.2	250	562	19	< 0.05	< 0.1	< 1.0	< 0.1	< 0.001
0142		1/16/2006	6,782.66	7.46	8.29	1040	22	9.9	312	3.1	250	521	17	< 0.05	1.4	< 1.0	< 0.1	< 0.001
0142		4/10/2006	6,782.62	7.55	7.68	1030	24.3	11.2	310	3	247	546	18	< 0.05	< 0.1	< 1.0	< 0.1	< 0.001

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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**
0142		4/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0008	0.9	< 1	0.9	< 0.2	< 1	< 1
0142		7/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0006	< 0.2	< 1	0	< 0.2	< 1	< 1
0142		10/6/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.0051	1.1	< 1	1.1	< 0.2	< 1	< 1
0142		1/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.21	0.14	< 0.05	< 0.001	< 0.1	0.004	2.1	3	5.1	< 0.2	< 1	< 1
0142		4/6/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0012	< 0.2	< 1	0	< 0.2	< 1	< 1
0142		7/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.001	< 0.1	0.0009	< 0.2	< 1	0	< 0.2	< 1	< 1
0142		10/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0008	0.7	< 1	0.7	< 0.2	< 1	< 1
0142		1/4/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.1	0.14	< 0.05	< 0.001	< 0.1	0.0077	2.4	1.5	3.9	< 0.2	< 1	2.5
0142		5/10/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.07	< 0.1	< 0.05	< 0.001	< 0.1	0.0013	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	Dup	5/10/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.0012	0.7	< 1	0.7	< 0.2	< 1	< 1
0142		7/10/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.07	< 0.1	< 0.05	< 0.001	< 0.1	0.0011	0.9	< 1	0.9	< 0.2	< 1	1.4
0142	Dup	7/10/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.0024	0.7	< 1	0.7	< 0.2	< 1	1.4
0142		10/2/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.39	0.76	< 0.05	< 0.001	< 0.1	0.0019	0.9	< 1	0.9	< 0.2	< 1	< 1
0142		1/16/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	0.4	3	3.4	< 0.2	< 1	< 1
0142		4/2/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0142		7/16/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.3	< 1	0.3	< 0.2	< 1	< 1
0142		10/3/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.5	< 1	0.5	< 0.2	< 1	< 1
0142		1/7/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.6	1.9	2.5	< 0.2	< 1	< 1
0142		4/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.3	< 1	0.3	< 0.2	< 1	< 1
0142		7/15/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.3	< 1	0.3	< 0.2	< 1	< 1
0142		10/14/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0003	0.8	< 1	0.8	< 0.2	< 1	< 1
0142		1/13/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	1	< 1	1	< 0.2	< 1	1.9
0142		4/14/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0003	< 0.2	< 1	0	< 0.2	< 1	1.1
0142		7/15/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.3	< 1	0.3	< 0.2	< 1	< 1.0
0142		10/13/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.09	< 0.1	< 0.05	< 0.001	< 0.1	0.0061	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0142		1/13/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0005 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0142		4/12/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	< 0.2	< 1	0	< 0.2	< 1	< 1
0142		7/19/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.4	< 1.0	0.4	< 0.2	< 1.0	< 1.0
0142		10/11/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0142		1/10/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.5	< 1.0	0.5	< 0.2	< 1.0	< 1.0
0142		4/12/2005	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0142		7/18/2005	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0142		10/10/2005	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0142		1/16/2006	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	< 0.2	2.3	2.3	< 0.2	< 1.0	< 1.0
0142		4/10/2006	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	2.8	2.8	< 0.2	< 1.0	< 1.0

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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
0142		7/24/2006	6,782.43	7.63	7.45	998	27.4	12.6	343	3.5	249	583	19	0.08	< 0.1	< 1.0	< 0.1	0.001
0142		10/9/2006	6,782.55	7.62	7.79	986	29.1	13.9	322	3.5	249	578	18	0.2	< 0.1	< 0.5	< 0.1	0.001
0142		1/15/2007	6,782.42	7.79	7.92	1070	31	15.4	315	3.9	251	599	19	0.14	0.1	<0.5	<0.1	<0.001
0142		4/16/2007	6,782.60	7.66	7.79	1070	32.4	17	325	4.1	257	644	21	0.23	<0.1	<0.5	<0.1	<0.001
0142		7/17/2007	6,782.30	7.51	7.42	1070	33.7	16.9	322	3.5	259	603	17	0.17	0.2	<0.5	<0.1	0.002
0142		10/9/2007	6,782.23	7.14	7.53	1090	33.9	17	305	3.5	250	570	16	0.15	0.3	<0.5	<0.1	0.001
0142		1/22/2008	6,781.90	7.62	7.56	1080	34.9	16.7	320	3.9	257	563 D	23 D	0.14	0.3	< 0.5	< 0.1	< 0.001
0142		4/16/2008	6,782.55	7.53	7.5	1060	38.9	19	346 D	3.5	250	617 D	15	0.18	0.1	< 0.5	< 0.1	0.002
0142		7/15/2008	6,782.15	7.42	7.76	1100	40	20	341 D	4	266	638 D	16	0.23	< 0.1	< 0.5	< 0.1	< 0.003
0142		10/14/2008	6,782.20	7.50	7.78	1130	40	20	338 D	3	261	629 D	15	0.3	< 0.1	< 0.5	< 0.1	0.001
0142		1/20/2009	6,782.10	7.75	7.33	1200	42	23	328	4	261	714 D	12	0.18	<0.1	<0.5	0.1	<0.001
0142		4/14/2009	6,782.50	7.68	7.26	1180	41	21	302	3	272	642 D	16	0.29	0.2	<0.50	<0.1	<0.001
0142		7/14/2009	6,782.20	7.88	7.48	1160 H	44	22	336	4	271	657 D	15	0.36	<0.1	<0.50	<0.1	<0.001
0142		10/13/2009	6,782.30	7.76	7.81	1180 H	43	22	335	4	281	624 D	19	0.28	<0.1	<0.50	<0.1	<0.001
0143		7/22/1989	6,759.40	7.90	7.86	1000	34	17	297	3.74	207	596	16.7	0.44	0.39	< 1	< 0.1	0.002
0143		10/11/1989	6,759.70	7.80	7.98	1022	31.3	16.6	285	4.8	220	541	16.8	0.37	0.29	< 1	< 0.1	0.001
0143		1/3/1990	6,759.60	7.50	7.65	1002	32.5	16.1	291	3.6	220	542	17.3	0.48	0.22	< 1	< 0.1	0.001
0143		4/3/1990	6,759.50	7.70	7.80	1042	33.8	17	280	3.7	232	503	19.7	0.57	0.37	< 1	< 0.1	0.002
0143		7/2/1990	6,759.30	7.40	7.90	1033	34.5	16.6	292	3.9	226	528	17.2	0.12	1.05	< 1	< 0.1	0.002
0143		10/2/1990	6,759.30	7.50	7.77	1051	31.5	19.9	281	4	212	591	17.4	0.1	2.08	< 1	< 0.1	0.002
0143		1/3/1991	6,759.40	7.50	7.15	1023	31.2	18.7	286	5.2	220	571	15.2	0.36	0.64	< 1	< 0.1	0.001
0143		4/9/1991	6,759.40	7.50	8.26	944	29.4	16.2	270	3.7	223	558	16.7	0.3	0.25	< 1	< 0.1	0.001
0143		7/16/1991	6,759.20	7.60	7.73	975	29.1	15.1	264	3.4	228	620	16.6	0.28	0.25	< 1	< 0.1	0.001
0143		10/14/1991	6,760.90	7.50	7.90	1007	25.1	13.1	279	3.1	230	533	23.4	0.11	0.06	< 1	< 0.1	0.001
0143		1/14/1992	6,764.70	7.40	7.54	1005	28.9	15.8	267	3.2	237	565	17.2	0.78	0.18	< 1	< 0.1	< 0.001
0143		4/7/1992	6,766.60	7.50	7.18	964	26.6	16	321	3.7	237	523	16.9	0.31	< 0.1	< 1	< 0.1	0.003
0143		7/7/1992	6,766.90	7.60	7.56	1019	27.5	15.7	334	3.89	238	543	16.2	0.53	< 0.1	< 1	< 0.1	0.001
0143		10/6/1992	6,768.00	7.80	7.86	999	31.2	15.9	284	1.7	236	524	15.5	0.23	< 0.1	< 1	< 0.1	0.001
0143		1/5/1993	6,769.00	7.80	8.14	1098	29.8	14.7	281	2.5	239	558	9.5	0.34	< 0.1	< 1	< 0.1	0.004
0143		4/6/1993	6,769.80	7.70	8.07	965	25.5	12.8	299	2.2	239	495	16.1	0.28	< 0.1	< 1	< 0.1	< 0.001
0143		7/13/1993	6,770.30	7.70	7.07	932	29.2	14.2	278	2.7	243	494	16.5	< 0.05	< 0.1	< 1	< 0.1	< 0.001
0143		10/6/1993	6,770.70	7.60	7.62	978	28.2	14.2	271	2.3	243	525	15.6	0.2	0.18	< 1	< 0.1	< 0.001
0143		1/5/1994	6,771.40	7.70	7.73	953	28.3	14.3	274	2.5	224	517	18.6	0.32	0.1	< 1	< 0.1	< 0.001
0143		4/13/1994	6,772.30	7.80	7.81	940	29.4	14.5	261	2.3	223	484	15.8	0.12	< 0.1	< 1	< 0.1	< 0.001
0143		7/20/1994	6,772.60	7.60	8.07	950	38.9	15.4	256	2.5	223	509	14.5	0.23	0.19	< 1	< 0.1	< 0.001

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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**
0142		7/24/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	2.8	2.8	< 0.2	< 1.0	< 1.0
0142		10/9/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	0.002	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0142		1/15/2007	<0.01	<0.005	<0.01	<0.05	0.03	<0.1	<0.05	<0.001	<0.1	<0.0003	<0.2	<1	0	<0.2	<1	<1
0142		4/16/2007	<0.01	<0.005	<0.01	<0.05	<0.01	<0.1	<0.05	<0.001	<0.1	<0.0003	<0.2	<1	0	<0.2	<1	<1
0142		7/17/2007	<0.01	<0.005	<0.01	<0.05	0.02	<0.1	<0.05	<0.001	<0.1	<0.0003	<0.2	<1	0	<0.2	<1	<1
0142		10/9/2007	<0.01	<0.005	<0.01	<0.05	0.03	<0.1	<0.05	<0.001	<0.1	<0.0003	<0.2	<1	0	<0.2	<1	<1
0142		1/22/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0005	0.9	< 1	0.9	< 0.2	6.1	3.6
0142		4/16/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	0.1 U	0.7 U	0.8	0.3	-0.8 U	1.5
0142		7/15/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0006	0.54	0.71 U	1.25	0 U	0.3 U	0.7 U
0142		10/14/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.08 U	0.57 U	0.65	0.3	-0.1 U	1.5
0142		1/20/2009	<0.01	<0.005	<0.01	<0.05	0.05	<0.1	<0.05	<0.001	<0.1	<0.0003	0.45	1.4	1.85	-0.2 U	0.2 U	0.6 U
0142		4/14/2009	<0.01	<0.005	<0.01	<0.05	0.04	<0.1	<0.05	<0.001	<0.1	<0.0003	0.67	0.24 U	0.91	-0.02 U	-2 U	0.7
0142		7/14/2009	<0.01	<0.005	<0.01	<0.05	0.05	<0.1	<0.05	<0.001	<0.1	<0.0003	0.73	0.70 U	1.43	0.05 U	0.4 U	1.7
0142		10/13/2009	<0.01	<0.005	<0.01	<0.05	0.06	<0.1	<0.05	<0.001	<0.1	<0.0003	0.28	0.95 U	1.23	0.2 U	1.0 U	0.9
0143		7/22/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	0.001	< 0.1	0.0034	0.7	< 1	0.7	3	< 1	1.4
0143		10/11/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.04	0.11	< 0.05	0.001	< 0.1	0.006	1.2	1.5	2.7	0.9	< 1	3.2
0143		1/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.04	0.01	< 0.05	0.001	< 0.1	0.006	1.4	< 1	1.4	< 0.2	2.1	4
0143		4/3/1990	< 0.05	< 0.01	0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.0681	0.8	< 1	0.8	< 0.2	< 1	1.3
0143		7/2/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0068	0.6	< 1	0.6	< 0.2	< 1	< 1
0143		10/2/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.006	0.3	< 1	0.3	< 0.2	< 1	< 1
0143		1/3/1991	< 0.01	0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0057	0.9	< 1	0.9	< 0.2	< 1	< 1
0143		4/9/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.002	< 0.2	1.7	1.7	< 0.2	< 1	< 1
0143		7/16/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0143		10/14/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.003	< 0.2	< 1	0	< 0.2	< 1	< 1
0143		1/14/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.01	0.1	< 0.05	< 0.001	< 0.1	0.007	0.2	< 1	0.2	< 0.2	< 1	< 1
0143		4/7/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.02	0.1	< 0.05	< 0.001	< 0.1	0.006	< 0.2	1.8	1.8	< 0.2	< 1	< 1
0143		7/7/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.001	< 0.1	0.008	< 0.2	< 1	0	< 0.2	< 1	< 1
0143		10/6/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.001	< 0.1	0.017	0.3	3.7	4	< 0.2	< 1	< 1
0143		1/5/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.007	< 0.1	0.006	0.4	< 1	0.4	< 0.2	< 1	< 1
0143		4/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.004	0.4	1.6	2	< 0.2	2.2	< 1
0143		7/13/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.003	0.8	1.2	2	< 0.2	< 1	< 1
0143		10/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.7	< 1	0.7	< 0.2	< 1	< 1
0143		1/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.3	< 1	0.3	< 0.2	1.4	< 1
0143		4/13/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.8	2.5	3.3	< 0.2	< 1	4.7
0143		7/20/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.002	1	< 1	1	< 0.2	< 1	1.2

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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
0143		10/4/1994	6,773.20	7.60	8.09	927	33.3	16.4	285	3.1	245	525	16.2	0.23	0.16	< 1	< 0.1	< 0.001
0143		1/4/1995	6,773.80	7.50	8.05	959	33	15.4	283	3.2	243	498	15.2	0.23	< 0.1	< 1	< 0.1	< 0.001
0143		4/6/1995	6,774.20	7.70	7.93	990	32	17	267	3.1	249	519	11.6	0.27	0.24	< 1	< 0.1	< 0.001
0143		7/6/1995	6,774.40	7.60	8.32	995	30.9	15.6	269	3.1	238	495	15.5	0.14	< 0.1	< 1	< 0.1	< 0.001
0143		10/3/1995	6,774.90	7.30	8.35	994	30.8	15.8	266	3.1	241	486	14.2	0.22	0.11	< 1	< 0.1	0.004
0143		1/3/1996	6,775.50	8.00	8.05	971	29.1	15.3	272	3	244	489	13.9	0.2	0.13	< 1	< 0.1	0.001
0143		4/2/1996	6,775.80	7.50	8.41	958	32.5	16.7	257	3.3	244	519	16.9	0.33	0.14	< 1	< 0.1	< 0.001
0143		7/7/1996	6,776.00	7.50	7.77	964	30.2	15.3	260	3.1	240	468	14.3	0.37	0.21	< 1	< 0.1	< 0.001
0143		10/1/1996	6,776.30	7.20	8.13	975	30.7	15.9	275	3.2	240	488	17.8	0.36	0.1	< 1	< 0.1	< 0.001
0143		1/21/1997	6,777.00	6.50	7.89	994	32.4	16.5	283	3.3	244	498	14.4	0.32	< 0.1	< 1	< 0.1	< 0.001
0143		4/8/1997	6,777.00	6.80	8.24	938	30	15.3	265	3.1	244	484	14.4	0.24	0.15	< 1	< 0.1	< 0.001
0143		7/8/1997	6,777.00	8.00	8.32	943	32.7	16.6	278	3.3	238	517	16.9	0.27	0.11	< 1	< 0.1	< 0.001
0143		10/7/1997	6,777.30	7.60	8.15	975	32.7	16.8	266	3.2	246	505	12.6	0.21	0.11	< 1	< 0.1	< 0.001
0143		1/15/1998	6,776.90	7.80	8.30	974	36.3	18	272	3.5	245	542	17.8	0.16	0.27	< 1	< 0.1	< 0.001
0143		4/7/1998	6,778.00	7.80	8.21	980	30	15.6	263	3.1	243	486	14.8	0.14	0.15	< 1	< 0.1	0.001
0143		7/7/1998	6,778.10	8.00	8.23	953	32.3	16.9	276	3.4	226	460	14.5	0.29	0.11	< 1	< 0.1	0.001
0143		10/6/1998	6,778.40	7.51	8.41	986	30.7	15.7	276	3.7	245	526	16	1	0.35	< 1	< 0.1	0.006
0143		1/5/1999	6,778.50	7.90	8.20	979	30.6	14.5	268	3.8	254	509	16.1	0.13	0.13	< 1	< 0.1	0.004
0143		4/6/1999	6,779.10	8.00	8.09	975	31.4	16.5	267	3.3	240	477	18.5	0.28	0.15	< 1	< 0.1	< 0.001
0143		7/13/1999	6,778.79	6.80	8.24	857	33.3	18	284	4	247	517	13.9	0.33	< 0.1	< 1	< 0.1	< 0.001
0143		10/5/1999	6,779.00	7.52	8.08	953	28.1	15.6	257	3	235	457	16.4	0.32	< 0.1	< 1	< 0.1	< 0.001
0143		1/4/2000	6,779.90	7.80	8.41	998	36.1	19.4	272	5.4	242	528	22.8	0.33	0.24	< 1	< 0.1	0.001
0515 A		7/23/1989	6,920.50	4.50	4.63	7411	482	871	340	12.6	18	4982	52.5	0.39	86	14	12	< 0.001
0515 A		10/12/1989	6,920.80	4.70	4.60	7650	439	861	328	15.8	4.1	4583	77.8	0.39	84	12	15	< 0.001
0515 A		1/10/1990	6,919.60	4.00	3.94	9350	449	1017	335	13.7	< 1	6227	36.8	3.79	52	8.4	110	< 0.001
0515 A		4/5/1990	6,918.80	3.90	3.98	9405	451	1073	331	13.3	< 1	6237	30.8	3.25	55	11.8	150	< 0.001
0515 A		7/3/1990	6,918.10	4.00	4.18	9187	435	941	320	12.7	< 1	6084	59.4	0.67	54.2	22.4	110	< 0.001
0515 A		10/3/1990	6,917.80	4.40	4.32	9021	440	992	390	15.7	< 1	5728	82.6	0.17	51.6	25.4	75.6	< 0.001
0515 A		1/15/1991	6,916.90	4.40	4.31	9290	523	1146	407	16.7	< 1	6476	68.5	0.65	58.5	42	48.4	< 0.001
0515 A		4/3/1991	6,916.60	4.60	4.88	9254	459	1159	387	12.9	16	5627	83	0.31	41.4	75.3	60.7	< 0.001
0515 A		7/17/1991	6,916.50	4.50	4.60	8966	486	940	342	13.2	12	6653	83.5	0.79	38.6	38.4	45.8	< 0.001
0515 A		9/4/1991	no data	no data	4.62	9792	429	768	385	13.6	5	6955	52.2	0.66	18.1	36.4	9.6	< 0.001
0515 A		10/15/1991	6,916.20	4.80	4.92	9118	410	749	453	15	9.5	5832	108	< 0.05	19.9	102	3.3	< 0.001
0515 A		11/4/1991	no data	no data	4.33	9001	426	759	377	12.9	< 1	5750	103	0.53	65.7	28	23.19	< 0.001
0515 A		12/2/1991	no data	no data	4.59	9153	425	831	376	13.4	7.2	5298	102	0.9	36	55.9	35.4	< 0.001

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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**
0143		10/4/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.002	0.7	< 1	0.7	< 0.2	< 1	< 1
0143		1/4/1995	< 0.01	< 0.01	< 0.01	< 0.05	< 0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.002	0.8	< 1	0.8	< 0.2	< 1	< 1
0143		4/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	< 0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.002	0.2	< 1	0.2	< 0.2	1.5	< 1
0143		7/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	< 0.03	< 0.1	< 0.05	0.001	< 0.1	< 0.0003	0.5	< 1	0.5	< 0.2	< 1	< 1
0143		10/3/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0018	0.3	1.3	1.6	< 0.2	< 1	< 1
0143		1/3/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0014	1	2.5	3.5	0.4	1	2.1
0143		4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	0.19	< 0.001	< 0.1	< 0.0003	0.5	< 1	0.5	< 0.2	< 1	< 1
0143		7/7/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.002	< 0.2	< 1	0	< 0.2	< 1	3.8
0143		10/1/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.003	< 0.1	< 0.0003	0.5	< 1	0.5	< 0.2	< 1	< 1
0143		1/21/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.6	< 1	0.6	< 0.2	< 1	< 1
0143		4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0143		7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0009	< 0.2	< 1	0	< 0.2	< 1	< 1
0143		10/7/1997	< 0.01	< 0.01	0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0143		1/15/1998	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0013	< 0.2	< 1	0	< 0.2	< 1	< 1
0143		4/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0015	< 0.2	< 1	0	< 0.2	< 1	< 1
0143		7/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0009	< 0.2	< 1	0	< 0.2	< 1	< 1
0143		10/6/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.0081	0.6	< 1	0.6	< 0.2	< 1	< 1
0143		1/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.09	< 0.1	< 0.05	< 0.001	< 0.1	0.0148	< 0.2	< 1	0	< 0.2	< 1	< 1
0143		4/6/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0014	< 0.2	1.7	1.7	< 0.2	< 1	< 1
0143		7/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0011	< 0.2	< 1	0	< 0.2	< 1	< 1
0143		10/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.3	< 1	0.3	< 0.2	< 1	< 1
0143		1/4/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	0.001	< 0.1	0.0047	2	< 1	2	< 0.2	< 1	3.1
0515 A		7/23/1989	< 0.05	< 0.01	0.07	< 0.05	7.7	< 0.1	0.26	< 0.001	< 0.1	0.0029	6.3	9.4	15.7	< 0.2	3	23.1
0515 A		10/12/1989	< 0.05	< 0.01	0.09	< 0.05	8.5	< 0.01	0.26	0.019	< 0.1	0.004	3.2	< 1	3.2	< 0.2	1.6	3.9
0515 A		1/10/1990	< 0.05	< 0.01	0.26	< 0.05	23	< 0.1	0.37	< 0.001	< 0.1	0.01	5.2	9.7	14.9	1.7	3.5	9.7
0515 A		4/5/1990	< 0.05	< 0.01	0.31	< 0.05	24	< 0.1	0.46	< 0.001	< 0.1	0.008	4.9	5.5	10.4	1.8	2.2	7.3
0515 A		7/3/1990	< 0.05	< 0.01	0.18	< 0.05	17.6	< 0.1	0.35	< 0.001	< 0.1	0.0107	6.9	6.2	13.1	< 0.2	< 1	7
0515 A		10/3/1990	< 0.05	< 0.01	0.17	< 0.05	12.8	< 0.1	0.31	< 0.001	< 0.1	0.005	3.3	8.3	11.6	< 0.2	< 1	4
0515 A		1/15/1991	0.01	0.01	0.16	< 0.05	11.6	< 0.1	0.32	< 0.001	< 0.1	0.007	5.3	7.1	12.4	< 0.2	< 1	5.7
0515 A		4/3/1991	< 0.01	< 0.01	0.11	< 0.05	7.1	< 0.1	0.2	< 0.001	< 0.1	0.003	6.1	7.2	13.3	< 0.2	2	6
0515 A		7/17/1991	0.02	< 0.01	0.24	< 0.05	14.7	< 0.1	0.3	< 0.001	< 0.1	0.011	2.7	3.5	6.2	< 0.2	< 1	3
0515 A		9/4/1991	< 0.01	< 0.01	0.15	< 0.05	11.6	< 0.1	0.28	< 0.001	< 0.1	0.008	2.1	6.3	8.4	< 0.2	< 1	2
0515 A		10/15/1991	< 0.01	< 0.01	0.22	< 0.05	14.4	< 0.1	0.19	< 0.001	< 0.1	0.02	2.4	9	11.4	< 0.2	< 1	3
0515 A		11/4/1991	0.02	< 0.01	0.17	< 0.05	15.2	< 0.1	0.33	< 0.001	< 0.1	0.0138	3.5	12	15.5	< 0.2	6.9	4
0515 A		12/2/1991	< 0.01	< 0.01	0.24	< 0.05	14.1	< 0.1	0.32	< 0.001	< 0.1	0.01	5.4	10.4	15.8	< 0.2	< 1	5

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0515 A		1/15/1992	6,916.10	4.50	4.61	9035	409	814	396	12.6	16.8	5854	90.3	0.18	26.5	19	26.6	< 0.001
0515 A		4/8/1992	6,916.20	4.30	5.30	9087	430	723	416	14.5	19.8	5710	130	1.23	19.2	24	16.2	0.003
0515 A		7/8/1992	6,915.80	4.30	4.78	8447	438	687	511	17.7	5.3	5892	109	1.78	31	63	21	0.001
0515 A		10/7/1992	6,915.70	4.60	4.10	8989	450	953	470	19.4	< 1	6028	78.2	0.43	15.1	48.2	48.8	< 0.001
0515 A		1/6/1993	6,915.60	5.30	4.98	7144	415	776	384	13	19.3	4980	145	0.71	21.8	102	10.2	< 0.001
0515 A		4/6/1993	6,915.60	4.70	4.55	8962	389	863	471	12.5	2.5	5942	150	0.35	27.1	89	35.6	< 0.001
0515 A		7/13/1993	6,915.00	5.00	4.60	8790	449	1088	458	14	7.1	5755	195	1.14	29.3	133	5.73	< 0.001
0515 A		10/6/1993	6,914.80	6.00	6.22	8235	454	1038	479	12.6	554	5500	225	0.94	38	255	1.87	< 0.001
0515 A		1/6/1994	6,914.70	5.50	6.13	8633	436	862	478	11.3	373	5042	227	2.18	45.7	315	2.92	< 0.001
0515 A		4/12/1994	6,914.40	5.70	5.98	8306	433	868	440	11.3	183	5305	223	2.17	51.9	277	1.51	< 0.001
0515 A		7/20/1994	6,913.90	5.60	6.91	8197	483	902	419	12.5	206	5157	195	0.97	45.6	271	1.42	< 0.001
0515 A		10/4/1994	6,914.00	5.60	6.62	8173	496	924	493	12.6	260	5276	236	1.64	51.8	241	2.45	< 0.001
0515 A		1/4/1995	6,913.70	5.50	6.69	8234	485	945	443	14.1	266	5293	212	1.42	49	213	1.7	< 0.001
0515 A		4/4/1995	6,913.40	5.60	5.91	7657	488	802	488	14.1	185	5196	240	2	58.5	182	2.04	< 0.001
0515 A		7/6/1995	6,912.90	5.80	7.09	8297	475	926	449	13.1	315	5060	236	3.99	49.7	181	0.25	< 0.001
0515 A		10/3/1995	6,912.90	5.80	7.16	8311	490	928	477	13	421	5042	253	6.81	53.3	0.264	0.65	0.002
0515 A		1/3/1996	6,912.70	5.80	6.43	8017	450	876	468	13.5	475	4830	252	5.6	56.9	236	< 0.1	< 0.001
0515 A		4/2/1996	6,912.40	6.00	7.53	8300	506	997	457	14	392	5360	279	6.57	61	0.247	0.6	< 0.001
0515 A		7/7/1996	6,912.20	5.30	5.94	8117	447	853	426	13.6	210	4670	250	1.76	54.7	0.211	1.42	< 0.001
0515 A		10/1/1996	6,912.00	5.70	6.58	8270	441	910	457	14.5	342	4834	268	6.97	53.5	238	0.85	< 0.001
0515 A		1/21/1997	6,911.90	5.60	6.77	8110	449	979	455	15	428	5140	253	8.03	46.8	239	0.97	< 0.001
0515 A		4/8/1997	6,911.70	5.50	7.37	8220	456	865	449	15	331	4388	294	6.41	58.5	230	0.75	< 0.001
0515 A		7/8/1997	6,911.20	6.40	6.75	8260	502	950	466	15.1	296	5130	300	5.39	57.9	238	1.27	< 0.001
0515 A		10/7/1997	6,911.20	5.50	6.71	8200	490	906	450	14.6	254	4790	255	6.04	56.4	242	0.98	< 0.001
0515 A		1/15/1998	6,911.00	5.70	6.80	8040	455	860	439	14.7	228	4800	287	10.4	64.8	262	2	< 0.001
0515 A		4/7/1998	6,911.00	5.50	7.14	8190	429	821	444	14.1	276	4420	257	6.47	58.9	236	0.78	< 0.001
0515 A		7/7/1998	6,910.90	5.80	7.61	8170	481	912	456	14.5	291	4500	291	6.9	63.9	270	0.87	< 0.001
0515 A		10/6/1998	6,910.50	5.69	7.32	8170	465	910	468	15.5	317	5000	286	3.89	70.5	no data	0.51	< 0.001
0515 A		1/5/1999	6,910.00	5.70	7.18	8200	412	867	410	14.2	306	4900	287	6.47	57.4	210	0.69	< 0.001
0515 A		4/6/1999	6,910.10	5.50	6.59	8130	444	889	404	13.7	292	4600	286	6.52	57.8	190	0.86	< 0.001
0515 A		7/13/1999	6,909.88	5.70	7.42	7930	486	938	440	18	272	4800	254	4.52	62.6	172	0.4	< 0.001
0515 A		10/5/1999	6,910.00	5.36	7.27	7950	526	1040	423	14.6	253	5440	272	6.64	55.6	183	1.02	< 0.001
0515 A		1/4/2000	6,910.40	5.50	7.14	7720	414	810	338	13.7	222	4150	221	3.59	65.1	171	1.22	< 0.001
0515 A		5/10/2000	6,910.60	5.50	7.01	8080	437	871	437	13.6	356	4440	261	9.79	62.8	198	2.44	< 0.001
0515 A		7/11/2000	6,910.30	5.45	6.50	7740	458	866	428	13.4	242	4460	239	4.19	86.5	154	2.11	< 0.001

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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**
0515 A		1/15/1992	0.02	< 0.01	0.02	< 0.05	15.5	< 0.1	0.31	0.01	< 0.1	0.012	2.6	4.4	7	< 0.2	4.2	3
0515 A		4/8/1992	0.01	< 0.01	0.19	< 0.05	13.6	< 0.1	0.27	0.01	< 0.1	0.013	3.4	6.4	9.8	< 0.2	< 1	3.6
0515 A		7/8/1992	< 0.01	< 0.01	0.19	< 0.05	15.7	< 0.1	0.26	0.001	< 0.1	0.02	3.4	10.8	14.2	< 0.2	1.6	3.7
0515 A		10/7/1992	< 0.01	< 0.01	0.28	< 0.05	18.7	< 0.1	0.38	< 0.001	< 0.1	0.02	5.6	7	12.6	< 0.2	< 1	5.9
0515 A		1/6/1993	0.01	< 0.01	0.21	< 0.05	14.2	< 0.1	0.34	0.004	< 0.1	0.015	5.7	6.7	12.4	< 0.2	< 1	5.9
0515 A		4/6/1993	0.013	< 0.01	0.26	< 0.05	18.8	< 0.1	0.37	0.001	< 0.1	0.015	2.9	9.5	12.4	< 0.2	4.4	3.6
0515 A		7/13/1993	< 0.01	< 0.01	0.2	< 0.05	14	< 0.1	0.28	< 0.001	< 0.1	0.012	2.6	6.5	9.1	< 0.2	2.9	3.4
0515 A		10/6/1993	< 0.01	< 0.01	0.13	< 0.05	9.81	< 0.1	0.27	< 0.001	< 0.1	0.004	3.5	7	10.5	< 0.2	2.6	3.9
0515 A		1/6/1994	< 0.01	< 0.01	0.15	< 0.05	12.1	< 0.1	0.26	< 0.001	< 0.1	0.004	5.4	2.8	8.2	< 0.2	< 1	10.6
0515 A		4/12/1994	< 0.01	< 0.01	< 0.01	< 0.05	10.6	< 0.1	0.21	0.001	< 0.1	0.03	4.8	< 1	4.8	< 0.2	3.9	5
0515 A		7/20/1994	< 0.01	< 0.01	0.18	< 0.05	11.4	< 0.1	0.25	0.001	< 0.1	0.002	4.2	9.3	13.5	< 0.2	< 1	24.2
0515 A		10/4/1994	< 0.01	< 0.01	0.16	< 0.05	15.3	< 0.1	0.31	< 0.001	< 0.1	0.003	6.6	3.7	10.3	< 0.2	1	12.3
0515 A		1/4/1995	< 0.01	< 0.01	0.11	< 0.05	10.2	< 0.1	0.42	< 0.001	< 0.1	0.004	6.2	4.7	10.9	< 0.2	< 1	13.4
0515 A		4/4/1995	< 0.01	< 0.01	0.13	< 0.05	11	< 0.1	0.15	< 0.001	< 0.1	0.002	4.7	7.5	12.2	< 0.2	2.9	16.1
0515 A		7/6/1995	< 0.01	< 0.01	0.02	< 0.05	2.52	< 0.1	< 0.05	0.002	< 0.1	0.0044	3	4.2	7.2	0.3	< 1	16.1
0515 A		10/3/1995	< 0.01	< 0.01	0.07	< 0.05	11.1	< 0.1	0.13	< 0.001	< 0.1	0.0057	3.6	< 1	3.6	< 0.2	< 1	13.6
0515 A		1/3/1996	< 0.01	< 0.01	< 0.01	< 0.05	11.4	< 0.1	0.14	< 0.001	< 0.1	0.0038	3.4	3.1	6.5	0.8	< 1	7.4
0515 A		4/2/1996	< 0.01	< 0.01	0.08	< 0.05	11.8	< 0.1	0.14	< 0.001	< 0.1	< 0.0003	2.4	3.9	6.3	< 0.2	< 1	5.4
0515 A		7/7/1996	< 0.01	< 0.01	0.11	< 0.05	12.9	< 0.1	0.17	< 0.001	< 0.1	0.0023	2.6	< 1	2.6	< 0.2	< 1	3.4
0515 A		10/1/1996	< 0.01	< 0.01	0.08	< 0.05	13.2	< 0.1	0.15	0.002	< 0.1	0.0028	2.1	5.4	7.5	< 0.2	< 1	3.8
0515 A		1/21/1997	< 0.01	< 0.01	0.07	< 0.05	12.2	< 0.1	0.14	< 0.001	< 0.1	0.004	2.9	3.6	6.5	< 0.2	< 1	2.5
0515 A		4/8/1997	< 0.01	< 0.01	0.07	< 0.05	12.1	< 0.1	0.15	0.069	< 0.1	0.0019	4.9	4.5	9.4	< 0.2	< 1	13
0515 A		7/8/1997	< 0.01	< 0.01	0.09	< 0.05	14.6	< 0.1	0.15	< 0.001	< 0.1	0.003	1.6	3.7	5.3	< 0.2	< 1	2.2
0515 A		10/7/1997	< 0.01	< 0.01	0.08	< 0.05	12.9	< 0.1	0.17	< 0.001	< 0.1	0.003	2.1	< 1	2.1	< 0.2	< 1	3.2
0515 A		1/15/1998	< 0.01	< 0.005	0.1	< 0.05	15.6	< 0.1	0.19	< 0.001	< 0.1	0.0025	2.3	4.8	7.1	< 0.2	< 1	2.4
0515 A		4/7/1998	< 0.01	< 0.005	0.08	< 0.05	12.1	< 0.1	0.17	< 0.001	< 0.1	0.0034	2.5	3.7	6.2	< 0.2	< 1	4.1
0515 A		7/7/1998	< 0.01	< 0.005	0.07	< 0.05	13.9	< 0.1	0.15	< 0.001	< 0.1	0.0031	2.9	4.2	7.1	< 0.2	< 1	3.8
0515 A		10/6/1998	< 0.01	< 0.005	0.06	< 0.05	11.8	< 0.1	0.15	< 0.001	< 0.1	0.0049	2.3	1.2	3.5	< 0.2	2.8	210
0515 A		1/5/1999	< 0.01	0.011	0.05	< 0.05	12.3	< 0.1	0.12	< 0.001	< 0.1	0.0035	2.2	3.9	6.1	< 0.2	2.5	2.5
0515 A		4/6/1999	< 0.01	0.006	0.07	< 0.05	13.6	< 0.1	0.15	< 0.001	< 0.1	0.0029	3.4	4.8	8.2	< 0.2	3.1	3.1
0515 A		7/13/1999	< 0.01	0.006	0.05	< 0.05	13.6	< 0.1	0.13	< 0.001	< 0.1	0.0036	2.3	2.9	5.2	< 0.2	2	2
0515 A		10/5/1999	< 0.01	0.008	0.07	< 0.05	16.6	< 0.1	0.15	< 0.001	< 0.1	0.0023	2.4	< 1	2.4	< 0.2	< 1	4.7
0515 A		1/4/2000	< 0.01	0.006	0.08	< 0.05	14	< 0.1	0.22	< 0.001	< 0.1	0.0025	3.2	4.2	7.4	< 0.2	< 1	3.7
0515 A		5/10/2000	< 0.01	< 0.005	0.06	< 0.05	11.8	< 0.1	0.18	< 0.001	< 0.1	0.0036	4.1	2.1	6.2	< 0.2	< 1	12
0515 A		7/11/2000	< 0.01	< 0.005	0.09	< 0.05	14.6	< 0.1	0.19	< 0.001	< 0.1	0.0021	2	3.6	5.6	< 0.2	< 1	4.6

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TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0515 A		10/3/2000	6,910.40	5.47	6.70	7550	456	906	432	16.2	228	5060	236	2.56	70.1	181	2.08	< 0.001
0515 A		1/10/2001	6,910.40	5.62	6.61	7610	440	816	364	12.9	222	4410	258	2.76	66.4	141	2.7	< 0.001
0515 A		4/3/2001	6,910.30	5.85	6.54	7580	512	929	373	12.3	225	4640	247	2.85	68.5	148	2.9	< 0.001
0515 A		7/17/2001	6,909.90	5.94	5.96	7770	420	810	421	14.1	225	4010	260	2.62	70.9	160	2.89	< 0.001
0515 A		10/2/2001	6,910.00	5.44	6.60	7780	430	820	351	14	217	4000	327	2	66.5	165	2.29	< 0.001
0515 A		1/14/2002	6,909.85	6.56	6.30	7680	501	887	349	14.6	212	4410	305	2.07	60.5	149	3	0.002
0515 A		4/2/2002	6,910.00	5.41	6.57	7670	492	855	412	15.2	214	4790	279	1.75	61.9	162	2.9	< 0.001
0515 A		7/10/2002	6,909.30	7.25	6.33	7750	470	850	401	13.4	211	4420	250	2.39	61.5	162	2.4	< 0.001
0515 A		10/9/2002	6,910.87	6.54	6.61	6900	428	778	386	12.5	210	4270	228	2.95	63	203	3.1	< 0.001
0515 A		1/8/2003	6,909.16	7.08	6.74	7640	385	720	392	13.1	209	3810	223	3.16	57	162	2.4	< 0.001
0515 A		4/9/2003	6,908.81	5.31	6.37	7680	443	816	402	18.9	198	4050	270	2.81	58	166	2.4	< 0.001
0515 A		7/9/2003	6,908.68	5.25	6.41	6250	450	814	450	14.5	203	4500	246	3.11	61	237	2.6	< 0.001
0515 A		10/8/2003	6,908.80	5.24	6.20	7800	453	843	427	12.4	190	4470	232	2.98	59	148	2.6	< 0.001
0515 A		1/7/2004	6,909.85	5.38	7.38	7680	512	916	445	14.3	193	4850	275	3.24	60.2 D	124 D	3	< 0.001
0515 A		4/7/2004	6,908.45	5.62	5.65	7720	476	847	431	13.6	202	4540 D	253	3.6	60.9 D	167 D	2.8	< 0.001
0515 A		7/14/2004	6,908.21	5.22	5.91	8010	470	815	426	14.3	200	4590 D	262	2.88	57.4 D	147 D	2.1	< 0.001
0515 A		10/6/2004	6,908.21	5.33	5.92	8000	473 D	857 D	440	13.9	199	4700 D	253	2.94	58 D	110 D	2	< 0.001
0515 A		1/5/2005	6,908.03	5.52	5.83	7910	486 D	871 D	432	14	213	4770 D	256	3.22	57 D	41.6 D	2.2	< 0.001
0515 A		4/6/2005	6,907.60	5.59	6.17	7530	483	849	436	13.8	207	4490	255	3.45	45	102	1.7	< 0.001
0515 A		7/13/2005	6,907.49	5.55	6.33	7690	500 D	845 D	425 D	12.7	199	4640 D	235	3.63	65.3 D	228 D	1.2	< 0.001
0515 A		10/5/2005	6,907.48	5.53	6.10	7710	455 D	875 D	427	14.3	209	4540 D	242	4.15	52 D	161 D	1.3	< 0.001
0515 A		1/11/2006	6,907.55	5.65	6.42	7560	477 D	872 D	403	13.5	214	4930 D	237	4.94	63 D	142 D	0.9	< 0.001
0515 A		4/5/2006	6,907.45	5.53	6.34	7620	489 D	861 D	397	14.1	211	4410 D	253	8.01	63 D	114 D	1.1	< 0.001
0515 A		7/19/2006	6,906.83	5.54	5.97	7460	494 D	825 D	436	14.1	215	4540 D	253	4.61	62 D	173 D	0.7	< 0.001
0515 A		10/4/2006	6,907.00	5.61	5.86	7710	461 D	813 D	423	14.4	202	4280 D	238	5.84	61 D	176 D	0.9	< 0.001
0515 A		1/10/2007	6,906.88	5.57	5.86	7850	448 D	807 D	388	14	220	4640 D	245	5.2 D	58 D	105	0.4	<0.001
0515 A		4/11/2007	6,906.77	5.61	6.12	7770	475 D	874 D	424	16	<1	4800 D	246	5.87	63 D	134	0.8	<0.001
0515 A		7/11/2007	6,906.38	5.54	6.02	7590	492 D	876 D	419	14.6	216	4880 D	240	8 D	68 D	157	0.2	0.003
0515 A		10/3/2007	6,906.33	5.40	5.96	7880	436 D	823 D	445 D	15.9	217	4440 D	255 D	6.2 D	61 D	168	0.5	<0.001
0515 A		1/16/2008	6,906.43	5.1	6.37	7470	454 D	819 D	444 D	16.1	202	4340 D	266 D	6.8 D	64 D	227	0.7	< 0.001
0515 A		4/9/2008	6,906.43	5.64	6.37	7450	493 D	926 D	485 D	15.8 D	190	5050 D	235	7.7 D	78.6	22.6	1.1	< 0.001
0515 A		7/9/2008	6,905.93	5.44	6.1	7460	493 D	897 D	484 D	15.3	212	4960 D	266	4.99	91.8 D	107	0.4	< 0.003
0515 A		10/8/2008	6,905.73	5.64	5.75	7770	460	832	430 D	14	202	5200 D	242	9.9	73.8	128	0.6	< 0.001
0515 A		1/14/2009	6,905.73	5.73	6.19	8190	420	825	478	13 D	219	5080 D	248	12.6 D	86 D	76.8	0.9	<0.001
0515 A		4/8/2009	6,905.68	5.66	6.31	7750	438 D	845 D	462 D	15	297	4980 D	275	12.2 D	59.2 D	64.4	0.7	<0.001

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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**
0515 A		10/3/2000	< 0.01	< 0.005	0.07	< 0.05	11.6	< 0.1	0.15	< 0.001	< 0.1	0.0019	2.8	5.9	8.7	< 0.2	< 1	5.1
0515 A		1/10/2001	< 0.01	< 0.005	0.08	< 0.05	12.5	< 0.1	0.22	< 0.001	< 0.1	0.0017	2.6	6.3	8.9	< 0.2	< 1	3.4
0515 A		4/3/2001	< 0.01	< 0.005	0.1	< 0.05	13.3	< 0.1	0.25	< 0.001	< 0.1	0.0011	2.7	< 1	2.7	< 0.2	< 1	3.1
0515 A		7/17/2001	< 0.01	< 0.005	0.09	< 0.05	13.9	< 0.1	0.24	< 0.001	< 0.1	0.001	3.1	6	9.1	< 0.2	< 1	4.1
0515 A		10/2/2001	< 0.01	< 0.005	0.07	< 0.05	13.4	< 0.1	0.11	< 0.001	< 0.1	0.0009	3.1	4.5	7.6	< 0.2	< 1	6.3
0515 A		1/14/2002	< 0.01	< 0.005	0.1	< 0.05	15.8	< 0.1	0.26	< 0.001	< 0.1	0.0011	3.2	6.6	9.8	< 0.2	< 1	3.5
0515 A		4/2/2002	< 0.01	< 0.005	0.09	< 0.05	15.3	< 0.1	0.23	< 0.001	< 0.1	0.0009	3.4	2.9	6.3	< 0.2	< 1	6
0515 A		7/10/2002	< 0.01	< 0.005	0.09	< 0.05	12.4	< 0.1	0.18	< 0.001	< 0.1	0.0013	3.6	6.8	10.4	< 0.2	< 1	8
0515 A		10/9/2002	< 0.01	< 0.005	0.08	< 0.05	13.3	< 0.1	0.2	< 0.001	< 0.1	0.002	3.5	3.1	6.6	< 0.2	< 1	9.3
0515 A		1/8/2003	< 0.01	< 0.005	0.09	< 0.05	14.8	< 0.1	0.21	< 0.001	< 0.1	0.0012	4	5.4	9.4	< 0.2	< 1	5
0515 A		4/9/2003	< 0.01	< 0.005	0.09	< 0.05	13.8	< 0.1	0.22	< 0.001	< 0.1	0.0011	3.3	7	10.3	< 0.2	< 1	3.5
0515 A		7/9/2003	< 0.01	< 0.005	0.09	< 0.05	15.7	< 0.1	0.26	< 0.001	< 0.1	0.0008	2.4	6.3	8.7	< 0.2	< 1	3.9
0515 A		10/8/2003	< 0.01	< 0.005	0.09	< 0.05	14.8	< 0.1	0.25	< 0.001	< 0.1	0.0014	2.2	2.5	4.7	< 0.2	< 1	5.3
0515 A		1/7/2004	< 0.01	< 0.005	0.09	< 0.05	17.4	< 0.1	0.24	< 0.001	< 0.1	0.0012 D	2.3	< 1.0	2.3	< 0.2	< 1.0	7.5
0515 A		4/7/2004	< 0.01	< 0.005	0.09	< 0.05	16.3	< 0.1	0.25	0.007	< 0.1	0.0011 D	1.4	4.2	5.6	< 0.2	< 1	7.3
0515 A		7/14/2004	< 0.01	< 0.005	0.08	< 0.05	14.6	< 0.1	0.2	< 0.001	< 0.1	0.0011 D	1.7	< 1.0	1.7	< 0.2	< 1.0	4.6
0515 A		10/6/2004	< 0.01	< 0.005	0.08	< 0.05	14.8	< 0.1	0.11	< 0.001	< 0.1	0.0009 D	2.3	2.5	4.8	< 0.2	< 1.0	3.5
0515 A		1/5/2005	< 0.01	0.006	0.09	< 0.05	15	< 0.1	0.25	0.002	< 0.1	0.001	4.2	1.8	6	< 0.2	< 1.0	10.9
0515 A		4/6/2005	< 0.01	< 0.005	0.06	< 0.05	16	< 0.1	0.25	< 0.001	< 0.1	0.001	3.3	1.1	4.4	< 0.2	< 1.0	1.9
0515 A		7/13/2005	< 0.01	< 0.005	0.06	< 0.05	15.6	< 0.1	0.24	< 0.001	< 0.1	0.0008	2.6	1.5	4.1	< 0.2	< 1.0	2.8
0515 A		10/5/2005	< 0.01	< 0.005	0.07	< 0.05	15.4	< 0.1	0.25	< 0.001	< 0.1	0.0009 D	1.9	1.3	3.2	< 0.2	< 1.0	3.1
0515 A		1/11/2006	< 0.01	< 0.005	0.05	< 0.05	15.3	< 0.1	0.23	0.008	< 0.1	0.0009	1.5	1.1	2.6	< 0.2	< 1.0	2.8
0515 A		4/5/2006	< 0.01	< 0.005	0.06	< 0.05	16.7	< 0.1	0.25	0.008	< 0.1	0.0008 D	1.3	< 1.0	1.3	< 0.2	< 1.0	2.6
0515 A		7/19/2006	< 0.01	< 0.005	0.05	< 0.05	14.7	< 0.1	0.22	< 0.001	< 0.1	0.0007	1.6	1.8	3.4	< 0.2	< 1.0	1.7
0515 A		10/4/2006	< 0.01	< 0.005	0.05	< 0.05	16.1	< 0.1	0.24	< 0.001	< 0.1	0.0021 D	1.3	4	5.3	< 0.2	< 1	1.2
0515 A		1/10/2007	<0.01	<0.005	0.04	<0.05	15.1	<0.1	0.2	<0.001	<0.1	0.0006	2	<1	2	<0.2	<1	1.4
0515 A		4/11/2007	<0.01	<0.005	0.06	<0.05	15.5	<0.1	0.24	<0.001	<0.1	0.0009	1.3	3.4	4.7	<0.2	<1	2.3
0515 A		7/11/2007	<0.01	<0.005	0.05	<0.05	16.2	<0.1	0.24	<0.001	<0.1	0.0007	2.5	<1	2.5	<0.2	<1	1.7
0515 A		10/3/2007	<0.01	<0.005	0.04	<0.05	16.8	<0.1	0.21	<0.001	<0.1	0.0006	1.3	<1	1.3	<0.2	<1	4.5
0515 A		1/16/2008	< 0.01	< 0.005	0.05	< 0.05	15.9	< 0.1	0.24	< 0.001	< 0.1	0.0007	2	2.7	4.7	< 0.2	< 1	6.6
0515 A		4/9/2008	< 0.01	< 0.005	0.06	< 0.05	18.0	< 0.1	0.27	< 0.001	< 0.1	0.0009	0.5	3	3.5	1.4	0 U	8.1
0515 A		7/9/2008	< 0.01	< 0.005	0.04	< 0.05	18.6	< 0.1	0.25	< 0.001	< 0.1	0.0011	1	3.1	4.1	-0.1 U	8.5 U	2.2
0515 A		10/8/2008	< 0.01	< 0.005	0.04	< 0.05	17.6	< 0.1	0.24	< 0.001	< 0.1	0.0011	0.64	3.4	4.04	0.3	1 U	3
0515 A		1/14/2009	<0.01	<0.005	0.03	<0.05	17.6	<0.1	0.21	<0.001	<0.1	0.0009 D	1.3	3.5	4.8	-0.3 U	-3 U	2.4
0515 A		4/8/2009	<0.01	<0.005	0.03	<0.05	17.0	<0.1	0.22	<0.001	<0.1	0.0008 D	1.1	3.2	4.3	0.2 U	-3 U	2.5

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TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0515 A		7/8/2009	6,905.33	5.61	6.00	7760	480 D	840	451 D	15	219	4960 D	258	13.6 D	58 D	72.4	1.2	<0.001
0515 A		10/7/2009	6,905.43	6.32	6.90	7800	471 D	831	434 D	15	200	4960 D	258	10.0 D	64 D	46.4	0.6	<0.001
0516 A		7/23/1989	6,918.70	4.20	4.08	12629	454	1519	399	9.29	0	8605	207	30.5	146	< 1	240	< 0.001
0516 A		10/12/1989	6,918.50	4.40	4.22	11560	449	1343	358	13.6	0	6992	264	39.8	188	< 1	150	< 0.001
0516 A		1/10/1990	6,917.80	4.40	4.31	10892	463	1281	409	11.7	< 1	6654	230	25	181	< 1	110	< 0.001
0516 A		4/6/1990	6,917.40	4.50	4.27	11343	463	1300	379	12.1	< 1	6989	216	57.3	186	< 1	130	< 0.001
0516 A		7/3/1990	6,916.40	4.20	4.28	11462	472	1212	359	10.2	< 1	7003	216	95.5	208	< 1	144	< 0.001
0516 A		10/9/1990	6,915.60	4.60	4.51	10430	429	1243	416	13.3	0.1	6467	203	78	208	< 1	80.3	< 0.001
0516 A		1/15/1991	6,915.10	4.60	4.50	10179	482	1207	436	19.4	< 1	5983	261	80.8	240	< 1	42.6	< 0.001
0516 A		4/2/1991	6,914.40	4.90	4.99	10493	464	1250	387	13.4	25	6165	267	97.9	240	< 1	20.5	< 0.001
0516 A		7/17/1991	6,913.80	4.80	5.75	9771	430	1097	390	12.8	100	6873	326	74	281	< 1	12.3	< 0.001
0516 A		9/4/1991	no data	no data	5.58	10598	444	1299	394	13.2	173	6936	215	144	59	< 1	8.6	< 0.001
0516 A		10/15/1991	6,911.40	5.10	6.39	9878	450	1068	451	16.5	213	6047	275	99	234	< 1	4.18	< 0.001
0516 A		11/4/1991	no data	no data	5.88	10139	490	875	392	13.6	381	5597	299	113	135	1.7	5.84	< 0.001
0516 A		12/2/1991	no data	no data	6.35	9819	471	879	375	13.8	340	5046	259	132	147	1.3	3.2	< 0.001
0516 A		1/15/1992	6,913.20	4.90	4.70	9588	403	1186	364	11.9	21.6	6079	241	201	93.5	1.2	22.2	< 0.001
0516 A		4/8/1992	6,912.90	4.90	5.51	10129	444	669	395	15.1	83	6152	369	117	97.1	1.6	11.4	0.002
0516 A		7/8/1992	6,912.40	4.80	6.21	9577	495	916	413	25.2	117	6065	234	129	119	1.4	6.56	< 0.001
0516 A		10/7/1992	6,912.20	5.00	5.19	9800	492	1090	433	17.2	73.2	6244	229	80.1	15.9	1.3	29.3	0.001
0516 A		1/6/1993	6,912.10	5.10	5.70	8137	502	889	398	15.5	168	5252	245	93.7	144	2.1	7.8	< 0.001
0516 A		4/6/1993	6,911.80	5.40	6.26	9954	423	1037	456	13.7	250	6106	252	112	141	1.8	2.9	< 0.001
0516 A		7/13/1993	6,911.20	5.60	6.48	9291	485	1102	401	14.4	421	5879	241	92.9	142	2.3	2	< 0.001
0516 A		10/7/1993	6,910.50	5.80	6.16	9168	481	1109	417	13.3	348	5596	255	101	169	1.6	2.4	< 0.001
0516 A		1/6/1994	6,910.70	5.70	6.26	10048	478	1044	445	12.7	477	5747	237	112	150	2.5	2.87	< 0.001
0516 A		4/12/1994	6,910.20	5.80	6.52	9862	472	1121	413	14.6	610	5815	249	138	155	0.87	0.97	< 0.001
0516 A		7/20/1994	6,906.80	6.00	6.96	10276	526	1293	389	17.6	953	6286	246	149	157	2.04	0.46	< 0.001
0516 A		10/4/1994	6,909.50	6.20	7.37	10221	533	1221	488	17.2	949	6371	249	164	138	1.6	< 0.1	< 0.001
0516 A		1/4/1995	6,909.10	6.10	7.01	10761	495	1245	458	19	939	6901	255	198	130	1.8	0.24	< 0.001
0516 A		4/5/1995	6,908.80	6.10	6.36	10757	505	1275	478	20.7	1069	6510	255	180	133	1.3	0.12	< 0.001
0516 A		7/6/1995	6,903.90	6.20	7.21	10428	491	1290	476	18.7	1302	6259	258	164	129	1.9	< 0.1	< 0.001
0516 A		10/3/1995	6,903.70	6.10	7.44	10761	527	1298	450	19.4	1332	6394	238	178	126	1.72	< 0.1	0.001
0516 A		1/3/1996	6,908.20	6.40	7.03	11314	469	1340	485	18.5	1302	6480	237	137	142	1.76	< 0.1	0.001
0516 A		4/2/1996	6,904.10	6.40	7.29	11345	527	1530	491	19	1320	7150	259	152	146	2.09	< 0.1	0.002
0516 A		7/7/1996	6,904.20	6.10	7.15	11529	465	1480	485	19.6	1309	6190	240	150	134	2.56	< 0.1	< 0.001
0516 A		10/1/1996	6,903.80	6.40	6.93	11500	494	1600	485	18.9	1270	6640	247	149	128	2.13	< 0.1	< 0.001

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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**
0515 A		7/8/2009	<0.01	<0.005	0.03	<0.05	17.5	<0.1	0.22	<0.001	<0.1	0.0009	1.9	4.2	6.1	0.04 U	1.9 U	2.9
0515 A		10/7/2009	<0.01	<0.005	0.04	<0.05	18.4	<0.1	0.29	<0.001	<0.1	0.0008	0.91	2.9	3.81	0.1 U	-2 U	2.6
0516 A		7/23/1989	< 0.05	< 0.01	0.45	< 0.05	37	< 0.1	0.051	< 0.001	< 0.1	0.0023	13.6	8.3	21.9	< 0.2	2.9	53.8
0516 A		10/12/1989	< 0.05	< 0.01	0.4	0.12	29	< 0.01	0.41	0.01	< 0.1	0.005	2.9	18.5	21.4	< 0.2	1.8	2.5
0516 A		1/10/1990	< 0.05	< 0.01	0.42	< 0.05	25	< 0.1	0.35	< 0.001	< 0.1	0.003	2.9	4.8	7.7	< 0.2	< 1	3.5
0516 A		4/6/1990	< 0.05	< 0.01	0.35	< 0.05	27	< 0.1	0.34	< 0.001	< 0.1	0.004	3.7	2.9	6.6	< 0.2	< 1	4
0516 A		7/3/1990	< 0.05	< 0.01	0.25	< 0.05	28	< 0.1	0.45	0.001	< 0.1	0.0029	3.4	2.9	6.3	< 0.2	< 1	3
0516 A		10/9/1990	< 0.05	< 0.01	0.25	< 0.05	21.9	< 0.1	0.3	< 0.001	< 0.1	0.0035	3.3	4.6	7.9	< 0.2	< 1	4
0516 A		1/15/1991	0.01	< 0.01	0.24	< 0.05	20.6	< 0.1	0.32	< 0.001	< 0.1	0.0028	6.5	6.4	12.9	< 0.2	< 1	6.7
0516 A		4/2/1991	< 0.01	< 0.01	0.19	< 0.05	20.3	< 0.1	0.26	< 0.001	< 0.1	0.0003	6	6.8	12.8	< 0.2	3.3	6
0516 A		7/17/1991	< 0.01	< 0.01	0.22	< 0.05	18.7	< 0.1	0.27	0.002	< 0.1	0.001	2.3	3.1	5.4	< 0.2	< 1	2
0516 A		9/4/1991	< 0.01	< 0.01	0.21	< 0.05	17.7	< 0.1	0.32	0.001	< 0.1	0.0021	1.5	4.7	6.2	< 0.2	1.2	2
0516 A		10/15/1991	< 0.01	< 0.01	0.18	< 0.05	15.3	< 0.1	0.22	0.002	< 0.1	0.004	1.3	9.5	10.8	< 0.2	< 1	1
0516 A		11/4/1991	< 0.01	< 0.01	0.12	< 0.05	15.3	< 0.1	0.17	0.002	< 0.1	0.0157	2	8.3	10.3	< 0.2	2.3	2
0516 A		12/2/1991	< 0.01	< 0.01	0.14	< 0.05	11.6	< 0.1	0.19	< 0.001	< 0.1	0.0009	4	7.8	11.8	< 0.2	< 1	4
0516 A		1/15/1992	0.01	< 0.01	0.21	< 0.05	19.2	< 0.1	0.29	0.063	< 0.1	0.063	2.4	8.9	11.3	< 0.2	< 1	2
0516 A		4/8/1992	0.01	< 0.01	0.2	< 0.05	15.8	< 0.1	0.22	0.001	< 0.1	0.001	1.8	9.8	11.6	< 0.2	< 1	2
0516 A		7/8/1992	< 0.01	< 0.01	0.17	< 0.05	16.2	< 0.1	0.21	< 0.001	< 0.1	0.002	2.1	7.2	9.3	< 0.2	2.6	2.5
0516 A		10/7/1992	< 0.01	< 0.01	0.23	< 0.05	18	< 0.1	0.28	0.003	< 0.1	< 0.0003	4.1	5.9	10	< 0.2	3	4.6
0516 A		1/6/1993	0.01	< 0.01	0.41	< 0.05	16	< 0.1	0.37	0.009	< 0.1	0.005	3.5	3.6	7.1	< 0.2	< 1	3.9
0516 A		4/6/1993	< 0.01	< 0.01	0.14	< 0.05	13	< 0.1	0.21	0.001	< 0.1	0.004	1.8	1.4	3.2	< 0.2	2.6	2
0516 A		7/13/1993	< 0.01	< 0.01	0.13	< 0.05	10.3	< 0.1	0.17	0.005	< 0.1	0.003	1.5	4.2	5.7	< 0.2	3	2
0516 A		10/7/1993	< 0.01	< 0.01	0.18	< 0.05	12.4	< 0.1	0.22	0.002	< 0.1	0.007	3.7	4	7.7	< 0.2	< 1	4
0516 A		1/6/1994	< 0.01	< 0.01	0.11	< 0.05	10.2	< 0.1	0.15	< 0.001	< 0.1	0.001	3.6	1.5	5.1	< 0.2	< 1	6.8
0516 A		4/12/1994	< 0.01	< 0.01	0.08	< 0.05	7.8	< 0.1	0.14	0.001	< 0.1	0.003	2.9	5.5	8.4	< 0.2	1.5	11.3
0516 A		7/20/1994	< 0.01	< 0.01	0.05	< 0.05	4.95	< 0.1	0.08	< 0.001	< 0.1	0.011	3.8	3.1	6.9	< 0.2	< 1	8.6
0516 A		10/4/1994	< 0.01	< 0.01	< 0.01	< 0.05	5.22	< 0.1	< 0.05	0.001	< 0.1	0.013	4.3	< 1	4.3	< 0.2	3.4	4.5
0516 A		1/4/1995	< 0.01	< 0.01	0.04	< 0.05	4.74	< 0.1	0.08	< 0.001	< 0.1	0.01	1.4	2.9	4.3	< 0.2	2	5.9
0516 A		4/5/1995	< 0.01	< 0.01	< 0.01	< 0.05	3.74	< 0.1	< 0.05	0.001	< 0.1	0.016	1.4	2.2	3.6	< 0.2	3.1	4.9
0516 A		7/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	2.7	< 0.1	< 0.05	0.003	< 0.1	0.0183	0.9	< 1	0.9	0.2	< 1	2
0516 A		10/3/1995	< 0.01	< 0.01	< 0.01	< 0.05	2.54	< 0.1	< 0.05	0.001	< 0.1	0.0256	1.3	< 1	1.3	< 0.2	< 1	2.5
0516 A		1/3/1996	< 0.01	< 0.01	< 0.01	< 0.05	2.34	< 0.1	< 0.05	< 0.001	< 0.1	0.014	1.1	1.4	2.5	< 0.2	1.7	2.7
0516 A		4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	2.1	< 0.1	< 0.05	< 0.001	< 0.1	0.014	0.8	< 1	0.8	< 0.2	< 1	1.4
0516 A		7/7/1996	< 0.01	< 0.01	< 0.01	< 0.05	2	< 0.1	< 0.05	< 0.001	< 0.1	0.018	0.7	< 1	0.7	< 0.2	< 1	< 1
0516 A		10/1/1996	< 0.01	< 0.01	0.02	< 0.05	2.2	< 0.1	< 0.05	0.002	< 0.1	0.013	0.9	< 1	0.9	< 0.2	< 1	< 1

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0516 A		1/22/1997	6,903.70	6.10	7.36	11200	510	1560	481	20.5	1420	6760	241	155	110	2.46	< 0.1	< 0.001
0516 A		4/8/1997	6,902.20	6.30	7.57	11500	457	1320	484	19.7	1360	6500	258	136	126	2.06	< 0.1	< 0.001
0516 A		7/8/1997	6,902.10	6.70	7.61	11700	528	1580	507	19.7	1360	7120	271	135	124	2.26	< 0.1	< 0.001
0516 A		10/7/1997	6,901.40	6.30	7.45	11600	516	1480	480	18.4	1370	6530	258	132	106	2.5	< 0.1	< 0.001
0516 A		1/15/1998	6,902.50	6.40	7.59	11600	474	1450	493	20.2	1370	7100	293	129	137	2.9	< 0.1	< 0.001
0516 A		4/7/1998	6,901.40	6.20	7.39	11800	450	1310	469	18.2	1360	6220	230	141	116	3	< 0.1	< 0.001
0516 A		7/7/1998	6,902.10	6.50	7.36	11800	491	1450	492	18.5	1380	6500	257	145	117	3	< 0.1	< 0.001
0516 A		10/6/1998	6,902.10	6.25	7.66	11800	478	1460	514	20.7	1390	7000	256	140	132	2.9	< 0.1	< 0.001
0516 A		1/5/1999	6,902.20	6.40	7.57	11900	421	1400	446	19.2	1350	7100	259	152	103	2.2	< 0.1	< 0.001
0516 A		4/6/1999	6,902.40	6.30	7.28	11900	456	1480	461	17.7	1350	6840	246	137	118	1.8	< 0.1	< 0.001
0516 A		7/13/1999	6,901.04	6.50	7.78	11900	485	1540	518	24.9	1370	6920	254	137	106	2.6	< 0.1	< 0.001
0516 A		10/5/1999	6,900.00	6.40	7.71	11900	553	1770	458	18.5	1387	8030	261	143	111	2.7	< 0.1	< 0.001
0516 A		1/4/2000	6,899.60	6.30	7.64	11700	459	1520	408	18.1	1290	6590	228	137	113	2.7	< 0.1	< 0.001

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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**
0516 A		1/22/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.79	< 0.1	< 0.05	< 0.001	< 0.1	0.016	1.2	3.2	4.4	< 0.2	< 1	< 1
0516 A		4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.77	< 0.1	< 0.05	0.078	< 0.1	0.016	1	4.2	5.2	< 0.2	< 1	< 1
0516 A		7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.8	< 0.1	< 0.05	< 0.001	< 0.1	0.015	0.8	< 1	0.8	< 0.2	< 1	< 1
0516 A		10/7/1997	< 0.01	< 0.01	0.02	< 0.05	1.83	< 0.1	< 0.05	< 0.001	< 0.1	0.015	1.2	< 1	1.2	< 0.2	< 1	< 1
0516 A		1/15/1998	< 0.01	< 0.005	< 0.01	< 0.05	2.03	< 0.1	< 0.05	< 0.001	< 0.1	0.023	1.1	< 1	1.1	< 0.2	< 1	< 1
0516 A		4/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.61	< 0.1	< 0.05	< 0.001	< 0.1	0.019	1.2	< 1	1.2	< 0.2	< 1	< 1
0516 A		7/7/1998	< 0.01	< 0.005	0.02	< 0.05	1.59	< 0.1	< 0.05	< 0.001	< 0.1	0.0181	1.1	< 1	1.1	< 0.2	< 1	2.2
0516 A		10/6/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.57	< 0.1	< 0.05	< 0.001	< 0.1	0.0211	1.1	1.6	2.7	< 0.2	< 1	< 1
0516 A		1/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	1.66	< 0.1	< 0.05	< 0.001	< 0.1	0.0189	0.8	1.9	2.7	< 0.2	< 1	< 1
0516 A		4/6/1999	< 0.01	< 0.005	< 0.01	< 0.05	1.59	< 0.1	< 0.05	0.001	< 0.1	0.0197	0.7	3.4	4.1	< 0.2	< 1	< 1
0516 A		7/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	1.67	< 0.1	< 0.05	< 0.001	< 0.1	0.0199	0.7	< 1	0.7	< 0.2	< 1	< 1
0516 A		10/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	2.11	< 0.1	< 0.05	< 0.001	< 0.1	0.0218	0.7	< 1	0.7	< 0.2	< 1	1.4
0516 A		1/4/2000	< 0.01	< 0.005	0.02	< 0.05	2.37	< 0.1	< 0.05	0.001	< 0.1	0.0178	1.2	< 1	1.2	< 0.2	< 1	1.2

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0604		7/23/1989	6,919.20	3.90	4.04	6697	454	707	251	11.6	0	3891	21.4	6.39	31	< 1	60	< 0.001
0604		10/12/1989	6,919.10	3.90	4.11	6728	428	644	235	14.6	0	4407	33.7	6.05	39	< 1	66	< 0.001
0604		1/10/1990	6,917.80	3.90	4.06	6602	444	691	291	13.7	< 1	4325	23.1	6.7	33	< 1	58	< 0.001
0604		4/5/1990	6,917.20	4.20	4.20	6806	455	670	240	11.6	< 1	4352	33.4	6.8	43	< 1	59	< 0.001
0604		7/3/1990	6,916.40	4.00	4.24	6824	461	662	240	9.6	< 1	4321	26.8	5.38	50.9	< 1	60	< 0.001
0604		10/3/1990	6,915.80	4.10	4.11	6616	453	628	264	13.3	< 1	4290	31.1	3.27	44	< 1	77.2	< 0.001
0604		1/15/1991	6,914.90	4.10	4.21	6802	475	710	265	15.2	< 1	4627	31.6	5.48	52	< 1	61.8	< 0.001
0604		4/2/1991	6,914.60	4.20	4.51	6380	432	659	215	11.1	< 1	4923	33	4.6	56.5	< 1	45.3	< 0.001
0604		7/17/1991	6,914.80	4.00	4.46	6949	408	624	218	11.1	< 1	5307	28.4	5.34	51.4	< 1	70.95	< 0.001
0604		9/4/1991	no data	no data	3.98	7438	444	715	251	11.4	< 1	5494	31	7.1	31.3	< 1	70.4	< 0.001
0604		10/15/1991	6,914.30	3.90	4.26	6909	432	570	275	12.5	< 1	4502	34.7	7.86	47.3	< 1	58.6	< 0.001
0604		11/4/1991	no data	no data	4.09	7177	460	593	231	11.3	< 1	4396	50	5.4	13.3	< 1	0.13	< 0.001
0604		12/2/1991	no data	no data	4.30	7047	439	564	256	12.6	< 1	4052	52.8	4.12	30.5	< 1	62.5	< 0.001
0604		1/15/1992	6,914.50	3.80	4.11	6837	414	702	222	10	< 1	4554	31.6	3.7	35.4	< 1	57.1	< 0.001
0604		4/8/1992	6,914.40	3.80	4.24	7106	454	654	252	12.2	< 1	4691	40.8	3.75	41.4	< 1	52.4	0.003
0604		7/8/1992	6,914.40	3.70	4.22	6654	495	610	285	12.3	< 1	4669	33.3	3.94	49.2	< 1	73.2	0.001
0604		10/7/1992	6,914.20	4.10	4.04	7185	447	702	273	15.1	< 1	4860	35.5	3.8	15.7	< 1	66.2	< 0.001
0604		1/6/1993	6,914.10	4.30	4.45	5855	411	642	236	12	< 1	4042	56.3	2.09	88.6	1.2	45.1	0.002
0604		4/6/1993	6,914.00	4.40	4.36	7409	414	687	284	10.2	< 1	4639	62	1.83	89.1	< 1	45.5	< 0.001
0604		7/13/1993	6,913.50	4.40	4.30	7711	449	816	265	11.9	< 1	4973	62.7	1.45	84.4	1	39.1	< 0.001
0604		10/6/1993	6,913.30	4.50	4.24	6891	475	785	250	10.8	< 1	4744	47.6	1.07	91.8	< 1	30	< 0.001
0604		1/6/1994	6,913.10	4.30	4.32	7520	450	691	243	10.3	< 1	4543	52.6	1.19	97.6	1.8	47.8	< 0.001
0604		4/12/1994	6,912.80	4.40	4.39	7215	423	729	254	10.2	< 1	4838	51.6	2.7	90.7	< 1	39.4	< 0.001
0604		7/20/1994	6,912.30	4.50	4.33	7069	491	856	232	11.2	< 1	4790	60.6	1.02	89.2	< 1	27.2	< 0.001
0604		10/4/1994	6,912.40	4.50	4.38	7504	493	837	280	11.6	< 1	4935	60	1.61	92.5	< 1	41.8	< 0.001
0604		1/4/1995	6,912.10	4.40	4.50	7621	490	835	256	12.5	< 1	5023	62.6	1.67	86.9	< 1	26.1	< 0.001
0604		4/5/1995	6,911.90	4.50	4.50	7614	475	850	260	12	0.5	4870	53	1.97	92.5	< 1	30.5	< 0.001
0604		7/6/1995	6,911.40	4.50	4.42	6741	455	760	260	11.5	< 1	4650	60.2	1.83	87.7	< 1	32	< 0.001
0604		10/3/1995	6,911.50	4.60	4.49	7616	496	877	279	11.5	< 1	5010	58	1.19	87.6	< 1	25.1	0.002
0604		1/3/1996	6,911.20	4.70	4.43	7223	440	827	277	11.8	< 1	4760	54.5	0.2	96.1	< 1	26.2	< 0.001
0604		4/2/1996	6,911.30	4.70	4.58	7638	497	920	260	12	2.5	5180	64.2	0.15	100	< 1	22	< 0.001
0604		7/7/1996	6,910.60	4.40	4.48	7742	452	816	262	12.4	< 1	4610	64.3	0.24	83.2	< 1	26.3	< 0.001
0604		10/1/1996	6,910.30	4.80	4.52	7690	464	850	265	12.3	0.9	4708	57.9	0.36	88.7	< 1	24.9	< 0.001
0604		1/22/1997	6,910.20	4.80	4.61	7560	441	897	262	12.4	3.9	4830	57	0.21	74.9	< 1	21.1	0.002
0604		4/8/1997	6,909.90	4.60	4.56	7650	539	458	170	8	3	3370	45	0.19	87.9	< 1	< 0.1	< 0.001

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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**
0604		7/23/1989	< 0.05	< 0.01	0.31	< 0.05	22	< 0.1	0.39	< 0.001	< 0.1	0.004	14.1	16.8	30.9	3.5	1.7	60.2
0604		10/12/1989	< 0.05	0.01	0.31	< 0.05	22	< 0.1	0.34	0.006	< 0.1	0.006	4.5	11	15.5	33.9	< 1	41.7
0604		1/10/1990	< 0.05	< 0.01	0.33	< 0.05	22	< 0.1	0.38	< 0.001	< 0.1	0.005	5.1	8.5	13.6	1.7	2.8	6.5
0604		4/5/1990	< 0.05	< 0.01	0.31	< 0.05	19	< 0.1	0.38	< 0.001	< 0.1	0.0006	5	9	14	< 0.2	2.6	6
0604		7/3/1990	< 0.05	< 0.01	0.21	< 0.05	18.2	< 0.1	0.34	< 0.001	< 0.1	0.0029	7.6	6.5	14.1	0.4	< 1	8
0604		10/3/1990	< 0.05	< 0.01	0.35	< 0.05	22.7	< 0.1	0.4	< 0.001	< 0.1	0.003	5.8	20.3	26.1	< 0.2	< 1	6
0604		1/15/1991	0.02	< 0.01	0.39	< 0.05	20.1	< 0.1	0.44	< 0.001	< 0.1	0.007	8.2	13.8	22	< 0.2	2.3	9.1
0604		4/2/1991	0.016	< 0.01	0.23	< 0.05	14.6	< 0.1	0.38	< 0.001	< 0.1	0.005	9.1	24.3	33.4	< 0.2	1.3	15
0604		7/17/1991	0.03	< 0.01	0.3	< 0.05	20.5	< 0.1	0.41	< 0.001	< 0.1	0.006	4.3	12.5	16.8	< 0.2	2.1	4
0604		9/4/1991	< 0.01	< 0.01	0.39	< 0.05	21	< 0.1	0.45	0.001	< 0.1	0.005	3.8	14.3	18.1	< 0.2	< 1	4
0604		10/15/1991	0.03	< 0.01	0.36	< 0.05	21.3	< 0.1	0.41	< 0.001	< 0.1	0.06	3.9	20.6	24.5	< 0.2	< 1	4
0604		11/4/1991	0.02	< 0.01	0.39	< 0.05	15.1	< 0.1	0.55	< 0.001	< 0.1	0.0059	4.1	16.9	21	< 0.2	< 1	4
0604		12/2/1991	< 0.01	< 0.01	0.35	< 0.05	19.6	< 0.1	0.42	< 0.001	< 0.1	0.004	6.2	22.7	28.9	< 0.2	< 1	6
0604		1/15/1992	0.02	< 0.01	0.34	< 0.05	20.5	< 0.1	0.41	0.013	< 0.1	0.0601	3.9	20.6	24.5	< 0.2	< 1	4
0604		4/8/1992	0.02	< 0.01	0.36	< 0.05	17.8	< 0.1	0.4	< 0.001	< 0.1	0.003	3.6	15.3	18.9	< 0.2	1.2	3.8
0604		7/8/1992	0.029	< 0.01	0.37	< 0.05	21.8	< 0.1	0.5	< 0.001	< 0.1	0.005	5.6	11.7	17.3	< 0.2	3.4	3.8
0604		10/7/1992	< 0.01	< 0.01	0.37	< 0.05	19.9	< 0.1	0.42	< 0.001	< 0.1	0.004	6.8	11.6	18.4	< 0.2	1.9	6.9
0604		1/6/1993	0.01	< 0.01	0.36	< 0.05	14.5	< 0.1	0.44	0.006	< 0.1	0.009	5.7	7.6	13.3	< 0.2	< 1	6.1
0604		4/6/1993	0.022	< 0.01	0.37	< 0.05	14.5	< 0.1	0.49	0.002	< 0.1	0.006	3.3	12	15.3	< 0.2	1.7	3.8
0604		7/13/1993	< 0.01	< 0.01	0.35	< 0.05	14.2	< 0.1	0.62	0.002	< 0.1	< 0.0003	2.4	6.9	9.3	< 0.2	3.1	3.2
0604		10/6/1993	0.017	< 0.01	0.36	< 0.05	13.5	< 0.1	0.43	< 0.001	< 0.1	0.0059	5.6	2.3	7.9	< 0.2	< 1	9
0604		1/6/1994	0.02	< 0.01	0.37	< 0.05	13	< 0.1	0.43	< 0.001	< 0.1	0.003	5.7	8.2	13.9	< 0.2	2.3	18.9
0604		4/12/1994	0.02	< 0.01	0.28	< 0.05	14.1	< 0.1	0.41	< 0.001	< 0.1	0.004	7.7	8	15.7	< 0.2	2.3	24.9
0604		7/20/1994	< 0.01	< 0.01	0.3	< 0.05	9.63	< 0.1	0.39	< 0.001	< 0.1	0.003	10	13	23	< 0.2	< 1	29.7
0604		10/4/1994	< 0.01	< 0.01	0.4	< 0.05	12.9	< 0.1	0.57	< 0.001	< 0.1	0.006	5.2	5.4	10.6	< 0.2	3.8	13.5
0604		1/4/1995	0.01	< 0.01	0.32	< 0.05	10.4	< 0.1	0.42	< 0.001	< 0.1	0.004	5.1	7.7	12.8	< 0.2	< 1	16.8
0604		4/5/1995	< 0.01	< 0.01	< 0.01	< 0.05	12	< 0.1	0.5	< 0.001	< 0.1	0.004	5	7.6	12.6	< 0.2	4	16.6
0604		7/6/1995	0.02	< 0.01	0.35	< 0.05	2.61	< 0.1	0.4	< 0.001	< 0.1	0.0035	3.8	5.7	9.5	< 0.2	< 1	15.3
0604		10/3/1995	< 0.01	< 0.01	0.32	< 0.05	11.1	< 0.1	0.38	0.031	< 0.1	0.0046	5.3	17.1	22.4	< 0.2	< 1	15.5
0604		1/3/1996	< 0.01	< 0.01	0.04	< 0.05	12	< 0.1	< 0.05	0.031	< 0.1	0.0034	3.1	2.2	5.3	< 0.2	2.8	9
0604		4/2/1996	< 0.01	< 0.01	0.32	< 0.05	10.8	< 0.1	0.36	< 0.001	< 0.1	< 0.0003	2.1	6.9	9	< 0.2	< 1	5.3
0604		7/7/1996	< 0.01	< 0.01	0.36	< 0.05	12.7	< 0.1	0.41	< 0.001	< 0.1	0.0034	2.5	< 1	2.5	< 0.2	< 1	3.1
0604		10/1/1996	< 0.01	< 0.01	0.35	< 0.05	11.4	< 0.1	0.42	0.002	< 0.1	0.0011	2.3	7.4	9.7	< 0.2	< 1	3.3
0604		1/22/1997	0.01	< 0.01	0.36	< 0.05	11.4	< 0.1	0.4	< 0.001	< 0.1	0.004	2.5	8.8	11.3	< 0.2	< 1	4.7
0604		4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.87	< 0.1	< 0.05	0.038	< 0.1	0.003	5.2	6.8	12	< 0.2	< 1	19.8

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0604		7/8/1997	6,910.00	5.50	4.60	7740	496	904	275	12.9	3.4	5050	69.2	0.21	83.8	< 1	21.4	< 0.001
0604		10/7/1997	6,909.60	4.50	4.63	7590	489	868	261	12.4	5.1	4790	62.1	0.38	77.3	< 1	21.9	< 0.001
0604		1/15/1998	6,910.40	4.70	4.61	7530	474	847	271	13	2.9	5100	75.1	0.79	89.8	< 1	18.1	< 0.001
0604		4/7/1998	6,909.70	4.50	4.73	7570	489	773	255	11.8	7.4	4300	60.9	0.35	87.4	< 1	16.9	< 0.001
0604		7/7/1998	6,908.90	4.90	4.64	7600	471	860	274	12.5	4.1	4600	61.5	0.46	80.7	< 1	20.8	< 0.001
0604		10/6/1998	6,908.90	4.55	4.63	7760	463	874	287	13.7	3.7	4860	61.6	0.78	89.3	< 1	18.7	< 0.001
0604		1/5/1999	6,908.90	4.70	4.60	7830	420	851	257	12.7	3	5100	64.9	0.45	70.7	< 1	20.2	< 0.001
0604		4/6/1999	6,908.40	4.60	4.69	7980	446	893	259	12.2	5	4740	62.7	0.83	92.4	< 1	20.4	< 0.001
0604		7/13/1999	6,907.80	4.60	4.61	8030	479	964	292	16.3	3	5120	55.3	0.57	73.2	< 1	15.7	< 0.001
0604		10/5/1999	6,908.60	4.42	4.64	8150	523	1120	280	12.5	4	6000	50.9	0.53	58.6	< 1	27	< 0.001
0604		1/4/2000	6,908.20	4.60	4.64	8180	397	883	231	12.8	4	4500	41.9	0.24	67.9	< 1	20	< 0.001
0604		5/3/2000	6,909.00	4.60	4.75	7500	416	808	264	14.2	6	4300	56.5	0.13	84.6	1.4	6.5	< 0.001
0604		7/11/2000	6,908.80	4.57	4.67	7380	460	837	258	11.9	5	4470	53.7	0.33	90.2	2.4	14.5	< 0.001
0604		10/3/2000	6,908.90	4.68	4.69	7220	455	830	247	13	6	4250	48.3	0.23	84.9	4.2	10.5	< 0.001
0604		1/10/2001	6,909.00	4.94	4.74	7280	450	790	222	11.6	7	4390	61.7	0.23	75.9	2.5	14	< 0.001
0604		4/3/2001	6,908.90	4.80	4.77	7260	533	916	229	11.3	8	4730	57.9	0.28	75.8	4.1	12.8	< 0.001
0604		7/17/2001	6,908.45	4.89	4.73	7470	424	782	246	12.5	7	4270	66.9	0.47	73.1	2.8	14.1	< 0.001
0604		10/2/2001	6,908.50	4.78	4.70	7420	440	820	217	12.8	4.9	4100	77.8	0.27	70	3	12.5	< 0.001
0604		1/14/2002	6,908.40	4.86	4.80	7390	516	882	235	13.6	6.7	4540	67.5	0.13	66	3	15.3	< 0.001
0604		4/9/2002	6,908.10	4.70	4.73	7500	446	790	261	12.2	6.7	4390	58.1	0.23	70.1	< 1	13.2	< 0.001
0604		7/16/2002	6,908.02	4.84	4.78	7500	439	805	271	13.5	6.7	4460	65	0.66	71.7	< 1	11.4	< 0.001
0604		10/9/2002	6,907.87	5.36	4.79	5790	431	775	258	11.4	7.3	4380	56.5	0.64	68.6	3.2	14.6	< 0.001
0604		1/8/2003	6,908.03	5.20	4.76	7440	423	783	230	10.7	6.7	4250	48.4	0.88	61	3.8	12.9	< 0.001
0604		4/14/2003	6,908.00	4.73	4.64	7360	454	860	293	15.3	6.7	4690	55.8	0.78	71	< 1	11.8	< 0.001
0604		7/9/2003	6,907.72	4.63	4.75	7470	440	794	261	13.3	6.7	4500	57.7	1.08	66	2.4	11.7	< 0.001
0604		10/8/2003	6,907.76	4.72	4.79	7450	427	714	268	10.6	8.5	4320	50.5	0.74	68	2.8	13.7	< 0.001
0604		1/7/2004	6,907.70	4.77	4.81	7290	495	873	283	12.8	7.9	4770	62.6	0.75	69.8 D	2.3	14.1	< 0.001
0604		4/7/2004	6,907.50	5.01	4.91	7340	469	830	287	12.2	3.2	4550 D	59.8	0.98	72.6 D	3.4	13.2	< 0.001
0604		7/14/2004	6,907.05	4.72	4.56	7320	455	796	282	12.6	9	4580 D	61.8	0.54	65.9 D	2.2	12.2	< 0.001
0604		10/6/2004	6,907.05	4.74	4.77	7350	440 D	802 D	292	12.2	10	4390 D	59	0.45	65.8 D	2.7	11.3	< 0.001
0604		1/5/2005	6,907.04	4.95	4.66	7480	475 D	856 D	284	12.3	7	4770 D	58	0.62	66 D	7	11.1	< 0.001
0604		4/6/2005	6,906.60	4.96	4.65	7050	454	803	296	12	6	4550	58	0.49	54	3.8	11.2	< 0.001
0604		7/13/2005	6,906.40	4.94	4.76	7220	472 D	824 D	278	11.3	2	4630 D	57	0.49	60 D	3	11.1	< 0.001
0604		10/5/2005	6,906.50	4.93	4.85	7260	450 D	854 D	286	12.4	12	4600 D	58	0.46	60 D	2.8	9.5	< 0.001
0604		1/11/2006	6,906.34	5.02	5.07	7160	430 D	813 D	283	12.2	76	4600 D	58	1.01	75 D	3.2	9.3	< 0.001

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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**
0604		7/8/1997	0.01	< 0.01	0.35	< 0.05	12.4	< 0.1	0.38	< 0.001	< 0.1	0.003	2.3	7.2	9.5	< 0.2	< 1	4
0604		10/7/1997	0.01	< 0.01	0.4	< 0.05	12.6	< 0.1	0.43	< 0.001	< 0.1	0.004	2.3	3.8	6.1	< 0.2	< 1	4.6
0604		1/15/1998	0.01	0.006	0.37	< 0.05	11.8	< 0.1	0.41	< 0.001	< 0.1	0.0032	2.1	6	8.1	< 0.2	< 1	3.1
0604		4/7/1998	0.01	0.007	0.34	< 0.05	10.7	< 0.1	0.39	< 0.001	< 0.1	0.0031	3.3	7	10.3	< 0.2	< 1	4.6
0604		7/7/1998	0.01	0.006	0.36	< 0.05	12.5	< 0.1	0.41	< 0.001	< 0.1	0.0031	1.6	4.3	5.9	< 0.2	< 1	3.7
0604		10/6/1998	0.01	0.006	0.37	< 0.05	12	< 0.1	0.45	< 0.001	< 0.1	0.0078	2.4	4.1	6.5	< 0.2	3.4	3.4
0604		1/5/1999	0.01	0.011	0.37	< 0.05	12.8	< 0.1	0.4	< 0.001	< 0.1	0.0033	2.4	7.4	9.8	< 0.2	4.3	4.3
0604		4/6/1999	0.01	0.015	0.41	< 0.05	12.6	< 0.1	0.44	< 0.001	< 0.1	0.0034	4	7.8	11.8	< 0.2	3.2	3.2
0604		7/13/1999	0.01	0.009	0.42	< 0.05	14	< 0.1	0.62	< 0.001	< 0.1	0.0071	3	5.2	8.2	< 0.2	3.7	3.7
0604		10/5/1999	< 0.01	0.015	0.53	< 0.05	16.1	< 0.1	0.46	< 0.001	< 0.1	0.0033	2.5	2.9	5.4	< 0.2	< 1	4.3
0604		1/4/2000	0.01	0.01	0.38	< 0.05	11.2	< 0.1	0.46	< 0.001	< 0.1	0.0032	2.3	6	8.3	< 0.2	< 1	4.7
0604		5/3/2000	< 0.01	0.022	0.23	< 0.05	8.81	< 0.1	0.26	< 0.001	< 0.1	0.0027	4.3	6.6	10.9	< 0.2	< 1	4.8
0604		7/11/2000	0.01	0.011	0.31	< 0.05	10.1	< 0.1	0.31	< 0.001	< 0.1	0.0022	2.5	6	8.5	< 0.2	< 1	4.2
0604		10/3/2000	< 0.01	0.005	0.26	< 0.05	8.17	0.23	0.25	< 0.001	< 0.1	0.002	1.9	7.5	9.4	< 0.2	< 1	4.3
0604		1/10/2001	< 0.01	< 0.005	0.29	< 0.05	9.38	< 0.1	0.35	< 0.001	< 0.1	0.0019	2.1	7.6	9.7	< 0.2	< 1	3.2
0604		4/3/2001	< 0.01	< 0.005	0.32	< 0.05	9.52	< 0.1	0.39	< 0.001	< 0.1	0.0018	1.9	7.1	9	< 0.2	< 1	3.9
0604		7/17/2001	< 0.01	< 0.005	0.29	< 0.05	9.9	< 0.1	0.36	< 0.001	< 0.1	0.002	2.2	6	8.2	< 0.2	< 1	4.1
0604		10/2/2001	< 0.01	< 0.005	0.26	< 0.05	9.45	< 0.1	0.35	< 0.001	< 0.1	0.0014	3.9	7.6	11.5	< 0.2	< 1	4.3
0604		1/14/2002	0.01	0.006	0.32	< 0.05	11	< 0.1	0.4	< 0.001	< 0.1	0.0016	2.9	9.3	12.2	< 0.2	< 1	4.5
0604		4/9/2002	< 0.01	0.007	0.33	< 0.05	11.2	< 0.1	0.4	< 0.001	< 0.1	0.0016	2.6	4.5	7.1	< 0.2	< 1	3.3
0604		7/16/2002	< 0.01	< 0.005	0.28	< 0.05	10.4	< 0.1	0.28	< 0.001	< 0.1	< 0.0003	2.9	3.5	6.4	< 0.2	< 1	5.3
0604		10/9/2002	< 0.01	< 0.005	0.26	< 0.05	9.67	< 0.1	0.3	< 0.001	< 0.1	0.0018	3.3	5.6	8.9	< 0.2	< 1	9.6
0604		1/8/2003	< 0.01	0.006	0.29	< 0.05	10.9	< 0.1	0.32	< 0.001	< 0.1	0.0019	3.6	6.8	10.4	< 0.2	< 1	4.7
0604		4/14/2003	< 0.01	< 0.005	0.26	< 0.05	9.91	< 0.1	0.28	< 0.001	< 0.1	0.0019	2.8	15.3	18.1	< 0.2	< 1	8.4
0604		7/9/2003	< 0.01	0.006	0.29	< 0.05	11.9	< 0.1	0.32	< 0.001	< 0.1	0.0008	1.8	8.2	10	< 0.2	< 1	4
0604		10/8/2003	< 0.01	< 0.005	0.31	< 0.05	11.3	< 0.1	0.34	< 0.001	< 0.1	0.0023	1.4	3.5	4.9	< 0.2	< 1	5.8
0604		1/7/2004	< 0.01	< 0.005	0.32	< 0.05	13.5	< 0.1	0.33	< 0.001	< 0.1	0.0018 D	1.9	4.9	6.8	< 0.2	< 1.0	5.8
0604		4/7/2004	< 0.01	0.005	0.3	< 0.05	12.1	< 0.1	0.35	0.007	< 0.1	0.0018 D	1.5	4.7	6.2	< 0.2	< 1	5.8
0604		7/14/2004	< 0.01	0.007	0.3	< 0.05	11.1	< 0.1	0.3	< 0.001	< 0.1	0.0017 D	2.4	1.9	4.3	< 0.2	< 1.0	3.3
0604		10/6/2004	< 0.01	< 0.005	0.27	< 0.05	11	< 0.1	0.18	< 0.001	< 0.1	0.0017 D	2	5.1	7.1	< 0.2	< 1.0	3.4
0604		1/5/2005	< 0.01	< 0.005	0.31	< 0.05	11.1	< 0.1	0.35	< 0.001	< 0.1	0.0017	4	3.9	7.9	< 0.2	< 1.0	13.4
0604		4/6/2005	< 0.01	< 0.005	0.24	< 0.05	11.9	< 0.1	0.33	< 0.001	< 0.1	0.0018	4.3	5.6	9.9	< 0.2	< 1.0	1.7
0604		7/13/2005	< 0.01	< 0.005	0.28	< 0.05	11.7	< 0.1	0.34	< 0.001	< 0.1	0.0015	4	5.6	9.6	< 0.2	< 1.0	3.3
0604		10/5/2005	< 0.01	< 0.005	0.27	< 0.05	11.1	< 0.1	0.34	< 0.001	< 0.1	0.0015	2.2	5.7	7.9	< 0.2	< 1.0	4
0604		1/11/2006	< 0.01	< 0.005	0.26	< 0.05	11.2	< 0.1	0.31	0.004	< 0.1	0.0013	1.8	3.5	5.3	< 0.2	< 1.0	4.6

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0604		4/5/2006	6,906.40	4.89	5.33	7150	452 D	827 D	264	12.3	3	4320 D	61	2.4	74 D	3	10	< 0.001
0604		7/19/2006	6,905.70	4.95	4.91	7170	469 D	810 D	292	12.6	10	4400 D	60	0.41	69 D	2.5	8	< 0.001
0604		10/4/2006	6,905.67	4.88	5.06	7170	437 D	792 D	277	12.1	4	4230 D	57	0.54	74 D	3.03	8.1	< 0.001
0604		1/10/2007	6,905.69	5.00	4.99	7270	417 D	779 D	256	11.6	20	4460 D	58	0.32	68 D	5.24	5.8	<0.001
0604		4/11/2007	6,905.64	5.02	5.00	7240	447 D	833 D	271	13.4	12	4600 D	62	0.1	76 D	5.92	6.3	<0.001
0604		7/11/2007	6,905.10	4.94	4.89	6900	470 D	853 D	280	12.1	5	4770 D	61	0.31	78 D	4.08	4.6	<0.001
0604		10/3/2007	6,905.13	4.86	5.11	7160	418 D	794 D	287 D	13.7	5	4410 D	82 D	0.24	75 D	7.68	5.7	<0.001
0604		1/16/2008	6,905.15	5.1	5.35	6880	435 D	801 D	286 D	16.3	5	4160 D	84 D	0.13	76 D	6.44	5.1	< 0.001
0604		4/9/2008	6,905.15	5.18	5.02	6880	480 D	903 D	332 D	13.6 D	3	4780 D	57	< 0.05	113 D	6.64	5.4	0.002
0604		7/9/2008	6,904.60	4.95	5.24	6880	466 D	850 D	308 D	12.5	3	4790 D	62	< 0.05	118 D	7.64	3.3	< 0.003
0604		10/13/2008	6,904.48	4.98	5.19	7060 H	487	880	310 D	13	5	4800 D	53	0.2	95.8 D	5.36	3.6	< 0.001
0604		1/14/2009	6,904.30	5.11	5.34	7330	440	823	311	12	<1	4220 D	49	<0.05	104 D	9.44	3.8	<0.001
0604		4/8/2009	6,904.40	5.05	5.19	6980	426 D	788 D	296 D	12	23	4620 D	62	<0.05	74.9 D	7.76	4.2	<0.001
0604		7/8/2009	6,904.00	5.01	5.19	7160	473 D	798	294 D	12	23 B	4810 D	53	0.19	68 D	5.40	3.3	<0.001
0604		10/6/2009	6,904.05	5.12	5.79	7090	436 D	808	286 D	12	10	4360 D	60	0.14	72 D	6.80	2.8	<0.001
0614		7/23/1989	6,929.30	6.60	6.84	6868	697	672	491	9.8	1501	3485	381	51	99	82	< 0.1	< 0.001
0614		10/12/1989	6,929.00	6.50	6.98	6734	624	612	479	11.6	1540	3002	377	38.6	126	59	0.18	< 0.001
0614		1/10/1990	6,928.00	6.40	6.80	6892	609	640	491	10.6	1586	3121	359	69	108	100	< 0.1	< 0.001
0614		4/5/1990	6,927.50	6.40	7.06	6877	622	680	492	11.2	1632	3277	350	94	107	164	< 0.1	< 0.001
0614		7/3/1990	6,926.60	6.30	6.86	6754	640	619	429	10.9	1492	2996	341	111	151	152	0.13	< 0.001
0614		10/3/1990	6,926.30	6.30	7.23	6567	585	577	507	14.1	1362	2894	334	76.6	106	176	0.1	0.005
0614		1/15/1991	6,926.40	6.40	6.96	6633	647	623	478	9.6	1412	3253	322	68	125	170	0.2	< 0.001
0614		4/2/1991	6,926.20	6.40	7.18	6539	619	495	420	10.1	1257	3165	322	78.3	131	254	0.11	< 0.001
0614		7/17/1991	6,925.90	6.40	7.49	6970	573	551	443	9.7	1680	3645	327	69.4	169	380	< 0.1	< 0.001
0614		9/4/1991	no data	no data	6.94	7610	624	634	446	10.3	1629	4105	303	116	83.2	486	0.22	< 0.001
0614		10/15/1991	6,925.30	6.30	7.15	7145	664	526	418	10	1515	3239	313	53.8	119	361	< 0.1	0.001
0614		11/4/1991	no data	no data	6.97	7026	614	490	436	10.5	1516	3449	308	87.3	97.6	464	0.32	< 0.001
0614		12/2/1991	no data	no data	7.38	7264	610	559	425	10.7	1577	3197	287	79.5	133	400	0.42	< 0.001
0614		1/15/1992	6,925.20	6.30	7.34	7026	584	645	449	10.1	1268	3376	287	94.9	123	525	< 0.1	< 0.001
0614		4/8/1992	6,925.10	6.30	7.48	7207	691	601	486	10.8	1568	3603	279	101	70.2	471	< 0.1	0.003
0614		7/8/1992	6,924.80	6.20	7.51	6583	697	496	640	11.3	1512	3249	274	79.8	116	303	< 0.1	0.001
0614		10/7/1992	6,924.70	6.40	8.08	6914	661	577	566	12.9	803	3248	273	48.6	15.8	426	0.1	< 0.001
0614		1/6/1993	6,924.50	6.40	7.04	6464	626	563	487	10.8	1459	3008	270	86.1	117	527	< 0.1	< 0.001
0614		4/6/1993	6,924.40	6.50	7.26	7340	616	607	521	10.1	1620	3518	288	97.4	47.5	400	< 0.1	< 0.001
0614		7/13/1993	6,923.90	6.50	7.11	7485	651	607	506	10.7	1454	3370	262	103	146	553	< 0.1	< 0.001

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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**
0604		4/5/2006	< 0.01	< 0.005	0.28	< 0.05	11.7	< 0.1	0.33	0.004	< 0.1	0.0014 D	1.1	< 1.0	1.1	< 0.2	< 1.0	2.9
0604		7/19/2006	< 0.01	< 0.005	0.25	< 0.05	10.3	< 0.1	0.29	< 0.001	< 0.1	0.0013	1.4	4.7	6.1	< 0.2	< 1.0	1.7
0604		10/4/2006	< 0.01	< 0.005	0.26	< 0.05	10.8	< 0.1	0.32	< 0.001	< 0.1	0.0019	1.5	7.3	8.8	< 0.2	< 1	2.2
0604		1/10/2007	<0.01	<0.005	0.23	<0.05	10.4	<0.1	0.28	<0.001	<0.1	0.0011	2.7	4.2	6.9	<0.2	<1	1.9
0604		4/11/2007	<0.01	<0.005	0.26	<0.05	10.2	<0.1	0.3	<0.001	<0.1	0.001	1.7	6	7.7	<0.2	<1	4.2
0604		7/11/2007	<0.01	<0.005	0.25	<0.05	10.2	<0.1	0.31	<0.001	<0.1	0.001	2.8	4.4	7.2	<0.2	<1	1.8
0604		10/3/2007	<0.01	<0.005	0.26	<0.05	10.8	<0.1	0.29	<0.001	<0.1	0.0008	1.7	2.9	4.6	<0.2	<1	6.1
0604		1/16/2008	< 0.01	< 0.005	0.24	< 0.05	9.73	< 0.1	0.29	< 0.001	< 0.1	0.0009	2.9	4.3	7.2	< 0.2	< 1	2.9
0604		4/9/2008	< 0.01	< 0.005	0.23	< 0.05	10.3	< 0.1	0.29	< 0.001	< 0.1	0.0009	1.5	5.4	6.9	1.1	-1.3 U	12
0604		7/9/2008	< 0.01	< 0.005	0.23	< 0.05	10.6	< 0.1	0.29	< 0.001	< 0.1	0.0008	1.2	5.7	6.9	-0.1 U	1.8 U	1.9
0604		10/13/2008	< 0.01	< 0.005	0.22	< 0.05	9.12	< 0.1	0.27	< 0.001	< 0.1	0.0014	0.93	5	5.93	1	-3 U	3.7
0604		1/14/2009	<0.01	<0.005	0.24	<0.05	9.8	<0.1	0.28	<0.001	<0.1	0.0007	1.4	5.8	7.2	-0.2 U	-1 U	2.1
0604		4/8/2009	<0.01	<0.005	0.22	<0.05	9.68	<0.1	0.29	<0.001	<0.1	0.0006 D	1.2	4.4	5.6	-0.4 U	-1 U	2.6
0604		7/8/2009	<0.01	<0.005	0.22	<0.05	9.56 D	<0.1	0.26	<0.001	<0.1	0.0007	1.9	6.2	8.1	0.2 U	2.2 U	3.6
0604		10/6/2009	<0.01	<0.005	0.19	<0.05	8.55	<0.1	0.26	<0.001	<0.1	0.0009	1.3	4.8	6.1	0.08 U	-1 U	2.6
0614		7/23/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.13	< 0.1	< 0.05	0.003	< 0.1	0.0624	2.9	3.4	6.3	0.6	< 1	8.9
0614		10/12/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.08	< 0.01	< 0.05	0.02	< 0.1	0.064	0.6	4.9	5.5	< 0.2	2.1	1.5
0614		1/10/1990	< 0.05	0.01	< 0.01	< 0.05	0.06	< 0.1	< 0.05	0.002	< 0.1	0.064	0.6	< 1	0.6	< 0.2	< 1	0.9
0614		4/5/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.09	< 0.1	< 0.05	0.003	< 0.1	0.045	1	< 1	1	< 0.2	< 1	1.7
0614		7/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.07	< 0.1	< 0.05	0.002	< 0.1	0.0611	0.9	1.6	2.5	< 0.2	< 1	< 1
0614		10/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.036	0.4	3	3.4	< 0.2	< 1	< 1
0614		1/15/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.09	< 0.1	< 0.05	0.001	< 0.1	0.0425	1.9	< 1	1.9	< 0.2	1.3	2.3
0614		4/2/1991	< 0.01	< 0.01	< 0.02	< 0.05	0.08	< 0.1	< 0.05	< 0.002	< 0.1	0.0589	2.7	1.8	4.5	2.2	1.3	3
0614		7/17/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.1	< 0.1	< 0.05	0.002	< 0.1	0.064	0.5	< 1	0.5	< 0.2	< 1	< 1
0614		9/4/1991	< 0.01	< 0.01	0.03	< 0.05	0.17	< 0.1	< 0.05	0.002	< 0.1	0.0631	0.5	5.4	5.9	< 0.2	< 1	< 1
0614		10/15/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.11	< 0.1	< 0.05	0.003	< 0.1	0.076	0.6	5.5	6.1	< 0.2	< 1	< 1
0614		11/4/1991	< 0.01	< 0.01	0.04	< 0.05	0.18	< 0.1	< 0.1	0.002	< 0.1	0.0472	0.9	3.7	4.6	< 0.2	< 1	< 1
0614		12/2/1991	< 0.01	< 0.01	0.02	< 0.05	0.15	< 0.1	0.06	0.002	< 0.1	0.05	1.2	1.3	2.5	< 0.2	< 1	1
0614		1/15/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	0.059	< 0.1	0.039	0.4	< 1	0.4	< 0.2	< 1	< 1
0614		4/8/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.14	< 0.1	< 0.05	0.004	< 0.1	0.051	0.8	4	4.8	< 0.2	< 1	< 1
0614		7/8/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.17	< 0.1	< 0.05	0.003	< 0.1	0.05	1	3.4	4.4	< 0.2	< 1	1.1
0614		10/7/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.15	< 0.1	< 0.05	0.005	< 0.1	0.078	1.5	4.1	5.6	< 0.2	1.9	1.8
0614		1/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.19	< 0.1	< 0.05	0.012	< 0.1	0.082	3.7	1.4	5.1	< 0.2	< 1	3.9
0614		4/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.24	< 0.1	< 0.05	0.003	< 0.1	0.072	1.9	5.1	7	< 0.2	< 1	2.1
0614		7/13/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.16	< 0.1	< 0.05	0.008	< 0.1	0.066	1.6	3.2	4.8	< 0.2	2.3	1.9

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0614		10/6/1993	6,923.60	6.70	6.95	7439	642	660	476	10.8	1431	3505	244	105	166	667	< 0.1	< 0.001
0614		1/6/1994	6,923.40	6.70	7.14	7380	594	565	485	10	1221	3435	242	91.4	192	617	< 0.1	< 0.001
0614		4/12/1994	6,923.10	6.60	6.96	7496	576	650	446	11.5	1174	3743	242	142	170	866	< 0.1	< 0.001
0614		7/20/1994	6,922.70	6.50	7.28	7490	641	748	425	13.5	1322	4076	231	140	140	799	< 0.1	< 0.001
0614		10/4/1994	6,922.60	6.60	7.54	7700	642	750	519	14.4	1465	4430	246	170	149	829	< 0.1	< 0.001
0614		1/4/1995	6,922.30	6.50	7.38	7528	606	636	446	15.2	1330	4176	237	213	155	520	< 0.1	< 0.001
0614		4/4/1995	6,922.00	6.50	6.90	7731	604	654	451	15	1370	4048	277	183	171	756	< 0.1	< 0.001
0614		7/6/1995	6,922.40	6.50	7.93	7816	565	685	440	15.4	1331	4000	241	227	154	585	< 0.1	< 0.001
0614		10/3/1995	6,921.30	6.50	7.71	7857	560	690	445	16	1357	4040	205	222	179	638	< 0.1	0.003
0614		1/3/1996	6,921.10	6.60	7.20	7886	543	750	470	17.7	1352	4260	204	234	179	583	< 0.1	0.002
0614		4/2/1996	6,920.60	6.50	7.92	7896	605	852	442	17.2	1286	4780	221	262	182	624	< 0.1	0.003
0614		7/7/1996	6,920.30	6.30	6.99	8045	537	750	432	18.5	1313	4210	238	243	181	587	< 0.1	< 0.001
0614		10/1/1996	6,919.70	6.50	6.89	8120	574	805	436	18.4	1320	4394	223	288	189	598	0.6	< 0.001
0614		1/21/1997	6,919.80	6.00	7.01	7850	555	800	437	18.8	1272	4355	201	290	188	635	< 0.1	< 0.001
0614		4/8/1997	6,919.00	6.60	7.79	7970	531	760	428	18.7	1280	4360	218	271	226	482	< 0.1	< 0.001
0614		7/8/1997	6,918.60	6.80	7.81	8100	594	841	449	18.6	1290	4520	233	264	223	444	< 0.1	< 0.001
0614		10/7/1997	6,918.30	6.40	7.62	7930	602	816	420	16.9	1320	4170	252	253	200	461	< 0.1	< 0.001
0614		1/15/1998	6,917.80	6.90	8.01	7980	558	775	446	17	1330	4200	267	225	214	289	< 0.1	< 0.001
0614		4/7/1998	6,917.70	6.80	7.72	7930	516	739	447	14	1440	3740	218	170	162	377	< 0.1	< 0.001
0614		7/7/1998	6,917.10	6.80	7.96	7990	579	823	466	14	1490	3800	261	171	202	392	< 0.1	< 0.001
0614		10/6/1998	6,916.90	7.16	7.87	7730	563	822	496	12.2	1380	4050	261	100	115	176	< 0.1	< 0.001
0614		1/5/1999	6,916.20	6.90	7.86	7900	551	786	434	9.9	1520	4000	262	81.2	85.5	255	< 0.1	< 0.001
0614		4/6/1999	6,916.20	6.70	7.90	7910	552	844	436	10.2	1590	3780	261	71.5	81.3	258	< 0.1	< 0.001
0614		7/13/1999	6,915.51	7.00	7.73	7680	605	891	439	12.7	1280	4000	239	58.1	90.7	188	< 0.1	< 0.001
0614		10/5/1999	6,915.30	6.80	7.84	7710	632	961	430	10.8	1362	4410	248	58	83	278	< 0.1	< 0.001
0614		1/4/2000	6,915.10	6.80	8.07	7650	510	770	358	11.5	1470	3430	217	65.1	97.4	226	< 0.1	< 0.001
0614		5/2/2000	6,914.60	6.50	7.56	7600	514	784	405	15.7	1450	3620	236	87	114	383	< 0.1	< 0.001
0614		7/11/2000	6,914.40	6.53	7.53	7600	560	830	426	13.8	1430	3760	229	93.1	109	215	< 0.1	< 0.001
0614		10/3/2000	6,914.15	6.55	7.04	7420	548	849	421	17.9	1420	4250	241	98.4	104	174	< 0.1	0.001
0614		1/10/2001	6,914.00	7.10	7.38	7380	531	762	349	14.7	1440	3720	268	107	93.3	199	< 0.1	< 0.001
0614		4/2/2001	6,913.70	6.64	7.28	7350	615	855	354	14.3	1420	3880	248	118	101	258	< 0.1	< 0.001
0614		7/16/2001	6,913.35	6.73	7.02	7330	507	722	415	17.3	1430	3300	320	116	96.9	260	< 0.1	< 0.001
0614		10/2/2001	6,913.20	6.61	7.50	7270	520	720	330	16.2	1500	3300	357	118	93.5	183	< 0.1	< 0.001
0614		1/14/2002	6,913.00	6.64	7.30	7110	602	751	356	16.7	1490	3460	332	123	86.7	230	< 0.1	< 0.001
0614		4/2/2002	6,912.90	6.56	7.60	7120	603	730	427	16.8	1460	3780	312	119	82.7	222	< 0.1	< 0.001

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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**
0614		10/6/1993	< 0.01	< 0.01	0.02	< 0.05	0.17	< 0.1	< 0.05	0.002	< 0.1	0.037	2.8	< 1	2.8	< 0.2	1.8	2.9
0614		1/6/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.17	< 0.1	< 0.05	< 0.001	< 0.1	0.048	1.6	< 1	1.6	< 0.2	< 1	2.6
0614		4/12/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.21	< 0.1	< 0.05	0.004	< 0.1	0.052	1.5	< 1	1.5	< 0.2	5.2	1.7
0614		7/20/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.24	< 0.1	< 0.05	0.001	< 0.1	0.054	2.8	1.9	4.7	< 0.2	< 1	3.8
0614		10/4/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.41	< 0.1	< 0.05	< 0.001	< 0.1	0.059	1.2	1.8	3	< 0.2	< 1	4.1
0614		1/4/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.23	< 0.1	< 0.05	< 0.001	< 0.1	0.04	1.8	2.4	4.2	< 0.2	< 1	5.6
0614		4/4/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.33	< 0.1	< 0.05	0.001	< 0.1	0.044	1.2	2.9	4.1	< 0.2	< 1	5.7
0614		7/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.3	< 0.1	< 0.05	0.003	< 0.1	0.052	7.2	8.4	15.6	0.5	< 1	22.8
0614		10/3/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.31	< 0.1	< 0.05	< 0.001	< 0.1	0.045	0.9	1.1	2	< 0.2	1.7	6.2
0614		1/3/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.35	< 0.1	< 0.05	< 0.001	< 0.1	0.047	6	1.2	7.2	0.7	1.5	12
0614		4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.32	< 0.1	< 0.05	< 0.001	< 0.1	0.05	1.2	3.4	4.6	< 0.2	< 1	3.5
0614		7/7/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.37	< 0.1	< 0.05	< 0.001	< 0.1	0.053	4.9	< 1	4.9	< 0.2	< 1	5.3
0614		10/1/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.41	< 0.1	< 0.05	0.002	< 0.1	0.044	1.6	< 1	1.6	< 0.2	< 1	2.1
0614		1/21/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.41	< 0.1	< 0.05	< 0.001	< 0.1	0.038	1.1	3.6	4.7	< 0.2	< 1	< 1
0614		4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.39	< 0.1	< 0.05	0.074	< 0.1	0.049	8.2	3.2	11.4	< 0.2	< 1	20.4
0614		7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.42	< 0.1	< 0.05	< 0.001	< 0.1	0.043	1.5	< 1	1.5	< 0.2	< 1	< 1
0614		10/7/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.47	< 0.1	< 0.05	< 0.001	< 0.1	0.051	4.3	3.8	8.1	< 0.2	< 1	7.8
0614		1/15/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.44	< 0.1	< 0.05	< 0.001	< 0.1	0.059	1.4	< 1	1.4	< 0.2	< 1	< 1
0614		4/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.32	< 0.1	< 0.05	< 0.001	< 0.1	0.06	2.2	< 1	2.2	< 0.2	< 1	< 1
0614		7/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.34	< 0.1	< 0.05	< 0.001	< 0.1	0.0631	2.3	< 1	2.3	< 0.2	< 1	2.3
0614		10/6/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.26	< 0.1	< 0.05	< 0.001	< 0.1	0.0732	0.6	< 1	0.6	< 0.2	< 1	< 1
0614		1/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.23	< 0.1	< 0.05	< 0.001	< 0.1	0.0682	0.9	2.2	3.1	< 0.2	< 1	< 1
0614		4/6/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.26	< 0.1	< 0.05	0.001	< 0.1	0.0641	2.9	3.6	6.5	< 0.2	3.3	3.3
0614		7/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.23	< 0.1	< 0.05	0.001	< 0.1	0.0672	0.9	1.2	2.1	< 0.2	< 1	< 1
0614		10/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.25	< 0.1	< 0.05	< 0.001	< 0.1	0.001	4.8	< 1	4.8	< 0.2	< 1	6.8
0614		1/4/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.24	< 0.1	< 0.05	0.001	< 0.1	0.0579	3.8	1.1	4.9	< 0.2	< 1	4.3
0614		5/2/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.34	< 0.1	< 0.05	< 0.001	< 0.1	0.0678	1.1	5.7	6.8	< 0.2	< 1	7
0614		7/11/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.22	< 0.1	< 0.05	< 0.001	< 0.1	0.0542	0.6	3.5	4.1	< 0.2	< 1	< 1
0614		10/3/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.2	< 0.1	< 0.05	< 0.001	< 0.1	0.053	0.7	3.7	4.4	< 0.2	< 1	< 1
0614		1/10/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.24	< 0.1	< 0.05	0.001	< 0.1	0.051	1.2	3.9	5.1	< 0.2	< 1	< 1
0614		4/2/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.27	< 0.1	< 0.05	0.001	< 0.1	0.056	0.8	< 1	0.8	< 0.2	< 1	< 1
0614		7/16/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.24	< 0.1	< 0.05	0.001	< 0.1	0.052	0.6	2.4	3	< 0.2	< 1	< 1
0614		10/2/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.22	< 0.1	< 0.05	0.001	< 0.1	0.0478	0.9	3.9	4.8	< 0.2	< 1	< 1
0614		1/14/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.28	< 0.1	< 0.05	0.003	< 0.1	0.0501	1.1	5.4	6.5	< 0.2	< 1	< 1
0614		4/2/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.28	< 0.1	< 0.05	< 0.001	< 0.1	0.0467	< 0.2	< 1	0	< 0.2	< 1	1.5

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0614		7/10/2002	6,912.40	6.45	7.31	6980	577	599	413	14	1430	3360	286	100	82	222	< 0.1	< 0.001
0614		10/9/2002	6,912.30	6.05	7.66	5220	520	621	400	12.4	1440	3080	286	87	79.2	228	< 0.1	< 0.001
0614		1/8/2003	6,912.06	7.23	7.60	6680	519	598	465	12.1	1470	3020	247	81	74	222	< 0.1	< 0.001
0614		4/9/2003	6,911.76	6.44	7.13	6840	559	640	434	16.5	1450	2918	334	76	72	248	< 0.1	< 0.001
0614		7/9/2003	6,911.61	6.29	7.38	6430	559	609	467	12	1430	3060	314	58	73	285	< 0.1	< 0.001
0614		10/8/2003	6,911.63	6.28	7.32	6670	579	576	460	9.8	1330	3060	312	50	71	192	< 0.1	< 0.001
0614		1/7/2004	6,911.41	6.40	6.97	6500	620	655	458	10.8	1390	3160	369	53 D	71.7 D	142 D	0.3	< 0.001
0614		4/7/2004	6,911.37	6.55	6.72	6590	597	635	450	10.6	1390	3020 D	347	47 D	72.8 D	140 D	< 0.1	< 0.001
0614		7/14/2004	6,911.01	6.28	6.49	6960	591	630	456	10.3	1430	3130 D	346	40 D	70.4 D	128 D	< 0.1	< 0.001
0614		10/6/2004	6,911.04	6.32	7.03	6850	600 D	665 D	481	9.9	1450	3230 D	343	45 D	76.5 D	165 D	< 0.1	< 0.001
0614		1/5/2005	6,911.01	6.48	6.87	6860	609 D	667 D	494 D	10	1240	3260 D	356	42 D	69 D	27.9 D	< 0.1	< 0.001
0614		4/6/2005	6,910.60	6.57	7.23	6500	592	637	478	9.8	1400	3120	346	37	63	157	< 0.1	< 0.001
0614		7/13/2005	6,910.51	6.47	7.28	6570	615 D	647 D	437	9.2	1360	3150 D	360	44 D	56 D	178 D	< 0.1	< 0.001
0614		10/5/2005	6,910.58	6.48	7.05	6550	584 D	659 D	460	10.5	1440	2910 D	324	50 D	61 D	202 D	< 0.1	0.001
0614		1/11/2006	6,910.48	6.58	7.30	6460	550 D	604 D	401	9.8	1370	3090 D	315	58 D	74 D	84.0 D	< 0.1	< 0.001
0614		4/4/2006	6,910.28	6.45	7.36	6450	602 D	639 D	417	10.2	1460	2950 D	376 D	139 D	77 D	108 D	< 0.1	< 0.001
0614		7/19/2006	6,910.01	6.45	6.83	6240	618	610 D	467	10.3	1350	3040 D	350	46 D	69 D	62.8 D	< 0.1	< 0.001
0614		10/4/2006	6,909.93	6.41	6.86	6360	577 D	592 D	439	10.5	1240	2850 D	332	55 D	73 D	125 D	0.1	< 0.001
0614		1/10/2007	6,909.94	6.49	6.89	6510	559 D	589 D	432	11.2	1340	3040 D	366	50 D	71 D	114	0.1	<0.001
0614		4/11/2007	6,909.94	6.59	6.19	6480	580 D	615 D	424	11.1	1340	3060 D	348	57 D	80 D	113	<0.1	<0.001
0614		7/11/2007	6,909.56	6.43	6.98	6280	605 D	626 D	436	10.6	1450	3150 D	310	52 D	82 D	83.2	<0.1	0.005
0614		10/3/2007	6,909.49	6.43	6.87	6490	540 D	582 D	455 D	11.9	1520	2910 D	378 D	72.3 D	78 D	182	<0.1	<0.001
0614		1/16/2008	6,909.66	6.61	6.54	6220	584 D	622 D	492 D	12.2	1440	3010 D	354 D	67 D	87 D	137	< 0.1	< 0.001
0614		4/9/2008	6,909.61	6.65	7.18	6430	619 D	678 D	517 D	12.0 D	1380	3360 D	309	68.6 D	147 D	210	< 0.1	< 0.001
0614		7/9/2008	6,909.11	7.49	7.07	6150	608 D	643 D	513 D	11.3	1290	3190 D	355	72.6 D	121 D	63.6	< 0.1	< 0.003
0614		10/8/2008	6,908.91	6.48	6.76	6500	577	612	468 D	10	1580	3510 D	320	72.1 D	111 D	146	< 0.1	< 0.001
0614		1/14/2009	6,908.81	7.34	7.09	6870	529	599	493	10 D	1290	2980 D	296	122 D	124 D	42	0.2	<0.001
0614		4/8/2009	6,908.91	6.55	6.80	6570	550 D	616 D	485 D	11	1470	3190 D	325	70.2 D	98.7 D	52.0	<0.1	<0.001
0614		7/8/2009	6,908.61	6.41	6.72	6800	615 D	655	490 D	12	1580	3290 D	335	85 D	94 D	141	0.3	<0.001
0614		10/7/2009	6,908.71	6.94	7.60	6650	576 D	652	477 D	12	1410	2980 D	343	76 D	101 D	92.0	<0.1	<0.001
0619		7/23/1989	6,888.10	6.60	6.50	5513	593	596	184	8.43	176	3852	35	0.61	0.34	< 1	< 0.1	< 0.001
0619		10/12/1989	6,888.20	6.70	7.28	5086	486	491	158	11.1	229	3251	36.6	0.44	1.56	< 1	< 0.1	< 0.001
0619		1/10/1990	6,887.60	6.50	7.08	5278	505	539	168	8.75	206	3360	40.5	0.74	1.01	< 1	< 0.1	< 0.001
0619		4/6/1990	6,887.60	6.80	6.92	4840	527	512	150	8.8	251	2966	38.5	0.69	0.22	< 1	< 0.1	< 0.001
0619		7/3/1990	6,887.00	6.50	7.32	5020	527	478	151	7.8	234	3160	34.2	0.27	0.09	< 1	< 0.1	< 0.001

CHESTER ENGINEERS

TABLE C.1
Zone 1 Data Summary, 1989-2009
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**	**9.4**	**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**
0614		7/10/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.23	< 0.1	< 0.05	< 0.001	< 0.1	0.0508	1.1	2.3	3.4	< 0.2	< 1	2.2
0614		10/9/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.32	< 0.1	< 0.05	< 0.001	< 0.1	0.0439	0.9	< 1	0.9	< 0.2	< 1	1.3
0614		1/8/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.25	< 0.1	< 0.05	< 0.001	< 0.1	0.0573	1.2	< 1	1.2	< 0.2	< 1	2.1
0614		4/9/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.22	< 0.1	< 0.05	< 0.001	< 0.1	0.0536	< 0.2	4	4	< 0.2	< 1	1.6
0614		7/9/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.25	< 0.1	< 0.05	< 0.001	< 0.1	0.0403	0.5	< 1	0.5	< 0.2	< 1	< 1.0
0614		10/8/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.24	< 0.1	< 0.05	< 0.001	< 0.1	0.0468	0.6	2.9	3.5	< 0.2	< 1	2
0614		1/7/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.28	< 0.1	< 0.05	< 0.001	< 0.1	0.0509 D	0.8	< 1.0	0.8	< 0.2	< 1.0	1.9
0614		4/7/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.26	< 0.1	< 0.05	0.01	< 0.1	0.0506 D	0.7	3.1	3.8	< 0.2	< 1	2.1
0614		7/14/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.2	< 0.1	< 0.05	< 0.001	< 0.1	0.0506 D	0.6	< 1.0	0.6	< 0.2	< 1.0	< 1.0
0614		10/6/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.23	< 0.1	< 0.05	0.001	< 0.1	0.0516 D	< 0.2	1.7	1.7	< 0.2	< 1.0	< 1.0
0614		1/5/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.24	< 0.1	< 0.05	0.004	< 0.1	0.0532	1.4	< 1.0	1.4	< 0.2	< 1.0	4.4
0614		4/6/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.25	< 0.1	< 0.05	< 0.001	< 0.1	0.05	1.1	4.3	5.4	< 0.2	< 1.0	< 1.0
0614		7/13/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.27	< 0.1	< 0.05	< 0.001	< 0.1	0.0489	1.3	< 1.0	1.3	< 0.2	< 1.0	1.3
0614		10/5/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.3	< 0.1	< 0.05	< 0.001	< 0.1	0.0498 D	0.6	1.6	2.2	< 0.2	< 1.0	< 1.0
0614		1/11/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.38	< 0.1	< 0.05	0.009	< 0.1	0.0512	0.7	1.2	1.9	< 0.2	< 1.0	1.3
0614		4/4/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.37	< 0.1	< 0.05	0.01	< 0.1	0.0488 D	0.7	< 1.0	0.7	< 0.2	< 1.0	1
0614		7/19/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.34	< 0.1	< 0.05	< 0.001	< 0.1	0.0507	0.5	1.8	2.3	< 0.2	< 1.0	< 1.0
0614		10/4/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.36	< 0.1	< 0.05	< 0.001	< 0.1	0.0462 D	0.5	3.4	3.9	< 0.2	< 1	< 1
0614		1/10/2007	<0.01	<0.005	<0.01	<0.05	0.39	<0.1	<0.05	<0.001	<0.1	0.0452	1.2	1.9	3.1	<0.2	<1	<1
0614		4/11/2007	<0.01	<0.005	<0.01	<0.05	0.38	<0.1	<0.05	<0.001	<0.1	0.0461	0.7	2.4	3.1	<0.2	<1	1.5
0614		7/11/2007	<0.01	<0.005	<0.01	<0.05	0.43	<0.1	<0.05	<0.001	<0.1	0.0492	1.3	<1	1.3	<0.2	<1	<1
0614		10/3/2007	<0.01	<0.005	<0.01	<0.05	0.49	<0.1	<0.05	<0.001	<0.1	0.0508	0.7	2	2.7	<0.2	<1	2.1
0614		1/16/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.48	< 0.1	< 0.05	0.002	< 0.1	0.054	1.6	2.3	3.9	< 0.2	< 1	3.8
0614		4/9/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.48	< 0.1	< 0.05	< 0.001	< 0.1	0.0512	1.1	2.2	3.3	-0.5 U	0 U	5.6
0614		7/9/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.5	< 0.1	< 0.05	< 0.001	< 0.1	0.0539	0.41	0.72 U	1.13	-0.3 U	5.3 U	0.6 U
0614		10/8/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.5	< 0.1	< 0.05	< 0.001	< 0.1	0.052	0.25	2.3	2.55	0.3	-2 U	2.4
0614		1/14/2009	<0.01	<0.005	<0.01	<0.05	0.46	<0.1	<0.05	0.001	<0.1	0.0624	0.54	4	4.54	0 U	-1 U	3.3
0614		4/8/2009	<0.01	<0.005	<0.01	<0.05	0.49	<0.1	<0.05	0.001	<0.1	0.0520 D	0.21	2.6	2.81	-0.1 U	-1 U	1.0
0614		7/8/2009	<0.01	<0.005	<0.01	<0.05	0.54	<0.1	<0.05	0.001	<0.1	0.0524	0.57	3.2	3.77	0.4 U	3.0	1.7
0614		10/7/2009	<0.01	<0.005	<0.01	<0.05	0.57	<0.1	<0.05	<0.001	<0.1	0.0512	0.37	2.4	2.77	0.0009 U	-1 U	1.3
0619		7/23/1989	< 0.05	< 0.01	< 0.01	< 0.05	2	< 0.1	< 0.05	< 0.001	< 0.1	0.0034	2.5	3.7	6.2	4.9	< 1	9.1
0619		10/12/1989	< 0.05	< 0.01	0.02	< 0.05	1.3	< 0.1	< 0.05	< 0.001	< 0.1	0.011	1.3	2	3.3	< 0.2	< 1	1.7
0619		1/10/1990	< 0.05	< 0.01	0.03	< 0.05	1.4	< 0.1	< 0.05	< 0.001	< 0.1	0.009	1.1	2	3.1	< 0.2	< 1	1.5
0619		4/6/1990	< 0.05	< 0.01	< 0.01	< 0.05	1	< 0.1	< 0.05	0.001	< 0.1	0.009	1.7	2	3.7	< 0.2	< 1	2.5
0619		7/3/1990	< 0.05	< 0.01	0.01	< 0.05	1.23	< 0.1	< 0.05	< 0.001	< 0.1	0.0068	1.7	< 1	1.7	0.5	< 1	2

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0619		10/3/1990	6,886.90	6.70	7.21	4526	487	392	147	10.1	254	2738	36.6	0.13	< 0.01	< 1	< 0.1	< 0.001
0619		1/15/1991	6,887.20	6.50	6.59	5538	572	611	185	12.1	176	3616	41.4	0.54	0.18	< 1	< 0.1	< 0.001
0619		4/2/1991	6,887.60	6.40	6.50	5610	479	459	172	8	184	3589	43.1	0.63	1	< 1	0.12	< 0.001
0619		7/17/1991	6,888.10	6.40	7.15	5446	452	471	168	7.9	195	3882	43.7	0.68	0.17	< 1	< 0.1	< 0.001
0619		10/15/1991	6,888.50	6.40	7.02	5399	540	508	189	7.6	165	3520	44.8	0.63	0.17	< 1	0.27	0.001
0619		1/15/1992	6,888.60	6.40	7.34	5182	455	544	177	7.8	231	3398	53.5	1.2	0.87	< 1	< 0.1	< 0.001
0619		4/8/1992	6,888.60	6.40	6.52	5323	537	466	204	9.4	180	3504	41.8	0.82	< 0.1	< 1	< 0.1	0.002
0619		7/8/1992	6,888.70	6.30	7.64	5017	500	548	302	12.9	175	3863	41.7	1.04	3.7	< 1	0.14	< 0.001
0619		10/7/1992	6,889.00	6.50	7.26	5257	538	499	222	10.2	168	3427	39.5	0.59	5.2	< 1	< 0.1	0.002
0619		1/6/1993	6,889.30	6.50	7.06	5176	563	507	315	12.6	166	3487	252	0.13	51.8	< 1	< 0.1	0.003
0619		4/6/1993	6,889.70	6.60	7.14	5314	487	439	213	7	272	3359	46.6	0.68	0.6	< 1	< 0.1	< 0.001
0619		7/13/1993	6,889.60	6.60	6.66	5057	531	471	200	8.1	190	3310	46.2	0.66	0.29	< 1	< 0.1	< 0.001
0619		10/7/1993	6,889.50	6.50	6.57	4615	512	460	188	7.4	165	3207	43.5	0.5	< 0.1	< 1	0.32	0.002
0619		1/6/1994	6,889.80	6.60	7.01	5111	505	416	179	7	171	3192	50.5	2.23	< 0.1	< 1	< 0.1	< 0.001
0619		4/12/1994	6,889.70	6.60	7.03	4764	502	432	177	7	173	3035	45.8	1.64	39.8	< 1	0.21	< 0.001
0619		7/20/1994	6,889.50	6.60	6.66	5111	565	427	158	7.5	177	3424	45.5	0.6	< 0.1	< 1	< 0.1	< 0.001
0619		10/4/1994	6,889.70	6.70	7.56	5045	573	453	187	8.1	200	3658	46	0.62	< 0.1	< 1	< 0.1	< 0.001
0619		1/4/1995	6,889.50	6.50	7.21	5078	580	432	172	8.8	203	3349	44.8	1.19	< 0.1	< 1	< 0.1	< 0.001
0619		4/5/1995	6,889.40	6.70	6.94	5148	540	500	174	7.67	212	3405	47	1.3	0.13	< 1	< 0.1	< 0.001
0619		7/6/1995	6,888.00	6.70	7.66	4288	515	410	153	7.2	216	2963	40	0.74	< 0.1	< 1	< 0.1	< 0.001
0619		10/3/1995	6,888.90	6.30	7.78	4677	530	457	175	7.5	192	3255	41	0.74	0.17	< 1	< 0.1	0.002
0619		1/3/1996	6,888.80	6.70	7.31	4731	505	445	182	7.8	179	3260	39.5	0.62	0.12	< 1	< 0.1	< 0.001
0619		4/2/1996	6,888.60	6.80	7.90	5039	545	473	164	7.9	204	3395	47	0.52	0.11	< 1	< 0.1	< 0.001
0619		7/7/1996	6,888.30	6.40	7.15	5207	515	450	180	8.6	179	3195	50	0.69	< 0.1	< 1	< 0.1	< 0.001
0619		10/1/1996	6,888.10	6.40	6.95	5140	547	478	182	8.1	190	3232	47.1	0.46	< 0.1	< 1	0.1	< 0.001
0619		1/22/1997	6,888.50	6.20	7.53	5060	540	490	177	8.09	182	3350	44	0.42	< 0.1	< 1	< 0.1	< 0.001
0619		4/8/1997	6,887.80	6.50	7.82	5110	539	458	170	8	193	3370	45	0.2	0.17	< 1	< 0.1	< 0.001
0619		7/8/1997	6,887.40	7.10	7.73	5130	586	514	182	8.3	190	3510	49.2	0.5	0.21	< 1	< 0.1	< 0.001
0619		10/7/1997	6,887.30	6.20	7.78	5080	569	483	178	8.15	217	3190	47.1	0.46	< 0.1	< 1	< 0.1	< 0.001
0619		1/15/1998	6,887.20	6.90	8.09	5310	521	484	187	8.8	190	3300	55	0.67	0.13	< 1	< 0.1	< 0.001
0619		4/7/1998	6,887.10	6.60	7.42	5280	504	469	176	7.9	188	3120	41.1	0.42	0.26	< 1	< 0.1	< 0.001
0619		7/7/1998	6,886.70	6.90	7.61	5210	505	478	181	8.4	195	3200	40.7	0.63	< 0.1	< 1	< 0.1	< 0.001
0619		10/6/1998	6,887.00	6.83	7.88	5390	535	532	197	9.4	191	3480	44.8	0.42	0.42	< 1	< 0.1	< 0.001
0619		1/5/1999	6,886.20	6.80	7.72	5350	523	497	175	8.5	186	3500	44.3	0.33	0.17	< 1	< 0.1	< 0.001
0619		4/6/1999	6,886.40	6.70	7.79	5430	528	534	167	8.1	181	3440	54.4	0.57	0.21	< 1	< 0.1	< 0.001

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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**
0619		10/3/1990	< 0.05	< 0.01	0.03	< 0.05	0.89	< 0.1	< 0.05	< 0.001	< 0.1	0.008	0.9	3.1	4	< 0.2	< 1	< 1
0619		1/15/1991	< 0.01	0.01	< 0.01	< 0.05	2.5	< 0.1	< 0.05	< 0.001	< 0.1	0.005	3	4.3	7.3	< 0.2	2.5	3.1
0619		4/2/1991	< 0.01	< 0.01	0.01	< 0.05	2.01	< 0.1	< 0.05	< 0.001	< 0.1	0.005	2.3	2.7	5	< 0.2	< 1	2
0619		7/17/1991	< 0.01	< 0.01	0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.004	1.1	1	2.1	0.2	1.6	1
0619		10/15/1991	< 0.01	< 0.01	< 0.01	< 0.05	2.22	< 0.1	< 0.05	< 0.001	< 0.1	0.009	0.6	4.6	5.2	< 0.2	< 1	< 1
0619		1/15/1992	< 0.01	< 0.01	< 0.01	< 0.05	1.82	< 0.1	< 0.05	0.003	< 0.1	0.007	1.2	1.2	2.4	< 0.2	< 1	1
0619		4/8/1992	< 0.01	< 0.01	< 0.01	< 0.05	1.92	< 0.1	< 0.05	< 0.001	< 0.1	0.006	0.7	1.8	2.5	< 0.2	< 1	< 1
0619		7/8/1992	< 0.01	< 0.01	< 0.01	< 0.05	1.91	< 0.1	< 0.05	0.001	< 0.1	0.003	1	5.2	6.2	< 0.2	1.1	1.5
0619		10/7/1992	< 0.01	< 0.01	< 0.01	< 0.05	2.04	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.7	3.2	4.9	< 0.02	< 1	1.9
0619		1/6/1993	< 0.01	< 0.01	0.01	< 0.05	0.66	< 0.1	< 0.05	0.003	< 0.1	0.975	0.5	1.6	2.1	< 0.2	< 1	< 1
0619		4/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	1.9	< 0.1	< 0.05	< 0.001	< 0.1	0.007	0.8	7.1	7.9	< 0.2	1.9	< 1
0619		7/13/1993	< 0.01	< 0.01	< 0.01	< 0.05	1.8	< 0.1	< 0.05	< 0.001	< 0.1	0.006	1.4	3.5	4.9	< 0.2	2.7	1.8
0619		10/7/1993	< 0.01	< 0.01	0.01	< 0.05	1.75	< 0.1	< 0.05	0.002	< 0.1	0.005	1.3	9	10.3	< 0.2	< 1	1.4
0619		1/6/1994	< 0.01	< 0.01	< 0.01	< 0.05	1.8	< 0.1	< 0.05	< 0.001	< 0.1	0.004	2.1	2.9	5	< 0.2	1.4	7.4
0619		4/12/1994	< 0.01	< 0.01	0.02	< 0.05	1.75	< 0.1	< 0.05	< 0.001	< 0.1	0.005	2	7.9	9.9	< 0.2	5.8	14
0619		7/20/1994	< 0.01	< 0.01	< 0.01	< 0.05	1.57	< 0.1	< 0.05	< 0.001	< 0.1	0.01	1.5	1.3	2.8	< 0.2	< 1	3.6
0619		10/4/1994	< 0.01	< 0.01	< 0.01	< 0.05	1.85	< 0.1	< 0.05	< 0.001	< 0.1	0.012	1.3	1.9	3.2	< 0.2	2.5	4.3
0619		1/4/1995	< 0.01	< 0.01	< 0.01	< 0.05	1.45	< 0.1	0.07	< 0.001	< 0.1	0.01	1.3	3.9	5.2	< 0.2	< 1	7.3
0619		4/5/1995	< 0.01	< 0.01	< 0.01	< 0.05	1.78	< 0.1	< 0.05	< 0.001	< 0.1	0.008	1.6	2.8	4.4	< 0.2	3.7	5.9
0619		7/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	1.65	< 0.1	< 0.05	< 0.001	< 0.1	0.0065	1.1	3.1	4.2	0.6	< 1	2.7
0619		10/3/1995	< 0.01	< 0.01	< 0.01	< 0.05	1.79	< 0.1	< 0.05	< 0.001	< 0.1	0.0101	1.3	< 1	1.3	< 0.2	< 1	3.1
0619		1/3/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.78	< 0.1	< 0.05	< 0.001	< 0.1	0.0067	1.5	< 1	1.5	1	< 1	2.5
0619		4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.71	< 0.1	< 0.05	< 0.001	< 0.1	0.018	1.7	4.8	6.5	< 0.2	4.1	3.5
0619		7/7/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.9	< 0.1	< 0.05	< 0.001	< 0.1	0.008	1.7	< 1	1.7	< 0.2	< 1	1.1
0619		10/1/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.86	< 0.1	< 0.05	0.001	< 0.1	0.0036	1.5	< 1	1.5	< 0.2	< 1	2
0619		1/22/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.84	< 0.1	< 0.05	< 0.001	< 0.1	0.008	1.3	< 1	1.3	< 0.2	< 1	< 1
0619		4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.87	< 0.1	< 0.05	0.004	< 0.1	0.0056	2	4.2	6.2	< 0.2	< 1	4.7
0619		7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.94	< 0.1	< 0.05	< 0.001	< 0.1	0.005	1.6	4.2	5.8	< 0.2	< 1	< 1
0619		10/7/1997	< 0.01	< 0.01	< 0.01	< 0.05	2.05	< 0.1	< 0.05	< 0.001	< 0.1	0.007	2	< 1	2	< 0.2	< 1	< 1
0619		1/15/1998	< 0.01	< 0.005	< 0.01	< 0.05	2.26	< 0.1	< 0.05	< 0.001	< 0.1	0.0099	4.3	3.6	7.9	< 0.2	< 1	7.5
0619		4/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.94	< 0.1	< 0.05	< 0.001	< 0.1	0.0062	3.6	4.7	8.3	< 0.2	< 1	2.3
0619		7/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.97	< 0.1	< 0.05	< 0.001	< 0.1	0.0051	1.2	3.6	4.8	< 0.2	< 1	< 1
0619		10/6/1998	< 0.01	< 0.005	0.01	< 0.05	2.04	< 0.1	< 0.05	< 0.001	< 0.1	0.016	1.4	3.2	4.6	< 0.2	< 1	< 1
0619		1/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	2.17	< 0.1	< 0.05	< 0.001	< 0.1	0.0072	1.3	4.1	5.4	< 0.2	2.4	2.4
0619		4/6/1999	< 0.01	0.005	< 0.01	< 0.05	2.19	< 0.1	< 0.05	< 0.001	< 0.1	0.0053	2.5	4.8	7.3	< 0.2	2	2

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
0619		7/13/1999	6,885.69	6.60	7.96	5400	551	565	195	11.4	194	3460	50.3	0.49	0.29	< 1	< 0.1	< 0.001
0619		10/5/1999	6,885.60	6.86	7.86	5220	581	606	169	8.4	188	3790	48.3	0.51	0.28	< 1	< 0.1	< 0.001
0619		1/4/2000	6,885.60	6.70	7.67	5330	467	497	151	8.9	188	3000	44.4	< 0.05	0.18	< 1	< 0.1	< 0.001
EPA 02		7/26/1989	6,843.90	6.80	6.80	3959	526	275	267	8.9	256	2463	32.1	0.89	0.01	< 1	0.37	< 0.001
EPA 02		10/5/1989	6,844.30	6.40	7.00	4088	528	264	268	11.7	262	2589	29.7	0.89	0.08	< 1	< 0.1	< 0.001
EPA 02		1/17/1990	6,844.80	6.20	6.62	3622	446	216	265	8.2	293	2197	29.3	0.77	0.12	< 1	< 0.1	0.001
EPA 02		4/18/1990	6,845.00	6.50	6.80	3704	440	220	250	7.8	293	2173	30.3	0.88	0.03	< 1	< 0.1	< 0.001
EPA 02		7/17/1990	6,844.90	6.60	6.70	3623	479	208	253	8.5	305	2104	28.8	0.51	0.05	< 1	< 0.1	< 0.001
EPA 02		10/16/1990	6,845.10	6.40	7.17	3965	445	230	259	7.5	259	2462	36.2	0.79	0.01	< 1	< 0.1	< 0.001
EPA 02		1/8/1991	6,845.30	6.50	6.85	3834	451	236	263	11	264	2388	35.6	0.76	0.01	< 1	< 0.1	< 0.001
EPA 02		4/17/1991	6,845.80	6.30	7.37	3708	452	238	268	7.6	284	2300	24.6	0.67	< 0.01	< 1	< 0.1	< 0.001
EPA 02		7/3/1991	6,846.00	6.40	6.83	4500	523	285	230	7.8	183	3175	38.1	1.07	< 0.01	< 1	0.3	< 0.001
EPA 02		10/22/1991	6,846.50	6.40	6.59	3843	475	244	242	7.7	275	2435	34.4	0.96	0.04	< 1	< 0.1	< 0.001
EPA 02		1/23/1992	6,846.70	6.50	7.02	3478	455	235	229	7.4	226	2364	32.6	0.88	< 0.01	< 1	< 0.1	< 0.001
EPA 02		4/2/1992	6,847.10	6.40	7.86	3799	483	243	279	8.4	282	2486	29.5	0.92	< 0.01	< 1	< 0.1	< 0.001
EPA 02		7/16/1992	6,846.50	6.50	6.71	3885	412	224	290	9	237	2606	33.4	0.58	0.2	< 1	0.13	< 0.001
EPA 02		10/15/1992	6,846.70	6.30	7.02	4554	580	300	286	10.6	198	2890	36.1	0.92	< 0.1	< 1	< 0.1	< 0.001
EPA 02		1/14/1993	6,847.00	6.60	7.12	3380	436	196	213	8.3	276	2201	29	0.88	< 0.1	< 1	< 0.1	< 0.001
EPA 02		4/15/1993	6,847.50	6.60	7.68	3534	455	186	255	6.3	270	2292	30.4	0.67	0.2	< 1	< 0.1	< 0.001
EPA 02		7/21/1993	6,848.20	6.60	7.43	3321	458	207	256	8	315	2247	24.3	0.4	< 0.1	< 1	< 0.1	< 0.001
EPA 02		10/12/1993	6,845.50	6.70	6.50	3692	498	222	231	7.2	300	2274	29.6	0.57	< 0.1	< 1	0.1	< 0.001
EPA 02		1/11/1994	6,847.80	6.70	7.10	2674	353	160	194	5.6	300	1765	26.3	0.55	< 0.1	< 1	0.13	< 0.001
EPA 02		4/19/1994	6,847.90	6.60	8.05	2781	357	159	223	6.9	284	1771	24.3	0.78	< 0.1	< 1	< 0.1	0.001
EPA 02		7/26/1994	6,848.10	6.70	6.93	3353	469	216	223	6.8	273	2026	26.6	0.59	< 0.1	< 1	0.16	< 0.001
EPA 02		10/11/1994	6,848.00	6.70	7.70	3036	462	182	222	6.4	304	2057	25.2	0.71	< 0.1	< 1	< 0.1	< 0.001
EPA 02		1/10/1995	6,848.10	6.60	7.16	3316	486	144	208	7.6	294	2057	27.5	0.98	< 0.1	< 1	< 0.1	< 0.001
EPA 02		4/6/1995	6,848.50	6.70	6.91	3267	423	183	216	6.72	295	2070	26.5	1.06	< 0.1	< 1	< 0.1	< 0.001
EPA 02		7/11/1995	6,848.40	6.80	7.14	2674	390	177	203	6.2	325	1705	25.4	0.81	< 0.1	< 1	< 0.1	< 0.001
EPA 02		10/10/1995	6,842.60	6.70	7.43	2782	393	156	216	6.4	321	1741	24.2	0.6	< 0.1	< 1	< 0.1	0.001
EPA 02		1/9/1996	6,848.50	6.80	7.73	2801	382	155	213	6.7	334	1791	24.7	0.46	< 0.1	< 1	< 0.1	0.003
EPA 02		4/10/1996	6,842.70	6.90	7.70	3018	408	168	191	6	321	1831	22.7	0.52	< 0.1	< 1	< 0.1	< 0.001
EPA 02		7/17/1996	6,848.50	6.70	6.88	3042	390	164	208	16	312	1746	29	0.45	< 0.1	< 1	< 0.1	< 0.001
EPA 02		10/8/1996	6,848.70	6.70	7.17	3150	453	198	211	6.7	315	1866	24.5	0.56	< 0.1	< 1	< 0.1	< 0.001
EPA 02		1/28/1997	6,848.70	6.90	7.75	3000	400	185	190	6.23	318	1883	29.9	0.48	< 0.1	< 1	< 0.1	< 0.001
EPA 02		4/15/1997	6,848.70	6.70	7.77	2970	410	184	202	6.6	325	1775	26.4	0.46	< 0.1	< 1	< 0.1	< 0.001

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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**
0619		7/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	2.34	< 0.1	< 0.05	< 0.001	< 0.1	0.0072	1.4	3	4.4	< 0.2	< 1	< 1
0619		10/5/1999	< 0.01	< 0.005	0.01	< 0.05	2.77	< 0.1	< 0.05	< 0.001	< 0.1	0.0066	1.7	3	4.7	< 0.2	< 1	3.9
0619		1/4/2000	< 0.01	< 0.005	< 0.01	< 0.05	2.43	< 0.1	< 0.05	< 0.001	< 0.1	0.0067	1.4	1.8	3.2	< 0.2	< 1	1.5
EPA 02		7/26/1989	< 0.05	< 0.01	0.06	< 0.05	2.9	< 0.1	0.07	< 0.001	< 0.1	0.0178	1.6	< 1	1.6	1.4	< 1	< 1
EPA 02		10/5/1989	< 0.05	< 0.01	< 0.01	< 0.05	2.8	< 0.01	< 0.05	< 0.001	< 0.1	0.004	0.6	1.9	2.5	< 0.2	3.4	1.1
EPA 02		1/17/1990	< 0.05	< 0.01	< 0.01	< 0.05	2.6	< 0.1	< 0.05	< 0.001	< 0.1	0.003	0.6	< 1	0.6	0.4	< 1	1.1
EPA 02		4/18/1990	< 0.05	< 0.01	< 0.01	< 0.05	2.3	< 0.1	< 0.05	0.001	< 0.1	0.002	1.8	< 1	1.8	< 0.2	< 1	2.3
EPA 02		7/17/1990	< 0.05	< 0.01	< 0.01	< 0.05	2.29	< 0.1	< 0.05	< 0.001	< 0.1	0.0019	0.4	1.9	2.3	< 0.2	< 1	< 1
EPA 02		10/16/1990	< 0.05	< 0.01	0.01	< 0.05	2.57	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.9	< 1	0.9	< 0.2	< 1	< 1
EPA 02		1/8/1991	< 0.01	< 0.01	< 0.01	< 0.05	2.62	< 0.1	< 0.05	< 0.001	< 0.1	0.0196	< 0.2	2	2	< 0.2	< 1	< 1
EPA 02		4/17/1991	< 0.01	< 0.01	< 0.01	< 0.05	2.12	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1	1.8	2.8	< 0.2	< 1	1
EPA 02		7/3/1991	< 0.01	< 0.01	< 0.01	< 0.05	3.02	0.03	< 0.05	< 0.001	< 0.1	< 0.0003	0.2	3.7	3.9	< 0.2	< 1	< 1
EPA 02		10/22/1991	< 0.01	< 0.01	0.02	< 0.05	2.09	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.2	3.7	3.9	< 0.2	< 1	< 1
EPA 02		1/23/1992	< 0.01	< 0.01	< 0.01	< 0.05	2.77	< 0.1	< 0.05	< 0.001	< 0.1	0.003	0.3	< 1	0.3	< 0.2	1.3	< 1
EPA 02		4/2/1992	< 0.01	< 0.01	< 0.01	< 0.05	2.46	< 0.1	< 0.05	< 0.001	< 0.1	0.009	0.2	4.4	4.6	< 0.2	3	< 1
EPA 02		7/16/1992	< 0.01	< 0.01	< 0.01	< 0.05	2.3	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1.8	6.3	8.1	< 0.2	2.5	1.9
EPA 02		10/15/1992	< 0.01	< 0.01	< 0.01	< 0.05	3.23	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.2	6.3	7.5	< 0.2	2.1	1.3
EPA 02		1/14/1993	< 0.01	< 0.01	< 0.01	< 0.05	2.27	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.2	< 1	0.2	< 0.2	< 1	< 1
EPA 02		4/15/1993	< 0.01	< 0.01	< 0.01	< 0.05	2.15	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.5	< 1	0.5	< 0.2	1.6	< 1
EPA 02		7/21/1993	< 0.01	< 0.01	< 0.01	< 0.05	1.59	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.7	2.7	3.4	< 0.2	< 1	< 1
EPA 02		10/12/1993	< 0.01	< 0.01	0.01	< 0.05	2.11	< 0.1	< 0.05	< 0.001	< 0.1	0.002	1.4	2.1	3.5	< 0.2	2.8	4.5
EPA 02		1/11/1994	< 0.01	< 0.01	< 0.01	< 0.05	1.78	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.7	4.3	5	< 0.2	< 1	8.1
EPA 02		4/19/1994	< 0.01	< 0.01	0.02	< 0.05	2	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.8	2.1	2.9	< 0.2	< 1	4.1
EPA 02		7/26/1994	< 0.01	< 0.01	< 0.01	< 0.05	1.81	< 0.1	< 0.05	< 0.001	< 0.1	0.002	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 02		10/11/1994	< 0.01	< 0.01	< 0.01	< 0.05	1.52	< 0.1	< 0.05	< 0.001	< 0.1	0.002	1	< 1	1	< 0.2	< 1	1.2
EPA 02		1/10/1995	< 0.01	< 0.01	< 0.01	< 0.05	1.82	< 0.1	< 0.05	< 0.001	< 0.1	0.002	1.1	< 1	1.1	< 0.2	< 1	2.8
EPA 02		4/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	1.59	< 0.1	< 0.05	< 0.001	< 0.1	0.002	0.6	2.4	3	< 0.2	< 1	3.8
EPA 02		7/11/1995	< 0.01	< 0.01	< 0.01	< 0.05	1.47	< 0.1	< 0.05	< 0.001	< 0.1	0.0012	1	< 1	1	< 0.2	< 1	3.4
EPA 02		10/10/1995	< 0.01	< 0.01	< 0.01	< 0.05	1.48	< 0.1	< 0.05	< 0.001	< 0.1	0.0011	1.2	< 1	1.2	< 0.2	< 1	1.1
EPA 02		1/9/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.48	< 0.1	< 0.05	< 0.001	< 0.1	0.0026	1	< 1	1	< 0.2	< 1	< 1
EPA 02		4/10/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.52	< 0.1	< 0.05	< 0.001	< 0.1	0.0008	0.7	< 1	0.7	0.7	< 1	< 1
EPA 02		7/17/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.58	< 0.1	< 0.05	< 0.001	< 0.1	0.0011	0.9	< 1	0.9	0.9	< 1	< 1
EPA 02		10/8/1996	< 0.01	< 0.01	< 0.01	< 0.05	1.53	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.8	< 1	0.8	< 0.2	< 1	1.7
EPA 02		1/28/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.46	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.8	< 1	1.8	< 0.2	< 1	< 1
EPA 02		4/15/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.49	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 02		7/15/1997	6,848.50	6.50	7.46	3090	411	186	192	6.6	321	1780	27.7	0.51	< 0.1	< 1	< 0.1	< 0.001
EPA 02		10/15/1997	6,848.50	6.60	7.64	2920	400	185	195	6.1	322	1740	31.6	0.5	< 0.1	< 1	< 0.1	< 0.001
EPA 02		1/20/1998	6,849.20	6.50	7.76	3060	407	182	208	6.9	318	2000	26.8	0.73	< 0.1	< 1	< 0.1	< 0.001
EPA 02		4/14/1998	6,848.90	6.40	7.47	3130	438	199	194	6.3	316	1830	26.2	0.54	< 0.1	< 1	< 0.1	< 0.001
EPA 02		7/14/1998	6,848.70	7.00	7.66	3120	385	190	207	6.9	313	1700	22.3	0.49	< 0.1	< 1	< 0.1	< 0.001
EPA 02		10/6/1998	6,849.50	6.60	7.82	3390	454	227	221	7.9	292	2150	28.6	0.75	< 0.1	< 1	< 0.1	< 0.001
EPA 02		1/12/1999	6,849.30	6.80	7.65	3060	364	180	181	6.7	311	1740	27.8	0.55	< 0.1	< 1	< 0.1	< 0.001
EPA 02		4/13/1999	6,849.50	6.70	7.69	3110	420	182	198	6.8	304	1800	31.3	0.64	< 0.1	< 1	< 0.1	< 0.001
EPA 02		7/20/1999	6,849.19	6.70	7.67	3080	385	186	187	8.8	307	1650	29	0.59	< 0.1	< 1	< 0.1	< 0.001
EPA 02		10/12/1999	6,849.30	6.64	7.65	3640	478	244	186	7.6	268	1970	45.7	0.7	< 1	< 1	< 0.1	< 0.001
EPA 02		1/11/2000	6,849.50	6.70	7.63	3090	384	187	179	7.4	310	1700	28.9	0.57	< 0.1	< 1	0.12	< 0.001
EPA 02		5/2/2000	6,850.10	6.60	7.72	2800	349	162	183	5.9	296	1490	20.2	0.48	< 0.1	< 1	< 0.1	< 0.001
EPA 02		7/10/2000	6,849.90	6.67	7.42	2740	369	166	192	5.89	334	1540	20.4	0.47	< 0.1	< 1	< 0.1	< 0.001
EPA 02		10/2/2000	6,849.95	6.70	7.49	2670	359	172	195	7.8	330	1740	21.2	0.42	< 0.1	< 1	< 0.1	0.004
EPA 02	Dup	10/9/2000	no data	6.69	7.62	2700	327	153	187	6.54	331	1380	18.1	0.43	< 0.1	< 1	< 0.1	< 0.001
EPA 02		1/15/2001	6,850.00	6.80	7.34	2680	360	157	185	6.5	350	1690	25.8	0.5	< 0.1	< 1	< 0.1	< 0.001
EPA 02	Dup	1/15/2001	no data	6.90	7.47	2560	358	156	185	6.5	330	1680	26.3	0.5	< 0.1	< 1	< 0.1	< 0.001
EPA 02		4/2/2001	6,850.10	6.87	7.39	2730	408	182	173	6	425	1600	23.7	0.53	< 0.1	< 1	< 0.1	0.001
EPA 02	Dup	4/2/2001	no data	6.88	7.26	2780	407	181	170	5.9	333	1610	24	0.46	< 0.1	< 1	< 0.1	0.001
EPA 02		7/16/2001	6,849.60	7.03	7.57	2770	341	159	182	6.9	430	1630	28.3	0.53	< 0.1	< 1	< 0.1	< 0.001
EPA 02	Dup	7/16/2001	no data	7.08	7.49	2720	343	159	185	6.8	331	1610	28.2	0.53	< 0.1	< 1	< 0.1	< 0.001
EPA 02		10/9/2001	6,849.75	6.67	7.70	2760	330	150	182	6.2	371	1420	25.1	0.36	< 0.1	< 1	< 0.1	0.002
EPA 02	Dup	10/9/2001	no data	6.72	7.10	2730	330	150	177	6.2	338	1440	27.1	0.45	< 0.1	< 1	< 0.1	< 0.001
EPA 02		1/14/2002	6,849.80	6.96	7.20	2730	406	177	168	8	355	1550	24.8	0.43	< 0.1	< 1	< 0.1	< 0.001
EPA 02	Dup	1/14/2002	no data	6.85	7.10	2770	409	179	174	8.13	334	1600	24.7	0.47	< 0.1	< 1	< 0.1	< 0.001
EPA 02		4/9/2002	6,849.36	6.83	7.29	2760	356	159	186	6.2	379	1570	25.4	0.45	< 0.1	< 1	< 0.1	< 0.001
EPA 02	Dup	4/9/2002	no data	6.72	7.21	2780	351	158	184	6.3	336	1570	24.8	0.5	< 0.1	< 1	< 0.1	< 0.001
EPA 02		7/16/2002	6,849.45	6.14	7.54	2760	352	161	188	6	448	1510	24.6	0.6	< 0.1	< 1	< 0.1	< 0.001
EPA 02	Dup	7/16/2002	no data	6.56	7.37	2770	352	160	190	7.6	332	1540	25.9	1.3	< 0.1	< 1	< 0.1	< 0.001
EPA 02		10/15/2002	6,849.16	6.14	7.72	2630	398	178	189	5.9	432	1700	21	0.5	< 0.1	< 1	< 0.1	0.002
EPA 02	Dup	10/15/2002	no data	6.43	7.48	2650	400	180	187	6.1	337	1750	15.2	0.62	< 0.1	< 1	< 0.1	0.001
EPA 02		1/14/2003	6,849.13	6.65	7.62	2700	345	154	172	6.4	409	1410	19.6	0.59	< 0.1	< 1	< 0.1	0.002
EPA 02	Dup	1/14/2003	no data	no data	7.38	2710	380	175	162	6.6	341	1590	23.5	0.69	< 0.1	< 1	< 0.1	< 0.001
EPA 02		4/15/2003	6,849.54	6.76	7.51	2740	328	141	194	9	448	1550	23.7	0.6	< 0.1	< 1	< 0.1	< 0.001
EPA 02	Dup	4/15/2003	no data	no data	7.37	2730	346	163	192	8.8	333	1520	23.3	0.6	< 0.1	< 1	< 0.1	< 0.001

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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 02		7/15/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.42	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.9	2.5	3.4	< 0.2	< 1	< 1
EPA 02		10/15/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.49	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.5	< 1	0.5	< 0.2	< 1	< 1
EPA 02		1/20/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.75	< 0.1	< 0.05	< 0.001	< 0.1	0.0009	1	< 1	1	< 0.2	< 1	< 1
EPA 02		4/14/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.6	< 0.1	< 0.05	< 0.001	< 0.1	0.0008	1.1	< 1	1.1	< 0.2	< 1	< 1
EPA 02		7/14/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.5	< 0.1	< 0.05	< 0.001	< 0.1	0.0009	0.9	< 1	0.9	< 0.2	7.5	< 1
EPA 02		10/6/1998	< 0.01	< 0.005	< 0.01	< 0.05	1.94	< 0.1	< 0.05	< 0.001	< 0.1	0.0007	1	2.5	3.5	< 0.2	< 1	< 1
EPA 02		1/12/1999	< 0.01	< 0.005	< 0.01	< 0.05	1.44	< 0.1	< 0.05	< 0.001	< 0.1	0.0028	0.9	2.5	3.4	< 0.2	< 1	< 1
EPA 02		4/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	1.64	< 0.1	< 0.05	< 0.001	< 0.1	0.0009	1.1	< 1	1.1	< 0.2	1.8	1.8
EPA 02		7/20/1999	< 0.01	< 0.005	< 0.01	< 0.05	1.35	< 0.1	< 0.05	< 0.001	< 0.1	0.0012	1.2	2.1	3.3	< 0.2	2.1	2.1
EPA 02		10/12/1999	< 0.01	< 0.005	< 0.01	< 0.05	2.21	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.6	2.2	2.8	< 0.2	< 1	1.8
EPA 02		1/11/2000	< 0.01	< 0.005	< 0.01	< 0.05	1.58	< 0.1	< 0.05	0.001	< 0.1	0.0015	0.8	< 1	0.8	< 0.2	< 1	< 1
EPA 02		5/2/2000	< 0.01	< 0.005	< 0.01	< 0.05	1.29	< 0.1	< 0.05	< 0.001	< 0.1	0.0016	1.7	< 1	1.7	< 0.2	< 1	2.2
EPA 02		7/10/2000	< 0.01	< 0.005	< 0.01	< 0.05	1.27	< 0.1	< 0.05	< 0.001	< 0.1	0.0011	1.5	3.9	5.4	< 0.2	< 1	1.4
EPA 02		10/2/2000	< 0.01	< 0.005	< 0.01	< 0.05	1.07	< 0.1	< 0.05	< 0.001	< 0.1	0.0011	1.8	< 1	1.8	< 0.2	< 1	2.6
EPA 02	Dup	10/9/2000	< 0.01	< 0.005	< 0.01	< 0.05	1.07	< 0.1	< 0.05	< 0.001	< 0.1	0.012	1.4	3.3	4.7	< 0.2	< 1	1.5
EPA 02		1/15/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.21	< 0.1	< 0.05	< 0.001	< 0.1	0.0015	1.2	2.8	4	< 0.2	< 1	1.2
EPA 02	Dup	1/15/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.15	< 0.1	< 0.05	< 0.001	< 0.1	0.0013	1.4	4.6	6	< 0.2	< 1	1.1
EPA 02		4/2/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.14	< 0.1	< 0.05	< 0.001	< 0.1	0.0005	1.4	< 1	1.4	< 0.2	< 1	2.1
EPA 02	Dup	4/2/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.24	< 0.1	< 0.05	< 0.001	< 0.1	0.0006	1.4	< 1	1.4	< 0.2	< 1	1.4
EPA 02		7/16/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.2	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	1.4	4.3	5.7	< 0.2	< 1	1.6
EPA 02	Dup	7/16/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.18	< 0.1	< 0.05	< 0.001	< 0.1	0.0006	0.8	6.4	7.2	< 0.2	< 1	< 1
EPA 02		10/9/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.08	< 0.1	< 0.05	< 0.001	< 0.1	0.0005	1.3	2.6	3.9	< 0.2	< 1	< 1
EPA 02	Dup	10/9/2001	< 0.01	< 0.005	< 0.01	< 0.05	1.08	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	1.2	< 1	1.2	< 0.2	< 1	< 1
EPA 02		1/14/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.34	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1.3	3.3	4.6	< 0.2	< 1	1.3
EPA 02	Dup	1/14/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.35	< 0.1	< 0.05	< 0.001	< 0.1	0.0008	1.8	12	13.8	< 0.2	< 1	1.9
EPA 02		4/9/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.28	< 0.1	< 0.05	< 0.001	< 0.1	0.0008	1.1	1.7	2.8	< 0.2	< 1	1.8
EPA 02	Dup	4/9/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.28	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1.5	< 1	1.5	< 0.2	< 1	1.4
EPA 02		7/16/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.28	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.7	< 1	1.7	< 0.2	< 1	1.7
EPA 02	Dup	7/16/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.26	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.9	< 1	0.9	< 0.2	< 1	1.8
EPA 02		10/15/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.12	< 0.1	< 0.05	< 0.001	< 0.1	0.0009	1.7	3	4.7	< 0.2	< 1	< 1
EPA 02	Dup	10/15/2002	< 0.01	< 0.005	< 0.01	< 0.05	1.29	< 0.1	< 0.05	< 0.001	< 0.1	0.0009	1.5	< 1	1.5	< 0.2	< 1	< 1
EPA 02		1/14/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.23	< 0.1	< 0.05	< 0.001	< 0.1	0.0014	3	< 1	3	< 0.2	< 1	2.2
EPA 02	Dup	1/14/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.23	< 0.1	< 0.05	< 0.001	< 0.1	0.0013	1.9	< 1	1.9	< 0.2	< 1	3
EPA 02		4/15/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.28	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1.8	10.1	11.9	< 0.2	< 1	2.1
EPA 02	Dup	4/15/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.25	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1.3	10.4	11.7	< 0.2	< 1	2.3

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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
EPA 02		7/14/2003	6,849.09	6.50	7.62	2750	352	156	183	7.1	436	1460	25.2	0.5	< 0.1	< 1	< 0.1	< 0.001
EPA 02	Dup	7/14/2003	no data	no data	7.48	2790	365	164	185	7.3	338	1550	19.2	0.57	< 0.1	< 1	< 0.1	< 0.001
EPA 02		10/14/2003	6,848.80	6.67	7.44	2710	390	172	194	6	438	1620	19.4	0.48	< 0.1	< 1	< 0.1	< 0.001
EPA 02	Dup	10/14/2003	no data	no data	7.52	2700	394	174	194	6.1	329	1600	21.7	0.55	< 0.1	< 1	0.2	< 0.001
EPA 02		1/13/2004	6,848.87	6.69	7.74	2700	380	176	196	7.1	323	1640	20.9	0.48	< 0.10	< 1.0	< 0.1	< 0.001
EPA 02	Dup	1/13/2004	no data	no data	7.63	2710	391	180	196	7.6	336	1680	20.5	0.58	< 0.10	< 1.0	< 0.1	< 0.001
EPA 02		4/13/2004	6,848.76	6.55	6.97	2680	353	164	182	6.9	405	1580	23.1	0.92	< 0.1	< 1	< 0.1	< 0.001
EPA 02	Dup	4/13/2004	no data	no data	6.82	2710	356	166	191	7.1	342	1620	24.8	0.78	< 0.1	< 1	< 0.1	< 0.001
EPA 02		7/20/2004	6,848.67	6.80	6.89	2740	374 D	164 D	202	5.9	358	1530 D	22	0.49	< 0.10	< 1.0	< 0.1	< 0.001
EPA 02	Dup	7/20/2004	no data	no data	6.62	2700	373 D	164 D	201	5.8	331	1550 D	21	0.55	< 0.10	< 1.0	< 0.1	< 0.001
EPA 02		10/13/2004	6,848.79	6.93	7.10	2810	367 D	176 D	180	6.5	378	1600 D	23	0.55	< 0.10	< 1.0	< 0.1	< 0.001
EPA 02	Dup	10/13/2004	no data	no data	7.07	2870	386 D	187 D	196	6.6	328	1700 D	24	0.58	< 0.10	< 1.0	< 0.1	< 0.001
EPA 02		1/11/2005	6,848.91	7.42	7.11	2850	390 D	180 D	201 D	6.6	356	1630	23	0.51	< 0.1	< 1.0	< 0.1	< 0.001
EPA 02	Dup	1/11/2005	no data	no data	7.05	2910	397 D	187 D	202	6.8	325	1670	23	0.57	< 0.1	< 1.0	< 0.1	< 0.001
EPA 02		4/12/2005	6,848.66	6.78	7.08	2750	403	185	206	6.8	348	1740	22	0.49	< 0.1	< 1.0	< 0.1	< 0.001
EPA 02	Dup	4/12/2005	no data	no data	7.11	2750	406	185	203	6.9	322	1760	23	0.5	< 0.1	< 1.0	< 0.1	< 0.001
EPA 02		7/19/2005	6,847.89	6.49	7.28	2590	350 D	160 D	195	5.9	389	1420	20	0.4	< 0.1	< 1.0	< 0.1	< 0.001
EPA 02	Dup	7/19/2005	no data	no data	7.15	2630	346 D	159 D	196	5.8	335	1450 D	17	0.46	< 0.1	< 1.0	< 0.1	< 0.001
EPA 02		10/11/2005	6,848.28	6.79	7.26	2640	352 D	163 D	199	6.4	284	1560 D	23	0.47	< 0.1	< 1.0	< 0.1	< 0.001
EPA 02	Dup	10/11/2005	no data	no data	7.19	2690	351 D	163 D	197	6.5	357	1570 D	24	0.52	< 0.1	< 1.0	< 0.1	< 0.001
EPA 02		1/17/2006	6,848.01	6.93	7.56	2540	345 D	161 D	185	6.2	336	1480 D	21	0.49	< 0.1	< 1.0	< 0.1	< 0.001
EPA 02	Dup	1/17/2006	no data	no data	7.72	2560	339 D	158 D	182	6.2	531	1390	20	0.61	< 0.1	< 1.0	< 0.1	< 0.001
EPA 02		4/11/2006	6,848.22	6.86	7.32	2560	364 D	168 D	191	5.9	383	1470	21	0.47	< 0.1	< 1.0	< 0.1	< 0.001
EPA 02	Dup	4/11/2006	no data	no data	7.44	2600	369 D	172 D	193	6	354	1520	21	0.61	< 0.1	< 1.0	< 0.1	< 0.001
EPA 02		7/25/2006	6,848.04	6.70	7.24	2540	346 D	154 D	204	6.2	321	1550	21	0.68	< 0.1	< 1.0	< 0.1	< 0.001
EPA 02	Dup	7/25/2006	no data	no data	7.08	2480	356 D	159 D	206	6.5	319	1580	21	0.51	< 0.1	< 1.0	< 0.1	< 0.001
EPA 02		10/10/2006	6,847.90	6.69	7.26	2490	352 D	158 D	195	6.3	335	1490	20	0.49	< 0.1	< 0.5	< 0.1	< 0.001
EPA 02	Dup	10/10/2006	no data	no data	7.03	2440	355 D	160 D	195	6.2	337	1500	20	0.54	< 0.1	< 0.5	< 0.1	< 0.001
EPA 02		1/16/2007	6,847.64	6.74	7.32	2580	352 D	161 D	186	6.5	310	1520	22	0.29	<0.1	<0.5	<0.1	<0.001
EPA 02	Dup	1/16/2007	6,847.17	6.74	7.24	2570	359 D	164 D	184	6.3	307	1480	21	0.39	<0.1	<0.5	<0.1	<0.001
EPA 02		4/16/2007	6,847.81	6.96	7.25	2590	343 D	157 D	182	6.4	342	1420	22	0.41	<0.1	<0.5	<0.1	0.002
EPA 02	Dup	4/16/2007	6,847.13	6.82	7.04	2600	349 D	160 D	177	6.2	351	1380	22	0.45	<0.1	<0.5	<0.1	<0.001
EPA 02		7/16/2007	6,847.44	6.61	7.10	2540	352	159	186	5.9	340	1440	20	0.35	<0.1	<0.5	<0.1	0.001
EPA 02	Dup	7/16/2007	6,847.04	6.67	6.83	2510	355 D	164 D	192	6	334	1510	20	0.42	<0.1	<0.5	<0.1	0.002
EPA 02		10/8/2007	6,847.26	6.85	7.39	2600	344 D	159 D	185	6.1	287	1490 D	20	0.33	<0.1	0.91	<0.1	<0.001

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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 02		7/14/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.26	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	1.6	8.7	10.3	< 0.2	< 1	< 1.0
EPA 02	Dup	7/14/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.32	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.3	9.9	11.2	< 0.2	< 1	< 1.0
EPA 02		10/14/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.3	< 0.1	< 0.05	< 0.001	< 0.1	0.0013	0.8	8.7	9.5	< 0.2	< 1	1.4
EPA 02	Dup	10/14/2003	< 0.01	< 0.005	< 0.01	< 0.05	1.32	< 0.1	< 0.05	< 0.001	< 0.1	0.0015	1	9.7	10.7	< 0.2	< 1	1.5
EPA 02		1/13/2004	< 0.01	< 0.005	< 0.01	< 0.05	1.32	< 0.1	< 0.05	< 0.001	< 0.1	0.0012 D	1.5	< 1.0	1.5	< 0.2	< 1.0	1.4
EPA 02	Dup	1/13/2004	< 0.01	< 0.005	< 0.01	< 0.05	1.3	< 0.1	< 0.05	< 0.001	< 0.1	0.0015 D	1.2	2.1	3.3	< 0.2	< 1.0	1.4
EPA 02		4/13/2004	< 0.01	< 0.005	< 0.01	< 0.05	1.29	< 0.1	< 0.05	< 0.001	< 0.1	0.0014	1.1	< 1	1.1	< 0.2	< 1	2
EPA 02	Dup	4/13/2004	< 0.01	< 0.005	< 0.01	< 0.05	1.31	< 0.1	< 0.05	< 0.001	< 0.1	0.0013	1.3	3.7	5	< 0.2	< 1	2.4
EPA 02		7/20/2004	< 0.01	< 0.005	< 0.01	< 0.05	1.28	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1.5	3.1	4.6	< 0.2	< 1.0	2.3
EPA 02	Dup	7/20/2004	< 0.01	< 0.005	< 0.01	< 0.05	1.27	< 0.1	< 0.05	< 0.001	< 0.1	0.0009	1.3	5.1	6.4	< 0.2	< 1.0	2.2
EPA 02		10/13/2004	< 0.01	< 0.005	< 0.01	< 0.05	1.25	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1	2.3	3.3	< 0.2	< 1.0	2.6
EPA 02	Dup	10/13/2004	< 0.01	< 0.005	< 0.01	< 0.05	1.36	< 0.1	< 0.5 D	< 0.001	< 0.1	0.001	1.5	1.1	2.6	< 0.2	< 1.0	2.6
EPA 02		1/11/2005	< 0.01	< 0.005	< 0.01	< 0.05	1.45	< 0.1	< 0.05	< 0.001	< 0.1	0.0018	0.8	2.2	3	< 0.2	< 1.0	2.7
EPA 02	Dup	1/11/2005	< 0.01	< 0.005	< 0.01	< 0.05	1.53	< 0.1	< 0.05	< 0.001	< 0.1	0.0019	0.5	4.1	4.6	< 0.2	< 1.0	3.4
EPA 02		4/12/2005	< 0.01	< 0.005	< 0.01	< 0.05	1.52	< 0.1	< 0.05	< 0.001	< 0.1	0.0012	0.7	1.4	2.1	< 0.2	< 1.0	1.5
EPA 02	Dup	4/12/2005	< 0.01	< 0.005	< 0.01	< 0.05	1.53	< 0.1	< 0.05	< 0.001	< 0.1	0.0012	0.7	3.2	3.9	< 0.2	< 1.0	2.5
EPA 02		7/19/2005	< 0.01	< 0.005	< 0.01	< 0.05	1.25	< 0.1	< 0.05	< 0.001	< 0.1	0.0011	1.1	1.8	2.9	< 0.2	< 1.0	< 1.0
EPA 02	Dup	7/19/2005	< 0.01	< 0.005	< 0.01	< 0.05	1.24	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.9	2	2.9	< 0.2	< 1.0	1.2
EPA 02		10/11/2005	< 0.01	< 0.005	< 0.01	< 0.05	1.28	< 0.1	< 0.05	< 0.001	< 0.1	0.0011	1.6	3.7	5.3	< 0.2	< 1.0	1.1
EPA 02	Dup	10/11/2005	< 0.01	< 0.005	< 0.01	< 0.05	1.31	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1.6	2.9	4.5	< 0.2	< 1.0	2.2
EPA 02		1/17/2006	< 0.01	< 0.005	< 0.01	< 0.05	1.29	< 0.1	< 0.05	< 0.001	< 0.1	0.0013	1.4	2	3.4	< 0.2	< 1.0	1.9
EPA 02	Dup	1/17/2006	< 0.01	< 0.005	< 0.01	< 0.05	1.3	< 0.1	< 0.05	< 0.001	< 0.1	0.0014	1.2	1.8	3	< 0.2	< 1.0	3.1
EPA 02		4/11/2006	< 0.01	< 0.005	< 0.01	< 0.05	1.1	< 0.1	< 0.05	< 0.001	< 0.1	0.0017	1	4.3	5.3	< 0.2	< 1.0	1.4
EPA 02	Dup	4/11/2006	< 0.01	< 0.005	< 0.01	< 0.05	1.19	< 0.1	< 0.05	< 0.001	< 0.1	0.0013	1.1	6.2	7.3	< 0.2	< 1.0	< 1.0
EPA 02		7/25/2006	< 0.01	< 0.005	< 0.01	< 0.05	1.24	< 0.1	< 0.05	< 0.001	< 0.1	0.0011	1.3	6.6	7.9	< 0.2	< 1.0	1.2
EPA 02	Dup	7/25/2006	< 0.01	< 0.005	< 0.01	< 0.05	1.46	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.8	4.8	5.6	< 0.2	< 1.0	1.2
EPA 02		10/10/2006	< 0.01	< 0.005	< 0.01	< 0.05	1.23	< 0.1	< 0.05	< 0.001	< 0.1	0.0011	1.4	1.2	2.6	< 0.2	< 1	1.7
EPA 02	Dup	10/10/2006	< 0.01	< 0.005	< 0.01	< 0.05	1.24	< 0.1	< 0.05	< 0.001	< 0.1	0.0011	1.7	1.5	3.2	< 0.2	< 1	2.5
EPA 02		1/16/2007	<0.01	<0.005	<0.01	<0.05	1.18	<0.1	<0.05	<0.001	<0.1	0.0012	1.4	2.9	4.3	<0.2	<1	1.8
EPA 02	Dup	1/16/2007	<0.01	<0.005	<0.01	<0.05	1.14	<0.1	<0.05	<0.001	<0.1	0.0012	1.9	<1	1.9	<0.2	<1	2
EPA 02		4/16/2007	<0.01	<0.005	<0.01	<0.05	1.28	<0.1	<0.05	<0.001	<0.1	0.0013 D	1.2	2.2	3.4	<0.2	<1	1.8
EPA 02	Dup	4/16/2007	<0.01	<0.005	<0.01	<0.05	1.29	<0.1	<0.05	<0.001	<0.1	0.0013 D	1.1	2.4	3.5	<0.2	<1	1.1
EPA 02		7/16/2007	<0.01	<0.005	<0.01	<0.05	1.14	<0.1	<0.05	<0.001	<0.1	0.0016	<0.2	1.4	1.4	<0.2	<1	<1
EPA 02	Dup	7/16/2007	<0.01	<0.005	<0.01	<0.05	1.28	<0.1	<0.05	<0.001	<0.1	0.0015	0.7	<1	0.7	<0.2	<1	1.6
EPA 02		10/8/2007	<0.01	<0.005	<0.01	<0.05	1.42	<0.1	<0.05	<0.001	<0.1	0.0012	1.1	<1	1.1	<0.2	<1	1.7

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 02	Dup	10/8/2007	6,846.84	6.78	7.15	2670	350 D	162 D	188	6.2	348	1470	20	0.32	<0.1	<0.5	<0.1	<0.001
EPA 02		1/21/2008	6,847.49	6.78	6.99	2580	333 D	145	192	6.9	291	1480 D	31 D	0.37	< 0.1	< 0.5	< 0.1	< 0.001
EPA 02	Dup	1/21/2008	6,846.94	6.76	6.88	2520	327 D	146	187	6.9	346	1490 D	26 D	0.35	< 0.1	< 0.5	< 0.1	< 0.001
EPA 02		4/14/2008	6,847.09	6.53	7.16	2520	369	153	198 D	6.1	335	1550 D	18	0.36	< 0.1	< 0.5	< 0.1	0.002
EPA 02	Dup	4/14/2008	6,846.34	6.48	6.94	2550	358	157	199 D	6.1	329	1590 D	18	0.34	< 0.1	< 0.5	< 0.1	0.001
EPA 02		7/14/2008	6,846.99	6.89	6.92	2550	352	157	192 D	6	305	1750 D	18	0.29	< 0.1	< 0.5	< 0.1	< 0.003
EPA 02	Dup	7/14/2008	6,846.39	6.84	6.89	2610	356	160	196 D	6	333	1730 D	19	0.33	< 0.1	< 0.5	< 0.1	< 0.003
EPA 02		10/13/2008	6,846.89	6.83	6.84	2780 H	364	165	195 D	6	279	1790 D	18	0.3	< 0.1	< 0.5	< 0.1	0.001
EPA 02	Dup	10/13/2008	6,846.19	6.69	6.87	2710 H	354	161	194 D	6	320	1720 D	18	0.3	< 0.1	< 0.5	< 0.1	< 0.001
EPA 02		1/13/2009	6,846.79	6.75	6.98	2750	378	173	212	6	286	1750 D	17	0.28	<0.1	<0.5	<0.1	<0.001
EPA 02	Dup	1/13/2009	no data	no data	6.96	2800	377	174	211	6	337	1560 D	14	0.28	<0.1	<0.5	<0.1	<0.001
EPA 02		4/13/2009	6,846.84	6.65	6.91	2610	336	153	198	6	309	1700 D	17	0.29	<0.1	<0.50	<0.1	<0.001
EPA 02	Dup	4/13/2009	no data	no data	6.84	2640	321	146	190	6	347	1610 D	16	0.31	<0.1	<0.50	<0.1	<0.001
EPA 02		7/13/2009	6,846.64	6.6	7.22 H	2690 H	343	149	197	6	326	1720 D	22	0.39	<0.1	<0.50	<0.1	<0.001
EPA 02	Dup	7/13/2009	no data	no data	7.09 H	2770 H	353	156	199	6	332	1720 D	17	0.46	<0.1	<0.50	<0.1	<0.001
EPA 02		10/12/2009	6,846.74	6.77	7.31	2830 H	360	158	192	6	318	1670 D	21	0.42	<0.1	<0.50	<0.1	<0.001
EPA 02	Dup	10/12/2009	no data	no data	7.20	2790	351	164	198	6	331	1620 D	24	0.45	<0.1	<0.50	<0.1	<0.001
EPA 04		7/26/1989	6,868.80	6.90	5.97	4433	559	373	242	9.1	183	3039	37.1	0.91	0.03	< 1	< 0.1	< 0.001
EPA 04		10/5/1989	6,869.10	6.50	6.90	4760	560	371	244	12.3	182	3043	38.9	0.98	0.1	< 1	< 0.1	< 0.001
EPA 04		1/16/1990	6,869.40	6.50	6.76	4554	491	343	229	8.95	217	2919	37.5	0.99	0.1	< 1	< 0.1	< 0.001
EPA 04		4/17/1990	6,869.30	6.50	6.90	4604	500	347	223	7.7	194	2851	38.4	1.02	0.15	< 1	< 0.1	< 0.001
EPA 04		7/17/1990	6,869.10	6.40	6.70	4642	526	367	226	9.2	201	2855	36.4	0.7	0.06	< 1	< 0.1	< 0.001
EPA 04		10/16/1990	6,869.10	6.40	7.15	4645	515	368	232	9.2	193	2987	42.7	0.82	0.11	< 1	< 0.1	< 0.001
EPA 04		1/8/1991	6,869.00	6.50	6.65	4644	494	337	225	17	185	3039	40.1	0.99	0.04	< 1	< 0.1	< 0.001
EPA 04		4/17/1991	6,869.50	6.50	7.22	4759	525	392	238	8.9	161	3260	40.2	0.97	< 0.01	< 1	0.11	< 0.001
EPA 04		7/3/1991	6,869.60	6.60	6.80	4686	504	352	210	7.7	184	3345	37.8	1.04	0.05	< 1	0.3	< 0.001
EPA 04		10/22/1991	6,870.20	6.50	6.56	4651	502	350	221	8.2	188	2948	44.2	1.16	0.04	< 1	< 0.1	< 0.001
EPA 04		1/23/1992	6,870.50	6.40	6.52	4263	490	344	211	8	184	2997	42.4	1.14	< 0.01	< 1	0.14	< 0.001
EPA 04		4/2/1992	6,870.50	6.40	7.82	4554	495	348	258	9.3	210	2963	37.3	1.19	< 0.01	< 1	< 0.1	< 0.001
EPA 04		7/15/1992	6,869.70	6.60	7.55	4808	482	336	238	9	173	3072	41.2	0.73	0.2	< 1	< 0.1	< 0.001
EPA 04		10/14/1992	6,869.80	6.80	6.87	4904	526	357	230	8.6	174	3164	40.2	0.79	< 0.1	< 1	0.1	< 0.001
EPA 04		1/13/1993	6,870.00	6.60	6.98	4631	506	343	228	9.7	177	3107	38.8	0.21	< 0.1	< 1	0.1	< 0.001
EPA 04		4/15/1993	6,870.50	6.60	7.05	4684	452	337	242	7.4	175	3006	39.4	0.98	0.1	< 1	< 0.1	< 0.001
EPA 04		7/20/1993	6,871.10	6.70	7.11	4351	519	369	211	7.8	203	3081	37.4	0.84	< 0.1	< 1	< 0.1	< 0.001
EPA 04		10/12/1993	6,868.80	7.10	6.47	4585	533	332	217	7.8	189	2962	34.3	0.79	< 0.1	< 1	< 0.1	< 0.001

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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 02	Dup	10/8/2007	<0.01	<0.005	<0.01	<0.05	1.39	<0.1	<0.05	<0.001	<0.1	0.0012	1.4	<1	1.4	<0.2	<1	2.5
EPA 02		1/21/2008	< 0.01	< 0.005	< 0.01	< 0.05	1.21	< 0.1	< 0.05	< 0.001	< 0.1	0.0017	1.6	< 1	1.6	< 0.2	< 1	1.6
EPA 02	Dup	1/21/2008	< 0.01	< 0.005	< 0.01	< 0.05	1.23	< 0.1	< 0.05	0.001	< 0.1	0.0018	0.5	< 1	0.5	< 0.2	< 1	2
EPA 02		4/14/2008	< 0.01	< 0.005	< 0.01	< 0.05	1.28	< 0.1	< 0.05	< 0.001	< 0.1	0.0013	1.1	2.7	3.8	0.7	-3.1 U	2.4
EPA 02	Dup	4/14/2008	< 0.01	< 0.005	< 0.01	< 0.05	1.26	< 0.1	< 0.05	< 0.001	< 0.1	0.0013	1.3	3	4.3	0.7	-0.1 U	2.6
EPA 02		7/14/2008	< 0.01	< 0.005	< 0.01	< 0.05	1.37	< 0.1	< 0.05	< 0.001	< 0.1	0.0016 D	1.5	3.1	4.6	-0.1 U	1.9 U	1.2
EPA 02	Dup	7/14/2008	< 0.01	< 0.005	< 0.01	< 0.05	1.49	< 0.1	< 0.05	< 0.001	< 0.1	0.0017 D	1.4	3.2	4.6	0 U	3.4 U	1.6
EPA 02		10/13/2008	< 0.01	< 0.005	< 0.01	< 0.05	1.55	< 0.1	< 0.05	< 0.001	< 0.1	0.0023	0.86	1.7	2.56	0.2	-0.7 U	2.5
EPA 02	Dup	10/13/2008	< 0.01	< 0.005	< 0.01	< 0.05	1.44	< 0.1	< 0.05	< 0.001	< 0.1	0.0019	0.96	2.2	3.16	0.5	0.5 U	2.7
EPA 02		1/13/2009	<0.01	<0.005	<0.01	<0.05	1.4	<0.1	<0.05	0.002	<0.1	0.0017	1.1	2.3	3.4	0.3	-3 U	3.7
EPA 02	Dup	1/13/2009	<0.01	<0.005	<0.01	<0.05	1.51	<0.1	<0.05	<0.001	<0.1	0.0015	1.2	3.3	4.5	-0.1 U	-2 U	3.4
EPA 02		4/13/2009	<0.01	<0.005	<0.01	<0.05	1.21	<0.1	<0.05	<0.001	<0.1	0.0019	1.1	2.2	3.3	-0.1 U	0.2 U	1
EPA 02	Dup	4/13/2009	<0.04	<0.005	<0.01	<0.05	1.26	<0.1	<0.05	<0.001	<0.1	0.0018	1.4	3.0	4.4	-0.03 U	1.2 U	1.0
EPA 02		7/13/2009	<0.01	<0.005	<0.01	<0.05	1.34	<0.1	<0.05	<0.001	<0.1	0.0013	1.3	3.0	4.3	-0.01 U	1.1 U	2.8
EPA 02	Dup	7/13/2009	<0.01	<0.005	<0.01	<0.05	1.34	<0.1	<0.05	<0.001	<0.1	0.0012	1.4	2.8	4.2	0.02 U	-0.4 U	3.0
EPA 02		10/12/2009	<0.01	<0.005	<0.01	<0.05	1.44	<0.1	<0.05	<0.001	<0.1	0.0019	1.1	3.1	4.2	-0.02 U	1.1 U	2.0
EPA 02	Dup	10/12/2009	<0.01	<0.005	<0.01	<0.05	1.49	<0.1	<0.05	<0.001	<0.1	0.0016	1.1	3.0	4.1	0.06 U	1.1 U	2.0
EPA 04		7/26/1989	< 0.05	< 0.01	< 0.01	< 0.05	3.4	< 0.1	< 0.05	< 0.001	< 0.1	0.004	1.9	1.4	3.3	0.9	< 1	3
EPA 04		10/5/1989	< 0.05	< 0.01	< 0.01	< 0.05	3.1	< 0.01	< 0.05	< 0.001	< 0.1	0.003	2.	1.9	3.9	0.3	2.2	3
EPA 04		1/16/1990	< 0.05	< 0.01	< 0.01	< 0.05	3.4	< 0.1	< 0.05	< 0.001	< 0.1	0.0007	1.3	3.4	4.7	2.8	< 1	3.5
EPA 04		4/17/1990	< 0.05	< 0.01	< 0.01	< 0.05	2.5	< 0.1	< 0.05	< 0.001	< 0.1	0.002	0.8	1.6	2.4	< 0.2	2.4	1.5
EPA 04		7/17/1990	< 0.05	< 0.01	< 0.01	< 0.05	3.31	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.8	4.4	5.2	< 0.2	1.5	< 1
EPA 04		10/16/1990	< 0.05	< 0.01	0.01	< 0.05	3.31	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.5	< 1	1.5	< 0.2	1.1	2
EPA 04		1/8/1991	< 0.01	< 0.01	0.01	< 0.05	3.27	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.5	2.7	4.2	< 0.2	< 1	2
EPA 04		4/17/1991	< 0.01	< 0.01	< 0.01	< 0.05	3.87	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.7	4.9	5.6	< 0.2	< 1	< 1
EPA 04		7/3/1991	< 0.01	< 0.01	0.01	< 0.05	3.21	0.03	< 0.05	< 0.001	< 0.1	0.0029	1.5	5.1	6.6	< 0.2	< 1	1
EPA 04		10/22/1991	< 0.01	< 0.01	0.02	< 0.05	3.28	< 0.1	< 0.05	< 0.001	< 0.1	0.0684	0.7	3.9	4.6	< 0.2	1.8	< 1
EPA 04		1/23/1992	< 0.01	< 0.01	< 0.01	< 0.05	2.95	< 0.1	< 0.05	< 0.001	< 0.1	0.007	1.2	< 1	1.2	< 0.2	1.9	1
EPA 04		4/2/1992	< 0.01	< 0.01	< 0.01	< 0.05	3.34	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.5	5.4	5.9	< 0.2	9.1	< 1
EPA 04		7/15/1992	< 0.01	< 0.01	< 0.01	< 0.05	3.19	< 0.1	< 0.05	< 0.001	< 0.1	0.004	1.9	5	6.9	< 0.2	< 1	2
EPA 04		10/14/1992	< 0.01	< 0.01	< 0.01	< 0.05	3.41	< 0.1	< 0.05	< 0.001	< 0.1	0.029	1.9	7.1	9	< 0.2	< 1	2.1
EPA 04		1/13/1993	< 0.01	< 0.01	0.02	< 0.05	3.47	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1	13.8	14.8	< 0.2	< 1	1.1
EPA 04		4/15/1993	< 0.01	< 0.01	< 0.01	< 0.05	3.55	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1	1.1	2.1	< 0.2	< 1	1.2
EPA 04		7/20/1993	< 0.01	< 0.01	< 0.01	< 0.05	2.81	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.1	3.5	4.6	< 0.2	< 1	1.5
EPA 04		10/12/1993	< 0.01	< 0.01	0.01	< 0.05	3.08	< 0.1	< 0.05	< 0.001	< 0.1	0.003	1.2	2.7	3.9	< 0.2	1.3	5.2

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 04		1/11/1994	6,869.50	6.80	6.88	4530	543	336	219	7.2	178	3119	35.8	0.89	< 0.1	< 1	< 0.1	≤ 0.001
EPA 04		4/20/1994	6,870.50	6.70	6.44	4612	544	346	233	7.3	167	3065	37.9	1.42	< 0.1	< 1	0.15	0.002
EPA 04		7/26/1994	6,870.40	6.70	6.45	4420	578	359	225	8.2	172	2863	35.7	0.93	< 0.1	< 1	< 0.1	< 0.001
EPA 04		10/11/1994	6,870.30	6.60	7.42	4528	539	380	229	8.3	195	3133	37.9	1.11	< 0.1	< 1	< 0.1	< 0.001
EPA 04		1/10/1995	6,870.40	6.50	6.98	4598	640	286	210	9.5	190	3090	38.3	1.48	< 0.1	< 1	< 0.1	< 0.001
EPA 04		4/6/1995	6,870.60	6.60	6.99	4715	640	328	212	8.3	189	3268	39.3	1.7	< 0.1	< 1	< 0.1	0.001
EPA 04		7/11/1995	6,870.30	6.80	7.44	3894	485	325	194	7.4	253	2490	35.1	1.29	< 0.1	< 1	< 0.1	< 0.001
EPA 04		10/10/1995	6,870.40	6.70	7.04	4004	515	335	220	8	217	2641	33.1	1.04	< 0.1	< 1	< 0.1	0.002
EPA 04		1/9/1996	6,870.30	6.80	7.89	4093	505	335	213	8.3	257	2637	34.4	0.75	< 0.1	< 1	< 0.1	0.003
EPA 04		4/10/1996	6,870.20	6.90	7.63	4412	544	338	199	7.6	223	3002	36.6	0.85	< 0.1	< 1	< 0.1	< 0.001
EPA 04		7/17/1996	6,870.20	6.80	6.76	4161	485	300	221	8.3	216	2580	38	0.69	< 0.1	< 1	< 0.1	< 0.001
EPA 04		10/8/1996	6,870.10	6.60	7.12	4390	555	358	211	8.3	196	2721	35.3	0.79	< 0.1	< 1	< 0.1	< 0.001
EPA 04		1/28/1997	6,870.10	6.80	7.51	4290	510	335	192	7.84	222	2895	44	0.77	< 0.1	< 1	< 0.1	< 0.001
EPA 04		4/15/1997	6,869.90	6.40	7.38	4390	544	354	212	8.5	222	2829	39.4	0.83	< 0.1	< 1	< 0.1	< 0.001
EPA 04		7/15/1997	6,869.50	6.50	7.22	4320	556	338	200	8	227	2800	38.9	0.79	< 0.1	< 1	< 0.1	< 0.001
EPA 04		10/15/1997	6,869.40	6.40	7.60	4480	591	372	202	7.8	209	2900	49.1	0.82	< 0.1	< 1	< 0.1	< 0.001
EPA 04		1/20/1998	6,870.30	6.60	7.85	4480	588	366	216	8.7	212	3100	41.9	1.08	< 0.1	< 1	< 0.1	< 0.001
EPA 04		4/14/1998	6,869.50	6.70	7.08	4480	586	340	226	8.2	209	3010	35.1	0.85	< 0.1	< 1	< 0.1	< 0.001
EPA 04		7/14/1998	6,869.20	6.60	7.25	4620	576	366	223	8.8	200	3000	36.7	0.86	< 0.1	< 1	< 0.1	< 0.001
EPA 04		10/13/1998	no data	6.41	7.84	4520	579	348	228	8.6	218	3000	36.1	0.98	< 0.1	< 1	< 0.1	< 0.001
EPA 04		1/12/1999	6,869.50	6.60	7.53	4590	615	347	199	8	214	3000	37.2	0.92	< 0.1	< 1	< 0.1	< 0.001
EPA 04		4/13/1999	6,869.80	6.50	7.46	4590	582	343	206	8.2	208	2860	43.8	0.97	0.11	< 1	< 0.1	< 0.001
EPA 04		7/20/1999	6,869.50	6.50	7.11	4790	555	323	193	10.4	207	2550	40	0.85	< 0.1	< 1	< 0.1	< 0.001
EPA 04		10/12/1999	6,869.20	6.60	7.94	4830	556	332	193	8.4	641	2780	39	0.87	< 0.1	< 1	< 0.1	0.001
EPA 04		1/11/2000	6,869.50	6.50	7.51	4680	557	332	187	8.8	204	2730	36.2	0.82	< 0.1	< 1	0.1	< 0.001
EPA 04		5/15/2000	6,869.10	6.70	7.42	4810	542	366	194	9.1	173	3000	37.5	1.03	< 0.1	< 1	< 0.1	0.001
EPA 04		7/11/2000	6,868.90	6.54	7.07	4790	574	386	199	8.4	171	2910	38.8	0.97	< 0.1	< 1	< 0.1	< 0.001
EPA 04		10/3/2000	6,868.90	6.61	7.21	4740	541	372	193	9.2	175	2770	36.5	0.74	< 0.1	< 1	< 0.1	< 0.001
EPA 04		1/9/2001	6,868.95	6.73	7.30	4680	555	373	164	8.7	174	2890	43.4	0.88	< 0.1	< 1	< 0.1	< 0.001
EPA 04		4/3/2001	6,868.80	6.70	7.06	4620	651	427	170	8.1	177	3230	42.1	1.01	< 0.1	< 1	< 0.1	< 0.001
EPA 04		7/17/2001	6,868.25	6.94	7.02	4780	533	372	173	9.1	172	2690	48.3	1.01	< 0.1	< 1	< 0.1	< 0.001
EPA 04		10/9/2001	6,868.30	6.55	6.80	4770	520	360	165	8.7	174	2700	46.3	0.86	< 0.1	< 1	< 0.1	< 0.001
EPA 04		1/14/2002	6,868.25	6.75	6.90	4730	624	413	165	10.5	178	2980	46.2	0.85	0.16	< 1	< 0.1	< 0.001
EPA 04		4/9/2002	6,867.90	6.54	7.27	4790	545	369	186	9	167	2880	39.5	0.82	0.31	< 1	< 0.1	< 0.001
EPA 04		7/16/2002	6,867.85	6.52	7.53	4740	533	369	172	10.4	163	2870	43.1	1.07	< 0.1	< 1	< 0.1	< 0.001

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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 04		1/11/1994	< 0.01	< 0.01	< 0.01	< 0.05	3.59	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1.1	3	4.1	< 0.2	< 1	6.6
EPA 04		4/20/1994	< 0.01	< 0.01	< 0.01	< 0.05	2.77	< 0.1	< 0.05	< 0.001	< 0.1	0.001	2	3	5	< 0.2	1.8	6.7
EPA 04		7/26/1994	< 0.01	< 0.01	< 0.01	< 0.05	3.4	< 0.1	< 0.05	< 0.001	< 0.1	0.002	1.9	5.1	7	< 0.2	< 1	9.7
EPA 04		10/11/1994	< 0.01	< 0.01	< 0.01	< 0.05	2.95	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1.6	2.3	3.9	< 0.2	< 1	5.2
EPA 04		1/10/1995	< 0.01	< 0.01	< 0.01	< 0.05	3.42	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1.7	2.5	4.2	0.2	3	5.6
EPA 04		4/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	3.25	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1.4	3	4.4	< 0.2	< 1	6.1
EPA 04		7/11/1995	< 0.01	< 0.01	< 0.01	< 0.05	2.76	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.7	3.1	3.8	0.4	< 1	5
EPA 04		10/10/1995	< 0.01	< 0.01	< 0.01	< 0.05	2.89	< 0.1	< 0.05	< 0.001	< 0.1	0.0008	1.5	4.2	5.7	0.4	< 1	2.2
EPA 04		1/9/1996	< 0.01	< 0.01	< 0.01	< 0.05	2.83	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1.1	2.4	3.5	< 0.2	2.6	< 1
EPA 04		4/10/1996	< 0.01	< 0.01	< 0.01	< 0.05	3.2	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.2	3.3	4.5	< 0.2	< 1	< 1
EPA 04		7/17/1996	< 0.01	< 0.01	< 0.01	< 0.05	2.85	< 0.1	< 0.05	< 0.001	< 0.1	0.0009	0.5	< 1	0.5	< 0.2	< 1	< 1
EPA 04		10/8/1996	< 0.01	< 0.01	< 0.01	< 0.05	2.89	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.2	< 1	1.2	< 0.2	< 1	< 1
EPA 04		1/28/1997	< 0.01	< 0.01	< 0.01	< 0.05	2.82	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.5	< 1	1.5	< 0.2	< 1	2.1
EPA 04		4/15/1997	< 0.01	< 0.01	< 0.01	< 0.05	2.97	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.9	1.2	2.1	< 0.2	< 1	2.3
EPA 04		7/15/1997	< 0.01	< 0.01	< 0.01	< 0.05	2.58	< 0.1	< 0.05	< 0.001	< 0.1	0.0009	1	4.1	5.1	< 0.2	< 1	< 1
EPA 04		10/15/1997	< 0.01	< 0.01	< 0.01	< 0.05	3.06	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.6	< 1	0.6	< 0.2	< 1	< 1
EPA 04		1/20/1998	< 0.01	< 0.005	< 0.01	< 0.05	3.25	< 0.1	< 0.05	< 0.001	< 0.1	0.0011	1	< 1	1	< 0.2	< 1	< 1
EPA 04		4/14/1998	< 0.01	< 0.005	< 0.01	< 0.05	2.88	< 0.1	< 0.05	< 0.001	< 0.1	0.0011	1.5	< 1	1.5	< 0.2	< 1	< 1
EPA 04		7/14/1998	< 0.01	< 0.005	< 0.01	< 0.05	2.98	< 0.1	< 0.05	< 0.001	< 0.1	0.0009	0.6	3.7	4.3	< 0.2	< 1	< 1
EPA 04		10/13/1998	< 0.01	< 0.005	< 0.01	< 0.05	2.87	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1.2	3.9	5.1	< 0.2	< 1	< 1
EPA 04		1/12/1999	< 0.01	< 0.005	< 0.01	< 0.05	2.78	< 0.1	< 0.05	< 0.001	< 0.1	0.0033	1.5	4.2	5.7	< 0.2	< 1	< 1
EPA 04		4/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	3	< 0.1	< 0.05	< 0.001	< 0.1	0.0017	2.2	3.5	5.7	< 0.2	2.2	2.2
EPA 04		7/20/1999	< 0.01	< 0.005	< 0.01	< 0.05	2.33	< 0.1	< 0.05	< 0.001	< 0.1	0.0013	0.9	1.5	2.4	< 0.2	1.5	1.5
EPA 04		10/12/1999	< 0.01	< 0.005	< 0.01	< 0.05	2.93	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.2	3.3	4.5	< 0.2	< 1	1.4
EPA 04		1/11/2000	< 0.01	< 0.005	< 0.01	< 0.05	3.1	< 0.1	0.06	< 0.001	< 0.1	0.0021	1	< 1	1	< 0.2	< 1	< 1
EPA 04		5/15/2000	< 0.01	< 0.005	< 0.01	< 0.05	4.15	< 0.1	< 0.05	< 0.001	< 0.1	0.0006	1.9	3.8	5.7	< 0.2	< 1	1.3
EPA 04		7/11/2000	< 0.01	0.007	< 0.01	< 0.05	3.37	< 0.1	< 0.05	< 0.001	< 0.1	0.0006	< 2	2.4	2.4	< 0.2	< 1	1.8
EPA 04		10/3/2000	< 0.01	< 0.005	< 0.01	< 0.05	2.66	< 0.1	< 0.05	< 0.001	< 0.1	0.0005	1.3	3.5	4.8	< 0.2	< 1	1.4
EPA 04		1/9/2001	< 0.01	< 0.005	< 0.01	< 0.05	3.28	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	1.5	5	6.5	< 0.2	< 1	2.2
EPA 04		4/3/2001	< 0.01	< 0.005	< 0.01	< 0.05	3.37	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.2	3.8	5	< 0.2	< 1	1.8
EPA 04		7/17/2001	< 0.01	< 0.005	< 0.01	< 0.05	3.22	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.1	5.8	6.9	< 0.2	< 1	2.2
EPA 04		10/9/2001	< 0.01	< 0.005	< 0.01	< 0.05	2.65	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.5	3.7	5.2	< 0.2	< 1	< 1
EPA 04		1/14/2002	< 0.01	< 0.005	< 0.01	< 0.05	3.59	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.5	5.4	6.9	< 0.2	< 1	< 1
EPA 04		4/9/2002	< 0.01	< 0.005	< 0.01	< 0.05	3.53	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.3	2	3.3	< 0.2	< 1	1.3
EPA 04		7/16/2002	< 0.01	< 0.005	< 0.01	< 0.05	3.37	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.4	< 1	1.4	< 0.2	< 1	< 1

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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
EPA 04		10/15/2002	6,867.70	6.32	7.06	4240	613	414	196	9.1	179	3260	40	1.15	< 0.1	< 1	< 0.1	< 0.001
EPA 04		1/14/2003	6,867.38	6.61	7.13	4720	461	319	154	9.6	164	2420	30.5	1.21	< 0.1	< 1	< 0.1	< 0.001
EPA 04		4/14/2003	6,867.44	6.67	7.07	4770	538	386	201	12.5	162	2940	37.9	1.17	< 0.1	< 1	< 0.1	< 0.001
EPA 04		7/15/2003	6,867.14	6.44	7.30	4820	552	374	186	9.3	168	2880	35	1.15	< 0.1	< 1	< 0.1	< 0.001
EPA 04		10/14/2003	6,866.96	6.49	7.42	4760	626	416	189	8.6	158	3140	38.9	0.91	< 0.1	< 1	0.2	< 0.001
EPA 04		1/13/2004	6,866.80	6.53	7.30	4780	603	417	188	10.2	166	3160	39.2	1.1	< 0.10	< 1.0	< 0.1	< 0.001
EPA 04		4/13/2004	6,866.82	6.35	6.55	4730	550	385	188	9.6	167	3040	43.4	1.21	< 0.1	< 1	< 0.1	< 0.001
EPA 04		7/20/2004	6,866.61	6.64	6.40	4690	597 D	391 D	200	8.2	183	3020 D	38	1.08	< 0.10	< 1.0	< 0.1	< 0.001
EPA 04		10/12/2004	6,866.64	6.67	6.80	4850	586 D	408 D	188	8.4	201	3060 D	37	1.02	< 0.10	< 1.0	< 0.1	< 0.001
EPA 04		1/11/2005	6,866.93	6.70	6.81	4750	557 D	382 D	192	8.6	165	2890 D	39	0.78	< 0.1	< 1.0	< 0.1	< 0.001
EPA 04		4/12/2005	no data	no data	6.79	4550	592	410	201	8.8	165	3190	40	0.85	< 0.1	< 1.0	< 0.1	< 0.001
EPA 04		7/19/2005	6,866.15	6.28	6.82	4720	549 D	386 D	193	8.3	180	2820 D	33	0.95	< 0.1	< 1.0	< 0.1	< 0.001
EPA 04		10/11/2005	6,866.02	6.65	7.02	4580	544 D	382 D	190	8.9	174	2880 D	39	0.77	< 0.1	< 1.0	< 0.1	< 0.001
EPA 04		1/17/2006	6,865.81	6.79	7.20	4480	525 D	372 D	179	8.7	177	2720 D	38	1.07	< 0.1	< 1.0	< 0.1	< 0.001
EPA 04		4/11/2006	6,865.71	6.64	7.22	4530	578 D	407 D	186	8.5	217	2980 D	41	1.09	< 0.1	< 1.0	< 0.1	< 0.001
EPA 04		7/25/2006	6,865.55	6.58	7.37	4420	570 D	388 D	196	9.2	254	3000 D	38	0.81	0.2	< 1.0	< 0.1	< 0.001
EPA 04		10/10/2006	6,865.45	6.60	6.89	4330	542 D	374 D	186	8.5	173	2830 D	34	0.78	< 0.1	< 0.5	< 0.1	< 0.001
EPA 04		1/23/2007	6,865.28	6.69	6.93	4620	534 D	376 D	187	9.3	165	2840 D	40	0.77	<0.1	<0.5	<0.1	<0.001
EPA 04		4/16/2007	6,865.20	6.60	6.82	4560	542 D	392 D	167	8.7	185	3060 D	40	0.82	<0.1	<0.5	<0.1	<0.001
EPA 04		7/16/2007	6,864.75	6.62	7.08	4390	555 D	388 D	176	8	181	2980 D	34	0.68	0.1	<0.5	<0.1	0.002
EPA 04		10/8/2007	6,864.52	6.67	6.91	4520	543 D	374 D	170	8.1	128	2840 D	36	0.64	<0.1	<0.5	<0.1	<0.001
EPA 04		1/21/2008	6,864.80	6.73	7.07 H	4250	533 D	359 D	140	8.5	174	2820 D	44 D	0.56	0.1	< 0.5	< 0.1	< 0.001
EPA 04		4/14/2008	6,864.50	6.33	6.83	4380	578	396	183 D	8.4	167	2980 D	35	0.61	< 0.1	< 0.5	< 0.1	0.002
EPA 04		7/14/2008	6,864.30	6.77	6.71	4420	516	384	184 D	8	167	3240 D	31	0.54	< 0.1	< 0.5	< 0.1	< 0.003
EPA 04		10/13/2008	6,864.08	6.69	6.65	4540 H	561	371	177 D	8	153	3120 D	34	0.9	< 0.1	< 0.5	< 0.1	< 0.001
EPA 04		1/19/2009	6,863.70	6.69	7.31	3910 H	499	353	172	8	160	2850 D	33	0.35	<0.1	<0.5	<0.1	<0.001
EPA 04		4/13/2009	6,863.90	6.52	6.55	4630	558 D	368	182 D	9	167	2950 D	36	0.60	<0.1	<0.50	<0.1	<0.001
EPA 04		7/13/2009	6,863.60	6.47	7.14 H	4590 H	562	372	181	9	155	3030 DH	38	0.80	<0.1	<0.50	<0.1	<0.001
EPA 04		10/12/2009	6,863.70	6.73	7.07	4640	540	364	183	9	161	3010 D	42	0.76	<0.1	<0.50	<0.1	<0.001
EPA 05		7/26/1989	6,895.20	6.50	6.15	5192	625	508	151	8.5	295	3279	93.1	0.3	15.8	< 1	< 0.1	< 0.001
EPA 05		10/5/1989	6,895.40	6.10	6.90	5726	639	531	171	12.3	512	3255	141	0.12	29	< 1	< 0.1	< 0.001
EPA 05		1/16/1990	6,895.60	6.10	6.40	5698	628	539	186	9.49	567	3175	169	0.18	53.2	< 1	< 0.1	< 0.001
EPA 05		4/17/1990	6,895.50	6.00	6.80	5882	662	555	199	9.5	671	3159	172	0.31	53	< 1	< 0.1	< 0.001
EPA 05		7/17/1990	6,895.10	6.00	6.46	5886	723	548	204	10.3	672	3146	152	0.15	41	< 1	< 0.1	< 0.001
EPA 05		10/16/1990	6,895.00	6.00	7.11	6192	647	540	215	9	742	3391	199	0.18	53	< 1	< 0.1	< 0.001

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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 04		10/15/2002	< 0.01	< 0.005	< 0.01	< 0.05	3.4	< 0.1	< 0.05	< 0.001	< 0.1	0.0005	1.7	< 1	1.7	< 0.2	< 1	< 1
EPA 04		1/14/2003	< 0.01	< 0.005	< 0.01	< 0.05	3.29	< 0.1	< 0.05	< 0.001	< 0.1	0.0005	1.9	< 1	1.9	< 0.2	< 1	2
EPA 04		4/14/2003	< 0.01	< 0.005	< 0.01	< 0.05	3.33	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	1.7	7.9	9.6	< 0.2	< 1	3
EPA 04		7/15/2003	< 0.01	< 0.005	< 0.01	< 0.05	3.35	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.5	3.1	4.6	< 0.2	< 1	< 1.0
EPA 04		10/14/2003	< 0.01	< 0.005	< 0.01	< 0.05	3.32	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	0.5	5.6	6.1	< 0.2	< 1	1.5
EPA 04		1/13/2004	< 0.01	< 0.005	< 0.01	< 0.05	3.74	< 0.1	< 0.05	< 0.001	< 0.1	0.0004 D	1.1	< 1.0	1.1	< 0.2	< 1.0	2.1
EPA 04		4/13/2004	< 0.01	< 0.005	< 0.01	< 0.05	3.41	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0004 D	0.7	< 1	0.7	< 0.2	< 1	1.7
EPA 04		7/20/2004	< 0.01	< 0.005	< 0.01	< 0.05	3.27	< 0.1	< 0.05	< 0.001	< 0.1	0.0004 D	1.6	2.4	4	< 0.2	< 1.0	2.1
EPA 04		10/12/2004	< 0.01	< 0.005	< 0.01	< 0.05	3.1	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	1.5	3.3	4.8	< 0.2	< 1.0	1.9
EPA 04		1/11/2005	< 0.01	< 0.005	< 0.01	< 0.05	3.16	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	0.7	2.5	3.2	< 0.2	< 1.0	3.6
EPA 04		4/12/2005	< 0.01	< 0.005	< 0.01	< 0.05	3.39	< 0.1	< 0.05	< 0.001	< 0.1	0.0007	0.9	2	2.9	< 0.2	< 1.0	1.7
EPA 04		7/19/2005	< 0.01	< 0.005	< 0.01	< 0.05	3.23	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	1.2	2	3.2	< 0.2	< 1.0	2.6
EPA 04		10/11/2005	< 0.01	< 0.005	< 0.01	< 0.05	3.24	< 0.1	< 0.05	< 0.001	< 0.1	0.0005	1.4	3.3	4.7	< 0.2	< 1.0	1.6
EPA 04		1/17/2006	< 0.01	< 0.005	< 0.01	< 0.05	3.42	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	1.4	< 1.0	1.4	< 0.2	< 1.0	2.8
EPA 04		4/11/2006	< 0.01	< 0.005	< 0.01	< 0.05	3.12	< 0.1	< 0.05	< 0.001	< 0.1	0.0006	0.9	4.9	5.8	< 0.2	< 1.0	1.3
EPA 04		7/25/2006	< 0.01	< 0.005	< 0.01	< 0.05	2.94	< 0.1	< 0.05	< 0.001	< 0.1	0.0005	0.8	3.3	4.1	< 0.2	< 1.0	< 1.0
EPA 04		10/10/2006	< 0.01	< 0.005	< 0.01	< 0.05	3.53	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	1.1	1.8	2.9	< 0.2	< 1	1.4
EPA 04		1/23/2007	<0.01	<0.005	<0.01	<0.05	3.54	<0.1	<0.05	<0.001	<0.1	0.0004	1	<1	1	<0.2	<1	3.1
EPA 04		4/16/2007	<0.01	<0.005	<0.01	<0.05	3.3	<0.1	<0.05	<0.001	<0.1	0.0004 D	1	<1	1	<0.2	<1	1.1
EPA 04		7/16/2007	<0.01	<0.005	<0.01	<0.05	3.04	<0.1	<0.05	<0.001	<0.1	0.0004	1.5	<1	1.5	<0.2	<1	1.7
EPA 04		10/8/2007	<0.01	<0.005	<0.01	<0.05	3.43	<0.1	<0.05	<0.001	<0.1	<0.0003	0.9	<1	0.9	<0.2	<1	2.3
EPA 04		1/21/2008	< 0.01	< 0.005	< 0.01	< 0.05	3.46	< 0.1	< 0.05	0.002	< 0.1	0.0005	1.7	< 1	1.7	< 0.2	4.4	1.5
EPA 04		4/14/2008	< 0.01	< 0.005	< 0.01	< 0.05	3.48	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	1.2	3	4.2	0.2	0.7 U	2.5
EPA 04		7/14/2008	< 0.01	< 0.005	< 0.01	< 0.05	3.65	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0005	1.4	3	4.4	-0.3 U	0.1 U	1
EPA 04		10/13/2008	< 0.01	< 0.005	< 0.01	< 0.05	3.4	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	1.1	2.6	3.7	-0.3 U	-0.1 U	2.2
EPA 04		1/19/2009	<0.01	<0.005	<0.01	<0.05	3.38	<0.1	<0.05	<0.001	<0.1	<0.0003	1	2.5	3.5	0.4	0.3 U	2
EPA 04		4/13/2009	<0.01	<0.005	<0.01	<0.05	3.31	<0.1	<0.05	<0.001	<0.1	0.0006	1.2	2.8	4	-0.1 U	0.7 U	1.6
EPA 04		7/13/2009	<0.01	<0.005	<0.01	<0.05	3.08	<0.1	<0.05	0.001	<0.1	0.0003	1.0	2.5	3.5	-0.1 U	-0.6 U	3.3
EPA 04		10/12/2009	<0.01	<0.005	<0.01	<0.05	3.48	<0.1	<0.05	<0.001	<0.1	0.0004	1.2	3.4	4.6	-0.0009 U	-0.2 U	1.6
EPA 05		7/26/1989	< 0.05	< 0.01	0.02	< 0.05	1.7	< 0.1	< 0.05	0.001	< 0.1	0.0069	1.7	1.3	3	3.2	1.2	2.2
EPA 05		10/5/1989	< 0.05	< 0.01	0.04	< 0.05	1.3	< 0.01	< 0.05	< 0.001	< 0.1	0.022	1.1	1.8	2.9	0.3	< 1	1.5
EPA 05		1/16/1990	< 0.05	< 0.01	< 0.01	< 0.05	1.8	< 0.1	< 0.05	0.002	< 0.1	0.032	0.7	2.8	3.5	0.2	< 1	1.1
EPA 05		4/17/1990	< 0.05	< 0.01	0.03	< 0.05	2.2	< 0.1	0.1	< 0.001	< 0.1	0.041	1.1	2.2	3.3	< 0.2	< 1	1.8
EPA 05		7/17/1990	< 0.05	< 0.01	0.03	< 0.05	2.36	< 0.1	< 0.05	0.001	< 0.1	0.0475	2.1	2.3	4.4	< 0.2	3.6	2
EPA 05		10/16/1990	< 0.05	< 0.01	0.03	< 0.05	2.79	< 0.1	< 0.05	< 0.001	< 0.1	0.0371	0.9	1.6	2.5	< 0.2	< 1	< 1

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 05		1/8/1991	6,894.80	6.10	7.22	5554	641	485	171	7.3	586	3088	137	0.27	36	< 1	< 0.1	< 0.001
EPA 05		4/17/1991	6,894.90	5.90	7.43	6608	678	591	241	10.6	380	3536	219	0.23	68	< 1	0.27	< 0.001
EPA 05		7/3/1991	6,894.60	6.10	6.69	5926	634	512	187	8.7	326	3440	146	0.38	39.4	< 1	0.15	< 0.001
EPA 05		10/22/1991	6,894.70	6.00	6.95	7076	676	712	263	10.2	653	3873	226	0.32	43.1	< 1	0.17	< 0.001
EPA 05		1/23/1992	no data	6.10	6.81	6207	607	679	246	9.7	312	3679	183	0.25	26.3	< 1	< 0.1	< 0.001
EPA 05		4/2/1992	6,894.60	5.90	7.21	7719	703	695	336	13.3	1091	4080	289	0.32	28.9	< 1	< 0.1	< 0.001
EPA 05		7/15/1992	6,894.20	6.20	7.18	7158	570	659	328	11.4	878	3934	192	0.23	29.6	< 1	< 0.1	< 0.001
EPA 05		10/15/1992	6,894.10	6.20	6.85	7824	612	774	365	12.9	857	4186	215	0.19	67.4	< 1	< 0.1	0.001
EPA 05		1/12/1993	6,894.50	6.10	6.78	8011	599	791	344	12.7	880	4407	214	0.19	93.5	< 1	< 0.1	< 0.001
EPA 05		4/15/1993	6,894.50	6.10	7.01	7246	621	751	303	8.8	926	4024	179	0.34	118	< 1	< 0.1	< 0.001
EPA 05		7/20/1993	6,894.30	6.20	7.14	6893	598	748	371	9.7	1000	3990	224	0.22	91.6	< 1	< 0.1	< 0.001
EPA 05		10/12/1993	6,892.00	6.50	6.76	7441	599	923	345	9.4	1177	4387	197	< 0.05	72	< 1	< 0.1	< 0.001
EPA 05		1/11/1994	6,894.00	6.50	7.19	8037	549	857	318	8.4	1109	4491	208	0.15	95.2	< 1	< 0.1	< 0.001
EPA 05		4/19/1994	6,893.80	6.30	7.72	8035	625	930	408	10.2	693	4651	121	0.25	91	< 1	< 0.1	0.001
EPA 05		7/26/1994	6,893.70	6.30	7.32	7684	601	926	399	9.5	1116	4492	209	0.12	91.9	< 1	0.16	< 0.001
EPA 05		10/11/1994	6,893.50	6.30	7.41	7630	572	998	371	9.4	1077	4448	204	0.13	99.8	< 1	< 0.1	< 0.001
EPA 05		1/11/1995	6,893.50	6.30	7.02	8106	581	960	325	10.8	1032	4533	192	0.17	87.3	< 1	< 0.1	< 0.001
EPA 05		4/11/1995	6,894.10	6.50	6.85	8693	595	1070	388	10.4	1168	4895	245	0.36	96	< 1	< 0.1	< 0.001
EPA 05		7/11/1995	6,893.30	6.50	7.41	8075	547	1043	388	9.8	1150	4604	205	0.47	82.9	< 1	< 0.1	< 0.001
EPA 05		10/10/1995	6,893.40	6.50	7.56	8070	550	1018	385	10.2	1258	4529	201	0.67	86.6	< 1	< 0.1	< 0.001
EPA 05		1/9/1996	6,893.20	6.60	7.52	7693	508	966	376	10.9	1182	4420	198	1.44	94	< 1	< 0.1	< 0.001
EPA 05		4/10/1996	6,893.10	6.70	7.54	8569	590	1110	362	10.7	1221	5200	211	2.74	89.2	< 1	< 0.1	< 0.001
EPA 05		7/17/1996	6,893.00	6.40	6.87	8522	510	957	372	11.9	1275	4404	221	1.05	100	1.42	< 0.1	< 0.001
EPA 05		10/8/1996	6,892.90	6.40	7.29	8870	581	1091	389	12	1294	4869	211	5.8	93.1	1.42	< 0.1	< 0.001
EPA 05		1/28/1997	6,892.70	6.50	7.81	8450	538	1050	343	11.3	1208	4620	246	6.24	86.7	< 1	< 0.1	< 0.001
EPA 05		4/15/1997	6,892.60	6.40	7.65	8670	544	1040	376	12.1	1220	4740	221	6.61	77.1	< 1	< 0.1	< 0.001
EPA 05		7/15/1997	6,892.20	6.30	7.43	8720	555	1010	351	12.4	1180	4570	216	7.6	78.1	< 1	< 0.1	< 0.001
EPA 05		10/21/1997	no data	6.70	7.70	8610	587	1100	368	12.7	1240	4840	254	9.31	90.3	< 1	0.11	< 0.001
EPA 05		1/20/1998	6,892.60	6.40	7.75	8290	532	1050	372	13.8	1100	5000	223	8.79	81.2	1.1	< 0.1	< 0.001
EPA 05		4/14/1998	6,892.40	6.60	7.16	8500	575	1010	374	13.2	1220	4720	195	1.72	83.7	1.3	< 0.1	< 0.001
EPA 05		7/14/1998	6,891.90	6.60	7.69	8620	541	963	364	14	1210	4200	201	11.4	67.7	1.1	< 0.1	< 0.001
EPA 05		10/13/1998	no data	6.45	7.75	8240	540	979	370	15	1190	4680	198	12.9	80	1	< 0.1	< 0.001
EPA 05		1/12/1999	6,892.00	6.50	7.75	8160	462	909	308	14.4	1140	4600	192	15.5	71.2	< 1	< 0.1	< 0.001
EPA 05		4/13/1999	6,892.20	6.50	7.71	8100	522	934	322	12.7	1100	4160	191	12.9	76.4	< 1	< 0.1	< 0.001
EPA 05		7/20/1999	6,891.94	6.50	7.55	8130	567	949	82	16.6	1090	4580	198	15	73.9	< 1	< 0.1	< 0.001

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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 05		1/8/1991	< 0.01	< 0.01	0.03	< 0.05	3.17	< 0.1	< 0.05	0.001	< 0.1	0.0003	0.8	< 1	0.8	< 0.2	< 1	< 1
EPA 05		4/17/1991	< 0.01	< 0.0045	0.06	< 0.05	3.81	< 0.1	0.09	0.001	< 0.1	0.04	0.6	< 1	0.6	< 0.2	2.3	< 1
EPA 05		7/3/1991	< 0.01	< 0.01	0.03	< 0.05	2.8	0.1	< 0.05	0.001	< 0.1	0.0422	0.7	3.1	3.8	< 0.2	< 1	< 1
EPA 05		10/22/1991	< 0.01	< 0.01	0.05	< 0.05	3.31	< 0.1	0.1	0.003	< 0.1	0.0021	0.7	1.8	2.5	< 0.2	1.8	< 1
EPA 05		1/23/1992	< 0.01	< 0.01	0.06	< 0.05	3	< 0.1	0.08	< 0.001	< 0.1	0.064	0.7	1	1.7	< 0.2	1.4	< 1
EPA 05		4/2/1992	< 0.01	< 0.01	0.05	< 0.05	2.56	< 0.1	< 0.05	0.013	< 0.1	0.002	0.2	2.8	3	< 0.2	6	< 1
EPA 05		7/15/1992	< 0.01	< 0.01	0.06	< 0.05	2.31	< 0.1	0.07	0.003	< 0.1	0.005	0.9	4.5	5.4	< 0.2	1.5	< 1
EPA 05		10/15/1992	< 0.01	< 0.01	0.1	< 0.05	1.96	< 0.1	0.12	0.005	< 0.1	0.105	1.3	< 1	1.3	< 0.2	< 1	1.9
EPA 05		1/12/1993	< 0.01	< 0.01	0.12	< 0.05	1.65	< 0.1	0.06	0.03	< 0.1	0.077	1	2.2	3.2	< 0.2	< 1	1.5
EPA 05		4/15/1993	< 0.001	< 0.01	0.05	< 0.05	1.95	< 0.1	0.08	0.003	< 0.1	0.036	0.3	< 1	0.3	< 0.2	1.6	< 1
EPA 05		7/20/1993	< 0.01	< 0.01	0.07	< 0.05	1.36	< 0.1	0.09	0.005	< 0.1	0.073	1.5	2.7	4.2	< 0.2	< 1	1.8
EPA 05		10/12/1993	< 0.01	< 0.01	0.08	< 0.05	1.39	< 0.1	0.08	0.004	< 0.1	0.084	1.9	2.3	4.2	< 0.2	2.9	5.3
EPA 05		1/11/1994	< 0.01	< 0.01	0.07	< 0.05	1.45	< 0.1	0.09	0.002	< 0.1	0.1	0.8	1.2	2	< 0.2	< 1	3.6
EPA 05		4/19/1994	< 0.01	< 0.01	0.12	< 0.05	1.19	< 0.1	< 0.05	0.003	< 0.1	0.101	1.9	5.7	7.6	< 0.2	1	10.6
EPA 05		7/26/1994	< 0.01	< 0.01	0.07	< 0.05	1.27	< 0.1	0.05	0.002	< 0.1	0.102	1.1	7.7	8.8	< 0.2	1.4	12.8
EPA 05		10/11/1994	< 0.01	< 0.01	0.09	< 0.05	1.02	< 0.1	0.14	0.002	< 0.1	0.095	2.1	< 1	2.1	< 0.2	< 1	2.3
EPA 05		1/11/1995	< 0.01	< 0.01	0.06	< 0.05	1.11	< 0.1	0.09	0.003	< 0.1	0.109	1.1	3.4	4.5	< 0.2	< 1	6.4
EPA 05		4/11/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.85	< 0.1	< 0.05	0.004	< 0.1	0.102	0.7	1.9	2.6	< 0.2	< 1	3.6
EPA 05		7/11/1995	< 0.01	< 0.01	0.065	< 0.05	0.6	< 0.1	0.06	0.004	< 0.1	0.09	1.1	< 1	1.1	< 0.2	< 1	5.6
EPA 05		10/10/1995	< 0.01	< 0.01	0.05	< 0.05	0.53	< 0.1	0.05	0.012	< 0.1	0.1132	1.4	4.8	6.2	0.7	< 1	2.1
EPA 05		1/9/1996	< 0.01	< 0.01	0.06	< 0.05	0.49	< 0.1	< 0.05	0.018	< 0.1	0.124	1.3	1.2	2.5	< 0.2	< 1	1.5
EPA 05		4/10/1996	< 0.01	< 0.01	0.05	< 0.05	0.47	< 0.1	0.05	0.001	< 0.1	0.126	0.8	2.7	3.5	0.7	< 1	< 1
EPA 05		7/17/1996	< 0.01	< 0.01	0.06	< 0.05	0.49	< 0.1	0.06	0.004	< 0.1	0.125	0.9	< 1	0.9	< 0.2	< 1	< 1
EPA 05		10/8/1996	< 0.01	< 0.01	0.06	< 0.05	0.51	< 0.1	0.06	0.002	< 0.1	0.117	0.6	< 1	0.6	< 0.2	< 1	< 1
EPA 05		1/28/1997	< 0.01	< 0.01	0.06	< 0.05	0.48	< 0.1	0.05	0.003	< 0.1	0.086	1.7	< 1	1.7	2	< 1	1.6
EPA 05		4/15/1997	< 0.01	< 0.01	0.05	< 0.05	0.47	< 0.1	0.06	0.024	< 0.1	0.107	1.8	< 1	1.8	< 0.2	< 1	< 1
EPA 05		7/15/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.41	< 0.1	0.05	0.006	< 0.1	0.097	0.9	< 1	0.9	< 0.2	< 1	< 1
EPA 05		10/21/1997	< 0.01	< 0.01	0.07	< 0.05	0.53	0.5	0.06	0.018	< 0.1	0.121	0.9	3.3	4.2	< 0.2	< 1	< 1
EPA 05		1/20/1998	< 0.01	< 0.005	0.07	< 0.05	0.63	3.1	< 0.05	< 0.001	< 0.1	0.239	2.4	1.5	3.9	< 0.2	< 1	5
EPA 05		4/14/1998	< 0.01	< 0.005	0.06	< 0.05	0.57	0.53	0.05	0.005	< 0.1	0.147	1.4	< 1	1.4	< 0.2	< 1	< 1
EPA 05		7/14/1998	< 0.01	< 0.005	0.06	< 0.05	0.54	0.5	< 0.05	0.005	< 0.1	0.173	1.3	< 1	1.3	< 0.2	< 1	< 1
EPA 05		10/13/1998	< 0.01	< 0.005	0.05	< 0.05	0.53	0.55	< 0.05	0.005	< 0.1	0.139	1.4	3.1	4.5	< 0.2	< 1	2.2
EPA 05		1/12/1999	< 0.01	< 0.005	0.04	< 0.05	0.53	0.43	< 0.05	< 0.001	< 0.1	0.149	1.1	3.8	4.9	< 0.2	< 1	< 1
EPA 05		4/13/1999	< 0.01	< 0.005	0.06	< 0.05	0.53	0.44	< 0.05	0.004	< 0.1	0.13	1	2.1	3.1	< 0.2	3.5	3.5
EPA 05		7/20/1999	< 0.01	< 0.005	0.05	< 0.05	0.49	0.36	< 0.05	0.004	< 0.1	0.127	1.6	< 1	1.6	< 0.2	2.2	2.2

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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
EPA 05		10/12/1999	6,891.80	6.45	7.75	7960	523	899	306	15	1086	4180	191	19.4	64.2	< 1	< 0.1	< 0.001
EPA 05		1/11/2000	6,891.90	6.50	7.78	7920	493	860	286	13.7	1050	3980	166	14.4	53.2	< 1	< 0.1	< 0.001
EPA 05		5/3/2000	6,891.80	6.20	7.56	5780	461	595	181	14.7	458	3160	94	22.3	42.3	< 1	< 0.1	< 0.001
EPA 05		7/11/2000	6,891.50	6.06	7.09	5720	496	630	188	13.5	415	3310	92.7	23	42.5	< 1	< 0.1	< 0.001
EPA 05		10/3/2000	6,891.60	6.14	6.99	5500	466	594	171	14.4	354	3060	85.4	20	37.5	< 1	< 0.1	< 0.001
EPA 05		1/9/2001	6,891.60	6.32	6.81	5560	475	591	148	12.7	362	3220	102	20.2	35.2	< 1	< 0.1	< 0.001
EPA 05		4/3/2001	6,891.40	6.30	7.22	5510	563	669	155	12	353	3460	96.3	17.5	36.3	< 1	< 0.1	< 0.001
EPA 05		7/17/2001	6,891.00	6.65	6.71	5520	448	563	150	13.7	267	2950	108	16.6	37.8	< 1	< 0.1	< 0.001
EPA 05		10/9/2001	6,891.10	5.99	6.50	5520	440	550	143	13	240	3000	95.2	16.2	35.8	< 1	< 0.1	< 0.001
EPA 05		1/14/2002	6,891.10	6.73	6.60	5430	531	621	139	14.1	230	3290	97.8	16.7	31	< 1	< 0.1	< 0.001
EPA 05		4/9/2002	6,890.74	6.05	6.80	5450	457	551	150	12.6	199	3150	88.8	15.7	29.8	< 1	< 0.1	< 0.001
EPA 05		7/16/2002	6,890.78	6.58	7.16	5410	452	550	139	13.6	179	3170	77.3	15.7	30.7	< 1	< 0.1	< 0.001
EPA 05		10/15/2002	6,890.63	6.30	6.77	4610	513	608	151	12.5	168	3580	75.1	15.1	12.3	< 1	< 0.1	< 0.001
EPA 05		1/14/2003	6,890.29	6.59	6.75	5320	429	524	145	15.1	160	2930	67.9	13.9	28.9	< 1	< 0.1	< 0.001
EPA 05		4/14/2003	6,890.24	6.00	6.75	5350	455	569	160	15.8	146	3210	80.2	12.6	29.8	< 1	< 0.1	< 0.001
EPA 05		7/9/2003	6,890.01	5.69	6.99	5340	486	580	139	12.6	138	3420	72.4	13.2	25.9	< 1	< 0.1	< 0.001
EPA 05		10/14/2003	6,890.07	5.72	7.02	5310	523	528	144	11.3	132	3390	75.8	11.6	25.9	< 1	0.4	< 0.001
EPA 05		1/12/2004	6,891.44	5.91	6.37	5310	508	600	156	12.6	120	3450	47.2	11.9 D	26.8 D	< 1.0	< 0.1	< 0.001
EPA 05		4/13/2004	6,889.95	5.63	5.87	5240	459	546	141	11.6	101	3410	82.4	10.8 D	22.6 D	< 1	< 0.1	< 0.001
EPA 05		7/20/2004	6,889.70	5.87	6.03	5360	505 D	562 D	147	10.4	124	3310 D	66	9.2 D	24.2 D	< 1.0	< 0.1	< 0.001
EPA 05		10/12/2004	6,889.67	5.89	6.32	5300	483 D	586 D	146	10.8	93	3300 D	71	10.1 D	25.1 D	< 1.0	< 0.1	< 0.001
EPA 05		1/11/2005	6,889.91	5.93	6.41	5220	494 D	563 D	138	10.7	86	3250 D	68	7.8 D	23.0 D	< 1.0	< 0.1	< 0.001
EPA 05		4/12/2005	no data	no data	6.29	4950	496	566	146	10.7	85	3410	72	8.3	23.6	< 1.0	0.1	< 0.001
EPA 05		7/19/2005	6,889.05	5.52	6.51	5200	466 D	541 D	136	10	100	3050 D	58	7.7 D	23.1 D	< 1.0	0.1	< 0.001
EPA 05		10/11/2005	6,889.14	5.87	6.51	5120	466 D	538 D	138	10.6	92	3120 D	66	7.8 D	22.4 D	< 1.0	< 0.1	< 0.001
EPA 05		1/17/2006	6,888.87	6.02	7.09	4960	474 D	551 D	127	9.8	85	3140 D	65	11.4 D	20.9 D	< 1.0	< 0.1	< 0.001
EPA 05		4/11/2006	6,888.84	5.83	6.70	4950	494 D	567 D	130	9.8	85	3190 D	65	8.5 D	21.2 D	< 1.0	< 0.1	< 0.001
EPA 05		7/25/2006	6,889.04	5.84	6.40	4710	490 D	541 D	134	10.1	72	3290 D	62	8.1 D	20.5 D	< 1.0	< 0.1	< 0.001
EPA 05		10/10/2006	6,888.64	5.95	6.43	4960	471 D	525 D	129	9.8	70	3080 D	55	8.4 D	20.4 D	< 0.5	< 0.1	< 0.001
EPA 05		1/23/2007	6,888.32	6.00	6.33	4910	468 D	533 D	127	10	71	3100 D	60	8.6 D	18.4 D	<0.5	<0.1	<0.001
EPA 05		4/16/2007	6,888.47	5.90	6.30	4940	465 D	537 D	115	9.7	73	3280 D	63	7.9 D	16.2 D	<0.5	<0.1	<0.001
EPA 05		7/16/2007	6,888.04	5.99	6.30	4780	600 D	663 D	116	8.4	110	3820 D	51	9.7 D	20.4 D	<0.5	<0.1	0.002
EPA 05		10/2/2007	6,888.03	5.93	6.34	4880	431 D	478 D	119 D	10.2	65	2960 D	69 D	8.2 D	18.4 D	<0.5	<0.1	<0.001
EPA 05		1/21/2008	6,887.99	5.95	6.65 H	4710	462 D	497 D	97.1	9.9	72	3050 D	59 D	5.2 D	18.9 D	< 0.5	< 0.1	< 0.001
EPA 05		4/14/2008	6,887.59	5.72	6.16	4620	498	536	118 D	8.9	101	3240 D	48	10.4 D	19.8	< 0.5	< 0.1	0.001

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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 05		10/12/1999	< 0.01	< 0.005	0.04	< 0.05	0.59	0.35	< 0.05	0.001	< 0.1	0.124	1.2	< 1	1.2	< 0.2	< 1	< 1
EPA 05		1/11/2000	< 0.01	< 0.005	0.06	< 0.05	0.51	0.37	0.07	0.005	< 0.1	0.111	0.9	< 1	0.9	< 0.2	< 1	< 1
EPA 05		5/3/2000	< 0.01	< 0.005	0.08	< 0.05	1.23	< 0.1	0.1	0.003	< 0.1	0.0365	0.7	2	2.7	< 0.2	< 1	< 1
EPA 05		7/11/2000	< 0.01	< 0.005	0.08	0.05	1.16	< 0.1	< 0.05	< 0.001	< 0.1	0.0219	0.7	2.3	3	< 0.2	< 1	< 1
EPA 05		10/3/2000	< 0.01	< 0.005	0.08	< 0.05	1.09	< 0.1	0.08	0.001	< 0.1	0.015	0.8	2.7	3.5	< 0.2	< 1	1.4
EPA 05		1/9/2001	< 0.01	< 0.005	0.09	< 0.05	1.24	< 0.1	0.11	0.003	< 0.1	0.016	1.3	< 1	1.3	< 0.2	< 1	1.5
EPA 05		4/3/2001	< 0.01	< 0.005	0.1	< 0.05	1.39	< 0.1	0.12	0.003	< 0.1	0.015	1.2	< 1	1.2	< 0.2	< 1	< 1
EPA 05		7/17/2001	< 0.01	< 0.005	0.1	< 0.05	1.26	< 0.1	0.09	0.002	< 0.1	0.007	1.4	4.1	5.5	< 0.2	< 1	< 1
EPA 05		10/9/2001	< 0.01	< 0.005	0.08	< 0.05	0.98	< 0.1	0.07	0.002	< 0.1	0.007	1.7	2.3	4	< 0.2	< 1	< 1
EPA 05		1/14/2002	< 0.01	< 0.005	0.11	< 0.05	1.28	< 0.1	0.13	0.002	< 0.1	0.0061	1.7	4.8	6.5	< 0.2	< 1	1.2
EPA 05		4/9/2002	< 0.01	< 0.005	0.1	< 0.05	1.23	< 0.1	0.11	0.001	< 0.1	0.0046	0.8	1.5	2.3	< 0.2	< 1	1.5
EPA 05		7/16/2002	< 0.01	< 0.005	0.1	< 0.05	1.25	< 0.1	0.09	0.001	< 0.1	< 0.0003	1.5	< 1	1.5	< 0.2	< 1	2.7
EPA 05		10/15/2002	< 0.01	< 0.005	0.09	< 0.05	1.17	< 0.1	0.1	< 0.001	< 0.1	0.0026	1.8	< 1	1.8	< 0.2	< 1	2.7
EPA 05		1/14/2003	< 0.01	< 0.005	0.1	< 0.05	1.22	< 0.1	0.09	< 0.001	< 0.1	0.003	1.1	< 1	1.1	< 0.2	< 1	2.3
EPA 05		4/14/2003	< 0.01	< 0.005	0.11	< 0.05	1.41	< 0.1	0.09	< 0.001	< 0.1	0.002	1.5	3.5	5	< 0.2	< 1	3.2
EPA 05		7/9/2003	< 0.01	< 0.005	0.1	< 0.05	1.29	< 0.1	0.07	< 0.001	< 0.1	0.0006	1.6	< 1	1.6	< 0.2	< 1	< 1.0
EPA 05		10/14/2003	< 0.01	< 0.005	0.1	< 0.05	1.28	< 0.1	0.08	< 0.001	< 0.1	0.0019	0.8	3.5	4.3	< 0.2	< 1	2.1
EPA 05		1/12/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0005 D	1.1	< 1.0	1.1	< 0.2	< 1.0	2.4
EPA 05		4/13/2004	< 0.01	< 0.005	0.09	< 0.05	1.31	< 0.1	0.09	0.001	< 0.1	0.0016 D	1.5	2.5	4	< 0.2	< 1	1.9
EPA 05		7/20/2004	< 0.01	< 0.005	0.09	< 0.05	1.2	< 0.1	0.08	0.002	< 0.1	0.0015 D	2	< 1.0	2	< 0.2	< 1.0	1.9
EPA 05		10/12/2004	< 0.01	< 0.005	0.08	< 0.05	1.23	< 0.1	< 0.05	0.002	< 0.1	0.0015	1.7	1.5	3.2	< 0.2	< 1.0	1.9
EPA 05		1/11/2005	< 0.01	< 0.005	0.09	< 0.05	1.26	< 0.1	0.09	0.001	< 0.1	0.0016	1.1	1.5	2.6	< 0.2	< 1.0	4.2
EPA 05		4/12/2005	< 0.01	< 0.005	0.08	< 0.05	1.31	< 0.1	0.07	< 0.001	< 0.1	0.0013	1.3	1.6	2.9	< 0.2	< 1.0	3.3
EPA 05		7/19/2005	< 0.01	< 0.005	0.07	< 0.05	1.14	< 0.1	0.07	< 0.001	< 0.1	0.0015	1	< 1.0	1	< 0.2	< 1.0	1.9
EPA 05		10/11/2005	< 0.01	< 0.005	0.08	< 0.05	1.23	< 0.1	0.06	< 0.001	< 0.1	0.0014	1.7	1.6	3.3	< 0.2	< 1.0	4
EPA 05		1/17/2006	< 0.01	< 0.005	0.07	< 0.05	1.26	< 0.1	0.07	< 0.001	< 0.1	0.0015	1.7	1.3	3	< 0.2	< 1.0	< 1.0
EPA 05		4/11/2006	< 0.01	< 0.005	0.06	< 0.05	1.09	< 0.1	0.06	< 0.001	< 0.1	0.0022	1.5	4.2	5.7	< 0.2	< 1.0	1.1
EPA 05		7/25/2006	< 0.01	< 0.005	0.06	< 0.05	1.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0016	1.2	4	5.2	< 0.2	< 1.0	2
EPA 05		10/10/2006	< 0.01	< 0.005	0.06	< 0.05	1.16	< 0.1	0.06	0.001	< 0.1	0.0012	1.2	2.2	3.4	< 0.2	< 1	2.2
EPA 05		1/23/2007	<0.01	<0.005	0.06	<0.05	1.19	<0.1	0.05	<0.001	<0.1	0.0013 D	1.2	<1	1.2	<0.2	<1	4.1
EPA 05		4/16/2007	<0.01	<0.005	0.06	<0.05	1.2	<0.1	0.05	<0.001	<0.1	0.0014	0.8	<1	0.8	<0.2	<1	1.7
EPA 05		7/16/2007	<0.01	<0.005	0.05	<0.05	0.95	<0.1	<0.05	<0.001	<0.1	0.0014	1.5	1.5	3	<0.2	<1	1.2
EPA 05		10/2/2007	<0.01	<0.005	0.05	<0.05	1.15	<0.1	<0.05	<0.001	<0.1	0.0015	1.3	<1	1.3	<0.2	<1	2.6
EPA 05		1/21/2008	< 0.01	< 0.005	0.04	< 0.05	0.98	< 0.1	< 0.05	< 0.001	< 0.1	0.0014	1.8	< 1	1.8	< 0.2	< 1	2.3
EPA 05		4/14/2008	< 0.01	< 0.005	0.04	< 0.05	1.08	< 0.1	< 0.05	< 0.001	< 0.1	0.0015	1.3	2.5	3.8	0.7	-6.3 U	2.9

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 05		7/14/2008	6,887.49	6.02	6.28	4530	486	514	115 D	8	95	3480 D	48	10.3 D	17.9	< 0.5	< 0.1	< 0.003
EPA 05		10/13/2008	6,887.34	5.92	6.36	4960 H	470	506	118 D	8	66	3360 D	46	10.2	16.1	< 0.5	< 0.1	< 0.001
EPA 05		1/19/2009	6,886.99	6	6.46	4990 H	451	485	116	8	84	3170 D	45	8.1 D	12.4	<0.5	<0.1	<0.001
EPA 05		4/13/2009	6,887.14	5.78	5.64	4940	463 D	499	118 D	11	49	3250 D	42	7.9 D	16.1 D	<0.50	<0.1	<0.001
EPA 05		7/13/2009	6,886.94	5.84	6.31 H	4740 H	474	495	111	8	67	3520 D	50	6.1 D	15.3	<0.50	<0.1	<0.001
EPA 05		10/12/2009	6,886.94	5.94	6.54	4850	469	488	115	8	65	3170 D	48	11.0 D	12.4	<0.50	<0.1	<0.001
EPA 07		7/26/1989	6,907.80	4.40	4.01	7774	526	871	212	9.1	0	5092	134	3.45	94	< 1	94	< 0.001
EPA 07		10/5/1989	6,908.00	4.20	4.26	8076	497	877	221	12	0	5272	192	3.41	69	< 1	99	< 0.001
EPA 07		1/16/1990	6,908.00	4.20	4.22	8190	449	915	226	9.09	< 1	5108	174	3.46	88	< 1	96	< 0.001
EPA 07		4/17/1990	6,907.70	4.20	4.30	9172	453	1100	226	8.7	< 1	5392	182	3.95	96	< 1	100	< 0.001
EPA 07		7/17/1990	6,907.10	4.40	4.35	9566	496	1009	230	10	0.1	5739	176	1.9	84	< 1	80.1	< 0.001
EPA 07		10/9/1990	no data	4.40	4.63	8003	449	928	241	10.5	10	5204	169	1.17	36.2	< 1	39.1	< 0.001
EPA 07		1/3/1991	no data	4.60	4.68	7145	475	829	262	24.4	6.1	4572	117	1.67	29.3	< 1	18	< 0.001
EPA 07		4/17/1991	no data	5.00	5.37	6918	454	757	252	12.4	15	4676	117	1.3	40.5	< 1	6.15	< 0.001
EPA 07		7/11/1991	no data	5.00	5.80	6957	386	759	230	10.1	39	4506	99.7	1.01	28.1	< 1	0.18	< 0.001
EPA 07		9/4/1991	no data	no data	5.58	7322	439	672	245	22.5	37	4415	107	1.2	17	< 1	1.21	< 0.001
EPA 07		10/17/1991	no data	5.20	5.69	6827	473	712	257	12.6	39.3	4296	111	1.25	25	< 1	1.15	0.001
EPA 07		11/4/1991	no data	no data	5.65	6986	445	610	238	10	38.8	4271	116	1.2	23.6	< 1	1.93	< 0.001
EPA 07		12/2/1991	no data	no data	5.84	6860	439	608	246	10.4	55.6	3834	114	1.31	54.7	< 1	2.29	< 0.001
EPA 07		1/16/1992	no data	5.10	6.31	6893	397	769	235	10	43.8	4409	113	1.5	29.8	< 1	1.91	< 0.001
EPA 07		4/13/1992	no data	5.20	6.25	6768	409	568	263	11.6	68.6	4167	116	1.1	25.1	< 1	0.6	< 0.001
EPA 07		7/15/1992	no data	5.50	6.37	6446	390	628	287	11.4	95	4088	94.4	0.6	30.6	< 1	0.72	< 0.001
EPA 07		10/7/1992	no data	5.60	6.14	6406	449	654	333	15.2	112	4150	90.8	0.85	15.3	< 1	0.8	< 0.001
EPA 07		1/7/1993	no data	5.60	6.79	5654	469	640	281	11.8	134	3675	98.4	0.92	45.6	< 1	0.6	< 0.001
EPA 07		4/7/1993	no data	5.60	6.32	5787	409	639	293	9.2	108	4101	115	0.78	35.9	< 1	1.4	0.001
EPA 07		7/14/1993	no data	5.70	6.08	6729	495	696	270	9.7	144	4208	65.9	0.84	27.8	< 1	0.53	< 0.001
EPA 07		10/7/1993	no data	5.60	6.07	5989	460	678	250	9.6	142	4049	106	0.75	41.4	< 1	0.62	< 0.001
EPA 07		1/6/1994	no data	5.70	6.27	6870	454	646	277	9.2	135	4312	126	0.87	39.6	< 1	0.84	< 0.001
EPA 07		4/12/1994	no data	5.80	6.33	6573	443	669	257	9.5	140	4378	121	1.88	35.7	< 1	0.63	< 0.001
EPA 07		7/26/1994	no data	5.90	6.87	6463	511	689	289	10.1	139	4144	120	0.88	37.4	< 1	0.59	< 0.001
EPA 07		10/4/1994	no data	5.80	7.16	7011	559	822	299	10.3	160	4647	141	2.94	46.2	< 1	0.74	< 0.001
EPA 07		1/11/1995	6,903.70	5.80	6.45	8136	540	900	353	9.4	326	4737	215	1.37	131	1.04	0.5	< 0.001
EPA 07		4/11/1995	6,904.40	5.90	6.35	7549	510	798	370	7.2	397	4566	244	1.27	139	1.08	0.41	< 0.001
EPA 07		7/11/1995	6,903.90	6.00	6.96	7971	475	931	346	6.9	426	4475	235	1.25	145	< 1	< 0.1	< 0.001
EPA 07		10/10/1995	6,904.10	6.00	7.50	7558	507	916	371	7.7	403	4368	200	1.12	137	< 1	0.22	0.002

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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 05		7/14/2008	< 0.01	< 0.005	0.04	< 0.05	1.15	< 0.1	< 0.05	< 0.001	< 0.1	0.0013 D	1.8	3.4	5.2	0 U	3.3 U	1.3
EPA 05		10/13/2008	< 0.01	< 0.005	0.04	< 0.05	1.09	< 0.1	< 0.05	< 0.001	< 0.1	0.0014	1.5	2.6	4.1	0.2	-2 U	1.9
EPA 05		1/19/2009	<0.01	<0.005	0.04	<0.05	1.12	<0.1	<0.05	0.001	<0.1	0.0011	0.5	3	3.5	-0.1 U	0.2 U	2.8
EPA 05		4/13/2009	<0.01	<0.005	0.04	<0.05	1.14	<0.1	<0.05	<0.001	<0.1	0.0013	1.6	2.3	3.9	-0.04 U	1.0 U	1.9
EPA 05		7/13/2009	<0.01	<0.005	0.04	<0.05	1.24	<0.1	<0.05	0.001	<0.1	0.0015	1.6	2.6	4.2	0.1 U	0.4 U	3.2
EPA 05		10/12/2009	<0.01	<0.005	0.04	<0.05	1.21	<0.1	<0.05	<0.001	<0.1	0.0015	1.7	3.3	5	0.04 U	0.4 U	2.3
EPA 07		7/26/1989	< 0.05	< 0.01	0.25	< 0.05	24	< 0.1	0.27	< 0.001	< 0.1	0.008	4.8	1.3	6.1	6	< 1	9
EPA 07		10/5/1989	< 0.05	< 0.01	0.26	0.09	25	< 0.01	0.29	0.002	< 0.1	0.012	2	3.3	5.3	0.8	< 1	2.5
EPA 07		1/16/1990	< 0.05	< 0.01	0.34	< 0.05	27	< 0.1	0.35	0.002	< 0.1	0.008	1.5	5.4	6.9	< 0.2	< 1	1.5
EPA 07		4/17/1990	< 0.05	< 0.01	0.36	< 0.05	42	< 0.1	0.44	< 0.001	< 0.1	0.006	2.7	5.8	8.5	< 0.2	< 1	2.8
EPA 07		7/17/1990	< 0.05	< 0.01	0.3	< 0.05	42.3	< 0.1	0.45	< 0.001	< 0.1	0.0155	0.6	5.2	5.8	< 0.2	< 1	< 1
EPA 07		10/9/1990	< 0.05	0.01	0.46	< 0.05	26.9	< 0.1	0.48	< 0.001	< 0.1	0.0052	3.3	4	7.3	< 0.2	< 1	4
EPA 07		1/3/1991	< 0.01	< 0.01	0.25	< 0.05	17.6	< 0.1	0.3	0.001	< 0.1	0.0081	7.7	8.6	16.3	< 0.2	< 1	8
EPA 07		4/17/1991	< 0.01	< 0.01	0.12	< 0.05	13.28	< 0.1	0.18	< 0.001	< 0.1	0.002	2.6	10.4	13	< 0.2	1.7	2
EPA 07		7/11/1991	< 0.01	< 0.01	0.12	< 0.05	12.51	< 0.1	0.16	0.017	< 0.1	0.0038	3.2	8.9	12.1	< 0.2	< 1	3
EPA 07		9/4/1991	< 0.01	< 0.01	0.15	< 0.05	12.1	< 0.1	0.17	< 0.001	< 0.1	0.0015	2	3.7	5.7	< 0.2	< 1	2
EPA 07		10/17/1991	< 0.01	< 0.01	0.15	< 0.05	13.51	< 0.1	0.16	0.001	< 0.1	0.0009	2.1	7.2	9.3	< 0.2	< 1	2
EPA 07		11/4/1991	< 0.01	< 0.01	0.15	< 0.05	15.6	< 0.1	0.21	< 0.001	< 0.1	0.0059	2.1	8.8	10.9	< 0.2	< 1	2
EPA 07		12/2/1991	< 0.01	< 0.01	0.12	< 0.05	13.2	< 0.1	0.19	< 0.001	< 0.1	0.002	3.5	13.1	16.6	< 0.2	< 1	4
EPA 07		1/16/1992	< 0.01	< 0.01	0.13	< 0.05	13.6	< 0.1	0.19	0.018	< 0.1	0.005	2.6	6.6	9.2	< 0.2	< 1	3
EPA 07		4/13/1992	< 0.01	< 0.01	0.13	< 0.05	13.3	< 0.1	0.16	0.014	< 0.1	0.001	2.4	7.4	9.8	< 0.2	< 1	2.4
EPA 07		7/15/1992	< 0.01	< 0.01	0.1	< 0.05	10.5	< 0.1	0.13	< 0.001	< 0.1	0.003	2.6	12.2	14.8	< 0.2	< 1	3
EPA 07		10/7/1992	< 0.01	< 0.01	0.1	< 0.05	11	< 0.1	0.15	< 0.001	< 0.1	< 0.0003	2.2	7.9	10.1	< 0.2	< 1	2.6
EPA 07		1/7/1993	< 0.01	< 0.01	0.12	< 0.05	11.3	< 0.1	0.21	< 0.01	< 0.1	0.007	2	7.2	9.2	< 0.2	< 1	2.1
EPA 07		4/7/1993	< 0.01	< 0.01	0.17	< 0.05	11.6	< 0.1	0.17	< 0.001	< 0.1	< 0.0003	1.3	9	10.3	< 0.2	1.3	1.5
EPA 07		7/14/1993	< 0.01	< 0.01	0.13	< 0.05	10.2	< 0.1	0.19	0.002	< 0.1	< 0.0003	2.1	5.9	8	< 0.2	< 1	2.8
EPA 07		10/7/1993	< 0.01	< 0.01	0.12	< 0.05	7.99	< 0.1	0.21	< 0.001	< 0.1	0.006	1.5	7.7	9.2	< 0.2	1.8	13
EPA 07		1/6/1994	< 0.01	< 0.01	0.13	< 0.05	9.79	< 0.1	0.22	< 0.001	< 0.1	< 0.0003	3.1	< 1	3.1	< 0.2	1.7	4.1
EPA 07		4/12/1994	< 0.01	< 0.01	0.12	< 0.05	9.59	< 0.1	0.21	< 0.001	< 0.1	0.001	2.8	3.5	6.3	< 0.2	< 1	8.2
EPA 07		7/26/1994	< 0.01	< 0.01	0.16	< 0.05	9.72	< 0.1	0.21	0.003	< 0.1	0.002	2.2	1.5	3.7	< 0.2	< 1	4.6
EPA 07		10/4/1994	< 0.01	< 0.01	0.1	< 0.05	8.52	< 0.1	0.15	< 0.001	< 0.1	0.003	3.1	4.5	7.6	< 0.2	< 1	9.8
EPA 07		1/11/1995	< 0.01	< 0.01	0.06	< 0.05	4.44	< 0.1	0.1	< 0.001	< 0.1	0.001	1.6	6.2	7.8	< 0.2	4.8	11.1
EPA 07		4/11/1995	< 0.01	< 0.01	< 0.01	< 0.05	3.81	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1.9	4.7	6.6	< 0.2	< 1	9
EPA 07		7/11/1995	< 0.01	< 0.01	< 0.01	< 0.05	4.02	< 0.1	< 0.05	< 0.001	< 0.1	0.002	3	< 1	3	0.5	14.9	16.3
EPA 07		10/10/1995	< 0.01	< 0.01	0.04	< 0.05	4.84	< 0.1	< 0.05	0.04	< 0.1	0.0023	2.3	6.7	9	< 0.2	< 1	5.4

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 07		1/9/1996	6,903.90	6.10	7.36	7349	474	894	352	7.6	438	4400	200	1.03	141	1.05	0.17	0.003
EPA 07		4/10/1996	6,903.80	6.30	7.26	8204	552	1040	349	7.4	428	5070	214	1.07	147	< 1	0.22	< 0.001
EPA 07		7/17/1996	6,903.60	6.20	6.36	8403	483	923	344	7.9	392	4529	222	0.72	156	1.56	0.25	< 0.001
EPA 07		10/8/1996	6,903.40	6.10	6.97	8440	534	1018	346	7.9	400	4920	206	1.2	142	5.02	0.27	< 0.001
EPA 07		1/28/1997	6,903.30	6.20	7.61	8280	485	1041	308	7.6	389	4555	239	1.21	137	1.23	0.27	< 0.001
EPA 07		4/15/1997	6,903.10	6.10	7.26	8440	504	999	338	8.3	386	4820	215	1.27	132	< 1	0.38	< 0.001
EPA 07		7/15/1997	6,902.80	5.90	7.15	8390	437	984	318	8.2	372	4780	209	1.28	137	1.2	0.19	< 0.001
EPA 07		10/15/1997	6,902.50	5.90	7.64	8410	528	1000	314	7.5	349	5010	238	1.49	130	< 1	0.25	< 0.001
EPA 07		1/20/1998	6,903.90	5.90	7.48	8340	534	947	335	9.6	340	5100	217	1.89	139	1.1	0.8	< 0.001
EPA 07		4/14/1998	6,902.60	6.00	6.75	8310	514	969	337	8	333	4870	184	1.32	138	1.2	0.48	< 0.001
EPA 07		7/14/1998	6,902.20	6.10	7.30	8460	486	942	322	8.3	342	4300	186	1.37	133	1.2	0.18	< 0.001
EPA 07		10/13/1998	no data	6.10	8.09	8150	481	951	327	8.4	325	4730	183	1.58	139	1.3	0.24	< 0.001
EPA 07		1/12/1999	6,903.00	6.00	7.70	8180	424	900	294	8.6	345	4750	189	1.31	137	< 1	0.13	< 0.001
EPA 07		4/13/1999	6,903.00	6.00	7.26	8020	468	926	308	7.9	355	4320	186	1.31	140	< 1	0.29	< 0.001
EPA 07		7/20/1999	6,903.06	6.06	7.20	8120	491	880	307	9.5	361	4500	166	1.11	130	< 1	< 0.1	< 0.001
EPA 07		10/12/1999	6,903.20	6.01	7.50	7940	476	903	300	8.4	366	4370	187	1.15	134	1.4	0.18	< 0.001
EPA 07		1/11/2000	6,902.80	6.10	7.73	7890	439	846	284	8.9	367	4000	171	0.9	122	1.3	0.29	< 0.001
EPA 07		5/3/2000	6,902.50	5.90	7.28	7750	430	827	306	10.6	362	3870	168	0.99	138	1.2	2.9	< 0.001
EPA 07		7/11/2000	6,902.20	5.80	7.28	7630	488	897	321	7.54	399	4160	167	0.75	150	1.9	3.57	< 0.001
EPA 07		10/3/2000	6,902.30	5.88	6.66	7540	474	889	309	8.7	444	3970	169	0.55	135	1.1	4.37	< 0.001
EPA 07		1/9/2001	6,902.40	6.06	6.83	7580	468	845	277	7.7	453	4040	180	0.72	124	< 1	4.61	< 0.001
EPA 07		4/3/2001	6,902.05	6.10	7.14	7590	551	964	294	7.1	456	4410	177	0.71	133	2.3	2.81	< 0.001
EPA 07		7/17/2001	6,901.70	6.33	6.68	7670	451	838	284	8.3	498	3660	233	0.64	130	1.8	2.6	< 0.001
EPA 07		10/9/2001	6,901.75	5.90	6.60	7670	450	820	285	8.7	515	3800	216	0.56	132	< 1	1.77	< 0.001
EPA 07		1/14/2002	6,901.75	6.09	6.60	7670	541	923	275	9.3	526	4050	217	0.49	121	1.7	2.3	< 0.001
EPA 07		4/9/2002	6,901.36	6.01	6.85	7720	465	821	304	7.8	537	3950	192	0.6	124	< 1	1.5	< 0.001
EPA 07		7/16/2002	6,901.25	6.22	7.17	7720	465	841	303	9.6	542	3950	208	0.7	131	< 1	1.3	< 0.001
EPA 07		10/15/2002	6,901.17	6.67	7.13	6430	531	932	316	7.9	544	4420	180	0.64	141	< 1	1.7	< 0.001
EPA 07		1/14/2003	6,901.09	7.23	7.03	7630	435	792	404	12.3	545	3620	170	0.99	128	< 1	1.6	< 0.001
EPA 07		4/14/2003	6,900.86	6.19	6.76	7520	476	892	325	12.5	542	4110	196	0.68	132	< 1	1.7	< 0.001
EPA 07		7/9/2003	6,900.68	6.61	7.09	6030	491	863	294	9.2	547	4150	178	0.74	125	1.3	0.9	< 0.001
EPA 07		10/14/2003	6,900.61	5.87	6.90	7660	548	933	314	7.8	551	4270	196	0.52	131	1.3	0.8	< 0.001
EPA 07		1/12/2004	6,900.43	6.01	7.37	7710	535	952	325	8.8	532	4370	202	0.57	129 D	< 1.0	0.9	< 0.001
EPA 07		4/13/2004	6,900.39	5.76	6.21	7670	486	862	312	8.6	550	4270	223	0.64	126 D	< 1	0.8	< 0.001
EPA 07		7/20/2004	6,900.08	6.01	6.18	7880	526 D	880 D	338	7.5	539	4140 D	190	0.57	122 D	< 1.0	0.6	< 0.001

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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 07		1/9/1996	< 0.01	< 0.01	0.04	< 0.05	5.35	< 0.1	< 0.05	0.067	< 0.1	0.0038	3.4	1.3	4.7	< 0.2	< 1	2.4
EPA 07		4/10/1996	< 0.01	< 0.01	0.06	< 0.05	6.6	< 0.1	< 0.05	< 0.001	< 0.1	0.0024	0.9	2.4	3.3	0.8	< 1	3.1
EPA 07		7/17/1996	< 0.01	< 0.01	0.08	< 0.05	9.71	< 0.1	0.08	< 0.001	< 0.1	0.0032	1.2	< 1	1.2	< 0.2	< 1	4.3
EPA 07		10/8/1996	< 0.01	< 0.01	0.08	< 0.05	10.5	< 0.1	0.09	< 0.001	< 0.1	0.0003	1.3	< 1	1.3	< 0.2	< 1	< 1
EPA 07		1/28/1997	< 0.01	< 0.01	0.07	< 0.05	11.2	< 0.1	0.09	< 0.001	< 0.1	0.0003	2.3	< 1	2.3	< 0.2	7.9	2
EPA 07		4/15/1997	< 0.01	< 0.01	0.09	< 0.05	12.4	< 0.1	0.12	0.06	< 0.1	0.001	1	1.8	2.8	< 0.2	< 1	< 1
EPA 07		7/15/1997	< 0.01	< 0.01	< 0.01	< 0.05	12.5	< 0.1	0.11	< 0.001	< 0.1	0.001	1.1	3.4	4.5	< 0.2	< 1	< 1
EPA 07		10/15/1997	< 0.01	< 0.01	0.13	< 0.05	15.2	< 0.1	0.13	< 0.001	< 0.1	0.002	< 0.2	< 1	0	< 0.2	< 1	< 1
EPA 07		1/20/1998	< 0.01	< 0.005	0.14	< 0.05	17.6	< 0.1	0.16	< 0.001	< 0.1	0.0021	1	< 1	1	< 0.2	< 1	< 1
EPA 07		4/14/1998	< 0.01	< 0.005	0.1	< 0.05	12.5	< 0.1	0.1	< 0.001	< 0.1	0.002	1.5	< 1	1.5	< 0.2	< 1	< 1
EPA 07		7/14/1998	< 0.01	< 0.005	0.1	< 0.05	15.1	< 0.1	0.12	< 0.001	< 0.1	0.0023	1.1	2.1	3.2	< 0.2	< 1	< 1
EPA 07		10/13/1998	< 0.01	< 0.005	0.1	< 0.05	13.4	< 0.1	0.14	< 0.001	< 0.1	0.0019	1.7	1.8	3.5	< 0.2	4.9	4.9
EPA 07		1/12/1999	< 0.01	0.007	0.09	< 0.05	12.6	< 0.1	0.08	< 0.001	< 0.1	0.011	3.2	3.7	6.9	< 0.2	< 1	< 1
EPA 07		4/13/1999	< 0.01	< 0.005	0.09	< 0.05	12.5	< 0.1	0.11	< 0.001	< 0.1	0.0017	1.2	2.1	3.3	< 0.2	3.8	3.8
EPA 07		7/20/1999	< 0.01	< 0.005	0.1	< 0.05	9.3	< 0.1	< 0.05	< 0.001	< 0.1	0.0019	3	< 1	3	< 0.2	5.2	5.2
EPA 07		10/12/1999	< 0.01	< 0.005	0.07	< 0.05	11.8	< 0.1	0.08	< 0.001	< 0.1	0.0009	< 0.2	3.3	3.3	< 0.2	< 1	1.1
EPA 07		1/11/2000	< 0.01	< 0.005	0.08	< 0.05	9.94	< 0.1	0.13	< 0.001	< 0.1	0.0021	1.2	< 1	1.2	< 0.2	< 1	2.3
EPA 07		5/3/2000	< 0.01	< 0.005	0.08	< 0.05	11.4	< 0.1	0.1	< 0.001	< 0.1	0.0032	1.5	1.6	3.1	< 0.2	< 1	2.6
EPA 07		7/11/2000	< 0.01	< 0.005	0.07	< 0.05	9.69	< 0.1	< 0.05	< 0.001	< 0.1	0.0026	1.4	3.4	4.8	< 0.2	< 1	2.8
EPA 07		10/3/2000	< 0.01	< 0.005	0.06	< 0.05	8.27	< 0.1	< 0.05	< 0.001	< 0.1	0.0024	0.8	1.8	2.6	< 0.2	< 1	1.9
EPA 07		1/9/2001	< 0.01	< 0.005	0.06	< 0.05	7.44	< 0.1	0.09	< 0.001	< 0.1	0.0021	0.9	2.9	3.8	< 0.2	< 1	< 1
EPA 07		4/3/2001	< 0.01	< 0.005	0.06	< 0.05	6.63	< 0.1	0.09	< 0.001	< 0.1	0.002	1.1	< 1	1.1	< 0.2	< 1	1.7
EPA 07		7/17/2001	< 0.01	< 0.005	0.05	< 0.05	6.92	< 0.1	0.07	< 0.001	< 0.1	0.002	1.4	< 1	1.4	< 0.2	< 1	< 1
EPA 07		10/9/2001	< 0.01	< 0.005	0.03	< 0.05	5.43	< 0.1	< 0.05	< 0.001	< 0.1	0.0015	1	< 1	1	< 0.2	< 1	< 1
EPA 07		1/14/2002	< 0.01	< 0.005	0.05	< 0.05	6.51	< 0.1	0.08	< 0.001	< 0.1	0.0022	1.1	4.4	5.5	< 0.2	< 1	1.3
EPA 07		4/9/2002	< 0.01	< 0.005	0.05	< 0.05	6.09	< 0.1	0.08	< 0.001	< 0.1	0.002	0.5	< 1	0.5	< 0.2	< 1	1.7
EPA 07		7/16/2002	< 0.01	< 0.005	0.04	< 0.05	5.32	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1	< 1	1	< 0.2	< 1	2.7
EPA 07		10/15/2002	< 0.01	< 0.005	0.04	< 0.05	5.66	< 0.1	0.07	< 0.001	< 0.1	0.0024	0.9	< 1	0.9	< 0.2	< 1	1.3
EPA 07		1/14/2003	< 0.01	< 0.005	0.04	< 0.05	4.94	< 0.1	0.06	< 0.001	< 0.1	0.0025	0.8	< 1	0.8	< 0.2	< 1	2.5
EPA 07		4/14/2003	< 0.01	< 0.005	0.04	< 0.05	4.94	< 0.1	< 0.05	< 0.001	< 0.1	0.0022	1.3	< 1	1.3	< 0.2	< 1	2.8
EPA 07		7/9/2003	< 0.01	< 0.005	0.04	< 0.05	4.64	< 0.1	< 0.05	< 0.001	< 0.1	0.0013	0.9	< 1	0.9	< 0.2	< 1	< 1.0
EPA 07		10/14/2003	< 0.01	< 0.005	0.03	< 0.05	4.62	< 0.1	< 0.05	< 0.001	< 0.1	0.0023	< 0.2	< 1	0	< 0.2	< 1	< 1.0
EPA 07		1/12/2004	< 0.01	< 0.005	0.03	< 0.05	4.57	< 0.1	< 0.05	< 0.001	< 0.1	0.0022 D	0.4	< 1.0	0.4	< 0.2	< 1.0	< 1.0
EPA 07		4/13/2004	< 0.01	< 0.005	0.03	< 0.05	3.94	< 0.1	< 0.05	< 0.001	< 0.1	0.0021 D	0.4	4.8	5.2	< 0.2	< 1	1.8
EPA 07		7/20/2004	< 0.01	< 0.005	0.03	< 0.05	3.74	< 0.1	< 0.05	0.004	< 0.1	0.0018 D	0.9	3.5	4.4	< 0.2	< 1.0	1.5

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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
EPA 07		10/12/2004	6,900.09	6.03	6.56	8030	486 D	890 D	301	7.6	529	4020 D	195	0.48	139 D	< 1.0	0.6	< 0.001
EPA 07		1/11/2005	6,900.32	5.99	6.57	7800	527 D	920 D	324	8	545	4260 D	197	0.32	110 D	< 1.0	0.5	< 0.001
EPA 07		4/12/2005	6,899.87	6.02	6.46	7650	520	906	344	7.8	530	4320	206	0.36	119	< 1.0	0.4	< 0.001
EPA 07		7/19/2005	6,899.62	5.68	6.76	7920	497 D	884 D	332	7.4	542	3960 D	184	0.41	122 D	< 1.0	0.3	< 0.001
EPA 07		10/11/2005	6,899.66	6.03	6.78	7790	494 D	896 D	333	8	564	4100 D	203	0.54	125 D	< 1.0	0.3	< 0.001
EPA 07		1/17/2006	6,899.29	6.15	6.98	7580	497 D	916 D	311	7.9	561	4080 D	196	0.44	141 D	< 1.0	0.3	< 0.001
EPA 07		4/11/2006	6,899.29	6.03	6.75	7730	508 D	881 D	332	7.7	580	4150 D	212	0.3	138 D	< 1.0	0.2	< 0.001
EPA 07		7/25/2006	6,899.12	5.96	6.62	7480	513 D	914 D	361	8.5	564	4340 D	213	0.37	138 D	< 1.0	0.3	< 0.001
EPA 07		10/10/2006	6,899.06	6.05	6.44	7550	505 D	917 D	345	8.4	588	4090 D	188	0.39	134 D	< 0.5	0.2	< 0.001
EPA 07		1/23/2007	6,898.84	6.13	6.46	7460	490 D	916 D	344	9.2	561	4180 D	200	0.25	138 D	<0.5	0.3	<0.001
EPA 07		4/16/2007	6,898.96	6.03	6.60	7860	502 D	961 D	317	9.2	583	4580 D	212	0.22	125 D	<0.5	<0.1	<0.001
EPA 07		7/16/2007	6,898.16	5.94	6.42	7680	511 D	938 D	336	7.8	590	4360 D	195	0.37	146 D	<0.5	0.2	0.003
EPA 07		10/8/2007	6,898.26	6.19	6.70	7820	489 D	898 D	334	7.8	598	4130 D	200	0.15	127 D	<0.5	0.5	<0.001
EPA 07		1/21/2008	6,898.51	6.15	6.53	7690	500 D	915 D	368	9.2	608	4190 D	221 D	0.19	127 D	0.6	1.3	< 0.001
EPA 07		4/14/2008	6,898.01	5.81	6.43	7280	520 D	987 D	364 D	7.8	596	4760 D	208	0.08	200 D	0.76	0.4	0.001
EPA 07		7/14/2008	6,897.96	6.13	6.37	7830	466	885	343 D	8	619	4700 D	222	< 0.05	193 D	0.57	0.5	< 0.003
EPA 07		10/13/2008	6,897.84	6.08	6.24	8010 H	543	1050	393 D	8	611	4800 D	201	0.2	174 D	0.6	0.3	< 0.001
EPA 07		1/19/2009	6,897.56	5.95	6.75	8360 H	479	952	360	8	607	4710 D	202	<0.05	164 D	0.82	0.2	<0.001
EPA 07		4/13/2009	6,897.56	5.96	6.22	8060	487 D	971	384 D	10	632	4740 D	208	0.15	123 D	0.64	0.2	<0.001
EPA 07		7/13/2009	6,897.46	5.83	6.68 H	8380 H	506 D	1020	368 D	8	621	4980 D	124	0.18	122 D	<0.50	0.2	<0.001
EPA 07		10/12/2009	6,897.51	6.00	6.77	8750 H	486 D	1050	366 D	8	647	4300 D	208	0.14	127 D	0.65	0.4	<0.001
EPA 08		7/26/1989	6,857.40	6.80	5.89	4304	521	366	222	8.1	163	3007	35.9	0.88	0.06	< 1	< 0.1	< 0.001
EPA 08		10/5/1989	6,858.00	6.50	6.96	4454	513	379	206	9.9	169	2863	35.4	0.84	0.09	< 1	0.13	< 0.001
EPA 08		1/16/1990	6,858.50	6.50	6.40	4478	486	348	209	8.15	165	2860	33.2	0.91	0.11	< 1	< 0.1	0.001
EPA 08		4/17/1990	6,858.70	6.40	6.61	4577	496	344	210	7.9	165	2738	36.3	0.93	0.16	< 1	< 0.1	0.001
EPA 08		7/17/1990	6,858.70	6.50	6.46	4699	613	431	183	8.5	159	2893	35.7	0.54	0.06	< 1	0.14	0.002
EPA 08		10/16/1990	6,859.20	6.50	6.73	4681	509	383	189	8	148	3053	43.4	0.71	0.03	< 1	< 0.1	0.002
EPA 08		1/8/1991	6,859.40	6.50	6.50	4648	530	387	194	19	159	2959	39.4	0.86	0.04	< 1	< 0.1	< 0.001
EPA 08		4/17/1991	6,860.00	6.40	7.18	4833	543	379	198	8.1	140	3164	45.4	0.82	3.3	< 1	0.16	< 0.001
EPA 08		7/3/1991	6,859.90	6.30	6.40	4711	514	373	161	7.1	141	3242	22.1	0.86	0.06	< 1	0.6	0.002
EPA 08		10/22/1991	6,860.50	6.30	6.29	4612	497	366	182	7.6	166	2998	39.6	1.01	0.23	< 1	0.24	< 0.001
EPA 08		1/22/1992	6,860.80	6.40	6.51	4311	525	376	155	7.3	128	3014	73.4	0.88	< 0.01	< 1	< 0.1	< 0.001
EPA 08		4/2/1992	6,860.80	6.30	7.65	4704	559	394	203	8.8	165	3034	36.4	0.98	< 0.01	< 1	< 0.1	0.001
EPA 08		7/15/1992	6,860.10	6.40	6.64	4809	521	388	176	7.7	126	3120	39.6	0.58	< 0.1	< 1	< 0.1	0.002
EPA 08		10/14/1992	6,860.30	6.60	6.47	4762	536	384	159	9.4	132	3158	39.3	0.66	< 0.1	< 1	0.21	0.001

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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 07		10/12/2004	< 0.01	< 0.005	0.03	< 0.05	3.43	< 0.1	< 0.05	0.002	< 0.1	0.0022 D	0.8	1.7	2.5	< 0.2	< 1.0	1.5
EPA 07		1/11/2005	< 0.01	< 0.005	0.03	< 0.05	3.44	< 0.1	0.05	0.001	< 0.1	0.0021 D	0.7	< 1.0	0.7	< 0.2	< 1.0	1.7
EPA 07		4/12/2005	< 0.01	< 0.005	0.03	< 0.05	3.17	< 0.1	< 0.05	< 0.001	< 0.1	0.0023	0.5	< 1.0	0.5	< 0.2	< 1.0	1.8
EPA 07		7/19/2005	< 0.01	< 0.005	0.02	< 0.05	2.71	< 0.1	< 0.05	< 0.001	< 0.1	0.0022	0.7	1.8	2.5	< 0.2	< 1.0	2.5
EPA 07		10/11/2005	< 0.01	< 0.005	0.02	< 0.05	2.8	< 0.1	< 0.05	< 0.001	< 0.1	0.0018 D	1.1	1.4	2.5	< 0.2	< 1.0	2.8
EPA 07		1/17/2006	< 0.01	< 0.005	0.02	< 0.05	2.59	< 0.1	< 0.05	< 0.001	< 0.1	0.0023	0.8	< 1.0	0.8	< 0.2	< 1.0	< 1.0
EPA 07		4/11/2006	< 0.01	< 0.005	0.02	< 0.05	2.21	< 0.1	< 0.05	0.009	< 0.1	0.0029	0.5	3.7	4.2	< 0.2	< 1.0	< 1.0
EPA 07		7/25/2006	< 0.01	< 0.005	0.02	< 0.05	2.96	< 0.1	< 0.05	< 0.001	< 0.1	0.0014	1	3.7	4.7	< 0.2	< 1.0	< 1.0
EPA 07		10/10/2006	< 0.01	< 0.005	0.02	< 0.05	2.4	< 0.1	< 0.05	< 0.001	< 0.1	0.0016 D	1.2	1.4	2.6	< 0.2	< 1	1.7
EPA 07		1/23/2007	<0.01	<0.005	0.02	<0.05	2.53	<0.1	<0.05	<0.001	<0.1	0.0015 D	0.6	<1	0.6	<0.2	<1	2.1
EPA 07		4/16/2007	<0.01	<0.005	0.02	<0.05	2.53	<0.1	<0.05	<0.001	<0.1	0.0022 D	<0.2	<1	0	<0.2	<1	<1
EPA 07		7/16/2007	<0.01	<0.005	0.02	<0.05	1.84	<0.1	<0.05	<0.001	<0.1	0.0019	<0.2	1.9	1.9	<0.2	<1	<1
EPA 07		10/8/2007	<0.01	<0.005	0.02	<0.05	1.96	<0.1	<0.05	<0.001	<0.1	0.0019	<0.2	<1	0	<0.2	<1	1.6
EPA 07		1/21/2008	< 0.01	< 0.005	0.02	< 0.05	1.74	< 0.1	< 0.05	< 0.001	< 0.1	0.0022	1.3	< 1	1.3	< 0.2	< 1	1.6
EPA 07		4/14/2008	< 0.01	< 0.005	0.02	< 0.05	1.8	< 0.1	< 0.05	< 0.001	0.2	0.0017	0.4	1 U	1.4	0.6	-6.7 U	1.9
EPA 07		7/14/2008	< 0.01	< 0.005	0.02	< 0.05	1.78	< 0.1	< 0.05	< 0.001	< 0.1	0.0017 D	0.57	1.7	2.27	0.3	5 U	0.7 U
EPA 07		10/13/2008	< 0.01	< 0.005	0.02	< 0.05	1.53	< 0.1	< 0.05	< 0.001	< 0.1	0.0019	0.22	0.66 U	0.88	-0.2 U	-2 U	1.5
EPA 07		1/19/2009	<0.01	<0.005	0.03	<0.05	1.85	<0.1	<0.05	<0.001	<0.1	0.0018 D	1.3	1.1 U	2.4	0.5	-2 U	1.1
EPA 07		4/13/2009	<0.01	<0.005	0.03	<0.05	1.77	<0.1	<0.05	<0.001	<0.1	0.0019	0.63	0.11 U	0.74	0.03 U	-0.3 U	1.2
EPA 07		7/13/2009	<0.01	<0.005	0.03	<0.05	2.16	<0.1	<0.05	0.001	<0.1	0.0020	0.70	2.0	2.7	-0.01 U	0.5 U	1.2
EPA 07		10/12/2009	<0.01	<0.005	0.03	<0.05	2.22	<0.1	<0.05	<0.001	<0.1	0.0020	0.44	5.0	5.44	0.05 U	-0.9 U	1.1
EPA 08		7/26/1989	< 0.05	< 0.01	< 0.01	< 0.05	3	< 0.1	< 0.05	< 0.001	< 0.1	0.0012	1.5	1.6	3.1	0.9	1.7	< 1
EPA 08		10/5/1989	< 0.05	< 0.01	< 0.01	< 0.05	2.9	< 0.01	< 0.05	< 0.001	< 0.1	0.004	1	< 1	1	< 0.2	2.1	1.5
EPA 08		1/16/1990	< 0.05	< 0.01	< 0.01	< 0.05	3.3	< 0.1	< 0.05	< 0.001	< 0.1	0.003	0.8	2.5	3.3	< 0.2	< 1	0.9
EPA 08		4/17/1990	< 0.05	< 0.01	< 0.01	< 0.05	3	< 0.1	< 0.05	< 0.001	< 0.1	0.003	1.4	1	2.4	< 0.2	1.7	1.9
EPA 08		7/17/1990	< 0.05	< 0.01	< 0.01	< 0.05	3.41	< 0.1	< 0.05	< 0.001	< 0.1	0.0019	0.6	< 1	0.6	< 0.2	< 1	< 1
EPA 08		10/16/1990	< 0.05	< 0.01	< 0.01	< 0.05	3.4	< 0.1	< 0.05	< 0.001	< 0.1	0.0007	0.7	2.5	3.2	< 0.2	< 1	< 1
EPA 08		1/8/1991	< 0.01	< 0.01	< 0.01	< 0.05	3.32	< 0.1	< 0.05	< 0.001	< 0.1	0.0027	2.3	1.2	3.5	< 0.2	< 1	2
EPA 08		4/17/1991	< 0.01	< 0.01	< 0.01	< 0.05	3.82	< 0.1	< 0.05	< 0.001	< 0.1	0.002	2.1	4.5	6.6	< 0.2	< 1	2
EPA 08		7/3/1991	< 0.01	< 0.01	< 0.01	< 0.05	2.93	< 0.1	< 0.05	< 0.001	< 0.1	0.0015	0.9	2	2.9	< 0.2	< 1	< 1
EPA 08		10/22/1991	< 0.01	< 0.01	0.02	< 0.05	3.22	< 0.1	< 0.05	< 0.001	< 0.1	0.0436	0.8	2	2.8	< 0.2	< 1	< 1
EPA 08		1/22/1992	< 0.01	< 0.01	< 0.01	0.05	2.88	< 0.1	< 0.05	< 0.001	< 0.1	0.001	5.4	< 1	5.4	< 0.2	1.3	5
EPA 08		4/2/1992	< 0.01	< 0.01	< 0.01	< 0.05	3.43	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.5	3.8	4.3	< 0.2	< 1	< 1
EPA 08		7/15/1992	< 0.01	< 0.01	< 0.01	< 0.05	3.17	< 0.1	< 0.05	< 0.001	< 0.1	0.003	1.2	5.6	6.8	< 0.2	< 1	1.5
EPA 08		10/14/1992	< 0.01	< 0.01	< 0.01	< 0.05	3.09	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.7	1.7	3.4	< 0.2	< 1	1.9

CHESTER ENGINEERS

TABLE C.1

Zone 1 Data Summary, 1989-2009

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	HCO3	SO4	Chl	NH4 as N	NO3 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**
EPA 08		1/13/1993	6,860.10	6.60	6.63	4739	528	637	157	7.8	147	3159	37.7	1.08	< 0.1	< 1	0.2	< 0.001
EPA 08		4/15/1993	6,861.00	6.60	6.53	4910	479	359	183	6.6	125	3019	40.8	0.8	< 0.1	< 1	< 0.1	0.001
EPA 08		7/20/1993	6,862.80	6.60	7.10	4144	562	352	159	7.9	134	2956	39.6	0.69	< 0.1	< 1	< 0.1	0.002
EPA 08		10/12/1993	6,859.40	6.70	6.19	4366	561	370	169	7.1	117	3110	36.9	0.71	< 0.1	< 1	0.16	< 0.001
EPA 08		1/11/1994	6,861.30	6.70	6.46	4765	528	366	177	6.7	111	3197	39.4	0.74	< 0.1	< 1	< 0.1	< 0.001
EPA 08		4/20/1994	6,861.40	6.50	6.22	4532	530	368	162	6.4	116	3154	39.6	1.33	< 0.1	< 1	0.1	0.001
EPA 08		7/26/1994	6,862.60	6.50	7.13	4389	592	379	142	7.5	109	3049	38.7	0.72	< 0.1	< 1	0.12	< 0.001
EPA 08		10/11/1994	6,861.50	6.50	6.90	4809	572	425	157	7.5	119	3367	41.5	1.08	< 0.1	< 1	< 0.1	< 0.001
EPA 08		1/10/1995	6,861.70	6.40	6.62	4848	644	388	142	8.5	139	3277	42	1.31	< 0.1	< 1	< 0.1	< 0.001
EPA 08		4/6/1995	6,861.60	6.50	6.48	4867	651	345	154	7.5	108	3364	40.2	1.52	< 0.1	< 1	< 0.1	< 0.001
EPA 08		7/11/1995	6,861.80	6.90	7.05	4212	550	408	144	7.3	127	2906	42	1.29	< 0.1	< 1	< 0.1	< 0.001
EPA 08		10/10/1995	6,861.90	6.60	7.13	4348	575	411	160	7.3	127	2965	38.4	0.93	< 0.1	< 1	< 0.1	0.002
EPA 08		1/9/1996	6,862.00	6.70	7.29	4185	545	401	156	7.9	162	2863	37.6	0.68	< 0.1	< 1	< 0.1	< 0.001
EPA 08		4/10/1996	6,862.20	6.90	7.24	4857	620	444	148	7.6	149	3460	41.8	0.75	< 0.1	< 1	< 0.1	0.001
EPA 08		7/17/1996	6,862.30	6.80	6.63	4876	560	395	159	8	165	3085	37.6	0.13	< 0.1	< 1	< 0.1	< 0.001
EPA 08		10/8/1996	6,862.30	6.60	6.98	4880	603	441	157	8	148	3061	39	0.73	< 0.1	< 1	< 0.1	< 0.001
EPA 08		1/28/1997	6,862.30	6.90	7.31	4870	565	415	141	7.6	143	3130	51	0.69	< 0.1	< 1	< 0.1	< 0.001
EPA 08		4/15/1997	6,862.40	6.60	7.10	4890	604	440	160	8.2	156	3330	42	0.73	< 0.1	< 1	< 0.1	< 0.001
EPA 08		7/15/1997	6,862.20	6.60	7.11	4860	603	432	145	7.8	138	3200	45.2	0.73	< 0.1	< 1	< 0.1	< 0.001
EPA 08		10/15/1997	6,862.40	6.50	7.49	4850	617	444	147	7.6	133	3190	53.7	0.75	< 0.1	< 1	< 0.1	< 0.001
EPA 08		1/20/1998	6,863.00	6.60	7.53	4840	598	439	156	8.4	133	3400	45.3	1.12	< 0.1	< 1	< 0.1	< 0.001
EPA 08		4/14/1998	6,862.70	6.70	6.93	4850	592	431	151	7.8	159	3300	39.6	0.74	< 0.1	< 1	< 0.1	< 0.001
EPA 08		7/14/1998	6,862.40	6.60	7.17	4820	594	430	154	8.3	132	3000	39.7	0.85	< 0.1	< 1	< 0.1	< 0.001
EPA 08		10/13/1998	no data	6.47	7.58	4780	566	428	156	8.3	134	3150	38.5	1.07	< 0.1	< 1	< 0.1	< 0.001
EPA 08		1/12/1999	6,865.50	6.60	7.20	4840	594	432	139	8	130	3200	41	0.81	< 0.1	< 1	< 0.1	0.003
EPA 08		4/13/1999	6,863.30	6.60	7.35	4630	558	420	136	7.7	131	3000	45.7	0.91	< 0.1	< 1	< 0.1	< 0.001
EPA 08		7/20/1999	6,863.00	6.36	7.18	4780	514	379	169	10.3	119	2710	47	0.76	< 0.1	< 1	< 0.1	< 0.001
EPA 08		10/12/1999	6,862.90	6.45	7.44	4790	552	414	133	7.7	121	3000	42.9	0.71	< 0.1	< 1	< 0.1	< 0.001
EPA 08		1/11/2000	6,863.20	6.60	7.29	4720	510	387	127	8.1	125	2750	39.3	0.79	< 0.1	< 1	< 0.1	< 0.001

TABLE C.1

Zone 1 Data Summary, 1989-2009

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**	**9.4**	**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 08		1/13/1993	< 0.01	< 0.01	< 0.01	< 0.05	3.46	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.4	10.7	11.1	< 0.2	< 1	< 1
EPA 08		4/15/1993	< 0.01	< 0.01	< 0.01	< 0.05	3.05	< 0.1	< 0.05	< 0.001	< 0.1	0.006	0.5	3.8	4.3	< 0.2	< 1	< 1
EPA 08		7/20/1993	< 0.01	< 0.01	< 0.01	< 0.05	2.78	< 0.1	< 0.05	< 0.001	< 0.1	< 0.003	1	3.4	4.4	< 0.2	< 1	1.4
EPA 08		10/12/1993	< 0.01	< 0.01	0.02	< 0.05	2.8	< 0.1	< 0.05	< 0.001	< 0.1	0.002	1.5	5.5	7	< 0.2	< 1	2
EPA 08		1/11/1994	< 0.01	< 0.01	< 0.01	< 0.05	3.07	< 0.1	< 0.05	< 0.001	< 0.1	0.006	1.1	5	6.1	< 0.2	< 1	9.6
EPA 08		4/20/1994	< 0.01	< 0.01	< 0.01	< 0.05	2.49	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1.3	3.5	4.8	< 0.2	1.3	6.7
EPA 08		7/26/1994	< 0.01	< 0.01	< 0.01	< 0.05	3.12	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.9	3.4	5.3	< 0.2	< 1	7.2
EPA 08		10/11/1994	< 0.01	< 0.01	< 0.01	< 0.05	2.46	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1.2	1.8	3	< 0.2	< 1	4.1
EPA 08		1/10/1995	< 0.01	< 0.01	< 0.01	< 0.05	2.95	< 0.1	< 0.05	< 0.001	< 0.1	0.001	2.3	2.6	4.9	< 0.2	< 1	6.4
EPA 08		4/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	3.15	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1.1	2.7	3.8	< 0.2	< 1	5.3
EPA 08		7/11/1995	< 0.01	< 0.01	< 0.01	< 0.05	2.92	0.27	< 0.05	< 0.001	< 0.1	0.0016	0.7	2.2	2.9	0.5	4.9	6.6
EPA 08		10/10/1995	< 0.01	< 0.01	< 0.01	< 0.05	2.99	< 0.1	< 0.05	< 0.001	< 0.1	0.0017	1.7	2.2	3.9	< 0.2	< 1	1.8
EPA 08		1/9/1996	< 0.01	< 0.01	< 0.01	< 0.05	2.8	0.13	< 0.05	< 0.001	< 0.1	0.001	1	1.5	2.5	< 0.2	3.8	< 1
EPA 08		4/10/1996	< 0.01	< 0.01	< 0.01	< 0.05	2.96	0.14	< 0.05	< 0.001	< 0.1	0.0006	1.2	1.3	2.5	0.7	< 1	1.2
EPA 08		7/17/1996	< 0.01	< 0.01	< 0.01	< 0.05	3.21	< 0.1	< 0.05	0.002	< 0.1	0.0016	0.7	< 1	0.7	0.8	< 1	< 1
EPA 08		10/8/1996	< 0.01	< 0.01	< 0.01	< 0.05	3	< 0.1	< 0.05	< 0.001	< 0.1	0.0005	0.9	< 1	0.9	< 0.2	< 1	< 1
EPA 08		1/28/1997	< 0.01	< 0.01	< 0.01	< 0.05	3.07	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1.1	< 1	1.1	< 0.2	< 1	1.1
EPA 08		4/15/1997	< 0.01	< 0.01	< 0.01	< 0.05	3.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.1	< 1	1.1	< 0.2	< 1	< 1
EPA 08		7/15/1997	< 0.01	< 0.01	< 0.01	< 0.05	2.82	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.7	< 1	0.7	< 0.2	< 1	< 1
EPA 08		10/15/1997	< 0.01	< 0.01	< 0.01	< 0.05	3.24	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.7	< 1	0.7	< 0.2	< 1	< 1
EPA 08		1/20/1998	< 0.01	< 0.005	< 0.01	< 0.05	3.42	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1.1	< 1	1.1	< 0.2	< 1	< 1
EPA 08		4/14/1998	< 0.01	< 0.005	< 0.01	< 0.05	2.99	< 0.1	< 0.05	< 0.001	< 0.1	0.0009	1	< 1	1	< 0.2	< 1	< 1
EPA 08		7/14/1998	< 0.01	< 0.005	< 0.01	< 0.05	2.84	< 0.1	< 0.05	< 0.001	< 0.1	0.0009	0.9	< 1	0.9	< 0.2	< 1	< 1
EPA 08		10/13/1998	< 0.01	< 0.005	< 0.01	< 0.05	3.05	< 0.1	< 0.05	< 0.001	< 0.1	0.001	1.4	3.8	5.2	< 0.2	2.3	2.3
EPA 08		1/12/1999	< 0.01	< 0.005	< 0.01	< 0.05	2.98	< 0.1	< 0.05	< 0.001	< 0.1	0.0038	1	2.3	3.3	< 0.2	< 1	< 1
EPA 08		4/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	2.98	< 0.1	< 0.05	< 0.001	< 0.1	0.0011	2	3.4	5.4	< 0.2	3	3
EPA 08		7/20/1999	< 0.01	< 0.005	< 0.01	< 0.05	2.4	< 0.1	< 0.05	< 0.001	< 0.1	0.0016	1.4	1.5	2.9	< 0.2	1.8	1.8
EPA 08		10/12/1999	< 0.01	< 0.005	< 0.01	< 0.05	3.08	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.9	4.2	5.1	< 0.2	< 1	1.6
EPA 08		1/11/2000	< 0.01	< 0.005	< 0.01	< 0.05	2.99	< 0.1	< 0.05	< 0.001	< 0.1	0.0016	0.9	2.6	3.5	< 0.2	< 1	< 1

CHESTER ENGINEERS

Laboratory Analytical Data
2009

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Zone 1 Monitor Wells

Well ID:		604	604	604	604
Collection Date:		10/6/2009	7/8/2009	4/8/2009	1/14/2009
Receive Date:		10/9/2009	7/10/2009	4/10/2009	1/16/2009
Report Date:		11/16/2009	8/10/2009	6/3/2009	3/17/2009
Analyte	**Units**	**C09100425-001**	**C09070426-003**	**C09040402-003**	**C09010565-005**
Bicarbonate as HCO3	mg/L	10	23	23	ND(1)
Calcium	mg/L	436	473	426	440
Chloride	mg/L	60	53	62	49
Magnesium	mg/L	808	798	788	823
Nitrogen, Ammonia as N	mg/L	0.14	0.19	ND(0.05)	ND(0.05)
Nitrogen, Nitrate+Nitrite as N	mg/L	72	68	74.9	104
Potassium	mg/L	12	12	12	12
Sodium	mg/L	286	294	296	311
Sulfate	mg/L	4360	4810	4620	4220
pH	s.u.	5.79	5.19	5.19	5.34
Solids, Total Dissolved TDS @ 180 C	mg/L	7090	7160	6980	7330
Aluminum	mg/L	2.8	3.3	4.2	3.8
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	0.19	0.22	0.22	0.24
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	8.55	9.56	9.68	9.80
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	0.26	0.26	0.29	0.28
Uranium	mg/L	0.0009	0.0007	0.0006	0.0007
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	2.6	3.6	2.6	2.1
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.5	0.9	0.7	0.5
Gross Alpha minus Rn & U MDC	pCi/L	0.4	0.8	0.6	0.3
Lead 210	pCi/L	-1	2.2	-1	-1
Lead 210 precision (±)	pCi/L	1.5	1.6	1.9	2.4
Lead 210 MDC	pCi/L	2.6	2.6	3.3	4.0
Radium 226	pCi/L	1.3	1.9	1.2	1.4
Radium 226 precision (±)	pCi/L	0.24	0.30	0.19	0.27
Radium 226 MDC	pCi/L	0.19	0.20	0.12	0.21
Radium 228	pCi/L	4.8	6.2	4.4	5.8
Radium 228 precision (±)	pCi/L	0.90	1.0	0.77	0.95
Radium 228 MDC	pCi/L	1.2	1.3	0.99	1.2
Thorium 230	pCi/L	0.08	0.2	-0.4	-0.2
Thorium 230 precision (±)	pCi/L	0.1	0.5	0.6	0.9
Thorium 230 MDC	pCi/L	0.2	1	1.8	
A/C Balance (± 5)	%	1.64	-2.18	-2.13	3.45
Anions	meq/L	97.7	107	104	96.6
Cations	meq/L	101	102	99.3	104
Solids, Total Dissolved Calculated	mg/L	6280	6760	6570	6350
TDS Balance (0.80 - 1.20)		1.13	1.06	1.06	1.15
Trihalomethanes, Total	ug/L	6.80	5.40	7.76	9.44

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Zone 1 Monitor Wells

Well ID:		614	614	614	614
Collection Date:		10/7/2009	7/8/2009	4/8/2009	1/14/2009
Receive Date:		10/9/2009	7/10/2009	4/10/2009	1/16/2009
Report Date:		11/16/2009	8/10/2009	6/3/2009	3/17/2009
Analyte	**Units**	**C09100425-002**	**C09070426-001**	**C09040402-001**	**C09010565-003**
Bicarbonate as HCO3	mg/L	1410	1580	1470	1290
Calcium	mg/L	576	615	550	529
Chloride	mg/L	343	335	325	296
Magnesium	mg/L	652	655	616	599
Nitrogen, Ammonia as N	mg/L	76	85	70.2	122
Nitrogen, Nitrate+Nitrite as N	mg/L	101	94	98.7	124
Potassium	mg/L	12	12	11	10
Sodium	mg/L	477	490	485	493
Sulfate	mg/L	2980	3290	3190	2980
pH	s.u.	7.60	6.72	6.80	7.09
Solids, Total Dissolved TDS @ 180 C	mg/L	6650	6800	6570	6870
Aluminum	mg/L	ND(0.1)	0.3	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	0.57	0.54	0.49	0.46
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	0.0512	0.0524	0.0520	0.0624
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)	0.001	0.001	0.001
Gross Alpha minus Rn & U	pCi/L	1.3	1.7	1.0	3.3
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.4	0.7	0.5	1
Gross Alpha minus Rn & U MDC	pCi/L	0.4	0.8	0.6	1
Lead 210	pCi/L	-1	3.0	-1	-1
Lead 210 precision (±)	pCi/L	1.5	1.6	1.9	2.4
Lead 210 MDC	pCi/L	2.6	2.6	3.3	4.0
Radium 226	pCi/L	0.37	0.57	0.21	0.54
Radium 226 precision (±)	pCi/L	0.15	0.17	0.10	0.17
Radium 226 MDC	pCi/L	0.17	0.17	0.12	0.18
Radium 228	pCi/L	2.4	3.2	2.6	4.0
Radium 228 precision (±)	pCi/L	0.75	0.83	0.71	0.89
Radium 228 MDC	pCi/L	1.1	1.2	1.0	1.2
Thorium 230	pCi/L	0.0009	0.4	-0.1	0.0
Thorium 230 precision (±)	pCi/L	0.08	0.8	0.3	0.5
Thorium 230 MDC	pCi/L	0.2	1.4	0.7	
A/C Balance (± 5)	%	3.18	0.789	-1.06	2.73
Anions	meq/L	102	111	107	100
Cations	meq/L	109	112	104	0
Solids, Total Dissolved Calculated	mg/L	6180	6590	6340	6120
TDS Balance (0.80 - 1.20)		1.08	1.03	1.04	1.12
Trihalomethanes, Total	ug/L	92.0	141	52.0	42.0

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Zone 1 Monitor Wells

Well ID:		515-A	515-A	515-A	515-A
Collection Date:		10/7/2009	7/8/2009	4/8/2009	1/14/2009
Receive Date:		10/9/2009	7/10/2009	4/10/2009	1/16/2009
Report Date:		11/16/2009	8/10/2009	6/3/2009	3/17/2009
Analyte	**Units**	**C09100425-003**	**C09070426-002**	**C09040402-002**	**C09010565-004**
Bicarbonate as HCO3	mg/L	200	219	297	219
Calcium	mg/L	471	480	438	420
Chloride	mg/L	258	258	275	248
Magnesium	mg/L	831	840	845	825
Nitrogen, Ammonia as N	mg/L	10.0	13.6	12.2	12.6
Nitrogen, Nitrate+Nitrite as N	mg/L	64	58	59.2	86.0
Potassium	mg/L	15	15	15	13
Sodium	mg/L	434	451	462	478
Sulfate	mg/L	4960	4960	4980	5080
pH	s.u.	6.90	6.00	6.31	6.19
Solids, Total Dissolved TDS @ 180 C	mg/L	7800	7760	7750	8190
Aluminum	mg/L	0.6	1.2	0.7	0.9
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	0.04	0.03	0.03	0.03
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	18.4	17.5	17.0	17.6
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	0.29	0.22	0.22	0.21
Uranium	mg/L	0.0008	0.0009	0.0008	0.0009
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	2.6	2.9	2.5	2.4
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.5	0.8	0.7	0.5
Gross Alpha minus Rn & U MDC	pCi/L	0.4	0.8	0.6	0.3
Lead 210	pCi/L	-2	1.9	-3	-3
Lead 210 precision (±)	pCi/L	1.5	1.6	1.9	2.3
Lead 210 MDC	pCi/L	2.6	2.6	3.3	4.0
Radium 226	pCi/L	0.91	1.9	1.1	1.3
Radium 226 precision (±)	pCi/L	0.21	0.28	0.18	0.24
Radium 226 MDC	pCi/L	0.17	0.18	0.12	0.19
Radium 228	pCi/L	2.9	4.2	3.2	3.5
Radium 228 precision (±)	pCi/L	0.80	0.88	0.74	0.87
Radium 228 MDC	pCi/L	1.1	1.2	1.0	1.2
Thorium 230	pCi/L	0.1	0.04	0.2	-0.3
Thorium 230 precision (±)	pCi/L	0.1	0.6	0.6	0.6
Thorium 230 MDC	pCi/L	0.2	1.4	1.2	
A/C Balance (± 5)	%	-2.88	-1.83	-3.31	-5.05
Anions	meq/L	118	118	120	123
Cations	meq/L	112	114	113	111
Solids, Total Dissolved Calculated	mg/L	7350	7370	7440	7580
TDS Balance (0.80 - 1.20)		1.06	1.05	1.04	1.08
Trihalomethanes, Total	ug/L	46.4	72.4	64.4	76.8

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Zone 1 Monitor Wells

Well ID:		EPA-4	EPA-4	EPA-4	EPA-4
Collection Date:		10/12/2009	7/13/2009	4/13/2009	1/19/2009
Receive Date:		10/15/2009	7/17/2009	4/17/2009	1/23/2009
Report Date:		11/20/2009	8/25/2009	6/4/2009	3/18/2009
Analyte	**Units**	**C09100635-001**	**C09070725-001**	**C09040592-001**	**C09010818-001**
Bicarbonate as HCO3	mg/L	161	155	167	160
Calcium	mg/L	540	562	558	499
Chloride	mg/L	42	38	36	33
Magnesium	mg/L	364	372	368	353
Nitrogen, Ammonia as N	mg/L	0.76	0.80	0.60	0.35
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Potassium	mg/L	9	9	9	8
Sodium	mg/L	183	181	182	172
Sulfate	mg/L	3010	3030	2950	2850
pH	s.u.	7.07	7.14	6.55	7.31
Solids, Total Dissolved TDS @ 180 C	mg/L	4640	4590	4630	3910
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	3.48	3.08	3.31	3.38
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	0.0004	0.0003	0.0006	ND(0.0003)
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)	0.001	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	1.6	3.3	1.6	2.0
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.7	0.7	0.5	0.8
Gross Alpha minus Rn & U MDC	pCi/L	0.8	0.5	0.6	0.9
Lead 210	pCi/L	-0.2	-0.6	0.7	0.3
Lead 210 precision (±)	pCi/L	2.5	1.4	2.1	3.4
Lead 210 MDC	pCi/L	4.2	2.4	3.6	5.6
Radium 226	pCi/L	1.2	1.0	1.2	1.0
Radium 226 precision (±)	pCi/L	0.22	0.20	0.24	0.24
Radium 226 MDC	pCi/L	0.16	0.16	0.14	0.23
Radium 228	pCi/L	3.4	2.5	2.8	2.5
Radium 228 precision (±)	pCi/L	0.72	0.81	0.72	0.82
Radium 228 MDC	pCi/L	0.98	1.2	1.0	1.2
Thorium 230	pCi/L	-0.0009	-0.1	-0.1	0.4
Thorium 230 precision (±)	pCi/L	0.1	0.2	0.3	0.8
Thorium 230 MDC	pCi/L	0.2	0.5	0.7	
A/C Balance (± 5)	%	-0.992	0.112	0.941	-1.02
Anions	meq/L	66.5	66.6	65.1	62.9
Cations	meq/L	65.2	66.8	66.3	61.7
Solids, Total Dissolved Calculated	mg/L	4260	4290	4210	4020
TDS Balance (0.80 - 1.20)		1.09	1.07	1.10	0.970
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: Zone 1 Monitor Wells

Well ID:		EPA-5	EPA-5	EPA-5	EPA-5
Collection Date:		10/12/2009	7/13/2009	4/13/2009	1/19/2009
Receive Date:		10/15/2009	7/17/2009	4/17/2009	1/23/2009
Report Date:		11/20/2009	8/25/2009	6/4/2009	3/18/2009
Analyte	Units	C09100635-002	C09070725-002	C09040592-002	C09010818-002
Bicarbonate as HCO3	mg/L	65	67	49	84
Calcium	mg/L	469	474	463	451
Chloride	mg/L	48	50	42	45
Magnesium	mg/L	488	495	499	485
Nitrogen, Ammonia as N	mg/L	11.0	6.1	7.9	8.1
Nitrogen, Nitrate+Nitrite as N	mg/L	12.4	15.3	16.1	12.4
Potassium	mg/L	8	8	11	8
Sodium	mg/L	115	111	118	116
Sulfate	mg/L	3170	3520	3250	3170
pH	s.u.	6.54	6.31	5.64	6.46
Solids, Total Dissolved TDS @ 180 C	mg/L	4850	4740	4940	4990
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	0.04	0.04	0.04	0.04
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	1.21	1.24	1.14	1.12
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	0.0015	0.0015	0.0013	0.0011
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)	0.001	ND(0.001)	0.001
Gross Alpha minus Rn & U	pCi/L	2.3	3.2	1.9	2.8
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.8	0.7	0.6	0.9
Gross Alpha minus Rn & U MDC	pCi/L	0.8	0.5	0.6	0.9
Lead 210	pCi/L	0.4	0.4	1.0	0.2
Lead 210 precision (±)	pCi/L	2.5	1.4	2.1	3.4
Lead 210 MDC	pCi/L	4.1	2.4	3.6	5.6
Radium 226	pCi/L	1.7	1.6	1.6	0.50
Radium 226 precision (±)	pCi/L	0.28	0.24	0.28	0.21
Radium 226 MDC	pCi/L	0.19	0.16	0.14	0.26
Radium 228	pCi/L	3.3	2.6	2.3	3.0
Radium 228 precision (±)	pCi/L	0.81	0.83	0.74	0.84
Radium 228 MDC	pCi/L	1.1	1.2	1.1	1.2
Thorium 230	pCi/L	0.04	0.1	-0.04	-0.1
Thorium 230 precision (±)	pCi/L	0.1	0.2	0.2	0.5
Thorium 230 MDC	pCi/L	0.2	0.3	0.5	
A/C Balance (± 5)	%	0.140	-4.84	-0.546	-0.982
Anions	meq/L	69.4	77.0	70.9	69.6
Cations	meq/L	69.6	69.9	70.1	68.2
Solids, Total Dissolved Calculated	mg/L	4400	4780	4500	4390
TDS Balance (0.80 - 1.20)		1.10	0.990	1.10	1.14
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: Zone 1 Monitor Wells

Well ID:		EPA-7	EPA-7	EPA-7	EPA-7
Collection Date:		10/12/2009	7/13/2009	4/13/2009	1/19/2009
Receive Date:		10/15/2009	7/17/2009	4/17/2009	1/23/2009
Report Date:		11/20/2009	8/25/2009	6/4/2009	3/18/2009
Analyte	**Units**	**C09100635-003**	**C09070725-003**	**C09040592-003**	**C09010818-003**
Bicarbonate as HCO3	mg/L	647	621	632	607
Calcium	mg/L	486	506	487	479
Chloride	mg/L	208	124	208	202
Magnesium	mg/L	1050	1020	971	952
Nitrogen, Ammonia as N	mg/L	0.14	0.18	0.15	ND(0.05)
Nitrogen, Nitrate+Nitrite as N	mg/L	127	122	123	164
Potassium	mg/L	8	8	10	8
Sodium	mg/L	366	368	384	360
Sulfate	mg/L	4300	4980	4740	4710
pH	s.u.	6.77	6.68	6.22	6.75
Solids, Total Dissolved TDS @ 180 C	mg/L	8750	8380	8060	8360
Aluminum	mg/L	0.4	0.2	0.2	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	0.03	0.03	0.03	0.03
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	2.22	2.16	1.77	1.85
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	0.0020	0.0020	0.0019	0.0018
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)	0.001	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	1.1	1.2	1.2	1.1
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.6	0.5	0.5	0.7
Gross Alpha minus Rn & U MDC	pCi/L	0.8	0.5	0.6	0.9
Lead 210	pCi/L	-0.9	0.5	-0.3	-2
Lead 210 precision (±)	pCi/L	2.4	1.4	2.1	3.3
Lead 210 MDC	pCi/L	4.1	2.4	3.6	5.6
Radium 226	pCi/L	0.44	0.70	0.63	1.3
Radium 226 precision (±)	pCi/L	0.18	0.15	0.19	0.25
Radium 226 MDC	pCi/L	0.21	0.1	0.15	0.22
Radium 228	pCi/L	5.0	2.0	0.11	1.1
Radium 228 precision (±)	pCi/L	0.94	0.88	0.65	0.77
Radium 228 MDC	pCi/L	1.2	1.3	1.1	1.2
Thorium 230	pCi/L	0.05	-0.01	0.03	0.5
Thorium 230 precision (±)	pCi/L	0.1	0.1	0.2	0.8
Thorium 230 MDC	pCi/L	0.2	0.3	0.4	
A/C Balance (± 5)	%	4.91	-0.244	-1.00	-3.00
Anions	meq/L	115	126	124	125
Cations	meq/L	127	125	121	118
Solids, Total Dissolved Calculated	mg/L	7300	7860	7660	7740
TDS Balance (0.80 - 1.20)		1.20	1.07	1.05	1.08
Trihalomethanes, Total	ug/L	0.65	ND(0.50)	0.64	0.82

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UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Zone 1 Monitor Wells

Well ID:		EPA-2	EPA-2	EPA-2	EPA-2
Collection Date:		10/12/2009	7/13/2009	4/13/2009	1/13/2009
Receive Date:		10/15/2009	7/17/2009	4/17/2009	1/16/2009
Report Date:		11/20/2009	8/25/2009	6/4/2009	3/17/2009
Analyte	Units	C09100635-004	C09070725-004	C09040592-004	C09010565-001
Bicarbonate as HCO3	mg/L	318	326	309	286
Calcium	mg/L	360	343	336	378
Chloride	mg/L	21	22	17	17
Magnesium	mg/L	158	149	153	173
Nitrogen, Ammonia as N	mg/L	0.42	0.39	0.29	0.28
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Potassium	mg/L	6	6	6	6
Sodium	mg/L	192	197	198	212
Sulfate	mg/L	1670	1720	1700	1750
pH	s.u.	7.31	7.22	6.91	6.98
Solids, Total Dissolved TDS @ 180 C	mg/L	2830	2690	2610	2750
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	1.44	1.34	1.21	1.40
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	0.0019	0.0013	0.0019	0.0017
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)	0.002
Gross Alpha minus Rn & U	pCi/L	2.0	2.8	1	3.7
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.7	0.6	0.4	1
Gross Alpha minus Rn & U MDC	pCi/L	0.8	0.5	0.6	1
Lead 210	pCi/L	1.1	1.1	0.2	-3
Lead 210 precision (±)	pCi/L	2.4	1.4	2.1	2.4
Lead 210 MDC	pCi/L	4.0	2.4	3.6	4.0
Radium 226	pCi/L	1.1	1.3	1.1	1.1
Radium 226 precision (±)	pCi/L	0.22	0.19	0.24	0.23
Radium 226 MDC	pCi/L	0.18	0.09	0.15	0.19
Radium 228	pCi/L	3.1	3.0	2.2	2.3
Radium 228 precision (±)	pCi/L	0.77	0.90	0.77	0.82
Radium 228 MDC	pCi/L	1.1	1.3	1.1	1.2
Thorium 230	pCi/L	-0.02	-0.01	-0.1	0.3
Thorium 230 precision (±)	pCi/L	0.09	0.1	0.2	0.8
Thorium 230 MDC	pCi/L	0.2	0.3	0.7	
A/C Balance (± 5)	%	-1.30	-4.58	-3.57	1.15
Anions	meq/L	40.5	41.8	41.0	41.5
Cations	meq/L	39.5	38.1	38.1	42.5
Solids, Total Dissolved Calculated	mg/L	2590	2630	2590	2710
TDS Balance (0.80 - 1.20)		1.09	1.02	1.01	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: Zone 1 Monitor Wells

Well ID:		EPA-2 Duplicate	EPA-2 Duplicate	EPA-2 Duplicate	EPA-2 Duplicate
Collection Date:		10/12/2009	7/13/2009	4/13/2009	1/13/2009
Receive Date:		10/15/2009	7/17/2009	4/17/2009	1/16/2009
Report Date:		11/20/2009	8/25/2009	6/4/2009	3/17/2009
Analyte	Units	C09100635-005	C09070725-005	C09040592-005	C09010565-002
Bicarbonate as HCO3	mg/L	331	332	347	337
Calcium	mg/L	351	353	321	377
Chloride	mg/L	24	17	16	14
Magnesium	mg/L	164	156	146	174
Nitrogen, Ammonia as N	mg/L	0.45	0.46	0.31	0.28
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Potassium	mg/L	6	6	6	6
Sodium	mg/L	198	199	190	211
Sulfate	mg/L	1620	1720	1610	1560
pH	s.u.	7.20	7.09	6.84	6.96
Solids, Total Dissolved TDS @ 180 C	mg/L	2790	2770	2640	2800
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(0.04)	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	1.49	1.34	1.26	1.51
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	0.0016	0.0012	0.0018	0.0015
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	2.0	3.0	1.0	3.4
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.7	0.7	0.5	1
Gross Alpha minus Rn & U MDC	pCi/L	0.8	0.5	0.6	1
Lead 210	pCi/L	1.1	-0.4	1.2	-2
Lead 210 precision (±)	pCi/L	2.4	1.4	2.1	2.4
Lead 210 MDC	pCi/L	4.1	2.4	3.6	4.0
Radium 226	pCi/L	1.1	1.4	1.4	1.2
Radium 226 precision (±)	pCi/L	0.23	0.20	0.27	0.23
Radium 226 MDC	pCi/L	0.18	0.09	0.15	0.18
Radium 228	pCi/L	3.0	2.8	3.0	3.3
Radium 228 precision (±)	pCi/L	0.78	0.89	0.79	0.86
Radium 228 MDC	pCi/L	1.1	1.3	1.1	1.2
Thorium 230	pCi/L	0.06	0.02	-0.03	-0.1
Thorium 230 precision (±)	pCi/L	0.1	0.09	0.1	0.7
Thorium 230 MDC	pCi/L	0.2	0.2	0.4	
A/C Balance (± 5)	%	-0.139	-3.04	-4.30	4.98
Anions	meq/L	39.9	41.7	39.7	38.5
Cations	meq/L	39.8	39.3	36.4	42.5
Solids, Total Dissolved Calculated	mg/L	2560	2650	2490	2550
TDS Balance (0.80 - 1.20)		1.09	1.05	1.06	1.10
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: Zone 1 Monitor Wells

Well ID:		TWQ-142	TWQ-142	TWQ-142	TWQ-142
Collection Date:		10/13/2009	7/14/2009	4/14/2009	1/20/2009
Receive Date:		10/15/2009	7/17/2009	4/17/2009	1/23/2009
Report Date:		11/20/2009	8/25/2009	6/4/2009	3/18/2009
Analyte	**Units**	**C09100635-006**	**C09070725-006**	**C09040592-006**	**C09010818-004**
Bicarbonate as HCO3	mg/L	281	271	272	261
Calcium	mg/L	43	44	41	42
Chloride	mg/L	19	15	16	12
Magnesium	mg/L	22	22	21	23
Nitrogen, Ammonia as N	mg/L	0.28	0.36	0.29	0.18
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.1)	ND(0.1)	0.2	ND(0.1)
Potassium	mg/L	4	4	3	4
Sodium	mg/L	335	336	302	328
Sulfate	mg/L	624	657	642	714
pH	s.u.	7.81	7.48	7.26	7.33
Solids, Total Dissolved TDS @ 180 C	mg/L	1180	1160	1180	1200
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	0.06	0.05	0.04	0.05
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	ND(0.0003)	ND(0.0003)	ND(0.0003)	ND(0.0003)
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	0.9	1.7	0.7	0.6
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.6	0.5	0.4	0.6
Gross Alpha minus Rn & U MDC	pCi/L	0.8	0.5	0.5	0.9
Lead 210	pCi/L	1.0	0.4	-2	0.2
Lead 210 precision (±)	pCi/L	2.5	1.4	3.4	3.4
Lead 210 MDC	pCi/L	4.1	2.4	5.7	5.6
Radium 226	pCi/L	0.28	0.73	0.67	0.45
Radium 226 precision (±)	pCi/L	0.15	0.15	0.21	0.19
Radium 226 MDC	pCi/L	0.19	0.1	0.16	0.24
Radium 228	pCi/L	0.95	0.70	0.24	1.4
Radium 228 precision (±)	pCi/L	0.73	0.81	0.75	0.78
Radium 228 MDC	pCi/L	1.2	1.3	1.2	1.2
Thorium 230	pCi/L	0.2	0.05	-0.02	-0.2
Thorium 230 precision (±)	pCi/L	0.2	0.08	0.1	0.5
Thorium 230 MDC	pCi/L	0.3	0.1	0.3	
A/C Balance (± 5)	%	1.47	0.592	-3.65	-2.88
Anions	meq/L	18.1	18.5	18.3	19.5
Cations	meq/L	18.7	18.8	17.0	18.4
Solids, Total Dissolved Calculated	mg/L	1200	1230	1170	1270
TDS Balance (0.80 - 1.20)		0.980	0.940	1.01	0.940
Trihalomethanes, Total	ug/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)

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